Appendix A

AOU1 Remedial Investigation Data Summary Reports and Supporting Information

Reporting Limits for Volatile Organic Compounds

First Environment. ***Vapor Intrusion Data Collection Report AOU-1: East Side Springs 700 South 1600 East PCE Plume Salt Lake City, Utah*****.**

EA Engineering, Science and Technology. ***700 South 1600 East PCE Plume AOU-1: East Side Springs 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City, Utah*****.**

EA Engineering, Science and Technology. ***700 South 1600 East PCE Plume 2016 Monitoring and Supply Well Groundwater Sampling Technical Memorandum.***

EA Engineering, Science and Technology. ***Conceptual Site Model Update for the 700 South 1600 East PCE Plume AOU-1: East Side Springs, Salt Lake City, Utah*****.**

CH2M Hill Inc. ***2017 Vapor Intrusion Investigation Field Data Report AOU1 700 South 1600 East PCE Plume*****.**

Reporting Limits and Detection Limits for Volatile Organic Compounds

Source: First Environment (FE). 2015a. *Final Remedial Investigation Work Plan AOU-1: East Side Springs 700 South 1600 East PCE Plume Salt Lake City, Utah*. Prepared for: VA Salt Lake City Health Care System under BPA No. VA259-14-A-0021, TO No. VA259-14-J-4311.

TABLE 4: Project Laboratory - Target Analytes and Quantitation Limits-Volatile Organic Compounds in Soil
QAPP for Department of Veterans Affairs
AOU-1 - 700 South 1600 East PCE Plume, Salt Lake City, Utah

Analyte	CAS Number	Method	Screening Level	Lowest Screening Level Value (mg/kg)[a]	CRQL (c) (mg/kg)
1,1,1-Trichloroethane	71-55-6	SOM02.1	Protection of Groundwater MCL-SSL (DAF=20)	1.4	0.005
1,1,2,2-Tetrachloroethane	79-34-5	SOM02.1	Protection of Groundwater SSL (DAF=20)	0.0052	0.005
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	76-13-1	SOM02.1	Soil Saturation	910	0.005
1,1,2-Trichloroethane	79-00-5	SOM02.1	Protection of Groundwater SSL (DAF=20)	0.0015	0.005
1,1-Dichloroethane	75-34-3	SOM02.1	Protection of Groundwater SSL (DAF=20)	0.014	0.005
1,1-Dichloroethene	75-35-4	SOM02.1	Protection of Groundwater MCL-SSL (DAF=20)	0.05	0.005
1,2,3-Trichlorobenzene	87-61-6	SOM02.1	Protection of Groundwater SSL (DAF=20)	0.3	0.005
1,2,4-Trichlorobenzene	120-82-1	SOM02.1	Protection of Groundwater SSL (DAF=20)	0.058	0.005
1,2-Dibromo-3-Chloropropane	96-12-8	SOM02.1	Protection of Groundwater SSL (DAF=20)	2.8E-06	0.005
1,2-Dibromoethane (EDB)	106-93-4	SOM02.1	Protection of Groundwater SSL (DAF=20)	3.6E-05	0.005
1,2-Dichlorobenzene	95-50-1	SOM02.1	Protection of Groundwater SSL (DAF=20)	5.4	0.005
1,2-Dichloroethane	107-06-2	SOM02.1	Protection of Groundwater SSL (DAF=20)	0.00084	0.005
1,2-Dichloropropane	78-87-5	SOM02.1	Protection of Groundwater SSL (DAF=20)	0.0026	0.005
1,3-Dichlorobenzene	541-73-1	SOM02.1	Protection of Groundwater SSL (DAF=20)	5.4	0.005
1,4-Dichlorobenzene	106-46-7	SOM02.1	Protection of Groundwater SSL (DAF=20)	0.008	0.005
2-Butanone (Methyl Ethyl Ketone)	78-93-3	SOM02.1	Protection of Groundwater SSL (DAF=20)	20	0.01
2-Hexanone	591-78-6	SOM02.1	Protection of Groundwater SSL (DAF=20)	0.16	0.01
4-Methyl-2-pentanone	108-10-1	SOM02.1	Protection of Groundwater SSL (DAF=20)	4.6	0.01
Acetone	67-64-1	SOM02.1	Protection of Groundwater SSL (DAF=20)	48	0.01
Benzene	71-43-2	SOM02.1	Protection of Groundwater SSL (DAF=20)	0.004	0.005
Bromochloromethane	74-97-5	SOM02.1	Protection of Groundwater SSL (DAF=20)	0.42	0.005

Bromodichloromethane	75-27-4	SOM02.1	Protection of Groundwater SSL (DAF=20)	0.00064	0.005
Bromoform	75-25-2	SOM02.1	Protection of Groundwater SSL (DAF=20)	0.042	0.005
Bromomethane	74-83-9	SOM02.1	Protection of Groundwater SSL (DAF=20)	0.036	0.005
Carbon Disulfide	75-15-0	SOM02.1	Protection of Groundwater SSL (DAF=20)	4.2	0.005
Carbon Tetrachloride	56-23-5	SOM02.1	Protection of Groundwater SSL (DAF=20)	0.003	0.005
Chlorobenzene	108-90-7	SOM02.1	Protection of Groundwater SSL (DAF=20)	0.98	0.005
Chloroethane	75-00-3	SOM02.1	Protection of Groundwater SSL (DAF=20)	120	0.005
Chloroform	67-66-3	SOM02.1	Protection of Groundwater SSL (DAF=20)	0.0011	0.005
Chloromethane	74-87-3	SOM02.1	Protection of Groundwater SSL (DAF=20)	0.98	0.005
cis-1,2-Dichloroethene	156-59-2	SOM02.1	Protection of Groundwater SSL (DAF=20)	0.16	0.005
Cyclohexane	110-82-7	SOM02.1	Soil Saturation	120	0.005
Dibromochloromethane	124-48-1	SOM02.1	Protection of Groundwater SSL (DAF=20)	0.00078	0.005
Dichlorodifluoromethane (Freon 12)	75-71-8	SOM02.1	Protection of Groundwater SSL (DAF=20)	6	0.005
Ethylbenzene	100-41-4	SOM02.1	Protection of Groundwater SSL (DAF=20)	0.03	0.005
Isopropylbenzene (Cumene)	98-82-8	SOM02.1	Protection of Groundwater SSL (DAF=20)	13	0.005
Methyl acetate	79-20-9	SOM02.1	Protection of Groundwater SSL (DAF=20)	64	0.005
Methylcyclohexane	108-87-2	SOM02.1	--	[b]	0.005
Methyl Tert-Butyl Ether	1634-04-4	SOM02.1	Protection of Groundwater SSL (DAF=20)	0.056	0.005
Methylene chloride	75-09-2	SOM02.1	Protection of Groundwater MCL-SSL (DAF=20)	0.026	0.005
m,p-Xylene	108-38-3 and 106-42-3	SOM02.1	Protection of Groundwater SSL (DAF=20)	3.6	0.005
o-Xylene	95-47-6	SOM02.1	Protection of Groundwater SSL (DAF=20)	3.8	0.005
Styrene	100-42-5	SOM02.1	Protection of Groundwater MCL-SSL (DAF=20)	2.2	0.005
Tetrachloroethene (PCE)	127-18-4	SOM02.1	Protection of Groundwater MCL-SSL (DAF=20)	0.046	0.005
Toluene	108-88-3	SOM02.1	Protection of Groundwater SSL (DAF=20)	12	0.005
Total 1,3-dichloro propene (cis- & trans-)	542-75-6	SOM02.1	Protection of Groundwater SSL (DAF=20)	0.003	0.005
trans-1,2-Dichloroethene	156-60-5	SOM02.1	Protection of Groundwater SSL (DAF=20)	0.5	0.005
Trichloroethene	79-01-6	SOM02.1	Protection of Groundwater SSL (DAF=20)	0.0032	0.005

Trichlorofluoromethane (Freon 11)	75-69-4	SOM02.1	Protection of Groundwater SSL (DAF=20)	14	0.005
Vinyl Chloride	75-01-4	SOM02.1	Protection of Groundwater SSL (DAF=20)	0.00011	0.005

[a] The Lowest Screening Level Values in this table were the lowest of: (1) RSLs for residential exposure (US EPA, May 2014), (2) SSLs for groundwater protection using and dilution attenuation factor (DAF) of 20, and Soil Saturation Level. RSLs corresponding to an ELCR of 1E-06 and an HQ of 0.1 were used.
[b] No commonly applied surrogate for this chemical.
[c] The CRQL values are generic to the CLP, and will be confirmed with the CLP laboratory, when it is selected by EPA.
Notes:
CRQL = Contract-required Quantification Levels
mg/kg = milligram per kilogram
Surrogate chemicals were used in this table to support the assessment of analytical sensitivity. The use of surrogates will be reviewed and may be revised during data evaluation and risk assessment.

TABLE 7: Project Laboratory – Target Analytes and Quantitation Limits-Volatile Organic Compounds in Air
Quality Assurance Project Plan for Department of Veterans Affairs
AOU-1 - 700 South 1600 East PCE Plume, Salt Lake City, Utah

Analyte	CAS Number	Method	Screening Level	Lowest Screening Level Value (µg/m^3) [a]	CRQL (c) (µg/m^3)
1,1,1-Trichloroethane	71-55-6	TO-15	EPA RSL	520	0.01
1,1,2,2-Tetrachloroethane	79-34-5	TO-15	EPA RSL	0.042	0.01
1,1,2-Trichloroethane	79-00-5	TO-15	EPA RSL	0.15	0.01
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	76-13-1	TO-15	EPA RSL	3,100	0.01
1,1-Dichloroethane	75-34-3	TO-15	EPA RSL	1.5	0.01
1,1-Dichloroethene	75-35-4	TO-15	EPA RSL	21	0.01
1,2,4-Trichlorobenzene	120-82-1	TO-15	EPA RSL	0.21	0.01
1,2,4-Trimethylbenzene	95-63-6	TO-15	EPA RSL	0.73	0.01
1,2-Dibromoethane (EDB)	106-93-4	TO-15	EPA RSL	0.0041	0.01
1,2-Dichlorobenzene	95-50-1	TO-15	EPA RSL	21	0.01
1,2-Dichloroethane	107-06-2	TO-15	EPA RSL	0.094	0.01
1,2-Dichloropropane	78-87-5	TO-15	EPA RSL	0.24	0.01
1,2-Dichlorotetrafluoethane (Freon 114)	76-14-2	TO-15	EPA RSL	3,100	0.01
1,3,5-Trimethylbenzene	108-67-8	TO-15	EPA RSL	0.73	0.01
1,3-Butadiene	106-99-0	TO-15	EPA RSL	0.081	0.01
1,3-Dichlorobenzene	541-73-1	TO-15	EPA RSL	21	0.01
1,4-Dichlorobenzene	106-46-7	TO-15	EPA RSL	0.22	0.01
1,4-Dioxane	123-91-1	TO-15	EPA RSL	0.49	0.01
2,2,4-Trimethylpentane	540-84-1	TO-15	--	[b]	0.01
2-Butanone (Methyl Ethyl Ketone)	78-93-3	TO-15	EPA RSL	520	0.01
2-Chloro-1,3-butadiene	126-99-8	TO-15	EPA RSL	0.0081	0.01
2-Hexanone	591-78-6	TO-15	EPA RSL	3.1	0.01
2-Propanol	67-63-0	TO-15	EPA RSL	730	0.01

Analyte	CAS Number	Method	Screening Level	Lowest Screening Level Value ($\mu g/m^3$) [a]	CRQL (c) ($\mu g/m^3$)
3-Chloropropene	107-05-1	TO-15	EPA RSL	0.1	0.01
4-Ethyltoluene	622-96-8	TO-15	--	[b]	0.01
4-Methyl-2-pentanone	108-10-1	TO-15	EPA RSL	310	0.01
Acetone	67-64-1	TO-15	EPA RSL	3,200	0.01
Benzene	71-43-2	TO-15	EPA RSL	0.31	0.01
Benzyl chloride	100-44-7	TO-15	EPA RSL	0.05	0.01
Bromodichloromethane	75-27-4	TO-15	EPA RSL	0.066	0.01
Bromoform	75-25-2	TO-15	EPA RSL	2.2	0.01
Bromomethane	74-83-9	TO-15	EPA RSL	0.52	0.01
Carbon disulfide	75-15-0	TO-15	EPA RSL	73	0.01
Carbon tetrachloride	56-23-5	TO-15	EPA RSL	0.41	0.01
Chlorobenzene	108-90-7	TO-15	EPA RSL	5.2	0.01
Chloroethane	75-00-3	TO-15	EPA RSL	1,000	0.01
Chloroform	67-66-3	TO-15	EPA RSL	0.11	0.01
Chloromethane	74-87-3	TO-15	EPA RSL	9.4	0.01
cis-1,2-Dichloroethene	156-59-2	TO-15	EPA RSL	6.3	0.01
cis-1,3-Dichloropropene	542-75-6	TO-15	EPA RSL	0.61	0.01
Isopropylbenzene (Cumene)	98-82-8	TO-15	EPA RSL	42	0.01
Cyclohexane	110-82-7	TO-15	EPA RSL	630	0.01
Dibromochloromethane	124-48-1	TO-15	EPA RSL	0.09	0.01
Dichlorodifluoromethane (Freon 12)	75-71-8	TO-15	EPA RSL	10	0.01
Ethanol	64-17-5	TO-15	--	[b]	0.01
Ethyl Acetate	141-78-6	TO-15	EPA RSL	7.3	0.01
Ethylbenzene	100-41-4	TO-15	EPA RSL	0.97	0.01
Hexachlorobutadiene	87-68-3	TO-15	EPA RSL	0.11	0.01
n-Heptane	142-82-5	TO-15	--	[b]	0.01
n-Hexane	110-54-3	TO-15	EPA RSL	73	0.01
Isopropylbenzene (Cumene)	98-82-8	TO-15	EPA RSL	42	0.01
Isopropyl ether	108-20-3		EPA RSL	73	0.01
m,p-Xylene	108-38-3 and 106-42-3	TO-15	EPA RSL	10	0.01
Methylene Chloride	75-09-2	TO-15	EPA RSL	63	0.01
Methyl tert-butyl ether	1634-04-4	TO-15	EPA RSL	9.4	0.01
Octane	111-65-9	TO-15	--	[b]	0.01
Propylbenzene	103-65-1	TO-15	EPA RSL	100	0.01
Propylene	115-07-1	TO-15	EPA RSL	310	0.01
o-Xylene	95-47-6	TO-15	EPA RSL	10	0.01
Styrene	100-42-5	TO-15	EPA RSL	100	0.01
Tetrachloroethene (PCE)	127-18-4	TO-15	EPA RSL	4.2	0.01
Tetrahydrofuran	109-99-9	TO-15	EPA RSL	210	0.01
Toluene	108-88-3	TO-15	EPA RSL	520	0.01
trans-1,2-Dichloroethene	156-60-5	TO-15	EPA RSL	6.3	0.01
trans-1,3-Dichloropropene	542-75-6	TO-15	EPA RSL	0.61	0.01

Analyte	CAS Number	Method	Screening Level	Lowest Screening Level Value ($\mu g/m^3$) [a]	CRQL (c) ($\mu g/m^3$)
Trichloroethene	79-01-6	TO-15	EPA RSL	0.21	0.01
Trichlorofluoromethane (Freon 11)	75-69-4	TO-15	EPA RSL	73	0.01
Vinyl Acetate	108-05-4	TO-15	EPA RSL	21	0.01
Vinyl Chloride	75-01-4	TO-15	EPA RSL	0.16	0.01

[a] The Lowest Screening Level Values in this table are RSLs for residential exposure. RSLs corresponding to an ELCR of 1E-06 and an HQ of 0.1 were used. RSLs from USEPA, May 2014
[b] No commonly applied surrogate for this chemical.
[c] CRQLs are from ALS Global – Salt Lake City
Notes:
$\mu g/m^3$ = micrograms per cubic meter
CRQL= Contract-required Quantification Level
Surrogate chemicals were used in this table to support the assessment of analytical sensitivity. The use of surrogates will be reviewed and may be revised during data evaluation and risk assessment.

TABLE 8: Project Laboratory – Target Analytes and Quantitation Limits-Volatile Organic Compounds in Water
QAPP for Department of Veterans Affairs
AOU-1 - 700 South 1600 East PCE Plume, Salt Lake City, Utah

Analyte	CAS Number	Method	Screening Level	Lowest Screening Level Value (µg/L)	CRQL(c) (µg/L)
1,1,1-Trichloroethane	71-55-6	SOM02.1	MCL	200	0.5
1,1,2,2-Tetrachloroethane	79-34-5	SOM02.1	EPA RSL	0.066	0.5
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	76-13-1	SOM02.1	EPA VISL	220	0.5
1,1,2-Trichloroethane	79-00-5	SOM02.1	EPA RSL	0.041	0.5
1,1-Dichloroethane	75-34-3	SOM02.1	EPA RSL	2.4	0.5
1,1-Dichloroethene	75-35-4	SOM02.1	MCL	7	0.5
1,2,3-Trichlorobenzene	87-61-6	SOM02.1	EPA RSL	0.52	0.5
1,2,4-Trichlorobenzene	120-82-1	SOM02.1	EPA RSL	0.39	0.5
1,2-Dibromo-3-Chloropropane	96-12-8	SOM02.1	EPA RSL	0.00032	0.5
1,2-Dibromoethane (EDB)	106-93-4	SOM02.1	EPA RSL	0.0065	0.5
1,2-Dichlorobenzene	95-50-1	SOM02.1	EPA RSL	28	0.5
1,2-Dichloroethane	107-06-2	SOM02.1	EPA RSL	0.15	0.5
1,2-Dichloropropane	78-87-5	SOM02.1	EPA RSL	0.38	0.5
1,3-Dichlorobenzene	541-73-1	SOM02.1	EPA RSL	28	0.5
1,4-Dichlorobenzene	106-46-7	SOM02.1	EPA RSL	0.42	0.5

Analyte	CAS Number	Method	Screening Level	Lowest Screening Level Value (µg/L)	CRQL(c) (µg/L)
2-Butanone (Methyl Ethyl Ketone)	78-93-3	SOM02.1	EPA RSL	490	5
2-Hexanone	591-78-6	SOM02.1	EPA RSL	3.4	5
4-Methyl-2-pentanone	108-10-1	SOM02.1	EPA RSL	100	5
Acetone	67-64-1	SOM02.1	EPA RSL	1,200	5
Benzene	71-43-2	SOM02.1	EPA RSL	0.39	0.5
Bromochloromethane	74-97-5	SOM02.1	EPA RSL	8.3	0.5
Bromodichloromethane	75-27-4	SOM02.1	EPA RSL	0.12	0.5
Bromoform	75-25-2	SOM02.1	EPA RSL	7.9	0.5
Bromomethane	74-83-9	SOM02.1	EPA RSL	0.7	0.5
Carbon Disulfide	75-15-0	SOM02.1	EPA RSL	72	0.5
Carbon Tetrachloride	56-23-5	SOM02.1	EPA RSL	0.39	0.5
Chlorobenzene	108-90-7	SOM02.1	EPA RSL	7.2	0.5
Chloroethane	75-00-3	SOM02.1	EPA RSL	2,100	0.5
Chloroform	67-66-3	SOM02.1	EPA RSL	0.19	0.5
Chloromethane	74-87-3	SOM02.1	EPA RSL	19	0.5
cis-1,2-Dichloroethene	156-59-2	SOM02.1	EPA RSL	2.8	0.5
Cyclohexane	110-82-7	SOM02.1	EPA VISL	160	0.5
Dibromochloromethane	124-48-1	SOM02.1	EPA RSL	0.15	0.5
Dichlorodifluoromethane (Freon 12)	75-71-8	SOM02.1	EPA VISL	1.2	0.5
Ethylbenzene	100-41-4	SOM02.1	EPA RSL	1.3	0.5
Isopropylbenzene (Cumene)	98-82-8	SOM02.1	EPA RSL	39	0.5
Methyl acetate	79-20-9	SOM02.1	EPA RSL	1,600	0.5
Methylcyclohexane	108-87-2	SOM02.1	--	[b]	0.5
Methyl Tert-Butyl Ether	1634-04-4	SOM02.1	EPA RSL	12	0.5
Methylene chloride	75-09-2	SOM02.1	MCL	5	0.5
m,p-Xylene	108-38-3 and 106-42-3	SOM02.1	EPA RSL	19	0.5
o-Xylene	95-47-6	SOM02.1	EPA RSL	19	0.5
Styrene	100-42-5	SOM02.1	MCL	100	0.5
Tetrachloroethene (PCE)	127-18-4	SOM02.1	EPA RSL	3.5	0.5
Toluene	108-88-3	SOM02.1	EPA RSL	86	0.5

Analyte	CAS Number	Method	Screening Level	Lowest Screening Level Value (µg/L)	CRQL(c) (µg/L)
Total 1,3-dichloropropene (cis- & trans-)	542-75-6	SOM02.1	EPA RSL	0.41	0.5
trans-1,2-Dichloroethene	156-60-5	SOM02.1	EPA RSL	8.6	0.5
Trichloroethene	79-01-6	SOM02.1	EPA RSL	0.26	0.5
Trichlorofluoromethane (Freon 11)	75-69-4	SOM02.1	EPA VISL	26	0.5
Vinyl Chloride	75-01-4	SOM02.1	EPA RSL	0.015	0.5

[a] The Lowest Screening Level Valuesin this table were the lowest of: (1) MCL, (2) RSLs for tap water and (3) VISLs using an attenuation factor (AF) of 0.001. RSLs and VISLs corresponding to an ELCR of 1E-06 and an HQ of 0.1 were used. RSLs from US EPA, May 2014 Tables.
[b] No commonly applied surrogate for this chemical.
[c] CRQL are generic to the CLP, and will be confirmed with the CLP laboratory, when it is selected by EPA.
Notes:
µg/L = microgram per liter
CRQL = Contract-required Quantification Level.
Surrogate chemicals were used in this table to support the assessment of analytical sensitivity. The use of surrogates will be reviewed and may be revised during data evaluation and risk assessment.

TABLE 10: Project Laboratory – Target Analytes and Quantitation Limits-Volatile Organic Compounds in Soil Gas
QAPP for Department of Veterans Affairs
AOU-1 - 700 South 1600 East PCE Plume, Salt Lake City, Utah

Analyte	CAS Number	Method	Screening Level	Lowest Screening Level Value (µg/m^3)	CRQL (c) (µg/m^3)
1,1,1-Trichloroethane	71-55-6	TO-15	VISL	520	0.01
1,1,2,2-Tetrachloroethane	79-34-5	TO-15	VISL	0.42	0.01
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	76-13-1	TO-15	VISL	0.21	0.01
1,1,2-Trichloroethane	79-00-5	TO-15	VISL	34,000	0.01
1,1-Dichloroethane	75-34-3	TO-15	VISL	15	0.01
1,1-Dichloroethene	75-35-4	TO-15	VISL	210	0.01
1,2,4-Trichlorobenzene	120-82-1	TO-15	VISL	2.1	0.01
1,2-Dibromo-3-Chloropropane	96-12-8	TO-15	VISL	0.0016	0.01
1,2,4-Trichlorobenzene	120-82-1	TO-15	VISL	2.1	0.01
1,2,4-Trimethylbenzene	95-63-6	TO-15	VISL	7.3	0.01
1,2-Dibromoethane (EDB)	106-93-4	TO-15	VISL	0.041	0.01
1,2-Dichlorobenzene	95-50-1	TO-15	VISL	210	0.01

Analyte	CAS Number	Method	Screening Level	Lowest Screening Level Value ($\mu g/m^3$)	CRQL (c) ($\mu g/m^3$)
1,2-Dichloroethane	107-06-2	TO-15	VISL	0.94	0.01
1,2-Dichloropropane	78-87-5	TO-15	VISL	2.4	0.01
1,3-Dichlorobenzene	541-73-1	TO-15	VISL	210	0.01
1,4-Dichlorobenzene	106-46-7	TO-15	VISL	2.2	0.01
2-Butanone (Methyl Ethyl Ketone)	78-93-3	TO-15	VISL	5,200	0.01
2-Hexanone	591-78-6	TO-15	VISL	31	0.01
4-Methyl-2-pentanone	108-10-1	TO-15	VISL	3,100	0.01
Acetone	67-64-1	TO-15	VISL	32,000	0.01
Benzene	71-43-2	TO-15	VISL	3.1	0.01
Bromochloromethane	74-97-5	TO-15	VISL	42	0.01
Bromodichloromethane	75-27-4	TO-15	VISL	0.66	0.01
Bromoform	75-25-2	TO-15	VISL	22	0.01
Bromomethane	74-83-9	TO-15	VISL	5.2	0.01
Carbon Disulfide	75-15-0	TO-15	VISL	730	0.01
Carbon Tetrachloride	56-23-5	TO-15	VISL	4.1	0.01
Chlorobenzene	108-90-7	TO-15	VISL	52	0.01
Chloroethane	75-00-3	TO-15	VISL	10,000	0.01
Chloroform	67-66-3	TO-15	VISL	1.1	0.01
Chloromethane	74-87-3	TO-15	VISL	94	0.01
cis-1,2-Dichloroethene	156-59-2	TO-15	VISL	63	0.01
cis-1,3-Dichloropropene	542-75-6	TO-15	VISL	6.1	0.01
Cyclohexane	110-82-7	TO-15	VISL	6,300	0.01
Dibromochloromethane	124-48-1	TO-15	VISL	0.9	0.01
Dichlorodifluoromethane (Freon 12)	75-71-8	TO-15	VISL	100	0.01
Ethylbenzene	100-41-4	TO-15	VISL	9.7	0.01
Isopropylbenzene (Cumene)	98-82-8	TO-15	VISL	420	0.01
Isopropyl ether	108-20-3	TO-15	VISL	730	0.01
Methylcyclohexane	108-87-2	TO-15	VISL	[b]	0.01
Methyl Tert-Butyl Ether	1634-04-4	TO-15	VISL	94	0.01
Methylene chloride	75-09-2	TO-15	VISL	630	0.01
m,p-Xylene	179601-23-1	TO-15	VISL	100	0.01

Analyte	CAS Number	Method	Screening Level	Lowest Screening Level Value ($\mu g/m^3$)	CRQL (c) ($\mu g/m^3$)
o-Xylene	95-47-6	TO-15	VISL	100	0.01
Styrene	100-42-5	TO-15	VISL	1,000	0.01
Tetrachloroethene (PCE)	127-18-4	TO-15	VISL	11.0	0.01
Toluene	108-88-3	TO-15	VISL	5,200	0.01
Total 1,3-dichloropropene (cis- & trans-)	542-75-6	TO-15	VISL	6.1	0.01
trans-1,2-Dichloroethene	156-60-5	TO-15	VISL	63	0.01
Trichloroethene	79-01-6	TO-15	VISL	0.42	0.01
Trichlorofluoromethane (Freon 11)	75-69-4	TO-15	VISL	730	0.01
Vinyl Chloride	75-01-4	TO-15	VISL	1.6	0.01

[a] The Lowest Screening Level Values in this table are residential VISLs using an attenuation factor (AF) of 0.1. VISLs corresponding to an ELCR of 1E-06 and an HQ of 0.1 were used. VISLs from USEPA, May 2014 Tables.
[b] No commonly applied surrogate for this chemical.
[c] CRQLs provided by ALS Global-Salt Lake City
Notes:
$\mu g/m^3$ = microgram per cubic meter
CRQL = Contract-required Quantification Level
Surrogate chemicals were used in this table to support the assessment of analytical sensitivity. The use of surrogates will be reviewed and may be revised during data evaluation and risk assessment.

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Vapor Intrusion Data Collection Report
AOU-1 700 South 1600 East PCE Plume
Salt Lake City, Utah

BPA No. VA259-14-A-0021
TO No. VA259-14-J-1384

October 2015

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Acronyms and Abbreviations

AOU	Accelerated Operable Unit
CCV	Calibration Confirmation Verification
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act, commonly called Superfund
Cis-1,2-DCE	Cis-1,2-dichloroethylene
CoC	Chain-of-Custody
COC	Contaminants of Concern
EPA	United States Environmental Protect Agency
ESS	East Side Springs
GIS	Geographic Information System
IA	Indoor Air Ambient Pressure
ug/m^3	Micrograms per cubic meter
NP	Indoor Air Negative Pressure
NPL	National Priorities List
PCE	Perchloroethylene or Tetrachloroethylene
PRP	Potentially Responsible Party
QAPP	Quality Assurance Project Plan
QA/QC	Quality Assurance/Quality Control
RAWP	Risk Assessment Workplan
RIWP	Remedial Investigation Workplan
RSL	Risk Screening Level
SAP	Sampling and Analysis Plan
SG	Soil Gas
SIM	Selective Ion Monitoring
SVOC	Semi-Volatile Organic Compound
TCE	Trichloroethylene
UDEQ	Utah Department of Environmental Quality
VA	United States Department of Veterans Affairs
VC	Vinyl Chloride
VI	Vapor Intrusion
VOC	Volatile Organic Compound

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1.0 Introduction and Purpose

This VI Protocol Data Collection Report presents the results of field activities which occurred between January 13, 2015 and April 14, 2015. The field activities were initiated to screen 36 sites for potential vapor intrusion (VI) at the Accelerated Operable Unit 1 (AOU-1) of the 700 South 1600 East Tetrachloroethylene (PCE) Plume Site (Plume Site).

The Plume Site is located on east side of Salt Lake City, Utah, with AOU-1 generally centered within the street blocks surrounding the Sunnyside Avenue and 1300 East Street intersection (Figure 1). The Plume Site is listed on U.S. Environmental Protection Agency's (EPA) National Priority List (NPL) pursuant to Section 105(a)(8) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The EPA added the Plume Site to the NPL on June 21, 2013 and identified the Veteran's Affairs (VA) George E. Whalen Medical Center as the only potentially responsible party (PRP).

The field effort was an initial screening effort that will eventually include screening of 50 to 60 sites specified by the Remedial Investigation Workplan (RIWP) for VI screening during the AOU-1 investigation. The 36 initial sites represent approximately two-thirds of the total number of sites that will be screened.

The specific volatile organic compounds of concern (COCs) at the sites were: PCE, trichloroethylene (TCE), cis-1,2-dichloroethylene (1,2-DCE), and vinyl chloride (VC). Field screening results from each site were compared to established Risk Screening Levels approved by the EPA and Utah Department of Environmental Quality (UDEQ), and sites with indoor air or soil gas COC concentrations above risk screening levels (RSLs) were subject to further confirmation sampling and fixed base laboratory analyses.

Although VC was also a COC for AOU-1 with an RSL of 0.08 ppb (0.17 ug/m^3), subsequent to the start of field activities, it was determined that the HAPSITE™ could not reliably detect VC at the RSL concentration or at any concentration under 5 ppb and an alternate field protocol, which relied on the collection of SUMMA canisters to ensure vinyl chloride could be detected during the screening activities, was developed and approved by regulators.

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The 36 sites consisted of 30 private residences, four private schools, one church, and an elder care facility. The sites were selected by VA from owners that voluntarily requested testing at public outreach meetings in 2014 and from subsequent volunteers that came forward after commencement of field activities. The site locations represented a cross-section of structure types, construction dates, depth-to-groundwater, and locations within and outside of the approximate Plume boundaries.

The sites were screened using an EPA and UDEQ-approved VI screening protocol that included the sampling of indoor air under ambient, negative, and positive pressure conditions; outdoor ambient air; and near-slab and open-field soil gas. The samples collected for VI screening included:

Table 1: Sampling Summary

Type Of Samples	Number Of Samples	Number Of Sites
Indoor Air	958	35
Outdoor Ambient	35	34
Near Slab Soil Gas	59	32
Open Field Soil Gas	10	4
QA (Daily CCV)	127	Every day of operation

This VI Protocol Data Collection Report provides a record of field screening activities and portable gas chromatograph/mass spectrometry (HAPSITE™) results at the 36 sites for indoor air, soil gas, and ambient air contaminants of concern (COCs). A second report, the Indoor Air QA Data Collection Report, provides the results of confirmatory SUMMA™ canister sampling conducted at the site.

The VI Field Screening Data Report consists of the following sections:

- Section 2 provides a summary of the data collection and quality assurance requirements for the use of the HAPSITE™ for vapor intrusion screening.
- Section 3 provides a discussion of the overall sampling program including a general timeline of activities, the total number/types of samples collected, and discussion of sites where field screening results for COCs exceeded the established RSLs.
- Section 4 provides discussions of any non-compliance issues related to HAPSITE™ use and field analyses, as well as a discussion of overall data quality and data gaps.

In addition, Appendices A through D provide copies of the final qualified field analytical results, copies of field logbooks, copies of the electronic field forms for each site, and copies of the raw HAPSITE™ data download files.

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2.0 Summary of Quality Assurance Requirements

The VI field screening commenced on January 13, 2015 and continued through April 14, 2015. Each screening location was assigned an identification number by VA to protect the property owner's privacy. Each number consisted of four digits followed by a structure type designator, H, S, C, or B which represents a home, school, church, or business. The site IDs for the initial screening effort consisted of sites 0001-H to 0033-H, and 0036-H through 0038-H. The site locations are shown on Figure 1.

The field activities were performed under the revised draft EPA and UDEQ provisionally approved RIWP dated December 2014, the EPA and UDEQ-approved Draft Final - Sample and Analysis Plan (SAP) and Quality Assurance Project Plan (QAPP) dated October 2014, and a detailed Draft Final - Protocol for Performing Indoor Air and Near-slab Soil Gas Assessments, dated December 2014, and approved by EPA and UDEQ as an attachment to the RIWP. In addition, RIWP Minor Field Modification-01, effective February 1, 2015, and RIWP Minor Field Modification-02: Clarification of QAPP Amendment Number 1, effective February 10, 2015, and Quality Assurance Project Plan Amendment No. 1, effective February 10, 2015, were subsequently approved by EPA and UDEQ and superseded portions of the QAPP. The Draft Final RIWP was accepted by the EPA on July 7, 2015 and conditionally approved by UDEQ on July 17, 2015 and was issued as a final document. The controlling documents for the AOU-1 investigation are all referenced in the Final RIWP dated July 17, 2015. The specific quality assurance requirements for the VI field screening activities were presented in the Final RIWP and its appended documents dated July 2015.

Quality assurance included the development of a specific field protocol for use of the HAPSITE™ portable GC/MS to conduct detailed real-time field testing of indoor air concentrations and provided further details for documentation of calibration, field recordkeeping, Global Positioning System (GPS) location of samples, GIS-compatible database entries, and sample result verification.

2.1 VI Field Screening Protocol

The vapor intrusion investigational approach for AOU-1 was adopted from an Environmental Security Technology Certification Program (ESTCP) Project No. ER- 201119-Final Report (GSI, 2013) and ER-201119-GD-Standard Protocol (GSI, 2014) and provides an alternative to the

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conventional investigation method of indoor air and sub-slab testing. This method is also generally known as the Hill Air Force Base method, for the location where the method was originally pioneered.

The following activities were performed as part of the VI screening protocol.

- Pre-Assessment Activities – confirmed access agreements/permissions, schedules, and addresses for testing; property owner/occupant review of questionnaire for locating potential indoor air background sources; and building condition assessment for sampling locations.
- Outdoor Real-time Qualitative Sampling - conducted ambient outdoor (background) testing at an upwind location adjacent to the structure (when possible) using the HAPSITE™ in analyze mode to identify outdoor presence of target volatile organic compounds (VOCs).
- Initial Real-Time Quantitative Sampling – conducted under ambient conditions, interior floor-by-floor and (if necessary) room-by-room quantitative assessment of target chlorinated VOCs: PCE, TCE, and 1,2-DCE.
- Survey of Interior Background Sources – used the HAPSITE™ in survey mode to identify the presence of any elevated localized (sub-areas of rooms) VOC concentrations as indicated by initial building survey and the ambient results to identify and record locations of interior background sources.
- Survey of Potential Vapor Intrusion Entry Points – assessed vapor entry points using HAPSITE™ in survey mode for areas identified during initial building condition assessment inspection.
- Negative Pressure Real-Time Quantitative Sampling – placed the building interior, or if the structure was divided into discrete areas, the portion of the building interior identified as having the greatest potential for vapor intrusion, under negative pressure and conducted continuous (repeated samples at a central location) quantitative sampling for target COCs during depressurization of 5 pascals and an air exchange of at least 2.5 volumes.
- Positive Pressure Real Time Quantitative Sampling – placed the same portion of the interior where depressurization was previously performed under positive pressure of 5 pascals and conducted continuous (repeated samples at a central location) quantitative sampling in the same locations utilizing the same sampling procedures used during the negative depressurization.
- Near-Slab Real-Time Soil Gas Sampling – performed real-time, near-slab soil gas quantitative evaluation of COCs using the HAPSITE™ in analytical mode. Collected samples at driven temporary sampling probe locations adjacent to structures tested for indoor COCs. Sample probes were driven adjacent to the structure's foundation to a depth approximately six inches below the base of the foundation or to the top of the water table or to refusal, whichever occurred first.
- Indoor Air and Soil Gas SUMMA Canister Sampling and Indoor Sorbent Tube Sampling for Semi-volatile Organic Compounds (SVOCs) – were deployed where HAPSITE™ data indicated exceedances of the established RSL for any COC, based on location relevant to the plume and at other selected locations. Results of SUMMA™ Canister and sorbent

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tube sampling are included in a separate report titled *Indoor Air QA Data Collection Report*.

2.2 Quality Assurance Requirements

2.2.1 HAPSITE™ Use

The HAPSITE™ was operated by a KD Analytical Trained and Certified assessment team member. The trained assessment team member was familiar with the general use of the instrument, as well as with the project specific measurements and QC requirements.

The HAPSITE™ was used in two modes - Quantitative Analyze and Qualitative Survey. In Quantitative Analyze mode the instrument was able to detect and quantify the target chlorinated VOCs: PCE, TCE, and cis-1,2-DCE. The sensitivity of the HAPSITE™ for chlorinated VOCs in Analyze Mode was 0.1 to 0.5 µg/m3, which is below the characterization criteria (EPA RSLs); for PCE, but close to the criteria for the other selected target analytes: PCE (RSL 11.0 µg/m3), TCE (RSL 0.48 µg/m3), and cis-1,2-DCE (no RSL established by EPA).

Survey mode was used to screen for indoor background generating materials and for screening potential entry points for subsurface vapors. In the Survey Mode, the HAPSITE™ bypassed the GC column and sent a continuous sample directly to the mass spectrometer detector. For the Survey Mode, the HAPSITE™ was carried from room to room and the concentrator probe placed near a suspected source or near potential vapor intrusion points (e.g., foundation cracks) to identify concentrations of VOCs, as further discussed below. The sensitivity of the HAPSITE™ for the target analytes in Survey Mode was in the low mg/m3 range.

For the Analyze Mode, selective ion monitoring (SIM) mode was used to increase the detector sensitivity for the target analytes. The customized method for the HAPSITE™ included selecting the characteristic ions for each compound targeted; the temperature settings; GC temperature profiles, including ramp times and rates; and the timing and mass measurements associated with each scan set in the method. The equipment vendor provided the method programming pre-installed. The method was designed for low concentration samples (i.e., 0.1 – 10 ppbV range), but when high concentrations were encountered (e.g., 100 – 1,000 ppbv), the method was modified by reducing the sampling duration – effectively diluting the sample and raising the lower quantification limit for any lower concentration VOCs.

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2.2.2 Calibration and QC Checks

For the Analyze Mode, tuning, initial calibration, continuing calibrations, and QC checks were performed to assure that the instrument met the data quality objectives. Prior to the analyses of any samples, blanks, or calibration standards in Analyze Mode, the instrument tuning check was performed to establish that the HAPSITE™ met the mass spectral ion abundance criteria. The instrument performance check (also known as the continuing calibration verification (CCV) gas was analyzed initially following the calibration of the HAPSITE™ and then at least once per 24-hour time period of operation. In the event the instrument performance check standard did not meet criteria, the HAPSITE™ was not used in Analyze mode until corrections (including recalibration) were made in accordance with the Operators Manual, however, the Survey Mode was able to be used to look for the selected ions of the chemicals of interest.

The HAPSITE™ was calibrated using a minimum of five chemical concentrations that span the monitoring range of interest (0.1 ppbv to 100 ppmv) in an initial calibration sequence to determine instrument sensitivity and the linearity of GC/MS response for the target compounds (PCE, TCE, and cis-1,2-DCE).

In the event a sample concentration overwhelmed the HAPSITE™ (i.e., concentrations completely saturated the detector as indicated by analytical results), the instrument required purging of the analytical system with nitrogen to clean the detector before the next sample can be analyzed. Purging was continued until the instrument results (blanks) indicated that no carry-over concentrations remained.

2.2.3 Storage and Routine Maintenance

The HAPSITE™ was stored at First Environment's field office in Midvale, Utah, a climate-controlled, dry location, where it was plugged into a stable power outlet and left in "Stand-by" mode – including over weekends. The use of Stand-by mode maintained the system temperature and carrier gas pumps and preserved the system calibration so that daily startup times were considerably shorter. As a result, the HAPSITE™ was able to maintain its reliability and calibration for up to a month.

A routine maintenance schedule for the HAPSITE, as described in the QAPP and in the Operators Manual, was implemented. Key maintenance included replacement of empty tuning standard cylinders and performing self-test programs before beginning sampling. The internal

power source (battery) for the HAPSITE™ provided only two to three hours of operation time and, except when using the instrument in Survey Mode, the HAPSITE was placed on a cart and connected to external electrical 110 Volt AC power.

2.3 Recordkeeping Requirements

Information that was included in the project data record relative to the field study included field log books, sample collection and handling records, operational records, GPS data, chain-of-custody (CoC) forms sample receipt records, and shipping documentation. Field log books documenting the daily VI screening activities at each site were kept electronically via hand-held tablets.

The project Field Team Leader (HAPSITE™ operator) maintained a field logbook of daily activities associated with the instrument use. The Project Manager maintained a separate logbook to record site observations, site sketches showing outdoor features of a site, and general site proceedings. The log books were bound with consecutively numbered pages. All entries were legibly written in black ink. Any entry errors were corrected by drawing one solid line through the incorrect entry followed by the user's initials and date. The bottom of each page was signed and dated by the individual making the entries. Factual and objective language was used. All entries were complete and accurate so as to allow reconstruction of each field activity. Activities were recorded contemporaneously as the work proceeded.

The field logbook cover included the following information:

- job name;
- site activity name;
- start date;
- end date of last logbook entry.

Daily entries of the following information were recorded in the logbooks and on electronic field forms as follows:

- date and time, expressed in 24-hour (military) format;
- sampling start/stop times;
- weather conditions;
- personnel present;
- field observations;

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- site identification and building layout (visual sketches where appropriate);
- locations of sampling points (GPS latitude/longitude coordinates and/or visual sketches where appropriate);
- descriptions of sample;
- sample identification number;
- numbers of samples taken;
- times of sample collection;
- number of Quality Assurance/Quality Control (QA/QC) samples taken;
- type and mode of field instrumentation;
- names of people collecting samples;
  all calibrations done;
- any other field instruments;
- any general observations or notes; and
- any deviations from the sampling plan.

Electronic field forms, including soil gas sampling data sheets, indoor air sampling data sheets, HAPSITE calibration records, and QC (CCV runs) information, were stored on a Microsoft Surface Pro tablet and used during field work to document the VI screening activities at each site.

Photographs were taken in the field to document sampling locations and conditions. A photographic log was kept within the electronic VI field form for each site and the date, location, photographer's name, and direction the photographer is facing (if appropriate) was recorded. Photographs were labeled, stored electronically, and submitted as attachments to the electronic field forms.

2.3.1 Mapping of Sample Locations and Geospatial Data

All outdoor sampling locations were located for GIS input using GPS survey techniques. A Trimble® GPS with sub-meter accuracy and additional software to perform post-processing data correction was used to survey soil gas sampling locations, surface water sampling locations, temporary groundwater monitoring points, and surface soil sample locations; elevations and orientations; utility clearances (as applicable); and other surface and subsurface features identified as useful to the project. Indoor air sampling locations were surveyed at the front entrance of the building tested, and an offset was measured to the center of the structure to determine the GIS location for all indoor air samples collected at the site.

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If the coordinates at a survey location could not be determined due to the presence of tree cover or other interfering obstacles which prohibited adequate signal reception, coordinates were obtained at a minimum of two alternate locations (offsets) where reception was available close to the original survey location. The distance and bearing from each of the alternate locations to the original survey location was then determined using a measuring tape and compass.

2.3.2 Field Data Records

The Field Data Records include:

- log books;
- analytical data;
- electronic field forms;
    - sampling locations (GIS),
    - figures of sampling locations,
    - sample IDs,
    - photographs.

These records, prepared by the Program Manager, have been provided to the VA RPM, EPA, and UDEQ as Appendices A through D of this report.

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3.0 VI Screening Results

The VI field screening (HAPSITE™) results are provided as an excel spreadsheet in Appendix A. The results are listed by the VA-provided Site ID numbers, followed by a unique sample name that includes the Site ID, sample date, sample type, sample number, and a suffix identifying the sample location. Hence a sample name of *A-0001H-012715-IA-003-LIV* can be identified as an indoor air sample collected from the living room of a residence at AOU-1 Site Location 0001-H on January 27, 2015.

The field efforts and HAPSITE™ screening is documented in the Project Manager and HAPSITE Team Leader Field Log Books provided as Appendix B. The VI Survey Electronic Field Forms are provided as Appendix C and include site-specific information and sample listings for each site, along with sample location (floor plan) sketch maps and copies of the Pre-Survey Questionnaire. The HAPSITE™ raw data output files are provided as Appendix D.

3.1 Indoor Air

A total of 958 indoor air samples were collected from 35 site locations (Figure 1) and screened using the HAPSITE. The sample total included 479 samples conducted under "as found" ambient conditions, 274 samples collected during negative pressurization of the site structures, and 205 samples collected during positive pressurization of the structures. Twenty-four samples were collected under ambient conditions from non-habitable spaces (spaces such as sump pits, soil floor crawl spaces, or wall cavities that cannot be occupied by a human) to further identify vapor entry points..

Table 2: Indoor Air Screening Results –Levels above RSL

Structure ID	Sample ID	Location in Structure	Sample Type	Analyte	Result (ug/m^3)	RSL (ug/m3)
0003-H	A-0003H-011915-IA-001-LIV	Main level - Living/Dining Room	IA	TCE	0.660	0.48
0011-H	A-0011H-022715-IA-009-BA2	Basement - Bathroom	IA	PCE	19.914	11
	A-0011H-022715-IA-012A-LLL	Basement – Family Room	NP	PCE	12.492	11

Structure ID	Sample ID	Location in Structure	Sample Type	Analyte	Result (ug/m^3)	RSL (ug/m3)
	A-0011H-022715-IA-010-STO	Basement - Shelf/Crawl Space Storage Area[(a)]	IA	PCE	25.960	11
0017-H	A-0017H-011415-IA-009_SUMP	Enclosed Sump in Basement Closet[(a)]	IA	TCE	10.547	0.48
	A-0017H-011415-IA-009_SUMP	Enclosed Sump in Basement Closet[(a)]	IA	PCE	20.253	11
0018-H	A-0018H-021815-IA-004-BR5	Basement Bedroom	IA	PCE	16.443	11
	A-0018H-021815-IA-003-BA1	Basement Bathroom	IA	PCE	15.813	11
	A-0018H-021815-IA-002-LLL	Basement living/family room	IA	TCE	0.493	0.48
0022-S	A-0022S-040615-IA-011-RM205	Main Bldg - 2nd Floor - Girls Restroom - Rm 205	IA	TCE	0.671	0.48
	A-0022S-040615-IA-008-STO1	Main Bldg - 2nd Floor maintenance storeroom - Rm 221[(a)]	IA	PCE	11.238	11
	A-0022S-040615-IA-005-CAFÉ	Main Bldg - 1st floor cafeteria/ lunch room	IA	TCE	1.332	0.48
0023-H	A-0023H-030915-IA-002-SUMP	Covered Sump Pit in Furnace Room/Basement[(a)]	IA	TCE	3.489	0.48
	A-0023H-030915-IA-002-SUMP	Covered Sump Pit in Furnace Room/Basement[(a)]	IA	PCE	132.374	11
	A-0037H-040215-IA-019-FUR3	Basement - Analyzed in Large Floor Crack in Furnace Room[(a)]	IA	PCE	88.249	11
0037-H	A-0037H-040215-IA-020A-LAU	Basement Laundry Room	NP	PCE	13.963	11
	A-0037H-040215-IA-020B-LAU	Basement Laundry Room	NP	PCE	12.465	11
	A-0037H-040215-IA-020C-LAU	Basement Laundry Room	NP	PCE	14.112	11
	A-0037H-040215-IA-020D-LAU	Basement Laundry Room	NP	PCE	13.868	11
	A-0037H-040215-IA-020F-LAU	Basement Laundry Room	NP	PCE	14.769	11
	A-0037H-040215-IA-020G-LAU	Basement Laundry Room	NP	PCE	13.434	11

[(a)] = sample was collected under ambient conditions from a non-habitable space (a space such as a sump pit, soil floor crawl space, or wall cavity) that cannot be occupied by a human
IA = Indoor Air Ambient Pressure; NP = Indoor Air Negative Pressure

Concentrations of PCE from samples at habitable space locations exceeded the indoor RSL of 11 ug/m3 in a total of 10 samples at 3 (Figure 1) of the 35 sites where indoor air was tested; 0011-H, 0018-H, and 0037-H. Site 0011-H contained a PCE concentration of 19.9 ug/m^3 in an ambient sample from the basement bathroom and a concentration of 12.5 ug/m^3 in a negative pressure test sample from the basement family room. Site 0018-H contained PCE concentrations of 16.4 and 15.8 ug/m^3 in two ambient air samples from the basement bedroom and bathroom, respectively. Six samples collected from the basement laundry room during negative pressure testing at site 0037-H contained PCE concentrations ranging from 12.5 to 14.8 ug/m^3. No ambient indoor air samples from 0037-H exceeded the RSL for PCE.

All three of these sites are located within line of sight of the intersection of 1200 East and 900 South, where seeps and springs are abundant and historical water samples have indicated the presence of PCE in groundwater. Furthermore, samples from non-habitable locations (a soil floored crawl space at 0011-H, and basement floor/wall cracks at 0018-H and 0037-H) contained elevated levels of PCE. RSL exceedances for indoor air are shown with yellow shaded lines in the Appendix A data table.

PCE concentrations did not exceed the RSL at 0017-H or 0023-H in any indoor air sample from a habitable space during the screening activities, but these two residences had sub-grade covered groundwater sump pits in their basements that contained ambient PCE concentrations well above the indoor RSL. These two sites are also located in the portion of AOU-1 along the East Bench Fault where abundant seeps and springs containing PCE occur.

Indoor air concentrations of TCE from samples at habitable space locations exceeded the indoor RSL of 0.48 ug/m^3 in three samples at four sites; 0003-H, 0018-H, and 0022-S. At Site 0003-H, TCE was detected in an ambient indoor air sample collected in the main floor living room at a concentration of 0.66 ug/m^3. Site 0018-H had a TCE concentration of 0.49 ug/m^3 in the basement family room (immediately adjacent to rooms containing PCE RSL exceedances). Site 0022-S had TCE concentrations of 0.67 and 1.3 ug/m^3 from samples located in the 2nd floor girls restroom and the 1st floor cafeteria, respectively. The TCE exceedance at 0022-S may be attributable to indoor source materials and not vapor intrusion. A stainless steel cleaning solution containing TCE was observed in the 2nd floor maintenance storage closet. This material was reportedly used by the school staff to clean stainless steel bathroom and cafeteria fixtures.

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3.2 Soil Gas

A total of 69 soil gas samples were collected from 34 sites shown on Figure 1. Of these, 59 were near-slab (defined as within five feet of a structure's foundation) collected at 32 sites. Ten were open-field (greater than five feet from a building) soil gas samples collected at four sites.

Only one near-slab soil gas sample, 0017-H-SG-001-4' (Figure 1), contained an RSL exceedance for PCE (soil gas RSL of 370 ug/m^3) with a concentration of 430.9 ug/m^3. Soil gas sample 0011-H-SG-003-4' contained a PCE concentration of 358 ug/m^3, just below the RSL. TCE did not exceed its soil gas RSL of 16 ug/m^3 at any sample location. No open-field soil gas sample had concentrations exceeding RSLs for PCE or TCE. RSL exceedances for soil gas are shown with light blue shaded lines in the Appendix A data table.

Table 3: Soil Gas Screening above RSL

Structure ID	Sample ID	Location in Structure	Sample Type	Analyte	Result (ug/m^3)	Residential Screening Level; RSL (ug/m^3)
0017-H	A-0017H-011415-SG-001-04'	Southeast corner of house	SG - near slab	PCE	430.881	370

3.3 Outdoor Ambient Air

A total of 34 outdoor ambient samples were collected and analyzed from AOU-1. Only one outdoor ambient sample, site 0008-H, contained levels and TCE above the RSL. Subsequent QA review of the raw data found that the instrument analytical confidence was well below the 0.699 acceptance criterion.

4.0 Deviations from VI Sampling Protocol and QAPP/SAP

4.1 VI Protocol Deviations

No significant deviations from the final approved VI protocol affected the usefulness of the initial VI screening results. Site 0031-S, a large-school campus, had previously conducted an independent indoor air sampling program and only consented to soil gas testing. Calibration records, auto tune records, and daily CCV samples show the HAPSITE™ to have been in calibration during testing at all 36 sites. Review of the raw data shows that the HAPSITE program failed to save the analytical results of a location fewer than five times over the entire field effort.

Minor deviations from the final VI protocol were primarily photograph omissions and minor glitches with the early version of the electronic VI Survey Form that resulted in some data being re-entered at the end of the day from written field logbook notes.

4.2 QAPP/SAP Deviations

No significant QAPP/SAP deviations affected the VI screening results with respect to the evaluation of the indoor air vapor intrusion pathway at the 35 sites fully tested under the VI protocol during this phase of work

Near-slab soil gas sampling probes could not be installed after numerous attempts at two sites, 00032-H and 0038-H, due to very shallow refusal on large cobbles or boulders; however, these two sites did not have any elevated detections of indoor air COCs. Near-slab soil gas samples were collected from a depth of four feet or less at many sites as a result of the rocky soils prevalent within AOU-1, and the vertical delineation of soil gas was limited. The lack of vertical delineation data will need to be addressed during future sampling phases by using mechanical rather than manual probe installation methods. Due to access restrictions to mechanical equipment, this may not be feasible for many near-slab locations. Vertical delineation of soil gas concentrations relative to the ground surface and water table at open-field locations should still provide adequate information.

Open-field soil gas sampling was to obtain additional information for extrapolation of the potential for VI to occur at properties adjacent to the initial VI testing sites. However, the number of open-field soil gas sample locations along street right-of-ways and near any seeps and springs

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observed on the 36 sites was limited. Ultimately, open-field samples were only collected at sites 0018-H, 0019-B, 0026-H, 0031-S. Large cobbles and boulders in sandy soil intervals, tight clays, and the close spacing of residences and their associated pavements and landscaping greatly limited the manual installation of open-field soil gas sample probes. In addition, much of the public roadside right-of-ways were narrow and underlain by numerous utility lines and large trees. Future soil gas investigation efforts will require mechanical equipment, and we will likely need to consider installing some points through concrete driveways or paved streets rather than through vegetated surfaces.

The ambient outdoor sample from Site 0007-H did not properly record in the HAPSITE™ data file and no outdoor ambient data was available for this site.

4.3 Data Gaps

Any detailed evaluation of data gaps with respect to the VI Screening program in AOU-1 is premature. The investigation, as described in the RIWP, is only about 50 percent complete after this initial phase of work.

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5.0 References

GSI Environmental, 2013: Final Report, ESTCP Project ER-201119: Use of On-Site GC/MS Analysis to Distinguish between Vapor Intrusion and Indoor Sources of VOCs (Beckley, McHugh, Gorder, Dettenmaier, Rivera-Duarte, Final Version, November 2013).

GSI Environmental, 2013. Final Report, ESTCP Project ER-201119: Use of GC/MS Analysis to Distinguish Between Vapor Intrusion and Indoor Sources of VOCs – Standardized Protocol for On-Site Evaluation of Vapor Intrusion, (Beckley, McHugh, Gorder, Dettenmaier, Rivera-Duarte, Final Version, July 2014).

INFICON (2006). *Operation Manual for the HAPSITE Smart Plus – 074-472-P1C*.

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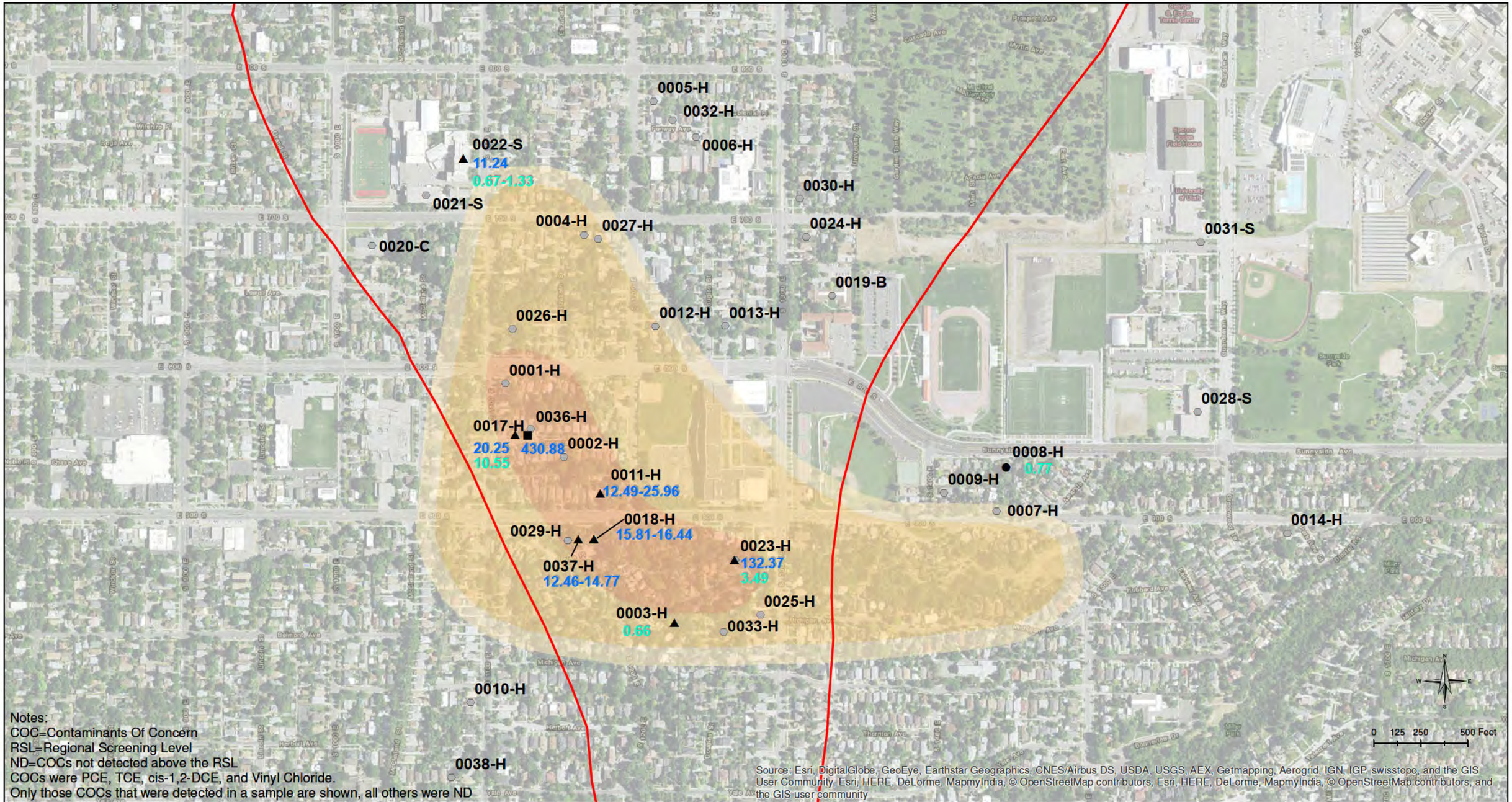
FIGURE



Notes:
COC=Contaminants Of Concern
RSL=Regional Screening Level
ND=COCs not detected above the RSL
COCs were PCE, TCE, cis-1,2-DCE, and Vinyl Chloride.
Only those COCs that were detected in a sample are shown, all others were ND

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community, Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community

Legend

- ▲ Indoor Air Sample Location
- ● Outdoor Ambient Air Sample Location
- ■ Soil Gas Sample Location
- Sample Not Detected Above RSLs
- Wasatch Fault Line
- AOU-1 Area Where Groundwater/Springs Are Known to Have PCE Concentration
- AOU-1 Area Where Groundwater May Have PCE Contamination
- AOU-1 100' Buffer Area
- 16.44 Tetrachloroethene Analytical Result (ug/m³)
- 0.49 Trichloroethene Analytical Result (ug/m³)
- **0029-H** Structure ID

FIRST ENVIRONMENT
91 Fulton Street
Boonton, New Jersey 07005

SALT LAKE CITY VETERANS HOSPITAL
Salt Lake City, Utah
FIGURE 1
VI Hapsite Screening Results
Exceeding RSLs, January – April 2015

Designed	Drawn	Checked	Approved	Date
	CJM	EJR	EJR	9/10/2015

APPENDIX A

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0001-H	A-0001H-012615-CCV	40.751728	-111.859211	4405	001	CCV - 5.0 ppb	CCV	NA	NA	1/26/2015	cis12Dichloroethene	0.995	5.46	5.46	Yes	=	0.1	0.431858	NA	NA	NA	NA
0001-H	A-0001H-012615-CCV	40.751728	-111.859211	4405	001	CCV - 5.0 ppb	CCV	NA	NA	1/26/2015	Trichloroethene	0.523	4.895	4.895	No	NR	0.1	0.78402	NA	NA	NA	NA
0001-H	A-0001H-012615-CCV	40.751728	-111.859211	4405	001	CCV - 5.0 ppb	CCV	NA	NA	1/26/2015	Tetrachloroethene	0.994	5.158	5.158	Yes	=	0.1	1.335266	NA	NA	NA	NA
0001-H	A-0001H-012715-IA-011-BA2	40.751728	-111.859211	4405	011	Basement bathroom	IA	NA	NA	1/27/2015	cis12Dichloroethene	0.625	0.001	<0.1	No	U	0.1	0.003962	NE	NE	No	No
0001-H	A-0001H-012715-IA-011-BA2	40.751728	-111.859211	4405	011	Basement bathroom	IA	NA	NA	1/27/2015	Trichloroethene	0.523	0.021	<0.1	No	NR	0.1	0.11277	16	0.48	No	No
0001-H	A-0001H-012715-IA-011-BA2	40.751728	-111.859211	4405	011	Basement bathroom	IA	NA	NA	1/27/2015	Tetrachloroethene	0.992	0.066	<0.1	Yes	U	0.1	0.447348	370	11	No	No
0001-H	A-0001H-012715-IA-010-STO	40.751728	-111.859211	4405	010	Store room (with floor sump)	IA	NA	NA	1/27/2015	cis12Dichloroethene	0.769	0.06	<0.1	Yes	U	0.1	0.23772	NE	NE	No	No
0001-H	A-0001H-012715-IA-010-STO	40.751728	-111.859211	4405	010	Store room (with floor sump)	IA	NA	NA	1/27/2015	Trichloroethene	0.523	0.037	<0.1	No	NR	0.1	0.19869	16	0.48	No	No
0001-H	A-0001H-012715-IA-010-STO	40.751728	-111.859211	4405	010	Store room (with floor sump)	IA	NA	NA	1/27/2015	Tetrachloroethene	0.995	0.089	<0.1	Yes	U	0.1	0.603242	370	11	No	No
0001-H	A-0001H-012715-IA-009-LAU	40.751728	-111.859211	4405	009	Laundry Closet	IA	NA	NA	1/27/2015	cis12Dichloroethene	0.824	0.04	<0.1	Yes	U	0.1	0.15848	NE	NE	No	No
0001-H	A-0001H-012715-IA-009-LAU	40.751728	-111.859211	4405	009	Laundry Closet	IA	NA	NA	1/27/2015	Trichloroethene	0.523	0.023	<0.1	No	NR	0.1	0.12351	16	0.48	No	No
0001-H	A-0001H-012715-IA-009-LAU	40.751728	-111.859211	4405	009	Laundry Closet	IA	NA	NA	1/27/2015	Tetrachloroethene	0.996	0.074	<0.1	Yes	U	0.1	0.501572	370	11	No	No
0001-H	A-0001H-012715-IA-008-BR2	40.751728	-111.859211	4405	008	Basement Bedroom	IA	NA	NA	1/27/2015	cis12Dichloroethene	0.885	0.045	<0.1	Yes	U	0.1	0.17829	NE	NE	No	No
0001-H	A-0001H-012715-IA-008-BR2	40.751728	-111.859211	4405	008	Basement Bedroom	IA	NA	NA	1/27/2015	Trichloroethene	0.523	0.022	<0.1	No	NR	0.1	0.11814	16	0.48	No	No
0001-H	A-0001H-012715-IA-008-BR2	40.751728	-111.859211	4405	008	Basement Bedroom	IA	NA	NA	1/27/2015	Tetrachloroethene	0.994	0.073	<0.1	Yes	U	0.1	0.494794	370	11	No	No
0001-H	A-0001H-012715-IA-007-FAM	40.751728	-111.859211	4405	007	Basement Family Room	IA	NA	NA	1/27/2015	cis12Dichloroethene	0.806	0.041	<0.1	Yes	U	0.1	0.162442	NE	NE	No	No
0001-H	A-0001H-012715-IA-007-FAM	40.751728	-111.859211	4405	007	Basement Family Room	IA	NA	NA	1/27/2015	Trichloroethene	0.523	0.022	<0.1	No	NR	0.1	0.11814	16	0.48	No	No
0001-H	A-0001H-012715-IA-007-FAM	40.751728	-111.859211	4405	007	Basement Family Room	IA	NA	NA	1/27/2015	Tetrachloroethene	0.996	0.079	<0.1	Yes	U	0.1	0.535462	370	11	No	No
0001-H	A-0001H-012715-IA-006-CLO	40.751728	-111.859211	4405	006	Broom closet in hall	IA	NA	NA	1/27/2015	cis12Dichloroethene	0.703	0.071	<0.1	Yes	U	0.1	0.281302	NE	NE	No	No
0001-H	A-0001H-012715-IA-006-CLO	40.751728	-111.859211	4405	006	Broom closet in hall	IA	NA	NA	1/27/2015	Trichloroethene	0.523	0.024	<0.1	No	NR	0.1	0.12888	16	0.48	No	No
0001-H	A-0001H-012715-IA-006-CLO	40.751728	-111.859211	4405	006	Broom closet in hall	IA	NA	NA	1/27/2015	Tetrachloroethene	0.994	0.057	<0.1	Yes	U	0.1	0.386346	370	11	No	No
0001-H	A-0001H-012715-IA-005-BA1	40.751728	-111.859211	4405	005	Bathroom at end of hall	IA	NA	NA	1/27/2015	cis12Dichloroethene	0.795	0.059	<0.1	Yes	U	0.1	0.233758	NE	NE	No	No
0001-H	A-0001H-012715-IA-005-BA1	40.751728	-111.859211	4405	005	Bathroom at end of hall	IA	NA	NA	1/27/2015	Trichloroethene	0.523	0.027	<0.1	No	NR	0.1	0.14499	16	0.48	No	No
0001-H	A-0001H-012715-IA-005-BA1	40.751728	-111.859211	4405	005	Bathroom at end of hall	IA	NA	NA	1/27/2015	Tetrachloroethene	0.995	0.075	<0.1	Yes	U	0.1	0.50835	370	11	No	No
0001-H	A-0001H-012715-IA-004-MBR	40.751728	-111.859211	4405	004	Master Bedroom	IA	NA	NA	1/27/2015	cis12Dichloroethene	0.816	0.055	<0.1	Yes	U	0.1	0.21791	NE	NE	No	No
0001-H	A-0001H-012715-IA-004-MBR	40.751728	-111.859211	4405	004	Master Bedroom	IA	NA	NA	1/27/2015	Trichloroethene	0.523	0.027	<0.1	No	NR	0.1	0.14499	16	0.48	No	No
0001-H	A-0001H-012715-IA-004-MBR	40.751728	-111.859211	4405	004	Master Bedroom	IA	NA	NA	1/27/2015	Tetrachloroethene	0.995	0.082	<0.1	Yes	U	0.1	0.555796	370	11	No	No
0001-H	A-0001H-012715-IA-003-BR1	40.751728	-111.859211	4405	003	Baby's Bedroom	IA	NA	NA	1/27/2015	cis12Dichloroethene	0.814	0.062	<0.1	Yes	U	0.1	0.245644	NE	NE	No	No
0001-H	A-0001H-012715-IA-003-BR1	40.751728	-111.859211	4405	003	Baby's Bedroom	IA	NA	NA	1/27/2015	Trichloroethene	0.523	0.027	<0.1	No	NR	0.1	0.14499	16	0.48	No	No
0001-H	A-0001H-012715-IA-003-BR1	40.751728	-111.859211	4405	003	Baby's Bedroom	IA	NA	NA	1/27/2015	Tetrachloroethene	0.995	0.069	<0.1	Yes	U	0.1	0.467682	370	11	No	No
0001-H	A-0001H-012715-IA-002-KIT	40.751728	-111.859211	4405	002	Kitchen	IA	NA	NA	1/27/2015	cis12Dichloroethene	0.856	0.069	<0.1	Yes	U	0.1	0.273378	NE	NE	No	No
0001-H	A-0001H-012715-IA-002-KIT	40.751728	-111.859211	4405	002	Kitchen	IA	NA	NA	1/27/2015	Trichloroethene	0.523	0.027	<0.1	No	NR	0.1	0.14499	16	0.48	No	No
0001-H	A-0001H-012715-IA-002-KIT	40.751728	-111.859211	4405	002	Kitchen	IA	NA	NA	1/27/2015	Tetrachloroethene	0.995	0.086	<0.1	Yes	U	0.1	0.582908	370	11	No	No
0001-H	A-0001H-012715-IA-001-LIV	40.751728	-111.859211	4405	001	Main level living/dining room	IA	NA	NA	1/27/2015	cis12Dichloroethene	0.989	0.109	0.109	Yes	=	0.1	0.431858	NE	NE	No	No
0001-H	A-0001H-012715-IA-001-LIV	40.751728	-111.859211	4405	001	Main level living/dining room	IA	NA	NA	1/27/2015	Trichloroethene	0.523	0.146	0.146	No	NR	0.1	0.78402	16	0.48	No	No
0001-H	A-0001H-012715-IA-001-LIV	40.751728	-111.859211	4405	001	Main level living/dining room	IA	NA	NA	1/27/2015	Tetrachloroethene	0.995	0.197	0.197	Yes	=	0.1	1.335266	370	11	No	No
0001-H	A-0001H-012715-IA-013L-LIV	40.751728	-111.859211	4405	024	Main level living/dining room	NP	LOST	LOST	1/27/2015	cis12Dichloroethene	0.791	0.002	<0.1	Yes	U	0.1	0.007924	NE	NE	No	No
0001-H	A-0001H-012715-IA-013L-LIV	40.751728	-111.859211	4405	024	Main level living/dining room	NP	LOST	LOST	1/27/2015	Trichloroethene	0.523	0.004	<0.1	No	NR	0.1	0.02148	16	0.48	No	No
0001-H	A-0001H-012715-IA-013L-LIV	40.751728	-111.859211	4405	024	Main level living/dining room	NP	LOST	LOST	1/27/2015	Tetrachloroethene	0.996	0.015	<0.1	Yes	U	0.1	0.10167	370	11	No	No
0001-H	A-0001H-012715-IA-013K-LIV	40.751728	-111.859211	4405	023	Main level living/dining room	NP	LOST	LOST	1/27/2015	cis12Dichloroethene	0.961	0.003	<0.1	Yes	U	0.1	0.011886	NE	NE	No	No
0001-H	A-0001H-012715-IA-013K-LIV	40.751728	-111.859211	4405	023	Main level living/dining room	NP	LOST	LOST	1/27/2015	Trichloroethene	0.523	0.005	<0.1	No	NR	0.1	0.02685	16	0.48	No	No
0001-H	A-0001H-012715-IA-013K-LIV	40.751728	-111.859211	4405	023	Main level living/dining room	NP	LOST	LOST	1/27/2015	Tetrachloroethene	0.997	0.016	<0.1	Yes	U	0.1	0.108448	370	11	No	No
0001-H	A-0001H-012715-IA-013J-LIV	40.751728	-111.859211	4405	022	Main level living/dining room	NP	LOST	LOST	1/27/2015	cis12Dichloroethene	0.91	0.005	<0.1	Yes	U	0.1	0.01981	NE	NE	No	No
0001-H	A-0001H-012715-IA-013J-LIV	40.751728	-111.859211	4405	022	Main level living/dining room	NP	LOST	LOST	1/27/2015	Trichloroethene	0.523	0.005	<0.1	No	NR	0.1	0.02685	16	0.48	No	No
0001-H	A-0001H-012715-IA-013J-LIV	40.751728	-111.859211	4405	022	Main level living/dining room	NP	LOST	LOST	1/27/2015	Tetrachloroethene	0.994	0.017	<0.1	Yes	U	0.1	0.115226	370	11	No	No
0001-H	A-0001H-012715-IA-013I-LIV	40.751728	-111.859211	4405	021	Main level living/dining room	NP	LOST	LOST	1/27/2015	cis12Dichloroethene	0.772	0.006	<0.1	Yes	U	0.1	0.023772	NE	NE	No	No
0001-H	A-0001H-012715-IA-013I-LIV	40.751728	-111.859211	4405	021	Main level living/dining room	NP	LOST	LOST	1/27/2015	Trichloroethene	0.523	0.005	<0.1	No	NR	0.1	0.02685	16	0.48	No	No
0001-H	A-0001H-012715-IA-013I-LIV	40.751728	-111.859211	4405	021	Main level living/dining room	NP	LOST	LOST	1/27/2015	Tetrachloroethene	0.996	0.021	<0.1	Yes	U	0.1	0.142338	370	11	No	No
0001-H	A-0001H-012715-IA-013H-LIV	40.751728	-111.859211	4405	020	Main level living/dining room	NP	LOST	LOST	1/27/2015	cis12Dichloroethene	0.767	0.006	<0.1	Yes	U	0.1	0.023772	NE	NE	No	No
0001-H	A-0001H-012715-IA-013H-LIV	40.751728	-111.859211	4405	020	Main level living/dining room	NP	LOST	LOST	1/27/2015	Trichloroethene	0.523	0.007	<0.1	No	NR	0.1	0.03759	16	0.48	No	No
0001-H	A-0001H-012715-IA-013H-LIV	40.751728	-111.859211	4405	020	Main level living/dining room	NP	LOST	LOST	1/27/2015	Tetrachloroethene	0.996	0.023	<0.1	Yes	U	0.1	0.155894	370	11	No	No
0001-H	A-0001H-012715-IA-013G-LIV	40.751728	-111.859211	4405	019	Main level living/dining room	NP	LOST	LOST	1/27/2015	cis12Dichloroethene	0.924	0.008	<0.1	Yes	U	0.1	0.031696	NE	NE	No	No
0001-H	A-0001H-012715-IA-013G-LIV	40.751728	-111.859211	4405	019	Main level living/dining room	NP	LOST	LOST	1/27/2015	Trichloroethene	0.523	0.007	<0.1	No	NR	0.1	0.03759	16	0.48	No	No
0001-H	A-0001H-012715-IA-013G-LIV	40.751728	-111.859211	4405	019	Main level living/dining room	NP	LOST	LOST	1/27/2015	Tetrachloroethene	0.995	0.024	<0.1	Yes	U	0.1	0.162672	370	11	No	No
0001-H	A-0001H-012715-IA-013F-LIV	40.751728	-111.859211	4405	018	Main level living/dining room	NP	LOST	LOST	1/27/2015	cis12Dichloroethene	0.857	0.001	<0.1	Yes	U	0.1	0.003962	NE	NE	No	No
0001-H	A-0001H-012715-IA-013F-LIV	40.751728	-111.859211	4405	018	Main level living/dining room	NP	LOST	LOST	1/27/2015	Trichloroethene	0.523	0.007	<0.1	No	NR	0.1	0.03759	16	0.48	No	No
0001-H	A-0001H-012715-IA-013F-LIV	40.751728	-111.859211	4405	018	Main level living/dining room	NP	LOST	LOST	1/27/2015	Tetrachloroethene	0.995	0.024	<0.1	Yes	U	0.1	0.162672	370	11	No	No
0001-H	A-0001H-012715-IA-013E-LIV	40.751728	-111.859211	4405	017	Main level living/dining room	NP	LOST	LOST	1/27/2015	cis12Dichloroethene	0.798	0.01	<0.1	Yes	U	0.1	0.03962	NE	NE	No	No
0001-H	A-0001H-012715-IA-013E-LIV	40.751728	-111.859211	4405	017	Main level living/dining room	NP	LOST	LOST	1/27/2015	Trichloroethene	0.523	0.008	<0.1	No	NR	0.1	0.04296	16	0.48	No	No
0001-H	A-0001H-012715-IA-013E-LIV	40.751728	-111.859211	4405	017	Main level living/dining room	NP	LOST	LOST	1/27/2015	Tetrachloroethene	0.996	0.027	<0.1	Yes	U	0.1	0.183006	370	11	No	No
0001-H	A-0001H-012715-IA-013D-LIV	40.751728	-111.859211	4405	016	Main level living/dining room	NP	LOST	LOST	1/27/2015	cis12Dichloroethene	0.968	0.005	<0.1	Yes	U	0.1	0.01981	NE	NE	No	No
0001-H	A-0001H-012715-IA-013D-LIV	40.751728	-111.859211	4405	016	Main level living/dining room	NP	LOST	LOST	1/27/2015	Trichloroethene	0.523	0.009	<0.1	No	NR	0.1	0.04833	16	0.48	No	No
0001-H	A-0001H-012715-IA-013D-LIV	40.751728	-111.859211	4405	016	Main level living/dining room	NP	LOST	LOST	1/27/2015	Tetrachloroethene	0.996	0.029	<0.1	Yes	U	0.1	0.196562	370	11	No	No
0001-H	A-0001H-012715-IA-013C-LIV	40.751728	-111.859211	4405	015	Main level living/dining room	NP	LOST	LOST	1/27/2015	cis12Dichloroethene	0.832	0.014	<0.1	Yes	U	0.1	0.055468	NE	NE	No	No
0001-H	A-0001H-012715-IA-013C-LIV	40.751728	-111.859211	4405	015	Main level living/dining room	NP	LOST	LOST	1/27/2015	Trichloroethene	0.523	0.01	<0.1	No	NR	0.1	0.0537	16	0.48	No	No
0001-H	A-0001H-012715-IA-013C-LIV	40.751728	-111.859211	4405	015	Main level living/dining room	NP	LOST	LOST	1/27/2015	Tetrachloroethene	0.996	0.031	<0.1	Yes	U	0.1	0.210118	370	11	No	No
0001-H	A-0001H-012715-IA-013B-LIV	40.751728	-111.859211	4405	014	Main level living/dining room	NP	LOST	LOST	1/27/2015	cis12Dichloroethene	0.843	0.018	<0.1	Yes	U	0.1	0.071316	NE	NE	No	No
0001-H	A-0001H-012715-IA-013B-LIV	40.751728	-111.859211	4405	014	Main level living/dining room	NP	LOST	LOST	1/27/2015	Trichloroethene	0.523	0.011	<0.1	No	NR	0.1	0.05907	16	0.48	No	No
0001-H	A-0001H-012715-IA-013B-LIV	40.751728	-111.859211	4405	014	Main level living/dining room	NP	LOST	LOST	1/27/2015	Tetrachloroethene	0.995	0.033	<0.1	Yes	U	0.1	0.223674	370	11	No	No
0001-H	A-0001H-012715-IA-013A-LIV	40.751728	-111.859211	4405	013	Main level living/dining room	NP	LOST	LOST	1/27/2015	cis12Dichloroethene	0.948	0.018	<0.1	Yes	U	0.1	0.071316	NE	NE	No	No
0001-H	A-0001H-012715-IA-013A-LIV	40.751728	-111.859211	4405	013	Main level living/dining room	NP	LOST	LOST	1/27/2015	Trichloroethene	0.523	0.015	<0.1	No	NR	0.1	0.08055	16	0.48	No	No
0001-H	A-0001H-012715-IA-013A-LIV	40.751728	-111.859211	4405	013	Main level living/dining room	NP	LOST	LOST	1/27/2015	Tetrachloroethene	0.995	0.038	<0.1	Yes	U	0.1	0.257564	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0001-H	A-0001H-012715-IA-012-OUT	40.751728	-111.859211	4405	012	Front Porch	OA	NA	NA	1/27/2015	cis12Dichloroethene	0.858	0.003	<0.1	Yes	U	0.1	0.011886	NE	NE	No	No
0001-H	A-0001H-012715-IA-012-OUT	40.751728	-111.859211	4405	012	Front Porch	OA	NA	NA	1/27/2015	Trichloroethene	0.523	0.005	<0.1	No	NR	0.1	0.02685	16	0.48	No	No
0001-H	A-0001H-012715-IA-012-OUT	40.751728	-111.859211	4405	012	Front Porch	OA	NA	NA	1/27/2015	Tetrachloroethene	0.995	0.019	<0.1	Yes	U	0.1	0.128782	370	11	No	No
0001-H	A-0001H-012715-IA-014G-LIV	40.751728	-111.859211	4405	031	Main level living/dining room	PP	LOST	LOST	1/27/2015	cis12Dichloroethene	0.915	0.001	<0.1	Yes	U	0.1	0.003962	NE	NE	No	No
0001-H	A-0001H-012715-IA-014G-LIV	40.751728	-111.859211	4405	031	Main level living/dining room	PP	LOST	LOST	1/27/2015	Trichloroethene	0.523	0.003	<0.1	No	NR	0.1	0.01611	16	0.48	No	No
0001-H	A-0001H-012715-IA-014G-LIV	40.751728	-111.859211	4405	031	Main level living/dining room	PP	LOST	LOST	1/27/2015	Tetrachloroethene	0.996	0.011	<0.1	Yes	U	0.1	0.074558	370	11	No	No
0001-H	A-0001H-012715-IA-014F-LIV	40.751728	-111.859211	4405	030	Main level living/dining room	PP	LOST	LOST	1/27/2015	cis12Dichloroethene	0.425	Not Found	<0.1	Yes	U	0.1	Not Found	NE	NE	No	No
0001-H	A-0001H-012715-IA-014F-LIV	40.751728	-111.859211	4405	030	Main level living/dining room	PP	LOST	LOST	1/27/2015	Trichloroethene	0.523	0.003	<0.1	No	U	0.1	0.01611	16	0.48	No	No
0001-H	A-0001H-012715-IA-014F-LIV	40.751728	-111.859211	4405	030	Main level living/dining room	PP	LOST	LOST	1/27/2015	Tetrachloroethene	0.995	0.01	<0.1	Yes	U	0.1	0.06778	370	11	No	No
0001-H	A-0001H-012715-IA-014E-LIV	40.751728	-111.859211	4405	029	Main level living/dining room	PP	LOST	LOST	1/27/2015	cis12Dichloroethene	0.836	0.001	<0.1	Yes	U	0.1	0.003962	NE	NE	No	No
0001-H	A-0001H-012715-IA-014E-LIV	40.751728	-111.859211	4405	029	Main level living/dining room	PP	LOST	LOST	1/27/2015	Trichloroethene	0.523	0.003	<0.1	No	NR	0.1	0.01611	16	0.48	No	No
0001-H	A-0001H-012715-IA-014E-LIV	40.751728	-111.859211	4405	029	Main level living/dining room	PP	LOST	LOST	1/27/2015	Tetrachloroethene	0.995	0.01	<0.1	Yes	U	0.1	0.06778	370	11	No	No
0001-H	A-0001H-012715-IA-014D-LIV	40.751728	-111.859211	4405	028	Main level living/dining room	PP	LOST	LOST	1/27/2015	cis12Dichloroethene	0.885	0.002	<0.1	Yes	U	0.1	0.007924	NE	NE	No	No
0001-H	A-0001H-012715-IA-014D-LIV	40.751728	-111.859211	4405	028	Main level living/dining room	PP	LOST	LOST	1/27/2015	Trichloroethene	0.523	0.003	<0.1	No	NR	0.1	0.01611	16	0.48	No	No
0001-H	A-0001H-012715-IA-014D-LIV	40.751728	-111.859211	4405	028	Main level living/dining room	PP	LOST	LOST	1/27/2015	Tetrachloroethene	0.997	0.012	<0.1	Yes	U	0.1	0.081336	370	11	No	No
0001-H	A-0001H-012715-IA-014C-LIV	40.751728	-111.859211	4405	027	Main level living/dining room	PP	LOST	LOST	1/27/2015	cis12Dichloroethene	0.875	0.002	<0.1	Yes	U	0.1	0.007924	NE	NE	No	No
0001-H	A-0001H-012715-IA-014C-LIV	40.751728	-111.859211	4405	027	Main level living/dining room	PP	LOST	LOST	1/27/2015	Trichloroethene	0.523	0.003	<0.1	No	NR	0.1	0.01611	16	0.48	No	No
0001-H	A-0001H-012715-IA-014C-LIV	40.751728	-111.859211	4405	027	Main level living/dining room	PP	LOST	LOST	1/27/2015	Tetrachloroethene	0.996	0.013	<0.1	Yes	U	0.1	0.088114	370	11	No	No
0001-H	A-0001H-012715-IA-014B-LIV	40.751728	-111.859211	4405	026	Main level living/dining room	PP	LOST	LOST	1/27/2015	cis12Dichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	NE	NE	No	No
0001-H	A-0001H-012715-IA-014B-LIV	40.751728	-111.859211	4405	026	Main level living/dining room	PP	LOST	LOST	1/27/2015	Trichloroethene	0.523	0.003	<0.1	No	NR	0.1	0.01611	16	0.48	No	No
0001-H	A-0001H-012715-IA-014B-LIV	40.751728	-111.859211	4405	026	Main level living/dining room	PP	LOST	LOST	1/27/2015	Tetrachloroethene	0.996	0.013	<0.1	Yes	U	0.1	0.088114	370	11	No	No
0001-H	A-0001H-012715-IA-014A-LIV	40.751728	-111.859211	4405	025	Main level living/dining room	PP	LOST	LOST	1/27/2015	cis12Dichloroethene	0.815	Not found	<0.1	Yes	U	0.1	Not found	NE	NE	No	No
0001-H	A-0001H-012715-IA-014A-LIV	40.751728	-111.859211	4405	025	Main level living/dining room	PP	LOST	LOST	1/27/2015	Trichloroethene	0.523	0.004	<0.1	No	NR	0.1	0.02148	16	0.48	No	No
0001-H	A-0001H-012715-IA-014A-LIV	40.751728	-111.859211	4405	025	Main level living/dining room	PP	LOST	LOST	1/27/2015	Tetrachloroethene	0.996	0.015	<0.1	Yes	U	0.1	0.10167	370	11	No	No
0001-H	A-0001H-012715-IA-SG-001-4'	40.751783	-111.859133	4417	032	Off NE corner of house - backyard	SG	NA	NA	1/27/2015	cis12Dichloroethene	0.967	0.004	<0.1	Yes	U	0.1	0.015848	NE	NE	No	No
0001-H	A-0001H-012715-IA-SG-001-4'	40.751783	-111.859133	4417	032	Off NE corner of house - backyard	SG	NA	NA	1/27/2015	Trichloroethene	0.523	0.004	<0.1	No	NR	0.1	0.02148	16	0.48	No	No
0001-H	A-0001H-012715-IA-SG-001-4'	40.751783	-111.859133	4417	032	Off NE corner of house - backyard	SG	NA	NA	1/27/2015	Tetrachloroethene	0.997	0.011	<0.1	Yes	U	0.1	0.074558	370	11	No	No
0002-H	A-0002H-022415-CCV	40.750665	-111.858081	4439	032	CCV - 0.5 ppb	CCV	NA	NA	2/24/2015	cis12Dichloroethene	0.994	0.5314	0.5314	Yes	=	0.1	3.6018292	NA	NA	NA	NA
0002-H	A-0002H-022415-CCV	40.750665	-111.858081	4439	032	CCV - 0.5 ppb	CCV	NA	NA	2/24/2015	Trichloroethene	0.906	0.5202	0.5202	Yes	=	0.1	3.5259156	NA	NA	NA	NA
0002-H	A-0002H-022415-CCV	40.750665	-111.858081	4439	032	CCV - 0.5 ppb	CCV	NA	NA	2/24/2015	Tetrachloroethene	0.994	0.5077	0.5077	Yes	=	0.1	3.4411906	NA	NA	NA	NA
0002-H	A-0002H-022415-CCV	40.750665	-111.858081	4439	031	CCV - 5.0 ppb	CCV	NA	NA	2/24/2015	cis12Dichloroethene	0.996	4.812	4.812	Yes	=	0.1	32.615736	NA	NA	NA	NA
0002-H	A-0002H-022415-CCV	40.750665	-111.858081	4439	031	CCV - 5.0 ppb	CCV	NA	NA	2/24/2015	Trichloroethene	0.977	5.15	5.15	Yes	=	0.1	34.9067	NA	NA	NA	NA
0002-H	A-0002H-022415-CCV	40.750665	-111.858081	4439	031	CCV - 5.0 ppb	CCV	NA	NA	2/24/2015	Tetrachloroethene	0.995	4.705	4.705	Yes	=	0.1	31.89049	NA	NA	NA	NA
0002-H	A-0002H-022315-CCV	40.750665	-111.858081	4439	030	CCV - 5.0 ppb	CCV	NA	NA	2/23/2015	cis12Dichloroethene	0.992	3.762	3.762	Yes	=	0.1	25.498836	NA	NA	NA	NA
0002-H	A-0002H-022315-CCV	40.750665	-111.858081	4439	030	CCV - 5.0 ppb	CCV	NA	NA	2/23/2015	Trichloroethene	0.963	4.021	4.021	Yes	=	0.1	27.254338	NA	NA	NA	NA
0002-H	A-0002H-022315-CCV	40.750665	-111.858081	4439	030	CCV - 5.0 ppb	CCV	NA	NA	2/23/2015	Tetrachloroethene	0.994	3.643	3.643	Yes	=	0.1	24.692254	NA	NA	NA	NA
0002-H	A-0002H-022415-IA-010-BR1	40.750665	-111.858081	4439	010	Basement Bedroom	IA	NA	NA	2/24/2015	cis12Dichloroethene	0.717	0.122	0.122	Yes	=	0.1	0.483364	NE	NE	No	No
0002-H	A-0002H-022415-IA-010-BR1	40.750665	-111.858081	4439	010	Basement Bedroom	IA	NA	NA	2/24/2015	Trichloroethene	0.99	0.06664	<0.1	Yes	U	0.1	0.3578568	16	0.48	No	No
0002-H	A-0002H-022415-IA-010-BR1	40.750665	-111.858081	4439	010	Basement Bedroom	IA	NA	NA	2/24/2015	Tetrachloroethene	0.994	0.311	0.311	Yes	=	0.1	2.107958	370	11	No	No
0002-H	A-0002H-022415-IA-009-BA2	40.750665	-111.858081	4439	009	Basement Bathroom	IA	NA	NA	2/24/2015	cis12Dichloroethene	0.709	0.1071	0.1071	Yes	=	0.1	0.4243302	NE	NE	No	No
0002-H	A-0002H-022415-IA-009-BA2	40.750665	-111.858081	4439	009	Basement Bathroom	IA	NA	NA	2/24/2015	Trichloroethene	0.996	0.0781	<0.1	Yes	U	0.1	0.419397	16	0.48	No	No
0002-H	A-0002H-022415-IA-009-BA2	40.750665	-111.858081	4439	009	Basement Bathroom	IA	NA	NA	2/24/2015	Tetrachloroethene	0.995	0.3377	0.3377	Yes	=	0.1	2.2889306	370	11	No	No
0002-H	A-0002H-022415-IA-008-LLL	40.750665	-111.858081	4439	008	Basement Living Room	IA	NA	NA	2/24/2015	cis12Dichloroethene	0.723	0.107	0.107	Yes	=	0.1	0.423934	NE	NE	No	No
0002-H	A-0002H-022415-IA-008-LLL	40.750665	-111.858081	4439	008	Basement Living Room	IA	NA	NA	2/24/2015	Trichloroethene	0.993	0.09152	<0.1	Yes	U	0.1	0.4914624	16	0.48	No	No
0002-H	A-0002H-022415-IA-008-LLL	40.750665	-111.858081	4439	008	Basement Living Room	IA	NA	NA	2/24/2015	Tetrachloroethene	0.993	0.309	0.309	Yes	=	0.1	2.094402	370	11	No	No
0002-H	A-0002H-022415-IA-007-STO	40.750665	-111.858081	4439	007	Basement Store Room below stairs	IA	NA	NA	2/24/2015	cis12Dichloroethene	0.663	0.04334	<0.1	No	NR	0.1	0.17171308	NE	NE	No	No
0002-H	A-0002H-022415-IA-007-STO	40.750665	-111.858081	4439	007	Basement Store Room below stairs	IA	NA	NA	2/24/2015	Trichloroethene	0.992	0.04153	<0.1	Yes	U	0.1	0.2230161	16	0.48	No	No
0002-H	A-0002H-022415-IA-007-STO	40.750665	-111.858081	4439	007	Basement Store Room below stairs	IA	NA	NA	2/24/2015	Tetrachloroethene	0.995	0.1363	0.1363	Yes	=	0.1	0.9238414	370	11	No	No
0002-H	A-0002H-022415-IA-006-MUD	40.750665	-111.858081	4439	006	Main Level Mudroom	IA	NA	NA	2/24/2015	cis12Dichloroethene	0.696	0.1163	0.1163	No	NR	0.1	0.4607806	NE	NE	No	No
0002-H	A-0002H-022415-IA-006-MUD	40.750665	-111.858081	4439	006	Main Level Mudroom	IA	NA	NA	2/24/2015	Trichloroethene	0.988	0.06143	<0.1	Yes	U	0.1	0.3298791	16	0.48	No	No
0002-H	A-0002H-022415-IA-006-MUD	40.750665	-111.858081	4439	006	Main Level Mudroom	IA	NA	NA	2/24/2015	Tetrachloroethene	0.995	0.2423	0.2423	Yes	=	0.1	1.6423094	370	11	No	No
0002-H	A-0002H-022415-IA-005-KIT	40.750665	-111.858081	4439	005	Main Level Kitchen	IA	NA	NA	2/24/2015	cis12Dichloroethene	0.672	0.1521	0.1521	No	NR	0.1	0.6026202	NE	NE	No	No
0002-H	A-0002H-022415-IA-005-KIT	40.750665	-111.858081	4439	005	Main Level Kitchen	IA	NA	NA	2/24/2015	Trichloroethene	0.982	0.05413	<0.1	Yes	U	0.1	0.2906781	16	0.48	No	No
0002-H	A-0002H-022415-IA-005-KIT	40.750665	-111.858081	4439	005	Main Level Kitchen	IA	NA	NA	2/24/2015	Tetrachloroethene	0.994	0.2535	0.2535	Yes	=	0.1	1.718223	370	11	No	No
0002-H	A-0002H-022415-IA-004-BA1	40.750665	-111.858081	4439	004	Main Level Bathroom	IA	NA	NA	2/24/2015	cis12Dichloroethene	0.657	0.213	0.213	No	NR	0.1	0.843906	NE	NE	No	No
0002-H	A-0002H-022415-IA-004-BA1	40.750665	-111.858081	4439	004	Main Level Bathroom	IA	NA	NA	2/24/2015	Trichloroethene	0.983	0.06063	<0.1	Yes	U	0.1	0.3255831	16	0.48	No	No
0002-H	A-0002H-022415-IA-004-BA1	40.750665	-111.858081	4439	004	Main Level Bathroom	IA	NA	NA	2/24/2015	Tetrachloroethene	0.995	0.2639	0.2639	Yes	=	0.1	1.7887142	370	11	No	No
0002-H	A-0002H-022415-IA-003-MBR	40.750665	-111.858081	4439	003	Main Level Master Bedroom	IA	NA	NA	2/24/2015	cis12Dichloroethene	0.691	0.1411	0.1411	No	NR	0.1	0.5590382	NE	NE	No	No
0002-H	A-0002H-022415-IA-003-MBR	40.750665	-111.858081	4439	003	Main Level Master Bedroom	IA	NA	NA	2/24/2015	Trichloroethene	0.991	0.061	<0.1	Yes	U	0.1	0.32757	16	0.48	No	No
0002-H	A-0002H-022415-IA-003-MBR	40.750665	-111.858081	4439	003	Main Level Master Bedroom	IA	NA	NA	2/24/2015	Tetrachloroethene	0.994	0.2619	0.2619	Yes	=	0.1	1.7751582	370	11	No	No
0002-H	A-0002H-022415-IA-002-LIV	40.750665	-111.858081	4439	002	Main Level- Living Room	IA	NA	NA	2/24/2015	cis12Dichloroethene	0.734	0.1368	0.1368	Yes	=	0.1	0.5420016	NE	NE	No	No
0002-H	A-0002H-022415-IA-002-LIV	40.750665	-111.858081	4439	002	Main Level- Living Room	IA	NA	NA	2/24/2015	Trichloroethene	0.989	0.06356	<0.1	Yes	U	0.1	0.3413172	16	0.48	No	No
0002-H	A-0002H-022415-IA-002-LIV	40.750665	-111.858081	4439	002	Main Level- Living Room	IA	NA	NA	2/24/2015	Tetrachloroethene	0.994	0.2461	0.2461	Yes	=	0.1	1.6680658	370	11	No	No
0002-H	A-0002H-022415-IA-011H-LLL	40.750665	-111.858081	4439	018	Basement Living Room	NP	-4.7	12:28	2/24/2015	cis12Dichloroethene	0.802	0.03862	<0.1	Yes	U	0.1	0.15301244	NE	NE	No	No
0002-H	A-0002H-022415-IA-011H-LLL	40.750665	-111.858081	4439	018	Basement Living Room	NP	-4.7	12:28	2/24/2015	Trichloroethene	0.997	0.06656	<0.1	Yes	U	0.1	0.3574272	16	0.48	No	No
0002-H	A-0002H-022415-IA-011H-LLL	40.750665	-111.858081	4439	018	Basement Living Room	NP	-4.7	12:28	2/24/2015	Tetrachloroethene	0.996	0.3767	0.3767	Yes	=	0.1	2.5532726	370	11	No	No
0002-H	A-0002H-022415-IA-011G-LLL	40.750665	-111.858081	4439	017	Basement Living Room	NP	-5.2	12:20	2/24/2015	cis12Dichloroethene	0.703	0.04072	<0.1	Yes	U	0.1	0.16133264	NE	NE	No	No
0002-H	A-0002H-022415-IA-011G-LLL	40.750665	-111.858081	4439	017	Basement Living Room	NP	-5.2	12:20	2/24/2015	Trichloroethene	0.992	0.0669	<0.1	Yes	U	0.1	0.359253	16	0.48	No	No
0002-H	A-0002H-022415-IA-011G-LLL	40.750665	-111.858081	4439	017	Basement Living Room	NP	-5.2	12:20	2/24/2015	Tetrachloroethene	0.993	0.3591	0.3591	Yes	=	0.1	2.4339798	370	11	No	No
0002-H	A-0002H-022415-IA-011F-LLL	40.750665	-111.858081	4439	016	Basement Living Room	NP	-5.4	12:12	2/24/2015	cis12Dichloroethene	0.768	0.04275	<0.1	Yes	U	0.1	0.1693755	NE	NE	No	No
0002-H	A-0002H-022415-IA-011F-LLL	40.750665	-111.858081	4439	016	Basement Living Room	NP	-5.4	12:12	2/24/2015	Trichloroethene	0.997	0.05841	<0.1	Yes	U	0.1	0.3136617	16	0.48	No	No
0002-H	A-0002H-022415-IA-011F-LLL	40.750665	-111.858081	4439	016	Basement Living Room	NP	-5.4	12:12	2/24/2015	Tetrachloroethene	0.994	0.3432	0.3432	Yes	=	0.1	2.3262096	370	11	No	No
0002-H	A-0002H-022415-IA-011E-LLL	40.750665	-111.858081	4439	015	Basement Living Room	NP	-4.9	12:03	2/24/2015	cis12Dichloroethene	0.826	0.04632	<0.1	Yes	U	0.1	0.18351984	NE	NE	No	No
0002-H	A-0002H-022415-IA-011E-LLL	40.750665	-111.858081	4439	015	Basement Living Room	NP	-4.9	12:03	2/24/2015	Trichloroethene	0.994	0.08586	<0.1	Yes	U	0.1	0.4610682	16	0.48	No	No
0002-H	A-0002H-022415-IA-011E-LLL	40.750665	-111.858081	4439	015	Basement Living Room	NP	-4.9	12:03	2/24/2015	Tetrachloroethene	0.995	0.3813	0.3813	Yes	=	0.1	2.5844514	370	11	No	No
0002-H	A-0002H-022415-IA-011D-LLL	40.750665	-111.858081	4439	014	Basement Living Room	NP	-5.7	11:56	2/24/2015	cis12Dichloroethene	0.706	0.05149	<0.1	Yes	U	0.1	0.20400338	NE	NE	No	No
0002-H	A-0002H-022415-IA-011D-LLL	40.750665	-111.858081	4439	014	Basement Living Room	NP	-5.7	11:56	2/24/2015	Trichloroethene	0.994	0.05868	<0.1	Yes	U	0.1	0.3151116	16	0.48	No	No
0002-H	A-0002H-022415-IA-011D-LLL	40.750665	-111.858081	4439	014	Basement Living Room	NP	-5.7	11:56	2/24/2015	Tetrachloroethene	0.995	0.3364	0.3364	Yes	=	0.1	2.2801192	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0002-H	A-0002H-022415-IA-011C-LLL	40.750665	-111.858081	4439	013	Basement Living Room	NP	-5.0	11:48	2/24/2015	cis12Dichloroethene	0.741	0.058	<0.1	Yes	U	0.1	0.229796	NE	NE	No	No
0002-H	A-0002H-022415-IA-011C-LLL	40.750665	-111.858081	4439	013	Basement Living Room	NP	-5.0	11:48	2/24/2015	Trichloroethene	0.994	0.06621	<0.1	Yes	U	0.1	0.3555477	16	0.48	No	No
0002-H	A-0002H-022415-IA-011C-LLL	40.750665	-111.858081	4439	013	Basement Living Room	NP	-5.0	11:48	2/24/2015	Tetrachloroethene	0.995	0.2905	0.2905	Yes	=	0.1	1.969009	370	11	No	No
0002-H	A-0002H-022415-IA-011B-LLL	40.750665	-111.858081	4439	012	Basement Living Room	NP	-4.5	11:40	2/24/2015	cis12Dichloroethene	0.676	0.06107	<0.1	No	NR	0.1	0.24195934	NE	NE	No	No
0002-H	A-0002H-022415-IA-011B-LLL	40.750665	-111.858081	4439	012	Basement Living Room	NP	-4.5	11:40	2/24/2015	Trichloroethene	0.995	0.07232	<0.1	Yes	U	0.1	0.3883584	16	0.48	No	No
0002-H	A-0002H-022415-IA-011B-LLL	40.750665	-111.858081	4439	012	Basement Living Room	NP	-4.5	11:40	2/24/2015	Tetrachloroethene	0.993	0.2517	0.2517	Yes	=	0.1	1.7060226	370	11	No	No
0002-H	A-0002H-022415-IA-011A-LLL	40.750665	-111.858081	4439	011	Basement Living Room	NP	-5.1	11:30	2/24/2015	cis12Dichloroethene	0.725	0.06465	<0.1	Yes	U	0.1	0.2561433	NE	NE	No	No
0002-H	A-0002H-022415-IA-011A-LLL	40.750665	-111.858081	4439	011	Basement Living Room	NP	-5.1	11:30	2/24/2015	Trichloroethene	0.988	0.05756	<0.1	Yes	U	0.1	0.3090972	16	0.48	No	No
0002-H	A-0002H-022415-IA-011A-LLL	40.750665	-111.858081	4439	011	Basement Living Room	NP	-5.1	11:30	2/24/2015	Tetrachloroethene	0.995	0.1983	0.1983	Yes	=	0.1	1.3440774	370	11	No	No
0002-H	A-0002H-022415-IA-001-OUT	40.750665	-111.858081	4439	001	Outdoor Ambient	OA	NA	NA	2/24/2015	cis12Dichloroethene	0.924	0.02739	<0.1	Yes	U	0.1	0.10851918	NE	NE	No	No
0002-H	A-0002H-022415-IA-001-OUT	40.750665	-111.858081	4439	001	Outdoor Ambient	OA	NA	NA	2/24/2015	Trichloroethene	0.995	0.03662	<0.1	Yes	U	0.1	0.1966494	16	0.48	No	No
0002-H	A-0002H-022415-IA-001-OUT	40.750665	-111.858081	4439	001	Outdoor Ambient	OA	NA	NA	2/24/2015	Tetrachloroethene	0.995	0.08479	<0.1	Yes	U	0.1	0.57470662	370	11	No	No
0002-H	A-0002H-022415-IA-012H-LLL	40.750665	-111.858081	4439	026	Basement Living Room	PP	5.2	13:33	2/24/2015	cis12Dichloroethene	0.736	0.01034	<0.1	Yes	U	0.1	0.04096708	NE	NE	No	No
0002-H	A-0002H-022415-IA-012H-LLL	40.750665	-111.858081	4439	026	Basement Living Room	PP	5.2	13:33	2/24/2015	Trichloroethene	0.954	0.0125	<0.1	Yes	U	0.1	0.067125	16	0.48	No	No
0002-H	A-0002H-022415-IA-012H-LLL	40.750665	-111.858081	4439	026	Basement Living Room	PP	5.2	13:33	2/24/2015	Tetrachloroethene	0.993	0.03848	<0.1	Yes	U	0.1	0.26081744	370	11	No	No
0002-H	A-0002H-022415-IA-012G-LLL	40.750665	-111.858081	4439	025	Basement Living Room	PP	5.2	13:25	2/24/2015	cis12Dichloroethene	0.768	0.01223	<0.1	Yes	U	0.1	0.04845526	NE	NE	No	No
0002-H	A-0002H-022415-IA-012G-LLL	40.750665	-111.858081	4439	025	Basement Living Room	PP	5.2	13:25	2/24/2015	Trichloroethene	0.996	0.00846	<0.1	Yes	U	0.1	0.0454302	16	0.48	No	No
0002-H	A-0002H-022415-IA-012G-LLL	40.750665	-111.858081	4439	025	Basement Living Room	PP	5.2	13:25	2/24/2015	Tetrachloroethene	0.996	0.03454	<0.1	Yes	U	0.1	0.23411212	370	11	No	No
0002-H	A-0002H-022415-IA-012F-LLL	40.750665	-111.858081	4439	024	Basement Living Room	PP	5.4	13:17	2/24/2015	cis12Dichloroethene	0.765	0.01267	<0.1	Yes	U	0.1	0.05019854	NE	NE	No	No
0002-H	A-0002H-022415-IA-012F-LLL	40.750665	-111.858081	4439	024	Basement Living Room	PP	5.4	13:17	2/24/2015	Trichloroethene	0.912	0.01614	<0.1	Yes	U	0.1	0.0866718	16	0.48	No	No
0002-H	A-0002H-022415-IA-012F-LLL	40.750665	-111.858081	4439	024	Basement Living Room	PP	5.4	13:17	2/24/2015	Tetrachloroethene	0.994	0.04673	<0.1	Yes	U	0.1	0.31673594	370	11	No	No
0002-H	A-0002H-022415-IA-012E-LLL	40.750665	-111.858081	4439	023	Basement Living Room	PP	4.6	13:09	2/24/2015	cis12Dichloroethene	0.54	0.01392	<0.1	No	NR	0.1	0.05515104	NE	NE	No	No
0002-H	A-0002H-022415-IA-012E-LLL	40.750665	-111.858081	4439	023	Basement Living Room	PP	4.6	13:09	2/24/2015	Trichloroethene	0.952	0.01091	<0.1	Yes	U	0.1	0.0585867	16	0.48	No	No
0002-H	A-0002H-022415-IA-012E-LLL	40.750665	-111.858081	4439	023	Basement Living Room	PP	4.6	13:09	2/24/2015	Tetrachloroethene	0.995	0.04677	<0.1	Yes	U	0.1	0.31700706	370	11	No	No
0002-H	A-0002H-022415-IA-012D-LLL	40.750665	-111.858081	4439	022	Basement Living Room	PP	4.9	13:00	2/24/2015	cis12Dichloroethene	0.725	0.01631	<0.1	Yes	U	0.1	0.06462022	NE	NE	No	No
0002-H	A-0002H-022415-IA-012D-LLL	40.750665	-111.858081	4439	022	Basement Living Room	PP	4.9	13:00	2/24/2015	Trichloroethene	0.99	0.01744	<0.1	Yes	U	0.1	0.0936528	16	0.48	No	No
0002-H	A-0002H-022415-IA-012D-LLL	40.750665	-111.858081	4439	022	Basement Living Room	PP	4.9	13:00	2/24/2015	Tetrachloroethene	0.994	0.0657	<0.1	Yes	U	0.1	0.4453146	370	11	No	No
0002-H	A-0002H-022415-IA-012C-LLL	40.750665	-111.858081	4439	021	Basement Living Room	PP	5.1	12:52	2/24/2015	cis12Dichloroethene	0.645	0.02204	<0.1	No	NR	0.1	0.08732248	NE	NE	No	No
0002-H	A-0002H-022415-IA-012C-LLL	40.750665	-111.858081	4439	021	Basement Living Room	PP	5.1	12:52	2/24/2015	Trichloroethene	0.99	0.02392	<0.1	Yes	U	0.1	0.1284504	16	0.48	No	No
0002-H	A-0002H-022415-IA-012C-LLL	40.750665	-111.858081	4439	021	Basement Living Room	PP	5.1	12:52	2/24/2015	Tetrachloroethene	0.994	0.1038	0.1038	Yes	=	0.1	0.7035564	370	11	No	No
0002-H	A-0002H-022415-IA-012B-LLL	40.750665	-111.858081	4439	020	Basement Living Room	PP	3.0	12:44	2/24/2015	cis12Dichloroethene	0.723	0.03161	<0.1	Yes	U	0.1	0.12523882	NE	NE	No	No
0002-H	A-0002H-022415-IA-012B-LLL	40.750665	-111.858081	4439	020	Basement Living Room	PP	3.0	12:44	2/24/2015	Trichloroethene	0.997	0.0361	<0.1	Yes	U	0.1	0.193857	16	0.48	No	No
0002-H	A-0002H-022415-IA-012B-LLL	40.750665	-111.858081	4439	020	Basement Living Room	PP	3.0	12:44	2/24/2015	Tetrachloroethene	0.995	0.1595	0.1595	Yes	=	0.1	1.081091	370	11	No	No
0002-H	A-0002H-022415-IA-012A-LLL	40.750665	-111.858081	4439	019	Basement Living Room	PP	4.6	12:36	2/24/2015	cis12Dichloroethene	0.764	0.04111	<0.1	Yes	U	0.1	0.16287782	NE	NE	No	No
0002-H	A-0002H-022415-IA-012A-LLL	40.750665	-111.858081	4439	019	Basement Living Room	PP	4.6	12:36	2/24/2015	Trichloroethene	0.994	0.07418	<0.1	Yes	U	0.1	0.3983466	16	0.48	No	No
0002-H	A-0002H-022415-IA-012A-LLL	40.750665	-111.858081	4439	019	Basement Living Room	PP	4.6	12:36	2/24/2015	Tetrachloroethene	0.994	0.362	0.362	Yes	=	0.1	2.453636	370	11	No	No
0002-H	A-0002H-022415-SG-001-8'	40.750617	-111.858142	4436	028	SW corner of home	SG	NA	NA	2/24/2015	cis12Dichloroethene	0.623	0.05624	<0.1	No	NR	0.1	0.22282288	NE	NE	No	No
0002-H	A-0002H-022415-SG-001-8'	40.750617	-111.858142	4436	028	SW corner of home	SG	NA	NA	2/24/2015	Trichloroethene	0.96	0.01923	<0.1	Yes	U	0.1	0.1032651	16	0.48	No	No
0002-H	A-0002H-022415-SG-001-8'	40.750617	-111.858142	4436	028	SW corner of home	SG	NA	NA	2/24/2015	Tetrachloroethene	0.993	0.07571	<0.1	Yes	U	0.1	0.51316238	370	11	No	No
0002-H	A-0002H-022415-SG-001-4'	40.750617	-111.858142	4436	027	SW corner of home	SG	NA	NA	2/24/2015	cis12Dichloroethene	0.663	0.129	0.129	No	NR	0.1	0.511098	NE	NE	No	No
0002-H	A-0002H-022415-SG-001-4'	40.750617	-111.858142	4436	027	SW corner of home	SG	NA	NA	2/24/2015	Trichloroethene	0.98	0.02489	<0.1	Yes	U	0.1	0.1336593	16	0.48	No	No
0002-H	A-0002H-022415-SG-001-4'	40.750617	-111.858142	4436	027	SW corner of home	SG	NA	NA	2/24/2015	Tetrachloroethene	0.993	0.1173	0.1173	Yes	=	0.1	0.7950594	370	11	No	No
0003-H	A-0003H-011915-CCV	40.748247	-111.855953	4447	043	CCV - 5.0 ppb	CCV	NA	NA	1/19/2015	cis12Dichloroethene	0.999	0.4342	0.4342	Yes	=	0.1	21.125384	NA	NA	NA	NA
0003-H	A-0003H-011915-CCV	40.748247	-111.855953	4447	043	CCV - 5.0 ppb	CCV	NA	NA	1/19/2015	Trichloroethene	0.959	0.4109	0.4109	Yes	=	0.1	26.41503	NA	NA	NA	NA
0003-H	A-0003H-011915-CCV	40.748247	-111.855953	4447	043	CCV - 5.0 ppb	CCV	NA	NA	1/19/2015	Tetrachloroethene	0.995	0.4265	0.4265	Yes	=	0.1	34.486464	NA	NA	NA	NA
0003-H	A-0003H-011915-CCV	40.748247	-111.855953	4447	042	CCV - 0.5 ppb	CCV	NA	NA	1/19/2015	cis12Dichloroethene	1	4.091	4.091	Yes	=	0.1	21.125384	NA	NA	NA	NA
0003-H	A-0003H-011915-CCV	40.748247	-111.855953	4447	042	CCV - 0.5 ppb	CCV	NA	NA	1/19/2015	Trichloroethene	0.991	4.275	4.275	Yes	=	0.1	26.41503	NA	NA	NA	NA
0003-H	A-0003H-011915-CCV	40.748247	-111.855953	4447	042	CCV - 0.5 ppb	CCV	NA	NA	1/19/2015	Tetrachloroethene	0.994	4.391	4.391	Yes	=	0.1	34.486464	NA	NA	NA	NA
0003-H	A-0003H-011915-CCV	40.748247	-111.855953	4447	001	CCV - 5.0 ppb	CCV	NA	NA	1/19/2015	cis12Dichloroethene	1	5.332	5.332	Yes	=	0.1	21.125384	NA	NA	NA	NA
0003-H	A-0003H-011915-CCV	40.748247	-111.855953	4447	001	CCV - 5.0 ppb	CCV	NA	NA	1/19/2015	Trichloroethene	0.999	4.919	4.919	Yes	=	0.1	26.41503	NA	NA	NA	NA
0003-H	A-0003H-011915-CCV	40.748247	-111.855953	4447	001	CCV - 5.0 ppb	CCV	NA	NA	1/19/2015	Tetrachloroethene	0.996	5.088	5.088	Yes	=	0.1	34.486464	NA	NA	NA	NA
0003-H	A-0003H-011915-IA-016-GAR	40.748247	-111.855953	4447	021	Garage	IA	NA	NA	1/19/2015	cis12Dichloroethene	0.465	0.126	0.126	No	NR	0.1	0.499212	NE	NE	No	No
0003-H	A-0003H-011915-IA-016-GAR	40.748247	-111.855953	4447	021	Garage	IA	NA	NA	1/19/2015	Trichloroethene	0.81	0.03533	<0.1	Yes	U	0.1	0.1897221	16	0.48	No	No
0003-H	A-0003H-011915-IA-016-GAR	40.748247	-111.855953	4447	021	Garage	IA	NA	NA	1/19/2015	Tetrachloroethene	0.995	0.1105	0.1105	Yes	=	0.1	0.748969	370	11	No	No
0003-H	A-0003H-011915-IA-015-BR3	40.748247	-111.855953	4447	017	Small bedroom in basement	IA	NA	NA	1/19/2015	cis12Dichloroethene	0.716	0.3592	0.3592	Yes	=	0.1	1.4231504	NE	NE	No	No
0003-H	A-0003H-011915-IA-015-BR3	40.748247	-111.855953	4447	017	Small bedroom in basement	IA	NA	NA	1/19/2015	Trichloroethene	0.969	0.04184	<0.1	Yes	U	0.1	0.2246808	16	0.48	No	No
0003-H	A-0003H-011915-IA-015-BR3	40.748247	-111.855953	4447	017	Small bedroom in basement	IA	NA	NA	1/19/2015	Tetrachloroethene	0.994	0.3231	0.3231	Yes	=	0.1	2.1899718	370	11	No	No
0003-H	A-0003H-011915-IA-013-BA2	40.748247	-111.855953	4447	014	Bathroom in basement	IA	NA	NA	1/19/2015	cis12Dichloroethene	0.78	0.5549	0.5549	Yes	=	0.1	2.1985138	NE	NE	No	No
0003-H	A-0003H-011915-IA-013-BA2	40.748247	-111.855953	4447	014	Bathroom in basement	IA	NA	NA	1/19/2015	Trichloroethene	0.989	0.03305	<0.1	Yes	U	0.1	0.1774785	16	0.48	No	No
0003-H	A-0003H-011915-IA-013-BA2	40.748247	-111.855953	4447	014	Bathroom in basement	IA	NA	NA	1/19/2015	Tetrachloroethene	0.994	0.2711	0.2711	Yes	=	0.1	1.8375158	370	11	No	No
0003-H	A-0003H-011915-IA-012-FUR	40.748247	-111.855953	4447	013	Furnance room	IA	NA	NA	1/19/2015	cis12Dichloroethene	0.868	0.09657	<0.1	Yes	U	0.1	0.38261034	NE	NE	No	No
0003-H	A-0003H-011915-IA-012-FUR	40.748247	-111.855953	4447	013	Furnance room	IA	NA	NA	1/19/2015	Trichloroethene	0.982	0.05521	<0.1	Yes	U	0.1	0.2964777	16	0.48	No	No
0003-H	A-0003H-011915-IA-012-FUR	40.748247	-111.855953	4447	013	Furnance room	IA	NA	NA	1/19/2015	Tetrachloroethene	0.994	0.1613	0.1613	Yes	=	0.1	1.0932914	370	11	No	No
0003-H	A-0003H-011915-IA-011-OF2	40.748247	-111.855953	4447	012	Office in basement	IA	NA	NA	1/19/2015	cis12Dichloroethene	0.765	0.3467	0.3467	Yes	=	0.1	1.3736254	NE	NE	No	No
0003-H	A-0003H-011915-IA-011-OF2	40.748247	-111.855953	4447	012	Office in basement	IA	NA	NA	1/19/2015	Trichloroethene	0.939	0.04142	<0.1	Yes	U	0.1	0.2224254	16	0.48	No	No
0003-H	A-0003H-011915-IA-011-OF2	40.748247	-111.855953	4447	012	Office in basement	IA	NA	NA	1/19/2015	Tetrachloroethene	0.994	0.4591	0.4591	Yes	=	0.1	3.1117798	370	11	No	No
0003-H	A-0003H-011915-IA-010-BR2	40.748247	-111.855953	4447	011	Main bedroom in basement	IA	NA	NA	1/19/2015	cis12Dichloroethene	0.366	0.02028	<0.1	No	NR	0.1	0.08034936	NE	NE	No	No
0003-H	A-0003H-011915-IA-010-BR2	40.748247	-111.855953	4447	011	Main bedroom in basement	IA	NA	NA	1/19/2015	Trichloroethene	0.962	0.04106	<0.1	Yes	U	0.1	0.2204922	16	0.48	No	No
0003-H	A-0003H-011915-IA-010-BR2	40.748247	-111.855953	4447	011	Main bedroom in basement	IA	NA	NA	1/19/2015	Tetrachloroethene	0.995	0.5774	0.5774	Yes	=	0.1	3.9136172	370	11	No	No
0003-H	A-0003H-011915-IA-009-OCL	40.748247	-111.855953	4447	010	Open living area in basement	IA	NA	NA	1/19/2015	cis12Dichloroethene	0.403	0.03665	<0.1	No	NR	0.1	0.1452073	NE	NE	No	No
0003-H	A-0003H-011915-IA-009-OCL	40.748247	-111.855953	4447	010	Open living area in basement	IA	NA	NA	1/19/2015	Trichloroethene	0.987	0.04188	<0.1	Yes	U	0.1	0.2248956	16	0.48	No	No
0003-H	A-0003H-011915-IA-009-OCL	40.748247	-111.855953	4447	010	Open living area in basement	IA	NA	NA	1/19/2015	Tetrachloroethene	0.995	0.2697	0.2697	Yes	=	0.1	1.8280266	370	11	No	No
0003-H	A-0003H-011915-IA-008-ENT	40.748247	-111.855953	4447	009	Entry way at top of stairs	IA	NA	NA	1/19/2015	cis12Dichloroethene	0.807	0.1899	0.1899	Yes	=	0.1	0.7523838	NE	NE	No	No
0003-H	A-0003H-011915-IA-008-ENT	40.748247	-111.855953	4447	009	Entry way at top of stairs	IA	NA	NA	1/19/2015	Trichloroethene	0.957	0.02413	<0.1	Yes	U	0.1	0.1295781	16	0.48	No	No
0003-H	A-0003H-011915-IA-008-ENT	40.748247	-111.855953	4447	009	Entry way at top of stairs	IA	NA	NA	1/19/2015	Tetrachloroethene	0.995	0.1608	0.1608	Yes	=	0.1	1.0899024	370	11	No	No
0003-H	A-0003H-011915-IA-007-BR1	40.748247	-111.855953	4447	008	Bedroom	IA	NA	NA	1/19/2015	cis12Dichloroethene	0.423	0.06112	<0.1	No	NR	0.1	0.24215744	NE	NE	No	No
0003-H	A-0003H-011915-IA-007-BR1	40.748247	-111.855953	4447	008	Bedroom	IA	NA	NA	1/19/2015	Trichloroethene	0.944	0.03481	<0.1	Yes	U	0.1	0.1869297	16	0.48	No	No
0003-H	A-0003H-011915-IA-007-BR1	40.748247	-111.855953	4447	008	Bedroom	IA	NA	NA	1/19/2015	Tetrachloroethene	0.995	0.144	0.144	Yes	=	0.1	0.976032	370	11	No	No
0003-H	A-0003H-011915-IA-006-OF1	40.748247	-111.855953	4447	007	Office	IA	NA	NA	1/19/2015	cis12Dichloroethene	0.848	0.2001	0.2001	Yes	=	0.1	0.7927962	NE	NE	No	No
0003-H	A-0003H-011915-IA-006-OF1	40.748247	-111.855953	4447	007	Office	IA	NA	NA	1/19/2015	Trichloroethene	0.89	0.02112	<0.1	Yes	U	0.1	0.1134144	16	0.48	No	No
0003-H	A-0003H-011915-IA-006-OF1	40.748247	-111.855953	4447	007	Office	IA	NA	NA	1/19/2015	Tetrachloroethene	0.996	0.1597	0.1597	Yes	=	0.1	1.0824466	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0003-H	A-0003H-011915-IA-005-MBA	40.748247	-111.855953	4447	006	Master Bathroom	IA	NA	NA	1/19/2015	cis12Dichloroethene	0.398	0.0552	<0.1	No	NR	0.1	0.2187024	NE	NE	No	No
0003-H	A-0003H-011915-IA-005-MBA	40.748247	-111.855953	4447	006	Master Bathroom	IA	NA	NA	1/19/2015	Trichloroethene	0.906	0.03208	<0.1	Yes	U	0.1	0.1722696	16	0.48	No	No
0003-H	A-0003H-011915-IA-005-MBA	40.748247	-111.855953	4447	006	Master Bathroom	IA	NA	NA	1/19/2015	Tetrachloroethene	0.995	0.1731	0.1731	Yes	=	0.1	1.1732718	370	11	No	No
0003-H	A-0003H-011915-IA-004-MBR	40.748247	-111.855953	4447	005	Master Bedroom	IA	NA	NA	1/19/2015	cis12Dichloroethene	0.453	0.06862	<0.1	No	NR	0.1	0.27187244	NE	NE	No	No
0003-H	A-0003H-011915-IA-004-MBR	40.748247	-111.855953	4447	005	Master Bedroom	IA	NA	NA	1/19/2015	Trichloroethene	0.905	0.03738	<0.1	Yes	U	0.1	0.2007306	16	0.48	No	No
0003-H	A-0003H-011915-IA-004-MBR	40.748247	-111.855953	4447	005	Master Bedroom	IA	NA	NA	1/19/2015	Tetrachloroethene	0.995	0.1597	0.1597	Yes	=	0.1	1.0824466	370	11	No	No
0003-H	A-0003H-011915-IA-003-BA1	40.748247	-111.855953	4447	004	Hall Bathroom	IA	NA	NA	1/19/2015	cis12Dichloroethene	0.372	0.06614	<0.1	No	NR	0.1	0.26204668	NE	NE	No	No
0003-H	A-0003H-011915-IA-003-BA1	40.748247	-111.855953	4447	004	Hall Bathroom	IA	NA	NA	1/19/2015	Trichloroethene	0.895	0.0257	<0.1	Yes	U	0.1	0.138009	16	0.48	No	No
0003-H	A-0003H-011915-IA-003-BA1	40.748247	-111.855953	4447	004	Hall Bathroom	IA	NA	NA	1/19/2015	Tetrachloroethene	0.994	0.1742	0.1742	Yes	=	0.1	1.1807276	370	11	No	No
0003-H	A-0003H-011915-IA-002-KIT	40.748247	-111.855953	4447	003	Kitchen	IA	NA	NA	1/19/2015	cis12Dichloroethene	0.34	0.02084	<0.1	No	NR	0.1	0.08256808	NE	NE	No	No
0003-H	A-0003H-011915-IA-002-KIT	40.748247	-111.855953	4447	003	Kitchen	IA	NA	NA	1/19/2015	Trichloroethene	0.896	0.04199	<0.1	Yes	U	0.1	0.2254863	16	0.48	No	No
0003-H	A-0003H-011915-IA-002-KIT	40.748247	-111.855953	4447	003	Kitchen	IA	NA	NA	1/19/2015	Tetrachloroethene	0.995	0.1705	0.1705	Yes	=	0.1	1.155649	370	11	No	No
0003-H	A-0003H-011915-IA-001-LIV	40.748247	-111.855953	4447	002	Living/Dining Room	IA	NA	NA	1/19/2015	cis12Dichloroethene	0.45	0.08831	<0.1	No	NR	0.1	0.34988422	NE	NE	No	No
0003-H	A-0003H-011915-IA-001-LIV	40.748247	-111.855953	4447	002	Living/Dining Room	IA	NA	NA	1/19/2015	Trichloroethene	0.975	0.1229	0.1229	Yes	=	0.1	0.659973	16	0.48	Yes	Yes
0003-H	A-0003H-011915-IA-001-LIV	40.748247	-111.855953	4447	002	Living/Dining Room	IA	NA	NA	1/19/2015	Tetrachloroethene	0.994	0.2212	0.2212	Yes	=	0.1	1.4992936	370	11	No	No
0003-H	A-0003H-011915-IA-018F-OCL	40.748247	-111.855953	4447	030	Open living area in basement	NP	-5.2	15:03	1/19/2015	cis12Dichloroethene	0.811	0.1246	0.1246	Yes	=	0.1	0.4936652	NE	NE	No	No
0003-H	A-0003H-011915-IA-018F-OCL	40.748247	-111.855953	4447	030	Open living area in basement	NP	-5.2	15:03	1/19/2015	Trichloroethene	0.945	0.01881	<0.1	Yes	U	0.1	0.1010097	16	0.48	No	No
0003-H	A-0003H-011915-IA-018F-OCL	40.748247	-111.855953	4447	030	Open living area in basement	NP	-5.2	15:03	1/19/2015	Tetrachloroethene	0.996	0.1247	0.1247	Yes	=	0.1	0.8452166	370	11	No	No
0003-H	A-0003H-011915-IA-018E-OCL	40.748247	-111.855953	4447	028	Open living area in basement	NP	-5.4	14:48	1/19/2015	cis12Dichloroethene	0.827	0.1262	0.1262	Yes	=	0.1	0.5000044	NE	NE	No	No
0003-H	A-0003H-011915-IA-018E-OCL	40.748247	-111.855953	4447	028	Open living area in basement	NP	-5.4	14:48	1/19/2015	Trichloroethene	0.495	0.03058	<0.1	No	NR	0.1	0.1642146	16	0.48	No	No
0003-H	A-0003H-011915-IA-018E-OCL	40.748247	-111.855953	4447	028	Open living area in basement	NP	-5.4	14:48	1/19/2015	Tetrachloroethene	0.995	0.1468	0.1468	Yes	=	0.1	0.9950104	370	11	No	No
0003-H	A-0003H-011915-IA-018D-OCL	40.748247	-111.855953	4447	026	Open living area in basement	NP	-5.4	14:33	1/19/2015	cis12Dichloroethene	0.826	0.1403	0.1403	Yes	=	0.1	0.5558686	NE	NE	No	No
0003-H	A-0003H-011915-IA-018D-OCL	40.748247	-111.855953	4447	026	Open living area in basement	NP	-5.4	14:33	1/19/2015	Trichloroethene	0.99	0.01804	<0.1	Yes	U	0.1	0.0968748	16	0.48	No	No
0003-H	A-0003H-011915-IA-018D-OCL	40.748247	-111.855953	4447	026	Open living area in basement	NP	-5.4	14:33	1/19/2015	Tetrachloroethene	0.995	0.1625	0.1625	Yes	=	0.1	1.101425	370	11	No	No
0003-H	A-0003H-011915-IA-018C-OCL	40.748247	-111.855953	4447	025	Open living area in basement	NP	-4.8	14:23	1/19/2015	cis12Dichloroethene	0.836	0.148	0.148	Yes	=	0.1	0.586376	NE	NE	No	No
0003-H	A-0003H-011915-IA-018C-OCL	40.748247	-111.855953	4447	025	Open living area in basement	NP	-4.8	14:23	1/19/2015	Trichloroethene	0.996	0.02367	<0.1	Yes	U	0.1	0.1271079	16	0.48	No	No
0003-H	A-0003H-011915-IA-018C-OCL	40.748247	-111.855953	4447	025	Open living area in basement	NP	-4.8	14:23	1/19/2015	Tetrachloroethene	0.994	0.1846	0.1846	Yes	=	0.1	1.2512188	370	11	No	No
0003-H	A-0003H-011915-IA-018B-OCL	40.748247	-111.855953	4447	024	Open living area in basement	NP	-5.3	14:18	1/19/2015	cis12Dichloroethene	0.675	0.1532	0.1532	No	NR	0.1	0.6069784	NE	NE	No	No
0003-H	A-0003H-011915-IA-018B-OCL	40.748247	-111.855953	4447	024	Open living area in basement	NP	-5.3	14:18	1/19/2015	Trichloroethene	0.993	0.02422	<0.1	Yes	U	0.1	0.1300614	16	0.48	No	No
0003-H	A-0003H-011915-IA-018B-OCL	40.748247	-111.855953	4447	024	Open living area in basement	NP	-5.3	14:18	1/19/2015	Tetrachloroethene	0.995	0.2161	0.2161	Yes	=	0.1	1.4647258	370	11	No	No
0003-H	A-0003H-011915-IA-018A-OCL	40.748247	-111.855953	4447	023	Open living area in basement	NP	-5.2	14:08	1/19/2015	cis12Dichloroethene	0.793	0.2436	0.2436	Yes	=	0.1	0.9651432	NE	NE	No	No
0003-H	A-0003H-011915-IA-018A-OCL	40.748247	-111.855953	4447	023	Open living area in basement	NP	-5.2	14:08	1/19/2015	Trichloroethene	0.994	0.03546	<0.1	Yes	U	0.1	0.1904202	16	0.48	No	No
0003-H	A-0003H-011915-IA-018A-OCL	40.748247	-111.855953	4447	023	Open living area in basement	NP	-5.2	14:08	1/19/2015	Tetrachloroethene	0.994	0.2856	0.2856	Yes	=	0.1	1.9357968	370	11	No	No
0003-H	A-0003H-011915-IA-019-OUT	40.748247	-111.855953	4447	033	Concrete slab outside of basement door on front of house	OA	NA	NA	1/19/2015	cis12Dichloroethene	0.841	0.015	<0.1	Yes	U	0.1	0.05943	NE	NE	No	No
0003-H	A-0003H-011915-IA-019-OUT	40.748247	-111.855953	4447	033	Concrete slab outside of basement door on front of house	OA	NA	NA	1/19/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0003-H	A-0003H-011915-IA-019-OUT	40.748247	-111.855953	4447	033	Concrete slab outside of basement door on front of house	OA	NA	NA	1/19/2015	Tetrachloroethene	0.992	0.01425	<0.1	Yes	U	0.1	0.0965865	370	11	No	No
0003-H	A-0003H-011915-IA-020D-OCL	40.748247	-111.855953	4447	040	Open living area in basement	PP	4.6	16:22	1/19/2015	cis12Dichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	NE	NE	No	No
0003-H	A-0003H-011915-IA-020D-OCL	40.748247	-111.855953	4447	040	Open living area in basement	PP	4.6	16:22	1/19/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0003-H	A-0003H-011915-IA-020D-OCL	40.748247	-111.855953	4447	040	Open living area in basement	PP	4.6	16:22	1/19/2015	Tetrachloroethene	1	0.0272	<0.1	Yes	U	0.1	0.1843616	370	11	No	No
0003-H	A-0003H-011915-IA-020C-OCL	40.748247	-111.855953	4447	039	Open living area in basement	PP	5.6	16:17	1/19/2015	cis12Dichloroethene	0.923	0.02069	<0.1	Yes	U	0.1	0.08197378	NE	NE	No	No
0003-H	A-0003H-011915-IA-020C-OCL	40.748247	-111.855953	4447	039	Open living area in basement	PP	5.6	16:17	1/19/2015	Trichloroethene	0.61	0.00661	<0.1	No	NR	0.1	0.0354957	16	0.48	No	No
0003-H	A-0003H-011915-IA-020C-OCL	40.748247	-111.855953	4447	039	Open living area in basement	PP	5.6	16:17	1/19/2015	Tetrachloroethene	0.998	0.02528	<0.1	Yes	U	0.1	0.17134784	370	11	No	No
0003-H	A-0003H-011915-IA-020B-OCL	40.748247	-111.855953	4447	038	Open living area in basement	PP	5.8	16:02	1/19/2015	cis12Dichloroethene	0.936	0.02836	<0.1	Yes	U	0.1	0.11236232	NE	NE	No	No
0003-H	A-0003H-011915-IA-020B-OCL	40.748247	-111.855953	4447	038	Open living area in basement	PP	5.8	16:02	1/19/2015	Trichloroethene	0.458	0.02055	<0.1	No	NR	0.1	0.1103535	16	0.48	No	No
0003-H	A-0003H-011915-IA-020B-OCL	40.748247	-111.855953	4447	038	Open living area in basement	PP	5.8	16:02	1/19/2015	Tetrachloroethene	0.998	0.03095	<0.1	Yes	U	0.1	0.2097791	370	11	No	No
0003-H	A-0003H-011915-IA-020A-OCL	40.748247	-111.855953	4447	036	Open living area in basement	PP	6.6	15:47	1/19/2015	cis12Dichloroethene	0.48	0.11	0.11	No	NR	0.1	0.43582	NE	NE	No	No
0003-H	A-0003H-011915-IA-020A-OCL	40.748247	-111.855953	4447	036	Open living area in basement	PP	6.6	15:47	1/19/2015	Trichloroethene	0.868	0.01106	<0.1	Yes	U	0.1	0.0593922	16	0.48	No	No
0003-H	A-0003H-011915-IA-020A-OCL	40.748247	-111.855953	4447	036	Open living area in basement	PP	6.6	15:47	1/19/2015	Tetrachloroethene	0.995	0.03922	<0.1	Yes	U	0.1	0.26583316	370	11	No	No
0003-H	A-0003H-011915-SG-001-8'	40.748233	-111.855892	4459	020	Backyard off of backdoor	SG	NA	NA	1/19/2015	cis12Dichloroethene	0.787	0.1218	0.1218	Yes	=	0.1	0.4825716	NE	NE	No	No
0003-H	A-0003H-011915-SG-001-8'	40.748233	-111.855892	4459	020	Backyard off of backdoor	SG	NA	NA	1/19/2015	Trichloroethene	0.951	0.03727	<0.1	Yes	U	0.1	0.2001399	16	0.48	No	No
0003-H	A-0003H-011915-SG-001-8'	40.748233	-111.855892	4459	020	Backyard off of backdoor	SG	NA	NA	1/19/2015	Tetrachloroethene	0.993	0.2982	0.2982	Yes	=	0.1	2.0211996	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0004-H	A-0004H-011315-CCV	40.753892	-111.857711	4487	034	CCV - 5.0 ppb	CCV	NA	NA	1/13/2015	cis12Dichloroethene	0.993	6.157	6.157	Yes	=	0.1	24.394034	NA	NA	NA	NA
0004-H	A-0004H-011315-CCV	40.753892	-111.857711	4487	034	CCV - 5.0 ppb	CCV	NA	NA	1/13/2015	Trichloroethene	0.998	5.712	5.712	Yes	=	0.1	30.67344	NA	NA	NA	NA
0004-H	A-0004H-011315-CCV	40.753892	-111.857711	4487	034	CCV - 5.0 ppb	CCV	NA	NA	1/13/2015	Tetrachloroethene	0.994	4.815	4.815	Yes	=	0.1	32.63607	NA	NA	NA	NA
0004-H	A-0004H-011315-CCV	40.753892	-111.857711	4487	032	CCV - 1 .0 ppb	CCV	NA	NA	1/13/2015	cis12Dichloroethene	0.992	1.24	1.24	Yes	=	0.1	4.91288	NA	NA	NA	NA
0004-H	A-0004H-011315-CCV	40.753892	-111.857711	4487	032	CCV - 1 .0 ppb	CCV	NA	NA	1/13/2015	Trichloroethene	0.998	1.293	1.293	Yes	=	0.1	6.94341	NA	NA	NA	NA
0004-H	A-0004H-011315-CCV	40.753892	-111.857711	4487	032	CCV - 1 .0 ppb	CCV	NA	NA	1/13/2015	Tetrachloroethene	0.994	1.348	1.348	Yes	=	0.1	9.136744	NA	NA	NA	NA
0004-H	A-0004H-011315-IA008_CRA	40.753892	-111.857711	4487	008	Downstairs Crawl Space	IA	NA	NA	1/13/2015	cis12Dichloroethene	0.714	0.06099	<0.1	Yes	U	0.1	0.24164238	NE	NE	No	No
0004-H	A-0004H-011315-IA008_CRA	40.753892	-111.857711	4487	008	Downstairs Crawl Space	IA	NA	NA	1/13/2015	Trichloroethene	0.993	0.00996	<0.1	Yes	U	0.1	0.0534852	16	0.48	No	No
0004-H	A-0004H-011315-IA008_CRA	40.753892	-111.857711	4487	008	Downstairs Crawl Space	IA	NA	NA	1/13/2015	Tetrachloroethene	0.993	0.01791	<0.1	Yes	U	0.1	0.12139398	370	11	No	No
0004-H	A-0004H-011315-IA007_BAS	40.753892	-111.857711	4487	007	Basement	IA	NA	NA	1/13/2015	cis12Dichloroethene	0.797	0.09222	<0.1	Yes	U	0.1	0.36537564	NE	NE	No	No
0004-H	A-0004H-011315-IA007_BAS	40.753892	-111.857711	4487	007	Basement	IA	NA	NA	1/13/2015	Trichloroethene	0.973	0.01211	<0.1	Yes	U	0.1	0.0650307	16	0.48	No	No
0004-H	A-0004H-011315-IA007_BAS	40.753892	-111.857711	4487	007	Basement	IA	NA	NA	1/13/2015	Tetrachloroethene	0.995	0.01765	<0.1	Yes	U	0.1	0.1196317	370	11	No	No
0004-H	A-0004H-011315-IA006_MUD	40.753892	-111.857711	4487	006	Mud Room	IA	NA	NA	1/13/2015	cis12Dichloroethene	0.748	0.1596	0.1596	Yes	=	0.1	0.6323352	NE	NE	No	No
0004-H	A-0004H-011315-IA006_MUD	40.753892	-111.857711	4487	006	Mud Room	IA	NA	NA	1/13/2015	Trichloroethene	0.992	0.01463	<0.1	Yes	U	0.1	0.0785631	16	0.48	No	No
0004-H	A-0004H-011315-IA006_MUD	40.753892	-111.857711	4487	006	Mud Room	IA	NA	NA	1/13/2015	Tetrachloroethene	0.995	0.02091	<0.1	Yes	U	0.1	0.14172798	370	11	No	No
0004-H	A-0004H-011315-IA005_BR2	40.753892	-111.857711	4487	005	North Bedroom	IA	NA	NA	1/13/2015	cis12Dichloroethene	0.674	0.2234	0.2234	No	NR	0.1	0.8851108	NE	NE	No	No
0004-H	A-0004H-011315-IA005_BR2	40.753892	-111.857711	4487	005	North Bedroom	IA	NA	NA	1/13/2015	Trichloroethene	0.986	0.01662	<0.1	Yes	U	0.1	0.0892494	16	0.48	No	No
0004-H	A-0004H-011315-IA005_BR2	40.753892	-111.857711	4487	005	North Bedroom	IA	NA	NA	1/13/2015	Tetrachloroethene	0.992	0.03537	<0.1	Yes	U	0.1	0.23973786	370	11	No	No
0004-H	A-0004H-011315-IA004_BA1	40.753892	-111.857711	4487	004	Bathroom	IA	NA	NA	1/13/2015	cis12Dichloroethene	0.64	1.353	1.353	No	NR	0.1	5.360586	NE	NE	No	No
0004-H	A-0004H-011315-IA004_BA1	40.753892	-111.857711	4487	004	Bathroom	IA	NA	NA	1/13/2015	Trichloroethene	0.997	0.01977	<0.1	Yes	U	0.1	0.1061649	16	0.48	No	No
0004-H	A-0004H-011315-IA004_BA1	40.753892	-111.857711	4487	004	Bathroom	IA	NA	NA	1/13/2015	Tetrachloroethene	0.994	0.02284	<0.1	Yes	U	0.1	0.15480952	370	11	No	No
0004-H	A-0004H-011315-IA003_BR1	40.753892	-111.857711	4487	003	South Bedroom	IA	NA	NA	1/13/2015	cis12Dichloroethene	0.751	0.2097	0.2097	Yes	=	0.1	0.8308314	NE	NE	No	No
0004-H	A-0004H-011315-IA003_BR1	40.753892	-111.857711	4487	003	South Bedroom	IA	NA	NA	1/13/2015	Trichloroethene	0.994	0.01889	<0.1	Yes	U	0.1	0.1014393	16	0.48	No	No
0004-H	A-0004H-011315-IA003_BR1	40.753892	-111.857711	4487	003	South Bedroom	IA	NA	NA	1/13/2015	Tetrachloroethene	0.995	0.02572	<0.1	Yes	U	0.1	0.17433016	370	11	No	No
0004-H	A-0004H-011315-IA002_KIT	40.753892	-111.857711	4487	002	Kitchen	IA	NA	NA	1/13/2015	cis12Dichloroethene	0.688	0.1613	0.1613	No	NR	0.1	0.6390706	NE	NE	No	No
0004-H	A-0004H-011315-IA002_KIT	40.753892	-111.857711	4487	002	Kitchen	IA	NA	NA	1/13/2015	Trichloroethene	0.986	0.02607	<0.1	Yes	U	0.1	0.1399959	16	0.48	No	No
0004-H	A-0004H-011315-IA002_KIT	40.753892	-111.857711	4487	002	Kitchen	IA	NA	NA	1/13/2015	Tetrachloroethene	0.994	0.02453	<0.1	Yes	U	0.1	0.16626434	370	11	No	No
0004-H	A-0004H-011315-IA001_LIV	40.753892	-111.857711	4487	001	Living Room	IA	NA	NA	1/13/2015	cis12Dichloroethene	0.891	0.1778	0.1778	Yes	=	0.1	0.7044436	NE	NE	No	No
0004-H	A-0004H-011315-IA001_LIV	40.753892	-111.857711	4487	001	Living Room	IA	NA	NA	1/13/2015	Trichloroethene	0.995	0.03785	<0.1	Yes	U	0.1	0.2032545	16	0.48	No	No
0004-H	A-0004H-011315-IA001_LIV	40.753892	-111.857711	4487	001	Living Room	IA	NA	NA	1/13/2015	Tetrachloroethene	0.995	0.03615	<0.1	Yes	U	0.1	0.2450247	370	11	No	No
0004-H	A-0004H-011315-IA009I_KIT	40.753892	-111.857711	4487	018	Upstairs hallway at Kitchen arch	NP	-5.1	13:46	1/13/2015	cis12Dichloroethene	0.565	0.1257	0.1257	No	NR	0.1	0.4980234	NE	NE	No	No
0004-H	A-0004H-011315-IA009I_KIT	40.753892	-111.857711	4487	018	Upstairs hallway at Kitchen arch	NP	-5.1	13:46	1/13/2015	Trichloroethene	0.999	0.00991	<0.1	Yes	U	0.1	0.0532167	16	0.48	No	No
0004-H	A-0004H-011315-IA009I_KIT	40.753892	-111.857711	4487	018	Upstairs hallway at Kitchen arch	NP	-5.1	13:46	1/13/2015	Tetrachloroethene	0.993	0.01747	<0.1	Yes	U	0.1	0.11841166	370	11	No	No
0004-H	A-0004H-011315-IA009H_KIT	40.753892	-111.857711	4487	017	Upstairs hallway at Kitchen arch	NP	-5.0	13:44	1/13/2015	cis12Dichloroethene	0.627	0.1364	0.1364	No	NR	0.1	0.5404168	NE	NE	No	No
0004-H	A-0004H-011315-IA009H_KIT	40.753892	-111.857711	4487	017	Upstairs hallway at Kitchen arch	NP	-5.0	13:44	1/13/2015	Trichloroethene	0.975	0.01212	<0.1	Yes	U	0.1	0.0650844	16	0.48	No	No
0004-H	A-0004H-011315-IA009H_KIT	40.753892	-111.857711	4487	017	Upstairs hallway at Kitchen arch	NP	-5.0	13:44	1/13/2015	Tetrachloroethene	0.993	0.02089	<0.1	Yes	U	0.1	0.14159242	370	11	No	No
0004-H	A-0004H-011315-IA009G_KIT	40.753892	-111.857711	4487	016	Upstairs hallway at Kitchen arch	NP	-5.3	13:34	1/13/2015	cis12Dichloroethene	0.671	0.1378	0.1378	No	NR	0.1	0.5459636	NE	NE	No	No
0004-H	A-0004H-011315-IA009G_KIT	40.753892	-111.857711	4487	016	Upstairs hallway at Kitchen arch	NP	-5.3	13:34	1/13/2015	Trichloroethene	0.948	0.01442	<0.1	Yes	U	0.1	0.0774354	16	0.48	No	No
0004-H	A-0004H-011315-IA009G_KIT	40.753892	-111.857711	4487	016	Upstairs hallway at Kitchen arch	NP	-5.3	13:34	1/13/2015	Tetrachloroethene	0.998	0.02173	<0.1	Yes	U	0.1	0.14728594	370	11	No	No
0004-H	A-0004H-011315-IA009F_KIT	40.753892	-111.857711	4487	015	Upstairs hallway at Kitchen arch	NP	-5.1	13:24	1/13/2015	cis12Dichloroethene	0.657	0.1434	0.1434	No	NR	0.1	0.5681508	NE	NE	No	No
0004-H	A-0004H-011315-IA009F_KIT	40.753892	-111.857711	4487	015	Upstairs hallway at Kitchen arch	NP	-5.1	13:24	1/13/2015	Trichloroethene	0.989	0.01683	<0.1	Yes	U	0.1	0.0903771	16	0.48	No	No
0004-H	A-0004H-011315-IA009F_KIT	40.753892	-111.857711	4487	015	Upstairs hallway at Kitchen arch	NP	-5.1	13:24	1/13/2015	Tetrachloroethene	0.996	0.02261	<0.1	Yes	U	0.1	0.15325058	370	11	No	No
0004-H	A-0004H-011315-IA009E_KIT	40.753892	-111.857711	4487	014	Upstairs hallway at Kitchen arch	NP	-5.1	13:14	1/13/2015	cis12Dichloroethene	0.72	0.1683	0.1683	Yes	=	0.1	0.6668046	NE	NE	No	No
0004-H	A-0004H-011315-IA009E_KIT	40.753892	-111.857711	4487	014	Upstairs hallway at Kitchen arch	NP	-5.1	13:14	1/13/2015	Trichloroethene	0.964	0.01274	<0.1	Yes	U	0.1	0.0684138	16	0.48	No	No
0004-H	A-0004H-011315-IA009E_KIT	40.753892	-111.857711	4487	014	Upstairs hallway at Kitchen arch	NP	-5.1	13:14	1/13/2015	Tetrachloroethene	0.994	0.01905	<0.1	Yes	U	0.1	0.1291209	370	11	No	No
0004-H	A-0004H-011315-IA009D_KIT	40.753892	-111.857711	4487	013	Upstairs hallway at Kitchen arch	NP	-5.2	13:04	1/13/2015	cis12Dichloroethene	0.695	0.1717	0.1717	No	NR	0.1	0.6802754	NE	NE	No	No
0004-H	A-0004H-011315-IA009D_KIT	40.753892	-111.857711	4487	013	Upstairs hallway at Kitchen arch	NP	-5.2	13:04	1/13/2015	Trichloroethene	0.997	0.01748	<0.1	Yes	U	0.1	0.0938676	16	0.48	No	No
0004-H	A-0004H-011315-IA009D_KIT	40.753892	-111.857711	4487	013	Upstairs hallway at Kitchen arch	NP	-5.2	13:04	1/13/2015	Tetrachloroethene	0.997	0.02045	<0.1	Yes	U	0.1	0.1386101	370	11	No	No
0004-H	A-0004H-011315-IA009C_KIT	40.753892	-111.857711	4487	012	Upstairs hallway at Kitchen arch	NP	-5.2	12:49	1/13/2015	cis12Dichloroethene	0.668	0.191	0.191	No	NR	0.1	0.756742	NE	NE	No	No
0004-H	A-0004H-011315-IA009C_KIT	40.753892	-111.857711	4487	012	Upstairs hallway at Kitchen arch	NP	-5.2	12:49	1/13/2015	Trichloroethene	0.998	0.01338	<0.1	Yes	U	0.1	0.0718506	16	0.48	No	No
0004-H	A-0004H-011315-IA009C_KIT	40.753892	-111.857711	4487	012	Upstairs hallway at Kitchen arch	NP	-5.2	12:49	1/13/2015	Tetrachloroethene	0.993	0.02366	<0.1	Yes	U	0.1	0.16036748	370	11	No	No
0004-H	A-0004H-011315-IA009B_KIT	40.753892	-111.857711	4487	011	Upstairs hallway at Kitchen arch	NP	-5.2	12:39	1/13/2015	cis12Dichloroethene	0.609	0.2061	0.2061	No	NR	0.1	0.8165682	NE	NE	No	No
0004-H	A-0004H-011315-IA009B_KIT	40.753892	-111.857711	4487	011	Upstairs hallway at Kitchen arch	NP	-5.2	12:39	1/13/2015	Trichloroethene	0.966	0.01677	<0.1	Yes	U	0.1	0.0900549	16	0.48	No	No
0004-H	A-0004H-011315-IA009B_KIT	40.753892	-111.857711	4487	011	Upstairs hallway at Kitchen arch	NP	-5.2	12:39	1/13/2015	Tetrachloroethene	0.996	0.02261	<0.1	Yes	U	0.1	0.15325058	370	11	No	No
0004-H	A-0004H-011315-IA009A_KIT	40.753892	-111.857711	4487	010	Upstairs hallway at Kitchen arch	NP	-5.2	12:29	1/13/2015	cis12Dichloroethene	0.607	0.2223	0.2223	No	NR	0.1	0.8807526	NE	NE	No	No
0004-H	A-0004H-011315-IA009A_KIT	40.753892	-111.857711	4487	010	Upstairs hallway at Kitchen arch	NP	-5.2	12:29	1/13/2015	Trichloroethene	0.991	0.01486	<0.1	Yes	U	0.1	0.0797982	16	0.48	No	No
0004-H	A-0004H-011315-IA009A_KIT	40.753892	-111.857711	4487	010	Upstairs hallway at Kitchen arch	NP	-5.2	12:29	1/13/2015	Tetrachloroethene	0.995	0.02505	<0.1	Yes	U	0.1	0.1697889	370	11	No	No
0004-H	A-0004H-011315-OA-001-OUT	40.753892	-111.857711	4487	030	Sidewalk - North of House	OA	NA	NA	1/13/2015	cis12Dichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	NE	NE	No	No
0004-H	A-0004H-011315-OA-001-OUT	40.753892	-111.857711	4487	030	Sidewalk - North of House	OA	NA	NA	1/13/2015	Trichloroethene	0.974	0.00737	<0.1	Yes	U	0.1	0.0395769	16	0.48	No	No
0004-H	A-0004H-011315-OA-001-OUT	40.753892	-111.857711	4487	030	Sidewalk - North of House	OA	NA	NA	1/13/2015	Tetrachloroethene	0.999	0.00996	<0.1	Yes	U	0.1	0.06750888	370	11	No	No
0004-H	A-0004H-011315-IA010I-KIT	40.753892	-111.857711	4487	028	Upstairs hallway at Kitchen arch	PP	5.0	15:07	1/13/2015	cis12Dichloroethene	0.972	0.01388	<0.1	Yes	U	0.1	0.05499256	NE	NE	No	No
0004-H	A-0004H-011315-IA010I-KIT	40.753892	-111.857711	4487	028	Upstairs hallway at Kitchen arch	PP	5.0	15:07	1/13/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0004-H	A-0004H-011315-IA010I-KIT	40.753892	-111.857711	4487	028	Upstairs hallway at Kitchen arch	PP	5.0	15:07	1/13/2015	Tetrachloroethene	0.998	0.00973	<0.1	Yes	U	0.1	0.06594994	370	11	No	No
0004-H	A-0004H-011315-IA010H-KIT	40.753892	-111.857711	4487	027	Upstairs hallway at Kitchen arch	PP	5.1	15:02	1/13/2015	cis12Dichloroethene	0.927	0.01965	<0.1	Yes	U	0.1	0.0778533	NE	NE	No	No
0004-H	A-0004H-011315-IA010H-KIT	40.753892	-111.857711	4487	027	Upstairs hallway at Kitchen arch	PP	5.1	15:02	1/13/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0004-H	A-0004H-011315-IA010H-KIT	40.753892	-111.857711	4487	027	Upstairs hallway at Kitchen arch	PP	5.1	15:02	1/13/2015	Tetrachloroethene	0.987	0.00876	<0.1	Yes	U	0.1	0.05937528	370	11	No	No
0004-H	A-0004H-011315-IA010G-KIT	40.753892	-111.857711	4487	026	Upstairs hallway at Kitchen arch	PP	5.3	14:52	1/13/2015	cis12Dichloroethene	0.776	0.0225	<0.1	Yes	U	0.1	0.089145	NE	NE	No	No
0004-H	A-0004H-011315-IA010G-KIT	40.753892	-111.857711	4487	026	Upstairs hallway at Kitchen arch	PP	5.3	14:52	1/13/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0004-H	A-0004H-011315-IA010G-KIT	40.753892	-111.857711	4487	026	Upstairs hallway at Kitchen arch	PP	5.3	14:52	1/13/2015	Tetrachloroethene	0.997	0.00795	<0.1	Yes	U	0.1	0.0538851	370	11	No	No
0004-H	A-0004H-011315-IA010F-KIT	40.753892	-111.857711	4487	025	Upstairs hallway at Kitchen arch	PP	5.3	14:42	1/13/2015	cis12Dichloroethene	0.833	0.02075	<0.1	Yes	U	0.1	0.0822115	NE	NE	No	No
0004-H	A-0004H-011315-IA010F-KIT	40.753892	-111.857711	4487	025	Upstairs hallway at Kitchen arch	PP	5.3	14:42	1/13/2015	Trichloroethene	0.971	0.00611	<0.1	Yes	U	0.1	0.0328107	16	0.48	No	No
0004-H	A-0004H-011315-IA010F-KIT	40.753892	-111.857711	4487	025	Upstairs hallway at Kitchen arch	PP	5.3	14:42	1/13/2015	Tetrachloroethene	0.995	0.00925	<0.1	Yes	U	0.1	0.0626965	370	11	No	No
0004-H	A-0004H-011315-IA010E-KIT	40.753892	-111.857711	4487	024	Upstairs hallway at Kitchen arch	PP	5.2	14:37	1/13/2015	cis12Dichloroethene	0.677	0.01689	<0.1	No	NR	0.1	0.06691818	NE	NE	No	No
0004-H	A-0004H-011315-IA010E-KIT	40.753892	-111.857711	4487	024	Upstairs hallway at Kitchen arch	PP	5.2	14:37	1/13/2015	Trichloroethene	0.997	0.00888	<0.1	Yes	U	0.1	0.0476856	16	0.48	No	No
0004-H	A-0004H-011315-IA010E-KIT	40.753892	-111.857711	4487	024	Upstairs hallway at Kitchen arch	PP	5.2	14:37	1/13/2015	Tetrachloroethene	0.993	0.00986	<0.1	Yes	U	0.1	0.06683108	370	11	No	No
0004-H	A-0004H-011315-IA010D-KIT	40.753892	-111.857711	4487	023	Upstairs hallway at Kitchen arch	PP	4.9	14:27	1/13/2015	cis12Dichloroethene	0.854	0.02335	<0.1	Yes	U	0.1	0.0925127	NE	NE	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0004-H	A-0004H-011315-IA010D-KIT	40.753892	-111.857711	4487	023	Upstairs hallway at Kitchen arch	PP	4.9	14:27	1/13/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0004-H	A-0004H-011315-IA010D-KIT	40.753892	-111.857711	4487	023	Upstairs hallway at Kitchen arch	PP	4.9	14:27	1/13/2015	Tetrachloroethene	0.993	0.00942	<0.1	Yes	U	0.1	0.06384876	370	11	No	No
0004-H	A-0004H-011315-IA010C_KIT	40.753892	-111.857711	4487	022	Upstairs hallway at Kitchen arch	PP	5.0	14:17	1/13/2015	cis12Dichloroethene	0.856	0.02304	<0.1	Yes	U	0.1	0.09128448	NE	NE	No	No
0004-H	A-0004H-011315-IA010C_KIT	40.753892	-111.857711	4487	022	Upstairs hallway at Kitchen arch	PP	5.0	14:17	1/13/2015	Trichloroethene	0.995	0.00847	<0.1	Yes	U	0.1	0.0454839	16	0.48	No	No
0004-H	A-0004H-011315-IA010C_KIT	40.753892	-111.857711	4487	022	Upstairs hallway at Kitchen arch	PP	5.0	14:17	1/13/2015	Tetrachloroethene	0.996	0.00746	<0.1	Yes	U	0.1	0.05056388	370	11	No	No
0004-H	A-0004H-011315-IA010B_KIT	40.753892	-111.857711	4487	021	Upstairs hallway at Kitchen arch	PP	4.7	14:12	1/13/2015	cis12Dichloroethene	0.861	0.046	<0.1	Yes	U	0.1	0.182252	NE	NE	No	No
0004-H	A-0004H-011315-IA010B_KIT	40.753892	-111.857711	4487	021	Upstairs hallway at Kitchen arch	PP	4.7	14:12	1/13/2015	Trichloroethene	0.993	0.00763	<0.1	Yes	U	0.1	0.0409731	16	0.48	No	No
0004-H	A-0004H-011315-IA010B_KIT	40.753892	-111.857711	4487	021	Upstairs hallway at Kitchen arch	PP	4.7	14:12	1/13/2015	Tetrachloroethene	0.995	0.01249	<0.1	Yes	U	0.1	0.08465722	370	11	No	No
0004-H	A-0004H-011315-IA010A_KIT	40.753892	-111.857711	4487	020	Upstairs hallway at Kitchen arch	PP	5.2	14:07	1/13/2015	cis12Dichloroethene	0.751	0.1137	0.1137	Yes	=	0.1	0.4504794	NE	NE	No	No
0004-H	A-0004H-011315-IA010A_KIT	40.753892	-111.857711	4487	020	Upstairs hallway at Kitchen arch	PP	5.2	14:07	1/13/2015	Trichloroethene	0.961	0.00818	<0.1	Yes	U	0.1	0.0439266	16	0.48	No	No
0004-H	A-0004H-011315-IA010A_KIT	40.753892	-111.857711	4487	020	Upstairs hallway at Kitchen arch	PP	5.2	14:07	1/13/2015	Tetrachloroethene	0.992	0.0168	<0.1	Yes	U	0.1	0.1138704	370	11	No	No
0004-H	A-0004H-011315-SG-001-07'	40.753817	111.857667	4486	031	Backyard - West of Back Door	SG	NA	NA	1/13/2015	cis12Dichloroethene	0.947	0.147	0.147	Yes	=	0.1	0.582414	NE	NE	No	No
0004-H	A-0004H-011315-SG-001-07'	40.753817	111.857667	4486	031	Backyard - West of Back Door	SG	NA	NA	1/13/2015	Trichloroethene	0.986	0.03961	<0.1	Yes	U	0.1	0.2127057	16	0.48	No	No
0004-H	A-0004H-011315-SG-001-07'	40.753817	111.857667	4486	031	Backyard - West of Back Door	SG	NA	NA	1/13/2015	Tetrachloroethene	0.996	0.1112	0.1112	Yes	=	0.1	0.7537136	370	11	No	No
0004-H	A-0004H-011315-SG001-04'	40.753817	111.857667	4486	029	Backyard - West of Back Door	SG	NA	NA	1/13/2015	cis12Dichloroethene	0.8	0.1283	0.1283	Yes	=	0.1	0.5083246	NE	NE	No	No
0004-H	A-0004H-011315-SG001-04'	40.753817	111.857667	4486	029	Backyard - West of Back Door	SG	NA	NA	1/13/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0004-H	A-0004H-011315-SG001-04'	40.753817	111.857667	4486	029	Backyard - West of Back Door	SG	NA	NA	1/13/2015	Tetrachloroethene	0.993	0.05987	<0.1	Yes	U	0.1	0.40579886	370	11	No	No
0005-H	A-0005H-041015-CCV	40.755851	-111.856386	4519	027	CCV - 0.55 ppb	CCV	NA	NA	4/10/2015	cis12Dichloroethene	0.993	0.4557	0.4557	Yes	=	0.1	1.8054834	NA	NA	NA	NA
0005-H	A-0005H-041015-CCV	40.755851	-111.856386	4519	027	CCV - 0.55 ppb	CCV	NA	NA	4/10/2015	Trichloroethene	0.957	0.5794	0.5794	Yes	=	0.1	3.111378	NA	NA	NA	NA
0005-H	A-0005H-041015-CCV	40.755851	-111.856386	4519	027	CCV - 0.55 ppb	CCV	NA	NA	4/10/2015	Tetrachloroethene	0.995	0.5778	0.5778	Yes	=	0.1	3.9163284	NA	NA	NA	NA
0005-H	A-0005H-040915-CCV	40.755851	-111.856386	4519	030	CCV - 5.5 ppb	CCV	NA	NA	4/9/2015	cis12Dichloroethene	0.999	3.904	3.904	Yes	=	0.1	15.467648	NA	NA	NA	NA
0005-H	A-0005H-040915-CCV	40.755851	-111.856386	4519	030	CCV - 5.5 ppb	CCV	NA	NA	4/9/2015	Trichloroethene	0.977	5.095	5.095	Yes	=	0.1	27.36015	NA	NA	NA	NA
0005-H	A-0005H-040915-CCV	40.755851	-111.856386	4519	030	CCV - 5.5 ppb	CCV	NA	NA	4/9/2015	Tetrachloroethene	0.993	4.65	4.65	Yes	=	0.1	31.5177	NA	NA	NA	NA
0005-H	A-0005H-040915-CCV	40.755851	-111.856386	4519	028	CCV - 0.55 ppb	CCV	NA	NA	4/9/2015	cis12Dichloroethene	0.998	0.4252	0.4252	Yes	=	0.1	1.6846424	NA	NA	NA	NA
0005-H	A-0005H-040915-CCV	40.755851	-111.856386	4519	028	CCV - 0.55 ppb	CCV	NA	NA	4/9/2015	Trichloroethene	0.912	0.57	0.57	Yes	=	0.1	3.0609	NA	NA	NA	NA
0005-H	A-0005H-040915-CCV	40.755851	-111.856386	4519	028	CCV - 0.55 ppb	CCV	NA	NA	4/9/2015	Tetrachloroethene	0.994	0.5403	0.5403	Yes	=	0.1	3.6621534	NA	NA	NA	NA
0005-H	A-0005H-041015-IA-011-COA	40.755851	-111.856386	4519	011	Basement - Coal Bin room	IA	NA	NA	4/10/2015	cis12Dichloroethene	0.679	0.03236	<0.1	No	NR	0.1	0.12821032	NE	NE	No	No
0005-H	A-0005H-041015-IA-011-COA	40.755851	-111.856386	4519	011	Basement - Coal Bin room	IA	NA	NA	4/10/2015	Trichloroethene	1	0.027	<0.1	Yes	U	0.1	0.14499	16	0.48	No	No
0005-H	A-0005H-041015-IA-011-COA	40.755851	-111.856386	4519	011	Basement - Coal Bin room	IA	NA	NA	4/10/2015	Tetrachloroethene	0.994	0.02278	<0.1	Yes	U	0.1	0.15440284	370	11	No	No
0005-H	A-0005H-041015-IA-010-GAR	40.755851	-111.856386	4519	010	Basement - Garage	IA	NA	NA	4/10/2015	cis12Dichloroethene	0.659	0.02412	<0.1	No	NR	0.1	0.09556344	NE	NE	No	No
0005-H	A-0005H-041015-IA-010-GAR	40.755851	-111.856386	4519	010	Basement - Garage	IA	NA	NA	4/10/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0005-H	A-0005H-041015-IA-010-GAR	40.755851	-111.856386	4519	010	Basement - Garage	IA	NA	NA	4/10/2015	Tetrachloroethene	0.995	0.02254	<0.1	Yes	U	0.1	0.15277612	370	11	No	No
0005-H	A-0005H-041015-IA-009-STO	40.755851	-111.856386	4519	009	Basement - Storage room	IA	NA	NA	4/10/2015	cis12Dichloroethene	0.743	0.03651	<0.1	Yes	U	0.1	0.14465262	NE	NE	No	No
0005-H	A-0005H-041015-IA-009-STO	40.755851	-111.856386	4519	009	Basement - Storage room	IA	NA	NA	4/10/2015	Trichloroethene	0.897	0.01467	<0.1	Yes	U	0.1	0.0787779	16	0.48	No	No
0005-H	A-0005H-041015-IA-009-STO	40.755851	-111.856386	4519	009	Basement - Storage room	IA	NA	NA	4/10/2015	Tetrachloroethene	0.995	0.01963	<0.1	Yes	U	0.1	0.13305214	370	11	No	No
0005-H	A-0005H-041015-IA-008-LAU	40.755851	-111.856386	4519	008	Basement - Laundry	IA	NA	NA	4/10/2015	cis12Dichloroethene	0.775	0.02695	<0.1	Yes	U	0.1	0.1067759	NE	NE	No	No
0005-H	A-0005H-041015-IA-008-LAU	40.755851	-111.856386	4519	008	Basement - Laundry	IA	NA	NA	4/10/2015	Trichloroethene	0.912	0.01377	<0.1	Yes	U	0.1	0.0739449	16	0.48	No	No
0005-H	A-0005H-041015-IA-008-LAU	40.755851	-111.856386	4519	008	Basement - Laundry	IA	NA	NA	4/10/2015	Tetrachloroethene	0.996	0.02027	<0.1	Yes	U	0.1	0.13739006	370	11	No	No
0005-H	A-0005H-041015-IA-007-ATT	40.755851	-111.856386	4519	007	Upper Level - Unfinished Attic	IA	NA	NA	4/10/2015	cis12Dichloroethene	0.779	0.03932	<0.1	Yes	U	0.1	0.15578584	NE	NE	No	No
0005-H	A-0005H-041015-IA-007-ATT	40.755851	-111.856386	4519	007	Upper Level - Unfinished Attic	IA	NA	NA	4/10/2015	Trichloroethene	0.912	0.01123	<0.1	Yes	U	0.1	0.0603051	16	0.48	No	No
0005-H	A-0005H-041015-IA-007-ATT	40.755851	-111.856386	4519	007	Upper Level - Unfinished Attic	IA	NA	NA	4/10/2015	Tetrachloroethene	0.995	0.01572	<0.1	Yes	U	0.1	0.10655016	370	11	No	No
0005-H	A-0005H-041015-IA-006-KIT	40.755851	-111.856386	4519	006	Main Level - Kitchen	IA	NA	NA	4/10/2015	cis12Dichloroethene	0.71	0.05713	<0.1	Yes	U	0.1	0.22634906	NE	NE	No	No
0005-H	A-0005H-041015-IA-006-KIT	40.755851	-111.856386	4519	006	Main Level - Kitchen	IA	NA	NA	4/10/2015	Trichloroethene	0.914	0.01152	<0.1	Yes	U	0.1	0.0618624	16	0.48	No	No
0005-H	A-0005H-041015-IA-006-KIT	40.755851	-111.856386	4519	006	Main Level - Kitchen	IA	NA	NA	4/10/2015	Tetrachloroethene	0.995	0.02024	<0.1	Yes	U	0.1	0.13718672	370	11	No	No
0005-H	A-0005H-041015-IA-005-BR2	40.755851	-111.856386	4519	005	Main Level - Back bedroom	IA	NA	NA	4/10/2015	cis12Dichloroethene	0.698	0.06463	<0.1	No	NR	0.1	0.25606406	NE	NE	No	No
0005-H	A-0005H-041015-IA-005-BR2	40.755851	-111.856386	4519	005	Main Level - Back bedroom	IA	NA	NA	4/10/2015	Trichloroethene	0.866	0.01394	<0.1	Yes	U	0.1	0.0748578	16	0.48	No	No
0005-H	A-0005H-041015-IA-005-BR2	40.755851	-111.856386	4519	005	Main Level - Back bedroom	IA	NA	NA	4/10/2015	Tetrachloroethene	0.995	0.01828	<0.1	Yes	U	0.1	0.12390184	370	11	No	No
0005-H	A-0005H-041015-IA-004-BA1	40.755851	-111.856386	4519	004	Main Level - Bathroom	IA	NA	NA	4/10/2015	cis12Dichloroethene	0.697	0.1419	0.1419	No	NR	0.1	0.5622078	NE	NE	No	No
0005-H	A-0005H-041015-IA-004-BA1	40.755851	-111.856386	4519	004	Main Level - Bathroom	IA	NA	NA	4/10/2015	Trichloroethene	0.968	0.01208	<0.1	Yes	U	0.1	0.0648696	16	0.48	No	No
0005-H	A-0005H-041015-IA-004-BA1	40.755851	-111.856386	4519	004	Main Level - Bathroom	IA	NA	NA	4/10/2015	Tetrachloroethene	0.995	0.01655	<0.1	Yes	U	0.1	0.1121759	370	11	No	No
0005-H	A-0005H-041015-IA-003-BR1	40.755851	-111.856386	4519	003	Main Level - Front bedroom	IA	NA	NA	4/10/2015	cis12Dichloroethene	0.686	0.07676	<0.1	No	NR	0.1	0.30412312	NE	NE	No	No
0005-H	A-0005H-041015-IA-003-BR1	40.755851	-111.856386	4519	003	Main Level - Front bedroom	IA	NA	NA	4/10/2015	Trichloroethene	0.907	0.01592	<0.1	Yes	U	0.1	0.0854904	16	0.48	No	No
0005-H	A-0005H-041015-IA-003-BR1	40.755851	-111.856386	4519	003	Main Level - Front bedroom	IA	NA	NA	4/10/2015	Tetrachloroethene	0.995	0.01916	<0.1	Yes	U	0.1	0.12986648	370	11	No	No
0005-H	A-0005H-041015-IA-002-OCL	40.755851	-111.856386	4519	002	Main Level - Open Living - Dining	IA	NA	NA	4/10/2015	cis12Dichloroethene	0.751	0.05737	<0.1	Yes	U	0.1	0.22729994	NE	NE	No	No
0005-H	A-0005H-041015-IA-002-OCL	40.755851	-111.856386	4519	002	Main Level - Open Living - Dining	IA	NA	NA	4/10/2015	Trichloroethene	0.861	0.01434	<0.1	Yes	U	0.1	0.0770058	16	0.48	No	No
0005-H	A-0005H-041015-IA-002-OCL	40.755851	-111.856386	4519	002	Main Level - Open Living - Dining	IA	NA	NA	4/10/2015	Tetrachloroethene	0.994	0.01901	<0.1	Yes	U	0.1	0.12884978	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0005-H	A-0005H-041015-IA-012H-LAU	40.755851	-111.856386	4519	019	Basement - Laundry	NP	-5.6	12:59	4/10/2015	cis12Dichloroethene	0.836	0.01382	<0.1	Yes	U	0.1	0.05475484	NE	NE	No	No
0005-H	A-0005H-041015-IA-012H-LAU	40.755851	-111.856386	4519	019	Basement - Laundry	NP	-5.6	12:59	4/10/2015	Trichloroethene	0.929	0.01138	<0.1	Yes	U	0.1	0.0611106	16	0.48	No	No
0005-H	A-0005H-041015-IA-012H-LAU	40.755851	-111.856386	4519	019	Basement - Laundry	NP	-5.6	12:59	4/10/2015	Tetrachloroethene	0.994	0.03254	<0.1	Yes	U	0.1	0.22055612	370	11	No	No
0005-H	A-0005H-041015-IA-012G-LAU	40.755851	-111.856386	4519	018	Basement - Laundry	NP	-5.1	12:51	4/10/2015	cis12Dichloroethene	0.888	0.0159	<0.1	Yes	U	0.1	0.0629958	NE	NE	No	No
0005-H	A-0005H-041015-IA-012G-LAU	40.755851	-111.856386	4519	018	Basement - Laundry	NP	-5.1	12:51	4/10/2015	Trichloroethene	0.988	0.01734	<0.1	Yes	U	0.1	0.0931158	16	0.48	No	No
0005-H	A-0005H-041015-IA-012G-LAU	40.755851	-111.856386	4519	018	Basement - Laundry	NP	-5.1	12:51	4/10/2015	Tetrachloroethene	0.993	0.03064	<0.1	Yes	U	0.1	0.20767792	370	11	No	No
0005-H	A-0005H-041015-IA-012F-LAU	40.755851	-111.856386	4519	017	Basement - Laundry	NP	-4.8	12:43	4/10/2015	cis12Dichloroethene	0.814	0.01628	<0.1	Yes	U	0.1	0.06450136	NE	NE	No	No
0005-H	A-0005H-041015-IA-012F-LAU	40.755851	-111.856386	4519	017	Basement - Laundry	NP	-4.8	12:43	4/10/2015	Trichloroethene	0.986	0.01677	<0.1	Yes	U	0.1	0.0900549	16	0.48	No	No
0005-H	A-0005H-041015-IA-012F-LAU	40.755851	-111.856386	4519	017	Basement - Laundry	NP	-4.8	12:43	4/10/2015	Tetrachloroethene	0.994	0.03046	<0.1	Yes	U	0.1	0.20645788	370	11	No	No
0005-H	A-0005H-041015-IA-012E-LAU	40.755851	-111.856386	4519	016	Basement - Laundry	NP	-4.1	12:35	4/10/2015	cis12Dichloroethene	0.742	0.01483	<0.1	Yes	U	0.1	0.05875646	NE	NE	No	No
0005-H	A-0005H-041015-IA-012E-LAU	40.755851	-111.856386	4519	016	Basement - Laundry	NP	-4.1	12:35	4/10/2015	Trichloroethene	0.91	0.01649	<0.1	Yes	U	0.1	0.0885513	16	0.48	No	No
0005-H	A-0005H-041015-IA-012E-LAU	40.755851	-111.856386	4519	016	Basement - Laundry	NP	-4.1	12:35	4/10/2015	Tetrachloroethene	0.993	0.0276	<0.1	Yes	U	0.1	0.1870728	370	11	No	No
0005-H	A-0005H-041015-IA-012D-LAU	40.755851	-111.856386	4519	015	Basement - Laundry	NP	-5.8	12:27	4/10/2015	cis12Dichloroethene	0.668	0.01548	<0.1	No	NR	0.1	0.06133176	NE	NE	No	No
0005-H	A-0005H-041015-IA-012D-LAU	40.755851	-111.856386	4519	015	Basement - Laundry	NP	-5.8	12:27	4/10/2015	Trichloroethene	0.911	0.01065	<0.1	Yes	U	0.1	0.0571905	16	0.48	No	No
0005-H	A-0005H-041015-IA-012D-LAU	40.755851	-111.856386	4519	015	Basement - Laundry	NP	-5.8	12:27	4/10/2015	Tetrachloroethene	0.994	0.02472	<0.1	Yes	U	0.1	0.16755216	370	11	No	No
0005-H	A-0005H-041015-IA-012C-LAU	40.755851	-111.856386	4519	014	Basement - Laundry	NP	-5.4	12:19	4/10/2015	cis12Dichloroethene	0.668	0.02067	<0.1	No	NR	0.1	0.08189454	NE	NE	No	No
0005-H	A-0005H-041015-IA-012C-LAU	40.755851	-111.856386	4519	014	Basement - Laundry	NP	-5.4	12:19	4/10/2015	Trichloroethene	0.921	0.01866	<0.1	Yes	U	0.1	0.1002042	16	0.48	No	No
0005-H	A-0005H-041015-IA-012C-LAU	40.755851	-111.856386	4519	014	Basement - Laundry	NP	-5.4	12:19	4/10/2015	Tetrachloroethene	0.996	0.02734	<0.1	Yes	U	0.1	0.18531052	370	11	No	No
0005-H	A-0005H-041015-IA-012B-LAU	40.755851	-111.856386	4519	013	Basement - Laundry	NP	-4.4	12:10	4/10/2015	cis12Dichloroethene	0.875	0.02202	<0.1	Yes	U	0.1	0.08724324	NE	NE	No	No
0005-H	A-0005H-041015-IA-012B-LAU	40.755851	-111.856386	4519	013	Basement - Laundry	NP	-4.4	12:10	4/10/2015	Trichloroethene	0.918	0.01247	<0.1	Yes	U	0.1	0.0669639	16	0.48	No	No
0005-H	A-0005H-041015-IA-012B-LAU	40.755851	-111.856386	4519	013	Basement - Laundry	NP	-4.4	12:10	4/10/2015	Tetrachloroethene	0.994	0.02524	<0.1	Yes	U	0.1	0.17107672	370	11	No	No
0005-H	A-0005H-041015-IA-012A-LAU	40.755851	-111.856386	4519	012	Basement - Laundry	NP	-4.6	12:02	4/10/2015	cis12Dichloroethene	0.902	0.02502	<0.1	Yes	U	0.1	0.09912924	NE	NE	No	No
0005-H	A-0005H-041015-IA-012A-LAU	40.755851	-111.856386	4519	012	Basement - Laundry	NP	-4.6	12:02	4/10/2015	Trichloroethene	0.909	0.01678	<0.1	Yes	U	0.1	0.0901086	16	0.48	No	No
0005-H	A-0005H-041015-IA-012A-LAU	40.755851	-111.856386	4519	012	Basement - Laundry	NP	-4.6	12:02	4/10/2015	Tetrachloroethene	0.995	0.02756	<0.1	Yes	U	0.1	0.18680168	370	11	No	No
0005-H	A-0005H-041015-IA-001-OUT	40.755851	-111.856386	4519	001	Outdoor Ambient - West side of house on porch	OA	NA	NA	4/10/2015	cis12Dichloroethene	0.961	0.01102	<0.1	Yes	U	0.1	0.04366124	NE	NE	No	No
0005-H	A-0005H-041015-IA-001-OUT	40.755851	-111.856386	4519	001	Outdoor Ambient - West side of house on porch	OA	NA	NA	4/10/2015	Trichloroethene	0.996	0.00857	<0.1	Yes	U	0.1	0.0460209	16	0.48	No	No
0005-H	A-0005H-041015-IA-001-OUT	40.755851	-111.856386	4519	001	Outdoor Ambient - West side of house on porch	OA	NA	NA	4/10/2015	Tetrachloroethene	0.995	0.02629	<0.1	Yes	U	0.1	0.17819362	370	11	No	No
0005-H	A-0005H-041015-IA-013F-LAU	40.755851	-111.856386	4519	025	Basement - Laundry	PP	5.5	14:02	4/10/2015	cis12Dichloroethene	0.853	0.00853	<0.1	Yes	U	0.1	0.03379586	NE	NE	No	No
0005-H	A-0005H-041015-IA-013F-LAU	40.755851	-111.856386	4519	025	Basement - Laundry	PP	5.5	14:02	4/10/2015	Trichloroethene	0.956	0.00812	<0.1	Yes	U	0.1	0.0436044	16	0.48	No	No
0005-H	A-0005H-041015-IA-013F-LAU	40.755851	-111.856386	4519	025	Basement - Laundry	PP	5.5	14:02	4/10/2015	Tetrachloroethene	0.993	0.0266	<0.1	Yes	U	0.1	0.1802948	370	11	No	No
0005-H	A-0005H-041015-IA-013E-LAU	40.755851	-111.856386	4519	024	Basement - Laundry	PP	4.8	13:53	4/10/2015	cis12Dichloroethene	0.875	0.01395	<0.1	Yes	U	0.1	0.0552699	NE	NE	No	No
0005-H	A-0005H-041015-IA-013E-LAU	40.755851	-111.856386	4519	024	Basement - Laundry	PP	4.8	13:53	4/10/2015	Trichloroethene	0.98	0.01497	<0.1	Yes	U	0.1	0.0803889	16	0.48	No	No
0005-H	A-0005H-041015-IA-013E-LAU	40.755851	-111.856386	4519	024	Basement - Laundry	PP	4.8	13:53	4/10/2015	Tetrachloroethene	0.993	0.02812	<0.1	Yes	U	0.1	0.19059736	370	11	No	No
0005-H	A-0005H-041015-IA-013D-LAU	40.755851	-111.856386	4519	023	Basement - Laundry	PP	6.4	13:45	4/10/2015	cis12Dichloroethene	0.916	0.00978	<0.1	Yes	U	0.1	0.03874836	NE	NE	No	No
0005-H	A-0005H-041015-IA-013D-LAU	40.755851	-111.856386	4519	023	Basement - Laundry	PP	6.4	13:45	4/10/2015	Trichloroethene	0.948	0.00696	<0.1	Yes	U	0.1	0.0373752	16	0.48	No	No
0005-H	A-0005H-041015-IA-013D-LAU	40.755851	-111.856386	4519	023	Basement - Laundry	PP	6.4	13:45	4/10/2015	Tetrachloroethene	0.995	0.02993	<0.1	Yes	U	0.1	0.20286554	370	11	No	No
0005-H	A-0005H-041015-IA-013C-LAU	40.755851	-111.856386	4519	022	Basement - Laundry	PP	6.5	13:37	4/10/2015	cis12Dichloroethene	0.849	0.01637	<0.1	Yes	U	0.1	0.06485794	NE	NE	No	No
0005-H	A-0005H-041015-IA-013C-LAU	40.755851	-111.856386	4519	022	Basement - Laundry	PP	6.5	13:37	4/10/2015	Trichloroethene	0.957	0.02272	<0.1	Yes	U	0.1	0.1220064	16	0.48	No	No
0005-H	A-0005H-041015-IA-013C-LAU	40.755851	-111.856386	4519	022	Basement - Laundry	PP	6.5	13:37	4/10/2015	Tetrachloroethene	0.993	0.02969	<0.1	Yes	U	0.1	0.20123882	370	11	No	No
0005-H	A-0005H-041015-IA-013B-LAU	40.755851	-111.856386	4519	021	Basement - Laundry	PP	6.2	13:27	4/10/2015	cis12Dichloroethene	0.78	0.01164	<0.1	Yes	U	0.1	0.04611768	NE	NE	No	No
0005-H	A-0005H-041015-IA-013B-LAU	40.755851	-111.856386	4519	021	Basement - Laundry	PP	6.2	13:27	4/10/2015	Trichloroethene	0.996	0.0174	<0.1	Yes	U	0.1	0.093438	16	0.48	No	No
0005-H	A-0005H-041015-IA-013B-LAU	40.755851	-111.856386	4519	021	Basement - Laundry	PP	6.2	13:27	4/10/2015	Tetrachloroethene	0.993	0.02968	<0.1	Yes	U	0.1	0.20117104	370	11	No	No
0005-H	A-0005H-041015-IA-013A-LAU	40.755851	-111.856386	4519	020	Basement - Laundry	PP	6.2	13:19	4/10/2015	cis12Dichloroethene	0.854	0.01478	<0.1	Yes	U	0.1	0.05855836	NE	NE	No	No
0005-H	A-0005H-041015-IA-013A-LAU	40.755851	-111.856386	4519	020	Basement - Laundry	PP	6.2	13:19	4/10/2015	Trichloroethene	0.983	0.01452	<0.1	Yes	U	0.1	0.0779724	16	0.48	No	No
0005-H	A-0005H-041015-IA-013A-LAU	40.755851	-111.856386	4519	020	Basement - Laundry	PP	6.2	13:19	4/10/2015	Tetrachloroethene	0.994	0.03051	<0.1	Yes	U	0.1	0.20679678	370	11	No	No
0005-H	A-0005H-041015-SG-001-4'	40.755841	-111.856509	4518	026	Collected off of walk - SE of house	SG	NA	NA	4/10/2015	cis12Dichloroethene	0.87	0.01744	<0.1	Yes	U	0.1	0.06909728	NE	NE	No	No
0005-H	A-0005H-041015-SG-001-4'	40.755841	-111.856509	4518	026	Collected off of walk - SE of house	SG	NA	NA	4/10/2015	Trichloroethene	0.907	0.00658	<0.1	Yes	U	0.1	0.0353346	16	0.48	No	No
0005-H	A-0005H-041015-SG-001-4'	40.755841	-111.856509	4518	026	Collected off of walk - SE of house	SG	NA	NA	4/10/2015	Tetrachloroethene	0.994	0.04145	<0.1	Yes	U	0.1	0.2809481	370	11	No	No
0006-H	A-0006H-030615-CCV	40.755330	-111.855572	4533	031	CCV - 0.5 ppb	CCV	NA	NA	3/5/2015	cis12Dichloroethene	0.995	0.5422	0.5422	Yes	=	0.1	2.1481964	NA	NA	NA	NA
0006-H	A-0006H-030615-CCV	40.755330	-111.855572	4533	031	CCV - 0.5 ppb	CCV	NA	NA	3/5/2015	Trichloroethene	0.994	0.5366	0.5366	Yes	=	0.1	2.881542	NA	NA	NA	NA
0006-H	A-0006H-030615-CCV	40.755330	-111.855572	4533	031	CCV - 0.5 ppb	CCV	NA	NA	3/5/2015	Tetrachloroethene	0.994	0.5168	0.5168	Yes	=	0.1	3.5028704	NA	NA	NA	NA
0006-H	A-0006H-030615-CCV	40.755330	-111.855572	4533	030	CCV - 5.0 ppb	CCV	NA	NA	3/5/2015	cis12Dichloroethene	0.995	4.668	4.668	Yes	=	0.1	18.494616	NA	NA	NA	NA
0006-H	A-0006H-030615-CCV	40.755330	-111.855572	4533	030	CCV - 5.0 ppb	CCV	NA	NA	3/5/2015	Trichloroethene	0.959	5.003	5.003	Yes	=	0.1	26.86611	NA	NA	NA	NA
0006-H	A-0006H-030615-CCV	40.755330	-111.855572	4533	030	CCV - 5.0 ppb	CCV	NA	NA	3/5/2015	Tetrachloroethene	0.994	4.673	4.673	Yes	=	0.1	31.673594	NA	NA	NA	NA
0006-H	A-0006H-030515-CCV	40.755330	-111.855572	4533	002	CCV - 0.5 ppb	CCV	NA	NA	3/5/2015	cis12Dichloroethene	0.99	0.6427	0.6427	Yes	=	0.1	2.5463774	NA	NA	NA	NA
0006-H	A-0006H-030515-CCV	40.755330	-111.855572	4533	002	CCV - 0.5 ppb	CCV	NA	NA	3/5/2015	Trichloroethene	0.976	0.591	0.591	Yes	=	0.1	3.17367	NA	NA	NA	NA
0006-H	A-0006H-030515-CCV	40.755330	-111.855572	4533	002	CCV - 0.5 ppb	CCV	NA	NA	3/5/2015	Tetrachloroethene	0.995	0.6027	0.6027	Yes	=	0.1	4.0851006	NA	NA	NA	NA
0006-H	A-0006H-030515-CCV	40.755330	-111.855572	4533	001	CCV - 5.0 ppb	CCV	NA	NA	3/5/2015	cis12Dichloroethene	0.996	5.065	5.065	Yes	=	0.1	20.06753	NA	NA	NA	NA
0006-H	A-0006H-030515-CCV	40.755330	-111.855572	4533	001	CCV - 5.0 ppb	CCV	NA	NA	3/5/2015	Trichloroethene	0.972	5.078	5.078	Yes	=	0.1	27.26886	NA	NA	NA	NA
0006-H	A-0006H-030515-CCV	40.755330	-111.855572	4533	001	CCV - 5.0 ppb	CCV	NA	NA	3/5/2015	Tetrachloroethene	0.995	5.059	5.059	Yes	=	0.1	34.289902	NA	NA	NA	NA
0006-H	A-0006H-030615-IA-009-LAU	40.755330	-111.855572	4533	009	Basement - Laundry Area	IA	NA	NA	3/6/2015	cis12Dichloroethene	0.736	0.02903	<0.1	Yes	U	0.1	0.11501686	NE	NE	No	No
0006-H	A-0006H-030615-IA-009-LAU	40.755330	-111.855572	4533	009	Basement - Laundry Area	IA	NA	NA	3/6/2015	Trichloroethene	0.783	0.00336	<0.1	Yes	U	0.1	0.0180432	16	0.48	No	No
0006-H	A-0006H-030615-IA-009-LAU	40.755330	-111.855572	4533	009	Basement - Laundry Area	IA	NA	NA	3/6/2015	Tetrachloroethene	0.998	0.01168	<0.1	Yes	U	0.1	0.07916704	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0006-H	A-0006H-030615-IA-008-FUR	40.755330	-111.855572	4533	008	Basement - Furnace Room (Open to Soil Floor Crawl Space)	IA	NA	NA	3/6/2015	cis12Dichloroethene	0.76	0.0292	<0.1	Yes	U	0.1	0.1156904	NE	NE	No	No
0006-H	A-0006H-030615-IA-008-FUR	40.755330	-111.855572	4533	008	Basement - Furnace Room (Open to Soil Floor Crawl Space)	IA	NA	NA	3/6/2015	Trichloroethene	0.957	0.00806	<0.1	Yes	U	0.1	0.0432822	16	0.48	No	No
0006-H	A-0006H-030615-IA-008-FUR	40.755330	-111.855572	4533	008	Basement - Furnace Room (Open to Soil Floor Crawl Space)	IA	NA	NA	3/6/2015	Tetrachloroethene	0.998	0.01193	<0.1	Yes	U	0.1	0.08086154	370	11	No	No
0006-H	A-0006H-030615-IA-007-BA2	40.755330	-111.855572	4533	007	Basement Bathroom	IA	NA	NA	3/6/2015	cis12Dichloroethene	0.748	0.02747	<0.1	Yes	U	0.1	0.10883614	NE	NE	No	No
0006-H	A-0006H-030615-IA-007-BA2	40.755330	-111.855572	4533	007	Basement Bathroom	IA	NA	NA	3/6/2015	Trichloroethene	0.905	0.00463	<0.1	Yes	U	0.1	0.0248631	16	0.48	No	No
0006-H	A-0006H-030615-IA-007-BA2	40.755330	-111.855572	4533	007	Basement Bathroom	IA	NA	NA	3/6/2015	Tetrachloroethene	0.993	0.01061	<0.1	Yes	U	0.1	0.07191458	370	11	No	No
0006-H	A-0006H-030615-IA-006-LLL	40.755330	-111.855572	4533	006	Basement Living Area	IA	NA	NA	3/6/2015	cis12Dichloroethene	0.714	0.03294	<0.1	Yes	U	0.1	0.13050828	NE	NE	No	No
0006-H	A-0006H-030615-IA-006-LLL	40.755330	-111.855572	4533	006	Basement Living Area	IA	NA	NA	3/6/2015	Trichloroethene	0.866	0.0058	<0.1	Yes	U	0.1	0.031146	16	0.48	No	No
0006-H	A-0006H-030615-IA-006-LLL	40.755330	-111.855572	4533	006	Basement Living Area	IA	NA	NA	3/6/2015	Tetrachloroethene	0.998	0.01195	<0.1	Yes	U	0.1	0.0809971	370	11	No	No
0006-H	A-0006H-030615-IA-004-MBR	40.755330	-111.855572	4533	004	Main Level-Master Bedroom	IA	NA	NA	3/6/2015	cis12Dichloroethene	0.673	0.0892	<0.1	No	NR	0.1	0.3534104	NE	NE	No	No
0006-H	A-0006H-030615-IA-004-MBR	40.755330	-111.855572	4533	004	Main Level-Master Bedroom	IA	NA	NA	3/6/2015	Trichloroethene	0.993	0.007	<0.1	Yes	U	0.1	0.03759	16	0.48	No	No
0006-H	A-0006H-030615-IA-004-MBR	40.755330	-111.855572	4533	004	Main Level-Master Bedroom	IA	NA	NA	3/6/2015	Tetrachloroethene	0.997	0.01199	<0.1	Yes	U	0.1	0.08126822	370	11	No	No
0006-H	A-0006H-030615-IA-003-BA1	40.755330	-111.855572	4533	003	Main Level-Hall Bathroom	IA	NA	NA	3/6/2015	cis12Dichloroethene	0.674	0.2791	0.2791	No	NR	0.1	1.1057942	NE	NE	No	No
0006-H	A-0006H-030615-IA-003-BA1	40.755330	-111.855572	4533	003	Main Level-Hall Bathroom	IA	NA	NA	3/6/2015	Trichloroethene	0.906	0.0053	<0.1	Yes	U	0.1	0.028461	16	0.48	No	No
0006-H	A-0006H-030615-IA-003-BA1	40.755330	-111.855572	4533	003	Main Level-Hall Bathroom	IA	NA	NA	3/6/2015	Tetrachloroethene	0.994	0.01261	<0.1	Yes	U	0.1	0.08547058	370	11	No	No
0006-H	A-0006H-030615-IA-002-BR1	40.755330	-111.855572	4533	002	Main Level-Front Bedroom	IA	NA	NA	3/6/2015	cis12Dichloroethene	0.666	0.1208	0.1208	No	NR	0.1	0.4786096	NE	NE	No	No
0006-H	A-0006H-030615-IA-002-BR1	40.755330	-111.855572	4533	002	Main Level-Front Bedroom	IA	NA	NA	3/6/2015	Trichloroethene	0.901	0.00855	<0.1	Yes	U	0.1	0.0459135	16	0.48	No	No
0006-H	A-0006H-030615-IA-002-BR1	40.755330	-111.855572	4533	002	Main Level-Front Bedroom	IA	NA	NA	3/6/2015	Tetrachloroethene	0.995	0.01327	<0.1	Yes	U	0.1	0.08994406	370	11	No	No
0006-H	A-0006H-030615-IA-001-OCL	40.755330	-111.855572	4533	001	Main Level - Open Living-Dining-Kitchen Area	IA	NA	NA	3/6/2015	cis12Dichloroethene	0.766	0.07236	<0.1	Yes	U	0.1	0.28669032	NE	NE	No	No
0006-H	A-0006H-030615-IA-001-OCL	40.755330	-111.855572	4533	001	Main Level - Open Living-Dining-Kitchen Area	IA	NA	NA	3/6/2015	Trichloroethene	0.998	0.00984	<0.1	Yes	U	0.1	0.0528408	16	0.48	No	No
0006-H	A-0006H-030615-IA-001-OCL	40.755330	-111.855572	4533	001	Main Level - Open Living-Dining-Kitchen Area	IA	NA	NA	3/6/2015	Tetrachloroethene	0.993	0.01498	<0.1	Yes	U	0.1	0.10153444	370	11	No	No
0006-H	A-0006H-030615-IA-010H-LLL	40.755330	-111.855572	4533	017	Basement Living Area	NP	-4.5	12:53	3/6/2015	cis12Dichloroethene	0.797	0.01249	<0.1	Yes	U	0.1	0.04948538	NE	NE	No	No
0006-H	A-0006H-030615-IA-010H-LLL	40.755330	-111.855572	4533	017	Basement Living Area	NP	-4.5	12:53	3/6/2015	Trichloroethene	0.909	0.00736	<0.1	Yes	U	0.1	0.0395232	16	0.48	No	No
0006-H	A-0006H-030615-IA-010H-LLL	40.755330	-111.855572	4533	017	Basement Living Area	NP	-4.5	12:53	3/6/2015	Tetrachloroethene	0.993	0.02425	<0.1	Yes	U	0.1	0.1643665	370	11	No	No
0006-H	A-0006H-030615-IA-010G-LLL	40.755330	-111.855572	4533	016	Basement Living Area	NP	-5.2	12:45	3/6/2015	cis12Dichloroethene	0.701	0.0138	<0.1	Yes	U	0.1	0.0546756	NE	NE	No	No
0006-H	A-0006H-030615-IA-010G-LLL	40.755330	-111.855572	4533	016	Basement Living Area	NP	-5.2	12:45	3/6/2015	Trichloroethene	0.903	0.0052	<0.1	Yes	U	0.1	0.027924	16	0.48	No	No
0006-H	A-0006H-030615-IA-010G-LLL	40.755330	-111.855572	4533	016	Basement Living Area	NP	-5.2	12:45	3/6/2015	Tetrachloroethene	0.994	0.02603	<0.1	Yes	U	0.1	0.17643134	370	11	No	No
0006-H	A-0006H-030615-IA-010F-LLL	40.755330	-111.855572	4533	015	Basement Living Area	NP	-4.8	12:36	3/6/2015	cis12Dichloroethene	0.688	0.01613	<0.1	No	NR	0.1	0.06390706	NE	NE	No	No
0006-H	A-0006H-030615-IA-010F-LLL	40.755330	-111.855572	4533	015	Basement Living Area	NP	-4.8	12:36	3/6/2015	Trichloroethene	0.994	0.00964	<0.1	Yes	U	0.1	0.0517668	16	0.48	No	No
0006-H	A-0006H-030615-IA-010F-LLL	40.755330	-111.855572	4533	015	Basement Living Area	NP	-4.8	12:36	3/6/2015	Tetrachloroethene	0.995	0.02362	<0.1	Yes	U	0.1	0.16009636	370	11	No	No
0006-H	A-0006H-030615-IA-010E-LLL	40.755330	-111.855572	4533	014	Basement Living Area	NP	-5.0	12:28	3/6/2015	cis12Dichloroethene	0.822	0.01619	<0.1	Yes	U	0.1	0.06414478	NE	NE	No	No
0006-H	A-0006H-030615-IA-010E-LLL	40.755330	-111.855572	4533	014	Basement Living Area	NP	-5.0	12:28	3/6/2015	Trichloroethene	0.958	0.00727	<0.1	Yes	U	0.1	0.0390399	16	0.48	No	No
0006-H	A-0006H-030615-IA-010E-LLL	40.755330	-111.855572	4533	014	Basement Living Area	NP	-5.0	12:28	3/6/2015	Tetrachloroethene	0.996	0.02381	<0.1	Yes	U	0.1	0.16138418	370	11	No	No
0006-H	A-0006H-030615-IA-010D-LLL	40.755330	-111.855572	4533	013	Basement Living Area	NP	-4.2	12:20	3/6/2015	cis12Dichloroethene	0.748	0.01989	<0.1	Yes	U	0.1	0.07880418	NE	NE	No	No
0006-H	A-0006H-030615-IA-010D-LLL	40.755330	-111.855572	4533	013	Basement Living Area	NP	-4.2	12:20	3/6/2015	Trichloroethene	0.844	0.00568	<0.1	Yes	U	0.1	0.0305016	16	0.48	No	No
0006-H	A-0006H-030615-IA-010D-LLL	40.755330	-111.855572	4533	013	Basement Living Area	NP	-4.2	12:20	3/6/2015	Tetrachloroethene	0.995	0.02304	<0.1	Yes	U	0.1	0.15616512	370	11	No	No
0006-H	A-0006H-030615-IA-010C-LLL	40.755330	-111.855572	4533	012	Basement Living Area	NP	-5.2	12:11	3/6/2015	cis12Dichloroethene	0.819	0.01436	<0.1	Yes	U	0.1	0.05689432	NE	NE	No	No
0006-H	A-0006H-030615-IA-010C-LLL	40.755330	-111.855572	4533	012	Basement Living Area	NP	-5.2	12:11	3/6/2015	Trichloroethene	0.909	0.0064	<0.1	Yes	U	0.1	0.034368	16	0.48	No	No
0006-H	A-0006H-030615-IA-010C-LLL	40.755330	-111.855572	4533	012	Basement Living Area	NP	-5.2	12:11	3/6/2015	Tetrachloroethene	0.995	0.02398	<0.1	Yes	U	0.1	0.16253644	370	11	No	No
0006-H	A-0006H-030615-IA-010B-LLL	40.755330	-111.855572	4533	011	Basement Living Area	NP	-4.8	12:03	3/6/2015	cis12Dichloroethene	0.803	0.01501	<0.1	Yes	U	0.1	0.05946962	NE	NE	No	No
0006-H	A-0006H-030615-IA-010B-LLL	40.755330	-111.855572	4533	011	Basement Living Area	NP	-4.8	12:03	3/6/2015	Trichloroethene	0.963	0.00603	<0.1	Yes	U	0.1	0.0323811	16	0.48	No	No
0006-H	A-0006H-030615-IA-010B-LLL	40.755330	-111.855572	4533	011	Basement Living Area	NP	-4.8	12:03	3/6/2015	Tetrachloroethene	0.994	0.02435	<0.1	Yes	U	0.1	0.1650443	370	11	No	No
0006-H	A-0006H-030615-IA-005-OUT	40.755330	-111.855572	4533	005	Outdoor Ambient - Front Porch	OA	NA	NA	3/6/2015	cis12Dichloroethene	0.887	0.00522	<0.1	Yes	U	0.1	0.02068164	NE	NE	No	No
0006-H	A-0006H-030615-IA-005-OUT	40.755330	-111.855572	4533	005	Outdoor Ambient - Front Porch	OA	NA	NA	3/6/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0006-H	A-0006H-030615-IA-005-OUT	40.755330	-111.855572	4533	005	Outdoor Ambient - Front Porch	OA	NA	NA	3/6/2015	Tetrachloroethene	0.996	0.01015	<0.1	Yes	U	0.1	0.0687967	370	11	No	No
0006-H	A-0006H-030615-IA-011G-LLL	40.755330	-111.855572	4533	024	Basement Living Area	PP	4.9	14:22	3/6/2015	cis12Dichloroethene	0.43	0.00255	<0.1	No	NR	0.1	0.0101031	NE	NE	No	No
0006-H	A-0006H-030615-IA-011G-LLL	40.755330	-111.855572	4533	024	Basement Living Area	PP	4.9	14:22	3/6/2015	Trichloroethene	0.972	0.01312	<0.1	Yes	U	0.1	0.0704544	16	0.48	No	No
0006-H	A-0006H-030615-IA-011G-LLL	40.755330	-111.855572	4533	024	Basement Living Area	PP	4.9	14:22	3/6/2015	Tetrachloroethene	0.994	0.01836	<0.1	Yes	U	0.1	0.12444408	370	11	No	No
0006-H	A-0006H-030615-IA-011F-LLL	40.755330	-111.855572	4533	023	Basement Living Area	PP	3.9	14:14	3/6/2015	cis12Dichloroethene	0.776	0.00675	<0.1	Yes	U	0.1	0.0267435	NE	NE	No	No
0006-H	A-0006H-030615-IA-011F-LLL	40.755330	-111.855572	4533	023	Basement Living Area	PP	3.9	14:14	3/6/2015	Trichloroethene	0.967	0.00999	<0.1	Yes	U	0.1	0.0536463	16	0.48	No	No
0006-H	A-0006H-030615-IA-011F-LLL	40.755330	-111.855572	4533	023	Basement Living Area	PP	3.9	14:14	3/6/2015	Tetrachloroethene	0.996	0.02073	<0.1	Yes	U	0.1	0.14050794	370	11	No	No
0006-H	A-0006H-030615-IA-011E-LLL	40.755330	-111.855572	4533	022	Basement Living Area	PP	5.3	14:05	3/6/2015	cis12Dichloroethene	0.909	0.00944	<0.1	Yes	U	0.1	0.03740128	NE	NE	No	No
0006-H	A-0006H-030615-IA-011E-LLL	40.755330	-111.855572	4533	022	Basement Living Area	PP	5.3	14:05	3/6/2015	Trichloroethene	0.946	0.0071	<0.1	Yes	U	0.1	0.038127	16	0.48	No	No
0006-H	A-0006H-030615-IA-011E-LLL	40.755330	-111.855572	4533	022	Basement Living Area	PP	5.3	14:05	3/6/2015	Tetrachloroethene	0.996	0.02031	<0.1	Yes	U	0.1	0.13766118	370	11	No	No
0006-H	A-0006H-030615-IA-011D-LLL	40.755330	-111.855572	4533	021	Basement Living Area	PP	4.5	13:57	3/6/2015	cis12Dichloroethene	0.866	0.01251	<0.1	Yes	U	0.1	0.04956462	NE	NE	No	No
0006-H	A-0006H-030615-IA-011D-LLL	40.755330	-111.855572	4533	021	Basement Living Area	PP	4.5	13:57	3/6/2015	Trichloroethene	0.973	0.01251	<0.1	Yes	U	0.1	0.0671787	16	0.48	No	No
0006-H	A-0006H-030615-IA-011D-LLL	40.755330	-111.855572	4533	021	Basement Living Area	PP	4.5	13:57	3/6/2015	Tetrachloroethene	0.996	0.01998	<0.1	Yes	U	0.1	0.13542444	370	11	No	No
0006-H	A-0006H-030615-IA-011C-LLL	40.755330	-111.855572	4533	020	Basement Living Area	PP	4.3	13:48	3/6/2015	cis12Dichloroethene	0.711	0.01455	<0.1	Yes	U	0.1	0.0576471	NE	NE	No	No
0006-H	A-0006H-030615-IA-011C-LLL	40.755330	-111.855572	4533	020	Basement Living Area	PP	4.3	13:48	3/6/2015	Trichloroethene	0.999	0.01357	<0.1	Yes	U	0.1	0.0728709	16	0.48	No	No
0006-H	A-0006H-030615-IA-011C-LLL	40.755330	-111.855572	4533	020	Basement Living Area	PP	4.3	13:48	3/6/2015	Tetrachloroethene	0.995	0.02007	<0.1	Yes	U	0.1	0.13603446	370	11	No	No
0006-H	A-0006H-030615-IA-011B-LLL	40.755330	-111.855572	4533	019	Basement Living Area	PP	5.2	13:38	3/6/2015	cis12Dichloroethene	0.692	0.01566	<0.1	No	NR	0.1	0.06204492	NE	NE	No	No
0006-H	A-0006H-030615-IA-011B-LLL	40.755330	-111.855572	4533	019	Basement Living Area	PP	5.2	13:38	3/6/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0006-H	A-0006H-030615-IA-011B-LLL	40.755330	-111.855572	4533	019	Basement Living Area	PP	5.2	13:38	3/6/2015	Tetrachloroethene	0.995	0.01982	<0.1	Yes	U	0.1	0.13433996	370	11	No	No
0006-H	A-0006H-030615-IA-011A-LLL	40.755330	-111.855572	4533	018	Basement Living Area	PP	4.6	13:29	3/6/2015	cis12Dichloroethene	0.65	0.01869	<0.1	No	NR	0.1	0.07404978	NE	NE	No	No
0006-H	A-0006H-030615-IA-011A-LLL	40.755330	-111.855572	4533	018	Basement Living Area	PP	4.6	13:29	3/6/2015	Trichloroethene	0.997	0.00854	<0.1	Yes	U	0.1	0.0458598	16	0.48	No	No
0006-H	A-0006H-030615-IA-011A-LLL	40.755330	-111.855572	4533	018	Basement Living Area	PP	4.6	13:29	3/6/2015	Tetrachloroethene	0.997	0.02218	<0.1	Yes	U	0.1	0.15033604	370	11	No	No
0006-H	A-0006H-030615-SG-001-4'	40.755380	-111.855500	4533	025	Located near NE corner of house, 18" from foundation.	SG	NA	NA	3/6/2015	cis12Dichloroethene	0.849	0.01246	<0.1	Yes	U	0.1	0.04936652	NE	NE	No	No
0006-H	A-0006H-030615-SG-001-4'	40.755380	-111.855500	4533	025	Located near NE corner of house, 18" from foundation.	SG	NA	NA	3/6/2015	Trichloroethene	0.862	Area too low	<0.1	Yes	U	0.1	Area too low	16	0.48	No	No
0006-H	A-0006H-030615-SG-001-4'	40.755380	-111.855500	4533	025	Located near NE corner of house, 18" from foundation.	SG	NA	NA	3/6/2015	Tetrachloroethene	0.996	0.04648	<0.1	Yes	U	0.1	0.31504144	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0007-H	A-0007H-012715-CCV	40.749894	-111.849769	4597	001	CCV - 5.0 ppb	CCV	NA	NA	1/27/2015	cis12Dichloroethene	0.998	5.282	5.282	Yes	=	0.1	20.927284	NA	NA	NA	NA
0007-H	A-0007H-012715-CCV	40.749894	-111.849769	4597	001	CCV - 5.0 ppb	CCV	NA	NA	1/27/2015	Trichloroethene	0.523	5.289	5.289	No	NR	0.1	28.40193	NA	NA	NA	NA
0007-H	A-0007H-012715-CCV	40.749894	-111.849769	4597	001	CCV - 5.0 ppb	CCV	NA	NA	1/27/2015	Tetrachloroethene	0.996	5.331	5.331	Yes	=	0.1	36.133518	NA	NA	NA	NA
0007-H	A-0007H-012815-IA-014-BA3	40.749894	-111.849769	4597	014	First Floor Bathroom	IA	NA	NA	1/28/2015	cis12Dichloroethene	0.954	0.004	<0.1	Yes	U	0.1	0.015848	NE	NE	No	No
0007-H	A-0007H-012815-IA-014-BA3	40.749894	-111.849769	4597	014	First Floor Bathroom	IA	NA	NA	1/28/2015	Trichloroethene	0.523	0.016	<0.1	No	NR	0.1	0.08592	16	0.48	No	No
0007-H	A-0007H-012815-IA-014-BA3	40.749894	-111.849769	4597	014	First Floor Bathroom	IA	NA	NA	1/28/2015	Tetrachloroethene	0.996	0.046	<0.1	Yes	U	0.1	0.311788	370	11	No	No
0007-H	A-0007H-012815-IA-013-CLO	40.749894	-111.849769	4597	013	Second floor hall closet at top of stairs	IA	NA	NA	1/28/2015	cis12Dichloroethene	0.87	0.005	<0.1	Yes	U	0.1	0.01981	NE	NE	No	No
0007-H	A-0007H-012815-IA-013-CLO	40.749894	-111.849769	4597	013	Second floor hall closet at top of stairs	IA	NA	NA	1/28/2015	Trichloroethene	0.523	0.016	<0.1	No	NR	0.1	0.08592	16	0.48	No	No
0007-H	A-0007H-012815-IA-013-CLO	40.749894	-111.849769	4597	013	Second floor hall closet at top of stairs	IA	NA	NA	1/28/2015	Tetrachloroethene	0.995	0.045	<0.1	Yes	U	0.1	0.30501	370	11	No	No
0007-H	A-0007H-012815-IA-012-BA2	40.749894	-111.849769	4597	012	Second floor Bathroom	IA	NA	NA	1/28/2015	cis12Dichloroethene	0.882	0.003	<0.1	Yes	U	0.1	0.011886	NE	NE	No	No
0007-H	A-0007H-012815-IA-012-BA2	40.749894	-111.849769	4597	012	Second floor Bathroom	IA	NA	NA	1/28/2015	Trichloroethene	0.523	0.013	<0.1	No	NR	0.1	0.06981	16	0.48	No	No
0007-H	A-0007H-012815-IA-012-BA2	40.749894	-111.849769	4597	012	Second floor Bathroom	IA	NA	NA	1/28/2015	Tetrachloroethene	0.994	0.036	<0.1	Yes	U	0.1	0.244008	370	11	No	No
0007-H	A-0007H-012815-IA-011-MBR	40.749894	-111.849769	4597	011	Second Floor Master Bedroom	IA	NA	NA	1/28/2015	cis12Dichloroethene	0.931	0.005	<0.1	Yes	U	0.1	0.01981	NE	NE	No	No
0007-H	A-0007H-012815-IA-011-MBR	40.749894	-111.849769	4597	011	Second Floor Master Bedroom	IA	NA	NA	1/28/2015	Trichloroethene	0.523	0.015	<0.1	No	NR	0.1	0.08055	16	0.48	No	No
0007-H	A-0007H-012815-IA-011-MBR	40.749894	-111.849769	4597	011	Second Floor Master Bedroom	IA	NA	NA	1/28/2015	Tetrachloroethene	0.994	0.035	<0.1	Yes	U	0.1	0.23723	370	11	No	No
0007-H	A-0007H-012815-IA-010- CLO	40.749894	-111.849769	4597	010	Second floor- hall closet	IA	NA	NA	1/28/2015	cis12Dichloroethene	0.647	0.008	<0.1	No	NR	0.1	0.031696	NE	NE	No	No
0007-H	A-0007H-012815-IA-010- CLO	40.749894	-111.849769	4597	010	Second floor- hall closet	IA	NA	NA	1/28/2015	Trichloroethene	0.523	0.011	<0.1	No	NR	0.1	0.05907	16	0.48	No	No
0007-H	A-0007H-012815-IA-010- CLO	40.749894	-111.849769	4597	010	Second floor- hall closet	IA	NA	NA	1/28/2015	Tetrachloroethene	0.996	0.044	<0.1	Yes	U	0.1	0.298232	370	11	No	No
0007-H	A-0007H-012815-IA-009-BR2	40.749894	-111.849769	4597	009	Second floor bedroom -front of house	IA	NA	NA	1/28/2015	cis12Dichloroethene	0.917	0.008	<0.1	Yes	U	0.1	0.031696	NE	NE	No	No
0007-H	A-0007H-012815-IA-009-BR2	40.749894	-111.849769	4597	009	Second floor bedroom -front of house	IA	NA	NA	1/28/2015	Trichloroethene	0.523	0.012	<0.1	No	NR	0.1	0.06444	16	0.48	No	No
0007-H	A-0007H-012815-IA-009-BR2	40.749894	-111.849769	4597	009	Second floor bedroom -front of house	IA	NA	NA	1/28/2015	Tetrachloroethene	0.995	0.031	<0.1	Yes	U	0.1	0.210118	370	11	No	No
0007-H	A-0007H-012815-IA-008-BR1	40.749894	-111.849769	4597	008	Second floor bedroom-rear of house	IA	NA	NA	1/28/2015	cis12Dichloroethene	0.524	0.006	<0.1	No	NR	0.1	0.023772	NE	NE	No	No
0007-H	A-0007H-012815-IA-008-BR1	40.749894	-111.849769	4597	008	Second floor bedroom-rear of house	IA	NA	NA	1/28/2015	Trichloroethene	0.523	0.012	<0.1	No	NR	0.1	0.06444	16	0.48	No	No
0007-H	A-0007H-012815-IA-008-BR1	40.749894	-111.849769	4597	008	Second floor bedroom-rear of house	IA	NA	NA	1/28/2015	Tetrachloroethene	0.996	0.029	<0.1	Yes	U	0.1	0.196562	370	11	No	No
0007-H	A-0007H-012815-IA-007-SUN	40.749894	-111.849769	4597	007	Sunroom	IA	NA	NA	1/28/2015	cis12Dichloroethene	0.787	0.01	<0.1	Yes	U	0.1	0.03962	NE	NE	No	No
0007-H	A-0007H-012815-IA-007-SUN	40.749894	-111.849769	4597	007	Sunroom	IA	NA	NA	1/28/2015	Trichloroethene	0.523	0.011	<0.1	No	U	0.1	0.05907	16	0.48	No	No
0007-H	A-0007H-012815-IA-007-SUN	40.749894	-111.849769	4597	007	Sunroom	IA	NA	NA	1/28/2015	Tetrachloroethene	0.993	0.026	<0.1	Yes	U	0.1	0.176228	370	11	No	No
0007-H	A-0007H-012815-IA-006-KIT	40.749894	-111.849769	4597	006	Kitchen/breakfast nook	IA	NA	NA	1/28/2015	cis12Dichloroethene	0.743	0.01	<0.1	Yes	U	0.1	0.03962	NE	NE	No	No
0007-H	A-0007H-012815-IA-006-KIT	40.749894	-111.849769	4597	006	Kitchen/breakfast nook	IA	NA	NA	1/28/2015	Trichloroethene	0.523	0.009	<0.1	No	NR	0.1	0.04833	16	0.48	No	No
0007-H	A-0007H-012815-IA-006-KIT	40.749894	-111.849769	4597	006	Kitchen/breakfast nook	IA	NA	NA	1/28/2015	Tetrachloroethene	0.995	0.025	<0.1	Yes	U	0.1	0.16945	370	11	No	No
0007-H	A-0007H-012815-IA-005-LIV	40.749894	-111.849769	4597	005	Main level living room	IA	NA	NA	1/28/2015	cis12Dichloroethene	0.584	0.012	<0.1	No	NR	0.1	0.047544	NE	NE	No	No
0007-H	A-0007H-012815-IA-005-LIV	40.749894	-111.849769	4597	005	Main level living room	IA	NA	NA	1/28/2015	Trichloroethene	0.523	0.009	<0.1	No	NR	0.1	0.04833	16	0.48	No	No
0007-H	A-0007H-012815-IA-005-LIV	40.749894	-111.849769	4597	005	Main level living room	IA	NA	NA	1/28/2015	Tetrachloroethene	0.995	0.02	<0.1	Yes	U	0.1	0.13556	370	11	No	No
0007-H	A-0007H-012815-IA-004-STO	40.749894	-111.849769	4597	004	Basement Storage room	IA	NA	NA	1/28/2015	cis12Dichloroethene	0.934	0.009	<0.1	Yes	U	0.1	0.035658	NE	NE	No	No
0007-H	A-0007H-012815-IA-004-STO	40.749894	-111.849769	4597	004	Basement Storage room	IA	NA	NA	1/28/2015	Trichloroethene	0.523	0.009	<0.1	No	NR	0.1	0.04833	16	0.48	No	No
0007-H	A-0007H-012815-IA-004-STO	40.749894	-111.849769	4597	004	Basement Storage room	IA	NA	NA	1/28/2015	Tetrachloroethene	0.994	0.033	<0.1	Yes	U	0.1	0.223674	370	11	No	No
0007-H	A-0007H-012815-IA-003-LAU	40.749894	-111.849769	4597	003	Basement furnace/laundry room	IA	NA	NA	1/28/2015	cis12Dichloroethene	0.819	0.011	<0.1	Yes	U	0.1	0.043582	NE	NE	No	No
0007-H	A-0007H-012815-IA-003-LAU	40.749894	-111.849769	4597	003	Basement furnace/laundry room	IA	NA	NA	1/28/2015	Trichloroethene	0.523	0.007	<0.1	No	NR	0.1	0.03759	16	0.48	No	No
0007-H	A-0007H-012815-IA-003-LAU	40.749894	-111.849769	4597	003	Basement furnace/laundry room	IA	NA	NA	1/28/2015	Tetrachloroethene	0.995	0.018	<0.1	Yes	U	0.1	0.122004	370	11	No	No
0007-H	A-0007H-012815-IA-002-BA1	40.749894	-111.849769	4597	002	Basement bathroom	IA	NA	NA	1/28/2015	cis12Dichloroethene	0.679	0.002	<0.1	No	NR	0.1	0.007924	NE	NE	No	No
0007-H	A-0007H-012815-IA-002-BA1	40.749894	-111.849769	4597	002	Basement bathroom	IA	NA	NA	1/28/2015	Trichloroethene	0.523	0.006	<0.1	No	NR	0.1	0.03222	16	0.48	No	No
0007-H	A-0007H-012815-IA-002-BA1	40.749894	-111.849769	4597	002	Basement bathroom	IA	NA	NA	1/28/2015	Tetrachloroethene	0.996	0.015	<0.1	Yes	U	0.1	0.10167	370	11	No	No
0007-H	A-0007H-012815-IA-001-LLL	40.749894	-111.849769	4597	001	Basement Living Room	IA	NA	NA	1/28/2015	cis12Dichloroethene	0.931	0.004	<0.1	Yes	U	0.1	0.015848	NE	NE	No	No
0007-H	A-0007H-012815-IA-001-LLL	40.749894	-111.849769	4597	001	Basement Living Room	IA	NA	NA	1/28/2015	Trichloroethene	0.523	0.018	<0.1	No	NR	0.1	0.09666	16	0.48	No	No
0007-H	A-0007H-012815-IA-001-LLL	40.749894	-111.849769	4597	001	Basement Living Room	IA	NA	NA	1/28/2015	Tetrachloroethene	0.997	0.017	<0.1	Yes	U	0.1	0.115226	370	11	No	No
0007-H	A-0007H-012815-IA-015I-LLL	40.749894	-111.849769	4597	023	Basement Living Room	NP	-5.1	14:42	1/28/2015	cis12Dichloroethene	0.653	0.002	<0.1	No	NR	0.1	0.007924	NE	NE	No	No
0007-H	A-0007H-012815-IA-015I-LLL	40.749894	-111.849769	4597	023	Basement Living Room	NP	-5.1	14:42	1/28/2015	Trichloroethene	0.523	0.004	<0.1	No	NR	0.1	0.02148	16	0.48	No	No
0007-H	A-0007H-012815-IA-015I-LLL	40.749894	-111.849769	4597	023	Basement Living Room	NP	-5.1	14:42	1/28/2015	Tetrachloroethene	0.99	0.009	<0.1	Yes	U	0.1	0.061002	370	11	No	No
0007-H	A-0007H-012815-IA-015H-LLL	40.749894	-111.849769	4597	022	Basement Living Room	NP	-4.9	14:33	1/28/2015	cis12Dichloroethene	0.937	0.002	<0.1	Yes	U	0.1	0.007924	NE	NE	No	No
0007-H	A-0007H-012815-IA-015H-LLL	40.749894	-111.849769	4597	022	Basement Living Room	NP	-4.9	14:33	1/28/2015	Trichloroethene	0.523	0.004	<0.1	No	NR	0.1	0.02148	16	0.48	No	No
0007-H	A-0007H-012815-IA-015H-LLL	40.749894	-111.849769	4597	022	Basement Living Room	NP	-4.9	14:33	1/28/2015	Tetrachloroethene	0.995	0.012	<0.1	Yes	U	0.1	0.081336	370	11	No	No
0007-H	A-0007H-012815-IA-015G-LLL	40.749894	-111.849769	4597	021	Basement Living Room	NP	-5.1	14:24	1/28/2015	cis12Dichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	NE	NE	No	No
0007-H	A-0007H-012815-IA-015G-LLL	40.749894	-111.849769	4597	021	Basement Living Room	NP	-5.1	14:24	1/28/2015	Trichloroethene	0.523	0.005	<0.1	No	NR	0.1	0.02685	16	0.48	No	No
0007-H	A-0007H-012815-IA-015G-LLL	40.749894	-111.849769	4597	021	Basement Living Room	NP	-5.1	14:24	1/28/2015	Tetrachloroethene	0.996	0.013	<0.1	Yes	U	0.1	0.088114	370	11	No	No
0007-H	A-0007H-012815-IA-015F-LLL	40.749894	-111.849769	4597	020	Basement Living Room	NP	-5.0	14:15	1/28/2015	cis12Dichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	NE	NE	No	No
0007-H	A-0007H-012815-IA-015F-LLL	40.749894	-111.849769	4597	020	Basement Living Room	NP	-5.0	14:15	1/28/2015	Trichloroethene	0.523	0.006	<0.1	No	NR	0.1	0.03222	16	0.48	No	No
0007-H	A-0007H-012815-IA-015F-LLL	40.749894	-111.849769	4597	020	Basement Living Room	NP	-5.0	14:15	1/28/2015	Tetrachloroethene	0.994	0.014	<0.1	Yes	U	0.1	0.094892	370	11	No	No
0007-H	A-0007H-012815-IA-015E-LLL	40.749894	-111.849769	4597	019	Basement Living Room	NP	-4.7	14:06	1/28/2015	cis12Dichloroethene	0.676	0.005	<0.1	No	NR	0.1	0.01981	NE	NE	No	No
0007-H	A-0007H-012815-IA-015E-LLL	40.749894	-111.849769	4597	019	Basement Living Room	NP	-4.7	14:06	1/28/2015	Trichloroethene	0.523	0.006	<0.1	No	NR	0.1	0.03222	16	0.48	No	No
0007-H	A-0007H-012815-IA-015E-LLL	40.749894	-111.849769	4597	019	Basement Living Room	NP	-4.7	14:06	1/28/2015	Tetrachloroethene	0.997	0.018	<0.1	Yes	U	0.1	0.122004	370	11	No	No
0007-H	A-0007H-012815-IA-015D-LLL	40.749894	-111.849769	4597	018	Basement Living Room	NP	-5.2	13:57	1/28/2015	cis12Dichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	NE	NE	No	No
0007-H	A-0007H-012815-IA-015D-LLL	40.749894	-111.849769	4597	018	Basement Living Room	NP	-5.2	13:57	1/28/2015	Trichloroethene	0.523	0.007	<0.1	No	NR	0.1	0.03759	16	0.48	No	No
0007-H	A-0007H-012815-IA-015D-LLL	40.749894	-111.849769	4597	018	Basement Living Room	NP	-5.2	13:57	1/28/2015	Tetrachloroethene	0.995	0.017	<0.1	Yes	U	0.1	0.115226	370	11	No	No
0007-H	A-0007H-012815-IA-015C-LLL	40.749894	-111.849769	4597	017	Basement Living Room	NP	-5.0	13:48	1/28/2015	cis12Dichloroethene	0.952	0.008	<0.1	Yes	U	0.1	0.031696	NE	NE	No	No
0007-H	A-0007H-012815-IA-015C-LLL	40.749894	-111.849769	4597	017	Basement Living Room	NP	-5.0	13:48	1/28/2015	Trichloroethene	0.523	0.011	<0.1	No	NR	0.1	0.05907	16	0.48	No	No
0007-H	A-0007H-012815-IA-015C-LLL	40.749894	-111.849769	4597	017	Basement Living Room	NP	-5.0	13:48	1/28/2015	Tetrachloroethene	0.995	0.028	<0.1	Yes	U	0.1	0.189784	370	11	No	No
0007-H	A-0007H-012815-IA-015B-LLL	40.749894	-111.849769	4597	016	Basement Living Room	NP	-4.8	13:39	1/28/2015	cis12Dichloroethene	0.989	0.005	<0.1	Yes	U	0.1	0.01981	NE	NE	No	No
0007-H	A-0007H-012815-IA-015B-LLL	40.749894	-111.849769	4597	016	Basement Living Room	NP	-4.8	13:39	1/28/2015	Trichloroethene	0.523	0.011	<0.1	No	NR	0.1	0.05907	16	0.48	No	No
0007-H	A-0007H-012815-IA-015B-LLL	40.749894	-111.849769	4597	016	Basement Living Room	NP	-4.8	13:39	1/28/2015	Tetrachloroethene	0.996	0.031	<0.1	Yes	U	0.1	0.210118	370	11	No	No
0007-H	A-0007H-012815-IA-015A-LLL	40.749894	-111.849769	4597	015	Basement Living Room	NP	-4.8	13:31	1/28/2015	cis12Dichloroethene	0.908	0.009	<0.1	Yes	U	0.1	0.035658	NE	NE	No	No
0007-H	A-0007H-012815-IA-015A-LLL	40.749894	-111.849769	4597	015	Basement Living Room	NP	-4.8	13:31	1/28/2015	Trichloroethene	0.523	0.018	<0.1	No	NR	0.1	0.09666	16	0.48	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0007-H	A-0007H-012815-IA-015A-LLL	40.749894	-111.849769	4597	015	Basement Living Room	NP	-4.8	13:31	1/28/2015	Tetrachloroethene	0.996	0.048	<0.1	Yes	U	0.1	0.325344	370	11	No	No
0007-H	A-0007H-012815-IA-016F-LLL	40.749894	-111.849769	4597	029	Basement Living Room	PP	5.2	15:43	1/28/2015	cis12Dichloroethene	0.52	0.001	<0.1	No	NR	0.1	0.003962	NE	NE	No	No
0007-H	A-0007H-012815-IA-016F-LLL	40.749894	-111.849769	4597	029	Basement Living Room	PP	5.2	15:43	1/28/2015	Trichloroethene	0.523	0.004	<0.1	No	NR	0.1	0.02148	16	0.48	No	No
0007-H	A-0007H-012815-IA-016F-LLL	40.749894	-111.849769	4597	029	Basement Living Room	PP	5.2	15:43	1/28/2015	Tetrachloroethene	0.994	0.005	<0.1	Yes	U	0.1	0.03389	370	11	No	No
0007-H	A-0007H-012815-IA-016E-LLL	40.749894	-111.849769	4597	028	Basement Living Room	PP	7.0	15:35	1/28/2015	cis12Dichloroethene	0.878	0.003	<0.1	Yes	U	0.1	0.011886	NE	NE	No	No
0007-H	A-0007H-012815-IA-016E-LLL	40.749894	-111.849769	4597	028	Basement Living Room	PP	7.0	15:35	1/28/2015	Trichloroethene	0.523	0.003	<0.1	No	NR	0.1	0.01611	16	0.48	No	No
0007-H	A-0007H-012815-IA-016E-LLL	40.749894	-111.849769	4597	028	Basement Living Room	PP	7.0	15:35	1/28/2015	Tetrachloroethene	0.995	0.006	<0.1	Yes	U	0.1	0.040668	370	11	No	No
0007-H	A-0007H-012815-IA-016D-LLL	40.749894	-111.849769	4597	027	Basement Living Room	PP	7.6	15:27	1/28/2015	cis12Dichloroethene	0.575	Area too low	<0.1	Yes	U	0.1	Area too low	NE	NE	No	No
0007-H	A-0007H-012815-IA-016D-LLL	40.749894	-111.849769	4597	027	Basement Living Room	PP	7.6	15:27	1/28/2015	Trichloroethene	0.523	0.003	<0.1	No	NR	0.1	0.01611	16	0.48	No	No
0007-H	A-0007H-012815-IA-016D-LLL	40.749894	-111.849769	4597	027	Basement Living Room	PP	7.6	15:27	1/28/2015	Tetrachloroethene	0.999	0.004	<0.1	Yes	U	0.1	0.027112	370	11	No	No
0007-H	A-0007H-012815-IA-016C-LLL	40.749894	-111.849769	4597	026	Basement Living Room	PP	5.4	15:17	1/28/2015	cis12Dichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	NE	NE	No	No
0007-H	A-0007H-012815-IA-016C-LLL	40.749894	-111.849769	4597	026	Basement Living Room	PP	5.4	15:17	1/28/2015	Trichloroethene	0.523	0.003	<0.1	No	NR	0.1	0.01611	16	0.48	No	No
0007-H	A-0007H-012815-IA-016C-LLL	40.749894	-111.849769	4597	026	Basement Living Room	PP	5.4	15:17	1/28/2015	Tetrachloroethene	0.996	0.005	<0.1	Yes	U	0.1	0.03389	370	11	No	No
0007-H	A-0007H-012815-IA-016B-LLL	40.749894	-111.849769	4597	025	Basement Living Room	PP	6.6	15:08	1/28/2015	cis12Dichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	NE	NE	No	No
0007-H	A-0007H-012815-IA-016B-LLL	40.749894	-111.849769	4597	025	Basement Living Room	PP	6.6	15:08	1/28/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0007-H	A-0007H-012815-IA-016B-LLL	40.749894	-111.849769	4597	025	Basement Living Room	PP	6.6	15:08	1/28/2015	Tetrachloroethene	0.996	0.005	<0.1	Yes	U	0.1	0.03389	370	11	No	No
0007-H	A-0007H-012815-IA-016A-LLL	40.749894	-111.849769	4597	024	Basement Living Room	PP	6.4	14:59	1/28/2015	cis12Dichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	NE	NE	No	No
0007-H	A-0007H-012815-IA-016A-LLL	40.749894	-111.849769	4597	024	Basement Living Room	PP	6.4	14:59	1/28/2015	Trichloroethene	0.523	0.003	<0.1	No	NR	0.1	0.01611	16	0.48	No	No
0007-H	A-0007H-012815-IA-016A-LLL	40.749894	-111.849769	4597	024	Basement Living Room	PP	6.4	14:59	1/28/2015	Tetrachloroethene	0.994	0.006	<0.1	Yes	U	0.1	0.040668	370	11	No	No
0007-H	A-0007H-012815-SG-001-4'	40.749853	-111.849839	4600	030	SW corner of house	SG	NA	NA	1/28/2015	cis12Dichloroethene	0.904	0.004	<0.1	Yes	U	0.1	0.015848	NE	NE	No	No
0007-H	A-0007H-012815-SG-001-4'	40.749853	-111.849839	4600	030	SW corner of house	SG	NA	NA	1/28/2015	Trichloroethene	0.523	0.006	<0.1	No	NR	0.1	0.03222	16	0.48	No	No
0007-H	A-0007H-012815-SG-001-4'	40.749853	-111.849839	4600	030	SW corner of house	SG	NA	NA	1/28/2015	Tetrachloroethene	0.997	0.033	<0.1	Yes	U	0.1	0.223674	370	11	No	No
0008-H	A-0008H-020615-CCV	40.750539	-111.849592	4606	013	CCV - 5.0 ppb	CCV	NA	NA	2/6/2015	cis12Dichloroethene	0.998	5.234	5.234	Yes	=	0.1	20.737108	NA	NA	NA	NA
0008-H	A-0008H-020615-CCV	40.750539	-111.849592	4606	013	CCV - 5.0 ppb	CCV	NA	NA	2/6/2015	Trichloroethene	0.523	4.139	4.139	Yes	=	0.1	22.22643	NA	NA	NA	NA
0008-H	A-0008H-020615-CCV	40.750539	-111.849592	4606	013	CCV - 5.0 ppb	CCV	NA	NA	2/6/2015	Tetrachloroethene	0.995	4.116	4.116	Yes	=	0.1	27.898248	NA	NA	NA	NA
0008-H	A-0008H-020515-CCV	40.750539	-111.849592	4606	016	CCV - 5.0 ppb	CCV	NA	NA	2/5/2015	cis12Dichloroethene	0.995	5.023	5.023	Yes	=	0.1	19.901126	NA	NA	NA	NA
0008-H	A-0008H-020515-CCV	40.750539	-111.849592	4606	016	CCV - 5.0 ppb	CCV	NA	NA	2/5/2015	Trichloroethene	0.523	4.434	4.434	Yes	=	0.1	23.81058	NA	NA	NA	NA
0008-H	A-0008H-020515-CCV	40.750539	-111.849592	4606	016	CCV - 5.0 ppb	CCV	NA	NA	2/5/2015	Tetrachloroethene	0.995	4.752	4.752	Yes	=	0.1	32.209056	NA	NA	NA	NA
0008-H	A-0008H-020515-CCV	40.750539	-111.849592	4606	005	CCV - 5.0 ppb	CCV	NA	NA	2/5/2015	cis12Dichloroethene	0.979	3.783	3.783	Yes	=	0.1	14.988246	NA	NA	NA	NA
0008-H	A-0008H-020515-CCV	40.750539	-111.849592	4606	005	CCV - 5.0 ppb	CCV	NA	NA	2/5/2015	Trichloroethene	0.523	5.046	5.046	Yes	=	0.1	27.09702	NA	NA	NA	NA
0008-H	A-0008H-020515-CCV	40.750539	-111.849592	4606	005	CCV - 5.0 ppb	CCV	NA	NA	2/5/2015	Tetrachloroethene	0.995	5.216	5.216	Yes	=	0.1	35.354048	NA	NA	NA	NA
0008-H	A-0008H-020415-CCV	40.750539	-111.849592	4606	002	CCV - 5.0 ppb	CCV	NA	NA	2/4/2015	cis12Dichloroethene	0.997	4.589	4.589	Yes	=	0.1	18.181618	NA	NA	NA	NA
0008-H	A-0008H-020415-CCV	40.750539	-111.849592	4606	002	CCV - 5.0 ppb	CCV	NA	NA	2/4/2015	Trichloroethene	0.523	4.144	4.144	Yes	=	0.1	22.25328	NA	NA	NA	NA
0008-H	A-0008H-020415-CCV	40.750539	-111.849592	4606	002	CCV - 5.0 ppb	CCV	NA	NA	2/4/2015	Tetrachloroethene	0.995	4.057	4.057	Yes	=	0.1	27.498346	NA	NA	NA	NA
0008-H	A-0008H-020515-IA-009-BA2	40.750539	-111.849592	4606	014	Main Level -Bathroom	IA	NA	NA	2/5/2015	cis12Dichloroethene	0.868	0.004	<0.1	Yes	U	0.1	0.015848	NE	NE	No	No
0008-H	A-0008H-020515-IA-009-BA2	40.750539	-111.849592	4606	014	Main Level -Bathroom	IA	NA	NA	2/5/2015	Trichloroethene	0.523	0.009	<0.1	No	NR	0.1	0.04833	16	0.48	No	No
0008-H	A-0008H-020515-IA-009-BA2	40.750539	-111.849592	4606	014	Main Level -Bathroom	IA	NA	NA	2/5/2015	Tetrachloroethene	0.995	0.625	0.625	Yes	=	0.1	4.23625	370	11	No	No
0008-H	A-0008H-020515-IA-008-OFC	40.750539	-111.849592	4606	013	Main Level - Office	IA	NA	NA	2/5/2015	cis12Dichloroethene	0.78	0.084	<0.1	Yes	U	0.1	0.332808	NE	NE	No	No
0008-H	A-0008H-020515-IA-008-OFC	40.750539	-111.849592	4606	013	Main Level - Office	IA	NA	NA	2/5/2015	Trichloroethene	0.523	0.009	<0.1	No	NR	0.1	0.04833	16	0.48	No	No
0008-H	A-0008H-020515-IA-008-OFC	40.750539	-111.849592	4606	013	Main Level - Office	IA	NA	NA	2/5/2015	Tetrachloroethene	0.995	0.512	0.512	Yes	=	0.1	3.470336	370	11	No	No
0008-H	A-0008H-020515-IA-007-OCL	40.750539	-111.849592	4606	012	Main Level - Open Large Living / Dining Area	IA	NA	NA	2/5/2015	cis12Dichloroethene	0.617	0.077	<0.1	No	NR	0.1	0.305074	NE	NE	No	No
0008-H	A-0008H-020515-IA-007-OCL	40.750539	-111.849592	4606	012	Main Level - Open Large Living / Dining Area	IA	NA	NA	2/5/2015	Trichloroethene	0.523	0.007	<0.1	No	NR	0.1	0.03759	16	0.48	No	No
0008-H	A-0008H-020515-IA-007-OCL	40.750539	-111.849592	4606	012	Main Level - Open Large Living / Dining Area	IA	NA	NA	2/5/2015	Tetrachloroethene	0.995	0.477	0.477	Yes	=	0.1	3.233106	370	11	No	No
0008-H	A-0008H-020515-IA-006-KIT	40.750539	-111.849592	4606	011	Main Level - Kitchen	IA	NA	NA	2/5/2015	cis12Dichloroethene	0.648	0.07	<0.1	No	NR	0.1	0.27734	NE	NE	No	No
0008-H	A-0008H-020515-IA-006-KIT	40.750539	-111.849592	4606	011	Main Level - Kitchen	IA	NA	NA	2/5/2015	Trichloroethene	0.523	0.007	<0.1	No	NR	0.1	0.03759	16	0.48	No	No
0008-H	A-0008H-020515-IA-006-KIT	40.750539	-111.849592	4606	011	Main Level - Kitchen	IA	NA	NA	2/5/2015	Tetrachloroethene	0.995	0.459	0.459	Yes	=	0.1	3.111102	370	11	No	No
0008-H	A-0008H-020515-IA-005-STO2	40.750539	-111.849592	4606	010	Small Basement Storage Unit - extends into crawl space	IA	NA	NA	2/5/2015	cis12Dichloroethene	0.834	0.076	<0.1	Yes	U	0.1	0.301112	NE	NE	No	No
0008-H	A-0008H-020515-IA-005-STO2	40.750539	-111.849592	4606	010	Small Basement Storage Unit - extends into crawl space	IA	NA	NA	2/5/2015	Trichloroethene	0.523	0.013	<0.1	No	NR	0.1	0.06981	16	0.48	No	No
0008-H	A-0008H-020515-IA-005-STO2	40.750539	-111.849592	4606	010	Small Basement Storage Unit - extends into crawl space	IA	NA	NA	2/5/2015	Tetrachloroethene	0.994	0.978	0.978	Yes	=	0.1	6.628884	370	11	No	No
0008-H	A-0008H-020515-IA-004-STO1	40.750539	-111.849592	4606	009	Basement Storage - Unused Bedroom	IA	NA	NA	2/5/2015	cis12Dichloroethene	0.671	0.111	0.111	No	NR	0.1	0.439782	NE	NE	No	No
0008-H	A-0008H-020515-IA-004-STO1	40.750539	-111.849592	4606	009	Basement Storage - Unused Bedroom	IA	NA	NA	2/5/2015	Trichloroethene	0.523	0.017	<0.1	No	NR	0.1	0.09129	16	0.48	No	No
0008-H	A-0008H-020515-IA-004-STO1	40.750539	-111.849592	4606	009	Basement Storage - Unused Bedroom	IA	NA	NA	2/5/2015	Tetrachloroethene	0.995	1.076	1.076	Yes	=	0.1	7.293128	370	11	No	No
0008-H	A-0008H-020515-IA-003-BA1	40.750539	-111.849592	4606	008	Basement Bathroom	IA	NA	NA	2/5/2015	cis12Dichloroethene	0.524	0.28	0.28	No	NR	0.1	1.10936	NE	NE	No	No
0008-H	A-0008H-020515-IA-003-BA1	40.750539	-111.849592	4606	008	Basement Bathroom	IA	NA	NA	2/5/2015	Trichloroethene	0.523	0.012	<0.1	No	NR	0.1	0.06444	16	0.48	No	No
0008-H	A-0008H-020515-IA-003-BA1	40.750539	-111.849592	4606	008	Basement Bathroom	IA	NA	NA	2/5/2015	Tetrachloroethene	0.994	0.77	0.77	Yes	=	0.1	5.21906	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0008-H	A-0008H-020515-IA-002-BR1	40.750539	-111.849592	4606	007	Basement Bedroom -Large	IA	NA	NA	2/5/2015	cis12Dichloroethene	0.726	0.096	<0.1	Yes	U	0.1	0.380352	NE	NE	No	No
0008-H	A-0008H-020515-IA-002-BR1	40.750539	-111.849592	4606	007	Basement Bedroom -Large	IA	NA	NA	2/5/2015	Trichloroethene	0.523	0.016	<0.1	No	NR	0.1	0.08592	16	0.48	No	No
0008-H	A-0008H-020515-IA-002-BR1	40.750539	-111.849592	4606	007	Basement Bedroom -Large	IA	NA	NA	2/5/2015	Tetrachloroethene	0.995	1.008	1.008	Yes	=	0.1	6.832224	370	11	No	No
0008-H	A-0008H-020515-IA-001-LAU	40.750539	-111.849592	4606	006	Basement Laundry Room	IA	NA	NA	2/5/2015	cis12Dichloroethene	0.967	0.154	0.154	Yes	=	0.1	0.610148	NE	NE	No	No
0008-H	A-0008H-020515-IA-001-LAU	40.750539	-111.849592	4606	006	Basement Laundry Room	IA	NA	NA	2/5/2015	Trichloroethene	0.523	0.109	0.109	No	NR	0.1	0.58533	16	0.48	No	No
0008-H	A-0008H-020515-IA-001-LAU	40.750539	-111.849592	4606	006	Basement Laundry Room	IA	NA	NA	2/5/2015	Tetrachloroethene	0.995	0.92	0.92	Yes	=	0.1	6.23576	370	11	No	No
0008-H	A-0008H-020615-IA-011E-LAU	40.750539	-111.849592	4606	006	Basement Laundry Room	NP	-5.2	10:10	2/6/2015	cis12Dichloroethene	0.834	0.003	<0.1	Yes	U	0.1	0.011886	NE	NE	No	No
0008-H	A-0008H-020615-IA-011E-LAU	40.750539	-111.849592	4606	006	Basement Laundry Room	NP	-5.2	10:10	2/6/2015	Trichloroethene	0.523	0.008	<0.1	No	NR	0.1	0.04296	16	0.48	No	No
0008-H	A-0008H-020615-IA-011E-LAU	40.750539	-111.849592	4606	006	Basement Laundry Room	NP	-5.2	10:10	2/6/2015	Tetrachloroethene	0.995	0.429	0.429	Yes	=	0.1	2.907762	370	11	No	No
0008-H	A-0008H-020615-IA-011D-LAU	40.750539	-111.849592	4606	005	Basement Laundry Room	NP	-5.2	10:00	2/6/2015	cis12Dichloroethene	0.876	0.091	<0.1	Yes	U	0.1	0.360542	NE	NE	No	No
0008-H	A-0008H-020615-IA-011D-LAU	40.750539	-111.849592	4606	005	Basement Laundry Room	NP	-5.2	10:00	2/6/2015	Trichloroethene	0.523	0.01	<0.1	No	NR	0.1	0.0537	16	0.48	No	No
0008-H	A-0008H-020615-IA-011D-LAU	40.750539	-111.849592	4606	005	Basement Laundry Room	NP	-5.2	10:00	2/6/2015	Tetrachloroethene	0.995	0.474	0.474	Yes	=	0.1	3.212772	370	11	No	No
0008-H	A-0008H-020615-IA-011C-LAU	40.750539	-111.849592	4606	004	Basement Laundry Room	NP	-4.9	9:50	2/6/2015	cis12Dichloroethene	0.781	0.064	<0.1	Yes	U	0.1	0.253568	NE	NE	No	No
0008-H	A-0008H-020615-IA-011C-LAU	40.750539	-111.849592	4606	004	Basement Laundry Room	NP	-4.9	9:50	2/6/2015	Trichloroethene	0.523	0.01	<0.1	No	NR	0.1	0.0537	16	0.48	No	No
0008-H	A-0008H-020615-IA-011C-LAU	40.750539	-111.849592	4606	004	Basement Laundry Room	NP	-4.9	9:50	2/6/2015	Tetrachloroethene	0.995	0.524	0.524	Yes	=	0.1	3.551672	370	11	No	No
0008-H	A-0008H-020615-IA-011B-LAU	40.750539	-111.849592	4606	003	Basement Laundry Room	NP	-5.2	9:40	2/6/2015	cis12Dichloroethene	0.663	0.093	<0.1	No	NR	0.1	0.368466	NE	NE	No	No
0008-H	A-0008H-020615-IA-011B-LAU	40.750539	-111.849592	4606	003	Basement Laundry Room	NP	-5.2	9:40	2/6/2015	Trichloroethene	0.523	0.009	<0.1	No	NR	0.1	0.04833	16	0.48	No	No
0008-H	A-0008H-020615-IA-011B-LAU	40.750539	-111.849592	4606	003	Basement Laundry Room	NP	-5.2	9:40	2/6/2015	Tetrachloroethene	0.995	0.548	0.548	Yes	=	0.1	3.714344	370	11	No	No
0008-H	A-0008H-020615-IA-011A-LAU	40.750539	-111.849592	4606	002	Basement Laundry Room	NP	-5.2	9:32	2/6/2015	cis12Dichloroethene	0.85	0.073	<0.1	Yes	U	0.1	0.289226	NE	NE	No	No
0008-H	A-0008H-020615-IA-011A-LAU	40.750539	-111.849592	4606	002	Basement Laundry Room	NP	-5.2	9:32	2/6/2015	Trichloroethene	0.523	0.011	<0.1	No	NR	0.1	0.05907	16	0.48	No	No
0008-H	A-0008H-020615-IA-011A-LAU	40.750539	-111.849592	4606	002	Basement Laundry Room	NP	-5.2	9:32	2/6/2015	Tetrachloroethene	0.995	0.71	0.71	Yes	=	0.1	4.81238	370	11	No	No
0008-H	A-0008H-020615-IA-010-OUT	40.750539	-111.849592	4606	001	Concrete walk off of back door	OA	NA	NA	2/6/2015	cis12Dichloroethene	0.997	0.094	<0.1	Yes	U	0.1	0.372428	NE	NE	No	No
0008-H	A-0008H-020615-IA-010-OUT	40.750539	-111.849592	4606	001	Concrete walk off of back door	OA	NA	NA	2/6/2015	Trichloroethene	0.523	0.144	0.144	No	NR	0.1	0.77328	16	0.48	No	No
0008-H	A-0008H-020615-IA-010-OUT	40.750539	-111.849592	4606	001	Concrete walk off of back door	OA	NA	NA	2/6/2015	Tetrachloroethene	0.995	0.134	0.134	Yes	=	0.1	0.908252	370	11	No	No
0008-H	A-0008H-020615-IA-012C-LAU	40.750539	-111.849592	4606	009	Basement Laundry Room	PP	9.3	10:51	2/6/2015	cis12Dichloroethene	0.606	0.021	<0.1	No	NR	0.1	0.083202	NE	NE	No	No
0008-H	A-0008H-020615-IA-012C-LAU	40.750539	-111.849592	4606	009	Basement Laundry Room	PP	9.3	10:51	2/6/2015	Trichloroethene	0.523	0.007	<0.1	No	NR	0.1	0.03759	16	0.48	No	No
0008-H	A-0008H-020615-IA-012C-LAU	40.750539	-111.849592	4606	009	Basement Laundry Room	PP	9.3	10:51	2/6/2015	Tetrachloroethene	0.996	0.111	0.111	Yes	=	0.1	0.752358	370	11	No	No
0008-H	A-0008H-020615-IA-012B-LAU	40.750539	-111.849592	4606	008	Basement Laundry Room	PP	11.9	10:41	2/6/2015	cis12Dichloroethene	0.767	0.032	<0.1	Yes	U	0.1	0.126784	NE	NE	No	No
0008-H	A-0008H-020615-IA-012B-LAU	40.750539	-111.849592	4606	008	Basement Laundry Room	PP	11.9	10:41	2/6/2015	Trichloroethene	0.523	0.007	<0.1	No	NR	0.1	0.03759	16	0.48	No	No
0008-H	A-0008H-020615-IA-012B-LAU	40.750539	-111.849592	4606	008	Basement Laundry Room	PP	11.9	10:41	2/6/2015	Tetrachloroethene	0.995	0.218	0.218	Yes	=	0.1	1.477604	370	11	No	No
0008-H	A-0008H-020615-IA-012A-LAU	40.750539	-111.849592	4606	007	Basement Laundry Room	PP	8.1	10:31	2/6/2015	cis12Dichloroethene	0.865	0.051	<0.1	Yes	U	0.1	0.202062	NE	NE	No	No
0008-H	A-0008H-020615-IA-012A-LAU	40.750539	-111.849592	4606	007	Basement Laundry Room	PP	8.1	10:31	2/6/2015	Trichloroethene	0.523	0.008	<0.1	No	NR	0.1	0.04296	16	0.48	No	No
0008-H	A-0008H-020615-IA-012A-LAU	40.750539	-111.849592	4606	007	Basement Laundry Room	PP	8.1	10:31	2/6/2015	Tetrachloroethene	0.994	0.306	0.306	Yes	=	0.1	2.074068	370	11	No	No
0008-H	A-0008H-020615-SG-001-4'	40.750489	-111.849567	4610	010	center south side of house	SG	NA	NA	2/6/2015	cis12Dichloroethene	0.58	0.135	0.135	No	NR	0.1	0.53487	NE	NE	No	No
0008-H	A-0008H-020615-SG-001-4'	40.750489	-111.849567	4610	010	center south side of house	SG	NA	NA	2/6/2015	Trichloroethene	0.523	0.015	<0.1	No	NR	0.1	0.08055	16	0.48	No	No
0008-H	A-0008H-020615-SG-001-4'	40.750489	-111.849567	4610	010	center south side of house	SG	NA	NA	2/6/2015	Tetrachloroethene	0.995	0.15	0.15	Yes	=	0.1	1.0167	370	11	No	No
0009-H	A-0009H-021015-CCV	40.750164	-111.850781	4574	035	CCV - 0.5 ppb	CCV	NA	NA	2/9/2015	cis12Dichloroethene	0.993	0.5305	0.5305	Yes	=	0.1	2.101841	NA	NA	NA	NA
0009-H	A-0009H-021015-CCV	40.750164	-111.850781	4574	035	CCV - 0.5 ppb	CCV	NA	NA	2/9/2015	Trichloroethene	0.997	0.3939	0.3939	Yes	=	0.1	2.115243	NA	NA	NA	NA
0009-H	A-0009H-021015-CCV	40.750164	-111.850781	4574	035	CCV - 0.5 ppb	CCV	NA	NA	2/9/2015	Tetrachloroethene	0.994	0.4554	0.4554	Yes	=	0.1	3.0867012	NA	NA	NA	NA
0009-H	A-0009H-021015-CCV	40.750164	-111.850781	4574	034	CCV - 5.0 ppb	CCV	NA	NA	2/9/2015	cis12Dichloroethene	0.995	4.785	4.785	Yes	=	0.1	18.95817	NA	NA	NA	NA
0009-H	A-0009H-021015-CCV	40.750164	-111.850781	4574	034	CCV - 5.0 ppb	CCV	NA	NA	2/9/2015	Trichloroethene	0.98	3.858	3.858	Yes	=	0.1	20.71746	NA	NA	NA	NA
0009-H	A-0009H-021015-CCV	40.750164	-111.850781	4574	034	CCV - 5.0 ppb	CCV	NA	NA	2/9/2015	Tetrachloroethene	0.993	4.473	4.473	Yes	=	0.1	30.317994	NA	NA	NA	NA
0009-H	A-0009H-020915-CCV	40.750164	-111.850781	4574	006	CCV - 5.0 ppb	CCV	NA	NA	2/9/2015	cis12Dichloroethene	0.999	5.398	5.398	Yes	=	0.1	21.386876	NA	NA	NA	NA
0009-H	A-0009H-020915-CCV	40.750164	-111.850781	4574	006	CCV - 5.0 ppb	CCV	NA	NA	2/9/2015	Trichloroethene	0.994	5.4	5.4	Yes	=	0.1	28.998	NA	NA	NA	NA
0009-H	A-0009H-020915-CCV	40.750164	-111.850781	4574	006	CCV - 5.0 ppb	CCV	NA	NA	2/9/2015	Tetrachloroethene	0.994	5.541	5.541	Yes	=	0.1	37.556898	NA	NA	NA	NA
0009-H	A-0009H-021015-IA-013-GAR	40.750164	-111.850781	4574	015	Drive under garage - entry thru basement	IA	NA	NA	2/10/2015	cis12Dichloroethene	0.98	0.01065	<0.1	Yes	U	0.1	0.0421953	NE	NE	No	No
0009-H	A-0009H-021015-IA-013-GAR	40.750164	-111.850781	4574	015	Drive under garage - entry thru basement	IA	NA	NA	2/10/2015	Trichloroethene	0.996	0.01509	<0.1	Yes	U	0.1	0.0810333	16	0.48	No	No
0009-H	A-0009H-021015-IA-013-GAR	40.750164	-111.850781	4574	015	Drive under garage - entry thru basement	IA	NA	NA	2/10/2015	Tetrachloroethene	0.994	0.02152	<0.1	Yes	U	0.1	0.14586256	370	11	No	No
0009-H	A-0009H-021015-IA-012-STO2	40.750164	-111.850781	4574	014	Basement furnace/store room	IA	NA	NA	2/10/2015	cis12Dichloroethene	0.881	0.03276	<0.1	Yes	U	0.1	0.12979512	NE	NE	No	No
0009-H	A-0009H-021015-IA-012-STO2	40.750164	-111.850781	4574	014	Basement furnace/store room	IA	NA	NA	2/10/2015	Trichloroethene	0.997	0.01304	<0.1	Yes	U	0.1	0.0700248	16	0.48	No	No
0009-H	A-0009H-021015-IA-012-STO2	40.750164	-111.850781	4574	014	Basement furnace/store room	IA	NA	NA	2/10/2015	Tetrachloroethene	0.994	0.04526	<0.1	Yes	U	0.1	0.30677228	370	11	No	No
0009-H	A-0009H-021015-IA-011-BR2	40.750164	-111.850781	4574	013	Basment Bedroom	IA	NA	NA	2/10/2015	cis12Dichloroethene	0.76	0.05925	<0.1	Yes	U	0.1	0.2347485	NE	NE	No	No
0009-H	A-0009H-021015-IA-011-BR2	40.750164	-111.850781	4574	013	Basment Bedroom	IA	NA	NA	2/10/2015	Trichloroethene	0.928	0.00671	<0.1	Yes	U	0.1	0.0360327	16	0.48	No	No
0009-H	A-0009H-021015-IA-011-BR2	40.750164	-111.850781	4574	013	Basment Bedroom	IA	NA	NA	2/10/2015	Tetrachloroethene	0.993	0.02494	<0.1	Yes	U	0.1	0.16904332	370	11	No	No
0009-H	A-0009H-021015-IA-010-LLL	40.750164	-111.850781	4574	012	Basement Sitting/TV Room	IA	NA	NA	2/10/2015	cis12Dichloroethene	0.755	0.05882	<0.1	Yes	U	0.1	0.23304484	NE	NE	No	No
0009-H	A-0009H-021015-IA-010-LLL	40.750164	-111.850781	4574	012	Basement Sitting/TV Room	IA	NA	NA	2/10/2015	Trichloroethene	0.97	0.00714	<0.1	Yes	U	0.1	0.0383418	16	0.48	No	No
0009-H	A-0009H-021015-IA-010-LLL	40.750164	-111.850781	4574	012	Basement Sitting/TV Room	IA	NA	NA	2/10/2015	Tetrachloroethene	0.991	0.01606	<0.1	Yes	U	0.1	0.10885468	370	11	No	No
0009-H	A-0009H-021015-IA-009-BA2	40.750164	-111.850781	4574	011	Basement Bathroom	IA	NA	NA	2/10/2015	cis12Dichloroethene	0.922	0.02213	<0.1	Yes	U	0.1	0.08767906	NE	NE	No	No
0009-H	A-0009H-021015-IA-009-BA2	40.750164	-111.850781	4574	011	Basement Bathroom	IA	NA	NA	2/10/2015	Trichloroethene	0.995	0.01639	<0.1	Yes	U	0.1	0.0880143	16	0.48	No	No
0009-H	A-0009H-021015-IA-009-BA2	40.750164	-111.850781	4574	011	Basement Bathroom	IA	NA	NA	2/10/2015	Tetrachloroethene	0.996	0.02961	<0.1	Yes	U	0.1	0.20069658	370	11	No	No
0009-H	A-0009H-021015-IA-008-LAU	40.750164	-111.850781	4574	010	Basement Laundry/Utility Room	IA	NA	NA	2/10/2015	cis12Dichloroethene	0.835	0.05146	<0.1	Yes	U	0.1	0.20388452	NE	NE	No	No
0009-H	A-0009H-021015-IA-008-LAU	40.750164	-111.850781	4574	010	Basement Laundry/Utility Room	IA	NA	NA	2/10/2015	Trichloroethene	0.989	0.01416	<0.1	Yes	U	0.1	0.0760392	16	0.48	No	No
0009-H	A-0009H-021015-IA-008-LAU	40.750164	-111.850781	4574	010	Basement Laundry/Utility Room	IA	NA	NA	2/10/2015	Tetrachloroethene	0.994	0.0283	<0.1	Yes	U	0.1	0.1918174	370	11	No	No
0009-H	A-0009H-021015-IA-007-STO1	40.750164	-111.850781	4574	009	Mudroom off kitchen	IA	NA	NA	2/10/2015	cis12Dichloroethene	0.721	0.06646	<0.1	Yes	U	0.1	0.26331452	NE	NE	No	No
0009-H	A-0009H-021015-IA-007-STO1	40.750164	-111.850781	4574	009	Mudroom off kitchen	IA	NA	NA	2/10/2015	Trichloroethene	0.973	0.01113	<0.1	Yes	U	0.1	0.0597681	16	0.48	No	No
0009-H	A-0009H-021015-IA-007-STO1	40.750164	-111.850781	4574	009	Mudroom off kitchen	IA	NA	NA	2/10/2015	Tetrachloroethene	0.996	0.022	<0.1	Yes	U	0.1	0.149116	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0009-H	A-0009H-021015-IA-006-KIT	40.750164	-111.850781	4574	008	Kitchen	IA	NA	NA	2/10/2015	cis12Dichloroethene	0.742	0.09923	<0.1	Yes	U	0.1	0.39314926	NE	NE	No	No
0009-H	A-0009H-021015-IA-006-KIT	40.750164	-111.850781	4574	008	Kitchen	IA	NA	NA	2/10/2015	Trichloroethene	0.889	0.009	<0.1	Yes	U	0.1	0.04833	16	0.48	No	No
0009-H	A-0009H-021015-IA-006-KIT	40.750164	-111.850781	4574	008	Kitchen	IA	NA	NA	2/10/2015	Tetrachloroethene	0.995	0.01947	<0.1	Yes	U	0.1	0.13196766	370	11	No	No
0009-H	A-0009H-021015-IA-005-MBR	40.750164	-111.850781	4574	007	Master Bedroom	IA	NA	NA	2/10/2015	cis12Dichloroethene	0.766	0.08662	<0.1	Yes	U	0.1	0.34318844	NE	NE	No	No
0009-H	A-0009H-021015-IA-005-MBR	40.750164	-111.850781	4574	007	Master Bedroom	IA	NA	NA	2/10/2015	Trichloroethene	0.912	0.00665	<0.1	Yes	U	0.1	0.0357105	16	0.48	No	No
0009-H	A-0009H-021015-IA-005-MBR	40.750164	-111.850781	4574	007	Master Bedroom	IA	NA	NA	2/10/2015	Tetrachloroethene	0.993	0.02093	<0.1	Yes	U	0.1	0.14186354	370	11	No	No
0009-H	A-0009H-021015-IA-004-BA1	40.750164	-111.850781	4574	006	Bathroom - main level	IA	NA	NA	2/10/2015	cis12Dichloroethene	0.656	0.09714	<0.1	No	NR	0.1	0.38486868	NE	NE	No	No
0009-H	A-0009H-021015-IA-004-BA1	40.750164	-111.850781	4574	006	Bathroom - main level	IA	NA	NA	2/10/2015	Trichloroethene	0.987	0.00897	<0.1	Yes	U	0.1	0.0481689	16	0.48	No	No
0009-H	A-0009H-021015-IA-004-BA1	40.750164	-111.850781	4574	006	Bathroom - main level	IA	NA	NA	2/10/2015	Tetrachloroethene	0.995	0.01758	<0.1	Yes	U	0.1	0.11915724	370	11	No	No
0009-H	IA-0009H-021015-A-003-BR1	40.750164	-111.850781	4574	005	Bedroom - main level	IA	NA	NA	2/10/2015	cis12Dichloroethene	0.903	0.05072	<0.1	Yes	U	0.1	0.20095264	NE	NE	No	No
0009-H	IA-0009H-021015-A-003-BR1	40.750164	-111.850781	4574	005	Bedroom - main level	IA	NA	NA	2/10/2015	Trichloroethene	0.965	0.01064	<0.1	Yes	U	0.1	0.0571368	16	0.48	No	No
0009-H	IA-0009H-021015-A-003-BR1	40.750164	-111.850781	4574	005	Bedroom - main level	IA	NA	NA	2/10/2015	Tetrachloroethene	0.995	0.01828	<0.1	Yes	U	0.1	0.12390184	370	11	No	No
0009-H	A-0009H-021015-IA-002-2LL	40.750164	-111.850781	4574	004	Main level living room	IA	NA	NA	2/10/2015	cis12Dichloroethene	0.906	0.05397	<0.1	Yes	U	0.1	0.21382914	NE	NE	No	No
0009-H	A-0009H-021015-IA-002-2LL	40.750164	-111.850781	4574	004	Main level living room	IA	NA	NA	2/10/2015	Trichloroethene	0.992	0.01387	<0.1	Yes	U	0.1	0.0744819	16	0.48	No	No
0009-H	A-0009H-021015-IA-002-2LL	40.750164	-111.850781	4574	004	Main level living room	IA	NA	NA	2/10/2015	Tetrachloroethene	0.995	0.02185	<0.1	Yes	U	0.1	0.1480993	370	11	No	No
0009-H	A-0009H-021015-IA-014I-LAU	40.750164	-111.850781	4574	025	Basement Laundry/Utility Room	NP	-5.3	13:31	2/10/2015	cis12Dichloroethene	0.774	0.01968	<0.1	Yes	U	0.1	0.07797216	NE	NE	No	No
0009-H	A-0009H-021015-IA-014I-LAU	40.750164	-111.850781	4574	025	Basement Laundry/Utility Room	NP	-5.3	13:31	2/10/2015	Trichloroethene	0.968	0.00512	<0.1	Yes	U	0.1	0.0274944	16	0.48	No	No
0009-H	A-0009H-021015-IA-014I-LAU	40.750164	-111.850781	4574	025	Basement Laundry/Utility Room	NP	-5.3	13:31	2/10/2015	Tetrachloroethene	0.996	0.0143	<0.1	Yes	U	0.1	0.0969254	370	11	No	No
0009-H	A-0009H-021015-IA-014H-LAU	40.750164	-111.850781	4574	024	Basement Laundry/Utility Room	NP	-5.2	13:21	2/10/2015	cis12Dichloroethene	0.902	0.01706	<0.1	Yes	U	0.1	0.06759172	NE	NE	No	No
0009-H	A-0009H-021015-IA-014H-LAU	40.750164	-111.850781	4574	024	Basement Laundry/Utility Room	NP	-5.2	13:21	2/10/2015	Trichloroethene	0.984	0.00537	<0.1	Yes	U	0.1	0.0288369	16	0.48	No	No
0009-H	A-0009H-021015-IA-014H-LAU	40.750164	-111.850781	4574	024	Basement Laundry/Utility Room	NP	-5.2	13:21	2/10/2015	Tetrachloroethene	0.994	0.01527	<0.1	Yes	U	0.1	0.10350006	370	11	No	No
0009-H	A-0009H-021015-IA-014G-LAU	40.750164	-111.850781	4574	023	Basement Laundry/Utility Room	NP	-5.2	13:16	2/10/2015	cis12Dichloroethene	0.9	0.01457	<0.1	Yes	U	0.1	0.05772634	NE	NE	No	No
0009-H	A-0009H-021015-IA-014G-LAU	40.750164	-111.850781	4574	023	Basement Laundry/Utility Room	NP	-5.2	13:16	2/10/2015	Trichloroethene	0.987	0.00623	<0.1	Yes	U	0.1	0.0334551	16	0.48	No	No
0009-H	A-0009H-021015-IA-014G-LAU	40.750164	-111.850781	4574	023	Basement Laundry/Utility Room	NP	-5.2	13:16	2/10/2015	Tetrachloroethene	0.996	0.01435	<0.1	Yes	U	0.1	0.0972643	370	11	No	No
0009-H	A-0009H-021015-IA-014F-LAU	40.750164	-111.850781	4574	022	Basement Laundry/Utility Room	NP	-5.1	13:06	2/10/2015	cis12Dichloroethene	0.934	0.01843	<0.1	Yes	U	0.1	0.07301966	NE	NE	No	No
0009-H	A-0009H-021015-IA-014F-LAU	40.750164	-111.850781	4574	022	Basement Laundry/Utility Room	NP	-5.1	13:06	2/10/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0009-H	A-0009H-021015-IA-014F-LAU	40.750164	-111.850781	4574	022	Basement Laundry/Utility Room	NP	-5.1	13:06	2/10/2015	Tetrachloroethene	0.994	0.01777	<0.1	Yes	U	0.1	0.12044506	370	11	No	No
0009-H	A-0009H-021015-IA-014E-LAU	40.750164	-111.850781	4574	021	Basement Laundry/Utility Room	NP	-5.1	12:56	2/10/2015	cis12Dichloroethene	0.807	0.02675	<0.1	Yes	U	0.1	0.1059835	NE	NE	No	No
0009-H	A-0009H-021015-IA-014E-LAU	40.750164	-111.850781	4574	021	Basement Laundry/Utility Room	NP	-5.1	12:56	2/10/2015	Trichloroethene	0.953	0.00587	<0.1	Yes	U	0.1	0.0315219	16	0.48	No	No
0009-H	A-0009H-021015-IA-014E-LAU	40.750164	-111.850781	4574	021	Basement Laundry/Utility Room	NP	-5.1	12:56	2/10/2015	Tetrachloroethene	0.995	0.01601	<0.1	Yes	U	0.1	0.10851578	370	11	No	No
0009-H	A-0009H-021015-IA-014D-LAU	40.750164	-111.850781	4574	020	Basement Laundry/Utility Room	NP	-5.0	12:51	2/10/2015	cis12Dichloroethene	0.952	0.01828	<0.1	Yes	U	0.1	0.07242536	NE	NE	No	No
0009-H	A-0009H-021015-IA-014D-LAU	40.750164	-111.850781	4574	020	Basement Laundry/Utility Room	NP	-5.0	12:51	2/10/2015	Trichloroethene	0.987	0.00626	<0.1	Yes	U	0.1	0.0336162	16	0.48	No	No
0009-H	A-0009H-021015-IA-014D-LAU	40.750164	-111.850781	4574	020	Basement Laundry/Utility Room	NP	-5.0	12:51	2/10/2015	Tetrachloroethene	0.995	0.01675	<0.1	Yes	U	0.1	0.1135315	370	11	No	No
0009-H	A-0009H-021015-IA-014C-LAU	40.750164	-111.850781	4574	019	Basement Laundry/Utility Room	NP	-4.9	12:41	2/10/2015	cis12Dichloroethene	0.878	0.02536	<0.1	Yes	U	0.1	0.10047632	NE	NE	No	No
0009-H	A-0009H-021015-IA-014C-LAU	40.750164	-111.850781	4574	019	Basement Laundry/Utility Room	NP	-4.9	12:41	2/10/2015	Trichloroethene	0.907	0.0092	<0.1	Yes	U	0.1	0.049404	16	0.48	No	No
0009-H	A-0009H-021015-IA-014C-LAU	40.750164	-111.850781	4574	019	Basement Laundry/Utility Room	NP	-4.9	12:41	2/10/2015	Tetrachloroethene	0.995	0.02038	<0.1	Yes	U	0.1	0.13813564	370	11	No	No
0009-H	A-0009H-021015-IA-014B-LAU	40.750164	-111.850781	4574	018	Basement Laundry/Utility Room	NP	-5.2	12:31	2/10/2015	cis12Dichloroethene	0.863	0.029	<0.1	Yes	U	0.1	0.114898	NE	NE	No	No
0009-H	A-0009H-021015-IA-014B-LAU	40.750164	-111.850781	4574	018	Basement Laundry/Utility Room	NP	-5.2	12:31	2/10/2015	Trichloroethene	0.952	0.0097	<0.1	Yes	U	0.1	0.052089	16	0.48	No	No
0009-H	A-0009H-021015-IA-014B-LAU	40.750164	-111.850781	4574	018	Basement Laundry/Utility Room	NP	-5.2	12:31	2/10/2015	Tetrachloroethene	0.995	0.02207	<0.1	Yes	U	0.1	0.14959046	370	11	No	No
0009-H	A-0009H-021015-IA-014A-LAU	40.750164	-111.850781	4574	017	Basement Laundry/Utility Room	NP	-5.0	12:26	2/10/2015	cis12Dichloroethene	0.877	0.04171	<0.1	Yes	U	0.1	0.16525502	NE	NE	No	No
0009-H	A-0009H-021015-IA-014A-LAU	40.750164	-111.850781	4574	017	Basement Laundry/Utility Room	NP	-5.0	12:26	2/10/2015	Trichloroethene	0.998	0.01038	<0.1	Yes	U	0.1	0.0557406	16	0.48	No	No
0009-H	A-0009H-021015-IA-014A-LAU	40.750164	-111.850781	4574	017	Basement Laundry/Utility Room	NP	-5.0	12:26	2/10/2015	Tetrachloroethene	0.995	0.02332	<0.1	Yes	U	0.1	0.15806296	370	11	No	No
0009-H	A-0009H-021015-IA-001-OUT	40.750164	-111.850781	4574	001	SW corner of porch by stairs	OA	NA	NA	2/10/2015	cis12Dichloroethene	0.893	0.01823	<0.1	Yes	U	0.1	0.07222726	NE	NE	No	No
0009-H	A-0009H-021015-IA-001-OUT	40.750164	-111.850781	4574	001	SW corner of porch by stairs	OA	NA	NA	2/10/2015	Trichloroethene	1	0.05759	<0.1	Yes	U	0.1	0.3092583	16	0.48	No	No
0009-H	A-0009H-021015-IA-001-OUT	40.750164	-111.850781	4574	001	SW corner of porch by stairs	OA	NA	NA	2/10/2015	Tetrachloroethene	0.993	0.06686	<0.1	Yes	U	0.1	0.45317708	370	11	No	No
0009-H	A-0009H-021015-IA-015H-LAU	40.750164	-111.850781	4574	033	Basement Laundry/Utility Room	PP	7.2	14:43	2/10/2015	cis12Dichloroethene	0.822	0.0255	<0.1	Yes	U	0.1	0.101031	NE	NE	No	No
0009-H	A-0009H-021015-IA-015H-LAU	40.750164	-111.850781	4574	033	Basement Laundry/Utility Room	PP	7.2	14:43	2/10/2015	Trichloroethene	0.95	0.00485	<0.1	Yes	U	0.1	0.0260445	16	0.48	No	No
0009-H	A-0009H-021015-IA-015H-LAU	40.750164	-111.850781	4574	033	Basement Laundry/Utility Room	PP	7.2	14:43	2/10/2015	Tetrachloroethene	0.997	0.0118	<0.1	Yes	U	0.1	0.0799804	370	11	No	No
0009-H	A-0009H-021015-IA-015G-LAU	40.750164	-111.850781	4574	032	Basement Laundry/Utility Room	PP	6.0	14:33	2/10/2015	cis12Dichloroethene	0.919	0.0106	<0.1	Yes	U	0.1	0.0419972	NE	NE	No	No
0009-H	A-0009H-021015-IA-015G-LAU	40.750164	-111.850781	4574	032	Basement Laundry/Utility Room	PP	6.0	14:33	2/10/2015	Trichloroethene	0.979	0.007	<0.1	Yes	U	0.1	0.03759	16	0.48	No	No
0009-H	A-0009H-021015-IA-015G-LAU	40.750164	-111.850781	4574	032	Basement Laundry/Utility Room	PP	6.0	14:33	2/10/2015	Tetrachloroethene	0.996	0.01265	<0.1	Yes	U	0.1	0.0857417	370	11	No	No
0009-H	A-0009H-021015-IA-015F-LAU	40.750164	-111.850781	4574	031	Basement Laundry/Utility Room	PP	4.6	14:23	2/10/2015	cis12Dichloroethene	0.827	0.00968	<0.1	Yes	U	0.1	0.03835216	NE	NE	No	No
0009-H	A-0009H-021015-IA-015F-LAU	40.750164	-111.850781	4574	031	Basement Laundry/Utility Room	PP	4.6	14:23	2/10/2015	Trichloroethene	0.985	0.00695	<0.1	Yes	U	0.1	0.0373215	16	0.48	No	No
0009-H	A-0009H-021015-IA-015F-LAU	40.750164	-111.850781	4574	031	Basement Laundry/Utility Room	PP	4.6	14:23	2/10/2015	Tetrachloroethene	0.997	0.0126	<0.1	Yes	U	0.1	0.0854028	370	11	No	No
0009-H	A-0009H-021015-IA-015E-LAU	40.750164	-111.850781	4574	030	Basement Laundry/Utility Room	PP	5.6	14:18	2/10/2015	cis12Dichloroethene	0.812	0.01424	<0.1	Yes	U	0.1	0.05641888	NE	NE	No	No
0009-H	A-0009H-021015-IA-015E-LAU	40.750164	-111.850781	4574	030	Basement Laundry/Utility Room	PP	5.6	14:18	2/10/2015	Trichloroethene	0.933	0.00892	<0.1	Yes	U	0.1	0.0479004	16	0.48	No	No
0009-H	A-0009H-021015-IA-015E-LAU	40.750164	-111.850781	4574	030	Basement Laundry/Utility Room	PP	5.6	14:18	2/10/2015	Tetrachloroethene	0.996	0.01251	<0.1	Yes	U	0.1	0.08479278	370	11	No	No
0009-H	A-0009H-021015-IA-015D-LAU	40.750164	-111.850781	4574	029	Basement Laundry/Utility Room	PP	6.3	14:08	2/10/2015	cis12Dichloroethene	0.887	0.00809	<0.1	Yes	U	0.1	0.03205258	NE	NE	No	No
0009-H	A-0009H-021015-IA-015D-LAU	40.750164	-111.850781	4574	029	Basement Laundry/Utility Room	PP	6.3	14:08	2/10/2015	Trichloroethene	0.992	0.0062	<0.1	Yes	U	0.1	0.033294	16	0.48	No	No
0009-H	A-0009H-021015-IA-015D-LAU	40.750164	-111.850781	4574	029	Basement Laundry/Utility Room	PP	6.3	14:08	2/10/2015	Tetrachloroethene	0.994	0.0118	<0.1	Yes	U	0.1	0.0799804	370	11	No	No
0009-H	A-0009H-021015-IA-015C-LAU	40.750164	-111.850781	4574	028	Basement Laundry/Utility Room	PP	6.9	14:03	2/10/2015	cis12Dichloroethene	0.934	0.01202	<0.1	Yes	U	0.1	0.04762324	NE	NE	No	No
0009-H	A-0009H-021015-IA-015C-LAU	40.750164	-111.850781	4574	028	Basement Laundry/Utility Room	PP	6.9	14:03	2/10/2015	Trichloroethene	0.896	0.00439	<0.1	Yes	U	0.1	0.0235743	16	0.48	No	No
0009-H	A-0009H-021015-IA-015C-LAU	40.750164	-111.850781	4574	028	Basement Laundry/Utility Room	PP	6.9	14:03	2/10/2015	Tetrachloroethene	0.998	0.01036	<0.1	Yes	U	0.1	0.07022008	370	11	No	No
0009-H	A-0009H-021015-IA-015B-LAU	40.750164	-111.850781	4574	027	Basement Laundry/Utility Room	PP	5.9	13:53	2/10/2015	cis12Dichloroethene	0.966	0.01304	<0.1	Yes	U	0.1	0.05166448	NE	NE	No	No
0009-H	A-0009H-021015-IA-015B-LAU	40.750164	-111.850781	4574	027	Basement Laundry/Utility Room	PP	5.9	13:53	2/10/2015	Trichloroethene	0.958	0.00615	<0.1	Yes	U	0.1	0.0330255	16	0.48	No	No
0009-H	A-0009H-021015-IA-015B-LAU	40.750164	-111.850781	4574	027	Basement Laundry/Utility Room	PP	5.9	13:53	2/10/2015	Tetrachloroethene	0.993	0.01105	<0.1	Yes	U	0.1	0.0748969	370	11	No	No
0009-H	A-0009H-021015-IA-015A-LAU	40.750164	-111.850781	4574	026	Basement Laundry/Utility Room	PP	7.1	13:48	2/10/2015	cis12Dichloroethene	0.942	0.01529	<0.1	Yes	U	0.1	0.06057898	NE	NE	No	No
0009-H	A-0009H-021015-IA-015A-LAU	40.750164	-111.850781	4574	026	Basement Laundry/Utility Room	PP	7.1	13:48	2/10/2015	Trichloroethene	0.993	0.00406	<0.1	Yes	U	0.1	0.0218022	16	0.48	No	No
0009-H	A-0009H-021015-IA-015A-LAU	40.750164	-111.850781	4574	026	Basement Laundry/Utility Room	PP	7.1	13:48	2/10/2015	Tetrachloroethene	0.995	0.01434	<0.1	Yes	U	0.1	0.09719652	370	11	No	No
0009-H	A-0009H-021015-SG-001-4'	40.750216	-111.850633	4582	016	Soil probe located at NE corner of house	SG	NA	NA	2/10/2015	cis12Dichloroethene	0.752	0.05497	<0.1	Yes	U	0.1	0.21779114	NE	NE	No	No
0009-H	A-0009H-021015-SG-001-4'	40.750216	-111.850633	4582	016	Soil probe located at NE corner of house	SG	NA	NA	2/10/2015	Trichloroethene	0.976	0.01313	<0.1	Yes	U	0.1	0.0705081	16	0.48	No	No
0009-H	A-0009H-021015-SG-001-4'	40.750216	-111.850633	4582	016	Soil probe located at NE corner of house	SG	NA	NA	2/10/2015	Tetrachloroethene	0.994	0.09012	<0.1	Yes	U	0.1	0.61083336	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0010-H	A-0010H-012715-IA-007-KIT2	40.747075	-111.859853	4378	007	Basement kitchen	IA	NA	NA	1/27/2015	cis12Dichloroethene	0.665	Fit too low	<0.1	No	NR	0.1	Fit too low	NE	NE	No	No
0010-H	A-0010H-012715-IA-007-KIT2	40.747075	-111.859853	4378	007	Basement kitchen	IA	NA	NA	1/27/2015	Trichloroethene	0.94	0.031	<0.1	Yes	U	0.1	0.16647	16	0.48	No	No
0010-H	A-0010H-012715-IA-007-KIT2	40.747075	-111.859853	4378	007	Basement kitchen	IA	NA	NA	1/27/2015	Tetrachloroethene	0.994	0.6735	0.6735	Yes	=	0.1	4.564983	370	11	No	No
0010-H	A-0010H-012715-CCV	40.747075	-111.859853	4378	001	CCV - 5.0 ppb	CCV	NA	NA	1/27/2015	cis12Dichloroethene	0.998	5.497	5.497	Yes	=	0.1	21.779114	NA	NA	NA	NA
0010-H	A-0010H-012715-CCV	40.747075	-111.859853	4378	001	CCV - 5.0 ppb	CCV	NA	NA	1/27/2015	Trichloroethene	0.523	5.222	5.222	No	NR	0.1	28.04214	NA	NA	NA	NA
0010-H	A-0010H-012715-CCV	40.747075	-111.859853	4378	001	CCV - 5.0 ppb	CCV	NA	NA	1/27/2015	Tetrachloroethene	0.996	4.13	4.13	Yes	=	0.1	27.99314	NA	NA	NA	NA
0010-H	A-0010H-012615-CCV	40.747075	-111.859853	4378	001	CCV - 5.0 ppb	CCV	NA	NA	1/27/2015	cis12Dichloroethene	0.961	5.223	5.223	Yes	=	0.1	20.693526	NA	NA	NA	NA
0010-H	A-0010H-012615-CCV	40.747075	-111.859853	4378	001	CCV - 5.0 ppb	CCV	NA	NA	1/27/2015	Trichloroethene	0.921	4.86	4.86	Yes	=	0.1	26.0982	NA	NA	NA	NA
0010-H	A-0010H-012615-CCV	40.747075	-111.859853	4378	001	CCV - 5.0 ppb	CCV	NA	NA	1/27/2015	Tetrachloroethene	0.994	5.836	5.836	Yes	=	0.1	39.556408	NA	NA	NA	NA
0010-H	A-0010H-012715-IA-012-BA1	40.747075	-111.859853	4378	012	Basement Bathroom	IA	NA	NA	1/27/2015	cis12Dichloroethene	0.797	0.4793	0.4793	Yes	=	0.1	1.8989866	NE	NE	No	No
0010-H	A-0010H-012715-IA-012-BA1	40.747075	-111.859853	4378	012	Basement Bathroom	IA	NA	NA	1/27/2015	Trichloroethene	0.957	0.0191	<0.1	Yes	U	0.1	0.102567	16	0.48	No	No
0010-H	A-0010H-012715-IA-012-BA1	40.747075	-111.859853	4378	012	Basement Bathroom	IA	NA	NA	1/27/2015	Tetrachloroethene	0.996	0.3273	0.3273	Yes	=	0.1	2.2184394	370	11	No	No
0010-H	A-0010H-012715-IA-011-STO	40.747075	-111.859853	4378	011	Basement storeroom	IA	NA	NA	1/27/2015	cis12Dichloroethene	0.596	Fit too low	<0.1	No	NR	0.1	Fit too low	NE	NE	No	No
0010-H	A-0010H-012715-IA-011-STO	40.747075	-111.859853	4378	011	Basement storeroom	IA	NA	NA	1/27/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0010-H	A-0010H-012715-IA-011-STO	40.747075	-111.859853	4378	011	Basement storeroom	IA	NA	NA	1/27/2015	Tetrachloroethene	0.995	0.8717	0.8717	Yes	=	0.1	5.9083826	370	11	No	No
0010-H	A-0010H-012715-IA-010-BR3	40.747075	-111.859853	4378	010	Basement Bedroom#2	IA	NA	NA	1/27/2015	cis12Dichloroethene	0.585	Fit too low	<0.1	No	NR	0.1	Fit too low	NE	NE	No	No
0010-H	A-0010H-012715-IA-010-BR3	40.747075	-111.859853	4378	010	Basement Bedroom#2	IA	NA	NA	1/27/2015	Trichloroethene	0.929	0.0241	<0.1	Yes	U	0.1	0.129417	16	0.48	No	No
0010-H	A-0010H-012715-IA-010-BR3	40.747075	-111.859853	4378	010	Basement Bedroom#2	IA	NA	NA	1/27/2015	Tetrachloroethene	0.995	0.4978	0.4978	Yes	=	0.1	3.3740884	370	11	No	No
0010-H	A-0010H-012715-IA-009-LLL	40.747075	-111.859853	4378	009	Basement living room	IA	NA	NA	1/27/2015	cis12Dichloroethene	0.581	Fit too low	<0.1	No	NR	0.1	Fit too low	NE	NE	No	No
0010-H	A-0010H-012715-IA-009-LLL	40.747075	-111.859853	4378	009	Basement living room	IA	NA	NA	1/27/2015	Trichloroethene	0.964	0.02939	<0.1	Yes	U	0.1	0.1578243	16	0.48	No	No
0010-H	A-0010H-012715-IA-009-LLL	40.747075	-111.859853	4378	009	Basement living room	IA	NA	NA	1/27/2015	Tetrachloroethene	0.994	0.6906	0.6906	Yes	=	0.1	4.6808868	370	11	No	No
0010-H	A-0010H-012715-IA-008-BR2	40.747075	-111.859853	4378	008	Basement bedroom	IA	NA	NA	1/27/2015	cis12Dichloroethene	0.604	Fit too low	<0.1	No	NR	0.1	Fit too low	NE	NE	No	No
0010-H	A-0010H-012715-IA-008-BR2	40.747075	-111.859853	4378	008	Basement bedroom	IA	NA	NA	1/27/2015	Trichloroethene	0.949	0.02997	<0.1	Yes	U	0.1	0.1609389	16	0.48	No	No
0010-H	A-0010H-012715-IA-008-BR2	40.747075	-111.859853	4378	008	Basement bedroom	IA	NA	NA	1/27/2015	Tetrachloroethene	0.993	0.4534	0.4534	Yes	=	0.1	3.0731452	370	11	No	No
0010-H	A-0010H-012715-IA-006-BR1	40.747075	-111.859853	4378	006	Bedroom	IA	NA	NA	1/27/2015	cis12Dichloroethene	0.658	Fit too low	<0.1	No	NR	0.1	Fit too low	NE	NE	No	No
0010-H	A-0010H-012715-IA-006-BR1	40.747075	-111.859853	4378	006	Bedroom	IA	NA	NA	1/27/2015	Trichloroethene	0.909	0.03575	<0.1	Yes	U	0.1	0.1919775	16	0.48	No	No
0010-H	A-0010H-012715-IA-006-BR1	40.747075	-111.859853	4378	006	Bedroom	IA	NA	NA	1/27/2015	Tetrachloroethene	0.996	0.5721	0.5721	Yes	=	0.1	3.8776938	370	11	No	No
0010-H	A-0010H-012715-IA-005-MBA	40.747075	-111.859853	4378	005	Master Bath	IA	NA	NA	1/27/2015	cis12Dichloroethene	0.589	Fit too low	<0.1	No	NR	0.1	Fit too low	NE	NE	No	No
0010-H	A-0010H-012715-IA-005-MBA	40.747075	-111.859853	4378	005	Master Bath	IA	NA	NA	1/27/2015	Trichloroethene	0.945	0.04027	<0.1	Yes	U	0.1	0.2162499	16	0.48	No	No
0010-H	A-0010H-012715-IA-005-MBA	40.747075	-111.859853	4378	005	Master Bath	IA	NA	NA	1/27/2015	Tetrachloroethene	0.996	0.8156	0.8156	Yes	=	0.1	5.5281368	370	11	No	No
0010-H	A-0010H-012715-IA-004-MBR	40.747075	-111.859853	4378	004	Upstairs Master Bedroom	IA	NA	NA	1/27/2015	cis12Dichloroethene	0.72	Fit too low	<0.1	Yes	NR	0.1	Fit too low	NE	NE	No	No
0010-H	A-0010H-012715-IA-004-MBR	40.747075	-111.859853	4378	004	Upstairs Master Bedroom	IA	NA	NA	1/27/2015	Trichloroethene	0.915	0.04249	<0.1	Yes	U	0.1	0.2281713	16	0.48	No	No
0010-H	A-0010H-012715-IA-004-MBR	40.747075	-111.859853	4378	004	Upstairs Master Bedroom	IA	NA	NA	1/27/2015	Tetrachloroethene	0.995	0.652	0.652	Yes	=	0.1	4.419256	370	11	No	No
0010-H	A-0010H-012715-IA-003-KIT	40.747075	-111.859853	4378	003	Upstairs Kitchen	IA	NA	NA	1/27/2015	cis12Dichloroethene	0.588	Fit too low	<0.1	No	NR	0.1	Fit too low	NE	NE	No	No
0010-H	A-0010H-012715-IA-003-KIT	40.747075	-111.859853	4378	003	Upstairs Kitchen	IA	NA	NA	1/27/2015	Trichloroethene	0.962	0.05541	<0.1	Yes	U	0.1	0.2975517	16	0.48	No	No
0010-H	A-0010H-012715-IA-003-KIT	40.747075	-111.859853	4378	003	Upstairs Kitchen	IA	NA	NA	1/27/2015	Tetrachloroethene	0.995	0.7297	0.7297	Yes	=	0.1	4.9459066	370	11	No	No
0010-H	A-0010H-012715-IA-002-LIV	40.747075	-111.859853	4378	002	Living Room	IA	NA	NA	1/27/2015	cis12Dichloroethene	0.708	Fit too low	<0.1	Yes	NR	0.1	Fit too low	NE	NE	No	No
0010-H	A-0010H-012715-IA-002-LIV	40.747075	-111.859853	4378	002	Living Room	IA	NA	NA	1/27/2015	Trichloroethene	0.922	0.04457	<0.1	Yes	U	0.1	0.2393409	16	0.48	No	No
0010-H	A-0010H-012715-IA-002-LIV	40.747075	-111.859853	4378	002	Living Room	IA	NA	NA	1/27/2015	Tetrachloroethene	0.995	0.6905	0.6905	Yes	=	0.1	4.680209	370	11	No	No
0010-H	A-0010H-012715-IA-015L-LLL	40.747075	-111.859853	4378	024	Bottom of stairs in basement	NP	-4.1	15:07	1/27/2015	cis12Dichloroethene	0.812	0.1348	0.1348	Yes	=	0.1	0.5340776	NE	NE	No	No
0010-H	A-0010H-012715-IA-015L-LLL	40.747075	-111.859853	4378	024	Bottom of stairs in basement	NP	-4.1	15:07	1/27/2015	Trichloroethene	0.975	0.02293	<0.1	Yes	U	0.1	0.1231341	16	0.48	No	No
0010-H	A-0010H-012715-IA-015L-LLL	40.747075	-111.859853	4378	024	Bottom of stairs in basement	NP	-4.1	15:07	1/27/2015	Tetrachloroethene	0.996	0.3619	0.3619	Yes	=	0.1	2.4529582	370	11	No	No
0010-H	A-0010H-012715-IA-015K-LLL	40.747075	-111.859853	4378	023	Bottom of stairs in basement	NP	-4.1	15:07	1/27/2015	cis12Dichloroethene	0.749	Area too low	<0.1	Yes	U	0.1	Area too low	NE	NE	No	No
0010-H	A-0010H-012715-IA-015K-LLL	40.747075	-111.859853	4378	023	Bottom of stairs in basement	NP	-4.1	15:07	1/27/2015	Trichloroethene	0.825	Area too low	<0.1	Yes	U	0.1	Area too low	16	0.48	No	No
0010-H	A-0010H-012715-IA-015K-LLL	40.747075	-111.859853	4378	023	Bottom of stairs in basement	NP	-4.1	15:07	1/27/2015	Tetrachloroethene	0.997	0.401	0.401	Yes	=	0.1	2.717978	370	11	No	No
0010-H	A-0010H-012715-IA-015J-LLL	40.747075	-111.859853	4378	022	Bottom of stairs in basement	NP	-4.1	15:07	1/27/2015	cis12Dichloroethene	0.786	0.05945	<0.1	Yes	U	0.1	0.2355409	NE	NE	No	No
0010-H	A-0010H-012715-IA-015J-LLL	40.747075	-111.859853	4378	022	Bottom of stairs in basement	NP	-4.1	15:07	1/27/2015	Trichloroethene	0.833	0.01878	<0.1	Yes	U	0.1	0.1008486	16	0.48	No	No
0010-H	A-0010H-012715-IA-015J-LLL	40.747075	-111.859853	4378	022	Bottom of stairs in basement	NP	-4.1	15:07	1/27/2015	Tetrachloroethene	0.999	0.3576	0.3576	Yes	=	0.1	2.4238128	370	11	No	No
0010-H	A-0010H-012715-IA-015I-LLL	40.747075	-111.859853	4378	021	Bottom of stairs in basement	NP	-4.8	14:57	1/27/2015	cis12Dichloroethene	0.684	Fit too low	<0.1	No	NR	0.1	Fit too low	NE	NE	No	No
0010-H	A-0010H-012715-IA-015I-LLL	40.747075	-111.859853	4378	021	Bottom of stairs in basement	NP	-4.8	14:57	1/27/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0010-H	A-0010H-012715-IA-015I-LLL	40.747075	-111.859853	4378	021	Bottom of stairs in basement	NP	-4.8	14:57	1/27/2015	Tetrachloroethene	0.998	0.3555	0.3555	Yes	=	0.1	2.409579	370	11	No	No
0010-H	A-0010H-012715-IA-015H-LLL	40.747075	-111.859853	4378	020	Bottom of stairs in basement	NP	-5.2	14:47	1/27/2015	cis12Dichloroethene	0.679	Fit too low	<0.1	No	NR	0.1	Fit too low	NE	NE	No	No
0010-H	A-0010H-012715-IA-015H-LLL	40.747075	-111.859853	4378	020	Bottom of stairs in basement	NP	-5.2	14:47	1/27/2015	Trichloroethene	0.899	0.02413	<0.1	Yes	U	0.1	0.1295781	16	0.48	No	No
0010-H	A-0010H-012715-IA-015H-LLL	40.747075	-111.859853	4378	020	Bottom of stairs in basement	NP	-5.2	14:47	1/27/2015	Tetrachloroethene	0.996	0.4021	0.4021	Yes	=	0.1	2.7254338	370	11	No	No
0010-H	A-0010H-012715-IA-015G-LLL	40.747075	-111.859853	4378	019	Bottom of stairs in basement	NP	-6.0	14:37	1/27/2015	cis12Dichloroethene	0.552	Fit too low	<0.1	No	NR	0.1	Fit too low	NE	NE	No	No
0010-H	A-0010H-012715-IA-015G-LLL	40.747075	-111.859853	4378	019	Bottom of stairs in basement	NP	-6.0	14:37	1/27/2015	Trichloroethene	0.905	0.03115	<0.1	Yes	U	0.1	0.1672755	16	0.48	No	No
0010-H	A-0010H-012715-IA-015G-LLL	40.747075	-111.859853	4378	019	Bottom of stairs in basement	NP	-6.0	14:37	1/27/2015	Tetrachloroethene	0.993	0.4069	0.4069	Yes	=	0.1	2.7579682	370	11	No	No
0010-H	A-0010H-012715-IA-015F-LLL	40.747075	-111.859853	4378	018	Bottom of stairs in basement	NP	-6.7	14:27	1/27/2015	cis12Dichloroethene	0.681	Fit too low	<0.1	No	NR	0.1	Fit too low	NE	NE	No	No
0010-H	A-0010H-012715-IA-015F-LLL	40.747075	-111.859853	4378	018	Bottom of stairs in basement	NP	-6.7	14:27	1/27/2015	Trichloroethene	0.901	0.01773	<0.1	Yes	U	0.1	0.0952101	16	0.48	No	No
0010-H	A-0010H-012715-IA-015F-LLL	40.747075	-111.859853	4378	018	Bottom of stairs in basement	NP	-6.7	14:27	1/27/2015	Tetrachloroethene	0.998	0.4894	0.4894	Yes	=	0.1	3.3171532	370	11	No	No
0010-H	A-0010H-012715-IA-015E-LLL	40.747075	-111.859853	4378	017	Bottom of stairs in basement	NP	-5.8	14:17	1/27/2015	cis12Dichloroethene	0.844	0.1238	0.1238	Yes	=	0.1	0.4904956	NE	NE	No	No
0010-H	A-0010H-012715-IA-015E-LLL	40.747075	-111.859853	4378	017	Bottom of stairs in basement	NP	-5.8	14:17	1/27/2015	Trichloroethene	0.488	Area too low	<0.1	No	U	0.1	Area too low	16	0.48	No	No
0010-H	A-0010H-012715-IA-015E-LLL	40.747075	-111.859853	4378	017	Bottom of stairs in basement	NP	-5.8	14:17	1/27/2015	Tetrachloroethene	0.995	0.4193	0.4193	Yes	=	0.1	2.8420154	370	11	No	No
0010-H	A-0010H-012715-IA-015D-LLL	40.747075	-111.859853	4378	016	Bottom of stairs in basement	NP	-4.9	13:52	1/27/2015	cis12Dichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	NE	NE	No	No
0010-H	A-0010H-012715-IA-015D-LLL	40.747075	-111.859853	4378	016	Bottom of stairs in basement	NP	-4.9	13:52	1/27/2015	Trichloroethene	0.902	Area too low	<0.1	Yes	U	0.1	Area too low	16	0.48	No	No
0010-H	A-0010H-012715-IA-015D-LLL	40.747075	-111.859853	4378	016	Bottom of stairs in basement	NP	-4.9	13:52	1/27/2015	Tetrachloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	370	11	No	No
0010-H	A-0010H-012715-IA-015A-LLL	40.747075	-111.859853	4378	013	Bottom of stairs in basement	NP	-5.1	13:17	1/27/2015	cis12Dichloroethene	0.855	0.05311	<0.1	Yes	U	0.1	0.21042182	NE	NE	No	No
0010-H	A-0010H-012715-IA-015A-LLL	40.747075	-111.859853	4378	013	Bottom of stairs in basement	NP	-5.1	13:17	1/27/2015	Trichloroethene	0.988	0.02499	<0.1	Yes	U	0.1	0.1341963	16	0.48	No	No
0010-H	A-0010H-012715-IA-015A-LLL	40.747075	-111.859853	4378	013	Bottom of stairs in basement	NP	-5.1	13:17	1/27/2015	Tetrachloroethene	0.996	0.4242	0.4242	Yes	=	0.1	2.8752276	370	11	No	No
0010-H	A-0010H-012715-IA-002-LIV	40.747075	-111.859853	4378	002	Living Room	IA	NA	NA	1/27/2015	Tetrachloroethene	0.995	0.6905	0.6905	Yes	=	0.1	4.680209	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0010-H	A-0010H-012715-IA-001-OUT	40.747075	-111.859853	4378	001	Off of front steps	OA	NA	NA	1/27/2015	cis12Dichloroethene	0.807	0.2568	0.2568	Yes	=	0.1	1.0174416	NE	NE	No	No
0010-H	A-0010H-012715-IA-001-OUT	40.747075	-111.859853	4378	001	Off of front steps	OA	NA	NA	1/27/2015	Trichloroethene	0.997	0.05307	<0.1	Yes	U	0.1	0.2849859	16	0.48	No	No
0010-H	A-0010H-012715-IA-001-OUT	40.747075	-111.859853	4378	001	Off of front steps	OA	NA	NA	1/27/2015	Tetrachloroethene	0.995	0.1694	0.1694	Yes	=	0.1	1.1481932	370	11	No	No
0010-H	A-0010H-012715-IA016F-LLL	40.747075	-111.859853	4378	030	Bottom of stairs in basement	PP	10.6	16:10	1/27/2015	cis12Dichloroethene	0.657	Fit too low	<0.1	No	NR	0.1	Fit too low	NE	NE	No	No
0010-H	A-0010H-012715-IA016F-LLL	40.747075	-111.859853	4378	030	Bottom of stairs in basement	PP	10.6	16:10	1/27/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0010-H	A-0010H-012715-IA016F-LLL	40.747075	-111.859853	4378	030	Bottom of stairs in basement	PP	10.6	16:10	1/27/2015	Tetrachloroethene	0.999	0.08345	<0.1	Yes	U	0.1	0.5656241	370	11	No	No
0010-H	A-0010H-012715-IA016E-LLL	40.747075	-111.859853	4378	029	Bottom of stairs in basement	PP	8.2	16:05	1/27/2015	cis12Dichloroethene	0.931	0.09986	<0.1	Yes	U	0.1	0.39564532	NE	NE	No	No
0010-H	A-0010H-012715-IA016E-LLL	40.747075	-111.859853	4378	029	Bottom of stairs in basement	PP	8.2	16:05	1/27/2015	Trichloroethene	0.789	Area too low	<0.1	Yes	U	0.1	Area too low	16	0.48	No	No
0010-H	A-0010H-012715-IA016E-LLL	40.747075	-111.859853	4378	029	Bottom of stairs in basement	PP	8.2	16:05	1/27/2015	Tetrachloroethene	0.999	0.05033	<0.1	Yes	U	0.1	0.34113674	370	11	No	No
0010-H	A-0010H-012715-IA016D-LLL	40.747075	-111.859853	4378	028	Bottom of stairs in basement	PP	9.8	15:55	1/27/2015	cis12Dichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	NE	NE	No	No
0010-H	A-0010H-012715-IA016D-LLL	40.747075	-111.859853	4378	028	Bottom of stairs in basement	PP	9.8	15:55	1/27/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0010-H	A-0010H-012715-IA016D-LLL	40.747075	-111.859853	4378	028	Bottom of stairs in basement	PP	9.8	15:55	1/27/2015	Tetrachloroethene	0.996	0.07107	<0.1	Yes	U	0.1	0.48171246	370	11	No	No
0010-H	A-0010H-012715-IA016C-LLL	40.747075	-111.859853	4378	027	Bottom of stairs in basement	PP	7.2	15:45	1/27/2015	cis12Dichloroethene	0.854	0.08064	<0.1	Yes	U	0.1	0.31949568	NE	NE	No	No
0010-H	A-0010H-012715-IA016C-LLL	40.747075	-111.859853	4378	027	Bottom of stairs in basement	PP	7.2	15:45	1/27/2015	Trichloroethene	0.567	Area too low	<0.1	No	U	0.1	Area too low	16	0.48	No	No
0010-H	A-0010H-012715-IA016C-LLL	40.747075	-111.859853	4378	027	Bottom of stairs in basement	PP	7.2	15:45	1/27/2015	Tetrachloroethene	0.999	0.06603	<0.1	Yes	U	0.1	0.44755134	370	11	No	No
0010-H	A-0010H-012715-IA016B-LLL	40.747075	-111.859853	4378	026	Bottom of stairs in basement	PP	13.5	15:35	1/27/2015	cis12Dichloroethene	0.834	0.4526	0.4526	Yes	=	0.1	1.7932012	NE	NE	No	No
0010-H	A-0010H-012715-IA016B-LLL	40.747075	-111.859853	4378	026	Bottom of stairs in basement	PP	13.5	15:35	1/27/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0010-H	A-0010H-012715-IA016B-LLL	40.747075	-111.859853	4378	026	Bottom of stairs in basement	PP	13.5	15:35	1/27/2015	Tetrachloroethene	0.999	0.1909	0.1909	Yes	=	0.1	1.2939202	370	11	No	No
0010-H	A-0010H-012715-IA016A-LLL	40.747075	-111.859853	4378	025	Bottom of stairs in basement	PP	11.5	15:25	1/27/2015	cis12Dichloroethene	0.668	Fit too low	<0.1	No	NR	0.1	Fit too low	NE	NE	No	No
0010-H	A-0010H-012715-IA016A-LLL	40.747075	-111.859853	4378	025	Bottom of stairs in basement	PP	11.5	15:25	1/27/2015	Trichloroethene	0.794	0.02188	<0.1	Yes	U	0.1	0.1174956	16	0.48	No	No
0010-H	A-0010H-012715-IA016A-LLL	40.747075	-111.859853	4378	025	Bottom of stairs in basement	PP	11.5	15:25	1/27/2015	Tetrachloroethene	0.994	0.1812	0.1812	Yes	=	0.1	1.2281736	370	11	No	No
0010-H	A-0010H-012715-SG-001-4'	40.747100	-111.859747	4378	002	Northeast corner off of porch	SG	NA	NA	1/27/2015	cis12Dichloroethene	1	0.173	0.173	Yes	=	0.1	0.685426	NE	NE	No	No
0010-H	A-0010H-012715-SG-001-4'	40.747100	-111.859747	4378	002	Northeast corner off of porch	SG	NA	NA	1/27/2015	Trichloroethene	0.523	0.099	<0.1	No	NR	0.1	0.53163	16	0.48	No	No
0010-H	A-0010H-012715-SG-001-4'	40.747100	-111.859747	4378	002	Northeast corner off of porch	SG	NA	NA	1/27/2015	Tetrachloroethene	0.996	0.24	0.24	Yes	=	0.1	1.62672	370	11	No	No
0011-H	A-0011H-022715-CCV	40.750128	-111.857387	4457	030	CCV - 0.5 ppb	CCV	NA	NA	2/27/2015	cis12Dichloroethene	0.995	0.4405	0.4405	Yes	=	0.1	1.745261	NA	NA	NA	NA
0011-H	A-0011H-022715-CCV	40.750128	-111.857387	4457	030	CCV - 0.5 ppb	CCV	NA	NA	2/27/2015	Trichloroethene	0.976	0.4319	0.4319	Yes	=	0.1	2.319303	NA	NA	NA	NA
0011-H	A-0011H-022715-CCV	40.750128	-111.857387	4457	030	CCV - 0.5 ppb	CCV	NA	NA	2/27/2015	Tetrachloroethene	0.996	0.4313	0.4313	Yes	=	0.1	2.9233514	NA	NA	NA	NA
0011-H	A-0011H-022715-CCV	40.750128	-111.857387	4457	029	CCV - 5.0 ppb	CCV	NA	NA	2/27/2015	cis12Dichloroethene	0.996	3.786	3.786	Yes	=	0.1	15.000132	NA	NA	NA	NA
0011-H	A-0011H-022715-CCV	40.750128	-111.857387	4457	029	CCV - 5.0 ppb	CCV	NA	NA	2/27/2015	Trichloroethene	0.956	4.204	4.204	Yes	=	0.1	22.57548	NA	NA	NA	NA
0011-H	A-0011H-022715-CCV	40.750128	-111.857387	4457	029	CCV - 5.0 ppb	CCV	NA	NA	2/27/2015	Tetrachloroethene	0.995	3.912	3.912	Yes	=	0.1	26.515536	NA	NA	NA	NA
0011-H	A-0011H-022715-CCV	40.750128	-111.857387	4457	002	CCV - 0.5 ppb	CCV	NA	NA	2/27/2015	cis12Dichloroethene	0.994	0.513	0.513	Yes	=	0.1	2.032506	NA	NA	NA	NA
0011-H	A-0011H-022715-CCV	40.750128	-111.857387	4457	002	CCV - 0.5 ppb	CCV	NA	NA	2/27/2015	Trichloroethene	0.985	0.4847	0.4847	Yes	=	0.1	2.602839	NA	NA	NA	NA
0011-H	A-0011H-022715-CCV	40.750128	-111.857387	4457	002	CCV - 0.5 ppb	CCV	NA	NA	2/27/2015	Tetrachloroethene	0.994	0.4743	0.4743	Yes	=	0.1	3.2148054	NA	NA	NA	NA
0011-H	A-0011H-022715-CCV	40.750128	-111.857387	4457	001	CCV - 5.0 ppb	CCV	NA	NA	2/27/2015	cis12Dichloroethene	0.995	4.873	4.873	Yes	=	0.1	19.306826	NA	NA	NA	NA
0011-H	A-0011H-022715-CCV	40.750128	-111.857387	4457	001	CCV - 5.0 ppb	CCV	NA	NA	2/27/2015	Trichloroethene	0.955	4.906	4.906	Yes	=	0.1	26.34522	NA	NA	NA	NA
0011-H	A-0011H-022715-CCV	40.750128	-111.857387	4457	001	CCV - 5.0 ppb	CCV	NA	NA	2/27/2015	Tetrachloroethene	0.995	4.522	4.522	Yes	=	0.1	30.650116	NA	NA	NA	NA
0011-H	A-0011H-022715-IA-011-FUR	40.750128	-111.857387	4457	013	Basement - Furnace Room (with opening into rear crawl space)	IA	NA	NA	2/27/2015	cis12Dichloroethene	0.786	0.00618	<0.1	Yes	U	0.1	0.02448516	NE	NE	No	No
0011-H	A-0011H-022715-IA-011-FUR	40.750128	-111.857387	4457	013	Basement - Furnace Room (with opening into rear crawl space)	IA	NA	NA	2/27/2015	Trichloroethene	0.843	Area too low	<0.1	Yes	U	0.1	Area too low	16	0.48	No	No
0011-H	A-0011H-022715-IA-011-FUR	40.750128	-111.857387	4457	013	Basement - Furnace Room (with opening into rear crawl space)	IA	NA	NA	2/27/2015	Tetrachloroethene	0.993	0.2817	0.2817	Yes	=	0.1	1.9093626	370	11	No	No
0011-H	A-0011H-022715-IA-010-STO	40.750128	-111.857387	4457	012	Basement - Shelf/Crawl Space Storage Area	IA	NA	NA	2/27/2015	cis12Dichloroethene	0.693	0.03047	<0.1	No	NR	0.1	0.12072214	NE	NE	No	No
0011-H	A-0011H-022715-IA-010-STO	40.750128	-111.857387	4457	012	Basement - Shelf/Crawl Space Storage Area	IA	NA	NA	2/27/2015	Trichloroethene	0.988	0.02762	<0.1	Yes	U	0.1	0.1483194	16	0.48	No	No
0011-H	A-0011H-022715-IA-010-STO	40.750128	-111.857387	4457	012	Basement - Shelf/Crawl Space Storage Area	IA	NA	NA	2/27/2015	Tetrachloroethene	0.996	3.83	3.83	Yes	=	0.1	25.95974	370	11	Yes	NH
0011-H	A-0011H-022715-IA-009-BA2	40.750128	-111.857387	4457	011	Basement -Bathroom	IA	NA	NA	2/27/2015	cis12Dichloroethene	0.639	0.07061	<0.1	No	NR	0.1	0.27975682	NE	NE	No	No
0011-H	A-0011H-022715-IA-009-BA2	40.750128	-111.857387	4457	011	Basement -Bathroom	IA	NA	NA	2/27/2015	Trichloroethene	0.977	0.01587	<0.1	Yes	U	0.1	0.0852219	16	0.48	No	No
0011-H	A-0011H-022715-IA-009-BA2	40.750128	-111.857387	4457	011	Basement -Bathroom	IA	NA	NA	2/27/2015	Tetrachloroethene	0.994	2.938	2.938	Yes	=	0.1	19.913764	370	11	Yes	Yes
0011-H	A-0011H-022715-IA-008-LLL	40.750128	-111.857387	4457	010	Basement - Open Large Room (Currently Used for Storage)	IA	NA	NA	2/27/2015	cis12Dichloroethene	0.787	0.03453	<0.1	Yes	U	0.1	0.13680786	NE	NE	No	No
0011-H	A-0011H-022715-IA-008-LLL	40.750128	-111.857387	4457	010	Basement - Open Large Room (Currently Used for Storage)	IA	NA	NA	2/27/2015	Trichloroethene	0.985	0.01643	<0.1	Yes	U	0.1	0.0882291	16	0.48	No	No
0011-H	A-0011H-022715-IA-008-LLL	40.750128	-111.857387	4457	010	Basement - Open Large Room (Currently Used for Storage)	IA	NA	NA	2/27/2015	Tetrachloroethene	0.994	1.419	1.419	Yes	=	0.1	9.617982	370	11	No	No
0011-H	A-0011H-022715-IA-007-MBR	40.750128	-111.857387	4457	009	Main Level - Master Bedroom - in newer addition at rear of house	IA	NA	NA	2/27/2015	cis12Dichloroethene	0.691	0.1082	0.1082	No	NR	0.1	0.4286884	NE	NE	No	No
0011-H	A-0011H-022715-IA-007-MBR	40.750128	-111.857387	4457	009	Main Level - Master Bedroom - in newer addition at rear of house	IA	NA	NA	2/27/2015	Trichloroethene	0.993	0.00995	<0.1	Yes	U	0.1	0.0534315	16	0.48	No	No
0011-H	A-0011H-022715-IA-007-MBR	40.750128	-111.857387	4457	009	Main Level - Master Bedroom - in newer addition at rear of house	IA	NA	NA	2/27/2015	Tetrachloroethene	0.994	1.007	1.007	Yes	=	0.1	6.825446	370	11	No	No
0011-H	A-0011H-022715-IA-006-LAU	40.750128	-111.857387	4457	008	Main Level- Laundry/Kitchen Open Area	IA	NA	NA	2/27/2015	cis12Dichloroethene	0.684	0.1817	0.1817	No	NR	0.1	0.7198954	NE	NE	No	No
0011-H	A-0011H-022715-IA-006-LAU	40.750128	-111.857387	4457	008	Main Level- Laundry/Kitchen Open Area	IA	NA	NA	2/27/2015	Trichloroethene	0.958	0.01189	<0.1	Yes	U	0.1	0.0638493	16	0.48	No	No
0011-H	A-0011H-022715-IA-006-LAU	40.750128	-111.857387	4457	008	Main Level- Laundry/Kitchen Open Area	IA	NA	NA	2/27/2015	Tetrachloroethene	0.993	0.9596	0.9596	Yes	=	0.1	6.5041688	370	11	No	No
0011-H	A-0011H-022715-IA-005-BR2	40.750128	-111.857387	4457	007	Main Level- Back Bedroom	IA	NA	NA	2/27/2015	cis12Dichloroethene	0.633	0.08871	<0.1	No	NR	0.1	0.35146902	NE	NE	No	No
0011-H	A-0011H-022715-IA-005-BR2	40.750128	-111.857387	4457	007	Main Level- Back Bedroom	IA	NA	NA	2/27/2015	Trichloroethene	0.974	0.00957	<0.1	Yes	U	0.1	0.0513909	16	0.48	No	No
0011-H	A-0011H-022715-IA-005-BR2	40.750128	-111.857387	4457	007	Main Level- Back Bedroom	IA	NA	NA	2/27/2015	Tetrachloroethene	0.994	1.111	1.111	Yes	=	0.1	7.530358	370	11	No	No
0011-H	A-0011H-022715-IA-004-BA1	40.750128	-111.857387	4457	006	Main Level - Bathroom	IA	NA	NA	2/27/2015	cis12Dichloroethene	0.635	0.7293	0.7293	No	NR	0.1	2.8894866	NE	NE	No	No
0011-H	A-0011H-022715-IA-004-BA1	40.750128	-111.857387	4457	006	Main Level - Bathroom	IA	NA	NA	2/27/2015	Trichloroethene	0.909	0.01188	<0.1	Yes	U	0.1	0.0637956	16	0.48	No	No
0011-H	A-0011H-022715-IA-004-BA1	40.750128	-111.857387	4457	006	Main Level - Bathroom	IA	NA	NA	2/27/2015	Tetrachloroethene	0.996	1.092	1.092	Yes	=	0.1	7.401576	370	11	No	No
0011-H	A-0011H-022715-IA-003-BR1	40.750128	-111.857387	4457	005	Main Level - Front Bedroom	IA	NA	NA	2/27/2015	cis12Dichloroethene	0.621	0.05171	<0.1	No	NR	0.1	0.20487502	NE	NE	No	No
0011-H	A-0011H-022715-IA-003-BR1	40.750128	-111.857387	4457	005	Main Level - Front Bedroom	IA	NA	NA	2/27/2015	Trichloroethene	0.96	0.01705	<0.1	Yes	U	0.1	0.0915585	16	0.48	No	No
0011-H	A-0011H-022715-IA-003-BR1	40.750128	-111.857387	4457	005	Main Level - Front Bedroom	IA	NA	NA	2/27/2015	Tetrachloroethene	0.993	1.072	1.072	Yes	=	0.1	7.266016	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0011-H	A-0011H-022715-IA-002-LIV	40.750128	-111.857387	4457	004	Main Level - Living Room	IA	NA	NA	2/27/2015	cis12Dichloroethene	0.746	0.07003	<0.1	Yes	U	0.1	0.27745886	NE	NE	No	No
0011-H	A-0011H-022715-IA-002-LIV	40.750128	-111.857387	4457	004	Main Level - Living Room	IA	NA	NA	2/27/2015	Trichloroethene	0.997	0.01283	<0.1	Yes	U	0.1	0.0688971	16	0.48	No	No
0011-H	A-0011H-022715-IA-002-LIV	40.750128	-111.857387	4457	004	Main Level - Living Room	IA	NA	NA	2/27/2015	Tetrachloroethene	0.993	1.024	1.024	Yes	=	0.1	6.940672	370	11	No	No
0011-H	A-0011H-022715-IA-012I-LLL	40.750128	-111.857387	4457	022	Basement - Open Large Room	NP	-6.0	12:48	2/27/2015	cis12Dichloroethene	0.898	0.00851	<0.1	Yes	U	0.1	0.03371662	NE	NE	No	No
0011-H	A-0011H-022715-IA-012I-LLL	40.750128	-111.857387	4457	022	Basement - Open Large Room	NP	-6.0	12:48	2/27/2015	Trichloroethene	0.965	0.00909	<0.1	Yes	U	0.1	0.0488133	16	0.48	No	No
0011-H	A-0011H-022715-IA-012I-LLL	40.750128	-111.857387	4457	022	Basement - Open Large Room	NP	-6.0	12:48	2/27/2015	Tetrachloroethene	0.993	0.7688	0.7688	Yes	=	0.1	5.2109264	370	11	No	No
0011-H	A-0011H-022715-IA-012H-LLL	40.750128	-111.857387	4457	021	Basement - Open Large Room	NP	-6.0	12:40	2/27/2015	cis12Dichloroethene	0.571	0.00914	<0.1	No	NR	0.1	0.03621268	NE	NE	No	No
0011-H	A-0011H-022715-IA-012H-LLL	40.750128	-111.857387	4457	021	Basement - Open Large Room	NP	-6.0	12:40	2/27/2015	Trichloroethene	0.901	0.01094	<0.1	Yes	U	0.1	0.0587478	16	0.48	No	No
0011-H	A-0011H-022715-IA-012H-LLL	40.750128	-111.857387	4457	021	Basement - Open Large Room	NP	-6.0	12:40	2/27/2015	Tetrachloroethene	0.995	0.7773	0.7773	Yes	=	0.1	5.2685394	370	11	No	No
0011-H	A-0011H-022715-IA-012G-LLL	40.750128	-111.857387	4457	020	Basement - Open Large Room	NP	-5.3	12:32	2/27/2015	cis12Dichloroethene	0.816	0.00747	<0.1	Yes	U	0.1	0.02959614	NE	NE	No	No
0011-H	A-0011H-022715-IA-012G-LLL	40.750128	-111.857387	4457	020	Basement - Open Large Room	NP	-5.3	12:32	2/27/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0011-H	A-0011H-022715-IA-012G-LLL	40.750128	-111.857387	4457	020	Basement - Open Large Room	NP	-5.3	12:32	2/27/2015	Tetrachloroethene	0.994	0.7494	0.7494	Yes	=	0.1	5.0794332	370	11	No	No
0011-H	A-0011H-022715-IA-012F-LLL	40.750128	-111.857387	4457	019	Basement - Open Large Room	NP	-5.6	12:24	2/27/2015	cis12Dichloroethene	0.781	0.01179	<0.1	Yes	U	0.1	0.04671198	NE	NE	No	No
0011-H	A-0011H-022715-IA-012F-LLL	40.750128	-111.857387	4457	019	Basement - Open Large Room	NP	-5.6	12:24	2/27/2015	Trichloroethene	0.769	0.00501	<0.1	Yes	U	0.1	0.0269037	16	0.48	No	No
0011-H	A-0011H-022715-IA-012F-LLL	40.750128	-111.857387	4457	019	Basement - Open Large Room	NP	-5.6	12:24	2/27/2015	Tetrachloroethene	0.993	0.7923	0.7923	Yes	=	0.1	5.3702094	370	11	No	No
0011-H	A-0011H-022715-IA-012E-LLL	40.750128	-111.857387	4457	018	Basement - Open Large Room	NP	-4.2	12:16	2/27/2015	cis12Dichloroethene	0.935	0.00778	<0.1	Yes	U	0.1	0.03082436	NE	NE	No	No
0011-H	A-0011H-022715-IA-012E-LLL	40.750128	-111.857387	4457	018	Basement - Open Large Room	NP	-4.2	12:16	2/27/2015	Trichloroethene	0.997	0.00892	<0.1	Yes	U	0.1	0.0479004	16	0.48	No	No
0011-H	A-0011H-022715-IA-012E-LLL	40.750128	-111.857387	4457	018	Basement - Open Large Room	NP	-4.2	12:16	2/27/2015	Tetrachloroethene	0.994	0.7705	0.7705	Yes	=	0.1	5.222449	370	11	No	No
0011-H	A-0011H-022715-IA-012D-LLL	40.750128	-111.857387	4457	017	Basement - Open Large Room	NP	-6.5	12:08	2/27/2015	cis12Dichloroethene	0.942	0.00923	<0.1	Yes	U	0.1	0.03656926	NE	NE	No	No
0011-H	A-0011H-022715-IA-012D-LLL	40.750128	-111.857387	4457	017	Basement - Open Large Room	NP	-6.5	12:08	2/27/2015	Trichloroethene	0.998	0.01214	<0.1	Yes	U	0.1	0.0651918	16	0.48	No	No
0011-H	A-0011H-022715-IA-012D-LLL	40.750128	-111.857387	4457	017	Basement - Open Large Room	NP	-6.5	12:08	2/27/2015	Tetrachloroethene	0.995	0.7912	0.7912	Yes	=	0.1	5.3627536	370	11	No	No
0011-H	A-0011H-022715-IA-012C-LLL	40.750128	-111.857387	4457	016	Basement - Open Large Room	NP	-5.3	11:59	2/27/2015	cis12Dichloroethene	0.765	0.01393	<0.1	Yes	U	0.1	0.05519066	NE	NE	No	No
0011-H	A-0011H-022715-IA-012C-LLL	40.750128	-111.857387	4457	016	Basement - Open Large Room	NP	-5.3	11:59	2/27/2015	Trichloroethene	0.971	0.01031	<0.1	Yes	U	0.1	0.0553647	16	0.48	No	No
0011-H	A-0011H-022715-IA-012C-LLL	40.750128	-111.857387	4457	016	Basement - Open Large Room	NP	-5.3	11:59	2/27/2015	Tetrachloroethene	0.995	0.866	0.866	Yes	=	0.1	5.869748	370	11	No	No
0011-H	A-0011H-022715-IA-012B-LLL	40.750128	-111.857387	4457	015	Basement - Open Large Room	NP	-4.0	11:51	2/27/2015	cis12Dichloroethene	0.842	0.0163	<0.1	Yes	U	0.1	0.0645806	NE	NE	No	No
0011-H	A-0011H-022715-IA-012B-LLL	40.750128	-111.857387	4457	015	Basement - Open Large Room	NP	-4.0	11:51	2/27/2015	Trichloroethene	0.991	0.0114	<0.1	Yes	U	0.1	0.061218	16	0.48	No	No
0011-H	A-0011H-022715-IA-012B-LLL	40.750128	-111.857387	4457	015	Basement - Open Large Room	NP	-4.0	11:51	2/27/2015	Tetrachloroethene	0.995	0.9927	0.9927	Yes	=	0.1	6.7285206	370	11	No	No
0011-H	A-0011H-022715-IA-012A-LLL	40.750128	-111.857387	4457	014	Basement - Open Large Room	NP	-4.1	11:43	2/27/2015	cis12Dichloroethene	0.778	0.02009	<0.1	Yes	U	0.1	0.07959658	NE	NE	No	No
0011-H	A-0011H-022715-IA-012A-LLL	40.750128	-111.857387	4457	014	Basement - Open Large Room	NP	-4.1	11:43	2/27/2015	Trichloroethene	0.993	0.01529	<0.1	Yes	U	0.1	0.0821073	16	0.48	No	No
0011-H	A-0011H-022715-IA-012A-LLL	40.750128	-111.857387	4457	014	Basement - Open Large Room	NP	-4.1	11:43	2/27/2015	Tetrachloroethene	0.996	1.843	1.843	Yes	=	0.1	12.491854	370	11	Yes	Yes
0011-H	A-0011H-022715-IA-001-OUT	40.750128	-111.857387	4457	003	On Front Porch	OA	NA	NA	2/27/2015	cis12Dichloroethene	0.952	0.01781	<0.1	Yes	U	0.1	0.07056322	NE	NE	No	No
0011-H	A-0011H-022715-IA-001-OUT	40.750128	-111.857387	4457	003	On Front Porch	OA	NA	NA	2/27/2015	Trichloroethene	0.992	0.02021	<0.1	Yes	U	0.1	0.1085277	16	0.48	No	No
0011-H	A-0011H-022715-IA-001-OUT	40.750128	-111.857387	4457	003	On Front Porch	OA	NA	NA	2/27/2015	Tetrachloroethene	0.995	0.05013	<0.1	Yes	U	0.1	0.33978114	370	11	No	No
0011-H	A-0011H-022715-IA-013E-LLL	40.750128	-111.857387	4457	027	Basement - Open Large Room	PP	8.6	13:34	2/27/2015	cis12Dichloroethene	0.864	0.01525	<0.1	Yes	U	0.1	0.0604205	NE	NE	No	No
0011-H	A-0011H-022715-IA-013E-LLL	40.750128	-111.857387	4457	027	Basement - Open Large Room	PP	8.6	13:34	2/27/2015	Trichloroethene	0.854	0.00744	<0.1	Yes	U	0.1	0.0399528	16	0.48	No	No
0011-H	A-0011H-022715-IA-013E-LLL	40.750128	-111.857387	4457	027	Basement - Open Large Room	PP	8.6	13:34	2/27/2015	Tetrachloroethene	0.994	0.06845	<0.1	Yes	U	0.1	0.4639541	370	11	No	No
0011-H	A-0011H-022715-IA-013D-LLL	40.750128	-111.857387	4457	026	Basement - Open Large Room	PP	10.2	13:26	2/27/2015	cis12Dichloroethene	0.839	0.0158	<0.1	Yes	U	0.1	0.0625996	NE	NE	No	No
0011-H	A-0011H-022715-IA-013D-LLL	40.750128	-111.857387	4457	026	Basement - Open Large Room	PP	10.2	13:26	2/27/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0011-H	A-0011H-022715-IA-013D-LLL	40.750128	-111.857387	4457	026	Basement - Open Large Room	PP	10.2	13:26	2/27/2015	Tetrachloroethene	0.994	0.07504	<0.1	Yes	U	0.1	0.50862112	370	11	No	No
0011-H	A-0011H-022715-IA-013C-LLL	40.750128	-111.857387	4457	025	Basement - Open Large Room	PP	9.8	13:18	2/27/2015	cis12Dichloroethene	0.863	0.01539	<0.1	Yes	U	0.1	0.06097518	NE	NE	No	No
0011-H	A-0011H-022715-IA-013C-LLL	40.750128	-111.857387	4457	025	Basement - Open Large Room	PP	9.8	13:18	2/27/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0011-H	A-0011H-022715-IA-013C-LLL	40.750128	-111.857387	4457	025	Basement - Open Large Room	PP	9.8	13:18	2/27/2015	Tetrachloroethene	0.995	0.118	0.118	Yes	=	0.1	0.799804	370	11	No	No
0011-H	A-0011H-022715-IA-013B-LLL	40.750128	-111.857387	4457	024	Basement - Open Large Room	PP	10.1	13:11	2/27/2015	cis12Dichloroethene	0.662	0.03219	<0.1	No	NR	0.1	0.12753678	NE	NE	No	No
0011-H	A-0011H-022715-IA-013B-LLL	40.750128	-111.857387	4457	024	Basement - Open Large Room	PP	10.1	13:11	2/27/2015	Trichloroethene	0	Not Found	<0.1	No	U	0.1	Not Found	16	0.48	No	No
0011-H	A-0011H-022715-IA-013B-LLL	40.750128	-111.857387	4457	024	Basement - Open Large Room	PP	10.1	13:11	2/27/2015	Tetrachloroethene	0.993	0.3797	0.3797	Yes	=	0.1	2.5736066	370	11	No	No
0011-H	A-0011H-022715-IA-013A-LLL	40.750128	-111.857387	4457	023	Basement - Open Large Room	PP	5.0	13:02	2/27/2015	cis12Dichloroethene	0.728	0.03175	<0.1	Yes	U	0.1	0.1257935	NE	NE	No	No
0011-H	A-0011H-022715-IA-013A-LLL	40.750128	-111.857387	4457	023	Basement - Open Large Room	PP	5.0	13:02	2/27/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0011-H	A-0011H-022715-IA-013A-LLL	40.750128	-111.857387	4457	023	Basement - Open Large Room	PP	5.0	13:02	2/27/2015	Tetrachloroethene	0.994	0.7536	0.7536	Yes	=	0.1	5.1079008	370	11	No	No
0011-H	A-0011H-022715-SG-003-4'	40.750044	-111.857398	4456	0028	south of house, just to left of front porch steps	SG	NA	NA	2/27/2015	cis12Dichloroethene	0.645	0.2157	0.2157	No	NR	0.1	0.8546034	NE	NE	No	No
0011-H	A-0011H-022715-SG-003-4'	40.750044	-111.857398	4456	0028	south of house, just to left of front porch steps	SG	NA	NA	2/27/2015	Trichloroethene	0.995	0.302	0.302	Yes	=	0.1	1.62174	16	0.48	No	No
0011-H	A-0011H-022715-SG-003-4'	40.750044	-111.857398	4456	0028	south of house, just to left of front porch steps	SG	NA	NA	2/27/2015	Tetrachloroethene	0.996	52.81	52.81	Yes	=	0.1	357.94618	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0012-H	A-0012H-022315-CCV	40.752571	-111.856336	4497	030	CCV - 5.0 ppb	CCV	NA	NA	2/23/2015	cis12Dichloroethene	0.992	3.762	3.762	Yes	=	0.1	14.905044	NA	NA	NA	NA
0012-H	A-0012H-022315-CCV	40.752571	-111.856336	4497	030	CCV - 5.0 ppb	CCV	NA	NA	2/23/2015	Trichloroethene	0.963	4.021	4.021	Yes	=	0.1	21.59277	NA	NA	NA	NA
0012-H	A-0012H-022315-CCV	40.752571	-111.856336	4497	030	CCV - 5.0 ppb	CCV	NA	NA	2/23/2015	Tetrachloroethene	0.994	3.643	3.643	Yes	=	0.1	24.692254	NA	NA	NA	NA
0012-H	A-0012H-022215-CCV	40.752571	-111.856336	4497	002	CCV - 0.5 ppb	CCV	NA	NA	2/22/2015	cis12Dichloroethene	0.973	0.495	0.495	Yes	=	0.1	1.96119	NA	NA	NA	NA
0012-H	A-0012H-022215-CCV	40.752571	-111.856336	4497	002	CCV - 0.5 ppb	CCV	NA	NA	2/22/2015	Trichloroethene	0.906	0.4058	0.4058	Yes	=	0.1	2.179146	NA	NA	NA	NA
0012-H	A-0012H-022215-CCV	40.752571	-111.856336	4497	002	CCV - 0.5 ppb	CCV	NA	NA	2/22/2015	Tetrachloroethene	0.995	0.3962	0.3962	Yes	=	0.1	2.6854436	NA	NA	NA	NA
0012-H	A-0012H-022215-CCV	40.752571	-111.856336	4497	001	CCV - 5.0 ppb	CCV	NA	NA	2/22/2015	cis12Dichloroethene	0.991	4.443	4.443	Yes	=	0.1	17.603166	NA	NA	NA	NA
0012-H	A-0012H-022215-CCV	40.752571	-111.856336	4497	001	CCV - 5.0 ppb	CCV	NA	NA	2/22/2015	Trichloroethene	0.996	4.06	4.06	Yes	=	0.1	21.8022	NA	NA	NA	NA
0012-H	A-0012H-022215-CCV	40.752571	-111.856336	4497	001	CCV - 5.0 ppb	CCV	NA	NA	2/22/2015	Tetrachloroethene	0.995	3.804	3.804	Yes	=	0.1	25.783512	NA	NA	NA	NA
0012-H	A-0012H-022315-IA-011-EXR	40.752571	-111.856336	4497	011	Basement Exercise Room	IA	NA	NA	2/23/2015	cis12Dichloroethene	0.562	0.01109	<0.1	No	NR	0.1	0.04393858	NE	NE	No	No
0012-H	A-0012H-022315-IA-011-EXR	40.752571	-111.856336	4497	011	Basement Exercise Room	IA	NA	NA	2/23/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0012-H	A-0012H-022315-IA-011-EXR	40.752571	-111.856336	4497	011	Basement Exercise Room	IA	NA	NA	2/23/2015	Tetrachloroethene	0.994	0.3356	0.3356	Yes	=	0.1	2.2746968	370	11	No	No
0012-H	A-0012H-022315IA-010-LAU	40.752571	-111.856336	4497	010	Basement Laundry Room	IA	NA	NA	2/23/2015	cis12Dichloroethene	0.613	0.1619	0.1619	No	NR	0.1	0.6414478	NE	NE	No	No
0012-H	A-0012H-022315IA-010-LAU	40.752571	-111.856336	4497	010	Basement Laundry Room	IA	NA	NA	2/23/2015	Trichloroethene	0.934	0.00648	<0.1	Yes	U	0.1	0.0347976	16	0.48	No	No
0012-H	A-0012H-022315IA-010-LAU	40.752571	-111.856336	4497	010	Basement Laundry Room	IA	NA	NA	2/23/2015	Tetrachloroethene	0.993	0.311	0.311	Yes	=	0.1	2.107958	370	11	No	No
0012-H	A-0012H-022315IA-009-OFC	40.752571	-111.856336	4497	009	Basement Office/Lego Room	IA	NA	NA	2/23/2015	cis12Dichloroethene	0.652	0.1521	0.1521	No	NR	0.1	0.6026202	NE	NE	No	No
0012-H	A-0012H-022315IA-009-OFC	40.752571	-111.856336	4497	009	Basement Office/Lego Room	IA	NA	NA	2/23/2015	Trichloroethene	0.57	0.00526	<0.1	No	NR	0.1	0.0282462	16	0.48	No	No
0012-H	A-0012H-022315IA-009-OFC	40.752571	-111.856336	4497	009	Basement Office/Lego Room	IA	NA	NA	2/23/2015	Tetrachloroethene	0.995	0.5674	0.5674	Yes	=	0.1	3.8458372	370	11	No	No
0012-H	A-0012H-022315IA-007-BR2	40.752571	-111.856336	4497	007	Basement - Guest Bedroom	IA	NA	NA	2/23/2015	cis12Dichloroethene	0.629	0.1569	0.1569	No	NR	0.1	0.6216378	NE	NE	No	No
0012-H	A-0012H-022315IA-007-BR2	40.752571	-111.856336	4497	007	Basement - Guest Bedroom	IA	NA	NA	2/23/2015	Trichloroethene	0.926	0.00868	<0.1	Yes	U	0.1	0.0466116	16	0.48	No	No
0012-H	A-0012H-022315IA-007-BR2	40.752571	-111.856336	4497	007	Basement - Guest Bedroom	IA	NA	NA	2/23/2015	Tetrachloroethene	0.995	0.4513	0.4513	Yes	=	0.1	3.0589114	370	11	No	No
0012-H	A-0012H-022315IA-006-FAM	40.752571	-111.856336	4497	006	Basement - Family Room	IA	NA	NA	2/23/2015	cis12Dichloroethene	0.628	0.1696	0.1696	No	NR	0.1	0.6719552	NE	NE	No	No
0012-H	A-0012H-022315IA-006-FAM	40.752571	-111.856336	4497	006	Basement - Family Room	IA	NA	NA	2/23/2015	Trichloroethene	0.961	0.0107	<0.1	Yes	U	0.1	0.057459	16	0.48	No	No
0012-H	A-0012H-022315IA-006-FAM	40.752571	-111.856336	4497	006	Basement - Family Room	IA	NA	NA	2/23/2015	Tetrachloroethene	0.994	0.3945	0.3945	Yes	=	0.1	2.673921	370	11	No	No
0012-H	A-0012H-022315IA-005-BR1	40.752571	-111.856336	4497	005	Main Level- Bedroom	IA	NA	NA	2/23/2015	cis12Dichloroethene	0.597	0.3217	0.3217	No	NR	0.1	1.2745754	NE	NE	No	No
0012-H	A-0012H-022315IA-005-BR1	40.752571	-111.856336	4497	005	Main Level- Bedroom	IA	NA	NA	2/23/2015	Trichloroethene	0.911	0.00589	<0.1	Yes	U	0.1	0.0316293	16	0.48	No	No
0012-H	A-0012H-022315IA-005-BR1	40.752571	-111.856336	4497	005	Main Level- Bedroom	IA	NA	NA	2/23/2015	Tetrachloroethene	0.994	0.1589	0.1589	Yes	=	0.1	1.0770242	370	11	No	No
0012-H	A-0012H-022315IA-004-BA1	40.752571	-111.856336	4497	004	Main Level - Hall Bathroom	IA	NA	NA	2/23/2015	cis12Dichloroethene	0.648	0.06276	<0.1	No	NR	0.1	0.24865512	NE	NE	No	No
0012-H	A-0012H-022315IA-004-BA1	40.752571	-111.856336	4497	004	Main Level - Hall Bathroom	IA	NA	NA	2/23/2015	Trichloroethene	0.906	0.00585	<0.1	Yes	U	0.1	0.0314145	16	0.48	No	No
0012-H	A-0012H-022315IA-004-BA1	40.752571	-111.856336	4497	004	Main Level - Hall Bathroom	IA	NA	NA	2/23/2015	Tetrachloroethene	0.996	0.1041	0.1041	Yes	=	0.1	0.7055898	370	11	No	No
0012-H	A-0012H-022315IA-003-MBR	40.752571	-111.856336	4497	003	Main Level - Master Bedroom	IA	NA	NA	2/23/2015	cis12Dichloroethene	0.627	0.1937	0.1937	No	NR	0.1	0.7674394	NE	NE	No	No
0012-H	A-0012H-022315IA-003-MBR	40.752571	-111.856336	4497	003	Main Level - Master Bedroom	IA	NA	NA	2/23/2015	Trichloroethene	0.968	0.00481	<0.1	Yes	U	0.1	0.0258297	16	0.48	No	No
0012-H	A-0012H-022315IA-003-MBR	40.752571	-111.856336	4497	003	Main Level - Master Bedroom	IA	NA	NA	2/23/2015	Tetrachloroethene	0.994	0.1931	0.1931	Yes	=	0.1	1.3088318	370	11	No	No
0012-H	A-0012H-022315IA-002-LIV	40.752571	-111.856336	4497	002	Main Level - Living	IA	NA	NA	2/23/2015	cis12Dichloroethene	0.652	0.1953	0.1953	No	NR	0.1	0.7737786	NE	NE	No	No
0012-H	A-0012H-022315IA-002-LIV	40.752571	-111.856336	4497	002	Main Level - Living	IA	NA	NA	2/23/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0012-H	A-0012H-022315IA-002-LIV	40.752571	-111.856336	4497	002	Main Level - Living	IA	NA	NA	2/23/2015	Tetrachloroethene	0.995	0.2315	0.2315	Yes	=	0.1	1.569107	370	11	No	No
0012-H	A-0012H-022315IA-008-BA2	40.752571	-111.856336	4497	008	Basement Bathroom	IA	NA	NA	2/23/2015	cis12Dichloroethene	0.633	0.09455	<0.1	No	NR	0.1	0.3746071	NE	NE	No	No
0012-H	A-0012H-022315IA-008-BA2	40.752571	-111.856336	4497	008	Basement Bathroom	IA	NA	NA	2/23/2015	Trichloroethene	0.941	0.00568	<0.1	Yes	U	0.1	0.0305016	16	0.48	No	No
0012-H	A-0012H-022315IA-008-BA2	40.752571	-111.856336	4497	008	Basement Bathroom	IA	NA	NA	2/23/2015	Tetrachloroethene	0.995	0.5843	0.5843	Yes	=	0.1	3.9603854	370	11	No	No
0012-H	A-0012H-022315-IA-001-KIT	40.752571	-111.856336	4497	001	Main Level -Kitchen	IA	NA	NA	2/23/2015	cis12Dichloroethene	0.682	0.1966	0.1966	No	NR	0.1	0.7789292	NE	NE	No	No
0012-H	A-0012H-022315-IA-001-KIT	40.752571	-111.856336	4497	001	Main Level -Kitchen	IA	NA	NA	2/23/2015	Trichloroethene	0.982	0.01555	<0.1	Yes	U	0.1	0.0835035	16	0.48	No	No
0012-H	A-0012H-022315-IA-001-KIT	40.752571	-111.856336	4497	001	Main Level -Kitchen	IA	NA	NA	2/23/2015	Tetrachloroethene	0.995	0.2408	0.2408	Yes	=	0.1	1.6321424	370	11	No	No
0012-H	A-0012H-022315-IA-012I-FAM	40.752571	-111.856336	4497	020	Basement - Family Room	NP	-12.5	13:01	2/23/2015	cis12Dichloroethene	0.646	0.04047	<0.1	No	NR	0.1	0.16034214	NE	NE	No	No
0012-H	A-0012H-022315-IA-012I-FAM	40.752571	-111.856336	4497	020	Basement - Family Room	NP	-12.5	13:01	2/23/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0012-H	A-0012H-022315-IA-012I-FAM	40.752571	-111.856336	4497	020	Basement - Family Room	NP	-12.5	13:01	2/23/2015	Tetrachloroethene	0.995	0.1388	0.1388	Yes	=	0.1	0.9407864	370	11	No	No
0012-H	A-0012H-022315-IA-012H-FAM	40.752571	-111.856336	4497	019	Basement - Family Room	NP	-15.3	12:49	2/23/2015	cis12Dichloroethene	0.657	0.04529	<0.1	No	NR	0.1	0.17943898	NE	NE	No	No
0012-H	A-0012H-022315-IA-012H-FAM	40.752571	-111.856336	4497	019	Basement - Family Room	NP	-15.3	12:49	2/23/2015	Trichloroethene	0.978	0.00648	<0.1	Yes	U	0.1	0.0347976	16	0.48	No	No
0012-H	A-0012H-022315-IA-012H-FAM	40.752571	-111.856336	4497	019	Basement - Family Room	NP	-15.3	12:49	2/23/2015	Tetrachloroethene	0.994	0.1516	0.1516	Yes	=	0.1	1.0275448	370	11	No	No
0012-H	A-0012H-022315-IA-012G-FAM	40.752571	-111.856336	4497	018	Basement - Family Room	NP	-11.0	12:41	2/23/2015	cis12Dichloroethene	0.646	0.05234	<0.1	No	NR	0.1	0.20737108	NE	NE	No	No
0012-H	A-0012H-022315-IA-012G-FAM	40.752571	-111.856336	4497	018	Basement - Family Room	NP	-11.0	12:41	2/23/2015	Trichloroethene	0.987	0.0077	<0.1	Yes	U	0.1	0.041349	16	0.48	No	No
0012-H	A-0012H-022315-IA-012G-FAM	40.752571	-111.856336	4497	018	Basement - Family Room	NP	-11.0	12:41	2/23/2015	Tetrachloroethene	0.994	0.1783	0.1783	Yes	=	0.1	1.2085174	370	11	No	No
0012-H	A-0012H-022315-IA-012F-FAM	40.752571	-111.856336	4497	017	Basement - Family Room	NP	-13.5	12:32	2/23/2015	cis12Dichloroethene	0.652	0.06207	<0.1	No	NR	0.1	0.24592134	NE	NE	No	No
0012-H	A-0012H-022315-IA-012F-FAM	40.752571	-111.856336	4497	017	Basement - Family Room	NP	-13.5	12:32	2/23/2015	Trichloroethene	0.548	0.00665	<0.1	No	NR	0.1	0.0357105	16	0.48	No	No
0012-H	A-0012H-022315-IA-012F-FAM	40.752571	-111.856336	4497	017	Basement - Family Room	NP	-13.5	12:32	2/23/2015	Tetrachloroethene	0.995	0.1921	0.1921	Yes	=	0.1	1.3020538	370	11	No	No
0012-H	A-0012H-022315-IA-012E-FAM	40.752571	-111.856336	4497	016	Basement - Family Room	NP	-13.2	12:23	2/23/2015	cis12Dichloroethene	0.683	0.07838	<0.1	No	NR	0.1	0.31054156	NE	NE	No	No
0012-H	A-0012H-022315-IA-012E-FAM	40.752571	-111.856336	4497	016	Basement - Family Room	NP	-13.2	12:23	2/23/2015	Trichloroethene	0.988	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0012-H	A-0012H-022315-IA-012E-FAM	40.752571	-111.856336	4497	016	Basement - Family Room	NP	-13.2	12:23	2/23/2015	Tetrachloroethene	0.995	0.2441	0.2441	Yes	=	0.1	1.6545098	370	11	No	No
0012-H	A-0012H-022315IA-012D-FAM	40.752571	-111.856336	4497	015	Basement - Family Room	NP	-6.3	12:16	2/23/2015	cis12Dichloroethene	0.618	0.09568	<0.1	No	NR	0.1	0.37908416	NE	NE	No	No
0012-H	A-0012H-022315IA-012D-FAM	40.752571	-111.856336	4497	015	Basement - Family Room	NP	-6.3	12:16	2/23/2015	Trichloroethene	0.825	Area too low	<0.1	Yes	U	0.1	Area too low	16	0.48	No	No
0012-H	A-0012H-022315IA-012D-FAM	40.752571	-111.856336	4497	015	Basement - Family Room	NP	-6.3	12:16	2/23/2015	Tetrachloroethene	0.993	0.2886	0.2886	Yes	=	0.1	1.9561308	370	11	No	No
0012-H	A-0012H-022315IA-012C-FAM	40.752571	-111.856336	4497	014	Basement - Family Room	NP	-7.3	12:09	2/23/2015	cis12Dichloroethene	0.703	0.0918	<0.1	Yes	U	0.1	0.3637116	NE	NE	No	No
0012-H	A-0012H-022315IA-012C-FAM	40.752571	-111.856336	4497	014	Basement - Family Room	NP	-7.3	12:09	2/23/2015	Trichloroethene	0.714	0.00675	<0.1	Yes	U	0.1	0.0362475	16	0.48	No	No
0012-H	A-0012H-022315IA-012C-FAM	40.752571	-111.856336	4497	014	Basement - Family Room	NP	-7.3	12:09	2/23/2015	Tetrachloroethene	0.993	0.2708	0.2708	Yes	=	0.1	1.8354824	370	11	No	No
0012-H	A-0012H-022315IA-012B-FAM	40.752571	-111.856336	4497	013	Basement - Family Room	NP	-4.8	12:00	2/23/2015	cis12Dichloroethene	0.623	0.1129	0.1129	No	NR	0.1	0.4473098	NE	NE	No	No
0012-H	A-0012H-022315IA-012B-FAM	40.752571	-111.856336	4497	013	Basement - Family Room	NP	-4.8	12:00	2/23/2015	Trichloroethene	0.592	0.00525	<0.1	No	NR	0.1	0.0281925	16	0.48	No	No
0012-H	A-0012H-022315IA-012B-FAM	40.752571	-111.856336	4497	013	Basement - Family Room	NP	-4.8	12:00	2/23/2015	Tetrachloroethene	0.996	0.3146	0.3146	Yes	=	0.1	2.1323588	370	11	No	No
0012-H	A-0012H-022315IA-012A-FAM	40.752571	-111.856336	4497	012	Basement - Family Room	NP	-6.0	11:50	2/23/2015	cis12Dichloroethene	0.638	0.121	0.121	No	NR	0.1	0.479402	NE	NE	No	No
0012-H	A-0012H-022315IA-012A-FAM	40.752571	-111.856336	4497	012	Basement - Family Room	NP	-6.0	11:50	2/23/2015	Trichloroethene	0.91	0.00693	<0.1	Yes	U	0.1	0.0372141	16	0.48	No	No
0012-H	A-0012H-022315IA-012A-FAM	40.752571	-111.856336	4497	012	Basement - Family Room	NP	-6.0	11:50	2/23/2015	Tetrachloroethene	0.994	0.3339	0.3339	Yes	=	0.1	2.2631742	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0012-H	A-0012H-022315-IA-015-OUT	40.752571	-111.856336	4497	031	On Driveway- south of house	OA	NA	NA	2/23/2015	cis12Dichloroethene	0.959	0.00959	<0.1	Yes	U	0.1	0.03799558	NE	NE	No	No
0012-H	A-0012H-022315-IA-015-OUT	40.752571	-111.856336	4497	031	On Driveway- south of house	OA	NA	NA	2/23/2015	Trichloroethene	0.911	0.01397	<0.1	Yes	U	0.1	0.0750189	16	0.48	No	No
0012-H	A-0012H-022315-IA-015-OUT	40.752571	-111.856336	4497	031	On Driveway- south of house	OA	NA	NA	2/23/2015	Tetrachloroethene	0.997	0.00911	<0.1	Yes	U	0.1	0.06174758	370	11	No	No
0012-H	A-0012H-022315-IA-013F-FAM	40.752571	-111.856336	4497	026	Basement - Family Room	PP	11.7	14:00	2/23/2015	cis12Dichloroethene	0.804	0.01485	<0.1	Yes	U	0.1	0.0588357	NE	NE	No	No
0012-H	A-0012H-022315-IA-013F-FAM	40.752571	-111.856336	4497	026	Basement - Family Room	PP	11.7	14:00	2/23/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0012-H	A-0012H-022315-IA-013F-FAM	40.752571	-111.856336	4497	026	Basement - Family Room	PP	11.7	14:00	2/23/2015	Tetrachloroethene	0.995	0.03709	<0.1	Yes	U	0.1	0.25139602	370	11	No	No
0012-H	A-0012H-022315-IA-013E-FAM	40.752571	-111.856336	4497	025	Basement - Family Room	PP	8.8	13:50	2/23/2015	cis12Dichloroethene	0.836	0.01681	<0.1	Yes	U	0.1	0.06660122	NE	NE	No	No
0012-H	A-0012H-022315-IA-013E-FAM	40.752571	-111.856336	4497	025	Basement - Family Room	PP	8.8	13:50	2/23/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0012-H	A-0012H-022315-IA-013E-FAM	40.752571	-111.856336	4497	025	Basement - Family Room	PP	8.8	13:50	2/23/2015	Tetrachloroethene	0.996	0.04412	<0.1	Yes	U	0.1	0.29904536	370	11	No	No
0012-H	A-0012H-022315-IA-013D-FAM	40.752571	-111.856336	4497	024	Basement - Family Room	PP	13.1	13:42	2/23/2015	cis12Dichloroethene	0.763	0.01876	<0.1	Yes	U	0.1	0.07432712	NE	NE	No	No
0012-H	A-0012H-022315-IA-013D-FAM	40.752571	-111.856336	4497	024	Basement - Family Room	PP	13.1	13:42	2/23/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0012-H	A-0012H-022315-IA-013D-FAM	40.752571	-111.856336	4497	024	Basement - Family Room	PP	13.1	13:42	2/23/2015	Tetrachloroethene	0.994	0.05332	<0.1	Yes	U	0.1	0.36140296	370	11	No	No
0012-H	A-0012H-022315-IA-013C-FAM	40.752571	-111.856336	4497	023	Basement - Family Room	PP	9.8	13:33	2/23/2015	cis12Dichloroethene	0.765	0.02028	<0.1	Yes	U	0.1	0.08034936	NE	NE	No	No
0012-H	A-0012H-022315-IA-013C-FAM	40.752571	-111.856336	4497	023	Basement - Family Room	PP	9.8	13:33	2/23/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0012-H	A-0012H-022315-IA-013C-FAM	40.752571	-111.856336	4497	023	Basement - Family Room	PP	9.8	13:33	2/23/2015	Tetrachloroethene	0.996	0.0708	<0.1	Yes	U	0.1	0.4798824	370	11	No	No
0012-H	A-0012H-022315-IA-013B-FAM	40.752571	-111.856336	4497	022	Basement - Family Room	PP	8.6	13:25	2/23/2015	cis12Dichloroethene	0.605	0.03083	<0.1	No	NR	0.1	0.12214846	NE	NE	No	No
0012-H	A-0012H-022315-IA-013B-FAM	40.752571	-111.856336	4497	022	Basement - Family Room	PP	8.6	13:25	2/23/2015	Trichloroethene	0.995	0.00413	<0.1	Yes	U	0.1	0.0221781	16	0.48	No	No
0012-H	A-0012H-022315-IA-013B-FAM	40.752571	-111.856336	4497	022	Basement - Family Room	PP	8.6	13:25	2/23/2015	Tetrachloroethene	0.995	0.1079	0.1079	Yes	=	0.1	0.7313462	370	11	No	No
0012-H	A-0012H-022315-IA-013A-FAM	40.752571	-111.856336	4497	021	Basement - Family Room	PP	8.1	13:17	2/23/2015	cis12Dichloroethene	0.73	0.04552	<0.1	Yes	U	0.1	0.18035024	NE	NE	No	No
0012-H	A-0012H-022315-IA-013A-FAM	40.752571	-111.856336	4497	021	Basement - Family Room	PP	8.1	13:17	2/23/2015	Trichloroethene	0.835	0.00606	<0.1	Yes	U	0.1	0.0325422	16	0.48	No	No
0012-H	A-0012H-022315-IA-013A-FAM	40.752571	-111.856336	4497	021	Basement - Family Room	PP	8.1	13:17	2/23/2015	Tetrachloroethene	0.995	0.207	0.207	Yes	=	0.1	1.403046	370	11	No	No
0012-H	A-0012H-022315-SG-001-8'	40.752594	-111.856453	4496	028	Near NW corner of house	SG	NA	NA	2/23/2015	cis12Dichloroethene	0.725	0.1101	0.1101	Yes	=	0.1	0.4362162	NE	NE	No	No
0012-H	A-0012H-022315-SG-001-8'	40.752594	-111.856453	4496	028	Near NW corner of house	SG	NA	NA	2/23/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0012-H	A-0012H-022315-SG-001-8'	40.752594	-111.856453	4496	028	Near NW corner of house	SG	NA	NA	2/23/2015	Tetrachloroethene	0.996	0.1887	0.1887	Yes	=	0.1	1.2790086	370	11	No	No
0012-H	A-0012H-022315-SG-001-4'	40.752594	-111.856453	4496	027	Near NW corner of house	SG	NA	NA	2/23/2015	cis12Dichloroethene	0.641	0.1999	0.1999	No	NR	0.1	0.7920038	NE	NE	No	No
0012-H	A-0012H-022315-SG-001-4'	40.752594	-111.856453	4496	027	Near NW corner of house	SG	NA	NA	2/23/2015	Trichloroethene	0.697	0.01147	<0.1	No	NR	0.1	0.0615939	16	0.48	No	No
0012-H	A-0012H-022315-SG-001-4'	40.752594	-111.856453	4496	027	Near NW corner of house	SG	NA	NA	2/23/2015	Tetrachloroethene	0.993	0.3256	0.3256	Yes	=	0.1	2.2069168	370	11	No	No
0013-H	A-0013H-011615-CCV	40.752578	-111.854994	4518	001	CCV - 5.0 ppb	CCV	NA	NA	1/16/2015	cis12Dichloroethene	1	5.166	5.166	Yes	=	0.1	20.467692	NA	NA	NA	NA
0013-H	A-0013H-011615-CCV	40.752578	-111.854994	4518	001	CCV - 5.0 ppb	CCV	NA	NA	1/16/2015	Trichloroethene	0.99	6.255	6.255	Yes	=	0.1	33.58935	NA	NA	NA	NA
0013-H	A-0013H-011615-CCV	40.752578	-111.854994	4518	001	CCV - 5.0 ppb	CCV	NA	NA	1/16/2015	Tetrachloroethene	0.994	6.367	6.367	Yes	=	0.1	43.155526	NA	NA	NA	NA
0013-H	A-0013H-011615-IA014_BA2	40.752578	-111.854994	4518	016	Basement Bathroom	IA	NA	NA	1/16/2015	cis12Dichloroethene	0.873	0.08715	<0.1	Yes	U	0.1	0.3452883	NE	NE	No	No
0013-H	A-0013H-011615-IA014_BA2	40.752578	-111.854994	4518	016	Basement Bathroom	IA	NA	NA	1/16/2015	Trichloroethene	0.968	0.02269	<0.1	Yes	U	0.1	0.1218453	16	0.48	No	No
0013-H	A-0013H-011615-IA014_BA2	40.752578	-111.854994	4518	016	Basement Bathroom	IA	NA	NA	1/16/2015	Tetrachloroethene	0.994	0.07605	<0.1	Yes	U	0.1	0.5154669	370	11	No	No
0013-H	A-0013H-011615-IA013_LAU	40.752578	-111.854994	4518	015	Laundry Room	IA	NA	NA	1/16/2015	cis12Dichloroethene	0.865	0.06093	<0.1	Yes	U	0.1	0.24140466	NE	NE	No	No
0013-H	A-0013H-011615-IA013_LAU	40.752578	-111.854994	4518	015	Laundry Room	IA	NA	NA	1/16/2015	Trichloroethene	0.977	0.02896	<0.1	Yes	U	0.1	0.1555152	16	0.48	No	No
0013-H	A-0013H-011615-IA013_LAU	40.752578	-111.854994	4518	015	Laundry Room	IA	NA	NA	1/16/2015	Tetrachloroethene	0.994	0.07211	<0.1	Yes	U	0.1	0.48876158	370	11	No	No
0013-H	A-0013H-011615-IA012_LIB	40.752578	-111.854994	4518	014	Library	IA	NA	NA	1/16/2015	cis12Dichloroethene	0.85	0.04247	<0.1	Yes	U	0.1	0.16826614	NE	NE	No	No
0013-H	A-0013H-011615-IA012_LIB	40.752578	-111.854994	4518	014	Library	IA	NA	NA	1/16/2015	Trichloroethene	0.989	0.02768	<0.1	Yes	U	0.1	0.1486416	16	0.48	No	No
0013-H	A-0013H-011615-IA012_LIB	40.752578	-111.854994	4518	014	Library	IA	NA	NA	1/16/2015	Tetrachloroethene	0.996	0.06544	<0.1	Yes	U	0.1	0.44355232	370	11	No	No
0013-H	A-0013H-011615-IA011_FUR	40.752578	-111.854994	4518	013	Furnace Room	IA	NA	NA	1/16/2015	cis12Dichloroethene	0.906	0.0744	<0.1	Yes	U	0.1	0.2947728	NE	NE	No	No
0013-H	A-0013H-011615-IA011_FUR	40.752578	-111.854994	4518	013	Furnace Room	IA	NA	NA	1/16/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0013-H	A-0013H-011615-IA011_FUR	40.752578	-111.854994	4518	013	Furnace Room	IA	NA	NA	1/16/2015	Tetrachloroethene	0.997	0.07793	<0.1	Yes	U	0.1	0.52820954	370	11	No	No
0013-H	A-0013H-011615-IA010_FAM	40.752578	-111.854994	4518	012	Family Room	IA	NA	NA	1/16/2015	cis12Dichloroethene	0.922	0.06555	<0.1	Yes	U	0.1	0.2597091	NE	NE	No	No
0013-H	A-0013H-011615-IA010_FAM	40.752578	-111.854994	4518	012	Family Room	IA	NA	NA	1/16/2015	Trichloroethene	0.997	0.03343	<0.1	Yes	U	0.1	0.1795191	16	0.48	No	No
0013-H	A-0013H-011615-IA010_FAM	40.752578	-111.854994	4518	012	Family Room	IA	NA	NA	1/16/2015	Tetrachloroethene	0.993	0.08049	<0.1	Yes	U	0.1	0.54556122	370	11	No	No
0013-H	A-0013H-011615-IA009_STO	40.752578	-111.854994	4518	011	Storage Room	IA	NA	NA	1/16/2015	cis12Dichloroethene	0.942	0.09395	<0.1	Yes	U	0.1	0.3722299	NE	NE	No	No
0013-H	A-0013H-011615-IA009_STO	40.752578	-111.854994	4518	011	Storage Room	IA	NA	NA	1/16/2015	Trichloroethene	0.994	0.04763	<0.1	Yes	U	0.1	0.2557731	16	0.48	No	No
0013-H	A-0013H-011615-IA009_STO	40.752578	-111.854994	4518	011	Storage Room	IA	NA	NA	1/16/2015	Tetrachloroethene	0.993	0.08306	<0.1	Yes	U	0.1	0.56298068	370	11	No	No
0013-H	A-0013H-011615-IA008_COM	40.752578	-111.854994	4518	010	Computer Room/ 2nd Floor	IA	NA	NA	1/16/2015	cis12Dichloroethene	0.909	0.05488	<0.1	Yes	U	0.1	0.21743456	NE	NE	No	No
0013-H	A-0013H-011615-IA008_COM	40.752578	-111.854994	4518	010	Computer Room/ 2nd Floor	IA	NA	NA	1/16/2015	Trichloroethene	0.999	0.03715	<0.1	Yes	U	0.1	0.1994955	16	0.48	No	No
0013-H	A-0013H-011615-IA008_COM	40.752578	-111.854994	4518	010	Computer Room/ 2nd Floor	IA	NA	NA	1/16/2015	Tetrachloroethene	0.995	0.07149	<0.1	Yes	U	0.1	0.48455922	370	11	No	No
0013-H	A-0013H-011615-IA007_PAR	40.752578	-111.854994	4518	009	Parlor	IA	NA	NA	1/16/2015	cis12Dichloroethene	0.954	0.04669	<0.1	Yes	U	0.1	0.18498578	NE	NE	No	No
0013-H	A-0013H-011615-IA007_PAR	40.752578	-111.854994	4518	009	Parlor	IA	NA	NA	1/16/2015	Trichloroethene	0.995	0.03924	<0.1	Yes	U	0.1	0.2107188	16	0.48	No	No
0013-H	A-0013H-011615-IA007_PAR	40.752578	-111.854994	4518	009	Parlor	IA	NA	NA	1/16/2015	Tetrachloroethene	0.994	0.06999	<0.1	Yes	U	0.1	0.47439222	370	11	No	No
0013-H	A-0013H-011615-IA006_BA1	40.752578	-111.854994	4518	008	Bathroom	IA	NA	NA	1/16/2015	cis12Dichloroethene	0.922	0.04471	<0.1	Yes	U	0.1	0.17714102	NE	NE	No	No
0013-H	A-0013H-011615-IA006_BA1	40.752578	-111.854994	4518	008	Bathroom	IA	NA	NA	1/16/2015	Trichloroethene	0.993	0.05562	<0.1	Yes	U	0.1	0.2986794	16	0.48	No	No
0013-H	A-0013H-011615-IA006_BA1	40.752578	-111.854994	4518	008	Bathroom	IA	NA	NA	1/16/2015	Tetrachloroethene	0.995	0.1054	0.1054	Yes	=	0.1	0.7144012	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0013-H	A-0013H-011615-IA005_BR2	40.752578	-111.854994	4518	007	Northeast Bedroom	IA	NA	NA	1/16/2015	cis12Dichloroethene	0.913	0.048	<0.1	Yes	U	0.1	0.190176	NE	NE	No	No
0013-H	A-0013H-011615-IA005_BR2	40.752578	-111.854994	4518	007	Northeast Bedroom	IA	NA	NA	1/16/2015	Trichloroethene	0.988	0.03186	<0.1	Yes	U	0.1	0.1710882	16	0.48	No	No
0013-H	A-0013H-011615-IA005_BR2	40.752578	-111.854994	4518	007	Northeast Bedroom	IA	NA	NA	1/16/2015	Tetrachloroethene	0.994	0.07346	<0.1	Yes	U	0.1	0.49791188	370	11	No	No
0013-H	A-0013H-011615-IA004_BR1	40.752578	-111.854994	4518	006	Southeast Bedroom	IA	NA	NA	1/16/2015	cis12Dichloroethene	0.908	0.05018	<0.1	Yes	U	0.1	0.19881316	NE	NE	No	No
0013-H	A-0013H-011615-IA004_BR1	40.752578	-111.854994	4518	006	Southeast Bedroom	IA	NA	NA	1/16/2015	Trichloroethene	0.84	0.01028	<0.1	Yes	U	0.1	0.0552036	16	0.48	No	No
0013-H	A-0013H-011615-IA004_BR1	40.752578	-111.854994	4518	006	Southeast Bedroom	IA	NA	NA	1/16/2015	Tetrachloroethene	0.997	0.05815	<0.1	Yes	U	0.1	0.3941407	370	11	No	No
0013-H	A-0013H-011615-IA003_ENT	40.752578	-111.854994	4518	005	Back Hall, 1st Floor	IA	NA	NA	1/16/2015	cis12Dichloroethene	0.89	0.05448	<0.1	Yes	U	0.1	0.21584976	NE	NE	No	No
0013-H	A-0013H-011615-IA003_ENT	40.752578	-111.854994	4518	005	Back Hall, 1st Floor	IA	NA	NA	1/16/2015	Trichloroethene	0.988	0.02636	<0.1	Yes	U	0.1	0.1415532	16	0.48	No	No
0013-H	A-0013H-011615-IA003_ENT	40.752578	-111.854994	4518	005	Back Hall, 1st Floor	IA	NA	NA	1/16/2015	Tetrachloroethene	0.995	0.06186	<0.1	Yes	U	0.1	0.41928708	370	11	No	No
0013-H	A-0013H-011615-IA002_KIT	40.752578	-111.854994	4518	004	Kitchen	IA	NA	NA	1/16/2015	cis12Dichloroethene	0.942	0.06259	<0.1	Yes	U	0.1	0.24798158	NE	NE	No	No
0013-H	A-0013H-011615-IA002_KIT	40.752578	-111.854994	4518	004	Kitchen	IA	NA	NA	1/16/2015	Trichloroethene	0.996	0.03827	<0.1	Yes	U	0.1	0.2055099	16	0.48	No	No
0013-H	A-0013H-011615-IA002_KIT	40.752578	-111.854994	4518	004	Kitchen	IA	NA	NA	1/16/2015	Tetrachloroethene	0.992	0.06313	<0.1	Yes	U	0.1	0.42789514	370	11	No	No
0013-H	A-0013H-011615-IA001_LIV	40.752578	-111.854994	4518	003	Living/Dining Room	IA	NA	NA	1/16/2015	cis12Dichloroethene	0.961	0.06352	<0.1	Yes	U	0.1	0.25166624	NE	NE	No	No
0013-H	A-0013H-011615-IA001_LIV	40.752578	-111.854994	4518	003	Living/Dining Room	IA	NA	NA	1/16/2015	Trichloroethene	0.989	0.04746	<0.1	Yes	U	0.1	0.2548602	16	0.48	No	No
0013-H	A-0013H-011615-IA001_LIV	40.752578	-111.854994	4518	003	Living/Dining Room	IA	NA	NA	1/16/2015	Tetrachloroethene	0.994	0.0679	<0.1	Yes	U	0.1	0.4602262	370	11	No	No
0013-H	A-0013H-011615-IA015L_ENT	40.752578	-111.854994	4518	029	Back Hall, 1st Floor	NP	-4.6	17:33	1/16/2015	cis12Dichloroethene	0.822	0.03183	<0.1	Yes	U	0.1	0.12611046	NE	NE	No	No
0013-H	A-0013H-011615-IA015L_ENT	40.752578	-111.854994	4518	029	Back Hall, 1st Floor	NP	-4.6	17:33	1/16/2015	Trichloroethene	1	0.03998	<0.1	Yes	U	0.1	0.2146926	16	0.48	No	No
0013-H	A-0013H-011615-IA015L_ENT	40.752578	-111.854994	4518	029	Back Hall, 1st Floor	NP	-4.6	17:33	1/16/2015	Tetrachloroethene	0.996	0.1204	0.1204	Yes	=	0.1	0.8160712	370	11	No	No
0013-H	A-0013H-011615-IA015K_ENT	40.752578	-111.854994	4518	028	Back Hall, 1st Floor	NP	-4.6	17:23	1/16/2015	cis12Dichloroethene	0.911	0.04121	<0.1	Yes	U	0.1	0.16327402	NE	NE	No	No
0013-H	A-0013H-011615-IA015K_ENT	40.752578	-111.854994	4518	028	Back Hall, 1st Floor	NP	-4.6	17:23	1/16/2015	Trichloroethene	0.995	0.04132	<0.1	Yes	U	0.1	0.2218884	16	0.48	No	No
0013-H	A-0013H-011615-IA015K_ENT	40.752578	-111.854994	4518	028	Back Hall, 1st Floor	NP	-4.6	17:23	1/16/2015	Tetrachloroethene	0.996	0.1154	0.1154	Yes	=	0.1	0.7821812	370	11	No	No
0013-H	A-0013H-011615-IA015J_ENT	40.752578	-111.854994	4518	027	Back Hall, 1st Floor	NP	-4.8	17:13	1/16/2015	cis12Dichloroethene	0.749	0.04514	<0.1	Yes	U	0.1	0.17884468	NE	NE	No	No
0013-H	A-0013H-011615-IA015J_ENT	40.752578	-111.854994	4518	027	Back Hall, 1st Floor	NP	-4.8	17:13	1/16/2015	Trichloroethene	0.988	0.05018	<0.1	Yes	U	0.1	0.2694666	16	0.48	No	No
0013-H	A-0013H-011615-IA015J_ENT	40.752578	-111.854994	4518	027	Back Hall, 1st Floor	NP	-4.8	17:13	1/16/2015	Tetrachloroethene	0.996	0.118	0.118	Yes	=	0.1	0.799804	370	11	No	No
0013-H	A-0013H-011615-IA015I_ENT	40.752578	-111.854994	4518	026	Back Hall, 1st Floor	NP	-4.8	17:13	1/16/2015	cis12Dichloroethene	0.903	0.03036	<0.1	Yes	U	0.1	0.12028632	NE	NE	No	No
0013-H	A-0013H-011615-IA015I_ENT	40.752578	-111.854994	4518	026	Back Hall, 1st Floor	NP	-4.8	17:13	1/16/2015	Trichloroethene	0.992	0.05577	<0.1	Yes	U	0.1	0.2994849	16	0.48	No	No
0013-H	A-0013H-011615-IA015I_ENT	40.752578	-111.854994	4518	026	Back Hall, 1st Floor	NP	-4.8	17:13	1/16/2015	Tetrachloroethene	0.996	0.1165	0.1165	Yes	=	0.1	0.789637	370	11	No	No
0013-H	A-0013H-011615-IA015H_ENT	40.752578	-111.854994	4518	025	Back Hall, 1st Floor	NP	-4.5	17:03	1/16/2015	cis12Dichloroethene	0.946	0.03428	<0.1	Yes	U	0.1	0.13581736	NE	NE	No	No
0013-H	A-0013H-011615-IA015H_ENT	40.752578	-111.854994	4518	025	Back Hall, 1st Floor	NP	-4.5	17:03	1/16/2015	Trichloroethene	0.99	0.04198	<0.1	Yes	U	0.1	0.2254326	16	0.48	No	No
0013-H	A-0013H-011615-IA015H_ENT	40.752578	-111.854994	4518	025	Back Hall, 1st Floor	NP	-4.5	17:03	1/16/2015	Tetrachloroethene	0.995	0.1149	0.1149	Yes	=	0.1	0.7787922	370	11	No	No
0013-H	A-0013H-011615-IA015G_ENT	40.752578	-111.854994	4518	024	Back Hall, 1st Floor	NP	-5.1	16:53	1/16/2015	cis12Dichloroethene	0.781	0.03933	<0.1	Yes	U	0.1	0.15582546	NE	NE	No	No
0013-H	A-0013H-011615-IA015G_ENT	40.752578	-111.854994	4518	024	Back Hall, 1st Floor	NP	-5.1	16:53	1/16/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0013-H	A-0013H-011615-IA015G_ENT	40.752578	-111.854994	4518	024	Back Hall, 1st Floor	NP	-5.1	16:53	1/16/2015	Tetrachloroethene	0.993	0.1231	0.1231	Yes	=	0.1	0.8343718	370	11	No	No
0013-H	A-0013H-011615-IA015F_ENT	40.752578	-111.854994	4518	023	Back Hall, 1st Floor	NP	-4.9	16:43	1/16/2015	cis12Dichloroethene	0.716	0.03329	<0.1	Yes	U	0.1	0.13189498	NE	NE	No	No
0013-H	A-0013H-011615-IA015F_ENT	40.752578	-111.854994	4518	023	Back Hall, 1st Floor	NP	-4.9	16:43	1/16/2015	Trichloroethene	0.992	0.04525	<0.1	Yes	U	0.1	0.2429925	16	0.48	No	No
0013-H	A-0013H-011615-IA015F_ENT	40.752578	-111.854994	4518	023	Back Hall, 1st Floor	NP	-4.9	16:43	1/16/2015	Tetrachloroethene	0.994	0.1173	0.1173	Yes	=	0.1	0.7950594	370	11	No	No
0013-H	A-0013H-011615-IA015E_ENT	40.752578	-111.854994	4518	022	Back Hall, 1st Floor	NP	4.9	16:33	1/16/2015	cis12Dichloroethene	0.848	0.04651	<0.1	Yes	U	0.1	0.18427262	NE	NE	No	No
0013-H	A-0013H-011615-IA015E_ENT	40.752578	-111.854994	4518	022	Back Hall, 1st Floor	NP	4.9	16:33	1/16/2015	Trichloroethene	0.994	0.043	<0.1	Yes	U	0.1	0.23091	16	0.48	No	No
0013-H	A-0013H-011615-IA015E_ENT	40.752578	-111.854994	4518	022	Back Hall, 1st Floor	NP	4.9	16:33	1/16/2015	Tetrachloroethene	0.997	0.1196	0.1196	Yes	=	0.1	0.8106488	370	11	No	No
0013-H	A-0013H-011615-IA015D_ENT	40.752578	-111.854994	4518	021	Back Hall, 1st Floor	NP	-4.8	16:28	1/16/2015	cis12Dichloroethene	0.957	0.03288	<0.1	Yes	U	0.1	0.13027056	NE	NE	No	No
0013-H	A-0013H-011615-IA015D_ENT	40.752578	-111.854994	4518	021	Back Hall, 1st Floor	NP	-4.8	16:28	1/16/2015	Trichloroethene	0.994	0.04545	<0.1	Yes	U	0.1	0.2440665	16	0.48	No	No
0013-H	A-0013H-011615-IA015D_ENT	40.752578	-111.854994	4518	021	Back Hall, 1st Floor	NP	-4.8	16:28	1/16/2015	Tetrachloroethene	0.994	0.1223	0.1223	Yes	=	0.1	0.8289494	370	11	No	No
0013-H	A-0013H-011615-IA015C_ENT	40.752578	-111.854994	4518	020	Back Hall, 1st Floor	NP	-4.7	16:23	1/16/2015	cis12Dichloroethene	0.903	0.03746	<0.1	Yes	U	0.1	0.14841652	NE	NE	No	No
0013-H	A-0013H-011615-IA015C_ENT	40.752578	-111.854994	4518	020	Back Hall, 1st Floor	NP	-4.7	16:23	1/16/2015	Trichloroethene	0.993	0.03475	<0.1	Yes	U	0.1	0.1866075	16	0.48	No	No
0013-H	A-0013H-011615-IA015C_ENT	40.752578	-111.854994	4518	020	Back Hall, 1st Floor	NP	-4.7	16:23	1/16/2015	Tetrachloroethene	0.994	0.09763	<0.1	Yes	U	0.1	0.66173614	370	11	No	No
0013-H	A-0013H-011615-IA015B_ENT	40.752578	-111.854994	4518	019	Back Hall, 1st Floor	NP	-5.0	16:13	1/16/2015	cis12Dichloroethene	0.887	0.04435	<0.1	Yes	U	0.1	0.1757147	NE	NE	No	No
0013-H	A-0013H-011615-IA015B_ENT	40.752578	-111.854994	4518	019	Back Hall, 1st Floor	NP	-5.0	16:13	1/16/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0013-H	A-0013H-011615-IA015B_ENT	40.752578	-111.854994	4518	019	Back Hall, 1st Floor	NP	-5.0	16:13	1/16/2015	Tetrachloroethene	0.996	0.08696	<0.1	Yes	U	0.1	0.58941488	370	11	No	No
0013-H	A-0013H-011615-IA015A_ENT	40.752578	-111.854994	4518	018	Back Hall, 1st Floor	NP	-4.9	16:03	1/16/2015	cis12Dichloroethene	0.911	0.04939	<0.1	Yes	U	0.1	0.19568318	NE	NE	No	No
0013-H	A-0013H-011615-IA015A_ENT	40.752578	-111.854994	4518	018	Back Hall, 1st Floor	NP	-4.9	16:03	1/16/2015	Trichloroethene	0.975	0.02686	<0.1	Yes	U	0.1	0.1442382	16	0.48	No	No
0013-H	A-0013H-011615-IA015A_ENT	40.752578	-111.854994	4518	018	Back Hall, 1st Floor	NP	-4.9	16:03	1/16/2015	Tetrachloroethene	0.991	0.07048	<0.1	Yes	U	0.1	0.47771344	370	11	No	No
0013-H	A-0013H-011615-OA001_OUT	40.752578	-111.854994	4518	002	Middle of walk - off of front porch steps	OA	NA	NA	1/16/2015	cis12Dichloroethene	0.971	0.0499	<0.1	Yes	U	0.1	0.1977038	NE	NE	No	No
0013-H	A-0013H-011615-OA001_OUT	40.752578	-111.854994	4518	002	Middle of walk - off of front porch steps	OA	NA	NA	1/16/2015	Trichloroethene	0.987	0.0418	<0.1	Yes	U	0.1	0.224466	16	0.48	No	No
0013-H	A-0013H-011615-OA001_OUT	40.752578	-111.854994	4518	002	Middle of walk - off of front porch steps	OA	NA	NA	1/16/2015	Tetrachloroethene	0.996	0.04913	<0.1	Yes	U	0.1	0.33300314	370	11	No	No
0013-H	A-0013H-011615-IA016B_ENT	40.752578	-111.854994	4518	033	Back Hall, 1st Floor	PP	4.4	18:38	1/16/2015	cis12Dichloroethene	0.835	0.0724	<0.1	Yes	U	0.1	0.2868488	NE	NE	No	No
0013-H	A-0013H-011615-IA016B_ENT	40.752578	-111.854994	4518	033	Back Hall, 1st Floor	PP	4.4	18:38	1/16/2015	Trichloroethene	0.985	0.03444	<0.1	Yes	U	0.1	0.1849428	16	0.48	No	No
0013-H	A-0013H-011615-IA016B_ENT	40.752578	-111.854994	4518	033	Back Hall, 1st Floor	PP	4.4	18:38	1/16/2015	Tetrachloroethene	0.994	0.5479	0.5479	Yes	=	0.1	3.7136662	370	11	No	No
0013-H	A-0013H-011615-IA016A_ENT	40.752578	-111.854994	4518	032	Back Hall, 1st Floor	PP	4.6	18:03	1/16/2015	cis12Dichloroethene	0.979	0.02572	<0.1	Yes	U	0.1	0.10190264	NE	NE	No	No
0013-H	A-0013H-011615-IA016A_ENT	40.752578	-111.854994	4518	032	Back Hall, 1st Floor	PP	4.6	18:03	1/16/2015	Trichloroethene	0.912	0.03117	<0.1	Yes	U	0.1	0.1673829	16	0.48	No	No
0013-H	A-0013H-011615-IA016A_ENT	40.752578	-111.854994	4518	032	Back Hall, 1st Floor	PP	4.6	18:03	1/16/2015	Tetrachloroethene	0.995	0.0701	<0.1	Yes	U	0.1	0.4751378	370	11	No	No
0013-H	A-0013H-011615-SG001_08'	40.752633	-111.854889	4520	034	East of house - North of Patio	SG	NA	NA	1/16/2015	cis12Dichloroethene	0.596	0.00824	<0.1	No	NR	0.1	0.03264688	NE	NE	No	No
0013-H	A-0013H-011615-SG001_08'	40.752633	-111.854889	4520	034	East of house - North of Patio	SG	NA	NA	1/16/2015	Trichloroethene	0.998	0.08594	<0.1	Yes	U	0.1	0.4614978	16	0.48	No	No
0013-H	A-0013H-011615-SG001_08'	40.752633	-111.854889	4520	034	East of house - North of Patio	SG	NA	NA	1/16/2015	Tetrachloroethene	0.995	0.3206	0.3206	Yes	=	0.1	2.1730268	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0014-H	A-0014H-030215-CCV	40.749589	-111.844184	4645	032	CCV - 0.5 ppb	CCV	NA	NA	3/2/2015	cis12Dichloroethene	0.993	0.5206	0.5206	Yes	=	0.1	2.0626172	NA	NA	NA	NA
0014-H	A-0014H-030215-CCV	40.749589	-111.844184	4645	032	CCV - 0.5 ppb	CCV	NA	NA	3/2/2015	Trichloroethene	0.992	0.4855	0.4855	Yes	=	0.1	2.607135	NA	NA	NA	NA
0014-H	A-0014H-030215-CCV	40.749589	-111.844184	4645	032	CCV - 0.5 ppb	CCV	NA	NA	3/2/2015	Tetrachloroethene	0.994	0.4748	0.4748	Yes	=	0.1	3.2181944	NA	NA	NA	NA
0014-H	A-0014H-030215-CCV	40.749589	-111.844184	4645	031	CCV - 5.0 ppb	CCV	NA	NA	3/2/2015	cis12Dichloroethene	0.998	4.027	4.027	Yes	=	0.1	15.954974	NA	NA	NA	NA
0014-H	A-0014H-030215-CCV	40.749589	-111.844184	4645	031	CCV - 5.0 ppb	CCV	NA	NA	3/2/2015	Trichloroethene	0.982	4.314	4.314	Yes	=	0.1	23.16618	NA	NA	NA	NA
0014-H	A-0014H-030215-CCV	40.749589	-111.844184	4645	031	CCV - 5.0 ppb	CCV	NA	NA	3/2/2015	Tetrachloroethene	0.996	3.988	3.988	Yes	=	0.1	27.030664	NA	NA	NA	NA
0014-H	A-0014H-030115-CCV	40.749589	-111.844184	4645	002	CCV - 0.5 ppb	CCV	NA	NA	3/1/2015	cis12Dichloroethene	0.995	0.6401	0.6401	Yes	=	0.1	2.5360762	NA	NA	NA	NA
0014-H	A-0014H-030115-CCV	40.749589	-111.844184	4645	002	CCV - 0.5 ppb	CCV	NA	NA	3/1/2015	Trichloroethene	0.984	0.5774	0.5774	Yes	=	0.1	3.100638	NA	NA	NA	NA
0014-H	A-0014H-030115-CCV	40.749589	-111.844184	4645	002	CCV - 0.5 ppb	CCV	NA	NA	3/1/2015	Tetrachloroethene	0.993	0.5745	0.5745	Yes	=	0.1	3.893961	NA	NA	NA	NA
0014-H	A-0014H-030115-CCV	40.749589	-111.844184	4645	001	CCV - 5.0 ppb	CCV	NA	NA	3/1/2015	cis12Dichloroethene	0.996	5.858	5.858	Yes	=	0.1	23.209396	NA	NA	NA	NA
0014-H	A-0014H-030115-CCV	40.749589	-111.844184	4645	001	CCV - 5.0 ppb	CCV	NA	NA	3/1/2015	Trichloroethene	0.963	5.552	5.552	Yes	=	0.1	29.81424	NA	NA	NA	NA
0014-H	A-0014H-030115-CCV	40.749589	-111.844184	4645	001	CCV - 5.0 ppb	CCV	NA	NA	3/1/2015	Tetrachloroethene	0.993	5.281	5.281	Yes	=	0.1	35.794618	NA	NA	NA	NA
0014-H	A-0014H-030215-IA-011-CLO	40.749589	-111.844184	4645	011	Basement- Closet	IA	NA	NA	3/2/2015	cis12Dichloroethene	0.759	0.03326	<0.1	Yes	U	0.1	0.13177612	NE	NE	No	No
0014-H	A-0014H-030215-IA-011-CLO	40.749589	-111.844184	4645	011	Basement- Closet	IA	NA	NA	3/2/2015	Trichloroethene	0.998	0.00711	<0.1	Yes	U	0.1	0.0381807	16	0.48	No	No
0014-H	A-0014H-030215-IA-011-CLO	40.749589	-111.844184	4645	011	Basement- Closet	IA	NA	NA	3/2/2015	Tetrachloroethene	0.995	0.06253	<0.1	Yes	U	0.1	0.42382834	370	11	No	No
0014-H	A-0014H-030215IA-010-OFC	40.749589	-111.844184	4645	010	Basement - Office	IA	NA	NA	3/2/2015	cis12Dichloroethene	0.736	0.06471	<0.1	Yes	U	0.1	0.25638102	NE	NE	No	No
0014-H	A-0014H-030215IA-010-OFC	40.749589	-111.844184	4645	010	Basement - Office	IA	NA	NA	3/2/2015	Trichloroethene	0.919	0.00752	<0.1	Yes	U	0.1	0.0403824	16	0.48	No	No
0014-H	A-0014H-030215IA-010-OFC	40.749589	-111.844184	4645	010	Basement - Office	IA	NA	NA	3/2/2015	Tetrachloroethene	0.994	0.01766	<0.1	Yes	U	0.1	0.11969948	370	11	No	No
0014-H	A-0014H-030215-IA-009-FUR	40.749589	-111.844184	4645	009	Basement - Furnace Room	IA	NA	NA	3/2/2015	cis12Dichloroethene	0.724	0.05167	<0.1	Yes	U	0.1	0.20471654	NE	NE	No	No
0014-H	A-0014H-030215-IA-009-FUR	40.749589	-111.844184	4645	009	Basement - Furnace Room	IA	NA	NA	3/2/2015	Trichloroethene	0.833	0.01031	<0.1	Yes	U	0.1	0.0553647	16	0.48	No	No
0014-H	A-0014H-030215-IA-009-FUR	40.749589	-111.844184	4645	009	Basement - Furnace Room	IA	NA	NA	3/2/2015	Tetrachloroethene	0.993	0.02052	<0.1	Yes	U	0.1	0.13908456	370	11	No	No
0014-H	A-0014H-030215-IA-008-BA2	40.749589	-111.844184	4645	008	Basement - Bathroom	IA	NA	NA	3/2/2015	cis12Dichloroethene	0.751	0.04652	<0.1	Yes	U	0.1	0.18431224	NE	NE	No	No
0014-H	A-0014H-030215-IA-008-BA2	40.749589	-111.844184	4645	008	Basement - Bathroom	IA	NA	NA	3/2/2015	Trichloroethene	0.849	0.00939	<0.1	Yes	U	0.1	0.0504243	16	0.48	No	No
0014-H	A-0014H-030215-IA-008-BA2	40.749589	-111.844184	4645	008	Basement - Bathroom	IA	NA	NA	3/2/2015	Tetrachloroethene	0.994	0.01933	<0.1	Yes	U	0.1	0.13101874	370	11	No	No
0014-H	A-0014H-030215-IA-007-BR2	40.749589	-111.844184	4645	007	Basement - Bedroom	IA	NA	NA	3/2/2015	cis12Dichloroethene	0.747	0.0685	<0.1	Yes	U	0.1	0.271397	NE	NE	No	No
0014-H	A-0014H-030215-IA-007-BR2	40.749589	-111.844184	4645	007	Basement - Bedroom	IA	NA	NA	3/2/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0014-H	A-0014H-030215-IA-007-BR2	40.749589	-111.844184	4645	007	Basement - Bedroom	IA	NA	NA	3/2/2015	Tetrachloroethene	0.996	0.01962	<0.1	Yes	U	0.1	0.13298436	370	11	No	No
0014-H	A-0014H-030215-IA-005-KIT	40.749589	-111.844184	4645	005	First Floor - Kitchen	IA	NA	NA	3/2/2015	cis12Dichloroethene	0.727	0.1057	0.1057	Yes	=	0.1	0.4187834	NE	NE	No	No
0014-H	A-0014H-030215-IA-005-KIT	40.749589	-111.844184	4645	005	First Floor - Kitchen	IA	NA	NA	3/2/2015	Trichloroethene	0.671	0.00955	<0.1	No	NR	0.1	0.0512835	16	0.48	No	No
0014-H	A-0014H-030215-IA-005-KIT	40.749589	-111.844184	4645	005	First Floor - Kitchen	IA	NA	NA	3/2/2015	Tetrachloroethene	0.994	0.01725	<0.1	Yes	U	0.1	0.1169205	370	11	No	No
0014-H	A-0014H-030215-IA-004-BR1	40.749589	-111.844184	4645	004	First Floor - Bedroom	IA	NA	NA	3/2/2015	cis12Dichloroethene	0.715	0.1007	0.1007	Yes	=	0.1	0.3989734	NE	NE	No	No
0014-H	A-0014H-030215-IA-004-BR1	40.749589	-111.844184	4645	004	First Floor - Bedroom	IA	NA	NA	3/2/2015	Trichloroethene	0.588	0.00749	<0.1	No	NR	0.1	0.0402213	16	0.48	No	No
0014-H	A-0014H-030215-IA-004-BR1	40.749589	-111.844184	4645	004	First Floor - Bedroom	IA	NA	NA	3/2/2015	Tetrachloroethene	0.996	0.01599	<0.1	Yes	U	0.1	0.10838022	370	11	No	No
0014-H	A-0014H-030215-IA-003-BA1	40.749589	-111.844184	4645	003	First Floor - Bathroom	IA	NA	NA	3/2/2015	cis12Dichloroethene	0.691	0.1495	0.1495	No	NR	0.1	0.592319	NE	NE	No	No
0014-H	A-0014H-030215-IA-003-BA1	40.749589	-111.844184	4645	003	First Floor - Bathroom	IA	NA	NA	3/2/2015	Trichloroethene	0.632	0.00675	<0.1	No	NR	0.1	0.0362475	16	0.48	No	No
0014-H	A-0014H-030215-IA-003-BA1	40.749589	-111.844184	4645	003	First Floor - Bathroom	IA	NA	NA	3/2/2015	Tetrachloroethene	0.994	0.01789	<0.1	Yes	U	0.1	0.12125842	370	11	No	No
0014-H	A-0014H-030215-IA-002-MBR	40.749589	-111.844184	4645	002	First Floor - Master Bedroom	IA	NA	NA	3/2/2015	cis12Dichloroethene	0.72	0.09976	<0.1	Yes	U	0.1	0.39524912	NE	NE	No	No
0014-H	A-0014H-030215-IA-002-MBR	40.749589	-111.844184	4645	002	First Floor - Master Bedroom	IA	NA	NA	3/2/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0014-H	A-0014H-030215-IA-002-MBR	40.749589	-111.844184	4645	002	First Floor - Master Bedroom	IA	NA	NA	3/2/2015	Tetrachloroethene	0.993	0.01649	<0.1	Yes	U	0.1	0.11176922	370	11	No	No
0014-H	A-0014H-030215-IA-001-LIV	40.749589	-111.844184	4645	001	First Floor - Living/Dining Room	IA	NA	NA	3/2/2015	cis12Dichloroethene	0.732	0.1115	0.1115	Yes	=	0.1	0.441763	NE	NE	No	No
0014-H	A-0014H-030215-IA-001-LIV	40.749589	-111.844184	4645	001	First Floor - Living/Dining Room	IA	NA	NA	3/2/2015	Trichloroethene	0.624	0.0105	<0.1	No	NR	0.1	0.056385	16	0.48	No	No
0014-H	A-0014H-030215-IA-001-LIV	40.749589	-111.844184	4645	001	First Floor - Living/Dining Room	IA	NA	NA	3/2/2015	Tetrachloroethene	0.993	0.01853	<0.1	Yes	U	0.1	0.12559634	370	11	No	No
0014-H	A-0014H-030215-IA-012J-FUR	40.749589	-111.844184	4645	022	Basement - Furnace Room	NP	-5.0	13:23	3/2/2015	cis12Dichloroethene	0.743	0.01458	<0.1	Yes	U	0.1	0.05776596	NE	NE	No	No
0014-H	A-0014H-030215-IA-012J-FUR	40.749589	-111.844184	4645	022	Basement - Furnace Room	NP	-5.0	13:23	3/2/2015	Trichloroethene	0.959	0.00557	<0.1	Yes	U	0.1	0.0299109	16	0.48	No	No
0014-H	A-0014H-030215-IA-012J-FUR	40.749589	-111.844184	4645	022	Basement - Furnace Room	NP	-5.0	13:23	3/2/2015	Tetrachloroethene	0.994	0.02208	<0.1	Yes	U	0.1	0.14965824	370	11	No	No
0014-H	A-0014H-030215-IA-012I-FUR	40.749589	-111.844184	4645	021	Basement - Furnace Room	NP	-5.3	13:15	3/2/2015	cis12Dichloroethene	0.801	0.01575	<0.1	Yes	U	0.1	0.0624015	NE	NE	No	No
0014-H	A-0014H-030215-IA-012I-FUR	40.749589	-111.844184	4645	021	Basement - Furnace Room	NP	-5.3	13:15	3/2/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0014-H	A-0014H-030215-IA-012I-FUR	40.749589	-111.844184	4645	021	Basement - Furnace Room	NP	-5.3	13:15	3/2/2015	Tetrachloroethene	0.995	0.02242	<0.1	Yes	U	0.1	0.15196276	370	11	No	No
0014-H	A-0014H-030215-IA-012H-FUR	40.749589	-111.844184	4645	020	Basement - Furnace Room	NP	-5.1	13:06	3/2/2015	cis12Dichloroethene	0.935	0.01958	<0.1	Yes	U	0.1	0.07757596	NE	NE	No	No
0014-H	A-0014H-030215-IA-012H-FUR	40.749589	-111.844184	4645	020	Basement - Furnace Room	NP	-5.1	13:06	3/2/2015	Trichloroethene	0.896	0.02041	<0.1	Yes	U	0.1	0.1096017	16	0.48	No	No
0014-H	A-0014H-030215-IA-012H-FUR	40.749589	-111.844184	4645	020	Basement - Furnace Room	NP	-5.1	13:06	3/2/2015	Tetrachloroethene	0.994	0.02199	<0.1	Yes	U	0.1	0.14904822	370	11	No	No
0014-H	A-0014H-030215-IA-012G-FUR	40.749589	-111.844184	4645	019	Basement - Furnace Room	NP	-5.1	13:06	3/2/2015	cis12Dichloroethene	0.846	0.0191	<0.1	Yes	U	0.1	0.0756742	NE	NE	No	No
0014-H	A-0014H-030215-IA-012G-FUR	40.749589	-111.844184	4645	019	Basement - Furnace Room	NP	-5.1	13:06	3/2/2015	Trichloroethene	0.902	0.00895	<0.1	Yes	U	0.1	0.0480615	16	0.48	No	No
0014-H	A-0014H-030215-IA-012G-FUR	40.749589	-111.844184	4645	019	Basement - Furnace Room	NP	-5.1	13:06	3/2/2015	Tetrachloroethene	0.992	0.01705	<0.1	Yes	U	0.1	0.1155649	370	11	No	No
0014-H	A-0014H-030215-IA-012F-FUR	40.749589	-111.844184	4645	018	Basement - Furnace Room	NP	-4.8	12:43	3/2/2015	cis12Dichloroethene	0.744	0.02513	<0.1	Yes	U	0.1	0.09956506	NE	NE	No	No
0014-H	A-0014H-030215-IA-012F-FUR	40.749589	-111.844184	4645	018	Basement - Furnace Room	NP	-4.8	12:43	3/2/2015	Trichloroethene	0.893	0.00858	<0.1	Yes	U	0.1	0.0460746	16	0.48	No	No
0014-H	A-0014H-030215-IA-012F-FUR	40.749589	-111.844184	4645	018	Basement - Furnace Room	NP	-4.8	12:43	3/2/2015	Tetrachloroethene	0.996	0.01355	<0.1	Yes	U	0.1	0.0918419	370	11	No	No
0014-H	A-0014H-030215-IA-012E-FUR	40.749589	-111.844184	4645	017	Basement - Furnace Room	NP	-5.1	12:34	3/2/2015	cis12Dichloroethene	0.76	0.02711	<0.1	Yes	U	0.1	0.10740982	NE	NE	No	No
0014-H	A-0014H-030215-IA-012E-FUR	40.749589	-111.844184	4645	017	Basement - Furnace Room	NP	-5.1	12:34	3/2/2015	Trichloroethene	0.958	0.01121	<0.1	Yes	U	0.1	0.0601977	16	0.48	No	No
0014-H	A-0014H-030215-IA-012E-FUR	40.749589	-111.844184	4645	017	Basement - Furnace Room	NP	-5.1	12:34	3/2/2015	Tetrachloroethene	0.996	0.01219	<0.1	Yes	U	0.1	0.08262382	370	11	No	No
0014-H	A-0014H-030215-IA-012D-FUR	40.749589	-111.844184	4645	016	Basement - Furnace Room	NP	-3.4	12:26	3/2/2015	cis12Dichloroethene	0.827	0.03439	<0.1	Yes	U	0.1	0.13625318	NE	NE	No	No
0014-H	A-0014H-030215-IA-012D-FUR	40.749589	-111.844184	4645	016	Basement - Furnace Room	NP	-3.4	12:26	3/2/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0014-H	A-0014H-030215-IA-012D-FUR	40.749589	-111.844184	4645	016	Basement - Furnace Room	NP	-3.4	12:26	3/2/2015	Tetrachloroethene	0.996	0.01475	<0.1	Yes	U	0.1	0.0999755	370	11	No	No
0014-H	A-0014H-030215-IA-012C-FUR	40.749589	-111.844184	4645	015	Basement - Furnace Room	NP	-5.2	12:16	3/2/2015	cis12Dichloroethene	0.797	0.04827	<0.1	Yes	U	0.1	0.19124574	NE	NE	No	No
0014-H	A-0014H-030215-IA-012C-FUR	40.749589	-111.844184	4645	015	Basement - Furnace Room	NP	-5.2	12:16	3/2/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0014-H	A-0014H-030215-IA-012C-FUR	40.749589	-111.844184	4645	015	Basement - Furnace Room	NP	-5.2	12:16	3/2/2015	Tetrachloroethene	0.996	0.01952	<0.1	Yes	U	0.1	0.13230656	370	11	No	No
0014-H	A-0014H-030215-IA-012B-FUR	40.749589	-111.844184	4645	014	Basement - Furnace Room	NP	-4.9	12:08	3/2/2015	cis12Dichloroethene	0.764	0.07231	<0.1	Yes	U	0.1	0.28649222	NE	NE	No	No
0014-H	A-0014H-030215-IA-012B-FUR	40.749589	-111.844184	4645	014	Basement - Furnace Room	NP	-4.9	12:08	3/2/2015	Trichloroethene	0.886	0.00915	<0.1	Yes	U	0.1	0.0491355	16	0.48	No	No
0014-H	A-0014H-030215-IA-012B-FUR	40.749589	-111.844184	4645	014	Basement - Furnace Room	NP	-4.9	12:08	3/2/2015	Tetrachloroethene	0.994	0.02466	<0.1	Yes	U	0.1	0.16714548	370	11	No	No
0014-H	A-0014H-030215-IA-012A-FUR	40.749589	-111.844184	4645	013	Basement - Furnace Room	NP	-6.4	11:59	3/2/2015	cis12Dichloroethene	0.743	0.111	0.111	Yes	=	0.1	0.439782	NE	NE	No	No
0014-H	A-0014H-030215-IA-012A-FUR	40.749589	-111.844184	4645	013	Basement - Furnace Room	NP	-6.4	11:59	3/2/2015	Trichloroethene	0.882	0.01021	<0.1	Yes	U	0.1	0.0548277	16	0.48	No	No
0014-H	A-0014H-030215-IA-012A-FUR	40.749589	-111.844184	4645	013	Basement - Furnace Room	NP	-6.4	11:59	3/2/2015	Tetrachloroethene	0.994	0.03323	<0.1	Yes	U	0.1	0.22523294	370	11	No	No
0014-H	A-0014H-030215-IA-006-OUT	40.749589	-111.844184	4645	006	Driveway - near back door	OA	NA	NA	3/2/2015	cis12Dichloroethene	0.971	0.01137	<0.1	Yes	U	0.1	0.04504794	NE	NE	No	No
0014-H	A-0014H-030215-IA-006-OUT	40.749589	-111.844184	4645	006	Driveway - near back door	OA	NA	NA	3/2/2015	Trichloroethene	1	0.00874	<0.1	Yes	U	0.1	0.0469338	16	0.48	No	No
0014-H	A-0014H-030215-IA-006-OUT	40.749589	-111.844184	4645	006	Driveway - near back door	OA	NA	NA	3/2/2015	Tetrachloroethene	0.995	0.01924	<0.1	Yes	U	0.1	0.13040872	370	11	No	No
0014-H	A-0014H-030215-IA-013H-FUR	40.749589	-111.844184	4645	030	Basement - Furnace Room	PP	4.3	14:53	3/2/2015	cis12Dichloroethene	0.826	0.01895	<0.1	Yes	U	0.1	0.0750799	NE	NE	No	No
0014-H	A-0014H-030215-IA-013H-FUR	40.749589	-111.844184	4645	030	Basement - Furnace Room	PP	4.3	14:53	3/2/2015	Trichloroethene	0.523	0.00427	<0.1	No	NR	0.1	0.0229299	16	0.48	No	No
0014-H	A-0014H-030215-IA-013H-FUR	40.749589	-111.844184	4645	030	Basement - Furnace Room	PP	4.3	14:53	3/2/2015	Tetrachloroethene	0.995	0.02135	<0.1	Yes	U	0.1	0.1447103	370	11	No	No
0014-H	A-0014H-030215-IA-013G-FUR	40.749589	-111.844184	4645	029	Basement - Furnace Room	PP	5.2	14:43	3/2/2015	cis12Dichloroethene	0.872	0.0213	<0.1	Yes	U	0.1	0.0843906	NE	NE	No	No
0014-H	A-0014H-030215-IA-013G-FUR	40.749589	-111.844184	4645	029	Basement - Furnace Room	PP	5.2	14:43	3/2/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0014-H	A-0014H-030215-IA-013G-FUR	40.749589	-111.844184	4645	029	Basement - Furnace Room	PP	5.2	14:43	3/2/2015	Tetrachloroethene	0.993	0.02027	<0.1	Yes	U	0.1	0.13739006	370	11	No	No
0014-H	A-0014H-030215-IA-013F-FUR	40.749589	-111.844184	4645	028	Basement - Furnace Room	PP	5.1	14:33	3/2/2015	cis12Dichloroethene	0.878	0.02114	<0.1	Yes	U	0.1	0.08375668	NE	NE	No	No
0014-H	A-0014H-030215-IA-013F-FUR	40.749589	-111.844184	4645	028	Basement - Furnace Room	PP	5.1	14:33	3/2/2015	Trichloroethene	0.959	0.00856	<0.1	Yes	U	0.1	0.0459672	16	0.48	No	No
0014-H	A-0014H-030215-IA-013F-FUR	40.749589	-111.844184	4645	028	Basement - Furnace Room	PP	5.1	14:33	3/2/2015	Tetrachloroethene	0.994	0.02035	<0.1	Yes	U	0.1	0.1379323	370	11	No	No
0014-H	A-0014H-030215-IA-013E-FUR	40.749589	-111.844184	4645	027	Basement - Furnace Room	PP	3.5	14:23	3/2/2015	cis12Dichloroethene	0.827	0.02176	<0.1	Yes	U	0.1	0.08621312	NE	NE	No	No
0014-H	A-0014H-030215-IA-013E-FUR	40.749589	-111.844184	4645	027	Basement - Furnace Room	PP	3.5	14:23	3/2/2015	Trichloroethene	0.99	0.00644	<0.1	Yes	U	0.1	0.0345828	16	0.48	No	No
0014-H	A-0014H-030215-IA-013E-FUR	40.749589	-111.844184	4645	027	Basement - Furnace Room	PP	3.5	14:23	3/2/2015	Tetrachloroethene	0.997	0.01933	<0.1	Yes	U	0.1	0.13101874	370	11	No	No
0014-H	A-0014H-030215-IA-013D-FUR	40.749589	-111.844184	4645	026	Basement - Furnace Room	PP	4.8	14:13	3/2/2015	cis12Dichloroethene	0.765	0.02307	<0.1	Yes	U	0.1	0.09140334	NE	NE	No	No
0014-H	A-0014H-030215-IA-013D-FUR	40.749589	-111.844184	4645	026	Basement - Furnace Room	PP	4.8	14:13	3/2/2015	Trichloroethene	0.912	0.01076	<0.1	Yes	U	0.1	0.0577812	16	0.48	No	No
0014-H	A-0014H-030215-IA-013D-FUR	40.749589	-111.844184	4645	026	Basement - Furnace Room	PP	4.8	14:13	3/2/2015	Tetrachloroethene	0.993	0.0208	<0.1	Yes	U	0.1	0.1409824	370	11	No	No
0014-H	A-0014H-030215-IA-013C-FUR	40.749589	-111.844184	4645	025	Basement - Furnace Room	PP	4.9	14:03	3/2/2015	cis12Dichloroethene	0.692	0.02407	<0.1	No	NR	0.1	0.09536534	NE	NE	No	No
0014-H	A-0014H-030215-IA-013C-FUR	40.749589	-111.844184	4645	025	Basement - Furnace Room	PP	4.9	14:03	3/2/2015	Trichloroethene	0.892	0.00612	<0.1	Yes	U	0.1	0.0328644	16	0.48	No	No
0014-H	A-0014H-030215-IA-013C-FUR	40.749589	-111.844184	4645	025	Basement - Furnace Room	PP	4.9	14:03	3/2/2015	Tetrachloroethene	0.994	0.022	<0.1	Yes	U	0.1	0.149116	370	11	No	No
0014-H	A-0014H-030215-IA-013B-FUR	40.749589	-111.844184	4645	024	Basement - Furnace Room	PP	4.7	13:54	3/2/2015	cis12Dichloroethene	0.851	0.02071	<0.1	Yes	U	0.1	0.08205302	NE	NE	No	No
0014-H	A-0014H-030215-IA-013B-FUR	40.749589	-111.844184	4645	024	Basement - Furnace Room	PP	4.7	13:54	3/2/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0014-H	A-0014H-030215-IA-013B-FUR	40.749589	-111.844184	4645	024	Basement - Furnace Room	PP	4.7	13:54	3/2/2015	Tetrachloroethene	0.995	0.02285	<0.1	Yes	U	0.1	0.1548773	370	11	No	No
0014-H	A-0014H-030215-IA-013A-FUR	40.749589	-111.844184	4645	023	Basement - Furnace Room	PP	6.3	13:45	3/2/2015	cis12Dichloroethene	0.733	0.02505	<0.1	Yes	U	0.1	0.0992481	NE	NE	No	No
0014-H	A-0014H-030215-IA-013A-FUR	40.749589	-111.844184	4645	023	Basement - Furnace Room	PP	6.3	13:45	3/2/2015	Trichloroethene	0.958	0.0068	<0.1	Yes	U	0.1	0.036516	16	0.48	No	No
0014-H	A-0014H-030215-IA-013A-FUR	40.749589	-111.844184	4645	023	Basement - Furnace Room	PP	6.3	13:45	3/2/2015	Tetrachloroethene	0.993	0.02326	<0.1	Yes	U	0.1	0.15765628	370	11	No	No
0014-H	A-0014H-030215-SG-001-4'	40.749650	-111.844239	4645	012	Near NW corner of house	SG	NA	NA	3/2/2015	cis12Dichloroethene	0.717	0.05036	<0.1	Yes	U	0.1	0.19952632	NE	NE	No	No
0014-H	A-0014H-030215-SG-001-4'	40.749650	-111.844239	4645	012	Near NW corner of house	SG	NA	NA	3/2/2015	Trichloroethene	0.895	0.00582	<0.1	Yes	U	0.1	0.0312534	16	0.48	No	No
0014-H	A-0014H-030215-SG-001-4'	40.749650	-111.844239	4645	012	Near NW corner of house	SG	NA	NA	3/2/2015	Tetrachloroethene	0.995	0.0831	<0.1	Yes	U	0.1	0.5632518	370	11	No	No
0015-H	A-0015H-033015-CCV	40.740506	-111.859957	4349	030	CCV - 5 ppb	CCV	NA	NA	3/30/2015	cis12Dichloroethene	0.993	5.592	5.592	Yes	=	0.1	22.155504	NA	NA	NA	NA
0015-H	A-0015H-033015-CCV	40.740506	-111.859957	4349	030	CCV - 5 ppb	CCV	NA	NA	3/30/2015	Trichloroethene	0.975	4.797	4.797	Yes	=	0.1	25.75989	NA	NA	NA	NA
0015-H	A-0015H-033015-CCV	40.740506	-111.859957	4349	030	CCV - 5 ppb	CCV	NA	NA	3/30/2015	Tetrachloroethene	0.994	5.001	5.001	Yes	=	0.1	33.896778	NA	NA	NA	NA
0015-H	A-0015H-033015-CCV	40.740506	-111.859957	4349	029	CCV - 0.5 ppb	CCV	NA	NA	3/30/2015	cis12Dichloroethene	0.99	0.5556	0.5556	Yes	=	0.1	2.2012872	NA	NA	NA	NA
0015-H	A-0015H-033015-CCV	40.740506	-111.859957	4349	029	CCV - 0.5 ppb	CCV	NA	NA	3/30/2015	Trichloroethene	0.91	0.5252	0.5252	Yes	=	0.1	2.820324	NA	NA	NA	NA
0015-H	A-0015H-033015-CCV	40.740506	-111.859957	4349	029	CCV - 0.5 ppb	CCV	NA	NA	3/30/2015	Tetrachloroethene	0.994	0.5081	0.5081	Yes	=	0.1	3.4439018	NA	NA	NA	NA
0015-H	A-0015H-033015-CCV	40.740506	-111.859957	4349	002	CCV - 0.5 ppb	CCV	NA	NA	3/30/2015	cis12Dichloroethene	0.993	0.5659	0.5659	Yes	=	0.1	2.2420958	NA	NA	NA	NA
0015-H	A-0015H-033015-CCV	40.740506	-111.859957	4349	002	CCV - 0.5 ppb	CCV	NA	NA	3/30/2015	Trichloroethene	0.982	0.5051	0.5051	Yes	=	0.1	2.712387	NA	NA	NA	NA
0015-H	A-0015H-033015-CCV	40.740506	-111.859957	4349	002	CCV - 0.5 ppb	CCV	NA	NA	3/30/2015	Tetrachloroethene	0.995	0.5273	0.5273	Yes	=	0.1	3.5740394	NA	NA	NA	NA
0015-H	A-0015H-033015-CCV	40.740506	-111.859957	4349	001	CCV - 5 ppb	CCV	NA	NA	3/30/2015	cis12Dichloroethene	0.994	5.489	5.489	Yes	=	0.1	21.747418	NA	NA	NA	NA
0015-H	A-0015H-033015-CCV	40.740506	-111.859957	4349	001	CCV - 5 ppb	CCV	NA	NA	3/30/2015	Trichloroethene	0.974	4.704	4.704	Yes	=	0.1	25.26048	NA	NA	NA	NA
0015-H	A-0015H-033015-CCV	40.740506	-111.859957	4349	001	CCV - 5 ppb	CCV	NA	NA	3/30/2015	Tetrachloroethene	0.994	4.895	4.895	Yes	=	0.1	33.17831	NA	NA	NA	NA
0015-H	A-0015H-032915-CCV	40.740506	-111.859957	4349	002	CCV - 0.5 ppb	CCV	NA	NA	3/29/2015	cis12Dichloroethene	0.995	0.5674	0.5674	Yes	=	0.1	2.2480388	NA	NA	NA	NA
0015-H	A-0015H-032915-CCV	40.740506	-111.859957	4349	002	CCV - 0.5 ppb	CCV	NA	NA	3/29/2015	Trichloroethene	0.995	0.6164	0.6164	Yes	=	0.1	3.310068	NA	NA	NA	NA
0015-H	A-0015H-032915-CCV	40.740506	-111.859957	4349	002	CCV - 0.5 ppb	CCV	NA	NA	3/29/2015	Tetrachloroethene	0.996	0.5695	0.5695	Yes	=	0.1	3.860071	NA	NA	NA	NA
0015-H	A-0015H-032915-CCV	40.740506	-111.859957	4349	001	CCV - 5 ppb	CCV	NA	NA	3/29/2015	cis12Dichloroethene	0.993	5.447	5.447	Yes	=	0.1	21.581014	NA	NA	NA	NA
0015-H	A-0015H-032915-CCV	40.740506	-111.859957	4349	001	CCV - 5 ppb	CCV	NA	NA	3/29/2015	Trichloroethene	0.989	5.035	5.035	Yes	=	0.1	27.03795	NA	NA	NA	NA
0015-H	A-0015H-032915-CCV	40.740506	-111.859957	4349	001	CCV - 5 ppb	CCV	NA	NA	3/29/2015	Tetrachloroethene	0.995	5.221	5.221	Yes	=	0.1	35.387938	NA	NA	NA	NA

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0015-H	A-0015H-033015-IA-016-STO	40.740506	-111.859957	4349	018	Basement - Closet/Storage	IA	NA	NA	3/30/2015	cis12Dichloroethene	0.604	0.4149	0.4149	No	NR	0.1	1.6438338	NE	NE	No	No
0015-H	A-0015H-033015-IA-016-STO	40.740506	-111.859957	4349	018	Basement - Closet/Storage	IA	NA	NA	3/30/2015	Trichloroethene	0.604	0.00384	<0.1	No	NR	0.1	0.0206208	16	0.48	No	No
0015-H	A-0015H-033015-IA-016-STO	40.740506	-111.859957	4349	018	Basement - Closet/Storage	IA	NA	NA	3/30/2015	Tetrachloroethene	0.995	0.0397	<0.1	Yes	U	0.1	0.2690866	370	11	No	No
0015-H	A-0015H-033015-IA-014-BR1	40.740506	-111.859957	4349	016	Basement - Bedroom	IA	NA	NA	3/30/2015	cis12Dichloroethene	0.635	1.236	1.236	No	NR	0.1	4.897032	NE	NE	No	No
0015-H	A-0015H-033015-IA-014-BR1	40.740506	-111.859957	4349	016	Basement - Bedroom	IA	NA	NA	3/30/2015	Trichloroethene	0.971	0.01507	<0.1	Yes	U	0.1	0.0809259	16	0.48	No	No
0015-H	A-0015H-033015-IA-014-BR1	40.740506	-111.859957	4349	016	Basement - Bedroom	IA	NA	NA	3/30/2015	Tetrachloroethene	0.994	0.02826	<0.1	Yes	U	0.1	0.19154628	370	11	No	No
0015-H	A-0015H-033015-IA-013-BA3	40.740506	-111.859957	4349	015	Basement - Bathroom	IA	NA	NA	3/30/2015	cis12Dichloroethene	0.626	1.058	1.058	No	NR	0.1	4.191796	NE	NE	No	No
0015-H	A-0015H-033015-IA-013-BA3	40.740506	-111.859957	4349	015	Basement - Bathroom	IA	NA	NA	3/30/2015	Trichloroethene	0.523	0.00377	<0.1	No	NR	0.1	0.0202449	16	0.48	No	No
0015-H	A-0015H-033015-IA-013-BA3	40.740506	-111.859957	4349	015	Basement - Bathroom	IA	NA	NA	3/30/2015	Tetrachloroethene	0.995	0.02537	<0.1	Yes	U	0.1	0.17195786	370	11	No	No
0015-H	A-0015H-033015-IA-012-OCL	40.740506	-111.859957	4349	014	Basement - Open Living-Dining-Kitchen	IA	NA	NA	3/30/2015	cis12Dichloroethene	0.635	1.246	1.246	No	NR	0.1	4.936652	NE	NE	No	No
0015-H	A-0015H-033015-IA-012-OCL	40.740506	-111.859957	4349	014	Basement - Open Living-Dining-Kitchen	IA	NA	NA	3/30/2015	Trichloroethene	0.986	0.01764	<0.1	Yes	U	0.1	0.0947268	16	0.48	No	No
0015-H	A-0015H-033015-IA-012-OCL	40.740506	-111.859957	4349	014	Basement - Open Living-Dining-Kitchen	IA	NA	NA	3/30/2015	Tetrachloroethene	0.994	0.02734	<0.1	Yes	U	0.1	0.18531052	370	11	No	No
0015-H	A-0015H-033015-IA-011-OFC5	40.740506	-111.859957	4349	013	Second Floor - Office	IA	NA	NA	3/30/2015	cis12Dichloroethene	0.641	0.4227	0.4227	No	NR	0.1	1.6747374	NE	NE	No	No
0015-H	A-0015H-033015-IA-011-OFC5	40.740506	-111.859957	4349	013	Second Floor - Office	IA	NA	NA	3/30/2015	Trichloroethene	0.999	0.00992	<0.1	Yes	U	0.1	0.0532704	16	0.48	No	No
0015-H	A-0015H-033015-IA-011-OFC5	40.740506	-111.859957	4349	013	Second Floor - Office	IA	NA	NA	3/30/2015	Tetrachloroethene	0.996	0.01958	<0.1	Yes	U	0.1	0.13271324	370	11	No	No
0015-H	A-0015H-033015-IA-010-BA2	40.740506	-111.859957	4349	012	Second floor - Bathroom	IA	NA	NA	3/30/2015	cis12Dichloroethene	0.648	0.4168	0.4168	No	NR	0.1	1.6513616	NE	NE	No	No
0015-H	A-0015H-033015-IA-010-BA2	40.740506	-111.859957	4349	012	Second floor - Bathroom	IA	NA	NA	3/30/2015	Trichloroethene	0.982	0.01	<0.1	Yes	U	0.1	0.0537	16	0.48	No	No
0015-H	A-0015H-033015-IA-010-BA2	40.740506	-111.859957	4349	012	Second floor - Bathroom	IA	NA	NA	3/30/2015	Tetrachloroethene	0.992	0.01251	<0.1	Yes	U	0.1	0.08479278	370	11	No	No
0015-H	A-0015H-033015-IA-009-2LL	40.740506	-111.859957	4349	011	Second Floor - Open Landing Area	IA	NA	NA	3/30/2015	cis12Dichloroethene	0.659	0.363	0.363	No	NR	0.1	1.438206	NE	NE	No	No
0015-H	A-0015H-033015-IA-009-2LL	40.740506	-111.859957	4349	011	Second Floor - Open Landing Area	IA	NA	NA	3/30/2015	Trichloroethene	0.96	0.00947	<0.1	Yes	U	0.1	0.0508539	16	0.48	No	No
0015-H	A-0015H-033015-IA-009-2LL	40.740506	-111.859957	4349	011	Second Floor - Open Landing Area	IA	NA	NA	3/30/2015	Tetrachloroethene	0.996	0.01862	<0.1	Yes	U	0.1	0.12620636	370	11	No	No
0015-H	A-0015H-033015-IA-008-OFC4	40.740506	-111.859957	4349	010	First Floor - Front Office	IA	NA	NA	3/30/2015	cis12Dichloroethene	0.603	0.3358	0.3358	No	NR	0.1	1.3304396	NE	NE	No	No
0015-H	A-0015H-033015-IA-008-OFC4	40.740506	-111.859957	4349	010	First Floor - Front Office	IA	NA	NA	3/30/2015	Trichloroethene	0.888	0.01124	<0.1	Yes	U	0.1	0.0603588	16	0.48	No	No
0015-H	A-0015H-033015-IA-008-OFC4	40.740506	-111.859957	4349	010	First Floor - Front Office	IA	NA	NA	3/30/2015	Tetrachloroethene	0.996	0.01958	<0.1	Yes	U	0.1	0.13271324	370	11	No	No
0015-H	A-0015H-033015-IA-007-BA1	40.740506	-111.859957	4349	009	First Floor - Bath Room	IA	NA	NA	3/30/2015	cis12Dichloroethene	0.645	0.3846	0.3846	No	NR	0.1	1.5237852	NE	NE	No	No
0015-H	A-0015H-033015-IA-007-BA1	40.740506	-111.859957	4349	009	First Floor - Bath Room	IA	NA	NA	3/30/2015	Trichloroethene	0.983	0.01094	<0.1	Yes	U	0.1	0.0587478	16	0.48	No	No
0015-H	A-0015H-033015-IA-007-BA1	40.740506	-111.859957	4349	009	First Floor - Bath Room	IA	NA	NA	3/30/2015	Tetrachloroethene	0.996	0.0154	<0.1	Yes	U	0.1	0.1043812	370	11	No	No
0015-H	A-0015H-033015-IA-005-OFC2	40.740506	-111.859957	4349	007	First Floor - West Office	IA	NA	NA	3/30/2015	cis12Dichloroethene	0.653	0.4593	0.4593	No	NR	0.1	1.8197466	NE	NE	No	No
0015-H	A-0015H-033015-IA-005-OFC2	40.740506	-111.859957	4349	007	First Floor - West Office	IA	NA	NA	3/30/2015	Trichloroethene	0.909	Area too low	<0.1	Yes	U	0.1	Area too low	16	0.48	No	No
0015-H	A-0015H-033015-IA-005-OFC2	40.740506	-111.859957	4349	007	First Floor - West Office	IA	NA	NA	3/30/2015	Tetrachloroethene	0.993	0.01857	<0.1	Yes	U	0.1	0.12586746	370	11	No	No
0015-H	A-0015H-033015-IA-002-SUN	40.740506	-111.859957	4349	004	First Floor - Sun Room - waiting area	IA	NA	NA	3/30/2015	cis12Dichloroethene	0.734	0.09061	<0.1	Yes	U	0.1	0.35899682	NE	NE	No	No
0015-H	A-0015H-033015-IA-002-SUN	40.740506	-111.859957	4349	004	First Floor - Sun Room - waiting area	IA	NA	NA	3/30/2015	Trichloroethene	0.905	0.01305	<0.1	Yes	U	0.1	0.0700785	16	0.48	No	No
0015-H	A-0015H-033015-IA-002-SUN	40.740506	-111.859957	4349	004	First Floor - Sun Room - waiting area	IA	NA	NA	3/30/2015	Tetrachloroethene	0.995	0.0143	<0.1	Yes	U	0.1	0.0969254	370	11	No	No
0015-H	A-0015H-033015-IA-015-CRA	40.740506	-111.859957	4349	017	Basement - Walk in Soil Floor Crawl Space (non-habitable space)	IA	NA	NA	3/30/2015	cis12Dichloroethene	0.671	0.2412	0.2412	No	NR	0.1	0.9556344	NE	NE	No	No
0015-H	A-0015H-033015-IA-015-CRA	40.740506	-111.859957	4349	017	Basement - Walk in Soil Floor Crawl Space (non-habitable space)	IA	NA	NA	3/30/2015	Trichloroethene	0.984	0.02851	<0.1	Yes	U	0.1	0.1530987	16	0.48	No	No
0015-H	A-0015H-033015-IA-015-CRA	40.740506	-111.859957	4349	017	Basement - Walk in Soil Floor Crawl Space (non-habitable space)	IA	NA	NA	3/30/2015	Tetrachloroethene	0.995	0.03065	<0.1	Yes	U	0.1	0.2077457	370	11	No	No
0015-H	A-0015H-033015-IA-006-OFC3	40.740506	-111.859957	4349	008	First Floor - East Office	IA	NA	NA	3/30/2015	cis12Dichloroethene	0.634	0.3456	0.3456	No	NR	0.1	1.3692672	NE	NE	No	No
0015-H	A-0015H-033015-IA-006-OFC3	40.740506	-111.859957	4349	008	First Floor - East Office	IA	NA	NA	3/30/2015	Trichloroethene	0.951	0.00756	<0.1	Yes	U	0.1	0.0405972	16	0.48	No	No
0015-H	A-0015H-033015-IA-006-OFC3	40.740506	-111.859957	4349	008	First Floor - East Office	IA	NA	NA	3/30/2015	Tetrachloroethene	0.991	0.01988	<0.1	Yes	U	0.1	0.13474664	370	11	No	No
0015-H	A-0015H-033015-IA-004-OFC1	40.740506	-111.859957	4349	006	First Floor - Back Office	IA	NA	NA	3/30/2015	cis12Dichloroethene	0.656	0.4673	0.4673	No	NR	0.1	1.8514426	NE	NE	No	No
0015-H	A-0015H-033015-IA-004-OFC1	40.740506	-111.859957	4349	006	First Floor - Back Office	IA	NA	NA	3/30/2015	Trichloroethene	0.989	0.01006	<0.1	Yes	U	0.1	0.0540222	16	0.48	No	No
0015-H	A-0015H-033015-IA-004-OFC1	40.740506	-111.859957	4349	006	First Floor - Back Office	IA	NA	NA	3/30/2015	Tetrachloroethene	0.994	0.02469	<0.1	Yes	U	0.1	0.16734882	370	11	No	No
0015-H	A-0015H-033015-IA-003-KIT	40.740506	-111.859957	4349	005	First Floor - Kitchen	IA	NA	NA	3/30/2015	cis12Dichloroethene	0.625	0.2969	0.2969	No	NR	0.1	1.1763178	NE	NE	No	No
0015-H	A-0015H-033015-IA-003-KIT	40.740506	-111.859957	4349	005	First Floor - Kitchen	IA	NA	NA	3/30/2015	Trichloroethene	0.99	0.00764	<0.1	Yes	U	0.1	0.0410268	16	0.48	No	No
0015-H	A-0015H-033015-IA-003-KIT	40.740506	-111.859957	4349	005	First Floor - Kitchen	IA	NA	NA	3/30/2015	Tetrachloroethene	0.995	0.01395	<0.1	Yes	U	0.1	0.0945531	370	11	No	No
0015-H	A-0015H-033015-IA-017E-OCL	40.740506	-111.859957	4349	023	Basement - Open Living-Dining-Kitchen	NP	-4.2	13:09	3/30/2015	cis12Dichloroethene	0.583	0.1045	0.1045	No	NR	0.1	0.414029	NE	NE	No	No
0015-H	A-0015H-033015-IA-017E-OCL	40.740506	-111.859957	4349	023	Basement - Open Living-Dining-Kitchen	NP	-4.2	13:09	3/30/2015	Trichloroethene	0.985	0.01389	<0.1	Yes	U	0.1	0.0745893	16	0.48	No	No
0015-H	A-0015H-033015-IA-017E-OCL	40.740506	-111.859957	4349	023	Basement - Open Living-Dining-Kitchen	NP	-4.2	13:09	3/30/2015	Tetrachloroethene	0.994	0.02042	<0.1	Yes	U	0.1	0.13840676	370	11	No	No
0015-H	A-0015H-033015-IA-017D-OCL	40.740506	-111.859957	4349	022	Basement - Open Living-Dining-Kitchen	NP	-4.2	13:01	3/30/2015	cis12Dichloroethene	0.728	0.1192	0.1192	Yes	=	0.1	0.4722704	NE	NE	No	No
0015-H	A-0015H-033015-IA-017D-OCL	40.740506	-111.859957	4349	022	Basement - Open Living-Dining-Kitchen	NP	-4.2	13:01	3/30/2015	Trichloroethene	0.684	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0015-H	A-0015H-033015-IA-017D-OCL	40.740506	-111.859957	4349	022	Basement - Open Living-Dining-Kitchen	NP	-4.2	13:01	3/30/2015	Tetrachloroethene	0.995	0.02177	<0.1	Yes	U	0.1	0.14755706	370	11	No	No
0015-H	A-0015H-033015-IA-017C-OCL	40.740506	-111.859957	4349	021	Basement - Open Living-Dining-Kitchen	NP	-4.3	12:53	3/30/2015	cis12Dichloroethene	0.647	0.1323	0.1323	No	NR	0.1	0.5241726	NE	NE	No	No
0015-H	A-0015H-033015-IA-017C-OCL	40.740506	-111.859957	4349	021	Basement - Open Living-Dining-Kitchen	NP	-4.3	12:53	3/30/2015	Trichloroethene	0.991	0.01638	<0.1	Yes	U	0.1	0.0879606	16	0.48	No	No
0015-H	A-0015H-033015-IA-017C-OCL	40.740506	-111.859957	4349	021	Basement - Open Living-Dining-Kitchen	NP	-4.3	12:53	3/30/2015	Tetrachloroethene	0.993	0.02304	<0.1	Yes	U	0.1	0.15616512	370	11	No	No
0015-H	A-0015H-033015-IA-017B-OCL	40.740506	-111.859957	4349	020	Basement - Open Living-Dining-Kitchen	NP	-3.4	12:45	3/30/2015	cis12Dichloroethene	0.689	0.1661	0.1661	No	NR	0.1	0.6580882	NE	NE	No	No
0015-H	A-0015H-033015-IA-017B-OCL	40.740506	-111.859957	4349	020	Basement - Open Living-Dining-Kitchen	NP	-3.4	12:45	3/30/2015	Trichloroethene	0.999	0.01804	<0.1	Yes	U	0.1	0.0968748	16	0.48	No	No
0015-H	A-0015H-033015-IA-017B-OCL	40.740506	-111.859957	4349	020	Basement - Open Living-Dining-Kitchen	NP	-3.4	12:45	3/30/2015	Tetrachloroethene	0.993	0.02241	<0.1	Yes	U	0.1	0.15189498	370	11	No	No
0015-H	A-0015H-033015-IA-017A-OCL	40.740506	-111.859957	4349	019	Basement - Open Living-Dining-Kitchen	NP	-6.2	12:37	3/30/2015	cis12Dichloroethene	0.683	0.3598	0.3598	No	NR	0.1	1.4255276	NE	NE	No	No
0015-H	A-0015H-033015-IA-017A-OCL	40.740506	-111.859957	4349	019	Basement - Open Living-Dining-Kitchen	NP	-6.2	12:37	3/30/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0015-H	A-0015H-033015-IA-017A-OCL	40.740506	-111.859957	4349	019	Basement - Open Living-Dining-Kitchen	NP	-6.2	12:37	3/30/2015	Tetrachloroethene	0.995	0.03181	<0.1	Yes	U	0.1	0.21560818	370	11	No	No
0015-H	A-0015H-033015-IA-001-OUT	40.740506	-111.859957	4349	003	Outdoor Ambient - Back Porch -West of Bldg	OA	NA	NA	3/30/2015	cis12Dichloroethene	0.945	0.01484	<0.1	Yes	U	0.1	0.05879608	NE	NE	No	No
0015-H	A-0015H-033015-IA-001-OUT	40.740506	-111.859957	4349	003	Outdoor Ambient - Back Porch -West of Bldg	OA	NA	NA	3/30/2015	Trichloroethene	0.995	0.01577	<0.1	Yes	U	0.1	0.0846849	16	0.48	No	No
0015-H	A-0015H-033015-IA-001-OUT	40.740506	-111.859957	4349	003	Outdoor Ambient - Back Porch -West of Bldg	OA	NA	NA	3/30/2015	Tetrachloroethene	0.996	0.01508	<0.1	Yes	U	0.1	0.10221224	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0015-H	A-0015H-033015-IA-018D-OCL	40.740506	-111.859957	4349	027	Basement - Open Living-Dining-Kitchen	PP	5.9	13:52	3/30/2015	cis12Dichloroethene	0.722	0.07143	<0.1	Yes	U	0.1	0.28300566	NE	NE	No	No
0015-H	A-0015H-033015-IA-018D-OCL	40.740506	-111.859957	4349	027	Basement - Open Living-Dining-Kitchen	PP	5.9	13:52	3/30/2015	Trichloroethene	0.973	0.01315	<0.1	Yes	U	0.1	0.0706155	16	0.48	No	No
0015-H	A-0015H-033015-IA-018D-OCL	40.740506	-111.859957	4349	027	Basement - Open Living-Dining-Kitchen	PP	5.9	13:52	3/30/2015	Tetrachloroethene	0.992	0.01774	<0.1	Yes	U	0.1	0.12024172	370	11	No	No
0015-H	A-0015H-033015-IA-018C-OCL	40.740506	-111.859957	4349	026	Basement - Open Living-Dining-Kitchen	PP	4.5	13:43	3/30/2015	cis12Dichloroethene	0.716	0.06579	<0.1	Yes	U	0.1	0.26065998	NE	NE	No	No
0015-H	A-0015H-033015-IA-018C-OCL	40.740506	-111.859957	4349	026	Basement - Open Living-Dining-Kitchen	PP	4.5	13:43	3/30/2015	Trichloroethene	0.951	0.00793	<0.1	Yes	U	0.1	0.0425841	16	0.48	No	No
0015-H	A-0015H-033015-IA-018C-OCL	40.740506	-111.859957	4349	026	Basement - Open Living-Dining-Kitchen	PP	4.5	13:43	3/30/2015	Tetrachloroethene	0.994	0.01581	<0.1	Yes	U	0.1	0.10716018	370	11	No	No
0015-H	A-0015H-033015-IA-018B-OCL	40.740506	-111.859957	4349	025	Basement - Open Living-Dining-Kitchen	PP	4.9	13:35	3/30/2015	cis12Dichloroethene	0.683	0.04212	<0.1	No	NR	0.1	0.16687944	NE	NE	No	No
0015-H	A-0015H-033015-IA-018B-OCL	40.740506	-111.859957	4349	025	Basement - Open Living-Dining-Kitchen	PP	4.9	13:35	3/30/2015	Trichloroethene	0.881	0.01301	<0.1	Yes	U	0.1	0.0698637	16	0.48	No	No
0015-H	A-0015H-033015-IA-018B-OCL	40.740506	-111.859957	4349	025	Basement - Open Living-Dining-Kitchen	PP	4.9	13:35	3/30/2015	Tetrachloroethene	0.993	0.0134	<0.1	Yes	U	0.1	0.0908252	370	11	No	No
0015-H	A-0015H-033015-IA-018A-OCL	40.740506	-111.859957	4349	024	Basement - Open Living-Dining-Kitchen	PP	5.9	13:26	3/30/2015	cis12Dichloroethene	0.669	0.1324	0.1324	No	NR	0.1	0.5245688	NE	NE	No	No
0015-H	A-0015H-033015-IA-018A-OCL	40.740506	-111.859957	4349	024	Basement - Open Living-Dining-Kitchen	PP	5.9	13:26	3/30/2015	Trichloroethene	0.988	0.02008	<0.1	Yes	U	0.1	0.1078296	16	0.48	No	No
0015-H	A-0015H-033015-IA-018A-OCL	40.740506	-111.859957	4349	024	Basement - Open Living-Dining-Kitchen	PP	5.9	13:26	3/30/2015	Tetrachloroethene	0.997	0.01861	<0.1	Yes	U	0.1	0.12613858	370	11	No	No
0015-H	A-0015H-033015-SG-001-4'	40.740459	-111.859989	4348	028	Soil Gas Sample - South Center Wall, between Driveway and Foundation	SG	NA	NA	3/30/2015	cis12Dichloroethene	0.574	0.1433	0.1433	No	NR	0.1	0.5677546	NE	NE	No	No
0015-H	A-0015H-033015-SG-001-4'	40.740459	-111.859989	4348	028	Soil Gas Sample - South Center Wall, between Driveway and Foundation	SG	NA	NA	3/30/2015	Trichloroethene	0.848	0.02549	<0.1	Yes	U	0.1	0.1368813	16	0.48	No	No
0015-H	A-0015H-033015-SG-001-4'	40.740459	-111.859989	4348	028	Soil Gas Sample - South Center Wall, between Driveway and Foundation	SG	NA	NA	3/30/2015	Tetrachloroethene	0.994	0.2092	0.2092	Yes	=	0.1	1.4179576	370	11	No	No
0016-H	A-0016H-012215-CCV	40.761442	-111.853533	4593	037	CCV - 5.0 ppb	CCV	NA	NA	1/22/2015	cis12Dichloroethene	0.999	3.871	3.871	Yes	=	0.1	15.336902	NA	NA	NA	NA
0016-H	A-0016H-012215-CCV	40.761442	-111.853533	4593	037	CCV - 5.0 ppb	CCV	NA	NA	1/22/2015	Trichloroethene	0.994	3.865	3.865	Yes	=	0.1	20.75505	NA	NA	NA	NA
0016-H	A-0016H-012215-CCV	40.761442	-111.853533	4593	037	CCV - 5.0 ppb	CCV	NA	NA	1/22/2015	Tetrachloroethene	0.995	3.921	3.921	Yes	=	0.1	26.576538	NA	NA	NA	NA
0016-H	A-0016H-012115-CCV	40.761442	-111.853533	4593	001	CCV- 5.0 ppb	CCV	NA	NA	1/21/2015	cis12Dichloroethene	1	5.822	5.822	Yes	=	0.1	23.066764	NA	NA	NA	NA
0016-H	A-0016H-012115-CCV	40.761442	-111.853533	4593	001	CCV- 5.0 ppb	CCV	NA	NA	1/21/2015	Trichloroethene	0.991	4.802	4.802	Yes	=	0.1	25.78674	NA	NA	NA	NA
0016-H	A-0016H-012115-CCV	40.761442	-111.853533	4593	001	CCV- 5.0 ppb	CCV	NA	NA	1/21/2015	Tetrachloroethene	0.995	5.064	5.064	Yes	=	0.1	34.323792	NA	NA	NA	NA
0016-H	A-0016H-012215-IA-011-2LL-E	40.761442	-111.853533	4593	022	2nd Floor-East End	IA	NA	NA	1/22/2015	cis12Dichloroethene	0.866	0.01036	<0.1	Yes	U	0.1	0.04104632	NE	NE	No	No
0016-H	A-0016H-012215-IA-011-2LL-E	40.761442	-111.853533	4593	022	2nd Floor-East End	IA	NA	NA	1/22/2015	Trichloroethene	0.925	0.01288	<0.1	Yes	U	0.1	0.0691656	16	0.48	No	No
0016-H	A-0016H-012215-IA-011-2LL-E	40.761442	-111.853533	4593	022	2nd Floor-East End	IA	NA	NA	1/22/2015	Tetrachloroethene	0.996	0.1211	0.1211	Yes	=	0.1	0.8208158	370	11	No	No
0016-H	A-0016H-012215-IA-010-2LL-W	40.761442	-111.853533	4593	021	2nd Floor-West End	IA	NA	NA	1/22/2015	cis12Dichloroethene	0.859	0.0464	<0.1	Yes	U	0.1	0.1838368	NE	NE	No	No
0016-H	A-0016H-012215-IA-010-2LL-W	40.761442	-111.853533	4593	021	2nd Floor-West End	IA	NA	NA	1/22/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0016-H	A-0016H-012215-IA-010-2LL-W	40.761442	-111.853533	4593	021	2nd Floor-West End	IA	NA	NA	1/22/2015	Tetrachloroethene	0.995	0.06334	<0.1	Yes	U	0.1	0.42931852	370	11	No	No
0016-H	A-0016H-012215-IA-009-BA2	40.761442	-111.853533	4593	018	Bathroom-2nd Floor	IA	NA	NA	1/22/2015	cis12Dichloroethene	0.797	0.04584	<0.1	Yes	U	0.1	0.18161808	NE	NE	No	No
0016-H	A-0016H-012215-IA-009-BA2	40.761442	-111.853533	4593	018	Bathroom-2nd Floor	IA	NA	NA	1/22/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0016-H	A-0016H-012215-IA-009-BA2	40.761442	-111.853533	4593	018	Bathroom-2nd Floor	IA	NA	NA	1/22/2015	Tetrachloroethene	0.996	0.02867	<0.1	Yes	U	0.1	0.19432526	370	11	No	No
0016-H	A-0016H-012215-IA-008-LAU	40.761442	-111.853533	4593	014	Laundry Room	IA	NA	NA	1/22/2015	cis12Dichloroethene	0.978	0.03472	<0.1	Yes	U	0.1	0.13756064	NE	NE	No	No
0016-H	A-0016H-012215-IA-008-LAU	40.761442	-111.853533	4593	014	Laundry Room	IA	NA	NA	1/22/2015	Trichloroethene	0.988	0.01349	<0.1	Yes	U	0.1	0.0724413	16	0.48	No	No
0016-H	A-0016H-012215-IA-008-LAU	40.761442	-111.853533	4593	014	Laundry Room	IA	NA	NA	1/22/2015	Tetrachloroethene	0.996	0.03757	<0.1	Yes	U	0.1	0.25464946	370	11	No	No
0016-H	A-0016H-012215-IA-007-BA1	40.761442	-111.853533	4593	013	Bathroom-1st Floor	IA	NA	NA	1/22/2015	cis12Dichloroethene	0.941	0.03626	<0.1	Yes	U	0.1	0.14366212	NE	NE	No	No
0016-H	A-0016H-012215-IA-007-BA1	40.761442	-111.853533	4593	013	Bathroom-1st Floor	IA	NA	NA	1/22/2015	Trichloroethene	0.981	0.01411	<0.1	Yes	U	0.1	0.0757707	16	0.48	No	No
0016-H	A-0016H-012215-IA-007-BA1	40.761442	-111.853533	4593	013	Bathroom-1st Floor	IA	NA	NA	1/22/2015	Tetrachloroethene	0.996	0.04455	<0.1	Yes	U	0.1	0.3019599	370	11	No	No
0016-H	A-0016H-012215-IA-006-LIV	40.761442	-111.853533	4593	009	Living/Family Room	IA	NA	NA	1/22/2015	cis12Dichloroethene	0.877	0.03995	<0.1	Yes	U	0.1	0.1582819	NE	NE	No	No
0016-H	A-0016H-012215-IA-006-LIV	40.761442	-111.853533	4593	009	Living/Family Room	IA	NA	NA	1/22/2015	Trichloroethene	0.867	0.01756	<0.1	Yes	U	0.1	0.0942972	16	0.48	No	No
0016-H	A-0016H-012215-IA-006-LIV	40.761442	-111.853533	4593	009	Living/Family Room	IA	NA	NA	1/22/2015	Tetrachloroethene	0.998	0.0233	<0.1	Yes	U	0.1	0.1579274	370	11	No	No
0016-H	A-0016H-012215-IA-005-DRF	40.761442	-111.853533	4593	008	Dining Room	IA	NA	NA	1/22/2015	cis12Dichloroethene	0.916	0.04259	<0.1	Yes	U	0.1	0.16874158	NE	NE	No	No
0016-H	A-0016H-012215-IA-005-DRF	40.761442	-111.853533	4593	008	Dining Room	IA	NA	NA	1/22/2015	Trichloroethene	0	Not found	<0.1	No	U	0.1	Not found	16	0.48	No	No
0016-H	A-0016H-012215-IA-005-DRF	40.761442	-111.853533	4593	008	Dining Room	IA	NA	NA	1/22/2015	Tetrachloroethene	0.998	0.02319	<0.1	Yes	U	0.1	0.15718182	370	11	No	No
0016-H	A-0016H-012215-IA-004-KIT	40.761442	-111.853533	4593	007	Kitchen	IA	NA	NA	1/22/2015	cis12Dichloroethene	0.896	0.04215	<0.1	Yes	U	0.1	0.1669983	NE	NE	No	No
0016-H	A-0016H-012215-IA-004-KIT	40.761442	-111.853533	4593	007	Kitchen	IA	NA	NA	1/22/2015	Trichloroethene	0.973	0.01549	<0.1	Yes	U	0.1	0.0831813	16	0.48	No	No
0016-H	A-0016H-012215-IA-004-KIT	40.761442	-111.853533	4593	007	Kitchen	IA	NA	NA	1/22/2015	Tetrachloroethene	0.995	0.02465	<0.1	Yes	U	0.1	0.1670777	370	11	No	No
0016-H	A-0016H-012215-IA-003-BAS-North	40.761442	-111.853533	4593	003	Basement -North	IA	NA	NA	1/22/2015	cis12Dichloroethene	0.58	0.01029	<0.1	No	NR	0.1	0.04076898	NE	NE	No	No
0016-H	A-0016H-012215-IA-003-BAS-North	40.761442	-111.853533	4593	003	Basement -North	IA	NA	NA	1/22/2015	Trichloroethene	0.977	0.01417	<0.1	Yes	U	0.1	0.0760929	16	0.48	No	No
0016-H	A-0016H-012215-IA-003-BAS-North	40.761442	-111.853533	4593	003	Basement -North	IA	NA	NA	1/22/2015	Tetrachloroethene	0.998	0.01316	<0.1	Yes	U	0.1	0.08919848	370	11	No	No
0016-H	A-0016H-012215-IA-002-COA	40.761442	-111.853533	4593	002	Basement Coal Bin	IA	NA	NA	1/22/2015	cis12Dichloroethene	0.956	0.04334	<0.1	Yes	U	0.1	0.17171308	NE	NE	No	No
0016-H	A-0016H-012215-IA-002-COA	40.761442	-111.853533	4593	002	Basement Coal Bin	IA	NA	NA	1/22/2015	Trichloroethene	0.985	0.02093	<0.1	Yes	U	0.1	0.1123941	16	0.48	No	No
0016-H	A-0016H-012215-IA-002-COA	40.761442	-111.853533	4593	002	Basement Coal Bin	IA	NA	NA	1/22/2015	Tetrachloroethene	0.998	0.03269	<0.1	Yes	U	0.1	0.22157282	370	11	No	No
0016-H	A-0016H-012215-IA-001-BAS-South	40.761442	-111.853533	4593	001	Basement-South	IA	NA	NA	1/22/2015	cis12Dichloroethene	0.994	0.07701	<0.1	Yes	U	0.1	0.30511362	NE	NE	No	No
0016-H	A-0016H-012215-IA-001-BAS-South	40.761442	-111.853533	4593	001	Basement-South	IA	NA	NA	1/22/2015	Trichloroethene	0.987	0.08043	<0.1	Yes	U	0.1	0.4319091	16	0.48	No	No
0016-H	A-0016H-012215-IA-001-BAS-South	40.761442	-111.853533	4593	001	Basement-South	IA	NA	NA	1/22/2015	Tetrachloroethene	0.995	0.05816	<0.1	Yes	U	0.1	0.39420848	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0016-H	A-0016H-012215-IA-012F-LIV	40.761442	-111.853533	4593	028	Living/Family Room	NP	-4.9	15:17	1/22/2015	cis12Dichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	NE	NE	No	No
0016-H	A-0016H-012215-IA-012F-LIV	40.761442	-111.853533	4593	028	Living/Family Room	NP	-4.9	15:17	1/22/2015	Trichloroethene	0.894	0.01328	<0.1	Yes	U	0.1	0.0713136	16	0.48	No	No
0016-H	A-0016H-012215-IA-012F-LIV	40.761442	-111.853533	4593	028	Living/Family Room	NP	-4.9	15:17	1/22/2015	Tetrachloroethene	0.994	0.0653	<0.1	Yes	U	0.1	0.4426034	370	11	No	No
0016-H	A-0016H-012215-IA-012E-LIV	40.761442	-111.853533	4593	027	Living/Family Room	NP	-5.0	15:12	1/22/2015	cis12Dichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	NE	NE	No	No
0016-H	A-0016H-012215-IA-012E-LIV	40.761442	-111.853533	4593	027	Living/Family Room	NP	-5.0	15:12	1/22/2015	Trichloroethene	0.97	0.01494	<0.1	Yes	U	0.1	0.0802278	16	0.48	No	No
0016-H	A-0016H-012215-IA-012E-LIV	40.761442	-111.853533	4593	027	Living/Family Room	NP	-5.0	15:12	1/22/2015	Tetrachloroethene	0.997	0.06729	<0.1	Yes	U	0.1	0.45609162	370	11	No	No
0016-H	A-0016H-012215-IA-012D-LIV	40.761442	-111.853533	4593	026	Living/Family Room	NP	-5.2	15:07	1/22/2015	cis12Dichloroethene	0.97	0.02567	<0.1	Yes	U	0.1	0.10170454	NE	NE	No	No
0016-H	A-0016H-012215-IA-012D-LIV	40.761442	-111.853533	4593	026	Living/Family Room	NP	-5.2	15:07	1/22/2015	Trichloroethene	0.937	0.01879	<0.1	Yes	U	0.1	0.1009023	16	0.48	No	No
0016-H	A-0016H-012215-IA-012D-LIV	40.761442	-111.853533	4593	026	Living/Family Room	NP	-5.2	15:07	1/22/2015	Tetrachloroethene	0.995	0.0732	<0.1	Yes	U	0.1	0.4961496	370	11	No	No
0016-H	A-0016H-012215-IA-012C-LIV	40.761442	-111.853533	4593	025	Living/Family Room	NP	-5.2	14:57	1/22/2015	cis12Dichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	NE	NE	No	No
0016-H	A-0016H-012215-IA-012C-LIV	40.761442	-111.853533	4593	025	Living/Family Room	NP	-5.2	14:57	1/22/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0016-H	A-0016H-012215-IA-012C-LIV	40.761442	-111.853533	4593	025	Living/Family Room	NP	-5.2	14:57	1/22/2015	Tetrachloroethene	0.997	0.06435	<0.1	Yes	U	0.1	0.4361643	370	11	No	No
0016-H	A-0016H-012215-IA-012B-LIV	40.761442	-111.853533	4593	024	Living/Family Room	NP	-5.2	14:47	1/22/2015	cis12Dichloroethene	0.809	0.02035	<0.1	Yes	U	0.1	0.0806267	NE	NE	No	No
0016-H	A-0016H-012215-IA-012B-LIV	40.761442	-111.853533	4593	024	Living/Family Room	NP	-5.2	14:47	1/22/2015	Trichloroethene	0.957	0.00924	<0.1	Yes	U	0.1	0.0496188	16	0.48	No	No
0016-H	A-0016H-012215-IA-012B-LIV	40.761442	-111.853533	4593	024	Living/Family Room	NP	-5.2	14:47	1/22/2015	Tetrachloroethene	0.995	0.07078	<0.1	Yes	U	0.1	0.47974684	370	11	No	No
0016-H	A-0016H-012215-IA-012A-LIV	40.761442	-111.853533	4593	023	Living/Family Room	NP	-5.2	14:37	1/22/2015	cis12Dichloroethene	0.859	0.01085	<0.1	Yes	U	0.1	0.0429877	NE	NE	No	No
0016-H	A-0016H-012215-IA-012A-LIV	40.761442	-111.853533	4593	023	Living/Family Room	NP	-5.2	14:37	1/22/2015	Trichloroethene	0.992	0.01381	<0.1	Yes	U	0.1	0.0741597	16	0.48	No	No
0016-H	A-0016H-012215-IA-012A-LIV	40.761442	-111.853533	4593	023	Living/Family Room	NP	-5.2	14:37	1/22/2015	Tetrachloroethene	0.997	0.04957	<0.1	Yes	U	0.1	0.33598546	370	11	No	No
0016-H	A-0016H-012215-OA-014-OUT	40.761442	-111.853533	4593	036	SE Corner of Driveway-Backyard	OA	NA	NA	1/22/2015	cis12Dichloroethene	0.55	0.0098	<0.1	No	NR	0.1	0.0388276	NE	NE	No	No
0016-H	A-0016H-012215-OA-014-OUT	40.761442	-111.853533	4593	036	SE Corner of Driveway-Backyard	OA	NA	NA	1/22/2015	Trichloroethene	0.895	0.01515	<0.1	Yes	U	0.1	0.0813555	16	0.48	No	No
0016-H	A-0016H-012215-OA-014-OUT	40.761442	-111.853533	4593	036	SE Corner of Driveway-Backyard	OA	NA	NA	1/22/2015	Tetrachloroethene	0.993	0.03274	<0.1	Yes	U	0.1	0.22191172	370	11	No	No
0016-H	A-0016H-012215-IA-013C-LIV	40.761442	-111.853533	4593	032	Living/Family Room	PP	7.4	15:48	1/22/2015	cis12Dichloroethene	0.769	0.0203	<0.1	Yes	U	0.1	0.0804286	NE	NE	No	No
0016-H	A-0016H-012215-IA-013C-LIV	40.761442	-111.853533	4593	032	Living/Family Room	PP	7.4	15:48	1/22/2015	Trichloroethene	0.97	0.02338	<0.1	Yes	U	0.1	0.1255506	16	0.48	No	No
0016-H	A-0016H-012215-IA-013C-LIV	40.761442	-111.853533	4593	032	Living/Family Room	PP	7.4	15:48	1/22/2015	Tetrachloroethene	0.995	0.0423	<0.1	Yes	U	0.1	0.2867094	370	11	No	No
0016-H	A-0016H-012215-IA-013B-LIV	40.761442	-111.853533	4593	031	Living/Family Room	PP	7.8	15:43	1/22/2015	cis12Dichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	NE	NE	No	No
0016-H	A-0016H-012215-IA-013B-LIV	40.761442	-111.853533	4593	031	Living/Family Room	PP	7.8	15:43	1/22/2015	Trichloroethene	0.965	0.02468	<0.1	Yes	U	0.1	0.1325316	16	0.48	No	No
0016-H	A-0016H-012215-IA-013B-LIV	40.761442	-111.853533	4593	031	Living/Family Room	PP	7.8	15:43	1/22/2015	Tetrachloroethene	0.995	0.03826	<0.1	Yes	U	0.1	0.25932628	370	11	No	No
0016-H	A-0016H-012215-IA-013A-LIV	40.761442	-111.853533	4593	029	Living/Family Room	PP	6.5	15:33	1/22/2015	cis12Dichloroethene	0.969	0.00901	<0.1	Yes	U	0.1	0.03569762	NE	NE	No	No
0016-H	A-0016H-012215-IA-013A-LIV	40.761442	-111.853533	4593	029	Living/Family Room	PP	6.5	15:33	1/22/2015	Trichloroethene	0.972	0.02185	<0.1	Yes	U	0.1	0.1173345	16	0.48	No	No
0016-H	A-0016H-012215-IA-013A-LIV	40.761442	-111.853533	4593	029	Living/Family Room	PP	6.5	15:33	1/22/2015	Tetrachloroethene	0.994	0.02744	<0.1	Yes	U	0.1	0.18598832	370	11	No	No
0016-H	A-0016H-012215-SG-001-06'	40.761417	-111.853661	4595	035	SW Corner of House	SG	NA	NA	1/22/2015	cis12Dichloroethene	0.868	0.04298	<0.1	Yes	U	0.1	0.17028676	NE	NE	No	No
0016-H	A-0016H-012215-SG-001-06'	40.761417	-111.853661	4595	035	SW Corner of House	SG	NA	NA	1/22/2015	Trichloroethene	0.927	0.02699	<0.1	Yes	U	0.1	0.1449363	16	0.48	No	No
0016-H	A-0016H-012215-SG-001-06'	40.761417	-111.853661	4595	035	SW Corner of House	SG	NA	NA	1/22/2015	Tetrachloroethene	0.993	0.1024	0.1024	Yes	=	0.1	0.6940672	370	11	No	No
0016-H	A-0016H-012215-SG-001-04'	40.761417	-111.853661	4595	034	SW Corner of House	SG	NA	NA	1/22/2015	cis12Dichloroethene	0.842	0.0505	<0.1	Yes	U	0.1	0.200081	NE	NE	No	No
0016-H	A-0016H-012215-SG-001-04'	40.761417	-111.853661	4595	034	SW Corner of House	SG	NA	NA	1/22/2015	Trichloroethene	0.91	0.01682	<0.1	Yes	U	0.1	0.0903234	16	0.48	No	No
0016-H	A-0016H-012215-SG-001-04'	40.761417	-111.853661	4595	034	SW Corner of House	SG	NA	NA	1/22/2015	Tetrachloroethene	0.994	0.149	0.149	Yes	=	0.1	1.009922	370	11	No	No
0017-H	A-0017H-011415-CCV	40.751067	-111.858819	4416	003	CCV - 1.0 ppb	CCV	NA	NA	1/14/2015	cis12Dichloroethene	0.993	1.065	1.065	Yes	=	0.1	4.21953	NA	NA	NA	NA
0017-H	A-0017H-011415-CCV	40.751067	-111.858819	4416	003	CCV - 1.0 ppb	CCV	NA	NA	1/14/2015	Trichloroethene	0.998	1.307	1.307	Yes	=	0.1	7.01859	NA	NA	NA	NA
0017-H	A-0017H-011415-CCV	40.751067	-111.858819	4416	003	CCV - 1.0 ppb	CCV	NA	NA	1/14/2015	Tetrachloroethene	0.994	1.567	1.567	Yes	=	0.1	10.621126	NA	NA	NA	NA
0017-H	A-0017H-011415-CCV	40.751067	-111.858819	4416	002	CCV - 5.0 ppb	CCV	NA	NA	1/14/2015	cis12Dichloroethene	0.991	4.97	4.97	Yes	=	0.1	19.69114	NA	NA	NA	NA
0017-H	A-0017H-011415-CCV	40.751067	-111.858819	4416	002	CCV - 5.0 ppb	CCV	NA	NA	1/14/2015	Trichloroethene	0.998	5.727	5.727	Yes	=	0.1	30.75399	NA	NA	NA	NA
0017-H	A-0017H-011415-CCV	40.751067	-111.858819	4416	002	CCV - 5.0 ppb	CCV	NA	NA	1/14/2015	Tetrachloroethene	0.994	5.769	5.769	Yes	=	0.1	39.102282	NA	NA	NA	NA
0017-H	A-0017H-011415-CCV	40.751067	-111.858819	4416	001	CCV - 1.0 ppb	CCV	NA	NA	1/14/2015	cis12Dichloroethene	0.994	1.608	1.608	Yes	=	0.1	6.370896	NA	NA	NA	NA
0017-H	A-0017H-011415-CCV	40.751067	-111.858819	4416	001	CCV - 1.0 ppb	CCV	NA	NA	1/14/2015	Trichloroethene	0.998	1.863	1.863	Yes	=	0.1	10.00431	NA	NA	NA	NA
0017-H	A-0017H-011415-CCV	40.751067	-111.858819	4416	001	CCV - 1.0 ppb	CCV	NA	NA	1/14/2015	Tetrachloroethene	0.995	2.021	2.021	Yes	=	0.1	13.698338	NA	NA	NA	NA
0017-H	A-0017H-011415-IA012_CAV	40.751067	-111.858819	4416	015	Wall Cavity - Water valve access point	IA	NA	NA	1/14/2015	cis12Dichloroethene	0.983	0.03916	<0.1	Yes	U	0.1	0.15515192	NE	NE	No	No
0017-H	A-0017H-011415-IA012_CAV	40.751067	-111.858819	4416	015	Wall Cavity - Water valve access point	IA	NA	NA	1/14/2015	Trichloroethene	0.999	0.03549	<0.1	Yes	U	0.1	0.1905813	16	0.48	No	No
0017-H	A-0017H-011415-IA012_CAV	40.751067	-111.858819	4416	015	Wall Cavity - Water valve access point	IA	NA	NA	1/14/2015	Tetrachloroethene	0.994	0.1889	0.1889	Yes	=	0.1	1.2803642	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0017-H	A-0017H-011415-IA011_STO	40.751067	-111.858819	4416	014	Storage Room	IA	NA	NA	1/14/2015	cis12Dichloroethene	0.801	0.09192	<0.1	Yes	U	0.1	0.36418704	NE	NE	No	No
0017-H	A-0017H-011415-IA011_STO	40.751067	-111.858819	4416	014	Storage Room	IA	NA	NA	1/14/2015	Trichloroethene	0.993	0.04938	<0.1	Yes	U	0.1	0.2651706	16	0.48	No	No
0017-H	A-0017H-011415-IA011_STO	40.751067	-111.858819	4416	014	Storage Room	IA	NA	NA	1/14/2015	Tetrachloroethene	0.995	0.7944	0.7944	Yes	=	0.1	5.3844432	370	11	No	No
0017-H	A-0017H-011415-IA010_WIC	40.751067	-111.858819	4416	013	Utility Closet	IA	NA	NA	1/14/2015	cis12Dichloroethene	0.794	0.09998	<0.1	Yes	U	0.1	0.39612076	NE	NE	No	No
0017-H	A-0017H-011415-IA010_WIC	40.751067	-111.858819	4416	013	Utility Closet	IA	NA	NA	1/14/2015	Trichloroethene	0.99	0.04982	<0.1	Yes	U	0.1	0.2675334	16	0.48	No	No
0017-H	A-0017H-011415-IA010_WIC	40.751067	-111.858819	4416	013	Utility Closet	IA	NA	NA	1/14/2015	Tetrachloroethene	0.995	0.9262	0.9262	Yes	=	0.1	6.2777836	370	11	No	No
0017-H	A-0017H-011415-IA009_SUMP	40.751067	-111.858819	4416	012	Enclosed Sump	IA	NA	NA	1/14/2015	cis12Dichloroethene	0.883	0.1085	0.1085	Yes	=	0.1	0.429877	NE	NE	No	No
0017-H	A-0017H-011415-IA009_SUMP	40.751067	-111.858819	4416	012	Enclosed Sump	IA	NA	NA	1/14/2015	Trichloroethene	0.999	1.964	1.964	Yes	=	0.1	10.54668	16	0.48	Yes	NH
0017-H	A-0017H-011415-IA009_SUMP	40.751067	-111.858819	4416	012	Enclosed Sump	IA	NA	NA	1/14/2015	Tetrachloroethene	0.994	2.988	2.988	Yes	=	0.1	20.252664	370	11	Yes	NH
0017-H	A-0017H-011415-IA008_PLA	40.751067	-111.858819	4416	011	Basement Playroom	IA	NA	NA	1/14/2015	cis12Dichloroethene	0.936	0.09176	<0.1	Yes	U	0.1	0.36355312	NE	NE	No	No
0017-H	A-0017H-011415-IA008_PLA	40.751067	-111.858819	4416	011	Basement Playroom	IA	NA	NA	1/14/2015	Trichloroethene	0.994	0.0541	<0.1	Yes	U	0.1	0.290517	16	0.48	No	No
0017-H	A-0017H-011415-IA008_PLA	40.751067	-111.858819	4416	011	Basement Playroom	IA	NA	NA	1/14/2015	Tetrachloroethene	0.994	0.8943	0.8943	Yes	=	0.1	6.0615654	370	11	No	No
0017-H	A-0017H-011415-IA007_MUD	40.751067	-111.858819	4416	010	Mud Room	IA	NA	NA	1/14/2015	cis12Dichloroethene	0.855	0.1567	0.1567	Yes	=	0.1	0.6208454	NE	NE	No	No
0017-H	A-0017H-011415-IA007_MUD	40.751067	-111.858819	4416	010	Mud Room	IA	NA	NA	1/14/2015	Trichloroethene	1	0.05771	<0.1	Yes	U	0.1	0.3099027	16	0.48	No	No
0017-H	A-0017H-011415-IA007_MUD	40.751067	-111.858819	4416	010	Mud Room	IA	NA	NA	1/14/2015	Tetrachloroethene	0.994	0.7253	0.7253	Yes	=	0.1	4.9160834	370	11	No	No
0017-H	A-0017H-011415-IA006_BA1	40.751067	-111.858819	4416	009	Bathroom	IA	NA	NA	1/14/2015	cis12Dichloroethene	0.802	0.2183	0.2183	Yes	=	0.1	0.8649046	NE	NE	No	No
0017-H	A-0017H-011415-IA006_BA1	40.751067	-111.858819	4416	009	Bathroom	IA	NA	NA	1/14/2015	Trichloroethene	0.986	0.0644	<0.1	Yes	U	0.1	0.345828	16	0.48	No	No
0017-H	A-0017H-011415-IA006_BA1	40.751067	-111.858819	4416	009	Bathroom	IA	NA	NA	1/14/2015	Tetrachloroethene	0.994	0.7265	0.7265	Yes	=	0.1	4.924217	370	11	No	No
0017-H	A-0017H-011415-IA005_MBR	40.751067	-111.858819	4416	008	Master Bedroom	IA	NA	NA	1/14/2015	cis12Dichloroethene	0.67	0.4485	0.4485	No	NR	0.1	1.776957	NE	NE	No	No
0017-H	A-0017H-011415-IA005_MBR	40.751067	-111.858819	4416	008	Master Bedroom	IA	NA	NA	1/14/2015	Trichloroethene	0.996	0.05604	<0.1	Yes	U	0.1	0.3009348	16	0.48	No	No
0017-H	A-0017H-011415-IA005_MBR	40.751067	-111.858819	4416	008	Master Bedroom	IA	NA	NA	1/14/2015	Tetrachloroethene	0.994	0.7205	0.7205	Yes	=	0.1	4.883549	370	11	No	No
0017-H	A-0017H-011415-IA004_BR1	40.751067	-111.858819	4416	007	Children's Room	IA	NA	NA	1/14/2015	cis12Dichloroethene	0.851	0.2195	0.2195	Yes	=	0.1	0.869659	NE	NE	No	No
0017-H	A-0017H-011415-IA004_BR1	40.751067	-111.858819	4416	007	Children's Room	IA	NA	NA	1/14/2015	Trichloroethene	0.985	0.06142	<0.1	Yes	U	0.1	0.3298254	16	0.48	No	No
0017-H	A-0017H-011415-IA004_BR1	40.751067	-111.858819	4416	007	Children's Room	IA	NA	NA	1/14/2015	Tetrachloroethene	0.994	0.7089	0.7089	Yes	=	0.1	4.8049242	370	11	No	No
0017-H	A-0017H-011415-IA003_KIT	40.751067	-111.858819	4416	006	Kitchen	IA	NA	NA	1/14/2015	cis12Dichloroethene	0.84	0.193	0.193	Yes	=	0.1	0.764666	NE	NE	No	No
0017-H	A-0017H-011415-IA003_KIT	40.751067	-111.858819	4416	006	Kitchen	IA	NA	NA	1/14/2015	Trichloroethene	1	0.0461	<0.1	Yes	U	0.1	0.247557	16	0.48	No	No
0017-H	A-0017H-011415-IA003_KIT	40.751067	-111.858819	4416	006	Kitchen	IA	NA	NA	1/14/2015	Tetrachloroethene	0.994	0.7448	0.7448	Yes	=	0.1	5.0482544	370	11	No	No
0017-H	A-0017H-011415-IA002_LIV	40.751067	-111.858819	4416	005	Living Room	IA	NA	NA	1/14/2015	cis12Dichloroethene	0.836	0.1945	0.1945	Yes	=	0.1	0.770609	NE	NE	No	No
0017-H	A-0017H-011415-IA002_LIV	40.751067	-111.858819	4416	005	Living Room	IA	NA	NA	1/14/2015	Trichloroethene	0.992	0.03504	<0.1	Yes	U	0.1	0.1881648	16	0.48	No	No
0017-H	A-0017H-011415-IA002_LIV	40.751067	-111.858819	4416	005	Living Room	IA	NA	NA	1/14/2015	Tetrachloroethene	0.996	0.691	0.691	Yes	=	0.1	4.683598	370	11	No	No
0017-H	A-0017H-011415-IA013J_BAS	40.751067	-111.858819	4416	025	Basement, Near Laundry	NP	-5.0	14:40	1/14/2015	cis12Dichloroethene	0.99	0.04693	<0.1	Yes	U	0.1	0.18593666	NE	NE	No	No
0017-H	A-0017H-011415-IA013J_BAS	40.751067	-111.858819	4416	025	Basement, Near Laundry	NP	-5.0	14:40	1/14/2015	Trichloroethene	0.993	0.04725	<0.1	Yes	U	0.1	0.2537325	16	0.48	No	No
0017-H	A-0017H-011415-IA013J_BAS	40.751067	-111.858819	4416	025	Basement, Near Laundry	NP	-5.0	14:40	1/14/2015	Tetrachloroethene	0.995	0.576	0.576	Yes	=	0.1	3.904128	370	11	No	No
0017-H	A-0017H-011415-IA013I_BAS	40.751067	-111.858819	4416	024	Basement, Near Laundry	NP	-5.0	14:30	1/14/2015	cis12Dichloroethene	0.766	0.00456	<0.1	Yes	U	0.1	0.01806672	NE	NE	No	No
0017-H	A-0017H-011415-IA013I_BAS	40.751067	-111.858819	4416	024	Basement, Near Laundry	NP	-5.0	14:30	1/14/2015	Trichloroethene	0.98	0.04639	<0.1	Yes	U	0.1	0.2491143	16	0.48	No	No
0017-H	A-0017H-011415-IA013I_BAS	40.751067	-111.858819	4416	024	Basement, Near Laundry	NP	-5.0	14:30	1/14/2015	Tetrachloroethene	0.995	0.6536	0.6536	Yes	=	0.1	4.4301008	370	11	No	No
0017-H	A-0017H-011415-IA013H_BAS	40.751067	-111.858819	4416	023	Basement, Near Laundry	NP	-4.5	14:15	1/14/2015	cis12Dichloroethene	0.968	0.04517	<0.1	Yes	U	0.1	0.17896354	NE	NE	No	No
0017-H	A-0017H-011415-IA013H_BAS	40.751067	-111.858819	4416	023	Basement, Near Laundry	NP	-4.5	14:15	1/14/2015	Trichloroethene	0.996	0.05285	<0.1	Yes	U	0.1	0.2838045	16	0.48	No	No
0017-H	A-0017H-011415-IA013H_BAS	40.751067	-111.858819	4416	023	Basement, Near Laundry	NP	-4.5	14:15	1/14/2015	Tetrachloroethene	0.995	0.608	0.608	Yes	=	0.1	4.121024	370	11	No	No
0017-H	A-0017H-011415-IA013G_BAS	40.751067	-111.858819	4416	022	Basement, Near Laundry	NP	-5.2	14:10	1/14/2015	cis12Dichloroethene	0.945	0.06082	<0.1	Yes	U	0.1	0.24096884	NE	NE	No	No
0017-H	A-0017H-011415-IA013G_BAS	40.751067	-111.858819	4416	022	Basement, Near Laundry	NP	-5.2	14:10	1/14/2015	Trichloroethene	0.995	0.05417	<0.1	Yes	U	0.1	0.2908929	16	0.48	No	No
0017-H	A-0017H-011415-IA013G_BAS	40.751067	-111.858819	4416	022	Basement, Near Laundry	NP	-5.2	14:10	1/14/2015	Tetrachloroethene	0.994	0.6358	0.6358	Yes	=	0.1	4.3094524	370	11	No	No
0017-H	A-0017H-011415-IA013F_BAS	40.751067	-111.858819	4416	021	Basement, Near Laundry	NP	-5.0	14:00	1/14/2015	cis12Dichloroethene	0.885	0.04958	<0.1	Yes	U	0.1	0.19643596	NE	NE	No	No
0017-H	A-0017H-011415-IA013F_BAS	40.751067	-111.858819	4416	021	Basement, Near Laundry	NP	-5.0	14:00	1/14/2015	Trichloroethene	0.988	0.05837	<0.1	Yes	U	0.1	0.3134469	16	0.48	No	No
0017-H	A-0017H-011415-IA013F_BAS	40.751067	-111.858819	4416	021	Basement, Near Laundry	NP	-5.0	14:00	1/14/2015	Tetrachloroethene	0.994	0.6801	0.6801	Yes	=	0.1	4.6097178	370	11	No	No
0017-H	A-0017H-011415-IA013E_BAS	40.751067	-111.858819	4416	020	Basement, Near Laundry	NP	-5.0	13:50	1/14/2015	cis12Dichloroethene	0.979	0.04794	<0.1	Yes	U	0.1	0.18993828	NE	NE	No	No
0017-H	A-0017H-011415-IA013E_BAS	40.751067	-111.858819	4416	020	Basement, Near Laundry	NP	-5.0	13:50	1/14/2015	Trichloroethene	0.997	0.03891	<0.1	Yes	U	0.1	0.2089467	16	0.48	No	No
0017-H	A-0017H-011415-IA013E_BAS	40.751067	-111.858819	4416	020	Basement, Near Laundry	NP	-5.0	13:50	1/14/2015	Tetrachloroethene	0.995	0.6216	0.6216	Yes	=	0.1	4.2132048	370	11	No	No
0017-H	A-0017H-011415-IA013D_BAS	40.751067	-111.858819	4416	019	Basement, Near Laundry	NP	-4.7	13:45	1/14/2015	cis12Dichloroethene	0.952	0.04199	<0.1	Yes	U	0.1	0.16636438	NE	NE	No	No
0017-H	A-0017H-011415-IA013D_BAS	40.751067	-111.858819	4416	019	Basement, Near Laundry	NP	-4.7	13:45	1/14/2015	Trichloroethene	0.998	0.05019	<0.1	Yes	U	0.1	0.2695203	16	0.48	No	No
0017-H	A-0017H-011415-IA013D_BAS	40.751067	-111.858819	4416	019	Basement, Near Laundry	NP	-4.7	13:45	1/14/2015	Tetrachloroethene	0.995	0.6419	0.6419	Yes	=	0.1	4.3507982	370	11	No	No
0017-H	A-0017H-011415-IA013C_BAS	40.751067	-111.858819	4416	018	Basement, Near Laundry	NP	-5.2	13:35	1/14/2015	cis12Dichloroethene	0.955	0.06559	<0.1	Yes	U	0.1	0.25986758	NE	NE	No	No
0017-H	A-0017H-011415-IA013C_BAS	40.751067	-111.858819	4416	018	Basement, Near Laundry	NP	-5.2	13:35	1/14/2015	Trichloroethene	0.998	0.05202	<0.1	Yes	U	0.1	0.2793474	16	0.48	No	No
0017-H	A-0017H-011415-IA013C_BAS	40.751067	-111.858819	4416	018	Basement, Near Laundry	NP	-5.2	13:35	1/14/2015	Tetrachloroethene	0.995	0.7036	0.7036	Yes	=	0.1	4.7690008	370	11	No	No
0017-H	A-0017H-011415-IA013B_BAS	40.751067	-111.858819	4416	017	Basement, Near Laundry	NP	-5.0	13:25	1/14/2015	cis12Dichloroethene	0.954	0.07106	<0.1	Yes	U	0.1	0.28153972	NE	NE	No	No
0017-H	A-0017H-011415-IA013B_BAS	40.751067	-111.858819	4416	017	Basement, Near Laundry	NP	-5.0	13:25	1/14/2015	Trichloroethene	0.988	0.05457	<0.1	Yes	U	0.1	0.2930409	16	0.48	No	No
0017-H	A-0017H-011415-IA013B_BAS	40.751067	-111.858819	4416	017	Basement, Near Laundry	NP	-5.0	13:25	1/14/2015	Tetrachloroethene	0.995	0.7463	0.7463	Yes	=	0.1	5.0584214	370	11	No	No
0017-H	A-0017H-011415-IA013A_BAS	40.751067	-111.858819	4416	016	Basement, Near Laundry	NP	-4.7	13:20	1/14/2015	cis12Dichloroethene	0.988	0.07366	<0.1	Yes	U	0.1	0.29184092	NE	NE	No	No
0017-H	A-0017H-011415-IA013A_BAS	40.751067	-111.858819	4416	016	Basement, Near Laundry	NP	-4.7	13:20	1/14/2015	Trichloroethene	0.99	0.04908	<0.1	Yes	U	0.1	0.2635596	16	0.48	No	No
0017-H	A-0017H-011415-IA013A_BAS	40.751067	-111.858819	4416	016	Basement, Near Laundry	NP	-4.7	13:20	1/14/2015	Tetrachloroethene	0.995	0.76	0.76	Yes	=	0.1	5.15128	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0017-H	A-0017H-011415-OA001_OUT	40.751067	-111.858819	4416	004	East of front steps on gravel walk	OA	NA	NA	1/14/2015	cis12Dichloroethene	0.974	0.03139	<0.1	Yes	U	0.1	0.12436718	NE	NE	No	No
0017-H	A-0017H-011415-OA001_OUT	40.751067	-111.858819	4416	004	East of front steps on gravel walk	OA	NA	NA	1/14/2015	Trichloroethene	0.997	0.02569	<0.1	Yes	U	0.1	0.1379553	16	0.48	No	No
0017-H	A-0017H-011415-OA001_OUT	40.751067	-111.858819	4416	004	East of front steps on gravel walk	OA	NA	NA	1/14/2015	Tetrachloroethene	0.994	0.0288	<0.1	Yes	U	0.1	0.1952064	370	11	No	No
0017-H	A-0017H-011415-IA014J_BAS	40.751067	-111.858819	4416	035	Basement, Near Laundry	PP	4.9	16:15	1/14/2015	cis12Dichloroethene	0.948	0.03458	<0.1	Yes	U	0.1	0.13700596	NE	NE	No	No
0017-H	A-0017H-011415-IA014J_BAS	40.751067	-111.858819	4416	035	Basement, Near Laundry	PP	4.9	16:15	1/14/2015	Trichloroethene	0.997	0.03774	<0.1	Yes	U	0.1	0.2026638	16	0.48	No	No
0017-H	A-0017H-011415-IA014J_BAS	40.751067	-111.858819	4416	035	Basement, Near Laundry	PP	4.9	16:15	1/14/2015	Tetrachloroethene	0.994	0.1081	0.1081	Yes	=	0.1	0.7327018	370	11	No	No
0017-H	A-0017H-011415-IA014I_BAS	40.751067	-111.858819	4416	034	Basement, Near Laundry	PP	5.3	16:05	1/14/2015	cis12Dichloroethene	0.952	0.03924	<0.1	Yes	U	0.1	0.15546888	NE	NE	No	No
0017-H	A-0017H-011415-IA014I_BAS	40.751067	-111.858819	4416	034	Basement, Near Laundry	PP	5.3	16:05	1/14/2015	Trichloroethene	0.979	0.03322	<0.1	Yes	U	0.1	0.1783914	16	0.48	No	No
0017-H	A-0017H-011415-IA014I_BAS	40.751067	-111.858819	4416	034	Basement, Near Laundry	PP	5.3	16:05	1/14/2015	Tetrachloroethene	0.997	0.09779	<0.1	Yes	U	0.1	0.66282062	370	11	No	No
0017-H	A-0017H-011415-IA014H_BAS	40.751067	-111.858819	4416	033	Basement, Near Laundry	PP	5.1	15:50	1/14/2015	cis12Dichloroethene	0.727	0.00587	<0.1	Yes	U	0.1	0.02325694	NE	NE	No	No
0017-H	A-0017H-011415-IA014H_BAS	40.751067	-111.858819	4416	033	Basement, Near Laundry	PP	5.1	15:50	1/14/2015	Trichloroethene	0.994	0.0394	<0.1	Yes	U	0.1	0.211578	16	0.48	No	No
0017-H	A-0017H-011415-IA014H_BAS	40.751067	-111.858819	4416	033	Basement, Near Laundry	PP	5.1	15:50	1/14/2015	Tetrachloroethene	0.996	0.118	0.118	Yes	=	0.1	0.799804	370	11	No	No
0017-H	A-0017H-011415-IA014G_BAS	40.751067	-111.858819	4416	032	Basement, Near Laundry	PP	5.1	15:45	1/14/2015	cis12Dichloroethene	0.955	0.03574	<0.1	Yes	U	0.1	0.14160188	NE	NE	No	No
0017-H	A-0017H-011415-IA014G_BAS	40.751067	-111.858819	4416	032	Basement, Near Laundry	PP	5.1	15:45	1/14/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0017-H	A-0017H-011415-IA014G_BAS	40.751067	-111.858819	4416	032	Basement, Near Laundry	PP	5.1	15:45	1/14/2015	Tetrachloroethene	0.996	0.1376	0.1376	Yes	=	0.1	0.9326528	370	11	No	No
0017-H	A-0017H-011415-IA014F_BAS	40.751067	-111.858819	4416	031	Basement, Near Laundry	PP	5.6	19:40	1/14/2015	cis12Dichloroethene	0.967	0.03694	<0.1	Yes	U	0.1	0.14635628	NE	NE	No	No
0017-H	A-0017H-011415-IA014F_BAS	40.751067	-111.858819	4416	031	Basement, Near Laundry	PP	5.8	21:40	1/14/2015	Trichloroethene	0.997	0.05018	<0.1	Yes	U	0.1	0.2694666	16	0.48	No	No
0017-H	A-0017H-011415-IA014F_BAS	40.751067	-111.858819	4416	031	Basement, Near Laundry	PP	5.9	22:40	1/14/2015	Tetrachloroethene	0.996	0.1284	0.1284	Yes	=	0.1	0.8702952	370	11	No	No
0017-H	A-0017H-011415-IA014E_BAS	40.751067	-111.858819	4416	030	Basement, Near Laundry	PP	5.0	15:30	1/14/2015	cis12Dichloroethene	0.893	0.04697	<0.1	Yes	U	0.1	0.18609514	NE	NE	No	No
0017-H	A-0017H-011415-IA014E_BAS	40.751067	-111.858819	4416	030	Basement, Near Laundry	PP	5.0	15:30	1/14/2015	Trichloroethene	0.995	0.03912	<0.1	Yes	U	0.1	0.2100744	16	0.48	No	No
0017-H	A-0017H-011415-IA014E_BAS	40.751067	-111.858819	4416	030	Basement, Near Laundry	PP	5.0	15:30	1/14/2015	Tetrachloroethene	0.994	0.1765	0.1765	Yes	=	0.1	1.196317	370	11	No	No
0017-H	A-0017H-011415-IA014D_BAS	40.751067	-111.858819	4416	029	Basement, Near Laundry	PP	4.8	15:25	1/14/2015	cis12Dichloroethene	0.927	0.04258	<0.1	Yes	U	0.1	0.16870196	NE	NE	No	No
0017-H	A-0017H-011415-IA014D_BAS	40.751067	-111.858819	4416	029	Basement, Near Laundry	PP	4.8	15:25	1/14/2015	Trichloroethene	0.995	0.03763	<0.1	Yes	U	0.1	0.2020731	16	0.48	No	No
0017-H	A-0017H-011415-IA014D_BAS	40.751067	-111.858819	4416	029	Basement, Near Laundry	PP	4.8	15:25	1/14/2015	Tetrachloroethene	0.995	0.2746	0.2746	Yes	=	0.1	1.8612388	370	11	No	No
0017-H	A-0017H-011415-IA014C_BAS	40.751067	-111.858819	4416	028	Basement, Near Laundry	PP	5.2	15:20	1/14/2015	cis12Dichloroethene	0.943	0.06045	<0.1	Yes	U	0.1	0.2395029	NE	NE	No	No
0017-H	A-0017H-011415-IA014C_BAS	40.751067	-111.858819	4416	028	Basement, Near Laundry	PP	5.2	15:20	1/14/2015	Trichloroethene	0.912	0.03625	<0.1	Yes	U	0.1	0.1946625	16	0.48	No	No
0017-H	A-0017H-011415-IA014C_BAS	40.751067	-111.858819	4416	028	Basement, Near Laundry	PP	5.2	15:20	1/14/2015	Tetrachloroethene	0.995	0.2454	0.2454	Yes	=	0.1	1.6633212	370	11	No	No
0017-H	A-0017H-011415-IA014B_BAS	40.751067	-111.858819	4416	027	Basement, Near Laundry	PP	4.7	15:10	1/14/2015	cis12Dichloroethene	0.967	0.06341	<0.1	Yes	U	0.1	0.25123042	NE	NE	No	No
0017-H	A-0017H-011415-IA014B_BAS	40.751067	-111.858819	4416	027	Basement, Near Laundry	PP	4.7	15:10	1/14/2015	Trichloroethene	0.97	0.02919	<0.1	Yes	U	0.1	0.1567503	16	0.48	No	No
0017-H	A-0017H-011415-IA014B_BAS	40.751067	-111.858819	4416	027	Basement, Near Laundry	PP	4.7	15:10	1/14/2015	Tetrachloroethene	0.995	0.3689	0.3689	Yes	=	0.1	2.5004042	370	11	No	No
0017-H	A-0017H-011415-IA014A_BAS	40.751067	-111.858819	4416	026	Basement, Near Laundry	PP	5.1	15:00	1/14/2015	cis12Dichloroethene	0.979	0.05577	<0.1	Yes	U	0.1	0.22096074	NE	NE	No	No
0017-H	A-0017H-011415-IA014A_BAS	40.751067	-111.858819	4416	026	Basement, Near Laundry	PP	5.1	15:00	1/14/2015	Trichloroethene	0.998	0.05658	<0.1	Yes	U	0.1	0.3038346	16	0.48	No	No
0017-H	A-0017H-011415-IA014A_BAS	40.751067	-111.858819	4416	026	Basement, Near Laundry	PP	5.1	15:00	1/14/2015	Tetrachloroethene	0.994	0.6827	0.6827	Yes	=	0.1	4.6273406	370	11	No	No
0017-H	A-0017H-011415-SG-001_04'	40.750975	111.858781	4416	036	Southeast corner of house	SG	NA	NA	1/14/2015	cis12Dichloroethene	0.897	0.06538	<0.1	Yes	U	0.1	0.25903556	NE	NE	No	No
0017-H	A-0017H-011415-SG-001_04'	40.750975	111.858781	4416	036	Southeast corner of house	SG	NA	NA	1/14/2015	Trichloroethene	0.999	0.8308	0.8308	Yes	=	0.1	4.461396	16	0.48	No	No
0017-H	A-0017H-011415-SG-001_04'	40.750975	111.858781	4416	036	Southeast corner of house	SG	NA	NA	1/14/2015	Tetrachloroethene	0.994	63.57	63.57	Yes	=	0.1	430.87746	370	11	Yes	Yes
0018-H	A-0018H-021715-CCV	40.749466	-111.857505	4435	002	CCV - 0.5 ppb	CCV	NA	NA	2/17/2015	cis12Dichloroethene	0.99	5.045	5.045	Yes	=	0.1	19.98829	NA	NA	NA	NA
0018-H	A-0018H-021715-CCV	40.749466	-111.857505	4435	002	CCV - 0.5 ppb	CCV	NA	NA	2/17/2015	Trichloroethene	0.967	5.236	5.236	Yes	=	0.1	28.11732	NA	NA	NA	NA
0018-H	A-0018H-021715-CCV	40.749466	-111.857505	4435	002	CCV - 0.5 ppb	CCV	NA	NA	2/17/2015	Tetrachloroethene	0.994	5.049	5.049	Yes	=	0.1	34.222122	NA	NA	NA	NA
0018-H	A-0018H-021715-CCV	40.749466	-111.857505	4435	001	CCV - 5.0 ppb	CCV	NA	NA	2/17/2015	cis12Dichloroethene	0.978	0.6448	0.6448	Yes	=	0.1	2.5546976	NA	NA	NA	NA
0018-H	A-0018H-021715-CCV	40.749466	-111.857505	4435	001	CCV - 5.0 ppb	CCV	NA	NA	2/17/2015	Trichloroethene	0.955	0.5531	0.5531	Yes	=	0.1	2.970147	NA	NA	NA	NA
0018-H	A-0018H-021715-CCV	40.749466	-111.857505	4435	001	CCV - 5.0 ppb	CCV	NA	NA	2/17/2015	Tetrachloroethene	0.995	0.5387	0.5387	Yes	=	0.1	3.6513086	NA	NA	NA	NA
0018-H	A-0018H-021815-CCV	40.749466	-111.857505	4435	041	CCV - 5.0 ppb	CCV	NA	NA	2/18/2015	cis12Dichloroethene	0.989	4.584	4.584	Yes	=	0.1	18.161808	NA	NA	NA	NA
0018-H	A-0018H-021815-CCV	40.749466	-111.857505	4435	041	CCV - 5.0 ppb	CCV	NA	NA	2/18/2015	Trichloroethene	0.961	4.108	4.108	Yes	=	0.1	22.05996	NA	NA	NA	NA
0018-H	A-0018H-021815-CCV	40.749466	-111.857505	4435	041	CCV - 5.0 ppb	CCV	NA	NA	2/18/2015	Tetrachloroethene	0.994	3.842	3.842	Yes	=	0.1	26.041076	NA	NA	NA	NA
0018-H	A-0018H-021815-CCV	40.749466	-111.857505	4435	040	CCV - 0.5 ppb	CCV	NA	NA	2/18/2015	cis12Dichloroethene	0.98	0.5615	0.5615	Yes	=	0.1	2.224663	NA	NA	NA	NA
0018-H	A-0018H-021815-CCV	40.749466	-111.857505	4435	040	CCV - 0.5 ppb	CCV	NA	NA	2/18/2015	Trichloroethene	0.963	0.4104	0.4104	Yes	=	0.1	2.203848	NA	NA	NA	NA
0018-H	A-0018H-021815-CCV	40.749466	-111.857505	4435	040	CCV - 0.5 ppb	CCV	NA	NA	2/18/2015	Tetrachloroethene	0.995	0.4027	0.4027	Yes	=	0.1	2.7295006	NA	NA	NA	NA
0018-H	A-0018H-021815-IA-015-HAL1	40.749466	-111.857505	4435	015	Second Floor Hallway	IA	NA	NA	2/18/2015	cis12Dichloroethene	0.754	0.08716	<0.1	Yes	U	0.1	0.34532792	NE	NE	No	No
0018-H	A-0018H-021815-IA-015-HAL1	40.749466	-111.857505	4435	015	Second Floor Hallway	IA	NA	NA	2/18/2015	Trichloroethene	0.998	0.02882	<0.1	Yes	U	0.1	0.1547634	16	0.48	No	No
0018-H	A-0018H-021815-IA-015-HAL1	40.749466	-111.857505	4435	015	Second Floor Hallway	IA	NA	NA	2/18/2015	Tetrachloroethene	0.994	0.6011	0.6011	Yes	=	0.1	4.0742558	370	11	No	No
0018-H	A-0018H-021815-IA-012-BR2	40.749466	-111.857505	4435	012	Second floor - Bedroom	IA	NA	NA	2/18/2015	cis12Dichloroethene	0.772	0.05721	<0.1	Yes	U	0.1	0.22666602	NE	NE	No	No
0018-H	A-0018H-021815-IA-012-BR2	40.749466	-111.857505	4435	012	Second floor - Bedroom	IA	NA	NA	2/18/2015	Trichloroethene	0.999	0.0313	<0.1	Yes	U	0.1	0.168081	16	0.48	No	No
0018-H	A-0018H-021815-IA-012-BR2	40.749466	-111.857505	4435	012	Second floor - Bedroom	IA	NA	NA	2/18/2015	Tetrachloroethene	0.994	0.5933	0.5933	Yes	=	0.1	4.0213874	370	11	No	No
0018-H	A-0018H-021815-IA-011-LIV	40.749466	-111.857505	4435	011	Main Level Living Room	IA	NA	NA	2/18/2015	cis12Dichloroethene	0.803	0.05758	<0.1	Yes	U	0.1	0.22813196	NE	NE	No	No
0018-H	A-0018H-021815-IA-011-LIV	40.749466	-111.857505	4435	011	Main Level Living Room	IA	NA	NA	2/18/2015	Trichloroethene	0.999	0.03466	<0.1	Yes	U	0.1	0.1861242	16	0.48	No	No
0018-H	A-0018H-021815-IA-011-LIV	40.749466	-111.857505	4435	011	Main Level Living Room	IA	NA	NA	2/18/2015	Tetrachloroethene	0.994	0.7037	0.7037	Yes	=	0.1	4.7696786	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0018-H	A-0018H-021815-IA-010-MBR	40.749466	-111.857505	4435	010	Main Level-Master Bedroom	IA	NA	NA	2/18/2015	cis12Dichloroethene	0.771	0.06292	<0.1	Yes	U	0.1	0.24928904	NE	NE	No	No
0018-H	A-0018H-021815-IA-010-MBR	40.749466	-111.857505	4435	010	Main Level-Master Bedroom	IA	NA	NA	2/18/2015	Trichloroethene	0.992	0.02085	<0.1	Yes	U	0.1	0.1119645	16	0.48	No	No
0018-H	A-0018H-021815-IA-010-MBR	40.749466	-111.857505	4435	010	Main Level-Master Bedroom	IA	NA	NA	2/18/2015	Tetrachloroethene	0.994	0.4325	0.4325	Yes	=	0.1	2.931485	370	11	No	No
0018-H	A-0018H-021815-IA-009-DRF	40.749466	-111.857505	4435	009	Main Level Dining Room	IA	NA	NA	2/18/2015	cis12Dichloroethene	0.842	0.05112	<0.1	Yes	U	0.1	0.20253744	NE	NE	No	No
0018-H	A-0018H-021815-IA-009-DRF	40.749466	-111.857505	4435	009	Main Level Dining Room	IA	NA	NA	2/18/2015	Trichloroethene	0.998	0.03495	<0.1	Yes	U	0.1	0.1876815	16	0.48	No	No
0018-H	A-0018H-021815-IA-009-DRF	40.749466	-111.857505	4435	009	Main Level Dining Room	IA	NA	NA	2/18/2015	Tetrachloroethene	0.995	0.6735	0.6735	Yes	=	0.1	4.564983	370	11	No	No
0018-H	A-0018H-021815-IA-008-KIT	40.749466	-111.857505	4435	008	Main Level Kitchen	IA	NA	NA	2/18/2015	cis12Dichloroethene	0.786	0.06384	<0.1	Yes	U	0.1	0.25293408	NE	NE	No	No
0018-H	A-0018H-021815-IA-008-KIT	40.749466	-111.857505	4435	008	Main Level Kitchen	IA	NA	NA	2/18/2015	Trichloroethene	0.998	0.03961	<0.1	Yes	U	0.1	0.2127057	16	0.48	No	No
0018-H	A-0018H-021815-IA-008-KIT	40.749466	-111.857505	4435	008	Main Level Kitchen	IA	NA	NA	2/18/2015	Tetrachloroethene	0.995	0.7266	0.7266	Yes	=	0.1	4.9248948	370	11	No	No
0018-H	A-0018H-021815-IA-007-GAR	40.749466	-111.857505	4435	007	Drive under garage	IA	NA	NA	2/18/2015	cis12Dichloroethene	0.9	0.02064	<0.1	Yes	U	0.1	0.08177568	NE	NE	No	No
0018-H	A-0018H-021815-IA-007-GAR	40.749466	-111.857505	4435	007	Drive under garage	IA	NA	NA	2/18/2015	Trichloroethene	0.976	0.0071	<0.1	Yes	U	0.1	0.038127	16	0.48	No	No
0018-H	A-0018H-021815-IA-007-GAR	40.749466	-111.857505	4435	007	Drive under garage	IA	NA	NA	2/18/2015	Tetrachloroethene	0.995	0.2805	0.2805	Yes	=	0.1	1.901229	370	11	No	No
0018-H	A-0018H-021815-IA-006-UTL	40.749466	-111.857505	4435	006	Basement Utility Room	IA	NA	NA	2/18/2015	cis12Dichloroethene	0.903	0.02058	<0.1	Yes	U	0.1	0.08153796	NE	NE	No	No
0018-H	A-0018H-021815-IA-006-UTL	40.749466	-111.857505	4435	006	Basement Utility Room	IA	NA	NA	2/18/2015	Trichloroethene	0.994	0.00717	<0.1	Yes	U	0.1	0.0385029	16	0.48	No	No
0018-H	A-0018H-021815-IA-006-UTL	40.749466	-111.857505	4435	006	Basement Utility Room	IA	NA	NA	2/18/2015	Tetrachloroethene	0.994	0.3014	0.3014	Yes	=	0.1	2.0428892	370	11	No	No
0018-H	A-0018H-021815-IA-005-LAU	40.749466	-111.857505	4435	005	Basement Laundry Room	IA	NA	NA	2/18/2015	cis12Dichloroethene	0.823	0.03523	<0.1	Yes	U	0.1	0.13958126	NE	NE	No	No
0018-H	A-0018H-021815-IA-005-LAU	40.749466	-111.857505	4435	005	Basement Laundry Room	IA	NA	NA	2/18/2015	Trichloroethene	0.998	0.0168	<0.1	Yes	U	0.1	0.090216	16	0.48	No	No
0018-H	A-0018H-021815-IA-005-LAU	40.749466	-111.857505	4435	005	Basement Laundry Room	IA	NA	NA	2/18/2015	Tetrachloroethene	0.996	0.4072	0.4072	Yes	=	0.1	2.7600016	370	11	No	No
0018-H	A-0018H-021815-IA-004-BR5	40.749466	-111.857505	4435	004	Basement Bedroom	IA	NA	NA	2/18/2015	cis12Dichloroethene	0.808	0.05867	<0.1	Yes	U	0.1	0.23245054	NE	NE	No	No
0018-H	A-0018H-021815-IA-004-BR5	40.749466	-111.857505	4435	004	Basement Bedroom	IA	NA	NA	2/18/2015	Trichloroethene	0.986	0.04007	<0.1	Yes	U	0.1	0.2151759	16	0.48	No	No
0018-H	A-0018H-021815-IA-004-BR5	40.749466	-111.857505	4435	004	Basement Bedroom	IA	NA	NA	2/18/2015	Tetrachloroethene	0.994	2.426	2.426	Yes	=	0.1	16.443428	370	11	Yes	Yes
0018-H	A-0018H-021815-IA-003-BA1	40.749466	-111.857505	4435	003	Basement Bathroom	IA	NA	NA	2/18/2015	cis12Dichloroethene	0.852	0.04734	<0.1	Yes	U	0.1	0.18756108	NE	NE	No	No
0018-H	A-0018H-021815-IA-003-BA1	40.749466	-111.857505	4435	003	Basement Bathroom	IA	NA	NA	2/18/2015	Trichloroethene	0.998	0.0512	<0.1	Yes	U	0.1	0.274944	16	0.48	No	No
0018-H	A-0018H-021815-IA-003-BA1	40.749466	-111.857505	4435	003	Basement Bathroom	IA	NA	NA	2/18/2015	Tetrachloroethene	0.995	2.333	2.333	Yes	=	0.1	15.813074	370	11	Yes	Yes
0018-H	A-0018H-021815-IA-002-LLL	40.749466	-111.857505	4435	002	Basement living/family room	IA	NA	NA	2/18/2015	cis12Dichloroethene	0.905	0.06534	<0.1	Yes	U	0.1	0.25887708	NE	NE	No	No
0018-H	A-0018H-021815-IA-002-LLL	40.749466	-111.857505	4435	002	Basement living/family room	IA	NA	NA	2/18/2015	Trichloroethene	0.988	0.09188	<0.1	Yes	U	0.1	0.4933956	16	0.48	Yes	Yes
0018-H	A-0018H-021815-IA-002-LLL	40.749466	-111.857505	4435	002	Basement living/family room	IA	NA	NA	2/18/2015	Tetrachloroethene	0.994	1.202	1.202	Yes	=	0.1	8.147156	370	11	No	No
0018-H	A-0018H-021815-IA-019I-BAS	40.749466	-111.857505	4435	027	Basement at Bottom of stairwell	NP	-5.1	15:01	2/18/2015	cis12Dichloroethene	0.854	0.01087	<0.1	Yes	U	0.1	0.04306694	NE	NE	No	No
0018-H	A-0018H-021815-IA-019I-BAS	40.749466	-111.857505	4435	027	Basement at Bottom of stairwell	NP	-5.1	15:01	2/18/2015	Trichloroethene	0.99	0.02125	<0.1	Yes	U	0.1	0.1141125	16	0.48	No	No
0018-H	A-0018H-021815-IA-019I-BAS	40.749466	-111.857505	4435	027	Basement at Bottom of stairwell	NP	-5.1	15:01	2/18/2015	Tetrachloroethene	0.993	0.2871	0.2871	Yes	=	0.1	1.9459638	370	11	No	No
0018-H	A-0018H-021815-IA-019H-BAS	40.749466	-111.857505	4435	026	Basement at Bottom of stairwell	NP	-5.1	14:53	2/18/2015	cis12Dichloroethene	0.878	0.01194	<0.1	Yes	U	0.1	0.04730628	NE	NE	No	No
0018-H	A-0018H-021815-IA-019H-BAS	40.749466	-111.857505	4435	026	Basement at Bottom of stairwell	NP	-5.1	14:53	2/18/2015	Trichloroethene	0.979	0.0114	<0.1	Yes	U	0.1	0.061218	16	0.48	No	No
0018-H	A-0018H-021815-IA-019H-BAS	40.749466	-111.857505	4435	026	Basement at Bottom of stairwell	NP	-5.1	14:53	2/18/2015	Tetrachloroethene	0.996	0.297	0.297	Yes	=	0.1	2.013066	370	11	No	No
0018-H	A-0018H-021815-IA-019G-BAS	40.749466	-111.857505	4435	025	Basement at Bottom of stairwell	NP	-5.2	14:45	2/18/2015	cis12Dichloroethene	0.881	0.01312	<0.1	Yes	U	0.1	0.05198144	NE	NE	No	No
0018-H	A-0018H-021815-IA-019G-BAS	40.749466	-111.857505	4435	025	Basement at Bottom of stairwell	NP	-5.2	14:45	2/18/2015	Trichloroethene	0.928	0.01253	<0.1	Yes	U	0.1	0.0672861	16	0.48	No	No
0018-H	A-0018H-021815-IA-019G-BAS	40.749466	-111.857505	4435	025	Basement at Bottom of stairwell	NP	-5.2	14:45	2/18/2015	Tetrachloroethene	0.993	0.3087	0.3087	Yes	=	0.1	2.0923686	370	11	No	No
0018-H	A-0018H-021815-IA-019F-BAS	40.749466	-111.857505	4435	024	Basement at Bottom of stairwell	NP	-5.2	14:37	2/18/2015	cis12Dichloroethene	0.891	0.01507	<0.1	Yes	U	0.1	0.05970734	NE	NE	No	No
0018-H	A-0018H-021815-IA-019F-BAS	40.749466	-111.857505	4435	024	Basement at Bottom of stairwell	NP	-5.2	14:37	2/18/2015	Trichloroethene	0.962	0.00951	<0.1	Yes	U	0.1	0.0510687	16	0.48	No	No
0018-H	A-0018H-021815-IA-019F-BAS	40.749466	-111.857505	4435	024	Basement at Bottom of stairwell	NP	-5.2	14:37	2/18/2015	Tetrachloroethene	0.996	0.3196	0.3196	Yes	=	0.1	2.1662488	370	11	No	No
0018-H	A-0018H-021815-IA-019E-BAS	40.749466	-111.857505	4435	023	Basement at Bottom of stairwell	NP	-5.1	14:29	2/18/2015	cis12Dichloroethene	0.872	0.0129	<0.1	Yes	U	0.1	0.0511098	NE	NE	No	No
0018-H	A-0018H-021815-IA-019E-BAS	40.749466	-111.857505	4435	023	Basement at Bottom of stairwell	NP	-5.1	14:29	2/18/2015	Trichloroethene	0.964	0.0114	<0.1	Yes	U	0.1	0.061218	16	0.48	No	No
0018-H	A-0018H-021815-IA-019E-BAS	40.749466	-111.857505	4435	023	Basement at Bottom of stairwell	NP	-5.1	14:29	2/18/2015	Tetrachloroethene	0.994	0.2954	0.2954	Yes	=	0.1	2.0022212	370	11	No	No
0018-H	A-0018H-021815-IA-019D-BAS	40.749466	-111.857505	4435	022	Basement at Bottom of stairwell	NP	-4.5	14:20	2/18/2015	cis12Dichloroethene	0.913	0.01621	<0.1	Yes	U	0.1	0.06422402	NE	NE	No	No
0018-H	A-0018H-021815-IA-019D-BAS	40.749466	-111.857505	4435	022	Basement at Bottom of stairwell	NP	-4.5	14:20	2/18/2015	Trichloroethene	0.999	0.01474	<0.1	Yes	U	0.1	0.0791538	16	0.48	No	No
0018-H	A-0018H-021815-IA-019D-BAS	40.749466	-111.857505	4435	022	Basement at Bottom of stairwell	NP	-4.5	14:20	2/18/2015	Tetrachloroethene	0.994	0.3153	0.3153	Yes	=	0.1	2.1371034	370	11	No	No
0018-H	A-0018H-021815-IA-019C-BAS	40.749466	-111.857505	4435	021	Basement at Bottom of stairwell	NP	-4.7	14:11	2/18/2015	cis12Dichloroethene	0.9	0.0163	<0.1	Yes	U	0.1	0.0645806	NE	NE	No	No
0018-H	A-0018H-021815-IA-019C-BAS	40.749466	-111.857505	4435	021	Basement at Bottom of stairwell	NP	-4.7	14:11	2/18/2015	Trichloroethene	0.996	0.01033	<0.1	Yes	U	0.1	0.0554721	16	0.48	No	No
0018-H	A-0018H-021815-IA-019C-BAS	40.749466	-111.857505	4435	021	Basement at Bottom of stairwell	NP	-4.7	14:11	2/18/2015	Tetrachloroethene	0.995	0.3233	0.3233	Yes	=	0.1	2.1913274	370	11	No	No
0018-H	A-0018H-021815-IA-019B-BAS	40.749466	-111.857505	4435	020	Basement at Bottom of stairwell	NP	-5.0	14:03	2/18/2015	cis12Dichloroethene	0.884	0.02195	<0.1	Yes	U	0.1	0.0869659	NE	NE	No	No
0018-H	A-0018H-021815-IA-019B-BAS	40.749466	-111.857505	4435	020	Basement at Bottom of stairwell	NP	-5.0	14:03	2/18/2015	Trichloroethene	0.982	0.01316	<0.1	Yes	U	0.1	0.0706692	16	0.48	No	No
0018-H	A-0018H-021815-IA-019B-BAS	40.749466	-111.857505	4435	020	Basement at Bottom of stairwell	NP	-5.0	14:03	2/18/2015	Tetrachloroethene	0.994	0.3395	0.3395	Yes	=	0.1	2.301131	370	11	No	No
0018-H	A-0018H-021815-IA-019A-BAS	40.749466	-111.857505	4435	019	Basement at Bottom of stairwell	NP	-5.7	13:55	2/18/2015	cis12Dichloroethene	0.82	0.02995	<0.1	Yes	U	0.1	0.1186619	NE	NE	No	No
0018-H	A-0018H-021815-IA-019A-BAS	40.749466	-111.857505	4435	019	Basement at Bottom of stairwell	NP	-5.7	13:55	2/18/2015	Trichloroethene	0.995	0.01624	<0.1	Yes	U	0.1	0.0872088	16	0.48	No	No
0018-H	A-0018H-021815-IA-019A-BAS	40.749466	-111.857505	4435	019	Basement at Bottom of stairwell	NP	-5.7	13:55	2/18/2015	Tetrachloroethene	0.994	0.3936	0.3936	Yes	=	0.1	2.6678208	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0018-H	A-0018H-021815-IA-001-OUT	40.749466	-111.857505	4435	001	Outdoor Ambient -front patio	OA	NA	NA	2/18/2015	cis12Dichloroethene	0.917	0.02691	<0.1	Yes	U	0.1	0.10661742	NE	NE	No	No
0018-H	A-0018H-021815-IA-001-OUT	40.749466	-111.857505	4435	001	Outdoor Ambient -front patio	OA	NA	NA	2/18/2015	Trichloroethene	0.523	Area too low	<0.1	No	NR	0.1	Area too low	16	0.48	No	No
0018-H	A-0018H-021815-IA-001-OUT	40.749466	-111.857505	4435	001	Outdoor Ambient -front patio	OA	NA	NA	2/18/2015	Tetrachloroethene	0.997	0.02741	<0.1	Yes	U	0.1	0.18578498	370	11	No	No
0018-H	A-0018H-021815-IA-020I-BAS	40.749466	-111.857505	4435	036	Basement at Bottom of stairwell	PP	5.3	16:40	2/18/2015	cis12Dichloroethene	0.839	0.01045	<0.1	Yes	U	0.1	0.0414029	NE	NE	No	No
0018-H	A-0018H-021815-IA-020I-BAS	40.749466	-111.857505	4435	036	Basement at Bottom of stairwell	PP	5.3	16:40	2/18/2015	Trichloroethene	0.988	0.01046	<0.1	Yes	U	0.1	0.0561702	16	0.48	No	No
0018-H	A-0018H-021815-IA-020I-BAS	40.749466	-111.857505	4435	036	Basement at Bottom of stairwell	PP	5.3	16:40	2/18/2015	Tetrachloroethene	0.996	0.05794	<0.1	Yes	U	0.1	0.39271732	370	11	No	No
0018-H	A-0018H-021815-IA-020H-BAS	40.749466	-111.857505	4435	035	Basement at Bottom of stairwell	PP	5.0	16:32	2/18/2015	cis12Dichloroethene	0.911	0.00912	<0.1	Yes	U	0.1	0.03613344	NE	NE	No	No
0018-H	A-0018H-021815-IA-020H-BAS	40.749466	-111.857505	4435	035	Basement at Bottom of stairwell	PP	5.0	16:32	2/18/2015	Trichloroethene	0.974	0.00522	<0.1	Yes	U	0.1	0.0280314	16	0.48	No	No
0018-H	A-0018H-021815-IA-020H-BAS	40.749466	-111.857505	4435	035	Basement at Bottom of stairwell	PP	5.0	16:32	2/18/2015	Tetrachloroethene	0.995	0.04334	<0.1	Yes	U	0.1	0.29375852	370	11	No	No
0018-H	A-0018H-021815-IA-020G-BAS	40.749466	-111.857505	4435	034	Basement at Bottom of stairwell	PP	4.9	16:24	2/18/2015	cis12Dichloroethene	0.839	0.01041	<0.1	Yes	U	0.1	0.04124442	NE	NE	No	No
0018-H	A-0018H-021815-IA-020G-BAS	40.749466	-111.857505	4435	034	Basement at Bottom of stairwell	PP	4.9	16:24	2/18/2015	Trichloroethene	0.981	0.00924	<0.1	Yes	U	0.1	0.0496188	16	0.48	No	No
0018-H	A-0018H-021815-IA-020G-BAS	40.749466	-111.857505	4435	034	Basement at Bottom of stairwell	PP	4.9	16:24	2/18/2015	Tetrachloroethene	0.994	0.0461	<0.1	Yes	U	0.1	0.3124658	370	11	No	No
0018-H	A-0018H-021815-IA-020F-BAS	40.749466	-111.857505	4435	033	Basement at Bottom of stairwell	PP	4.9	16:16	2/18/2015	cis12Dichloroethene	0.957	0.01075	<0.1	Yes	U	0.1	0.0425915	NE	NE	No	No
0018-H	A-0018H-021815-IA-020F-BAS	40.749466	-111.857505	4435	033	Basement at Bottom of stairwell	PP	4.9	16:16	2/18/2015	Trichloroethene	0.999	0.01094	<0.1	Yes	U	0.1	0.0587478	16	0.48	No	No
0018-H	A-0018H-021815-IA-020F-BAS	40.749466	-111.857505	4435	033	Basement at Bottom of stairwell	PP	4.9	16:16	2/18/2015	Tetrachloroethene	0.996	0.05471	<0.1	Yes	U	0.1	0.37082438	370	11	No	No
0018-H	A-0018H-021815-IA-020E-BAS	40.749466	-111.857505	4435	032	Basement at Bottom of stairwell	PP	5.5	16:08	2/18/2015	cis12Dichloroethene	0.791	0.00941	<0.1	Yes	U	0.1	0.03728242	NE	NE	No	No
0018-H	A-0018H-021815-IA-020E-BAS	40.749466	-111.857505	4435	032	Basement at Bottom of stairwell	PP	5.5	16:08	2/18/2015	Trichloroethene	0.981	0.00871	<0.1	Yes	U	0.1	0.0467727	16	0.48	No	No
0018-H	A-0018H-021815-IA-020E-BAS	40.749466	-111.857505	4435	032	Basement at Bottom of stairwell	PP	5.5	16:08	2/18/2015	Tetrachloroethene	0.995	0.05031	<0.1	Yes	U	0.1	0.34100118	370	11	No	No
0018-H	A-0018H-021815-IA-020D-BAS	40.749466	-111.857505	4435	031	Basement at Bottom of stairwell	PP	5.1	16:00	2/18/2015	cis12Dichloroethene	0.758	0.01215	<0.1	Yes	U	0.1	0.0481383	NE	NE	No	No
0018-H	A-0018H-021815-IA-020D-BAS	40.749466	-111.857505	4435	031	Basement at Bottom of stairwell	PP	5.1	16:00	2/18/2015	Trichloroethene	0.989	0.0147	<0.1	Yes	U	0.1	0.078939	16	0.48	No	No
0018-H	A-0018H-021815-IA-020D-BAS	40.749466	-111.857505	4435	031	Basement at Bottom of stairwell	PP	5.1	16:00	2/18/2015	Tetrachloroethene	0.996	0.08331	<0.1	Yes	U	0.1	0.56467518	370	11	No	No
0018-H	A-0018H-021815-IA-020C-BAS	40.749466	-111.857505	4435	030	Basement at Bottom of stairwell	PP	5.3	15:52	2/18/2015	cis12Dichloroethene	0.679	0.01258	<0.1	No	NR	0.1	0.04984196	NE	NE	No	No
0018-H	A-0018H-021815-IA-020C-BAS	40.749466	-111.857505	4435	030	Basement at Bottom of stairwell	PP	5.3	15:52	2/18/2015	Trichloroethene	0.954	0.01076	<0.1	Yes	U	0.1	0.0577812	16	0.48	No	No
0018-H	A-0018H-021815-IA-020C-BAS	40.749466	-111.857505	4435	030	Basement at Bottom of stairwell	PP	5.3	15:52	2/18/2015	Tetrachloroethene	0.995	0.04868	<0.1	Yes	U	0.1	0.32995304	370	11	No	No
0018-H	A-0018H-021815-IA-020B-BAS	40.749466	-111.857505	4435	029	Basement at Bottom of stairwell	PP	4.6	15:43	2/18/2015	cis12Dichloroethene	0.87	0.01614	<0.1	Yes	U	0.1	0.06394668	NE	NE	No	No
0018-H	A-0018H-021815-IA-020B-BAS	40.749466	-111.857505	4435	029	Basement at Bottom of stairwell	PP	4.6	15:43	2/18/2015	Trichloroethene	0.996	0.02491	<0.1	Yes	U	0.1	0.1337667	16	0.48	No	No
0018-H	A-0018H-021815-IA-020B-BAS	40.749466	-111.857505	4435	029	Basement at Bottom of stairwell	PP	4.6	15:43	2/18/2015	Tetrachloroethene	0.994	0.1899	0.1899	Yes	=	0.1	1.2871422	370	11	No	No
0018-H	A-0018H-021815-IA-020A-BAS	40.749466	-111.857505	4435	028	Basement at Bottom of stairwell	PP	4.6	15:13	2/18/2015	cis12Dichloroethene	0.813	0.0193	<0.1	Yes	U	0.1	0.0764666	NE	NE	No	No
0018-H	A-0018H-021815-IA-020A-BAS	40.749466	-111.857505	4435	028	Basement at Bottom of stairwell	PP	4.6	15:13	2/18/2015	Trichloroethene	0.99	0.03814	<0.1	Yes	U	0.1	0.2048118	16	0.48	No	No
0018-H	A-0018H-021815-IA-020A-BAS	40.749466	-111.857505	4435	028	Basement at Bottom of stairwell	PP	4.6	15:13	2/18/2015	Tetrachloroethene	0.993	0.3927	0.3927	Yes	=	0.1	2.6617206	370	11	No	No
0018-H	A-0018H-021815-SG-002-4' (Undilu	40.749544	-111.857442	4435	018	Backyard, centered on house	SG	NA	NA	2/18/2015	cis12Dichloroethene	0.703	0.206	0.206	Yes	=	0.1	0.816172	NE	NE	No	No
0018-H	A-0018H-021815-SG-002-4' (Undilu	40.749544	-111.857442	4435	018	Backyard, centered on house	SG	NA	NA	2/18/2015	Trichloroethene	0.934	0.02523	<0.1	Yes	U	0.1	0.1354851	16	0.48	No	No
0018-H	A-0018H-021815-SG-002-4' (Undilu	40.749544	-111.857442	4435	018	Backyard, centered on house	SG	NA	NA	2/18/2015	Tetrachloroethene	0.995	6.895	6.895	Yes	=	0.1	46.73431	370	11	No	No
0018-H	A-0018H-021815-SG-002-4' (dilute	40.749544	-111.857442	4435	017	Backyard, centered on house	SG	NA	NA	2/18/2015	cis12Dichloroethene	0.663	0.2171	0.2171	No	NR	0.1	0.8601502	NE	NE	No	No
0018-H	A-0018H-021815-SG-002-4' (dilute	40.749544	-111.857442	4435	017	Backyard, centered on house	SG	NA	NA	2/18/2015	Trichloroethene	0.84	0.01529	<0.1	Yes	U	0.1	0.0821073	16	0.48	No	No
0018-H	A-0018H-021815-SG-002-4' (dilute	40.749544	-111.857442	4435	017	Backyard, centered on house	SG	NA	NA	2/18/2015	Tetrachloroethene	0.995	0.4358	0.4358	Yes	=	0.1	2.9538524	370	11	No	No
0018-H	A-0018H-021815-SG-001-4' (diluted	40.749421	-111.857497	4428	016	Front of house, adjacent to family room window well	SG	NA	NA	2/18/2015	cis12Dichloroethene	0.667	0.04395	<0.1	No	NR	0.1	0.1741299	NE	NE	No	No
0018-H	A-0018H-021815-SG-001-4' (diluted	40.749421	-111.857497	4428	016	Front of house, adjacent to family room window well	SG	NA	NA	2/18/2015	Trichloroethene	0.983	0.00594	<0.1	Yes	U	0.1	0.0318978	16	0.48	No	No
0018-H	A-0018H-021815-SG-001-4' (diluted	40.749421	-111.857497	4428	016	Front of house, adjacent to family room window well	SG	NA	NA	2/18/2015	Tetrachloroethene	0.993	0.08072	<0.1	Yes	U	0.1	0.54712016	370	11	No	No
0019-B	A-0019B-020315-CCV	40.753028	-111.852947	4555	014	CCV - 5.0 ppb	CCV	NA	NA	2/3/2015	cis12Dichloroethene	0.998	6.509	6.509	Yes	=	0.1	25.788658	NA	NA	NA	NA
0019-B	A-0019B-020315-CCV	40.753028	-111.852947	4555	014	CCV - 5.0 ppb	CCV	NA	NA	2/3/2015	Trichloroethene	0.523	4.211	4.211	No	NR	0.1	22.61307	NA	NA	NA	NA
0019-B	A-0019B-020315-CCV	40.753028	-111.852947	4555	014	CCV - 5.0 ppb	CCV	NA	NA	2/3/2015	Tetrachloroethene	0.996	4.147	4.147	Yes	=	0.1	28.108366	NA	NA	NA	NA
0019-B	A-0019B-020315-CCV	40.753028	-111.852947	4555	011	CCV - 5.0 ppb	CCV	NA	NA	2/3/2015	cis12Dichloroethene	0.997	5.408	5.408	Yes	=	0.1	21.426496	NA	NA	NA	NA
0019-B	A-0019B-020315-CCV	40.753028	-111.852947	4555	011	CCV - 5.0 ppb	CCV	NA	NA	2/3/2015	Trichloroethene	0.523	3.773	3.773	No	NR	0.1	20.26101	NA	NA	NA	NA
0019-B	A-0019B-020315-CCV	40.753028	-111.852947	4555	011	CCV - 5.0 ppb	CCV	NA	NA	2/3/2015	Tetrachloroethene	0.995	3.985	3.985	Yes	=	0.1	27.01033	NA	NA	NA	NA
0019-B	A-0019B-020215-CCV	40.753028	-111.852947	4555	041	CCV - 5.0 ppb	CCV	NA	NA	2/3/2015	cis12Dichloroethene	0.978	3.846	3.846	Yes	=	0.1	15.237852	NA	NA	NA	NA
0019-B	A-0019B-020215-CCV	40.753028	-111.852947	4555	041	CCV - 5.0 ppb	CCV	NA	NA	2/3/2015	Trichloroethene	0.523	3.672	3.672	No	NR	0.1	19.71864	NA	NA	NA	NA
0019-B	A-0019B-020215-CCV	40.753028	-111.852947	4555	041	CCV - 5.0 ppb	CCV	NA	NA	2/3/2015	Tetrachloroethene	0.995	4.172	4.172	Yes	=	0.1	28.277816	NA	NA	NA	NA
0019-B	A-0019B-020115-CCV	40.753028	-111.852947	4555	001	CCV - 5.0 ppb	CCV	NA	NA	2/3/2015	cis12Dichloroethene	0.983	5.707	5.707	Yes	=	0.1	22.611134	NA	NA	NA	NA
0019-B	A-0019B-020115-CCV	40.753028	-111.852947	4555	001	CCV - 5.0 ppb	CCV	NA	NA	2/3/2015	Trichloroethene	0.523	4.45	4.45	No	NR	0.1	23.8965	NA	NA	NA	NA
0019-B	A-0019B-020115-CCV	40.753028	-111.852947	4555	001	CCV - 5.0 ppb	CCV	NA	NA	2/3/2015	Tetrachloroethene	0.995	4.953	4.953	Yes	=	0.1	33.571434	NA	NA	NA	NA
0019-B	A-0019B-020215-IA-032-OFC	40.753028	-111.852947	4555	032	1st floor-Admin office area - new section	IA	NA	NA	2/2/2015	cis12Dichloroethene	0.79	0.007	<0.1	Yes	U	0.1	0.027734	NE	NE	No	No
0019-B	A-0019B-020215-IA-032-OFC	40.753028	-111.852947	4555	032	1st floor-Admin office area - new section	IA	NA	NA	2/2/2015	Trichloroethene	0.523	0.002	<0.1	No	NR	0.1	0.01074	16	0.48	No	No
0019-B	A-0019B-020215-IA-032-OFC	40.753028	-111.852947	4555	032	1st floor-Admin office area - new section	IA	NA	NA	2/2/2015	Tetrachloroethene	0.993	0.005	<0.1	Yes	U	0.1	0.03389	370	11	No	No
0019-B	A-0019B-020215-IA-031-HAL7	40.753028	-111.852947	4555	031	Main north-south hallway- north end - new section	IA	NA	NA	2/2/2015	cis12Dichloroethene	0.733	0.038	<0.1	Yes	U	0.1	0.150556	NE	NE	No	No
0019-B	A-0019B-020215-IA-031-HAL7	40.753028	-111.852947	4555	031	Main north-south hallway- north end - new section	IA	NA	NA	2/2/2015	Trichloroethene	0.523	0.002	<0.1	No	NR	0.1	0.01074	16	0.48	No	No
0019-B	A-0019B-020215-IA-031-HAL7	40.753028	-111.852947	4555	031	Main north-south hallway- north end - new section	IA	NA	NA	2/2/2015	Tetrachloroethene	0.997	0.005	<0.1	Yes	U	0.1	0.03389	370	11	No	No
0019-B	A-0019B-020215-IA-030-HAL6	40.753028	-111.852947	4555	030	Main north-south hallway- south end - new section	IA	NA	NA	2/2/2015	cis12Dichloroethene	0.758	0.011	<0.1	Yes	U	0.1	0.043582	NE	NE	No	No
0019-B	A-0019B-020215-IA-030-HAL6	40.753028	-111.852947	4555	030	Main north-south hallway- south end - new section	IA	NA	NA	2/2/2015	Trichloroethene	0.523	0.001	<0.1	No	NR	0.1	0.00537	16	0.48	No	No
0019-B	A-0019B-020215-IA-030-HAL6	40.753028	-111.852947	4555	030	Main north-south hallway- south end - new section	IA	NA	NA	2/2/2015	Tetrachloroethene	0.996	0.004	<0.1	Yes	U	0.1	0.027112	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0019-B	A-0019B-020215-IA-029-FUR2	40.753028	-111.852947	4555	029	1st Floor- furnace room - new section	IA	NA	NA	2/2/2015	cis12Dichloroethene	0.957	0.011	<0.1	Yes	U	0.1	0.043582	NE	NE	No	No
0019-B	A-0019B-020215-IA-029-FUR2	40.753028	-111.852947	4555	029	1st Floor- furnace room - new section	IA	NA	NA	2/2/2015	Trichloroethene	0.523	0.002	<0.1	No	NR	0.1	0.01074	16	0.48	No	No
0019-B	A-0019B-020215-IA-029-FUR2	40.753028	-111.852947	4555	029	1st Floor- furnace room - new section	IA	NA	NA	2/2/2015	Tetrachloroethene	0.998	0.006	<0.1	Yes	U	0.1	0.040668	370	11	No	No
0019-B	A-0019B-020215-IA-028-LAU2	40.753028	-111.852947	4555	028	1st floor - Laundry Room - new section	IA	NA	NA	2/2/2015	cis12Dichloroethene	0.779	0.018	<0.1	Yes	U	0.1	0.071316	NE	NE	No	No
0019-B	A-0019B-020215-IA-028-LAU2	40.753028	-111.852947	4555	028	1st floor - Laundry Room - new section	IA	NA	NA	2/2/2015	Trichloroethene	0.523	0.002	<0.1	No	NR	0.1	0.01074	16	0.48	No	No
0019-B	A-0019B-020215-IA-028-LAU2	40.753028	-111.852947	4555	028	1st floor - Laundry Room - new section	IA	NA	NA	2/2/2015	Tetrachloroethene	0.993	0.005	<0.1	Yes	U	0.1	0.03389	370	11	No	No
0019-B	A-0019B-020215-IA-027-BR2	40.753028	-111.852947	4555	027	1st floor - Bedroom suite- typical - new section	IA	NA	NA	2/2/2015	cis12Dichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	NE	NE	No	No
0019-B	A-0019B-020215-IA-027-BR2	40.753028	-111.852947	4555	027	1st floor - Bedroom suite- typical - new section	IA	NA	NA	2/2/2015	Trichloroethene	0.523	0.002	<0.1	No	NR	0.1	0.01074	16	0.48	No	No
0019-B	A-0019B-020215-IA-027-BR2	40.753028	-111.852947	4555	027	1st floor - Bedroom suite- typical - new section	IA	NA	NA	2/2/2015	Tetrachloroethene	0.991	0.004	<0.1	Yes	U	0.1	0.027112	370	11	No	No
0019-B	A-0019B-020215-IA-026-HAL5	40.753028	-111.852947	4555	026	Main east-west hall in new section	IA	NA	NA	2/2/2015	cis12Dichloroethene	0.618	0.025	<0.1	No	NR	0.1	0.09905	NE	NE	No	No
0019-B	A-0019B-020215-IA-026-HAL5	40.753028	-111.852947	4555	026	Main east-west hall in new section	IA	NA	NA	2/2/2015	Trichloroethene	0.523	0.003	<0.1	No	NR	0.1	0.01611	16	0.48	No	No
0019-B	A-0019B-020215-IA-026-HAL5	40.753028	-111.852947	4555	026	Main east-west hall in new section	IA	NA	NA	2/2/2015	Tetrachloroethene	1	0.005	<0.1	Yes	U	0.1	0.03389	370	11	No	No
0019-B	A-0019B-020215-IA-025-DRF	40.753028	-111.852947	4555	025	1st Floor- Dining Room	IA	NA	NA	2/2/2015	cis12Dichloroethene	0.905	0.026	<0.1	Yes	U	0.1	0.103012	NE	NE	No	No
0019-B	A-0019B-020215-IA-025-DRF	40.753028	-111.852947	4555	025	1st Floor- Dining Room	IA	NA	NA	2/2/2015	Trichloroethene	0.523	0.006	<0.1	No	NR	0.1	0.03222	16	0.48	No	No
0019-B	A-0019B-020215-IA-025-DRF	40.753028	-111.852947	4555	025	1st Floor- Dining Room	IA	NA	NA	2/2/2015	Tetrachloroethene	0.995	0.017	<0.1	Yes	U	0.1	0.115226	370	11	No	No
0019-B	A-0019B-020215-IA-024-KIT2	40.753028	-111.852947	4555	024	1st Floor - Kitchen in new section	IA	NA	NA	2/2/2015	cis12Dichloroethene	0.659	0.024	<0.1	No	NR	0.1	0.095088	NE	NE	No	No
0019-B	A-0019B-020215-IA-024-KIT2	40.753028	-111.852947	4555	024	1st Floor - Kitchen in new section	IA	NA	NA	2/2/2015	Trichloroethene	0.523	0.008	<0.1	No	NR	0.1	0.04296	16	0.48	No	No
0019-B	A-0019B-020215-IA-024-KIT2	40.753028	-111.852947	4555	024	1st Floor - Kitchen in new section	IA	NA	NA	2/2/2015	Tetrachloroethene	0.994	0.02	<0.1	Yes	U	0.1	0.13556	370	11	No	No
0019-B	A-0019B-020215-IA-022-STO5	40.753028	-111.852947	4555	022	1st floor-Cleaning Chem Storage room- near Kitchen	IA	NA	NA	2/2/2015	cis12Dichloroethene	0.681	0.026	<0.1	No	NR	0.1	0.103012	NE	NE	No	No
0019-B	A-0019B-020215-IA-022-STO5	40.753028	-111.852947	4555	022	1st floor-Cleaning Chem Storage room- near Kitchen	IA	NA	NA	2/2/2015	Trichloroethene	0.523	0.007	<0.1	No	NR	0.1	0.03759	16	0.48	No	No
0019-B	A-0019B-020215-IA-022-STO5	40.753028	-111.852947	4555	022	1st floor-Cleaning Chem Storage room- near Kitchen	IA	NA	NA	2/2/2015	Tetrachloroethene	0.996	0.021	<0.1	Yes	U	0.1	0.142338	370	11	No	No
0019-B	A-0019B-020215-IA-021-KIT1	40.753028	-111.852947	4555	021	1st Floor Kitchen -old building	IA	NA	NA	2/2/2015	cis12Dichloroethene	0.669	0.026	<0.1	No	NR	0.1	0.103012	NE	NE	No	No
0019-B	A-0019B-020215-IA-021-KIT1	40.753028	-111.852947	4555	021	1st Floor Kitchen -old building	IA	NA	NA	2/2/2015	Trichloroethene	0.523	0.007	<0.1	No	NR	0.1	0.03759	16	0.48	No	No
0019-B	A-0019B-020215-IA-021-KIT1	40.753028	-111.852947	4555	021	1st Floor Kitchen -old building	IA	NA	NA	2/2/2015	Tetrachloroethene	0.995	0.019	<0.1	Yes	U	0.1	0.128782	370	11	No	No
0019-B	A-0019B-020215-IA-020-HAL4	40.753028	-111.852947	4555	020	2nd floor Hall- south end -old bldg	IA	NA	NA	2/2/2015	cis12Dichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	NE	NE	No	No
0019-B	A-0019B-020215-IA-020-HAL4	40.753028	-111.852947	4555	020	2nd floor Hall- south end -old bldg	IA	NA	NA	2/2/2015	Trichloroethene	0.523	0.008	<0.1	No	NR	0.1	0.04296	16	0.48	No	No
0019-B	A-0019B-020215-IA-020-HAL4	40.753028	-111.852947	4555	020	2nd floor Hall- south end -old bldg	IA	NA	NA	2/2/2015	Tetrachloroethene	0.997	0.021	<0.1	Yes	U	0.1	0.142338	370	11	No	No
0019-B	A-0019B-020215-IA-019-HAL3	40.753028	-111.852947	4555	019	2nd Floor - Hall at top of stairwell-old section	IA	NA	NA	2/2/2015	cis12Dichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	NE	NE	No	No
0019-B	A-0019B-020215-IA-019-HAL3	40.753028	-111.852947	4555	019	2nd Floor - Hall at top of stairwell-old section	IA	NA	NA	2/2/2015	Trichloroethene	0.523	0.007	<0.1	No	NR	0.1	0.03759	16	0.48	No	No
0019-B	A-0019B-020215-IA-019-HAL3	40.753028	-111.852947	4555	019	2nd Floor - Hall at top of stairwell-old section	IA	NA	NA	2/2/2015	Tetrachloroethene	0.997	0.02	<0.1	Yes	U	0.1	0.13556	370	11	No	No
0019-B	A-0019B-020215-IA-018-BR1	40.753028	-111.852947	4555	018	2nd Floor -Bedroom Suite- typical- old bldg	IA	NA	NA	2/2/2015	cis12Dichloroethene	0.982	Area too low	<0.1	Yes	U	0.1	Area too low	NE	NE	No	No
0019-B	A-0019B-020215-IA-018-BR1	40.753028	-111.852947	4555	018	2nd Floor -Bedroom Suite- typical- old bldg	IA	NA	NA	2/2/2015	Trichloroethene	0.523	0.008	<0.1	No	NR	0.1	0.04296	16	0.48	No	No
0019-B	A-0019B-020215-IA-018-BR1	40.753028	-111.852947	4555	018	2nd Floor -Bedroom Suite- typical- old bldg	IA	NA	NA	2/2/2015	Tetrachloroethene	0.996	0.021	<0.1	Yes	U	0.1	0.142338	370	11	No	No
0019-B	A-0019B-020215-IA-017-HAL2	40.753028	-111.852947	4555	017	1st floor hall-south end-old building	IA	NA	NA	2/2/2015	cis12Dichloroethene	0.681	0.055	<0.1	No	NR	0.1	0.21791	NE	NE	No	No
0019-B	A-0019B-020215-IA-017-HAL2	40.753028	-111.852947	4555	017	1st floor hall-south end-old building	IA	NA	NA	2/2/2015	Trichloroethene	0.523	0.029	<0.1	No	NR	0.1	0.15573	16	0.48	No	No
0019-B	A-0019B-020215-IA-017-HAL2	40.753028	-111.852947	4555	017	1st floor hall-south end-old building	IA	NA	NA	2/2/2015	Tetrachloroethene	0.995	0.085	<0.1	Yes	U	0.1	0.57613	370	11	No	No
0019-B	A-0019B-020215-IA-016-LL2	40.753028	-111.852947	4555	016	1st floor Living room - old building	IA	NA	NA	2/2/2015	cis12Dichloroethene	0.73	0.003	<0.1	Yes	U	0.1	0.011886	NE	NE	No	No
0019-B	A-0019B-020215-IA-016-LL2	40.753028	-111.852947	4555	016	1st floor Living room - old building	IA	NA	NA	2/2/2015	Trichloroethene	0.523	0.03	<0.1	No	NR	0.1	0.1611	16	0.48	No	No
0019-B	A-0019B-020215-IA-016-LL2	40.753028	-111.852947	4555	016	1st floor Living room - old building	IA	NA	NA	2/2/2015	Tetrachloroethene	0.995	0.091	<0.1	Yes	U	0.1	0.616798	370	11	No	No
0019-B	A-0019B-020215-IA-015-SAL	40.753028	-111.852947	4555	015	1st floor Hair Salon - old section	IA	NA	NA	2/2/2015	cis12Dichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	NE	NE	No	No
0019-B	A-0019B-020215-IA-015-SAL	40.753028	-111.852947	4555	015	1st floor Hair Salon - old section	IA	NA	NA	2/2/2015	Trichloroethene	0.523	0.063	<0.1	No	NR	0.1	0.33831	16	0.48	No	No
0019-B	A-0019B-020215-IA-015-SAL	40.753028	-111.852947	4555	015	1st floor Hair Salon - old section	IA	NA	NA	2/2/2015	Tetrachloroethene	0.997	0.209	0.209	Yes	=	0.1	1.416602	370	11	No	No
0019-B	A-0019B-020215-IA-014-LL1	40.753028	-111.852947	4555	014	1st Floor Activity Room-north end of old section	IA	NA	NA	2/2/2015	cis12Dichloroethene	0.713	0.033	<0.1	Yes	U	0.1	0.130746	NE	NE	No	No
0019-B	A-0019B-020215-IA-014-LL1	40.753028	-111.852947	4555	014	1st Floor Activity Room-north end of old section	IA	NA	NA	2/2/2015	Trichloroethene	0.523	0.033	<0.1	No	NR	0.1	0.17721	16	0.48	No	No
0019-B	A-0019B-020215-IA-014-LL1	40.753028	-111.852947	4555	014	1st Floor Activity Room-north end of old section	IA	NA	NA	2/2/2015	Tetrachloroethene	0.995	0.082	<0.1	Yes	U	0.1	0.555796	370	11	No	No
0019-B	A-0019B-020215-IA-013-ELE	40.753028	-111.852947	4555	013	Elevator Shaft	IA	NA	NA	2/2/2015	cis12Dichloroethene	0.64	0.012	<0.1	No	NR	0.1	0.047544	NE	NE	No	No
0019-B	A-0019B-020215-IA-013-ELE	40.753028	-111.852947	4555	013	Elevator Shaft	IA	NA	NA	2/2/2015	Trichloroethene	0.523	0.012	<0.1	No	NR	0.1	0.06444	16	0.48	No	No
0019-B	A-0019B-020215-IA-013-ELE	40.753028	-111.852947	4555	013	Elevator Shaft	IA	NA	NA	2/2/2015	Tetrachloroethene	0.996	0.031	<0.1	Yes	U	0.1	0.210118	370	11	No	No
0019-B	A-0019B-020215-IA-012-COA	40.753028	-111.852947	4555	012	SE corner of Coal bin area at pipe pentration	IA	NA	NA	2/2/2015	cis12Dichloroethene	0.674	0.024	<0.1	No	NR	0.1	0.095088	NE	NE	No	No
0019-B	A-0019B-020215-IA-012-COA	40.753028	-111.852947	4555	012	SE corner of Coal bin area at pipe pentration	IA	NA	NA	2/2/2015	Trichloroethene	0.523	0.043	<0.1	No	NR	0.1	0.23091	16	0.48	No	No
0019-B	A-0019B-020215-IA-012-COA	40.753028	-111.852947	4555	012	SE corner of Coal bin area at pipe pentration	IA	NA	NA	2/2/2015	Tetrachloroethene	0.996	0.126	0.126	Yes	=	0.1	0.854028	370	11	No	No
0019-B	A-0019-020215-IA-011-BLK	40.753028	-111.852947	4555	011	Nitrogen Blank after survey runs to confirm column at baseline	IA	NA	NA	2/2/2015	cis12Dichloroethene	0.763	0.038	<0.1	Yes	U	0.1	0.150556	NE	NE	No	No
0019-B	A-0019-020215-IA-011-BLK	40.753028	-111.852947	4555	011	Nitrogen Blank after survey runs to confirm column at baseline	IA	NA	NA	2/2/2015	Trichloroethene	0.523	0.014	<0.1	No	NR	0.1	0.07518	16	0.48	No	No
0019-B	A-0019-020215-IA-011-BLK	40.753028	-111.852947	4555	011	Nitrogen Blank after survey runs to confirm column at baseline	IA	NA	NA	2/2/2015	Tetrachloroethene	0.994	0.025	<0.1	Yes	U	0.1	0.16945	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0019-B	A-0019B-020215-IA-010-FUR2	40.753028	-111.852947	4555	010	Basement-Big Boiler room and Coal bin	IA	NA	NA	2/2/2015	cis12Dichloroethene	0.822	0.052	<0.1	Yes	U	0.1	0.206024	NE	NE	No	No
0019-B	A-0019B-020215-IA-010-FUR2	40.753028	-111.852947	4555	010	Basement-Big Boiler room and Coal bin	IA	NA	NA	2/2/2015	Trichloroethene	0.523	0.012	<0.1	No	NR	0.1	0.06444	16	0.48	No	No
0019-B	A-0019B-020215-IA-010-FUR2	40.753028	-111.852947	4555	010	Basement-Big Boiler room and Coal bin	IA	NA	NA	2/2/2015	Tetrachloroethene	0.995	0.026	<0.1	Yes	U	0.1	0.176228	370	11	No	No
0019-B	A-0019B-020215-IA-009-STO4	40.753028	-111.852947	4555	009	Basement Storeroom - south end (wheel chairs)	IA	NA	NA	2/2/2015	cis12Dichloroethene	0.745	0.041	<0.1	Yes	U	0.1	0.162442	NE	NE	No	No
0019-B	A-0019B-020215-IA-009-STO4	40.753028	-111.852947	4555	009	Basement Storeroom - south end (wheel chairs)	IA	NA	NA	2/2/2015	Trichloroethene	0.523	0.06	<0.1	No	NR	0.1	0.3222	16	0.48	No	No
0019-B	A-0019B-020215-IA-009-STO4	40.753028	-111.852947	4555	009	Basement Storeroom - south end (wheel chairs)	IA	NA	NA	2/2/2015	Tetrachloroethene	0.996	0.226	0.226	Yes	=	0.1	1.531828	370	11	No	No
0019-B	A-0019B-020215-IA-008-STO3	40.753028	-111.852947	4555	008	Basement Storeroom - west central	IA	NA	NA	2/2/2015	cis12Dichloroethene	0.692	0.043	<0.1	No	NR	0.1	0.170366	NE	NE	No	No
0019-B	A-0019B-020215-IA-008-STO3	40.753028	-111.852947	4555	008	Basement Storeroom - west central	IA	NA	NA	2/2/2015	Trichloroethene	0.523	0.059	<0.1	No	NR	0.1	0.31683	16	0.48	No	No
0019-B	A-0019B-020215-IA-008-STO3	40.753028	-111.852947	4555	008	Basement Storeroom - west central	IA	NA	NA	2/2/2015	Tetrachloroethene	0.994	0.212	0.212	Yes	=	0.1	1.436936	370	11	No	No
0019-B	A-0019B-020215-IA-007-BA1	40.753028	-111.852947	4555	007	Basement Bathroom	IA	NA	NA	2/2/2015	cis12Dichloroethene	0.773	0.04	<0.1	Yes	U	0.1	0.15848	NE	NE	No	No
0019-B	A-0019B-020215-IA-007-BA1	40.753028	-111.852947	4555	007	Basement Bathroom	IA	NA	NA	2/2/2015	Trichloroethene	0.523	0.065	<0.1	No	NR	0.1	0.34905	16	0.48	No	No
0019-B	A-0019B-020215-IA-007-BA1	40.753028	-111.852947	4555	007	Basement Bathroom	IA	NA	NA	2/2/2015	Tetrachloroethene	0.995	0.242	0.242	Yes	=	0.1	1.640276	370	11	No	No
0019-B	A-0019B-020215-IA-006-LAU1	40.753028	-111.852947	4555	006	Basement Laundry Area	IA	NA	NA	2/2/2015	cis12Dichloroethene	0.887	0.057	<0.1	Yes	U	0.1	0.225834	NE	NE	No	No
0019-B	A-0019B-020215-IA-006-LAU1	40.753028	-111.852947	4555	006	Basement Laundry Area	IA	NA	NA	2/2/2015	Trichloroethene	0.523	0.071	<0.1	No	NR	0.1	0.38127	16	0.48	No	No
0019-B	A-0019B-020215-IA-006-LAU1	40.753028	-111.852947	4555	006	Basement Laundry Area	IA	NA	NA	2/2/2015	Tetrachloroethene	0.995	0.29	0.29	Yes	=	0.1	1.96562	370	11	No	No
0019-B	A-0019B-020215-IA-005-WOR1	40.753028	-111.852947	4555	005	Basement wood working shop	IA	NA	NA	2/2/2015	cis12Dichloroethene	0.914	0.056	<0.1	Yes	U	0.1	0.221872	NE	NE	No	No
0019-B	A-0019B-020215-IA-005-WOR1	40.753028	-111.852947	4555	005	Basement wood working shop	IA	NA	NA	2/2/2015	Trichloroethene	0.523	0.077	<0.1	No	NR	0.1	0.41349	16	0.48	No	No
0019-B	A-0019B-020215-IA-005-WOR1	40.753028	-111.852947	4555	005	Basement wood working shop	IA	NA	NA	2/2/2015	Tetrachloroethene	0.996	0.276	0.276	Yes	=	0.1	1.870728	370	11	No	No
0019-B	A-0019B-020215-IA-004-FUR1	40.753028	-111.852947	4555	004	Basement furnace room (aka pool room)	IA	NA	NA	2/2/2015	cis12Dichloroethene	0.876	0.067	<0.1	Yes	U	0.1	0.265454	NE	NE	No	No
0019-B	A-0019B-020215-IA-004-FUR1	40.753028	-111.852947	4555	004	Basement furnace room (aka pool room)	IA	NA	NA	2/2/2015	Trichloroethene	0.523	0.085	<0.1	No	NR	0.1	0.45645	16	0.48	No	No
0019-B	A-0019B-020215-IA-004-FUR1	40.753028	-111.852947	4555	004	Basement furnace room (aka pool room)	IA	NA	NA	2/2/2015	Tetrachloroethene	0.995	0.271	0.271	Yes	=	0.1	1.836838	370	11	No	No
0019-B	A-0019B-020215-IA-003-HAL1	40.753028	-111.852947	4555	003	Central Basement Hallway	IA	NA	NA	2/2/2015	cis12Dichloroethene	0.833	0.074	<0.1	Yes	U	0.1	0.293188	NE	NE	No	No
0019-B	A-0019B-020215-IA-003-HAL1	40.753028	-111.852947	4555	003	Central Basement Hallway	IA	NA	NA	2/2/2015	Trichloroethene	0.523	0.114	0.114	No	NR	0.1	0.61218	16	0.48	No	No
0019-B	A-0019B-020215-IA-003-HAL1	40.753028	-111.852947	4555	003	Central Basement Hallway	IA	NA	NA	2/2/2015	Tetrachloroethene	0.995	0.323	0.323	Yes	=	0.1	2.189294	370	11	No	No
0019-B	A-0019B-020215-IA-002-STO2	40.753028	-111.852947	4555	002	Basement Storeroom- north end, east side	IA	NA	NA	2/2/2015	cis12Dichloroethene	0.826	0.057	<0.1	Yes	U	0.1	0.225834	NE	NE	No	No
0019-B	A-0019B-020215-IA-002-STO2	40.753028	-111.852947	4555	002	Basement Storeroom- north end, east side	IA	NA	NA	2/2/2015	Trichloroethene	0.523	0.083	<0.1	No	NR	0.1	0.44571	16	0.48	No	No
0019-B	A-0019B-020215-IA-002-STO2	40.753028	-111.852947	4555	002	Basement Storeroom- north end, east side	IA	NA	NA	2/2/2015	Tetrachloroethene	0.995	0.242	0.242	Yes	=	0.1	1.640276	370	11	No	No
0019-B	A-0019B-020215-IA-001-STO1	40.753028	-111.852947	4555	001	Basement Storeroom- north end, west side	IA	NA	NA	2/2/2015	cis12Dichloroethene	0.87	0.049	<0.1	Yes	U	0.1	0.194138	NE	NE	No	No
0019-B	A-0019B-020215-IA-001-STO1	40.753028	-111.852947	4555	001	Basement Storeroom- north end, west side	IA	NA	NA	2/2/2015	Trichloroethene	0.523	0.082	<0.1	No	NR	0.1	0.44034	16	0.48	No	No
0019-B	A-0019B-020215-IA-001-STO1	40.753028	-111.852947	4555	001	Basement Storeroom- north end, west side	IA	NA	NA	2/2/2015	Tetrachloroethene	0.995	0.222	0.222	Yes	=	0.1	1.504716	370	11	No	No
0019-B	A-0019B-020315-IA-033D-STO4	40.753028	-111.852947	4555	004	Store room -south end of basement	NP	-9.7	10:03	2/3/2015	cis12Dichloroethene	0.687	0.167	0.167	No	NR	0.1	0.661654	NE	NE	No	No
0019-B	A-0019B-020315-IA-033D-STO4	40.753028	-111.852947	4555	004	Store room -south end of basement	NP	-9.7	10:03	2/3/2015	Trichloroethene	0.523	0.08	<0.1	No	NR	0.1	0.4296	16	0.48	No	No
0019-B	A-0019B-020315-IA-033D-STO4	40.753028	-111.852947	4555	004	Store room -south end of basement	NP	-9.7	10:03	2/3/2015	Tetrachloroethene	0.995	0.292	0.292	Yes	=	0.1	1.979176	370	11	No	No
0019-B	A-0019B-020315-IA-033C-STO4	40.753028	-111.852947	4555	003	Store room -south end of basement	NP	-10.0	9:55	2/3/2015	cis12Dichloroethene	0.813	0.183	0.183	Yes	=	0.1	0.725046	NE	NE	No	No
0019-B	A-0019B-020315-IA-033C-STO4	40.753028	-111.852947	4555	003	Store room -south end of basement	NP	-10.0	9:55	2/3/2015	Trichloroethene	0.523	0.074	<0.1	No	NR	0.1	0.39738	16	0.48	No	No
0019-B	A-0019B-020315-IA-033C-STO4	40.753028	-111.852947	4555	003	Store room -south end of basement	NP	-10.0	9:55	2/3/2015	Tetrachloroethene	0.995	0.282	0.282	Yes	=	0.1	1.911396	370	11	No	No
0019-B	A-0019B-020315-IA-033B-STO4	40.753028	-111.852947	4555	002	Store room -south end of basement	NP	-10.3	9:44	2/3/2015	cis12Dichloroethene	0.649	0.177	0.177	No	NR	0.1	0.701274	NE	NE	No	No
0019-B	A-0019B-020315-IA-033B-STO4	40.753028	-111.852947	4555	002	Store room -south end of basement	NP	-10.3	9:44	2/3/2015	Trichloroethene	0.523	0.075	<0.1	No	NR	0.1	0.40275	16	0.48	No	No
0019-B	A-0019B-020315-IA-033B-STO4	40.753028	-111.852947	4555	002	Store room -south end of basement	NP	-10.3	9:44	2/3/2015	Tetrachloroethene	0.995	0.281	0.281	Yes	=	0.1	1.904618	370	11	No	No
0019-B	A-0019B-020315-IA-033A-STO4	40.753028	-111.852947	4555	001	Store room -south end of basement	NP	-10.2	9:35	2/3/2015	cis12Dichloroethene	0.537	0.006	<0.1	No	NR	0.1	0.023772	NE	NE	No	No
0019-B	A-0019B-020315-IA-033A-STO4	40.753028	-111.852947	4555	001	Store room -south end of basement	NP	-10.2	9:35	2/3/2015	Trichloroethene	0.523	0.08	<0.1	No	NR	0.1	0.4296	16	0.48	No	No
0019-B	A-0019B-020315-IA-033A-STO4	40.753028	-111.852947	4555	001	Store room -south end of basement	NP	-10.2	9:35	2/3/2015	Tetrachloroethene	0.995	0.286	0.286	Yes	=	0.1	1.938508	370	11	No	No
0019-B	A-0019B-020215-IA-023-OUT	40.753028	-111.852947	4555	023	north side, parking lot near employee entrance	OA	NA	NA	2/2/2015	cis12Dichloroethene	0.879	0.003	<0.1	Yes	U	0.1	0.011886	NE	NE	No	No
0019-B	A-0019B-020215-IA-023-OUT	40.753028	-111.852947	4555	023	north side, parking lot near employee entrance	OA	NA	NA	2/2/2015	Trichloroethene	0.523	0.002	<0.1	No	NR	0.1	0.01074	16	0.48	No	No
0019-B	A-0019B-020215-IA-023-OUT	40.753028	-111.852947	4555	023	north side, parking lot near employee entrance	OA	NA	NA	2/2/2015	Tetrachloroethene	0.997	0.005	<0.1	Yes	U	0.1	0.03389	370	11	No	No
0019-B	A-0019B-020315-IA-034D-STO4	40.753028	-111.852947	4555	008	Store room -south end of basement	PP	10.0	10:45	2/3/2015	cis12Dichloroethene	0.567	0.09	<0.1	No	NR	0.1	0.35658	NE	NE	No	No
0019-B	A-0019B-020315-IA-034D-STO4	40.753028	-111.852947	4555	008	Store room -south end of basement	PP	10.0	10:45	2/3/2015	Trichloroethene	0.523	0.065	<0.1	No	NR	0.1	0.34905	16	0.48	No	No
0019-B	A-0019B-020315-IA-034D-STO4	40.753028	-111.852947	4555	008	Store room -south end of basement	PP	10.0	10:45	2/3/2015	Tetrachloroethene	0.995	0.266	0.266	Yes	=	0.1	1.802948	370	11	No	No
0019-B	A-0019B-020315-IA-034C-STO4	40.753028	-111.852947	4555	007	Store room -south end of basement	PP	10.1	10:36	2/3/2015	cis12Dichloroethene	0.879	0.101	0.101	Yes	=	0.1	0.400162	NE	NE	No	No
0019-B	A-0019B-020315-IA-034C-STO4	40.753028	-111.852947	4555	007	Store room -south end of basement	PP	10.1	10:36	2/3/2015	Trichloroethene	0.523	0.071	<0.1	No	NR	0.1	0.38127	16	0.48	No	No
0019-B	A-0019B-020315-IA-034C-STO4	40.753028	-111.852947	4555	007	Store room -south end of basement	PP	10.1	10:36	2/3/2015	Tetrachloroethene	0.995	0.276	0.276	Yes	=	0.1	1.870728	370	11	No	No
0019-B	A-0019B-020315-IA-034B-STO4	40.753028	-111.852947	4555	006	Store room -south end of basement	PP	10.2	10:26	2/3/2015	cis12Dichloroethene	0.832	0.124	0.124	Yes	=	0.1	0.491288	NE	NE	No	No
0019-B	A-0019B-020315-IA-034B-STO4	40.753028	-111.852947	4555	006	Store room -south end of basement	PP	10.2	10:26	2/3/2015	Trichloroethene	0.523	0.073	<0.1	No	NR	0.1	0.39201	16	0.48	No	No
0019-B	A-0019B-020315-IA-034B-STO4	40.753028	-111.852947	4555	006	Store room -south end of basement	PP	10.2	10:26	2/3/2015	Tetrachloroethene	0.995	0.284	0.284	Yes	=	0.1	1.924952	370	11	No	No
0019-B	A-0019B-020315-IA-034A-STO4	40.753028	-111.852947	4555	005	Store room -south end of basement	PP	10.1	10:16	2/3/2015	cis12Dichloroethene	0.747	0.129	0.129	Yes	=	0.1	0.511098	NE	NE	No	No
0019-B	A-0019B-020315-IA-034A-STO4	40.753028	-111.852947	4555	005	Store room -south end of basement	PP	10.1	10:16	2/3/2015	Trichloroethene	0.523	0.077	<0.1	No	NR	0.1	0.41349	16	0.48	No	No
0019-B	A-0019B-020315-IA-034A-STO4	40.753028	-111.852947	4555	005	Store room -south end of basement	PP	10.1	10:16	2/3/2015	Tetrachloroethene	0.995	0.297	0.297	Yes	=	0.1	2.013066	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0019-B	A-0019B-020315-SG-002B-8'	40.753144	-111.852894	4556	013	North side of new section - outside of Room #4	SG	NA	NA	2/3/2015	cis12Dichloroethene	0.568	0.206	0.206	No	NR	0.1	0.816172	NE	NE	No	No
0019-B	A-0019B-020315-SG-002B-8'	40.753144	-111.852894	4556	013	North side of new section - outside of Room #4	SG	NA	NA	2/3/2015	Trichloroethene	0.523	0.036	<0.1	No	NR	0.1	0.19332	16	0.48	No	No
0019-B	A-0019B-020315-SG-002B-8'	40.753144	-111.852894	4556	013	North side of new section - outside of Room #4	SG	NA	NA	2/3/2015	Tetrachloroethene	0.995	0.16	0.16	Yes	=	0.1	1.08448	370	11	No	No
0019-B	A-0019B-020315-SG-002B-4'	40.753144	-111.852894	4556	012	North side of new section - outside of Room #4	SG	NA	NA	2/3/2015	cis12Dichloroethene	0.808	0.129	0.129	Yes	=	0.1	0.511098	NE	NE	No	No
0019-B	A-0019B-020315-SG-002B-4'	40.753144	-111.852894	4556	012	North side of new section - outside of Room #4	SG	NA	NA	2/3/2015	Trichloroethene	0.523	0.066	<0.1	No	NR	0.1	0.35442	16	0.48	No	No
0019-B	A-0019B-020315-SG-002B-4'	40.753144	-111.852894	4556	012	North side of new section - outside of Room #4	SG	NA	NA	2/3/2015	Tetrachloroethene	0.995	0.189	0.189	Yes	=	0.1	1.281042	370	11	No	No
0019-B	A-0019B-020215-SG-003-8'	40.753167	-111.853431	4554	038	near NW corner of old bldg	SG	NA	NA	2/2/2015	cis12Dichloroethene	0.891	0.006	<0.1	Yes	U	0.1	0.023772	NE	NE	No	No
0019-B	A-0019B-020215-SG-003-8'	40.753167	-111.853431	4554	038	near NW corner of old bldg	SG	NA	NA	2/2/2015	Trichloroethene	0.523	0.015	<0.1	No	NR	0.1	0.08055	16	0.48	No	No
0019-B	A-0019B-020215-SG-003-8'	40.753167	-111.853431	4554	038	near NW corner of old bldg	SG	NA	NA	2/2/2015	Tetrachloroethene	0.995	0.061	<0.1	Yes	U	0.1	0.413458	370	11	No	No
0019-B	A-0019B-020215-SG-003-4'	40.753167	-111.853431	4554	037	near NW corner of old bldg	SG	NA	NA	2/2/2015	cis12Dichloroethene	0.708	0.041	<0.1	Yes	U	0.1	0.162442	NE	NE	No	No
0019-B	A-0019B-020215-SG-003-4'	40.753167	-111.853431	4554	037	near NW corner of old bldg	SG	NA	NA	2/2/2015	Trichloroethene	0.523	0.016	<0.1	No	NR	0.1	0.08592	16	0.48	No	No
0019-B	A-0019B-020215-SG-003-4'	40.753167	-111.853431	4554	037	near NW corner of old bldg	SG	NA	NA	2/2/2015	Tetrachloroethene	0.996	0.067	<0.1	Yes	U	0.1	0.454126	370	11	No	No
0019-B	A-0019B-020215-SG-002A-8'	40.753144	-111.852894	4556	036	North side of new section - outside of Room #4	SG	NA	NA	2/2/2015	cis12Dichloroethene	0.813	0.033	<0.1	Yes	U	0.1	0.130746	NE	NE	No	No
0019-B	A-0019B-020215-SG-002A-8'	40.753144	-111.852894	4556	036	North side of new section - outside of Room #4	SG	NA	NA	2/2/2015	Trichloroethene	0.523	0.011	<0.1	No	NR	0.1	0.05907	16	0.48	No	No
0019-B	A-0019B-020215-SG-002A-8'	40.753144	-111.852894	4556	036	North side of new section - outside of Room #4	SG	NA	NA	2/2/2015	Tetrachloroethene	0.996	0.081	<0.1	Yes	U	0.1	0.549018	370	11	No	No
0019-B	A-0019B-020215-SG-002A-4'	40.753144	-111.852894	4556	035	North side of new section - outside of Room #4	SG	NA	NA	2/2/2015	cis12Dichloroethene	0.648	0.029	<0.1	No	NR	0.1	0.114898	NE	NE	No	No
0019-B	A-0019B-020215-SG-002A-4'	40.753144	-111.852894	4556	035	North side of new section - outside of Room #4	SG	NA	NA	2/2/2015	Trichloroethene	0.523	0.014	<0.1	No	NR	0.1	0.07518	16	0.48	No	No
0019-B	A-0019B-020215-SG-002A-4'	40.753144	-111.852894	4556	035	North side of new section - outside of Room #4	SG	NA	NA	2/2/2015	Tetrachloroethene	0.996	0.069	<0.1	Yes	U	0.1	0.467682	370	11	No	No
0019-B	A-0019B-020215-SG-001-8'	40.753269	-111.852556	4557	034	NE corner of new section (slab on grade foundation)	SG	NA	NA	2/2/2015	cis12Dichloroethene	0.599	0.028	<0.1	No	NR	0.1	0.110936	NE	NE	No	No
0019-B	A-0019B-020215-SG-001-8'	40.753269	-111.852556	4557	034	NE corner of new section (slab on grade foundation)	SG	NA	NA	2/2/2015	Trichloroethene	0.523	0.013	<0.1	No	NR	0.1	0.06981	16	0.48	No	No
0019-B	A-0019B-020215-SG-001-8'	40.753269	-111.852556	4557	034	NE corner of new section (slab on grade foundation)	SG	NA	NA	2/2/2015	Tetrachloroethene	0.995	0.04	<0.1	Yes	U	0.1	0.27112	370	11	No	No
0019-B	A-0019B-020215-SG-001-4'	40.753269	-111.852556	4557	033	NE corner of new section (slab on grade foundation)	SG	NA	NA	2/2/2015	cis12Dichloroethene	0.835	0.017	<0.1	Yes	U	0.1	0.067354	NE	NE	No	No
0019-B	A-0019B-020215-SG-001-4'	40.753269	-111.852556	4557	033	NE corner of new section (slab on grade foundation)	SG	NA	NA	2/2/2015	Trichloroethene	0.523	0.01	<0.1	No	NR	0.1	0.0537	16	0.48	No	No
0019-B	A-0019B-020215-SG-001-4'	40.753269	-111.852556	4557	033	NE corner of new section (slab on grade foundation)	SG	NA	NA	2/2/2015	Tetrachloroethene	0.997	0.045	<0.1	Yes	U	0.1	0.30501	370	11	No	No
0020-C	A-0020C-022515-CCV	40.753739	-111.861786	4377	028	CCV - 0.5 ppb	CCV	NA	NA	2/25/2015	cis12Dichloroethene	0.993	0.511	0.511	Yes	=	0.1	2.024582	NA	NA	NA	NA
0020-C	A-0020C-022515-CCV	40.753739	-111.861786	4377	028	CCV - 0.5 ppb	CCV	NA	NA	2/25/2015	Trichloroethene	0.904	0.4866	0.4866	Yes	=	0.1	2.613042	NA	NA	NA	NA
0020-C	A-0020C-022515-CCV	40.753739	-111.861786	4377	028	CCV - 0.5 ppb	CCV	NA	NA	2/25/2015	Tetrachloroethene	0.993	0.4739	0.4739	Yes	=	0.1	3.2120942	NA	NA	NA	NA
0020-C	A-0020C-022515-CCV	40.753739	-111.861786	4377	027	CCV - 5.0 ppb	CCV	NA	NA	2/25/2015	cis12Dichloroethene	0.997	3.991	3.991	Yes	=	0.1	15.812342	NA	NA	NA	NA
0020-C	A-0020C-022515-CCV	40.753739	-111.861786	4377	027	CCV - 5.0 ppb	CCV	NA	NA	2/25/2015	Trichloroethene	0.992	4.483	4.483	Yes	=	0.1	24.07371	NA	NA	NA	NA
0020-C	A-0020C-022515-CCV	40.753739	-111.861786	4377	027	CCV - 5.0 ppb	CCV	NA	NA	2/24/2015	Tetrachloroethene	0.995	4.023	4.023	Yes	=	0.1	27.267894	NA	NA	NA	NA
0020-C	A-0020C-022415-CCV	40.753739	-111.861786	4377	032	CCV - 0.5 ppb	CCV	NA	NA	2/24/2015	cis12Dichloroethene	0.994	0.5314	0.5314	Yes	=	0.1	2.1054068	NA	NA	NA	NA
0020-C	A-0020C-022415-CCV	40.753739	-111.861786	4377	032	CCV - 0.5 ppb	CCV	NA	NA	2/24/2015	Trichloroethene	0.906	0.5202	0.5202	Yes	=	0.1	2.793474	NA	NA	NA	NA
0020-C	A-0020C-022415-CCV	40.753739	-111.861786	4377	032	CCV - 0.5 ppb	CCV	NA	NA	2/24/2015	Tetrachloroethene	0.994	0.5077	0.5077	Yes	=	0.1	3.4411906	NA	NA	NA	NA
0020-C	A-0020C-022415-CCV	40.753739	-111.861786	4377	031	CCV - 5.0 ppb	CCV	NA	NA	2/24/2015	cis12Dichloroethene	0.996	4.812	4.812	Yes	=	0.1	19.065144	NA	NA	NA	NA
0020-C	A-0020C-022415-CCV	40.753739	-111.861786	4377	031	CCV - 5.0 ppb	CCV	NA	NA	2/24/2015	Trichloroethene	0.977	5.15	5.15	Yes	=	0.1	27.6555	NA	NA	NA	NA
0020-C	A-0020C-022415-CCV	40.753739	-111.861786	4377	031	CCV - 5.0 ppb	CCV	NA	NA	2/24/2015	Tetrachloroethene	0.995	4.705	4.705	Yes	=	0.1	31.89049	NA	NA	NA	NA
0020-C	A-0020C-022515-IA-015-BOI	40.753739	-111.861786	4377	015	Basement Level- Boiler Room (separated by concrete firewall and accessed from exterior of bldg	IA	NA	NA	2/25/2015	cis12Dichloroethene	0.897	0.00705	<0.1	Yes	U	0.1	0.0279321	NE	NE	No	No
0020-C	A-0020C-022515-IA-015-BOI	40.753739	-111.861786	4377	015	Basement Level- Boiler Room (separated by concrete firewall and accessed from exterior of bldg	IA	NA	NA	2/25/2015	Trichloroethene	0.98	0.01092	<0.1	Yes	U	0.1	0.0586404	16	0.48	No	No
0020-C	A-0020C-022515-IA-015-BOI	40.753739	-111.861786	4377	015	Basement Level- Boiler Room (separated by concrete firewall and accessed from exterior of bldg	IA	NA	NA	2/25/2015	Tetrachloroethene	0.993	0.01094	<0.1	Yes	U	0.1	0.07415132	370	11	No	No
0020-C	A-0020C-022515-IA-014-BA2	40.753739	-111.861786	4377	014	Upper Level - Women's Restroom off entrance foyer	IA	NA	NA	2/25/2015	cis12Dichloroethene	0.775	0.0287	<0.1	Yes	U	0.1	0.1137094	NE	NE	No	No
0020-C	A-0020C-022515-IA-014-BA2	40.753739	-111.861786	4377	014	Upper Level - Women's Restroom off entrance foyer	IA	NA	NA	2/25/2015	Trichloroethene	0.935	0.01367	<0.1	Yes	U	0.1	0.0734079	16	0.48	No	No
0020-C	A-0020C-022515-IA-014-BA2	40.753739	-111.861786	4377	014	Upper Level - Women's Restroom off entrance foyer	IA	NA	NA	2/25/2015	Tetrachloroethene	0.995	0.01771	<0.1	Yes	U	0.1	0.12003838	370	11	No	No
0020-C	A-0020C-022515-IA-013-CAF	40.753739	-111.861786	4377	013	Upper Level- Café/Social Hall	IA	NA	NA	2/25/2015	cis12Dichloroethene	0.717	0.04164	<0.1	Yes	U	0.1	0.16497768	NE	NE	No	No
0020-C	A-0020C-022515-IA-013-CAF	40.753739	-111.861786	4377	013	Upper Level- Café/Social Hall	IA	NA	NA	2/25/2015	Trichloroethene	0.825	0.00882	<0.1	Yes	U	0.1	0.0473634	16	0.48	No	No
0020-C	A-0020C-022515-IA-013-CAF	40.753739	-111.861786	4377	013	Upper Level- Café/Social Hall	IA	NA	NA	2/25/2015	Tetrachloroethene	0.995	0.01902	<0.1	Yes	U	0.1	0.12891756	370	11	No	No
0020-C	A-0020C-022515-IA-012-SAN	40.753739	-111.861786	4377	012	Upper Level-Sanctuary	IA	NA	NA	2/25/2015	cis12Dichloroethene	0.845	0.01674	<0.1	Yes	U	0.1	0.06632388	NE	NE	No	No
0020-C	A-0020C-022515-IA-012-SAN	40.753739	-111.861786	4377	012	Upper Level-Sanctuary	IA	NA	NA	2/25/2015	Trichloroethene	0.999	0.01119	<0.1	Yes	U	0.1	0.0600903	16	0.48	No	No
0020-C	A-0020C-022515-IA-012-SAN	40.753739	-111.861786	4377	012	Upper Level-Sanctuary	IA	NA	NA	2/25/2015	Tetrachloroethene	0.995	0.01751	<0.1	Yes	U	0.1	0.11868278	370	11	No	No
0020-C	A-0020C-022515-IA-011-OFC2	40.753739	-111.861786	4377	011	Lower Level - Main Church Offices	IA	NA	NA	2/25/2015	cis12Dichloroethene	0.702	0.08493	<0.1	Yes	U	0.1	0.33649266	NE	NE	No	No
0020-C	A-0020C-022515-IA-011-OFC2	40.753739	-111.861786	4377	011	Lower Level - Main Church Offices	IA	NA	NA	2/25/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0020-C	A-0020C-022515-IA-011-OFC2	40.753739	-111.861786	4377	011	Lower Level - Main Church Offices	IA	NA	NA	2/25/2015	Tetrachloroethene	0.994	0.0183	<0.1	Yes	U	0.1	0.1240374	370	11	No	No
0020-C	A-0020C-022515-IA-010-CKC	40.753739	-111.861786	4377	010	Lower Level Capitol Kids Classroom	IA	NA	NA	2/25/2015	cis12Dichloroethene	0.914	0.01641	<0.1	Yes	U	0.1	0.06501642	NE	NE	No	No
0020-C	A-0020C-022515-IA-010-CKC	40.753739	-111.861786	4377	010	Lower Level Capitol Kids Classroom	IA	NA	NA	2/25/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0020-C	A-0020C-022515-IA-010-CKC	40.753739	-111.861786	4377	010	Lower Level Capitol Kids Classroom	IA	NA	NA	2/25/2015	Tetrachloroethene	0.995	0.01488	<0.1	Yes	U	0.1	0.10085664	370	11	No	No

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AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0020-C	A-0020C-022515-IA-009-R102	40.753739	-111.861786	4377	009	Lower Level Classroom 102	IA	NA	NA	2/25/2015	cis12Dichloroethene	0.811	0.01306	<0.1	Yes	U	0.1	0.05174372	NE	NE	No	No
0020-C	A-0020C-022515-IA-009-R102	40.753739	-111.861786	4377	009	Lower Level Classroom 102	IA	NA	NA	2/25/2015	Trichloroethene	0.589	0.00452	<0.1	No	NR	0.1	0.0242724	16	0.48	No	No
0020-C	A-0020C-022515-IA-009-R102	40.753739	-111.861786	4377	009	Lower Level Classroom 102	IA	NA	NA	2/25/2015	Tetrachloroethene	0.992	0.0135	<0.1	Yes	U	0.1	0.091503	370	11	No	No
0020-C	A-0020C-022515-IA-008-BA1	40.753739	-111.861786	4377	008	Lower Level Women's Bathroom	IA	NA	NA	2/25/2015	cis12Dichloroethene	0.886	0.01414	<0.1	Yes	U	0.1	0.05602268	NE	NE	No	No
0020-C	A-0020C-022515-IA-008-BA1	40.753739	-111.861786	4377	008	Lower Level Women's Bathroom	IA	NA	NA	2/25/2015	Trichloroethene	0.887	0.00532	<0.1	Yes	U	0.1	0.0285684	16	0.48	No	No
0020-C	A-0020C-022515-IA-008-BA1	40.753739	-111.861786	4377	008	Lower Level Women's Bathroom	IA	NA	NA	2/25/2015	Tetrachloroethene	0.995	0.01609	<0.1	Yes	U	0.1	0.10905802	370	11	No	No
0020-C	A-0020C-022515-IA-007-HAL2	40.753739	-111.861786	4377	007	Lower Level East Hall near Rm 105	IA	NA	NA	2/25/2015	cis12Dichloroethene	0.774	0.02553	<0.1	Yes	U	0.1	0.10114986	NE	NE	No	No
0020-C	A-0020C-022515-IA-007-HAL2	40.753739	-111.861786	4377	007	Lower Level East Hall near Rm 105	IA	NA	NA	2/25/2015	Trichloroethene	0.936	0.00998	<0.1	Yes	U	0.1	0.0535926	16	0.48	No	No
0020-C	A-0020C-022515-IA-007-HAL2	40.753739	-111.861786	4377	007	Lower Level East Hall near Rm 105	IA	NA	NA	2/25/2015	Tetrachloroethene	0.993	0.01772	<0.1	Yes	U	0.1	0.12010616	370	11	No	No
0020-C	A-0020C-022515-IA-006-CLO	40.753739	-111.861786	4377	006	Lower Level Custodial Closet	IA	NA	NA	2/25/2015	cis12Dichloroethene	0.954	0.01384	<0.1	Yes	U	0.1	0.05483408	NE	NE	No	No
0020-C	A-0020C-022515-IA-006-CLO	40.753739	-111.861786	4377	006	Lower Level Custodial Closet	IA	NA	NA	2/25/2015	Trichloroethene	0.988	0.0087	<0.1	Yes	U	0.1	0.046719	16	0.48	No	No
0020-C	A-0020C-022515-IA-006-CLO	40.753739	-111.861786	4377	006	Lower Level Custodial Closet	IA	NA	NA	2/25/2015	Tetrachloroethene	0.997	0.01658	<0.1	Yes	U	0.1	0.11237924	370	11	No	No
0020-C	A-0020C-022515-IA-005-R109	40.753739	-111.861786	4377	005	Lower Level Classroom 109	IA	NA	NA	2/25/2015	cis12Dichloroethene	0.635	0.02234	<0.1	No	NR	0.1	0.08851108	NE	NE	No	No
0020-C	A-0020C-022515-IA-005-R109	40.753739	-111.861786	4377	005	Lower Level Classroom 109	IA	NA	NA	2/25/2015	Trichloroethene	0.687	Area too low	<0.1	No	NR	0.1	Area too low	16	0.48	No	No
0020-C	A-0020C-022515-IA-005-R109	40.753739	-111.861786	4377	005	Lower Level Classroom 109	IA	NA	NA	2/25/2015	Tetrachloroethene	0.997	0.02058	<0.1	Yes	U	0.1	0.13949124	370	11	No	No
0020-C	A-0020C-022515-IA-004-HAL1	40.753739	-111.861786	4377	004	Lower Level Hallway near Rm 108 & 110	IA	NA	NA	2/25/2015	cis12Dichloroethene	0.806	0.03752	<0.1	Yes	U	0.1	0.14865424	NE	NE	No	No
0020-C	A-0020C-022515-IA-004-HAL1	40.753739	-111.861786	4377	004	Lower Level Hallway near Rm 108 & 110	IA	NA	NA	2/25/2015	Trichloroethene	0.935	0.01368	<0.1	Yes	U	0.1	0.0734616	16	0.48	No	No
0020-C	A-0020C-022515-IA-004-HAL1	40.753739	-111.861786	4377	004	Lower Level Hallway near Rm 108 & 110	IA	NA	NA	2/25/2015	Tetrachloroethene	0.996	0.02018	<0.1	Yes	U	0.1	0.13678004	370	11	No	No
0020-C	A-0020C-022515-IA-003-OFC1	40.753739	-111.861786	4377	003	Lower Level Office	IA	NA	NA	2/25/2015	cis12Dichloroethene	0.86	0.03145	<0.1	Yes	U	0.1	0.1246049	NE	NE	No	No
0020-C	A-0020C-022515-IA-003-OFC1	40.753739	-111.861786	4377	003	Lower Level Office	IA	NA	NA	2/25/2015	Trichloroethene	0.952	0.00966	<0.1	Yes	U	0.1	0.0518742	16	0.48	No	No
0020-C	A-0020C-022515-IA-003-OFC1	40.753739	-111.861786	4377	003	Lower Level Office	IA	NA	NA	2/25/2015	Tetrachloroethene	0.996	0.0215	<0.1	Yes	U	0.1	0.145727	370	11	No	No
0020-C	A-0020C-A-0020C-022515-LLK	40.753739	-111.861786	4377	002	Lower Level Kitchen	IA	NA	NA	2/25/2015	cis12Dichloroethene	0.852	0.04309	<0.1	Yes	U	0.1	0.17072258	NE	NE	No	No
0020-C	A-0020C-A-0020C-022515-LLK	40.753739	-111.861786	4377	002	Lower Level Kitchen	IA	NA	NA	2/25/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0020-C	A-0020C-A-0020C-022515-LLK	40.753739	-111.861786	4377	002	Lower Level Kitchen	IA	NA	NA	2/25/2015	Tetrachloroethene	0.995	0.02747	<0.1	Yes	U	0.1	0.18619166	370	11	No	No
0020-C	A-0020C-022515-IA-016E-CKC	40.753739	-111.861786	4377	022	Lower Level Capitol Kids Classroom	NP	-5.6	12:56	2/25/2015	cis12Dichloroethene	0.72	0.02266	<0.1	Yes	U	0.1	0.08977892	NE	NE	No	No
0020-C	A-0020C-022515-IA-016E-CKC	40.753739	-111.861786	4377	022	Lower Level Capitol Kids Classroom	NP	-5.6	12:56	2/25/2015	Trichloroethene	0.523	0.00453	<0.1	No	NR	0.1	0.0243261	16	0.48	No	No
0020-C	A-0020C-022515-IA-016E-CKC	40.753739	-111.861786	4377	022	Lower Level Capitol Kids Classroom	NP	-5.6	12:56	2/25/2015	Tetrachloroethene	0.995	0.01233	<0.1	Yes	U	0.1	0.08357274	370	11	No	No
0020-C	A-0020C-022515-IA-016D-CKC	40.753739	-111.861786	4377	021	Lower Level Capitol Kids Classroom	NP	-5.1	12:48	2/25/2015	cis12Dichloroethene	0.699	0.03062	<0.1	No	NR	0.1	0.12131644	NE	NE	No	No
0020-C	A-0020C-022515-IA-016D-CKC	40.753739	-111.861786	4377	021	Lower Level Capitol Kids Classroom	NP	-5.1	12:48	2/25/2015	Trichloroethene	0.871	0.00979	<0.1	Yes	U	0.1	0.0525723	16	0.48	No	No
0020-C	A-0020C-022515-IA-016D-CKC	40.753739	-111.861786	4377	021	Lower Level Capitol Kids Classroom	NP	-5.1	12:48	2/25/2015	Tetrachloroethene	0.994	0.01292	<0.1	Yes	U	0.1	0.08757176	370	11	No	No
0020-C	A-0020C-022515-IA-016C-CKC	40.753739	-111.861786	4377	020	Lower Level Capitol Kids Classroom	NP	-5.3	12:39	2/25/2015	cis12Dichloroethene	0.796	0.03077	<0.1	Yes	U	0.1	0.12191074	NE	NE	No	No
0020-C	A-0020C-022515-IA-016C-CKC	40.753739	-111.861786	4377	020	Lower Level Capitol Kids Classroom	NP	-5.3	12:39	2/25/2015	Trichloroethene	0.916	Area too low	<0.1	Yes	U	0.1	Area too low	16	0.48	No	No
0020-C	A-0020C-022515-IA-016C-CKC	40.753739	-111.861786	4377	020	Lower Level Capitol Kids Classroom	NP	-5.3	12:39	2/25/2015	Tetrachloroethene	0.996	0.01267	<0.1	Yes	U	0.1	0.08587726	370	11	No	No
0020-C	A-0020C-022515-IA-016B-CKC	40.753739	-111.861786	4377	019	Lower Level Capitol Kids Classroom	NP	-4.9	12:32	2/25/2015	cis12Dichloroethene	0.693	0.04814	<0.1	No	NR	0.1	0.19073068	NE	NE	No	No
0020-C	A-0020C-022515-IA-016B-CKC	40.753739	-111.861786	4377	019	Lower Level Capitol Kids Classroom	NP	-4.9	12:32	2/25/2015	Trichloroethene	0.965	0.0052	<0.1	Yes	U	0.1	0.027924	16	0.48	No	No
0020-C	A-0020C-022515-IA-016B-CKC	40.753739	-111.861786	4377	019	Lower Level Capitol Kids Classroom	NP	-4.9	12:32	2/25/2015	Tetrachloroethene	0.996	0.0129	<0.1	Yes	U	0.1	0.0874362	370	11	No	No
0020-C	A-0020C-022515-IA-016A-CKC	40.753739	-111.861786	4377	018	Lower Level Capitol Kids Classroom	NP	-5.2	12:22	2/25/2015	cis12Dichloroethene	0.783	0.04168	<0.1	Yes	U	0.1	0.16513616	NE	NE	No	No
0020-C	A-0020C-022515-IA-016A-CKC	40.753739	-111.861786	4377	018	Lower Level Capitol Kids Classroom	NP	-5.2	12:22	2/25/2015	Trichloroethene	0.986	0.00989	<0.1	Yes	U	0.1	0.0531093	16	0.48	No	No
0020-C	A-0020C-022515-IA-016A-CKC	40.753739	-111.861786	4377	018	Lower Level Capitol Kids Classroom	NP	-5.2	12:22	2/25/2015	Tetrachloroethene	0.993	0.01239	<0.1	Yes	U	0.1	0.08397942	370	11	No	No
0020-C	A-0020C-022515-IA-001-OUT	40.753739	-111.861786	4377	001	Parking Lot - South side	OA	NA	NA	2/25/2015	cis12Dichloroethene	0.901	0.01549	<0.1	Yes	U	0.1	0.06137138	NE	NE	No	No
0020-C	A-0020C-022515-IA-001-OUT	40.753739	-111.861786	4377	001	Parking Lot - South side	OA	NA	NA	2/25/2015	Trichloroethene	0.983	0.01483	<0.1	Yes	U	0.1	0.0796371	16	0.48	No	No
0020-C	A-0020C-022515-IA-001-OUT	40.753739	-111.861786	4377	001	Parking Lot - South side	OA	NA	NA	2/25/2015	Tetrachloroethene	0.997	0.01586	<0.1	Yes	U	0.1	0.10749908	370	11	No	No
0020-C	A-0020C-022515-IA-017D-SKC	40.753739	-111.861786	4377	026	Lower Level Capitol Kids Classroom	PP	7.4	13:28	2/25/2015	cis12Dichloroethene	0.76	0.02148	<0.1	Yes	U	0.1	0.08510376	NE	NE	No	No
0020-C	A-0020C-022515-IA-017D-SKC	40.753739	-111.861786	4377	026	Lower Level Capitol Kids Classroom	PP	7.4	13:28	2/25/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0020-C	A-0020C-022515-IA-017D-SKC	40.753739	-111.861786	4377	026	Lower Level Capitol Kids Classroom	PP	7.4	13:28	2/25/2015	Tetrachloroethene	0.996	0.01241	<0.1	Yes	U	0.1	0.08411498	370	11	No	No
0020-C	A-0020C-022515-IA-017C-SKC	40.753739	-111.861786	4377	025	Lower Level Capitol Kids Classroom	PP	6.2	13:20	2/25/2015	cis12Dichloroethene	0.784	0.02555	<0.1	Yes	U	0.1	0.1012291	NE	NE	No	No
0020-C	A-0020C-022515-IA-017C-SKC	40.753739	-111.861786	4377	025	Lower Level Capitol Kids Classroom	PP	6.2	13:20	2/25/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0020-C	A-0020C-022515-IA-017C-SKC	40.753739	-111.861786	4377	025	Lower Level Capitol Kids Classroom	PP	6.2	13:20	2/25/2015	Tetrachloroethene	0.997	0.01299	<0.1	Yes	U	0.1	0.08804622	370	11	No	No
0020-C	A-0020C-022515-IA-017B-SKC	40.753739	-111.861786	4377	024	Lower Level Capitol Kids Classroom	PP	3.9	13:12	2/25/2015	cis12Dichloroethene	0.858	0.02258	<0.1	Yes	U	0.1	0.08946196	NE	NE	No	No
0020-C	A-0020C-022515-IA-017B-SKC	40.753739	-111.861786	4377	024	Lower Level Capitol Kids Classroom	PP	3.9	13:12	2/25/2015	Trichloroethene	0.901	0.00911	<0.1	Yes	U	0.1	0.0489207	16	0.48	No	No
0020-C	A-0020C-022515-IA-017B-SKC	40.753739	-111.861786	4377	024	Lower Level Capitol Kids Classroom	PP	3.9	13:12	2/25/2015	Tetrachloroethene	0.994	0.01216	<0.1	Yes	U	0.1	0.08242048	370	11	No	No
0020-C	A-0020C-022515-IA-017A-SKC	40.753739	-111.861786	4377	023	Lower Level Capitol Kids Classroom	PP	4.2	13:03	2/25/2015	cis12Dichloroethene	0.821	0.02184	<0.1	Yes	U	0.1	0.08653008	NE	NE	No	No
0020-C	A-0020C-022515-IA-017A-SKC	40.753739	-111.861786	4377	023	Lower Level Capitol Kids Classroom	PP	4.2	13:03	2/25/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0020-C	A-0020C-022515-IA-017A-SKC	40.753739	-111.861786	4377	023	Lower Level Capitol Kids Classroom	PP	4.2	13:03	2/25/2015	Tetrachloroethene	0.991	0.01215	<0.1	Yes	U	0.1	0.0823527	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0020-C	A-0020C-022515-SG-001-6'	40.753684	-111.861600	4380	017	Southeast corner of bldg, 2' from foundation	SG	NA	NA	2/25/2015	cis12Dichloroethene	0.71	0.05132	<0.1	Yes	U	0.1	0.20332984	NE	NE	No	No
0020-C	A-0020C-022515-SG-001-6'	40.753684	-111.861600	4380	017	Southeast corner of bldg, 2' from foundation	SG	NA	NA	2/25/2015	Trichloroethene	0.914	0.01085	<0.1	Yes	U	0.1	0.0582645	16	0.48	No	No
0020-C	A-0020C-022515-SG-001-6'	40.753684	-111.861600	4380	017	Southeast corner of bldg, 2' from foundation	SG	NA	NA	2/25/2015	Tetrachloroethene	0.995	0.03901	<0.1	Yes	U	0.1	0.26440978	370	11	No	No
0020-C	A-0020C-022515-SG-001-4'	40.753684	-111.861600	4380	016	Southeast corner of bldg, 2' from foundation	SG	NA	NA	2/25/2015	cis12Dichloroethene	0.718	0.05535	<0.1	Yes	U	0.1	0.2192967	NE	NE	No	No
0020-C	A-0020C-022515-SG-001-4'	40.753684	-111.861600	4380	016	Southeast corner of bldg, 2' from foundation	SG	NA	NA	2/25/2015	Trichloroethene	0.897	0.01459	<0.1	Yes	U	0.1	0.0783483	16	0.48	No	No
0020-C	A-0020C-022515-SG-001-4'	40.753684	-111.861600	4380	016	Southeast corner of bldg, 2' from foundation	SG	NA	NA	2/25/2015	Tetrachloroethene	0.994	0.03701	<0.1	Yes	U	0.1	0.25085378	370	11	No	No
0021-S	A-0021S-022015-CCV	40.754474	-111.860751	4443	015	CCV - 0.5 ppb	CCV	NA	NA	2/20/2015	cis12Dichloroethene	0.981	0.6244	0.6244	Yes	=	0.1	2.4738728	NA	NA	NA	NA
0021-S	A-0021S-022015-CCV	40.754474	-111.860751	4443	015	CCV - 0.5 ppb	CCV	NA	NA	2/20/2015	Trichloroethene	0.988	0.4737	0.4737	Yes	=	0.1	2.543769	NA	NA	NA	NA
0021-S	A-0021S-022015-CCV	40.754474	-111.860751	4443	015	CCV - 0.5 ppb	CCV	NA	NA	2/20/2015	Tetrachloroethene	0.994	0.4526	0.4526	Yes	=	0.1	3.0677228	NA	NA	NA	NA
0021-S	A-0021S-022015-CCV	40.754474	-111.860751	4443	014	CCV - 5.0 ppb	CCV	NA	NA	2/20/2015	cis12Dichloroethene	0.992	4.276	4.276	Yes	=	0.1	16.941512	NA	NA	NA	NA
0021-S	A-0021S-022015-CCV	40.754474	-111.860751	4443	014	CCV - 5.0 ppb	CCV	NA	NA	2/20/2015	Trichloroethene	0.952	4.179	4.179	Yes	=	0.1	22.44123	NA	NA	NA	NA
0021-S	A-0021S-022015-CCV	40.754474	-111.860751	4443	014	CCV - 5.0 ppb	CCV	NA	NA	2/20/2015	Tetrachloroethene	0.993	3.767	3.767	Yes	=	0.1	25.532726	NA	NA	NA	NA
0021-S	A-0021S-021915-CCV	40.754474	-111.860751	4443	024	CCV - 0.5 ppb	CCV	NA	NA	2/19/2015	cis12Dichloroethene	0.979	0.5714	0.5714	Yes	=	0.1	2.2638868	NA	NA	NA	NA
0021-S	A-0021S-021915-CCV	40.754474	-111.860751	4443	024	CCV - 0.5 ppb	CCV	NA	NA	2/19/2015	Trichloroethene	0.966	0.4469	0.4469	Yes	=	0.1	2.399853	NA	NA	NA	NA
0021-S	A-0021S-021915-CCV	40.754474	-111.860751	4443	024	CCV - 0.5 ppb	CCV	NA	NA	2/19/2015	Tetrachloroethene	0.994	0.4215	0.4215	Yes	=	0.1	2.856927	NA	NA	NA	NA
0021-S	A-0021S-021815-CCV	40.754474	-111.860751	4443	041	CCV - 5.0 ppb	CCV	NA	NA	2/18/2015	cis12Dichloroethene	0.989	4.584	4.584	Yes	=	0.1	18.161808	NA	NA	NA	NA
0021-S	A-0021S-021815-CCV	40.754474	-111.860751	4443	041	CCV - 5.0 ppb	CCV	NA	NA	2/18/2015	Trichloroethene	0.961	4.108	4.108	Yes	=	0.1	22.05996	NA	NA	NA	NA
0021-S	A-0021S-021815-CCV	40.754474	-111.860751	4443	041	CCV - 5.0 ppb	CCV	NA	NA	2/18/2015	Tetrachloroethene	0.994	3.842	3.842	Yes	=	0.1	26.041076	NA	NA	NA	NA
0021-S	A-0021S-021815-CCV	40.754474	-111.860751	4443	040	CCV - 0.5 ppb	CCV	NA	NA	2/18/2015	cis12Dichloroethene	0.98	0.5615	0.5615	Yes	=	0.1	2.224663	NA	NA	NA	NA
0021-S	A-0021S-021815-CCV	40.754474	-111.860751	4443	040	CCV - 0.5 ppb	CCV	NA	NA	2/18/2015	Trichloroethene	0.963	0.4104	0.4104	Yes	=	0.1	2.203848	NA	NA	NA	NA
0021-S	A-0021S-021815-CCV	40.754474	-111.860751	4443	040	CCV - 0.5 ppb	CCV	NA	NA	2/18/2015	Tetrachloroethene	0.995	0.4027	0.4027	Yes	=	0.1	2.7295006	NA	NA	NA	NA
0021-S	A-0021S-021915-IA-005-STO	40.754474	-111.860751	4443	005	Store Room under western Stairwell	IA	NA	NA	2/19/2015	cis12Dichloroethene	0.902	0.01903	<0.1	Yes	U	0.1	0.07539686	NE	NE	No	No
0021-S	A-0021S-021915-IA-005-STO	40.754474	-111.860751	4443	005	Store Room under western Stairwell	IA	NA	NA	2/19/2015	Trichloroethene	0.982	0.0095	<0.1	Yes	U	0.1	0.051015	16	0.48	No	No
0021-S	A-0021S-021915-IA-005-STO	40.754474	-111.860751	4443	005	Store Room under western Stairwell	IA	NA	NA	2/19/2015	Tetrachloroethene	0.995	0.04665	<0.1	Yes	U	0.1	0.3161937	370	11	No	No
0021-S	A-0021S-021915-IA-004-MAN	40.754474	-111.860751	4443	004	Manhole in Social Hall Floor - soil in bottom with gas valve	IA	NA	NA	2/19/2015	cis12Dichloroethene	0.835	0.0115	<0.1	Yes	U	0.1	0.045563	NE	NE	No	No
0021-S	A-0021S-021915-IA-004-MAN	40.754474	-111.860751	4443	004	Manhole in Social Hall Floor - soil in bottom with gas valve	IA	NA	NA	2/19/2015	Trichloroethene	0.94	0.01177	<0.1	Yes	U	0.1	0.0632049	16	0.48	No	No
0021-S	A-0021S-021915-IA-004-MAN	40.754474	-111.860751	4443	004	Manhole in Social Hall Floor - soil in bottom with gas valve	IA	NA	NA	2/19/2015	Tetrachloroethene	0.997	0.01465	<0.1	Yes	U	0.1	0.0992977	370	11	No	No
0021-S	A-0021S-021915-IA-003-KIT	40.754474	-111.860751	4443	003	Social Hall Kitchen Under Rectory/Sanctuary	IA	NA	NA	2/19/2015	cis12Dichloroethene	0.886	0.01301	<0.1	Yes	U	0.1	0.05154562	NE	NE	No	No
0021-S	A-0021S-021915-IA-003-KIT	40.754474	-111.860751	4443	003	Social Hall Kitchen Under Rectory/Sanctuary	IA	NA	NA	2/19/2015	Trichloroethene	0.962	0.01044	<0.1	Yes	U	0.1	0.0560628	16	0.48	No	No
0021-S	A-0021S-021915-IA-003-KIT	40.754474	-111.860751	4443	003	Social Hall Kitchen Under Rectory/Sanctuary	IA	NA	NA	2/19/2015	Tetrachloroethene	0.994	0.0147	<0.1	Yes	U	0.1	0.0996366	370	11	No	No
0021-S	A-0021S-021915-IA-002-BOI	40.754474	-111.860751	4443	002	Sanctuary Boiler Room	IA	NA	NA	2/19/2015	cis12Dichloroethene	0.873	0.01021	<0.1	Yes	U	0.1	0.04045202	NE	NE	No	No
0021-S	A-0021S-021915-IA-002-BOI	40.754474	-111.860751	4443	002	Sanctuary Boiler Room	IA	NA	NA	2/19/2015	Trichloroethene	0.977	0.01057	<0.1	Yes	U	0.1	0.0567609	16	0.48	No	No
0021-S	A-0021S-021915-IA-002-BOI	40.754474	-111.860751	4443	002	Sanctuary Boiler Room	IA	NA	NA	2/19/2015	Tetrachloroethene	0.996	0.01229	<0.1	Yes	U	0.1	0.08330162	370	11	No	No
0021-S	A-0021S-022015-IA-001-FEL	40.754474	-111.860751	4443	001	Social Event Hall Under Rectory/Sanctuary-partially below grade	IA	NA	NA	2/20/2015	cis12Dichloroethene	0.791	0.01285	<0.1	Yes	U	0.1	0.0509117	NE	NE	No	No
0021-S	A-0021S-022015-IA-001-FEL	40.754474	-111.860751	4443	001	Social Event Hall Under Rectory/Sanctuary-partially below grade	IA	NA	NA	2/20/2015	Trichloroethene	0.996	0.01893	<0.1	Yes	U	0.1	0.1016541	16	0.48	No	No
0021-S	A-0021S-022015-IA-001-FEL	40.754474	-111.860751	4443	001	Social Event Hall Under Rectory/Sanctuary-partially below grade	IA	NA	NA	2/20/2015	Tetrachloroethene	0.997	0.0175	<0.1	Yes	U	0.1	0.118615	370	11	No	No
0021-S	A-0021S-021915-IA-020-HAL2	40.754474	-111.860751	4443	022	Rectory Southside Basement Hall to Garage with Sump	IA	NA	NA	2/19/2015	cis12Dichloroethene	0.817	0.03228	<0.1	Yes	U	0.1	0.12789336	NE	NE	No	No
0021-S	A-0021S-021915-IA-020-HAL2	40.754474	-111.860751	4443	022	Rectory Southside Basement Hall to Garage with Sump	IA	NA	NA	2/19/2015	Trichloroethene	0.83	0.01668	<0.1	Yes	U	0.1	0.0895716	16	0.48	No	No
0021-S	A-0021S-021915-IA-020-HAL2	40.754474	-111.860751	4443	022	Rectory Southside Basement Hall to Garage with Sump	IA	NA	NA	2/19/2015	Tetrachloroethene	0.993	0.05481	<0.1	Yes	U	0.1	0.37150218	370	11	No	No
0021-S	A-0021S-021915-IA-019-LAU	40.754474	-111.860751	4443	021	Basement Laundry Room under Rectory -north side	IA	NA	NA	2/19/2015	cis12Dichloroethene	0.871	0.03451	<0.1	Yes	U	0.1	0.13672862	NE	NE	No	No
0021-S	A-0021S-021915-IA-019-LAU	40.754474	-111.860751	4443	021	Basement Laundry Room under Rectory -north side	IA	NA	NA	2/19/2015	Trichloroethene	0.698	0.01337	<0.1	No	NR	0.1	0.0717969	16	0.48	No	No
0021-S	A-0021S-021915-IA-019-LAU	40.754474	-111.860751	4443	021	Basement Laundry Room under Rectory -north side	IA	NA	NA	2/19/2015	Tetrachloroethene	0.996	0.06894	<0.1	Yes	U	0.1	0.46727532	370	11	No	No
0021-S	A-0021S-021915-IA-018-BR1	40.754474	-111.860751	4443	020	1st Floor Rectory - Typical Priest Dorm	IA	NA	NA	2/19/2015	cis12Dichloroethene	0.803	0.04362	<0.1	Yes	U	0.1	0.17282244	NE	NE	No	No
0021-S	A-0021S-021915-IA-018-BR1	40.754474	-111.860751	4443	020	1st Floor Rectory - Typical Priest Dorm	IA	NA	NA	2/19/2015	Trichloroethene	0.742	0.01892	<0.1	Yes	U	0.1	0.1016004	16	0.48	No	No
0021-S	A-0021S-021915-IA-018-BR1	40.754474	-111.860751	4443	020	1st Floor Rectory - Typical Priest Dorm	IA	NA	NA	2/19/2015	Tetrachloroethene	0.995	0.08294	<0.1	Yes	U	0.1	0.56216732	370	11	No	No
0021-S	A-0021S-021915-IA-017-FAM	40.754474	-111.860751	4443	019	1st Floor Rectory-TV/Lounge Room	IA	NA	NA	2/19/2015	cis12Dichloroethene	0.823	0.03846	<0.1	Yes	U	0.1	0.15237852	NE	NE	No	No
0021-S	A-0021S-021915-IA-017-FAM	40.754474	-111.860751	4443	019	1st Floor Rectory-TV/Lounge Room	IA	NA	NA	2/19/2015	Trichloroethene	0.96	0.01389	<0.1	Yes	U	0.1	0.0745893	16	0.48	No	No
0021-S	A-0021S-021915-IA-017-FAM	40.754474	-111.860751	4443	019	1st Floor Rectory-TV/Lounge Room	IA	NA	NA	2/19/2015	Tetrachloroethene	0.996	0.07351	<0.1	Yes	U	0.1	0.49825078	370	11	No	No
0021-S	A-0021S-021915-IA-016-DIN	40.754474	-111.860751	4443	018	1st Floor Rectory Dining Room	IA	NA	NA	2/19/2015	cis12Dichloroethene	0.734	0.05099	<0.1	Yes	U	0.1	0.20202238	NE	NE	No	No
0021-S	A-0021S-021915-IA-016-DIN	40.754474	-111.860751	4443	018	1st Floor Rectory Dining Room	IA	NA	NA	2/19/2015	Trichloroethene	0.734	0.01652	<0.1	Yes	U	0.1	0.0887124	16	0.48	No	No
0021-S	A-0021S-021915-IA-016-DIN	40.754474	-111.860751	4443	018	1st Floor Rectory Dining Room	IA	NA	NA	2/19/2015	Tetrachloroethene	0.994	0.08223	<0.1	Yes	U	0.1	0.55735494	370	11	No	No
0021-S	A-0021S-021915-IA-015-HAL	40.754474	-111.860751	4443	015	East End -3rd Floor Hall outside Library	IA	NA	NA	2/19/2015	cis12Dichloroethene	0.892	0.0262	<0.1	Yes	U	0.1	0.1038044	NE	NE	No	No
0021-S	A-0021S-021915-IA-015-HAL	40.754474	-111.860751	4443	015	East End -3rd Floor Hall outside Library	IA	NA	NA	2/19/2015	Trichloroethene	0.973	0.02813	<0.1	Yes	U	0.1	0.1510581	16	0.48	No	No
0021-S	A-0021S-021915-IA-015-HAL	40.754474	-111.860751	4443	015	East End -3rd Floor Hall outside Library	IA	NA	NA	2/19/2015	Tetrachloroethene	0.995	0.07038	<0.1	Yes	U	0.1	0.47703564	370	11	No	No
0021-S	A-0021S-021915-IA-014-LIB	40.754474	-111.860751	4443	014	3rd Floor Media/Library Room	IA	NA	NA	2/19/2015	cis12Dichloroethene	0.774	0.03037	<0.1	Yes	U	0.1	0.12032594	NE	NE	No	No
0021-S	A-0021S-021915-IA-014-LIB	40.754474	-111.860751	4443	014	3rd Floor Media/Library Room	IA	NA	NA	2/19/2015	Trichloroethene	0.973	0.02054	<0.1	Yes	U	0.1	0.1102998	16	0.48	No	No
0021-S	A-0021S-021915-IA-014-LIB	40.754474	-111.860751	4443	014	3rd Floor Media/Library Room	IA	NA	NA	2/19/2015	Tetrachloroethene	0.995	0.1201	0.1201	Yes	=	0.1	0.8140378	370	11	No	No
0021-S	A-0021S-021915-IA-013-STEM	40.754474	-111.860751	4443	013	2nd Floor STEM Room	IA	NA	NA	2/19/2015	cis12Dichloroethene	0.685	0.1302	0.1302	No	NR	0.1	0.5158524	NE	NE	No	No
0021-S	A-0021S-021915-IA-013-STEM	40.754474	-111.860751	4443	013	2nd Floor STEM Room	IA	NA	NA	2/19/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0021-S	A-0021S-021915-IA-013-STEM	40.754474	-111.860751	4443	013	2nd Floor STEM Room	IA	NA	NA	2/19/2015	Tetrachloroethene	0.994	0.07875	<0.1	Yes	U	0.1	0.5337675	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0021-S	A-0021S-021915IA-012-KIT	40.754474	-111.860751	4443	012	Faculty Kitchen/Break Area	IA	NA	NA	2/19/2015	cis12Dichloroethene	0.671	0.1058	0.1058	No	NR	0.1	0.4191796	NE	NE	No	No
0021-S	A-0021S-021915IA-012-KIT	40.754474	-111.860751	4443	012	Faculty Kitchen/Break Area	IA	NA	NA	2/19/2015	Trichloroethene	0.92	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0021-S	A-0021S-021915IA-012-KIT	40.754474	-111.860751	4443	012	Faculty Kitchen/Break Area	IA	NA	NA	2/19/2015	Tetrachloroethene	0.995	0.08033	<0.1	Yes	U	0.1	0.54447674	370	11	No	No
0021-S	A-0021S-021915-IA-011-STO4	40.754474	-111.860751	4443	011	Chemical Storage Area	IA	NA	NA	2/19/2015	cis12Dichloroethene	0.762	0.04769	<0.1	Yes	U	0.1	0.18894778	NE	NE	No	No
0021-S	A-0021S-021915-IA-011-STO4	40.754474	-111.860751	4443	011	Chemical Storage Area	IA	NA	NA	2/19/2015	Trichloroethene	0.982	0.01616	<0.1	Yes	U	0.1	0.0867792	16	0.48	No	No
0021-S	A-0021S-021915-IA-011-STO4	40.754474	-111.860751	4443	011	Chemical Storage Area	IA	NA	NA	2/19/2015	Tetrachloroethene	0.994	0.05415	<0.1	Yes	U	0.1	0.3670287	370	11	No	No
0021-S	A-0021S-021915-IA-010-UTL	40.754474	-111.860751	4443	010	Basement Boiler & Utility Room - Maintenance Office	IA	NA	NA	2/19/2015	cis12Dichloroethene	0.709	0.01683	<0.1	Yes	U	0.1	0.06668046	NE	NE	No	No
0021-S	A-0021S-021915-IA-010-UTL	40.754474	-111.860751	4443	010	Basement Boiler & Utility Room - Maintenance Office	IA	NA	NA	2/19/2015	Trichloroethene	0.996	0.02144	<0.1	Yes	U	0.1	0.1151328	16	0.48	No	No
0021-S	A-0021S-021915-IA-010-UTL	40.754474	-111.860751	4443	010	Basement Boiler & Utility Room - Maintenance Office	IA	NA	NA	2/19/2015	Tetrachloroethene	0.993	0.07501	<0.1	Yes	U	0.1	0.50841778	370	11	No	No
0021-S	A-0021S-021915-IA-009-STO3	40.754474	-111.860751	4443	009	Storage under Stage in Gym	IA	NA	NA	2/19/2015	cis12Dichloroethene	0.678	0.01877	<0.1	No	NR	0.1	0.07436674	NE	NE	No	No
0021-S	A-0021S-021915-IA-009-STO3	40.754474	-111.860751	4443	009	Storage under Stage in Gym	IA	NA	NA	2/19/2015	Trichloroethene	0.997	0.01971	<0.1	Yes	U	0.1	0.1058427	16	0.48	No	No
0021-S	A-0021S-021915-IA-009-STO3	40.754474	-111.860751	4443	009	Storage under Stage in Gym	IA	NA	NA	2/19/2015	Tetrachloroethene	0.996	0.0474	<0.1	Yes	U	0.1	0.3212772	370	11	No	No
0021-S	A-0021S-021915-IA-008-GYM	40.754474	-111.860751	4443	008	Gym near Stage	IA	NA	NA	2/19/2015	cis12Dichloroethene	0.864	0.03928	<0.1	Yes	U	0.1	0.15562736	NE	NE	No	No
0021-S	A-0021S-021915-IA-008-GYM	40.754474	-111.860751	4443	008	Gym near Stage	IA	NA	NA	2/19/2015	Trichloroethene	0.995	0.01351	<0.1	Yes	U	0.1	0.0725487	16	0.48	No	No
0021-S	A-0021S-021915-IA-008-GYM	40.754474	-111.860751	4443	008	Gym near Stage	IA	NA	NA	2/19/2015	Tetrachloroethene	0.993	0.05467	<0.1	Yes	U	0.1	0.37055326	370	11	No	No
0021-S	A-0021S-021915-IA-007-STO2	40.754474	-111.860751	4443	007	Basement Storeroom - with Gravity Sump	IA	NA	NA	2/19/2015	cis12Dichloroethene	0.879	0.02611	<0.1	Yes	U	0.1	0.10344782	NE	NE	No	No
0021-S	A-0021S-021915-IA-007-STO2	40.754474	-111.860751	4443	007	Basement Storeroom - with Gravity Sump	IA	NA	NA	2/19/2015	Trichloroethene	0.974	0.01563	<0.1	Yes	U	0.1	0.0839331	16	0.48	No	No
0021-S	A-0021S-021915-IA-007-STO2	40.754474	-111.860751	4443	007	Basement Storeroom - with Gravity Sump	IA	NA	NA	2/19/2015	Tetrachloroethene	0.993	0.04836	<0.1	Yes	U	0.1	0.32778408	370	11	No	No
0021-S	A-0021S-021915-IA-006-KIND	40.754474	-111.860751	4443	006	Basement Level Kindergarten Room	IA	NA	NA	2/19/2015	cis12Dichloroethene	0.91	0.02682	<0.1	Yes	U	0.1	0.10626084	NE	NE	No	No
0021-S	A-0021S-021915-IA-006-KIND	40.754474	-111.860751	4443	006	Basement Level Kindergarten Room	IA	NA	NA	2/19/2015	Trichloroethene	0.879	0.00505	<0.1	Yes	U	0.1	0.0271185	16	0.48	No	No
0021-S	A-0021S-021915-IA-006-KIND	40.754474	-111.860751	4443	006	Basement Level Kindergarten Room	IA	NA	NA	2/19/2015	Tetrachloroethene	0.996	0.03761	<0.1	Yes	U	0.1	0.25492058	370	11	No	No
0021-S	A-0021S-021915-IA-003-4THWest	40.754474	-111.860751	4443	003	4th Grade Room - West End - "Third Floor"	IA	NA	NA	2/19/2015	cis12Dichloroethene	0.747	0.03487	<0.1	Yes	U	0.1	0.13815494	NE	NE	No	No
0021-S	A-0021S-021915-IA-003-4THWest	40.754474	-111.860751	4443	003	4th Grade Room - West End - "Third Floor"	IA	NA	NA	2/19/2015	Trichloroethene	0.437	0.00934	<0.1	No	NR	0.1	0.0501558	16	0.48	No	No
0021-S	A-0021S-021915-IA-003-4THWest	40.754474	-111.860751	4443	003	4th Grade Room - West End - "Third Floor"	IA	NA	NA	2/19/2015	Tetrachloroethene	0.996	0.06752	<0.1	Yes	U	0.1	0.45765056	370	11	No	No
0021-S	A-0021S-021915-IA-001-8THWest	40.754474	-111.860751	4443	001	8th Grade Room - West End- "Third Floor"	IA	NA	NA	2/19/2015	cis12Dichloroethene	0.733	0.06035	<0.1	Yes	U	0.1	0.2391067	NE	NE	No	No
0021-S	A-0021S-021915-IA-001-8THWest	40.754474	-111.860751	4443	001	8th Grade Room - West End- "Third Floor"	IA	NA	NA	2/19/2015	Trichloroethene	0.519	0.01253	<0.1	No	NR	0.1	0.0672861	16	0.48	No	No
0021-S	A-0021S-021915-IA-001-8THWest	40.754474	-111.860751	4443	001	8th Grade Room - West End- "Third Floor"	IA	NA	NA	2/19/2015	Tetrachloroethene	0.996	0.04498	<0.1	Yes	U	0.1	0.30487444	370	11	No	No
0021-S	A-0021S-021915-IA-006E-LAU	40.754474	-111.860751	4443	010	Basement Laundry Room under Rectory -north side	NP	-4.2	11:13	2/19/2015	cis12Dichloroethene	0.801	0.02821	<0.1	Yes	U	0.1	0.11176802	NE	NE	No	No
0021-S	A-0021S-021915-IA-006E-LAU	40.754474	-111.860751	4443	010	Basement Laundry Room under Rectory -north side	NP	-4.2	11:13	2/19/2015	Trichloroethene	0.865	0.01139	<0.1	Yes	U	0.1	0.0611643	16	0.48	No	No
0021-S	A-0021S-021915-IA-006E-LAU	40.754474	-111.860751	4443	010	Basement Laundry Room under Rectory -north side	NP	-4.2	11:13	2/19/2015	Tetrachloroethene	0.995	0.02102	<0.1	Yes	U	0.1	0.14247356	370	11	No	No
0021-S	A-0021S-021915-IA-006D-LAU	40.754474	-111.860751	4443	009	Basement Laundry Room under Rectory -north side	NP	-8.4	11:05	2/19/2015	cis12Dichloroethene	0.81	0.02816	<0.1	Yes	U	0.1	0.11156992	NE	NE	No	No
0021-S	A-0021S-021915-IA-006D-LAU	40.754474	-111.860751	4443	009	Basement Laundry Room under Rectory -north side	NP	-8.4	11:05	2/19/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0021-S	A-0021S-021915-IA-006D-LAU	40.754474	-111.860751	4443	009	Basement Laundry Room under Rectory -north side	NP	-8.4	11:05	2/19/2015	Tetrachloroethene	0.994	0.02088	<0.1	Yes	U	0.1	0.14152464	370	11	No	No
0021-S	A-0021S-021915-IA-006C-LAU	40.754474	-111.860751	4443	008	Basement Laundry Room under Rectory -north side	NP	-4.2	10:57	2/19/2015	cis12Dichloroethene	0.777	0.02913	<0.1	Yes	U	0.1	0.11541306	NE	NE	No	No
0021-S	A-0021S-021915-IA-006C-LAU	40.754474	-111.860751	4443	008	Basement Laundry Room under Rectory -north side	NP	-4.2	10:57	2/19/2015	Trichloroethene	0.996	0.01046	<0.1	Yes	U	0.1	0.0561702	16	0.48	No	No
0021-S	A-0021S-021915-IA-006C-LAU	40.754474	-111.860751	4443	008	Basement Laundry Room under Rectory -north side	NP	-4.2	10:57	2/19/2015	Tetrachloroethene	0.996	0.02558	<0.1	Yes	U	0.1	0.17338124	370	11	No	No
0021-S	A-0021S-021915-IA-006B-LAU	40.754474	-111.860751	4443	007	Basement Laundry Room under Rectory -north side	NP	-5.2	10:48	2/19/2015	cis12Dichloroethene	0.732	0.0261	<0.1	Yes	U	0.1	0.1034082	NE	NE	No	No
0021-S	A-0021S-021915-IA-006B-LAU	40.754474	-111.860751	4443	007	Basement Laundry Room under Rectory -north side	NP	-5.2	10:48	2/19/2015	Trichloroethene	0.995	0.00914	<0.1	Yes	U	0.1	0.0490818	16	0.48	No	No
0021-S	A-0021S-021915-IA-006B-LAU	40.754474	-111.860751	4443	007	Basement Laundry Room under Rectory -north side	NP	-5.2	10:48	2/19/2015	Tetrachloroethene	0.995	0.02722	<0.1	Yes	U	0.1	0.18449716	370	11	No	No
0021-S	A-0021S-021915-IA-006A-LAU	40.754474	-111.860751	4443	006	Basement Laundry Room under Rectory -north side	NP	-5.4	10:40	2/19/2015	cis12Dichloroethene	0.796	0.02438	<0.1	Yes	U	0.1	0.09659356	NE	NE	No	No
0021-S	A-0021S-021915-IA-006A-LAU	40.754474	-111.860751	4443	006	Basement Laundry Room under Rectory -north side	NP	-5.4	10:40	2/19/2015	Trichloroethene	0.99	0.01184	<0.1	Yes	U	0.1	0.0635808	16	0.48	No	No
0021-S	A-0021S-021915-IA-006A-LAU	40.754474	-111.860751	4443	006	Basement Laundry Room under Rectory -north side	NP	-5.4	10:40	2/19/2015	Tetrachloroethene	0.996	0.02703	<0.1	Yes	U	0.1	0.18320934	370	11	No	No
0021-S	A-0021S-021915-IA-004-OUT	40.754474	-111.860751	4443	004	Outdoor Ambient - North Side of Bldg-Faculty Parking area	OA	NA	NA	2/19/2015	cis12Dichloroethene	0.885	0.01728	<0.1	Yes	U	0.1	0.06846336	NE	NE	No	No
0021-S	A-0021S-021915-IA-004-OUT	40.754474	-111.860751	4443	004	Outdoor Ambient - North Side of Bldg-Faculty Parking area	OA	NA	NA	2/19/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0021-S	A-0021S-021915-IA-004-OUT	40.754474	-111.860751	4443	004	Outdoor Ambient - North Side of Bldg-Faculty Parking area	OA	NA	NA	2/19/2015	Tetrachloroethene	0.994	0.02952	<0.1	Yes	U	0.1	0.20008656	370	11	No	No
0021-S	A-0021S-021915-IA-005-OUT	40.754474	-111.860751	4443	005	Outdoor Ambient, Southside near Rectory entrance	OA	NA	NA	2/19/2015	cis12Dichloroethene	0.899	0.00851	<0.1	Yes	U	0.1	0.03371662	NE	NE	No	No
0021-S	A-0021S-021915-IA-005-OUT	40.754474	-111.860751	4443	005	Outdoor Ambient, Southside near Rectory entrance	OA	NA	NA	2/19/2015	Trichloroethene	0.966	0.01199	<0.1	Yes	U	0.1	0.0643863	16	0.48	No	No
0021-S	A-0021S-021915-IA-005-OUT	40.754474	-111.860751	4443	005	Outdoor Ambient, Southside near Rectory entrance	OA	NA	NA	2/19/2015	Tetrachloroethene	0.997	0.00598	<0.1	Yes	U	0.1	0.04053244	370	11	No	No
0021-S	A-0021S-021915-IA-007C-LAU	40.754474	-111.860751	4443	013	Basement Laundry Room under Rectory -north side	PP	4.5	11:39	2/19/2015	cis12Dichloroethene	0.888	0.00645	<0.1	Yes	U	0.1	0.0255549	NE	NE	No	No
0021-S	A-0021S-021915-IA-007C-LAU	40.754474	-111.860751	4443	013	Basement Laundry Room under Rectory -north side	PP	4.5	11:39	2/19/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0021-S	A-0021S-021915-IA-007C-LAU	40.754474	-111.860751	4443	013	Basement Laundry Room under Rectory -north side	PP	4.5	11:39	2/19/2015	Tetrachloroethene	0.996	0.00569	<0.1	Yes	U	0.1	0.03856682	370	11	No	No
0021-S	A-0021S-021915-IA-007B-LAU	40.754474	-111.860751	4443	012	Basement Laundry Room under Rectory -north side	PP	5.5	11:31	2/19/2015	cis12Dichloroethene	0.925	0.0069	<0.1	Yes	U	0.1	0.0273378	NE	NE	No	No
0021-S	A-0021S-021915-IA-007B-LAU	40.754474	-111.860751	4443	012	Basement Laundry Room under Rectory -north side	PP	5.5	11:31	2/19/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0021-S	A-0021S-021915-IA-007B-LAU	40.754474	-111.860751	4443	012	Basement Laundry Room under Rectory -north side	PP	5.5	11:31	2/19/2015	Tetrachloroethene	0.995	0.00633	<0.1	Yes	U	0.1	0.04290474	370	11	No	No
0021-S	A-0021S-021915-IA-007A-LAU	40.754474	-111.860751	4443	011	Basement Laundry Room under Rectory -north side	PP	5.3	11:23	2/19/2015	cis12Dichloroethene	0.832	0.02095	<0.1	Yes	U	0.1	0.0830039	NE	NE	No	No
0021-S	A-0021S-021915-IA-007A-LAU	40.754474	-111.860751	4443	011	Basement Laundry Room under Rectory -north side	PP	5.3	11:23	2/19/2015	Trichloroethene	0.884	0.00813	<0.1	Yes	U	0.1	0.0436581	16	0.48	No	No
0021-S	A-0021S-021915-IA-007A-LAU	40.754474	-111.860751	4443	011	Basement Laundry Room under Rectory -north side	PP	5.3	11:23	2/19/2015	Tetrachloroethene	0.996	0.01573	<0.1	Yes	U	0.1	0.10661794	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0021-S	A-0021S-021915-SG-002-4'	40.754397	-111.860051	4459	017	Junction of rectory and sanctuary	SG	NA	NA	2/19/2015	cis12Dichloroethene	0.75	0.08644	<0.1	Yes	U	0.1	0.34247528	NE	NE	No	No
0021-S	A-0021S-021915-SG-002-4'	40.754397	-111.860051	4459	017	Junction of rectory and sanctuary	SG	NA	NA	2/19/2015	Trichloroethene	0.789	0.02159	<0.1	Yes	U	0.1	0.1159383	16	0.48	No	No
0021-S	A-0021S-021915-SG-002-4'	40.754397	-111.860051	4459	017	Junction of rectory and sanctuary	SG	NA	NA	2/19/2015	Tetrachloroethene	0.992	0.2025	0.2025	Yes	=	0.1	1.372545	370	11	No	No
0021-S	A-0021S-021915-SG-001-4'	40.754336	-111.861099	4418	016	SW corner of School Bldg	SG	NA	NA	2/19/2015	cis12Dichloroethene	0.75	0.09682	<0.1	Yes	U	0.1	0.38360084	NE	NE	No	No
0021-S	A-0021S-021915-SG-001-4'	40.754336	-111.861099	4418	016	SW corner of School Bldg	SG	NA	NA	2/19/2015	Trichloroethene	0.873	0.0132	<0.1	Yes	U	0.1	0.070884	16	0.48	No	No
0021-S	A-0021S-021915-SG-001-4'	40.754336	-111.861099	4418	016	SW corner of School Bldg	SG	NA	NA	2/19/2015	Tetrachloroethene	0.995	0.1103	0.1103	Yes	=	0.1	0.7476134	370	11	No	No
0022-S	A-0022S-040615-CCV	40.755005	-111.860038	4470	037	CCV - 5.5 ppb	CCV	NA	NA	4/6/2015	cis12Dichloroethene	0.998	3.959	3.959	Yes	=	0.1	15.685558	NA	NA	NA	NA
0022-S	A-0022S-040615-CCV	40.755005	-111.860038	4470	037	CCV - 5.5 ppb	CCV	NA	NA	4/6/2015	Trichloroethene	0.98	4.662	4.662	Yes	=	0.1	25.03494	NA	NA	NA	NA
0022-S	A-0022S-040615-CCV	40.755005	-111.860038	4470	037	CCV - 5.5 ppb	CCV	NA	NA	4/6/2015	Tetrachloroethene	0.995	4.329	4.329	Yes	=	0.1	29.341962	NA	NA	NA	NA
0022-S	A-0022S-040615-CCV	40.755005	-111.860038	4470	036	CCV - 0.55 ppb	CCV	NA	NA	4/6/2015	cis12Dichloroethene	0.997	0.3799	0.3799	Yes	=	0.1	1.5051638	NA	NA	NA	NA
0022-S	A-0022S-040615-CCV	40.755005	-111.860038	4470	036	CCV - 0.55 ppb	CCV	NA	NA	4/6/2015	Trichloroethene	0.998	0.5128	0.5128	Yes	=	0.1	2.753736	NA	NA	NA	NA
0022-S	A-0022S-040615-CCV	40.755005	-111.860038	4470	036	CCV - 0.55 ppb	CCV	NA	NA	4/6/2015	Tetrachloroethene	0.995	0.458	0.458	Yes	=	0.1	3.104324	NA	NA	NA	NA
0022-S	A-0022S-040515-CCV	40.755005	-111.860038	4470	003	CCV - 5.5 ppb	CCV	NA	NA	4/5/2015	cis12Dichloroethene	0.993	4.308	4.308	Yes	=	0.1	17.068296	NA	NA	NA	NA
0022-S	A-0022S-040515-CCV	40.755005	-111.860038	4470	003	CCV - 5.5 ppb	CCV	NA	NA	4/5/2015	Trichloroethene	0.965	5.084	5.084	Yes	=	0.1	27.30108	NA	NA	NA	NA
0022-S	A-0022S-040515-CCV	40.755005	-111.860038	4470	003	CCV - 5.5 ppb	CCV	NA	NA	4/5/2015	Tetrachloroethene	0.994	4.817	4.817	Yes	=	0.1	32.649626	NA	NA	NA	NA
0022-S	A-0022S-040515-CCV	40.755005	-111.860038	4470	002	CCV - 0.55 ppb	CCV	NA	NA	4/5/2015	cis12Dichloroethene	0.995	0.4437	0.4437	Yes	=	0.1	1.7579394	NA	NA	NA	NA
0022-S	A-0022S-040515-CCV	40.755005	-111.860038	4470	002	CCV - 0.55 ppb	CCV	NA	NA	4/5/2015	Trichloroethene	0.991	0.5968	0.5968	Yes	=	0.1	3.204816	NA	NA	NA	NA
0022-S	A-0022S-040515-CCV	40.755005	-111.860038	4470	002	CCV - 0.55 ppb	CCV	NA	NA	4/5/2015	Tetrachloroethene	0.993	0.5232	0.5232	Yes	=	0.1	3.5462496	NA	NA	NA	NA
0022-S	A-0022S-040715-CCV	40.755005	-111.860038	4470	005	CCV - 5.5 ppb	CCV	NA	NA	4/7/2015	cis12Dichloroethene	0.998	4.547	4.547	Yes	=	0.1	18.015214	NA	NA	NA	NA
0022-S	A-0022S-040715-CCV	40.755005	-111.860038	4470	005	CCV - 5.5 ppb	CCV	NA	NA	4/7/2015	Trichloroethene	0.996	5.003	5.003	Yes	=	0.1	26.86611	NA	NA	NA	NA
0022-S	A-0022S-040715-CCV	40.755005	-111.860038	4470	005	CCV - 5.5 ppb	CCV	NA	NA	4/7/2015	Tetrachloroethene	0.995	4.812	4.812	Yes	=	0.1	32.615736	NA	NA	NA	NA
0022-S	A-0022S-040715-CCV	40.755005	-111.860038	4470	004	CCV - 0.55 ppb	CCV	NA	NA	4/7/2015	cis12Dichloroethene	0.985	0.562	0.562	Yes	=	0.1	2.226644	NA	NA	NA	NA
0022-S	A-0022S-040715-CCV	40.755005	-111.860038	4470	004	CCV - 0.55 ppb	CCV	NA	NA	4/7/2015	Trichloroethene	0.911	0.6567	0.6567	Yes	=	0.1	3.526479	NA	NA	NA	NA
0022-S	A-0022S-040715-CCV	40.755005	-111.860038	4470	004	CCV - 0.55 ppb	CCV	NA	NA	4/7/2015	Tetrachloroethene	0.995	0.6496	0.6496	Yes	=	0.1	4.4029888	NA	NA	NA	NA
0022-S	A-0022S-040615-IA-035-CR235	40.755005	-111.860038	4470	035	Gym Bldg - classrom on upper level - #235	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.924	0.00867	<0.1	Yes	U	0.1	0.03435054	NE	NE	No	No
0022-S	A-0022S-040615-IA-035-CR235	40.755005	-111.860038	4470	035	Gym Bldg - classrom on upper level - #235	IA	NA	NA	4/6/2015	Trichloroethene	0.978	0.00674	<0.1	Yes	U	0.1	0.0361938	16	0.48	No	No
0022-S	A-0022S-040615-IA-035-CR235	40.755005	-111.860038	4470	035	Gym Bldg - classrom on upper level - #235	IA	NA	NA	4/6/2015	Tetrachloroethene	0.994	1.051	1.051	Yes	=	0.1	7.123678	370	11	No	No
0022-S	A-0022S-040615-IA-034-CR231	40.755005	-111.860038	4470	034	Gym Bldg - classrom on upper level - #231	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.782	0.01091	<0.1	Yes	U	0.1	0.04322542	NE	NE	No	No
0022-S	A-0022S-040615-IA-034-CR231	40.755005	-111.860038	4470	034	Gym Bldg - classrom on upper level - #231	IA	NA	NA	4/6/2015	Trichloroethene	0.808	0.00452	<0.1	Yes	U	0.1	0.0242724	16	0.48	No	No
0022-S	A-0022S-040615-IA-034-CR231	40.755005	-111.860038	4470	034	Gym Bldg - classrom on upper level - #231	IA	NA	NA	4/6/2015	Tetrachloroethene	0.994	1.239	1.239	Yes	=	0.1	8.397942	370	11	No	No
0022-S	A-0022S-040615-IA-033-GYM	40.755005	-111.860038	4470	033	Gym Bldg - Gymnasium	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.859	0.01295	<0.1	Yes	U	0.1	0.0513079	NE	NE	No	No
0022-S	A-0022S-040615-IA-033-GYM	40.755005	-111.860038	4470	033	Gym Bldg - Gymnasium	IA	NA	NA	4/6/2015	Trichloroethene	0.611	0.00681	<0.1	No	NR	0.1	0.0365697	16	0.48	No	No
0022-S	A-0022S-040615-IA-033-GYM	40.755005	-111.860038	4470	033	Gym Bldg - Gymnasium	IA	NA	NA	4/6/2015	Tetrachloroethene	0.996	0.7665	0.7665	Yes	=	0.1	5.195337	370	11	No	No
0022-S	A-0022S-040615-IA-032-CR148	40.755005	-111.860038	4470	032	Auditorium Bldg - Health Classroom #148	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.922	0.00487	<0.1	Yes	U	0.1	0.01929494	NE	NE	No	No
0022-S	A-0022S-040615-IA-032-CR148	40.755005	-111.860038	4470	032	Auditorium Bldg - Health Classroom #148	IA	NA	NA	4/6/2015	Trichloroethene	0.984	0.00652	<0.1	Yes	U	0.1	0.0350124	16	0.48	No	No
0022-S	A-0022S-040615-IA-032-CR148	40.755005	-111.860038	4470	032	Auditorium Bldg - Health Classroom #148	IA	NA	NA	4/6/2015	Tetrachloroethene	0.998	0.01123	<0.1	Yes	U	0.1	0.07611694	370	11	No	No
0022-S	A-0022S-040615-IA-031-RM149	40.755005	-111.860038	4470	031	Auditorium Bldg - Boys Locker Rm - Rm 149 (149 and 148 are only below grade area in bldg	IA	NA	NA	4/6/2015	cis12Dichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	NE	NE	No	No
0022-S	A-0022S-040615-IA-031-RM149	40.755005	-111.860038	4470	031	Auditorium Bldg - Boys Locker Rm - Rm 149 (149 and 148 are only below grade area in bldg	IA	NA	NA	4/6/2015	Trichloroethene	0.925	0.01033	<0.1	Yes	U	0.1	0.0554721	16	0.48	No	No
0022-S	A-0022S-040615-IA-031-RM149	40.755005	-111.860038	4470	031	Auditorium Bldg - Boys Locker Rm - Rm 149 (149 and 148 are only below grade area in bldg	IA	NA	NA	4/6/2015	Tetrachloroethene	0.995	0.0115	<0.1	Yes	U	0.1	0.077947	370	11	No	No
0022-S	A-0022S-040615-IA-029-RM248	40.755005	-111.860038	4470	029	Auditorium Bldg - Music Room - Rm 248	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.856	0.00775	<0.1	Yes	U	0.1	0.0307055	NE	NE	No	No
0022-S	A-0022S-040615-IA-029-RM248	40.755005	-111.860038	4470	029	Auditorium Bldg - Music Room - Rm 248	IA	NA	NA	4/6/2015	Trichloroethene	0.967	0.00875	<0.1	Yes	U	0.1	0.0469875	16	0.48	No	No
0022-S	A-0022S-040615-IA-029-RM248	40.755005	-111.860038	4470	029	Auditorium Bldg - Music Room - Rm 248	IA	NA	NA	4/6/2015	Tetrachloroethene	0.996	0.01402	<0.1	Yes	U	0.1	0.09502756	370	11	No	No
0022-S	A-0022S-040615-IA-028-AUD	40.755005	-111.860038	4470	028	Auditorium Bldg - Center of the auditorium	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.771	0.00369	<0.1	Yes	U	0.1	0.01461978	NE	NE	No	No
0022-S	A-0022S-040615-IA-028-AUD	40.755005	-111.860038	4470	028	Auditorium Bldg - Center of the auditorium	IA	NA	NA	4/6/2015	Trichloroethene	0.979	0.01162	<0.1	Yes	U	0.1	0.0623994	16	0.48	No	No
0022-S	A-0022S-040615-IA-028-AUD	40.755005	-111.860038	4470	028	Auditorium Bldg - Center of the auditorium	IA	NA	NA	4/6/2015	Tetrachloroethene	0.995	0.01343	<0.1	Yes	U	0.1	0.09102854	370	11	No	No
0022-S	A-0022S-040615-IA-027-RM141A	40.755005	-111.860038	4470	027	Dance Bldg - Lower (first floor) Weight room - Rm 141A	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.915	0.00495	<0.1	Yes	U	0.1	0.0196119	NE	NE	No	No
0022-S	A-0022S-040615-IA-027-RM141A	40.755005	-111.860038	4470	027	Dance Bldg - Lower (first floor) Weight room - Rm 141A	IA	NA	NA	4/6/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0022-S	A-0022S-040615-IA-027-RM141A	40.755005	-111.860038	4470	027	Dance Bldg - Lower (first floor) Weight room - Rm 141A	IA	NA	NA	4/6/2015	Tetrachloroethene	0.993	0.03468	<0.1	Yes	U	0.1	0.23506104	370	11	No	No
0022-S	A-0022S-040615-IA-026-BOI2	40.755005	-111.860038	4470	026	Dance Bldg - Lower (first floor) Boiler Room (not a habitable space)	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.94	0.00347	<0.1	Yes	U	0.1	0.01374814	NE	NE	No	No
0022-S	A-0022S-040615-IA-026-BOI2	40.755005	-111.860038	4470	026	Dance Bldg - Lower (first floor) Boiler Room (not a habitable space)	IA	NA	NA	4/6/2015	Trichloroethene	0.997	0.01577	<0.1	Yes	U	0.1	0.0846849	16	0.48	No	No
0022-S	A-0022S-040615-IA-026-BOI2	40.755005	-111.860038	4470	026	Dance Bldg - Lower (first floor) Boiler Room (not a habitable space)	IA	NA	NA	4/6/2015	Tetrachloroethene	0.995	0.01483	<0.1	Yes	U	0.1	0.10051774	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0022-S	A-0022S-040615-IA-025-DAN	40.755005	-111.860038	4470	025	Dance Bldg - Upper Level - Open dance studio	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.754	0.00658	<0.1	Yes	U	0.1	0.02606996	NE	NE	No	No
0022-S	A-0022S-040615-IA-025-DAN	40.755005	-111.860038	4470	025	Dance Bldg - Upper Level - Open dance studio	IA	NA	NA	4/6/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0022-S	A-0022S-040615-IA-025-DAN	40.755005	-111.860038	4470	025	Dance Bldg - Upper Level - Open dance studio	IA	NA	NA	4/6/2015	Tetrachloroethene	0.995	0.2407	0.2407	Yes	=	0.1	1.6314646	370	11	No	No
0022-S	A-0022S-040615-IA-024-CR406	40.755005	-111.860038	4470	024	Main Bldg - 4th floor classroom #406	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.729	0.00932	<0.1	Yes	U	0.1	0.03692584	NE	NE	No	No
0022-S	A-0022S-040615-IA-024-CR406	40.755005	-111.860038	4470	024	Main Bldg - 4th floor classroom #406	IA	NA	NA	4/6/2015	Trichloroethene	0.997	0.03517	<0.1	Yes	U	0.1	0.1888629	16	0.48	No	No
0022-S	A-0022S-040615-IA-024-CR406	40.755005	-111.860038	4470	024	Main Bldg - 4th floor classroom #406	IA	NA	NA	4/6/2015	Tetrachloroethene	0.995	0.06443	<0.1	Yes	U	0.1	0.43670654	370	11	No	No
0022-S	A-0022S-040615-IA-023-STO3	40.755005	-111.860038	4470	023	Main Bldg - 4th floor - Storeroom - Rm 414	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.904	0.00963	<0.1	Yes	U	0.1	0.03815406	NE	NE	No	No
0022-S	A-0022S-040615-IA-023-STO3	40.755005	-111.860038	4470	023	Main Bldg - 4th floor - Storeroom - Rm 414	IA	NA	NA	4/6/2015	Trichloroethene	0.999	0.08341	<0.1	Yes	U	0.1	0.4479117	16	0.48	No	No
0022-S	A-0022S-040615-IA-023-STO3	40.755005	-111.860038	4470	023	Main Bldg - 4th floor - Storeroom - Rm 414	IA	NA	NA	4/6/2015	Tetrachloroethene	0.995	0.1706	0.1706	Yes	=	0.1	1.1563268	370	11	No	No
0022-S	A-0022S-040615-IA-022-RM414	40.755005	-111.860038	4470	022	Main Bldg - 4th floor - Library - Rm 414	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.78	0.00752	<0.1	Yes	U	0.1	0.02979424	NE	NE	No	No
0022-S	A-0022S-040615-IA-022-RM414	40.755005	-111.860038	4470	022	Main Bldg - 4th floor - Library - Rm 414	IA	NA	NA	4/6/2015	Trichloroethene	0.994	0.02215	<0.1	Yes	U	0.1	0.1189455	16	0.48	No	No
0022-S	A-0022S-040615-IA-022-RM414	40.755005	-111.860038	4470	022	Main Bldg - 4th floor - Library - Rm 414	IA	NA	NA	4/6/2015	Tetrachloroethene	0.994	0.199	0.199	Yes	=	0.1	1.348822	370	11	No	No
0022-S	A-0022S-040615-IA-021-CR422	40.755005	-111.860038	4470	021	Main Bldg - 4th Floor - Art Classroom #422	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.779	0.01397	<0.1	Yes	U	0.1	0.05534914	NE	NE	No	No
0022-S	A-0022S-040615-IA-021-CR422	40.755005	-111.860038	4470	021	Main Bldg - 4th Floor - Art Classroom #422	IA	NA	NA	4/6/2015	Trichloroethene	0.998	0.02437	<0.1	Yes	U	0.1	0.1308669	16	0.48	No	No
0022-S	A-0022S-040615-IA-021-CR422	40.755005	-111.860038	4470	021	Main Bldg - 4th Floor - Art Classroom #422	IA	NA	NA	4/6/2015	Tetrachloroethene	0.995	0.2161	0.2161	Yes	=	0.1	1.4647258	370	11	No	No
0022-S	A-0022S-040615-IA-020-CR300	40.755005	-111.860038	4470	020	Main Bldg - 3rd Floor - Classroom #300	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.882	0.00562	<0.1	Yes	U	0.1	0.02226644	NE	NE	No	No
0022-S	A-0022S-040615-IA-020-CR300	40.755005	-111.860038	4470	020	Main Bldg - 3rd Floor - Classroom #300	IA	NA	NA	4/6/2015	Trichloroethene	0.911	0.01351	<0.1	Yes	U	0.1	0.0725487	16	0.48	No	No
0022-S	A-0022S-040615-IA-020-CR300	40.755005	-111.860038	4470	020	Main Bldg - 3rd Floor - Classroom #300	IA	NA	NA	4/6/2015	Tetrachloroethene	0.995	0.1209	0.1209	Yes	=	0.1	0.8194602	370	11	No	No
0022-S	A-0022S-040615-IA-019-HAL2	40.755005	-111.860038	4470	019	Main Bldg - 3rd floor -Hallway at southeast corner	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.969	0.00928	<0.1	Yes	U	0.1	0.03676736	NE	NE	No	No
0022-S	A-0022S-040615-IA-019-HAL2	40.755005	-111.860038	4470	019	Main Bldg - 3rd floor -Hallway at southeast corner	IA	NA	NA	4/6/2015	Trichloroethene	0.981	0.01433	<0.1	Yes	U	0.1	0.0769521	16	0.48	No	No
0022-S	A-0022S-040615-IA-019-HAL2	40.755005	-111.860038	4470	019	Main Bldg - 3rd floor -Hallway at southeast corner	IA	NA	NA	4/6/2015	Tetrachloroethene	0.995	0.2555	0.2555	Yes	=	0.1	1.731779	370	11	No	No
0022-S	A-0022S-040615-IA-018-RM309	40.755005	-111.860038	4470	018	Main Bldg - 3rd floor - Counseling office- Rm 309	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.937	0.00952	<0.1	Yes	U	0.1	0.03771824	NE	NE	No	No
0022-S	A-0022S-040615-IA-018-RM309	40.755005	-111.860038	4470	018	Main Bldg - 3rd floor - Counseling office- Rm 309	IA	NA	NA	4/6/2015	Trichloroethene	0.994	0.01367	<0.1	Yes	U	0.1	0.0734079	16	0.48	No	No
0022-S	A-0022S-040615-IA-018-RM309	40.755005	-111.860038	4470	018	Main Bldg - 3rd floor - Counseling office- Rm 309	IA	NA	NA	4/6/2015	Tetrachloroethene	0.994	0.2566	0.2566	Yes	=	0.1	1.7392348	370	11	No	No
0022-S	A-0022S-040615-IA-017-CR318	40.755005	-111.860038	4470	017	Main Bldg - 3rd floor - Classroom #318	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.762	0.00863	<0.1	Yes	U	0.1	0.03419206	NE	NE	No	No
0022-S	A-0022S-040615-IA-017-CR318	40.755005	-111.860038	4470	017	Main Bldg - 3rd floor - Classroom #318	IA	NA	NA	4/6/2015	Trichloroethene	0.985	0.02166	<0.1	Yes	U	0.1	0.1163142	16	0.48	No	No
0022-S	A-0022S-040615-IA-017-CR318	40.755005	-111.860038	4470	017	Main Bldg - 3rd floor - Classroom #318	IA	NA	NA	4/6/2015	Tetrachloroethene	0.994	0.164	0.164	Yes	=	0.1	1.111592	370	11	No	No
0022-S	A-0022S-040615-IA-016-CR330	40.755005	-111.860038	4470	016	Main Bldg - 3rd floor - Classroom #330	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.871	0.00962	<0.1	Yes	U	0.1	0.03811444	NE	NE	No	No
0022-S	A-0022S-040615-IA-016-CR330	40.755005	-111.860038	4470	016	Main Bldg - 3rd floor - Classroom #330	IA	NA	NA	4/6/2015	Trichloroethene	0.988	0.01028	<0.1	Yes	U	0.1	0.0552036	16	0.48	No	No
0022-S	A-0022S-040615-IA-016-CR330	40.755005	-111.860038	4470	016	Main Bldg - 3rd floor - Classroom #330	IA	NA	NA	4/6/2015	Tetrachloroethene	0.995	0.393	0.393	Yes	=	0.1	2.663754	370	11	No	No
0022-S	A-0022S-040615-IA-015-CR324	40.755005	-111.860038	4470	015	Main Bldg - 3rd floor - Chemistry Lab Room #324	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.881	0.01502	<0.1	Yes	U	0.1	0.05950924	NE	NE	No	No
0022-S	A-0022S-040615-IA-015-CR324	40.755005	-111.860038	4470	015	Main Bldg - 3rd floor - Chemistry Lab Room #324	IA	NA	NA	4/6/2015	Trichloroethene	0.991	0.00899	<0.1	Yes	U	0.1	0.0482763	16	0.48	No	No
0022-S	A-0022S-040615-IA-015-CR324	40.755005	-111.860038	4470	015	Main Bldg - 3rd floor - Chemistry Lab Room #324	IA	NA	NA	4/6/2015	Tetrachloroethene	0.994	0.343	0.343	Yes	=	0.1	2.324854	370	11	No	No
0022-S	A-0022S-040615-IA-014-STO2	40.755005	-111.860038	4470	014	Main Bldg - 3rd floor - Storage room - Rm 321 (not a habitable space)	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.897	0.00805	<0.1	Yes	U	0.1	0.0318941	NE	NE	No	No
0022-S	A-0022S-040615-IA-014-STO2	40.755005	-111.860038	4470	014	Main Bldg - 3rd floor - Storage room - Rm 321 (not a habitable space)	IA	NA	NA	4/6/2015	Trichloroethene	0.911	0.00955	<0.1	Yes	U	0.1	0.0512835	16	0.48	No	No
0022-S	A-0022S-040615-IA-014-STO2	40.755005	-111.860038	4470	014	Main Bldg - 3rd floor - Storage room - Rm 321 (not a habitable space)	IA	NA	NA	4/6/2015	Tetrachloroethene	0.994	0.4633	0.4633	Yes	=	0.1	3.1402474	370	11	No	No
0022-S	A-0022S-040615-IA-013-HAL1	40.755005	-111.860038	4470	013	Main Bldg - 2nd floor - Southwest Hallway	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.79	0.00853	<0.1	Yes	U	0.1	0.03379586	NE	NE	No	No
0022-S	A-0022S-040615-IA-013-HAL1	40.755005	-111.860038	4470	013	Main Bldg - 2nd floor - Southwest Hallway	IA	NA	NA	4/6/2015	Trichloroethene	0.997	0.03404	<0.1	Yes	U	0.1	0.1827948	16	0.48	No	No
0022-S	A-0022S-040615-IA-013-HAL1	40.755005	-111.860038	4470	013	Main Bldg - 2nd floor - Southwest Hallway	IA	NA	NA	4/6/2015	Tetrachloroethene	0.994	0.08226	<0.1	Yes	U	0.1	0.55755828	370	11	No	No
0022-S	A-0022S-040615-IA-012-CR206	40.755005	-111.860038	4470	012	Main Bldg - 2nd Floor classroom #206	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.773	0.00647	<0.1	Yes	U	0.1	0.02563414	NE	NE	No	No
0022-S	A-0022S-040615-IA-012-CR206	40.755005	-111.860038	4470	012	Main Bldg - 2nd Floor classroom #206	IA	NA	NA	4/6/2015	Trichloroethene	0.967	0.01121	<0.1	Yes	U	0.1	0.0601977	16	0.48	No	No
0022-S	A-0022S-040615-IA-012-CR206	40.755005	-111.860038	4470	012	Main Bldg - 2nd Floor classroom #206	IA	NA	NA	4/6/2015	Tetrachloroethene	0.994	0.01982	<0.1	Yes	U	0.1	0.13433996	370	11	No	No
0022-S	A-0022S-040615-IA-011-RM205	40.755005	-111.860038	4470	011	Main Bldg - 2nd Floor - Girls Restroom - Rm 205	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.823	0.01392	<0.1	Yes	U	0.1	0.05515104	NE	NE	No	No
0022-S	A-0022S-040615-IA-011-RM205	40.755005	-111.860038	4470	011	Main Bldg - 2nd Floor - Girls Restroom - Rm 205	IA	NA	NA	4/6/2015	Trichloroethene	0.998	0.125	0.125	Yes	=	0.1	0.67125	16	0.48	Yes	Yes
0022-S	A-0022S-040615-IA-011-RM205	40.755005	-111.860038	4470	011	Main Bldg - 2nd Floor - Girls Restroom - Rm 205	IA	NA	NA	4/6/2015	Tetrachloroethene	0.994	0.1758	0.1758	Yes	=	0.1	1.1915724	370	11	No	No
0022-S	A-0022S-040615-IA-010-RM216	40.755005	-111.860038	4470	010	Main Bldg - 2nd Floor - Principal Office - Rm 216	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.898	0.00976	<0.1	Yes	U	0.1	0.03866912	NE	NE	No	No
0022-S	A-0022S-040615-IA-010-RM216	40.755005	-111.860038	4470	010	Main Bldg - 2nd Floor - Principal Office - Rm 216	IA	NA	NA	4/6/2015	Trichloroethene	0.922	0.01297	<0.1	Yes	U	0.1	0.0696489	16	0.48	No	No
0022-S	A-0022S-040615-IA-010-RM216	40.755005	-111.860038	4470	010	Main Bldg - 2nd Floor - Principal Office - Rm 216	IA	NA	NA	4/6/2015	Tetrachloroethene	0.994	0.1386	0.1386	Yes	=	0.1	0.9394308	370	11	No	No
0022-S	A-0022S-040615-IA-009-CR226	40.755005	-111.860038	4470	009	Main Bldg - 2nd Floor classroom #226	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.935	0.00583	<0.1	Yes	U	0.1	0.02309846	NE	NE	No	No
0022-S	A-0022S-040615-IA-009-CR226	40.755005	-111.860038	4470	009	Main Bldg - 2nd Floor classroom #226	IA	NA	NA	4/6/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0022-S	A-0022S-040615-IA-009-CR226	40.755005	-111.860038	4470	009	Main Bldg - 2nd Floor classroom #226	IA	NA	NA	4/6/2015	Tetrachloroethene	0.994	0.04502	<0.1	Yes	U	0.1	0.30514556	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0022-S	A-0022S-040615-IA-008-STO1	40.755005	-111.860038	4470	008	Main Bldg - 2nd Floor maintenance storeroom -Rm 221 (Not a habitable space)	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.793	0.01161	<0.1	Yes	U	0.1	0.04599882	NE	NE	No	No
0022-S	A-0022S-040615-IA-008-STO1	40.755005	-111.860038	4470	008	Main Bldg - 2nd Floor maintenance storeroom -Rm 221 (Not a habitable space)	IA	NA	NA	4/6/2015	Trichloroethene	0.897	0.01095	<0.1	Yes	U	0.1	0.0588015	16	0.48	No	No
0022-S	A-0022S-040615-IA-008-STO1	40.755005	-111.860038	4470	008	Main Bldg - 2nd Floor maintenance storeroom -Rm 221 (Not a habitable space)	IA	NA	NA	4/6/2015	Tetrachloroethene	0.995	1.658	1.658	Yes	=	0.1	11.237924	370	11	Yes	NH
0022-S	A-0022S-040615-IA-007-CR102	40.755005	-111.860038	4470	007	Main Bldg - 1st Floor classroom #102	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.418	0.00326	<0.1	No	NR	0.1	0.01291612	NE	NE	No	No
0022-S	A-0022S-040615-IA-007-CR102	40.755005	-111.860038	4470	007	Main Bldg - 1st Floor classroom #102	IA	NA	NA	4/6/2015	Trichloroethene	0.997	0.0517	<0.1	Yes	U	0.1	0.277629	16	0.48	No	No
0022-S	A-0022S-040615-IA-007-CR102	40.755005	-111.860038	4470	007	Main Bldg - 1st Floor classroom #102	IA	NA	NA	4/6/2015	Tetrachloroethene	0.995	0.06514	<0.1	Yes	U	0.1	0.44151892	370	11	No	No
0022-S	A-0022S-040615-IA-006-RM108	40.755005	-111.860038	4470	006	Main Bldg - 1st floor student council office	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.771	0.00912	<0.1	Yes	U	0.1	0.03613344	NE	NE	No	No
0022-S	A-0022S-040615-IA-006-RM108	40.755005	-111.860038	4470	006	Main Bldg - 1st floor student council office	IA	NA	NA	4/6/2015	Trichloroethene	0.998	0.04619	<0.1	Yes	U	0.1	0.2480403	16	0.48	No	No
0022-S	A-0022S-040615-IA-006-RM108	40.755005	-111.860038	4470	006	Main Bldg - 1st floor student council office	IA	NA	NA	4/6/2015	Tetrachloroethene	0.994	0.07039	<0.1	Yes	U	0.1	0.47710342	370	11	No	No
0022-S	A-0022S-040615-IA-005-CAFÉ	40.755005	-111.860038	4470	005	Main Bldg - 1st floor cafeteria/lunchroom	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.839	0.01609	<0.1	Yes	U	0.1	0.06374858	NE	NE	No	No
0022-S	A-0022S-040615-IA-005-CAFÉ	40.755005	-111.860038	4470	005	Main Bldg - 1st floor cafeteria/lunchroom	IA	NA	NA	4/6/2015	Trichloroethene	0.998	0.248	0.248	Yes	=	0.1	1.33176	16	0.48	Yes	Yes
0022-S	A-0022S-040615-IA-005-CAFÉ	40.755005	-111.860038	4470	005	Main Bldg - 1st floor cafeteria/lunchroom	IA	NA	NA	4/6/2015	Tetrachloroethene	0.995	0.227	0.227	Yes	=	0.1	1.538606	370	11	No	No
0022-S	A-0022S-040615-IA-004-RM122	40.755005	-111.860038	4470	004	Main Bldg - 1st floor campus ministry- Rm 122	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.891	0.01456	<0.1	Yes	U	0.1	0.05768672	NE	NE	No	No
0022-S	A-0022S-040615-IA-004-RM122	40.755005	-111.860038	4470	004	Main Bldg - 1st floor campus ministry- Rm 122	IA	NA	NA	4/6/2015	Trichloroethene	0.999	0.04778	<0.1	Yes	U	0.1	0.2565786	16	0.48	No	No
0022-S	A-0022S-040615-IA-004-RM122	40.755005	-111.860038	4470	004	Main Bldg - 1st floor campus ministry- Rm 122	IA	NA	NA	4/6/2015	Tetrachloroethene	0.992	0.1038	0.1038	Yes	=	0.1	0.7035564	370	11	No	No
0022-S	A-0022S-040615-IA-003-CR126	40.755005	-111.860038	4470	003	Main Bldg - 1st floor classroom #126	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.888	0.00992	<0.1	Yes	U	0.1	0.03930304	NE	NE	No	No
0022-S	A-0022S-040615-IA-003-CR126	40.755005	-111.860038	4470	003	Main Bldg - 1st floor classroom #126	IA	NA	NA	4/6/2015	Trichloroethene	0.999	0.01678	<0.1	Yes	U	0.1	0.0901086	16	0.48	No	No
0022-S	A-0022S-040615-IA-003-CR126	40.755005	-111.860038	4470	003	Main Bldg - 1st floor classroom #126	IA	NA	NA	4/6/2015	Tetrachloroethene	0.993	0.02402	<0.1	Yes	U	0.1	0.16280756	370	11	No	No
0022-S	A-0022S-040615-IA-002-BOI1	40.755005	-111.860038	4470	002	Main Bldg - 1st floor boiler room (has office area for maintenance)	IA	NA	NA	4/6/2015	cis12Dichloroethene	0.896	0.00728	<0.1	Yes	U	0.1	0.02884336	NE	NE	No	No
0022-S	A-0022S-040615-IA-002-BOI1	40.755005	-111.860038	4470	002	Main Bldg - 1st floor boiler room (has office area for maintenance)	IA	NA	NA	4/6/2015	Trichloroethene	0.96	0.01928	<0.1	Yes	U	0.1	0.1035336	16	0.48	No	No
0022-S	A-0022S-040615-IA-002-BOI1	40.755005	-111.860038	4470	002	Main Bldg - 1st floor boiler room (has office area for maintenance)	IA	NA	NA	4/6/2015	Tetrachloroethene	0.995	0.04764	<0.1	Yes	U	0.1	0.32290392	370	11	No	No
0022-S	A-0022S-040615-IA-001-OUT	40.755005	-111.860038	4470	001	Outdoor Ambient - West side of Classroom Bldg	OA	NA	NA	4/6/2015	cis12Dichloroethene	0.888	0.00927	<0.1	Yes	U	0.1	0.03672774	NE	NE	No	No
0022-S	A-0022S-040615-IA-001-OUT	40.755005	-111.860038	4470	001	Outdoor Ambient - West side of Classroom Bldg	OA	NA	NA	4/6/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0022-S	A-0022S-040615-IA-001-OUT	40.755005	-111.860038	4470	001	Outdoor Ambient - West side of Classroom Bldg	OA	NA	NA	4/6/2015	Tetrachloroethene	0.993	0.0123	<0.1	Yes	U	0.1	0.0833694	370	11	No	No
0022-S	A-0022S-040715-SG-002-8.5'	40.755309	-111.859875	4471	003	Soil Gas Probe - NE corner of main building - 8.5 ft	SG	NA	NA	4/7/2015	cis12Dichloroethene	0.676	0.09262	<0.1	No	NR	0.1	0.36696044	NE	NE	No	No
0022-S	A-0022S-040715-SG-002-8.5'	40.755309	-111.859875	4471	003	Soil Gas Probe - NE corner of main building - 8.5 ft	SG	NA	NA	4/7/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0022-S	A-0022S-040715-SG-002-8.5'	40.755309	-111.859875	4471	003	Soil Gas Probe - NE corner of main building - 8.5 ft	SG	NA	NA	4/7/2015	Tetrachloroethene	0.994	0.1113	0.1113	Yes	=	0.1	0.7543914	370	11	No	No
0022-S	A-0022S-040715-SG-002-4'	40.755309	-111.859875	4471	002	Soil Gas Probe -NE corner of main building - 4 ft	SG	NA	NA	4/7/2015	cis12Dichloroethene	0.709	0.07409	<0.1	Yes	U	0.1	0.29354458	NE	NE	No	No
0022-S	A-0022S-040715-SG-002-4'	40.755309	-111.859875	4471	002	Soil Gas Probe -NE corner of main building - 4 ft	SG	NA	NA	4/7/2015	Trichloroethene	0.889	0.01507	<0.1	Yes	U	0.1	0.0809259	16	0.48	No	No
0022-S	A-0022S-040715-SG-002-4'	40.755309	-111.859875	4471	002	Soil Gas Probe -NE corner of main building - 4 ft	SG	NA	NA	4/7/2015	Tetrachloroethene	0.996	0.07735	<0.1	Yes	U	0.1	0.5242783	370	11	No	No
0022-S	A-0022S-040715-SG-001-4'	40.754680	-111.859855	4467	001	Soil Gas Probe -SE corner of main building - 4 ft	SG	NA	NA	4/7/2015	cis12Dichloroethene	0.707	0.09287	<0.1	Yes	U	0.1	0.36795094	NE	NE	No	No
0022-S	A-0022S-040715-SG-001-4'	40.754680	-111.859855	4467	001	Soil Gas Probe -SE corner of main building - 4 ft	SG	NA	NA	4/7/2015	Trichloroethene	0.883	0.01149	<0.1	Yes	U	0.1	0.0617013	16	0.48	No	No
0022-S	A-0022S-040715-SG-001-4'	40.754680	-111.859855	4467	001	Soil Gas Probe -SE corner of main building - 4 ft	SG	NA	NA	4/7/2015	Tetrachloroethene	0.994	0.05951	<0.1	Yes	U	0.1	0.40335878	370	11	No	No
0023-H	A-0023H-031015-CCV	40.749164	-111.854789	4474	003	CCV - 0.5 ppb	CCV	NA	NA	3/10/2015	cis12Dichloroethene	0.991	0.4478	0.4478	Yes	=	0.1	1.7741836	NA	NA	NA	NA
0023-H	A-0023H-031015-CCV	40.749164	-111.854789	4474	003	CCV - 0.5 ppb	CCV	NA	NA	3/10/2015	Trichloroethene	0.906	0.4432	0.4432	Yes	=	0.1	2.379984	NA	NA	NA	NA
0023-H	A-0023H-031015-CCV	40.749164	-111.854789	4474	003	CCV - 0.5 ppb	CCV	NA	NA	3/10/2015	Tetrachloroethene	0.993	0.4307	0.4307	Yes	=	0.1	2.9192846	NA	NA	NA	NA
0023-H	A-0023H-031015-CCV	40.749164	-111.854789	4474	001	CCV - 5.0 ppb	CCV	NA	NA	3/10/2015	cis12Dichloroethene	0.996	4.256	4.256	Yes	=	0.1	16.862272	NA	NA	NA	NA
0023-H	A-0023H-031015-CCV	40.749164	-111.854789	4474	001	CCV - 5.0 ppb	CCV	NA	NA	3/10/2015	Trichloroethene	0.97	4.728	4.728	Yes	=	0.1	25.38936	NA	NA	NA	NA
0023-H	A-0023H-031015-CCV	40.749164	-111.854789	4474	001	CCV - 5.0 ppb	CCV	NA	NA	3/10/2015	Tetrachloroethene	0.994	4.345	4.345	Yes	=	0.1	29.45041	NA	NA	NA	NA
0023-H	A-0023H-030915-CCV	40.749164	-111.854789	4474	037	CCV - 0.5 ppb	CCV	NA	NA	3/9/2015	cis12Dichloroethene	0.994	0.484	0.484	Yes	=	0.1	1.917608	NA	NA	NA	NA
0023-H	A-0023H-030915-CCV	40.749164	-111.854789	4474	037	CCV - 0.5 ppb	CCV	NA	NA	3/9/2015	Trichloroethene	0.904	0.4931	0.4931	Yes	=	0.1	2.647947	NA	NA	NA	NA
0023-H	A-0023H-030915-CCV	40.749164	-111.854789	4474	037	CCV - 0.5 ppb	CCV	NA	NA	3/9/2015	Tetrachloroethene	0.994	0.4766	0.4766	Yes	=	0.1	3.2303948	NA	NA	NA	NA
0023-H	A-0023H-030915-CCV	40.749164	-111.854789	4474	036	CCV - 5.0 ppb	CCV	NA	NA	3/9/2015	cis12Dichloroethene	0.998	3.67	3.67	Yes	=	0.1	14.54054	NA	NA	NA	NA
0023-H	A-0023H-030915-CCV	40.749164	-111.854789	4474	036	CCV - 5.0 ppb	CCV	NA	NA	3/9/2015	Trichloroethene	0.97	4.393	4.393	Yes	=	0.1	23.59041	NA	NA	NA	NA
0023-H	A-0023H-030915-CCV	40.749164	-111.854789	4474	036	CCV - 5.0 ppb	CCV	NA	NA	3/9/2015	Tetrachloroethene	0.995	4.054	4.054	Yes	=	0.1	27.478012	NA	NA	NA	NA
0023-H	A-0023H-030915-CCV	40.749164	-111.854789	4474	002	CCV - 0.5 ppb	CCV	NA	NA	3/9/2015	cis12Dichloroethene	0.988	0.5829	0.5829	Yes	=	0.1	2.3094498	NA	NA	NA	NA
0023-H	A-0023H-030915-CCV	40.749164	-111.854789	4474	002	CCV - 0.5 ppb	CCV	NA	NA	3/9/2015	Trichloroethene	0.992	0.5515	0.5515	Yes	=	0.1	2.961555	NA	NA	NA	NA
0023-H	A-0023H-030915-CCV	40.749164	-111.854789	4474	002	CCV - 0.5 ppb	CCV	NA	NA	3/9/2015	Tetrachloroethene	0.996	0.54	0.54	Yes	=	0.1	3.66012	NA	NA	NA	NA
0023-H	A-0023H-030915-CCV	40.749164	-111.854789	4474	001	CCV - 5.0 ppb	CCV	NA	NA	3/9/2015	cis12Dichloroethene	0.995	5.067	5.067	Yes	=	0.1	20.075454	NA	NA	NA	NA
0023-H	A-0023H-030915-CCV	40.749164	-111.854789	4474	001	CCV - 5.0 ppb	CCV	NA	NA	3/9/2015	Trichloroethene	0.947	5.018	5.018	Yes	=	0.1	26.94666	NA	NA	NA	NA
0023-H	A-0023H-030915-CCV	40.749164	-111.854789	4474	001	CCV - 5.0 ppb	CCV	NA	NA	3/9/2015	Tetrachloroethene	0.995	4.863	4.863	Yes	=	0.1	32.961414	NA	NA	NA	NA
0023-H	A-0023H-030915-IA-015-MBR	40.749164	-111.854789	4474	018	2nd Floor - Master Bedroom Suite	IA	NA	NA	3/9/2015	cis12Dichloroethene	0.719	0.05965	<0.1	Yes	U	0.1	0.2363333	NE	NE	No	No
0023-H	A-0023H-030915-IA-015-MBR	40.749164	-111.854789	4474	018	2nd Floor - Master Bedroom Suite	IA	NA	NA	3/9/2015	Trichloroethene	0.858	0.01142	<0.1	Yes	U	0.1	0.0613254	16	0.48	No	No
0023-H	A-0023H-030915-IA-015-MBR	40.749164	-111.854789	4474	018	2nd Floor - Master Bedroom Suite	IA	NA	NA	3/9/2015	Tetrachloroethene	0.993	0.1639	0.1639	Yes	=	0.1	1.1109142	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0023-H	A-0023H-030915-IA-014-BA3	40.749164	-111.854789	4474	017	2nd Floor - Hall Bathroom	IA	NA	NA	3/9/2015	cis12Dichloroethene	0.687	0.04669	<0.1	No	NR	0.1	0.18498578	NE	NE	No	No
0023-H	A-0023H-030915-IA-014-BA3	40.749164	-111.854789	4474	017	2nd Floor - Hall Bathroom	IA	NA	NA	3/9/2015	Trichloroethene	0.87	0.00838	<0.1	Yes	U	0.1	0.0450006	16	0.48	No	No
0023-H	A-0023H-030915-IA-014-BA3	40.749164	-111.854789	4474	017	2nd Floor - Hall Bathroom	IA	NA	NA	3/9/2015	Tetrachloroethene	0.994	0.1491	0.1491	Yes	=	0.1	1.0105998	370	11	No	No
0023-H	A-0023H-030915-IA-013-BR2	40.749164	-111.854789	4474	016	2nd Floor - Girls Bedroom (back of house)	IA	NA	NA	3/9/2015	cis12Dichloroethene	0.67	0.09979	<0.1	No	NR	0.1	0.39536798	NE	NE	No	No
0023-H	A-0023H-030915-IA-013-BR2	40.749164	-111.854789	4474	016	2nd Floor - Girls Bedroom (back of house)	IA	NA	NA	3/9/2015	Trichloroethene	0.978	0.02319	<0.1	Yes	U	0.1	0.1245303	16	0.48	No	No
0023-H	A-0023H-030915-IA-013-BR2	40.749164	-111.854789	4474	016	2nd Floor - Girls Bedroom (back of house)	IA	NA	NA	3/9/2015	Tetrachloroethene	0.993	0.1685	0.1685	Yes	=	0.1	1.142093	370	11	No	No
0023-H	A-0023H-030915-IA-012-BR1	40.749164	-111.854789	4474	015	2nd Floor - Boys Bedroom (front of house)	IA	NA	NA	3/9/2015	cis12Dichloroethene	0.777	0.0483	<0.1	Yes	U	0.1	0.1913646	NE	NE	No	No
0023-H	A-0023H-030915-IA-012-BR1	40.749164	-111.854789	4474	015	2nd Floor - Boys Bedroom (front of house)	IA	NA	NA	3/9/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0023-H	A-0023H-030915-IA-012-BR1	40.749164	-111.854789	4474	015	2nd Floor - Boys Bedroom (front of house)	IA	NA	NA	3/9/2015	Tetrachloroethene	0.994	0.166	0.166	Yes	=	0.1	1.125148	370	11	No	No
0023-H	A-0023H-030915-IA-011-OCL2	40.749164	-111.854789	4474	014	1st Floor (Above Grade) - Open Living/Dining Area	IA	NA	NA	3/9/2015	cis12Dichloroethene	0.774	0.01775	<0.1	Yes	U	0.1	0.0703255	NE	NE	No	No
0023-H	A-0023H-030915-IA-011-OCL2	40.749164	-111.854789	4474	014	1st Floor (Above Grade) - Open Living/Dining Area	IA	NA	NA	3/9/2015	Trichloroethene	0.774	0.00315	<0.1	Yes	U	0.1	0.0169155	16	0.48	No	No
0023-H	A-0023H-030915-IA-011-OCL2	40.749164	-111.854789	4474	014	1st Floor (Above Grade) - Open Living/Dining Area	IA	NA	NA	3/9/2015	Tetrachloroethene	0.994	0.1498	0.1498	Yes	=	0.1	1.0153444	370	11	No	No
0023-H	A-0023H-030915-IA-010-BA2	40.749164	-111.854789	4474	013	1st Floor (Above Grade) - Bathroom	IA	NA	NA	3/9/2015	cis12Dichloroethene	0.742	0.01996	<0.1	Yes	U	0.1	0.07908152	NE	NE	No	No
0023-H	A-0023H-030915-IA-010-BA2	40.749164	-111.854789	4474	013	1st Floor (Above Grade) - Bathroom	IA	NA	NA	3/9/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0023-H	A-0023H-030915-IA-010-BA2	40.749164	-111.854789	4474	013	1st Floor (Above Grade) - Bathroom	IA	NA	NA	3/9/2015	Tetrachloroethene	0.993	0.147	0.147	Yes	=	0.1	0.996366	370	11	No	No
0023-H	A-0023H-030915-IA-009-OCL1	40.749164	-111.854789	4474	012	5th Floor (Above Grade) - Open Kitchen/Dining Area	IA	NA	NA	3/9/2015	cis12Dichloroethene	0.771	0.019	<0.1	Yes	U	0.1	0.075278	NE	NE	No	No
0023-H	A-0023H-030915-IA-009-OCL1	40.749164	-111.854789	4474	012	7th Floor (Above Grade) - Open Kitchen/Dining Area	IA	NA	NA	3/9/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0023-H	A-0023H-030915-IA-009-OCL1	40.749164	-111.854789	4474	012	8th Floor (Above Grade) - Open Kitchen/Dining Area	IA	NA	NA	3/9/2015	Tetrachloroethene	0.996	0.1461	0.1461	Yes	=	0.1	0.9902658	370	11	No	No
0023-H	A-0023H-030915-IA-008-LAU	40.749164	-111.854789	4474	011	Finished Basement Level - Laundry Room	IA	NA	NA	3/9/2015	cis12Dichloroethene	0.831	0.01711	<0.1	Yes	U	0.1	0.06778982	NE	NE	No	No
0023-H	A-0023H-030915-IA-008-LAU	40.749164	-111.854789	4474	011	Finished Basement Level - Laundry Room	IA	NA	NA	3/9/2015	Trichloroethene	0.985	0.01612	<0.1	Yes	U	0.1	0.0865644	16	0.48	No	No
0023-H	A-0023H-030915-IA-008-LAU	40.749164	-111.854789	4474	011	Finished Basement Level - Laundry Room	IA	NA	NA	3/9/2015	Tetrachloroethene	0.993	0.173	0.173	Yes	=	0.1	1.172594	370	11	No	No
0023-H	A-0023H-030915-IA-007-BA1	40.749164	-111.854789	4474	009	Finished Basement Level - Bathroom	IA	NA	NA	3/9/2015	cis12Dichloroethene	0.824	0.01669	<0.1	Yes	U	0.1	0.06612578	NE	NE	No	No
0023-H	A-0023H-030915-IA-007-BA1	40.749164	-111.854789	4474	009	Finished Basement Level - Bathroom	IA	NA	NA	3/9/2015	Trichloroethene	0.855	0.00442	<0.1	Yes	U	0.1	0.0237354	16	0.48	No	No
0023-H	A-0023H-030915-IA-007-BA1	40.749164	-111.854789	4474	009	Finished Basement Level - Bathroom	IA	NA	NA	3/9/2015	Tetrachloroethene	0.994	0.1544	0.1544	Yes	=	0.1	1.0465232	370	11	No	No
0023-H	A-0023H-030915-IA-006-PLA	40.749164	-111.854789	4474	012	Finished Basement Level - Playroom/Game Room	IA	NA	NA	3/9/2015	cis12Dichloroethene	0.861	0.01889	<0.1	Yes	U	0.1	0.07484218	NE	NE	No	No
0023-H	A-0023H-030915-IA-006-PLA	40.749164	-111.854789	4474	014	Finished Basement Level - Playroom/Game Room	IA	NA	NA	3/9/2015	Trichloroethene	0.954	0.01086	<0.1	Yes	U	0.1	0.0583182	16	0.48	No	No
0023-H	A-0023H-030915-IA-006-PLA	40.749164	-111.854789	4474	015	Finished Basement Level - Playroom/Game Room	IA	NA	NA	3/9/2015	Tetrachloroethene	0.993	0.1488	0.1488	Yes	=	0.1	1.0085664	370	11	No	No
0023-H	A-0023H-030915-IA-005-LLL	40.749164	-111.854789	4474	007	Finished Basement Level - Family/Living Room	IA	NA	NA	3/9/2015	cis12Dichloroethene	0.811	0.01794	<0.1	Yes	U	0.1	0.07107828	NE	NE	No	No
0023-H	A-0023H-030915-IA-005-LLL	40.749164	-111.854789	4474	007	Finished Basement Level - Family/Living Room	IA	NA	NA	3/9/2015	Trichloroethene	0.968	0.01058	<0.1	Yes	U	0.1	0.0568146	16	0.48	No	No
0023-H	A-0023H-030915-IA-005-LLL	40.749164	-111.854789	4474	007	Finished Basement Level - Family/Living Room	IA	NA	NA	3/9/2015	Tetrachloroethene	0.996	0.1464	0.1464	Yes	=	0.1	0.9922992	370	11	No	No
0023-H	A-0023H-030915-IA-003-GAR	40.749164	-111.854789	4474	005	Garage -Below Grade on East Side	IA	NA	NA	3/9/2015	cis12Dichloroethene	0.832	0.01071	<0.1	Yes	U	0.1	0.04243302	NE	NE	No	No
0023-H	A-0023H-030915-IA-003-GAR	40.749164	-111.854789	4474	005	Garage -Below Grade on East Side	IA	NA	NA	3/9/2015	Trichloroethene	0.913	0.0078	<0.1	Yes	U	0.1	0.041886	16	0.48	No	No
0023-H	A-0023H-030915-IA-003-GAR	40.749164	-111.854789	4474	005	Garage -Below Grade on East Side	IA	NA	NA	3/9/2015	Tetrachloroethene	0.994	0.1217	0.1217	Yes	=	0.1	0.8248826	370	11	No	No
0023-H	A-0023H-030915-IA-002-SUMP	40.749164	-111.854789	4474	004	Covered Sump Pit in Furnace Room/Basement	IA	NA	NA	3/9/2015	cis12Dichloroethene	0.99	0.05849	<0.1	Yes	U	0.1	0.23173738	NE	NE	No	No
0023-H	A-0023H-030915-IA-002-SUMP	40.749164	-111.854789	4474	004	Covered Sump Pit in Furnace Room/Basement	IA	NA	NA	3/9/2015	Trichloroethene	0.992	0.6497	0.6497	Yes	=	0.1	3.488889	16	0.48	Yes	NH
0023-H	A-0023H-030915-IA-002-SUMP	40.749164	-111.854789	4474	004	Covered Sump Pit in Furnace Room/Basement	IA	NA	NA	3/9/2015	Tetrachloroethene	0.994	19.53	19.53	Yes	=	0.1	132.37434	370	11	Yes	NH
0023-H	A-0023H-030915-IA-001-FUR	40.749164	-111.854789	4474	003	Lowest Basement/Furnace Room (accessed from garage)	IA	NA	NA	3/9/2015	cis12Dichloroethene	0.936	0.02108	<0.1	Yes	U	0.1	0.08351896	NE	NE	No	No
0023-H	A-0023H-030915-IA-001-FUR	40.749164	-111.854789	4474	003	Lowest Basement/Furnace Room (accessed from garage)	IA	NA	NA	3/9/2015	Trichloroethene	0.838	0.01291	<0.1	Yes	U	0.1	0.0693267	16	0.48	No	No
0023-H	A-0023H-030915-IA-001-FUR	40.749164	-111.854789	4474	003	Lowest Basement/Furnace Room (accessed from garage)	IA	NA	NA	3/9/2015	Tetrachloroethene	0.995	0.1155	0.1155	Yes	=	0.1	0.782859	370	11	No	No
0023-H	A-0023H-030915-IA-016I-PLA	40.749164	-111.854789	4474	027	Finished Basement Level - Playroom/Game Room	NP	-5.3	14:57	3/9/2015	cis12Dichloroethene	0.749	0.00679	<0.1	Yes	U	0.1	0.02690198	NE	NE	No	No
0023-H	A-0023H-030915-IA-016I-PLA	40.749164	-111.854789	4474	027	Finished Basement Level - Playroom/Game Room	NP	-5.3	14:57	3/9/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0023-H	A-0023H-030915-IA-016I-PLA	40.749164	-111.854789	4474	027	Finished Basement Level - Playroom/Game Room	NP	-5.3	14:57	3/9/2015	Tetrachloroethene	0.994	0.09	<0.1	Yes	U	0.1	0.61002	370	11	No	No
0023-H	A-0023H-030915-IA-016H-PLA	40.749164	-111.854789	4474	026	Finished Basement Level - Playroom/Game Room	NP	-5.4	14:47	3/9/2015	cis12Dichloroethene	0.875	0.00938	<0.1	Yes	U	0.1	0.03716356	NE	NE	No	No
0023-H	A-0023H-030915-IA-016H-PLA	40.749164	-111.854789	4474	026	Finished Basement Level - Playroom/Game Room	NP	-5.4	14:47	3/9/2015	Trichloroethene	0.965	0.00454	<0.1	Yes	U	0.1	0.0243798	16	0.48	No	No
0023-H	A-0023H-030915-IA-016H-PLA	40.749164	-111.854789	4474	026	Finished Basement Level - Playroom/Game Room	NP	-5.4	14:47	3/9/2015	Tetrachloroethene	0.994	0.09679	<0.1	Yes	U	0.1	0.65604262	370	11	No	No
0023-H	A-0023H-030915-IA-016G-PLA	40.749164	-111.854789	4474	025	Finished Basement Level - Playroom/Game Room	NP	-4.4	14:30	3/9/2015	cis12Dichloroethene	0.807	0.00458	<0.1	Yes	U	0.1	0.01814596	NE	NE	No	No
0023-H	A-0023H-030915-IA-016G-PLA	40.749164	-111.854789	4474	025	Finished Basement Level - Playroom/Game Room	NP	-4.4	14:30	3/9/2015	Trichloroethene	0.971	0.00791	<0.1	Yes	U	0.1	0.0424767	16	0.48	No	No
0023-H	A-0023H-030915-IA-016G-PLA	40.749164	-111.854789	4474	025	Finished Basement Level - Playroom/Game Room	NP	-4.4	14:30	3/9/2015	Tetrachloroethene	0.996	0.06501	<0.1	Yes	U	0.1	0.44063778	370	11	No	No
0023-H	A-0023H-030915-IA-016F-PLA	40.749164	-111.854789	4474	024	Finished Basement Level - Playroom/Game Room	NP	-4.7	14:15	3/9/2015	cis12Dichloroethene	0.865	0.01265	<0.1	Yes	U	0.1	0.0501193	NE	NE	No	No
0023-H	A-0023H-030915-IA-016F-PLA	40.749164	-111.854789	4474	024	Finished Basement Level - Playroom/Game Room	NP	-4.7	14:15	3/9/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0023-H	A-0023H-030915-IA-016F-PLA	40.749164	-111.854789	4474	024	Finished Basement Level - Playroom/Game Room	NP	-4.7	14:15	3/9/2015	Tetrachloroethene	0.994	0.1044	0.1044	Yes	=	0.1	0.7076232	370	11	No	No
0023-H	A-0023H-030915-IA-016E-PLA	40.749164	-111.854789	4474	023	Finished Basement Level - Playroom/Game Room	NP	-5.2	14:00	3/9/2015	cis12Dichloroethene	0.898	0.00803	<0.1	Yes	U	0.1	0.03181486	NE	NE	No	No
0023-H	A-0023H-030915-IA-016E-PLA	40.749164	-111.854789	4474	023	Finished Basement Level - Playroom/Game Room	NP	-5.2	14:00	3/9/2015	Trichloroethene	0.983	0.01698	<0.1	Yes	U	0.1	0.0911826	16	0.48	No	No
0023-H	A-0023H-030915-IA-016E-PLA	40.749164	-111.854789	4474	023	Finished Basement Level - Playroom/Game Room	NP	-5.2	14:00	3/9/2015	Tetrachloroethene	0.994	0.1085	0.1085	Yes	=	0.1	0.735413	370	11	No	No
0023-H	A-0023H-030915-IA-016D-PLA	40.749164	-111.854789	4474	022	Finished Basement Level - Playroom/Game Room	NP	-4.1	13:50	3/9/2015	cis12Dichloroethene	0.91	0.01182	<0.1	Yes	U	0.1	0.04683084	NE	NE	No	No
0023-H	A-0023H-030915-IA-016D-PLA	40.749164	-111.854789	4474	022	Finished Basement Level - Playroom/Game Room	NP	-4.1	13:50	3/9/2015	Trichloroethene	0.987	0.01258	<0.1	Yes	U	0.1	0.0675546	16	0.48	No	No
0023-H	A-0023H-030915-IA-016D-PLA	40.749164	-111.854789	4474	022	Finished Basement Level - Playroom/Game Room	NP	-4.1	13:50	3/9/2015	Tetrachloroethene	0.994	0.1076	0.1076	Yes	=	0.1	0.7293128	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0023-H	A-0023H-030915-IA-016C-PLA	40.749164	-111.854789	4474	021	Finished Basement Level - Playroom/Game Room	NP	-5.6	13:41	3/9/2015	cis12Dichloroethene	0.796	0.01318	<0.1	Yes	U	0.1	0.05221916	NE	NE	No	No
0023-H	A-0023H-030915-IA-016C-PLA	40.749164	-111.854789	4474	021	Finished Basement Level - Playroom/Game Room	NP	-5.6	13:41	3/9/2015	Trichloroethene	0.876	0.01145	<0.1	Yes	U	0.1	0.0614865	16	0.48	No	No
0023-H	A-0023H-030915-IA-016C-PLA	40.749164	-111.854789	4474	021	Finished Basement Level - Playroom/Game Room	NP	-5.6	13:41	3/9/2015	Tetrachloroethene	0.995	0.1074	0.1074	Yes	=	0.1	0.7279572	370	11	No	No
0023-H	A-0023H-030915-IA-016B-PLA	40.749164	-111.854789	4474	020	Finished Basement Level - Playroom/Game Room	NP	-5.5	13:33	3/9/2015	cis12Dichloroethene	0.781	0.01494	<0.1	Yes	U	0.1	0.05919228	NE	NE	No	No
0023-H	A-0023H-030915-IA-016B-PLA	40.749164	-111.854789	4474	020	Finished Basement Level - Playroom/Game Room	NP	-5.5	13:33	3/9/2015	Trichloroethene	0.992	0.02075	<0.1	Yes	U	0.1	0.1114275	16	0.48	No	No
0023-H	A-0023H-030915-IA-016B-PLA	40.749164	-111.854789	4474	020	Finished Basement Level - Playroom/Game Room	NP	-5.5	13:33	3/9/2015	Tetrachloroethene	0.995	0.1037	0.1037	Yes	=	0.1	0.7028786	370	11	No	No
0023-H	A-0023H-030915-IA-016A-PLA	40.749164	-111.854789	4474	019	Finished Basement Level - Playroom/Game Room	NP	-4.7	13:25	3/9/2015	cis12Dichloroethene	0.912	0.01638	<0.1	Yes	U	0.1	0.06489756	NE	NE	No	No
0023-H	A-0023H-030915-IA-016A-PLA	40.749164	-111.854789	4474	019	Finished Basement Level - Playroom/Game Room	NP	-4.7	13:25	3/9/2015	Trichloroethene	0.998	0.01773	<0.1	Yes	U	0.1	0.0952101	16	0.48	No	No
0023-H	A-0023H-030915-IA-016A-PLA	40.749164	-111.854789	4474	019	Finished Basement Level - Playroom/Game Room	NP	-4.7	13:25	3/9/2015	Tetrachloroethene	0.993	0.112	0.112	Yes	=	0.1	0.759136	370	11	No	No
0023-H	A-0023H-030915-IA-004-OUT	40.749164	-111.854789	4474	006	Outdoor Ambient - Driveway south of house	OA	NA	NA	3/9/2015	cis12Dichloroethene	0.938	0.00442	<0.1	Yes	U	0.1	0.01751204	NE	NE	No	No
0023-H	A-0023H-030915-IA-004-OUT	40.749164	-111.854789	4474	006	Outdoor Ambient - Driveway south of house	OA	NA	NA	3/9/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0023-H	A-0023H-030915-IA-004-OUT	40.749164	-111.854789	4474	006	Outdoor Ambient - Driveway south of house	OA	NA	NA	3/9/2015	Tetrachloroethene	0.996	0.02228	<0.1	Yes	U	0.1	0.15101384	370	11	No	No
0023-H	A-0023H-030915-IA-017H-PLA	40.749164	-111.854789	4474	035	Finished Basement Level - Playroom/Game Room	PP	5.3	16:34	3/9/2015	cis12Dichloroethene	0.819	0.01648	<0.1	Yes	U	0.1	0.06529376	NE	NE	No	No
0023-H	A-0023H-030915-IA-017H-PLA	40.749164	-111.854789	4474	035	Finished Basement Level - Playroom/Game Room	PP	5.3	16:34	3/9/2015	Trichloroethene	0.92	0.00626	<0.1	Yes	U	0.1	0.0336162	16	0.48	No	No
0023-H	A-0023H-030915-IA-017H-PLA	40.749164	-111.854789	4474	035	Finished Basement Level - Playroom/Game Room	PP	5.3	16:34	3/9/2015	Tetrachloroethene	0.994	0.04328	<0.1	Yes	U	0.1	0.29335184	370	11	No	No
0023-H	A-0023H-030915-IA-017G-PLA	40.749164	-111.854789	4474	034	Finished Basement Level - Playroom/Game Room	PP	4.2	16:25	3/9/2015	cis12Dichloroethene	0.877	0.01941	<0.1	Yes	U	0.1	0.07690242	NE	NE	No	No
0023-H	A-0023H-030915-IA-017G-PLA	40.749164	-111.854789	4474	034	Finished Basement Level - Playroom/Game Room	PP	4.2	16:25	3/9/2015	Trichloroethene	0.996	0.01153	<0.1	Yes	U	0.1	0.0619161	16	0.48	No	No
0023-H	A-0023H-030915-IA-017G-PLA	40.749164	-111.854789	4474	034	Finished Basement Level - Playroom/Game Room	PP	4.2	16:25	3/9/2015	Tetrachloroethene	0.996	0.04869	<0.1	Yes	U	0.1	0.33002082	370	11	No	No
0023-H	A-0023H-030915-IA-017F-PLA	40.749164	-111.854789	4474	033	Finished Basement Level - Playroom/Game Room	PP	6.2	16:10	3/9/2015	cis12Dichloroethene	0.77	0.01647	<0.1	Yes	U	0.1	0.06525414	NE	NE	No	No
0023-H	A-0023H-030915-IA-017F-PLA	40.749164	-111.854789	4474	033	Finished Basement Level - Playroom/Game Room	PP	6.2	16:10	3/9/2015	Trichloroethene	0.523	0.00674	<0.1	No	NR	0.1	0.0361938	16	0.48	No	No
0023-H	A-0023H-030915-IA-017F-PLA	40.749164	-111.854789	4474	033	Finished Basement Level - Playroom/Game Room	PP	6.2	16:10	3/9/2015	Tetrachloroethene	0.995	0.05676	<0.1	Yes	U	0.1	0.38471928	370	11	No	No
0023-H	A-0023H-030915-IA-017E-PLA	40.749164	-111.854789	4474	032	Finished Basement Level - Playroom/Game Room	PP	4.9	15:56	3/9/2015	cis12Dichloroethene	0.804	0.01865	<0.1	Yes	U	0.1	0.0738913	NE	NE	No	No
0023-H	A-0023H-030915-IA-017E-PLA	40.749164	-111.854789	4474	032	Finished Basement Level - Playroom/Game Room	PP	4.9	15:56	3/9/2015	Trichloroethene	0.95	0.00631	<0.1	Yes	U	0.1	0.0338847	16	0.48	No	No
0023-H	A-0023H-030915-IA-017E-PLA	40.749164	-111.854789	4474	032	Finished Basement Level - Playroom/Game Room	PP	4.9	15:56	3/9/2015	Tetrachloroethene	0.995	0.06186	<0.1	Yes	U	0.1	0.41928708	370	11	No	No
0023-H	A-0023H-030915-IA-017D-PLA	40.749164	-111.854789	4474	031	Finished Basement Level - Playroom/Game Room	PP	4.9	15:56	3/9/2015	cis12Dichloroethene	0.725	0.01986	<0.1	Yes	U	0.1	0.07868532	NE	NE	No	No
0023-H	A-0023H-030915-IA-017D-PLA	40.749164	-111.854789	4474	031	Finished Basement Level - Playroom/Game Room	PP	4.9	15:56	3/9/2015	Trichloroethene	0.939	0.00629	<0.1	Yes	U	0.1	0.0337773	16	0.48	No	No
0023-H	A-0023H-030915-IA-017D-PLA	40.749164	-111.854789	4474	031	Finished Basement Level - Playroom/Game Room	PP	4.9	15:56	3/9/2015	Tetrachloroethene	0.995	0.07609	<0.1	Yes	U	0.1	0.51573802	370	11	No	No
0023-H	A-0023H-030915-IA-017C-PLA	40.749164	-111.854789	4474	030	Finished Basement Level - Playroom/Game Room	PP	5.0	15:30	3/9/2015	cis12Dichloroethene	0.787	0.01978	<0.1	Yes	U	0.1	0.07836836	NE	NE	No	No
0023-H	A-0023H-030915-IA-017C-PLA	40.749164	-111.854789	4474	030	Finished Basement Level - Playroom/Game Room	PP	5.0	15:30	3/9/2015	Trichloroethene	0.952	0.00667	<0.1	Yes	U	0.1	0.0358179	16	0.48	No	No
0023-H	A-0023H-030915-IA-017C-PLA	40.749164	-111.854789	4474	030	Finished Basement Level - Playroom/Game Room	PP	5.0	15:30	3/9/2015	Tetrachloroethene	0.995	0.08965	<0.1	Yes	U	0.1	0.6076477	370	11	No	No
0023-H	A-0023H-030915-IA-017B-PLA	40.749164	-111.854789	4474	029	Finished Basement Level - Playroom/Game Room	PP	4.4	15:20	3/9/2015	cis12Dichloroethene	0.732	0.01573	<0.1	Yes	U	0.1	0.06232226	NE	NE	No	No
0023-H	A-0023H-030915-IA-017B-PLA	40.749164	-111.854789	4474	029	Finished Basement Level - Playroom/Game Room	PP	4.4	15:20	3/9/2015	Trichloroethene	0.97	0.0093	<0.1	Yes	U	0.1	0.049941	16	0.48	No	No
0023-H	A-0023H-030915-IA-017B-PLA	40.749164	-111.854789	4474	029	Finished Basement Level - Playroom/Game Room	PP	4.4	15:20	3/9/2015	Tetrachloroethene	0.994	0.09933	<0.1	Yes	U	0.1	0.67325874	370	11	No	No
0023-H	A-0023H-030915-IA-017A-PLA	40.749164	-111.854789	4474	028	Finished Basement Level - Playroom/Game Room	PP	3.9	15:11	3/9/2015	cis12Dichloroethene	0.936	0.00872	<0.1	Yes	U	0.1	0.03454864	NE	NE	No	No
0023-H	A-0023H-030915-IA-017A-PLA	40.749164	-111.854789	4474	028	Finished Basement Level - Playroom/Game Room	PP	3.9	15:11	3/9/2015	Trichloroethene	0	Not Found	<0.1	YEs	U	0.1	Not found	16	0.48	No	No
0023-H	A-0023H-030915-IA-017A-PLA	40.749164	-111.854789	4474	028	Finished Basement Level - Playroom/Game Room	PP	3.9	15:11	3/9/2015	Tetrachloroethene	0.994	0.1077	0.1077	Yes	=	0.1	0.7299906	370	11	No	No
0023-H	A-0023H-031015-SG-001-6.5'	40.749207	-111.854724	4488	005	Soil gas sample - NE corner of home, on east wall near bay window	SG	NA	NA	3/10/2015	cis12Dichloroethene	0.739	0.06496	<0.1	Yes	U	0.1	0.25737152	NE	NE	No	No
0023-H	A-0023H-031015-SG-001-6.5'	40.749207	-111.854724	4488	005	Soil gas sample - NE corner of home, on east wall near bay window	SG	NA	NA	3/10/2015	Trichloroethene	0.965	0.00916	<0.1	Yes	U	0.1	0.0491892	16	0.48	No	No
0023-H	A-0023H-031015-SG-001-6.5'	40.749207	-111.854724	4488	005	Soil gas sample - NE corner of home, on east wall near bay window	SG	NA	NA	3/10/2015	Tetrachloroethene	0.995	1.326	1.326	Yes	=	0.1	8.987628	370	11	No	No
0023-H	A-0023H-031015-SG-001-4'	40.749207	-111.854724	4488	004	Soil gas sample - NE corner of home, on east wall near bay window	SG	NA	NA	3/10/2015	cis12Dichloroethene	0.817	0.03768	<0.1	Yes	U	0.1	0.14928816	NE	NE	No	No
0023-H	A-0023H-031015-SG-001-4'	40.749207	-111.854724	4488	004	Soil gas sample - NE corner of home, on east wall near bay window	SG	NA	NA	3/10/2015	Trichloroethene	0.951	0.00794	<0.1	Yes	U	0.1	0.0426378	16	0.48	No	No
0023-H	A-0023H-031015-SG-001-4'	40.749207	-111.854724	4488	004	Soil gas sample - NE corner of home, on east wall near bay window	SG	NA	NA	3/10/2015	Tetrachloroethene	0.994	0.6666	0.6666	Yes	=	0.1	4.5182148	370	11	No	No
0024-H	A-0024H-021015-CCV	40.753888	-111.853447	4550	035	CCV - 0.5 ppb	CCV	NA	NA	2/10/2015	cis12Dichloroethene	0.993	0.5305	0.5305	Yes	=	0.1	2.101841	NA	NA	NA	NA
0024-H	A-0024H-021015-CCV	40.753888	-111.853447	4550	035	CCV - 0.5 ppb	CCV	NA	NA	2/10/2015	Trichloroethene	0.997	0.3939	0.3939	Yes	=	0.1	2.115243	NA	NA	NA	NA
0024-H	A-0024H-021015-CCV	40.753888	-111.853447	4550	035	CCV - 0.5 ppb	CCV	NA	NA	2/10/2015	Tetrachloroethene	0.994	0.4554	0.4554	Yes	=	0.1	3.0867012	NA	NA	NA	NA
0024-H	A-0024H-021015-CCV	40.753888	-111.853447	4550	034	CCV - 5 ppb	CCV	NA	NA	2/10/2015	cis12Dichloroethene	0.995	4.785	4.785	Yes	=	0.1	18.95817	NA	NA	NA	NA
0024-H	A-0024H-021015-CCV	40.753888	-111.853447	4550	034	CCV - 5 ppb	CCV	NA	NA	2/10/2015	Trichloroethene	0.98	3.858	3.858	Yes	=	0.1	20.71746	NA	NA	NA	NA
0024-H	A-0024H-021015-CCV	40.753888	-111.853447	4550	034	CCV - 5 ppb	CCV	NA	NA	2/10/2015	Tetrachloroethene	0.993	4.473	4.473	Yes	=	0.1	30.317994	NA	NA	NA	NA
0024-H	A-0024H-021115-CCV	40.753888	-111.853447	4550	045	CCV - 5 ppb	CCV	NA	NA	2/10/2015	cis12Dichloroethene	0.991	5.555	5.555	Yes	=	0.1	22.00891	NA	NA	NA	NA
0024-H	A-0024H-021115-CCV	40.753888	-111.853447	4550	045	CCV - 5 ppb	CCV	NA	NA	2/10/2015	Trichloroethene	0.977	3.47	3.47	Yes	=	0.1	18.6339	NA	NA	NA	NA
0024-H	A-0024H-021115-CCV	40.753888	-111.853447	4550	045	CCV - 5 ppb	CCV	NA	NA	2/10/2015	Tetrachloroethene	0.995	4.215	4.215	Yes	=	0.1	28.56927	NA	NA	NA	NA
0024-H	A-0024H-021115-IA-016-BR3	40.753888	-111.853447	4550	017	Second floor - front bedroom	IA	NA	NA	2/11/2015	cis12Dichloroethene	0.743	0.04197	<0.1	Yes	U	0.1	0.16628514	NE	NE	No	No
0024-H	A-0024H-021115-IA-016-BR3	40.753888	-111.853447	4550	017	Second floor - front bedroom	IA	NA	NA	2/11/2015	Trichloroethene	0.97	0.00622	<0.1	Yes	U	0.1	0.0334014	16	0.48	No	No
0024-H	A-0024H-021115-IA-016-BR3	40.753888	-111.853447	4550	017	Second floor - front bedroom	IA	NA	NA	2/11/2015	Tetrachloroethene	0.995	0.00988	<0.1	Yes	U	0.1	0.06696664	370	11	No	No
0024-H	A-0024H-021115-IA-015-BR2	40.753888	-111.853447	4550	016	Second floor - back bedroom	IA	NA	NA	2/11/2015	cis12Dichloroethene	0.807	0.03798	<0.1	Yes	U	0.1	0.15047676	NE	NE	No	No
0024-H	A-0024H-021115-IA-015-BR2	40.753888	-111.853447	4550	016	Second floor - back bedroom	IA	NA	NA	2/11/2015	Trichloroethene	0.986	0.00905	<0.1	Yes	U	0.1	0.0485985	16	0.48	No	No
0024-H	A-0024H-021115-IA-015-BR2	40.753888	-111.853447	4550	016	Second floor - back bedroom	IA	NA	NA	2/11/2015	Tetrachloroethene	0.995	0.01198	<0.1	Yes	U	0.1	0.08120044	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0024-H	A-0024H-021115-IA-014-MBR	40.753888	-111.853447	4550	015	Second floor- Master Bedroom	IA	NA	NA	2/11/2015	cis12Dichloroethene	0.833	0.03288	<0.1	Yes	U	0.1	0.13027056	NE	NE	No	No
0024-H	A-0024H-021115-IA-014-MBR	40.753888	-111.853447	4550	015	Second floor- Master Bedroom	IA	NA	NA	2/11/2015	Trichloroethene	0.964	0.00935	<0.1	Yes	U	0.1	0.0502095	16	0.48	No	No
0024-H	A-0024H-021115-IA-014-MBR	40.753888	-111.853447	4550	015	Second floor- Master Bedroom	IA	NA	NA	2/11/2015	Tetrachloroethene	0.996	0.01208	<0.1	Yes	U	0.1	0.08187824	370	11	No	No
0024-H	A-0024H-021115-IA-013-HAL	40.753888	-111.853447	4550	014	Landing at top of stairs to second floor	IA	NA	NA	2/11/2015	cis12Dichloroethene	0.892	0.05805	<0.1	Yes	U	0.1	0.2299941	NE	NE	No	No
0024-H	A-0024H-021115-IA-013-HAL	40.753888	-111.853447	4550	014	Landing at top of stairs to second floor	IA	NA	NA	2/11/2015	Trichloroethene	0.941	0.00931	<0.1	Yes	U	0.1	0.0499947	16	0.48	No	No
0024-H	A-0024H-021115-IA-013-HAL	40.753888	-111.853447	4550	014	Landing at top of stairs to second floor	IA	NA	NA	2/11/2015	Tetrachloroethene	0.994	0.07	<0.1	Yes	U	0.1	0.47446	370	11	No	No
0024-H	A-0024H-021115-IA-012-OFC	40.753888	-111.853447	4550	013	Main level office	IA	NA	NA	2/11/2015	cis12Dichloroethene	0.736	0.02959	<0.1	Yes	U	0.1	0.11723558	NE	NE	No	No
0024-H	A-0024H-021115-IA-012-OFC	40.753888	-111.853447	4550	013	Main level office	IA	NA	NA	2/11/2015	Trichloroethene	0.975	0.00797	<0.1	Yes	U	0.1	0.0427989	16	0.48	No	No
0024-H	A-0024H-021115-IA-012-OFC	40.753888	-111.853447	4550	013	Main level office	IA	NA	NA	2/11/2015	Tetrachloroethene	0.997	0.02286	<0.1	Yes	U	0.1	0.15494508	370	11	No	No
0024-H	A-0024H-021115-IA-011-BA2	40.753888	-111.853447	4550	012	Main level hall bathroom	IA	NA	NA	2/11/2015	cis12Dichloroethene	0.658	0.04162	<0.1	No	NR	0.1	0.16489844	NE	NE	No	No
0024-H	A-0024H-021115-IA-011-BA2	40.753888	-111.853447	4550	012	Main level hall bathroom	IA	NA	NA	2/11/2015	Trichloroethene	0.979	0.00629	<0.1	Yes	U	0.1	0.0337773	16	0.48	No	No
0024-H	A-0024H-021115-IA-011-BA2	40.753888	-111.853447	4550	012	Main level hall bathroom	IA	NA	NA	2/11/2015	Tetrachloroethene	0.994	0.01721	<0.1	Yes	U	0.1	0.11664938	370	11	No	No
0024-H	A-0024H-021115-IA-010-BR1	40.753888	-111.853447	4550	011	Main level bedroom	IA	NA	NA	2/11/2015	cis12Dichloroethene	0.713	0.05818	<0.1	Yes	U	0.1	0.23050916	NE	NE	No	No
0024-H	A-0024H-021115-IA-010-BR1	40.753888	-111.853447	4550	011	Main level bedroom	IA	NA	NA	2/11/2015	Trichloroethene	0.577	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0024-H	A-0024H-021115-IA-010-BR1	40.753888	-111.853447	4550	011	Main level bedroom	IA	NA	NA	2/11/2015	Tetrachloroethene	0.997	0.01247	<0.1	Yes	U	0.1	0.08452166	370	11	No	No
0024-H	A-0024H-021115-IA-009-FAM	40.753888	-111.853447	4550	010	Main level family room	IA	NA	NA	2/11/2015	cis12Dichloroethene	0.745	0.02928	<0.1	Yes	U	0.1	0.11600736	NE	NE	No	No
0024-H	A-0024H-021115-IA-009-FAM	40.753888	-111.853447	4550	010	Main level family room	IA	NA	NA	2/11/2015	Trichloroethene	0.903	0.00463	<0.1	Yes	U	0.1	0.0248631	16	0.48	No	No
0024-H	A-0024H-021115-IA-009-FAM	40.753888	-111.853447	4550	010	Main level family room	IA	NA	NA	2/11/2015	Tetrachloroethene	0.995	0.01072	<0.1	Yes	U	0.1	0.07266016	370	11	No	No
0024-H	A-0024H-021115-IA-008-OCL	40.753888	-111.853447	4550	009	Main level living-dining area	IA	NA	NA	2/11/2015	cis12Dichloroethene	0.871	0.0241	<0.1	Yes	U	0.1	0.0954842	NE	NE	No	No
0024-H	A-0024H-021115-IA-008-OCL	40.753888	-111.853447	4550	009	Main level living-dining area	IA	NA	NA	2/11/2015	Trichloroethene	0.943	0.00501	<0.1	Yes	U	0.1	0.0269037	16	0.48	No	No
0024-H	A-0024H-021115-IA-008-OCL	40.753888	-111.853447	4550	009	Main level living-dining area	IA	NA	NA	2/11/2015	Tetrachloroethene	0.996	0.00937	<0.1	Yes	U	0.1	0.06350986	370	11	No	No
0024-H	A-0024H-021115-IA-007-CRA	40.753888	-111.853447	4550	007	Crawl space - soil floor - at entry from Basement	IA	NA	NA	2/11/2015	cis12Dichloroethene	0.347	0.00585	<0.1	No	NR	0.1	0.0231777	NE	NE	No	No
0024-H	A-0024H-021115-IA-007-CRA	40.753888	-111.853447	4550	007	Crawl space - soil floor - at entry from Basement	IA	NA	NA	2/11/2015	Trichloroethene	0.987	0.00916	<0.1	Yes	U	0.1	0.0491892	16	0.48	No	No
0024-H	A-0024H-021115-IA-007-CRA	40.753888	-111.853447	4550	007	Crawl space - soil floor - at entry from Basement	IA	NA	NA	2/11/2015	Tetrachloroethene	0.995	0.01285	<0.1	Yes	U	0.1	0.0870973	370	11	No	No
0024-H	A-0024H-021115-IA-006-STO3	40.753888	-111.853447	4550	006	Store room in basement	IA	NA	NA	2/11/2015	cis12Dichloroethene	0.728	0.05797	<0.1	Yes	U	0.1	0.22967714	NE	NE	No	No
0024-H	A-0024H-021115-IA-006-STO3	40.753888	-111.853447	4550	006	Store room in basement	IA	NA	NA	2/11/2015	Trichloroethene	0.99	0.00862	<0.1	Yes	U	0.1	0.0462894	16	0.48	No	No
0024-H	A-0024H-021115-IA-006-STO3	40.753888	-111.853447	4550	006	Store room in basement	IA	NA	NA	2/11/2015	Tetrachloroethene	0.995	0.01241	<0.1	Yes	U	0.1	0.08411498	370	11	No	No
0024-H	A-0024H-021115-IA-005-STO2	40.753888	-111.853447	4550	005	Ski Storeroom in basement	IA	NA	NA	2/11/2015	cis12Dichloroethene	0.664	0.06373	<0.1	No	NR	0.1	0.25249826	NE	NE	No	No
0024-H	A-0024H-021115-IA-005-STO2	40.753888	-111.853447	4550	005	Ski Storeroom in basement	IA	NA	NA	2/11/2015	Trichloroethene	0.968	0.00579	<0.1	Yes	U	0.1	0.0310923	16	0.48	No	No
0024-H	A-0024H-021115-IA-005-STO2	40.753888	-111.853447	4550	005	Ski Storeroom in basement	IA	NA	NA	2/11/2015	Tetrachloroethene	0.995	0.01267	<0.1	Yes	U	0.1	0.08587726	370	11	No	No
0024-H	A-0024H-021115-IA-004-STO1	40.753888	-111.853447	4550	004	Basement storeroom/kitchen	IA	NA	NA	2/11/2015	cis12Dichloroethene	0.725	0.04864	<0.1	Yes	U	0.1	0.19271168	NE	NE	No	No
0024-H	A-0024H-021115-IA-004-STO1	40.753888	-111.853447	4550	004	Basement storeroom/kitchen	IA	NA	NA	2/11/2015	Trichloroethene	0.966	0.00852	<0.1	Yes	U	0.1	0.0457524	16	0.48	No	No
0024-H	A-0024H-021115-IA-004-STO1	40.753888	-111.853447	4550	004	Basement storeroom/kitchen	IA	NA	NA	2/11/2015	Tetrachloroethene	0.994	0.0174	<0.1	Yes	U	0.1	0.1179372	370	11	No	No
0024-H	A-0024H-021115-IA-003-BA1	40.753888	-111.853447	4550	003	Basement Bathroom	IA	NA	NA	2/11/2015	cis12Dichloroethene	0.799	0.0457	<0.1	Yes	U	0.1	0.1810634	NE	NE	No	No
0024-H	A-0024H-021115-IA-003-BA1	40.753888	-111.853447	4550	003	Basement Bathroom	IA	NA	NA	2/11/2015	Trichloroethene	0.947	0.01059	<0.1	Yes	U	0.1	0.0568683	16	0.48	No	No
0024-H	A-0024H-021115-IA-003-BA1	40.753888	-111.853447	4550	003	Basement Bathroom	IA	NA	NA	2/11/2015	Tetrachloroethene	0.994	0.0137	<0.1	Yes	U	0.1	0.0928586	370	11	No	No
0024-H	A-0024H-021115-IA-002-LAU	40.753888	-111.853447	4550	002	Basement Laundry Room	IA	NA	NA	2/11/2015	cis12Dichloroethene	0.685	0.05819	<0.1	No	NR	0.1	0.23054878	NE	NE	No	No
0024-H	A-0024H-021115-IA-002-LAU	40.753888	-111.853447	4550	002	Basement Laundry Room	IA	NA	NA	2/11/2015	Trichloroethene	0.929	0.00691	<0.1	Yes	U	0.1	0.0371067	16	0.48	No	No
0024-H	A-0024H-021115-IA-002-LAU	40.753888	-111.853447	4550	002	Basement Laundry Room	IA	NA	NA	2/11/2015	Tetrachloroethene	0.994	0.01623	<0.1	Yes	U	0.1	0.11000694	370	11	No	No
0024-H	A-0024H-021115-IA-017M-LAU	40.753888	-111.853447	4550	030	Basement Laundry Room	NP	-4.8	13:54	2/11/2015	cis12Dichloroethene	0.944	0.01509	<0.1	Yes	U	0.1	0.05978658	NE	NE	No	No
0024-H	A-0024H-021115-IA-017M-LAU	40.753888	-111.853447	4550	030	Basement Laundry Room	NP	-4.8	13:54	2/11/2015	Trichloroethene	1	0.00441	<0.1	Yes	U	0.1	0.0236817	16	0.48	No	No
0024-H	A-0024H-021115-IA-017M-LAU	40.753888	-111.853447	4550	030	Basement Laundry Room	NP	-4.8	13:54	2/11/2015	Tetrachloroethene	0.996	0.01927	<0.1	Yes	U	0.1	0.13061206	370	11	No	No
0024-H	A-0024H-021115-IA-017L-LAU	40.753888	-111.853447	4550	029	Basement Laundry Room	NP	-5.3	13:46	2/11/2015	cis12Dichloroethene	0.748	0.02225	<0.1	Yes	U	0.1	0.0881545	NE	NE	No	No
0024-H	A-0024H-021115-IA-017L-LAU	40.753888	-111.853447	4550	029	Basement Laundry Room	NP	-5.3	13:46	2/11/2015	Trichloroethene	0.975	0.00857	<0.1	Yes	U	0.1	0.0460209	16	0.48	No	No
0024-H	A-0024H-021115-IA-017L-LAU	40.753888	-111.853447	4550	029	Basement Laundry Room	NP	-5.3	13:46	2/11/2015	Tetrachloroethene	0.994	0.02514	<0.1	Yes	U	0.1	0.17039892	370	11	No	No
0024-H	A-0024H-021115-IA-017K-LAU	40.753888	-111.853447	4550	028	Basement Laundry Room	NP	-5.0	13:38	2/11/2015	cis12Dichloroethene	0.657	0.01996	<0.1	No	NR	0.1	0.07908152	NE	NE	No	No
0024-H	A-0024H-021115-IA-017K-LAU	40.753888	-111.853447	4550	028	Basement Laundry Room	NP	-5.0	13:38	2/11/2015	Trichloroethene	0.989	0.00563	<0.1	Yes	U	0.1	0.0302331	16	0.48	No	No
0024-H	A-0024H-021115-IA-017K-LAU	40.753888	-111.853447	4550	028	Basement Laundry Room	NP	-5.0	13:38	2/11/2015	Tetrachloroethene	0.995	0.0258	<0.1	Yes	U	0.1	0.1748724	370	11	No	No
0024-H	A-0024H-021115-IA-017J-LAU	40.753888	-111.853447	4550	027	Basement Laundry Room	NP	-5.6	13:27	2/11/2015	cis12Dichloroethene	0.814	0.02655	<0.1	Yes	U	0.1	0.1051911	NE	NE	No	No
0024-H	A-0024H-021115-IA-017J-LAU	40.753888	-111.853447	4550	027	Basement Laundry Room	NP	-5.6	13:27	2/11/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0024-H	A-0024H-021115-IA-017J-LAU	40.753888	-111.853447	4550	027	Basement Laundry Room	NP	-5.6	13:27	2/11/2015	Tetrachloroethene	0.994	0.02784	<0.1	Yes	U	0.1	0.18869952	370	11	No	No
0024-H	A-0024H-021115-IA-017I-LAU	40.753888	-111.853447	4550	026	Basement Laundry Room	NP	-5.6	13:27	2/11/2015	cis12Dichloroethene	0.735	0.02518	<0.1	Yes	U	0.1	0.09976316	NE	NE	No	No
0024-H	A-0024H-021115-IA-017I-LAU	40.753888	-111.853447	4550	026	Basement Laundry Room	NP	-5.6	13:27	2/11/2015	Trichloroethene	0.983	0.00614	<0.1	Yes	U	0.1	0.0329718	16	0.48	No	No
0024-H	A-0024H-021115-IA-017I-LAU	40.753888	-111.853447	4550	026	Basement Laundry Room	NP	-5.6	13:27	2/11/2015	Tetrachloroethene	0.996	0.02863	<0.1	Yes	U	0.1	0.19405414	370	11	No	No
0024-H	A-0024H-021115-IA-017H-LAU	40.753888	-111.853447	4550	025	Basement Laundry Room	NP	-5.6	13:27	2/11/2015	cis12Dichloroethene	0.645	0.02469	<0.1	No	NR	0.1	0.09782178	NE	NE	No	No
0024-H	A-0024H-021115-IA-017H-LAU	40.753888	-111.853447	4550	025	Basement Laundry Room	NP	-5.6	13:27	2/11/2015	Trichloroethene	0.984	0.00862	<0.1	Yes	U	0.1	0.0462894	16	0.48	No	No
0024-H	A-0024H-021115-IA-017H-LAU	40.753888	-111.853447	4550	025	Basement Laundry Room	NP	-5.6	13:27	2/11/2015	Tetrachloroethene	0.997	0.0323	<0.1	Yes	U	0.1	0.2189294	370	11	No	No

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700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0024-H	A-0024H-021115-IA-017G-LAU	40.753888	-111.853447	4550	024	Basement Laundry Room	NP	-4.7	13:08	2/11/2015	cis12Dichloroethene	0.71	0.02916	<0.1	Yes	U	0.1	0.11553192	NE	NE	No	No
0024-H	A-0024H-021115-IA-017G-LAU	40.753888	-111.853447	4550	024	Basement Laundry Room	NP	-4.7	13:08	2/11/2015	Trichloroethene	0.995	0.00844	<0.1	Yes	U	0.1	0.0453228	16	0.48	No	No
0024-H	A-0024H-021115-IA-017G-LAU	40.753888	-111.853447	4550	024	Basement Laundry Room	NP	-4.7	13:08	2/11/2015	Tetrachloroethene	0.995	0.03341	<0.1	Yes	U	0.1	0.22645298	370	11	No	No
0024-H	A-0024H-021115-IA-017F-LAU	40.753888	-111.853447	4550	023	Basement Laundry Room	NP	-5.8	12:51	2/11/2015	cis12Dichloroethene	0.819	0.02725	<0.1	Yes	U	0.1	0.1079645	NE	NE	No	No
0024-H	A-0024H-021115-IA-017F-LAU	40.753888	-111.853447	4550	023	Basement Laundry Room	NP	-5.8	12:51	2/11/2015	Trichloroethene	0.936	0.00748	<0.1	Yes	U	0.1	0.0401676	16	0.48	No	No
0024-H	A-0024H-021115-IA-017F-LAU	40.753888	-111.853447	4550	023	Basement Laundry Room	NP	-5.8	12:51	2/11/2015	Tetrachloroethene	0.996	0.03197	<0.1	Yes	U	0.1	0.21669266	370	11	No	No
0024-H	A-0024H-021115-IA-017E-LAU	40.753888	-111.853447	4550	022	Basement Laundry Room	NP	-5.5	12:51	2/11/2015	cis12Dichloroethene	0.759	0.03157	<0.1	Yes	U	0.1	0.12508034	NE	NE	No	No
0024-H	A-0024H-021115-IA-017E-LAU	40.753888	-111.853447	4550	022	Basement Laundry Room	NP	-5.5	12:51	2/11/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0024-H	A-0024H-021115-IA-017E-LAU	40.753888	-111.853447	4550	022	Basement Laundry Room	NP	-5.5	12:51	2/11/2015	Tetrachloroethene	0.993	0.03133	<0.1	Yes	U	0.1	0.21235474	370	11	No	No
0024-H	A-0024H-021115-IA-017D-LAU	40.753888	-111.853447	4550	021	Basement Laundry Room	NP	-5.0	12:44	2/11/2015	cis12Dichloroethene	0.788	0.02864	<0.1	Yes	U	0.1	0.11347168	NE	NE	No	No
0024-H	A-0024H-021115-IA-017D-LAU	40.753888	-111.853447	4550	021	Basement Laundry Room	NP	-5.0	12:44	2/11/2015	Trichloroethene	0.99	0.00479	<0.1	Yes	U	0.1	0.0257223	16	0.48	No	No
0024-H	A-0024H-021115-IA-017D-LAU	40.753888	-111.853447	4550	021	Basement Laundry Room	NP	-5.0	12:44	2/11/2015	Tetrachloroethene	0.994	0.02989	<0.1	Yes	U	0.1	0.20259442	370	11	No	No
0024-H	A-0024H-021115-IA-017C-LAU	40.753888	-111.853447	4550	020	Basement Laundry Room	NP	-5.1	12:36	2/11/2015	cis12Dichloroethene	0.719	0.03132	<0.1	Yes	U	0.1	0.12408984	NE	NE	No	No
0024-H	A-0024H-021115-IA-017C-LAU	40.753888	-111.853447	4550	020	Basement Laundry Room	NP	-5.1	12:36	2/11/2015	Trichloroethene	1	0.00928	<0.1	Yes	U	0.1	0.0498336	16	0.48	No	No
0024-H	A-0024H-021115-IA-017C-LAU	40.753888	-111.853447	4550	020	Basement Laundry Room	NP	-5.1	12:36	2/11/2015	Tetrachloroethene	0.995	0.02981	<0.1	Yes	U	0.1	0.20205218	370	11	No	No
0024-H	A-0024H-021115-IA-017B-LAU	40.753888	-111.853447	4550	019	Basement Laundry Room	NP	-5.0	12:28	2/11/2015	cis12Dichloroethene	0.849	0.0348	<0.1	Yes	U	0.1	0.1378776	NE	NE	No	No
0024-H	A-0024H-021115-IA-017B-LAU	40.753888	-111.853447	4550	019	Basement Laundry Room	NP	-5.0	12:28	2/11/2015	Trichloroethene	0.989	0.00703	<0.1	Yes	U	0.1	0.0377511	16	0.48	No	No
0024-H	A-0024H-021115-IA-017B-LAU	40.753888	-111.853447	4550	019	Basement Laundry Room	NP	-5.0	12:28	2/11/2015	Tetrachloroethene	0.995	0.02517	<0.1	Yes	U	0.1	0.17060226	370	11	No	No
0024-H	A-0024H-021115-IA-017A-LAU	40.753888	-111.853447	4550	018	Basement Laundry Room	NP	-5.7	12:21	2/11/2015	cis12Dichloroethene	0.666	0.03891	<0.1	No	NR	0.1	0.15416142	NE	NE	No	No
0024-H	A-0024H-021115-IA-017A-LAU	40.753888	-111.853447	4550	018	Basement Laundry Room	NP	-5.7	12:21	2/11/2015	Trichloroethene	0.999	0.0069	<0.1	Yes	U	0.1	0.037053	16	0.48	No	No
0024-H	A-0024H-021115-IA-017A-LAU	40.753888	-111.853447	4550	018	Basement Laundry Room	NP	-5.7	12:21	2/11/2015	Tetrachloroethene	0.994	0.02393	<0.1	Yes	U	0.1	0.16219754	370	11	No	No
0024-H	A-0024H-021115-IA-001-OUT	40.753888	-111.853447	4550	001	Outdoor Ambient - north side of home	OA	NA	NA	2/11/2015	cis12Dichloroethene	0.736	0.07012	<0.1	Yes	U	0.1	0.27781544	NE	NE	No	No
0024-H	A-0024H-021115-IA-001-OUT	40.753888	-111.853447	4550	001	Outdoor Ambient - north side of home	OA	NA	NA	2/11/2015	Trichloroethene	0.988	0.00752	<0.1	Yes	U	0.1	0.0403824	16	0.48	No	No
0024-H	A-0024H-021115-IA-001-OUT	40.753888	-111.853447	4550	001	Outdoor Ambient - north side of home	OA	NA	NA	2/11/2015	Tetrachloroethene	0.995	0.01113	<0.1	Yes	U	0.1	0.07543914	370	11	No	No
0024-H	A-0024H-021115-IA-018K-LAU	40.753888	-111.853447	4550	040	Basement Laundry Room	PP	6.3	15:24	2/11/2015	cis12Dichloroethene	0.971	0.00893	<0.1	Yes	U	0.1	0.03538066	NE	NE	No	No
0024-H	A-0024H-021115-IA-018K-LAU	40.753888	-111.853447	4550	040	Basement Laundry Room	PP	6.3	15:24	2/11/2015	Trichloroethene	0.891	0.00402	<0.1	Yes	U	0.1	0.0215874	16	0.48	No	No
0024-H	A-0024H-021115-IA-018K-LAU	40.753888	-111.853447	4550	040	Basement Laundry Room	PP	6.3	15:24	2/11/2015	Tetrachloroethene	0.997	0.01136	<0.1	Yes	U	0.1	0.07699808	370	11	No	No
0024-H	A-0024H-021115-IA-018J-LAU	40.753888	-111.853447	4550	039	Basement Laundry Room	PP	6.1	15:17	2/11/2015	cis12Dichloroethene	0.888	0.00936	<0.1	Yes	U	0.1	0.03708432	NE	NE	No	No
0024-H	A-0024H-021115-IA-018J-LAU	40.753888	-111.853447	4550	039	Basement Laundry Room	PP	6.1	15:17	2/11/2015	Trichloroethene	0.992	0.00347	<0.1	Yes	U	0.1	0.0186339	16	0.48	No	No
0024-H	A-0024H-021115-IA-018J-LAU	40.753888	-111.853447	4550	039	Basement Laundry Room	PP	6.1	15:17	2/11/2015	Tetrachloroethene	0.992	0.01267	<0.1	Yes	U	0.1	0.08587726	370	11	No	No
0024-H	A-0024H-021115-IA-018I-LAU	40.753888	-111.853447	4550	038	Basement Laundry Room	PP	6.0	15:08	2/11/2015	cis12Dichloroethene	0.967	0.00945	<0.1	Yes	U	0.1	0.0374409	NE	NE	No	No
0024-H	A-0024H-021115-IA-018I-LAU	40.753888	-111.853447	4550	038	Basement Laundry Room	PP	6.0	15:08	2/11/2015	Trichloroethene	0.899	0.0042	<0.1	Yes	U	0.1	0.022554	16	0.48	No	No
0024-H	A-0024H-021115-IA-018I-LAU	40.753888	-111.853447	4550	038	Basement Laundry Room	PP	6.0	15:08	2/11/2015	Tetrachloroethene	0.995	0.01426	<0.1	Yes	U	0.1	0.09665428	370	11	No	No
0024-H	A-0024H-021115-IA-018H-LAU	40.753888	-111.853447	4550	037	Basement Laundry Room	PP	6.4	14:59	2/11/2015	cis12Dichloroethene	0.97	0.00853	<0.1	Yes	U	0.1	0.03379586	NE	NE	No	No
0024-H	A-0024H-021115-IA-018H-LAU	40.753888	-111.853447	4550	037	Basement Laundry Room	PP	6.4	14:59	2/11/2015	Trichloroethene	0.993	0.00526	<0.1	Yes	U	0.1	0.0282462	16	0.48	No	No
0024-H	A-0024H-021115-IA-018H-LAU	40.753888	-111.853447	4550	037	Basement Laundry Room	PP	6.4	14:59	2/11/2015	Tetrachloroethene	0.996	0.01104	<0.1	Yes	U	0.1	0.07482912	370	11	No	No
0024-H	A-0024H-021115-IA-018G-LAU	40.753888	-111.853447	4550	036	Basement Laundry Room	PP	7.0	14:51	2/11/2015	cis12Dichloroethene	0.94	0.00711	<0.1	Yes	U	0.1	0.02816982	NE	NE	No	No
0024-H	A-0024H-021115-IA-018G-LAU	40.753888	-111.853447	4550	036	Basement Laundry Room	PP	7.0	14:51	2/11/2015	Trichloroethene	0.973	0.00338	<0.1	Yes	U	0.1	0.0181506	16	0.48	No	No
0024-H	A-0024H-021115-IA-018G-LAU	40.753888	-111.853447	4550	036	Basement Laundry Room	PP	7.0	14:51	2/11/2015	Tetrachloroethene	0.996	0.0096	<0.1	Yes	U	0.1	0.0650688	370	11	No	No
0024-H	A-0024H-021115-IA-018F-LAU	40.753888	-111.853447	4550	035	Basement Laundry Room	PP	5.1	14:43	2/11/2015	cis12Dichloroethene	0.965	0.00888	<0.1	Yes	U	0.1	0.03518256	NE	NE	No	No
0024-H	A-0024H-021115-IA-018F-LAU	40.753888	-111.853447	4550	035	Basement Laundry Room	PP	5.1	14:43	2/11/2015	Trichloroethene	0.903	0.00517	<0.1	Yes	U	0.1	0.0277629	16	0.48	No	No
0024-H	A-0024H-021115-IA-018F-LAU	40.753888	-111.853447	4550	035	Basement Laundry Room	PP	5.1	14:43	2/11/2015	Tetrachloroethene	0.996	0.01186	<0.1	Yes	U	0.1	0.08038708	370	11	No	No
0024-H	A-0024H-021115-IA-018E-LAU	40.753888	-111.853447	4550	034	Basement Laundry Room	PP	5.2	14:35	2/11/2015	cis12Dichloroethene	0.943	0.01075	<0.1	Yes	U	0.1	0.0425915	NE	NE	No	No
0024-H	A-0024H-021115-IA-018E-LAU	40.753888	-111.853447	4550	034	Basement Laundry Room	PP	5.2	14:35	2/11/2015	Trichloroethene	0.992	0.00882	<0.1	Yes	U	0.1	0.0473634	16	0.48	No	No
0024-H	A-0024H-021115-IA-018E-LAU	40.753888	-111.853447	4550	034	Basement Laundry Room	PP	5.2	14:35	2/11/2015	Tetrachloroethene	0.996	0.01191	<0.1	Yes	U	0.1	0.08072598	370	11	No	No
0024-H	A-0024H-021115-IA-018C-LAU	40.753888	-111.853447	4550	033	Basement Laundry Room	PP	5.2	14:19	2/11/2015	cis12Dichloroethene	0.843	0.00923	<0.1	Yes	U	0.1	0.03656926	NE	NE	No	No
0024-H	A-0024H-021115-IA-018C-LAU	40.753888	-111.853447	4550	033	Basement Laundry Room	PP	5.2	14:19	2/11/2015	Trichloroethene	0.961	0.00496	<0.1	Yes	U	0.1	0.0266352	16	0.48	No	No
0024-H	A-0024H-021115-IA-018C-LAU	40.753888	-111.853447	4550	033	Basement Laundry Room	PP	5.2	14:19	2/11/2015	Tetrachloroethene	0.996	0.01253	<0.1	Yes	U	0.1	0.08492834	370	11	No	No
0024-H	A-0024H-021115-IA-018B-LAU	40.753888	-111.853447	4550	032	Basement Laundry Room	PP	7.0	14:11	2/11/2015	cis12Dichloroethene	0.93	0.01171	<0.1	Yes	U	0.1	0.04639502	NE	NE	No	No
0024-H	A-0024H-021115-IA-018B-LAU	40.753888	-111.853447	4550	032	Basement Laundry Room	PP	7.0	14:11	2/11/2015	Trichloroethene	0.942	0.00349	<0.1	Yes	U	0.1	0.0187413	16	0.48	No	No
0024-H	A-0024H-021115-IA-018B-LAU	40.753888	-111.853447	4550	032	Basement Laundry Room	PP	7.0	14:11	2/11/2015	Tetrachloroethene	0.996	0.01324	<0.1	Yes	U	0.1	0.08974072	370	11	No	No
0024-H	A-0024H-021115-IA-018A-LAU	40.753888	-111.853447	4550	031	Basement Laundry Room	PP	5.9	14:02	2/11/2015	cis12Dichloroethene	0.895	0.00825	<0.1	Yes	U	0.1	0.0326865	NE	NE	No	No
0024-H	A-0024H-021115-IA-018A-LAU	40.753888	-111.853447	4550	031	Basement Laundry Room	PP	5.9	14:02	2/11/2015	Trichloroethene	0.993	0.00552	<0.1	Yes	U	0.1	0.0296424	16	0.48	No	No
0024-H	A-0024H-021115-IA-018A-LAU	40.753888	-111.853447	4550	031	Basement Laundry Room	PP	5.9	14:02	2/11/2015	Tetrachloroethene	0.997	0.01498	<0.1	Yes	U	0.1	0.10153444	370	11	No	No
0024-H	A-0024H-021115-SG-001-4'	40.753932	-111.853352	4552	008	Soil gas - NE corner of house just off patio	SG	NA	NA	2/11/2015	cis12Dichloroethene	0.844	0.03774	<0.1	Yes	U	0.1	0.14952588	NE	NE	No	No
0024-H	A-0024H-021115-SG-001-4'	40.753932	-111.853352	4552	008	Soil gas - NE corner of house just off patio	SG	NA	NA	2/11/2015	Trichloroethene	0.981	0.0095	<0.1	Yes	U	0.1	0.051015	16	0.48	No	No
0024-H	A-0024H-021115-SG-001-4'	40.753932	-111.853352	4552	008	Soil gas - NE corner of house just off patio	SG	NA	NA	2/11/2015	Tetrachloroethene	0.993	0.01498	<0.1	Yes	U	0.1	0.10153444	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0025-H	A-0025H-020915-CCV	40.748372	-111.854300	4515	032	CCV - 5.0 ppb	CCV	NA	NA	2/8/2015	cis12Dichloroethene	0.994	5.459	5.459	Yes	=	0.1	21.628558	NA	NA	NA	NA
0025-H	A-0025H-020915-CCV	40.748372	-111.854300	4515	032	CCV - 5.0 ppb	CCV	NA	NA	2/8/2015	Trichloroethene	0.523	4.978	4.978	No	NR	0.1	26.73186	NA	NA	NA	NA
0025-H	A-0025H-020915-CCV	40.748372	-111.854300	4515	032	CCV - 5.0 ppb	CCV	NA	NA	2/8/2015	Tetrachloroethene	0.995	5.265	5.265	Yes	=	0.1	35.68617	NA	NA	NA	NA
0025-H	A-0025H-020815-CCV	40.748372	-111.854300	4515	003	CCV - 5.0 ppb	CCV	NA	NA	2/8/2015	cis12Dichloroethene	0.998	6.311	6.311	Yes	=	0.1	25.004182	NA	NA	NA	NA
0025-H	A-0025H-020815-CCV	40.748372	-111.854300	4515	003	CCV - 5.0 ppb	CCV	NA	NA	2/8/2015	Trichloroethene	0.523	5.03	5.03	No	NR	0.1	27.0111	NA	NA	NA	NA
0025-H	A-0025H-020815-CCV	40.748372	-111.854300	4515	003	CCV - 5.0 ppb	CCV	NA	NA	2/8/2015	Tetrachloroethene	0.995	4.597	4.597	Yes	=	0.1	31.158466	NA	NA	NA	NA
0025-H	A-0025H-020915-IA-012-OFC	40.748372	-111.854300	4515	012	Main Floor - Office	IA	NA	NA	2/9/2015	cis12Dichloroethene	0.537	0.116	0.116	No	NR	0.1	0.459592	NE	NE	No	No
0025-H	A-0025H-020915-IA-012-OFC	40.748372	-111.854300	4515	012	Main Floor - Office	IA	NA	NA	2/9/2015	Trichloroethene	0.523	0.013	<0.1	No	NR	0.1	0.06981	16	0.48	No	No
0025-H	A-0025H-020915-IA-012-OFC	40.748372	-111.854300	4515	012	Main Floor - Office	IA	NA	NA	2/9/2015	Tetrachloroethene	0.995	0.103	0.103	Yes	=	0.1	0.698134	370	11	No	No
0025-H	A-0025H-020915-IA-011-BA2	40.748372	-111.854300	4515	011	Main Floor - Bathroom	IA	NA	NA	2/9/2015	cis12Dichloroethene	0.647	0.124	0.124	No	NR	0.1	0.491288	NE	NE	No	No
0025-H	A-0025H-020915-IA-011-BA2	40.748372	-111.854300	4515	011	Main Floor - Bathroom	IA	NA	NA	2/9/2015	Trichloroethene	0.523	0.015	<0.1	No	NR	0.1	0.08055	16	0.48	No	No
0025-H	A-0025H-020915-IA-011-BA2	40.748372	-111.854300	4515	011	Main Floor - Bathroom	IA	NA	NA	2/9/2015	Tetrachloroethene	0.996	0.082	<0.1	Yes	U	0.1	0.555796	370	11	No	No
0025-H	A-0025H-020915-IA-010-BR3	40.748372	-111.854300	4515	010	Main Floor Bedroom	IA	NA	NA	2/9/2015	cis12Dichloroethene	0.628	0.062	<0.1	No	NR	0.1	0.245644	NE	NE	No	No
0025-H	A-0025H-020915-IA-010-BR3	40.748372	-111.854300	4515	010	Main Floor Bedroom	IA	NA	NA	2/9/2015	Trichloroethene	0.523	0.016	<0.1	No	NR	0.1	0.08592	16	0.48	No	No
0025-H	A-0025H-020915-IA-010-BR3	40.748372	-111.854300	4515	010	Main Floor Bedroom	IA	NA	NA	2/9/2015	Tetrachloroethene	0.995	0.041	<0.1	Yes	U	0.1	0.277898	370	11	No	No
0025-H	A-0025H-020915-IA-009-LIV	40.748372	-111.854300	4515	009	Main Floor - Living Room	IA	NA	NA	2/9/2015	cis12Dichloroethene	0.584	0.132	0.132	No	NR	0.1	0.522984	NE	NE	No	No
0025-H	A-0025H-020915-IA-009-LIV	40.748372	-111.854300	4515	009	Main Floor - Living Room	IA	NA	NA	2/9/2015	Trichloroethene	0.523	0.012	<0.1	No	NR	0.1	0.06444	16	0.48	No	No
0025-H	A-0025H-020915-IA-009-LIV	40.748372	-111.854300	4515	009	Main Floor - Living Room	IA	NA	NA	2/9/2015	Tetrachloroethene	0.995	0.089	<0.1	Yes	U	0.1	0.603242	370	11	No	No
0025-H	A-0025H-020915-IA-008-KIT	40.748372	-111.854300	4515	008	Main Floor- Kitchen	IA	NA	NA	2/9/2015	cis12Dichloroethene	0.779	0.123	0.123	Yes	=	0.1	0.487326	NE	NE	No	No
0025-H	A-0025H-020915-IA-008-KIT	40.748372	-111.854300	4515	008	Main Floor- Kitchen	IA	NA	NA	2/9/2015	Trichloroethene	0.523	0.01	<0.1	No	NR	0.1	0.0537	16	0.48	No	No
0025-H	A-0025H-020915-IA-008-KIT	40.748372	-111.854300	4515	008	Main Floor- Kitchen	IA	NA	NA	2/9/2015	Tetrachloroethene	0.995	0.072	<0.1	Yes	U	0.1	0.488016	370	11	No	No
0025-H	A-0025H-020915-IA-007-FAM	40.748372	-111.854300	4515	007	Main Floor- Family Room	IA	NA	NA	2/9/2015	cis12Dichloroethene	0.778	0.136	0.136	Yes	=	0.1	0.538832	NE	NE	No	No
0025-H	A-0025H-020915-IA-007-FAM	40.748372	-111.854300	4515	007	Main Floor- Family Room	IA	NA	NA	2/9/2015	Trichloroethene	0.523	0.012	<0.1	No	NR	0.1	0.06444	16	0.48	No	No
0025-H	A-0025H-020915-IA-007-FAM	40.748372	-111.854300	4515	007	Main Floor- Family Room	IA	NA	NA	2/9/2015	Tetrachloroethene	0.995	0.077	<0.1	Yes	U	0.1	0.521906	370	11	No	No
0025-H	A-0025H-020915-IA-006-STO-1	40.748372	-111.854300	4515	006	Crawl Space Storage	IA	NA	NA	2/9/2015	cis12Dichloroethene	0.987	0.105	0.105	Yes	=	0.1	0.41601	NE	NE	No	No
0025-H	A-0025H-020915-IA-006-STO-1	40.748372	-111.854300	4515	006	Crawl Space Storage	IA	NA	NA	2/9/2015	Trichloroethene	0.523	0.017	<0.1	No	NR	0.1	0.09129	16	0.48	No	No
0025-H	A-0025H-020915-IA-006-STO-1	40.748372	-111.854300	4515	006	Crawl Space Storage	IA	NA	NA	2/9/2015	Tetrachloroethene	0.995	0.092	<0.1	Yes	U	0.1	0.623576	370	11	No	No
0025-H	A-0025H-020915-IA-005-FUR	40.748372	-111.854300	4515	005	Basement Furnace/Store room	IA	NA	NA	2/9/2015	cis12Dichloroethene	0.81	0.12	0.12	Yes	=	0.1	0.47544	NE	NE	No	No
0025-H	A-0025H-020915-IA-005-FUR	40.748372	-111.854300	4515	005	Basement Furnace/Store room	IA	NA	NA	2/9/2015	Trichloroethene	0.523	0.02	<0.1	No	NR	0.1	0.1074	16	0.48	No	No
0025-H	A-0025H-020915-IA-005-FUR	40.748372	-111.854300	4515	005	Basement Furnace/Store room	IA	NA	NA	2/9/2015	Tetrachloroethene	0.995	0.242	0.242	Yes	=	0.1	1.640276	370	11	No	No
0025-H	A-0025H-020915-IA-004-LAU	40.748372	-111.854300	4515	004	Basement Laundry	IA	NA	NA	2/9/2015	cis12Dichloroethene	0.778	0.128	0.128	Yes	=	0.1	0.507136	NE	NE	No	No
0025-H	A-0025H-020915-IA-004-LAU	40.748372	-111.854300	4515	004	Basement Laundry	IA	NA	NA	2/9/2015	Trichloroethene	0.523	0.014	<0.1	No	NR	0.1	0.07518	16	0.48	No	No
0025-H	A-0025H-020915-IA-004-LAU	40.748372	-111.854300	4515	004	Basement Laundry	IA	NA	NA	2/9/2015	Tetrachloroethene	0.994	0.103	0.103	Yes	=	0.1	0.698134	370	11	No	No
0025-H	A-0025H-020915-IA-003-BR2	40.748372	-111.854300	4515	003	Basement Bedroom#2	IA	NA	NA	2/9/2015	cis12Dichloroethene	0.699	0.11	0.11	No	NR	0.1	0.43582	NE	NE	No	No
0025-H	A-0025H-020915-IA-003-BR2	40.748372	-111.854300	4515	003	Basement Bedroom#2	IA	NA	NA	2/9/2015	Trichloroethene	0.523	0.017	<0.1	No	NR	0.1	0.09129	16	0.48	No	No
0025-H	A-0025H-020915-IA-003-BR2	40.748372	-111.854300	4515	003	Basement Bedroom#2	IA	NA	NA	2/9/2015	Tetrachloroethene	0.996	0.073	<0.1	Yes	U	0.1	0.494794	370	11	No	No
0025-H	A-0025H-020915-IA-002-BA1	40.748372	-111.854300	4515	002	Basement Bathroom	IA	NA	NA	2/9/2015	cis12Dichloroethene	0.718	0.099	<0.1	Yes	U	0.1	0.392238	NE	NE	No	No
0025-H	A-0025H-020915-IA-002-BA1	40.748372	-111.854300	4515	002	Basement Bathroom	IA	NA	NA	2/9/2015	Trichloroethene	0.523	0.016	<0.1	No	NR	0.1	0.08592	16	0.48	No	No
0025-H	A-0025H-020915-IA-002-BA1	40.748372	-111.854300	4515	002	Basement Bathroom	IA	NA	NA	2/9/2015	Tetrachloroethene	0.995	0.061	<0.1	Yes	U	0.1	0.413458	370	11	No	No
0025-H	A-0025H-020915-IA-001-BR1	40.748372	-111.854300	4515	001	Basement Bedroom-large	IA	NA	NA	2/9/2015	cis12Dichloroethene	0.94	0.126	0.126	Yes	=	0.1	0.499212	NE	NE	No	No
0025-H	A-0025H-020915-IA-001-BR1	40.748372	-111.854300	4515	001	Basement Bedroom-large	IA	NA	NA	2/9/2015	Trichloroethene	0.523	0.18	0.18	No	NR	0.1	0.9666	16	0.48	No	No
0025-H	A-0025H-020915-IA-001-BR1	40.748372	-111.854300	4515	001	Basement Bedroom-large	IA	NA	NA	2/9/2015	Tetrachloroethene	0.995	0.195	0.195	Yes	=	0.1	1.32171	370	11	No	No
0025-H	A-0025H-020915-IA-013I-BR1	40.748372	-111.854300	4515	021	Basement Bedroom-large	NP	-5.4	13:57	2/9/2015	cis12Dichloroethene	0.723	0.032	<0.1	Yes	U	0.1	0.126784	NE	NE	No	No
0025-H	A-0025H-020915-IA-013I-BR1	40.748372	-111.854300	4515	021	Basement Bedroom-large	NP	-5.4	13:57	2/9/2015	Trichloroethene	0.523	0.01	<0.1	No	NR	0.1	0.0537	16	0.48	No	No
0025-H	A-0025H-020915-IA-013I-BR1	40.748372	-111.854300	4515	021	Basement Bedroom-large	NP	-5.4	13:57	2/9/2015	Tetrachloroethene	0.995	0.04	<0.1	Yes	U	0.1	0.27112	370	11	No	No
0025-H	A-0025H-020915-IA-013H-BR1	40.748372	-111.854300	4515	020	Basement Bedroom-large	NP	-5.2	13:44	2/9/2015	cis12Dichloroethene	0.877	0.029	<0.1	Yes	U	0.1	0.114898	NE	NE	No	No
0025-H	A-0025H-020915-IA-013H-BR1	40.748372	-111.854300	4515	020	Basement Bedroom-large	NP	-5.2	13:44	2/9/2015	Trichloroethene	0.523	0.011	<0.1	No	NR	0.1	0.05907	16	0.48	No	No
0025-H	A-0025H-020915-IA-013H-BR1	40.748372	-111.854300	4515	020	Basement Bedroom-large	NP	-5.2	13:44	2/9/2015	Tetrachloroethene	0.996	0.045	<0.1	Yes	U	0.1	0.30501	370	11	No	No
0025-H	A-0025H-020915-IA-013G-BR1	40.748372	-111.854300	4515	019	Basement Bedroom-large	NP	-5.8	13:36	2/9/2015	cis12Dichloroethene	0.692	0.036	<0.1	No	NR	0.1	0.142632	NE	NE	No	No
0025-H	A-0025H-020915-IA-013G-BR1	40.748372	-111.854300	4515	019	Basement Bedroom-large	NP	-5.8	13:36	2/9/2015	Trichloroethene	0.523	0.01	<0.1	No	NR	0.1	0.0537	16	0.48	No	No
0025-H	A-0025H-020915-IA-013G-BR1	40.748372	-111.854300	4515	019	Basement Bedroom-large	NP	-5.8	13:36	2/9/2015	Tetrachloroethene	0.995	0.05	<0.1	Yes	U	0.1	0.3389	370	11	No	No
0025-H	A-0025H-020915-IA-013F-BR1	40.748372	-111.854300	4515	018	Basement Bedroom-large	NP	-6.6	13:24	2/9/2015	cis12Dichloroethene	0.833	0.033	<0.1	Yes	U	0.1	0.130746	NE	NE	No	No
0025-H	A-0025H-020915-IA-013F-BR1	40.748372	-111.854300	4515	018	Basement Bedroom-large	NP	-6.6	13:24	2/9/2015	Trichloroethene	0.523	0.01	<0.1	No	NR	0.1	0.0537	16	0.48	No	No
0025-H	A-0025H-020915-IA-013F-BR1	40.748372	-111.854300	4515	018	Basement Bedroom-large	NP	-6.6	13:24	2/9/2015	Tetrachloroethene	0.992	0.053	<0.1	Yes	U	0.1	0.359234	370	11	No	No
0025-H	A-0025H-020915-IA-013E-BR1	40.748372	-111.854300	4515	017	Basement Bedroom-large	NP	-5.1	13:14	2/9/2015	cis12Dichloroethene	0.524	0.002	<0.1	No	NR	0.1	0.007924	NE	NE	No	No
0025-H	A-0025H-020915-IA-013E-BR1	40.748372	-111.854300	4515	017	Basement Bedroom-large	NP	-5.1	13:14	2/9/2015	Trichloroethene	0.523	0.01	<0.1	No	NR	0.1	0.0537	16	0.48	No	No
0025-H	A-0025H-020915-IA-013E-BR1	40.748372	-111.854300	4515	017	Basement Bedroom-large	NP	-5.1	13:14	2/9/2015	Tetrachloroethene	0.994	0.056	<0.1	Yes	U	0.1	0.379568	370	11	No	No
0025-H	A-0025H-020915-IA-013D-BR1	40.748372	-111.854300	4515	016	Basement Bedroom-large	NP	-5.5	13:05	2/9/2015	cis12Dichloroethene	0.876	0.042	<0.1	Yes	U	0.1	0.166404	NE	NE	No	No
0025-H	A-0025H-020915-IA-013D-BR1	40.748372	-111.854300	4515	016	Basement Bedroom-large	NP	-5.5	13:05	2/9/2015	Trichloroethene	0.523	0.01	<0.1	No	NR	0.1	0.0537	16	0.48	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0025-H	A-0025H-020915-IA-013D-BR1	40.748372	-111.854300	4515	016	Basement Bedroom-large	NP	-5.5	13:05	2/9/2015	Tetrachloroethene	0.995	0.054	<0.1	Yes	U	0.1	0.366012	370	11	No	No
0025-H	A-0025H-020915-IA-013C-BR1	40.748372	-111.854300	4515	015	Basement Bedroom-large	NP	-5.0	12:55	2/9/2015	cis12Dichloroethene	0.631	0.045	<0.1	No	NR	0.1	0.17829	NE	NE	No	No
0025-H	A-0025H-020915-IA-013C-BR1	40.748372	-111.854300	4515	015	Basement Bedroom-large	NP	-5.0	12:55	2/9/2015	Trichloroethene	0.523	0.011	<0.1	No	NR	0.1	0.05907	16	0.48	No	No
0025-H	A-0025H-020915-IA-013C-BR1	40.748372	-111.854300	4515	015	Basement Bedroom-large	NP	-5.0	12:55	2/9/2015	Tetrachloroethene	0.996	0.059	<0.1	Yes	U	0.1	0.399902	370	11	No	No
0025-H	A-0025H-020915-IA-013B-BR1	40.748372	-111.854300	4515	014	Basement Bedroom-large	NP	-6.9	12:46	2/9/2015	cis12Dichloroethene	0.963	0.039	<0.1	Yes	U	0.1	0.154518	NE	NE	No	No
0025-H	A-0025H-020915-IA-013B-BR1	40.748372	-111.854300	4515	014	Basement Bedroom-large	NP	-6.9	12:46	2/9/2015	Trichloroethene	0.523	0.01	<0.1	No	NR	0.1	0.0537	16	0.48	No	No
0025-H	A-0025H-020915-IA-013B-BR1	40.748372	-111.854300	4515	014	Basement Bedroom-large	NP	-6.9	12:46	2/9/2015	Tetrachloroethene	0.993	0.048	<0.1	Yes	U	0.1	0.325344	370	11	No	No
0025-H	A-0025H-020915-IA-013A-BR1	40.748372	-111.854300	4515	013	Basement Bedroom-large	NP	-4.6	12:35	2/9/2015	cis12Dichloroethene	0.781	0.053	<0.1	Yes	U	0.1	0.209986	NE	NE	No	No
0025-H	A-0025H-020915-IA-013A-BR1	40.748372	-111.854300	4515	013	Basement Bedroom-large	NP	-4.6	12:35	2/9/2015	Trichloroethene	0.523	0.012	<0.1	No	NR	0.1	0.06444	16	0.48	No	No
0025-H	A-0025H-020915-IA-013A-BR1	40.748372	-111.854300	4515	013	Basement Bedroom-large	NP	-4.6	12:35	2/9/2015	Tetrachloroethene	0.995	0.046	<0.1	Yes	U	0.1	0.311788	370	11	No	No
0025-H	A-0025H-020915-IA-015-OUT	40.748372	-111.854300	4515	028	Off of back porch - SW corner of house	OA	NA	NA	2/9/2015	cis12Dichloroethene	0.979	0.008	<0.1	Yes	U	0.1	0.031696	NE	NE	No	No
0025-H	A-0025H-020915-IA-015-OUT	40.748372	-111.854300	4515	028	Off of back porch - SW corner of house	OA	NA	NA	2/9/2015	Trichloroethene	0.523	0.013	<0.1	No	NR	0.1	0.06981	16	0.48	No	No
0025-H	A-0025H-020915-IA-015-OUT	40.748372	-111.854300	4515	028	Off of back porch - SW corner of house	OA	NA	NA	2/9/2015	Tetrachloroethene	0.995	0.021	<0.1	Yes	U	0.1	0.142338	370	11	No	No
0025-H	A-0025H-020915-IA-014F-BR1	40.748372	-111.854300	4515	027	Basement Bedroom-large	PP	10.6	14:56	2/9/2015	cis12Dichloroethene	0.956	0.005	<0.1	Yes	U	0.1	0.01981	NE	NE	No	No
0025-H	A-0025H-020915-IA-014F-BR1	40.748372	-111.854300	4515	027	Basement Bedroom-large	PP	10.6	14:56	2/9/2015	Trichloroethene	0.523	0.015	<0.1	No	NR	0.1	0.08055	16	0.48	No	No
0025-H	A-0025H-020915-IA-014F-BR1	40.748372	-111.854300	4515	027	Basement Bedroom-large	PP	10.6	14:56	2/9/2015	Tetrachloroethene	0.995	0.417	0.417	Yes	=	0.1	2.826426	370	11	No	No
0025-H	A-0025H-020915-IA-014E-BR1	40.748372	-111.854300	4515	026	Basement Bedroom-large	PP	9.3	14:47	2/9/2015	cis12Dichloroethene	0.992	0.016	<0.1	Yes	U	0.1	0.063392	NE	NE	No	No
0025-H	A-0025H-020915-IA-014E-BR1	40.748372	-111.854300	4515	026	Basement Bedroom-large	PP	9.3	14:47	2/9/2015	Trichloroethene	0.523	0.015	<0.1	No	NR	0.1	0.08055	16	0.48	No	No
0025-H	A-0025H-020915-IA-014E-BR1	40.748372	-111.854300	4515	026	Basement Bedroom-large	PP	9.3	14:47	2/9/2015	Tetrachloroethene	0.994	0.018	<0.1	Yes	U	0.1	0.122004	370	11	No	No
0025-H	A-0025H-020915-IA-014D-BR1	40.748372	-111.854300	4515	025	Basement Bedroom-large	PP	9.4	14:38	2/9/2015	cis12Dichloroethene	0.832	0.008	<0.1	Yes	U	0.1	0.031696	NE	NE	No	No
0025-H	A-0025H-020915-IA-014D-BR1	40.748372	-111.854300	4515	025	Basement Bedroom-large	PP	9.4	14:38	2/9/2015	Trichloroethene	0.523	0.009	<0.1	No	NR	0.1	0.04833	16	0.48	No	No
0025-H	A-0025H-020915-IA-014D-BR1	40.748372	-111.854300	4515	025	Basement Bedroom-large	PP	9.4	14:38	2/9/2015	Tetrachloroethene	0.995	0.008	<0.1	Yes	U	0.1	0.054224	370	11	No	No
0025-H	A-0025H-020915-IA-014C-BR1	40.748372	-111.854300	4515	024	Basement Bedroom-large	PP	8.9	14:28	2/9/2015	cis12Dichloroethene	0.98	0.006	<0.1	Yes	U	0.1	0.023772	NE	NE	No	No
0025-H	A-0025H-020915-IA-014C-BR1	40.748372	-111.854300	4515	024	Basement Bedroom-large	PP	8.9	14:28	2/9/2015	Trichloroethene	0.523	0.013	<0.1	No	NR	0.1	0.06981	16	0.48	No	No
0025-H	A-0025H-020915-IA-014C-BR1	40.748372	-111.854300	4515	024	Basement Bedroom-large	PP	8.9	14:28	2/9/2015	Tetrachloroethene	0.996	0.016	<0.1	Yes	U	0.1	0.108448	370	11	No	No
0025-H	A-0025H-020915-IA-014B-BR1	40.748372	-111.854300	4515	023	Basement Bedroom-large	PP	9.5	14:19	2/9/2015	cis12Dichloroethene	0.986	0.015	<0.1	Yes	U	0.1	0.05943	NE	NE	No	No
0025-H	A-0025H-020915-IA-014B-BR1	40.748372	-111.854300	4515	023	Basement Bedroom-large	PP	9.5	14:19	2/9/2015	Trichloroethene	0.523	0.011	<0.1	No	NR	0.1	0.05907	16	0.48	No	No
0025-H	A-0025H-020915-IA-014B-BR1	40.748372	-111.854300	4515	023	Basement Bedroom-large	PP	9.5	14:19	2/9/2015	Tetrachloroethene	0.996	0.015	<0.1	Yes	U	0.1	0.10167	370	11	No	No
0025-H	A-0025H-020915-IA-014A-BR1	40.748372	-111.854300	4515	022	Basement Bedroom-large	PP	9.1	14:10	2/9/2015	cis12Dichloroethene	0.879	0.024	<0.1	Yes	U	0.1	0.095088	NE	NE	No	No
0025-H	A-0025H-020915-IA-014A-BR1	40.748372	-111.854300	4515	022	Basement Bedroom-large	PP	9.1	14:10	2/9/2015	Trichloroethene	0.523	0.009	<0.1	No	NR	0.1	0.04833	16	0.48	No	No
0025-H	A-0025H-020915-IA-014A-BR1	40.748372	-111.854300	4515	022	Basement Bedroom-large	PP	9.1	14:10	2/9/2015	Tetrachloroethene	0.994	0.013	<0.1	Yes	U	0.1	0.088114	370	11	No	No
0025-H	A-0025H-020915-SG-001-8'	40.748403	-111.854453	4513	030	Off NW corner of house	SG	NA	NA	2/9/2015	cis12Dichloroethene	0.692	0.303	0.303	No	NR	0.1	1.200486	NE	NE	No	No
0025-H	A-0025H-020915-SG-001-8'	40.748403	-111.854453	4513	030	Off NW corner of house	SG	NA	NA	2/9/2015	Trichloroethene	0.523	0.019	<0.1	No	NR	0.1	0.10203	16	0.48	No	No
0025-H	A-0025H-020915-SG-001-8'	40.748403	-111.854453	4513	030	Off NW corner of house	SG	NA	NA	2/9/2015	Tetrachloroethene	0.995	0.153	0.153	Yes	=	0.1	1.037034	370	11	No	No
0025-H	A-0025H-020915-SG-001-4'	40.748403	-111.854453	4513	029	Off NW corner of house	SG	NA	NA	2/9/2015	cis12Dichloroethene	0.638	0.287	0.287	No	NR	0.1	1.137094	NE	NE	No	No
0025-H	A-0025H-020915-SG-001-4'	40.748403	-111.854453	4513	029	Off NW corner of house	SG	NA	NA	2/9/2015	Trichloroethene	0.523	0.015	<0.1	No	NR	0.1	0.08055	16	0.48	No	No
0025-H	A-0025H-020915-SG-001-4'	40.748403	-111.854453	4513	029	Off NW corner of house	SG	NA	NA	2/9/2015	Tetrachloroethene	0.995	0.11	0.11	Yes	=	0.1	0.74558	370	11	No	No
0026-H	A-0026H-030315-CCV	40.752523	-111.859080	4435	031	CCV - 0.5 ppb	CCV	NA	NA	3/3/2015	cis12Dichloroethene	0.994	0.4354	0.4354	Yes	=	0.1	1.7250548	NA	NA	NA	NA
0026-H	A-0026H-030315-CCV	40.752523	-111.859080	4435	031	CCV - 0.5 ppb	CCV	NA	NA	3/3/2015	Trichloroethene	0.906	0.4811	0.4811	Yes	=	0.1	2.583507	NA	NA	NA	NA
0026-H	A-0026H-030315-CCV	40.752523	-111.859080	4435	031	CCV - 0.5 ppb	CCV	NA	NA	3/3/2015	Tetrachloroethene	0.994	0.4411	0.4411	Yes	=	0.1	2.9897758	NA	NA	NA	NA
0026-H	A-0026H-030315-CCV	40.752523	-111.859080	4435	030	CCV - 5.0 ppb	CCV	NA	NA	3/3/2015	cis12Dichloroethene	0.998	3.849	3.849	Yes	=	0.1	15.249738	NA	NA	NA	NA
0026-H	A-0026H-030315-CCV	40.752523	-111.859080	4435	030	CCV - 5.0 ppb	CCV	NA	NA	3/3/2015	Trichloroethene	0.978	4.551	4.551	Yes	=	0.1	24.43887	NA	NA	NA	NA
0026-H	A-0026H-030315-CCV	40.752523	-111.859080	4435	030	CCV - 5.0 ppb	CCV	NA	NA	3/3/2015	Tetrachloroethene	0.993	3.987	3.987	Yes	=	0.1	27.023886	NA	NA	NA	NA
0026-H	A-0026H-030215-CCV	40.752523	-111.859080	4435	032	CCV - 0.5 ppb	CCV	NA	NA	3/2/2015	cis12Dichloroethene	0.993	0.5206	0.5206	Yes	=	0.1	2.0626172	NA	NA	NA	NA
0026-H	A-0026H-030215-CCV	40.752523	-111.859080	4435	032	CCV - 0.5 ppb	CCV	NA	NA	3/2/2015	Trichloroethene	0.992	0.4855	0.4855	Yes	=	0.1	2.607135	NA	NA	NA	NA
0026-H	A-0026H-030215-CCV	40.752523	-111.859080	4435	032	CCV - 0.5 ppb	CCV	NA	NA	3/2/2015	Tetrachloroethene	0.994	0.4748	0.4748	Yes	=	0.1	3.2181944	NA	NA	NA	NA
0026-H	A-0026H-030215-CCV	40.752523	-111.859080	4435	031	CCV - 5.0 ppb	CCV	NA	NA	3/2/2015	cis12Dichloroethene	0.998	4.027	4.027	Yes	=	0.1	15.954974	NA	NA	NA	NA
0026-H	A-0026H-030215-CCV	40.752523	-111.859080	4435	031	CCV - 5.0 ppb	CCV	NA	NA	3/2/2015	Trichloroethene	0.982	4.314	4.314	Yes	=	0.1	23.16618	NA	NA	NA	NA
0026-H	A-0026H-030215-CCV	40.752523	-111.859080	4435	031	CCV - 5.0 ppb	CCV	NA	NA	3/2/2015	Tetrachloroethene	0.996	3.988	3.988	Yes	=	0.1	27.030664	NA	NA	NA	NA
0026-H	A-0026H-030315-IA-014-BA3	40.752523	-111.859080	4435	016	Second Floor Bathroom	IA	NA	NA	3/3/2015	cis12Dichloroethene	0.768	0.02817	<0.1	Yes	U	0.1	0.11160954	NE	NE	No	No
0026-H	A-0026H-030315-IA-014-BA3	40.752523	-111.859080	4435	016	Second Floor Bathroom	IA	NA	NA	3/3/2015	Trichloroethene	0.943	0.01335	<0.1	Yes	U	0.1	0.0716895	16	0.48	No	No
0026-H	A-0026H-030315-IA-014-BA3	40.752523	-111.859080	4435	016	Second Floor Bathroom	IA	NA	NA	3/3/2015	Tetrachloroethene	0.995	0.06108	<0.1	Yes	U	0.1	0.41400024	370	11	No	No
0026-H	A-0026H-030315-IA-013-HAL	40.752523	-111.859080	4435	015	Second Floor Central Hallway	IA	NA	NA	3/3/2015	cis12Dichloroethene	0.812	0.02702	<0.1	Yes	U	0.1	0.10705324	NE	NE	No	No
0026-H	A-0026H-030315-IA-013-HAL	40.752523	-111.859080	4435	015	Second Floor Central Hallway	IA	NA	NA	3/3/2015	Trichloroethene	0.909	0.01446	<0.1	Yes	U	0.1	0.0776502	16	0.48	No	No
0026-H	A-0026H-030315-IA-013-HAL	40.752523	-111.859080	4435	015	Second Floor Central Hallway	IA	NA	NA	3/3/2015	Tetrachloroethene	0.995	0.05928	<0.1	Yes	U	0.1	0.40179984	370	11	No	No
0026-H	A-0026H-030315-IA-012-KIT	40.752523	-111.859080	4435	014	Main Level Kitchen	IA	NA	NA	3/3/2015	cis12Dichloroethene	0.762	0.03078	<0.1	Yes	U	0.1	0.12195036	NE	NE	No	No
0026-H	A-0026H-030315-IA-012-KIT	40.752523	-111.859080	4435	014	Main Level Kitchen	IA	NA	NA	3/3/2015	Trichloroethene	0.981	0.01083	<0.1	Yes	U	0.1	0.0581571	16	0.48	No	No
0026-H	A-0026H-030315-IA-012-KIT	40.752523	-111.859080	4435	014	Main Level Kitchen	IA	NA	NA	3/3/2015	Tetrachloroethene	0.994	0.03663	<0.1	Yes	U	0.1	0.24827814	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0026-H	A-0026H-030315-IA-011-BA2	40.752523	-111.859080	4435	013	Main Level Hallway Bathroom	IA	NA	NA	3/3/2015	cis12Dichloroethene	0.622	0.02328	<0.1	No	NR	0.1	0.09223536	NE	NE	No	No
0026-H	A-0026H-030315-IA-011-BA2	40.752523	-111.859080	4435	013	Main Level Hallway Bathroom	IA	NA	NA	3/3/2015	Trichloroethene	0.955	0.0147	<0.1	Yes	U	0.1	0.078939	16	0.48	No	No
0026-H	A-0026H-030315-IA-011-BA2	40.752523	-111.859080	4435	013	Main Level Hallway Bathroom	IA	NA	NA	3/3/2015	Tetrachloroethene	0.993	0.04794	<0.1	Yes	U	0.1	0.32493732	370	11	No	No
0026-H	A-0026H-030315-IA-010-MBR	40.752523	-111.859080	4435	012	Main Level Master Bedroom	IA	NA	NA	3/3/2015	cis12Dichloroethene	0.76	0.01993	<0.1	Yes	U	0.1	0.07896266	NE	NE	No	No
0026-H	A-0026H-030315-IA-010-MBR	40.752523	-111.859080	4435	012	Main Level Master Bedroom	IA	NA	NA	3/3/2015	Trichloroethene	0.988	0.0099	<0.1	Yes	U	0.1	0.053163	16	0.48	No	No
0026-H	A-0026H-030315-IA-010-MBR	40.752523	-111.859080	4435	012	Main Level Master Bedroom	IA	NA	NA	3/3/2015	Tetrachloroethene	0.994	0.05115	<0.1	Yes	U	0.1	0.3466947	370	11	No	No
0026-H	A-0026H-030315-IA-009-LIB	40.752523	-111.859080	4435	011	Main Level Library	IA	NA	NA	3/3/2015	cis12Dichloroethene	0.837	0.02936	<0.1	Yes	U	0.1	0.11632432	NE	NE	No	No
0026-H	A-0026H-030315-IA-009-LIB	40.752523	-111.859080	4435	011	Main Level Library	IA	NA	NA	3/3/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0026-H	A-0026H-030315-IA-009-LIB	40.752523	-111.859080	4435	011	Main Level Library	IA	NA	NA	3/3/2015	Tetrachloroethene	0.994	0.05413	<0.1	Yes	U	0.1	0.36689314	370	11	No	No
0026-H	A-0026H-030315-IA-008-DRF	40.752523	-111.859080	4435	010	Main Level Dining Room	IA	NA	NA	3/3/2015	cis12Dichloroethene	0.735	0.02534	<0.1	Yes	U	0.1	0.10039708	NE	NE	No	No
0026-H	A-0026H-030315-IA-008-DRF	40.752523	-111.859080	4435	010	Main Level Dining Room	IA	NA	NA	3/3/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0026-H	A-0026H-030315-IA-008-DRF	40.752523	-111.859080	4435	010	Main Level Dining Room	IA	NA	NA	3/3/2015	Tetrachloroethene	0.995	0.04718	<0.1	Yes	U	0.1	0.31978604	370	11	No	No
0026-H	A-0026H-030315-IA-007-LIV	40.752523	-111.859080	4435	009	Main Level (First Floor) Living Room	IA	NA	NA	3/3/2015	cis12Dichloroethene	0.921	0.02445	<0.1	Yes	U	0.1	0.0968709	NE	NE	No	No
0026-H	A-0026H-030315-IA-007-LIV	40.752523	-111.859080	4435	009	Main Level (First Floor) Living Room	IA	NA	NA	3/3/2015	Trichloroethene	0.98	0.01971	<0.1	Yes	U	0.1	0.1058427	16	0.48	No	No
0026-H	A-0026H-030315-IA-007-LIV	40.752523	-111.859080	4435	009	Main Level (First Floor) Living Room	IA	NA	NA	3/3/2015	Tetrachloroethene	0.996	0.0535	<0.1	Yes	U	0.1	0.362623	370	11	No	No
0026-H	A-0026H-030315-IA-006-STO	40.752523	-111.859080	4435	006	Basement Store Room and Furnace Room	IA	NA	NA	3/3/2015	cis12Dichloroethene	0.804	0.01879	<0.1	Yes	U	0.1	0.07444598	NE	NE	No	No
0026-H	A-0026H-030315-IA-006-STO	40.752523	-111.859080	4435	006	Basement Store Room and Furnace Room	IA	NA	NA	3/3/2015	Trichloroethene	0.992	0.02301	<0.1	Yes	U	0.1	0.1235637	16	0.48	No	No
0026-H	A-0026H-030315-IA-006-STO	40.752523	-111.859080	4435	006	Basement Store Room and Furnace Room	IA	NA	NA	3/3/2015	Tetrachloroethene	0.996	0.08428	<0.1	Yes	U	0.1	0.57124984	370	11	No	No
0026-H	A-0026H-030315-IA-005-BA1	40.752523	-111.859080	4435	005	Basement Bathroom	IA	NA	NA	3/3/2015	cis12Dichloroethene	0.885	0.01529	<0.1	Yes	U	0.1	0.06057898	NE	NE	No	No
0026-H	A-0026H-030315-IA-005-BA1	40.752523	-111.859080	4435	005	Basement Bathroom	IA	NA	NA	3/3/2015	Trichloroethene	0.966	0.01138	<0.1	Yes	U	0.1	0.0611106	16	0.48	No	No
0026-H	A-0026H-030315-IA-005-BA1	40.752523	-111.859080	4435	005	Basement Bathroom	IA	NA	NA	3/3/2015	Tetrachloroethene	0.996	0.03611	<0.1	Yes	U	0.1	0.24475358	370	11	No	No
0026-H	A-0026H-030315-IA-004-PAN	40.752523	-111.859080	4435	004	Basement Pantry	IA	NA	NA	3/3/2015	cis12Dichloroethene	0.729	0.04677	<0.1	Yes	U	0.1	0.18530274	NE	NE	No	No
0026-H	A-0026H-030315-IA-004-PAN	40.752523	-111.859080	4435	004	Basement Pantry	IA	NA	NA	3/3/2015	Trichloroethene	0.996	0.03273	<0.1	Yes	U	0.1	0.1757601	16	0.48	No	No
0026-H	A-0026H-030315-IA-004-PAN	40.752523	-111.859080	4435	004	Basement Pantry	IA	NA	NA	3/3/2015	Tetrachloroethene	0.995	0.2539	0.2539	Yes	=	0.1	1.7209342	370	11	No	No
0026-H	A-0026H-030315-IA-003-LAU	40.752523	-111.859080	4435	003	Basement Laundry Room	IA	NA	NA	3/3/2015	cis12Dichloroethene	0.816	0.02258	<0.1	Yes	U	0.1	0.08946196	NE	NE	No	No
0026-H	A-0026H-030315-IA-003-LAU	40.752523	-111.859080	4435	003	Basement Laundry Room	IA	NA	NA	3/3/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0026-H	A-0026H-030315-IA-003-LAU	40.752523	-111.859080	4435	003	Basement Laundry Room	IA	NA	NA	3/3/2015	Tetrachloroethene	0.996	0.07114	<0.1	Yes	U	0.1	0.48218692	370	11	No	No
0026-H	A-0026H-030315-IA-002-BR1	40.752523	-111.859080	4435	002	Basement Bedroom	IA	NA	NA	3/3/2015	cis12Dichloroethene	0.879	0.01926	<0.1	Yes	U	0.1	0.07630812	NE	NE	No	No
0026-H	A-0026H-030315-IA-002-BR1	40.752523	-111.859080	4435	002	Basement Bedroom	IA	NA	NA	3/3/2015	Trichloroethene	0.992	0.01522	<0.1	Yes	U	0.1	0.0817314	16	0.48	No	No
0026-H	A-0026H-030315-IA-002-BR1	40.752523	-111.859080	4435	002	Basement Bedroom	IA	NA	NA	3/3/2015	Tetrachloroethene	0.995	0.062	<0.1	Yes	U	0.1	0.420236	370	11	No	No
0026-H	A-0026H-030315-IA-001-FAM	40.752523	-111.859080	4435	001	Basement Family Room	IA	NA	NA	3/3/2015	cis12Dichloroethene	0.847	0.02006	<0.1	Yes	U	0.1	0.07947772	NE	NE	No	No
0026-H	A-0026H-030315-IA-001-FAM	40.752523	-111.859080	4435	001	Basement Family Room	IA	NA	NA	3/3/2015	Trichloroethene	0.998	0.01485	<0.1	Yes	U	0.1	0.0797445	16	0.48	No	No
0026-H	A-0026H-030315-IA-001-FAM	40.752523	-111.859080	4435	001	Basement Family Room	IA	NA	NA	3/3/2015	Tetrachloroethene	0.994	0.05796	<0.1	Yes	U	0.1	0.39285288	370	11	No	No
0026-H	A-0026H-030315-IA-015G-LAU	40.752523	-111.859080	4435	023	Basement Laundry Room	NP	-4.9	13:15	3/3/2015	cis12Dichloroethene	0.92	0.00936	<0.1	Yes	U	0.1	0.03708432	NE	NE	No	No
0026-H	A-0026H-030315-IA-015G-LAU	40.752523	-111.859080	4435	023	Basement Laundry Room	NP	-4.9	13:15	3/3/2015	Trichloroethene	0.982	0.00425	<0.1	Yes	U	0.1	0.0228225	16	0.48	No	No
0026-H	A-0026H-030315-IA-015G-LAU	40.752523	-111.859080	4435	023	Basement Laundry Room	NP	-4.9	13:15	3/3/2015	Tetrachloroethene	0.993	0.05795	<0.1	Yes	U	0.1	0.3927851	370	11	No	No
0026-H	A-0026H-030315-IA-015F-LAU	40.752523	-111.859080	4435	022	Basement Laundry Room	NP	-5.1	13:07	3/3/2015	cis12Dichloroethene	0.865	0.01652	<0.1	Yes	U	0.1	0.06545224	NE	NE	No	No
0026-H	A-0026H-030315-IA-015F-LAU	40.752523	-111.859080	4435	022	Basement Laundry Room	NP	-5.1	13:07	3/3/2015	Trichloroethene	0.876	0.01169	<0.1	Yes	U	0.1	0.0627753	16	0.48	No	No
0026-H	A-0026H-030315-IA-015F-LAU	40.752523	-111.859080	4435	022	Basement Laundry Room	NP	-5.1	13:07	3/3/2015	Tetrachloroethene	0.993	0.06406	<0.1	Yes	U	0.1	0.43419868	370	11	No	No
0026-H	A-0026H-030315-IA-015E-LAU	40.752523	-111.859080	4435	021	Basement Laundry Room	NP	-5.1	12:59	3/3/2015	cis12Dichloroethene	0.776	0.00574	<0.1	Yes	U	0.1	0.02274188	NE	NE	No	No
0026-H	A-0026H-030315-IA-015E-LAU	40.752523	-111.859080	4435	021	Basement Laundry Room	NP	-5.1	12:59	3/3/2015	Trichloroethene	0.966	0.00536	<0.1	Yes	U	0.1	0.0287832	16	0.48	No	No
0026-H	A-0026H-030315-IA-015E-LAU	40.752523	-111.859080	4435	021	Basement Laundry Room	NP	-5.1	12:59	3/3/2015	Tetrachloroethene	0.995	0.06163	<0.1	Yes	U	0.1	0.41772814	370	11	No	No
0026-H	A-0026H-030315-IA-015D-LAU	40.752523	-111.859080	4435	020	Basement Laundry Room	NP	-4.9	12:51	3/3/2015	cis12Dichloroethene	0.836	0.00975	<0.1	Yes	U	0.1	0.0386295	NE	NE	No	No
0026-H	A-0026H-030315-IA-015D-LAU	40.752523	-111.859080	4435	020	Basement Laundry Room	NP	-4.9	12:51	3/3/2015	Trichloroethene	0.96	0.0127	<0.1	Yes	U	0.1	0.068199	16	0.48	No	No
0026-H	A-0026H-030315-IA-015D-LAU	40.752523	-111.859080	4435	020	Basement Laundry Room	NP	-4.9	12:51	3/3/2015	Tetrachloroethene	0.995	0.06681	<0.1	Yes	U	0.1	0.45283818	370	11	No	No
0026-H	A-0026H-030315-IA-015C-LAU	40.752523	-111.859080	4435	019	Basement Laundry Room	NP	-6.0	12:43	3/3/2015	cis12Dichloroethene	0.858	0.00991	<0.1	Yes	U	0.1	0.03926342	NE	NE	No	No
0026-H	A-0026H-030315-IA-015C-LAU	40.752523	-111.859080	4435	019	Basement Laundry Room	NP	-6.0	12:43	3/3/2015	Trichloroethene	0.998	0.01602	<0.1	Yes	U	0.1	0.0860274	16	0.48	No	No
0026-H	A-0026H-030315-IA-015C-LAU	40.752523	-111.859080	4435	019	Basement Laundry Room	NP	-6.0	12:43	3/3/2015	Tetrachloroethene	0.994	0.06143	<0.1	Yes	U	0.1	0.41637254	370	11	No	No
0026-H	A-0026H-030315-IA-015B-LAU	40.752523	-111.859080	4435	018	Basement Laundry Room	NP	-5.2	12:34	3/3/2015	cis12Dichloroethene	0.707	0.01217	<0.1	Yes	U	0.1	0.04821754	NE	NE	No	No
0026-H	A-0026H-030315-IA-015B-LAU	40.752523	-111.859080	4435	018	Basement Laundry Room	NP	-5.2	12:34	3/3/2015	Trichloroethene	0.992	0.01632	<0.1	Yes	U	0.1	0.0876384	16	0.48	No	No
0026-H	A-0026H-030315-IA-015B-LAU	40.752523	-111.859080	4435	018	Basement Laundry Room	NP	-5.2	12:34	3/3/2015	Tetrachloroethene	0.994	0.0643	<0.1	Yes	U	0.1	0.4358254	370	11	No	No
0026-H	A-0026H-030315-IA-015A-LAU	40.752523	-111.859080	4435	017	Basement Laundry Room	NP	-5.6	12:26	3/3/2015	cis12Dichloroethene	0.747	0.02308	<0.1	Yes	U	0.1	0.09144296	NE	NE	No	No
0026-H	A-0026H-030315-IA-015A-LAU	40.752523	-111.859080	4435	017	Basement Laundry Room	NP	-5.6	12:26	3/3/2015	Trichloroethene	0.995	0.02094	<0.1	Yes	U	0.1	0.1124478	16	0.48	No	No
0026-H	A-0026H-030315-IA-015A-LAU	40.752523	-111.859080	4435	017	Basement Laundry Room	NP	-5.6	12:26	3/3/2015	Tetrachloroethene	0.994	0.07413	<0.1	Yes	U	0.1	0.50245314	370	11	No	No
0026-H	A-0026H-030315-IA-017-OUT	40.752523	-111.859080	4435	032	Outdoor Ambient on driveway	OA	NA	NA	3/3/2015	cis12Dichloroethene	0.948	0.00944	<0.1	Yes	U	0.1	0.03740128	NE	NE	No	No
0026-H	A-0026H-030315-IA-017-OUT	40.752523	-111.859080	4435	032	Outdoor Ambient on driveway	OA	NA	NA	3/3/2015	Trichloroethene	0.901	0.00851	<0.1	Yes	U	0.1	0.0456987	16	0.48	No	No
0026-H	A-0026H-030315-IA-017-OUT	40.752523	-111.859080	4435	032	Outdoor Ambient on driveway	OA	NA	NA	3/3/2015	Tetrachloroethene	0.996	0.0106	<0.1	Yes	U	0.1	0.0718468	370	11	No	No
0026-H	A-0026H-030315-IA-016F-LAU	40.752523	-111.859080	4435	029	Basement Laundry Room	PP	5.1	14:30	3/3/2015	cis12Dichloroethene	0.762	0.00523	<0.1	Yes	U	0.1	0.02072126	NE	NE	No	No
0026-H	A-0026H-030315-IA-016F-LAU	40.752523	-111.859080	4435	029	Basement Laundry Room	PP	5.1	14:30	3/3/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0026-H	A-0026H-030315-IA-016F-LAU	40.752523	-111.859080	4435	029	Basement Laundry Room	PP	5.1	14:30	3/3/2015	Tetrachloroethene	0.996	0.01701	<0.1	Yes	U	0.1	0.11529378	370	11	No	No
0026-H	A-0026H-030315-IA-016E-LAU	40.752523	-111.859080	4435	028	Basement Laundry Room	PP	4.9	14:23	3/3/2015	cis12Dichloroethene	0.655	0.00715	<0.1	No	NR	0.1	0.0283283	NE	NE	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0026-H	A-0026H-030315-IA-016E-LAU	40.752523	-111.859080	4435	028	Basement Laundry Room	PP	4.9	14:23	3/3/2015	Trichloroethene	0.961	0.00678	<0.1	Yes	U	0.1	0.0364086	16	0.48	No	No
0026-H	A-0026H-030315-IA-016E-LAU	40.752523	-111.859080	4435	028	Basement Laundry Room	PP	4.9	14:23	3/3/2015	Tetrachloroethene	0.996	0.01767	<0.1	Yes	U	0.1	0.11976726	370	11	No	No
0026-H	A-0026H-030315-IA-016C-LAU	40.752523	-111.859080	4435	026	Basement Laundry Room	PP	5.5	13:53	3/3/2015	cis12Dichloroethene	0.637	0.01081	<0.1	No	NR	0.1	0.04282922	NE	NE	No	No
0026-H	A-0026H-030315-IA-016C-LAU	40.752523	-111.859080	4435	026	Basement Laundry Room	PP	5.5	13:53	3/3/2015	Trichloroethene	0.822	0.00413	<0.1	Yes	U	0.1	0.0221781	16	0.48	No	No
0026-H	A-0026H-030315-IA-016C-LAU	40.752523	-111.859080	4435	026	Basement Laundry Room	PP	5.5	13:53	3/3/2015	Tetrachloroethene	0.995	0.03156	<0.1	Yes	U	0.1	0.21391368	370	11	No	No
0026-H	A-0026H-030315-IA-016B-LAU	40.752523	-111.859080	4435	025	Basement Laundry Room	PP	7.7	13:45	3/3/2015	cis12Dichloroethene	0.819	0.01497	<0.1	Yes	U	0.1	0.05931114	NE	NE	No	No
0026-H	A-0026H-030315-IA-016B-LAU	40.752523	-111.859080	4435	025	Basement Laundry Room	PP	7.7	13:45	3/3/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0026-H	A-0026H-030315-IA-016B-LAU	40.752523	-111.859080	4435	025	Basement Laundry Room	PP	7.7	13:45	3/3/2015	Tetrachloroethene	0.993	0.03564	<0.1	Yes	U	0.1	0.24156792	370	11	No	No
0026-H	A-0026H-030315-IA-016A-LAU	40.752523	-111.859080	4435	024	Basement Laundry Room	PP	4.4	13:37	3/3/2015	cis12Dichloroethene	0.763	0.02459	<0.1	Yes	U	0.1	0.09742558	NE	NE	No	No
0026-H	A-0026H-030315-IA-016A-LAU	40.752523	-111.859080	4435	024	Basement Laundry Room	PP	4.4	13:37	3/3/2015	Trichloroethene	0.993	0.01456	<0.1	Yes	U	0.1	0.0781872	16	0.48	No	No
0026-H	A-0026H-030315-IA-016A-LAU	40.752523	-111.859080	4435	024	Basement Laundry Room	PP	4.4	13:37	3/3/2015	Tetrachloroethene	0.996	0.05818	<0.1	Yes	U	0.1	0.39434404	370	11	No	No
0026-H	A-0026H-030615-SG-001-4'	40.752461	-111.859034	4435	026	South side of house - east of bay window	SG	NA	NA	3/6/2015	cis12Dichloroethene	0.631	0.05753	<0.1	No	NR	0.1	0.22793386	NE	NE	No	No
0026-H	A-0026H-030615-SG-001-4'	40.752461	-111.859034	4435	026	South side of house - east of bay window	SG	NA	NA	3/6/2015	Trichloroethene	0.993	0.4753	0.4753	Yes	=	0.1	2.552361	16	0.48	No	No
0026-H	A-0026H-030615-SG-001-4'	40.752461	-111.859034	4435	026	South side of house - east of bay window	SG	NA	NA	3/6/2015	Tetrachloroethene	0.994	22.75	22.75	Yes	=	0.1	154.1995	370	11	No	No
0026-H	A-0026H-040715-SG-001A-4'	40.752461	-111.859034	4435	006	South side of house - east of bay window	SG	NA	NA	4/7/2015	cis12Dichloroethene	0.453	0.01561	<0.1	No	NR	0.1	0.06184682	NE	NE	No	No
0026-H	A-0026H-040715-SG-001A-4'	40.752461	-111.859034	4435	006	South side of house - east of bay window	SG	NA	NA	4/7/2015	Trichloroethene	0.908	0.02143	<0.1	Yes	U	0.1	0.1150791	16	0.48	No	No
0026-H	A-0026H-040715-SG-001A-4'	40.752461	-111.859034	4435	006	South side of house - east of bay window	SG	NA	NA	4/7/2015	Tetrachloroethene	0.993	0.02934	<0.1	Yes	U	0.1	0.19886652	370	11	No	No
0026-H	A-0026H-040715-SG-001A-4'-DUPE	40.752461	-111.859034	4435	007	South side of house - east of bay window	SG	NA	NA	4/7/2015	cis12Dichloroethene	0.693	0.05466	<0.1	No	NR	0.1	0.21656292	NE	NE	No	No
0026-H	A-0026H-040715-SG-001A-4'-DUPE	40.752461	-111.859034	4435	007	South side of house - east of bay window	SG	NA	NA	4/7/2015	Trichloroethene	0.96	0.02349	<0.1	Yes	U	0.1	0.1261413	16	0.48	No	No
0026-H	A-0026H-040715-SG-001A-4'-DUPE	40.752461	-111.859034	4435	007	South side of house - east of bay window	SG	NA	NA	4/7/2015	Tetrachloroethene	0.994	0.08973	<0.1	Yes	U	0.1	0.60818994	370	11	No	No
0026-H	A-0026H-040715-SG-002-4'	40.722515	-111.858890	4441	008	Open field sample - East of House	SG	NA	NA	4/7/2015	cis12Dichloroethene	0.7	0.0337	<0.1	Yes	U	0.1	0.1335194	NE	NE	No	No
0026-H	A-0026H-040715-SG-002-4'	40.722515	-111.858890	4441	008	Open field sample - East of House	SG	NA	NA	4/7/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not Found	16	0.48	No	No
0026-H	A-0026H-040715-SG-002-4'	40.722515	-111.858890	4441	008	Open field sample - East of House	SG	NA	NA	4/7/2015	Tetrachloroethene	0.994	0.06762	<0.1	Yes	U	0.1	0.45832836	370	11	No	No
0027-H	A-0027H-021215-CCV	40.753845	-111.857440	4491	036	CCV - 5.0 ppb	CCV	NA	NA	2/12/2015	cis12Dichloroethene	0.992	5.326	5.326	Yes	=	0.1	21.101612	NA	NA	NA	NA
0027-H	A-0027H-021215-CCV	40.753845	-111.857440	4491	036	CCV - 5.0 ppb	CCV	NA	NA	2/12/2015	Trichloroethene	0.99	3.579	3.579	Yes	=	0.1	19.21923	NA	NA	NA	NA
0027-H	A-0027H-021215-CCV	40.753845	-111.857440	4491	036	CCV - 5.0 ppb	CCV	NA	NA	2/12/2015	Tetrachloroethene	0.995	4.006	4.006	Yes	=	0.1	27.152668	NA	NA	NA	NA
0027-H	A-0027H-021115-CCV	40.753845	-111.857440	4491	045	CCV - 5.0 ppb	CCV	NA	NA	2/11/2015	cis12Dichloroethene	0.991	5.555	5.555	Yes	=	0.1	22.00891	NA	NA	NA	NA
0027-H	A-0027H-021115-CCV	40.753845	-111.857440	4491	045	CCV - 5.0 ppb	CCV	NA	NA	2/11/2015	Trichloroethene	0.977	3.47	3.47	Yes	=	0.1	18.6339	NA	NA	NA	NA
0027-H	A-0027H-021115-CCV	40.753845	-111.857440	4491	045	CCV - 5.0 ppb	CCV	NA	NA	2/11/2015	Tetrachloroethene	0.995	4.215	4.215	Yes	=	0.1	28.56927	NA	NA	NA	NA
0027-H	A-0027H-021215-IA-015-STO3	40.753845	-111.857440	4491	017	Basement - Old Coal Bin Room used for Storage	IA	NA	NA	2/12/2015	cis12Dichloroethene	0.742	0.02523	<0.1	Yes	U	0.1	0.09996126	NE	NE	No	No
0027-H	A-0027H-021215-IA-015-STO3	40.753845	-111.857440	4491	017	Basement - Old Coal Bin Room used for Storage	IA	NA	NA	2/12/2015	Trichloroethene	1	0.00849	<0.1	Yes	U	0.1	0.0455913	16	0.48	No	No
0027-H	A-0027H-021215-IA-015-STO3	40.753845	-111.857440	4491	017	Basement - Old Coal Bin Room used for Storage	IA	NA	NA	2/12/2015	Tetrachloroethene	0.995	0.03752	<0.1	Yes	U	0.1	0.25431056	370	11	No	No
0027-H	A-0027H-021215-IA-014-FUR	40.753845	-111.857440	4491	016	Basement Furnace Room	IA	NA	NA	2/12/2015	cis12Dichloroethene	0.88	0.0272	<0.1	Yes	U	0.1	0.1077664	NE	NE	No	No
0027-H	A-0027H-021215-IA-014-FUR	40.753845	-111.857440	4491	016	Basement Furnace Room	IA	NA	NA	2/12/2015	Trichloroethene	0.999	0.01081	<0.1	Yes	U	0.1	0.0580497	16	0.48	No	No
0027-H	A-0027H-021215-IA-014-FUR	40.753845	-111.857440	4491	016	Basement Furnace Room	IA	NA	NA	2/12/2015	Tetrachloroethene	0.995	0.04085	<0.1	Yes	U	0.1	0.2768813	370	11	No	No
0027-H	A-0027H-021215-IA-013-STO2	40.753845	-111.857440	4491	015	Crawl Space Storage area - in Basement bedroom	IA	NA	NA	2/12/2015	cis12Dichloroethene	0.762	0.02866	<0.1	Yes	U	0.1	0.11355092	NE	NE	No	No
0027-H	A-0027H-021215-IA-013-STO2	40.753845	-111.857440	4491	015	Crawl Space Storage area - in Basement bedroom	IA	NA	NA	2/12/2015	Trichloroethene	0.942	0.00936	<0.1	Yes	U	0.1	0.0502632	16	0.48	No	No
0027-H	A-0027H-021215-IA-013-STO2	40.753845	-111.857440	4491	015	Crawl Space Storage area - in Basement bedroom	IA	NA	NA	2/12/2015	Tetrachloroethene	0.994	0.04515	<0.1	Yes	U	0.1	0.3060267	370	11	No	No
0027-H	A-0027H-021215-IA-012-BR2	40.753845	-111.857440	4491	014	Basement Bedroom	IA	NA	NA	2/12/2015	cis12Dichloroethene	0.762	0.03277	<0.1	Yes	U	0.1	0.12983474	NE	NE	No	No
0027-H	A-0027H-021215-IA-012-BR2	40.753845	-111.857440	4491	014	Basement Bedroom	IA	NA	NA	2/12/2015	Trichloroethene	0.903	0.01068	<0.1	Yes	U	0.1	0.0573516	16	0.48	No	No
0027-H	A-0027H-021215-IA-012-BR2	40.753845	-111.857440	4491	014	Basement Bedroom	IA	NA	NA	2/12/2015	Tetrachloroethene	0.995	0.05465	<0.1	Yes	U	0.1	0.3704177	370	11	No	No
0027-H	A-0027H-021215-IA-011-BA2	40.753845	-111.857440	4491	013	Basement Bathroom	IA	NA	NA	2/12/2015	cis12Dichloroethene	0.739	0.03496	<0.1	Yes	U	0.1	0.13851152	NE	NE	No	No
0027-H	A-0027H-021215-IA-011-BA2	40.753845	-111.857440	4491	013	Basement Bathroom	IA	NA	NA	2/12/2015	Trichloroethene	0.912	0.00777	<0.1	Yes	U	0.1	0.0417249	16	0.48	No	No
0027-H	A-0027H-021215-IA-011-BA2	40.753845	-111.857440	4491	013	Basement Bathroom	IA	NA	NA	2/12/2015	Tetrachloroethene	0.995	0.05731	<0.1	Yes	U	0.1	0.38844718	370	11	No	No
0027-H	A-0027H-021215-IA-010-LAU	40.753845	-111.857440	4491	012	Laundry Room	IA	NA	NA	2/12/2015	cis12Dichloroethene	0.756	0.03437	<0.1	Yes	U	0.1	0.13617394	NE	NE	No	No
0027-H	A-0027H-021215-IA-010-LAU	40.753845	-111.857440	4491	012	Laundry Room	IA	NA	NA	2/12/2015	Trichloroethene	0.899	0.00672	<0.1	Yes	U	0.1	0.0360864	16	0.48	No	No
0027-H	A-0027H-021215-IA-010-LAU	40.753845	-111.857440	4491	012	Laundry Room	IA	NA	NA	2/12/2015	Tetrachloroethene	0.996	0.05048	<0.1	Yes	U	0.1	0.34215344	370	11	No	No
0027-H	A-0027H-021215-IA-009-STO	40.753845	-111.857440	4491	011	Small Storeroom	IA	NA	NA	2/12/2015	cis12Dichloroethene	0.807	0.02879	<0.1	Yes	U	0.1	0.11406598	NE	NE	No	No
0027-H	A-0027H-021215-IA-009-STO	40.753845	-111.857440	4491	011	Small Storeroom	IA	NA	NA	2/12/2015	Trichloroethene	0.978	0.00545	<0.1	Yes	U	0.1	0.0292665	16	0.48	No	No
0027-H	A-0027H-021215-IA-009-STO	40.753845	-111.857440	4491	011	Small Storeroom	IA	NA	NA	2/12/2015	Tetrachloroethene	0.994	0.04536	<0.1	Yes	U	0.1	0.30745008	370	11	No	No
0027-H	A-0027H-021215-IA-008-KIT	40.753845	-111.857440	4491	008	Main Level - Kitchen	IA	NA	NA	2/12/2015	cis12Dichloroethene	0.709	0.03774	<0.1	Yes	U	0.1	0.14952588	NE	NE	No	No
0027-H	A-0027H-021215-IA-008-KIT	40.753845	-111.857440	4491	008	Main Level - Kitchen	IA	NA	NA	2/12/2015	Trichloroethene	0.912	0.00634	<0.1	Yes	U	0.1	0.0340458	16	0.48	No	No
0027-H	A-0027H-021215-IA-008-KIT	40.753845	-111.857440	4491	008	Main Level - Kitchen	IA	NA	NA	2/12/2015	Tetrachloroethene	0.995	0.0548	<0.1	Yes	U	0.1	0.3714344	370	11	No	No
0027-H	A-0027H-021215-IA-007-MBA	40.753845	-111.857440	4491	007	Master Bathroom	IA	NA	NA	2/12/2015	cis12Dichloroethene	0.678	0.1216	0.1216	No	NR	0.1	0.4817792	NE	NE	No	No
0027-H	A-0027H-021215-IA-007-MBA	40.753845	-111.857440	4491	007	Master Bathroom	IA	NA	NA	2/12/2015	Trichloroethene	0.852	0.00881	<0.1	Yes	U	0.1	0.0473097	16	0.48	No	No
0027-H	A-0027H-021215-IA-007-MBA	40.753845	-111.857440	4491	007	Master Bathroom	IA	NA	NA	2/12/2015	Tetrachloroethene	0.994	0.05784	<0.1	Yes	U	0.1	0.39203952	370	11	No	No
0027-H	A-0027H-021215-IA-006-BA1	40.753845	-111.857440	4491	006	Main Level - Bathroom	IA	NA	NA	2/12/2015	cis12Dichloroethene	0.649	0.1241	0.1241	No	NR	0.1	0.4916842	NE	NE	No	No
0027-H	A-0027H-021215-IA-006-BA1	40.753845	-111.857440	4491	006	Main Level - Bathroom	IA	NA	NA	2/12/2015	Trichloroethene	0.911	0.0079	<0.1	Yes	U	0.1	0.042423	16	0.48	No	No
0027-H	A-0027H-021215-IA-006-BA1	40.753845	-111.857440	4491	006	Main Level - Bathroom	IA	NA	NA	2/12/2015	Tetrachloroethene	0.996	0.06015	<0.1	Yes	U	0.1	0.4076967	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0027-H	A-0027H-021215-IA-005-MBR	40.753845	-111.857440	4491	005	Main Level - Master Bedroom	IA	NA	NA	2/12/2015	cis12Dichloroethene	0.74	0.03927	<0.1	Yes	U	0.1	0.15558774	NE	NE	No	No
0027-H	A-0027H-021215-IA-005-MBR	40.753845	-111.857440	4491	005	Main Level - Master Bedroom	IA	NA	NA	2/12/2015	Trichloroethene	0.987	0.00892	<0.1	Yes	U	0.1	0.0479004	16	0.48	No	No
0027-H	A-0027H-021215-IA-005-MBR	40.753845	-111.857440	4491	005	Main Level - Master Bedroom	IA	NA	NA	2/12/2015	Tetrachloroethene	0.995	0.05531	<0.1	Yes	U	0.1	0.37489118	370	11	No	No
0027-H	A-0027H-021215-IA-004-BR1	40.753845	-111.857440	4491	004	Main Level Bedroom	IA	NA	NA	2/12/2015	cis12Dichloroethene	0.766	0.04483	<0.1	Yes	U	0.1	0.17761646	NE	NE	No	No
0027-H	A-0027H-021215-IA-004-BR1	40.753845	-111.857440	4491	004	Main Level Bedroom	IA	NA	NA	2/12/2015	Trichloroethene	0.975	0.01246	<0.1	Yes	U	0.1	0.0669102	16	0.48	No	No
0027-H	A-0027H-021215-IA-004-BR1	40.753845	-111.857440	4491	004	Main Level Bedroom	IA	NA	NA	2/12/2015	Tetrachloroethene	0.994	0.07448	<0.1	Yes	U	0.1	0.50482544	370	11	No	No
0027-H	A-0027H-021215-IA-003-DRF	40.753845	-111.857440	4491	003	Main Level - Dining Room	IA	NA	NA	2/12/2015	cis12Dichloroethene	0.817	0.03763	<0.1	Yes	U	0.1	0.14909006	NE	NE	No	No
0027-H	A-0027H-021215-IA-003-DRF	40.753845	-111.857440	4491	003	Main Level - Dining Room	IA	NA	NA	2/12/2015	Trichloroethene	0.999	0.01259	<0.1	Yes	U	0.1	0.0676083	16	0.48	No	No
0027-H	A-0027H-021215-IA-003-DRF	40.753845	-111.857440	4491	003	Main Level - Dining Room	IA	NA	NA	2/12/2015	Tetrachloroethene	0.994	0.05502	<0.1	Yes	U	0.1	0.37292556	370	11	No	No
0027-H	A-0027H-021215-IA-002-LIV	40.753845	-111.857440	4491	002	Main Level - Living/Sitting Room	IA	NA	NA	2/12/2015	cis12Dichloroethene	0.855	0.04055	<0.1	Yes	U	0.1	0.1606591	NE	NE	No	No
0027-H	A-0027H-021215-IA-002-LIV	40.753845	-111.857440	4491	002	Main Level - Living/Sitting Room	IA	NA	NA	2/12/2015	Trichloroethene	0.997	0.01344	<0.1	Yes	U	0.1	0.0721728	16	0.48	No	No
0027-H	A-0027H-021215-IA-002-LIV	40.753845	-111.857440	4491	002	Main Level - Living/Sitting Room	IA	NA	NA	2/12/2015	Tetrachloroethene	0.994	0.05607	<0.1	Yes	U	0.1	0.38004246	370	11	No	No
0027-H	A-0027H-021215-IA-017J-HAL	40.753845	-111.857440	4491	027	Basement Hall - bottom of stairs	NP	-5.2	13:04	2/12/2015	cis12Dichloroethene	0.675	0.02336	<0.1	No	NR	0.1	0.09255232	NE	NE	No	No
0027-H	A-0027H-021215-IA-017J-HAL	40.753845	-111.857440	4491	027	Basement Hall - bottom of stairs	NP	-5.2	13:04	2/12/2015	Trichloroethene	0.985	0.00842	<0.1	Yes	U	0.1	0.0452154	16	0.48	No	No
0027-H	A-0027H-021215-IA-017J-HAL	40.753845	-111.857440	4491	027	Basement Hall - bottom of stairs	NP	-5.2	13:04	2/12/2015	Tetrachloroethene	0.995	0.04516	<0.1	Yes	U	0.1	0.30609448	370	11	No	No
0027-H	A-0027H-021215-IA-017I-HAL	40.753845	-111.857440	4491	026	Basement Hall - bottom of stairs	NP	-5.0	12:56	2/12/2015	cis12Dichloroethene	0.741	0.02127	<0.1	Yes	U	0.1	0.08427174	NE	NE	No	No
0027-H	A-0027H-021215-IA-017I-HAL	40.753845	-111.857440	4491	026	Basement Hall - bottom of stairs	NP	-5.0	12:56	2/12/2015	Trichloroethene	0.973	0.00919	<0.1	Yes	U	0.1	0.0493503	16	0.48	No	No
0027-H	A-0027H-021215-IA-017I-HAL	40.753845	-111.857440	4491	026	Basement Hall - bottom of stairs	NP	-5.0	12:56	2/12/2015	Tetrachloroethene	0.994	0.04459	<0.1	Yes	U	0.1	0.30223102	370	11	No	No
0027-H	A-0027H-021215-IA-017H-HAL	40.753845	-111.857440	4491	025	Basement Hall - bottom of stairs	NP	-4.9	12:48	2/12/2015	cis12Dichloroethene	0.771	0.01986	<0.1	Yes	U	0.1	0.07868532	NE	NE	No	No
0027-H	A-0027H-021215-IA-017H-HAL	40.753845	-111.857440	4491	025	Basement Hall - bottom of stairs	NP	-4.9	12:48	2/12/2015	Trichloroethene	0.994	0.00779	<0.1	Yes	U	0.1	0.0418323	16	0.48	No	No
0027-H	A-0027H-021215-IA-017H-HAL	40.753845	-111.857440	4491	025	Basement Hall - bottom of stairs	NP	-4.9	12:48	2/12/2015	Tetrachloroethene	0.996	0.04779	<0.1	Yes	U	0.1	0.32392062	370	11	No	No
0027-H	A-0027H-021215-IA-017G-HAL	40.753845	-111.857440	4491	024	Basement Hall - bottom of stairs	NP	-4.8	12:39	2/12/2015	cis12Dichloroethene	0.829	0.01889	<0.1	Yes	U	0.1	0.07484218	NE	NE	No	No
0027-H	A-0027H-021215-IA-017G-HAL	40.753845	-111.857440	4491	024	Basement Hall - bottom of stairs	NP	-4.8	12:39	2/12/2015	Trichloroethene	0.997	0.01015	<0.1	Yes	U	0.1	0.0545055	16	0.48	No	No
0027-H	A-0027H-021215-IA-017G-HAL	40.753845	-111.857440	4491	024	Basement Hall - bottom of stairs	NP	-4.8	12:39	2/12/2015	Tetrachloroethene	0.994	0.04772	<0.1	Yes	U	0.1	0.32344616	370	11	No	No
0027-H	A-0027H-021215-IA-017F-HAL	40.753845	-111.857440	4491	023	Basement Hall - bottom of stairs	NP	-5.0	12:29	2/12/2015	cis12Dichloroethene	0.809	0.02269	<0.1	Yes	U	0.1	0.08989778	NE	NE	No	No
0027-H	A-0027H-021215-IA-017F-HAL	40.753845	-111.857440	4491	023	Basement Hall - bottom of stairs	NP	-5.0	12:29	2/12/2015	Trichloroethene	0.998	0.00919	<0.1	Yes	U	0.1	0.0493503	16	0.48	No	No
0027-H	A-0027H-021215-IA-017F-HAL	40.753845	-111.857440	4491	023	Basement Hall - bottom of stairs	NP	-5.0	12:29	2/12/2015	Tetrachloroethene	0.995	0.04793	<0.1	Yes	U	0.1	0.32486954	370	11	No	No
0027-H	A-0027H-021215-IA-017E-HAL	40.753845	-111.857440	4491	022	Basement Hall - bottom of stairs	NP	-4.9	12:23	2/12/2015	cis12Dichloroethene	0.832	0.02191	<0.1	Yes	U	0.1	0.08680742	NE	NE	No	No
0027-H	A-0027H-021215-IA-017E-HAL	40.753845	-111.857440	4491	022	Basement Hall - bottom of stairs	NP	-4.9	12:23	2/12/2015	Trichloroethene	0.966	0.00781	<0.1	Yes	U	0.1	0.0419397	16	0.48	No	No
0027-H	A-0027H-021215-IA-017E-HAL	40.753845	-111.857440	4491	022	Basement Hall - bottom of stairs	NP	-4.9	12:23	2/12/2015	Tetrachloroethene	0.995	0.04531	<0.1	Yes	U	0.1	0.30711118	370	11	No	No
0027-H	A-0027H-021215-IA-017D-HAL	40.753845	-111.857440	4491	021	Basement Hall - bottom of stairs	NP	-5.0	12:15	2/12/2015	cis12Dichloroethene	0.766	0.02251	<0.1	Yes	U	0.1	0.08918462	NE	NE	No	No
0027-H	A-0027H-021215-IA-017D-HAL	40.753845	-111.857440	4491	021	Basement Hall - bottom of stairs	NP	-5.0	12:15	2/12/2015	Trichloroethene	0.957	0.01279	<0.1	Yes	U	0.1	0.0686823	16	0.48	No	No
0027-H	A-0027H-021215-IA-017D-HAL	40.753845	-111.857440	4491	021	Basement Hall - bottom of stairs	NP	-5.0	12:15	2/12/2015	Tetrachloroethene	0.993	0.04638	<0.1	Yes	U	0.1	0.31436364	370	11	No	No
0027-H	A-0027H-021215-IA-017C-HAL	40.753845	-111.857440	4491	020	Basement Hall - bottom of stairs	NP	-4.7	12:06	2/12/2015	cis12Dichloroethene	0.815	0.02202	<0.1	Yes	U	0.1	0.08724324	NE	NE	No	No
0027-H	A-0027H-021215-IA-017C-HAL	40.753845	-111.857440	4491	020	Basement Hall - bottom of stairs	NP	-4.7	12:06	2/12/2015	Trichloroethene	0.994	0.01653	<0.1	Yes	U	0.1	0.0887661	16	0.48	No	No
0027-H	A-0027H-021215-IA-017C-HAL	40.753845	-111.857440	4491	020	Basement Hall - bottom of stairs	NP	-4.7	12:06	2/12/2015	Tetrachloroethene	0.994	0.04542	<0.1	Yes	U	0.1	0.30785676	370	11	No	No
0027-H	A-0027H-021215-IA-017B-HAL	40.753845	-111.857440	4491	019	Basement Hall - bottom of stairs	NP	-5.0	11:58	2/12/2015	cis12Dichloroethene	0.823	0.02343	<0.1	Yes	U	0.1	0.09282966	NE	NE	No	No
0027-H	A-0027H-021215-IA-017B-HAL	40.753845	-111.857440	4491	019	Basement Hall - bottom of stairs	NP	-5.0	11:58	2/12/2015	Trichloroethene	0.992	0.01652	<0.1	Yes	U	0.1	0.0887124	16	0.48	No	No
0027-H	A-0027H-021215-IA-017B-HAL	40.753845	-111.857440	4491	019	Basement Hall - bottom of stairs	NP	-5.0	11:58	2/12/2015	Tetrachloroethene	0.994	0.04656	<0.1	Yes	U	0.1	0.31558368	370	11	No	No
0027-H	A-0027H-021215-IA-017A-HAL	40.753845	-111.857440	4491	018	Basement Hall - bottom of stairs	NP	-5.3	11:50	2/12/2015	cis12Dichloroethene	0.596	0.03169	<0.1	No	NR	0.1	0.12555578	NE	NE	No	No
0027-H	A-0027H-021215-IA-017A-HAL	40.753845	-111.857440	4491	018	Basement Hall - bottom of stairs	NP	-5.3	11:50	2/12/2015	Trichloroethene	0.992	0.00863	<0.1	Yes	U	0.1	0.0463431	16	0.48	No	No
0027-H	A-0027H-021215-IA-017A-HAL	40.753845	-111.857440	4491	018	Basement Hall - bottom of stairs	NP	-5.3	11:50	2/12/2015	Tetrachloroethene	0.995	0.04768	<0.1	Yes	U	0.1	0.32317504	370	11	No	No
0027-H	A-0027H-021215-IA-001-OUT	40.753845	-111.857440	4491	001	Outdoor Ambient -front sidewalk	OA	NA	NA	2/12/2015	cis12Dichloroethene	0.851	0.01874	<0.1	Yes	U	0.1	0.07424788	NE	NE	No	No
0027-H	A-0027H-021215-IA-001-OUT	40.753845	-111.857440	4491	001	Outdoor Ambient -front sidewalk	OA	NA	NA	2/12/2015	Trichloroethene	0.998	0.03729	<0.1	Yes	U	0.1	0.2002473	16	0.48	No	No
0027-H	A-0027H-021215-IA-001-OUT	40.753845	-111.857440	4491	001	Outdoor Ambient -front sidewalk	OA	NA	NA	2/12/2015	Tetrachloroethene	0.996	0.03482	<0.1	Yes	U	0.1	0.23600996	370	11	No	No
0027-H	A-0027H-021215-IA-018H-HAL	40.753845	-111.857440	4491	035	Basement Hall - bottom of stairs	PP	5.0	14:08	2/12/2015	cis12Dichloroethene	0.936	0.00948	<0.1	Yes	U	0.1	0.03755976	NE	NE	No	No
0027-H	A-0027H-021215-IA-018H-HAL	40.753845	-111.857440	4491	035	Basement Hall - bottom of stairs	PP	5.0	14:08	2/12/2015	Trichloroethene	0.99	0.01872	<0.1	Yes	U	0.1	0.1005264	16	0.48	No	No
0027-H	A-0027H-021215-IA-018H-HAL	40.753845	-111.857440	4491	035	Basement Hall - bottom of stairs	PP	5.0	14:08	2/12/2015	Tetrachloroethene	0.994	0.0304	<0.1	Yes	U	0.1	0.2060512	370	11	No	No
0027-H	A-0027H-021215-IA-018G-HAL	40.753845	-111.857440	4491	034	Basement Hall - bottom of stairs	PP	4.8	14:00	2/12/2015	cis12Dichloroethene	0.865	0.00992	<0.1	Yes	U	0.1	0.03930304	NE	NE	No	No
0027-H	A-0027H-021215-IA-018G-HAL	40.753845	-111.857440	4491	034	Basement Hall - bottom of stairs	PP	4.8	14:00	2/12/2015	Trichloroethene	0.998	0.03192	<0.1	Yes	U	0.1	0.1714104	16	0.48	No	No
0027-H	A-0027H-021215-IA-018G-HAL	40.753845	-111.857440	4491	034	Basement Hall - bottom of stairs	PP	4.8	14:00	2/12/2015	Tetrachloroethene	0.994	0.03841	<0.1	Yes	U	0.1	0.26034298	370	11	No	No
0027-H	A-0027H-021215-IA-018F-HAL	40.753845	-111.857440	4491	033	Basement Hall - bottom of stairs	PP	5.1	13:52	2/12/2015	cis12Dichloroethene	0.655	0.0106	<0.1	No	NR	0.1	0.0419972	NE	NE	No	No
0027-H	A-0027H-021215-IA-018F-HAL	40.753845	-111.857440	4491	033	Basement Hall - bottom of stairs	PP	5.1	13:52	2/12/2015	Trichloroethene	0.965	0.01165	<0.1	Yes	U	0.1	0.0625605	16	0.48	No	No
0027-H	A-0027H-021215-IA-018F-HAL	40.753845	-111.857440	4491	033	Basement Hall - bottom of stairs	PP	5.1	13:52	2/12/2015	Tetrachloroethene	0.996	0.02441	<0.1	Yes	U	0.1	0.16545098	370	11	No	No
0027-H	A-0027H-021215-IA-018E-HAL	40.753845	-111.857440	4491	032	Basement Hall - bottom of stairs	PP	4.9	13:46	2/12/2015	cis12Dichloroethene	0.828	0.01191	<0.1	Yes	U	0.1	0.04718742	NE	NE	No	No
0027-H	A-0027H-021215-IA-018E-HAL	40.753845	-111.857440	4491	032	Basement Hall - bottom of stairs	PP	4.9	13:46	2/12/2015	Trichloroethene	0.903	0.00671	<0.1	Yes	U	0.1	0.0360327	16	0.48	No	No
0027-H	A-0027H-021215-IA-018E-HAL	40.753845	-111.857440	4491	032	Basement Hall - bottom of stairs	PP	4.9	13:46	2/12/2015	Tetrachloroethene	0.995	0.02164	<0.1	Yes	U	0.1	0.14667592	370	11	No	No
0027-H	A-0027H-021215-IA-018D-HAL	40.753845	-111.857440	4491	031	Basement Hall - bottom of stairs	PP	4.7	13:37	2/12/2015	cis12Dichloroethene	0.921	0.00918	<0.1	Yes	U	0.1	0.03637116	NE	NE	No	No
0027-H	A-0027H-021215-IA-018D-HAL	40.753845	-111.857440	4491	031	Basement Hall - bottom of stairs	PP	4.7	13:37	2/12/2015	Trichloroethene	0.996	0.01073	<0.1	Yes	U	0.1	0.0576201	16	0.48	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0027-H	A-0027H-021215-IA-018D-HAL	40.753845	-111.857440	4491	031	Basement Hall - bottom of stairs	PP	4.7	13:37	2/12/2015	Tetrachloroethene	0.993	0.03068	<0.1	Yes	U	0.1	0.20794904	370	11	No	No
0027-H	A-0027H-021215-IA-018C-HAL	40.753845	-111.857440	4491	030	Basement Hall - bottom of stairs	PP	5.0	13:28	2/12/2015	cis12Dichloroethene	0.754	0.01114	<0.1	Yes	U	0.1	0.04413668	NE	NE	No	No
0027-H	A-0027H-021215-IA-018C-HAL	40.753845	-111.857440	4491	030	Basement Hall - bottom of stairs	PP	5.0	13:28	2/12/2015	Trichloroethene	0.977	0.00928	<0.1	Yes	U	0.1	0.0498336	16	0.48	No	No
0027-H	A-0027H-021215-IA-018C-HAL	40.753845	-111.857440	4491	030	Basement Hall - bottom of stairs	PP	5.0	13:28	2/12/2015	Tetrachloroethene	0.994	0.0338	<0.1	Yes	U	0.1	0.2290964	370	11	No	No
0027-H	A-0027H-021215-IA-018B-HAL	40.753845	-111.857440	4491	029	Basement Hall - bottom of stairs	PP	5.7	13:21	2/12/2015	cis12Dichloroethene	0.813	0.01132	<0.1	Yes	U	0.1	0.04484984	NE	NE	No	No
0027-H	A-0027H-021215-IA-018B-HAL	40.753845	-111.857440	4491	029	Basement Hall - bottom of stairs	PP	5.7	13:21	2/12/2015	Trichloroethene	0.997	0.01769	<0.1	Yes	U	0.1	0.0949953	16	0.48	No	No
0027-H	A-0027H-021215-IA-018B-HAL	40.753845	-111.857440	4491	029	Basement Hall - bottom of stairs	PP	5.7	13:21	2/12/2015	Tetrachloroethene	0.994	0.03344	<0.1	Yes	U	0.1	0.22665632	370	11	No	No
0027-H	A-0027H-021215-IA-018A-HAL	40.753845	-111.857440	4491	028	Basement Hall - bottom of stairs	PP	4.8	13:12	2/12/2015	cis12Dichloroethene	0.861	0.01714	<0.1	Yes	U	0.1	0.06790868	NE	NE	No	No
0027-H	A-0027H-021215-IA-018A-HAL	40.753845	-111.857440	4491	028	Basement Hall - bottom of stairs	PP	4.8	13:12	2/12/2015	Trichloroethene	0.996	0.00982	<0.1	Yes	U	0.1	0.0527334	16	0.48	No	No
0027-H	A-0027H-021215-IA-018A-HAL	40.753845	-111.857440	4491	028	Basement Hall - bottom of stairs	PP	4.8	13:12	2/12/2015	Tetrachloroethene	0.995	0.04014	<0.1	Yes	U	0.1	0.27206892	370	11	No	No
0027-H	A-0027H-021215-0027H-SG-001-5.	40.753802	-111.857517	4489	010	Soil Gas sample - located on west wall of house	SG	NA	NA	2/12/2015	cis12Dichloroethene	0.752	0.09904	<0.1	Yes	U	0.1	0.3923648	NE	NE	No	No
0027-H	A-0027H-021215-0027H-SG-001-5.	40.753802	-111.857517	4489	010	Soil Gas sample - located on west wall of house	SG	NA	NA	2/12/2015	Trichloroethene	0.936	0.00617	<0.1	Yes	U	0.1	0.0331329	16	0.48	No	No
0027-H	A-0027H-021215-0027H-SG-001-5.	40.753802	-111.857517	4489	010	Soil Gas sample - located on west wall of house	SG	NA	NA	2/12/2015	Tetrachloroethene	0.995	0.04585	<0.1	Yes	U	0.1	0.3107713	370	11	No	No
0027-H	A-0027H-021215-0027H-SG-001-4'	40.753802	-111.857517	4489	009	Soil Gas sample - located on west wall of house	SG	NA	NA	2/12/2015	cis12Dichloroethene	0.682	0.151	0.151	No	NR	0.1	0.598262	NE	NE	No	No
0027-H	A-0027H-021215-0027H-SG-001-4'	40.753802	-111.857517	4489	009	Soil Gas sample - located on west wall of house	SG	NA	NA	2/12/2015	Trichloroethene	0.883	0.01131	<0.1	Yes	U	0.1	0.0607347	16	0.48	No	No
0027-H	A-0027H-021215-0027H-SG-001-4'	40.753802	-111.857517	4489	009	Soil Gas sample - located on west wall of house	SG	NA	NA	2/12/2015	Tetrachloroethene	0.993	0.0598	<0.1	Yes	U	0.1	0.4053244	370	11	No	No
0028-S	A-0028S-033115-CCV	40.751356	-111.845914	4648	036	CCV - 5.0 ppb	CCV	NA	NA	3/31/2015	cis12Dichloroethene	0.997	6.227	6.227	Yes	=	0.1	24.671374	NA	NA	NA	NA
0028-S	A-0028S-033115-CCV	40.751356	-111.845914	4648	036	CCV - 5.0 ppb	CCV	NA	NA	3/31/2015	Trichloroethene	0.969	5.588	5.588	Yes	=	0.1	30.00756	NA	NA	NA	NA
0028-S	A-0028S-033115-CCV	40.751356	-111.845914	4648	036	CCV - 5.0 ppb	CCV	NA	NA	3/31/2015	Tetrachloroethene	0.994	6.576	6.576	Yes	=	0.1	44.572128	NA	NA	NA	NA
0028-S	A-0028S-033115-CCV	40.751356	-111.845914	4648	035	CCV - 0.5 ppb	CCV	NA	NA	3/31/2015	cis12Dichloroethene	0.992	0.4526	0.4526	Yes	=	0.1	1.7932012	NA	NA	NA	NA
0028-S	A-0028S-033115-CCV	40.751356	-111.845914	4648	035	CCV - 0.5 ppb	CCV	NA	NA	3/31/2015	Trichloroethene	0.91	0.4163	0.4163	Yes	=	0.1	2.235531	NA	NA	NA	NA
0028-S	A-0028S-033115-CCV	40.751356	-111.845914	4648	035	CCV - 0.5 ppb	CCV	NA	NA	3/31/2015	Tetrachloroethene	0.995	0.5033	0.5033	Yes	=	0.1	3.4113674	NA	NA	NA	NA
0028-S	A-0028S-033015-CCV	40.751356	-111.845914	4648	030	CCV - 5.0 ppb	CCV	NA	NA	3/30/2015	cis12Dichloroethene	0.993	5.592	5.592	Yes	=	0.1	22.155504	NA	NA	NA	NA
0028-S	A-0028S-033015-CCV	40.751356	-111.845914	4648	030	CCV - 5.0 ppb	CCV	NA	NA	3/30/2015	Trichloroethene	0.975	4.797	4.797	Yes	=	0.1	25.75989	NA	NA	NA	NA
0028-S	A-0028S-033015-CCV	40.751356	-111.845914	4648	030	CCV - 5.0 ppb	CCV	NA	NA	3/30/2015	Tetrachloroethene	0.994	5.001	5.001	Yes	=	0.1	33.896778	NA	NA	NA	NA
0028-S	A-0028S-033015-CCV	40.751356	-111.845914	4648	029	CCV - 0.5 ppb	CCV	NA	NA	3/30/2015	cis12Dichloroethene	0.99	0.5556	0.5556	Yes	=	0.1	2.2012872	NA	NA	NA	NA
0028-S	A-0028S-033015-CCV	40.751356	-111.845914	4648	029	CCV - 0.5 ppb	CCV	NA	NA	3/30/2015	Trichloroethene	0.91	0.5252	0.5252	Yes	=	0.1	2.820324	NA	NA	NA	NA
0028-S	A-0028S-033015-CCV	40.751356	-111.845914	4648	029	CCV - 0.5 ppb	CCV	NA	NA	3/30/2015	Tetrachloroethene	0.994	0.5081	0.5081	Yes	=	0.1	3.4439018	NA	NA	NA	NA
0028-S	A-0028S-040115-CCV	40.751356	-111.845914	4648	020	CCV - 5.5 ppb	CCV	NA	NA	4/1/2015	cis12Dichloroethene	0.988	4.779	4.779	Yes	=	0.1	18.934398	NA	NA	NA	NA
0028-S	A-0028S-040115-CCV	40.751356	-111.845914	4648	020	CCV - 5.5 ppb	CCV	NA	NA	4/1/2015	Trichloroethene	0.977	4.852	4.852	Yes	=	0.1	26.05524	NA	NA	NA	NA
0028-S	A-0028S-040115-CCV	40.751356	-111.845914	4648	020	CCV - 5.5 ppb	CCV	NA	NA	4/1/2015	Tetrachloroethene	0.993	4.863	4.863	Yes	=	0.1	32.961414	NA	NA	NA	NA
0028-S	A-0028S-040115-CCV	40.751356	-111.845914	4648	019	CCV - 0.55 ppb	CCV	NA	NA	4/1/2015	cis12Dichloroethene	0.997	0.4263	0.4263	Yes	=	0.1	1.6890006	NA	NA	NA	NA
0028-S	A-0028S-040115-CCV	40.751356	-111.845914	4648	019	CCV - 0.55 ppb	CCV	NA	NA	4/1/2015	Trichloroethene	0.927	0.4808	0.4808	Yes	=	0.1	2.581896	NA	NA	NA	NA
0028-S	A-0028S-040115-CCV	40.751356	-111.845914	4648	019	CCV - 0.55 ppb	CCV	NA	NA	4/1/2015	Tetrachloroethene	0.994	0.4604	0.4604	Yes	=	0.1	3.1205912	NA	NA	NA	NA
0028-S	A-0028S-040115-CCV	40.751356	-111.845914	4648	002	CCV - 0.55 ppb	CCV	NA	NA	4/1/2015	cis12Dichloroethene	0.992	0.5635	0.5635	Yes	=	0.1	2.232587	NA	NA	NA	NA
0028-S	A-0028S-040115-CCV	40.751356	-111.845914	4648	002	CCV - 0.55 ppb	CCV	NA	NA	4/1/2015	Trichloroethene	0.997	0.5666	0.5666	Yes	=	0.1	3.042642	NA	NA	NA	NA
0028-S	A-0028S-040115-CCV	40.751356	-111.845914	4648	002	CCV - 0.55 ppb	CCV	NA	NA	4/1/2015	Tetrachloroethene	0.994	0.5581	0.5581	Yes	=	0.1	3.7828018	NA	NA	NA	NA
0028-S	A-0028S-040115-CCV	40.751356	-111.845914	4648	001	CCV - 5.5 ppb	CCV	NA	NA	4/1/2015	cis12Dichloroethene	0.981	5.429	5.429	Yes	=	0.1	21.509698	NA	NA	NA	NA
0028-S	A-0028S-040115-CCV	40.751356	-111.845914	4648	001	CCV - 5.5 ppb	CCV	NA	NA	4/1/2015	Trichloroethene	0.972	5.279	5.279	Yes	=	0.1	28.34823	NA	NA	NA	NA
0028-S	A-0028S-040115-CCV	40.751356	-111.845914	4648	001	CCV - 5.5 ppb	CCV	NA	NA	4/1/2015	Tetrachloroethene	0.994	5.376	5.376	Yes	=	0.1	36.438528	NA	NA	NA	NA
0028-S	A-0028S-033115-IA-028-RM218	40.751356	-111.845914	4648	028	Second Floor - Mechanical Room	IA	NA	NA	3/31/2015	cis12Dichloroethene	0.95	0.01754	<0.1	Yes	U	0.1	0.06949348	NE	NE	No	No
0028-S	A-0028S-033115-IA-028-RM218	40.751356	-111.845914	4648	028	Second Floor - Mechanical Room	IA	NA	NA	3/31/2015	Trichloroethene	0.61	0.0046	<0.1	No	NR	0.1	0.024702	16	0.48	No	No
0028-S	A-0028S-033115-IA-028-RM218	40.751356	-111.845914	4648	028	Second Floor - Mechanical Room	IA	NA	NA	3/31/2015	Tetrachloroethene	0.993	0.00999	<0.1	Yes	U	0.1	0.06771222	370	11	No	No
0028-S	A-0028S-033115-IA-027-CR232	40.751356	-111.845914	4648	027	Second Floor - Classroom 232	IA	NA	NA	3/31/2015	cis12Dichloroethene	0.335	0.00511	<0.1	No	NR	0.1	0.02024582	NE	NE	No	No
0028-S	A-0028S-033115-IA-027-CR232	40.751356	-111.845914	4648	027	Second Floor - Classroom 232	IA	NA	NA	3/31/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0028-S	A-0028S-033115-IA-027-CR232	40.751356	-111.845914	4648	027	Second Floor - Classroom 232	IA	NA	NA	3/31/2015	Tetrachloroethene	0.995	0.01161	<0.1	Yes	U	0.1	0.07869258	370	11	No	No
0028-S	A-0028S-033115-IA-026-RM230	40.751356	-111.845914	4648	026	Second Floor - Telephone Room - Room 230	IA	NA	NA	3/31/2015	cis12Dichloroethene	0.812	0.02674	<0.1	Yes	U	0.1	0.10594388	NE	NE	No	No
0028-S	A-0028S-033115-IA-026-RM230	40.751356	-111.845914	4648	026	Second Floor - Telephone Room - Room 230	IA	NA	NA	3/31/2015	Trichloroethene	0.908	0.00706	<0.1	Yes	U	0.1	0.0379122	16	0.48	No	No
0028-S	A-0028S-033115-IA-026-RM230	40.751356	-111.845914	4648	026	Second Floor - Telephone Room - Room 230	IA	NA	NA	3/31/2015	Tetrachloroethene	0.993	0.01113	<0.1	Yes	U	0.1	0.07543914	370	11	No	No
0028-S	A-0028S-033115-IA-025-CR227	40.751356	-111.845914	4648	025	Second Floor - Classroom 227	IA	NA	NA	3/31/2015	cis12Dichloroethene	0.731	0.02661	<0.1	Yes	U	0.1	0.10542882	NE	NE	No	No
0028-S	A-0028S-033115-IA-025-CR227	40.751356	-111.845914	4648	025	Second Floor - Classroom 227	IA	NA	NA	3/31/2015	Trichloroethene	0.912	0.00413	<0.1	Yes	U	0.1	0.0221781	16	0.48	No	No
0028-S	A-0028S-033115-IA-025-CR227	40.751356	-111.845914	4648	025	Second Floor - Classroom 227	IA	NA	NA	3/31/2015	Tetrachloroethene	0.992	0.01185	<0.1	Yes	U	0.1	0.0803193	370	11	No	No
0028-S	A-0028S-033115-IA-024-RM224	40.751356	-111.845914	4648	024	Second Floor - Conference Room - Room 224	IA	NA	NA	3/31/2015	cis12Dichloroethene	0.47	0.0044	<0.1	No	NR	0.1	0.0174328	NE	NE	No	No
0028-S	A-0028S-033115-IA-024-RM224	40.751356	-111.845914	4648	024	Second Floor - Conference Room - Room 224	IA	NA	NA	3/31/2015	Trichloroethene	0.794	0.01696	<0.1	Yes	U	0.1	0.0910752	16	0.48	No	No
0028-S	A-0028S-033115-IA-024-RM224	40.751356	-111.845914	4648	024	Second Floor - Conference Room - Room 224	IA	NA	NA	3/31/2015	Tetrachloroethene	0.995	0.01173	<0.1	Yes	U	0.1	0.07950594	370	11	No	No
0028-S	A-0028S-033115-IA-023-CR228	40.751356	-111.845914	4648	023	Second Floor - Classroom 228	IA	NA	NA	3/31/2015	cis12Dichloroethene	0.854	0.02905	<0.1	Yes	U	0.1	0.1150961	NE	NE	No	No
0028-S	A-0028S-033115-IA-023-CR228	40.751356	-111.845914	4648	023	Second Floor - Classroom 228	IA	NA	NA	3/31/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0028-S	A-0028S-033115-IA-023-CR228	40.751356	-111.845914	4648	023	Second Floor - Classroom 228	IA	NA	NA	3/31/2015	Tetrachloroethene	0.996	0.01244	<0.1	Yes	U	0.1	0.08431832	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0028-S	A-0028S-033115-IA-022-BA1	40.751356	-111.845914	4648	022	Second Floor - Boys Bathroom	IA	NA	NA	3/31/2015	cis12Dichloroethene	0.637	0.03187	<0.1	No	NR	0.1	0.12626894	NE	NE	No	No
0028-S	A-0028S-033115-IA-022-BA1	40.751356	-111.845914	4648	022	Second Floor - Boys Bathroom	IA	NA	NA	3/31/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0028-S	A-0028S-033115-IA-022-BA1	40.751356	-111.845914	4648	022	Second Floor - Boys Bathroom	IA	NA	NA	3/31/2015	Tetrachloroethene	0.994	0.01296	<0.1	Yes	U	0.1	0.08784288	370	11	No	No
0028-S	A-0028S-033115-IA-021-RM217	40.751356	-111.845914	4648	021	Second Floor - Time Out Room - Rm 217	IA	NA	NA	3/31/2015	cis12Dichloroethene	0.751	0.05951	<0.1	Yes	U	0.1	0.23577862	NE	NE	No	No
0028-S	A-0028S-033115-IA-021-RM217	40.751356	-111.845914	4648	021	Second Floor - Time Out Room - Rm 217	IA	NA	NA	3/31/2015	Trichloroethene	0.887	0.00574	<0.1	Yes	U	0.1	0.0308238	16	0.48	No	No
0028-S	A-0028S-033115-IA-021-RM217	40.751356	-111.845914	4648	021	Second Floor - Time Out Room - Rm 217	IA	NA	NA	3/31/2015	Tetrachloroethene	0.993	0.01414	<0.1	Yes	U	0.1	0.09584092	370	11	No	No
0028-S	A-0028S-033115-IA-020-RM213	40.751356	-111.845914	4648	020	Second Floor - Office - Room 213	IA	NA	NA	3/31/2015	cis12Dichloroethene	0.657	0.03515	<0.1	No	NR	0.1	0.1392643	NE	NE	No	No
0028-S	A-0028S-033115-IA-020-RM213	40.751356	-111.845914	4648	020	Second Floor - Office - Room 213	IA	NA	NA	3/31/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0028-S	A-0028S-033115-IA-020-RM213	40.751356	-111.845914	4648	020	Second Floor - Office - Room 213	IA	NA	NA	3/31/2015	Tetrachloroethene	0.993	0.01247	<0.1	Yes	U	0.1	0.08452166	370	11	No	No
0028-S	A-0028S-033115-IA-019-RM210	40.751356	-111.845914	4648	019	Second Floor - Workroom - Room 210	IA	NA	NA	3/31/2015	cis12Dichloroethene	0.51	0.00478	<0.1	No	NR	0.1	0.01893836	NE	NE	No	No
0028-S	A-0028S-033115-IA-019-RM210	40.751356	-111.845914	4648	019	Second Floor - Workroom - Room 210	IA	NA	NA	3/31/2015	Trichloroethene	0.745	0.00426	<0.1	Yes	U	0.1	0.0228762	16	0.48	No	No
0028-S	A-0028S-033115-IA-019-RM210	40.751356	-111.845914	4648	019	Second Floor - Workroom - Room 210	IA	NA	NA	3/31/2015	Tetrachloroethene	0.994	0.01177	<0.1	Yes	U	0.1	0.07977706	370	11	No	No
0028-S	A-0028S-033115-IA-018-RM203	40.751356	-111.845914	4648	018	Second Floor - Office - Room 203	IA	NA	NA	3/31/2015	cis12Dichloroethene	0.683	0.05933	<0.1	No	NR	0.1	0.23506546	NE	NE	No	No
0028-S	A-0028S-033115-IA-018-RM203	40.751356	-111.845914	4648	018	Second Floor - Office - Room 203	IA	NA	NA	3/31/2015	Trichloroethene	0.812	0.00814	<0.1	Yes	U	0.1	0.0437118	16	0.48	No	No
0028-S	A-0028S-033115-IA-018-RM203	40.751356	-111.845914	4648	018	Second Floor - Office - Room 203	IA	NA	NA	3/31/2015	Tetrachloroethene	0.991	0.01081	<0.1	Yes	U	0.1	0.07327018	370	11	No	No
0028-S	A-0028S-033115-IA-017-RM201	40.751356	-111.845914	4648	017	Second Floor - Room 201	IA	NA	NA	3/31/2015	cis12Dichloroethene	0.932	0.01453	<0.1	Yes	U	0.1	0.05756786	NE	NE	No	No
0028-S	A-0028S-033115-IA-017-RM201	40.751356	-111.845914	4648	017	Second Floor - Room 201	IA	NA	NA	3/31/2015	Trichloroethene	0.988	0.00833	<0.1	Yes	U	0.1	0.0447321	16	0.48	No	No
0028-S	A-0028S-033115-IA-017-RM201	40.751356	-111.845914	4648	017	Second Floor - Room 201	IA	NA	NA	3/31/2015	Tetrachloroethene	0.995	0.01435	<0.1	Yes	U	0.1	0.0972643	370	11	No	No
0028-S	A-0028S-033115-IA-015-RM118	40.751356	-111.845914	4648	015	First Floor - Kitchen (Room 118)	IA	NA	NA	3/31/2015	cis12Dichloroethene	0.515	0.00468	<0.1	No	NR	0.1	0.01854216	NE	NE	No	No
0028-S	A-0028S-033115-IA-015-RM118	40.751356	-111.845914	4648	015	First Floor - Kitchen (Room 118)	IA	NA	NA	3/31/2015	Trichloroethene	0.959	0.00596	<0.1	Yes	U	0.1	0.0320052	16	0.48	No	No
0028-S	A-0028S-033115-IA-015-RM118	40.751356	-111.845914	4648	015	First Floor - Kitchen (Room 118)	IA	NA	NA	3/31/2015	Tetrachloroethene	0.998	0.01301	<0.1	Yes	U	0.1	0.08818178	370	11	No	No
0028-S	A-0028S-033115-IA-014-RM113	40.751356	-111.845914	4648	014	First Floor - Cafeteria (Room 113)	IA	NA	NA	3/31/2015	cis12Dichloroethene	0.853	0.02326	<0.1	Yes	U	0.1	0.09215612	NE	NE	No	No
0028-S	A-0028S-033115-IA-014-RM113	40.751356	-111.845914	4648	014	First Floor - Cafeteria (Room 113)	IA	NA	NA	3/31/2015	Trichloroethene	0.939	0.00388	<0.1	Yes	U	0.1	0.0208356	16	0.48	No	No
0028-S	A-0028S-033115-IA-014-RM113	40.751356	-111.845914	4648	014	First Floor - Cafeteria (Room 113)	IA	NA	NA	3/31/2015	Tetrachloroethene	0.996	0.01261	<0.1	Yes	U	0.1	0.08547058	370	11	No	No
0028-S	A-0028S-033115-IA-013-RM116	40.751356	-111.845914	4648	013	First Floor - Mechanical Room 116	IA	NA	NA	3/31/2015	cis12Dichloroethene	0.439	0.00858	<0.1	No	NR	0.1	0.03399396	NE	NE	No	No
0028-S	A-0028S-033115-IA-013-RM116	40.751356	-111.845914	4648	013	First Floor - Mechanical Room 116	IA	NA	NA	3/31/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0028-S	A-0028S-033115-IA-013-RM116	40.751356	-111.845914	4648	013	First Floor - Mechanical Room 116	IA	NA	NA	3/31/2015	Tetrachloroethene	0.996	0.01245	<0.1	Yes	U	0.1	0.0843861	370	11	No	No
0028-S	A-0028S-033115-IA-012-CR119	40.751356	-111.845914	4648	012	First Floor - Classroom 119	IA	NA	NA	3/31/2015	cis12Dichloroethene	0.451	0.01563	<0.1	No	NR	0.1	0.06192606	NE	NE	No	No
0028-S	A-0028S-033115-IA-012-CR119	40.751356	-111.845914	4648	012	First Floor - Classroom 119	IA	NA	NA	3/31/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0028-S	A-0028S-033115-IA-012-CR119	40.751356	-111.845914	4648	012	First Floor - Classroom 119	IA	NA	NA	3/31/2015	Tetrachloroethene	0.992	0.01687	<0.1	Yes	U	0.1	0.11434486	370	11	No	No
0028-S	A-0028S-033115-IA-011-CR122	40.751356	-111.845914	4648	011	First Floor - Classroom 122	IA	NA	NA	3/31/2015	cis12Dichloroethene	0.466	0.01911	<0.1	No	NR	0.1	0.07571382	NE	NE	No	No
0028-S	A-0028S-033115-IA-011-CR122	40.751356	-111.845914	4648	011	First Floor - Classroom 122	IA	NA	NA	3/31/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0028-S	A-0028S-033115-IA-011-CR122	40.751356	-111.845914	4648	011	First Floor - Classroom 122	IA	NA	NA	3/31/2015	Tetrachloroethene	0.992	0.01514	<0.1	Yes	U	0.1	0.10261892	370	11	No	No
0028-S	A-0028S-033115-IA-010-CR124	40.751356	-111.845914	4648	010	First Floor - Classroom 124	IA	NA	NA	3/31/2015	cis12Dichloroethene	0.441	0.01314	<0.1	No	NR	0.1	0.05206068	NE	NE	No	No
0028-S	A-0028S-033115-IA-010-CR124	40.751356	-111.845914	4648	010	First Floor - Classroom 124	IA	NA	NA	3/31/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0028-S	A-0028S-033115-IA-010-CR124	40.751356	-111.845914	4648	010	First Floor - Classroom 124	IA	NA	NA	3/31/2015	Tetrachloroethene	0.994	0.01417	<0.1	Yes	U	0.1	0.09604426	370	11	No	No
0028-S	A-0028S-033115-IA-009-CR128	40.751356	-111.845914	4648	009	First Floor -Classroom 128	IA	NA	NA	3/31/2015	cis12Dichloroethene	0.481	0.00976	<0.1	No	NR	0.1	0.03866912	NE	NE	No	No
0028-S	A-0028S-033115-IA-009-CR128	40.751356	-111.845914	4648	009	First Floor -Classroom 128	IA	NA	NA	3/31/2015	Trichloroethene	0.904	0.00414	<0.1	Yes	U	0.1	0.0222318	16	0.48	No	No
0028-S	A-0028S-033115-IA-009-CR128	40.751356	-111.845914	4648	009	First Floor -Classroom 128	IA	NA	NA	3/31/2015	Tetrachloroethene	0.997	0.01898	<0.1	Yes	U	0.1	0.12864644	370	11	No	No
0028-S	A-0028S-033115-IA-008-CR133	40.751356	-111.845914	4648	008	First Floor -Classroom 133	IA	NA	NA	3/31/2015	cis12Dichloroethene	0.736	0.01587	<0.1	Yes	U	0.1	0.06287694	NE	NE	No	No
0028-S	A-0028S-033115-IA-008-CR133	40.751356	-111.845914	4648	008	First Floor -Classroom 133	IA	NA	NA	3/31/2015	Trichloroethene	0.965	0.00774	<0.1	Yes	U	0.1	0.0415638	16	0.48	No	No
0028-S	A-0028S-033115-IA-008-CR133	40.751356	-111.845914	4648	008	First Floor -Classroom 133	IA	NA	NA	3/31/2015	Tetrachloroethene	0.996	0.01876	<0.1	Yes	U	0.1	0.12715528	370	11	No	No
0028-S	A-0028S-033115-IA-007-CR137	40.751356	-111.845914	4648	007	First Floor - Classroom 137	IA	NA	NA	3/31/2015	cis12Dichloroethene	0.928	0.01492	<0.1	Yes	U	0.1	0.05911304	NE	NE	No	No
0028-S	A-0028S-033115-IA-007-CR137	40.751356	-111.845914	4648	007	First Floor - Classroom 137	IA	NA	NA	3/31/2015	Trichloroethene	0.95	0.00799	<0.1	Yes	U	0.1	0.0429063	16	0.48	No	No
0028-S	A-0028S-033115-IA-007-CR137	40.751356	-111.845914	4648	007	First Floor - Classroom 137	IA	NA	NA	3/31/2015	Tetrachloroethene	0.993	0.02077	<0.1	Yes	U	0.1	0.14077906	370	11	No	No
0028-S	A-0028S-033115-IA-006-CR139	40.751356	-111.845914	4648	006	First Floor - Daycare Room	IA	NA	NA	3/31/2015	cis12Dichloroethene	0.879	0.0085	<0.1	Yes	U	0.1	0.033677	NE	NE	No	No
0028-S	A-0028S-033115-IA-006-CR139	40.751356	-111.845914	4648	006	First Floor - Daycare Room	IA	NA	NA	3/31/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0028-S	A-0028S-033115-IA-006-CR139	40.751356	-111.845914	4648	006	First Floor - Daycare Room	IA	NA	NA	3/31/2015	Tetrachloroethene	0.994	0.02566	<0.1	Yes	U	0.1	0.17392348	370	11	No	No
0028-S	A-0028S-033115-IA-005-RM102	40.751356	-111.845914	4648	005	First Floor - Front Office/Reception	IA	NA	NA	3/31/2015	cis12Dichloroethene	0.927	0.01237	<0.1	Yes	U	0.1	0.04900994	NE	NE	No	No
0028-S	A-0028S-033115-IA-005-RM102	40.751356	-111.845914	4648	005	First Floor - Front Office/Reception	IA	NA	NA	3/31/2015	Trichloroethene	0.878	0.00503	<0.1	Yes	U	0.1	0.0270111	16	0.48	No	No
0028-S	A-0028S-033115-IA-005-RM102	40.751356	-111.845914	4648	005	First Floor - Front Office/Reception	IA	NA	NA	3/31/2015	Tetrachloroethene	0.994	0.01371	<0.1	Yes	U	0.1	0.09292638	370	11	No	No
0028-S	A-0028S-033115-IA-004-RM104	40.751356	-111.845914	4648	004	First Floor - Elevator Equipment Room 104	IA	NA	NA	3/31/2015	cis12Dichloroethene	0.698	0.02131	<0.1	No	NR	0.1	0.08443022	NE	NE	No	No
0028-S	A-0028S-033115-IA-004-RM104	40.751356	-111.845914	4648	004	First Floor - Elevator Equipment Room 104	IA	NA	NA	3/31/2015	Trichloroethene	0.99	0.00646	<0.1	Yes	U	0.1	0.0346902	16	0.48	No	No
0028-S	A-0028S-033115-IA-004-RM104	40.751356	-111.845914	4648	004	First Floor - Elevator Equipment Room 104	IA	NA	NA	3/31/2015	Tetrachloroethene	0.997	0.00977	<0.1	Yes	U	0.1	0.06622106	370	11	No	No
0028-S	A-0028S-033115-IA-003-CR106	40.751356	-111.845914	4648	003	First Floor - Classroom 106	IA	NA	NA	3/31/2015	cis12Dichloroethene	0.784	0.0239	<0.1	Yes	U	0.1	0.0946918	NE	NE	No	No
0028-S	A-0028S-033115-IA-003-CR106	40.751356	-111.845914	4648	003	First Floor - Classroom 106	IA	NA	NA	3/31/2015	Trichloroethene	0.825	0.00356	<0.1	Yes	U	0.1	0.0191172	16	0.48	No	No
0028-S	A-0028S-033115-IA-003-CR106	40.751356	-111.845914	4648	003	First Floor - Classroom 106	IA	NA	NA	3/31/2015	Tetrachloroethene	0.992	0.00716	<0.1	Yes	U	0.1	0.04853048	370	11	No	No
0028-S	A-0028S-033115-IA-002-RM119A	40.751356	-111.845914	4648	002	First Floor - Mechanical Room with Pipe Chases- Room 119A	IA	NA	NA	3/31/2015	cis12Dichloroethene	0.756	0.03028	<0.1	Yes	U	0.1	0.11996936	NE	NE	No	No
0028-S	A-0028S-033115-IA-002-RM119A	40.751356	-111.845914	4648	002	First Floor - Mechanical Room with Pipe Chases- Room 119A	IA	NA	NA	3/31/2015	Trichloroethene	0.907	0.01383	<0.1	Yes	U	0.1	0.0742671	16	0.48	No	No
0028-S	A-0028S-033115-IA-002-RM119A	40.751356	-111.845914	4648	002	First Floor - Mechanical Room with Pipe Chases- Room 119A	IA	NA	NA	3/31/2015	Tetrachloroethene	0.995	0.01022	<0.1	Yes	U	0.1	0.06927116	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0028-S	A-0028S-033115-IA-001-HAL	40.751356	-111.845914	4648	001	First Floor - Central Hall - in front of room 110	IA	NA	NA	3/31/2015	cis12Dichloroethene	0.753	0.03731	<0.1	Yes	U	0.1	0.14782222	NE	NE	No	No
0028-S	A-0028S-033115-IA-001-HAL	40.751356	-111.845914	4648	001	First Floor - Central Hall - in front of room 110	IA	NA	NA	3/31/2015	Trichloroethene	0.994	0.0104	<0.1	Yes	U	0.1	0.055848	16	0.48	No	No
0028-S	A-0028S-033115-IA-001-HAL	40.751356	-111.845914	4648	001	First Floor - Central Hall - in front of room 110	IA	NA	NA	3/31/2015	Tetrachloroethene	0.994	0.01051	<0.1	Yes	U	0.1	0.07123678	370	11	No	No
0028-S	A-0028S-040115-IA-029L-RM118	40.751356	-111.845914	4648	014	First Floor - Room 118 - Kitchen and Food Service Area	NP	-5.2	11:41	4/1/2015	cis12Dichloroethene	0.896	0.00633	<0.1	Yes	U	0.1	0.02507946	NE	NE	No	No
0028-S	A-0028S-040115-IA-029L-RM118	40.751356	-111.845914	4648	014	First Floor - Room 118 - Kitchen and Food Service Area	NP	-5.2	11:41	4/1/2015	Trichloroethene	0.609	0.00454	<0.1	No	NR	0.1	0.0243798	16	0.48	No	No
0028-S	A-0028S-040115-IA-029L-RM118	40.751356	-111.845914	4648	014	First Floor - Room 118 - Kitchen and Food Service Area	NP	-5.2	11:41	4/1/2015	Tetrachloroethene	0.995	0.00612	<0.1	Yes	U	0.1	0.04148136	370	11	No	No
0028-S	A-0028S-040115-IA-029K-RM118	40.751356	-111.845914	4648	013	First Floor - Room 118 - Kitchen and Food Service Area	NP	-4.8	11:30	4/1/2015	cis12Dichloroethene	0.842	0.00509	<0.1	Yes	U	0.1	0.02016658	NE	NE	No	No
0028-S	A-0028S-040115-IA-029K-RM118	40.751356	-111.845914	4648	013	First Floor - Room 118 - Kitchen and Food Service Area	NP	-4.8	11:30	4/1/2015	Trichloroethene	0.844	0.00437	<0.1	Yes	U	0.1	0.0234669	16	0.48	No	No
0028-S	A-0028S-040115-IA-029K-RM118	40.751356	-111.845914	4648	013	First Floor - Room 118 - Kitchen and Food Service Area	NP	-4.8	11:30	4/1/2015	Tetrachloroethene	0.996	0.00622	<0.1	Yes	U	0.1	0.04215916	370	11	No	No
0028-S	A-0028S-040115-IA-029J-RM118	40.751356	-111.845914	4648	012	First Floor - Room 118 - Kitchen and Food Service Area	NP	-4.8	11:22	4/1/2015	cis12Dichloroethene	0.421	0.00522	<0.1	No	NR	0.1	0.02068164	NE	NE	No	No
0028-S	A-0028S-040115-IA-029J-RM118	40.751356	-111.845914	4648	012	First Floor - Room 118 - Kitchen and Food Service Area	NP	-4.8	11:22	4/1/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0028-S	A-0028S-040115-IA-029J-RM118	40.751356	-111.845914	4648	012	First Floor - Room 118 - Kitchen and Food Service Area	NP	-4.8	11:22	4/1/2015	Tetrachloroethene	0.997	0.00763	<0.1	Yes	U	0.1	0.05171614	370	11	No	No
0028-S	A-0028S-040115-IA-029I-RM118	40.751356	-111.845914	4648	011	First Floor - Room 118 - Kitchen and Food Service Area	NP	-4.7	11:13	4/1/2015	cis12Dichloroethene	0.733	0.00708	<0.1	Yes	U	0.1	0.02805096	NE	NE	No	No
0028-S	A-0028S-040115-IA-029I-RM118	40.751356	-111.845914	4648	011	First Floor - Room 118 - Kitchen and Food Service Area	NP	-4.7	11:13	4/1/2015	Trichloroethene	0.973	0.00817	<0.1	Yes	U	0.1	0.0438729	16	0.48	No	No
0028-S	A-0028S-040115-IA-029I-RM118	40.751356	-111.845914	4648	011	First Floor - Room 118 - Kitchen and Food Service Area	NP	-4.7	11:13	4/1/2015	Tetrachloroethene	0.998	0.00776	<0.1	Yes	U	0.1	0.05259728	370	11	No	No
0028-S	A-0028S-040115-IA-029H-RM118	40.751356	-111.845914	4648	010	First Floor - Room 118 - Kitchen and Food Service Area	NP	-5.5	11:04	4/1/2015	cis12Dichloroethene	0.478	0.00375	<0.1	No	NR	0.1	0.0148575	NE	NE	No	No
0028-S	A-0028S-040115-IA-029H-RM118	40.751356	-111.845914	4648	010	First Floor - Room 118 - Kitchen and Food Service Area	NP	-5.5	11:04	4/1/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0028-S	A-0028S-040115-IA-029H-RM118	40.751356	-111.845914	4648	010	First Floor - Room 118 - Kitchen and Food Service Area	NP	-5.5	11:04	4/1/2015	Tetrachloroethene	0.996	0.00655	<0.1	Yes	U	0.1	0.0443959	370	11	No	No
0028-S	A-0028S-040115-IA-029G-RM118	40.751356	-111.845914	4648	009	First Floor - Room 118 - Kitchen and Food Service Area	NP	-5.2	10:54	4/1/2015	cis12Dichloroethene	0.973	0.00813	<0.1	Yes	U	0.1	0.03221106	NE	NE	No	No
0028-S	A-0028S-040115-IA-029G-RM118	40.751356	-111.845914	4648	009	First Floor - Room 118 - Kitchen and Food Service Area	NP	-5.2	10:54	4/1/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0028-S	A-0028S-040115-IA-029G-RM118	40.751356	-111.845914	4648	009	First Floor - Room 118 - Kitchen and Food Service Area	NP	-5.2	10:54	4/1/2015	Tetrachloroethene	0.989	0.00762	<0.1	Yes	U	0.1	0.05164836	370	11	No	No
0028-S	A-0028S-040115-IA-029F-RM118	40.751356	-111.845914	4648	008	First Floor - Room 118 - Kitchen and Food Service Area	NP	-5.1	10:45	4/1/2015	cis12Dichloroethene	0.757	0.0058	<0.1	Yes	U	0.1	0.0229796	NE	NE	No	No
0028-S	A-0028S-040115-IA-029F-RM118	40.751356	-111.845914	4648	008	First Floor - Room 118 - Kitchen and Food Service Area	NP	-5.1	10:45	4/1/2015	Trichloroethene	0.523	0.00362	<0.1	No	NR	0.1	0.0194394	16	0.48	No	No
0028-S	A-0028S-040115-IA-029F-RM118	40.751356	-111.845914	4648	008	First Floor - Room 118 - Kitchen and Food Service Area	NP	-5.1	10:45	4/1/2015	Tetrachloroethene	0.994	0.00695	<0.1	Yes	U	0.1	0.0471071	370	11	No	No
0028-S	A-0028S-040115-IA-029E-RM118	40.751356	-111.845914	4648	007	First Floor - Room 118 - Kitchen and Food Service Area	NP	-4.7	10:34	4/1/2015	cis12Dichloroethene	0.44	0.00794	<0.1	No	NR	0.1	0.03145828	NE	NE	No	No
0028-S	A-0028S-040115-IA-029E-RM118	40.751356	-111.845914	4648	007	First Floor - Room 118 - Kitchen and Food Service Area	NP	-4.7	10:34	4/1/2015	Trichloroethene	0.959	0.00391	<0.1	Yes	U	0.1	0.0209967	16	0.48	No	No
0028-S	A-0028S-040115-IA-029E-RM118	40.751356	-111.845914	4648	007	First Floor - Room 118 - Kitchen and Food Service Area	NP	-4.7	10:34	4/1/2015	Tetrachloroethene	0.995	0.0065	<0.1	Yes	U	0.1	0.044057	370	11	No	No
0028-S	A-0028S-040115-IA-029D-RM118	40.751356	-111.845914	4648	006	First Floor - Room 118 - Kitchen and Food Service Area	NP	-4.7	10:22	4/1/2015	cis12Dichloroethene	0.482	0.00532	<0.1	No	NR	0.1	0.02107784	NE	NE	No	No
0028-S	A-0028S-040115-IA-029D-RM118	40.751356	-111.845914	4648	006	First Floor - Room 118 - Kitchen and Food Service Area	NP	-4.7	10:22	4/1/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0028-S	A-0028S-040115-IA-029D-RM118	40.751356	-111.845914	4648	006	First Floor - Room 118 - Kitchen and Food Service Area	NP	-4.7	10:22	4/1/2015	Tetrachloroethene	0.995	0.00551	<0.1	Yes	U	0.1	0.03734678	370	11	No	No
0028-S	A-0028S-040115-IA-029C-RM118	40.751356	-111.845914	4648	005	First Floor - Room 118 - Kitchen and Food Service Area	NP	-4.9	10:13	4/1/2015	cis12Dichloroethene	0.433	0.00627	<0.1	No	NR	0.1	0.02484174	NE	NE	No	No
0028-S	A-0028S-040115-IA-029C-RM118	40.751356	-111.845914	4648	005	First Floor - Room 118 - Kitchen and Food Service Area	NP	-4.9	10:13	4/1/2015	Trichloroethene	0.938	0.00844	<0.1	Yes	U	0.1	0.0453228	16	0.48	No	No
0028-S	A-0028S-040115-IA-029C-RM118	40.751356	-111.845914	4648	005	First Floor - Room 118 - Kitchen and Food Service Area	NP	-4.9	10:13	4/1/2015	Tetrachloroethene	0.997	0.00684	<0.1	Yes	U	0.1	0.04636152	370	11	No	No
0028-S	A-0028S-040115-IA-029B-RM118	40.751356	-111.845914	4648	004	First Floor - Room 118 - Kitchen and Food Service Area	NP	-4.7	10:05	4/1/2015	cis12Dichloroethene	0.909	0.011	<0.1	Yes	U	0.1	0.043582	NE	NE	No	No
0028-S	A-0028S-040115-IA-029B-RM118	40.751356	-111.845914	4648	004	First Floor - Room 118 - Kitchen and Food Service Area	NP	-4.7	10:05	4/1/2015	Trichloroethene	0.877	0.00726	<0.1	Yes	U	0.1	0.0389862	16	0.48	No	No
0028-S	A-0028S-040115-IA-029B-RM118	40.751356	-111.845914	4648	004	First Floor - Room 118 - Kitchen and Food Service Area	NP	-4.7	10:05	4/1/2015	Tetrachloroethene	0.993	0.00617	<0.1	Yes	U	0.1	0.04182026	370	11	No	No
0028-S	A-0028S-040115-IA-029A-RM118	40.751356	-111.845914	4648	003	First Floor - Room 118 - Kitchen and Food Service Area	NP	-4.9	9:58	4/1/2015	cis12Dichloroethene	0.972	0.01689	<0.1	Yes	U	0.1	0.06691818	NE	NE	No	No
0028-S	A-0028S-040115-IA-029A-RM118	40.751356	-111.845914	4648	003	First Floor - Room 118 - Kitchen and Food Service Area	NP	-4.9	9:58	4/1/2015	Trichloroethene	0.909	0.0119	<0.1	Yes	U	0.1	0.063903	16	0.48	No	No
0028-S	A-0028S-040115-IA-029A-RM118	40.751356	-111.845914	4648	003	First Floor - Room 118 - Kitchen and Food Service Area	NP	-4.9	9:58	4/1/2015	Tetrachloroethene	0.993	0.01058	<0.1	Yes	U	0.1	0.07171124	370	11	No	No
0028-S	A-0028S-033115-IA-016-OUT	40.751356	-111.845914	4648	016	Outdoor Ambient - Front Entry Sidewalk - north of bldg	OA	NA	NA	3/31/2015	cis12Dichloroethene	0.899	0.00559	<0.1	Yes	U	0.1	0.02214758	NE	NE	No	No
0028-S	A-0028S-033115-IA-016-OUT	40.751356	-111.845914	4648	016	Outdoor Ambient - Front Entry Sidewalk - north of bldg	OA	NA	NA	3/31/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0028-S	A-0028S-033115-IA-016-OUT	40.751356	-111.845914	4648	016	Outdoor Ambient - Front Entry Sidewalk - north of bldg	OA	NA	NA	3/31/2015	Tetrachloroethene	0.992	0.00964	<0.1	Yes	U	0.1	0.06533992	370	11	No	No
0028-S	A-0028S-040115-IA-030D-RM118	40.751356	-111.845914	4648	018	First Floor - Room 118 - Kitchen and Food Service Area	PP	8.7	12:28	4/1/2015	cis12Dichloroethene	0.946	0.00476	<0.1	Yes	U	0.1	0.01885912	NE	NE	No	No
0028-S	A-0028S-040115-IA-030D-RM118	40.751356	-111.845914	4648	018	First Floor - Room 118 - Kitchen and Food Service Area	PP	8.7	12:28	4/1/2015	Trichloroethene	0.942	0.00682	<0.1	Yes	U	0.1	0.0366234	16	0.48	No	No
0028-S	A-0028S-040115-IA-030D-RM118	40.751356	-111.845914	4648	018	First Floor - Room 118 - Kitchen and Food Service Area	PP	8.7	12:28	4/1/2015	Tetrachloroethene	0.997	0.00727	<0.1	Yes	U	0.1	0.04927606	370	11	No	No
0028-S	A-0028S-040115-IA-030C-RM118	40.751356	-111.845914	4648	017	First Floor - Room 118 - Kitchen and Food Service Area	PP	7.9	12:20	4/1/2015	cis12Dichloroethene	0.943	0.00577	<0.1	Yes	U	0.1	0.02286074	NE	NE	No	No
0028-S	A-0028S-040115-IA-030C-RM118	40.751356	-111.845914	4648	017	First Floor - Room 118 - Kitchen and Food Service Area	PP	7.9	12:20	4/1/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0028-S	A-0028S-040115-IA-030C-RM118	40.751356	-111.845914	4648	017	First Floor - Room 118 - Kitchen and Food Service Area	PP	7.9	12:20	4/1/2015	Tetrachloroethene	0.992	0.00741	<0.1	Yes	U	0.1	0.05022498	370	11	No	No
0028-S	A-0028S-040115-IA-030B-RM118	40.751356	-111.845914	4648	016	First Floor - Room 118 - Kitchen and Food Service Area	PP	7.3	12:02	4/1/2015	cis12Dichloroethene	0.882	0.00605	<0.1	Yes	U	0.1	0.0239701	NE	NE	No	No
0028-S	A-0028S-040115-IA-030B-RM118	40.751356	-111.845914	4648	016	First Floor - Room 118 - Kitchen and Food Service Area	PP	7.3	12:02	4/1/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0028-S	A-0028S-040115-IA-030B-RM118	40.751356	-111.845914	4648	016	First Floor - Room 118 - Kitchen and Food Service Area	PP	7.3	12:02	4/1/2015	Tetrachloroethene	0.996	0.00616	<0.1	Yes	U	0.1	0.04175248	370	11	No	No
0028-S	A-0028S-040115-IA-030A-RM118	40.751356	-111.845914	4648	015	First Floor - Room 118 - Kitchen and Food Service Area	PP	4.9	11:50	4/1/2015	cis12Dichloroethene	0.984	0.00514	<0.1	Yes	U	0.1	0.02036468	NE	NE	No	No
0028-S	A-0028S-040115-IA-030A-RM118	40.751356	-111.845914	4648	015	First Floor - Room 118 - Kitchen and Food Service Area	PP	4.9	11:50	4/1/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0028-S	A-0028S-040115-IA-030A-RM118	40.751356	-111.845914	4648	015	First Floor - Room 118 - Kitchen and Food Service Area	PP	4.9	11:50	4/1/2015	Tetrachloroethene	0.996	0.00617	<0.1	Yes	U	0.1	0.04182026	370	11	No	No
0028-S	A-0028S-033115-SG-001-8'	40.751540	-111.846144	4647	031	Soil Gas Probe - West side of building between sidewalk and wall	SG	NA	NA	3/31/2015	cis12Dichloroethene	0.735	0.06479	<0.1	Yes	U	0.1	0.25669798	NE	NE	No	No
0028-S	A-0028S-033115-SG-001-8'	40.751540	-111.846144	4647	031	Soil Gas Probe - West side of building between sidewalk and wall	SG	NA	NA	3/31/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0028-S	A-0028S-033115-SG-001-8'	40.751540	-111.846144	4647	031	Soil Gas Probe - West side of building between sidewalk and wall	SG	NA	NA	3/31/2015	Tetrachloroethene	0.995	0.3428	0.3428	Yes	=	0.1	2.3234984	370	11	No	No
0028-S	A-0028S-033115-SG-001-4'	40.751540	-111.846144	4647	030	Soil Gas Probe - West side of building between sidewalk and wall	SG	NA	NA	3/31/2015	cis12Dichloroethene	0.79	0.02341	<0.1	Yes	U	0.1	0.09275042	NE	NE	No	No
0028-S	A-0028S-033115-SG-001-4'	40.751540	-111.846144	4647	030	Soil Gas Probe - West side of building between sidewalk and wall	SG	NA	NA	3/31/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0028-S	A-0028S-033115-SG-001-4'	40.751540	-111.846144	4647	030	Soil Gas Probe - West side of building between sidewalk and wall	SG	NA	NA	3/31/2015	Tetrachloroethene	0.994	0.01422	<0.1	Yes	U	0.1	0.09638316	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0029-H	A-0029H-031115-CCV	40.749444	-111.858000	4418	031	CCV - 0.5 ppb	CCV	NA	NA	3/11/2015	cis12Dichloroethene	0.993	0.5124	0.5124	Yes	=	0.1	2.0301288	NA	NA	NA	NA
0029-H	A-0029H-031115-CCV	40.749444	-111.858000	4418	031	CCV - 0.5 ppb	CCV	NA	NA	3/11/2015	Trichloroethene	0.906	0.4831	0.4831	Yes	=	0.1	2.594247	NA	NA	NA	NA
0029-H	A-0029H-031115-CCV	40.749444	-111.858000	4418	031	CCV - 0.5 ppb	CCV	NA	NA	3/11/2015	Tetrachloroethene	0.994	0.4709	0.4709	Yes	=	0.1	3.1917602	NA	NA	NA	NA
0029-H	A-0029H-031115-CCV	40.749444	-111.858000	4418	030	CCV - 5.0 ppb	CCV	NA	NA	3/11/2015	cis12Dichloroethene	0.997	4.136	4.136	Yes	=	0.1	16.386832	NA	NA	NA	NA
0029-H	A-0029H-031115-CCV	40.749444	-111.858000	4418	030	CCV - 5.0 ppb	CCV	NA	NA	3/11/2015	Trichloroethene	0.982	4.423	4.423	Yes	=	0.1	23.75151	NA	NA	NA	NA
0029-H	A-0029H-031115-CCV	40.749444	-111.858000	4418	030	CCV - 5.0 ppb	CCV	NA	NA	3/11/2015	Tetrachloroethene	0.994	4.15	4.15	Yes	=	0.1	28.1287	NA	NA	NA	NA
0029-H	A-0029H-031115-CCV	40.749444	-111.858000	4418	002	CCV - 0.5 ppb	CCV	NA	NA	3/11/2015	cis12Dichloroethene	0.992	0.5699	0.5699	Yes	=	0.1	2.2579438	NA	NA	NA	NA
0029-H	A-0029H-031115-CCV	40.749444	-111.858000	4418	002	CCV - 0.5 ppb	CCV	NA	NA	3/11/2015	Trichloroethene	0.989	0.5139	0.5139	Yes	=	0.1	2.759643	NA	NA	NA	NA
0029-H	A-0029H-031115-CCV	40.749444	-111.858000	4418	002	CCV - 0.5 ppb	CCV	NA	NA	3/11/2015	Tetrachloroethene	0.994	0.5144	0.5144	Yes	=	0.1	3.4866032	NA	NA	NA	NA
0029-H	A-0029H-031115-CCV	40.749444	-111.858000	4418	001	CCV - 5.0 ppb	CCV	NA	NA	3/11/2015	cis12Dichloroethene	0.994	4.929	4.929	Yes	=	0.1	19.528698	NA	NA	NA	NA
0029-H	A-0029H-031115-CCV	40.749444	-111.858000	4418	001	CCV - 5.0 ppb	CCV	NA	NA	3/11/2015	Trichloroethene	0.951	5.043	5.043	Yes	=	0.1	27.08091	NA	NA	NA	NA
0029-H	A-0029H-031115-CCV	40.749444	-111.858000	4418	001	CCV - 5.0 ppb	CCV	NA	NA	3/11/2015	Tetrachloroethene	0.994	4.717	4.717	Yes	=	0.1	31.971826	NA	NA	NA	NA
0029-H	A-0029H-031115-IA-013-BA2	40.749444	-111.858000	4418	015	Basement Bathroom	IA	NA	NA	3/11/2015	cis12Dichloroethene	0.757	0.03251	<0.1	Yes	U	0.1	0.12880462	NE	NE	No	No
0029-H	A-0029H-031115-IA-013-BA2	40.749444	-111.858000	4418	015	Basement Bathroom	IA	NA	NA	3/11/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0029-H	A-0029H-031115-IA-013-BA2	40.749444	-111.858000	4418	015	Basement Bathroom	IA	NA	NA	3/11/2015	Tetrachloroethene	0.994	0.2355	0.2355	Yes	=	0.1	1.596219	370	11	No	No
0029-H	A-0029H-031115-IA-012-FUR	40.749444	-111.858000	4418	014	Basement Furnace Room	IA	NA	NA	3/11/2015	cis12Dichloroethene	0.727	0.01974	<0.1	Yes	U	0.1	0.07820988	NE	NE	No	No
0029-H	A-0029H-031115-IA-012-FUR	40.749444	-111.858000	4418	014	Basement Furnace Room	IA	NA	NA	3/11/2015	Trichloroethene	0.996	0.00529	<0.1	Yes	U	0.1	0.0284073	16	0.48	No	No
0029-H	A-0029H-031115-IA-012-FUR	40.749444	-111.858000	4418	014	Basement Furnace Room	IA	NA	NA	3/11/2015	Tetrachloroethene	0.994	0.2891	0.2891	Yes	=	0.1	1.9595198	370	11	No	No
0029-H	A-0029H-031115-IA-011-LAU	40.749444	-111.858000	4418	013	Basement Laundry Area	IA	NA	NA	3/11/2015	cis12Dichloroethene	0.703	0.02612	<0.1	Yes	U	0.1	0.10348744	NE	NE	No	No
0029-H	A-0029H-031115-IA-011-LAU	40.749444	-111.858000	4418	013	Basement Laundry Area	IA	NA	NA	3/11/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0029-H	A-0029H-031115-IA-011-LAU	40.749444	-111.858000	4418	013	Basement Laundry Area	IA	NA	NA	3/11/2015	Tetrachloroethene	0.995	0.1223	0.1223	Yes	=	0.1	0.8289494	370	11	No	No
0029-H	A-0029H-031115-IA-010-FAM	40.749444	-111.858000	4418	012	Basement Family Room	IA	NA	NA	3/11/2015	cis12Dichloroethene	0.759	0.0365	<0.1	Yes	U	0.1	0.144613	NE	NE	No	No
0029-H	A-0029H-031115-IA-010-FAM	40.749444	-111.858000	4418	012	Basement Family Room	IA	NA	NA	3/11/2015	Trichloroethene	0.941	0.01016	<0.1	Yes	U	0.1	0.0545592	16	0.48	No	No
0029-H	A-0029H-031115-IA-010-FAM	40.749444	-111.858000	4418	012	Basement Family Room	IA	NA	NA	3/11/2015	Tetrachloroethene	0.993	0.2838	0.2838	Yes	=	0.1	1.9235964	370	11	No	No
0029-H	A-0029H-031115-IA-009-BA1	40.749444	-111.858000	4418	011	Second Floor Bathroom	IA	NA	NA	3/11/2015	cis12Dichloroethene	0.703	0.03262	<0.1	Yes	U	0.1	0.12924044	NE	NE	No	No
0029-H	A-0029H-031115-IA-009-BA1	40.749444	-111.858000	4418	011	Second Floor Bathroom	IA	NA	NA	3/11/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0029-H	A-0029H-031115-IA-009-BA1	40.749444	-111.858000	4418	011	Second Floor Bathroom	IA	NA	NA	3/11/2015	Tetrachloroethene	0.995	0.2547	0.2547	Yes	=	0.1	1.7263566	370	11	No	No
0029-H	A-0029H-031115-IA-008-MBR	40.749444	-111.858000	4418	010	Second Floor Master Bedroom	IA	NA	NA	3/11/2015	cis12Dichloroethene	0.8	0.05676	<0.1	Yes	U	0.1	0.22488312	NE	NE	No	No
0029-H	A-0029H-031115-IA-008-MBR	40.749444	-111.858000	4418	010	Second Floor Master Bedroom	IA	NA	NA	3/11/2015	Trichloroethene	0.831	0.00937	<0.1	Yes	U	0.1	0.0503169	16	0.48	No	No
0029-H	A-0029H-031115-IA-008-MBR	40.749444	-111.858000	4418	010	Second Floor Master Bedroom	IA	NA	NA	3/11/2015	Tetrachloroethene	0.995	0.2809	0.2809	Yes	=	0.1	1.9039402	370	11	No	No
0029-H	A-0029H-031115-IA-007-BR3	40.749444	-111.858000	4418	009	Second Floor Guest Bedroom	IA	NA	NA	3/11/2015	cis12Dichloroethene	0.633	0.04366	<0.1	No	NR	0.1	0.17298092	NE	NE	No	No
0029-H	A-0029H-031115-IA-007-BR3	40.749444	-111.858000	4418	009	Second Floor Guest Bedroom	IA	NA	NA	3/11/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0029-H	A-0029H-031115-IA-007-BR3	40.749444	-111.858000	4418	009	Second Floor Guest Bedroom	IA	NA	NA	3/11/2015	Tetrachloroethene	0.994	0.2839	0.2839	Yes	=	0.1	1.9242742	370	11	No	No
0029-H	A-0029H-031115-IA-006-BR2	40.749444	-111.858000	4418	008	Second Floor Bedroom	IA	NA	NA	3/11/2015	cis12Dichloroethene	0.689	0.1082	0.1082	No	NR	0.1	0.4286884	NE	NE	No	No
0029-H	A-0029H-031115-IA-006-BR2	40.749444	-111.858000	4418	008	Second Floor Bedroom	IA	NA	NA	3/11/2015	Trichloroethene	0.924	0.00799	<0.1	Yes	U	0.1	0.0429063	16	0.48	No	No
0029-H	A-0029H-031115-IA-006-BR2	40.749444	-111.858000	4418	008	Second Floor Bedroom	IA	NA	NA	3/11/2015	Tetrachloroethene	0.994	0.291	0.291	Yes	=	0.1	1.972398	370	11	No	No
0029-H	A-0029H-031115-IA-005-BR1	40.749444	-111.858000	4418	007	Bedroom above garage "second floor"	IA	NA	NA	3/11/2015	cis12Dichloroethene	0.799	0.03181	<0.1	Yes	U	0.1	0.12603122	NE	NE	No	No
0029-H	A-0029H-031115-IA-005-BR1	40.749444	-111.858000	4418	007	Bedroom above garage "second floor"	IA	NA	NA	3/11/2015	Trichloroethene	0.999	0.00425	<0.1	Yes	U	0.1	0.0228225	16	0.48	No	No
0029-H	A-0029H-031115-IA-005-BR1	40.749444	-111.858000	4418	007	Bedroom above garage "second floor"	IA	NA	NA	3/11/2015	Tetrachloroethene	0.995	0.1412	0.1412	Yes	=	0.1	0.9570536	370	11	No	No
0029-H	A-0029H-031115-IA-004-KIT	40.749444	-111.858000	4418	006	First Floor - Kitchen	IA	NA	NA	3/11/2015	cis12Dichloroethene	0.742	0.1015	0.1015	Yes	=	0.1	0.402143	NE	NE	No	No
0029-H	A-0029H-031115-IA-004-KIT	40.749444	-111.858000	4418	006	First Floor - Kitchen	IA	NA	NA	3/11/2015	Trichloroethene	0.85	0.00784	<0.1	Yes	U	0.1	0.0421008	16	0.48	No	No
0029-H	A-0029H-031115-IA-004-KIT	40.749444	-111.858000	4418	006	First Floor - Kitchen	IA	NA	NA	3/11/2015	Tetrachloroethene	0.996	0.3258	0.3258	Yes	=	0.1	2.2082724	370	11	No	No
0029-H	A-0029H-031115-IA-003-OFC	40.749444	-111.858000	4418	005	First Floor - Office	IA	NA	NA	3/11/2015	cis12Dichloroethene	0.731	0.05687	<0.1	Yes	U	0.1	0.22531894	NE	NE	No	No
0029-H	A-0029H-031115-IA-003-OFC	40.749444	-111.858000	4418	005	First Floor - Office	IA	NA	NA	3/11/2015	Trichloroethene	0.472	0.0095	<0.1	No	NR	0.1	0.051015	16	0.48	No	No
0029-H	A-0029H-031115-IA-003-OFC	40.749444	-111.858000	4418	005	First Floor - Office	IA	NA	NA	3/11/2015	Tetrachloroethene	0.994	0.2802	0.2802	Yes	=	0.1	1.8991956	370	11	No	No
0029-H	A-0029H-031115-A-002-OCL	40.749444	-111.858000	4418	004	1st Floor -Open Floor plan-living dining areas	IA	NA	NA	3/11/2015	cis12Dichloroethene	0.756	0.07289	<0.1	Yes	U	0.1	0.28879018	NE	NE	No	No
0029-H	A-0029H-031115-A-002-OCL	40.749444	-111.858000	4418	004	1st Floor -Open Floor plan-living dining areas	IA	NA	NA	3/11/2015	Trichloroethene	0.737	0.00793	<0.1	Yes	U	0.1	0.0425841	16	0.48	No	No
0029-H	A-0029H-031115-A-002-OCL	40.749444	-111.858000	4418	004	1st Floor -Open Floor plan-living dining areas	IA	NA	NA	3/11/2015	Tetrachloroethene	0.994	0.2962	0.2962	Yes	=	0.1	2.0076436	370	11	No	No
0029-H	A-0029H-031115-IA-014E-FAM	40.749444	-111.858000	4418	021	Basement Family Room	NP	-5.0	12:58	3/11/2015	cis12Dichloroethene	0.653	0.00904	<0.1	No	NR	0.1	0.03581648	NE	NE	No	No
0029-H	A-0029H-031115-IA-014E-FAM	40.749444	-111.858000	4418	021	Basement Family Room	NP	-5.0	12:58	3/11/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0029-H	A-0029H-031115-IA-014E-FAM	40.749444	-111.858000	4418	021	Basement Family Room	NP	-5.0	12:58	3/11/2015	Tetrachloroethene	0.995	0.05313	<0.1	Yes	U	0.1	0.36011514	370	11	No	No
0029-H	A-0029H-031115-IA-014D-FAM	40.749444	-111.858000	4418	020	Basement Family Room	NP	-4.7	12:50	3/11/2015	cis12Dichloroethene	0.827	0.00888	<0.1	Yes	U	0.1	0.03518256	NE	NE	No	No
0029-H	A-0029H-031115-IA-014D-FAM	40.749444	-111.858000	4418	020	Basement Family Room	NP	-4.7	12:50	3/11/2015	Trichloroethene	0.912	0.01171	<0.1	Yes	U	0.1	0.0628827	16	0.48	No	No
0029-H	A-0029H-031115-IA-014D-FAM	40.749444	-111.858000	4418	020	Basement Family Room	NP	-4.7	12:50	3/11/2015	Tetrachloroethene	0.994	0.05926	<0.1	Yes	U	0.1	0.40166428	370	11	No	No
0029-H	A-0029H-031115-IA-014C-FAM	40.749444	-111.858000	4418	019	Basement Family Room	NP	-5.5	12:42	3/11/2015	cis12Dichloroethene	0.907	0.00885	<0.1	Yes	U	0.1	0.0350637	NE	NE	No	No
0029-H	A-0029H-031115-IA-014C-FAM	40.749444	-111.858000	4418	019	Basement Family Room	NP	-5.5	12:42	3/11/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0029-H	A-0029H-031115-IA-014C-FAM	40.749444	-111.858000	4418	019	Basement Family Room	NP	-5.5	12:42	3/11/2015	Tetrachloroethene	0.996	0.07352	<0.1	Yes	U	0.1	0.49831856	370	11	No	No
0029-H	A-0029H-031115-IA-014B-FAM	40.749444	-111.858000	4418	018	Basement Family Room	NP	-4.6	12:34	3/11/2015	cis12Dichloroethene	0.912	0.01112	<0.1	Yes	U	0.1	0.04405744	NE	NE	No	No
0029-H	A-0029H-031115-IA-014B-FAM	40.749444	-111.858000	4418	018	Basement Family Room	NP	-4.6	12:34	3/11/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0029-H	A-0029H-031115-IA-014B-FAM	40.749444	-111.858000	4418	018	Basement Family Room	NP	-4.6	12:34	3/11/2015	Tetrachloroethene	0.994	0.1005	0.1005	Yes	=	0.1	0.681189	370	11	No	No
0029-H	A-0029H-031115-IA-005-BR1	40.749444	-111.858000	4418	007	Bedroom above garage "second floor"	IA	NA	NA	3/11/2015	Tetrachloroethene	0.995	0.1412	0.1412	Yes	=	0.1	0.9570536	370	11	No	No
0029-H	A-0029H-031115-IA-004-KIT	40.749444	-111.858000	4418	006	First Floor - Kitchen	IA	NA	NA	3/11/2015	cis12Dichloroethene	0.742	0.1015	0.1015	Yes	=	0.1	0.402143	NE	NE	No	No
0029-H	A-0029H-031115-IA-004-KIT	40.749444	-111.858000	4418	006	First Floor - Kitchen	IA	NA	NA	3/11/2015	Trichloroethene	0.85	0.00784	<0.1	Yes	U	0.1	0.0421008	16	0.48	No	No
0029-H	A-0029H-031115-IA-004-KIT	40.749444	-111.858000	4418	006	First Floor - Kitchen	IA	NA	NA	3/11/2015	Tetrachloroethene	0.996	0.3258	0.3258	Yes	=	0.1	2.2082724	370	11	No	No
0029-H	A-0029H-031115-IA-003-OFC	40.749444	-111.858000	4418	005	First Floor - Office	IA	NA	NA	3/11/2015	cis12Dichloroethene	0.731	0.05687	<0.1	Yes	U	0.1	0.22531894	NE	NE	No	No
0029-H	A-0029H-031115-IA-003-OFC	40.749444	-111.858000	4418	005	First Floor - Office	IA	NA	NA	3/11/2015	Trichloroethene	0.472	0.0095	<0.1	No	NR	0.1	0.051015	16	0.48	No	No
0029-H	A-0029H-031115-IA-003-OFC	40.749444	-111.858000	4418	005	First Floor - Office	IA	NA	NA	3/11/2015	Tetrachloroethene	0.994	0.2802	0.2802	Yes	=	0.1	1.8991956	370	11	No	No
0029-H	A-0029H-031115-A-002-OCL	40.749444	-111.858000	4418	004	1st Floor -Open Floor plan-living dining areas	IA	NA	NA	3/11/2015	cis12Dichloroethene	0.756	0.07289	<0.1	Yes	U	0.1	0.28879018	NE	NE	No	No
0029-H	A-0029H-031115-A-002-OCL	40.749444	-111.858000	4418	004	1st Floor -Open Floor plan-living dining areas	IA	NA	NA	3/11/2015	Trichloroethene	0.737	0.00793	<0.1	Yes	U	0.1	0.0425841	16	0.48	No	No
0029-H	A-0029H-031115-A-002-OCL	40.749444	-111.858000	4418	004	1st Floor -Open Floor plan-living dining areas	IA	NA	NA	3/11/2015	Tetrachloroethene	0.994	0.2962	0.2962	Yes	=	0.1	2.0076436	370	11	No	No
0029-H	A-0029H-031115-IA-014E-FAM	40.749444	-111.858000	4418	021	Basement Family Room	NP	-5.0	12:58	3/11/2015	cis12Dichloroethene	0.653	0.00904	<0.1	No	NR	0.1	0.03581648	NE	NE	No	No
0029-H	A-0029H-031115-IA-014E-FAM	40.749444	-111.858000	4418	021	Basement Family Room	NP	-5.0	12:58	3/11/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0029-H	A-0029H-031115-IA-014E-FAM	40.749444	-111.858000	4418	021	Basement Family Room	NP	-5.0	12:58	3/11/2015	Tetrachloroethene	0.995	0.05313	<0.1	Yes	U	0.1	0.36011514	370	11	No	No
0029-H	A-0029H-031115-IA-014D-FAM	40.749444	-111.858000	4418	020	Basement Family Room	NP	-4.7	12:50	3/11/2015	cis12Dichloroethene	0.827	0.00888	<0.1	Yes	U	0.1	0.03518256	NE	NE	No	No
0029-H	A-0029H-031115-IA-014D-FAM	40.749444	-111.858000	4418	020	Basement Family Room	NP	-4.7	12:50	3/11/2015	Trichloroethene	0.912	0.01171	<0.1	Yes	U	0.1	0.0628827	16	0.48	No	No
0029-H	A-0029H-031115-IA-014D-FAM	40.749444	-111.858000	4418	020	Basement Family Room	NP	-4.7	12:50	3/11/2015	Tetrachloroethene	0.994	0.05926	<0.1	Yes	U	0.1	0.40166428	370	11	No	No
0029-H	A-0029H-031115-IA-014C-FAM	40.749444	-111.858000	4418	019	Basement Family Room	NP	-5.5	12:42	3/11/2015	cis12Dichloroethene	0.907	0.00885	<0.1	Yes	U	0.1	0.0350637	NE	NE	No	No
0029-H	A-0029H-031115-IA-014C-FAM	40.749444	-111.858000	4418	019	Basement Family Room	NP	-5.5	12:42	3/11/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0029-H	A-0029H-031115-IA-014C-FAM	40.749444	-111.858000	4418	019	Basement Family Room	NP	-5.5	12:42	3/11/2015	Tetrachloroethene	0.996	0.07352	<0.1	Yes	U	0.1	0.49831856	370	11	No	No
0029-H	A-0029H-031115-IA-014B-FAM	40.749444	-111.858000	4418	018	Basement Family Room	NP	-4.6	12:34	3/11/2015	cis12Dichloroethene	0.912	0.01112	<0.1	Yes	U	0.1	0.04405744	NE	NE	No	No
0029-H	A-0029H-031115-IA-014B-FAM	40.749444	-111.858000	4418	018	Basement Family Room	NP	-4.6	12:34	3/11/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0029-H	A-0029H-031115-IA-014B-FAM	40.749444	-111.858000	4418	018	Basement Family Room	NP	-4.6	12:34	3/11/2015	Tetrachloroethene	0.994	0.1005	0.1005	Yes	=	0.1	0.681189	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0029-H	A-0029H-031115-IA-001-OUT	40.749444	-111.858000	4418	003	Outdoor Ambient- South Front of house	OA	NA	NA	3/11/2015	cis12Dichloroethene	0.931	0.01554	<0.1	Yes	U	0.1	0.06156948	NE	NE	No	No
0029-H	A-0029H-031115-IA-001-OUT	40.749444	-111.858000	4418	003	Outdoor Ambient- South Front of house	OA	NA	NA	3/11/2015	Trichloroethene	0.99	0.01156	<0.1	Yes	U	0.1	0.0620772	16	0.48	No	No
0029-H	A-0029H-031115-IA-001-OUT	40.749444	-111.858000	4418	003	Outdoor Ambient- South Front of house	OA	NA	NA	3/11/2015	Tetrachloroethene	0.995	0.0565	<0.1	Yes	U	0.1	0.382957	370	11	No	No
0029-H	A-0029H-031115-IA-015E-FAM	40.749444	-111.858000	4418	026	Basement Family Room	PP	5.2	13:51	3/11/2015	cis12Dichloroethene	0.795	0.01182	<0.1	Yes	U	0.1	0.04683084	NE	NE	No	No
0029-H	A-0029H-031115-IA-015E-FAM	40.749444	-111.858000	4418	026	Basement Family Room	PP	5.2	13:51	3/11/2015	Trichloroethene	0.874	0.00586	<0.1	Yes	U	0.1	0.0314682	16	0.48	No	No
0029-H	A-0029H-031115-IA-015E-FAM	40.749444	-111.858000	4418	026	Basement Family Room	PP	5.2	13:51	3/11/2015	Tetrachloroethene	0.994	0.02847	<0.1	Yes	U	0.1	0.19296966	370	11	No	No
0029-H	A-0029H-031115-IA-015D-FAM	40.749444	-111.858000	4418	025	Basement Family Room	PP	4.6	13:43	3/11/2015	cis12Dichloroethene	0.689	0.01464	<0.1	No	NR	0.1	0.05800368	NE	NE	No	No
0029-H	A-0029H-031115-IA-015D-FAM	40.749444	-111.858000	4418	025	Basement Family Room	PP	4.6	13:43	3/11/2015	Trichloroethene	0.861	0.00844	<0.1	Yes	U	0.1	0.0453228	16	0.48	No	No
0029-H	A-0029H-031115-IA-015D-FAM	40.749444	-111.858000	4418	025	Basement Family Room	PP	4.6	13:43	3/11/2015	Tetrachloroethene	0.995	0.02894	<0.1	Yes	U	0.1	0.19615532	370	11	No	No
0029-H	A-0029H-031115-IA-015C-FAM	40.749444	-111.858000	4418	024	Basement Family Room	PP	4.3	13:35	3/11/2015	cis12Dichloroethene	0.752	0.01006	<0.1	Yes	U	0.1	0.03985772	NE	NE	No	No
0029-H	A-0029H-031115-IA-015C-FAM	40.749444	-111.858000	4418	024	Basement Family Room	PP	4.3	13:35	3/11/2015	Trichloroethene	0.998	Area too low	<0.1	Yes	U	0.1	Area too low	16	0.48	No	No
0029-H	A-0029H-031115-IA-015C-FAM	40.749444	-111.858000	4418	024	Basement Family Room	PP	4.3	13:35	3/11/2015	Tetrachloroethene	0.994	0.03005	<0.1	Yes	U	0.1	0.2036789	370	11	No	No
0029-H	A-0029H-031115-IA-015B-FAM	40.749444	-111.858000	4418	023	Basement Family Room	PP	5.9	13:25	3/11/2015	cis12Dichloroethene	0.722	0.01158	<0.1	Yes	U	0.1	0.04587996	NE	NE	No	No
0029-H	A-0029H-031115-IA-015B-FAM	40.749444	-111.858000	4418	023	Basement Family Room	PP	5.9	13:25	3/11/2015	Trichloroethene	0.98	0.00825	<0.1	Yes	U	0.1	0.0443025	16	0.48	No	No
0029-H	A-0029H-031115-IA-015B-FAM	40.749444	-111.858000	4418	023	Basement Family Room	PP	5.9	13:25	3/11/2015	Tetrachloroethene	0.995	0.03045	<0.1	Yes	U	0.1	0.2063901	370	11	No	No
0029-H	A-0029H-031115-IA-015A-FAM	40.749444	-111.858000	4418	022	Basement Family Room	PP	5.1	13:17	3/11/2015	cis12Dichloroethene	0.91	0.00786	<0.1	Yes	U	0.1	0.03114132	NE	NE	No	No
0029-H	A-0029H-031115-IA-015A-FAM	40.749444	-111.858000	4418	022	Basement Family Room	PP	5.1	13:17	3/11/2015	Trichloroethene	0.984	0.01049	<0.1	Yes	U	0.1	0.0563313	16	0.48	No	No
0029-H	A-0029H-031115-IA-015A-FAM	40.749444	-111.858000	4418	022	Basement Family Room	PP	5.1	13:17	3/11/2015	Tetrachloroethene	0.994	0.0445	<0.1	Yes	U	0.1	0.301621	370	11	No	No
0029-H	A-0029H-031115-SG-002-4'	40.749519	-111.857909	4422	029	NE corner of garage at edge of driveway - approx 48" from slab	SG	NA	NA	3/11/2015	cis12Dichloroethene	0.645	0.06079	<0.1	No	NR	0.1	0.24084998	NE	NE	No	No
0029-H	A-0029H-031115-SG-002-4'	40.749519	-111.857909	4422	029	NE corner of garage at edge of driveway - approx 48" from slab	SG	NA	NA	3/11/2015	Trichloroethene	0.897	0.00975	<0.1	Yes	U	0.1	0.0523575	16	0.48	No	No
0029-H	A-0029H-031115-SG-002-4'	40.749519	-111.857909	4422	029	NE corner of garage at edge of driveway - approx 48" from slab	SG	NA	NA	3/11/2015	Tetrachloroethene	0.995	0.5488	0.5488	Yes	=	0.1	3.7197664	370	11	No	No
0029-H	A-0029H-031115-SG-001-6'	40.749419	-111.857943	4420	028	SE corner of house - 18" of foundation wall	SG	NA	NA	3/11/2015	cis12Dichloroethene	0.817	0.02111	<0.1	Yes	U	0.1	0.08363782	NE	NE	No	No
0029-H	A-0029H-031115-SG-001-6'	40.749419	-111.857943	4420	028	SE corner of house - 18" of foundation wall	SG	NA	NA	3/11/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0029-H	A-0029H-031115-SG-001-6'	40.749419	-111.857943	4420	028	SE corner of house - 18" of foundation wall	SG	NA	NA	3/11/2015	Tetrachloroethene	0.994	0.08408	<0.1	Yes	U	0.1	0.56989424	370	11	No	No
0029-H	A-0029H-031115-SG-001-4'	40.749419	-111.857943	4420	027	SE corner of house - 18" of foundation wall	SG	NA	NA	3/11/2015	cis12Dichloroethene	0.806	0.01347	<0.1	Yes	U	0.1	0.05336814	NE	NE	No	No
0029-H	A-0029H-031115-SG-001-4'	40.749419	-111.857943	4420	027	SE corner of house - 18" of foundation wall	SG	NA	NA	3/11/2015	Trichloroethene	0.972	0.00608	<0.1	Yes	U	0.1	0.0326496	16	0.48	No	No
0029-H	A-0029H-031115-SG-001-4'	40.749419	-111.857943	4420	027	SE corner of house - 18" of foundation wall	SG	NA	NA	3/11/2015	Tetrachloroethene	0.995	0.03957	<0.1	Yes	U	0.1	0.26820546	370	11	No	No
0030-H	A-0030H-031715-CCV	40.754441	-111.853577	4453	033	CCV - 0.5 ppb	CCV	NA	NA	3/17/2015	cis12Dichloroethene	0.989	0.4385	0.4385	Yes	=	0.1	1.737337	NA	NA	NA	NA
0030-H	A-0030H-031715-CCV	40.754441	-111.853577	4453	033	CCV - 0.5 ppb	CCV	NA	NA	3/17/2015	Trichloroethene	0.995	0.4362	0.4362	Yes	=	0.1	2.342394	NA	NA	NA	NA
0030-H	A-0030H-031715-CCV	40.754441	-111.853577	4453	033	CCV - 0.5 ppb	CCV	NA	NA	3/17/2015	Tetrachloroethene	0.994	0.4056	0.4056	Yes	=	0.1	2.7491568	NA	NA	NA	NA
0030-H	A-0030H-031715-CCV	40.754441	-111.853577	4453	032	CCV - 5.0 ppb	CCV	NA	NA	3/17/2015	cis12Dichloroethene	0.994	3.791	3.791	Yes	=	0.1	15.019942	NA	NA	NA	NA
0030-H	A-0030H-031715-CCV	40.754441	-111.853577	4453	032	CCV - 5.0 ppb	CCV	NA	NA	3/17/2015	Trichloroethene	0.967	4.066	4.066	Yes	=	0.1	21.83442	NA	NA	NA	NA
0030-H	A-0030H-031715-CCV	40.754441	-111.853577	4453	032	CCV - 5.0 ppb	CCV	NA	NA	3/17/2015	Tetrachloroethene	0.993	3.586	3.586	Yes	=	0.1	24.305908	NA	NA	NA	NA
0030-H	A-0030H-031715-CCV	40.754441	-111.853577	4453	002	CCV - 0.5 ppb	CCV	NA	NA	3/17/2015	cis12Dichloroethene	0.991	0.481	0.481	Yes	=	0.1	1.905722	NA	NA	NA	NA
0030-H	A-0030H-031715-CCV	40.754441	-111.853577	4453	002	CCV - 0.5 ppb	CCV	NA	NA	3/17/2015	Trichloroethene	0.978	0.5681	0.5681	Yes	=	0.1	3.050697	NA	NA	NA	NA
0030-H	A-0030H-031715-CCV	40.754441	-111.853577	4453	002	CCV - 0.5 ppb	CCV	NA	NA	3/17/2015	Tetrachloroethene	0.993	0.4892	0.4892	Yes	=	0.1	3.3157976	NA	NA	NA	NA
0030-H	A-0030H-031715-CCV	40.754441	-111.853577	4453	001	CCV - 5.0 ppb	CCV	NA	NA	3/17/2015	cis12Dichloroethene	0.994	4.35	4.35	Yes	=	0.1	17.2347	NA	NA	NA	NA
0030-H	A-0030H-031715-CCV	40.754441	-111.853577	4453	001	CCV - 5.0 ppb	CCV	NA	NA	3/17/2015	Trichloroethene	0.972	5.21	5.21	Yes	=	0.1	27.9777	NA	NA	NA	NA
0030-H	A-0030H-031715-CCV	40.754441	-111.853577	4453	001	CCV - 5.0 ppb	CCV	NA	NA	3/17/2015	Tetrachloroethene	0.993	4.295	4.295	Yes	=	0.1	29.11151	NA	NA	NA	NA
0030-H	A-0030H-031715-IA-011-CRA	40.754441	-111.853577	4453	013	Basement - Crawl Space Storage Under Stairs	IA	NA	NA	3/17/2015	cis12Dichloroethene	0.651	0.1297	0.1297	No	NR	0.1	0.5138714	NE	NE	No	No
0030-H	A-0030H-031715-IA-011-CRA	40.754441	-111.853577	4453	013	Basement - Crawl Space Storage Under Stairs	IA	NA	NA	3/17/2015	Trichloroethene	0.903	0.0076	<0.1	Yes	U	0.1	0.040812	16	0.48	No	No
0030-H	A-0030H-031715-IA-011-CRA	40.754441	-111.853577	4453	013	Basement - Crawl Space Storage Under Stairs	IA	NA	NA	3/17/2015	Tetrachloroethene	0.996	0.7359	0.7359	Yes	=	0.1	4.9879302	370	11	No	NH
0030-H	A-0030H-031715-IA-010-STO	40.754441	-111.853577	4453	012	Basement - Shelf Crawl Space-Storeroom	IA	NA	NA	3/17/2015	cis12Dichloroethene	0.66	0.1601	0.1601	No	NR	0.1	0.6343162	NE	NE	No	No
0030-H	A-0030H-031715-IA-010-STO	40.754441	-111.853577	4453	012	Basement - Shelf Crawl Space-Storeroom	IA	NA	NA	3/17/2015	Trichloroethene	0.817	0.0072	<0.1	Yes	U	0.1	0.038664	16	0.48	No	No
0030-H	A-0030H-031715-IA-010-STO	40.754441	-111.853577	4453	012	Basement - Shelf Crawl Space-Storeroom	IA	NA	NA	3/17/2015	Tetrachloroethene	0.994	0.834	0.834	Yes	=	0.1	5.652852	370	11	No	NH
0030-H	A-0030H-031715-IA-009-LAU	40.754441	-111.853577	4453	011	Basement - Laundry/Unfinished big room	IA	NA	NA	3/17/2015	cis12Dichloroethene	0.641	0.19	0.19	No	NR	0.1	0.75278	NE	NE	No	No
0030-H	A-0030H-031715-IA-009-LAU	40.754441	-111.853577	4453	011	Basement - Laundry/Unfinished big room	IA	NA	NA	3/17/2015	Trichloroethene	0.9	0.00893	<0.1	Yes	U	0.1	0.0479541	16	0.48	No	No
0030-H	A-0030H-031715-IA-009-LAU	40.754441	-111.853577	4453	011	Basement - Laundry/Unfinished big room	IA	NA	NA	3/17/2015	Tetrachloroethene	0.995	1.184	1.184	Yes	=	0.1	8.025152	370	11	No	No
0030-H	A-0030H-031715-IA-008-MBR	40.754441	-111.853577	4453	010	First Floor - Master Bedroom	IA	NA	NA	3/17/2015	cis12Dichloroethene	0.615	0.78	0.78	No	NR	0.1	3.09036	NE	NE	No	No
0030-H	A-0030H-031715-IA-008-MBR	40.754441	-111.853577	4453	010	First Floor - Master Bedroom	IA	NA	NA	3/17/2015	Trichloroethene	0.801	0.01504	<0.1	Yes	U	0.1	0.0807648	16	0.48	No	No
0030-H	A-0030H-031715-IA-008-MBR	40.754441	-111.853577	4453	010	First Floor - Master Bedroom	IA	NA	NA	3/17/2015	Tetrachloroethene	0.994	0.4694	0.4694	Yes	=	0.1	3.1815932	370	11	No	No
0030-H	A-0030H-031715-IA-007-OFC	40.754441	-111.853577	4453	009	First Floor - Office	IA	NA	NA	3/17/2015	cis12Dichloroethene	0.605	0.8412	0.8412	No	NR	0.1	3.3328344	NE	NE	No	No
0030-H	A-0030H-031715-IA-007-OFC	40.754441	-111.853577	4453	009	First Floor - Office	IA	NA	NA	3/17/2015	Trichloroethene	0.767	0.0077	<0.1	Yes	U	0.1	0.041349	16	0.48	No	No
0030-H	A-0030H-031715-IA-007-OFC	40.754441	-111.853577	4453	009	First Floor - Office	IA	NA	NA	3/17/2015	Tetrachloroethene	0.994	0.4383	0.4383	Yes	=	0.1	2.9707974	370	11	No	No
0030-H	A-0030H-031715-IA-006-FAM	40.754441	-111.853577	4453	008	First Floor - Family Room	IA	NA	NA	3/17/2015	cis12Dichloroethene	0.576	1.164	1.164	No	NR	0.1	4.611768	NE	NE	No	No
0030-H	A-0030H-031715-IA-006-FAM	40.754441	-111.853577	4453	008	First Floor - Family Room	IA	NA	NA	3/17/2015	Trichloroethene	0.79	0.01085	<0.1	Yes	U	0.1	0.0582645	16	0.48	No	No
0030-H	A-0030H-031715-IA-006-FAM	40.754441	-111.853577	4453	008	First Floor - Family Room	IA	NA	NA	3/17/2015	Tetrachloroethene	0.996	0.3935	0.3935	Yes	=	0.1	2.667143	370	11	No	No
0030-H	A-0030H-031715-IA-005-BR1	40.754441	-111.853577	4453	007	First Floor - Guest Bedroom	IA	NA	NA	3/17/2015	cis12Dichloroethene	0.572	0.8425	0.8425	No	NR	0.1	3.337985	NE	NE	No	No
0030-H	A-0030H-031715-IA-005-BR1	40.754441	-111.853577	4453	007	First Floor - Guest Bedroom	IA	NA	NA	3/17/2015	Trichloroethene	0.734	0.00757	<0.1	Yes	U	0.1	0.0406509	16	0.48	No	No
0030-H	A-0030H-031715-IA-005-BR1	40.754441	-111.853577	4453	007	First Floor - Guest Bedroom	IA	NA	NA	3/17/2015	Tetrachloroethene	0.994	0.4484	0.4484	Yes	=	0.1	3.0392552	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0030-H	A-0030H-031715-IA-004-BA1	40.754441	-111.853577	4453	006	First Floor - Bathroom	IA	NA	NA	3/17/2015	cis12Dichloroethene	0.596	0.8778	0.8778	No	NR	0.1	3.4778436	NE	NE	No	No
0030-H	A-0030H-031715-IA-004-BA1	40.754441	-111.853577	4453	006	First Floor - Bathroom	IA	NA	NA	3/17/2015	Trichloroethene	0.82	0.01152	<0.1	Yes	U	0.1	0.0618624	16	0.48	No	No
0030-H	A-0030H-031715-IA-004-BA1	40.754441	-111.853577	4453	006	First Floor - Bathroom	IA	NA	NA	3/17/2015	Tetrachloroethene	0.995	0.5108	0.5108	Yes	=	0.1	3.4622024	370	11	No	No
0030-H	A-0030H-031715-IA-003-KIT	40.754441	-111.853577	4453	005	First Floor - Kitchen	IA	NA	NA	3/17/2015	cis12Dichloroethene	0.575	1.66	1.66	No	NR	0.1	6.57692	NE	NE	No	No
0030-H	A-0030H-031715-IA-003-KIT	40.754441	-111.853577	4453	005	First Floor - Kitchen	IA	NA	NA	3/17/2015	Trichloroethene	0.785	0.01127	<0.1	Yes	U	0.1	0.0605199	16	0.48	No	No
0030-H	A-0030H-031715-IA-003-KIT	40.754441	-111.853577	4453	005	First Floor - Kitchen	IA	NA	NA	3/17/2015	Tetrachloroethene	0.995	0.3988	0.3988	Yes	=	0.1	2.7030664	370	11	No	No
0030-H	A-0030H-031715-IA-002-LIV	40.754441	-111.853577	4453	004	First Floor - Living Room	IA	NA	NA	3/17/2015	cis12Dichloroethene	0.613	0.9522	0.9522	No	NR	0.1	3.7726164	NE	NE	No	No
0030-H	A-0030H-031715-IA-002-LIV	40.754441	-111.853577	4453	004	First Floor - Living Room	IA	NA	NA	3/17/2015	Trichloroethene	0.825	0.01061	<0.1	Yes	U	0.1	0.0569757	16	0.48	No	No
0030-H	A-0030H-031715-IA-002-LIV	40.754441	-111.853577	4453	004	First Floor - Living Room	IA	NA	NA	3/17/2015	Tetrachloroethene	0.996	0.399	0.399	Yes	=	0.1	2.704422	370	11	No	No
0030-H	A-0030H-031715-IA-012I-LAU	40.754441	-111.853577	4453	022	Basement - Laundry/Unfinished big room	NP	-10.8	13:17	3/17/2015	cis12Dichloroethene	0.75	0.03101	<0.1	Yes	U	0.1	0.12286162	NE	NE	No	No
0030-H	A-0030H-031715-IA-012I-LAU	40.754441	-111.853577	4453	022	Basement - Laundry/Unfinished big room	NP	-10.8	13:17	3/17/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0030-H	A-0030H-031715-IA-012I-LAU	40.754441	-111.853577	4453	022	Basement - Laundry/Unfinished big room	NP	-10.8	13:17	3/17/2015	Tetrachloroethene	0.994	0.113	0.113	Yes	=	0.1	0.765914	370	11	No	No
0030-H	A-0030H-031715-IA-012H-LAU	40.754441	-111.853577	4453	021	Basement - Laundry/Unfinished big room	NP	-12.0	13:06	3/17/2015	cis12Dichloroethene	0.802	0.03403	<0.1	Yes	U	0.1	0.13482686	NE	NE	No	No
0030-H	A-0030H-031715-IA-012H-LAU	40.754441	-111.853577	4453	021	Basement - Laundry/Unfinished big room	NP	-12.0	13:06	3/17/2015	Trichloroethene	0.696	0.00504	<0.1	No	NR	0.1	0.0270648	16	0.48	No	No
0030-H	A-0030H-031715-IA-012H-LAU	40.754441	-111.853577	4453	021	Basement - Laundry/Unfinished big room	NP	-12.0	13:06	3/17/2015	Tetrachloroethene	0.994	0.1504	0.1504	Yes	=	0.1	1.0194112	370	11	No	No
0030-H	A-0030H-031715-IA-012G-LAU	40.754441	-111.853577	4453	020	Basement - Laundry/Unfinished big room	NP	-10.1	12:55	3/17/2015	cis12Dichloroethene	0.68	0.04204	<0.1	No	NR	0.1	0.16656248	NE	NE	No	No
0030-H	A-0030H-031715-IA-012G-LAU	40.754441	-111.853577	4453	020	Basement - Laundry/Unfinished big room	NP	-10.1	12:55	3/17/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0030-H	A-0030H-031715-IA-012G-LAU	40.754441	-111.853577	4453	020	Basement - Laundry/Unfinished big room	NP	-10.1	12:55	3/17/2015	Tetrachloroethene	0.995	0.1821	0.1821	Yes	=	0.1	1.2342738	370	11	No	No
0030-H	A-0030H-031715-IA-012F-LAU	40.754441	-111.853577	4453	019	Basement - Laundry/Unfinished big room	NP	-9.9	12:47	3/17/2015	cis12Dichloroethene	0.596	0.05218	<0.1	No	NR	0.1	0.20673716	NE	NE	No	No
0030-H	A-0030H-031715-IA-012F-LAU	40.754441	-111.853577	4453	019	Basement - Laundry/Unfinished big room	NP	-9.9	12:47	3/17/2015	Trichloroethene	0.927	0.00998	<0.1	Yes	U	0.1	0.0535926	16	0.48	No	No
0030-H	A-0030H-031715-IA-012F-LAU	40.754441	-111.853577	4453	019	Basement - Laundry/Unfinished big room	NP	-9.9	12:47	3/17/2015	Tetrachloroethene	0.994	0.2598	0.2598	Yes	=	0.1	1.7609244	370	11	No	No
0030-H	A-0030H-031715-IA-012E-LAU	40.754441	-111.853577	4453	018	Basement - Laundry/Unfinished big room	NP	-10.2	12:39	3/17/2015	cis12Dichloroethene	0.646	0.06036	<0.1	No	NR	0.1	0.23914632	NE	NE	No	No
0030-H	A-0030H-031715-IA-012E-LAU	40.754441	-111.853577	4453	018	Basement - Laundry/Unfinished big room	NP	-10.2	12:39	3/17/2015	Trichloroethene	0.93	0.00778	<0.1	Yes	U	0.1	0.0417786	16	0.48	No	No
0030-H	A-0030H-031715-IA-012E-LAU	40.754441	-111.853577	4453	018	Basement - Laundry/Unfinished big room	NP	-10.2	12:39	3/17/2015	Tetrachloroethene	0.995	0.3403	0.3403	Yes	=	0.1	2.3065534	370	11	No	No
0030-H	A-0030H-031715-IA-012D-LAU	40.754441	-111.853577	4453	017	Basement - Laundry/Unfinished big room	NP	-11.5	12:30	3/17/2015	cis12Dichloroethene	0.696	0.07531	<0.1	No	NR	0.1	0.29837822	NE	NE	No	No
0030-H	A-0030H-031715-IA-012D-LAU	40.754441	-111.853577	4453	017	Basement - Laundry/Unfinished big room	NP	-11.5	12:30	3/17/2015	Trichloroethene	0	Not found	<0.1	Ues	U	0.1	Not found	16	0.48	No	No
0030-H	A-0030H-031715-IA-012D-LAU	40.754441	-111.853577	4453	017	Basement - Laundry/Unfinished big room	NP	-11.5	12:30	3/17/2015	Tetrachloroethene	0.995	0.4886	0.4886	Yes	=	0.1	3.3117308	370	11	No	No
0030-H	A-0030H-031715-IA-012C-LAU	40.754441	-111.853577	4453	016	Basement - Laundry/Unfinished big room	NP	-9.0	12:21	3/17/2015	cis12Dichloroethene	0.69	0.1017	0.1017	No	NR	0.1	0.4029354	NE	NE	No	No
0030-H	A-0030H-031715-IA-012C-LAU	40.754441	-111.853577	4453	016	Basement - Laundry/Unfinished big room	NP	-9.0	12:21	3/17/2015	Trichloroethene	0.862	Area too low	<0.1	Yes	U	0.1	Area too low	16	0.48	No	No
0030-H	A-0030H-031715-IA-012C-LAU	40.754441	-111.853577	4453	016	Basement - Laundry/Unfinished big room	NP	-9.0	12:21	3/17/2015	Tetrachloroethene	0.993	0.6771	0.6771	Yes	=	0.1	4.5893838	370	11	No	No
0030-H	A-0030H-031715-IA-012B-LAU	40.754441	-111.853577	4453	015	Basement - Laundry/Unfinished big room	NP	-5.2	12:12	3/17/2015	cis12Dichloroethene	0.656	0.1129	0.1129	No	NR	0.1	0.4473098	NE	NE	No	No
0030-H	A-0030H-031715-IA-012B-LAU	40.754441	-111.853577	4453	015	Basement - Laundry/Unfinished big room	NP	-5.2	12:12	3/17/2015	Trichloroethene	0.911	0.00769	<0.1	Yes	U	0.1	0.0412953	16	0.48	No	No
0030-H	A-0030H-031715-IA-012B-LAU	40.754441	-111.853577	4453	015	Basement - Laundry/Unfinished big room	NP	-5.2	12:12	3/17/2015	Tetrachloroethene	0.994	0.796	0.796	Yes	=	0.1	5.395288	370	11	No	No
0030-H	A-0030H-031715-IA-012A-LAU	40.754441	-111.853577	4453	014	Basement - Laundry/Unfinished big room	NP	-4.8	12:02	3/17/2015	cis12Dichloroethene	0.625	0.1333	0.1333	No	NR	0.1	0.5281346	NE	NE	No	No
0030-H	A-0030H-031715-IA-012A-LAU	40.754441	-111.853577	4453	014	Basement - Laundry/Unfinished big room	NP	-4.8	12:02	3/17/2015	Trichloroethene	0.98	0.01683	<0.1	Yes	U	0.1	0.0903771	16	0.48	No	No
0030-H	A-0030H-031715-IA-012A-LAU	40.754441	-111.853577	4453	014	Basement - Laundry/Unfinished big room	NP	-4.8	12:02	3/17/2015	Tetrachloroethene	0.994	1.008	1.008	Yes	=	0.1	6.832224	370	11	No	No
0030-H	A-0030H-031715-IA-001-OUT	40.754441	-111.853577	4453	003	Outdoor Ambient - Front Porch (west side of house)	OA	NA	NA	3/17/2015	cis12Dichloroethene	0.865	0.02485	<0.1	Yes	U	0.1	0.0984557	NE	NE	No	No
0030-H	A-0030H-031715-IA-001-OUT	40.754441	-111.853577	4453	003	Outdoor Ambient - Front Porch (west side of house)	OA	NA	NA	3/17/2015	Trichloroethene	0.981	0.01171	<0.1	Yes	U	0.1	0.0628827	16	0.48	No	No
0030-H	A-0030H-031715-IA-001-OUT	40.754441	-111.853577	4453	003	Outdoor Ambient - Front Porch (west side of house)	OA	NA	NA	3/17/2015	Tetrachloroethene	0.993	0.02419	<0.1	Yes	U	0.1	0.16395982	370	11	No	No
0030-H	A-0030H-031715-IA-013F-LAU	40.754441	-111.853577	4453	028	Basement - Laundry/Unfinished big room	PP	10.3	14:24	3/17/2015	cis12Dichloroethene	0.612	0.03385	<0.1	No	NR	0.1	0.1341137	NE	NE	No	No
0030-H	A-0030H-031715-IA-013F-LAU	40.754441	-111.853577	4453	028	Basement - Laundry/Unfinished big room	PP	10.3	14:24	3/17/2015	Trichloroethene	0.811	0.00499	<0.1	Yes	U	0.1	0.0267963	16	0.48	No	No
0030-H	A-0030H-031715-IA-013F-LAU	40.754441	-111.853577	4453	028	Basement - Laundry/Unfinished big room	PP	10.3	14:24	3/17/2015	Tetrachloroethene	0.993	0.1216	0.1216	Yes	=	0.1	0.8242048	370	11	No	No
0030-H	A-0030H-031715-IA-013E-LAU	40.754441	-111.853577	4453	027	Basement - Laundry/Unfinished big room	PP	12.4	14:15	3/17/2015	cis12Dichloroethene	0.712	0.03546	<0.1	Yes	U	0.1	0.14049252	NE	NE	No	No
0030-H	A-0030H-031715-IA-013E-LAU	40.754441	-111.853577	4453	027	Basement - Laundry/Unfinished big room	PP	12.4	14:15	3/17/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0030-H	A-0030H-031715-IA-013E-LAU	40.754441	-111.853577	4453	027	Basement - Laundry/Unfinished big room	PP	12.4	14:15	3/17/2015	Tetrachloroethene	0.996	0.1167	0.1167	Yes	=	0.1	0.7909926	370	11	No	No
0030-H	A-0030H-031715-IA-013D-LAU	40.754441	-111.853577	4453	026	Basement - Laundry/Unfinished big room	PP	11.8	14:05	3/17/2015	cis12Dichloroethene	0.722	0.03975	<0.1	Yes	U	0.1	0.1574895	NE	NE	No	No
0030-H	A-0030H-031715-IA-013D-LAU	40.754441	-111.853577	4453	026	Basement - Laundry/Unfinished big room	PP	11.8	14:05	3/17/2015	Trichloroethene	0.995	0.0038	<0.1	Yes	U	0.1	0.020406	16	0.48	No	No
0030-H	A-0030H-031715-IA-013D-LAU	40.754441	-111.853577	4453	026	Basement - Laundry/Unfinished big room	PP	11.8	14:05	3/17/2015	Tetrachloroethene	0.994	0.1391	0.1391	Yes	=	0.1	0.9428198	370	11	No	No
0030-H	A-0030H-031715-IA-013C-LAU	40.754441	-111.853577	4453	025	Basement - Laundry/Unfinished big room	PP	13.5	13:55	3/17/2015	cis12Dichloroethene	0.735	0.04042	<0.1	Yes	U	0.1	0.16014404	NE	NE	No	No
0030-H	A-0030H-031715-IA-013C-LAU	40.754441	-111.853577	4453	025	Basement - Laundry/Unfinished big room	PP	13.5	13:55	3/17/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0030-H	A-0030H-031715-IA-013C-LAU	40.754441	-111.853577	4453	025	Basement - Laundry/Unfinished big room	PP	13.5	13:55	3/17/2015	Tetrachloroethene	0.996	0.1518	0.1518	Yes	=	0.1	1.0289004	370	11	No	No
0030-H	A-0030H-031715-IA-013B-LAU	40.754441	-111.853577	4453	024	Basement - Laundry/Unfinished big room	PP	11.8	13:44	3/17/2015	cis12Dichloroethene	0.622	0.04402	<0.1	No	NR	0.1	0.17440724	NE	NE	No	No
0030-H	A-0030H-031715-IA-013B-LAU	40.754441	-111.853577	4453	024	Basement - Laundry/Unfinished big room	PP	11.8	13:44	3/17/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0030-H	A-0030H-031715-IA-013B-LAU	40.754441	-111.853577	4453	024	Basement - Laundry/Unfinished big room	PP	11.8	13:44	3/17/2015	Tetrachloroethene	0.994	0.1603	0.1603	Yes	=	0.1	1.0865134	370	11	No	No
0030-H	A-0030H-031715-IA-013A-LAU	40.754441	-111.853577	4453	023	Basement - Laundry/Unfinished big room	PP	10.3	13:36	3/17/2015	cis12Dichloroethene	0.631	0.03147	<0.1	No	NR	0.1	0.12468414	NE	NE	No	No
0030-H	A-0030H-031715-IA-013A-LAU	40.754441	-111.853577	4453	023	Basement - Laundry/Unfinished big room	PP	10.3	13:36	3/17/2015	Trichloroethene	0.979	0.00463	<0.1	Yes	U	0.1	0.0248631	16	0.48	No	No
0030-H	A-0030H-031715-IA-013A-LAU	40.754441	-111.853577	4453	023	Basement - Laundry/Unfinished big room	PP	10.3	13:36	3/17/2015	Tetrachloroethene	0.994	0.1596	0.1596	Yes	=	0.1	1.0817688	370	11	No	No
0030-H	A-0030H-031715-SG-001-6'	40.754450	-111.853528	4553	031	Soil Gas - center of south wall	SG	NA	NA	3/17/2015	cis12Dichloroethene	0.648	0.1664	0.1664	No	NR	0.1	0.6592768	NE	NE	No	No
0030-H	A-0030H-031715-SG-001-6'	40.754450	-111.853528	4553	031	Soil Gas - center of south wall	SG	NA	NA	3/17/2015	Trichloroethene	0.848	0.01454	<0.1	Yes	U	0.1	0.0780798	16	0.48	No	No
0030-H	A-0030H-031715-SG-001-6'	40.754450	-111.853528	4553	031	Soil Gas - center of south wall	SG	NA	NA	3/17/2015	Tetrachloroethene	0.994	0.1534	0.1534	Yes	=	0.1	1.0397452	370	11	No	No
0030-H	A-0030H-031715-SG-001-4'	40.754450	-111.853528	4553	030	Soil Gas - center of south wall	SG	NA	NA	3/17/2015	cis12Dichloroethene	0.6	0.6509	0.6509	No	NR	0.1	2.5788658	NE	NE	No	No
0030-H	A-0030H-031715-SG-001-4'	40.754450	-111.853528	4553	030	Soil Gas - center of south wall	SG	NA	NA	3/17/2015	Trichloroethene	0.747	0.01659	<0.1	Yes	U	0.1	0.0890883	16	0.48	No	No
0030-H	A-0030H-031715-SG-001-4'	40.754450	-111.853528	4553	030	Soil Gas - center of south wall	SG	NA	NA	3/17/2015	Tetrachloroethene	0.996	0.144	0.144	Yes	=	0.1	0.976032	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0031-S	A-0031S-031615-CCV	40.753826	-111.845870	4464	015	CCV - 0.5 ppb	CCV	NA	NA	3/16/2015	cis12Dichloroethene	0.99	0.5949	0.5949	Yes	=	0.1	2.3569938	NA	NA	NA	NA
0031-S	A-0031S-031615-CCV	40.753826	-111.845870	4464	015	CCV - 0.5 ppb	CCV	NA	NA	3/16/2015	Trichloroethene	0.982	0.6755	0.6755	Yes	=	0.1	3.627435	NA	NA	NA	NA
0031-S	A-0031S-031615-CCV	40.753826	-111.845870	4464	015	CCV - 0.5 ppb	CCV	NA	NA	3/16/2015	Tetrachloroethene	0.994	0.5997	0.5997	Yes	=	0.1	4.0647666	NA	NA	NA	NA
0031-S	A-0031S-031615-CCV	40.753826	-111.845870	4464	014	CCV - 5.0 ppb	CCV	NA	NA	3/16/2015	cis12Dichloroethene	0.993	5.062	5.062	Yes	=	0.1	20.055644	NA	NA	NA	NA
0031-S	A-0031S-031615-CCV	40.753826	-111.845870	4464	014	CCV - 5.0 ppb	CCV	NA	NA	3/16/2015	Trichloroethene	0.983	6.128	6.128	Yes	=	0.1	32.90736	NA	NA	NA	NA
0031-S	A-0031S-031615-CCV	40.753826	-111.845870	4464	014	CCV - 5.0 ppb	CCV	NA	NA	3/16/2015	Tetrachloroethene	0.995	5.386	5.386	Yes	=	0.1	36.506308	NA	NA	NA	NA
0031-S	A-0031S-031615-CCV	40.753826	-111.845870	4464	002	CCV - 0.5 ppb	CCV	NA	NA	3/16/2015	cis12Dichloroethene	0.994	0.5021	0.5021	Yes	=	0.1	1.9893202	NA	NA	NA	NA
0031-S	A-0031S-031615-CCV	40.753826	-111.845870	4464	002	CCV - 0.5 ppb	CCV	NA	NA	3/16/2015	Trichloroethene	0.977	0.5713	0.5713	Yes	=	0.1	3.067881	NA	NA	NA	NA
0031-S	A-0031S-031615-CCV	40.753826	-111.845870	4464	002	CCV - 0.5 ppb	CCV	NA	NA	3/16/2015	Tetrachloroethene	0.993	0.5288	0.5288	Yes	=	0.1	3.5842064	NA	NA	NA	NA
0031-S	A-0031S-031615-CCV	40.753826	-111.845870	4464	001	CCV - 5.0 ppb	CCV	NA	NA	3/16/2015	cis12Dichloroethene	0.996	4.586	4.586	Yes	=	0.1	18.169732	NA	NA	NA	NA
0031-S	A-0031S-031615-CCV	40.753826	-111.845870	4464	001	CCV - 5.0 ppb	CCV	NA	NA	3/16/2015	Trichloroethene	0.966	5.517	5.517	Yes	=	0.1	29.62629	NA	NA	NA	NA
0031-S	A-0031S-031615-CCV	40.753826	-111.845870	4464	001	CCV - 5.0 ppb	CCV	NA	NA	3/16/2015	Tetrachloroethene	0.994	4.942	4.942	Yes	=	0.1	33.496876	NA	NA	NA	NA
0031-S	A-0031S-031615-SG-008-4'	40.752097	-111.845867	4652	013	Soil Gas Probe - south edge of property, close to SE corner	SG	NA	NA	3/16/2015	cis12Dichloroethene	0.794	0.03643	<0.1	Yes	U	0.1	0.14433566	NE	NE	No	No
0031-S	A-0031S-031615-SG-008-4'	40.752097	-111.845867	4652	013	Soil Gas Probe - south edge of property, close to SE corner	SG	NA	NA	3/16/2015	Trichloroethene	0.912	0.01503	<0.1	Yes	U	0.1	0.0807111	16	0.48	No	No
0031-S	A-0031S-031615-SG-008-4'	40.752097	-111.845867	4652	013	Soil Gas Probe - south edge of property, close to SE corner	SG	NA	NA	3/16/2015	Tetrachloroethene	0.993	0.04508	<0.1	Yes	U	0.1	0.30555224	370	11	No	No
0031-S	A-0031S-031615-SG-007-3.5'	40.752052	-111.847534	4646	012	Soil Gas Probe - island in parking lot, near SW corner of school campus	SG	NA	NA	3/16/2015	cis12Dichloroethene	0.674	0.06761	<0.1	No	NR	0.1	0.26787082	NE	NE	No	No
0031-S	A-0031S-031615-SG-007-3.5'	40.752052	-111.847534	4646	012	Soil Gas Probe - island in parking lot, near SW corner of school campus	SG	NA	NA	3/16/2015	Trichloroethene	0.543	0.00405	<0.1	No	NR	0.1	0.0217485	16	0.48	No	No
0031-S	A-0031S-031615-SG-007-3.5'	40.752052	-111.847534	4646	012	Soil Gas Probe - island in parking lot, near SW corner of school campus	SG	NA	NA	3/16/2015	Tetrachloroethene	0.994	0.1426	0.1426	Yes	=	0.1	0.9665428	370	11	No	No
0031-S	A-0031S-031615-SG-006-3'	40.752561	-111.846822	4651	009	Soil Gas Probe - adjacent to west wall of the Lower Level School	SG	NA	NA	3/16/2015	cis12Dichloroethene	0.825	0.02965	<0.1	Yes	U	0.1	0.1174733	NE	NE	No	No
0031-S	A-0031S-031615-SG-006-3'	40.752561	-111.846822	4651	009	Soil Gas Probe - adjacent to west wall of the Lower Level School	SG	NA	NA	3/16/2015	Trichloroethene	0.933	0.01375	<0.1	Yes	U	0.1	0.0738375	16	0.48	No	No
0031-S	A-0031S-031615-SG-006-3'	40.752561	-111.846822	4651	009	Soil Gas Probe - adjacent to west wall of the Lower Level School	SG	NA	NA	3/16/2015	Tetrachloroethene	0.995	0.08668	<0.1	Yes	U	0.1	0.58751704	370	11	No	No
0031-S	A-0031S-031615-SG-005-4'	40.752733	-111.847323	4652	008	Soil Gas Probe - 10' north of the NE corner of the Field House	SG	NA	NA	3/16/2015	cis12Dichloroethene	0.734	0.07952	<0.1	Yes	U	0.1	0.31505824	NE	NE	No	No
0031-S	A-0031S-031615-SG-005-4'	40.752733	-111.847323	4652	008	Soil Gas Probe - 10' north of the NE corner of the Field House	SG	NA	NA	3/16/2015	Trichloroethene	0.946	0.01735	<0.1	Yes	U	0.1	0.0931695	16	0.48	No	No
0031-S	A-0031S-031615-SG-005-4'	40.752733	-111.847323	4652	008	Soil Gas Probe - 10' north of the NE corner of the Field House	SG	NA	NA	3/16/2015	Tetrachloroethene	0.995	0.1097	0.1097	Yes	=	0.1	0.7435466	370	11	No	No
0031-S	A-0031S-031615-SG-004-4'	40.753329	-111.847066	4657	006	Soil Gas Probe - just west of the Dining Hall in grass	SG	NA	NA	3/16/2015	cis12Dichloroethene	0.738	0.09075	<0.1	Yes	U	0.1	0.3595515	NE	NE	No	No
0031-S	A-0031S-031615-SG-004-4'	40.753329	-111.847066	4657	006	Soil Gas Probe - just west of the Dining Hall in grass	SG	NA	NA	3/16/2015	Trichloroethene	0.99	0.00999	<0.1	Yes	U	0.1	0.0536463	16	0.48	No	No
0031-S	A-0031S-031615-SG-004-4'	40.753329	-111.847066	4657	006	Soil Gas Probe - just west of the Dining Hall in grass	SG	NA	NA	3/16/2015	Tetrachloroethene	0.995	0.1102	0.1102	Yes	=	0.1	0.7469356	370	11	No	No
0031-S	A-0031S-031615-SG-003-3.5'	40.753790	-111.847645	4650	005	Soil Gas Probe - north edge of property, near NW corner of campus, just south of catch basin on U of U maintenance yard	SG	NA	NA	3/16/2015	cis12Dichloroethene	0.72	0.06659	<0.1	Yes	U	0.1	0.26382958	NE	NE	No	No
0031-S	A-0031S-031615-SG-003-3.5'	40.753790	-111.847645	4650	005	Soil Gas Probe - north edge of property, near NW corner of campus, just south of catch basin on U of U maintenance yard	SG	NA	NA	3/16/2015	Trichloroethene	0.919	0.01237	<0.1	Yes	U	0.1	0.0664269	16	0.48	No	No
0031-S	A-0031S-031615-SG-003-3.5'	40.753790	-111.847645	4650	005	Soil Gas Probe - north edge of property, near NW corner of campus, just south of catch basin on U of U maintenance yard	SG	NA	NA	3/16/2015	Tetrachloroethene	0.994	0.2341	0.2341	Yes	=	0.1	1.5867298	370	11	No	No
0031-S	A-0031S-031615-SG-002-4'	40.753788	-111.846937	4660	004	Soil Gas probe - north edge of property, less than 6 feet from adjacent former Utah army national guard garage	SG	NA	NA	3/16/2015	cis12Dichloroethene	0.68	0.08939	<0.1	No	NR	0.1	0.35416318	NE	NE	No	No
0031-S	A-0031S-031615-SG-002-4'	40.753788	-111.846937	4660	004	Soil Gas probe - north edge of property, less than 6 feet from adjacent former Utah army national guard garage	SG	NA	NA	3/16/2015	Trichloroethene	0.825	Area too low	<0.1	Yes	U	0.1	Area too low	16	0.48	No	No
0031-S	A-0031S-031615-SG-002-4'	40.753788	-111.846937	4660	004	Soil Gas probe - north edge of property, less than 6 feet from adjacent former Utah army national guard garage	SG	NA	NA	3/16/2015	Tetrachloroethene	0.995	0.1285	0.1285	Yes	=	0.1	0.870973	370	11	No	No
0031-S	A-0031S-031615-SG-001-3.5'	40.753826	-111.845870	4464	003	Soil Gas probe - north edge of property near NE corner	SG	NA	NA	3/16/2015	cis12Dichloroethene	0.808	0.03912	<0.1	Yes	U	0.1	0.15499344	NE	NE	No	No
0031-S	A-0031S-031615-SG-001-3.5'	40.753826	-111.845870	4464	003	Soil Gas probe - north edge of property near NE corner	SG	NA	NA	3/16/2015	Trichloroethene	0.966	0.02073	<0.1	Yes	U	0.1	0.1113201	16	0.48	No	No
0031-S	A-0031S-031615-SG-001-3.5'	40.753826	-111.845870	4464	003	Soil Gas probe - north edge of property near NE corner	SG	NA	NA	3/16/2015	Tetrachloroethene	0.995	0.09435	<0.1	Yes	U	0.1	0.6395043	370	11	No	No
0032-H	A-0032H-031215-CCV	40.755573	-111.856021	4526	029	CCV - 5.0 ppb	CCV	NA	NA	3/12/2015	cis12Dichloroethene	0.997	3.771	3.771	Yes	=	0.1	14.940702	NA	NA	NA	NA
0032-H	A-0032H-031215-CCV	40.755573	-111.856021	4526	029	CCV - 5.0 ppb	CCV	NA	NA	3/12/2015	Trichloroethene	0.966	4.412	4.412	Yes	=	0.1	23.69244	NA	NA	NA	NA
0032-H	A-0032H-031215-CCV	40.755573	-111.856021	4526	029	CCV - 5.0 ppb	CCV	NA	NA	3/12/2015	Tetrachloroethene	0.995	4.024	4.024	Yes	=	0.1	27.274672	NA	NA	NA	NA
0032-H	A-0032H-031215-CCV	40.755573	-111.856021	4526	028	CCV - 0.5 ppb	CCV	NA	NA	3/12/2015	cis12Dichloroethene	0.997	0.4052	0.4052	Yes	=	0.1	1.6054024	NA	NA	NA	NA
0032-H	A-0032H-031215-CCV	40.755573	-111.856021	4526	028	CCV - 0.5 ppb	CCV	NA	NA	3/12/2015	Trichloroethene	0.906	0.4568	0.4568	Yes	=	0.1	2.453016	NA	NA	NA	NA
0032-H	A-0032H-031215-CCV	40.755573	-111.856021	4526	028	CCV - 0.5 ppb	CCV	NA	NA	3/12/2015	Tetrachloroethene	0.995	0.436	0.436	Yes	=	0.1	2.955208	NA	NA	NA	NA
0032-H	A-0032H-031215-CCV	40.755573	-111.856021	4526	002	CCV - 0.5 ppb	CCV	NA	NA	3/12/2015	cis12Dichloroethene	0.99	0.5145	0.5145	Yes	=	0.1	2.038449	NA	NA	NA	NA
0032-H	A-0032H-031215-CCV	40.755573	-111.856021	4526	002	CCV - 0.5 ppb	CCV	NA	NA	3/12/2015	Trichloroethene	0.906	0.5355	0.5355	Yes	=	0.1	2.875635	NA	NA	NA	NA
0032-H	A-0032H-031215-CCV	40.755573	-111.856021	4526	002	CCV - 0.5 ppb	CCV	NA	NA	3/12/2015	Tetrachloroethene	0.994	0.5093	0.5093	Yes	=	0.1	3.4520354	NA	NA	NA	NA
0032-H	A-0032H-031215-CCV	40.755573	-111.856021	4526	001	CCV - 5.0 ppb	CCV	NA	NA	3/12/2015	cis12Dichloroethene	0.994	4.568	4.568	Yes	=	0.1	18.098416	NA	NA	NA	NA
0032-H	A-0032H-031215-CCV	40.755573	-111.856021	4526	001	CCV - 5.0 ppb	CCV	NA	NA	3/12/2015	Trichloroethene	0.981	5.073	5.073	Yes	=	0.1	27.24201	NA	NA	NA	NA
0032-H	A-0032H-031215-CCV	40.755573	-111.856021	4526	001	CCV - 5.0 ppb	CCV	NA	NA	3/12/2015	Tetrachloroethene	0.996	4.508	4.508	Yes	=	0.1	30.555224	NA	NA	NA	NA
0032-H	A-0032H-031215-IA-010-BR2	40.755573	-111.856021	4526	012	Basement - Bedroom	IA	NA	NA	3/12/2015	cis12Dichloroethene	0.648	0.03145	<0.1	No	NR	0.1	0.1246049	NE	NE	No	No
0032-H	A-0032H-031215-IA-010-BR2	40.755573	-111.856021	4526	012	Basement - Bedroom	IA	NA	NA	3/12/2015	Trichloroethene	0.97	0.0073	<0.1	Yes	U	0.1	0.039201	16	0.48	No	No
0032-H	A-0032H-031215-IA-010-BR2	40.755573	-111.856021	4526	012	Basement - Bedroom	IA	NA	NA	3/12/2015	Tetrachloroethene	0.995	0.02102	<0.1	Yes	U	0.1	0.14247356	370	11	No	No
0032-H	A-0032H-031215-IA-009-FAM	40.755573	-111.856021	4526	011	Basement - Family Room	IA	NA	NA	3/12/2015	cis12Dichloroethene	0.611	0.02794	<0.1	No	NR	0.1	0.11069828	NE	NE	No	No
0032-H	A-0032H-031215-IA-009-FAM	40.755573	-111.856021	4526	011	Basement - Family Room	IA	NA	NA	3/12/2015	Trichloroethene	0.985	0.00922	<0.1	Yes	U	0.1	0.0495114	16	0.48	No	No
0032-H	A-0032H-031215-IA-009-FAM	40.755573	-111.856021	4526	011	Basement - Family Room	IA	NA	NA	3/12/2015	Tetrachloroethene	0.993	0.02134	<0.1	Yes	U	0.1	0.14464252	370	11	No	No
0032-H	A-0032H-031215-IA-008-BA2	40.755573	-111.856021	4526	010	Basement - Bathroom	IA	NA	NA	3/12/2015	cis12Dichloroethene	0.776	0.02592	<0.1	Yes	U	0.1	0.10269504	NE	NE	No	No
0032-H	A-0032H-031215-IA-008-BA2	40.755573	-111.856021	4526	010	Basement - Bathroom	IA	NA	NA	3/12/2015	Trichloroethene	0.974	0.00852	<0.1	Yes	U	0.1	0.0457524	16	0.48	No	No
0032-H	A-0032H-031215-IA-008-BA2	40.755573	-111.856021	4526	010	Basement - Bathroom	IA	NA	NA	3/12/2015	Tetrachloroethene	0.995	0.01787	<0.1	Yes	U	0.1	0.12112286	370	11	No	No
0032-H	A-0032H-031215-IA-007-LAU	40.755573	-111.856021	4526	009	Basement - Laundry Area	IA	NA	NA	3/12/2015	cis12Dichloroethene	0.782	0.03379	<0.1	Yes	U	0.1	0.13387598	NE	NE	No	No
0032-H	A-0032H-031215-IA-007-LAU	40.755573	-111.856021	4526	009	Basement - Laundry Area	IA	NA	NA	3/12/2015	Trichloroethene	0.984	0.01132	<0.1	Yes	U	0.1	0.0607884	16	0.48	No	No
0032-H	A-0032H-031215-IA-007-LAU	40.755573	-111.856021	4526	009	Basement - Laundry Area	IA	NA	NA	3/12/2015	Tetrachloroethene	0.996	0.02121	<0.1	Yes	U	0.1	0.14376138	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0032-H	A-0032H-031215-IA-006-BA1	40.755573	-111.856021	4526	008	First Floor- Bathroom	IA	NA	NA	3/12/2015	cis12Dichloroethene	0.791	0.03574	<0.1	Yes	U	0.1	0.14160188	NE	NE	No	No
0032-H	A-0032H-031215-IA-006-BA1	40.755573	-111.856021	4526	008	First Floor- Bathroom	IA	NA	NA	3/12/2015	Trichloroethene	0.99	0.01426	<0.1	Yes	U	0.1	0.0765762	16	0.48	No	No
0032-H	A-0032H-031215-IA-006-BA1	40.755573	-111.856021	4526	008	First Floor- Bathroom	IA	NA	NA	3/12/2015	Tetrachloroethene	0.995	0.02146	<0.1	Yes	U	0.1	0.14545588	370	11	No	No
0032-H	A-0032H-031215-IA-005-MBR	40.755573	-111.856021	4526	007	First Floor - Master Bedroom	IA	NA	NA	3/12/2015	cis12Dichloroethene	0.72	0.0387	<0.1	Yes	U	0.1	0.1533294	NE	NE	No	No
0032-H	A-0032H-031215-IA-005-MBR	40.755573	-111.856021	4526	007	First Floor - Master Bedroom	IA	NA	NA	3/12/2015	Trichloroethene	0.964	0.01449	<0.1	Yes	U	0.1	0.0778113	16	0.48	No	No
0032-H	A-0032H-031215-IA-005-MBR	40.755573	-111.856021	4526	007	First Floor - Master Bedroom	IA	NA	NA	3/12/2015	Tetrachloroethene	0.995	0.02277	<0.1	Yes	U	0.1	0.15433506	370	11	No	No
0032-H	A-0032H-031215-IA-004-BR1	40.755573	-111.856021	4526	006	First Floor - Child's Bedroom	IA	NA	NA	3/12/2015	cis12Dichloroethene	0.761	0.03801	<0.1	Yes	U	0.1	0.15059562	NE	NE	No	No
0032-H	A-0032H-031215-IA-004-BR1	40.755573	-111.856021	4526	006	First Floor - Child's Bedroom	IA	NA	NA	3/12/2015	Trichloroethene	0.981	0.01175	<0.1	Yes	U	0.1	0.0630975	16	0.48	No	No
0032-H	A-0032H-031215-IA-004-BR1	40.755573	-111.856021	4526	006	First Floor - Child's Bedroom	IA	NA	NA	3/12/2015	Tetrachloroethene	0.995	0.02331	<0.1	Yes	U	0.1	0.15799518	370	11	No	No
0032-H	A-0032H-031215-IA-003-KIT	40.755573	-111.856021	4526	005	First Floor - Kitchen	IA	NA	NA	3/12/2015	cis12Dichloroethene	0.81	0.04061	<0.1	Yes	U	0.1	0.16089682	NE	NE	No	No
0032-H	A-0032H-031215-IA-003-KIT	40.755573	-111.856021	4526	005	First Floor - Kitchen	IA	NA	NA	3/12/2015	Trichloroethene	0.98	0.01869	<0.1	Yes	U	0.1	0.1003653	16	0.48	No	No
0032-H	A-0032H-031215-IA-003-KIT	40.755573	-111.856021	4526	005	First Floor - Kitchen	IA	NA	NA	3/12/2015	Tetrachloroethene	0.996	0.0226	<0.1	Yes	U	0.1	0.1531828	370	11	No	No
0032-H	A-0032H-031215-IA-002-OCL	40.755573	-111.856021	4526	004	First Floor - Open Concept Living/Dining	IA	NA	NA	3/12/2015	cis12Dichloroethene	0.705	0.03895	<0.1	Yes	U	0.1	0.1543199	NE	NE	No	No
0032-H	A-0032H-031215-IA-002-OCL	40.755573	-111.856021	4526	004	First Floor - Open Concept Living/Dining	IA	NA	NA	3/12/2015	Trichloroethene	0.842	Area too low	<0.1	Yes	U	0.1	Area too low	16	0.48	No	No
0032-H	A-0032H-031215-IA-002-OCL	40.755573	-111.856021	4526	004	First Floor - Open Concept Living/Dining	IA	NA	NA	3/12/2015	Tetrachloroethene	0.995	0.02484	<0.1	Yes	U	0.1	0.16836552	370	11	No	No
0032-H	A-0032H-031215-IA-011H-LAU	40.755573	-111.856021	4526	020	Basement - Laundry Area	NP	-5.1	12:37	3/12/2015	cis12Dichloroethene	0.783	0.01667	<0.1	Yes	U	0.1	0.06604654	NE	NE	No	No
0032-H	A-0032H-031215-IA-011H-LAU	40.755573	-111.856021	4526	020	Basement - Laundry Area	NP	-5.1	12:37	3/12/2015	Trichloroethene	0.974	0.00531	<0.1	Yes	U	0.1	0.0285147	16	0.48	No	No
0032-H	A-0032H-031215-IA-011H-LAU	40.755573	-111.856021	4526	020	Basement - Laundry Area	NP	-5.1	12:37	3/12/2015	Tetrachloroethene	0.993	0.02426	<0.1	Yes	U	0.1	0.16443428	370	11	No	No
0032-H	A-0032H-031215-IA-011G-LAU	40.755573	-111.856021	4526	019	Basement - Laundry Area	NP	-5.6	12:28	3/12/2015	cis12Dichloroethene	0.748	0.01982	<0.1	Yes	U	0.1	0.07852684	NE	NE	No	No
0032-H	A-0032H-031215-IA-011G-LAU	40.755573	-111.856021	4526	019	Basement - Laundry Area	NP	-5.6	12:28	3/12/2015	Trichloroethene	0.983	0.00837	<0.1	Yes	U	0.1	0.0449469	16	0.48	No	No
0032-H	A-0032H-031215-IA-011G-LAU	40.755573	-111.856021	4526	019	Basement - Laundry Area	NP	-5.6	12:28	3/12/2015	Tetrachloroethene	0.995	0.02533	<0.1	Yes	U	0.1	0.17168674	370	11	No	No
0032-H	A-0032H-031215-IA-011F-LAU	40.755573	-111.856021	4526	018	Basement - Laundry Area	NP	-5.2	12:20	3/12/2015	cis12Dichloroethene	0.646	0.01521	<0.1	No	NR	0.1	0.06026202	NE	NE	No	No
0032-H	A-0032H-031215-IA-011F-LAU	40.755573	-111.856021	4526	018	Basement - Laundry Area	NP	-5.2	12:20	3/12/2015	Trichloroethene	0.99	0.0049	<0.1	Yes	U	0.1	0.026313	16	0.48	No	No
0032-H	A-0032H-031215-IA-011F-LAU	40.755573	-111.856021	4526	018	Basement - Laundry Area	NP	-5.2	12:20	3/12/2015	Tetrachloroethene	0.993	0.02209	<0.1	Yes	U	0.1	0.14972602	370	11	No	No
0032-H	A-0032H-031215-IA-011E-LAU	40.755573	-111.856021	4526	017	Basement - Laundry Area	NP	-5.2	12:11	3/12/2015	cis12Dichloroethene	0.838	0.0194	<0.1	Yes	U	0.1	0.0768628	NE	NE	No	No
0032-H	A-0032H-031215-IA-011E-LAU	40.755573	-111.856021	4526	017	Basement - Laundry Area	NP	-5.2	12:11	3/12/2015	Trichloroethene	0.99	0.01066	<0.1	Yes	U	0.1	0.0572442	16	0.48	No	No
0032-H	A-0032H-031215-IA-011E-LAU	40.755573	-111.856021	4526	017	Basement - Laundry Area	NP	-5.2	12:11	3/12/2015	Tetrachloroethene	0.996	0.02173	<0.1	Yes	U	0.1	0.14728594	370	11	No	No
0032-H	A-0032H-031215-IA-011D-LAU	40.755573	-111.856021	4526	016	Basement - Laundry Area	NP	-5.3	12:01	3/12/2015	cis12Dichloroethene	0.782	0.02313	<0.1	Yes	U	0.1	0.09164106	NE	NE	No	No
0032-H	A-0032H-031215-IA-011D-LAU	40.755573	-111.856021	4526	016	Basement - Laundry Area	NP	-5.3	12:01	3/12/2015	Trichloroethene	0.94	0.01264	<0.1	Yes	U	0.1	0.0678768	16	0.48	No	No
0032-H	A-0032H-031215-IA-011D-LAU	40.755573	-111.856021	4526	016	Basement - Laundry Area	NP	-5.3	12:01	3/12/2015	Tetrachloroethene	0.998	0.0182	<0.1	Yes	U	0.1	0.1233596	370	11	No	No
0032-H	A-0032H-031215-IA-011C-LAU	40.755573	-111.856021	4526	015	Basement - Laundry Area	NP	-5.0	11:53	3/12/2015	cis12Dichloroethene	0.747	0.02671	<0.1	Yes	U	0.1	0.10582502	NE	NE	No	No
0032-H	A-0032H-031215-IA-011C-LAU	40.755573	-111.856021	4526	015	Basement - Laundry Area	NP	-5.0	11:53	3/12/2015	Trichloroethene	0.999	0.01472	<0.1	Yes	U	0.1	0.0790464	16	0.48	No	No
0032-H	A-0032H-031215-IA-011C-LAU	40.755573	-111.856021	4526	015	Basement - Laundry Area	NP	-5.0	11:53	3/12/2015	Tetrachloroethene	0.994	0.01657	<0.1	Yes	U	0.1	0.11231146	370	11	No	No
0032-H	A-0032H-031215-IA-011B-LAU	40.755573	-111.856021	4526	014	Basement - Laundry Area	NP	-4.7	11:44	3/12/2015	cis12Dichloroethene	0.765	0.02669	<0.1	Yes	U	0.1	0.10574578	NE	NE	No	No
0032-H	A-0032H-031215-IA-011B-LAU	40.755573	-111.856021	4526	014	Basement - Laundry Area	NP	-4.7	11:44	3/12/2015	Trichloroethene	0.995	0.01601	<0.1	Yes	U	0.1	0.0859737	16	0.48	No	No
0032-H	A-0032H-031215-IA-011B-LAU	40.755573	-111.856021	4526	014	Basement - Laundry Area	NP	-4.7	11:44	3/12/2015	Tetrachloroethene	0.994	0.01841	<0.1	Yes	U	0.1	0.12478298	370	11	No	No
0032-H	A-0032H-031215-IA-011A-LAU	40.755573	-111.856021	4526	013	Basement - Laundry Area	NP	-5.2	11:36	3/12/2015	cis12Dichloroethene	0.756	0.0364	<0.1	Yes	U	0.1	0.1442168	NE	NE	No	No
0032-H	A-0032H-031215-IA-011A-LAU	40.755573	-111.856021	4526	013	Basement - Laundry Area	NP	-5.2	11:36	3/12/2015	Trichloroethene	0.995	0.01231	<0.1	Yes	U	0.1	0.0661047	16	0.48	No	No
0032-H	A-0032H-031215-IA-011A-LAU	40.755573	-111.856021	4526	013	Basement - Laundry Area	NP	-5.2	11:36	3/12/2015	Tetrachloroethene	0.996	0.02351	<0.1	Yes	U	0.1	0.15935078	370	11	No	No
0032-H	A-0032H-031215-IA-001-OUT	40.755573	-111.856021	4526	003	Outdoor Ambient - Front Steps - south of house	OA	NA	NA	3/12/2015	cis12Dichloroethene	0.93	0.01456	<0.1	Yes	U	0.1	0.05768672	NE	NE	No	No
0032-H	A-0032H-031215-IA-001-OUT	40.755573	-111.856021	4526	003	Outdoor Ambient - Front Steps - south of house	OA	NA	NA	3/12/2015	Trichloroethene	0.983	0.01717	<0.1	Yes	U	0.1	0.0922029	16	0.48	No	No
0032-H	A-0032H-031215-IA-001-OUT	40.755573	-111.856021	4526	003	Outdoor Ambient - Front Steps - south of house	OA	NA	NA	3/12/2015	Tetrachloroethene	0.993	0.02391	<0.1	Yes	U	0.1	0.16206198	370	11	No	No
0032-H	A-0032H-031215-IA-012F-LAU	40.755573	-111.856021	4526	026	Basement - Laundry Area	PP	5.3	13:44	3/12/2015	cis12Dichloroethene	0.763	0.00945	<0.1	Yes	U	0.1	0.0374409	NE	NE	No	No
0032-H	A-0032H-031215-IA-012F-LAU	40.755573	-111.856021	4526	026	Basement - Laundry Area	PP	5.3	13:44	3/12/2015	Trichloroethene	0.523	0.0048	<0.1	No	NR	0.1	0.025776	16	0.48	No	No
0032-H	A-0032H-031215-IA-012F-LAU	40.755573	-111.856021	4526	026	Basement - Laundry Area	PP	5.3	13:44	3/12/2015	Tetrachloroethene	0.997	0.00753	<0.1	Yes	U	0.1	0.05103834	370	11	No	No
0032-H	A-0032H-031215-IA-012E-LAU	40.755573	-111.856021	4526	025	Basement - Laundry Area	PP	5.8	13:36	3/12/2015	cis12Dichloroethene	0.733	Area too low	<0.1	Yes	U	0.1	Area too low	NE	NE	No	No
0032-H	A-0032H-031215-IA-012E-LAU	40.755573	-111.856021	4526	025	Basement - Laundry Area	PP	5.8	13:36	3/12/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0032-H	A-0032H-031215-IA-012E-LAU	40.755573	-111.856021	4526	025	Basement - Laundry Area	PP	5.8	13:36	3/12/2015	Tetrachloroethene	0.998	0.00775	<0.1	Yes	U	0.1	0.0525295	370	11	No	No
0032-H	A-0032H-031215-IA-012D-LAU	40.755573	-111.856021	4526	024	Basement - Laundry Area	PP	3.5	13:27	3/12/2015	cis12Dichloroethene	0.884	0.0059	<0.1	Yes	U	0.1	0.0233758	NE	NE	No	No
0032-H	A-0032H-031215-IA-012D-LAU	40.755573	-111.856021	4526	024	Basement - Laundry Area	PP	3.5	13:27	3/12/2015	Trichloroethene	0.836	0.00609	<0.1	Yes	U	0.1	0.0327033	16	0.48	No	No
0032-H	A-0032H-031215-IA-012D-LAU	40.755573	-111.856021	4526	024	Basement - Laundry Area	PP	3.5	13:27	3/12/2015	Tetrachloroethene	0.996	0.00803	<0.1	Yes	U	0.1	0.05442734	370	11	No	No
0032-H	A-0032H-031215-IA-012C-LAU	40.755573	-111.856021	4526	023	Basement - Laundry Area	PP	4.4	13:17	3/12/2015	cis12Dichloroethene	0.908	0.00642	<0.1	Yes	U	0.1	0.02543604	NE	NE	No	No
0032-H	A-0032H-031215-IA-012C-LAU	40.755573	-111.856021	4526	023	Basement - Laundry Area	PP	4.4	13:17	3/12/2015	Trichloroethene	0.971	0.00659	<0.1	Yes	U	0.1	0.0353883	16	0.48	No	No
0032-H	A-0032H-031215-IA-012C-LAU	40.755573	-111.856021	4526	023	Basement - Laundry Area	PP	4.4	13:17	3/12/2015	Tetrachloroethene	0.998	0.00817	<0.1	Yes	U	0.1	0.05537626	370	11	No	No
0032-H	A-0032H-031215-IA-012B-LAU	40.755573	-111.856021	4526	022	Basement - Laundry Area	PP	5.7	13:08	3/12/2015	cis12Dichloroethene	0.841	0.0077	<0.1	Yes	U	0.1	0.0305074	NE	NE	No	No
0032-H	A-0032H-031215-IA-012B-LAU	40.755573	-111.856021	4526	022	Basement - Laundry Area	PP	5.7	13:08	3/12/2015	Trichloroethene	0.992	0.00466	<0.1	Yes	U	0.1	0.0250242	16	0.48	No	No
0032-H	A-0032H-031215-IA-012B-LAU	40.755573	-111.856021	4526	022	Basement - Laundry Area	PP	5.7	13:08	3/12/2015	Tetrachloroethene	0.992	0.00884	<0.1	Yes	U	0.1	0.05991752	370	11	No	No
0032-H	A-0032H-031215-IA-012A-LAU	40.755573	-111.856021	4526	021	Basement - Laundry Area	PP	7.3	12:57	3/12/2015	cis12Dichloroethene	0.834	0.00812	<0.1	Yes	U	0.1	0.03217144	NE	NE	No	No
0032-H	A-0032H-031215-IA-012A-LAU	40.755573	-111.856021	4526	021	Basement - Laundry Area	PP	7.3	12:57	3/12/2015	Trichloroethene	0.884	0.00334	<0.1	Yes	U	0.1	0.0179358	16	0.48	No	No
0032-H	A-0032H-031215-IA-012A-LAU	40.755573	-111.856021	4526	021	Basement - Laundry Area	PP	7.3	12:57	3/12/2015	Tetrachloroethene	0.994	0.01602	<0.1	Yes	U	0.1	0.10858356	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0033-H	A-0033H-040815-IA-015-STO	40.748120	-111.8550005	4495	016	Basement - Storage under stairs -off of garage	IA	NA	NA	4/8/2015	cis12Dichloroethene	0.826	0.02452	<0.1	Yes	U	0.1	0.09714824	NE	NE	No	No
0033-H	A-0033H-040815-IA-015-STO	40.748120	-111.8550005	4495	016	Basement - Storage under stairs -off of garage	IA	NA	NA	4/8/2015	Trichloroethene	0.474	0.0049	<0.1	No	NR	0.1	0.026313	16	0.48	No	No
0033-H	A-0033H-040815-IA-015-STO	40.748120	-111.8550005	4495	016	Basement - Storage under stairs -off of garage	IA	NA	NA	4/8/2015	Tetrachloroethene	0.996	0.03426	<0.1	Yes	U	0.1	0.23221428	370	11	No	No
0033-H	A-0033H-040815-IA-014-GAR	40.748120	-111.8550005	4495	015	Basement - Garage	IA	NA	NA	4/8/2015	cis12Dichloroethene	0.711	0.03999	<0.1	Yes	U	0.1	0.15844038	NE	NE	No	No
0033-H	A-0033H-040815-IA-014-GAR	40.748120	-111.8550005	4495	015	Basement - Garage	IA	NA	NA	4/8/2015	Trichloroethene	0.694	0.00482	<0.1	No	NR	0.1	0.0258834	16	0.48	No	No
0033-H	A-0033H-040815-IA-014-GAR	40.748120	-111.8550005	4495	015	Basement - Garage	IA	NA	NA	4/8/2015	Tetrachloroethene	0.993	0.0378	<0.1	Yes	U	0.1	0.2562084	370	11	No	No
0033-H	A-0033H-040815-IA-013-OFC	40.748120	-111.8550005	4495	014	Basement - Office	IA	NA	NA	4/8/2015	cis12Dichloroethene	0.629	0.2195	0.2195	No	NR	0.1	0.869659	NE	NE	No	No
0033-H	A-0033H-040815-IA-013-OFC	40.748120	-111.8550005	4495	014	Basement - Office	IA	NA	NA	4/8/2015	Trichloroethene	0.859	0.00973	<0.1	Yes	U	0.1	0.0522501	16	0.48	No	No
0033-H	A-0033H-040815-IA-013-OFC	40.748120	-111.8550005	4495	014	Basement - Office	IA	NA	NA	4/8/2015	Tetrachloroethene	0.993	0.3421	0.3421	Yes	=	0.1	2.3187538	370	11	No	No
0033-H	A-0033H-040815-IA-012-LAU	40.748120	-111.8550005	4495	013	Basement - Laundry room	IA	NA	NA	4/8/2015	cis12Dichloroethene	0.696	0.1131	0.1131	No	NR	0.1	0.4481022	NE	NE	No	No
0033-H	A-0033H-040815-IA-012-LAU	40.748120	-111.8550005	4495	013	Basement - Laundry room	IA	NA	NA	4/8/2015	Trichloroethene	0.994	0.015	<0.1	Yes	U	0.1	0.08055	16	0.48	No	No
0033-H	A-0033H-040815-IA-012-LAU	40.748120	-111.8550005	4495	013	Basement - Laundry room	IA	NA	NA	4/8/2015	Tetrachloroethene	0.994	0.7411	0.7411	Yes	=	0.1	5.0231758	370	11	No	No
0033-H	A-0033H-040815-IA-011-CRA	40.748120	-111.8550005	4495	012	Basement - Craft room	IA	NA	NA	4/8/2015	cis12Dichloroethene	0.677	0.2015	0.2015	No	NR	0.1	0.798343	NE	NE	No	No
0033-H	A-0033H-040815-IA-011-CRA	40.748120	-111.8550005	4495	012	Basement - Craft room	IA	NA	NA	4/8/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0033-H	A-0033H-040815-IA-011-CRA	40.748120	-111.8550005	4495	012	Basement - Craft room	IA	NA	NA	4/8/2015	Tetrachloroethene	0.994	0.7721	0.7721	Yes	=	0.1	5.2332938	370	11	No	No
0033-H	A-0033H-040815-IA-010-BA3	40.748120	-111.8550005	4495	011	Basement - Bathroom	IA	NA	NA	4/8/2015	cis12Dichloroethene	0.738	0.131	0.131	Yes	=	0.1	0.519022	NE	NE	No	No
0033-H	A-0033H-040815-IA-010-BA3	40.748120	-111.8550005	4495	011	Basement - Bathroom	IA	NA	NA	4/8/2015	Trichloroethene	0.975	0.01011	<0.1	Yes	U	0.1	0.0542907	16	0.48	No	No
0033-H	A-0033H-040815-IA-010-BA3	40.748120	-111.8550005	4495	011	Basement - Bathroom	IA	NA	NA	4/8/2015	Tetrachloroethene	0.995	0.2429	0.2429	Yes	=	0.1	1.6463762	370	11	No	No
0033-H	A-0033H-040815-IA-009-BR2	40.748120	-111.8550005	4495	010	Second Floor - North Bedroom	IA	NA	NA	4/8/2015	cis12Dichloroethene	0.723	0.136	0.136	Yes	=	0.1	0.538832	NE	NE	No	No
0033-H	A-0033H-040815-IA-009-BR2	40.748120	-111.8550005	4495	010	Second Floor - North Bedroom	IA	NA	NA	4/8/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0033-H	A-0033H-040815-IA-009-BR2	40.748120	-111.8550005	4495	010	Second Floor - North Bedroom	IA	NA	NA	4/8/2015	Tetrachloroethene	0.994	0.173	0.173	Yes	=	0.1	1.172594	370	11	No	No
0033-H	A-0033H-040815-IA-008-BR1	40.748120	-111.8550005	4495	009	Second Floor - Front Bedroom	IA	NA	NA	4/8/2015	cis12Dichloroethene	0.608	0.127	0.127	No	NR	0.1	0.503174	NE	NE	No	No
0033-H	A-0033H-040815-IA-008-BR1	40.748120	-111.8550005	4495	009	Second Floor - Front Bedroom	IA	NA	NA	4/8/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0033-H	A-0033H-040815-IA-008-BR1	40.748120	-111.8550005	4495	009	Second Floor - Front Bedroom	IA	NA	NA	4/8/2015	Tetrachloroethene	0.994	0.1784	0.1784	Yes	=	0.1	1.2091952	370	11	No	No
0033-H	A-0033H-040815-IA-007-MBR	40.748120	-111.8550005	4495	008	Second Floor - Master Bedroom	IA	NA	NA	4/8/2015	cis12Dichloroethene	0.688	0.1601	0.1601	No	NR	0.1	0.6343162	NE	NE	No	No
0033-H	A-0033H-040815-IA-007-MBR	40.748120	-111.8550005	4495	008	Second Floor - Master Bedroom	IA	NA	NA	4/8/2015	Trichloroethene	0.563	0.00335	<0.1	No	NR	0.1	0.0179895	16	0.48	No	No
0033-H	A-0033H-040815-IA-007-MBR	40.748120	-111.8550005	4495	008	Second Floor - Master Bedroom	IA	NA	NA	4/8/2015	Tetrachloroethene	0.995	0.2478	0.2478	Yes	=	0.1	1.6795884	370	11	No	No
0033-H	A-0033H-040815-IA-006-BA2	40.748120	-111.8550005	4495	007	Second Floor - Bathroom	IA	NA	NA	4/8/2015	cis12Dichloroethene	0.683	0.2199	0.2199	No	NR	0.1	0.8712438	NE	NE	No	No
0033-H	A-0033H-040815-IA-006-BA2	40.748120	-111.8550005	4495	007	Second Floor - Bathroom	IA	NA	NA	4/8/2015	Trichloroethene	0.945	0.00715	<0.1	Yes	U	0.1	0.0383955	16	0.48	No	No
0033-H	A-0033H-040815-IA-006-BA2	40.748120	-111.8550005	4495	007	Second Floor - Bathroom	IA	NA	NA	4/8/2015	Tetrachloroethene	0.995	0.1991	0.1991	Yes	=	0.1	1.3494998	370	11	No	No
0033-H	A-0033H-040815-IA-005-PLA	40.748120	-111.8550005	4495	006	First Floor - Playroom	IA	NA	NA	4/8/2015	cis12Dichloroethene	0.71	0.1263	0.1263	Yes	=	0.1	0.5004006	NE	NE	No	No
0033-H	A-0033H-040815-IA-005-PLA	40.748120	-111.8550005	4495	006	First Floor - Playroom	IA	NA	NA	4/8/2015	Trichloroethene	0.899	0.01252	<0.1	Yes	U	0.1	0.0672324	16	0.48	No	No
0033-H	A-0033H-040815-IA-005-PLA	40.748120	-111.8550005	4495	006	First Floor - Playroom	IA	NA	NA	4/8/2015	Tetrachloroethene	0.993	0.2084	0.2084	Yes	=	0.1	1.4125352	370	11	No	No
0033-H	A-0033H-040815-IA-004-BA1	40.748120	-111.8550005	4495	005	First Floor - Bathroom	IA	NA	NA	4/8/2015	cis12Dichloroethene	0.642	0.1422	0.1422	No	NR	0.1	0.5633964	NE	NE	No	No
0033-H	A-0033H-040815-IA-004-BA1	40.748120	-111.8550005	4495	005	First Floor - Bathroom	IA	NA	NA	4/8/2015	Trichloroethene	0.771	0.01018	<0.1	Yes	U	0.1	0.0546666	16	0.48	No	No
0033-H	A-0033H-040815-IA-004-BA1	40.748120	-111.8550005	4495	005	First Floor - Bathroom	IA	NA	NA	4/8/2015	Tetrachloroethene	0.993	0.1566	0.1566	Yes	=	0.1	1.0614348	370	11	No	No
0033-H	A-0033H-040815-IA-003-KIT	40.748120	-111.8550005	4495	004	First Floor - Kitchen	IA	NA	NA	4/8/2015	cis12Dichloroethene	0.627	0.4789	0.4789	No	NR	0.1	1.8974018	NE	NE	No	No
0033-H	A-0033H-040815-IA-003-KIT	40.748120	-111.8550005	4495	004	First Floor - Kitchen	IA	NA	NA	4/8/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0033-H	A-0033H-040815-IA-003-KIT	40.748120	-111.8550005	4495	004	First Floor - Kitchen	IA	NA	NA	4/8/2015	Tetrachloroethene	0.994	0.2149	0.2149	Yes	=	0.1	1.4565922	370	11	No	No
0033-H	A-0033H-040815-IA-002-OCL	40.748120	-111.8550005	4495	003	First Floor - Living/Dining Room	IA	NA	NA	4/8/2015	cis12Dichloroethene	0.686	0.1714	0.1714	No	NR	0.1	0.6790868	NE	NE	No	No
0033-H	A-0033H-040815-IA-002-OCL	40.748120	-111.8550005	4495	003	First Floor - Living/Dining Room	IA	NA	NA	4/8/2015	Trichloroethene	0.91	0.00853	<0.1	Yes	U	0.1	0.0458061	16	0.48	No	No
0033-H	A-0033H-040815-IA-002-OCL	40.748120	-111.8550005	4495	003	First Floor - Living/Dining Room	IA	NA	NA	4/8/2015	Tetrachloroethene	0.994	0.2078	0.2078	Yes	=	0.1	1.4084684	370	11	No	No
0033-H	A-0033H-040815-CCV	40.748120	-111.8550005	4495	029	CCV - 0.55 ppb	CCV	NA	NA	4/8/2015	cis12Dichloroethene	0.999	0.4055	0.4055	Yes	=	0.1	1.606591	NA	NA	NA	NA
0033-H	A-0033H-040815-CCV	40.748120	-111.8550005	4495	029	CCV - 0.55 ppb	CCV	NA	NA	4/8/2015	Trichloroethene	0.995	0.5071	0.5071	Yes	=	0.1	2.723127	NA	NA	NA	NA
0033-H	A-0033H-040815-CCV	40.748120	-111.8550005	4495	029	CCV - 0.55 ppb	CCV	NA	NA	4/8/2015	Tetrachloroethene	0.993	0.4953	0.4953	Yes	=	0.1	3.3571434	NA	NA	NA	NA
0033-H	A-0033H-040815-CCV	40.748120	-111.8550005	4495	001	CCV - 0.55 ppb	CCV	NA	NA	4/8/2015	cis12Dichloroethene	0.986	0.5165	0.5165	Yes	=	0.1	2.046373	NA	NA	NA	NA
0033-H	A-0033H-040815-CCV	40.748120	-111.8550005	4495	001	CCV - 0.55 ppb	CCV	NA	NA	4/8/2015	Trichloroethene	0.912	0.622	0.622	Yes	=	0.1	3.34014	NA	NA	NA	NA
0033-H	A-0033H-040815-CCV	40.748120	-111.8550005	4495	001	CCV - 0.55 ppb	CCV	NA	NA	4/8/2015	Tetrachloroethene	0.994	0.5903	0.5903	Yes	=	0.1	4.0010534	NA	NA	NA	NA
0033-H	A-0033H-040715-CCV	40.748120	-111.8550005	4495	005	CCV - 5.5 ppb	CCV	NA	NA	4/7/2015	cis12Dichloroethene	0.998	4.547	4.547	Yes	=	0.1	18.015214	NA	NA	NA	NA
0033-H	A-0033H-040715-CCV	40.748120	-111.8550005	4495	005	CCV - 5.5 ppb	CCV	NA	NA	4/7/2015	Trichloroethene	0.996	5.003	5.003	Yes	=	0.1	26.86611	NA	NA	NA	NA
0033-H	A-0033H-040715-CCV	40.748120	-111.8550005	4495	005	CCV - 5.5 ppb	CCV	NA	NA	4/7/2015	Tetrachloroethene	0.995	4.812	4.812	Yes	=	0.1	32.615736	NA	NA	NA	NA
0033-H	A-0033H-040715-CCV	40.748120	-111.8550005	4495	004	CCV - 0.55 ppb	CCV	NA	NA	4/7/2015	cis12Dichloroethene	0.985	0.562	0.562	Yes	=	0.1	2.226644	NA	NA	NA	NA
0033-H	A-0033H-040715-CCV	40.748120	-111.8550005	4495	004	CCV - 0.55 ppb	CCV	NA	NA	4/7/2015	Trichloroethene	0.911	0.6567	0.6567	Yes	=	0.1	3.526479	NA	NA	NA	NA
0033-H	A-0033H-040715-CCV	40.748120	-111.8550005	4495	004	CCV - 0.55 ppb	CCV	NA	NA	4/7/2015	Tetrachloroethene	0.995	0.6496	0.6496	Yes	=	0.1	4.4029888	NA	NA	NA	NA
0033-H	A-0033H-040815-IA-016E-CRA	40.748120	-111.8550005	4495	021	Basement - Craft room - in front of bathroom door	NP	-6.1	13:42	4/8/2015	cis12Dichloroethene	0.654	0.04552	<0.1	No	NR	0.1	0.18035024	NE	NE	No	No
0033-H	A-0033H-040815-IA-016E-CRA	40.748120	-111.8550005	4495	021	Basement - Craft room - in front of bathroom door	NP	-6.1	13:42	4/8/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0033-H	A-0033H-040815-IA-016E-CRA	40.748120	-111.8550005	4495	021	Basement - Craft room - in front of bathroom door	NP	-6.1	13:42	4/8/2015	Tetrachloroethene	0.995	0.2596	0.2596	Yes	=	0.1	1.7595688	370	11	No	No
0033-H	A-0033H-040815-IA-016D-CRA	40.748120	-111.8550005	4495	020	Basement - Craft room - in front of bathroom door	NP	-7.7	13:34	4/8/2015	cis12Dichloroethene	0.553	0.0497	<0.1	No	NR	0.1	0.1969114	NE	NE	No	No
0033-H	A-0033H-040815-IA-016D-CRA	40.748120	-111.8550005	4495	020	Basement - Craft room - in front of bathroom door	NP	-7.7	13:34	4/8/2015	Trichloroethene	0.523	0.00654	<0.1	No	NR	0.1	0.0351198	16	0.48	No	No
0033-H	A-0033H-040815-IA-016D-CRA	40.748120	-111.8550005	4495	020	Basement - Craft room - in front of bathroom door	NP	-7.7	13:34	4/8/2015	Tetrachloroethene	0.995	0.2575	0.2575	Yes	=	0.1	1.745335	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0033-H	A-0033H-040815-IA-016C-CRA	40.748120	-111.8550005	4495	019	Basement - Craft room - in front of bathroom door	NP	-5.8	13:26	4/8/2015	cis12Dichloroethene	0.693	0.05375	<0.1	No	NR	0.1	0.2129575	NE	NE	No	No
0033-H	A-0033H-040815-IA-016C-CRA	40.748120	-111.8550005	4495	019	Basement - Craft room - in front of bathroom door	NP	-5.8	13:26	4/8/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0033-H	A-0033H-040815-IA-016C-CRA	40.748120	-111.8550005	4495	019	Basement - Craft room - in front of bathroom door	NP	-5.8	13:26	4/8/2015	Tetrachloroethene	0.994	0.2563	0.2563	Yes	=	0.1	1.7372014	370	11	No	No
0033-H	A-0033H-040815-IA-016B-CRA	40.748120	-111.8550005	4495	018	Basement - Craft room - in front of bathroom door	NP	-6.2	13:18	4/8/2015	cis12Dichloroethene	0.667	0.0581	<0.1	No	NR	0.1	0.2301922	NE	NE	No	No
0033-H	A-0033H-040815-IA-016B-CRA	40.748120	-111.8550005	4495	018	Basement - Craft room - in front of bathroom door	NP	-6.2	13:18	4/8/2015	Trichloroethene	0.988	0.01221	<0.1	Yes	U	0.1	0.0655677	16	0.48	No	No
0033-H	A-0033H-040815-IA-016B-CRA	40.748120	-111.8550005	4495	018	Basement - Craft room - in front of bathroom door	NP	-6.2	13:18	4/8/2015	Tetrachloroethene	0.996	0.2662	0.2662	Yes	=	0.1	1.8043036	370	11	No	No
0033-H	A-0033H-040815-IA-016A-CRA	40.748120	-111.8550005	4495	017	Basement - Craft room - in front of bathroom door	NP	-5.6	13:10	4/8/2015	cis12Dichloroethene	0.729	0.08079	<0.1	Yes	U	0.1	0.32008998	NE	NE	No	No
0033-H	A-0033H-040815-IA-016A-CRA	40.748120	-111.8550005	4495	017	Basement - Craft room - in front of bathroom door	NP	-5.6	13:10	4/8/2015	Trichloroethene	0.991	0.00809	<0.1	Yes	U	0.1	0.0434433	16	0.48	No	No
0033-H	A-0033H-040815-IA-016A-CRA	40.748120	-111.8550005	4495	017	Basement - Craft room - in front of bathroom door	NP	-5.6	13:10	4/8/2015	Tetrachloroethene	0.994	0.3389	0.3389	Yes	=	0.1	2.2970642	370	11	No	No
0033-H	A-0033H-040815-IA-001-OUT	40.748120	-111.8550005	4495	002	Outdoor Ambient - Front Stoop	OA	NA	NA	4/8/2015	cis12Dichloroethene	0.895	0.00834	<0.1	Yes	U	0.1	0.03304308	NE	NE	No	No
0033-H	A-0033H-040815-IA-001-OUT	40.748120	-111.8550005	4495	002	Outdoor Ambient - Front Stoop	OA	NA	NA	4/8/2015	Trichloroethene	0.892	0.01158	<0.1	Yes	U	0.1	0.0621846	16	0.48	No	No
0033-H	A-0033H-040815-IA-001-OUT	40.748120	-111.8550005	4495	002	Outdoor Ambient - Front Stoop	OA	NA	NA	4/8/2015	Tetrachloroethene	0.993	0.01337	<0.1	Yes	U	0.1	0.09062186	370	11	No	No
0033-H	A-0033H-040815-IA-017F-CRA	40.748120	-111.8550005	4495	027	Basement - Craft room - in front of bathroom door	PP	3.5	14:42	4/8/2015	cis12Dichloroethene	0.765	0.01602	<0.1	Yes	U	0.1	0.06347124	NE	NE	No	No
0033-H	A-0033H-040815-IA-017F-CRA	40.748120	-111.8550005	4495	027	Basement - Craft room - in front of bathroom door	PP	3.5	14:42	4/8/2015	Trichloroethene	0.998	0.02171	<0.1	Yes	U	0.1	0.1165827	16	0.48	No	No
0033-H	A-0033H-040815-IA-017F-CRA	40.748120	-111.8550005	4495	027	Basement - Craft room - in front of bathroom door	PP	3.5	14:42	4/8/2015	Tetrachloroethene	0.993	0.04345	<0.1	Yes	U	0.1	0.2945041	370	11	No	No
0033-H	A-0033H-040815-IA-017E-CRA	40.748120	-111.8550005	4495	026	Basement - Craft room - in front of bathroom door	PP	3.3	14:34	4/8/2015	cis12Dichloroethene	0.734	0.01523	<0.1	Yes	U	0.1	0.06034126	NE	NE	No	No
0033-H	A-0033H-040815-IA-017E-CRA	40.748120	-111.8550005	4495	026	Basement - Craft room - in front of bathroom door	PP	3.3	14:34	4/8/2015	Trichloroethene	0.989	0.02115	<0.1	Yes	U	0.1	0.1135755	16	0.48	No	No
0033-H	A-0033H-040815-IA-017E-CRA	40.748120	-111.8550005	4495	026	Basement - Craft room - in front of bathroom door	PP	3.3	14:34	4/8/2015	Tetrachloroethene	0.995	0.04359	<0.1	Yes	U	0.1	0.29545302	370	11	No	No
0033-H	A-0033H-040815-IA-017D-CRA	40.748120	-111.8550005	4495	025	Basement - Craft room - in front of bathroom door	PP	1.4	14:26	4/8/2015	cis12Dichloroethene	0.691	0.01816	<0.1	No	NR	0.1	0.07194992	NE	NE	No	No
0033-H	A-0033H-040815-IA-017D-CRA	40.748120	-111.8550005	4495	025	Basement - Craft room - in front of bathroom door	PP	1.4	14:26	4/8/2015	Trichloroethene	0.839	0.00832	<0.1	Yes	U	0.1	0.0446784	16	0.48	No	No
0033-H	A-0033H-040815-IA-017D-CRA	40.748120	-111.8550005	4495	025	Basement - Craft room - in front of bathroom door	PP	1.4	14:26	4/8/2015	Tetrachloroethene	0.994	0.04993	<0.1	Yes	U	0.1	0.33842554	370	11	No	No
0033-H	A-0033H-040815-IA-017C-CRA	40.748120	-111.8550005	4495	024	Basement - Craft room - in front of bathroom door	PP	1.6	14:17	4/8/2015	cis12Dichloroethene	0.771	0.02338	<0.1	Yes	U	0.1	0.09263156	NE	NE	No	No
0033-H	A-0033H-040815-IA-017C-CRA	40.748120	-111.8550005	4495	024	Basement - Craft room - in front of bathroom door	PP	1.6	14:17	4/8/2015	Trichloroethene	0.966	0.0108	<0.1	Yes	U	0.1	0.057996	16	0.48	No	No
0033-H	A-0033H-040815-IA-017C-CRA	40.748120	-111.8550005	4495	024	Basement - Craft room - in front of bathroom door	PP	1.6	14:17	4/8/2015	Tetrachloroethene	0.994	0.0816	<0.1	Yes	U	0.1	0.5530848	370	11	No	No
0033-H	A-0033H-040815-IA-017B-CRA	40.748120	-111.8550005	4495	023	Basement - Craft room - in front of bathroom door	PP	2.0	14:09	4/8/2015	cis12Dichloroethene	0.712	0.02251	<0.1	Yes	U	0.1	0.08918462	NE	NE	No	No
0033-H	A-0033H-040815-IA-017B-CRA	40.748120	-111.8550005	4495	023	Basement - Craft room - in front of bathroom door	PP	2.0	14:09	4/8/2015	Trichloroethene	0.979	0.01108	<0.1	Yes	U	0.1	0.0594996	16	0.48	No	No
0033-H	A-0033H-040815-IA-017B-CRA	40.748120	-111.8550005	4495	023	Basement - Craft room - in front of bathroom door	PP	2.0	14:09	4/8/2015	Tetrachloroethene	0.994	0.09252	<0.1	Yes	U	0.1	0.62710056	370	11	No	No
0033-H	A-0033H-040815-IA-017A-CRA	40.748120	-111.8550005	4495	022	Basement - Craft room - in front of bathroom door	PP	3.2	14:01	4/8/2015	cis12Dichloroethene	0.786	0.0297	<0.1	Yes	U	0.1	0.1176714	NE	NE	No	No
0033-H	A-0033H-040815-IA-017A-CRA	40.748120	-111.8550005	4495	022	Basement - Craft room - in front of bathroom door	PP	3.2	14:01	4/8/2015	Trichloroethene	0.999	0.01452	<0.1	Yes	U	0.1	0.0779724	16	0.48	No	No
0033-H	A-0033H-040815-IA-017A-CRA	40.748120	-111.8550005	4495	022	Basement - Craft room - in front of bathroom door	PP	3.2	14:01	4/8/2015	Tetrachloroethene	0.995	0.1286	0.1286	Yes	=	0.1	0.8716508	370	11	No	No
0033-H	A-0033H-040815-SG-001-4'	40.748132	-111.855108	4495	028	West side of home - about 3 ft off SW corner of front stoop	SG	NA	NA	4/8/2015	cis12Dichloroethene	0.741	0.07315	<0.1	Yes	U	0.1	0.2898203	NE	NE	No	No
0033-H	A-0033H-040815-SG-001-4'	40.748132	-111.855108	4495	028	West side of home - about 3 ft off SW corner of front stoop	SG	NA	NA	4/8/2015	Trichloroethene	0.896	0.02093	<0.1	Yes	U	0.1	0.1123941	16	0.48	No	No
0033-H	A-0033H-040815-SG-001-4'	40.748132	-111.855108	4495	028	West side of home - about 3 ft off SW corner of front stoop	SG	NA	NA	4/8/2015	Tetrachloroethene	0.993	0.03905	<0.1	Yes	U	0.1	0.2646809	370	11	No	No
0036-H	A-0036H-040315-CCV	40.751067	-111.858721	4423	025	CCV - 0.55 ppb	CCV	NA	NA	4/3/2015	cis12Dichloroethene	0.995	0.5302	0.5302	Yes	=	0.1	2.1006524	NA	NA	NA	NA
0036-H	A-0036H-040315-CCV	40.751067	-111.858721	4423	025	CCV - 0.55 ppb	CCV	NA	NA	4/3/2015	Trichloroethene	0.911	0.5636	0.5636	Yes	=	0.1	3.026532	NA	NA	NA	NA
0036-H	A-0036H-040315-CCV	40.751067	-111.858721	4423	025	CCV - 0.55 ppb	CCV	NA	NA	4/3/2015	Tetrachloroethene	0.994	0.5814	0.5814	Yes	=	0.1	3.9407292	NA	NA	NA	NA
0036-H	A-0036H-040215-CCV	40.751067	-111.858721	4423	037	CCV - 5.5 ppb	CCV	NA	NA	4/2/2015	cis12Dichloroethene	0.996	3.925	3.925	Yes	=	0.1	15.55085	NA	NA	NA	NA
0036-H	A-0036H-040215-CCV	40.751067	-111.858721	4423	037	CCV - 5.5 ppb	CCV	NA	NA	4/2/2015	Trichloroethene	0.98	4.573	4.573	Yes	=	0.1	24.55701	NA	NA	NA	NA
0036-H	A-0036H-040215-CCV	40.751067	-111.858721	4423	037	CCV - 5.5 ppb	CCV	NA	NA	4/2/2015	Tetrachloroethene	0.994	4.469	4.469	Yes	=	0.1	30.290882	NA	NA	NA	NA
0036-H	A-0036H-040215-CCV	40.751067	-111.858721	4423	036	CCV - 0.55 ppb	CCV	NA	NA	4/2/2015	cis12Dichloroethene	0.995	0.3961	0.3961	Yes	=	0.1	1.5693482	NA	NA	NA	NA
0036-H	A-0036H-040215-CCV	40.751067	-111.858721	4423	036	CCV - 0.55 ppb	CCV	NA	NA	4/2/2015	Trichloroethene	0.982	0.4928	0.4928	Yes	=	0.1	2.646336	NA	NA	NA	NA
0036-H	A-0036H-040215-CCV	40.751067	-111.858721	4423	036	CCV - 0.55 ppb	CCV	NA	NA	4/2/2015	Tetrachloroethene	0.995	0.497	0.497	Yes	=	0.1	3.368666	NA	NA	NA	NA
0036-H	A-0036H-040315-IA-008-FUR	40.751067	-111.858721	4423	008	Basement - Furnace Room -at north end	IA	NA	NA	4/3/2015	cis12Dichloroethene	0.753	0.06284	<0.1	Yes	U	0.1	0.24897208	NE	NE	No	No
0036-H	A-0036H-040315-IA-008-FUR	40.751067	-111.858721	4423	008	Basement - Furnace Room -at north end	IA	NA	NA	4/3/2015	Trichloroethene	0.998	0.0125	<0.1	Yes	U	0.1	0.067125	16	0.48	No	No
0036-H	A-0036H-040315-IA-008-FUR	40.751067	-111.858721	4423	008	Basement - Furnace Room -at north end	IA	NA	NA	4/3/2015	Tetrachloroethene	0.993	0.2331	0.2331	Yes	=	0.1	1.5799518	370	11	No	No
0036-H	A-0036H-040315-IA-007-STO	40.751067	-111.858721	4423	007	Basement - Storage Room at south end	IA	NA	NA	4/3/2015	cis12Dichloroethene	0.731	0.07203	<0.1	Yes	U	0.1	0.28538286	NE	NE	No	No
0036-H	A-0036H-040315-IA-007-STO	40.751067	-111.858721	4423	007	Basement - Storage Room at south end	IA	NA	NA	4/3/2015	Trichloroethene	0.911	0.0097	<0.1	Yes	U	0.1	0.052089	16	0.48	No	No
0036-H	A-0036H-040315-IA-007-STO	40.751067	-111.858721	4423	007	Basement - Storage Room at south end	IA	NA	NA	4/3/2015	Tetrachloroethene	0.993	0.4407	0.4407	Yes	=	0.1	2.9870646	370	11	No	No
0036-H	A-0036H-040315-IA-005-MBR	40.751067	-111.858721	4423	005	Main Level - Master Bedroom	IA	NA	NA	4/3/2015	cis12Dichloroethene	0.671	0.1152	0.1152	No	NR	0.1	0.4564224	NE	NE	No	No
0036-H	A-0036H-040315-IA-005-MBR	40.751067	-111.858721	4423	005	Main Level - Master Bedroom	IA	NA	NA	4/3/2015	Trichloroethene	0.91	0.01304	<0.1	Yes	U	0.1	0.0700248	16	0.48	No	No
0036-H	A-0036H-040315-IA-005-MBR	40.751067	-111.858721	4423	005	Main Level - Master Bedroom	IA	NA	NA	4/3/2015	Tetrachloroethene	0.994	0.1532	0.1532	Yes	=	0.1	1.0383896	370	11	No	No
0036-H	A-0036H-040315-IA-004-BR1	40.751067	-111.858721	4423	004	Main Level - Child's bedroom	IA	NA	NA	4/3/2015	cis12Dichloroethene	0.715	0.101	0.101	Yes	=	0.1	0.400162	NE	NE	No	No
0036-H	A-0036H-040315-IA-004-BR1	40.751067	-111.858721	4423	004	Main Level - Child's bedroom	IA	NA	NA	4/3/2015	Trichloroethene	0.952	0.01366	<0.1	Yes	U	0.1	0.0733542	16	0.48	No	No
0036-H	A-0036H-040315-IA-004-BR1	40.751067	-111.858721	4423	004	Main Level - Child's bedroom	IA	NA	NA	4/3/2015	Tetrachloroethene	0.995	0.1366	0.1366	Yes	=	0.1	0.9258748	370	11	No	No
0036-H	A-0036H-040315-IA-003-BA1	40.751067	-111.858721	4423	003	Main Level - Bathroom	IA	NA	NA	4/3/2015	cis12Dichloroethene	0.655	0.7145	0.7145	No	NR	0.1	2.830849	NE	NE	No	No
0036-H	A-0036H-040315-IA-003-BA1	40.751067	-111.858721	4423	003	Main Level - Bathroom	IA	NA	NA	4/3/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0036-H	A-0036H-040315-IA-003-BA1	40.751067	-111.858721	4423	003	Main Level - Bathroom	IA	NA	NA	4/3/2015	Tetrachloroethene	0.994	0.1348	0.1348	Yes	=	0.1	0.9136744	370	11	No	No
0036-H	A-0036H-040315-IA-002-OCL	40.751067	-111.858721	4423	002	Main Level - Open Living-Dining-Kitchen	IA	NA	NA	4/3/2015	cis12Dichloroethene	0.736	0.1165	0.1165	Yes	=	0.1	0.461573	NE	NE	No	No
0036-H	A-0036H-040315-IA-002-OCL	40.751067	-111.858721	4423	002	Main Level - Open Living-Dining-Kitchen	IA	NA	NA	4/3/2015	Trichloroethene	0.985	0.01264	<0.1	Yes	U	0.1	0.0678768	16	0.48	No	No
0036-H	A-0036H-040315-IA-002-OCL	40.751067	-111.858721	4423	002	Main Level - Open Living-Dining-Kitchen	IA	NA	NA	4/3/2015	Tetrachloroethene	0.994	0.1152	0.1152	Yes	=	0.1	0.7808256	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0036-H	A-0036H-040315-IA-009G-FUR	40.751067	-111.858721	4423	015	Basement - Furnace Room -at north end	NP	-5.3	11:39	4/3/2015	cis12Dichloroethene	0.801	0.02994	<0.1	Yes	U	0.1	0.11862228	NE	NE	No	No
0036-H	A-0036H-040315-IA-009G-FUR	40.751067	-111.858721	4423	015	Basement - Furnace Room -at north end	NP	-5.3	11:39	4/3/2015	Trichloroethene	0.891	0.00838	<0.1	Yes	U	0.1	0.0450006	16	0.48	No	No
0036-H	A-0036H-040315-IA-009G-FUR	40.751067	-111.858721	4423	015	Basement - Furnace Room -at north end	NP	-5.3	11:39	4/3/2015	Tetrachloroethene	0.993	0.3027	0.3027	Yes	=	0.1	2.0517006	370	11	No	No
0036-H	A-0036H-040315-IA-009F-FUR	40.751067	-111.858721	4423	014	Basement - Furnace Room -at north end	NP	-5.0	11:31	4/3/2015	cis12Dichloroethene	0.783	0.03999	<0.1	Yes	U	0.1	0.15844038	NE	NE	No	No
0036-H	A-0036H-040315-IA-009F-FUR	40.751067	-111.858721	4423	014	Basement - Furnace Room -at north end	NP	-5.0	11:31	4/3/2015	Trichloroethene	0.901	0.00766	<0.1	Yes	U	0.1	0.0411342	16	0.48	No	No
0036-H	A-0036H-040315-IA-009F-FUR	40.751067	-111.858721	4423	014	Basement - Furnace Room -at north end	NP	-5.0	11:31	4/3/2015	Tetrachloroethene	0.996	0.3107	0.3107	Yes	=	0.1	2.1059246	370	11	No	No
0036-H	A-0036H-040315-IA-009E-FUR	40.751067	-111.858721	4423	013	Basement - Furnace Room -at north end	NP	-4.8	11:23	4/3/2015	cis12Dichloroethene	0.724	0.04112	<0.1	Yes	U	0.1	0.16291744	NE	NE	No	No
0036-H	A-0036H-040315-IA-009E-FUR	40.751067	-111.858721	4423	013	Basement - Furnace Room -at north end	NP	-4.8	11:23	4/3/2015	Trichloroethene	0.9	0.00857	<0.1	Yes	U	0.1	0.0460209	16	0.48	No	No
0036-H	A-0036H-040315-IA-009E-FUR	40.751067	-111.858721	4423	013	Basement - Furnace Room -at north end	NP	-4.8	11:23	4/3/2015	Tetrachloroethene	0.993	0.2174	0.2174	Yes	=	0.1	1.4735372	370	11	No	No
0036-H	A-0036H-040315-IA-009D-FUR	40.751067	-111.858721	4423	012	Basement - Furnace Room -at north end	NP	-5.1	11:15	4/3/2015	cis12Dichloroethene	0.851	0.03753	<0.1	Yes	U	0.1	0.14869386	NE	NE	No	No
0036-H	A-0036H-040315-IA-009D-FUR	40.751067	-111.858721	4423	012	Basement - Furnace Room -at north end	NP	-5.1	11:15	4/3/2015	Trichloroethene	0.523	Area too low	<0.1	No	NR	0.1	Area too low	16	0.48	No	No
0036-H	A-0036H-040315-IA-009D-FUR	40.751067	-111.858721	4423	012	Basement - Furnace Room -at north end	NP	-5.1	11:15	4/3/2015	Tetrachloroethene	0.994	0.2479	0.2479	Yes	=	0.1	1.6802662	370	11	No	No
0036-H	A-0036H-040315-IA-009C-FUR	40.751067	-111.858721	4423	011	Basement - Furnace Room -at north end	NP	-5.5	11:07	4/3/2015	cis12Dichloroethene	0.696	0.04131	<0.1	No	NR	0.1	0.16367022	NE	NE	No	No
0036-H	A-0036H-040315-IA-009C-FUR	40.751067	-111.858721	4423	011	Basement - Furnace Room -at north end	NP	-5.5	11:07	4/3/2015	Trichloroethene	0.911	0.00891	<0.1	Yes	U	0.1	0.0478467	16	0.48	No	No
0036-H	A-0036H-040315-IA-009C-FUR	40.751067	-111.858721	4423	011	Basement - Furnace Room -at north end	NP	-5.5	11:07	4/3/2015	Tetrachloroethene	0.993	0.2791	0.2791	Yes	=	0.1	1.8917398	370	11	No	No
0036-H	A-0036H-040315-IA-009B-FUR	40.751067	-111.858721	4423	010	Basement - Furnace Room -at north end	NP	-5.4	10:59	4/3/2015	cis12Dichloroethene	0.768	0.03959	<0.1	Yes	U	0.1	0.15685558	NE	NE	No	No
0036-H	A-0036H-040315-IA-009B-FUR	40.751067	-111.858721	4423	010	Basement - Furnace Room -at north end	NP	-5.4	10:59	4/3/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0036-H	A-0036H-040315-IA-009B-FUR	40.751067	-111.858721	4423	010	Basement - Furnace Room -at north end	NP	-5.4	10:59	4/3/2015	Tetrachloroethene	0.994	0.3118	0.3118	Yes	=	0.1	2.1133804	370	11	No	No
0036-H	A-0036H-040315-IA-009A-FUR	40.751067	-111.858721	4423	009	Basement - Furnace Room -at north end	NP	-5.1	10:50	4/3/2015	cis12Dichloroethene	0.837	0.03745	<0.1	Yes	U	0.1	0.1483769	NE	NE	No	No
0036-H	A-0036H-040315-IA-009A-FUR	40.751067	-111.858721	4423	009	Basement - Furnace Room -at north end	NP	-5.1	10:50	4/3/2015	Trichloroethene	0.611	0.00433	<0.1	No	NR	0.1	0.0232521	16	0.48	No	No
0036-H	A-0036H-040315-IA-009A-FUR	40.751067	-111.858721	4423	009	Basement - Furnace Room -at north end	NP	-5.1	10:50	4/3/2015	Tetrachloroethene	0.996	0.2063	0.2063	Yes	=	0.1	1.3983014	370	11	No	No
0036-H	A-0036H-040315-IA-001-OUT	40.751067	-111.858721	4423	001	Outdoor Ambient - South side of house at porch	OA	NA	NA	4/3/2015	cis12Dichloroethene	0.941	0.01224	<0.1	Yes	U	0.1	0.04849488	NE	NE	No	No
0036-H	A-0036H-040315-IA-001-OUT	40.751067	-111.858721	4423	001	Outdoor Ambient - South side of house at porch	OA	NA	NA	4/3/2015	Trichloroethene	0.984	0.01171	<0.1	Yes	U	0.1	0.0628827	16	0.48	No	No
0036-H	A-0036H-040315-IA-001-OUT	40.751067	-111.858721	4423	001	Outdoor Ambient - South side of house at porch	OA	NA	NA	4/3/2015	Tetrachloroethene	0.995	0.01608	<0.1	Yes	U	0.1	0.10899024	370	11	No	No
0036-H	A-0036H-040315-IA-010G-FUR	40.751067	-111.858721	4423	022	Basement - Furnace Room -at north end	PP	5.1	12:46	4/3/2015	cis12Dichloroethene	0.869	0.00841	<0.1	Yes	U	0.1	0.03332042	NE	NE	No	No
0036-H	A-0036H-040315-IA-010G-FUR	40.751067	-111.858721	4423	022	Basement - Furnace Room -at north end	PP	5.1	12:46	4/3/2015	Trichloroethene	0.822	0.00651	<0.1	Yes	U	0.1	0.0349587	16	0.48	No	No
0036-H	A-0036H-040315-IA-010G-FUR	40.751067	-111.858721	4423	022	Basement - Furnace Room -at north end	PP	5.1	12:46	4/3/2015	Tetrachloroethene	0.993	0.04612	<0.1	Yes	U	0.1	0.31260136	370	11	No	No
0036-H	A-0036H-040315-IA-010F-FUR	40.751067	-111.858721	4423	021	Basement - Furnace Room -at north end	PP	5.5	12:38	4/3/2015	cis12Dichloroethene	0.826	0.00835	<0.1	Yes	U	0.1	0.0330827	NE	NE	No	No
0036-H	A-0036H-040315-IA-010F-FUR	40.751067	-111.858721	4423	021	Basement - Furnace Room -at north end	PP	5.5	12:38	4/3/2015	Trichloroethene	0.944	0.00677	<0.1	Yes	U	0.1	0.0363549	16	0.48	No	No
0036-H	A-0036H-040315-IA-010F-FUR	40.751067	-111.858721	4423	021	Basement - Furnace Room -at north end	PP	5.5	12:38	4/3/2015	Tetrachloroethene	0.994	0.04964	<0.1	Yes	U	0.1	0.33645992	370	11	No	No
0036-H	A-0036H-040315-IA-010E-FUR	40.751067	-111.858721	4423	020	Basement - Furnace Room -at north end	PP	5.1	12:28	4/3/2015	cis12Dichloroethene	0.756	0.00822	<0.1	Yes	U	0.1	0.03256764	NE	NE	No	No
0036-H	A-0036H-040315-IA-010E-FUR	40.751067	-111.858721	4423	020	Basement - Furnace Room -at north end	PP	5.1	12:28	4/3/2015	Trichloroethene	0.888	0.0069	<0.1	Yes	U	0.1	0.037053	16	0.48	No	No
0036-H	A-0036H-040315-IA-010E-FUR	40.751067	-111.858721	4423	020	Basement - Furnace Room -at north end	PP	5.1	12:28	4/3/2015	Tetrachloroethene	0.994	0.0435	<0.1	Yes	U	0.1	0.294843	370	11	No	No
0036-H	A-0036H-040315-IA-010D-FUR	40.751067	-111.858721	4423	019	Basement - Furnace Room -at north end	PP	4.0	12:20	4/3/2015	cis12Dichloroethene	0.857	0.01036	<0.1	Yes	U	0.1	0.04104632	NE	NE	No	No
0036-H	A-0036H-040315-IA-010D-FUR	40.751067	-111.858721	4423	019	Basement - Furnace Room -at north end	PP	4.0	12:20	4/3/2015	Trichloroethene	0.882	0.00423	<0.1	Yes	U	0.1	0.0227151	16	0.48	No	No
0036-H	A-0036H-040315-IA-010D-FUR	40.751067	-111.858721	4423	019	Basement - Furnace Room -at north end	PP	4.0	12:20	4/3/2015	Tetrachloroethene	0.993	0.07919	<0.1	Yes	U	0.1	0.53674982	370	11	No	No
0036-H	A-0036H-040315-IA-010C-FUR	40.751067	-111.858721	4423	018	Basement - Furnace Room -at north end	PP	4.1	12:10	4/3/2015	cis12Dichloroethene	0.833	0.01214	<0.1	Yes	U	0.1	0.04809868	NE	NE	No	No
0036-H	A-0036H-040315-IA-010C-FUR	40.751067	-111.858721	4423	018	Basement - Furnace Room -at north end	PP	4.1	12:10	4/3/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0036-H	A-0036H-040315-IA-010C-FUR	40.751067	-111.858721	4423	018	Basement - Furnace Room -at north end	PP	4.1	12:10	4/3/2015	Tetrachloroethene	0.994	0.06087	<0.1	Yes	U	0.1	0.41257686	370	11	No	No
0036-H	A-0036H-040315-IA-010B-FUR	40.751067	-111.858721	4423	017	Basement - Furnace Room -at north end	PP	4.9	12:01	4/3/2015	cis12Dichloroethene	0.712	0.01527	<0.1	Yes	U	0.1	0.06049974	NE	NE	No	No
0036-H	A-0036H-040315-IA-010B-FUR	40.751067	-111.858721	4423	017	Basement - Furnace Room -at north end	PP	4.9	12:01	4/3/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0036-H	A-0036H-040315-IA-010B-FUR	40.751067	-111.858721	4423	017	Basement - Furnace Room -at north end	PP	4.9	12:01	4/3/2015	Tetrachloroethene	0.995	0.07332	<0.1	Yes	U	0.1	0.49696296	370	11	No	No
0036-H	A-0036H-040315-IA-010A-FUR	40.751067	-111.858721	4423	016	Basement - Furnace Room -at north end	PP	4.6	11:52	4/3/2015	cis12Dichloroethene	0.843	0.03225	<0.1	Yes	U	0.1	0.1277745	NE	NE	No	No
0036-H	A-0036H-040315-IA-010A-FUR	40.751067	-111.858721	4423	016	Basement - Furnace Room -at north end	PP	4.6	11:52	4/3/2015	Trichloroethene	0.965	0.00621	<0.1	Yes	U	0.1	0.0333477	16	0.48	No	No
0036-H	A-0036H-040315-IA-010A-FUR	40.751067	-111.858721	4423	016	Basement - Furnace Room -at north end	PP	4.6	11:52	4/3/2015	Tetrachloroethene	0.994	0.2879	0.2879	Yes	=	0.1	1.9513862	370	11	No	No
0036-H	A-0036H-040315-SG-001-8'	40.751143	-111.858659	4424	024	At NE corner of home, 18" from foundation wall	SG	NA	NA	4/3/2015	cis12Dichloroethene	0.811	0.03684	<0.1	Yes	U	0.1	0.14596008	NE	NE	No	No
0036-H	A-0036H-040315-SG-001-8'	40.751143	-111.858659	4424	024	At NE corner of home, 18" from foundation wall	SG	NA	NA	4/3/2015	Trichloroethene	0.997	0.3694	0.3694	Yes	=	0.1	1.983678	16	0.48	No	No
0036-H	A-0036H-040315-SG-001-8'	40.751143	-111.858659	4424	024	At NE corner of home, 18" from foundation wall	SG	NA	NA	4/3/2015	Tetrachloroethene	0.995	0.2222	0.2222	Yes	=	0.1	1.5060716	370	11	No	No
0036-H	A-0036H-040315-SG-001-4'	40.751143	-111.858659	4424	023	At NE corner of home, 18" from foundation wall	SG	NA	NA	4/3/2015	cis12Dichloroethene	0.369	0.01863	<0.1	No	NR	0.1	0.07381206	NE	NE	No	No
0036-H	A-0036H-040315-SG-001-4'	40.751143	-111.858659	4424	023	At NE corner of home, 18" from foundation wall	SG	NA	NA	4/3/2015	Trichloroethene	0.995	0.3874	0.3874	Yes	=	0.1	2.080338	16	0.48	No	No
0036-H	A-0036H-040315-SG-001-4'	40.751143	-111.858659	4424	023	At NE corner of home, 18" from foundation wall	SG	NA	NA	4/3/2015	Tetrachloroethene	0.994	0.2523	0.2523	Yes	=	0.1	1.7100894	370	11	No	No
0037-H	A-0037H-040215-CCV	40.749457	-111.857804	4424	037	CCV - 5.5 ppb	CCV	NA	NA	4/2/2015	cis12Dichloroethene	0.996	3.925	3.925	Yes	=	0.1	15.55085	NA	NA	NA	NA
0037-H	A-0037H-040215-CCV	40.749457	-111.857804	4424	037	CCV - 5.5 ppb	CCV	NA	NA	4/2/2015	Trichloroethene	0.98	4.573	4.573	Yes	=	0.1	24.55701	NA	NA	NA	NA
0037-H	A-0037H-040215-CCV	40.749457	-111.857804	4424	037	CCV - 5.5 ppb	CCV	NA	NA	4/2/2015	Tetrachloroethene	0.994	4.469	4.469	Yes	=	0.1	30.290882	NA	NA	NA	NA
0037-H	A-0037H-040215-CCV	40.749457	-111.857804	4424	036	CCV - 0.55 ppb	CCV	NA	NA	4/2/2015	cis12Dichloroethene	0.995	0.3961	0.3961	Yes	=	0.1	1.5693482	NA	NA	NA	NA
0037-H	A-0037H-040215-CCV	40.749457	-111.857804	4424	036	CCV - 0.55 ppb	CCV	NA	NA	4/2/2015	Trichloroethene	0.982	0.4928	0.4928	Yes	=	0.1	2.646336	NA	NA	NA	NA
0037-H	A-0037H-040215-CCV	40.749457	-111.857804	4424	036	CCV - 0.55 ppb	CCV	NA	NA	4/2/2015	Tetrachloroethene	0.995	0.497	0.497	Yes	=	0.1	3.368666	NA	NA	NA	NA
0037-H	A-0037H-040115-CCV	40.749457	-111.857804	4424	020	CCV - 5.5 ppb	CCV	NA	NA	4/1/2015	cis12Dichloroethene	0.988	4.779	4.779	Yes	=	0.1	18.934398	NA	NA	NA	NA
0037-H	A-0037H-040115-CCV	40.749457	-111.857804	4424	020	CCV - 5.5 ppb	CCV	NA	NA	4/1/2015	Trichloroethene	0.977	4.852	4.852	Yes	=	0.1	26.05524	NA	NA	NA	NA
0037-H	A-0037H-040115-CCV	40.749457	-111.857804	4424	020	CCV - 5.5 ppb	CCV	NA	NA	4/1/2015	Tetrachloroethene	0.993	4.863	4.863	Yes	=	0.1	32.961414	NA	NA	NA	NA

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0037-H	A-0037H-040115-CCV	40.749457	-111.857804	4424	019	CCV - 0.55 ppb	CCV	NA	NA	4/1/2015	cis12Dichloroethene	0.997	0.4263	0.4263	Yes	=	0.1	1.6890006	NA	NA	NA	NA
0037-H	A-0037H-040115-CCV	40.749457	-111.857804	4424	019	CCV - 0.55 ppb	CCV	NA	NA	4/1/2015	Trichloroethene	0.927	0.4808	0.4808	Yes	=	0.1	2.581896	NA	NA	NA	NA
0037-H	A-0037H-040115-CCV	40.749457	-111.857804	4424	019	CCV - 0.55 ppb	CCV	NA	NA	4/1/2015	Tetrachloroethene	0.994	0.4604	0.4604	Yes	=	0.1	3.1205912	NA	NA	NA	NA
0037-H	A-0037H-040215-IA-023-MBRA	40.749457	-111.857804	4424	034	Second Floor - Master Bedroom (after positive test)	IA	NA	NA	4/2/2015	cis12Dichloroethene	0.679	0.04495	<0.1	No	NR	0.1	0.1780919	NE	NE	No	No
0037-H	A-0037H-040215-IA-023-MBRA	40.749457	-111.857804	4424	034	Second Floor - Master Bedroom (after positive test)	IA	NA	NA	4/2/2015	Trichloroethene	0.976	0.006	<0.1	Yes	U	0.1	0.03222	16	0.48	No	No
0037-H	A-0037H-040215-IA-023-MBRA	40.749457	-111.857804	4424	034	Second Floor - Master Bedroom (after positive test)	IA	NA	NA	4/2/2015	Tetrachloroethene	0.993	0.123	0.123	Yes	=	0.1	0.833694	370	11	No	No
0037-H	A-0037H-040215-IA-022-BR2A	40.749457	-111.857804	4424	033	Second Floor - Front Bedroom (after positive test)	IA	NA	NA	4/2/2015	cis12Dichloroethene	0.629	0.03613	<0.1	No	NR	0.1	0.14314706	NE	NE	No	No
0037-H	A-0037H-040215-IA-022-BR2A	40.749457	-111.857804	4424	033	Second Floor - Front Bedroom (after positive test)	IA	NA	NA	4/2/2015	Trichloroethene	0.906	0.00587	<0.1	Yes	U	0.1	0.0315219	16	0.48	No	No
0037-H	A-0037H-040215-IA-022-BR2A	40.749457	-111.857804	4424	033	Second Floor - Front Bedroom (after positive test)	IA	NA	NA	4/2/2015	Tetrachloroethene	0.994	0.1045	0.1045	Yes	=	0.1	0.708301	370	11	No	No
0037-H	A-0037H-040215-IA-019-FUR3	40.749457	-111.857804	4424	019	Basement - Analyze at Large Floor Crack in Furnace Room	IA	NA	NA	4/2/2015	cis12Dichloroethene	0.7	0.01917	<0.1	Yes	U	0.1	0.07595154	NE	NE	No	No
0037-H	A-0037H-040215-IA-019-FUR3	40.749457	-111.857804	4424	019	Basement - Analyze at Large Floor Crack in Furnace Room	IA	NA	NA	4/2/2015	Trichloroethene	0.997	0.04326	<0.1	Yes	U	0.1	0.2323062	16	0.48	No	No
0037-H	A-0037H-040215-IA-019-FUR3	40.749457	-111.857804	4424	019	Basement - Analyze at Large Floor Crack in Furnace Room	IA	NA	NA	4/2/2015	Tetrachloroethene	0.994	13.02	13.02	Yes	=	0.1	88.24956	370	11	Yes	NH
0037-H	A-0037H-040215-IA-018-FUR2	40.749457	-111.857804	4424	018	Basement - Analyze at Large Wall Crack in Furnace Room	IA	NA	NA	4/2/2015	cis12Dichloroethene	0.489	0.01869	<0.1	No	NR	0.1	0.07404978	NE	NE	No	No
0037-H	A-0037H-040215-IA-018-FUR2	40.749457	-111.857804	4424	018	Basement - Analyze at Large Wall Crack in Furnace Room	IA	NA	NA	4/2/2015	Trichloroethene	0.989	0.01215	<0.1	Yes	U	0.1	0.0652455	16	0.48	No	No
0037-H	A-0037H-040215-IA-018-FUR2	40.749457	-111.857804	4424	018	Basement - Analyze at Large Wall Crack in Furnace Room	IA	NA	NA	4/2/2015	Tetrachloroethene	0.994	0.4218	0.4218	Yes	=	0.1	2.8589604	370	11	No	No
0037-H	A-0037H-040215-IA-017-FUR1	40.749457	-111.857804	4424	017	Basement - Furnace Room	IA	NA	NA	4/2/2015	cis12Dichloroethene	0.427	0.01183	<0.1	No	NR	0.1	0.04687046	NE	NE	No	No
0037-H	A-0037H-040215-IA-017-FUR1	40.749457	-111.857804	4424	017	Basement - Furnace Room	IA	NA	NA	4/2/2015	Trichloroethene	0.9	0.015	<0.1	Yes	U	0.1	0.08055	16	0.48	No	No
0037-H	A-0037H-040215-IA-017-FUR1	40.749457	-111.857804	4424	017	Basement - Furnace Room	IA	NA	NA	4/2/2015	Tetrachloroethene	0.994	0.9453	0.9453	Yes	=	0.1	6.4072434	370	11	No	No
0037-H	A-0037H-040215-IA-016-PLA	40.749457	-111.857804	4424	016	Basement - Playroom	IA	NA	NA	4/2/2015	cis12Dichloroethene	0.594	0.03332	<0.1	No	NR	0.1	0.13201384	NE	NE	No	No
0037-H	A-0037H-040215-IA-016-PLA	40.749457	-111.857804	4424	016	Basement - Playroom	IA	NA	NA	4/2/2015	Trichloroethene	0.985	0.01332	<0.1	Yes	U	0.1	0.0715284	16	0.48	No	No
0037-H	A-0037H-040215-IA-016-PLA	40.749457	-111.857804	4424	016	Basement - Playroom	IA	NA	NA	4/2/2015	Tetrachloroethene	0.995	0.4496	0.4496	Yes	=	0.1	3.0473888	370	11	No	No
0037-H	A-0037H-040215-IA-015-LAU	40.749457	-111.857804	4424	015	Basement - Laundry Room	IA	NA	NA	4/2/2015	cis12Dichloroethene	0.747	0.03025	<0.1	Yes	U	0.1	0.1198505	NE	NE	No	No
0037-H	A-0037H-040215-IA-015-LAU	40.749457	-111.857804	4424	015	Basement - Laundry Room	IA	NA	NA	4/2/2015	Trichloroethene	0.977	0.01026	<0.1	Yes	U	0.1	0.0550962	16	0.48	No	No
0037-H	A-0037H-040215-IA-015-LAU	40.749457	-111.857804	4424	015	Basement - Laundry Room	IA	NA	NA	4/2/2015	Tetrachloroethene	0.995	0.2788	0.2788	Yes	=	0.1	1.8897064	370	11	No	No
0037-H	A-0037H-040215-IA-014-STO	40.749457	-111.857804	4424	014	Basement - Storage Room leading to Garage	IA	NA	NA	4/2/2015	cis12Dichloroethene	0.792	0.05492	<0.1	Yes	U	0.1	0.21759304	NE	NE	No	No
0037-H	A-0037H-040215-IA-014-STO	40.749457	-111.857804	4424	014	Basement - Storage Room leading to Garage	IA	NA	NA	4/2/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0037-H	A-0037H-040215-IA-014-STO	40.749457	-111.857804	4424	014	Basement - Storage Room leading to Garage	IA	NA	NA	4/2/2015	Tetrachloroethene	0.994	0.3989	0.3989	Yes	=	0.1	2.7037442	370	11	No	No
0037-H	A-0037H-040215-IA-013-CLO3	40.749457	-111.857804	4424	013	Basement - Closet in Basement Bedroom	IA	NA	NA	4/2/2015	cis12Dichloroethene	0.583	0.1315	0.1315	No	NR	0.1	0.521003	NE	NE	No	No
0037-H	A-0037H-040215-IA-013-CLO3	40.749457	-111.857804	4424	013	Basement - Closet in Basement Bedroom	IA	NA	NA	4/2/2015	Trichloroethene	0.857	0.01563	<0.1	Yes	U	0.1	0.0839331	16	0.48	No	No
0037-H	A-0037H-040215-IA-013-CLO3	40.749457	-111.857804	4424	013	Basement - Closet in Basement Bedroom	IA	NA	NA	4/2/2015	Tetrachloroethene	0.995	0.5491	0.5491	Yes	=	0.1	3.7217998	370	11	No	No
0037-H	A-0037H-040215-IA-012-BR3	40.749457	-111.857804	4424	012	Basement - Guest Bedroom	IA	NA	NA	4/2/2015	cis12Dichloroethene	0.488	0.00527	<0.1	No	NR	0.1	0.02087974	NE	NE	No	No
0037-H	A-0037H-040215-IA-012-BR3	40.749457	-111.857804	4424	012	Basement - Guest Bedroom	IA	NA	NA	4/2/2015	Trichloroethene	0.992	0.00619	<0.1	Yes	U	0.1	0.0332403	16	0.48	No	No
0037-H	A-0037H-040215-IA-012-BR3	40.749457	-111.857804	4424	012	Basement - Guest Bedroom	IA	NA	NA	4/2/2015	Tetrachloroethene	0.994	0.5009	0.5009	Yes	=	0.1	3.3951002	370	11	No	No
0037-H	A-0037H-040215-IA-011-BA3	40.749457	-111.857804	4424	011	Basement - Bathroom	IA	NA	NA	4/2/2015	cis12Dichloroethene	0.77	0.05339	<0.1	Yes	U	0.1	0.21153118	NE	NE	No	No
0037-H	A-0037H-040215-IA-011-BA3	40.749457	-111.857804	4424	011	Basement - Bathroom	IA	NA	NA	4/2/2015	Trichloroethene	0.996	0.00875	<0.1	Yes	U	0.1	0.0469875	16	0.48	No	No
0037-H	A-0037H-040215-IA-011-BA3	40.749457	-111.857804	4424	011	Basement - Bathroom	IA	NA	NA	4/2/2015	Tetrachloroethene	0.994	0.5573	0.5573	Yes	=	0.1	3.7737394	370	11	No	No
0037-H	A-0037H-040215-IA-010-CLO2	40.749457	-111.857804	4424	010	Second Floor - Hall Closet	IA	NA	NA	4/2/2015	cis12Dichloroethene	0.718	0.107	0.107	Yes	=	0.1	0.423934	NE	NE	No	No
0037-H	A-0037H-040215-IA-010-CLO2	40.749457	-111.857804	4424	010	Second Floor - Hall Closet	IA	NA	NA	4/2/2015	Trichloroethene	0.997	0.01149	<0.1	Yes	U	0.1	0.0617013	16	0.48	No	No
0037-H	A-0037H-040215-IA-010-CLO2	40.749457	-111.857804	4424	010	Second Floor - Hall Closet	IA	NA	NA	4/2/2015	Tetrachloroethene	0.994	0.6246	0.6246	Yes	=	0.1	4.2335388	370	11	No	No
0037-H	A-0037H-040215-IA-009-BA2	40.749457	-111.857804	4424	009	Second Floor - Hall Bathroom	IA	NA	NA	4/2/2015	cis12Dichloroethene	0.598	0.07497	<0.1	No	NR	0.1	0.29703114	NE	NE	No	No
0037-H	A-0037H-040215-IA-009-BA2	40.749457	-111.857804	4424	009	Second Floor - Hall Bathroom	IA	NA	NA	4/2/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0037-H	A-0037H-040215-IA-009-BA2	40.749457	-111.857804	4424	009	Second Floor - Hall Bathroom	IA	NA	NA	4/2/2015	Tetrachloroethene	0.993	0.9599	0.9599	Yes	=	0.1	6.5062022	370	11	No	No
0037-H	A-0037H-040215-IA-008-CLO1	40.749457	-111.857804	4424	008	Second Floor - Master Bath-Pipechase/Closet	IA	NA	NA	4/2/2015	cis12Dichloroethene	0.519	0.00463	<0.1	No	NR	0.1	0.01834406	NE	NE	No	No
0037-H	A-0037H-040215-IA-008-CLO1	40.749457	-111.857804	4424	008	Second Floor - Master Bath-Pipechase/Closet	IA	NA	NA	4/2/2015	Trichloroethene	0.782	0.00674	<0.1	Yes	U	0.1	0.0361938	16	0.48	No	No
0037-H	A-0037H-040215-IA-008-CLO1	40.749457	-111.857804	4424	008	Second Floor - Master Bath-Pipechase/Closet	IA	NA	NA	4/2/2015	Tetrachloroethene	0.993	0.1855	0.1855	Yes	=	0.1	1.257319	370	11	No	No
0037-H	A-0037H-040215-IA-007-MBR	40.749457	-111.857804	4424	007	Second Floor - Master Bedroom	IA	NA	NA	4/2/2015	cis12Dichloroethene	0.605	0.09219	<0.1	No	NR	0.1	0.36525678	NE	NE	No	No
0037-H	A-0037H-040215-IA-007-MBR	40.749457	-111.857804	4424	007	Second Floor - Master Bedroom	IA	NA	NA	4/2/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0037-H	A-0037H-040215-IA-007-MBR	40.749457	-111.857804	4424	007	Second Floor - Master Bedroom	IA	NA	NA	4/2/2015	Tetrachloroethene	0.996	0.682	0.682	Yes	=	0.1	4.622596	370	11	No	No
0037-H	A-0037H-040215-IA-006-BR2	40.749457	-111.857804	4424	006	Second Floor-Front Bedroom	IA	NA	NA	4/2/2015	cis12Dichloroethene	0.659	0.07167	<0.1	No	NR	0.1	0.28395654	NE	NE	No	No
0037-H	A-0037H-040215-IA-006-BR2	40.749457	-111.857804	4424	006	Second Floor-Front Bedroom	IA	NA	NA	4/2/2015	Trichloroethene	0.995	0.00923	<0.1	Yes	U	0.1	0.0495651	16	0.48	No	No
0037-H	A-0037H-040215-IA-006-BR2	40.749457	-111.857804	4424	006	Second Floor-Front Bedroom	IA	NA	NA	4/2/2015	Tetrachloroethene	0.994	0.9018	0.9018	Yes	=	0.1	6.1124004	370	11	No	No
0037-H	A-0037H-040215-IA-005-BR1	40.749457	-111.857804	4424	005	Second Floor-East Bedroom	IA	NA	NA	4/2/2015	cis12Dichloroethene	0.672	0.04973	<0.1	No	NR	0.1	0.19703026	NE	NE	No	No
0037-H	A-0037H-040215-IA-005-BR1	40.749457	-111.857804	4424	005	Second Floor-East Bedroom	IA	NA	NA	4/2/2015	Trichloroethene	0.912	0.0082	<0.1	Yes	U	0.1	0.044034	16	0.48	No	No
0037-H	A-0037H-040215-IA-005-BR1	40.749457	-111.857804	4424	005	Second Floor-East Bedroom	IA	NA	NA	4/2/2015	Tetrachloroethene	0.993	0.3338	0.3338	Yes	=	0.1	2.2624964	370	11	No	No
0037-H	A-0037H-040215-IA-004-BA1	40.749457	-111.857804	4424	004	First Floor - Bathroom	IA	NA	NA	4/2/2015	cis12Dichloroethene	0.71	0.02442	<0.1	Yes	U	0.1	0.09675204	NE	NE	No	No
0037-H	A-0037H-040215-IA-004-BA1	40.749457	-111.857804	4424	004	First Floor - Bathroom	IA	NA	NA	4/2/2015	Trichloroethene	0.77	0.00499	<0.1	Yes	U	0.1	0.0267963	16	0.48	No	No
0037-H	A-0037H-040215-IA-004-BA1	40.749457	-111.857804	4424	004	First Floor - Bathroom	IA	NA	NA	4/2/2015	Tetrachloroethene	0.996	0.09222	<0.1	Yes	U	0.1	0.62506716	370	11	No	No
0037-H	A-0037H-040215-IA-003-KIT	40.749457	-111.857804	4424	003	First Floor - Kitchen	IA	NA	NA	4/2/2015	cis12Dichloroethene	0.67	0.07494	<0.1	No	NR	0.1	0.29691228	NE	NE	No	No
0037-H	A-0037H-040215-IA-003-KIT	40.749457	-111.857804	4424	003	First Floor - Kitchen	IA	NA	NA	4/2/2015	Trichloroethene	0.673	0.00541	<0.1	No	NR	0.1	0.0290517	16	0.48	No	No
0037-H	A-0037H-040215-IA-003-KIT	40.749457	-111.857804	4424	003	First Floor - Kitchen	IA	NA	NA	4/2/2015	Tetrachloroethene	0.994	0.1713	0.1713	Yes	=	0.1	1.1610714	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0037-H	A-0037H-040215-IA-002-LIV	40.749457	-111.857804	4424	002	First Floor - Living Room	IA	NA	NA	4/2/2015	cis12Dichloroethene	0.814	0.02666	<0.1	Yes	U	0.1	0.10562692	NE	NE	No	No
0037-H	A-0037H-040215-IA-002-LIV	40.749457	-111.857804	4424	002	First Floor - Living Room	IA	NA	NA	4/2/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0037-H	A-0037H-040215-IA-002-LIV	40.749457	-111.857804	4424	002	First Floor - Living Room	IA	NA	NA	4/2/2015	Tetrachloroethene	0.994	0.1221	0.1221	Yes	=	0.1	0.8275938	370	11	No	No
0037-H	A-0037H-040215-IA-020G-LAU	40.749457	-111.857804	4424	026	Basement Laundry Room	NP	-3.5	13:43	4/2/2015	cis12Dichloroethene	0.931	0.02097	<0.1	Yes	U	0.1	0.08308314	NE	NE	No	No
0037-H	A-0037H-040215-IA-020G-LAU	40.749457	-111.857804	4424	026	Basement Laundry Room	NP	-3.5	13:43	4/2/2015	Trichloroethene	0.999	0.03889	<0.1	Yes	U	0.1	0.2088393	16	0.48	No	No
0037-H	A-0037H-040215-IA-020G-LAU	40.749457	-111.857804	4424	026	Basement Laundry Room	NP	-3.5	13:43	4/2/2015	Tetrachloroethene	0.993	1.982	1.982	Yes	=	0.1	13.433996	370	11	Yes	Yes
0037-H	A-0037H-040215-IA-020F-LAU	40.749457	-111.857804	4424	025	Basement Laundry Room	NP	-4.5	13:34	4/2/2015	cis12Dichloroethene	0.969	0.02257	<0.1	Yes	U	0.1	0.08942234	NE	NE	No	No
0037-H	A-0037H-040215-IA-020F-LAU	40.749457	-111.857804	4424	025	Basement Laundry Room	NP	-4.5	13:34	4/2/2015	Trichloroethene	0.998	0.04505	<0.1	Yes	U	0.1	0.2419185	16	0.48	No	No
0037-H	A-0037H-040215-IA-020F-LAU	40.749457	-111.857804	4424	025	Basement Laundry Room	NP	-4.5	13:34	4/2/2015	Tetrachloroethene	0.995	2.179	2.179	Yes	=	0.1	14.769262	370	11	Yes	Yes
0037-H	A-0037H-040215-IA-020E-LAU	40.749457	-111.857804	4424	024	Basement Laundry Room	NP	-3.6	13:26	4/2/2015	cis12Dichloroethene	0.875	0.01743	<0.1	Yes	U	0.1	0.06905766	NE	NE	No	No
0037-H	A-0037H-040215-IA-020E-LAU	40.749457	-111.857804	4424	024	Basement Laundry Room	NP	-3.6	13:26	4/2/2015	Trichloroethene	0.816	0.01624	<0.1	Yes	U	0.1	0.0872088	16	0.48	No	No
0037-H	A-0037H-040215-IA-020E-LAU	40.749457	-111.857804	4424	024	Basement Laundry Room	NP	-3.6	13:26	4/2/2015	Tetrachloroethene	0.993	0.6711	0.6711	Yes	=	0.1	4.5487158	370	11	No	No
0037-H	A-0037H-040215-IA-020D-LAU	40.749457	-111.857804	4424	023	Basement Laundry Room	NP	-4.0	13:18	4/2/2015	cis12Dichloroethene	0.919	0.03009	<0.1	Yes	U	0.1	0.11921658	NE	NE	No	No
0037-H	A-0037H-040215-IA-020D-LAU	40.749457	-111.857804	4424	023	Basement Laundry Room	NP	-4.0	13:18	4/2/2015	Trichloroethene	0.986	0.04704	<0.1	Yes	U	0.1	0.2526048	16	0.48	No	No
0037-H	A-0037H-040215-IA-020D-LAU	40.749457	-111.857804	4424	023	Basement Laundry Room	NP	-4.0	13:18	4/2/2015	Tetrachloroethene	0.994	2.046	2.046	Yes	=	0.1	13.867788	370	11	Yes	Yes
0037-H	A-0037H-040215-IA-020C-LAU	40.749457	-111.857804	4424	022	Basement Laundry Room	NP	-3.3	13:10	4/2/2015	cis12Dichloroethene	0.933	0.02795	<0.1	Yes	U	0.1	0.1107379	NE	NE	No	No
0037-H	A-0037H-040215-IA-020C-LAU	40.749457	-111.857804	4424	022	Basement Laundry Room	NP	-3.3	13:10	4/2/2015	Trichloroethene	0.996	0.03552	<0.1	Yes	U	0.1	0.1907424	16	0.48	No	No
0037-H	A-0037H-040215-IA-020C-LAU	40.749457	-111.857804	4424	022	Basement Laundry Room	NP	-3.3	13:10	4/2/2015	Tetrachloroethene	0.994	2.082	2.082	Yes	=	0.1	14.111796	370	11	Yes	Yes
0037-H	A-0037H-040215-IA-020B-LAU	40.749457	-111.857804	4424	021	Basement Laundry Room	NP	-5.4	13:02	4/2/2015	cis12Dichloroethene	0.908	0.03025	<0.1	Yes	U	0.1	0.1198505	NE	NE	No	No
0037-H	A-0037H-040215-IA-020B-LAU	40.749457	-111.857804	4424	021	Basement Laundry Room	NP	-5.4	13:02	4/2/2015	Trichloroethene	0.993	0.02852	<0.1	Yes	U	0.1	0.1531524	16	0.48	No	No
0037-H	A-0037H-040215-IA-020B-LAU	40.749457	-111.857804	4424	021	Basement Laundry Room	NP	-5.4	13:02	4/2/2015	Tetrachloroethene	0.993	1.839	1.839	Yes	=	0.1	12.464742	370	11	Yes	Yes
0037-H	A-0037H-040215-IA-020A-LAU	40.749457	-111.857804	4424	020	Basement Laundry Room	NP	-3.5	12:53	4/2/2015	cis12Dichloroethene	0.904	0.03635	<0.1	Yes	U	0.1	0.1440187	NE	NE	No	No
0037-H	A-0037H-040215-IA-020A-LAU	40.749457	-111.857804	4424	020	Basement Laundry Room	NP	-3.5	12:53	4/2/2015	Trichloroethene	0.998	0.04269	<0.1	Yes	U	0.1	0.2292453	16	0.48	No	No
0037-H	A-0037H-040215-IA-020A-LAU	40.749457	-111.857804	4424	020	Basement Laundry Room	NP	-3.5	12:53	4/2/2015	Tetrachloroethene	0.995	2.06	2.06	Yes	=	0.1	13.96268	370	11	Yes	Yes
0037-H	A-0037H-040215-IA-001-OUT	40.749457	-111.857804	4424	001	Outdoor Ambient - Front Stoop	OA	NA	NA	4/2/2015	cis12Dichloroethene	0.922	0.00305	<0.1	Yes	U	0.1	0.0120841	NE	NE	No	No
0037-H	A-0037H-040215-IA-001-OUT	40.749457	-111.857804	4424	001	Outdoor Ambient - Front Stoop	OA	NA	NA	4/2/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0037-H	A-0037H-040215-IA-001-OUT	40.749457	-111.857804	4424	001	Outdoor Ambient - Front Stoop	OA	NA	NA	4/2/2015	Tetrachloroethene	0.997	0.00544	<0.1	Yes	U	0.1	0.03687232	370	11	No	No
0037-H	A-0037H-040215-IA-021F-LAU	40.749457	-111.857804	4424	032	Basement Laundry Room	PP	5.7	14:51	4/2/2015	cis12Dichloroethene	0.756	0.01329	<0.1	Yes	U	0.1	0.05265498	NE	NE	No	No
0037-H	A-0037H-040215-IA-021F-LAU	40.749457	-111.857804	4424	032	Basement Laundry Room	PP	5.7	14:51	4/2/2015	Trichloroethene	0.753	0.01062	<0.1	Yes	U	0.1	0.0570294	16	0.48	No	No
0037-H	A-0037H-040215-IA-021F-LAU	40.749457	-111.857804	4424	032	Basement Laundry Room	PP	5.7	14:51	4/2/2015	Tetrachloroethene	0.995	0.1104	0.1104	Yes	=	0.1	0.7482912	370	11	No	No
0037-H	A-0037H-040215-IA-021E-LAU	40.749457	-111.857804	4424	031	Basement Laundry Room	PP	5.1	14:43	4/2/2015	cis12Dichloroethene	0.781	0.01403	<0.1	Yes	U	0.1	0.05558686	NE	NE	No	No
0037-H	A-0037H-040215-IA-021E-LAU	40.749457	-111.857804	4424	031	Basement Laundry Room	PP	5.1	14:43	4/2/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0037-H	A-0037H-040215-IA-021E-LAU	40.749457	-111.857804	4424	031	Basement Laundry Room	PP	5.1	14:43	4/2/2015	Tetrachloroethene	0.993	0.128	0.128	Yes	=	0.1	0.867584	370	11	No	No
0037-H	A-0037H-040215-IA-021D-LAU	40.749457	-111.857804	4424	030	Basement Laundry Room	PP	2.9	14:34	4/2/2015	cis12Dichloroethene	0.743	0.01618	<0.1	Yes	U	0.1	0.06410516	NE	NE	No	No
0037-H	A-0037H-040215-IA-021D-LAU	40.749457	-111.857804	4424	030	Basement Laundry Room	PP	2.9	14:34	4/2/2015	Trichloroethene	0.965	0.00597	<0.1	Yes	U	0.1	0.0320589	16	0.48	No	No
0037-H	A-0037H-040215-IA-021D-LAU	40.749457	-111.857804	4424	030	Basement Laundry Room	PP	2.9	14:34	4/2/2015	Tetrachloroethene	0.993	0.1525	0.1525	Yes	=	0.1	1.033645	370	11	No	No
0037-H	A-0037H-040215-IA-021C-LAU	40.749457	-111.857804	4424	029	Basement Laundry Room	PP	4.6	14:25	4/2/2015	cis12Dichloroethene	0.584	0.01467	<0.1	No	NR	0.1	0.05812254	NE	NE	No	No
0037-H	A-0037H-040215-IA-021C-LAU	40.749457	-111.857804	4424	029	Basement Laundry Room	PP	4.6	14:25	4/2/2015	Trichloroethene	0.996	0.00571	<0.1	Yes	U	0.1	0.0306627	16	0.48	No	No
0037-H	A-0037H-040215-IA-021C-LAU	40.749457	-111.857804	4424	029	Basement Laundry Room	PP	4.6	14:25	4/2/2015	Tetrachloroethene	0.994	0.2064	0.2064	Yes	=	0.1	1.3989792	370	11	No	No
0037-H	A-0037H-040215-IA-021B-LAU	40.749457	-111.857804	4424	028	Basement Laundry Room	PP	4.7	14:17	4/2/2015	cis12Dichloroethene	0.619	0.01984	<0.1	No	NR	0.1	0.07860608	NE	NE	No	No
0037-H	A-0037H-040215-IA-021B-LAU	40.749457	-111.857804	4424	028	Basement Laundry Room	PP	4.7	14:17	4/2/2015	Trichloroethene	0.983	0.00589	<0.1	Yes	U	0.1	0.0316293	16	0.48	No	No
0037-H	A-0037H-040215-IA-021B-LAU	40.749457	-111.857804	4424	028	Basement Laundry Room	PP	4.7	14:17	4/2/2015	Tetrachloroethene	0.994	0.2813	0.2813	Yes	=	0.1	1.9066514	370	11	No	No
0037-H	A-0037H-040215-IA-021A-LAU	40.749457	-111.857804	4424	027	Basement Laundry Room	PP	5.5	14:05	4/2/2015	cis12Dichloroethene	0.829	0.02033	<0.1	Yes	U	0.1	0.08054746	NE	NE	No	No
0037-H	A-0037H-040215-IA-021A-LAU	40.749457	-111.857804	4424	027	Basement Laundry Room	PP	5.5	14:05	4/2/2015	Trichloroethene	0.967	0.01389	<0.1	Yes	U	0.1	0.0745893	16	0.48	No	No
0037-H	A-0037H-040215-IA-021A-LAU	40.749457	-111.857804	4424	027	Basement Laundry Room	PP	5.5	14:05	4/2/2015	Tetrachloroethene	0.995	0.3857	0.3857	Yes	=	0.1	2.6142746	370	11	No	No
0037-H	A-0037H-040215-SG-001-4'	40.749441	-111.857883	4421	035	Soil Gas - at SW corner of house, 12" off foundation	SG	NA	NA	4/2/2015	cis12Dichloroethene	0.653	0.02386	<0.1	No	NR	0.1	0.09453332	NE	NE	No	No
0037-H	A-0037H-040215-SG-001-4'	40.749441	-111.857883	4421	035	Soil Gas - at SW corner of house, 12" off foundation	SG	NA	NA	4/2/2015	Trichloroethene	0	Not Found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0037-H	A-0037H-040215-SG-001-4'	40.749441	-111.857883	4421	035	Soil Gas - at SW corner of house, 12" off foundation	SG	NA	NA	4/2/2015	Tetrachloroethene	0.995	0.3259	0.3259	Yes	=	0.1	2.2089502	370	11	No	No
0038-H	A-0038H-040915-CCV	40.745985	-111.860218	4372	030	CCV - 5.5 ppb	CCV	NA	NA	4/8/2015	cis12Dichloroethene	0.999	3.904	3.904	Yes	=	0.1	15.467648	NA	NA	NA	NA
0038-H	A-0038H-040915-CCV	40.745985	-111.860218	4372	030	CCV - 5.5 ppb	CCV	NA	NA	4/8/2015	Trichloroethene	0.977	5.095	5.095	Yes	=	0.1	27.36015	NA	NA	NA	NA
0038-H	A-0038H-040915-CCV	40.745985	-111.860218	4372	030	CCV - 5.5 ppb	CCV	NA	NA	4/8/2015	Tetrachloroethene	0.993	4.65	4.65	Yes	=	0.1	31.5177	NA	NA	NA	NA
0038-H	A-0038H-040915-CCV	40.745985	-111.860218	4372	028	CCV - 0.55 ppb	CCV	NA	NA	4/8/2015	cis12Dichloroethene	0.998	0.4252	0.4252	Yes	=	0.1	1.6846424	NA	NA	NA	NA
0038-H	A-0038H-040915-CCV	40.745985	-111.860218	4372	028	CCV - 0.55 ppb	CCV	NA	NA	4/8/2015	Trichloroethene	0.912	0.57	0.57	Yes	=	0.1	3.0609	NA	NA	NA	NA
0038-H	A-0038H-040915-CCV	40.745985	-111.860218	4372	028	CCV - 0.55 ppb	CCV	NA	NA	4/8/2015	Tetrachloroethene	0.994	0.5403	0.5403	Yes	=	0.1	3.6621534	NA	NA	NA	NA
0038-H	A-0038H-040815-CCV	40.745985	-111.860218	4372	029	CCV - 0.55 ppb	CCV	NA	NA	4/8/2015	cis12Dichloroethene	0.999	0.4055	0.4055	Yes	=	0.1	1.606591	NA	NA	NA	NA
0038-H	A-0038H-040815-CCV	40.745985	-111.860218	4372	029	CCV - 0.55 ppb	CCV	NA	NA	4/8/2015	Trichloroethene	0.995	0.5071	0.5071	Yes	=	0.1	2.723127	NA	NA	NA	NA
0038-H	A-0038H-040815-CCV	40.745985	-111.860218	4372	029	CCV - 0.55 ppb	CCV	NA	NA	4/8/2015	Tetrachloroethene	0.993	0.4953	0.4953	Yes	=	0.1	3.3571434	NA	NA	NA	NA
0038-H	A-0038H-040915-IA-011-FUR	40.745985	-111.860218	4372	013	Basement - Furnance room	IA	NA	NA	4/9/2015	cis12Dichloroethene	0.645	0.1781	0.1781	No	NR	0.1	0.7056322	NE	NE	No	No
0038-H	A-0038H-040915-IA-011-FUR	40.745985	-111.860218	4372	013	Basement - Furnance room	IA	NA	NA	4/9/2015	Trichloroethene	0.975	0.00911	<0.1	Yes	U	0.1	0.0489207	16	0.48	No	No
0038-H	A-0038H-040915-IA-011-FUR	40.745985	-111.860218	4372	013	Basement - Furnance room	IA	NA	NA	4/9/2015	Tetrachloroethene	0.993	0.01731	<0.1	Yes	U	0.1	0.11732718	370	11	No	No

APPENDIX A - HAPSITE FIELD DATA
AOU-1 VAPOR INTRUSION SCREENING, JANUARY 13 TO APRIL 14, 2015
700 SOUTH 1600 EAST PCE PLUME, SALT LAKE CITY, UTAH

Structure ID	Sample ID	Latitude	Longitude	Elevation	Run Number	Location in Structure	Sample Type	Pressure	Time	Date Sampled	Analyte Name	Fit	Raw Data Concentration - Hapsite file (ppb)	Qualified Concentration (ppb)	Confidence (Fit >70%)	Qualifier Flag	Detection Limit	ug/m^3	Residential Soil Gas SL (ug/m3)	Residential Indoor Air SL (ug/m3)	Exceedance	Concern
0038-H	A-0038H-040915-IA-010-MBR	40.745985	-111.860218	4372	012	Basement - Master bedroom	IA	NA	NA	4/9/2015	cis12Dichloroethene	0.611	0.2599	0.2599	No	NR	0.1	1.0297238	NE	NE	No	No
0038-H	A-0038H-040915-IA-010-MBR	40.745985	-111.860218	4372	012	Basement - Master bedroom	IA	NA	NA	4/9/2015	Trichloroethene	0.998	0.00641	<0.1	Yes	U	0.1	0.0344217	16	0.48	No	No
0038-H	A-0038H-040915-IA-010-MBR	40.745985	-111.860218	4372	012	Basement - Master bedroom	IA	NA	NA	4/9/2015	Tetrachloroethene	0.994	0.01714	<0.1	Yes	U	0.1	0.11617492	370	11	No	No
0038-H	A-0038H-040915-IA-009-FAM	40.745985	-111.860218	4372	011	Basement - Family room	IA	NA	NA	4/9/2015	cis12Dichloroethene	0.675	0.2474	0.2474	No	NR	0.1	0.9801988	NE	NE	No	No
0038-H	A-0038H-040915-IA-009-FAM	40.745985	-111.860218	4372	011	Basement - Family room	IA	NA	NA	4/9/2015	Trichloroethene	0.973	0.01015	<0.1	Yes	U	0.1	0.0545055	16	0.48	No	No
0038-H	A-0038H-040915-IA-009-FAM	40.745985	-111.860218	4372	011	Basement - Family room	IA	NA	NA	4/9/2015	Tetrachloroethene	0.992	0.01534	<0.1	Yes	U	0.1	0.10397452	370	11	No	No
0038-H	A-0038H-040915-IA-008-LAU	40.745985	-111.860218	4372	010	Basement - Laundry closet	IA	NA	NA	4/9/2015	cis12Dichloroethene	0.683	0.1663	0.1663	No	NR	0.1	0.6588806	NE	NE	No	No
0038-H	A-0038H-040915-IA-008-LAU	40.745985	-111.860218	4372	010	Basement - Laundry closet	IA	NA	NA	4/9/2015	Trichloroethene	0.988	0.01222	<0.1	Yes	U	0.1	0.0656214	16	0.48	No	No
0038-H	A-0038H-040915-IA-008-LAU	40.745985	-111.860218	4372	010	Basement - Laundry closet	IA	NA	NA	4/9/2015	Tetrachloroethene	0.995	0.01572	<0.1	Yes	U	0.1	0.10655016	370	11	No	No
0038-H	A-0038H-040915-IA-007-BA2	40.745985	-111.860218	4372	009	Basement - Bathroom	IA	NA	NA	4/9/2015	cis12Dichloroethene	0.646	0.2939	0.2939	No	NR	0.1	1.1644318	NE	NE	No	No
0038-H	A-0038H-040915-IA-007-BA2	40.745985	-111.860218	4372	009	Basement - Bathroom	IA	NA	NA	4/9/2015	Trichloroethene	0.982	0.01259	<0.1	Yes	U	0.1	0.0676083	16	0.48	No	No
0038-H	A-0038H-040915-IA-007-BA2	40.745985	-111.860218	4372	009	Basement - Bathroom	IA	NA	NA	4/9/2015	Tetrachloroethene	0.99	0.01634	<0.1	Yes	U	0.1	0.11075252	370	11	No	No
0038-H	A-0038H-040915-IA-006-BR2	40.745985	-111.860218	4372	008	Main Level - West bedroom	IA	NA	NA	4/9/2015	cis12Dichloroethene	0.631	0.4346	0.4346	No	NR	0.1	1.7218852	NE	NE	No	No
0038-H	A-0038H-040915-IA-006-BR2	40.745985	-111.860218	4372	008	Main Level - West bedroom	IA	NA	NA	4/9/2015	Trichloroethene	0.834	0.00656	<0.1	Yes	U	0.1	0.0352272	16	0.48	No	No
0038-H	A-0038H-040915-IA-006-BR2	40.745985	-111.860218	4372	008	Main Level - West bedroom	IA	NA	NA	4/9/2015	Tetrachloroethene	0.996	0.01829	<0.1	Yes	U	0.1	0.12396962	370	11	No	No
0038-H	A-0038H-040915-IA-005-BA1	40.745985	-111.860218	4372	007	Main Level - Bathroom	IA	NA	NA	4/9/2015	cis12Dichloroethene	0.634	0.4369	0.4369	No	NR	0.1	1.7309978	NE	NE	No	No
0038-H	A-0038H-040915-IA-005-BA1	40.745985	-111.860218	4372	007	Main Level - Bathroom	IA	NA	NA	4/9/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0038-H	A-0038H-040915-IA-005-BA1	40.745985	-111.860218	4372	007	Main Level - Bathroom	IA	NA	NA	4/9/2015	Tetrachloroethene	0.998	0.01852	<0.1	Yes	U	0.1	0.12552856	370	11	No	No
0038-H	A-0038H-040915-IA-004-BR1	40.745985	-111.860218	4372	006	Main Level - East bedroom	IA	NA	NA	4/9/2015	cis12Dichloroethene	0.641	0.4446	0.4446	No	NR	0.1	1.7615052	NE	NE	No	No
0038-H	A-0038H-040915-IA-004-BR1	40.745985	-111.860218	4372	006	Main Level - East bedroom	IA	NA	NA	4/9/2015	Trichloroethene	0.777	0.00873	<0.1	Yes	U	0.1	0.0468801	16	0.48	No	No
0038-H	A-0038H-040915-IA-004-BR1	40.745985	-111.860218	4372	006	Main Level - East bedroom	IA	NA	NA	4/9/2015	Tetrachloroethene	0.995	0.0187	<0.1	Yes	U	0.1	0.1267486	370	11	No	No
0038-H	A-0038H-040915-IA-003-DRF	40.745985	-111.860218	4372	005	Main Level - Dining	IA	NA	NA	4/9/2015	cis12Dichloroethene	0.639	0.4391	0.4391	No	NR	0.1	1.7397142	NE	NE	No	No
0038-H	A-0038H-040915-IA-003-DRF	40.745985	-111.860218	4372	005	Main Level - Dining	IA	NA	NA	4/9/2015	Trichloroethene	0.955	0.00964	<0.1	Yes	U	0.1	0.0517668	16	0.48	No	No
0038-H	A-0038H-040915-IA-003-DRF	40.745985	-111.860218	4372	005	Main Level - Dining	IA	NA	NA	4/9/2015	Tetrachloroethene	0.993	0.01827	<0.1	Yes	U	0.1	0.12383406	370	11	No	No
0038-H	A-0038H-040915-IA-002-OCL	40.745985	-111.860218	4372	004	Main Level - Open Sitting - Living	IA	NA	NA	4/9/2015	cis12Dichloroethene	0.628	0.4552	0.4552	No	NR	0.1	1.8035024	NE	NE	No	No
0038-H	A-0038H-040915-IA-002-OCL	40.745985	-111.860218	4372	004	Main Level - Open Sitting - Living	IA	NA	NA	4/9/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0038-H	A-0038H-040915-IA-002-OCL	40.745985	-111.860218	4372	004	Main Level - Open Sitting - Living	IA	NA	NA	4/9/2015	Tetrachloroethene	0.993	0.01809	<0.1	Yes	U	0.1	0.12261402	370	11	No	No
0038-H	A-0038H-040915-IA-001-OUT	40.745985	-111.860218	4372	003	Outdoor Ambient - South side of house on porch	OA	NA	NA	4/9/2015	cis12Dichloroethene	0.991	0.01189	<0.1	Yes	U	0.1	0.04710818	NE	NE	No	No
0038-H	A-0038H-040915-IA-001-OUT	40.745985	-111.860218	4372	003	Outdoor Ambient - South side of house on porch	OA	NA	NA	4/9/2015	Trichloroethene	0.951	0.01585	<0.1	Yes	U	0.1	0.0851145	16	0.48	No	No
0038-H	A-0038H-040915-IA-001-OUT	40.745985	-111.860218	4372	003	Outdoor Ambient - South side of house on porch	OA	NA	NA	4/9/2015	Tetrachloroethene	0.994	0.01762	<0.1	Yes	U	0.1	0.11942836	370	11	No	No
0038-H	A-0038H-040915-IA-012G-FAM	40.745985	-111.860218	4372	020	Basement - Family room	NP	-4.7	13:03	4/9/2015	cis12Dichloroethene	0.711	0.05466	<0.1	Yes	U	0.1	0.21656292	NE	NE	No	No
0038-H	A-0038H-040915-IA-012G-FAM	40.745985	-111.860218	4372	020	Basement - Family room	NP	-4.7	13:03	4/9/2015	Trichloroethene	0.93	0.00937	<0.1	Yes	U	0.1	0.0503169	16	0.48	No	No
0038-H	A-0038H-040915-IA-012G-FAM	40.745985	-111.860218	4372	020	Basement - Family room	NP	-4.7	13:03	4/9/2015	Tetrachloroethene	0.993	0.01697	<0.1	Yes	U	0.1	0.11502266	370	11	No	No
0038-H	A-0038H-040915-IA-012F-FAM	40.745985	-111.860218	4372	019	Basement - Family room	NP	-5.6	12:54	4/9/2015	cis12Dichloroethene	0.68	0.0647	<0.1	No	NR	0.1	0.2563414	NE	NE	No	No
0038-H	A-0038H-040915-IA-012F-FAM	40.745985	-111.860218	4372	019	Basement - Family room	NP	-5.6	12:54	4/9/2015	Trichloroethene	0.912	Area too low	<0.1	Yes	U	0.1	Area too low	16	0.48	No	No
0038-H	A-0038H-040915-IA-012F-FAM	40.745985	-111.860218	4372	019	Basement - Family room	NP	-5.6	12:54	4/9/2015	Tetrachloroethene	0.996	0.01578	<0.1	Yes	U	0.1	0.10695684	370	11	No	No
0038-H	A-0038H-040915-IA-012E-FAM	40.745985	-111.860218	4372	018	Basement - Family room	NP	-5.1	12:45	4/9/2015	cis12Dichloroethene	0.677	0.06871	<0.1	No	NR	0.1	0.27222902	NE	NE	No	No
0038-H	A-0038H-040915-IA-012E-FAM	40.745985	-111.860218	4372	018	Basement - Family room	NP	-5.1	12:45	4/9/2015	Trichloroethene	0.639	0.0048	<0.1	No	NR	0.1	0.025776	16	0.48	No	No
0038-H	A-0038H-040915-IA-012E-FAM	40.745985	-111.860218	4372	018	Basement - Family room	NP	-5.1	12:45	4/9/2015	Tetrachloroethene	0.993	0.01616	<0.1	Yes	U	0.1	0.10953248	370	11	No	No
0038-H	A-0038H-040915-IA-012D-FAM	40.745985	-111.860218	4372	017	Basement - Family room	NP	-5.4	12:37	4/9/2015	cis12Dichloroethene	0.561	0.07804	<0.1	No	NR	0.1	0.30919448	NE	NE	No	No
0038-H	A-0038H-040915-IA-012D-FAM	40.745985	-111.860218	4372	017	Basement - Family room	NP	-5.4	12:37	4/9/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0038-H	A-0038H-040915-IA-012D-FAM	40.745985	-111.860218	4372	017	Basement - Family room	NP	-5.4	12:37	4/9/2015	Tetrachloroethene	0.994	0.01543	<0.1	Yes	U	0.1	0.10458454	370	11	No	No
0038-H	A-0038H-040915-IA-012C-FAM	40.745985	-111.860218	4372	016	Basement - Family room	NP	-6.4	12:29	4/9/2015	cis12Dichloroethene	0.617	0.09146	<0.1	No	NR	0.1	0.36236452	NE	NE	No	No
0038-H	A-0038H-040915-IA-012C-FAM	40.745985	-111.860218	4372	016	Basement - Family room	NP	-6.4	12:29	4/9/2015	Trichloroethene	0.912	0.00993	<0.1	Yes	U	0.1	0.0533241	16	0.48	No	No
0038-H	A-0038H-040915-IA-012C-FAM	40.745985	-111.860218	4372	016	Basement - Family room	NP	-6.4	12:29	4/9/2015	Tetrachloroethene	0.993	0.01551	<0.1	Yes	U	0.1	0.10512678	370	11	No	No
0038-H	A-0038H-040915-IA-012B-FAM	40.745985	-111.860218	4372	015	Basement - Family room	NP	-5.6	12:20	4/9/2015	cis12Dichloroethene	0.63	0.09005	<0.1	No	NR	0.1	0.3567781	NE	NE	No	No
0038-H	A-0038H-040915-IA-012B-FAM	40.745985	-111.860218	4372	015	Basement - Family room	NP	-5.6	12:20	4/9/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0038-H	A-0038H-040915-IA-012B-FAM	40.745985	-111.860218	4372	015	Basement - Family room	NP	-5.6	12:20	4/9/2015	Tetrachloroethene	0.998	0.01672	<0.1	Yes	U	0.1	0.11332816	370	11	No	No
0038-H	A-0038H-040915-IA-012A-FAM	40.745985	-111.860218	4372	014	Basement - Family room	NP	-3.9	12:12	4/9/2015	cis12Dichloroethene	0.683	0.117	0.117	No	NR	0.1	0.463554	NE	NE	No	No
0038-H	A-0038H-040915-IA-012A-FAM	40.745985	-111.860218	4372	014	Basement - Family room	NP	-3.9	12:12	4/9/2015	Trichloroethene	0.961	0.00617	<0.1	Yes	U	0.1	0.0331329	16	0.48	No	No
0038-H	A-0038H-040915-IA-012A-FAM	40.745985	-111.860218	4372	014	Basement - Family room	NP	-3.9	12:12	4/9/2015	Tetrachloroethene	0.998	0.01592	<0.1	Yes	U	0.1	0.10790576	370	11	No	No
0038-H	A-0038H-040915-IA-013G-FAM	40.745985	-111.860218	4372	027	Basement - Family room	PP	6.4	14:18	4/9/2015	cis12Dichloroethene	0.821	0.01643	<0.1	Yes	U	0.1	0.06509566	NE	NE	No	No
0038-H	A-0038H-040915-IA-013G-FAM	40.745985	-111.860218	4372	027	Basement - Family room	PP	6.4	14:18	4/9/2015	Trichloroethene	0.986	0.02256	<0.1	Yes	U	0.1	0.1211472	16	0.48	No	No
0038-H	A-0038H-040915-IA-013G-FAM	40.745985	-111.860218	4372	027	Basement - Family room	PP	6.4	14:18	4/9/2015	Tetrachloroethene	0.996	0.01572	<0.1	Yes	U	0.1	0.10655016	370	11	No	No
0038-H	A-0038H-040915-IA-013F-FAM	40.745985	-111.860218	4372	026	Basement - Family room	PP	6.3	14:10	4/9/2015	cis12Dichloroethene	0.665	0.02709	<0.1	No	NR	0.1	0.10733058	NE	NE	No	No
0038-H	A-0038H-040915-IA-013F-FAM	40.745985	-111.860218	4372	026	Basement - Family room	PP	6.3	14:10	4/9/2015	Trichloroethene	0	Not found	<0.1	Yes	U	0.1	Not found	16	0.48	No	No
0038-H	A-0038H-040915-IA-013F-FAM	40.745985	-111.860218	4372	026	Basement - Family room	PP	6.3	14:10	4/9/2015	Tetrachloroethene	0.998	0.01702	<0.1	Yes	U	0.1	0.11536156	370	11	No	No
0038-H	A-0038H-040915-IA-013E-FAM	40.745985	-111.860218	4372	025	Basement - Family room	PP	5.2	13:59	4/9/2015	cis12Dichloroethene	0.748	0.01586	<0.1	Yes	U	0.1	0.06283732	NE	NE	No	No
0038-H	A-0038H-040915-IA-013E-FAM	40.745985	-111.860218	4372	025	Basement - Family room	PP	5.2	13:59	4/9/2015	Trichloroethene	0.991	0.01318	<0.1	Yes	U	0.1	0.0707766	16	0.48	No	No
0038-H	A-0038H-040915-IA-013E-FAM	40.745985	-111.860218	4372	025	Basement - Family room	PP	5.2	13:59	4/9/2015	Tetrachloroethene	0.994	0.01658	<0.1	Yes	U	0.1	0.11237924	370	11	No	No
0038-H	A-0038H-040915-IA-013D-FAM	40.745985	-111.860218	4372	024	Basement - Family room	PP	5.4	13:51	4/9/2015	cis12Dichloroethene	0.852	0.02169	<0.1	Yes	U	0.1	0.08593578	NE	NE	No	No
0038-H	A-0038H-040915-IA-013D-FAM	40.745985	-111.860218	4372	024	Basement - Family room	PP	5.4	13:51	4/9/2015	Trichloroethene	0.969	0.01354	<0.1	Yes	U	0.1	0.0727098	16	0.48	No	No
0038-H	A-0038H-040915-IA-013D-FAM	40.745985	-111.860218	4372	024	Basement - Family room	PP	5.4	13:51	4/9/2015	Tetrachloroethene	0.996	0.01639	<0.1	Yes	U	0.1	0.11109142	370	11	No	No
0038-H	A-0038H-040915-IA-013C-FAM	40.745985	-111.860218	4372	023	Basement - Family room	PP	4.1	13:43	4/9/2015	cis12Dichloroethene	0.699	0.02488	<0.1	No	NR	0.1	0.09857456	NE	NE	No	No
0038-H	A-0038H-040915-IA-013C-FAM	40.745985	-111.860218	4372	023	Basement - Family room	PP	4.1	13:43	4/9/2015	Trichloroethene	0.936	0.01697	<0.1	Yes	U	0.1	0.0911289	16	0.48	No	No
0038-H	A-0038H-040915-IA-013C-FAM	40.745985	-111.860218	4372	023	Basement - Family room	PP	4.1	13:43	4/9/2015	Tetrachloroethene	0.992	0.01589	<0.1	Yes	U	0.1	0.10770242	370	11	No	No
0038-H	A-0038H-040915-IA-013B-FAM	40.745985	-111.860218	4372	022	Basement - Family room	PP	3.7	13:35	4/9/2015	cis12Dichloroethene	0.794	0.03022	<0.1	Yes	U	0.1	0.11973164	NE	NE	No	No
0038-H	A-0038H-040915-IA-013B-FAM	40.745985	-111.860218	4372	022	Basement - Family room	PP	3.7	13:35	4/9/2015	Trichloroethene	0.971	0.01323	<0.1	Yes	U	0.1	0.0710451	16	0.48	No	No
0038-H	A-0038H-040915-IA-013B-FAM	40.745985	-111.860218	4372	022	Basement - Family room	PP	3.7	13:35	4/9/2015	Tetrachloroethene	0.997	0.01656	<0.1	Yes	U	0.1	0.11224368	370	11	No	No
0038-H	A-0038H-040915-IA-013A-FAM	40.745985	-111.860218	4372	021	Basement - Family room	PP	0.8	13:22	4/9/2015	cis12Dichloroethene	0.654	0.03692	<0.1	No	NR	0.1	0.14627704	NE	NE	No	No
0038-H	A-0038H-040915-IA-013A-FAM	40.745985	-111.860218	4372	021	Basement - Family room	PP	0.8	13:22	4/9/2015	Trichloroethene	0.936	0.00343	<0.1	Yes	U	0.1	0.0184191	16	0.48	No	No
0038-H	A-0038H-040915-IA-013A-FAM	40.745985	-111.860218	4372	021	Basement - Family room	PP	0.8	13:22	4/9/2015	Tetrachloroethene	0.994	0.01918	<0.1	Yes	U	0.1	0.13000204	370	11	No	No

APPENDIX

(39) AOUB VI 0001-H E/ Collin Rw 1/27/15

Left office - 0730 - Weather - 30's
At Sunnyside Park - 0805 rising to 50's
Lat - 40.45.0622 Lt Breeze (W-Mid
Long - 111.51.3316 - Mostly Cloudy
0840 - at 0001-H Elev - 4405 Cat
ERR/ER w/ Mark Aguilar, + Weston 11th S double
0900-1200 - Indoor Ambient
1200-1230 - Lunch
1230 - 1530 - Negative Pressure testing
1530 - 1630 Positive Pressure testing

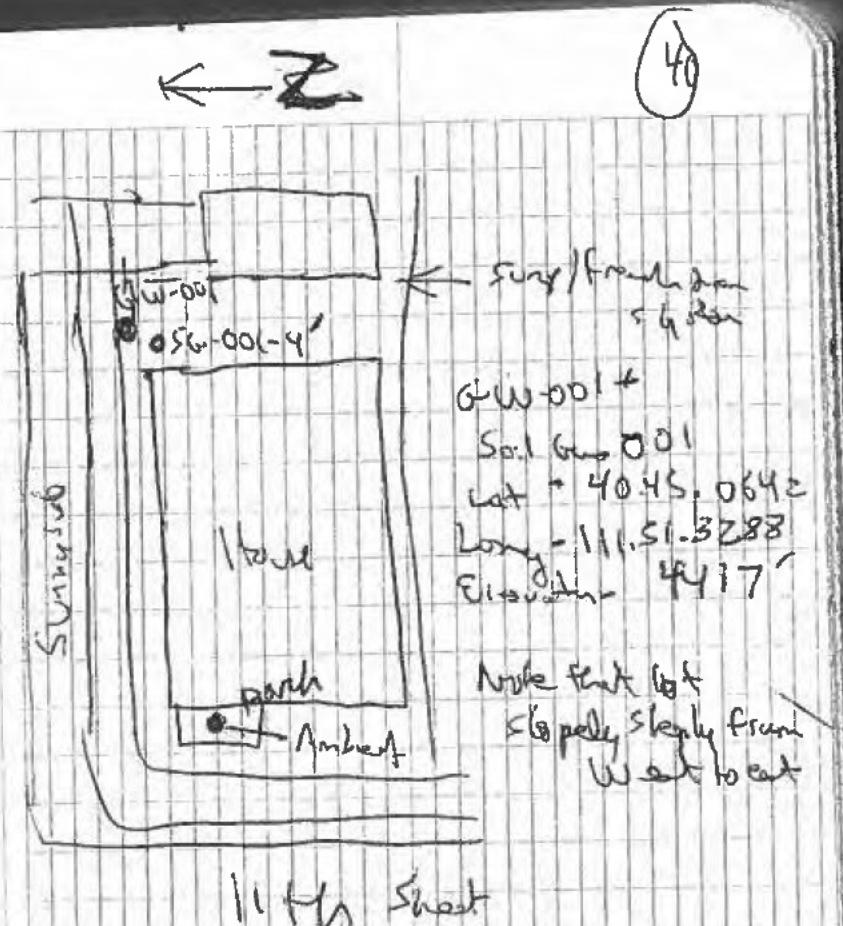
0001-H-SG-001-4' 5' Fan
back (east wall) - in island -
Soil v. soft, Vacuum - 5' Hg
quickly (5-6 sec) to zero
Collected sampled 1655

GW-001 - Sump Pit for French
drain at NE corner of house
WL - 5.0' BLS - Total depth 5.8'
collected sample at - 1630

Sump in basement = Sealed / inaccessible
pumps to pit in yard

Left house - 1715
Back to office - 1815 E/ [illegible]

(40)



GW-001 +
Soil Gas 001
Lat + 40.45.0642
Long - 111.51.3288
Elevation - 4417'

Note that lot slopes slightly from West to east

Calibrated Horiba - U53 - @ 1600 w/ Autocal solution

GW-001 - Field Parameters

pH	- 6.27
Temp	- 14.05
DO	- 9.4
SC	- 1300
ORP	- 274+
Turb	1.3

WR

40A

Addendum
0001-H

4/29/15

Instrument - Hapsite ER
Operator - Ellen Reid

Sample Tally -

1	- Outdoor Ambient
11	- Indoor Ambient
19	- Neg/Positive Pressure
1	- Soil Gas
32	- TOTAL

Also collected water sample (GW-001) from french drain sump on east side of house.

Sump in basement - sealed & not accessible

END OF

40B

END OF

(83)

AOV-VI
0002-H-Sunnyside Ave

Ed Reid

2/24/15

Onsite - 0830
H&S Mtg - 0840
Lat - 40.750673
Elev: [illegible] ft msl
ERR [illegible] → 4439

Weather Cold 80's
LH Breeze, Sunny
Long - 111.858081

Installed Soil Gas Probe
On West side of house Near SW corners.

0002H-SG-001 - 4' - soft clay 1030 hrs
8' - silt/clay, soft - 1040

Lat: 40.750617 Long - 111.858142
Elev: 4436

Collected GW-001
Backyard at East side Fresh dam

pH - 7.17
DO = 8.01
SC = 1360
Temp = 10.35
ORP = 197 +

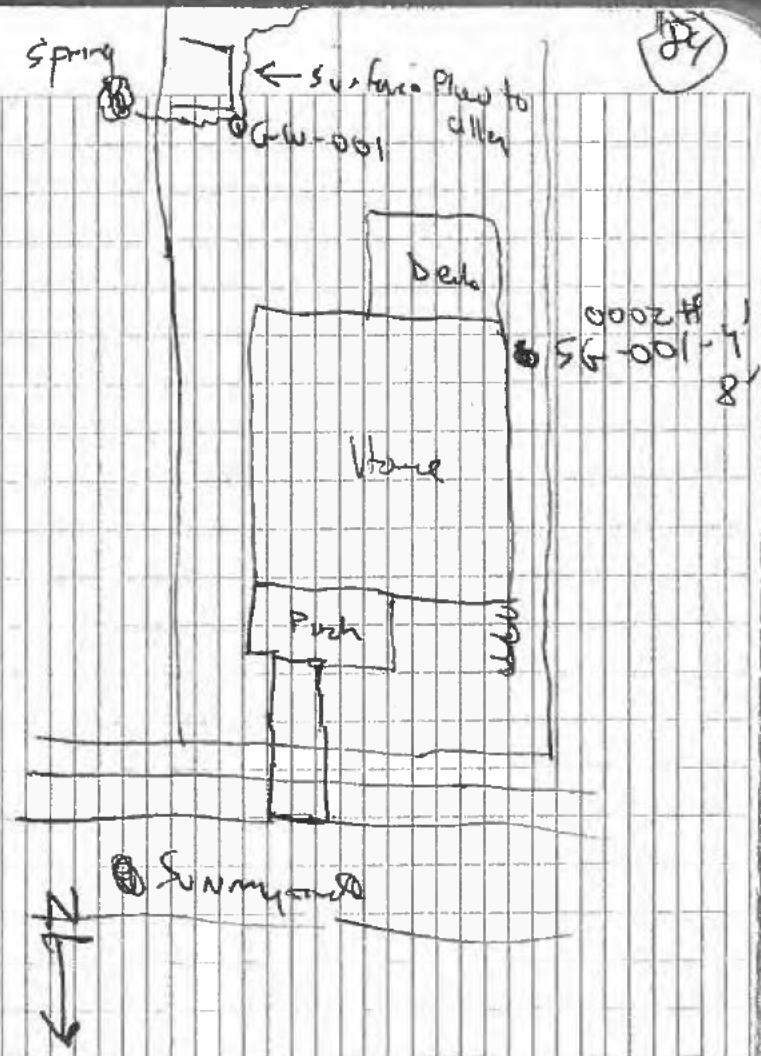
Lat - 40.750559
Long - 111.858009
Elev - 4435

House across street w/ red door has large sewer in backyard + drain sump in yard

Finished Home - 1400 hrs

[signature]

(84)



← ERR/CH/AC Run contact indoor, surface + Neg/pos. pressure

[signature]

84A

Addendum
0002-H

5/11/15

Instrument - Hapsite SmartPlus
Operator - Ellen Reid ~~[illegible]~~

Sample Totals -

1	- Outdoor Ambient
9	- Indoor Ambient
16	- Neg/Positive Pressure
2	- Soil Vapor (4'+8')
28 -	TOTAL

Also collected 1 Groundwater sample at Seep in background for full parameters.
(calibrated Hydrolab U-53 at 1000 w/ autocal solution.
Decon'd soil probes and GW equipment per SOPs

Ellen Reid

84B

Ellen Reid

(23) 003-H
AOU-1 VI 1/19/15

Met at Sunnyside Park - 0810 - H+S Mtg @ 0815
Weather - Mostly cloudy, 40's, calm
Met homeowner at 0830 - Gilmer Street

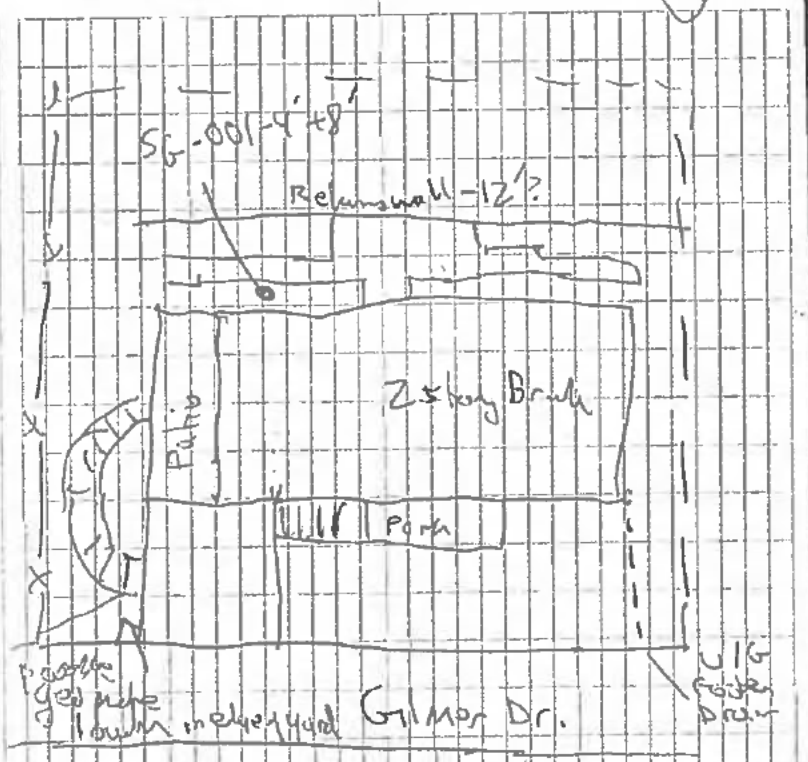
*House built into deep hillside. Front is two story w/ drive under gage ~~[illegible]~~ and front daylight basement
Back - 2nd story is on grade

- Footer French drain, reportedly wrap around back and side of house, discharges to underground vault & then to storm sewer in street. NO visible components - No apparent drainage

- Placed Soil Gas port 0003-H-SG-001 4' + 8' behind house
4' - applied 10" Hg vacuum + held for 60 seconds, slowly bleed off - Could not pull vacuum sample - tight, dark clay soil (plastic)
Drove probe to 8' - hit pebbly, rocky material at 7' - Probe did not hold vacuum - collected sample SG-001-8' at - 1100

E/R

(24)



← SG Elevation is ≈ 12' higher than street

Center of Residence = Lat - 40.44.5369
Long - 111.51.2143
Elevation at Street - 4447 ft MSL
SG-001 - Lat - 40.44.5364
Long - 111.51.2121
Elevation - 4459.0

E/R

(23) 003H. (Cont) 1/19/15

Team 1 - ERR, DEG, Chris -
Conducted ambient indoor,
ambient outdoor + survey modes
8:30 - 1300
Set up blower door and started Negative
pressure at 1430
Finished 1540
Switched out fan to run positive test
Ran positive pressure test
Finished 1640
Pickup restated furnaces
Left - 1700

(26)

Decon'd Soil Gas Probes at office
Way three step wash rinse - alcohol
Ran SAP SOP

← Homeowner called 1900 - heat in
basement not working - ERR/JR
returned to house @ 1940 and
checked system → Thermostat switch
was jammed w/ spider web - removed
and started right up!

copy

(26A) Addendum ~~T/14~~ 0003-H 4/29/15

VI Field Testing - 1/19/15
Instrument = Hayesite Smart PNUS 8860
Operator - Ellen Reid + Aaron Cantrell

Sample Tally -
1 - Outdoor Ambient
15 - Indoor Ambient
10 - Negative / Positive Pressure
1 - Soil Gas (attempted 4+8', only collected 8')
27 TOTAL

Ambient sample from living room had anomalous TCE just above RSL, although this concentration was an outlier + likely an indoor source material. ~~X~~ Summa samples were collected from the residence - 4/8/15
1 - Main Level Living/Dining Room
1 - Basement Level - Living - Kit - dining
1 - Duplicate of Basement Sample
3 Total

Also re-installed + collected a Summa for Soil Gas - 4/8/15 - 1 - for 8'
Decon'd soil probes per SOP in SAP

Ellen Reid
4-29-15

(26B)

Ellen Reid 4-29-15

(7) H00-1-VI 0004-H 1/13/15

Left W. Jordan - 0730 Weather - 35°,
at Sunny Side Park - 0815 Cloudy, damp, calm

Held H+S tailgate mtg - 0820
Then mobilized to 7th Street
(0004H) - Duplex
Met w/ owner + set up Hapsite
(calibrated at 6 am 1/13/15)

Checked rear location for soil gas probe
- can locate 3' off back center of house

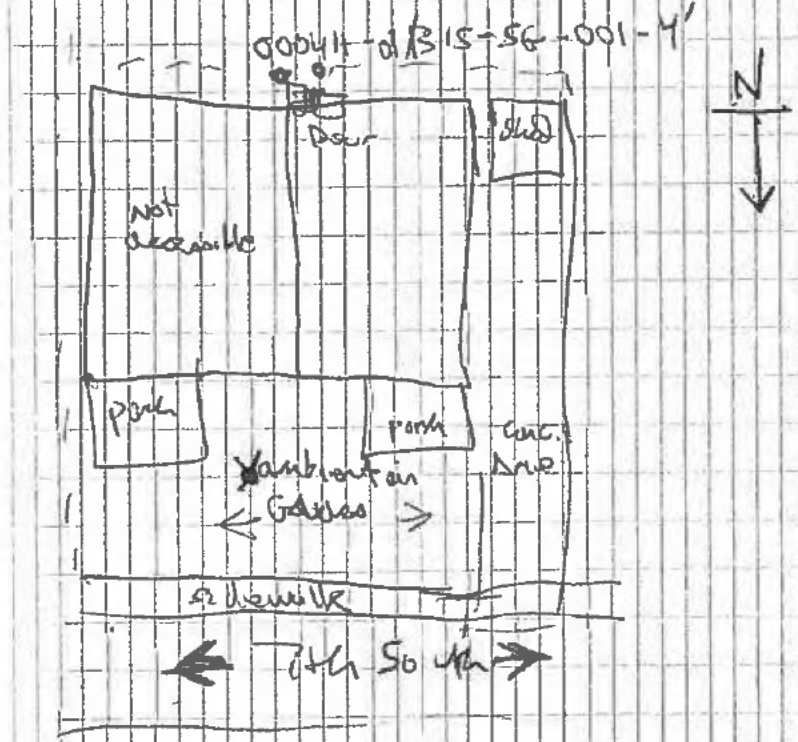
Started ambient survey + analysis
by 0930
Finished 1130
Set up ~~[illegible]~~ on door in back
door and stated air door at 1220
630 cfm @ 5 pascal -
Switched to positive pressure and
ran Hapsite again

Drove soil gas at center rear of
house - to 4' collected SG-001
at 1520 @ 1 lpm, no vacuum
pulled dry test

EM

(8)

center of rear
Elev - 4487.0
Lat. 40°45.1398 Long - 111°51.2772



← purged lines, emptied by,
pulled one liter - tested w/
Mini rae 3000 - 0.3 ppm vac
pulled one liter for sample

EM

(9) 0004-H
AOU-1-VI 1/13/15 (Cont)

0004H (Cont)
Drove Probe to 7' - Collected
0004H-SG-002 - 7' at 1620
1 lpm flow, 2" ltg for 3 sec
MiniRAE Ready = 0.3ppm
EJR ~~Hapsite [illegible] + end of day~~ EJR 1/15
Moved Hapsite outdoors - Rain
B.G. ambient location at ~~[illegible]~~ NW
corner of house on sidewalk

Removed AirDoor, removed equipment from house, removed soil gas probe + decontaminated equipment w/ Three part wash rinse.

Left site 1710

EJR

(10)

← Refused on rock (boulder?)
← Later determined that Tedlar bag was previously used - may have affected samples

← Wind coming from W-NW - very light

SG-001 - 4', 7' > Elev - 4486'
Lat. 40°45.1374
Long - 111°51.2760

EJR

(10A) - Addendum - Site 0004-H 4/28/15

VI Field Testing conducted 01/13/15 -
Instrument - Hapsite Smart #us#1774
Operator - Aaron Cantrell
Sample Totals for Site:

9	- Indoor Ambient
1	- Outdoor Ambient
19	- Negative/Positive Pressure test
2	- Soil Gas
31	TOTAL

4/28/15

4/28/15

(153) 6135 1200E AOU-1 VI Ed Reid

0005-H 4/10/15

Met at Sunnyside Park - 0820 | Weather - Sunny

H+S Mtg - 0830 - No PPB | Calm, Mild 40°-60°

Required

Proceeded to site 0840 w/ VA rep Brian Speer.

ERR/JC setup for ambient testing

ran ambient in am. - Finished - 1200

Instrument - Hapsite Smart Plus Operator = Ellen Reid

EJR/DED installed Soil Gas Probe in front yard

only open area - both sides of house are concrete or have gas lines, etc.:

0005-H - SG-001 - 4' - Sampled 0855

- no vacuum, refused on cobble at 4.5'

Soil Gas Location - Lat - 40.755841

Long - 111.856509

Elev - 4518

Center of House - Lat 40.755851 Long 111.856386

Elev 4519

Conducted Neg/Positive pressure tests - in pm

Finished 1430

DED - decon'd probes per SOP

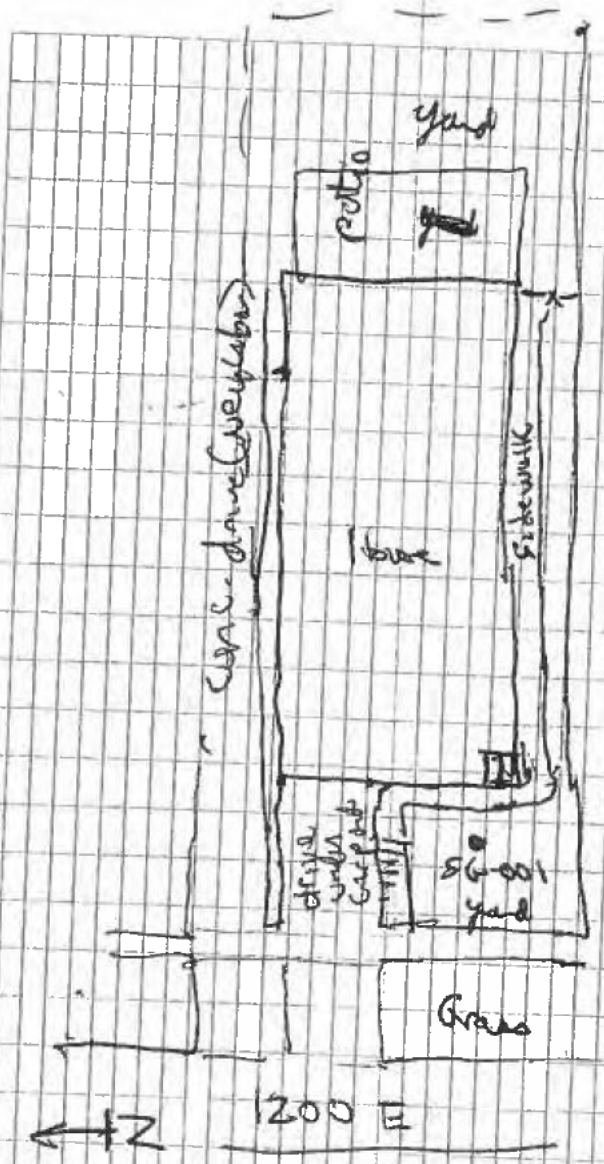
EJR - took samples to lab ~1500

Left site - 1500

Tally -	1 ambient (outdoor)
	1 - Soil Gas
	10 - Indoor
	14 - Pool/Neg.
	26 - Total

Ed Reid

(154)

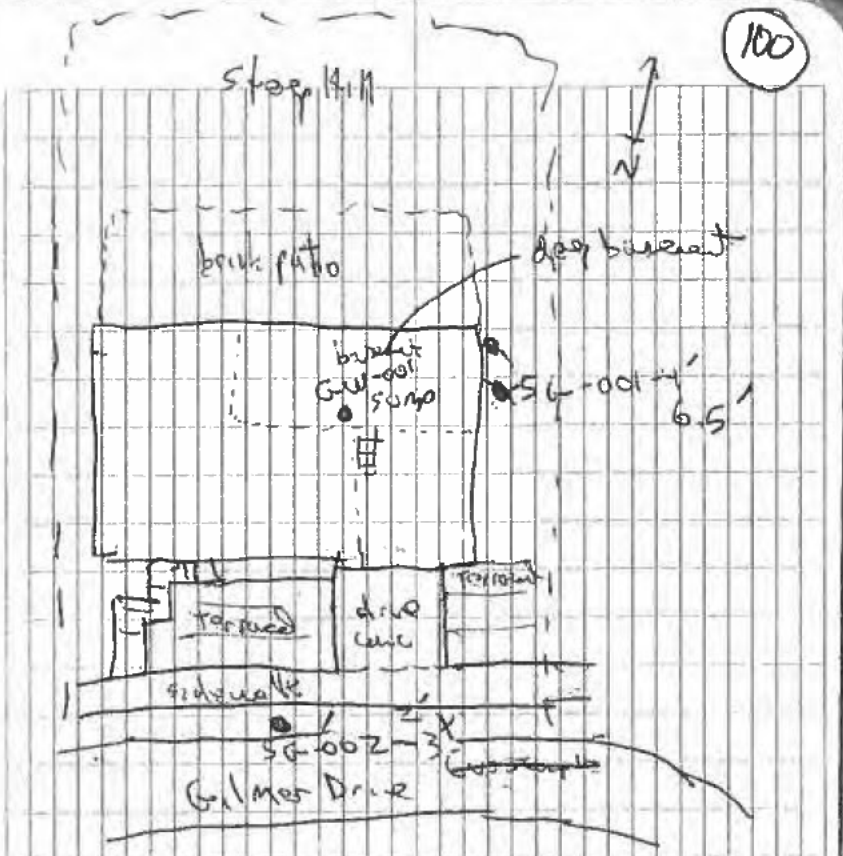


EJR

(99) 0023-H Gilmer 3/9/15 ERR

At Sunnyside Parker 0800 Weather 30's nightly
H&S Mtg - 0815 50's, Calm, Clear
0830 - At site w/ VA rep (Lynne)
Lat - 40.749164
Long - 111.854789
Oleadin at Street (about basement floor) = 4474'
ERR / RED - operators - Hazardous Smart Plus
Slated ambient in lowest basement level
in furnace / sump room - collected field
parameter sample @ 1650. - GW-001
Sump - TD = 1.6'
WL = 0.8
Flow = ? Est 5+ gpm to 10 gpm
sump runs 30-45 sec intervals.
ERR run basement source entry
surveys in deep basement + in living basement
PM - Negative + positive survey
between 1:30 and 4:45 pm

(100)



Note - relief on property from
Gilmer curbside to top of hill behind
house = 30'
Field Parameters - Horiba autocal - 3/9/15 - 1600
0023H-GW-001 - pH - 7.08
SC = 1610 u/m DO = 3.62
ORP = 135 Temp = 18.01
Turb = 0.00

ERR

(43) AOV-1 VI

0008-H ~~[illegible]~~ 1/28/15

Left Office - 0730
At Surrogate Rch 0800.
At House - 0830
Hes Mtg w/ team - at house 0845

Weather - Cloudy, 40's - 50's, Lt Breeze

ERR/AC/Dave - Running Hepsite

No sump or water/spring on property

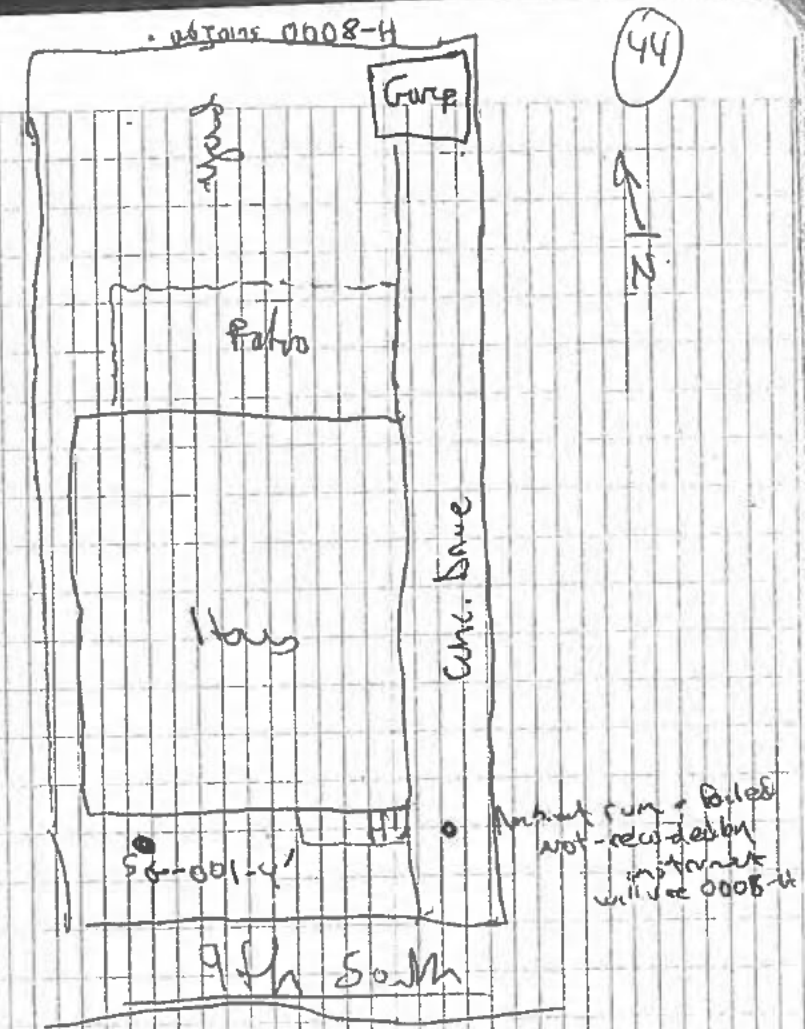
- Installed Soil Gas Probe - at SW corner of house - refused at depth of 4.5'
SG-001-4' - collected 1030.
Lat 40.44.5947
Long 111.50.5942
Elev 4600' ft msl

Testing completely successfully at 1615
- CCV passed

EPA + Westin onsite part of day
- Tour Panels w/ UDEQ onsite all day.

[signature]

(44)



Lat/long of center house
Lat - 40.44.5962
Long - 111.50.5917
Elev - 4597 Cat street

[signature]

(44A) Addendum
0007-H 4/29/15

Instrument - Hapsite ER
Operators - Ellen Reid / Aaron Cantrell

Sample totals -
0 - Outdoor Ambient *
14 - Indoor Ambient
15 - Negative / Positive Pressure
1 - Soil Gas
30 - TOTAL

* Outdoor Ambient Sample collected at end of day - Hapsite did not save the result
Adjoining property 0008-H (same owner) was tested 2/5/15 - See ambient results

Selected site for upgradient "background" Summa confirmation - Returned to site on 3/18/15 and set summa canister is basement family room
A-0007H - TO-001-LLL
- 031915 -
Picked up sample on 3/19/15 - See field book page 113

EJ Reid

(44B)

EJ Reid

(57) AOV-1 VA VI
0008-H (Sunnyside) 2/5/15

Left office - 0745 Weather: Warm 60's
Onsite - 0830 HSS Mtg - 0840 Mostly Cloudy, LIB [illegible]

Lat - 40.45.0194
Long - 111.50.5853
Elev - 4606'

DED placed 2 summers at 0018H @ 0745-0800

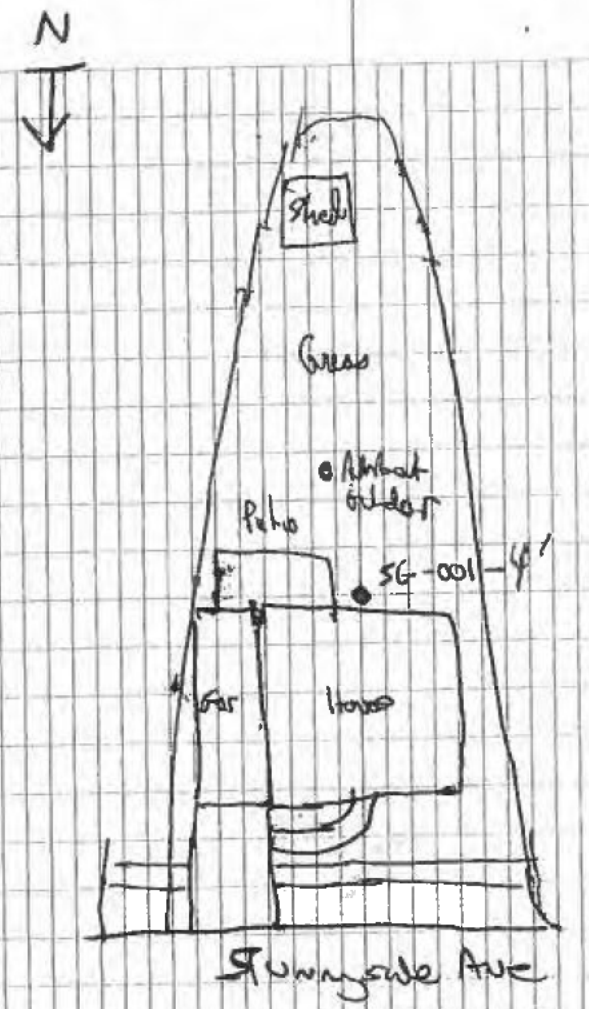
ERR/DED started in basement of house
Ran two samples + Hepatic failed
due to GC/MS communication issue
at 1000
Troubleshooting indicated circuit board
reset needed, dismantled + returned
to field office to repair

1400 - Returned to site + completed
ambient indoor survey, will return on
2/6/15 to conduct Positive/neg pressure

1700 - Drove [illegible]

[signature]

(58)



0008H - SG-001 - 4'
Lat - 40.45.0176
Long - 111.50.5844
Elev - 4610

[signature]

(59) AOU-1
0008-H

2/6/15

Onsite - 0830
H+S Mtg - 0840

Weather: Warm, Breezy, PH, Cloudy

Set up negative pressure test - Fan in back door
- Hepatt in basement open room
1030 - Switched to positive pressure test

1130 - Finished testing indoors,
Run soil gas G-001-4' + outdoor ambient

Had issue relighting boiler pilot
- H.O. called HVAC to elevate it
was old + faulty.

1210 - Left site - Returned to office

(60)

ESP/PSD Retrieved summers at 0018H @ 0800
and delivered to lab - 1130 2/6/15

← Installed backward, just off sidewalk - South
of house -
Refused at 4.5' on rocky cobble?
Soil is sandy/cobbly.
Decon'd probes pump rotocol

60A

Addendum
0008-H

4/24/15

Instrument - Hapsite ER
Operator - Ellen Reid

Sample Totals -

1	- Outdoor Ambient
9	- Indoor Ambient
8	- Negative/Postive Pressure*
1	- Soil Gas
19	Total

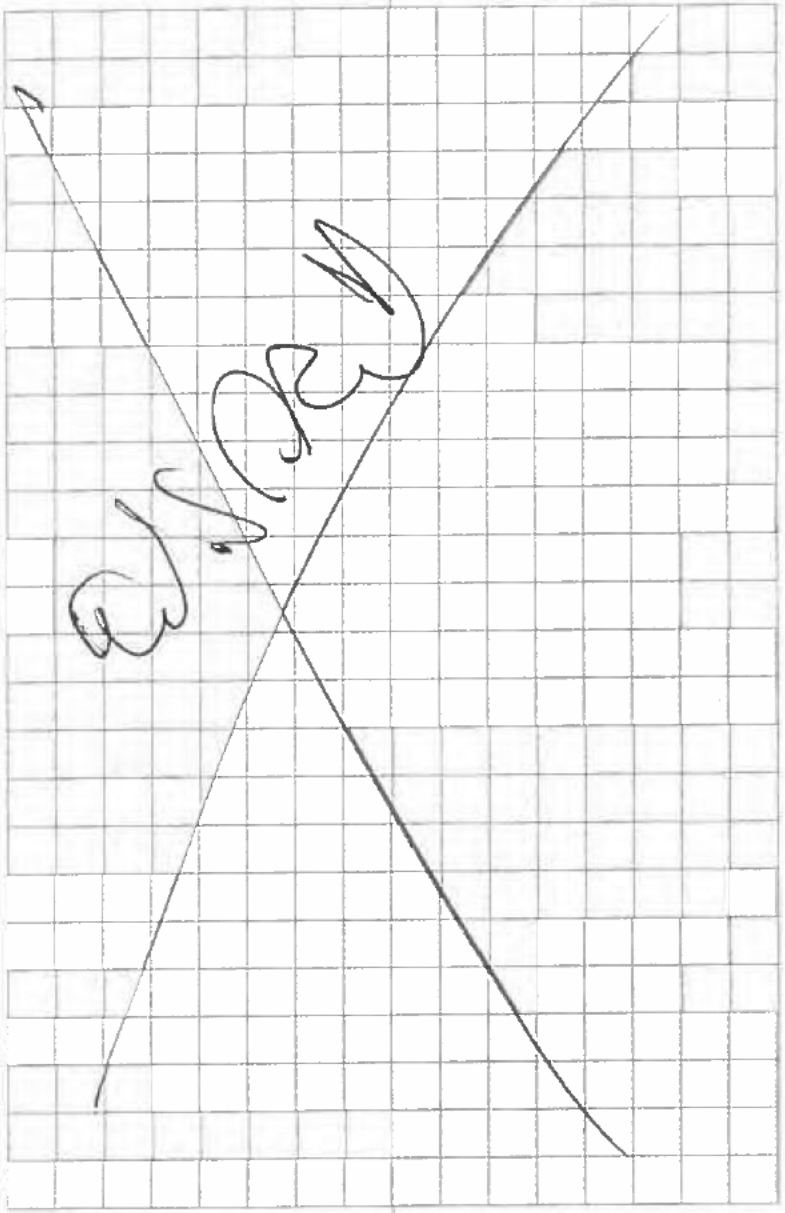
* Pressure tests conducted 2/6/15

Ambient sample from basement bedroom (used for storage) had No PCE, but a TCE concentration just above RSL. Returned to house on 4/9/15 and set 24hr Indoor Summa Can in Basement + Soil Gas Summa at SG-1

A-0008H-04/015-TO-001-BAS
A-0008H-04/015-SG-001A-4" (and dupe SG-001B-4")

Total of 3 summa samples.
See Page 151.

60B



(63) AOU-1 VI
0009-H

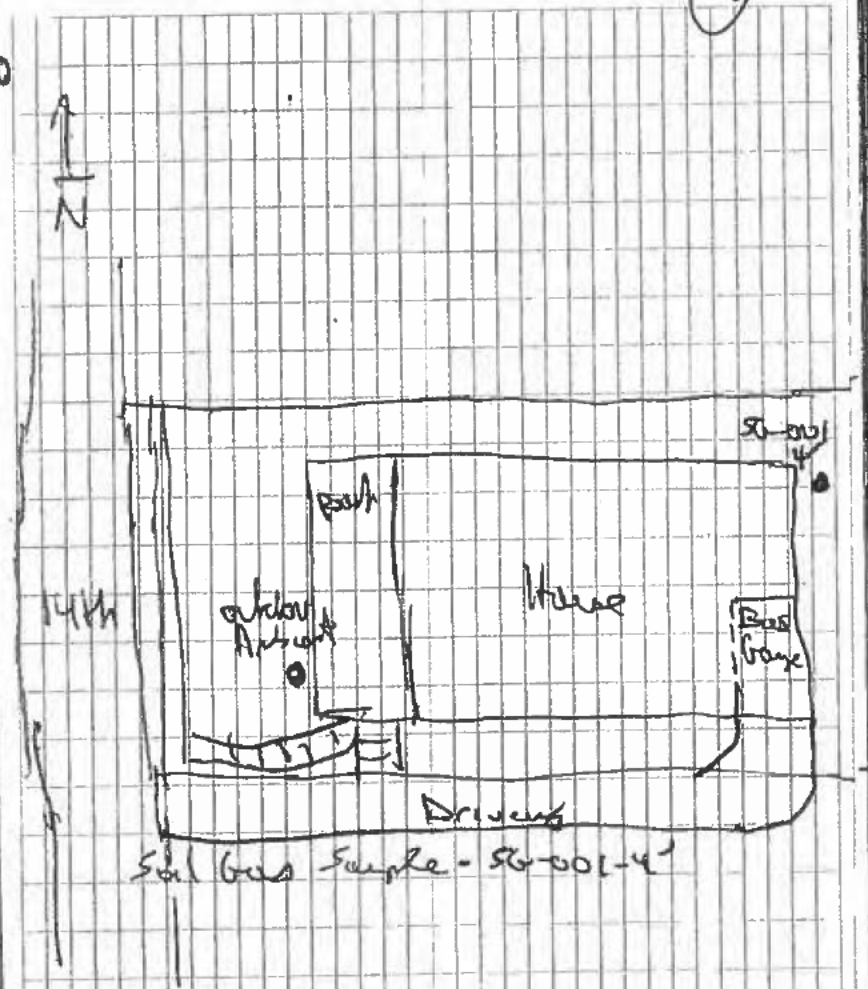
Edl 2/10/15

Left office - 0730 at Park 0800 - H+S Bmfg - 0810
At home - 0830
Lat - 40.45.0051'
long - 111.51.0281
Elevation - 4574 ft msl
Weather, Sunny, Lt NW breeze, Cool - 40s - 50k

met homeowner - Aaron/Chris setup &
Skeled ambient - 0900

DED - installed Soil Gas Probe
SG-001-4'
Backyard at NE corner of yard.
Held 5" Hg vacuum for 15 seconds & returned to zero
Lat - 40.750216
Long - 111.850633
Elev - 4582'
Decon'd soil probes per protocol
AC/CH/DED - Ran Rosita / negative in Pm
Done at site ≈ 1600

(64)



Soil Gas Sample - SG-001-4'

64A Addendum 0009-H

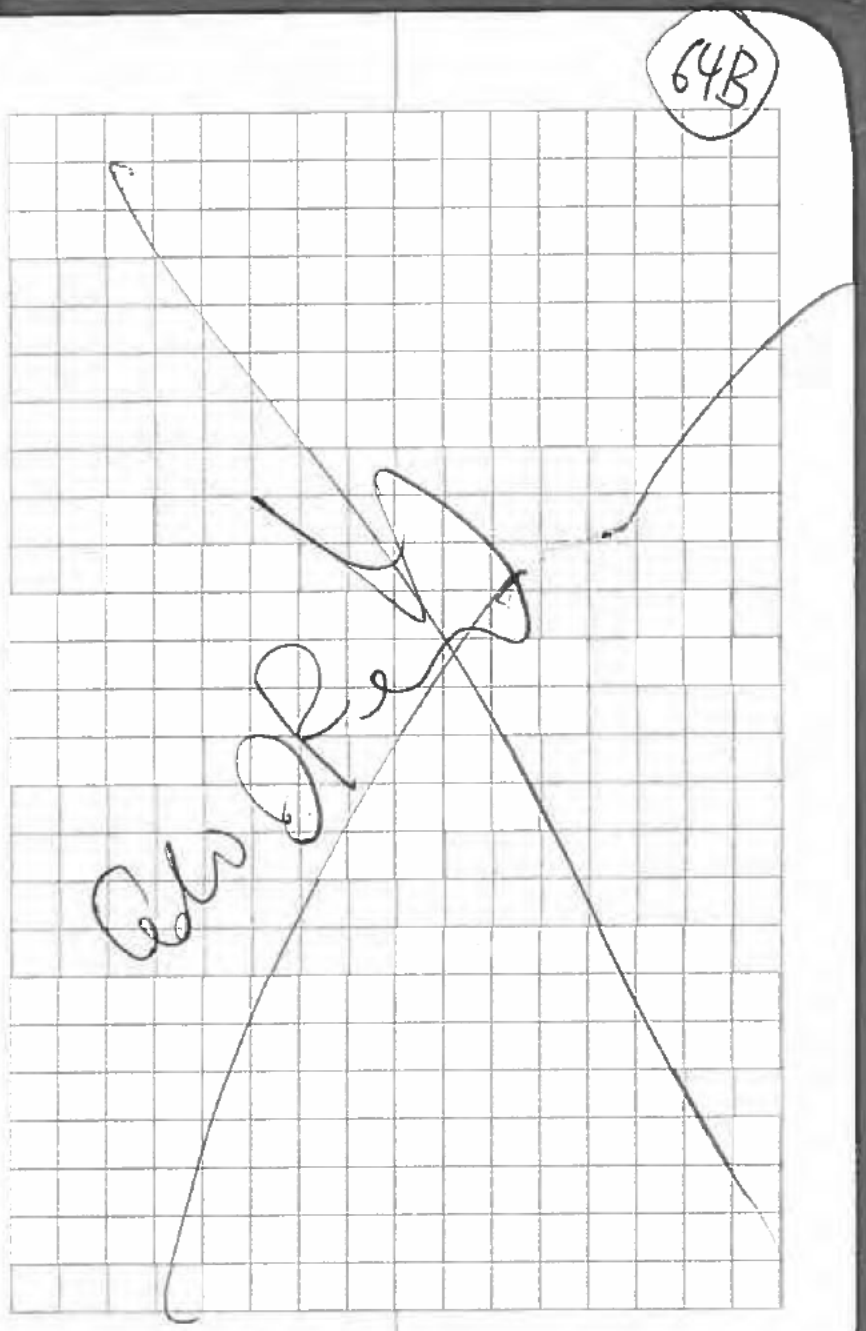
5/1/15

Instrument - Hapsite-Smart Plus H860
Operator - Aaron Cantrell w/ Issac Edwards

Sample tally -

1 - Outdoor Ambient
12 - Indoor Ambient
17 - Negative/Positive Pressure
1 - Soil Gas
31 - TOTAL

64B



(65) 2-D-15

Crew: CHRM-2, FE-1

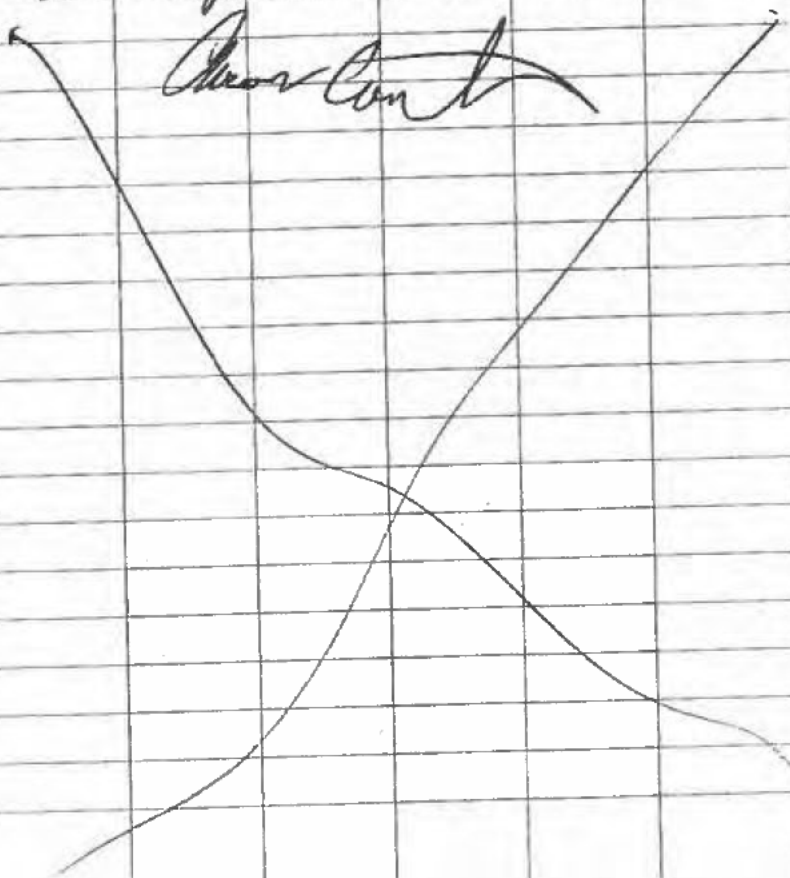
Weather: Sunny ~

Eq: Hopsite, Hand tools

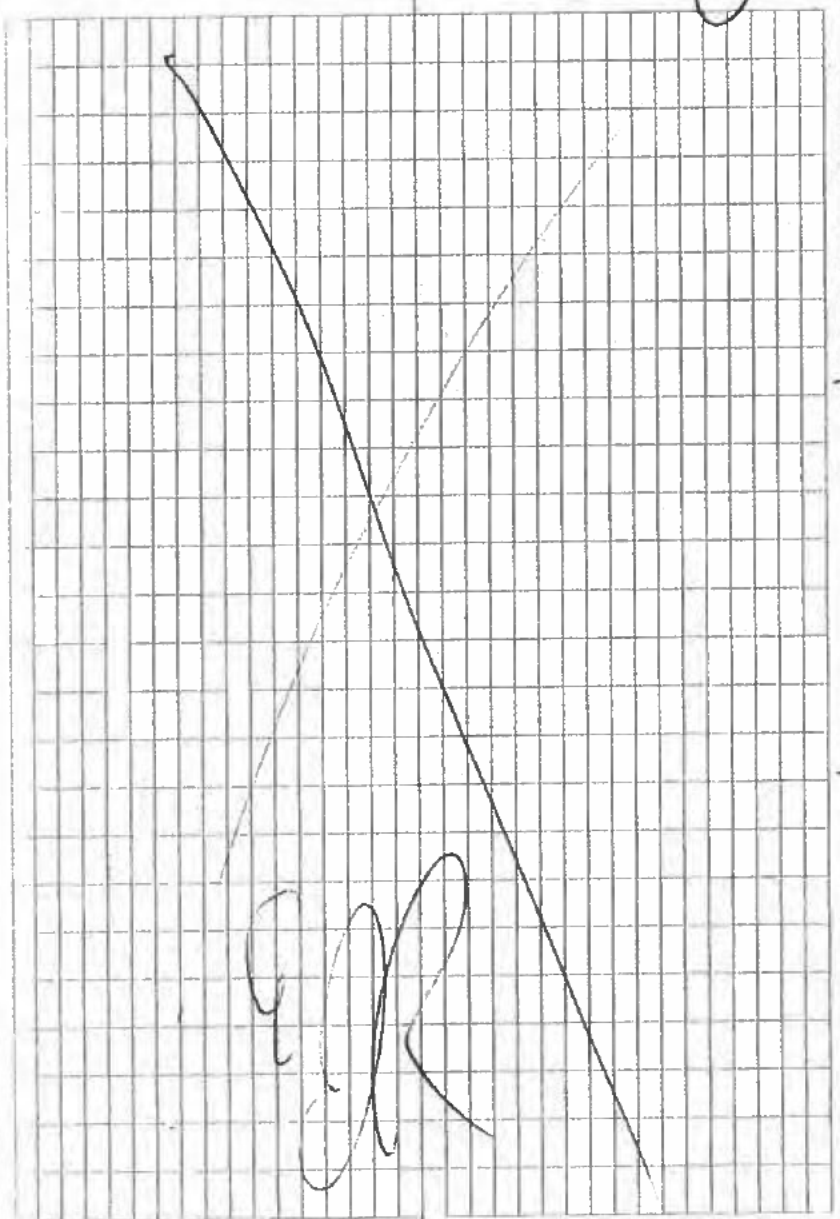
0745: Meet @ Sunny Side

0850: 801-879-0928 ◦ Lee Herron
Will contact resident ↗ when we
Start pressure cycling.

* Wrong note book. See team #2. *



(66)



(41) ADU-1 0010-H ERiD 1/27/15

House done by Aaron/Dave - weather 30's rising to 50°
w/ smart
Lt Breeze, Cleaning

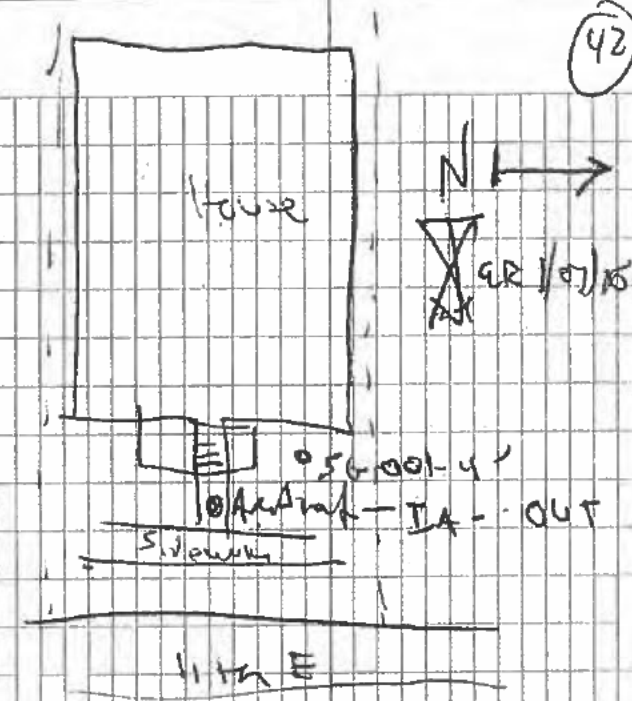
Soil Gas sample - 0010H-SG-001-4'
In front yard NW corner
refusal at 4.5' on rock
Soil soft down - silt/sand

House center - Lat - 40.44.4947
Long - 111.51.3547
Elevation 4378 mSL

Soil Gas - Lat - 40.44.4956
Long - 111.51.3509
Elevation - 4378 mSL

Testing complete - CCU OK - at 1715

(42)



42A

Addendum
0010-H

4/29/15

Instrument - Hapsite Smart [redacted] #0270
operator - Aaron Cantrell

Sample totals =
1 - Outdoor Ambient
11 - Indoor Ambient
14 - Neg | Pos. Pressure
1 - Soil Gas *
27 - TOTAL

* = Soil Gas sample returned to office and analyzed using Hapsite ER due to failure of Hapsite Smart

ETC, RD

42B

Conf Red

(81) AOU-1VI 0012-H 12th Street EdRed 2/23/15

At Park - 0810
At Site - 0830
Lat - 40.752571
Long - 111.856336
Elev - 4497'

Weather - Sunny, Cold - 19° rising to 32°
Windy gust to 50 mph
Inan

Setup / Stated Ambient Testing by 0900
Finished around 1045
- conducted survey runs on basement

Installed Soil Gas Probe Near NW corner of house by foundation wall.
0012H-SG-001-4' +8'
Lat - 40.752544 Long - 111.856453
Elevation - 4496' ft msl

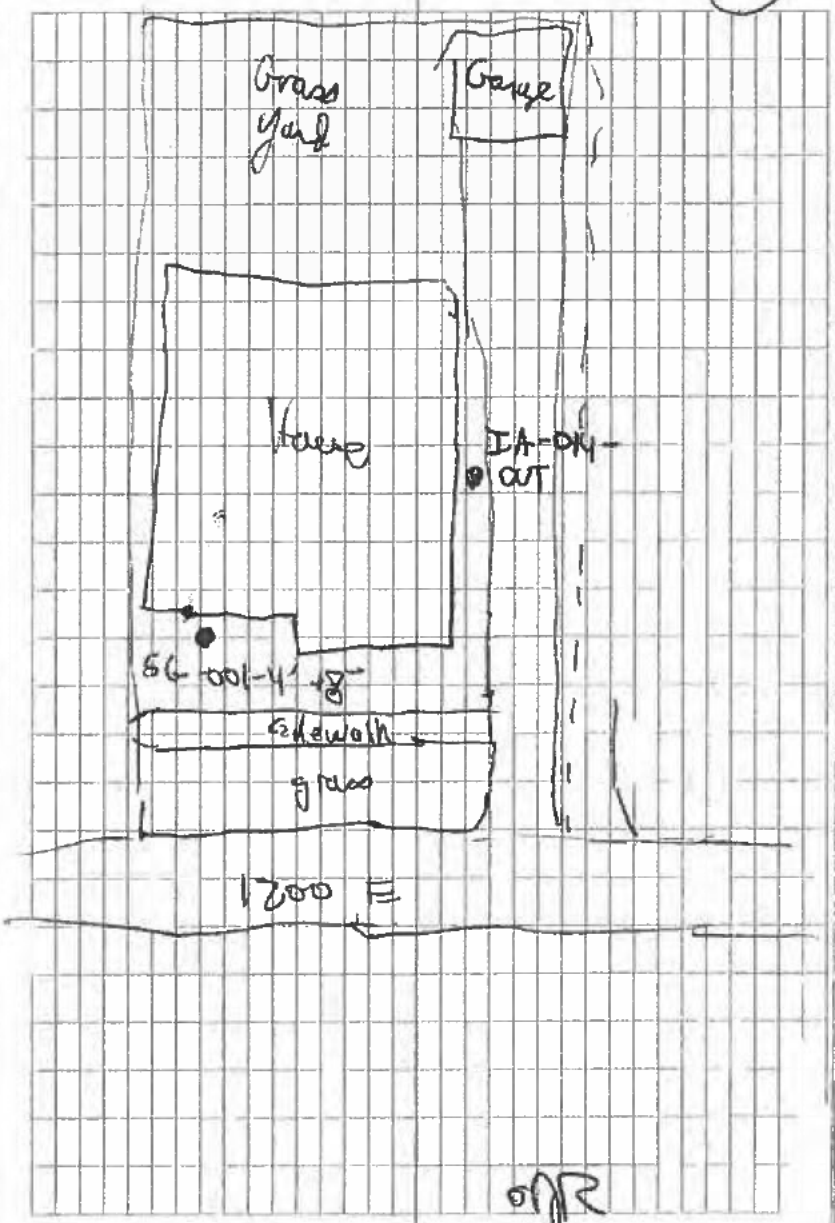
~~0012H-SG-001-8'~~ 2/23/15
~~Lat~~
~~Elevation~~

Soft clay loam soil, no cobbles

Finished Neg / Positive testing @ 1500

Pelory cylinders - 15 PS

(82)



82A

Addendum
0012-H

5/11/15

Ttes mtg at site at 0840 -
Instrument - Hapsite Smart Plus H860
Operator - Ellen Reid
NOTE - Sub-freezing temps and very high winds (Gusting to 50 mph) during testing - pressure differential on homeway 10+ pascals at times, Ran Air door pressure testing as high as -15 pascals to compensate.

Sample totals -

1 - Outdoor Ambient
11 - Indoor Ambient
15 - Negative/Positive Pressure
2 - Soil Gas

29 - TOTAL

Probe rods decon'd by team following SOPs.

82B

(19) 0013-H
AOU-VI

1/16/15

Left West Jordan - 0720 at Park - 0815
0013-H - Douglas Street
Center of house - 4518' msl
Lat. 40° 45'.0928
Long - 111° 51'.1798

Weather - Cloudy, cold, Calm - 30's

0820 - Tailgate H+S Briefing - Proceed to site - 0830
Team Meet homeowner at 0830 -
*| Proceeded to conduct ambient on all floors in am

Drove SG-001-4' and
Tried sampling - Pulled 10" Hg, dropped in 15 seconds to 0, but pump could not run vac box to collect sample. Tried lower pump - collected sample at 11 pm @ 1620
Team 2 - calibrated ER - had issues w/ Vinyl Chloride cal, but got good correlation at 1200
Went to 0011-H and retested ambient - (1/15/15 results deemed unverifiable due to low LCV runs)

Team 2 finished ambient @ 1600 @ 0011 H
+ Packed up equipment, LCVs again failed, ER will not hold calibration. GJR

(20)

EJR - Guin Mgr call - 12 MST - at VA
Emmie Quin: schedule/location
Monday -
Kyle Gonder -
Summa canister
- Weekly Rept - Due x days later
- Field Activity
- Non-conformance
- Data: w/ QA/QC
- w/ sketch of sample location
- By Thursday early am

Confirmed w/ Homeowner -
* Summa Set - Tuesday at 9:30 am
at 0017-H 1/20/15 1114 Summa Dr

0013-H Soil Gas - See sketch next page

0013-SG-001-4' + 001-8'
Elev - 4520' msl
Lat - 40° 45'.0948
Long - 111° 51'.1760
Decon'd soil probes per SOP in SAP, triple washrinse procedure

GJR

(21) AOU-1 VI 0013-H (Cont) 1/16/15

Drove SG-001 to 8'; could not pressure - very sandy soil at about 6' - pulled SG-001-8'

0-6' DK moist plastic clay - very tight

6-8' Brown sandy/cobbly sand?

Team 1 w/ homeowner permission run negative pressure test

Started 1500 w/ setup,

Started test 1600, Ran to 1730

Switched to positive pressure

Started positive pressure test @ 1750

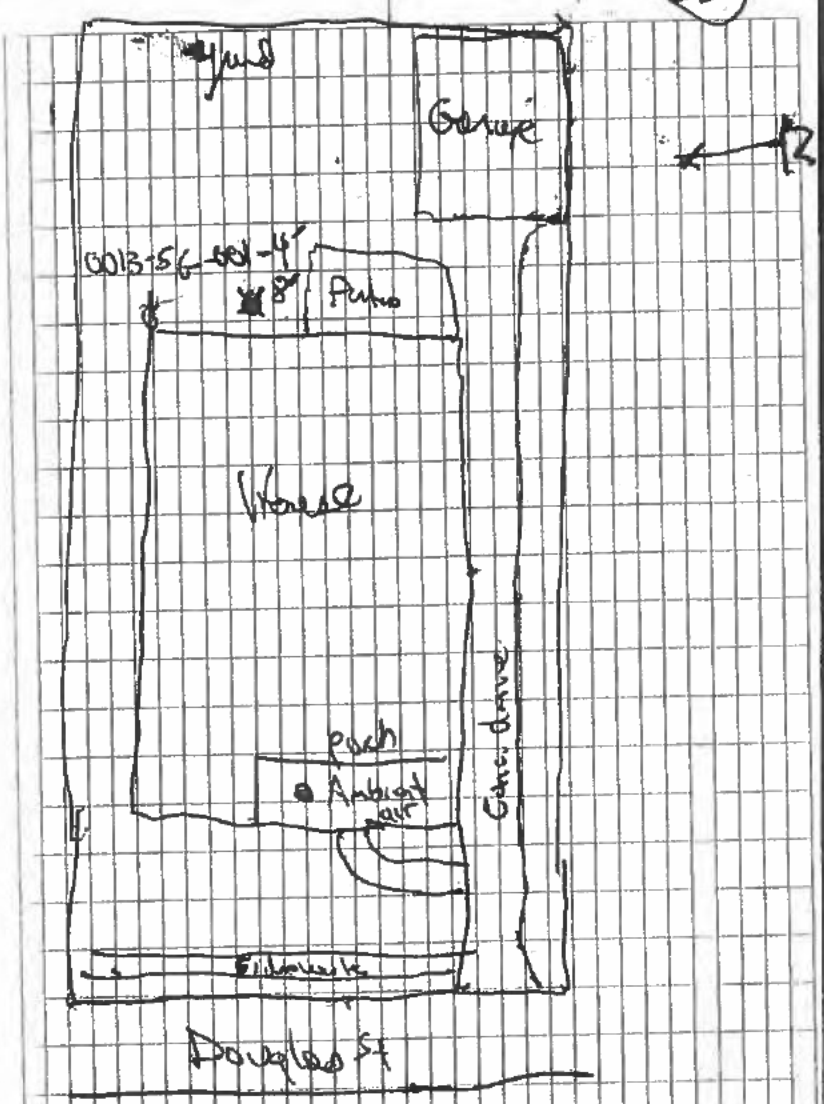
Finished 1850

Packed Equipment - left home - 1930

Picked up office Keys - 2000 hrs

[signature]

(22)



GAR

22A

Addendum 0013-H — AOU-1 VE — 4/28/15

VI Field Testing - 1/16/15

Instrument - Hapsite Smart plus - H860

Operator - Ellen Reid w/ Isaac Edwards on pm

Sample Tallies -

1	- Outdoor Ambient
14	- Indoor Ambient
14	- Positive + Negative Pressure
2	- Soil Gas 4' + 8'
31	- TOTAL

ER 4-28-15

22B

ER 4/28/15

(91) AOV-1 VD 0014-H Ed Reid 3/2/15

Meet at Sunnyside Park - 0800 - weather: Drizzle, Cool - 30°, Calm
DED to set summa at 0011-H
ERR/ESR/DC plan to go to 0014H
0815 - Tailgate Hes mtg at park
0830 - at site - w/ Lynne Welsh, RPM VA

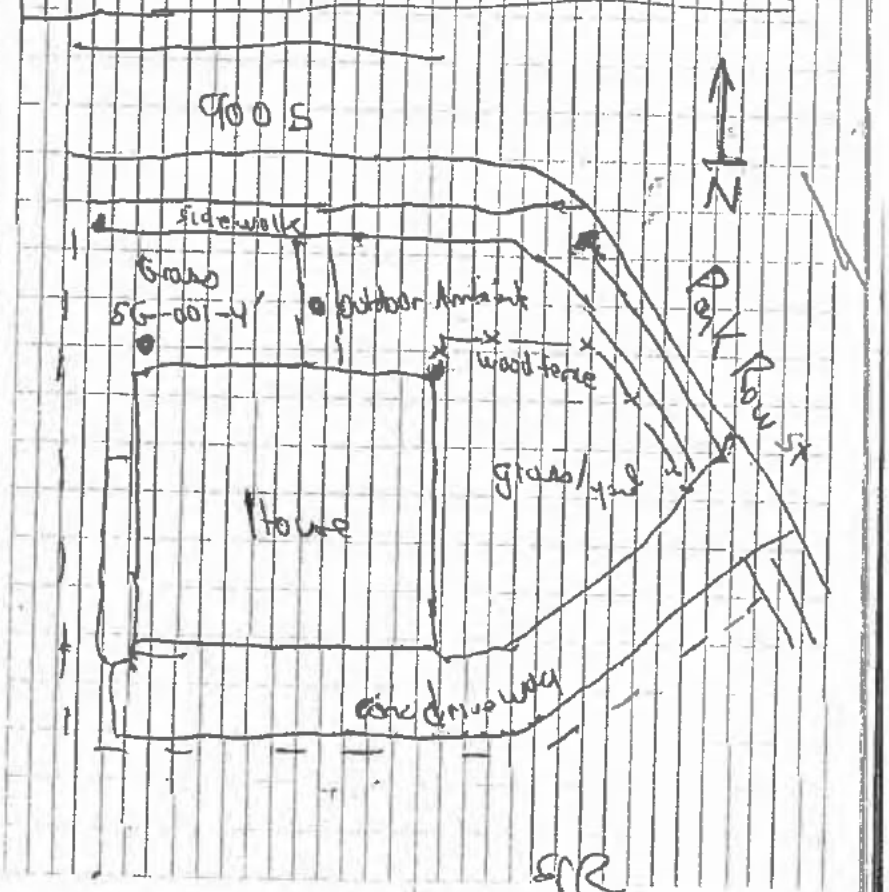
Lat - 40.749589
Long - 111.844184
Elev - 4645 ft msl - at base of steps (FWD)
ER/DC conducted ambient VI testing in am
Conducted negative/positive pressure testing in early pm -

Soil Gas sample location - Front yard near NW corner of house, in flowerbed
0011H - SG-001 - 4'
Held vacuum of 2" for few seconds
Lat - 40.749650
Long - 111.844239
Elev - 4645 ft msl
Soil appeared to be sandy/cobbly w/ silt.
Decon'd soil probe rods per SOP
Finished testing, ran Hepate CLVs at
Team Left site - 1550 -

(92)

0011-H Summary -

DED - Summa placement at 0011-H -
0810 - 0820 on 3/2/15
A-0011H-030315-TO-001-BAZ (Basement Bath)
A-0011H-030315-TO-002-BRZ - Main level Bath
A-0011H-030315-TO-003-OUT - Outdoor - Porch
A-0011H-030315-TO-004-BAS (Duplicate of TO-001



SR

92A

Addendum
0014-H

5/14/15

Instrument - Hapsite SmartPlus H860
Operator - Ester Reid

Sample Totals -

1	- Outdoor Ambient
10	- Indoor Ambient
18	- Neg/Positive Pressure
1	- Soil Gas
30	- TOTAL

Ester Reid

92B

Ester Reid

(115) AOV-1VI
0015-1H (1348 E 1100)

Ed Reed
3-30-15

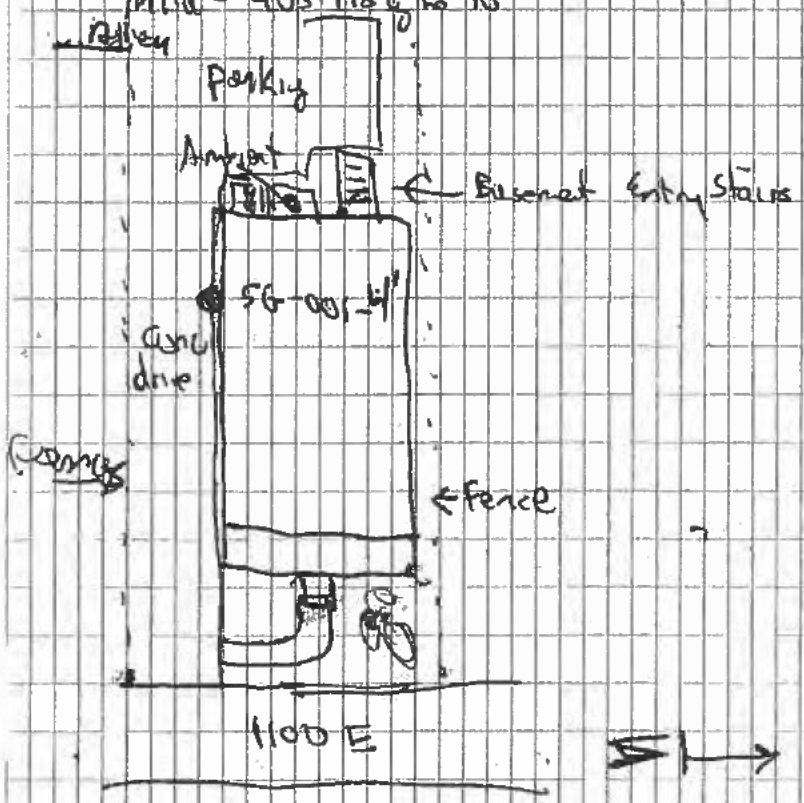
Met at Sunnyside Park - 0810
H+S Mtg - 0820 - No RPE Regard
Proceeded to site w/ VA Rep (Brian Spear) - 0840
Met w/ owner -
Site is used as a psychology counseling office (1st + 2nd floor)
Basement = small apartment w/ separate entrance from the rear of Bldg - Center house location:
Lat - 40.740506
Long - 111.859957
Elev - 4349 ft msl

Entire lot is paved, or covered w/ buildings - only a narrow, utility-free strip along southside available for SG-001

DED = Deconn'd soil probe per SOP/QAPP
- Three step wash
DED/ERR/JC completed - Neg/positive tidy in pm - Done - 1530
Sample totals - 1 soil gas
(Hopewell) 1 outdoor ambient
- Indoor air
total

(116)

Weather - Sunny, Lt Breeze
Mild - 40s rising to 70°



0054-SG-001 - 4' - 1000 hrs
Soil = Silt/Sand cobble mix refusal on rock.
Lat = 40.740459 Long = 111.859989
Elev = 4348 ft msl

116A

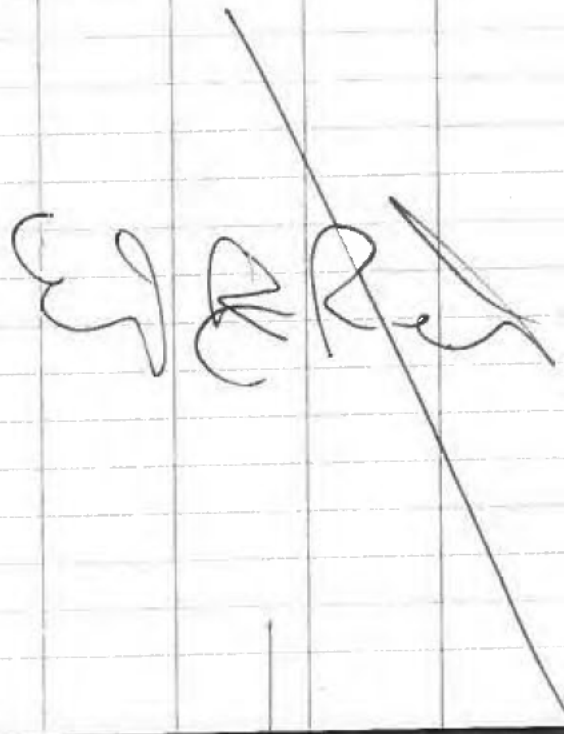
Addendum
0015-H

5/22/15

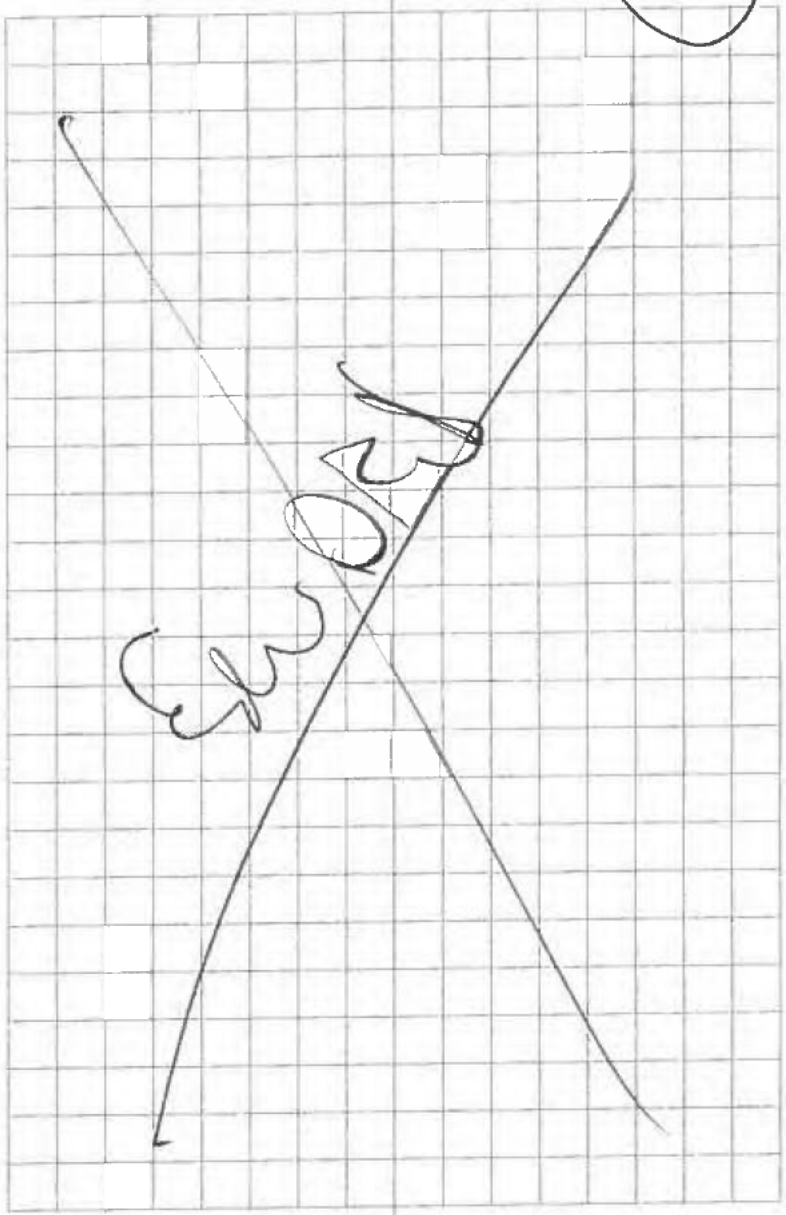
Instrument - Hapsite Smart Plus A860
Operator - Ellen Reed

Sample Totals

1	- Outdoor Ambient
15	- Indoor Ambient
9	- Neg/Pos Pressure
1	- Soil Gas
26	TOTAL



116B



(33) 0016-H
AOU-1 VI

1/22/15
Cold, Clear, Calm

Left office - 0730
At Sunnyside - 0800 - H+S Mtg 085
Met at house - 0830 - checked out
Floors ISE/AC operators
Hepatitis started in basement
Very clutter w/ storage boxes
Shelf basement = 7' high down
middle, shelf on edges - 3' high

ER/ERR → 10pm Reg Briefing Call

Lunch w/ Mark Aguilar, EPA

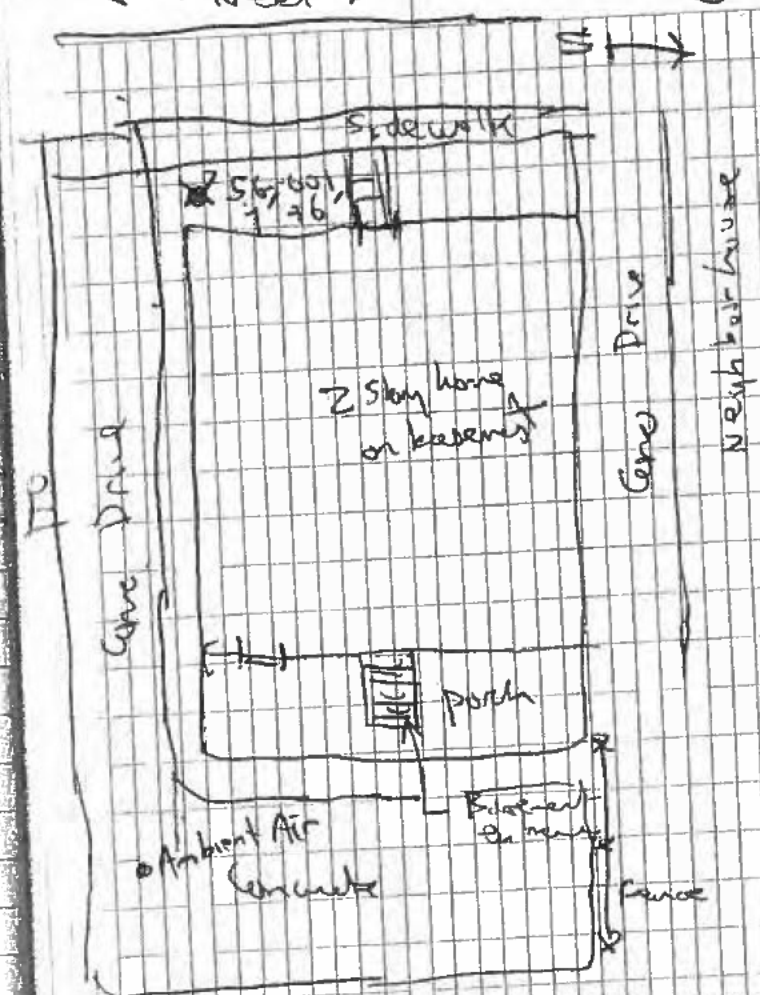
1300 - Returned to home - team
finishing upstairs ambient + source
surveys - 2nd floor craft room
Notable sources - glues, cloth treatments
- highest PCE detections

1440 - Started Neg pressure tests

DEG - collected 0016H-SG-001-4' - 1400
0016-H SG-001-6' [illegible]
Refused on rock at 6' - soil - sandy [illegible]
w/ some silt/clay.

GR

(34)



Lat - 40.45.4119 Long - 111.51.1272
Elevation at sidewalk - 4593' msl

Soil Gas - 0016H-SG-001-4' (Fast cone of house
Lat 40.45.4110 Long 111.51.1318
Elevation - 4595' msl

GR

(35) 0016-H (Cont) 1/22/15

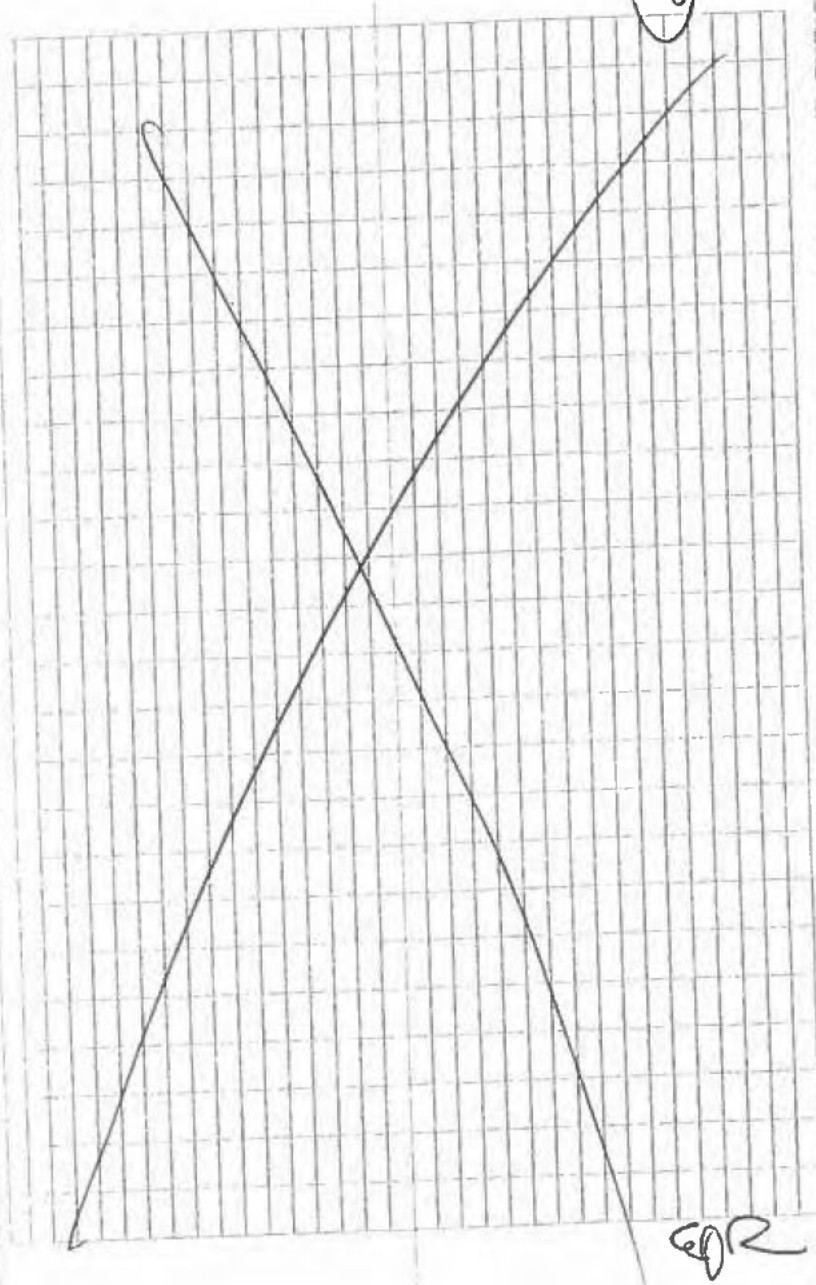
Finished Neg pressure at 1530
Reset for positive pressure
Started positive - 1535
Finishing 1610
Relit furnace + water heater - 1615

Soil Gas - Runs 034/035

Outdoor Ambient + CCU end of day - Passed
Decon'd Soil probes per SOP
Packed up, left side - 1655

Note - Smart Plus very cranky - many aborts -

(36)



EDR

36A

Addendum
0016-H

4/29/15

UI Field Test - 1/22/15
Instrument - Hapsite Smart Plus - H860
Operator - Isaac E / Chris Holt

Sample tally -
1 - Outdoor Ambient
11 - Indoor Ambient
9 - Neg / Positive Pressure Test
2 - Soil Gas
23 - TOTAL

Edward Reid
4/29/15

36B

Edward Reid
4-29-15

(11) AOU-1 VI -0017-H EdReid 1/14/2015

0017-H - Sunnyside

Lat - 40.45.0384 Weather - Mid 30's

Long - 111°51.3175 Cloudy v LP

Met at Park-0800 - Hts Mtg 0815, NOPE Breeze

Onsite -0830 - E-NE

Conducted amb. at in Front yr at 1000 East side

Proceeded to conduct indoor ambient + source survey - NO significant indoor sources identified.

Identified potential source of entry in abandoned sump pit (open to soil) in closet w/ w. Heater

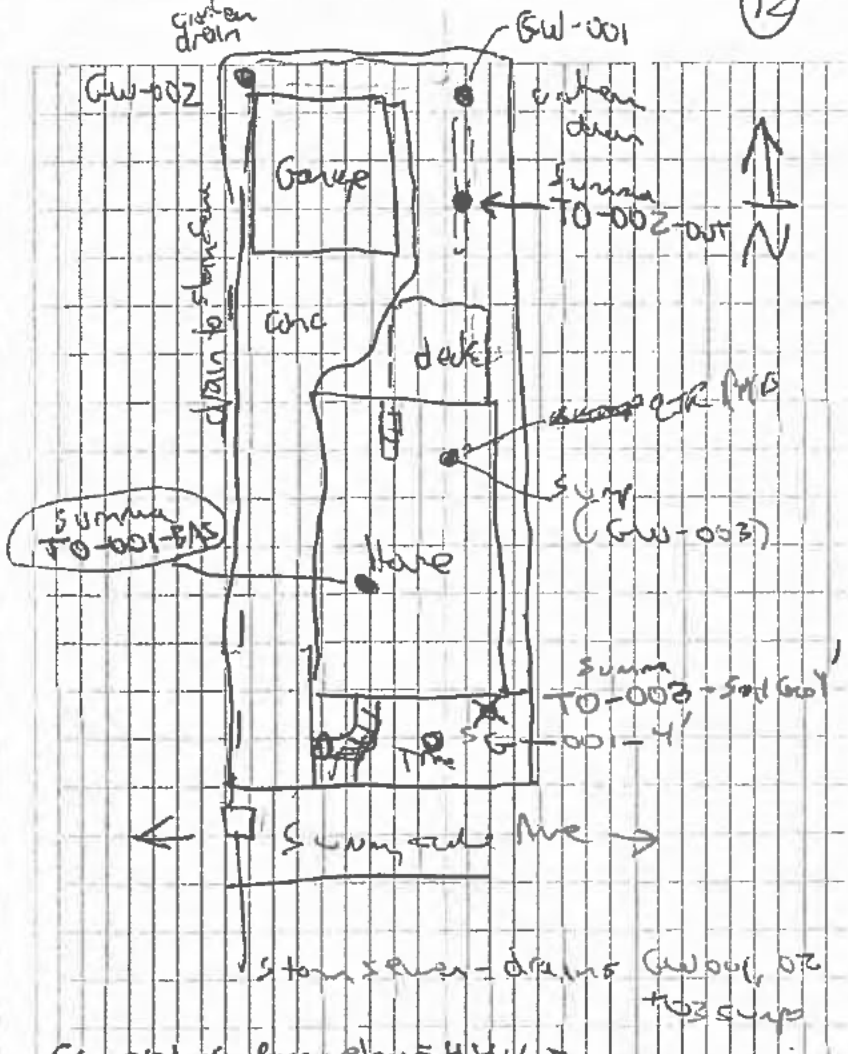
Also entry at covered sump box in walk-in closet - up to 3 ppb PCE

Finished ambient, conducted negative + positive pressure tests in afternoon - NO evidence of induced VI

suspect water at base of basement slab may hinder VI

EJR

(12)



SG-001 - surface - elev = 4416.2

Lat - 40°45.0351 Long - 111°51.3161

GW-001 - TOC - elev = 4424.0'

Lat. 40°45.0484 Long - 111°51.3162

GW-002 - TOC - elev = 4420.0

Lat - 40°45.0486 Long - 111°51.3199

EJR

(13) 0017-H
AOV-1 VI 1/14/2015 (Cont)

0017-
GW-001 - WL - 1.93 below edge of rim
water elevation is ≈ 4422'
TD = 4.10 flow = estim
GW-002 - WL = 2.53 b/w rim
TD = 3.15
water elevation ≈ 4417.5' flow - 1-2 gpm

Sampled GW -
0017-GW-001 - 1/14/15 - 1445
0017-GW-002 - 1/14/15 - 1450
Sump - 0017-GW-003 - 1/14/15 - 1640

Soil Gas Sample -
0017H-SG-001 4' @ 1600
4' bls in front yard Non-SE Corner
No vacuum - ≈ 1 pm
Refused on rock - likely w/in 2-3' of GW.
Decon'd probe rods per SOP - 3 steps, wash/rinse
Packed up / left site - 1655

(14)

- 3-4 gpm

← Layer of fine black/brown organic matter on bottom

Dupe-1 2.90 8.57 Sump

	001	002	003
Temp	~~6.92~~	~~6.70~~	9.06
PH	~~7.50~~ ~~6.70~~	7.57	7.68
ORP	~~2.63~~	237	161
SC	1480	1390	1110
DO	8.17	7.46	4.60
Turb	1.6	629	4.58

GR 1/14/15

Calibrated Horiba 1/14/15 - ~~[illegible]~~ 1400

Resampled water for analysis w/ HAPSite
0017-H-GW-001 - 1000
0017-H-GW-002 - 1005
0017-H-GW-003 - 1010
0017-H-GW-Dupe-1 ←

GR

(14-A) Addendum - Site 0017-H 4/28/15

UI Field Testing conducted 01/14/15
Instrument - Hapsite - ~~ER~~ ER Start Plus
Operator - Ellen Reid

*Air Sample Tally (Field)
11 - Indoor Ambient
1 - Outdoor Ambient
20 - Neg/Pos Pressure Test
1 - Soil Gas
33 TOTALS

* Water Sample Tally (field Parameters)
2 - French Drain "Sumps" outdoor
1 - Pit Sump (basement)
3 Total

* Summa Confirmation Samples - Set 1/20/15
1 - Outdoor Ambient
1 - Indoor Ambient (Basement)
1 - Soil Gas - Front Yard - 4'
3 Total

[signature]

(14B)

[signature]
4/28/15

[signature]

(45) 0019B (Draft House) 1/29/15

Left office - 0730 Walker Sunny,
At Sunnyside Park - 0900 LLBeeve,
Met at Draft House - 0830 40s-50s
Director not onsite, assistant
provided walk through of Bldg
After tour ended, ERR + AR
left site at 0920 + went to
field office to calibrate Hepatics.
EJR, DEG scouted soil gas
locations and identified three -
EDR - proceed to UA for 10am
call
DEG remained on site + installed
probes, collected Tedlar Bags

0019B SG-001 - 4' Lat - 40.45.1177
8' Long 111.51.0920
Elev - 4557'

SG-002 - 4' - Lat 40.45.1132
8' - Long 111.51.1042
Elev 4556'

SG-003 - 4' - Lat 40.45.1140
8' - Long 111.51.1235
Elev - 4554

See sketch map on following page for map
EJR

(46)

← A watch interval standard for
Hepatics - Carrier 900 m
- will tour facility + plan
sample locations w/ AR/ERR
calibrate instruments

Mark Aguilar onsite or w/ EJR
at UA all day -

Center of Bldg (New wing area)
Lat - 40.45.1090
Long - 111.51.1061
Elev - 4555

EDR

(47) 0019B Draft (Continued) 1/29/15

DEG finished Soil Gas at 1215
ESR back onsite at 1230

1300 ERR / AJC report Hepatics will not calibrate - but will continue working on them

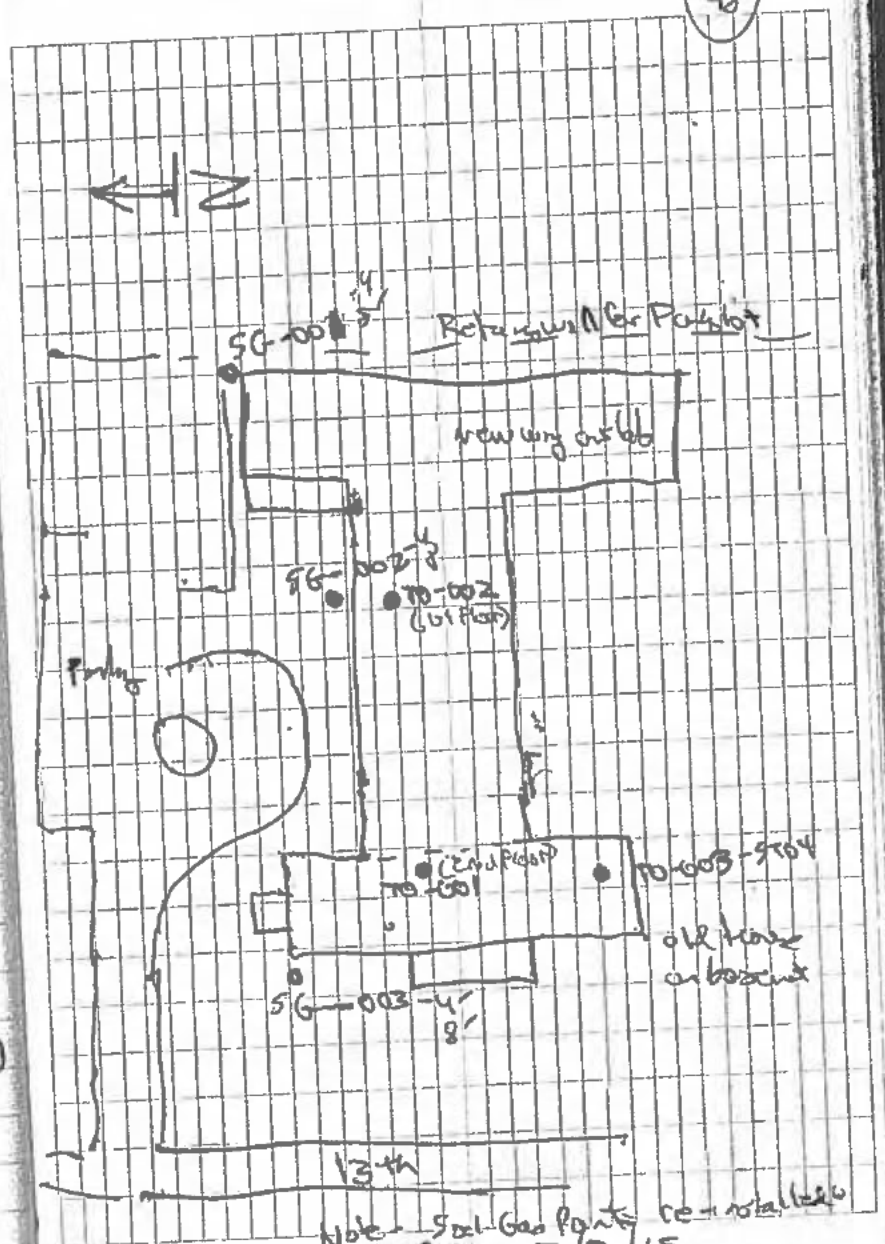
1500 - ERR / AJC report that Hepatics are still inoperable and PM concludes to cancel testing on 1/29 - hope to start 1/30 -

Left site - 1545 - often spoke w/ director.
ESR proceeded to field office - Mech w/ AJC + ERR

1700 - Hepatics Not operable
Out of Cal gas -
Will need to cancel 1/30 + reschedule

[signature]

(48)



Note - Soil Gas Points re-installed
re-sampled on 2/2/15

ERR

49 1/30/15 - AOU 1

Hoperites both down + Cal gas supply exhausted -

Multiple Phone calls w/ NJ + Hill to discuss mechanical failure of Hoperites

Decision w/ VA to cancel 2/2 week schedule since Hoperites will not likely be ready.

50

(51) 0019-B
AOV-1 VI - South Dept Ed Rec'd 2/2/15
EJR in Charleston SC - Weather - Warm
ERR/DED - got ER running Pfly Cloudy, Breezy
+ checked in w/ S. Dept Director
Worked on ambient testing + surveys

ER worked thru day + CWs were in ced
ran soil gas at end of day.

Plan to return Tuesday to do
~~ambient~~ positive + neg pressure
tests.
Also will set three Summa Cans
per VA -

2/3 set
Basement - 0019B - TO-003 - Store room - Southend
2nd floor - 0019B TO-00[illegible] - Sea floor Hallway
New wing 1st floor - 0019B - TO-002 - BRR - 1st floor Room #4 (Suite)
Set cans - Tuesday - 1350 - 1450 - Pick day = Wed, 2/3/15
ER 2/2

(52)

← DED re-installed soil gas bump at
same locations noted on 1/29/15 (Page 48)
+ recollected samples for analysis.

← Conducted pressure testing in large storeroom
area - South end of basement.

E/R

(53)

AOV-1 UD
0019B - Daft Hue

Ed Rod
2/3/15

Onsite - 0900

Weather, Drizzle
Warm, Calm

ERR/DED Conducted Positive + Negative
+ Leaky + set out Summa
Per TO-001, 002, 003
Reattached Soil Gas SG-0029-4'
8'
Same locations as original near
center of Bldg on northside

Set Summa - 1350-1450 w/ PED + ERR —
A-0019B-020415-TO-003-STO (Basement storeroom - Southend) -
A-0019B-020415-TO-002-BR2 (New Wing - Room #4)
A-0019B-020415-TO-001-HAL (Second floor Hall at Stairs to 3rd floor Attic)

Left site - 1500

Ed J Rod

(54)

JR

54A

Addendum
0019-B

4/29/15

IA Screen = 1st attempt - 1/29/15 - Hapsite ER would not calibrate, Smart would not even operate.

IA Screen - 2nd attempt 2/2/15 - 2/3/15
Instrument - Hapsite ER
Operator - Ellen Reid
Conducted ambient on 2/2/15 + neg/pos on 2/3/15

Sample totals -

11	- Outdoor Ambient
31	- Indoor Ambient
8	- Neg + / Positive Pressure
8	- Soil Gas (3 locations, + 2 retested)
48	- TOTAL

2/3/15 - Set three indoor 24hr Summa confirmatory samples

A-0019B-020415-TO-001-[redacted] (Hallway - second Floor)
A-0019B-020415-TO-002-BR2 (1st Floor Patient)
A-0019B-020415-TO-003-STO - Storeroom basement
Retrieved canisters on 2/4/15

Ellen Reid

54B

Ellen Reid

(58) AOU-1 VI 0[illegible] Ed Reid 2/4/15

No homes scheduled

1380 → Retrieved Supt Draft Summary

Cons + returned to lab at 1600

Confirmed 0008H for Thursday 2/5/15

Set up 0018H (Alpine Circle) w/ homeowner

Summer placement for 0745 - 2/5/15

see locations on map - Page 58

Plan to set -

0018H - T0 - 001 - OUT (outdoor ambient) - backyard

0018H - T0 - 002 - BR1 - (Basement Bedroom)

Ed Reid

(58)

EDR

(85) 40V-1 [illegible] 0020-C (Crystal Church) Ed Red 2/25/15

Onsite - 0830 1445 Mtg - 0840

Weather - Cool (30s-40s) lt Breeze, Pt Ly Cloudy

Lat - 40.753739

Long - 111.861786

Elev - 4377 [illegible]

EF/AC setup to conduct ambient air tests

Soil Gas - SE Corner of Bldg in landscaping -

SG-001-4' + 6' - 0940 + 0950

Lat - 40.753684 Long - 111.861600

Elev - 4380' msl

Soil appeared to be sandy material, likely fill. Struck rock at 6' + refused

Ambient complete about 1200

Setup air door to pressure the NE corner of basement (large classroom + closet) - mostly below grade area (only part on entire site below grade -

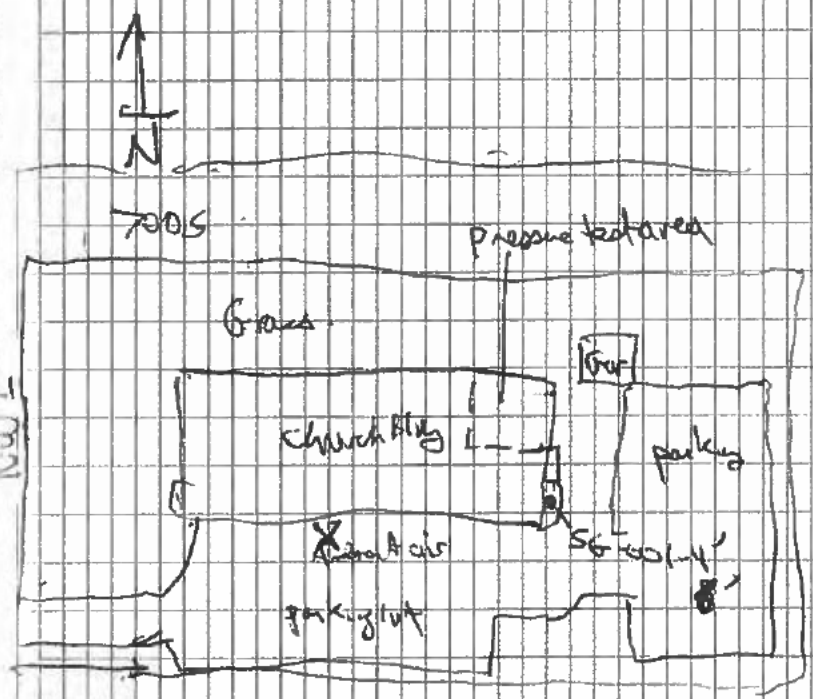
Ran both neg + positive pressure in this area

Flushed by 1600 + off site -

Hopsite CCVs passed

[signature]

(86)



[signature]

86A

Addendum
0020-C

5/11/15

Instrument- Hapsite Smart Plus H860
Operator- Ellen Reed / Aaron Gantrell

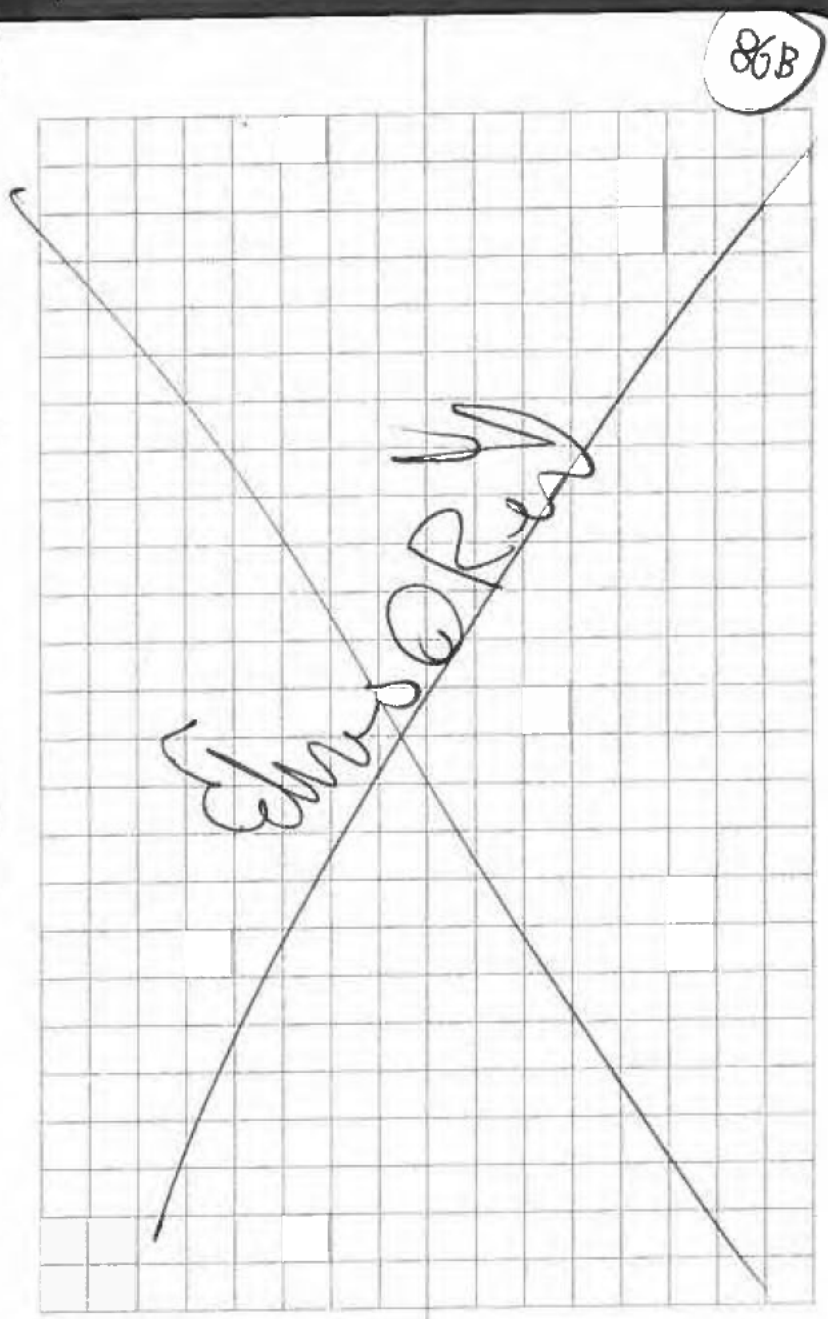
Sample Totals-

1 - Outdoor Ambient
14 - Indoor Ambient
9 - Negative/Positive Pressure *
2 - Soil Gas (4'+6')
26 - TOTAL

* Pressure testing conducted in isolatable area that was mostly below grade at NE corner.

Soil Gas probes decommed 2/26/15 at worksite offices.

86B



(78) ADU-1-VI EJR 2/19/15

0021-5 (Loudes)

Onsite -0840- H+S Mtg 0850 Weather - Mildly Sunny, LFB none

Met Principal + staff

Skip escorted = DED/AE/IEE to operate

Started in basement, checked open rooms representative of each floor

Installed two soil gas probes -

SG-001 - 4' lowest end of Bldg facing 700 South,

SG-002 - 4' sharp corner of Factory

Near connection to School

Refused at 4' in sandy cobbly soil w/ U little clay

Decided probes per SOP

Sampled Seepage water at gate in Hall from gauge - basement

-0021-5 - GW-001 - 1400 hrs

Center of School Bldg - Lat - 40.754474

Long 111.860751

Elev 4443' (at front ent

SG-001 - 4' - Lat 40.754336

Long 111.861099

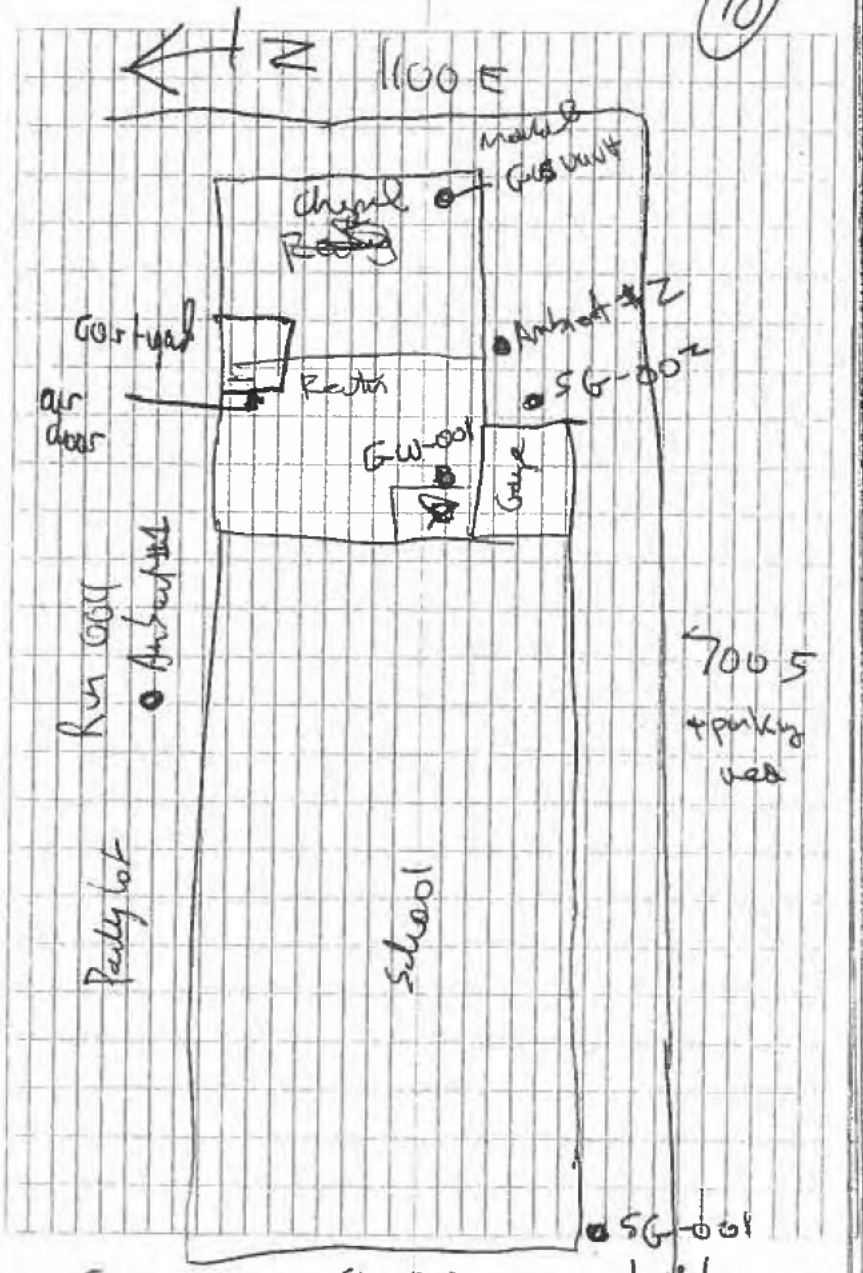
Elev - 4418

SG-002-4' Lat: 40.754397 Long 111.860051

Elev = 4459'

EJR

(76)



EJR

(97) 0021-S (Lourdes) 2/19/15 Ed Rad

GW-001 Lourdes = Cold 1400 - approx -100
Lat - 40.754464
Long - 111.860363
Elev - 4445' est (in bldg)

Hepatitis - finished contact in Rectory
+ left 1600 -
Will Do Chapel + social hall
Friday, and attempt Neg pressure on Rectory

GW-002 - Discharge point to sewerline ← "Lourdes Spring" of USGS
Lat - 40.754283
Long - 111.861227
Elev - 4413
EJR/DED offsite 1620

EJR

(78)

GW-002 - Spring line outfall
1605

Field Parameters -

Location	pH	Temp	DO	SC	Turb	ORP
GW001	6.96	1620	6.05	1550	3.1	270
GW002	7.50	1627	8.78	1326	1.3	246

EJR

78A

Addendum
0021-S

5/11/15

Instrument – Hapsite Smart Plus – H860
Operators – Issac Eduardo and Aaron Cantrell
Conducted ambient tests on 2/19/15, neg/positive on 2/20/15
Sample totals –

1 – Outdoor Ambient
22 – Indoor Ambient
8 – Neg/Pos. Pressure (2/20/15)
2 – Soil Gas (2 locations)
34 – TOTAL

Also collected two (2) groundwater samples + checked field parameters
Decon'd soil probes for soil gas every day 2/19/15 per SOP

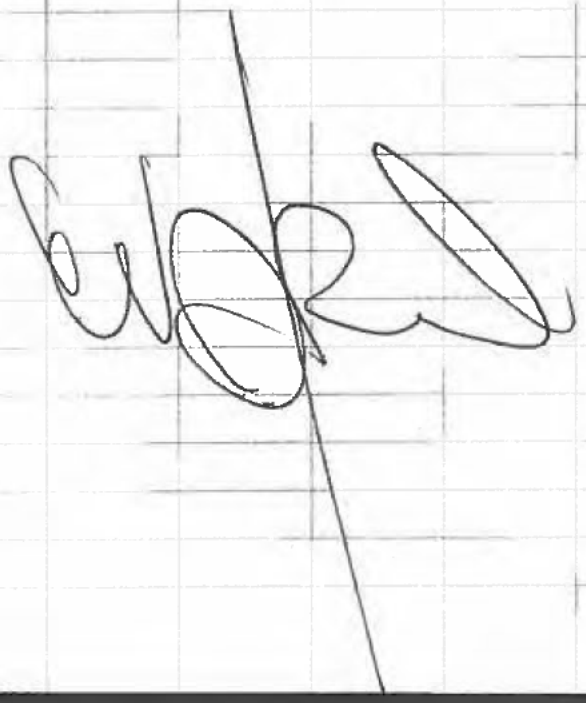
78B

(79) 0021-5 (Lowds)
Arrival - 0830
0840 - 1145 [illegible] MH
Setup in basement chapel / church
+ finished [illegible] by 1015 - ISE/AL/[illegible]

Setup audio in rectory section
to vent to countryside + pull via
Basement laundry room.
Conducted veg + pleasure prevention
1030 — 1240

Returned to office + [illegible] loaded [illegible]

[illegible]



(80)

(135) Judge Mem HS 0022-5 Ed Reid 4/6/15

Met at Judge HS - 0630. Weather, Mild, mostly Cloudy, Lt Breeze
HS Mtg - 0635 - No PPE Required
Operator - Ellen Reid

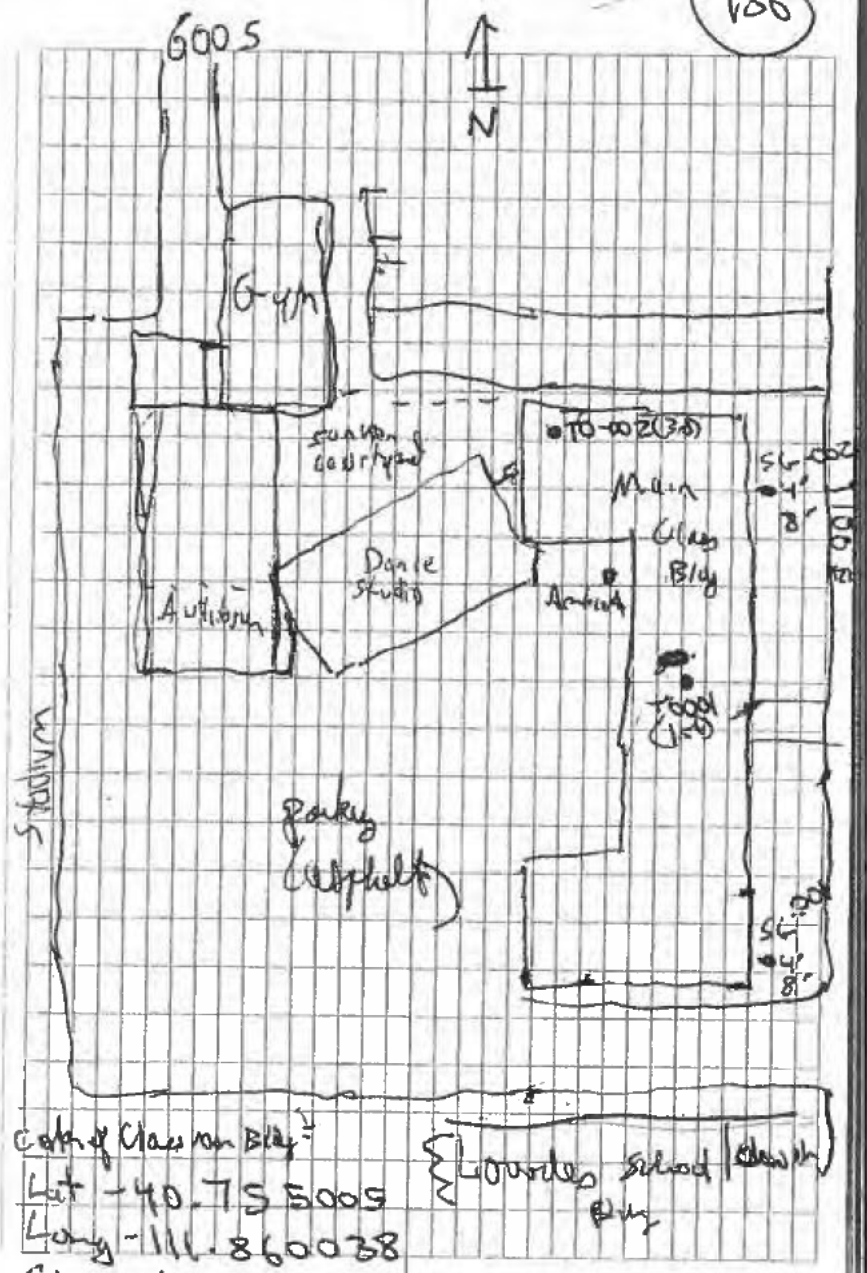
Started in main classroom building (Fronting 1100 E). Worked from ground floor to 4th floor conducting ambient testing in mix of offices, classrooms, storerooms, + restrooms. From classroom building, moved to old gym (now dance studio) w/ weight room on first floor.
- Moved to auditorium / band room bldg.) then to new gym on northside of complex. Finished ambient -

Based on ambient results - set two summers in classroom bldg: One in 1st floor (partially below grade) cafeteria. + One in Rm 330 on northwing, 3rd floor in science lecture room

A-00225-040715-TO-001-CAFE
Start 04/06/15 - 1200 Start Hg = 25 End - 4"
Can ID - 0199 Reg ID - 0375

A-00225-040715-TO-002-CR330
Start 04/06/15 - 1240 Start Hg = 27
Can ID - 0260 Reg ID - 0191
End Hg 2" End time - 1200 ER

(136)



Center of Classroom Bldg:
Lat - 40.755005
Long - 111.860038
Elev - 4470'

{Lourdes School / Classroom Bldg

ER

(137) Judge 0022-S (Continued) EJRS 4/6/15

Re'cond air door locations - plan to do air door on 4/7/15 if area can be isolated

Recon'd soil gas locations for installation on 4/7/15

SG-001-4+8 Near SE corner of classroom Bldg by driveway between Judge + Lowdes.

Lat - 40.754680 Long - 111.859855

Elevation - 4467' ft msl

Sample time - 0905 (4') - 4" Hg

~~[illegible]~~ at 0915 (8') - 10" Hg, but quick drop

SG-002 - 4' + 8.5' - NE corner of Bldg

sample time - 0940 - 7" Hg

Lat - 40.755309 Long - 111.859875

Elev - 4471' ft msl

8.5 sample time - 1000 7" Hg

~~[illegible]~~ [illegible]

Off site - 1500

EJRS

(138)

Note - DED set summa at 0037-H at 0800-0815 (see page 127) - Delivered to lab by DED - 1520

← Vacuum too high - could not sample tight clay soil

← Very slow fill due to tight clay soil dark brown clay w/ silt loam

Sample tally - ~~[illegible]~~ GPR 4/6/15 0028-S

1 - outdoor ambient

3 - Soil Gas (2 locations)

34 - Indoor Ambient

0 - Indoor Neg/Positive Pressure *

38 - TOTAL

* - No pressure testing - could isolate suitable portion of classroom or gyp-building to conduct test

Also - 2 indoor ambient summa samples coll

EJR

(139)

Judge
0022-5

EL Reid
4/7/15

Met at Site - 0815
EJR, DED, JL -

Weather, Cloudy,
Cool (40°) drizzle

H+S Mtg - 0820 - No PPE Required
Installed Soil Gas probes SG-001 + SG-002
See Page 137 - Finished 1030
Decon'd probe rods using triple wash/
rinse procedure per SOPs.
Attempted SG-003. East of Newgym - refusal
Picked up summa - 1200
Delivered summas to Lab @ 1520 by
DED
Finished at Judge - 1215

EL Reid

(140)

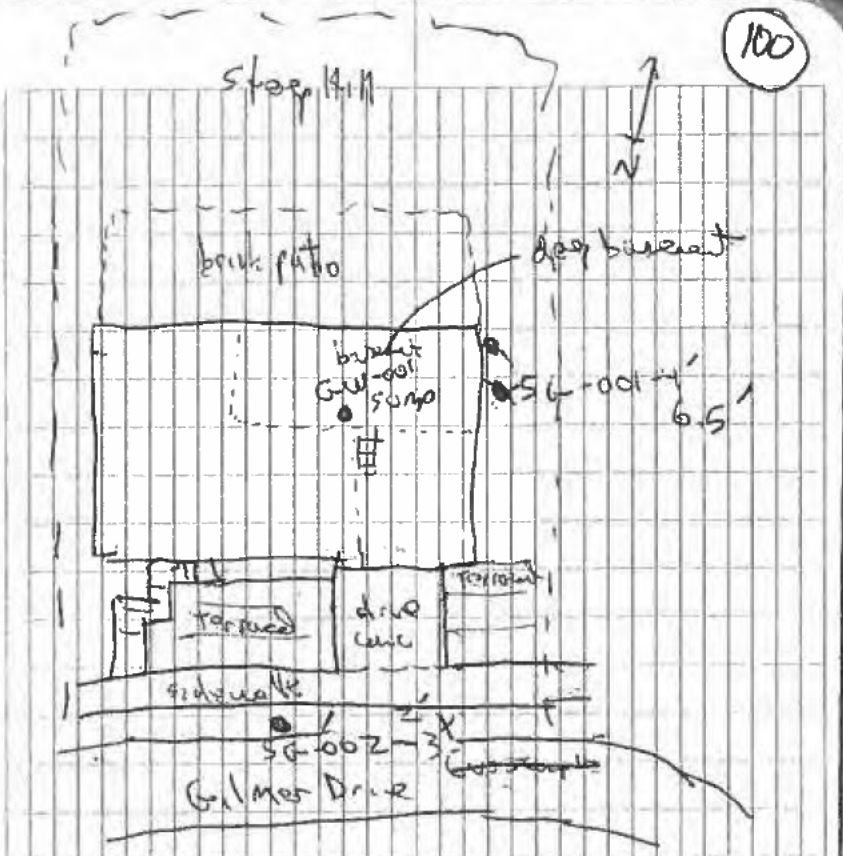
EL Reid

EJR

(99) 0023-H Gilmer 3/9/15 ERR

At Sunnyside Parker 0800 Weather 30's nightly
H&S Mtg - 0815 50's, Calm, Clear
0830 - At site w/ VA rep (Lynne)
Lat - 40.749164
Long - 111.854789
Oleadin at Street (about basement floor) = 4474'
ERR / RED - operators - Hazardous Smart Plus
Slated ambient in lowest basement level
in furnace / sump room - collected field
parameter sample @ 1650. - GW-001
Sump - TD = 1.6'
WL = 0.8
Flow = ? Est 5+ gpm to 10 gpm
sump runs 30-45 sec intervals.
ERR run basement source entry
surveys in deep basement + in living basement
PM - Negative + positive survey
between 1:30 and 4:45 pm

(100)



Note - relief on property from
Gilmer curbside to top of hill behind
house = 30'
Field Parameters - Horiba autocal - 3/9/15 - 1600
0023H - GW-001 - pH - 7.08
SC = 1610 u/m DO = 3.62
ORP = 135 Temp = 18.01
Turb = 0.00

ERR

(101) AOU-1 UC
0023-H

EDR
3/10/15

Mat at site - 0830 Weather - Mid, 30'
H+S mtg at site 0840 Sunny, Lt Breeze
ETR + DED - Soil gas probe installs -

Installed SG-002-3' Near corner of driveway by Gilmer.
Held vacuum - 20' Hg, slow decrease for 30 seconds - too much vacuum
No sample - pulled water
Very tight clay, refusal at 3' on hard surface
Lat - 40.749028
Long - 111.854747
Elevation - 4475'

Installed SG-001-4' Near North wall of house - opposite basement game room. Did not hold a vacuum
Tried to push to 8', refusal at 6.5'
Lat - 40.749207
Long - 111.854724
Elevation - 4488' (15' above Shrt)
Finished at 1015 + left site -
Delivered samples to field office for analysis

EDR

(102)

0023 - Sample Totals
1 - Outdoor Ambient
14 - Indoor Ambient
18 - Neg/Positive Pressure
2 - Soil Gas
35 - TOTAL
Also collected GW from sump for field parameters

← Re-installed to 2', + triangulation - Same result - Very tight clay held vacuum. No water at 2', just tight soil

→ 0940 + 0950
← On grade with 1st floor

- Soft, sandy fill material w/some cobbles

← Decon'd probe rods at site per SOPs.

EDR

(67) AOU-1 VE
0024-4 (7015 1300)

EA Rd
2/11/15

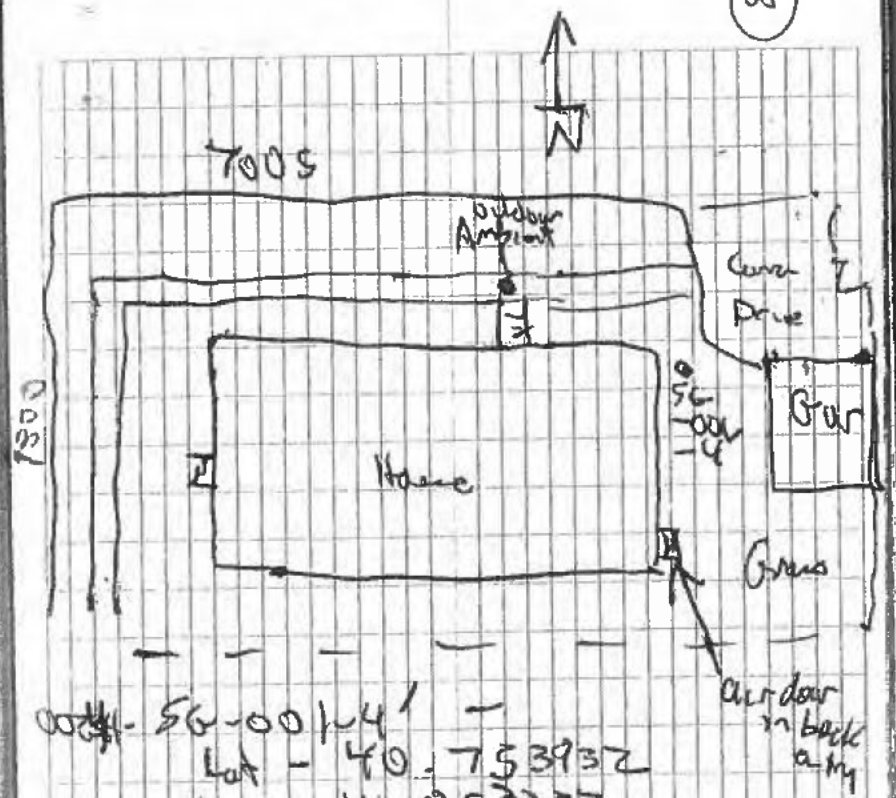
Left office 0740 at Pat - 0810 - 1145 Mtg - 0815
At home - 0830
met homeowner.

weather - Sunny
Calm to Lt Breezes
Cold to Cool - 30s - 40's

Center of house - Decimal Degrees
Lat - 40.753888 N
Long - 111.853447 W
Elev - 4550' Ft mr

Basement is used as work room + storage
not currently habitable.
Gravel space at front of house.
Aaron/Chris/DED set up to run
by 0910 - amplifier / pos/neg in pin
- Day uneventfull -
Done at 1630

(68)



0024-SG-001-4' -
Lat - 40.753932
Long - 111.853352
Elev - 4552 ft mr

Soil - appeared to be sandy/cobbly, probe refused at 4' after six attempts that refused at 3' or less

68A

Addendum
0024-H

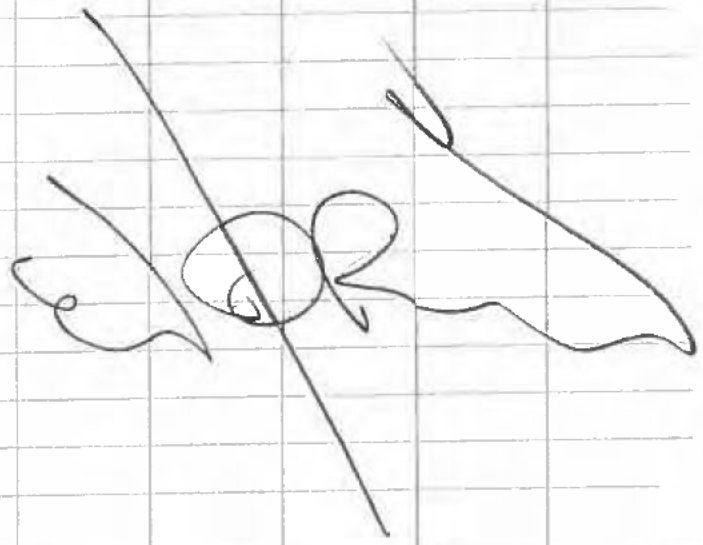
5/1/15

Instrument – Hapsite Smart Plus H860
Operator – Aaron Cantrell w/ Isaac Edwards

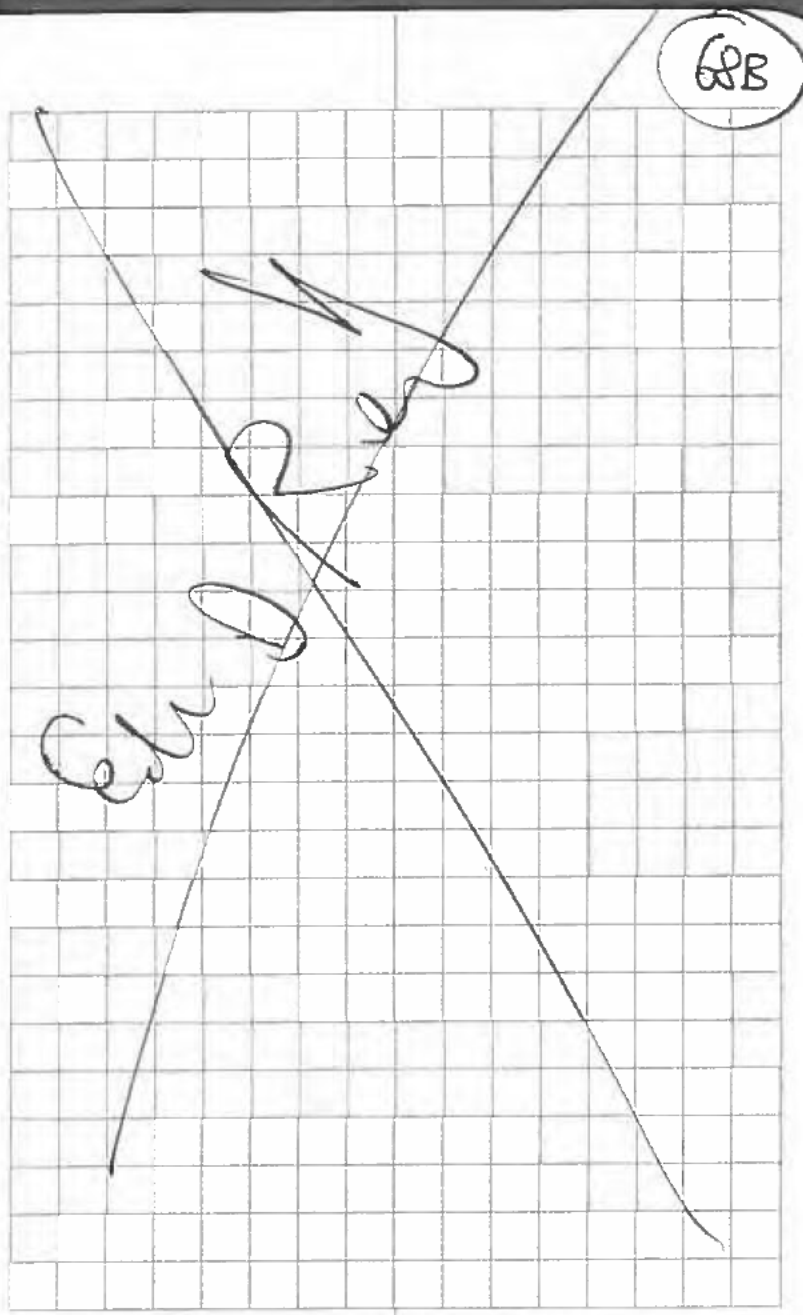
Sample Totals —

1	– Outdoor Ambient
16	– Indoor Ambient
23	– Negative/Positive Pressure
1	– Soil Gas
41	TOTAL

Note – Soil Gas probe rods decon'd every of 2/11/15 at UA facility – procedure according to protocol



68B



(61) AOU-1 VI
0025-H

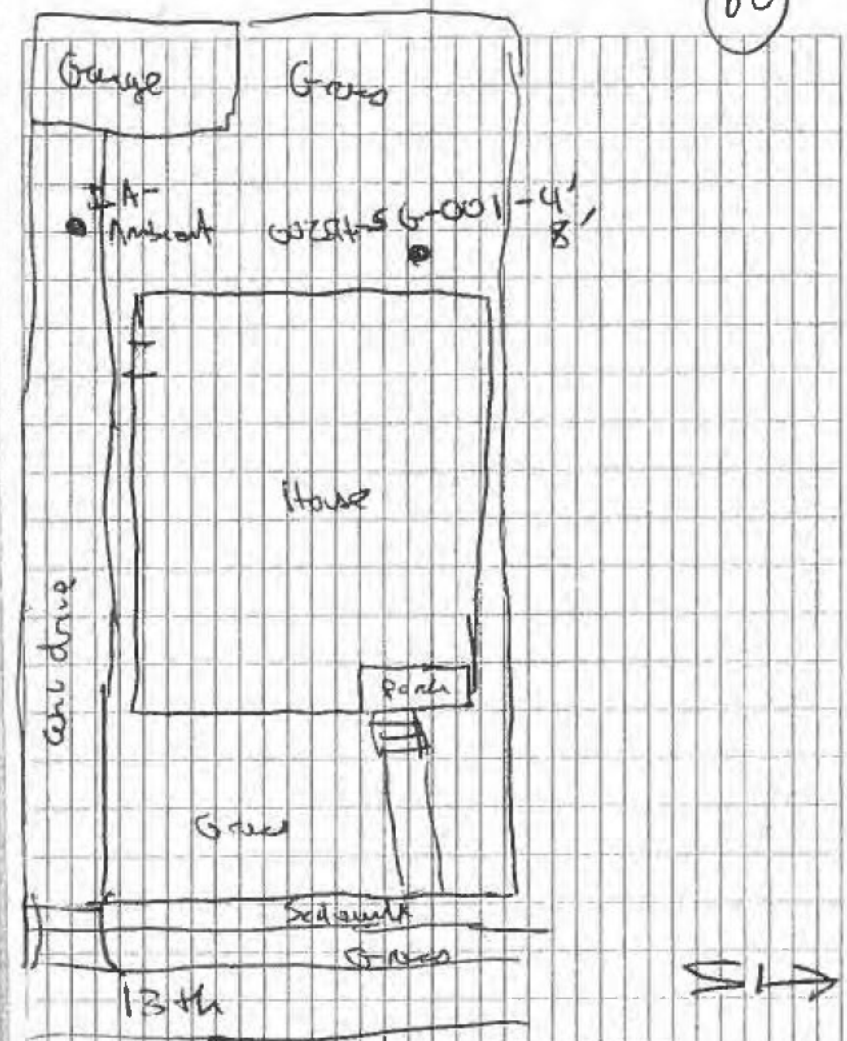
Ed Rd
2/9/2015

Left office - 0740 at Park - 0810 Arrive - 0830
Lat - 40.44.5414'
Long - 111.51.1548
Elev. - 4515 ft msl

Weather - Cloudy
w/ percent of rain
Calm, 40°-50°s

Met w/ homeowner + UA rep at home -
Set up Hepatite in basement to start - 18/
DED Ran indoor ambient testing
EJR - offsite - 1040
DED / TSE continued w/ ambient indoor,
then proceeded to do Negative/
positive pressure testing
Finished at 1530 + moved outside
to conduct ambient + soil gas
Decond soil probes per protocol
Cleaned up + left site - 1615

(62)



SG-001-4' + 8' - installed 1600 -
Lat - 40.44.5425
Long - 111.51.1603
Elev. - 4513 ft msl

Soil - Silty Sand, some clay?

62A

Addendum
0025-H

5/1/15

Instrument - Hapsite ER
Operator - Isaac Edwards

Sample totals -

1 - Outdoor Ambient
12 - Indoor Ambient
15 - Neg/Positive Pressure
2 - Soil Gas (4'+8')
30 - Tot AL

Ed R

62B

Edw R

(93) AOU-1 VI
0026-H

Ed Red
3/3/15

Meet at Summer Park - 0800 Weather - Hoary Snow
H+S tailgate mtg - 0815 In am, Breezy
Proceed to site - 0830 32°F.
Meet homeowner w/ VAR rep

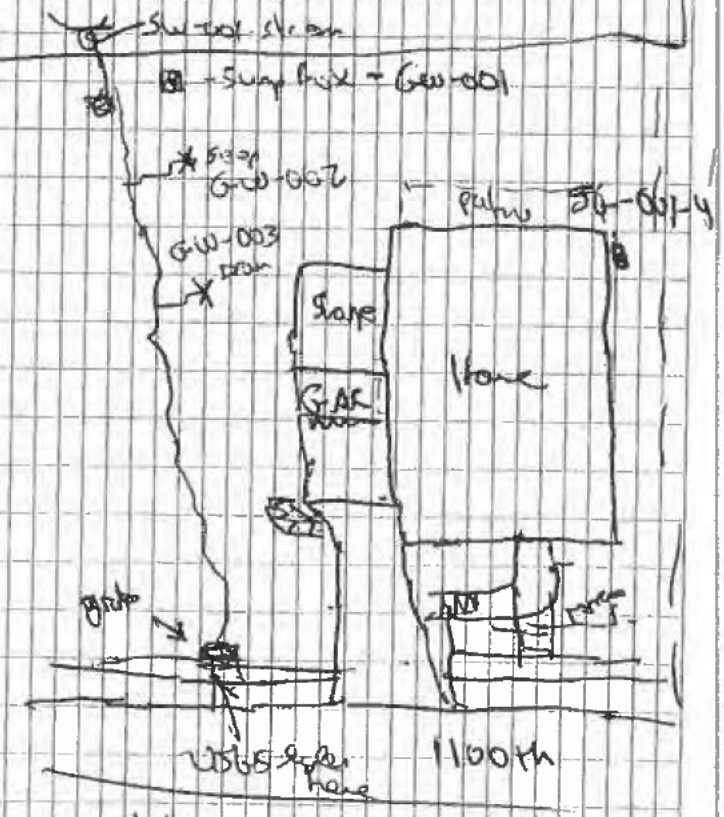
Lat - 40.752523
Long - 111.859080
Elevation - of main floor - 4435 ft msl
Note property slopes up to east w/ ravine along North side -

3" snow (wet) prevented soil gas probe
install and GW sampling.
Afternoon melting fed stream
Will do soils / GW / spring on Thursday & Friday
ER / DC / DED - Conducted ambient indoor
air tests - in am
Setup + conducted negative pressure
in pm.
air door set in back (kitchen) door.
w/ doors to both basement stairwells open
Finished pressure at - 1500

Ed Red

(94)

DED -
Picked up Summa cans at 0011-H
@0800 took to lab (ALS) at 0910



Sample Totals -
1 - Outdoor Ambient
14 - Indoor Ambient
13 - Neg / Positive Pressure
4 - Soil Gas (3/6/15) + 4/7/15
32 - TOTAL

Returned on 4/7/15 to set Summa + SVOC samples - See page

(95)

AOV-VI

0026-H Soil Gas/water 3/6/15

Returned to site to install soil gas + collect GW/Spring samples

Weather Sunny 30's to 40's, Calm

Onsite - 0945

SG-001-4' -1000

Located SE corner of house, Refusal on hard surface

Lat - 40.752461

Long 111.859034

Elevation 4435'

Note - Heavy wooded lot - GPS had difficulty

* Sump on hill side - GW-001 - 1.2' WL

appears to be old water TD = 7.8'

storage basin to collect spring water

Sampled 1120

Lat 40.752828 Long 111.858679 Elev - 4432'

* SW-001 - Spring stream - collected at drain pipe outfall coming under Elizabeth Shed - 1125 hrs -

Flow = 70-80 gpm due to snow melts

GW-002 - seep on hillside 25' south of sump - drugs small hole in hill - Sampled 1130 - Elevation 4431'

Lat - 40.752822 Long - 111.858722

Calibrated Horiba U-53 - 1300

(96)

Lat - 40.752731 Elev - 4423'

Long - 111.859045

GW-003 - French Drain from East of house - 1135

Empties into stream by driving

GW 3/6 Lat ~~40.752999~~ Long 111.~~858416~~ 3/6

Elev - ~~4433~~ 3/6

Sample	pH	SC	Temp	ORP	Turb	DO2
GW-001	6.97	1290	16.29	259	7.4	5.19
GW-002	7.28	1270	15.87	231	217	4.01
GW-003	7.32	1440	16.04	217	5.6	4.49
SW-001	7.60	1220	16.31	209	0.00	5.34

← Homeowner notes this "well" is noted on her Property deed -

DERR May have records for this well

← This stream heads east of Elizabeth Shed in ravine - what is feed by many small hillside seep

SW-00 Sample Lat 40.752999

Long 111.858416

Elev 4433' Ft msl

Decon'd probe rods per SOP -

Offsite - 1220 hrs

96A

Addendum
0026-H

5/15/15

Instrument - Hapsite Smart Plus H860
Operator - Ellen Reid
Due to heavy snow fall on 3/3/15, team returned on 3/6/15 to collect soil gas + locate seep/spring - ∅
Collected 3 groundwater samples for field parameters
Collected 1 surface water - at bridge on 1100. Surface water is sourced 1 block East at large spring.

* Returned to site on 4/7/15 + installed additional soil Gas sample points + re-installed SG-01 next to foundation.
Total Soil Gas Samples for 0026-H = 5

96B

(69) 11645.700 Ed Rob 2/12/13

0027-H

At Park -0800 - H+5 mtg Weather - Sunny, Calm, Cool to warm

At Site -0830

Center of House -

Lat - 40.753845 N

Long - 111.857440 W

Elevation - 4491 at bottom of front steps

Arm / [illegible] - setup on main level + [illegible] in am

Ran negative/positive - via front door impos

No issues - Easy day -

Soil Gas sample on west side of house near SW Corner,

0027-H - SG-001-4' + 5.5'

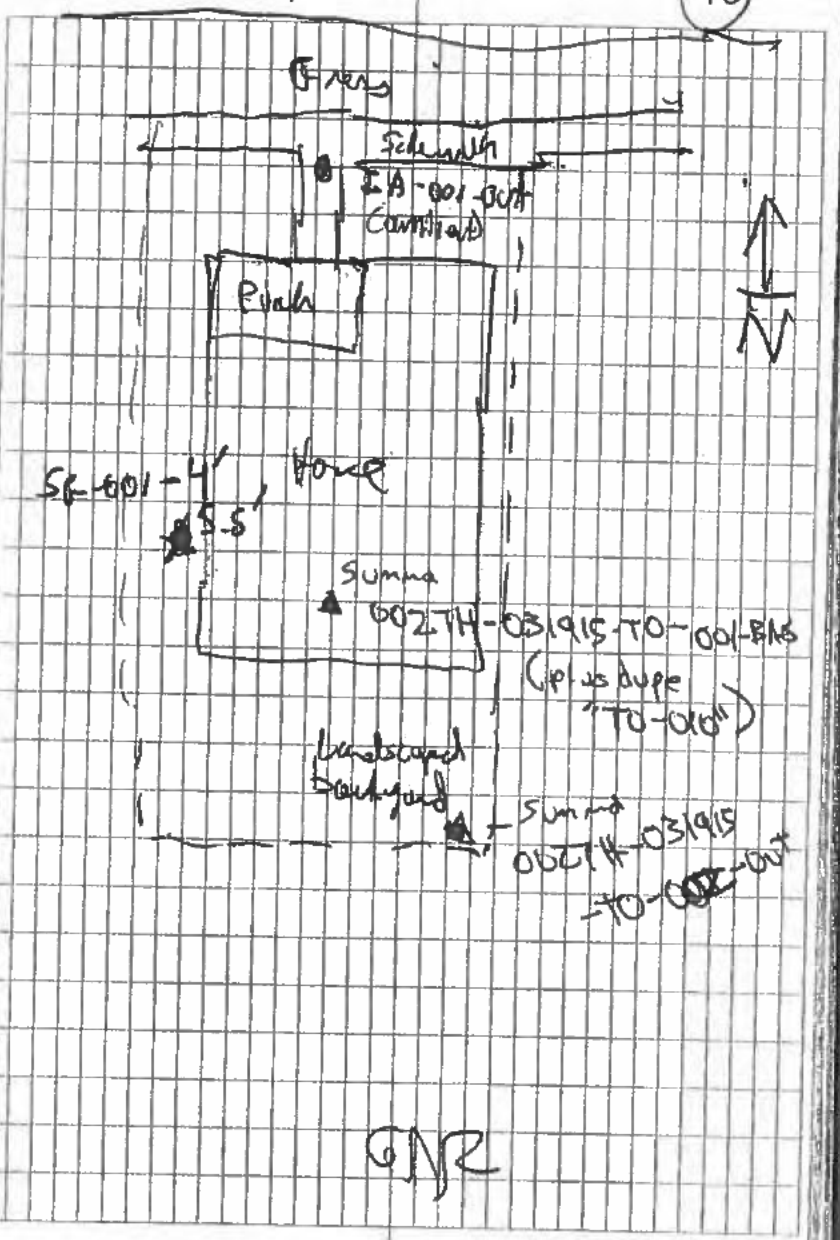
Refused on cobble at 5.5'

Lat - 40.753802 N

Long - 111.857517

Elev - 4489'

Decon'd soil probes per SOP



70A

Addendum
0027-H

5/1/15

Instrument – Hapsite SmartPlus - H860
Operator – Aaron Cantrell + Jesse Edwards

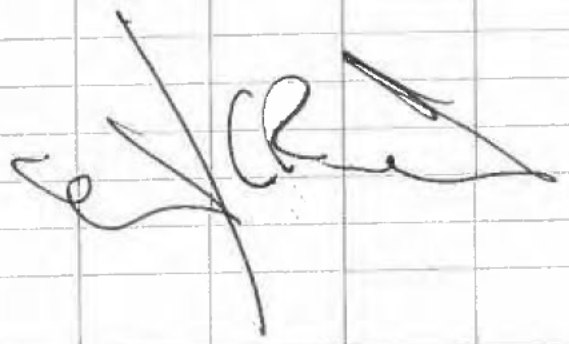
Sample totals –

1	- Outdoor Ambient
14	- Indoor Ambient
18	– Neg/Positive Pressure
2	- Soil Gas (4' + 5.5')
35	- TOTAL

Determined that site was good cross-gradient location to collect confirmation samples – Placed Indoor Ambient + Outdoor Ambient, plus duplicate of Indoor on 3/18/15

See Page 113 and Page 70

3 Confirmation Samples



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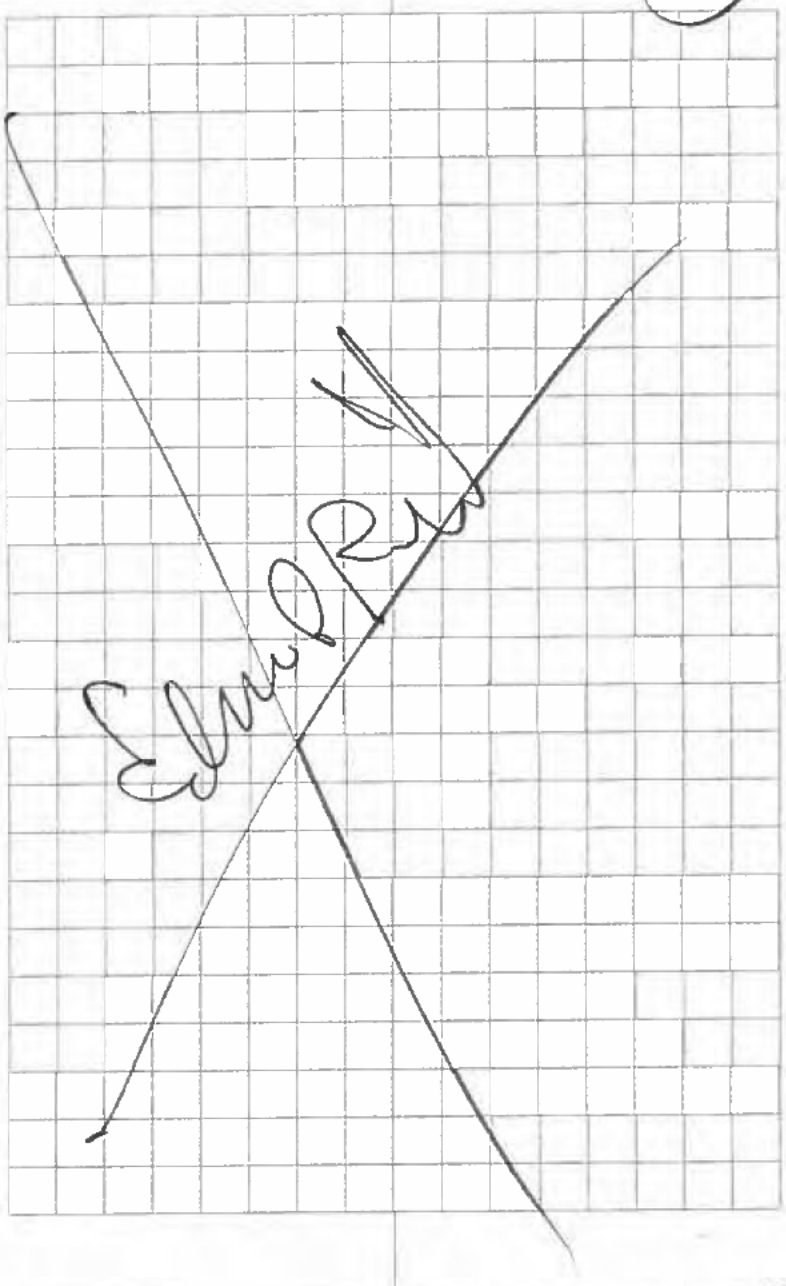


(117) AOU-1 UB
0028-5 (Pingree) Ed Reid 3/31/15

Met at Sunnyside Park - 0810
Hut Mtg - 0815 - Weather - Pt Cloudy
No PPE Required Warm (70s), Lt Breeze
Proceeded to site + met office administrator for school - w/ Brian Green (VA Rep).
Instrument - Hopsite Smart Plus - Operator - Ellen Reid
ERR/JC/DED - commenced ambient testing on 1st floor at 0900
Brian Green + EJR reviewed building construction plans to ID Soil Gas Probe location without U/G utilities

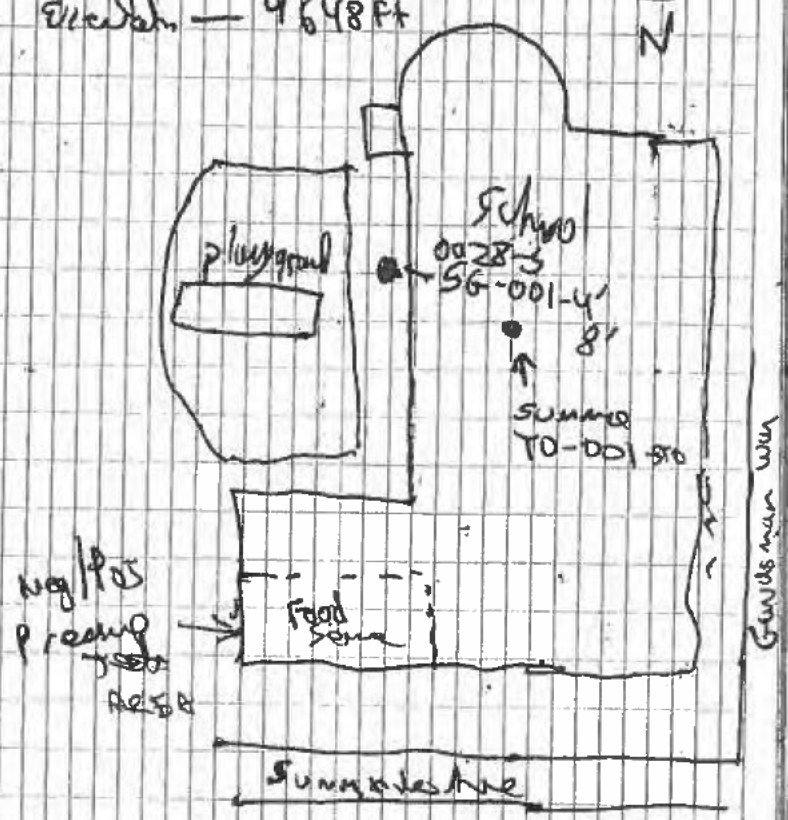
DED/EJR - installed Soil Gas Probe on west side of Bldg between playground + classrooms
0028-5 G-001-4' + 8', 1000-1040 hr attempted six times - before penalty to 4'. - Soil was fill - mix of crushed stone, cobble, clay + sand.
Lat - 40.751540
Long - 111.846144
Elevation - 4647 ft msl

Decon'd probe rods per SOP/QAPP w/ triple rinse/brushing.

EJR

(118)

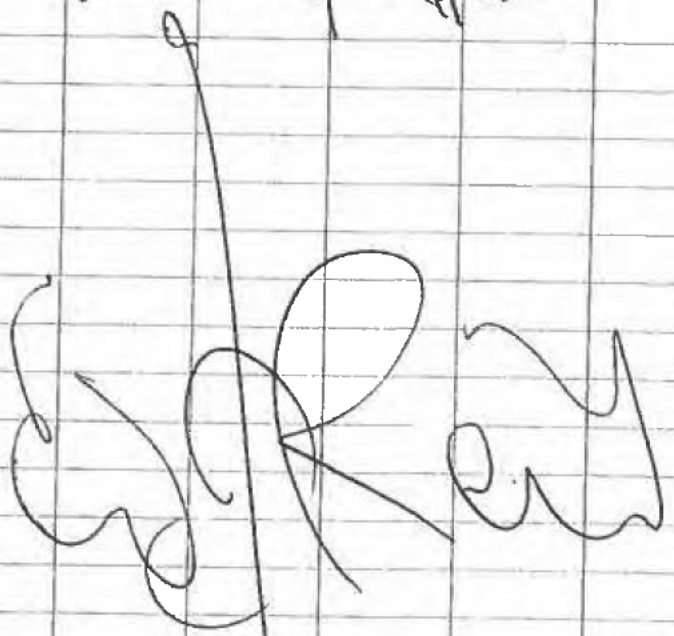
Center of Bldg Location
Lat - 40.751356
Long - 111.845914
Elevation - 4648 ft



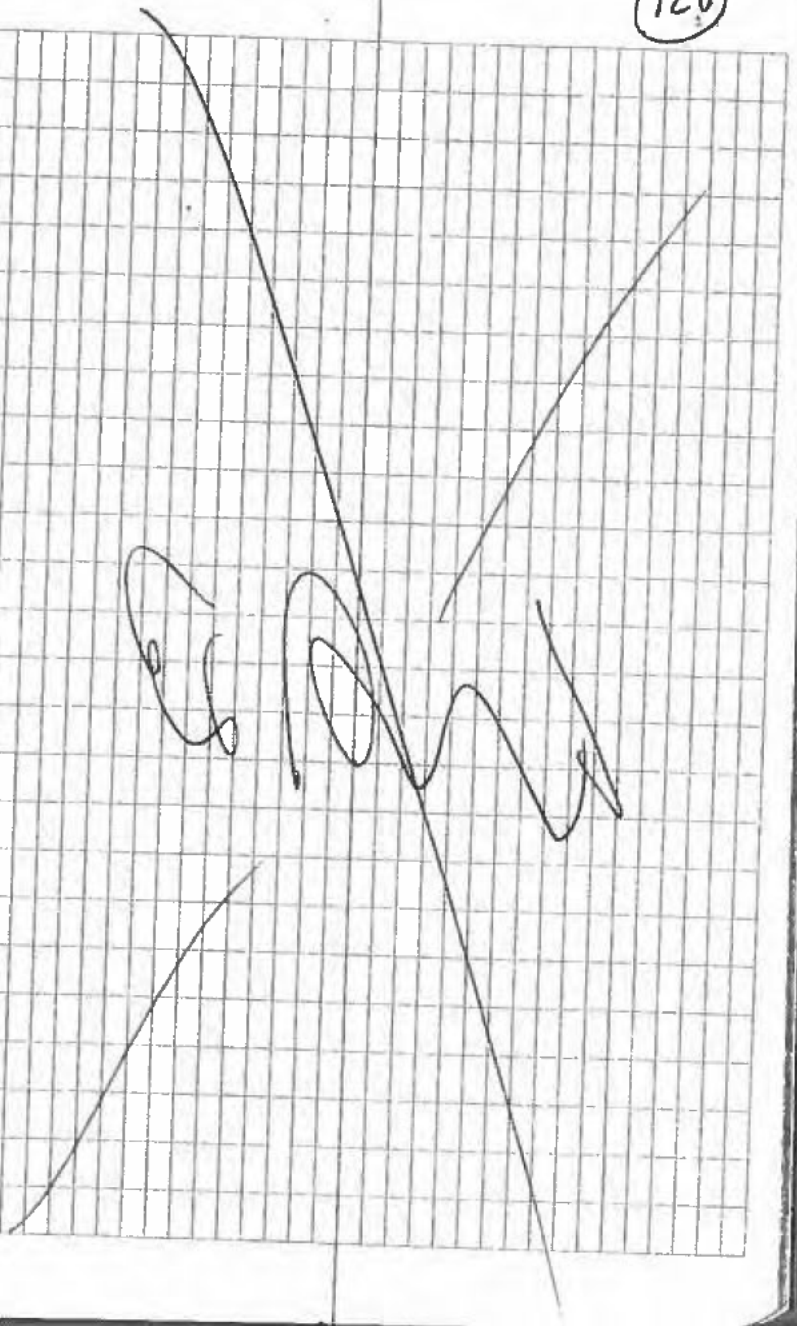
EJR

119

Accidentally Skipped



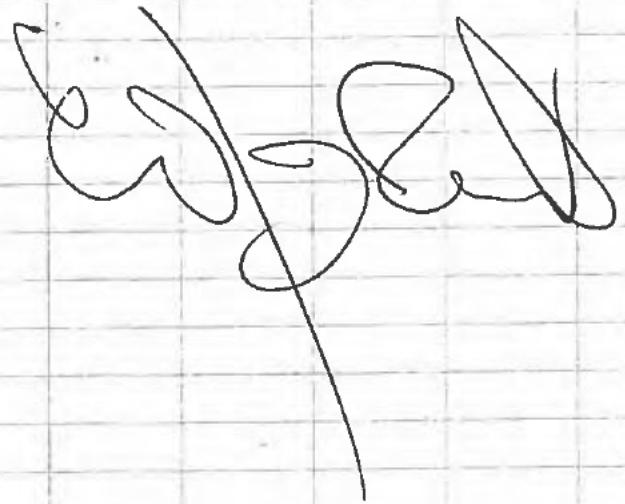
120



(121) AOV-1UD 0028-5 (Pingree) Ed Rud 3/31/15

Continued -

ERR/DED/JC proceeded w/ indoor ambient until 1500, finished, then ran soil gas samples + CCUs
Will conduct negative/positive pressure test on Food Service Section on 4/1/15.
Offsite - 1530
Sample totals - all w/ Hopcalite H-860
2 - Soil Gas
1 - Outdoor Ambient
27 + Indoor Ambient
30 Total for 3/31/15
Soil probe decon'd in accordance w/ SOPs in DWP



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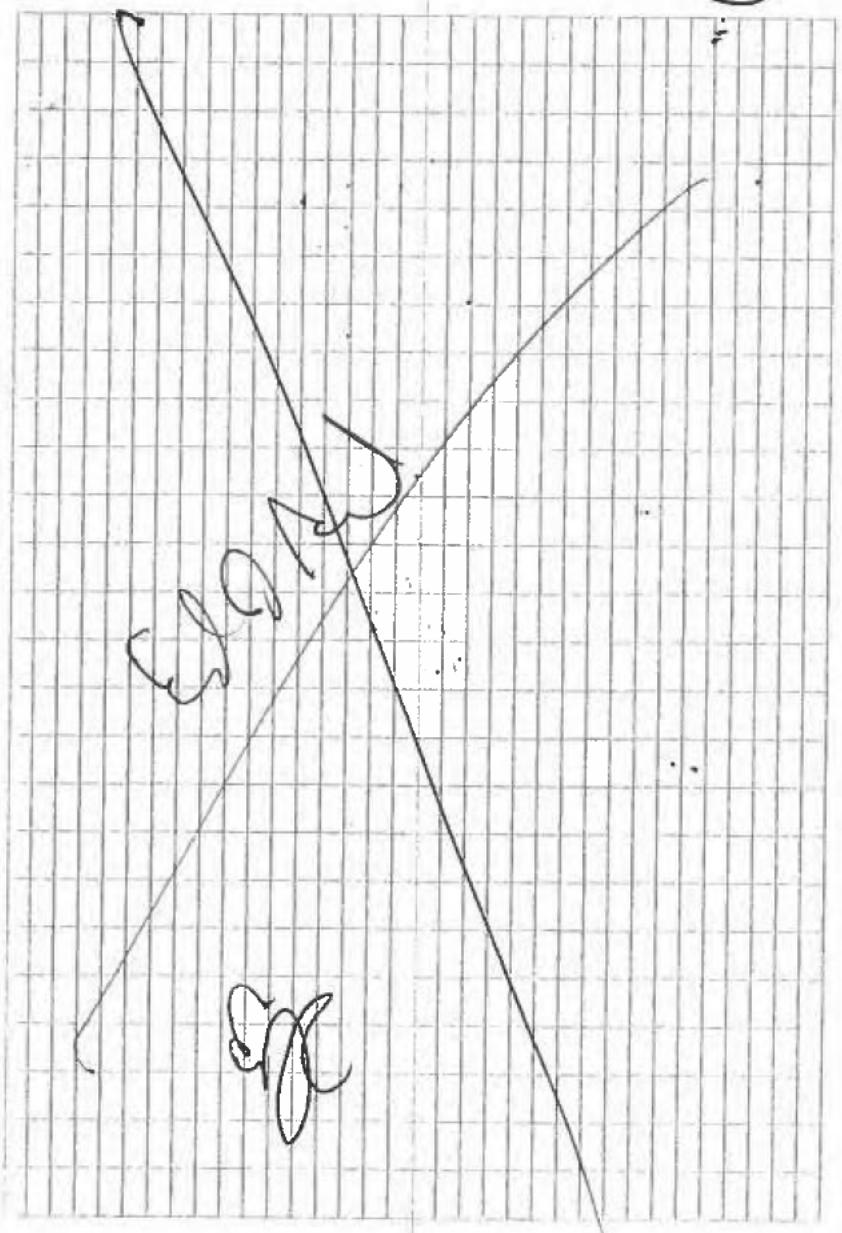


(123) AOU-1 VI
0028-5

Ed Reid
04/1/15

0830 - Return to Pingree School to conduct negative & positive pressure testing -

Weather - Sunny to Pty Cloudy, Mild - 50°, Mid Breeze

H+S Mtg - 0840 - No PPE Required

Setup air door in middle door to food service area - the only easily isolated part of school - ≈ 1800 sq ft

Put Hapsite in bank prep room

Conducted localized pressure testing in am - finished about 1300.

Set indoor ambient 24-hr Summa cam in West Corridor - Boys Bathroom in Maintenance storage Area w/ - open Pipe chases

→ A-00285-040215-TO-001-STO
Set - 0945 Start Hg - 26"
See COC for more information
Will Pickup on 4-2-15 - 0940 or so

ERP ran CCVs - Hapsite H860 - passed
Offsite - 1330

Ed Reid

(124)

0028-5 Sample Totals (2 days) -
1 - Outdoor Ambient
27 - Indoor Ambient
16 - Neg/Pos Pressure
2 - Soil Gas (4'+8')
46 - TOTAL
1 - Indoor Summa sample collected

← See Sketch of Summa locations on Page 118.

EDR

(103) AOV-1 VI

0029-H CM pond 3/11/2015 E.R. Reed

Mtg at Sunnyside Park - 0810 Weather -

Tailgate mtg - 0820

Proceeded to site - w/ UA rep - Jeff Rogers - 0835

Lat - 40.749444

Long - 111.858000

Elevation - 4418 ft msl - at slab of house

Low spot in front yard is about 4416 + gets boggy at times - shallow GW by curb

ERR / JC Ran Hupute - ambient in am

SG-001-4' + 6' - sand/silt fill - 1100 1115

Lat - 40.749419 Refused 6'

long - 111.857943 Vac - 2.4" Hg

Elev - 4420'

SG-002-4' - 1120 10" Ctg

very tight clay. barely obtained

Lat - 40.749519 sample - high

Long - 111.857909 vac -

Elev - 4422' Refused at 4.5'

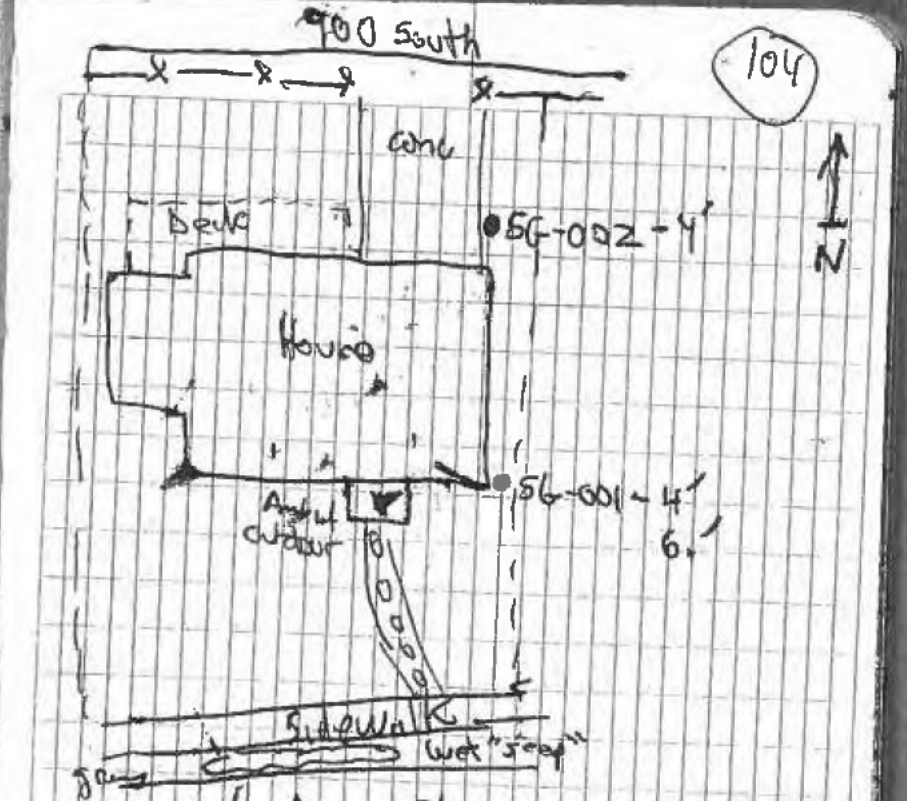
Decon'd soil probes per SOP

Negative / Positive Pressure in pm

- Finished by 1530 Coffeetake

E.R. Reed

(104)



Potential location for GeoProbe well point in future

0029H - Sample Totals -

1 - Outdoor Ambient

12 - Indoor Ambient

9 - Neg/Pos Pressure

3 - Soil Gas

25 - TOTAL

E.R.

(11) (111) 0030-H 15th VI testing Ed Red 3/17/15

Met at Sunnyside Park - 0815 Weather - Warm

HSMg - 0820 - No PPE Required Breezy, Ptly Cloudy

Met homeowner w/ VA Rep (Brian Speed) at 0835.

ERR/JC set up Hepatite Sprint Plus conducted ambient testing 0900 - 1130

DED - installed 0030H-SG-001-4' - 1000

refused on cable 6.0' 6' - 1010

Soil - Silt/Clay w/ some sand and pebbles

Lat - 40.754450

Long - 111.853528

Elev - 4553' msl

Center of House Location:

Lat - 40.754441

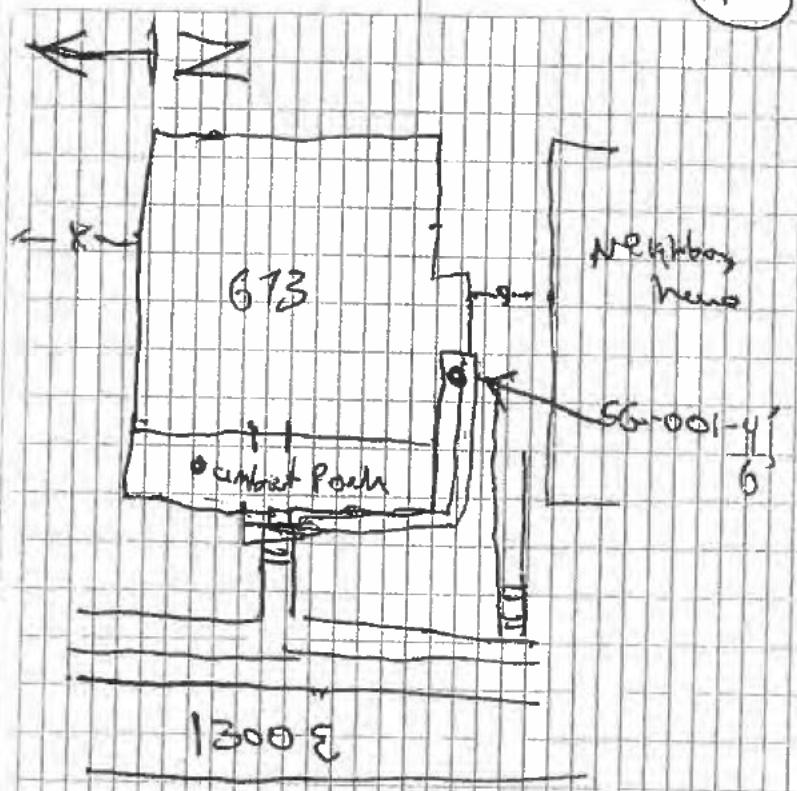
Long - 111.853577

Elev - 4553' (Front sidewalk at steps)

DED/JC - Decon'd Soil Vapor Rods per SVP

ERR, DED, JC - conducted Negative + positive pressure testing - 1150 - 1450

Cleanup, Left site - 1530 after CCV runs



0030-H Sample Totals -

1 - Ambient Outdoor

10 - Ambient Indoor

15 - Negative / Positive Pressure

2 - Soil Gas (4'+6')

28 - TOTAL

Set Summa Conf. Sample on 4/10/15 - 1 - Soil Gas

1 - Indoor (plus DUP)

1 - Outdoor

Ergh

(107)

0030-S Rowland Hall Soil Gas Sampling — EL Rep 3/16/15

Met at Sunnyside Park - 0800
Held tailgate HAC mtg - 0810 Weather - Pty
- NOPPE Required Cloudy, Warm, Lt
Moved to Rowland Hall School Breeze
at 0845
Marked out SG-001 Thru SG-003
along ~~edge~~ North edge of property.
SG-001 - required almost 20 attempts
and moved along 50' of fence before
a location could be driven deeper than 2'
SG-001-3.5' - Lat - 40.753826
Long 111.845870
Elevation 4664'

SG-002 - adjacent to fence - next to former
UANG Building - required six attempts, +
but made it to 4' - only moved off by 5'
0030 SG-002-4.0' - Lat 40.753788
Long - 111.846937
Elev - 4660'

SG-003 - Near NW corner of soccer field by
fence - U of U "pond" is just across fence
0030-H-SG-003 Lat - 40.753790
Long - 111.847845
Elev - 4650'

ERR

(108)

See sample summary form for sampling info.
SG-004-4' - 1215 sample
Near dining hall cov. tpd.
Lat - 40.753329
Long - 111.847066
Elev - 4657

SG-005 - NW corner of field house -
multiple attempts - finally moved to NE corner
and tried 3 times - Pushed to 4'
SG-005-4 - 1330 Sample time
Lat - 40.752733
Long - 111.847323
Elev - 4652

SG-006 - West ~~North~~ center of lower school
Attempted 4-4 times, drove to 3' + no more
each time -
SG-006-3' - Sample time - 1350
Lat - 40.752561
Long - 111.846822
Elev - 4651

ERR - set up Hayfeet's Smart Plus at PE office
and picked samples up at 1400

ERR

(109) 00305 - Soil Gas 3/16/15 (Continued)

SG-007 - [illegible] SW corner of property
South of Field House in parking lot [illegible]
Took 4 tries, but reached 4.0'
SG-007-4' - 1410 sample time
Lat - 40.752052
Long - 111.847534
Elev - 4646

SG-008 - south fence line edge of property.
Took 3 tries - reached 4'
SG-008-4' - 1445 sample time
Lat - 40.752097
Long - 111.846867
Elev - 4652'

SG-009 - Center Courtyard - between
line of trees - 10 attempts - none
deeper than 18" - No Sample

SG-010 - Many utility lines - tried
one clear area - 6 tries - 12" or less
No Sample -
Public Utilities not marked along
Groundwater (although Locate Report
was turned in on 3/8/15

EJR

(110)

SG-011
SG-012 } No attempt made -
too many roots/utility/
sprinkler lines and pavement

Decon'd Probe Rods per SOP.

See Map of School for
Locations
Total Samples = 8 Soil Gas



105

AOV-1 VI
0032H - 1219 Fenway

EdRey
3/12/15

At Sunnyside Park - 0800
H+S Mtg - 0820
At site w/ VA Rep - 0830

Weather - Sunny, Cold to Warm, Calm

Lat - 40.755573
Long - 111.856021
Elev (at street/sidewalk) = 4526 msl

Instrument - Hopkins Easmart Plus - Operator - Ellen Reid
Abmiant testing in am, ERR, JL/DED
Negative + Positive pressure tests in pm

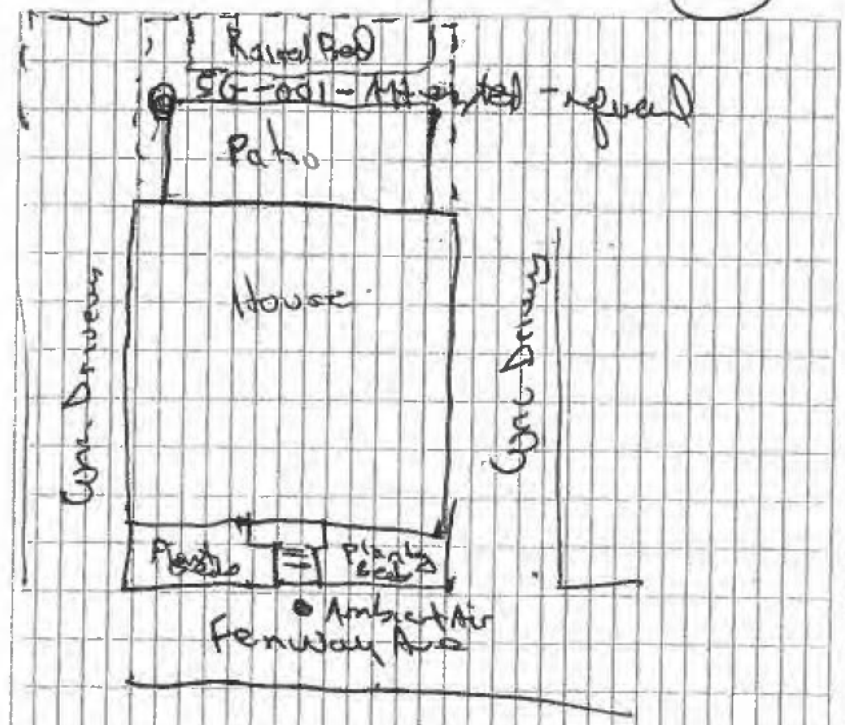
Soil Gas - Very limited locations next to house - entire lot is either covered with driveway, home footprint, and patio, and the few open areas have sprinkler lines, gas line + water line.

Attempted SG-001 at -
Hit Rock in multiple attempts (10+) at less than 12".
No Soil Gas sample could be obtained at 0032-H.

Decon'd probe rods per SOP.
VI Testing finished at - 1500 [illegible]

[signature]

106



Attempted SG location
Lat - 40.755665
Long - 111.856017
Elev - 4528' msl

Sample Totals
-1 Ambient Outdoor
9 - Ambient Indoor
14 - Neg/Pos Pressure
0 - Soil Gas
24 - TOTAL

EDR

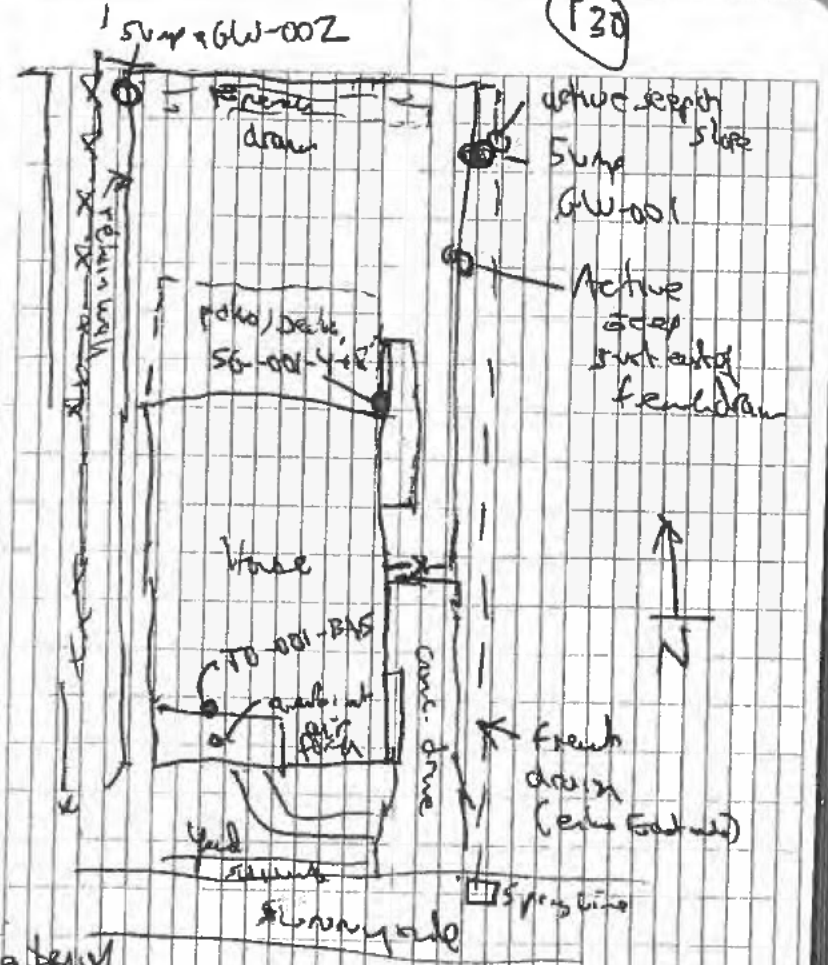
(129) Sunnyside 0036-H Ed Reid 4/3/15

0800 - Met at Sunnyside Park - Weather -
0810 - H&S Briefing - No PPE required Sunny, Lt Breeze, Warming 50°
0830 - Proceeded to property w/ Unit Rep - Rolf Lange
ERR + SC set up Chopinite Smart Plus # H866 to conduct indoor ambient - Ellen Reid = Operator
CIR/PEP checked for sumps/seeps in yard, installed soil gas probe near NE corner of house.
0036-H SG-001 - 4' - 1010
8' - 1020
Very tight black silt/clay soil - probes held 8-10" Hg, only able to collected 200 +/- ml in Tedlar bag
Soil too tight to collect 2 thru summer Canister sample.

Collected GW-001 from sump for the east-1000 French drain line - sump at NE corner of property - Flow thru ≈ 0.5 - 0.75 gpm
Second sump for the north boundary drain line is at NW corner of property
+ Sump is barely flowing + less than 1/4" of water -
Two active seeps along east property, just upslope of East drain line

EDR

(130)



Center of House - Lat 40.751067 Long 111-858721
Elev - 4423' msl

Soil Gas Probe - SG-001 - 4' + 8'
Lat - 40.751143 Long - 111-858659
Elev - 4424' msl

EDR

(131) 0036-H (Continued) 4-3-15

Spring line at end of driveway in street, receives the French drain discharges
- outfall flow = ≈ 3 gpm

GW-001 - Field Water Quality Parameters

pH - 6.66
SC - 1310
ORP - 244
DO - 5.11
Temp - 13.92
Turb - ~~5.1~~ ERR 4/3/15 - 77.0

Horiba U-53 calibrated at 1015 using autocal solution (provided by manufacturer)

1100 - ERR / SC / DSD conducted negative/positive pressure tests

Finished - 1300

Ran CCVs - passed

Home has unfinished partial basement - w/ opening to surrounding shelf w/ soil floor. Basement appears to have been wet in the past.

Will set summa is basement open room

[illegible]

Decon'd soil gas probes + GW equipment
pH COP at 1330

0036-H

Sample totals -	[illegible]
Indoor Ambient -	~~8~~ 6
Soil Gas -	2
Outdoor Ambient -	1
Indoor Pressure Tests -	14
TOTAL	23

plus 1 indoor summa sample

[illegible]

(133) 0036-H (Continued) Ed Rd 4/3/15

Summa 24-hr Sample collection:

A-0036-H-0404 15-TO-001-BAS

Start date/time - 4/3/15 - 1315

Start Hg - 25"

End date/time = 4/4/15 - 1300

End Hg = [illegible] 1

Can ID# 0537 Reg# 0017

Placed in Breathing Zone in basement - storage room at front of house.

Left site - 1330

Edward Rd

(134)

EDR

(125)

4/2/15 Alpine 0037-H Ed Ryd

Met at Park - 0800 - Weather - Drizzle

H+S Mtg - No PPE Required to Cloudy, Mild 40s - Lt Breeze

Proceeded to house at 0815 -

UA Rep - Brian Spear - Met w/ Home owner -

ERR/DED/JL - Set up Hapsite Smart Plus 860 to center tumbler - Completed Artist at 1230.

0920 - DED installed Soil Gas Probe Near SW corner of house along west wall -

0038H - SG-001-4' - collected at 1040

Soil - tight silty clay w/ [illegible] fill -

Home has a French drain / downspout drain that connects to a sump near SE corner of house by driveway.

Sump is 16" diameter

WL = 3.20' btoc / ground surface

TD = 3.75 btoc / ground surface

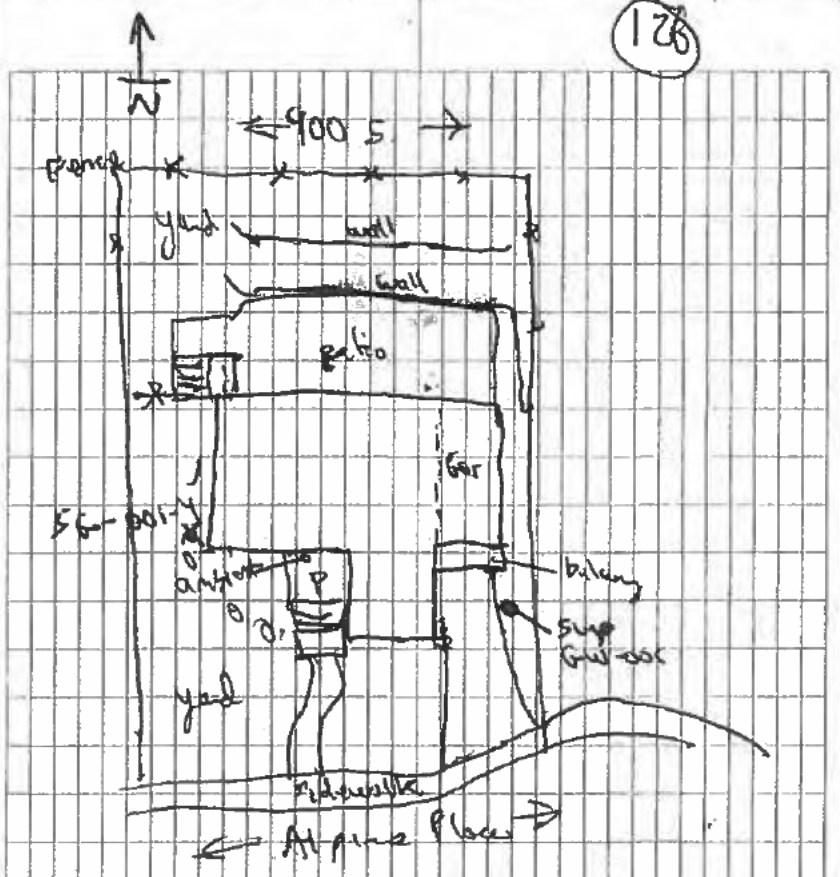
Sump pump reportedly discharges to spring line along Alpine circle.

Collected sample for Water Quality Parameters @ 1330

GW-001

ERR

(126)



Center of house - Lat - 40.749457 Long 111.857804

Elev - 4424' ft-m

SG-001-4' Lat - 40.749441 Long - 111.857883

Elev 4421' ft-m

GW-001 (Sump) - Lat - 40.749408

Long - 111.857649

Elevation - 4421'

ERR

(127) AOU-1-VI
0037-H (Continued) 4/2/15

1200 - Set up air door in front door, placed Hygrate in basement boundary near furnace room where floor crack w/ PCE was observed.

1300 - Commenced negative pressure test
Finished 1600
Worked on homeowner until 1720

ER - prepared two summa's 1 for soil gas, 2 for indoor air (Laundry in Basement, 2nd floor Front BR, 1 Dupe

A-0037H-040315-TO-001-LAU
Start Time 4/6/15-0812 Start Hg 25
Canister # 0216 Reg # -0491

A-0037H-040315-SG-001-4'
Start time - 1700 Start Hg 26"
Can ID# 0119 Reg # 0532

A-0037H-040315-TO-002-BR
Start time - 4/6/15-0813 Start Hg 27"
Canister # 0133 Reg # 0092

A-0037H-040315-TO-003-BR5
(Duplicate from Laundry - TO-001
Start time - 040315-0800 Start Hg
Can # 0089 Reg # ~~0017~~ 0460

Left site 1730

(128)

GW-001 Field Water Quality Formula
pH - 6.53
SC - 12.60
ORP - 280
D.O - 7.30
Temp - 14.25
Turb - 23.1

Horiba U-53 calibrated at 1500 using auto cal solution.

← Set soil gas 4/2/15
HO me over scheduled indoor for April 6-7 - OPASM
Decon'd soil probes per SOP

4/2/15 - Sample tally for 0037H
1 outdoor Ambient
1 - Soil gas
20 - Indoor Ambient
13 - Pressure Test Samples
35 - TOTAL

plus - 3 summas + 1 duplicate

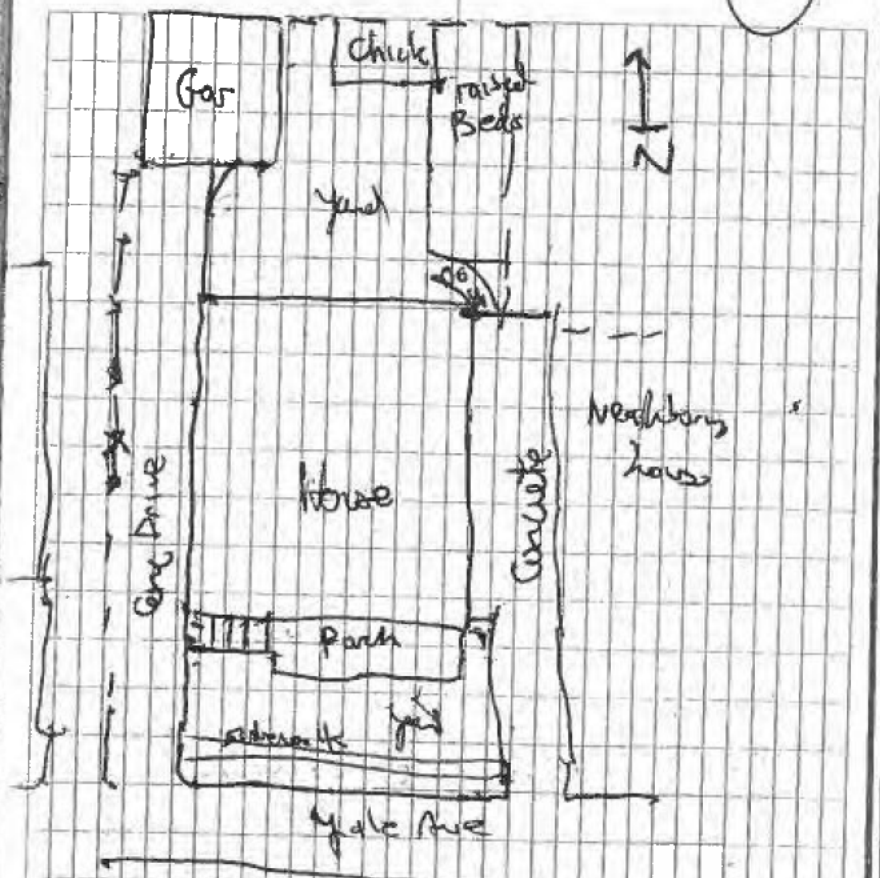
(149) AOU-1 UD
0038-H - Yale Ave
Ed Reid 4/9/15

Met at Sunnyside Park - 0830
H&S Mtg - 0840 - No PPE Required
Weather - Partly Cloudy / Cool - 40's, Lt Breeze

Proceeded to home w/ VA Rep - Rolf Lange - 0850
Instrument - Hopcite Smart Plus - Operator - Ellen Reid
Set up ambient testing - ERR/JZ
+ conducted ambient in am.

EJR/OED - attempted Soil Gas point in Front + backyards - 20 attempts
None deeper than 12" - encountered large cobbles or boulders at all locations.
→ No Soil Gas Sample Collected &
Decon'd probe rods per SOP
1200-1230 - Lunch
Set up Negative / positive pressure tests
Air door in side (south) entry by basement stairs, Hopcite in Basement
Finished - 1450
Sample tally - 1 - outdoor ambient
10 - indoor ambient
14 - Neg/positive pressure
0 - Soil Gas
25 - TOTAL
Left site - 1530

(150)



Center of house - Lat - 40.745985
Long - 111.860218
Elev - 4372

EJR

1/27/15 0001-H

Onsite ~0840
- Introduce team to homeowner
Ellen Reid, Ed Reid,
Mark A. - EPA - Roy
Weindorf - Weston.

Run001 - Ambient Living/Dining
A-0001H-012715-IA-001-LIV
time 0913 pce - 0.197ppb

Run002 - Ambient Kitchen
A-0001H-012715-IA-002-KIT
time 0923 pce 0.086ppb

Run003 - Ambient - child's room
A-0001H-012715-IA-003-BR1
time 0932 pce ~~0.086~~ 0.069 ppb

Run004 - Ambient - master bedroom
A-0001H-012715-IA-004-MBR
time 0941 pce 0.082ppb

Run005 - Ambient bathroom
A-0001H-012715-IA-005-BA1
time 0949 pce 0.075ppb

ERR

Run006 - Ambient broom closet
A-0001H-012715-IA-006-STO
time 0958 pce 0.057ppb

Run007 - Ambient family room
A-0001H-012715-IA-007-FAM
time 1018 pce 0.079ppb

Run008 - Ambient - basement bedroom
A-0001H-012715-IA-008-BR2
time 1027 pce 0.073ppb

Run009 - Ambient laundry closet
A-0001H-012715-IA-009-LAU
time 1038 pce 0.074ppb

Run010 - Ambient basement storeroom (sump area)
A-0001H-012715-IA-010-STO
time 1049 pce 0.089ppb

Run011 - Ambient basement bath
A-0001H-012715-IA-011-BA2
time 1058 pce 0.066ppb

ERR

01/27/15 0001H

Switched to survey mode

Survey 001 - Drain in furnace area

Survey 002 - Sump area

Survey 003 - Crack b/w slab + wall in sump area (N wall)

Survey 004 - Water seep area in sump room near sink area (East wall)

Run 012 - Ambient outdoor on front porch
A-0001H-012715-IA-012-amb
time 1137 pce 0.019ppb

Survey 005 - Living/Dining area
No TIC above baseline present

RR

Neg Pressure
- Target 48,000 cuft
Baseline - 2.0 pa
Start time 1338

Run 013 time 1341
flow 445 pce 0.038ppb
A-0001H-012715-IA-013A-LIV

Run 014 time 1350
flow 403 pce 0.033ppb
A-0001H-012715-IA-013B-LIV

Run 015 time 1359
flow 400 pce
A-0001H-012715-IA-013C-LIV

Run 016 time 1408
flow 423 pce 0.029ppb
A-0001H-012715-IA-013D-LIV

Run 017 time 1417
flow 408 pce 0.027ppb
A-0001H-012715-IA-013E-LIV

01/27/15 (32) ~~23,390~~ 38,693 ~~40905~~

Run 018 time 1426 flow 424
A-0001H-012715-IA-013F-LIV
pce 0.024 ppb

Run 019 time 1435 flow 367
A-0001H-012715-IA-013G-LIV
pce 0.024 ppb

Run 020 time 1444 flow 427
A-0001H-012715-IA-013H-LIV
pce 0.023 ppb

Run 021 time 1453 flow 386
A-0001H-012715-IA-013I-LIV
pce 0.021 ppb

Run 022 time 1503 flow 390
A-0001H-012715-IA-013J-LIV
pce 0.017 ppb

Run 023 time 1512 flow 421
A-0001H-012715-IA-013K-LIV
pce 0.014 ppb

24 (33)

Run 024 time 1521 flow 405
A-0001H-012715-IA-013L-LIV
pce 0.015 ppb
Final flow reading - 402
Total vol removed -
End time 1531

Positive Pressure test
Baseline -0.8 pa
Start time 1536

Run 025 time 1547 flow 364
A-0001H-012715-IA-014A-LIV
pce - 0.015 ppb

Run 026 time 1557 flow 379
A-0001H-012715-IA-014B-LIV
pce - 0.013 ppb

Run 027 time 1604 flow 398
A-0001H-012715-IA-014C-LIV
pce - 0.013 ppb

Run 028 time 1617 flow 376
A-0001H-012715-IA-014D-LIV
pce - 0.012 ppb

1/27/15 0001-1H

Run029 time 1626 flow 388
A-0001H-012715-1A-014-8-4V
pce 0.010 ppb

Run030 time 1636 flow 402
A-0001H-012715-1A-014-F-4V
pce 0.010 ppb

Run031 time 1646 flow 390
A-0001H-012715-1A-014G-4V

Final flow reading - 387
Total vol -
End time 1649

Soil gas sample

GA-0001H-012715-SG-001-4'
Run032

Run033 - CCV - 5ppb
VC - 1.1
cis 0.76 7.7
TCE - 1.4
PCE - 2.7

GSR

3545

Recalibrated HAPSite ER

Calibration runs
SIM_100PPB_1HLL_VOL_LIST_012615
Runs 034, 035, 036, 037, 038
Calibration saved as
SIM_100PPB_1HLL_VOL_LIST_012715

CCV Check 1/27/15 2035
Run001
Results VC 5.375 ppb
cis 5.282 ppb
TCE 5.289 ppb
PCE 5.331 ppb

(14)

V19/15 0003-H

VI team - Ellen Reid, Chris Holt, + Dave Dechetto

0830 Onsite - unload equip

0844 - Set up HAPSite to run Indoor Ambient

Run002 - Ambient Living/Dining
0852 A-0003H-01192015-IA-001-LIV

Run003 - Ambient in Kitchen
0859 A-0003H-01192015-IA-002-KIT

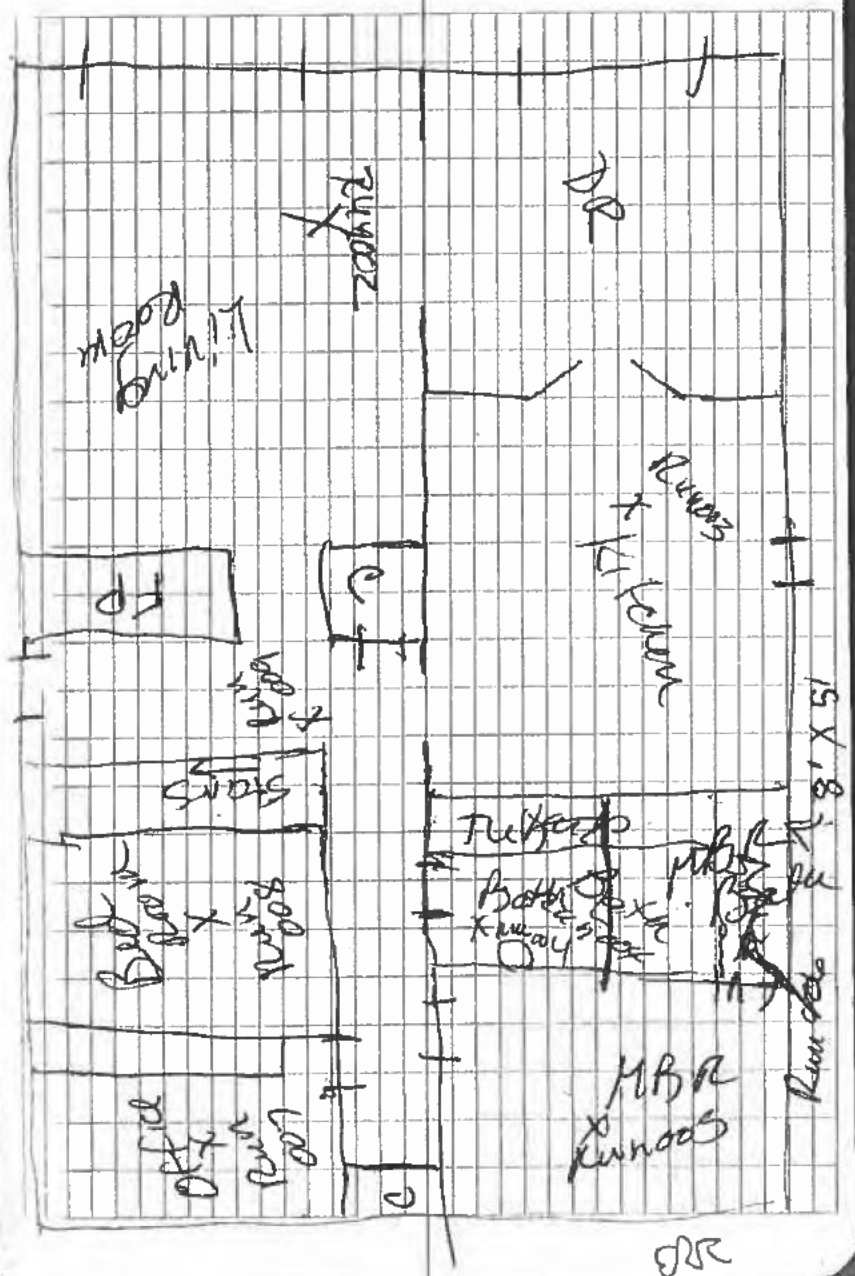
Run004 - Ambient Bathroom
0907 A-0003H-01192015-IA-003-BA1

Run005 - Ambient MBR
0915 A-0003H-01192015-IA-004-MBR

Run006 - Ambient Master Bath
0923 A-0003H-01192015-IA-005-~~BA2~~ MBA

ERR

(15)



ERR

01/19/15 0003H

Run 007 - Ambient - office
0931 - A-0003H-01192015-IA
006-OFC

Run 008 - Ambient - Front Bedroom
0940 - A-0003H-01192015-IA
007-BR1

Run 009 - Ambient Entry way
0948 A-0003H-01192015-IA
008-ENT

HAPSite saying needs Auto Tune - Ran auto tune
0953 - ok

Run 010 - Ambient - basement
1007 - Living/DR/kitchen
A-0003H-01192015-IA-009
OOL

Run 011 - Ambient - Basement bedroom
1015 - A-0003H-01192015-IA
010-BR2

ERR

Run 012 - Ambient - Basement
1023 Office area
A-0003H - 01192015 - IA-011-OFC

Run 013 - Furnance Room
1032 - A-0003H-01192015-IA-012
FUR

Run 014 - Ambient - Basement Bath
1040 - A0003H-01192015-IA-013
BAT

Run 015 - Ambient - Basement BR
1048 - A0003H-01192015IA-014-BR3
↖ Aborted - flament error

Run 016 - Ambient - Basement BR
1053 - A0003H-01192015IA-015-BR3
↖ Aborted - no sure why
HAPSite froze up - pulled battery pack & re booted.
Tried to do auto tune & got a HS pressure error.
Machine started cool down.

Run 017 - Ambient Basement Bath
1144

ERR

01/19/15 0003-H

RUN 018 - Soil gas sample
- Backyard just off of backdoor area.
A-0003H-011915-SG-001-08'
sample time 1145
Run time - 1158
* RUN 018 + RUN 019 Aborted - locked up at end of cone fill before scanning started. Ran - RUN 019 to clean out column.

RUN 020 - Soil gas sample
A-0003H-011915-SG-001-08'
sample time - 1145
Run time - 1234

Run Survey mode 1238-1248
- clothed / laundry sheet
- bath drain, + FP basement
- no TICs above background

RUN 021 - Ambient Garage
1300

ERR

RUN 022 - Ambient outdoor - Porch on front of house, outside of door to basement time 1319 A-0003H-011915-IA-021-OUT * Duplicate Record #

NEG Pressure Test - 1403
Baseline pressure - 0 pa
55-125.

RUN 023 - time 1404 flow 305

RUN 024 - time 1416 flow 777

RUN 025 time 1424 flow 785

RUN 026 time 1432 flow 786

RUN 027 time 1440 flow 799
aborted

RUN 028 time 1445 flow 797

RUN 029 ~~time 1455~~ flow 757
Aborted

RUN 030 time 1502 flow 776

ERR

01/19/15 0003-1t

RUN 031 ~~time 1509~~ Aborted flow 789

RUN 032 ~~time 1517~~ Aborted flow 749
End 1518 58,875 cuft

RUN 033 - OutDoor AMBIENT
1529
POS PRESSURE 1534 start

RUN 034 time 1537 flow 1090
aborted - pressure to high

RUN 035 ~~time 1541~~ Aborted ~~flow 1113~~

RUN 036 - ~~Aborted time 1547~~ flow 1107

RUN 037 ~~time 1558 flow 1106~~
Aborted - filament error

RUN 038 time 1602 flow 1107

RUN 039 time 1616 flow 1101

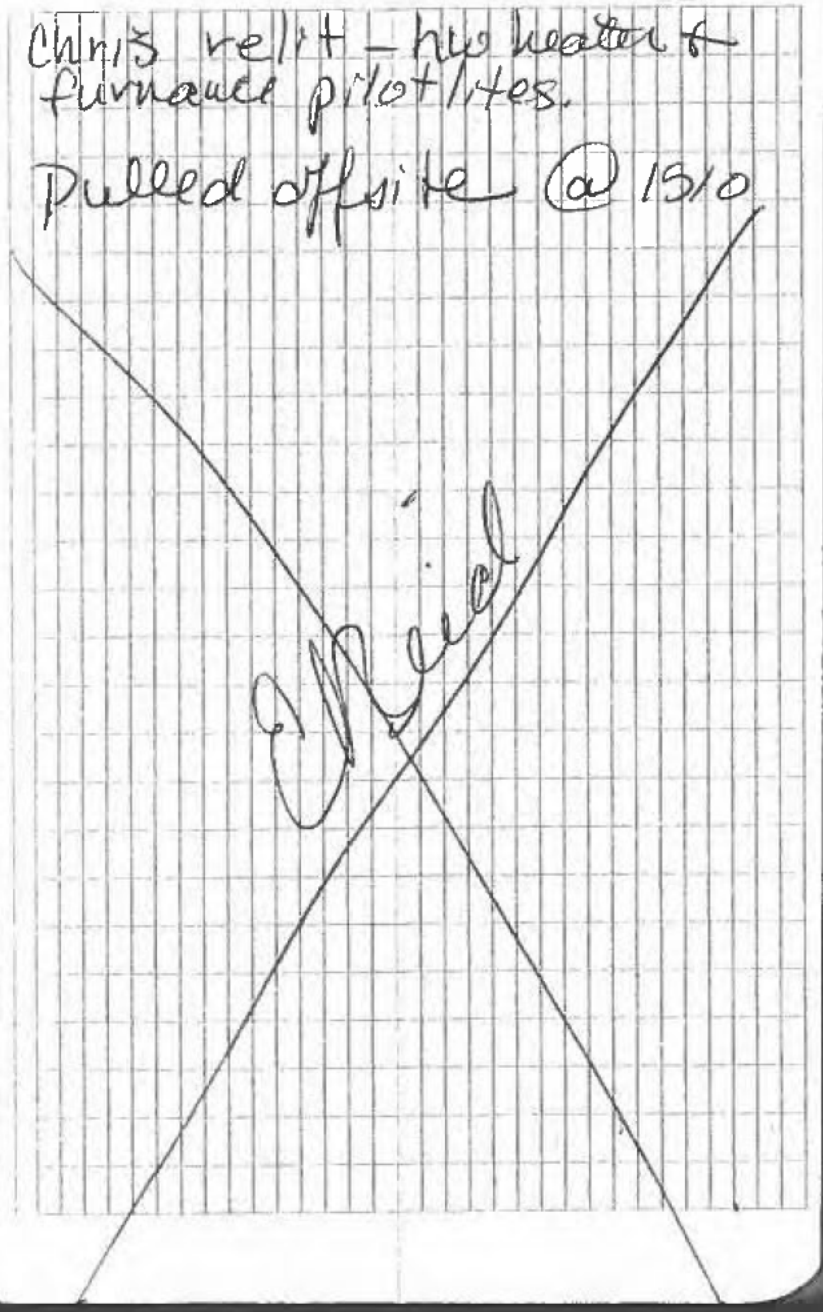
RUN 040 time 1623 flow 1107

End 1625 57,564 cuft

Breaking down loading up equipment SR

Chris relit - hw heater & furnace pilot lites.

Pulled offsite @ 1510



01/19/15

CCV Checks on HAPSite H860

5ppb run - RUN042 6:41pm

VC - 5.6ppb
cis - 4.1ppb
TCE - 4.3ppb
PCE - 4.4ppb

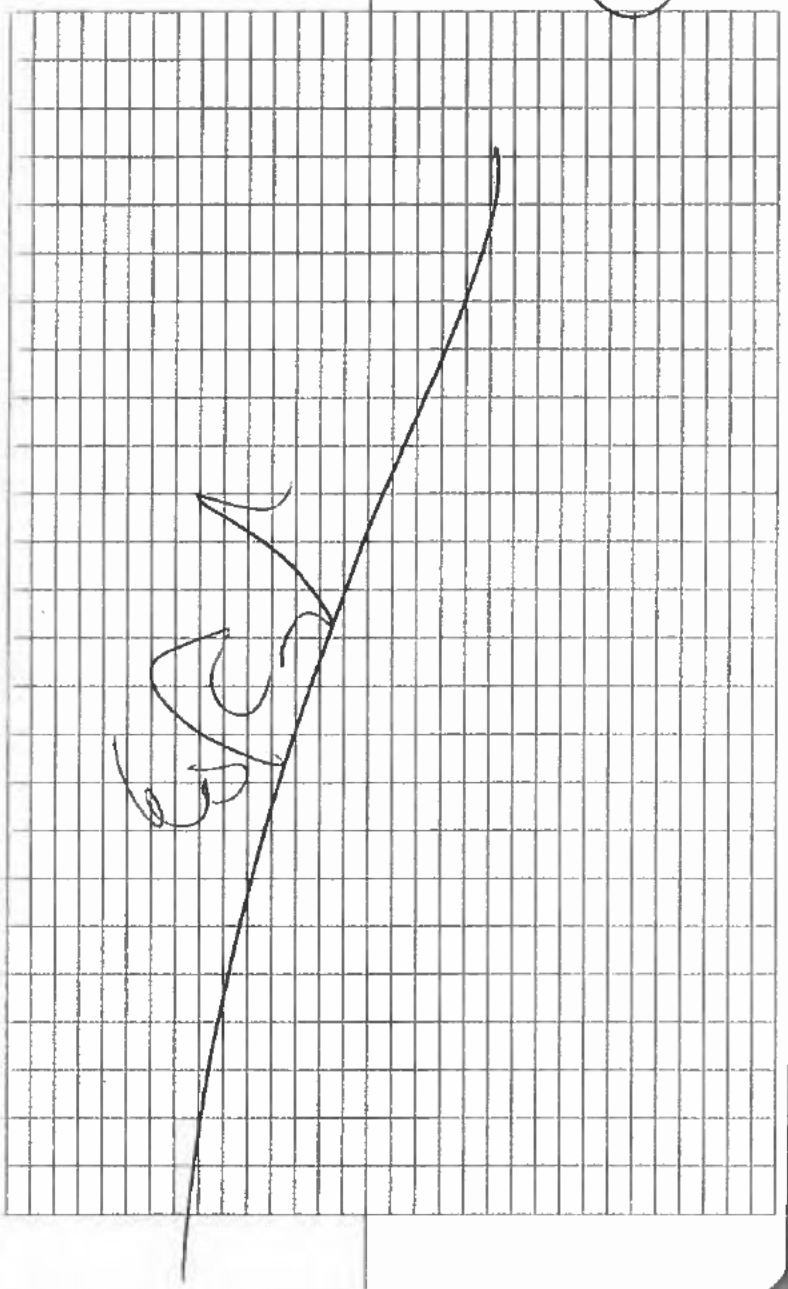
01/21/15

CCV check on HAPSite H860

5ppb run - RUN001 5:07pm

VC 5.2 ppb
cis 5.8 ppb
TCE 4.8 ppb
PCE 5.1 ppb

CRR



1/28/15 (36) 2007-14

0840 Onsite - set up equip.

0913 Run 001 - Family room
A-0007H-012815-IA-001-LLL
pce 0.026 ppb

0921 Run 002 - Basement bath
A-0007H-012815-IA-002-~~LAU~~ BA1
pce 0.022 ppb

0931 Run 003 - Laundry area
A-0007H-012815-IA-003-LAU
pce 0.027 ppb

0940 Run 004 - Storage w/ paint fixtures
A-0007H-012815-IA-004-STO
pce 0.050 ppb

0949 Run 005 - 1st floor Living
A-0007H-012815-IA-005-LIV
pce 0.030 ppb

0958 Run 006 - Kitchen/~~w~~/ first
A-0007H-012815-IA-006-KIT
pce 0.038 ppb QDR

(37)

1008 Run 007 - Sun room
A-0007H-012815-IA-007-SUN
pce ppb

1022 Run 008 - Back bedroom
A-0007H-012815-IA-008-~~BR1~~ ~~LAU~~ BE1
pce 0.045 ppb

1031 Run 009 - ~~Master Bedroom~~ Front Bedroom
A-0007H-012815-IA-009-~~MBE~~ BR2
pce ppb

1040 Run 010 - 2nd floor hallway ~~closet~~ BA2
A-0007H-012815-IA-010-CLO
pce 0.067 ppb

1057 Run 011 - Master Bedroom
A-0007H-012815-IA-011-MBE
pce 0.054 ppb

1117 Run 012 - 2nd floor Bath
A-0007H-012815-IA-012-BA2
pce 0.054 ppb

RR

11/28/15 0007H

1127 Run 013 Closet - Top of stairs
A-0007H-012815-IA013-CLO
pce 0.069 ppb

1142 Run 014 - 1st floor bath
A-0007H-012815-IA014-BA3
pce ppb

Negative Pressure
Baseline -1.0 pa
Start time 1329
Total vol 54,000 cuft

1331 Run 015A Family room
A-0007H-012815-IA-015A-LL
pce 0.074 ppb

1339 Run ~~015B~~ 014 Family Room
A-0007H-012815-IA-015B-LL
pce 0.047 ppb

1348 Run 017 Family room
A-0007H-012815-IA-015C-LL
pce 0.043 ppb

1357 Run 018 Family Room
A-0007H-012815-IA-015D-LL
pce 0.025 ppb

1408 Run 019 Family Room
A-0007H-012815-IA-015E-LL
pce 0.027 ppb

1415 Run 020 Family Room
A-0007H-012815-IA-015F-LL
pce 0.021 ppb

1424 Run 021 Family Room
A-0007H-012815-IA-015G-LL
pce 0.020 ppb

1433 Run 022 Family Room
A-0007H-012815-IA-015H-LL
pce 0.018 ppb

1442 Run 023 Family Room
A-0007H-012815-IA-015I-LL
pce 0.013 ppb

GRR

T	CFM	Pa	Run #	Time
0	~~723~~ 695	-4.8	015A	1331
5	720	-5.1		
10	709	-4.8	015B	1339
15	708	-5.1		
20	723	-5.0	015C	1348
25	671	-4.8		
30	710	-5.2	015d	1357
40	722	-4.7	015e	1406
50	729	-5.0	015f	1415
60	696	-5.1	015g	1424
70	710	-4.9	015h	1433
80	725	-5.1	015I	1443

End time = 1452
Final Vol = 52,626

Positive Pressure
Baseline - 1.3 Pa
Start time 1455

1459 Run 024 Family Room
A-0007H-012815-IA-016A-LLL
pce 0.009 ppb

1508 Run 025 Family Room
A-0007H-012815-IA-016B-LLL
Pce 0.007 ppb

1517 Run 026 Family Room
A-0007H-012815-IA-016C-LLL
pce 0.008 ppb

1527 Run 027 Family Room
A-0007H-012815-IA-016D-LLL
pce 0.007 ppb

1535 Run 028 Family Room
A-0007H-012815-IA-016E-LLL
pce 0.009 ppb

1543 Run 029 Family room
A-0007H-012815-IA-016F-LLL
pce 0.008 ppb

End time - 1555
Total Vol - 56,850

Soil gas reading
A-0007H-012815-SG-001-3-5'
CS - 0.018 ppb
TCE - 0.914 ppb
PCE - 0.050 ppb

T	CFM	Pa	Run #	Time
0	940	4.4	016A	1459
5	942	4.7		
10	954	5.4	~~016B 1509~~	
15	945	4.4	016B	1508
20	950	6.2		
25	930	5.4	016C	1517
30	958	4.0	016D	1527
40	957	7.6	016E	1535
50	949	7.0	~~016 G~~	~~1558~~
60			016F	1543

Run 031 – CCV 5ppb
VC – 9.0
cis – 4.8
tce – 4.5
pce – 4.8

01/31/15

Recalibrated HAPSite SYC

Calibration Runs
SIM_100PPB_HILL_VL_LIST_013115
Runs 001, 002, 003, 004, 005

Calibration saved as
SIM_100PPB_HILL_VL_LIST_013115
* Run Volume – 200mlK

CCV Check 02/01/15

Run 001 @ 12:31 pm
VC – 8.5 – not required
cis – 5.7
TCE – 4.4
PCE – 5.0

L Bennett

02/05/15 0008-H

0830 Onsite
Personnel - Ellen Reid, Ed Reid,
Dave DeGhetto, Lynne Wetts-VA

0845 Setting up equipment
Getting HAPsite warmed up

0857 Jill Atwood-VA onsite

Run001 0920 Ambient
Laundry area - basement
A-0008H-020515-IA-001-LAU
pce 0.653 ppb

Run002 0930 Ambient
Bedroom in basement
A-0008H-020515-IA-002-BR1
pce 0.824 ppb

Run003 Ambient
Bathroom in basement
A-0008H-020515-IA-003-BA1
pce ppb
→ Aborted - pump did not
Kick on to pull sample. SR

Pulled Battery + Rebooted
1002 - Issues w/ Auto tune
Running full auto tune
on instrument (HAPsite EK)
Showing Base Peak Gain
@ 31.43 High
- Tried running resolve peak
twice + rerunning autotune
Auto tune runs to 99% + stops
Called KD Analytical +
Jessica through facetime
looked at screen. Said
the red + high gain meant
computer not communicating
with MS. Need to reseat
circuit boards
~1150 pulled off site + took
HAPsite EK back to office

- Reseated boards, ran auto tune
+ Conc cleanout

Run004 - Aborted previously

Run005 5 ppb CCV
VC 5.8 CS - 3.8 tce 5.0 pce - 5.2
Passed
SR

2/05/15 0008H

1457 Back at house - setting up equipment to run ambient indoor samples

Run006 1513 Ambient
Laundry basement
A-0008H-020515-IA-001-LAU
pce 0.920 ppb

Run007 1522 Ambient
Basement bedroom
A-0008H-020515-IA-002-BR1
pce ~~0.920~~ 1,001 ppb

Run008 1531 Ambient
Basement bathroom
A-0008H-020515-IA-003-BA1
pce ~~1.10~~ 0.770 ppb

Run009 1540 Ambient
Basement storage room
A-0008H-020515-IA-004-STO1
pce 1.1 ppb

RR

Run010 1549 Ambient
Storage in basement shelf area
A-0008H-020515-IA-005-STO2
pce 0.988 ppb

Survey Mode

Survey 001 1400 Walk in closet
Max TIC 37,928

Survey 002 1403 Bedroom
Max TIC 39,870

Survey 003 1404 Small storage area Max TIC 38,577

Survey 004 1417 Laundry Area Max TIC 36,635

Survey 005 1417 Storage 1
Max TIC 39,305

Run011 1705 Ambient Kitchen
A-0008H-020515-IA-006-KIT
pce 0.459 ppb RR

02/05/15 00084

Run 012 1718 Ambient
Living / Dining Room
A-00084-020515-IA-007-CCC
pce 0.477 ppb

Run 013 1718 Ambient
office area
A-00084-020515-IA-008-OFC
pce 0.512 ppb

Run 014 1727 Ambient
Upstairs bathroom
A-00084-020515-IA-009-BTZ
pce 0.629 ppb

Run 015 1737 Ambient
Crawlspace walk-off
backdoor
A-00084-020515-IA-010-OUT
pce ppb
↳ Aborted run - Need to redo

Run 016 CCU 5 ppb 738 pm
ve 6.9 ppb CR5 5.0 ppb fce 4.4 ppb pce 4.8 ppb

02/04/15 00084

Run 011 0849 Ambient
Outdoors - back porch area
A-00084-020415-IA-010-OUT
pce 0.134 ppb

0859 - Setting up to run
neg pressure on house

Run 002 time 0932
Flow 628 pce 0.710 ppb
A-00084-020415-IA-011-LIVE

Run 003 time 0940
Flow 617 pce 0.548
A-00084-020415-IA-011-BATH

Run 004 time 0950
Flow 659 pce 0.524
A-00084-020415-IA-011-LAUN

Run 005 time 0958
Flow 628 pce 0.477
A-00084-020415-IA-011-DINE

GR

02/06/15 0008H (68)

Neg Pressure test - Laundryarea
Baseline -0.2 Pa
Start time 0930
End time 1017
Cal Removal Vol 24,250 cuft

To	CFM	Pa	Run	time
5	658	-5.2	002	0932
10	640	-5.2	003	0940
15	653	-5.3	—	—
20	659	-4.9	004	0950
25	690	-5.5	—	—
30	628	-5.2	005	0958
40	471	-5.2	006	1010
47	584	-5.1	—	—

End Volume 29,234 cuft

Pos Pressure - Baseline 0.0 pa
Start 1026 End 1057

To	CFM	Pa	Run	time
5	1052	8.1	007	1031
10	1102	10.0	—	—
15			008	1041
20	1205	10.0	—	—
25	1127	9.3	009	1051
30	1234	10.0	—	—
32	1239	9.8	—	—

(69)

Run 006 time 1010
flow 471 pce 0.429 ppb
A-0008H-020615-IA-011E-LAU

Positive Pressure Runs

Run 007 time 1031
flow 1052 pce 0.306
A-0008H-020615-IA-012A-LAU

Run 008 time 1041
flow 1102 pce 0.218
A-0008H-020615-IA-012B-LAU

Run 009 time 1051
flow 1127 pce 0.111
A-0008H-020615-IA-012C-LAU

End Volume for pressure test
— 37,394 cuft

Run 010 time 1147
Soilgas sample pce - 0.150 ppb
A-0008H-020615-SG-001-4'
Near water faucet on back of
house ~2' from foundation
Refused @ 4.5' [illegible] 8' sample

02/06/15

Run 011	CCV	5ppb	
	VC	7.712	ppb
	cis	6.354	ppb - borderline
	tce	4.921	ppb
	pce	5.114	ppb
Run 012	CCV	5ppb	
	VC	7.5	ppb
	cis	6.5	ppb - borderline
	tce	5.0	ppb
	pce	5.1	ppb
Run 013	CCV	5ppb	
	VC	5.4	> passed
	cis	5.2	
	tce	4.1	
	pce	4.1	

02/08/15 SIM-100PPB_HILL VI_LIST_02042015

Run 003	CCV	5ppb
VC	4.644	- slightly high
cis	4.311	> passed
tce	5.030	
pce	4.597	

QR

(8) 0013-H Data Survey 1/16/15

0843 Arrived onsite

HAPsite was shutdown - Brought up van auto tune and conc cleanout.

Run001 - Method survey after conc cleanout

Run002 Ambient outdoor air - middle of walk off front porch steps time 0919 - 0922

Run003 Ambient between Living/Dining - time 0931

Run004 - Ambient Kitchen time - 0939

Run005 - Ambient hallway time 0948

Run006 - SE Bedroom time 0956

Run007 - NE Bedroom time 1002

ERR

(9) 1/16/15

Run008 - Main Bath time 1012

Run009 - Parlor time 1020

Run010 - Computer Room/upstair ambient time 1030

Run011 - ~~0013H-SG001-4'bgs time taken 1130~~ ERR Basement storage room time 1203

Run012 - Family Room time 1213

Run013 - Furnace Room time 1221

Run014 - Library Room time 1230

Run015 - Laundry room time 1240

ERR

1/16/15 (10)

Run 016 - Bath (basement)
time 1247
End time 1250

Survey Mode
Survey Run 001 - Aborted Filament Error
Run 002 - Closet SE corner of laundry room - old water line & some paint stored here.

Run 003 - Cabinet in NE corner of Family Room 1309

Run 004 - Foundation burnout off family room 1313

End time 1316

Neg pressure test
Run 007 - time 1536
flow 1003 - Shutdown
Restarted 1604
Run 018 time 1604 flow 948

Run 09 time 1612 flow 1037

BRR

~~44,240~~ ~~475.54~~ 992.2 ~~43500~~ 79,376 (11) 1/16/15

Run 020 time 1620 flow 980

Run 021 time 1628 flow 995

Run 022 time 1638 flow 990

Run 023 time 1644 flow 995

Run 024 time 1652 flow 990

Run 025 time 1700 flow 995

Run 026 time 1708 flow 1000

Run 027 time 1716 flow 1000

Run 028 time 1724 flow 985

Run 029 time 1732 flow 980

Final flow - 91,241 cuft
Postive Pressure
Baseline -1.7 Start 1748
Run 030 time 1748 flow 1000

1/16/15 (12)

~~Run 031~~ time flow
→ aborted low carrier gas
~~Run 032 time 1801 flow 1094~~
aborted
Run 032 - 2nd time 1839 flow 1100

~1810 - HAPsite froze up
1820 - HAPsite backup & running.

Shutdown 1842
total vol - 59,135 cuft

Soil gas samples

Run 033 - 0013-H-SG-001 4' bgs
3 2nd

Run 034 - 0013-H-SG-001 8' bgs
4 2nd
0.32 ppb

Packup equipment & pull off site at 1938 ~~pm~~ CK

E Reid

01/18/15

Calibration Runs (13)

	Conc	Conc Fill
Run 001	5 ppb	1:00/5 ppb
Run 002	~~10 ppb~~	~~2:00~~/5 ppb
	5 ppb	1:00/5 ppb

01192015
Run 002 - 5 ppb - 2 min → 10 ppb

2015 0119
Run 003 - 0.5 ppb - 2 min → 1 ppb

Run 004 - 0.5 ppb → 1 min → 0.5 ppb

Run 005 - 0.5 ppb → 20 sec → 0.1 ppb

Saved Cal as:
SIM_100PPB_VA_VI_LIST_011920

CCV - RUN001 ← 5 ppm standard ~11:30 pm
VC - 5.7 ppb
CIS - 5.3 ppb
TCE - 4.9 ppb
PCE - 5.1 ppb

E Reid

CONTENTS

PAGE NO.	REFERENCE	DATE

1/14/15 0017-H (1)

0800 - Meet at Sunnyside Park - Do safety mtg + discuss work from yesterday

0850 - At property meet w/ owner - go over work for day + set up equipment

Heat up HAP Site and run AutoTune - AutoTune is ok.

ECV check at 1ppb - Run #001 - came back high issues w/ temperatures

ECV check at 5ppb Run #002 - Passed

ECV check at 1ppb - Run #003 rerun - better but still issues w/ temperature of standard

Run #004 - 1000 - Ambient Outdoor Air - East of front steps on gravel walk

ERR

1/14/15 - 0017H ②

Run 5 - Ambient in Living / Dining Room Area 1023

Run 6 - Ambient in Kitchen - 1031

Run 7 - Ambient child's bedroom - 1040

Run 8 - Ambient Master bedroom - 1048

Run 9 - Ambient bathroom 1056

Run 010 - Mudroom Ambient 1105

Run 011 - Playroom - basement 1115

Survey - Sump / Walk in Closet
Survey Run 001 - aborted run not at temperature.
Run 002 - 1136 - abo

KRR

1/14/15 ③

Run 012 - 1138 - Ambient Sump in Walk in Closet

Run 013 - 1151 - Ambient HW heater / furnace Area

Run 014 - 1202 - Ambient in Storage Room / Dog
Run 015 - water shutoff - SW corner

Air Door - Neg Pressure
Start time 1315
Doing cont - analyze runs
Run 016 - Between HW heater closet + sump area at bottom of stairs - time 1318
PCE - 0.760 RPD ~425 flow
Run 017 - time 1326 ~425 flow
PCE -
Run 018 - time 1334 ~430 flow
PCE - 0.704

Run 019 - time 1342 ~423 flow
PCE - 0.642

Run 020 - time 1350 ~430 flow
PCE - 0.622

KRR

1/14/15 - 0017-H

Baseline was = 0.6 ppb

Run 020 — time 1358 ~425 flow
pce -

Run 022 - time 1407 ~430 flow
pce = 0.637 ppb

Run 023 - time 1417 ~390 flow
pce - 0.608 ppb

Run 024 - time 1425 ~435 flow
pce 0.654 ppb

Run 025 - time 1434 ~425 flow
pce - 0.576 ppb ~~ppb~~ ~~ppb~~ ~~ppb~~

(6) 1/14/15 - 0017H

RUN	028	TIME- 1511		~ 464	FLOW
	PCE	0.245	PPb	FLOW Shut down 3 seconds	
RUN	029	TIME- 1520		~ 445	FLOW
	PCE	0.275	PPb		
RUN	030	TIME- 1527		~ 455	FLOW
	PCE	0.176	PPb		
RUN	031	TIME	1536	~ 461	FLOW
	PCE	0.128	PPb		
RUN	032	TIME	1544	~ 451	FLOW
	PCE	0.138	PPb		
RUN	033	TIME	1552	~ 458	FLOW
	PCE	0.118	PPb		
RUN	034	TIME	1559	~ 469	FLOW
	PCE	0.098	PPB		
RUN	035	TIME	1609	~ 461	FLOW
	PCE	0.108	PRESSURE TASTE ENDED 1618 +5 PM		
RUN	036	TIME		~	FLOW
	PCE		#	ERR	

1/14/15 (7)

RUN 036 TIME 1620

PCE - 64 PPb

TCE 0.831

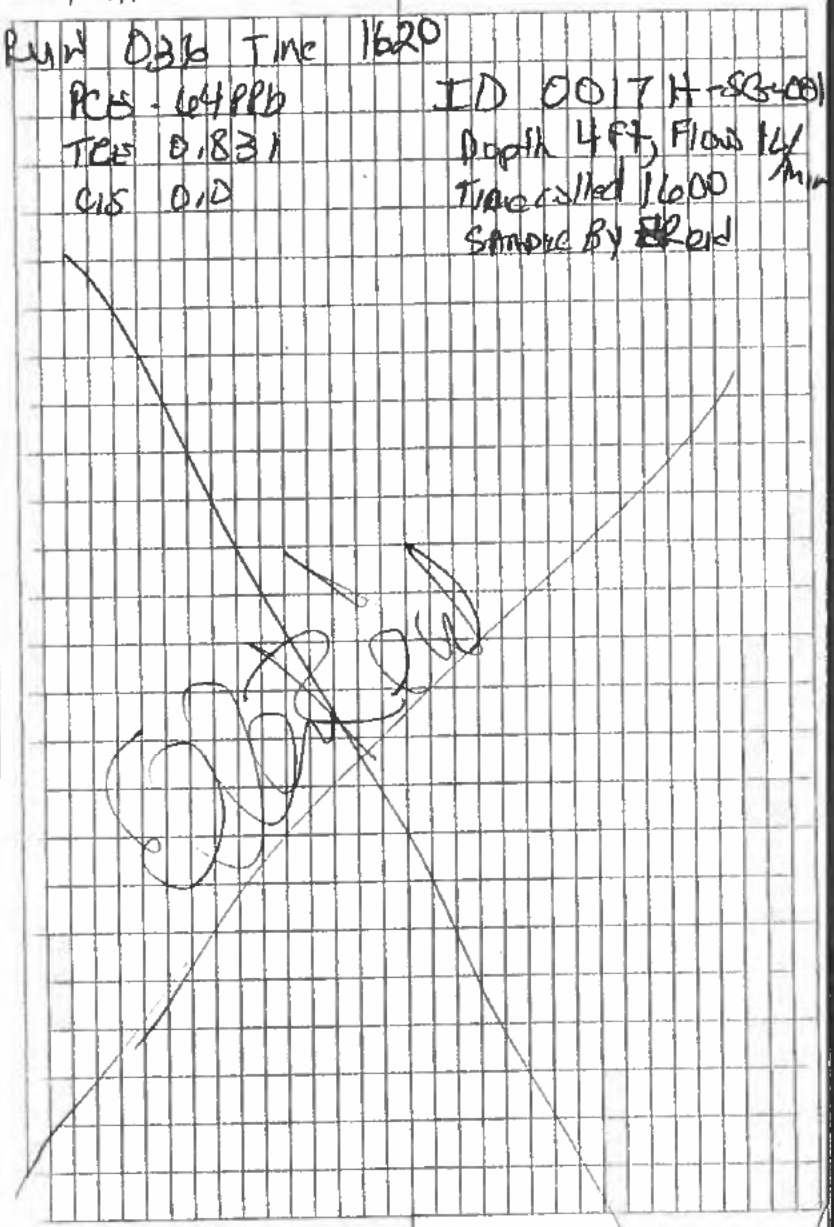
CIS 0.10

ID 0017H-SG-001

Depth 4 Ft, Flow 1L/min

Time called 1600

Sample By ERR end



ERR

(44)

2/02/15 0019B

0835 onsite - talked w/ Hazel to get permission to use side door to access elevator

Set up equipment in basement to start ambient VI survey.

0850 - Take HAPSite ER off standby - Autotune + conc cleanout run

Run 001 0922 - Ambient storage room near elevator - southern west side of hall. - PCE 0.222 ppb
A-0019B-02015-IA-001-STO-1

Run 002 0931 Ambient storage room cleaning products NE corner of basement
A-0019B-02015-IA-002-STO-2
PCE - 0.242 ppb
SRR

(45)

Run 003 0939 Ambient Hallway - just south of open doorway
A-0019B-02015-IA-003-HAL-1
PCE 0.323 ppb

Run 004 0948 Ambient furnace room (aka pool room)
A-0019B-02015-IA-004-FAC-1
PCE 0.271 ppb

Run 005 0957 Ambient Woodworking shop
A-0019B-02015-IA-005-WOK-1
PCE 0.276 ppb

Run 006 1005 Ambient Laundry area near main stairs - A-0019B-02015-IA-006-LAU-1
PCE 0.290 ppb

Run 007 1014 Ambient Bathroom - bottom of stairs in basement
A-0019B-02015-IA-007-BAT-1
PCE 0.242 ppb
SRR

02/02/15 0019B (46)

Run008 1022 Ambient
West Central Store room - basement
A-0019B-020215-IA-008-STO-3
pce 0.212 ppb

Run009 1033 Ambient
File/Wheelchair storage Send of hall
A-0019B-020215-IA-009-STO-4
pce 0.226 ppb

Run010 1044 Ambient
Boilerroom/coal bin room
A-0019B-020215-IA-010-FLR-2
pce 0.026 ppb

Survey001 - Sump area
1053 max tic - 34,147

Survey002 - Exposed dirt near boiler
1057 max tic - 35,911

Survey003 - Pipe coming
through S wall of coal bin room
1103 max tic - 180,000,000

EBR

(47)

Run011 - 1126 - Nitrogen Blank

Run012 - 1135 - Ambient
SE corner of coal bin room
A-0019B-020215-IA-012-COA

Run013 - 1146 Ambient
elevator shaft
A-0019B-020215-IA-013-ELE

Run014 1155 Ambient
Activity room 1st floor near elev
A-0019B-020215-IA-014-LLL-1
pce 0.082 ppb

Run015 1204 Ambient
Hair Salon
A-0019B-020215-IA-015-SAL
pce 0.209 ppb

Run016 1213 Ambient
Main Living Room
A-0019B-020215-IA-016-LLL-2
pce ppb

EBR

02/02/15 0019B

Run017 1222 Ambient
1st floor hallway - southend
A-0019B-020215-IA-017-HAL-2
pce 0.085 ppb

Run018 1231 Ambient
Room 17 - 2nd floor
A-0019B-020215-IA-018-BR1
pce 0.021 ppb

Run019 1240 Ambient
2nd floor hall - top of stairs
A-0019B-020215-IA-019-HA-3
pce 0.020 ppb

Run020 1250 Ambient
2nd floor hall - south end
A-0019B-020215-IA-020-HA-4
pce 0.021 ppb

Run021 1302 Ambient
1st floor original kitchen
(employee breakroom
A-0019B-020215-IA-021-KIT-1
pce 0.019 ppb

Run022 1311 Ambient
Chem Storage near kitchen
A-0019B-020215-IA-022-STO-5
pce 0.021 ppb

Run023 1320 Ambient outdoors
A-0019B-020215-IA023-OUT
employee entrance N side of bldg
pce 0.005 ppb

Run024 1330 Ambient
1st floor - new kitchen
A-0019B-020215-IA-024-KIT-2
pce 0.020 ppb

Run025 1339 Ambient
1st floor - dining room
A-0019B-020215-IA-025-DRF
pce 0.017 ppb

Run026 1348 Ambient
E-W hallway in new looms
A-0019B-020215-IA-026-HALL-5
pce 0.005 ppb

02/02/15 0019B

Run 027 1401 Ambient
Room 4 - new wing
A-0019B-020215-IA-027-RM2
pce 0.004 ppb

Run 028 1410 Ambient
Laundry - new wing
A-0019B-020215-IA-028-LAU2
pce 0.005 ppb

Run 029 1419 Ambient
Furnace room - new wing
A-0019B-020215-IA-029-FUR2
pce ppb

Run 030 1429 Ambient
N-S hall - south end - new wing
A-0019B-020215-IA-030-HAL6
pce 0.0004 ppb

Run 031 1438 Ambient
N-S hall - northwest end - new wing
A-0019B-020215-IA-031-HAL7
pce 0.005 ppb

SJR

Run 032 1447 Ambient
Office area - new wing
A-0019B-020215-IA-032-OFC
pce 0.005 ppb

Run 033 1414 Soil gas
A-0019B-012915-SG-001-4'
VC 0.021 cis 0.017 TCE 0.010 PCE 0.005

Run 034 1625 Soil gas
A-0019B-012915-SG-001-6.5'
VC 0.271 cis 0.028 TCE 0.013 pce 0.010

Run 035 1643 Soil gas
A-0019B-012915-SG-002-4'
VC 0.029 cis 0.029 TCE 0.014 PCE 0.008

Run 036 1652 Soil gas
A-0019B-012915-SG-002-8'
VC 0.080 cis 0.033 TCE 0.011 PCE 0.081

Run 037 1701 Soil gas
A-0019B-012915-SG-003-8'
VC 0.108 cis 0.041 TCE 0.014 PCE 0.007

SJR

02/02/15 0019B

Run038 1711 Soil gas
A-0019B-020215-SG-003-81
VC-ND CIS-ND TCE 0.015 PCE 0.041

Run039 1721 CCV - 5 ppb
VC 3.1 ppb
CIS 1.4 ppb
TCE 1.4 ppb
PCE 2.4 ppb
} failed

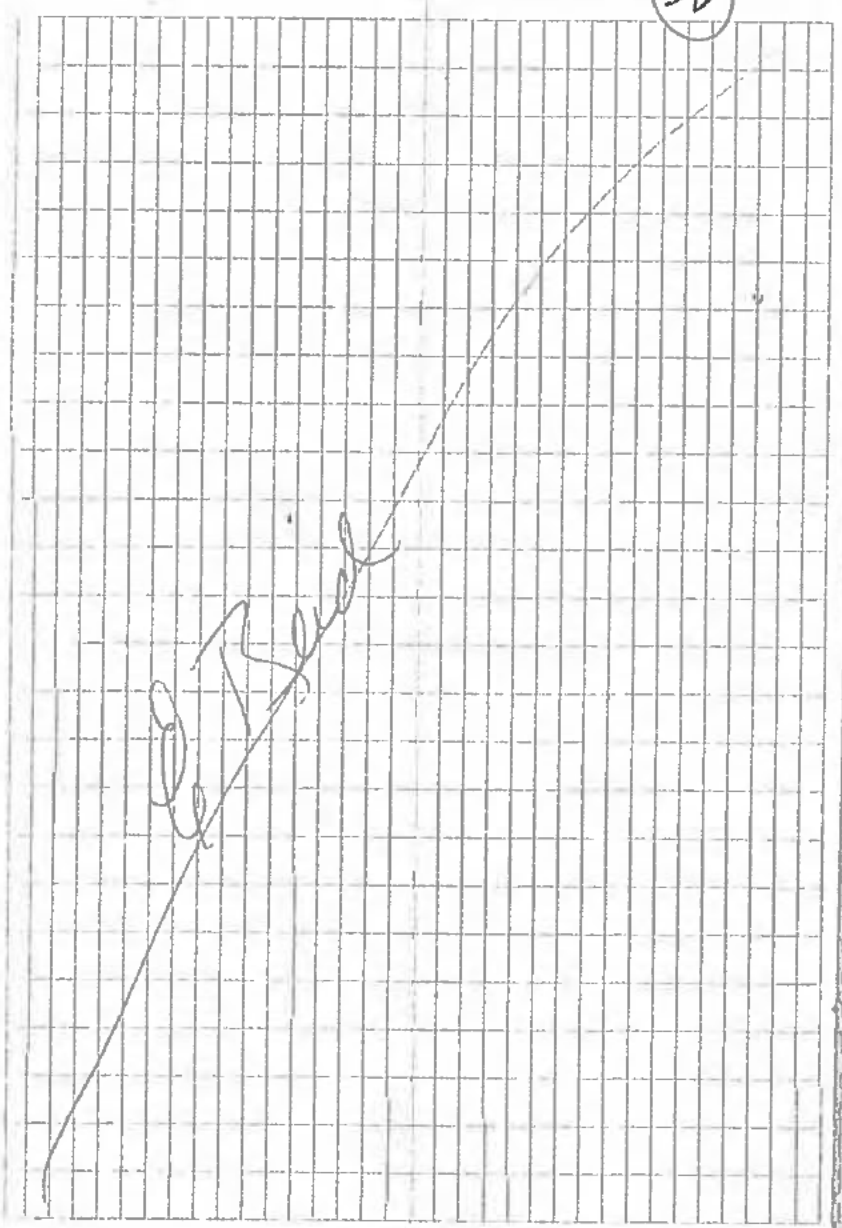
Run Auto Tune

Run040 1737 CCV - 5 ppb
VC 4.9
CIS 3.4
TCE 3.3
PCE 4.0
} failed

Run Auto Tune - again 1746

~~Run 041~~ 1753 CCV 5 ppb
VC 4.4
CIS 3.8
TCE 3.7
PCE 4.2
Passed

CR



(54)

02/03/15 0019B

Neg pressure test
Baseline – 0.0 Pa
Start – 0934 End – 1006

To	CFM	Pa	Run #	Time
0	low	10	001	0935
5	low	-10.2	–	–
10	low	-10.3	002	0944
15	low	-9.6	–	–
20	low	-10.0	003	0955
25	low	-10.0	–	–
30	low	-9.7	004	1003

Cal removal vol ~ 6000 cf
Final could not be calculated due to low flow of fan-
Ran test at -10.0 Pa for 30 minutes

(55)

Run # 001 Time 0935
Flow low PCE 0.286

Run # 002 Time 0944
Flow low PCE 0.281

Run # 003 Time 0955
Flow low PCE 0.282

Run # 004 Time 1003
Flow low PCE 0.292

02/03/15 0019B (56)

Pos Pressure test
Baseline 0.0 Pa
Start 1016 End 1049

To	CFM	Pa	Run#	time
0	low	10.0	005	1016
5	low	10.1	—	—
10	low	10.2	006	1026
15	low	9.9	—	—
20	low	10.1	007	1036
25	low	10.1	—	—
30	low	10.0	008	1045

Calculated ~6,000 cuft
final not calculated as
computer could not record
flow as SCFM was too low
Ran @ 10 Pa for 30 minutes

E Bud

(57)

Run#005 time 1016
Flow - low PCE 0.297 ppb

Run# 006 time 1026
Flow - low PCE 0.284 ppb

Run# 007 time 1036
Flow - low PCE 0.276 ppb

Run # 008 time 1045
Flow - low PCE 0.266 ppb

Redoing soil gas for SG002
A-0019B-020315-SG-002B-4'
A-0019B-020315-SG-002B-8'

Summa Canister Room 4
A-0019B-020315-TO-002-BR2
Set time 1346 Press 28"
Canister-4462 Reg-0330

Summa Canister - Top of stairs 2nd floor
Set time 1357 Press - 27"
Canister 4758 Reg 0532
A-0019B-020315-TO-001-

HAC-3

02/03/15 – 0019B (58)

Summa Canister – File/
Wheelchair storage room
South end of basement

A-0019B-020315-TO-003-S104
St time 1443 Pressure 25"
Canister# 4790 Reg# 0301

(59)

Run012 – Soil gas 1641
A0019B-020315-SG-002B-4'
VC ND cis 0.129 tce 0.044 pce 0.189

Run013 – Soil gas
A-0019B-020315-SG-002B-8'
VC 0.594 cis 0.204 tce 0.036 pce 0.140

Run 011 – 5ppb CCV 4:29pm
VC – 6.046 ppb
cis – 5.408 ppb
tce – 3.773 ppb
pce – 3.985 ppb

Run014 – 5ppb CCV 4:58pm
VC – 9.819 ppb
cis – 6.509 ppb
tce – 4.211 ppb
pce – 4.147 ppb

(134) 00225 - 04/06/15

Cal Runs 044, 003, 005, 006, 008
Method SIM-100PPB_VA VI_LIST-04012015
on 04/01/2015 @ 0835
HAPSite Smart Plus H860

CCV Checks
Run 002 04/05/15 @ 2124
0.55 ppb
VC-0.657, CIS-0.444, tce-0.597, pce 0.523
passed
RUN003 04/05/15 @ 2133 5.5 ppb
VC-4.8, CIS-4.3, tce-5.1, pce 4.8
passed

Autotune - 4/5/15 ck 20:47
Cone Cleanout - 4/5/15 ck 5:46
Final TIC - 314, 416

RUN001 0650 Outdoor Ambient
A-00225-04062015-IA-001-OUT
pce 0.012 tce ND ppb

RUN002 0702 Boiler Room-Main Bldg
A-00225-04062015-IA-002-BOI1
pce 0.048 tce 0.019
ERR

(135)

RUN003 0710 Room 126-Main Bldg
A-00225-04062015-IA-003-CR126
pce 0.024 tce 0.017 ppb

RUN004 0718 Campus Ministry Room 122 Main Bldg
A-00225-04062015-IA-004-RM122
pce 0.104 tce 0.048

RUN005 0726 1st Floor ~~Hallway~~ Cafeteria-Main Bldg
A-00225-04062015-IA-005-~~HAL1~~ CAF2
pce 0.248 tce 0.227

RUN006 0737 Room 108 Student Council-Main Bldg
A-00225-04062015-IA-006-RM108
pce 0.070 tce 0.046

RUN007 0744 Classroom 102-Main Bldg
A-00225-04062015-IA-007-CR102
pce 0.065 tce 0.048

Run008 - 0758 2nd floor Storage RM221
A-00225-04062015-IA-008-STO1
pce 1.7 tce 0.011

ERR

136 00225 04/06/15

Run009 0806 ~~Class~~ Class Room 226 Main Bldg
A-00225-04062015-IA-009-RM 226
pce 0.045 tce ND
~~* 2nd floor - Main office ahead~~

Run010 0814 2nd floor - Main office Rm 216
A-00225-04062015-IA-010-RM216
pce 0.139 tce 0.013

Run011 0827 Rm205 - 2nd Floor Girls RR ~~Storage~~
A-00225-04062015-IA-011-~~ST02~~ RM205
pce 0.176 tce 0.125

Run012 0836 Rm206 - Main Bldg
A-00225-04062015-IA-012-CR206
pce 0.020 tce 0.011

Run013 0844 Hallway - 2nd floor
A-00225-04062015-IA-013-HAL1
pce 0.082 tce 0.034

Survey001 - RM221 - Storage Room
w/ cleaners + treatment tank for lab waste
MAY 215, 518
Source - degreaser + cleaning rags

ERR

137

Run014 0916 Rm321 - Storage
A-00225-04062015-IA-014-ST02
pce 0.463 tce 0.010

Run015 0923 Rm324 - Chem Lab
A-00225-04062015-IA-015-CR324
pce 0.343 tce 0.009

Run016 0932 Rm330 - Class room Main
A-00225-04062015-IA-016-CR330
pce 0.393 tce 0.010 ppb

Run017 0943 Rm318 - Main Bldg Classroom
A-00225-04062015-IA-017-CR318
pce 0.164 tce 0.022

Run018 0952 Rm309 - Counseling Center
A-00225-04062015-IA-018-Rm309
pce 0.257 tce 0.014

Run019 1000 Hallway - 3rd floor SE corner
A-00225-04062015-IA-019-HAL2
pce 0.255 tce 0.014

ERR

(138) 0022S 04/06/15

RUN022 1009 Classroom 300
A-0022S-04062015-IA-020-CR300
pce 0.121 tce 0.014 ppb

RUN021 1024 Rm 422 - Art Room
A-0022S-04062015-IA-021-CR422
pce 0.214 tce 0.024 ppb

RUN023 1033 Rm 414 - Library
A-0022S-04062015-IA-022-RM414
pce 0.199 tce 0.022 ppb

RUN023 1044 Rm 413 - Storage
A-0022S-04062015-IA-023-ST03
pce 0.171 tce 0.083

RUN024 1054 Rm 406 - Classroom
A-0022S-04062015-IA-024-CR406
pce 0.064 tce 0.035

RUN025 1111 Main floor Dance Bldg
A-0022S-04062015-IA-025-DAN
pce 0.241 tce ND

CRR

(139)

RUN026 1129 Boiler Room in Dance Bldg
A-0022S-04062015-IA-026-BOIZ
pce 0.015 tce 0.016 ppb

RUN027 1135 Rm 141A Weight Room Dance Bldg
A-0022S-04062015-IA-027-RM141A
pce 0.035 tce ND

RUN028 1247 Auditorium
A-0022S-04062015-IA-028-AUD
pce 0.013 tce 0.012

RUN029 1255 Rm 248 - Music Room Auditorium
A-0022S-04062015-IA-029-RM248
pce 0.014 tce 0.009
+RUN030 - Aborted - low battery *

RUN031 1308 1316 Rm 149
Boys Locker Room Ind
A-0022S-04062015-IA-031-RM149
pce 0.012 tce 0.010

RUN032 ~~1315~~ 1326 Rm 148 - Classroom
A-0022S-04062015-IA-032-RM148
pce 0.011 tce 0.007 ppb

ERR

(140) 0022S 04/06/15

RUN033 1339 Gymnasium
A-0022S-040620 15-IA-033-GYM
pce 0.766 tce 0.007

RUN034 1348 Rm231-Gym
A-0022S-040620 15-IA-034-RM231
pce 1.2 tce 0.005

RUN035 1357 Rm235-Gym
A-0022S-040620 15-IA-035-RM235
pce 1.1 tce 0.007

BCV Checks

RUN036 1412 0.55 ppb
VC 0.514
cis 0.380
tce 0.513
pce 0.458
} passed

RUN037 1420 5.5 ppb
VC 4.2
cis 4.0
tce 4.7
pce 4.3
} passed

RA

0022-S 04/07/15 (141)

RUN001 Soil gas
Auto tune - OK 11:35
Leak Check - OK 12:50
Final TIC = 33,308

RUN001 1302 Soil gas
A-0022S-040720 15-SG-001-4'
0" Hg collected at 0905 SE Corner
VC 0.245 ppb
cis 0.093 ppb
tce 0.011 ppb
pce 0.060 ppb

RUN002 1310 Soil gas
A-0022S-040720 15-SG-002-4'
7" Hg collected @ 0945 NE Corner
VC 0.227 cis 0.074
tce 0.015 pce 0.077 ppb

RUN003 1318 Soil gas
A-0022S-040720 15-SG-002-8.5'
6" Hg collected @ 1000 NE Corner
VC 0.304 cis 0.093
tce ND pce 0.111

RR

(142) 002255 04/07/15

CCV Checks

RUN 004 1338 0.55 ppb

VC	0.695	passed
cis	0.562	
tce	0.657	
pce	0.650	

RUN 005 1349 5.5 ppb

VC	5.3	passed
cis	4.5	
tce	5.0	
pce	4.8	

Bad

0026-H 04/07/15 (143)

RUN 006 1511 Soil gas

A-0026H-04072015-SG-0001A-4'

Collected @ 1345

VC	0.226	ppb
cis	0.016	ppb
tce	0.021	ppb
pce	0.029	ppb

* Note: just had empassy sample +

RUN 007 1524 Soil gas

A-0026H-04072015-SG-0001A-4'-DUPE

Collected @ 1340

VC	0.186	ppb
cis	0.055	ppb
tce	0.023	ppb
pce	0.090	ppb

RUN 008 1533 Soil gas

A-0026H-04072015-SG-0002-4'

Collected @ 1400

VC	0.184	ppb
cis	0.034	ppb
tce	ND	ppb
pce	0.068	ppb

ERR

0/2/9/15 #0025H (72)

Bar 30.03 ISE

Wind S - 17 MPH

T° 54

Run
001 VI 0025 BR1 0932 Basement
PCE 0.195

Run
002 VI 0025 BA1 0950 Basement
PCE 0.061

Run
003 VI 0025 BR2 1007 Basement
PCE 0.073

Run
004 VI 0025 LAU 1016 Basement
PCE 0.103

Run
005 VI 0025 FUR 1025 Basement
PCE 0.242

Run
006 VI 0025 ST01 1035 Crawl Space
PCE 0.090

Run
007 VI 0025 FAM 2LL 1103
PCE 0.077

ERR/ISE

0025H 02/9/15 (73)

Run
008 VI 0025 KIT 1117
PCE - 0.072

Run
009 VI 0025 LIV 1127
PCE - 0.089

Run
010 VI 0025 BR3 1137
PCE 0.041

Run
011 VI 0025 BA2 1147 4 Pstrn
PCE - 0.082

Run
012 VI 0025 OFC 1157
PCE - 0.049

NEGATIVE PRESSURE Hall way
2500 sq - 56

Run
013 IA BR1 1235
PCE - 0.046 666 CFM

Run
014 IA BR1 1246
PCE - 0.048 676 CFM

ERR/ISE

0025 H 02/9/15 (78)

Run 015 IA BR1 1255
PCE 0.059 645 CFM

Run 016 IA BR1 1305
PCE - 0.054 613 - CFM

Run 017 IA BR1 1314
PCE - 0.056 630 - CFM

Run 018 IA BR1 1324
PCE - 637 - CFM

Run 019 IA BR1 1336
PCE - 0.050 655 CFM

Run 020 IA BR1 1344
PCE 0.045 650 CFM

Run 021 IA BR1 ~~804~~ 1357
PCE - 0.040 804 CFM

POSTIVE PRESSURE

Run 022 IA BR1 1410
PCE 0.013 CFM 1408

ISE

0025 H 02/9/15 (79)

Run 023 IA BR1 1419
PCE -0.015 ~~1078~~ CFM 1078

Run 024 IA BR1 1428
PCE -0.016 8.9PA CFM 1073

Run 025 IA BR1 1438
PCE - 0.013 7.7PA CFM - 1061

Run 026 IA BR1 1447
PCE 0.018 CFM 1098

Run 027 IA BR1 1456
PCE 0.017 PA CFM 1096
small sparkling sweat

Run 028 OUTDOOR AMB 1523
PCE 0.021

Run 029 VAPOR 0025-4' 1539
PCE 0.110

Run 030 VAPOR 0025-8' 1547
PCE 0.153

ISE

(76) 2/19/15 0025H

RUN031 Amb Outdoor 1557

PCE 0.027

RUN 032 CCV

PCE 5.3

TCE 5.0

CIS 5.5

VC 7.8

(77)

ER 2/17/15 CAL RUNS

SIM 100PPB - HILL VI - LIST - 02042015

RUN#	#9	0.1 PPB
	#8	0.5 "
	#3	1.0 "
	#4	5.0 "
	#5	10.0 "

Cal saved as SIM 100 PPB HILL VI - LIST - 02172015

~~Run #10~~ CCV 5.0 PPB

Run001 & Reid

CIS	5.3
TCE	4.6
PCE	4.9

~~Run #11~~ CCV 0.5 PPB

Run002 & Reid

CIS	0.65
TCE	0.532
PCE	0.588

(78) ER 2/20/15

CCV Checks

Run # 004 CCV 5.0 PPB

CIS	4.3	ppb
TCE	4.1	ppb
PCE	4.4	ppb

Passed

~~Run # 002 CCV 0.5 PPB~~

Failed

~~Passed~~

(79) 02/22/15

ER CCV checks - Ellen Reich

Auto tune - 13:25:54 ok

Conc cleanout - succeeded
Final TIC Count - 4,792,779

CCV check 5 ppb - 17½

Run 001

VC	5.7	ppb
CIS	3.9	ppb
TCE	3.4	ppb ← Failed
PCE	3.4	ppb

CCV check 5.0 ppb

Run 002

VC	4.2	ppb
CIS	3.9	ppb
TCE	3.6	ppb
PCE	3.9	ppb

} passed

CCV Check 0.5 ppb

Run 003

CIS	0.45	ppb
TCE	0.37	ppb
PCE	0.42	ppb

} passed

RLH JST

(106) 0028-S 03/31/15

Ca/Runs - 001, 002, 003, 004 + 005
Method - S/H_100 PPB_VA_VI_LIST 032815
on 3/29/15 @ 1830
HAPSite Smart Plus H860
CCV Runs - 029 (1412) + 030 (1507) on 3/30/15
Auto tune - 03/31/15 07:38:27
Conc Cleanout - 3/31/15 07:47:41
Final TIC - 174,470
03/31/15
0840 - onsite setup equipment
& prep for sampling

RUN001 0908 - Central Hall - East-West - Near Rm 110
A-00285-033/2015-IA-001-HAL1
pce 0.011 ppb tce 0.01ppb

RUN002 0916 - Mechanical Room - Room 119A
A-00285-033/2015-IA-002-RM119A
pce 0.010 tce 0.014 ppb

RUN003 0924 Class 106
A-00285-033/2015-IA-003-CR106
pce 0.007 tce 0.004 ppb
ERR

(107)

RUN004 0933 Elevator Mechanical Room - Rm 104
A-00285-033/2015-IA-004-RM104
pce 0.010 tce 0.006 ppb

RUN005 0941 Front office
A-00285-033/2015-IA-005-RM102
pce 0.014 tce 0.005 ppb

RUN006 0954 Daycare
A-00285-033/2015-IA-006-CR139
pce 0.026 tce ND ppb

RUN007 1002 Classroom 137
A-00285-033/2015-IA-007-CR137
pce 0.021 tce 0.008 ppb

RUN008 1010 Classroom 133
A-00285-033/2015-IA-008-CR133
pce 0.019 tce 0.008 ppb

RUN009 1019 Classroom 128
A-00285-033/2015-IA-009-CR128
pce 0.219 tce 0.004 ppb
ERR

0028-S

RUN010 1027 Observation
Rm 124 (office area)
A-00285-03312015-IA-010-RM124
pce 0.014 tce ND ppb

RUN011 1035 Classroom 122
A-00285-03312015-IA-011-CR122
pce 0.015 tce ND ppb

RUN012 1044 Classroom 119
A-00285-03312015-IA-012-CR119
pce 0.017 tce ND ppb
* - check unknown peak A

RUN013 1058 Mechanical Room
A-00285-03312015-IA-013-RM116
pce 0.012 tce ND ppb
x - check unknown peak x

Survey001 1109-1111 Chemicals
stored in RM116
MAX TIC = 131,108

Survey002 1114-1116 Vapor pt
entry - Main SS line - Rm 116
MAX TIC = 163,497

SR2

RUN014 1120 Cafeteria-RM113
A-00285-03312015-IA-014-RM113
pce 0.013 tce 0.004 ppb

RUN015 1129 Kitchen-RM118
A-00285-03312015-IA-015-RM118
pce 0.013 tce 0.006 ppb

Survey003 1142-1144 Haz Mat Closet RM118
MAX TIC = 172,012

Survey004 1146-1148 Floor drain
in dishwashing room
MAX TIC = 149,631

Survey005 1151-1153 Floor drain
near steam table
MAX TIC = 161,660

RUN016 1233 Outdoor Ambient
Sidewalk near front entrance
A-00285-03312015-IA-016-OUT
pce 0.010 tce ND ppb

SR2

(110) 00285

RUN017 1254 Library - Rm201
A-00285-033/2015-IA-017-RM201
pce 0.014 tce 0.008 ppb

RUN018 1305 Office RM203
A-00285-033/2015-IA-018-RM203
pce tce ppb

RUN019 1314 Workroom RM210
A-00285-033/2015-IA-019-RM210
pce 0.012 tce ND ppb

RUN020 1325 Office RM213
A-00285-033/2015-IA-020-RM213
pce 0.012 tce ND ppb

RUN021 1333 Tinmont RM217
A-00285-033/2015-IA-021-RM217
pce 0.014 tce 0.004 ppb

RUN022 1341 2nd Floor - Bays RR
A-00285-033/2015-IA-022-BA1
pce 0.013 tce ND ppb

ERR

(111)

RUN023 1350 Testing Room 228
A-00285-033/2015-IA-023-CR228
pce 0.012 tce ND ppb

RUN024 1358 Conference Rm 224
A-00285-033/2015-IA-024-RM224
pce 0.012 tce 0.017 ppb

RUN025 1406 Classroom 227
A-00285-033/2015-IA-025-CR227
pce 0.012 tce 0.004 ppb

RUN026 1415 telephone RM230
A-00285-033/2015-IA-026-RM230
pce 0.011 tce 0.007 ppb

RUN027 1423 Classroom 232
A-00285-033/2015-IA-027-CR232
pce 0.012 tce ND ppb

RUN028 1432 Mechanical RM218
A-00285-033/2015-IA-028-RM218
pce 0.010 tce 0.005 ppb

ERR

0028-S

RUN 029 030 1448 Soil gas 4'
A-00285-033/2015-SG-001-4'
Collected on N side of bldg
@ 1030 - NE corner 10' away
VC 0.434 cis 0.023 tce ND pce 0.014

RUN 030 1456 Soil gas 8'
A-00285-033/2015-SG-001-8'
Collected on N side of bldg near
NE corner ~10' from slab @ 1045
VC 0.224 cis 0.005 tce ND pce 0.343

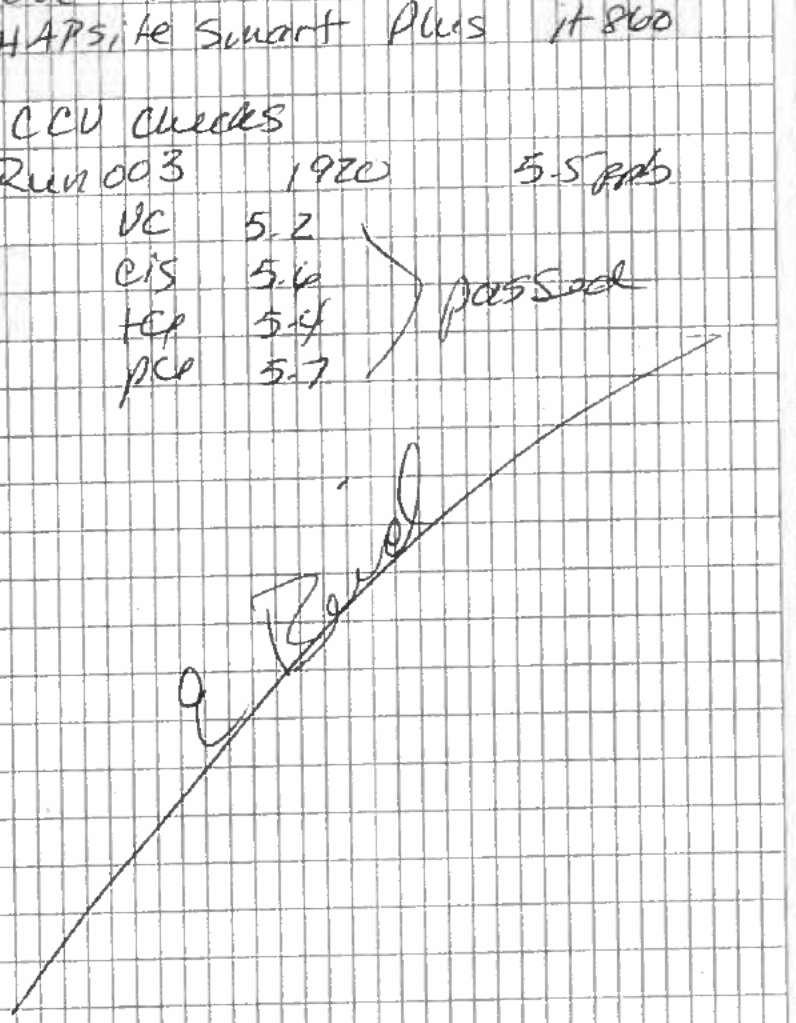
*Note RUN 029 Aborted-
HAPSite Powered off for
unknown reason*

CCV Checks
RUN 032 - 1504 5.5 ppb PCE
VC 4.2 cis 3.3 tce 3.2 pce 3.7
- failed - low N2 flow
RUN 033 1513 0.55 ppb PCE
VC 0.159 cis 0.414 tce 0.373 pce 0.449
- failed - low N2 flow

CR

Col Runs - 035, 036, 039, 043, 044
Method - SIM 100 ppb VA VI 45T 033/2015
on 03/3/15
HAPSite Smart Plus it 800

CCV Checks
Run 003 1920 5.5 ppb
VC 5.2
cis 5.6
tce 5.4
pce 5.7
} passed



(114) 00285 04/01/15

Cal Runs 044, 003, 005, 006, 008
Method SIM 100PPB VA VI LIST 04012015
on 04/01/15 @ 0835
HAPsite Smart Plus H860

CCU Checks 0837

RUN001 0840 5.5ppb

VC	5.7	
cis	5.4	passed
tcp	5.3	
pce	5.4	

RUN002 0848 0.55ppb

VC	0.700	
cis	0.563	passed
tcp	0.567	
pce	0.558	

RUN003 0958
IA-00285-04012015-IA-029A-RM118
pce 0.011 tce 0.012 ppb

RUN004 1005
A-00285-04012015-IA-029B-RM118
ERR pce 0.006 tce 0.007 ppb

44T.5 ~~22.5~~ 425.45 33.874

Neg Pressure (115)

Baseline +7.8 Removal Vol 45,000cuft
Kitchen Area - RM118
Start 0955 End 1145

To	Flow	Pa	Run	Time
5	476	-4.9	003/029A	0958
10	444	-4.7	004/029B	1005
15	464	-4.9	005/029C	1013
20	381	-4.8	—	—
25	385	-4.7	006/029D	1022
30	475	-4.7	007/029E	1034
40	568	-5.1	008/029F	1045
50	387	-5.2	009/029G	1054
60	low	-5.5	010/029H	1104
70	388	-4.7	011/029I	1113
80	340	-4.8	012/029J	1122
90	low	-4.8	013/029K	1130
100	low	-5.2	014/029L	1141
110	low	-5.0		

RUN005 1013
A-00285-04012015-IA-029C-RM118
pce 0.007 tce 0.008 ppb

RUN006 1022
A-00285-04012015-IA-029D-RM118
ERR pce 0.006 tce ND ppb

(16) 00285

RUN007 1034
A-00285-04012015-IA-029E-RH18
pce 0.007 tce 0.004 ppb

RUN008 1045
A-00285-04012015-IA-029F-RH18
pce 0.007 tce 0.004 ppb

RUN009 1054
-00285-04012015-IA-029G-RH18
pce 0.007 tce ND ppb

RUN10 1104
-00285-04012015-IA-029H-RH18
pce 0007 tce ND ppb

RUN11 1113
-00285-04012015-IA-029I-RH118
pce 0.008 tce 0.008 ppb

RUN12 1122
-00285-04012015-IA-029J-RH18
pce 0.008 tce ND ppb

RUN13 1130
00285-04012015-IA-029K-RH118
PCE 0.008 tce ND ppb

(17)

RUN014 1141
A-00285-04012015-IA-029L-RH18
pce 0.0006 tce 0.004 ppb
Total Vol Removed 45,848

Baseline +4.8 psi
Start 1148 End

TO	Flow	Psi	Run	Time
5	1051	4.9	015/030A	1150
10	1052	7.3	016/030B	1202
15	2057	3.4	—	—
20	1052	6.5	017/030C	1214
25	1041	9.0	—	—
30	1053	7.9	017/030C	1220
40	1063	8.7	018/030D	1228
44	1063	6.4		

Total Vol inserted - 46,486 cuft

Next page ——→

RR 11055

(118) 0028S 04/01/15

RUN015 1150
A-0028S-04012015-IA-030A-RM118
pce 0.004 tce ND ppb

RUN016 1202
A-0028S-04012015-IA-030B-RM118
pce 0.004 tce ND ppb

RUN017 1220
A-0028S-04012015-IA-030C-RM118
pce 0.007 tce ND ppb

RUN018 1228
A-0028S-04012015-IA-030D-RM118
pce 0.007 tce 0.007 ppb

CCV Checks

RUN019 1240 0.55 ppb
vc 0.544 cis 0.426 tce 0.481 pce 0.46
* PASSED *

RUN 020 1248 5.5 ppb
vc 4.9 cis 4.8 tce 4.9 pce 4.9
X PASSED X

[signature]

0037-H 04/02/15 (119)

Cal Runs 044, 003, 005, 006, 008
Method SIM 100ppb VA VI LIST
04012015 on 04/01/15 @ 0835
HAB Site Smart Plus #860

CCV Checks on 04/01/15
RUN019 @ 1240
RUN020 @ 1248

AUTOTUNE - 04/02/15 ok 7:12:36
Conc Cleanout - 04/02/15 7:21:50
Final TIC - 245,052

RUN001 0900 Outdoor
ambient outfront porch
A-0037H-04022015-IA-001-OUT
pce 0.005 tce ND ppb

RUN002 0910 Living Room
A-0037H-04022015-IA-002-LIV
pce 0.122 tce ND ppb

RUN003 0919 Kitchen
A-0037H-04022015-IA-003-KIT
pce 0.171 tce 0.005 ppb

RR

(86) 03/17/15 0030-H

Calibration Runs 001, 002, 004, 005 + 006
Method - SIM_100PPB_VA_VI_HST_030515
on 03/05/15 @ 1830
HAPSite Smart Plus H860

Auto tune - ok - 3/17/15 - 09:27:30
Conc Cleanout - 3/17/15 - 09:38:51
Final TIC = 402,009

CCV Checks

RUN001 0745 5ppb

VC	5.8	passed
CIS	4.3	
TCE	5.2	
PCE	4.3	

RUN002 0754 0.5ppb

VC	0.836 - not required	passed
CIS	0.481	
TCE	0.548	
PCE	0.489	

0835 onsite talk to homeowner + setup equipment.

EDR

(87)

RUN003 0854 - Outdoor Ambient
A-0030H-031715-IA-001-OUT
pce 0.024 ppb

RUN004 0913 Living/Dining
A-0030H-031715-IA-002-LIV
pce 0.400 ppb

RUN005 0921 - Kitchen
A-0030H-031715-IA-003-KIT
pce 0.399 ppb

RUN006 0929 - 1st Floor Bath
A-0030H-031715-IA-004-BA1
pce 0.511 ppb

RUN007 0937 Guest bedroom
A-0030H-031715-IA-005-BR1
pce 0.448 ppb

RUN008 0945 TV/Family Room
A-0030H-031715-IA-006-FAM
pce 0.394 ppb

EDR

(88) 3/17/15 0030-H

RUN009 0954 office
A-0030H-031715-IA-007-OFC
pce 0.438 ppb

RUN010 1005 Master Bedroom
A-0030H-031715-IA-008-MBR
pce 0.469 ppb

RUN011 1019 Basement landing
A-0030H-031715-IA-009-LND
pce 1.2 ppb

RUN012 103 storage/Shelf room
A-0030H-031715-IA-010-STO
pce 0.834 ppb

Survey001 - 1040-1042 - Paint/Chems on shelves MAX TIC 125,739

Survey002 1045-1047 Paint in storage/shelf area MAX TIC - 161,326

(89)

Survey003 - 1053-1055
Eastern Southern most post in basement
Max TIC - 170,389

Survey004 - 1057-1059
SE corner of basement floor -
MAX TIC 168,780

Survey005 - 1103-1105
NE corner of basement near shelves. MAX TIC = 169,000

Survey006 1107-1109
Cleanout of sewer line.
MAX TIC = 151,554

Survey007 1111-1113
Dryer vent penetration understair to dirt floor shelf area.
MAX TIC = 158,185

RUN013 - 1117
Area under stairs crawlspace
A-0030H-031715-IA-011-CRA
pce 0.736 ppb

47,250

(90)

3/17/15 0030-H

Negative Pressure,
Base line ~~-0.4~~ 0.1 pa
Removal vol 47,250 cuft
Set up on front door

RUN014 1202 Laundry area
A-0030H-031715-IA-012A-LAU
pce 1.0 ppb

RUN015 1212
A-0030H-031715-IA-012B-LAU
pce 0.794 ppb

*Note increased test to -10 pa as wind was causing issues with maintaining pressure had dropped to -2.9 ~~A~~

RUN016 1221
A-0030H-031715-IA-012C-LAU
pce 0.677 ppb

RUN017 1230
A-0030H-031715-IA-012D-LAU
pce 0.489 ppb

CRR

(91)

START ~~1157~~ 1153 END ~~1325~~ 1321

To	Flow	Pa	Run	Time
5	393	-4.8	014/012A	1202
10	384	-5.0	~~015/012B~~	~~1212~~
15	378	-5.2	015/012B	1212
20	322	-4.4		
25	604	-9.0	016/012C	1221
30	553	-11.5	017/012D	1230
40	642	-10.2	018/012E	1239
50	680	-10.2	019/012F	1247
60	631	-10.1	020/012G	1255
70	654	-12.0	021/012H	1306
80	679	-12.9	022/012I	~~1315~~
88	642	-10.8		1317

Final vol - 50,607.5 cuft

RUN 018 1239
A-0030H-031715-IA-012E-LAU
pce 0.340 ppb

RUN 019 1247
A-0030H-031715-IA-012F-LAU
pce 0.260 ppb

RUN 020 1255
A-0030H-031715-IA-012G-LAU
pce 0.182 ppb

CRR

369.25 ~~7385~~ 11,493 21273 ~~1444H~~ 411.84

03/17/15 0030-H

RUN021 1309
A-0030H-031715-IA-012H-LAu
pce 0.150 ppb

RUN022 1317
A-0030H-031715-IA-012I-LAu
pce 0.113 ppb

Positive Pressure
Baseline ~1.5 pa

RUN023 1336
A-0030H-031715-IA-013A-LAu
pce 0.160 ppb

RUN024 1344
A-0030H-031715-IA-013B-LAu
pce 0.160 ppb

RUN025 1355
A-0030H-031715-IA-013C-LAu
pce 0.152 ppb

RUN026 1405
A-0030H-031715-IA-013D-LAu
pce 0.139 ppb

ERR

Start 1329 End

ID	Flow	Pa	Run	Time
5	804	10.3	023/13A	1336
10	829	11.0	024/13B	1344
15	905	11.8	—	—
20	896	9.3	025/13C	1355
25	1034	13.5	—	—
30	883	1.8	026/13D	1405
40	965	12.4	027/13E	1415
50	870	10.3	028/13F	1424
54	799	18.2	—	—

Final injected vol - 49,684 cuft

RUN027 1415
A-0030H-031715-IA-013E-LAu
pce 0.117 ppb

RUN028 1424
A-0030H-031715-IA-013F-LAu
pce 0.122 ppb

RUN 029 - 1432 - Basket of work rags
A-0030H-031715-IA-014-LAu
PCE 0.161 ppb

Survey 008 1327 - Basket of rags from vacuum skis - near washer/dryer MAX TLC 12,905

ERR

03/17/15 0030-H

RUN030 - 1442 Soilgas
A-0030H-031715-SG-001-4' - 6" Hg
Collected @ 0900 on S side W of fence
pce 0.144 ppb

RUN031 - 1449 Soilgas
A-0030H-031715-SG-001-6' - 10" Hg
Collected @ 0910 on S side - W of fence
pce 0.153 ppb

CCV Checks

RUN032 1459 5 ppb
VC 4.8
cis 3.8
tce 4.1
pce 3.6
passed

RUN033 1507 0.5 ppb
VC 0.895 - not required
cis 0.438
tce 0.436
pce 0.406
passed

E Reid

03/29/15

Calibration Runs 001, 002, 004, 005 + 006
Method - SIM 100PPB VA VI LIST
03052015 on 03/05/15 @ 1830
HAPsite Smart Plus H860

Auto tune - ok 03/29/15 19:23:23
Conc Cleanout - ok 03/29/15 19:52:36
Final TIC 455202

CCV Checks

RUN001 1938 5 ppb
VC 5.1
cis 2.9 — failed
TCE 4.9
PCE 3.7

RUN002 1946 0.5 ppb
VC 0.701 - not required
cis 0.316 - failed
TCE 0.546
PCE 0.384
* Need to recalibrate *
RUN 003 1955 1.0 ppb
RUN 004 2004 10.0 ppb
RUN 005 2013 0.1 ppb

ER

3/16/15 0031-S

Calibration Runs 001, 002, 004, 005 + 006 - Method SIM 100PPB VA, VI - LIST - 030520150n 030715@1830
HAPSite Smart Plus 14860

Auto tune - ok 3/16/15 11:19:16
Conc Cleanout - 3/16/15 ok 11:32:19
Final TIC = 489,944

CCV Checks

Run 001 0936 5 ppb
VC 5.7
CIS 4.6
TCE 5.5
PCE 4.9
} passed

Run 002 0949 0.5 ppb
VC 0.724 ← not required
CIS 0.502
TCE 0.571
PCE 0.529
} passed

RUN003 - 1323
A-0031S-031615-SG-001-3.5'
collected @ 1130
VC - 0.124 CIS - 0.039 TCE - 0.021 PCE - 0.094

RUN004 1333
A-0031S-031615-SG-002-4'
collected @ 1000
VC - 0.348 CIS - 0.089 TCE - ND PCE - 0.128

RUN005 1341
A-0031S-031615-SG-003-3.5'
collected @ 1050
VC - 0.380 CIS - 0.067 TCE - 0.012 PCE - 0.231

RUN006 1354
A-0031S-031415-SG-004-4'
collected @ 1205
VC 0.367 CIS - 0.091 TCE - 0.010 PCE - 0.110

RUN007 1505
Cleaned Tedlar Bag Blank
VC 0.036 CIS 0.009 TCE 0.031? PCE 0.0008

RUN008 1559
A-0031S-031615-SG-005-4' collected 1330
VC 0.235 CIS 0.080 TCE 0.017 PCE 0.110

RUN009 1608
A-0031S-031615-SG-006-3' collected 1352
VC ND CIS 0.030 TCE 0.014 PCE 0.087
EOL

(84) 3/16/15 0031-S

Large peak at ~1.30 w/ tic over 18,000,000, used NIST library to ID - library identified compounds as Hexane, 1-bromo.

RUN 010 1636
Nitrogen blank

RUN 011 1645
Nitrogen blank

RUN 012 1655
A-0031S-031615-SG-007-3.5'
collected @ 1410
VC 0.368 cis 0.008 tce 0.004 pce 0.143

RUN 013 1706
A-0031S-031615-SG-008-4'
collected @ 1445
VC-0.464 cis-0.036 tce-0.015 pce-0.045

CCV Checks

RUN 014. 1747 5ppb

VC	7.1	ppb	- not required
cis	5.1	ppb	
tce	4.1	ppb	> passed
pce	5.4	ppb	

SPS2

(85)

CCV Check

RUN 015 1757 0.5 ppb

VC	1.274	ppb	- not required
cis	0.594	ppb	
tce	0.655	ppb	> passed
pce	0.599	ppb	

RL Rec'd

(126) 0037-H 04/02/15

RUN033 1506 Front Bedroom
confirmation sample
A-0037H-04022015-IA-022-BR2A
pce 0.105 tce 0.006 ppb

RUN034 1514 Master bedroom
confirmation sample
A-0037H-04022015-IA-023-MB2A
pce 0.123 tce 0.006 ppb

RUN035 1526 Soilgas 4'
collected on W side near SW
corner ~ 2.5' from slab - 0" Hg
A-0037H-04022015-SG-001-4'
vc 0.055 cis 0.024 pce 0.326 tce ND

CCV Checks

RUN036 1534 0.55 ppb
vc 0.600 cis 0.394 tce 0.493 pce 0.497
* PASSED *

RUN037 1548 5.5 ppb
vc 4.3 cis 3.9 tce 4.6 pce 4.5
* PASSED *

E Reid

04/03/15 0036-H (127)

Cal Runs 044, 003, 005, 006, 008
Method SIM 100ppb VA VI LIST
04012015 on 04/01/2015 @ 0835
HAPSite Smart Plus H860

CCV Checks - Run 036 - 0.55 ppb
@ 1534 on 04/02/15
Run 037 - 5.5 ppb @ 1548 on 04/02/15

Auto Tune - ok 04/03/15 07:21
Conc Cleanout - ok 04/03/15 0730
Final TIC = 231,933

RUN001 0845 Outdoor Air
A-0036H-04032015-IA-001-OUT
pce 0.014 tce 0.012 ppb

RUN002 0854 Open Living/Dining/Kitchen
A-0036H-04032015-IA-002-OCL
pce 0.115 tce 0.013 ppb

RUN003 0910 Bathroom
A-0036H-04032015-IA-003-BA1
pce 0.135 tce ND ppb

CRR

0036-1H 04/03/15

Run004 0919 Child's Bedroom
A-0036H-04032015-IA-004-BR1
pce 0.137 tce 0.014 ppb

Run005 0927 Master bedroom
A-0036H-04032015-IA-005-MBR
pce 0.153 tce 0.013 ppb

Run006
Accidental run when
carrying AAPS/te to basement.

Run007 0947 Storage
A-0036H-04032015-IA-007-STO
pce 0.441 tce 0.010 ppb

Run008 0956 Furnace Room
A-0036H-04032015-IA-008-FUR
pce 0.233 tce 0.013 ppb

Survey001 1008-1010 Work bench in
furnace room - WD40, bug spray, etc.
MAX TIC = 138,467

ERR

Survey002 1014-1018 Base of wall
behind furnace
MAX TIC = 182,628

Survey003 1020-1022 - Dirt crawl
space on E side of basement
MAX TIC = 205,723

Survey004 1023-1025 - Base of
wall near NE corner of
basement - heavy water staining
MAX TIC = 171,892

Run009 - 1050 - Neg Pressure
A-0036H-04032015-IA-009A-FUR
pce 0.206 tce 0.004 ppb

Run010 - 1059
A-0036H-04032015-IA-009B-FUR
pce 0.312 tce ND ppb

Run011 1107
A-0036H-04032015-IA-009C-FUR
pce 0.279 tce 0.009 ppb

ERR

(130) 0036-H 04/05/15

Neg Pressure

Start 1045 End

Baseline - -0.9

Removal Vol - 26,000

To	Flow	Pa	Run	Time
5	435	-5.1	009/009A	1050
10	449	-5.4	010/009B	1059
15	432	-5.1	— —	—
20	439	-5.5	011/009C	1107
25	449	-5.1	012/009D	1115
30	420	-5.1	013/009E	1123
40	446	-4.8	014/009F	1131
50	439	-5.0	015/009G	1139
60	443	-5.3		

Total Vol Removed - 26,346 cuft

Positive Pressure

Baseline - -0.5 Start 1150

To	Flow	Pa	Run	Time
5	461	4.6	016/010A	1152
10	476	4.9	017/010B	1201
15	450	5.5	018/010C	1210
20	457	4.1	— —	
25	440	4.5	019/010D	1220
30	430	4.0	020/010E	1228
40	461	5.1	021/010F	1238
				~~[illegible]~~

GRR

(131)

RUN012 - 1115

A-0036H-04032015-IA-009D-FUR

pce 0.248 tce ND ppb

RUN013 - 1123

A-0036H-04032015-IA-009E-FUR

pce 0.217 tce 0.009 ppb

RUN014 1131

A-0036H-04032015-IA-009F-FUR

pce 0.311 tce 0.008 ppb

RUN015 1139

A-0036H-04032015-IA-009G-FUR

pce 0.303 tce 0.008 ppb

RUN016 1152

A-0036H-04032015-IA-010A-FUR

pce 0.288 tce 0.006 ppb

RUN017 1201

A-0036H-04032015-IA-010B-FUR

pce 0.073 tce ND ppb

To	Flow	Pa	Run	Time
50	460	5.5	022/010G	1246
50	444	5.1		

End - 1248 TOTAL VOL = 26,286 cuft

GRR

0036-H 04/03/15

RUN018 1210
A-0036H-04032015-IA-010B-FUR
pce 0.061 tce ND

RUN019 1220
A-0036H-04032015-IA-010D-FUR
pce 0.079 tce 0.004 ppb

RUN020 1228
A-0036H-04032015-IA-010E-FUR
pce 0.043 tce 0.007 ppb

RUN021 1238
A-0036H-04032015-IA-010F-FUR
pce 0.050 tce 0.007 ppb

RUN023 1246
A-0036H-04032015-IA-010G-FUR
pce 0.046 tce 0.007 ppb

RUN023 1255 Soil gas 4'
pce 0.252 tce 0.387 ppb
A-0036H-04032015-SG-001-4'
Collected on NE corner of house @ 0950

GRR

RUN024 1304 Soil gas 8'
pce 0.222 tce 0.349 ppb
A-0036H-04032015-SG-001-8'
Collected on NE corner of house @ 1005

CCV Checks

RUN025 1314 0.557 ppb
VC 0.667
cis 0.530
tce 0.564
pce 0.581
} passed

RUN026 1322 5.5 ppb
VC 4.4
cis — failed-not id
tce 5.0
pce 4.7

RUN027 1340 5.5 ppb
VC - 4.5
cis - — failed-not id
tce - 5.0
pce - 4.8

GRR

(118) 0028S 04/01/15

RUN015 1150
A-0028S-04012015-IA-030A-RM118
pce 0.004 tce ND ppb

RUN016 1202
A-0028S-04012015-IA-030B-RM118
pce 0.004 tce ND ppb

RUN017 1220
A-0028S-04012015-IA-030C-RM118
pce 0.007 tce ND ppb

RUN018 1228
A-0028S-04012015-IA-030D-RM118
pce 0.007 tce 0.007 ppb

CCV Checks

RUN019 1240 0.55 ppb
vc 0.544 cis 0.426 tce 0.481 pce 0.46
* PASSED *

RUN 020 1248 5.5 ppb
vc 4.9 cis 4.8 tce 4.9 pce 4.9
X PASSED X

E Bard

0037-H 04/02/15 (119)

Cal Runs 044, 003, 005, 006, 008
Method SIM 100PPB VA VI LIST-
04012015 on 04/01/15 @ 0835
HAPSite Smart Plus H860

CCV Checks on 04/01/15
RUN019 @ 1240
RUN020 @ 1248

AUTOTUNE - 04/02/15 ok 7:12:36
Conc Cleanout - 04/02/15 7:21:50
FinalTIC - 245,052

RUN001 0900 Outdoor
ambient on front porch
A-0037H-04022015-IA-001-out
pce 0.005 tce ND ppb

RUN002 0910 Living Room
A-0037H-04022015-IA-002-LIV
pce 0.122 tce ND ppb

RUN003 0919 Kitchen
A-0037H-04022015-IA-003-KIT
pce 0.171 tce 0.005 ppb

RR

(120) 0037H

RUN004 0928 1st floor bath
A-0037H-04022015-IA-004-BA1
pce 0.092 tce 0.005 ppb

RUN005 0937 East Bedroom
A-0037H-04022015-IA-005-BE1
pce 0.334 tce 0.008 ppb

RUN006 0946 Front Bedroom
A-0037H-04022015-IA-006-BE2
pce 0.902 tce 0.009 ppb

RUN007 0955 Master bedroom
A-0037H-04022015-IA-007-MBR
pce 0.682 tce ND ppb

RUN008 1003 Pipechase
closet in master bathroom
A-0037H-04022015-IA-008-CL01
pce 0.185 tce 0.007 ppb

RUN009 1011 2nd floor bath
A-0037H-04022015-IA-009-BA2
pce 0.960 tce ND ppb

CLL

(121)

RUN010 1021 2nd floor hall closet
A-0037H-04022015-IA-010-CL02
pce 0.625 tce 0.011 ppb

RUN011 1038 Basement bath
A-0037H-04022015-IA-011-BA3
pce 0.557 tce 0.009 ppb

RUN012 1048 Basement bedroom
A-0037H-04022015-IA-012-BE3
pce 0.501 tce 0.014 ppb

RUN013 1057 Basement Bedroom closet
A-0037H-04022015-IA-013-CL03
pce 0.519 tce 0.016 ppb

RUN014 1106 Storage Room
A-0037H-04022015-IA-014-STO
pce 0.399 tce ND ppb

RUN015 1115 Laundry Room
A-0037H-04022015-IA-015-LAU
pce 0.279 tce 0.010 ppb

RUN016 1129 Playroom
A-0037H-04022015-IA-016-PLA
CLR pce 0.450 tce 0.013 ppb

(122) 0037H 04/02/15

RUN017 1142 Furnace Room
A-0037H-04022015-IA-017-FUR2
pce 0.945 tce 0.015 ppb

RUN018 1150 Large crack where concrete meets brick wall behind furnace.
A-0037H-04022015-IA-018-FUR2
pce 0.422 tce 0.012 ppb

RUN019 1159 Crack in concrete floor near furnace
A-0037H-04022015-IA-019-FUR3
pce 13ppb 0.043 → tce

SURVEY001 - 1212-1214 - Closet w/ cleaning supplies - laundry room
MAX TIC = 129,280

Survey002 1215-1217 - Sewerline through slab - shelf in laundry room
MAX TIC = 147,789

Survey003 1219-1221 Floor drain in laundry room.
MAX TIC = 158,835
RR

31,130 ~~26,115~~ ~~26,8~~ 10,299 10,446

Neg Pressure test - (123)
Baseline - -3.1 pa
Removal vol 56,000 cuft
START 1250 END 1345

To	Flow	Pa	Run	Time
5	1052	-3.5	020/020A	1253
10	1045	-5.4	021/020B	1302
15	1039	-6.6	022/020C	1310
20	1042	-3.3		
25	1045	-4.0	023/020D	1318
30	1003	-3.6	024/020E	1326
40	1046	-4.5	025/020F	1334
50	1044	-3.5	026/020G	1343
35	1055	-4.0		

Total vol removed 57,145 cuft

RUN020 1253
A-0037H-04022015-IA-020A-LAU
pce 2.1 tce 0.043 ppb

RUN021 1302
A-0037H-04022015-IA-020B-LAU
pce 1.8 tce 0.029 ppb

RUN022 1310
A-0037H-04022015-IA-020C-LAU
RR pce 2.1 tce 0.036 ppb

(24) 0037H 04/02/15

Run 023 1318
A-0037H-04022015-IA-020D-LAL
pce 2.0 tce 0.047 ppb

Run 024 1326
A-0037H-04022015-IA-020E-LAL
pce 0.671 tce 0.016 ppb

RUN 025 1334
A-0037H-04022015-IA-020F-LAL
pce 2.2 tce 0.045 ppb

RUN 026 1343
A-0037H-04022015-IA-020E-LAL
pce 2.0 tce 0.039 ppb

RUN 027 1405
A-0037H-04022015-IA-021A-LAL
pce 0.386 tce 0.014 ppb

RUN 028 1417
A-0037H 04022015-IA-021B-LAL
pce 0.281 tce 0.006 ppb

RUN 029 1425
A-0037H-04022015-IA-021C-LAL
pce 0.204 tce 0.006 ppb

(25)

Positive Pressure Test

Start 1359 End -1.7
Baseline ~~35 pa~~ 60 pa

TO	Flow	Pa	Run	Time
5	1105	5.5	027/021A	1405
10	1042	4.2		
15	1043	4.7	028/021B	1417
20	1054	5.0		
25	1036	4.6	029/021C	1425
30	1058	2.9	030/021D	1434
40	1050	5.1	031/021E	1443
50	1073	5.7	032/021F	1451
SK-1	1073	3.3		

Injected air volume - 57,204 cu ft

RUN 030 1434
A-0037H-04022015-IA-021D-LAL
pce 0.153 tce 0.006 ppb

RUN 031 1443
A-0037H-04022015-IA-021E-LAL
pce 0.128 tce ND ppb

RUN 032 1451
A-0037H-04022015-IA-021F-LAL
pce 0.110 tce 0.011 ppb

10 55.4
42217

(R6) 0037-H 04/02/15

RUN033 1506 Front Bedroom
confirmation sample
A-0037H-04022015-IA-022-BRRA
pce 0.105 tce 0.006 ppb

RUN034 1514 Master bedroom
confirmation sample
A-0037H-04022015-IA-023-MBRA
pce 0.123 tce 0.006 ppb

RUN035 1526 Soilgas 4'
collected on W side near SW
corner ~ 2.5' from slab - 0" Hg
A-0037H-04022015-SG-001-4'
vc 0.055 cis 0.024 pce 0.326 tce ND

CCV Checks

RUN036 1534 0.55 ppb
vc 0.600 cis 0.394 tce 0.493 pce 0.497
* PASSED *

RUN037 1548 5.5 ppb
vc 4.3 cis 3.9 tce 4.6 pce 4.5
* PASSED *

E Reid

04/03/15 0036-H (R7)

Cal Runs 044, 003, 005, 006, 008
Method SIM 100ppb VA VI LIST
04012015 on 04/01/2015 @ 0835
HAPSite Smart Plus H860

CCV Checks - Run 036 - 0.55 ppb
@ 1534 on 04/02/15
Run037 - 5.5 ppb @ 1548 on 04/02/15

Auto Tune - ok 04/03/15 07:21
Conc Cleanout - ok 04/03/15 0730
Final TIC = 231,933

RUN001 0845 Outdoor Air
A-0036H-04032015-IA-001-OUT
pce 0.014 tce 0.012 ppb

RUN002 0854 Open Living/Dining/Kitchen
A-0036H-04032015-IA-002-OCL
pce 0.115 tce 0.013 ppb

RUN003 0910 Bathroom
A-0036H-04032015-IA-003-BA1
pce 0.135 tce ND ppb

CRR

0038-H 04/09/15

Cal Runs - 044, 003, 005, 006 + 008
Method - SIM 100PPB VA VI - HST 04012015
on 04/01/2015 @ 0835
HAPSite Smart Plus #860

Autotune - 04/09/15 ok 0740
Calc Clearned - 04/09/15 ok 0749
Final TIC = 223,661

CCV - Run 029 04/08/15 1513
0.55 ppb

RUN003 0923 Outdoor
A-0038H-04092015-IA-001-OUT
pce 0.018 tce 0.016 ppb

RUN004 0934 Living Room
A-0038H-04092015-IA-002-OCL
pce 0.018 tce ND

RUN005 0943 Dining Room
A-0038H-04092015-IA-003-DRF
pce 0.018 tce 0.010

GRR

RUN006 0952 East bedroom
A-0038H-04092015-IA-004-BR1
pce 0.019 tce 0.009 ppb

RUN007 1002 1st Floor Bath
A-0038H-04092015-IA-005-BA1
pce 0.019 tce ND

RUN008 1009 West Bedroom
A-0038H-04092015-IA-006-BR2
pce 0.018 tce 0.007 ppb

RUN009 1020 Basement Bath
A-0038H-04092015-IA-007-BA2
pce 0.016 tce 0.013 ppb

RUN010 1029 Laundry Closet
A-0038H-04092015-IA-008-LAU
pce 0.016 tce 0.012 ppb

RUN011 1037 Family Room
A-0038H-04092015-IA-009-FAM
pce 0.015 tce 0.010 ND

GRR

154 C038-H 04/09/15

RUN012 1044 Master Bedroom
A-0038H-04092015-IA-010-MBR
PCE 0.017 tce 0.006 ppb

RUN013 1053 Furnace Room
A-0038H-04092015-IA-011-FUR
PCE 0.017 tce 0.009 ppb

Survey001 1106-1108 Drain near hw heater MAX TIC = 153,953

Survey002 1109-1111 Old Chimney near floor MAX TIC = 181, 131

Survey003 1113-1115 Paint on shelf in furnace room - MAX TIC = 190,580

Survey004 1118-1120 - Loader line access near sink MAX TIC - 190,118

Survey005 1122-1124 - Laundry area supplies MAX TIC = 200,079

ERR

155

Negative Pressure Test

Baseline - +1.6 Pa
Removal Volume - 36,000 cuft
START 1210 END 1310

ID	Flow	Pa	Run	Time
5	612	-3.9	014/012A	1212
10	606	-5.6	015/012B	1220
15	575	-4.4	014/012C	1229
20	613	-5.3	—	—
25	601	-5.4	017/012D	1237
30	605	-5.1	018/012E	1245
40	610	-5.6	019/012F	1254
50	606	-4.7	020/012G	1303
60	618	-4.9	—	—

Total volume removed = 36,300 cuft

RUN014 1212
A-0038H-04092015-IA-012A-FAM
PCE 0.016 TCE 0.006 ppb

RUN015 1220
A-0038H-04092015-IA-012B-FAM
PCE 0.017 TCE ND

RUN016 1229
A-0038H-04092015-IA-012C-FAM
PCE 0.016 tce 0.010 ppb ERR

156 0038-H 04/09/15

RUN 017 1237
A-0038H-04092015-IA-012D-FAM
pce 0.015 tce ND

RUN018 1245
A-0038H-04092015-IA-012E-FAM
pce 0.016 tce 0.005 ppb

RUN019 1254
A-0038H-04092015-IA-012F-FAM
pce 0.016 tce ND

RUN020 1303
A-0038H-04092015-IA-012G-FAM
pce 0.017 tce 0.009 ppb

RUN021 1322
A-0038H-04092015-IA-013A FAM
pce 0.019 tce 0.002 ppb

RUN022 1335
A-0038H-04092015-IA-013B-FAM
pce 0.017 tce 0.013 ppb

ERR

START 1320 END
Positive Pressure

157

Baseline - -0.7 pa

To	Flow	Pa	Run	Time
5	831	0.8	021/013A	1322
10	621	5.6	022/013B	1335
15	608	3.7	—	—
20	650	4.1	023/013C	1343
25	646	5.4	024/013D	1351
30	643	5.2	025/013E	1359
40	645	6.3	026/013F	1410
50	644	6.4	027/013G	1418
60	625	4.9	—	—

Total volume injected - 39,420 cuft

RUN023 1343
A-0038H-04092015-IA-013C-FAM
pce 0.016 tce 0.017 ppb

RUN024 1351
A-0038H-04092015-IA-013D-FAM
pce 0.016 tce 0.014 ppb

RUN025 1359
A-0038H-04092015-IA-013E-FAM
pce 0.017 tce 0.013 ppb

ERR

0038-H 04/09/15

RUN 026 1410
A-0038H-04092015-IA-023F-FAM
pce 0.017 tce ND

RUN 027 1418
A-0038H-04092015-IA-013C-FAM
pce 0.016 tce 0.023

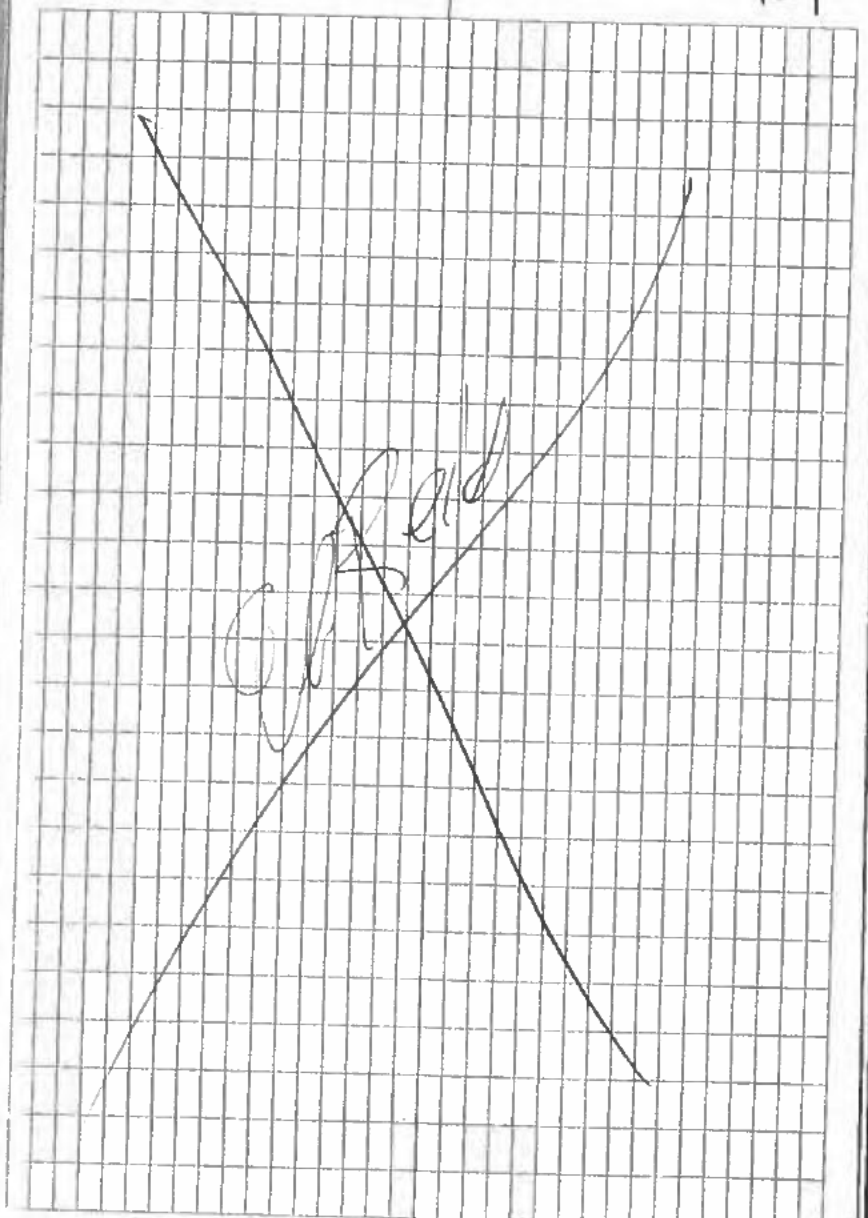
CCV Check

RUN 028 1428 0.55 ppb
VC 0.636
cis 0.425
tce 0.570
pce 0.540
} passed

RUN 029 - Aborted - loco N2

RUN 030 - 1445 5.5 ppb
VC 4.6
cis 3.9
tce 5.1
pce 4.7
} passed

SLR



CONTENTS

PAGE	REFERENCE	DATE

Location 0005-H Date 04/10/15

Project / Client

Cal Runs - 044, 003, 005, 006 + 008
Method - SIM_100PAB_V.4.VI_LIST_
04012015 on 04/01/2015 @ 0835
HAPSite Smart Plus #860

Auto tune - 04/10/15 ok 0746
Conc Cleanout - 4/10/15 ok 0755
Final TIC = 255,844
CCV's Ran on 04/09/15
CCV-Run 028 - 0.55 ppb 1428
CCV-Run 030 - 5.5 ppb 1445

RUN001 0852 - Outdoor
Front porch - West side of house
A-0005H-04102015-IA-001-04T
pce 0.026 tce 0.009 ppb

RUN002 0903 Livims/Dinng
A-0005H-04102015-IA-002-04T
pce 0.019 tce 0.014 ppb

SDR

4

Location 0005H Date 04/10/15

Project / Client

Run003 0911 Front Bedroom
A-0005H-04102015-IA-003-BR1
pce 0.019 tce 0.016 ppb

Run004 0918 Bathroom
A-0005H-04102015-IA-004BA1
pce 0.017 tce 0.012 ppb

Run005 0926 Back Bedroom
A-0005H-04102015-IA-005-BR2
pce 0.018 tce 0.014 ppb

Run006 0935 Kitchen
A-0005H-04102015-IA-006-KIT
pce 0.020 tce 0.012 ppb

Run007 0943 Attic
A-0005H-04102015-IA-007-ATT
pce 0.016 tce 0.011 ppb

ERR

5

Location 0005H Date 04/10/15

Project / Client

Run008 1000 Laundry Area
A-0005H-04102015-IA-008-LAU
pce 0.020 tce 0.014 ppb

Run009 1008 Storage Room
A-0005H-04102015-IA-009-STO
pce 0.020 tce 0.015 ppb

Run010 1022 Garage
A-0005H-04102015-IA-010-GAR
pce 0.023 tce ND

Run011 1035 Coal Bin Room
A-0005H-04102015-IA-011-COA
pce 0.023 tce 0.027 ppb

Survey001 1017-1019 NE corner storage Room
MAX TIC = 147,361

Survey002 1020-1022 Paint/Chem Shelf in Storage Room. MAX TIC = 171,465

ERR

6

Location 0005-H Date 04/10/15

Project / Client

~~Removal Volume = 59,000 cuft~~

Negative Pressure Test
Baseline +0.4 Pa
START 1158 END

To	Flow	Pa	Run	Time
5	749	-4.6	012 / 012A	1202
10	744	-4.4	013 / 012B	1210
15	729	-4.7		
20	753	-5.4	014 / 012C	1219
25	740	-5.8	015 / 012D	1227
30	753	-4.1	016 / 012E	1235
40	739	-4.8	017 / 012F	1243
50	751	-5.1	018 / 012G	1251
60	749	-5.6	019 / 012H	1259
70	747	-5.1		

Total vdume removed = 52,458

Run 012 1202
A-0005H-04102015-IA-012A-LAir
pce 0.028 tce 0.017 ppb

ERR

Location 0005-H Date 4/10/15 7

Project / Client

Survey 003 1043-1045 Chemicals + glues on storage shelf in Coal bin room - MAX TIC = 152,024
Survey 004 1047-1049 Chemicals, oils, etc on garage shelf - MAX TIC = 170,165
Survey 005 1052-1054 Floor drain in laundry room - MAX TIC = 193,829

Run 013 - 1210
A-0005H-04102015-IA-012B-LAir
pce 0.025 tce 0.012 ppb

Run 014 1219
A-0005H-04102015-IA-012C-LAir
pce 0.027 tce 0.019 ppb

Run 015 1227
A-0005H-04102015-IA-012D-LAir
pce 0.025 tce 0.011 ppb

ERR

8

Location 0005H Date 04/10/15

Project / Client

Positive Pressure Test

Baseline – +0.0 pa

Start 1315 End

To	Flow	Pa	Run	Time
5	900	4.2	020 / 013A	1319
10	895	4.2	021 / 013B	1327
15	1019	4.6	—	—
20	933	6.5	022 / 013C	1337
25	848	6.4	—	—
30	952	4.8	023 / 013D	1345
40	831	5.5	024 / 013E	1353
50	926	5.4	025 / 013F	1402
55	926	4.1	—	—

Total volume injected ~~50,292~~

= 50,294 cuft

RUN 016 1235

A-0005H-04102015-IA-012E-LAU

pce 0.028 tce 0.016 ppb

CLR

9

Location 0005H Date 04/10/15

Project / Client

RUN 017 1243

A-0005H-04102015-IA-012F-LAU

pce 0.030 tce 0.017 ppb

RUN 018 1251

A-0005H-04102015-IA-012G-LAU

pce 0.031 tce 0.017 ppb

RUN 019 1259

A-0005H-04102015-IA-012H-LAU

pce 0.033 tce 0.011 ppb

RUN 020 1319

A-0005H-04102015-IA-013A-LAU

pce 0.031 tce 0.015 ppb

RUN 021 1327

A-0005H-04102015-IA-013B-LAU

pce 0.030 tce 0.017 ppb

CLR

9/11/14

10 Location 0005H Date 04/2/2015

Project / Client

RUN022 1337
A-0005H-04102015-IA-013C-LAU
pce 0.030 tce 0.023 ppb

RUN023 1345
A-0005H-04102015-IA-013D-LAU
pce 0.030 tce 0.007 ppb

RUN024 1353
A-0005H-04102015-IA-013E-LAU
pce 0.028 tce 0.015 ppb

RUN025 1402
A-0005H-04102015-IA-013F-LAU
pce 0.027 tce 0.008 ppb

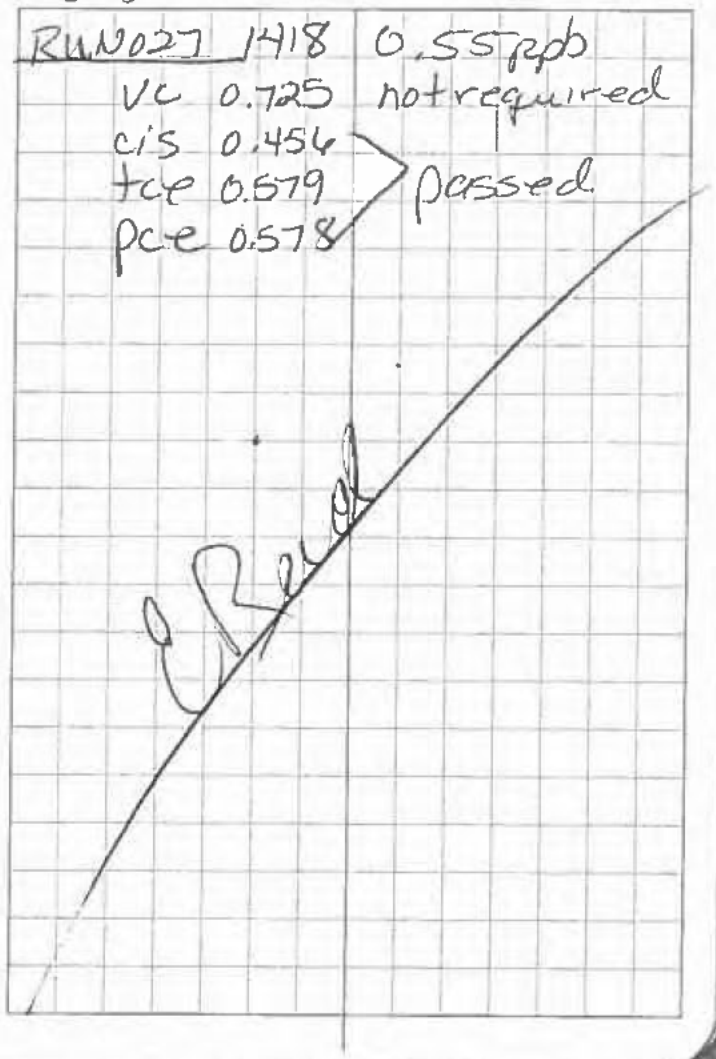
RUN026 1409 Soil gas
A-0005H-04102015-SG-001-4'
Collected off walk-SE of house @ 0855.
RL pce 0.041 tce 0.007 ppb
cis 0.017 VC 0.109

Location 0005H Date 04/10/15 11

Project / Client

~~CCV's~~

RUN027 1418 0.55 ppb
VC 0.725 not required
cis 0.456 >
tce 0.579 > passed
pce 0.578



02/24/15 0002-H

0800 Meet crew at Sunnyside

0830 At house - setup equipment & prep house, close doors, turn off heat, etc.

Auto tune - 10:49:18 ok
Conc Cleanout - succeeded
10:59:18 Final TIC 308,990

RUN001 - 0907 Outdoor Ambient
A-0002H-022415-IA-001-OUT
pce 0.085 ppb

RUN002 0916 Living/Dining
A-0002H-022415-IA-002-LIV
pce 0.246 ppb

RUN003 0924 Master bedroom
A-0002H-022415-IA-003-MBR
pce 0.262 ppb

RUN004 0932 upstairs bath
A-0002H-022415-IA-004-BA1
pce 0.264 ppb

RUN005 0940 Kitchen
A-0002H-022415-IA-005-KIT
pce 0.254 ppb

RUN006 0951 Mudroom utility
A-0002H-022415-IA-006-MUD
pce 0.242 ppb

RUN007 1002 storage below stairs
A-0002H-022415-IA-007-STO
pce 0.136 ppb

RUN008 1011 lower living area
A-0002H-022415-IA-008-LLL
pce 0.309 ppb

RUN009 1019 basement bath
A-0002H-022415-IA-009-BA2
pce 0.538 ppb

02/24/15 0002H (78)

RUN 010 1027 Basement Below
A-0002H-022415-IA-010-BR1
pce 0.311 ppb

SURVEY 001 1039 - Basement
floor drain in laundry area
max TIC - 100,221

SURVEY 002 1042 - wall
penetration near laundry sink
max TIC - 118,972

SURVEY 003 1046 - Gap in baseboard
at door between laundry + foyer
living area max TIC - 116,917

SURVEY 004 Mudroom
closet along wall/floor crack
Max TIC 131,243

Negative Pressure testing
set up on lower basement floor
Baseline pressure - -2.2
removal vol - 24,375

(79)

Start 1130 End 1229

To	Flow	Pa	Run	Time
5	371	-5.1	011/11A	1130
10	417	-4.5	012/11B	1140
15	438	-5.0	013/11C	1148
20	333	-5.7	014/11D	1156
25	430	-4.9	015/11E	1203
30	444	-5.4		
35	436	-5.2	016/11F	1212
40	437	-4.7		
45	449	-5.4	017/11G	1220
50	424	-4.8		
55	396	-4.6	018/11H	1228
59	446	-5.6		

Run 11 1130
flow 428 Pa -4.9
A-0002H-022415-IA-017A-LLL
pce 0.198 ppb

Run 012 1140
flow 422 Pa -4.9
A-0002H-022415-IA-017B-LLL
pce 0.252 ppb

02/24/15 0002-H (80)

RUN013 1148
flow 439 pa -5.1
A-0002H-022415-IA-011C-LLL
pce 0.290 ppb

Run 014 1156
flow 435 pa -5.1
A-0002H-022415-IA-011D-LLL
pce 0.336 ppb

Run015 1203
flow 422 pa -5.1
A-0002H-022415-IA-011E-LLL
pce 0.381 ppb

Run016 1212
flow 437 pa -4.7
A-0002H-022415-IA-011F-LLL
pce 0.343 ppb

RUN017 1220
flow 449 pa -5.4
A-0002H-022415-IA-011G-LLL
pce 0.359 ppb

(81)

RUN018 1228
flow 446 pa -5.6
A-0002H-022415-IA-011H-LLL
pce ppb

TOTAL VOL → 24,539 cuft

POSITIVE PRESSURE TEST
Baseline pressure -0.8
START 1235 END 1339

TO	Flow	Pa	Run	Time
5	385	4.6	019/12A	1236
10	415	3.0	020/12B	1244
15	389	5.1	021/12C	1252
20	389	4.9		
25	380	4.6	022/12D	1300
30	366	5.4		
35	404	5.2	023/12E	1309
40	385	5.2	024/12F	1317
45	377	4.8		
50	377	5.1	025/12G	1325
55	358	5.1	026/12H	1333
64	361	4.6		

Final vol - 24,~~[illegible]~~ 458 cuft

02/24/15 0002H

RUN 019 1234
flow 342 pa 5.1
A-0002H-022415-IA-012A-LLL
pce 0.342 ppb

Run 020 1244
flow 415 pa 3.0
A-0002H-022415-IA-012B-LLL
pce 0.140 ppb

RUN021 1252
flow 389 pa 5.1
A-0002H-022415-IA-012C-LLL
pce 0.104 ppb

RUN022 1300
flow pa
A-0002H-022415-IA-012D-LLL
pce 0.0[illegible] ppb

RUN023 1309
flow 404 pa 5.2
A-0002H-022415-IA-012E-LLL
pce 0.047 ppb

RUN024 1317
flow 385 pa 5.2
A-0002H-022415-IA-012F-LLL
pce 0.047 ppb

RUN025 1325
flow 377 pa 5.1
A-0002H-022415-IA-012G-LLL
pce 0.035 ppb

RUN026 1333
flow pa
A-0002H-022415-IA-012H-LLL
pce 0.038 ppb

RUN027 1341
Soil gas collected 1030 SW corner of house
A-0002H-022415-SG-001-41
cis 0.129 tce 0.025 pce 0.117 ppb

Run028 1349 Soil gas
A-0002H-022415-SG-001-81 1035
cis 0.054 tce 0.019 pce 0.076

Run029 - 1358 5.1 pb ccl4 failed
Run 030 - 1405 5 ppb ccl4

02/24/15 0002H

Run 031 1523

CCV run 5ppb

VC	5.2	passed
cis	4.8	
tce	5.2	
pce	4.7	

Run 032 1532

CCV run 0.5 ppb

cis	0.531	passed
tce	0.520	
pce	0.508	

02/25/15 0020-C

0830 - Meet at Church
- Have them unlock doors to bldg - set up equipment
Close doors, look at area to do air door, soil vapor.

Auto tune 10:35:56 ok
conc cleanout ok TIC 328,54

RUN001 0904 outdoor Ambient
A-0020C-022515-IA-001-out
pce 0.014 ppb

RUN002 0913 Kitchen
A-0020C-022515-IA-002-KIT
pce 0.027 ppb

RUN003 0921 OFFICE-WEST
A-0020C-022515-IA-003-OFC1
pce 0.022 ppb

RUN004 0929 Westend of Hall
A-0020C-022515-IA-004-HAL1
pce ppb

CONTENTS

PAGE NO.	REFERENCE	DATE

C. Holt
A. Cantrell

1

Pg. 1 11/13/15 House# 0004-H

Crew: CH2M-2, FEY

Weather: Snow ~ 35°F

Eq: Hapsite, Surface Pro, Hand tools

0500: @ office, calibrate Hapsite

0800: @ Sunny side to meet F.E.

0830: Safety meeting head to house.

0845: Arrive @ residents. Set up.

0915: Hapsite in use is borrowed because ER would not cal. using H1774. No survey method installed on H1774 so move into Analyze mode. Tenant seems to refinish furniture downstairs

Run#	Location	PCE ~~PEC~~
01132015_001	Front Room	0.036
002	Kitchen	
003	South B Room	0.025
004	Bath → ~~North B. Room~~	will post
005	N. Bedroom	process
006	Mudroom	runs.
007	Basement	

1040: All rooms have initial ~~survey~~ analyze. Detections (or noise) so low that survey would not ID

AC

1-13-15 pg 2.

any of the analytes. Upper level had potential trace detects at VC and C/S (needs post process) So Hapsite will be up stairs in the hall between kitchen, bathroom, and both bedrooms.

12:00: Blower set up. Calc air exchange Volumes; 20,000 ft³ so 2.5 Exchange Volumes = 50,000 ft³.

12:07: All doors open, blowers set up Begin to collect base line pressure. Background = -1.5 pa; target depressurization (50) = -6.4pa

12:23: Wait to start depressurization test; hapsite warming up heaters.

12:30: Start test. ~600 cfm; Begin Sampling & Run 009.

12:34: Run 010.

12:46: Run 011 CFM @ 640

12:50: Run 012 CFM @ 634

12:57: Run 013 CFM @ 648

13:06 Run 014 CFM @ 635

13:15: Run 015 CFM @ 640

13:25: Run 016 CFM @ 604

13:32: Run 017 CFM @ 645

tc →

1-13-15 pg 3

1340: Run 018; CFM @ 652 ~10 min left to hit 50,000 ft³

13:48 81 min test ~645 ft³/min average = 52,245 ft³ removed w/ 9 samples Collected, switch to pressure +5 pa.

1350: Start pressure @ +5 pa; Hapsite run #019 Starts pressure test.

1351: Stop test; flow not reversed Run #019 is an ambient while blower door is figured out.

14:02: Start pressure cycle; Start hapsite pressure cycle data @ 020.

14:11 Run 021; cfm @ 690

14:20: Run 022; CFM @ 673

14:27: Run 023; ~700 cfm; total (17,931 cf @ 26 min avg 689 cfm).

1435: Run 024; CFM 718. ~25,000 ft³ removed.

14:42: Run 025; CFM 725.

14:50: Run 026; CFM 731

1457: Run 027; CFM 739

1505: Run 028; CFM 721

15:15: Test complete. Run #028 PCE/TCE C/S and VC match (close to) Ambient.

tc →

(4)

1-13-15

15:15: Total Vol of ~51,903 ft³ added to house 72.5 air cycle Volumes. Begin to break down and Clean up.

1520: Collect 0004H-SG-001 ~4'bgs; flow Rate 1L/min w/ No vaccuum. No leak check. SVP went in w/ 3 pounds/hits soft soil: Run #029.

1534: Run #30 Outdoor ambient Sample.

1620: Run #031; 0004H-SG-002 ~~8'ft~~ 7'bgs @ 1L/min w/ Vac 2-inch of water

16:40: Head to office to do CCV. last SG Sample bag was previously used for 1ppm cal standard (ending in 002).

17:24: Day review: Sample runs 008 (Crawl space next to stairs) and 009 (PCE 3-Ion Survey) were not recorded @ time conducted but included in data report sent to E.R. Also run 009 was Survey run 001

1-13-15 ~~systematic run Shift~~

AC

(5)

1-13-15

17:48: CCV @ 1ppb (Run 032)
TCE = 1.29 ppbv good fit = 99.8 ✓
PCE = 1.34 " fit = 99.4 ✓
Cis = 1.24 " fit = 99.2 ✓
VC = 2.65 fit = 86.5 low fit
RPD ~ 30% w/ good fit (not VC).

1800: CCV @ 5ppb (Run 033)
PCE
TCE
Cis
VC
Canceled No Run

1906: CCV @ 5ppb (Run 034)
PCE = 4.8
TCE = 5.7
Cis = 6.1
VC = 9.8

1900: End of day.

Aaron Cantor

AC

(116) 3/5/15 prior to 0006-ff

Calibration Runs
SIM_100PPB_VA_VI_LIST_0217205
Runs 002, 003, 004, 005, +006

CCV Checks

Auto Tune - ok 3/5/15 18:52:19
Conc Cleanout - ok 3/5/15 19:01:32
Final TIC - 455,014

~~Run001~~ 1712 5ppb
VC 6.2
cis 5.8
tce 5.9
pce 5.7
} passed

~~Run 002~~ 0.5ppb
VC 0.877
cis 0.698
tce 0.662
pce 0.640
} failed

~~Run 003~~ 0.5ppb
VC 1.4
cis 0.714
tce 0.688
pce 0.643
} failed

3/5/15 - prior to 0006-ff (117)

Decided to recalibrate since numbers are high for the 0.5ppb CCV check.

Calibration Runs under Cal Method SIM_100PPB_VA_VI_LIST_0217205
Runs 001, 002, 004, 005, +006
↳ dated 03/05/15
Saved calibration as SIM_100PPB_VA_VI_LIST_03052015 at 1830 on 3/5/15

Run001 1844 5ppb CCV check
VC 5.3
cis 5.1
tce 5.1
pce 5.1
} passed

Run002 1854 0.5ppb CCV check - Not required
VC 0.892
cis 0.643
tce 0.591
pce 0.603
} passed

3/6/15 00064

0830 Onsite - Setup equip, run auto temp & core cleanout

Auto tune - ok 10:45:19
Core Cleanout - ok 10:56:19
TIC Count 304,718

RUN001 0910 Living/Dining/kitchen area
A-00064-03015-IA-001-ACL
pce 0.015 ppb

RUN002 0918 child's BR
A-00064-03015-IA-002-BR1
pce 0.013 ppb

RUN003 0927 Bathroom
A-00064-03015-IA003-BA1
pce 0.013 ppb

RUN004 0935 Master Bedroom
A-00064-03015-IA-004-MBR
pce 0.012 ppb

RUN005 0944 Outdoor
A-00064-03015-IA-005-out
pce 0.010 ppb

RUN006 1004 Lower Living
A-00064-03015-IA-006-LLR
pce 0.012 ppb

RUN007 1013 Jacuzzi bath
A-00064-03015-IA-007-BAT
pce 0.011 ppb

RUN008 1021 Furnance closet
A-00064-03015-IA-008-Fur
pce ppb

RUN009 1029 Laundry area
A-00064-03015-IA-009-LAU
pce 0.012 ppb

Survey001 1038 - Crawl Space
paint, WD40, etc - Max TIC 122,880

Survey002 1043 Lanndry area
Cleaning supplies on shelf.
Max TIC 135,221

3/6/15 0006H

Survey 003 1049 - Drain in furnace room MAX TIC 148,048

Survey 004 1054 - Dirt floor crawlspace / furnace room MAX TIC - 143,092

Survey 005 - 1059 Baseboard southwall in laundry room MAX TIC 138,055

~~RUN 010~~ Neg Pressure Test
Baseline - 0.8 pa
Vol to Remove 30,000 cuft

RUN 010 1147 - Aborted
A-0006H-030615-IA-010A-LLL
pce — ppb

RUN 011 1203
A-0006H-030615-IA-010B-LLL
pce 0.024 ppb

RUN 012 1211
A-0006H-030615-IA-010C-LLL
pce 0.024 ppb

4355 ~~423.64~~ 415 ~~420.8~~ ~~413.70~~ ~~412.88~~ 415.44

START 1140 END 1255

To	Flow	Pa	Run	time
5	442	-5.3	010/010A	1147
10	414	-4.8		
15	415	-5.2		
20	388	-4.2	011/010B	1203
25	445	-5.0	012/010C	1211
30	385	-4.8		
40	407	-5.2	013/010D	1220
50	407	-4.5	014/010E	1228
60	436	-5.3	015/010F	1236
70	432	-5.2	016/010G	1245
75	399	-4.5	017/010H	1253

Total Vol Removed - 31,159 cu ft

Run 013 1220
A-0006H-030615-IA-010D-LLL
pce 0.023 ppb

RUN 014 1228
A-0006H-030615-IA-010E-LLL
pce 0.024 ppb

RUN 015 1236
A-0006H-030615-IA-010F-LLL
pce 0.024 ppb

3/6/15 — 0006 H

RUN014 1248
A-0006H-030615-IA-010G-LLL
pce 0.026 ppb

RUN017 1253
A-0006H-030615-IA-010H-LLL
pce 0.024 ppb

Positive Pressure test
Baseline -0.8 pa

RUN018 1329
A-0006H-030615-IA-011A-LLL
pce 0.022 ppb

RUN019 1338
A-0006H-030615-IA-011B-LLL
pce 0.020 ppb

RUN020 1348
A-0006H-030615-IA-011C-LLL
pce 0.020 ppb

RUN021 1357
A-0006H-030615-IA-011D-LLL
pce 0.020 ppb

Positive Pressure

START 1325 END

To	Flow	Pa	Run	Time
5	514	4.8	018/11A	1329
10	526	5.2	019/11B	1338
15	537	4.3		
20	529	4.5	020/11C	1348
25	520	5.3	021/11D	1357
30	540	3.9	022/11E	1405
40	504	4.9	023/11F	1414
50	498	5.3	024/11G	1422
Up	520	4.1	—	—

Volume pulled into house - 31,253 cuft

RUN022 1405
A-0006H-030615-IA-011E-LLL
pce 0.020 ppb

RUN023 1414
A-0006H-030615-IA-011F-LLL
pce 0.021 ppb

RUN024 1422
A-0006H-030615-IA-011G-LLL
pce 0.18 ppb

~~526.5~~ ~~526.2~~ ~~527.67~~ ~~524.29~~ 520.425

3/6/15 0006 H

RUN 025 1434 Soil gas vac 5" Hg
sample 4' bgs on NE corner of front yard. Collected at 0930. A-0006H-030615-SG-001-4:
VC 0.023 ppb cis 0.012 ppb tce ND ppb pce 0.046 ppb
* 0026H *

RUN 026 1446 Soil gas
Sample 4' bgs on East side of house near SE corner. Collected at 1000. A-0026H-030615-SG-001-4
VC 0.027 ppb cis 0.058 ppb tce 0.475 ppb pce 23.0 ppb
vacuum - 10" Hg

RUN 027 1457 5 ppb CCV Check
VC ~~5.7~~ 3.3
cis ~~4.7~~ 3.0
tce ~~5.0~~ 3.4
pce ~~4.7~~ 3.3
} failed

Run 028 1505 5 ppb CCV Check
VC 3.7
cis 3.1
tce 3.5
pce 3.4
} failed

Run 029 1626 5 ppb CCV Check
VC 3.1
cis 2.5
tce 2.8
pce 2.7
} failed
* Mixed fresh standards *

Run 030 1653 5 ppb CCV Check
VC 5.7
cis 4.7
tce 5.0
pce 4.7
} passed

Run 031 1704 0.5 ppb CCV Check
VC 0.780 - not required
cis 0.542
tce 0.537
pce 0.517
} passed

Fresh standards passed.
standards used for Runs 027, 028, + 029 were ~20 hours old.

E Bard

(32)

2-10-15 0009-H Pg. 1

Weather: P.C. / Sunny ~50°F

Crew: CHRM-2, FE-3

Eq: Hapsite Smart Plus H860

0800: Crew meets @ Sunnyside

0908: Hapsite Cal. ✓ and CCV ✓ cal. less than 24hrs ago so okay to go. 021015 (b) 2-10-15 PCE: 0.067ppb

0912: A0009H-~~020915~~-IA-001-out Resident Lee Herron 801879.0928 Run #001 on 02102015 Hill 100ppb.

0919: A0009H-021015-IA-002-LIV Run #002; 1st Floor living room has open diner/living area (2LL?) *PCE: Abort run due to low nitrogen*

0922: A009H-021015-IA-003-LIV Run #003; PCE: Abort

0933: Nitrogen can ran out on Sample 002 so that Sample abort; also affected Sample 003 (aborted; run would not end). Hard re-set.

0939: Hapsite H860 up and running doing auto-tune, then C/O.

0950: C/O done, lost 20 min due to hapsite glitch

(33) (Pg. 2)

2LL 2-10-15

0951: A009H-021015-IA-004-~~LIV~~ (AP) Run #004; PCE: 0.022ppb Sample location same as before hapsite glitch (run not ending).

10:01: A009H-021015-IA-005-BR01 Run #005 PCE: 0.018ppb

10:09: A009H-021015-IA-006-BA1 Run #006, PCE 0.018ppb 1st floor bathroom

1017: A009H-021015-IA-007-MBR Run #007 PCE: 0.21ppb

10:25: A009H-021015-IA-008-KIT Run #008; PCE: 0.019ppb

10:33: A009H-021015-IA-009-STO Run #009 PCE 0.022ppb Located 1st floor mud room at the back of the house. D.D. informed me to use STO for Sample ID.

1043: A009H-021015-IA-010-LAU Laundry room downstairs. Run #010 PCE: 0.028ppb

1051: A009H-021015-IA-011-BA2 Run #011 PCE 0.030ppb

11:00: A009H-021015-IA-012-LLL Run #012 PCE:

Downstairs Sitting/TV room just out of laundry Rm.

(34)

0009H 02-10-15 pg.3

11:07: A009H-021015-IA-013-BR2
Run#13 ; PCE: 0.016

11:45: A009H-021015-IA-014-ST02
Storage area w/ boiler and craft room. Run#14
PCE: 0.045 ppb

11:24: A009H-021015-IA-015-GAR
Run#015 PCE: 0.022 ppb

11:35: A009H-021015-IA-016-Survey
*PCE3-Ion Survey in downstairs boiler room/craft room and garage. Run#: <Method>_<Date>_001#
Background TIC ~30,000 to 34,000 and no ion counts found in any room or point entry location. Ran survey for 7:54 min
Set-up air door in back and place hapsite H860 downstairs in laundry room; lowest habitat level. 12:00

1215: Dave Collected Soil gas 4'bgs
A009H-021015-SG-009 - 4ft
Run#016 PCE: 0.090 ppb

12:20: Air door set up. Baseline -0.4Pa
~~house is 25,200 ft³ x 2.5 =~~

(35) (Pg.4)

009H 2-10-15

house is 2,800 ft² x 9' Ceiling = 25,200 ft³
25,200 ft³ x 2.5 = 63,000 ft³ per leg of pressure cycle.
Neg-pressure Started Baseline = -0.4Pa.

1224: IA-017-LAU PCE: 0.023
Run#017 CFM: 800

1231: IA-018-LAU PCE: 0.022
Run#018 CFM: 830

1239: IA-019-LAU PCE: 0.020
Run#19 CFM: 864

1248: IA-020-LAU PCE 0.017
Run#20 CFM: 869

1255: IA-021-LAU CFM 863
Run#21 PCE 0.016

1304: IA-022-LAU PCE 0.018 ppb
Run#022 CFM 865

1312: IA-023-LAU PCE: 0.014
Run#23 CFM: 847

1320: IA-024-LAU PCE 0.015
Run#24 CFM: 822

1329: IA-025 2-10-15 LAU PCE: 0.014
Run#25 CFM: 824

1336: Removed 63,695 ft³ during depress. cycling. Run time @ 7:4 min w/ flow ~845-ish. Switch to press. cycle

009A 2-10-15 Pg.5

1343: Fan switched will run #5A and see where flow is.
IA-026-LAU - Start pressure cycle
1343 Run #26 ; PCE = 0.014 CFM 1063
1352: IA-027 LAU PCE: 0.011ppb
Run #27 CFM: 1080
14:01 IA-028-LAU PCE: 0.010ppb
Run #28 CFM: 1072
1408 IA-029-~~LAU~~ LAU 2-10-15 PCE 0.012
Run #29 CFM 1055
1417: IA-030-LAU PCE 0.013
Run #30 CFM 1057
1425: IA-031-LAU PCE: 0.013
Run # 31 CFM: 1071
1433: IA-032-LAU PCE: 0.013
Run #32 CFM: 1076
1441: IA-033-LAU PCE: 0.01
Run #33 CFM: 1073
14:54: Positive pressure cycling stopped. >63,000 ft³ of outdoor air blown into house. All detections <0.1ppb Begin clean up and CCUs.
1456: IA-034-CCU 5ppb CCU
Run # 34
Cis = 4.8ppb ✓ / TCE 3.9 ✓ 2-10-15
PCE 4.5 ✓ Pass

1500: AI-035-CCU CCU @ 0.5ppb
Run #35
SO, CCU runs were #034/035.
Run #034 was 5ppb standard w/
Cis = 4.8ppb okay
TCE = 3.9ppb (24.7%) okay
PCE = 4.5ppb okay
Run #35 was 0.5ppb standard
Cis = 0.530ppb
TCE = 0.394 (23.7%) okay
PCE = 0.455 okay
CCU pass for both 0.5 and 5ppb. Instrument is operable and does not need to be calibrated. All standards were within 30%. Final call by F.E. Start to break down Hapsite and pack up.
1530: No lighter, dave runs to Sev-A to get one, fireplace and water heater ~~pilots~~ pilots ignighted. Need to light boiler. All pilot lights lit. Lee (home owner) is back. Say goodby 2-10-15

[signature]

(20)

01/26/15

Calibration runs
- SIM 100PPB Hill VI List 20150126
Runs 021, 020, 017, 016, + 015

Calibration saved as
- SIM 100 PPB HILL VI LIST 012615

CCV check - 01/26/15 - 19:55
RUN 001

Results			
	VC	5.96	ppb
	CIS	5.22	ppb
	TCE	4.86	ppb
	PCE	5.83	ppb

Runtime should be 90 secs.

Ian Reed

(21)

1-27-15 0010H AJC; DED pg 1
Crew: AJC; DED; R.L. + Weston.
Weather: P.C. 240°F Rain afternoon
Eq: Hopsite 0270 (last 4 S/N)
Computer is California
0910: Arrived @ 0010H; introductions, close doors, turn off heater.
09:18: Ellen R. w/F.E. did ~~calc~~ 1-27-15 Calibration and CCV documented on previous date of 1-26-15; CCV is w/in 24 hrs. Good to sample.
0927: A0010H-012715-001-OUT
Run# <Date>_001 *Hours 0010H
hrs 2520 ft² per owner; PCE 0.169
0935: A0010H-012715-002-LIV
PCE: 0.691 Run: 002
0944: A0010H-012715-003-KIT
PCE: 0.730 ppb Run#: 003
0955: A0010H-012715-004-MBR
PCE: 0.652 Run: 004
10:05: A0010H-012715-005-MBA
*MBA is not attached to MBR.
PCE: 0.816 ppb Run#: 005
1017: A0010H-012715-006-BR1
PCE: 0.572; Run# 006
10:33: A0010H-012715-007-Kit2
PCE: 0.674 ppb Run# 007 →

1-22-15 0010H ASC/DES pg2

10:43 : A0010H-012715-008-BR2
PCE: 0.453 ppb Run#: 008

10:53 : A0010H-012715-009-LLL *
PCE: 0.641 Run# 009

11:03 : A0010H-012715-010-BR3
PCE: Run#010

11:15 : A0010H-012715-011-STO
STO is downstairs and the utility room w/furnace and 2 water heaters
PCE: 0.870 Run#011

Note run#010 had 12-DCA @ 3ppb

11:23 : A0010H-012715-012-BA1
PCE: 0.327 Run#012.
Dave and Weston (Mark?) head to go get lunch. Review data and Call Ellen.
Called and left message w/Ellen describing data set w/ max reading @ 0.8ppb in MBR. No source ID'ed and less than RSL (1.63ppb) So move ahead per protocol w/ pressure cycling.

12:01 : Talk w/Ellen, need to Survey w/ 3-Ion PCE Survey all remain SO. 1ppb.

pg3

12:22 : A0010H-012715-013-MBR
3-Ion PCE Survey w/ max. TIC @ 180,000 tns, no ion spikes at all, no background PCE source Identified in MBR. Head downstairs and Survey STO then pressure cycle
Run#(3 Ion PCE Survey) Date? 001

1235 : A0010H-012715-014-STO
Survey 3-Ion PCE Run#002 (Under Survey double), Max ion Count @ 169,631 no PCE spikes, no ion spikes in general Prep for depressurization. End @ 1242
Hapsite placed @ bottom of Stairs

1357 Start depressurization; baseline @ -3.9 Pa. Rng B is in and initial flow is ~270 cfm.
A0010H-012715-015-LLL (Basement Stairs) Run#013 PCE: 0.424 ppb
Flow @ ~175 cfm; Total Vol @ 47,250 ft³ @ 200 cfm = ~4 hrs per cycle. Call Ellen.

1530 Ellen directs to run depressurization for ~2 hrs then pressurize 1 hrs, regardless of 2.5 exchange calc.

(24) 1-27-15 pg 4

1-27-15 0010H

1340: Restart test but keep initial press. diff data e -3.9Pa. Had to get new N can. Sample runs 014/~~015~~ 1-27-15 aborted due to N can.

1-27-15 13:50 A0010H 1-27-15 012715-016-LLL2 Run#16 1st run of depress. cycle. #014 and 015 were aborted. Software acting up, glitchy. Run #013 last recorded (Sample A0010H-012715-015-LLL2) Hard reboot and re-try.

14:10: A0010H-012715-017-LLL2 1-27-15 Run#017 PCE: ~~Double blank~~ Previous samples A0010H-012715-015 and 016 aborted also. Total 3 runs (014, 015, 016) aborted due to nitrogen can low and software glich; sample run would not end.

14:19: A0010H-012715-018-LLL2 Run#018 PCE 0.4894 Also... Run017 was to clean out concentrator after hard reboot. Run 018 first sample data to use after hard re-boot.

(25) pg 5

0010H 1-27-15

14:27: A0010H-012715-019-LLL2 Run#019 PCE: 0.407 ppb

1435: A0010H-012715-020-LLL2 Run#020 PCE: 0.402

1445: A0010H-012715-021-LLL2 Run#021 PCE 0.355

1452: A0010H-012715-022-LLL2 Run#022 PCE: 0.3576

1500: A0010H-012715-023-LLL2 Run#023 PCE: 0.401

1509: A0010H-012715-024-LLL2 Run#024 PCE: 0.362 ppb

15:20: ~2hrs passed. Total ft³ @ 22,365 ft³. Stop dep test. reverse fan.

1525: Start pressurization test, A0010H-012715-025-LLL2; Run#025 PCE 0.181

1534: A0010H-012715-026-LLL2 Run#26 PCE: 0.191 cfm=420.

1543: A0010H-012715-027-LLL2 Run#027/PCE: 0.06 ppb Cfm: 425

1551: A0010H-012715-028-LLL2 Run#028/PCE 0.071 Dave is tracking flow rates and Vol removed/added to 0010H Cfm: 426

1559: A0010H-012715-029-LLL2/Cfm: Run#029 PCE: 0.050 ppb →

1-27-15 0010H AJC/DED Pg.6

1608: A0010H-012715-030-LLL2
Run# 30 PCE: 0.083 Cfm: 426

1615: End pressure test. Added 23,345 ft³ of outdoor air @ ~+5 Pa.

16:25: Run CCU @ 5ppbv as run# 31 and A0010H-012715-032-CCU1 @ 1-27-15
CIS: 9.465
TCE: 55.21
PCE: 25.54
Run ambient then re-run 5ppbv.

16:36: A0010H-012715-032-CCU2
Run#32 (indoor Air) PCE: 0.255
A0010H-012715-033-OUT
outdoor ambient clean out Run#33. PCE Area too low (ND). GC appears to be clean ↑.
Dave collecting soil gas samples.

17:03: 0010H-012715-SG-001-4'
Soil gas from 4' bgs
Sample collected.

17:10: Run 2nd blank (outdoor ambient) before SG 001 (4' bgs) A0010H-012715-034-OUT. Software glich on Run#033, may not be recorded.

17:15: So Run#33 recorded twice (maybe?) →

1-27-15

Did not seem to record run#33 when glich (run went on for ~10 min?) happened. Started next run and showed up as 033 again. Now Run#34 shows but w/o chromatograph. Hard re-boot; 2nd time today.

17:20: Ambient outdoor C/O runs 033/034 Show in data file...? Okay do another outdoor ambient C/O then SG.

1737 0010H-SG-001-4' run#36
collected @ 1703 by DED (Sample# 036 for the day).
Runs/Sample #'s A0010H-012715-034/035-OUT lost w/ re-boot data not to be used. Soil gas Sample PCE: 0.697 ppb
Ferrel lost so can't attach tedlar bag to probe. DED tried to get ferrel unstuck and it went flying. back up @ F.E. office. CCU Still needs to be run on this unit. Clean up/pack up. End notes

[signature]

(28)

01/27/15

Recalibration of Hapsite
(California)

Calibration runs
- SIM_100PPB_Hill_VI_HST
  Runs 002, 003, 004, 005, 006

Calibration saved as
- SIM_100PPB_Hill VI_HST_012715

CCV Check - 01/27/15 2104
Run 007

Results			
	VC	7.115	ppb
	CIS	5.497	ppb
	TCE	5.222	ppb
	PCE	4.130	ppb

* Run time is 90 sec *

L Boyd

(29)

01/27/15 0010H

Ran soil gas sample on
HAPSite ER

Run 002 21:20
A-0010-H-012715-SG-002-4

Results			
	VC	0.097	ppb
	CIS	0.172	ppb
	TCE	0.099	ppb
	PCE	0.240	ppb

L Boyd

64 0012-H

02/22/15 HAPSite SmartPlus
H 860

CCV checks - Ellen Reid

Auto tune - OK 17:53:20

Conc cleanout - ok 18:09:51
succeeded - Final TIC Count
548,450

CCV check 5 ppb - 100 mL
Run 001 18:25

VC	5.5	ppb	passed
cis	4.4	ppb	
TCE	4.1	ppb	
PCE	3.8	ppb	

CCV check 0.5 ppb - 100 mL
Run 002 18:33

VC	0.65	ppb	passed
cis	0.5	ppb	
TCE	0.41	ppb	
PCE	0.4	ppb	

66

E Reid

02/23/15 0012H

Weather - Clear - ~20°F - High winds

Field Team - Ellen Reid & Dave DeGraffo, Ed Reid, Jeff Rogers/VA.

0800 Arrive @ Summerside Park to meet team.

0830 Arrived onsite - Setup equipment - Run Auto
Time passed 10:44:19
Conc. Cleanout - succeeded
Final TIC Count 333,247.
HAPSite Smart Plus SN440

Run 001 Kitchen/Dining Room
A-0012H-022315-IA-001-KIT
Time 0904 pce 0.241 ppb

Run 002 Living Room
A-0012H-022315-IA-002-LIV
Time 0912 pce 0.231 ppb

Run 003 Master bedroom
A-0012H-022315-IA-003-MBR
Time 0920 pce 0.193 ppb

Run 004 Hall Bathroom
A-0012H-022315-IA-004-BA1
Time 0928 pce 0.104 ppb

Run 005 Bedroom
A-0012H-022315-IA-005-BR1
Time 0936 pce 0.159 ppb

Run 006 Basement Family Room
A-0012H-022315-IA-006-FAM
Time 0948 pce 0.394 ppb

Run 007 Basement Bedroom
A-0012H-022315-IA-007-BR2
Time 0957 pce 0.451 ppb

Run 008 Basement Bath
A-0012H-022315-IA-008-BA2
Time 1005 pce 0.584 ppb

02/23/15 0012H (68)

Run 009 Basement office
A-0012H-022315-IA-009-OFC
time 1013 pce 0.567ppb

Run 010 Laundry
A-0012H-022315-IA-010-LAU
time 1021 pce 0.311ppb

Run 011 Exercise Room
A-0012H-022315-IA-011-EXR
time 1033 pce 0.384ppb

Survey mode - PCE 3-Iow

Survey 001 - Built in closet on N side of laundry area
time 1042 maxTIC 89,079

Survey 002 - Metal wall cabinet - W laundry room
time 1047 maxTIC 108,397

Survey 003 - Closet near laundry area / E wall
time 1057 maxTic 100,646

(69)

Survey 004 - North basement wall - near floor by fireplace
time 1100 maxTIC 114,800

Survey 005 - Bath - E wall
time 1105 maxTIC 163,745
- jumped up when surveying break in tile on E wall.

Survey 006 - office closet
time 1112 maxTic 98,113

---

start time 1150
Negative Pressure test
Baseline -7.0 Pa
Run 012 - Starting Run
Removal vol 40,000 cuft
Time 1150 Run 012
Flow 350 pa -5.9
A-0012H-022315-IA-012A-EAM
pce 0.334 ppb
Run 013 Time 1200
Flow 432 pa -4.8
A-0012H-022315-IA-012B-EAM
pce 0.315 ppb

02123115 0012-1+

Run 014 time 1209
flow 373 pa -10.8
A-0012H-022315-IA-012C-FAM
pce 0.271 ppb

Run 015 time 1216
flow 471 pa -7.3
A-0012H-022315-IA-012D-FAM
pce 0.289 ppb

Run 016 time 1223
flow 714 pa -15.9
A-0012H-022315-IA-012E-FAM
pce 0.244 ppb

Run 017 time 1232
flow 552 pa -12.8
A-0012H-022315-IA-012F-FAM
pce 0.192 ppb

Run 018 time 1241
flow 676 pa -14.8
A-0012H-022315-IA-012G-FAM
pce 0.178 ppb

Start 1150

Time	Flow	Pa	Run	Time
5	395	-6.0	12-12A	1150
10	432	-4.8	13-12B	1200
15	490	-4.6	14-12C	1209
20	441	-7.3	↳	↳ 1216
25	463	-6.3	15-12D	1216
30	675	-13.1	16-12E	1223
40	620	-13.2	17-12F	1232
50	676	-13.5	↳	↳
60	622	-11.0	18-12G	1241
70	690	-15.3	19-12A	1249
75	695	-12.5	20-12I	1301

Run 019 time 1249
Flow 462 pa -11.6
A-0012H-022315-IA-012H-FAM
pce 0.152 ppb

Run 020 time 1301
Flow 440 pa -13.5
A-0012H-022315-IA-012I-FAM
pce 0.139 ppb

Final Vd → 42,265 cuft

02/23/15 0012-H

Positive Pressure

Baseline -2.9 Pa

Start time 1315

Run021 time 1317

flow 670 pa 10.8

A-0012H-022315-IA-013A-FAM

pce 0.207 ppb

Run022 time 1325

flow 642 pa 9.7

A-0012H-022315-IA-013D-FAM

pce 0.108 ppb

Run 023 time 1333

flow 719 pa 8.8

A-0012H-022315-IA-013C-FAM

pce 0.071 ppb

Run024 time 1342

flow 739 pa 11.4

A-0012H-022315-IA-013D-FAM

pce 0.053 ppb

Run025 time 1350

flow 715 pa 8.8

A-0012H-022315-IA-013C-FAM

pce 0.044 ppb

Start time 1315 Stop 1406

T	Flow	Pa	Run	time
5	721	8.1	021-13A	1317
10	739	8.6	022-13B	1325
15	757	10.1	023-13C	1333
20	732	9.8		
25	739	8.3		
30	722	13.1	024-13D	1342
40	715	8.8	025-13E	1350
50	759	11.7	026-13F	1400
55	741	9.9		

Final Vol → 40,484 cuft

Run 026 time 1400

flow 759 pa 11.7

A-0012H-022315-IA-013F-FAM

pce 0.037 ppb

Run 027 time 1407

Soil gas sample NW corner F3 floor slab

A-0012H-022315-SG-001-4'

cis 0.200 tce 0.011 pce 0.326

Run 028 time 1415

Soil gas sample NW corner front yard

A-0012H-022315-SG-001-8'

cis 0.110 tce - ND pce 0.189

02/23/15 0012H

RUN029 time 1423
CCV run 5ppb
VC 4.4
cis 3.5
tce 3.8
pce 3.4 ← failed

RUN030 time 1435
CCV run 5ppb
VC 4.893
cis 3.762
tce 4.021
pce 3.643
> passed

RUN 031 time 1448
outdoor ambient - outside door - South side of house
A-0012H-022315-1A-814-out
VC ND
cis 0.010
tce 0.014
pce 0.009

C Reed

C Reed

3/1/15 HAPSite H860 (100)

Calibration Runs
SIM 100PPB_VA_VI_LIST_0217205
Runs 002, 003, 004, 005, +006

CCV Checks -

Auto Tune - ok 3/1/15 19:47:27
Conc Cleanout - ok 3/1/15 19:50:4
TIC count - 429,412

Run 001 1822 5 ppb
VC 4.5
CIS 5.9
tce 5.6
pce 5.3
> passed

Run 002 1836 0.5 ppb
VC 0.794 - Not required
CIS 0.440
tce 0.577
pce 0.575
> passed

3/2/15 0014-H (101)

0830 Onsite - setup equip, Auto tune + Conc Cleanout.

Auto tune - ok 3/2/15 10:49:11
Conc Cleanout - ok
Final TIC - 260,454

RUN 001 0906 A Living / Dining
A-0014H-030215-[illegible]1A-001-LIV
pce 0.019 ppb

RUN 002 0915 - Master bedroom
A-0014H-030215-1A-002-MBR
pce 0.016 ppb

RUN 003 0923 Bathroom
A-0014H-030215-1A-003-BTI
pce 0.018 ppb

RUN 004 0931 Bedroom
A-0014H-030215-1A-004-BR1
pce 0.014 ppb

3/2/15 0014-H (102)

Run005 0939 Kitchen
A-0014H-030215-IA-005-KIT
pce 0.017 ppb

Run006 0947 Outdoor
A-0014H-030215-IA-006-OUT
pce 0.019 ppb

RUN007 1000 Basement bedroom
A-0014H-030215-IA-007-BC2
pce 0.020 ppb

Run008 1008 Basement bathroom
A-0014H-030215-IA-008-BA2
pce 0.019 ppb

RUN009 1016 Furnance
A-0014H-030215-IA-009-FUR
pce 0.021 ppb

RUN010 1026 Office
A-0014H-030215-IA-010-OFG
pce 0.018 ppb

(103)

RUN011 1034 Closet
A-0014H-030215-IA-011-CLO
pce 0.063 ppb

Survey001 1046-1048
Closet - Max TIC 106,773

Survey002 - Chimney cleanout
in basement - Max TIC 131,735
1051-1053

Survey003 - Dirt floor
crawl space behind furnance
Max TIC - 148,046
1057-1059

Survey004 - Penetration-laundry
1101-1104 Max TIC - 131,890

Neg pressure test
- Set up on door at top
of stairs
Baseline - -0.5 pa
volume to remove 37,500

Run 012 1138 Sol gas 4'
A-0014H-pce 0.083 ppb
030215-SG001-4'

3/21/5 0014-H (104) 28511 407.3

Run 013 1159
A-0014H-030215-IA-012A-FLR
pce 0.033 ppb

Run 014 1208
A-0014H-030215-IA-012B-FLR
pce 0.025 ppb

Run 015 1216
A-0014H-030215-IA-012C-FLR
pce 0.020 ppb

Run 016 1226
A-0014H-030215-IA-012D-FLR
pce 0.015 ppb

Run 017 1234
A-0014H-030215-IA-012E-FLR
pce 0.012 ppb

Run 018 1243
A-0014H-030215-IA-012F-FLR
pce 0.014 ppb

Start 1157 End (105)

To	Flow	Pa	Run	Time
5	418	-6.4	013/012A	1159
10	375	-4.9	014/12B	1208
15	377	-5.2	015/12C	1216
20	383	-3.4	—	—
25	350	-5.1	016/12D	1226
30	354	-4.8	017/12E	1237
40	443	-4.8	018/12F	1243
50	441	-5.1	019/12G	1254
60	468	-5.2	—	—
70	464	-5.0	020/12H	1304
80	470	-4.9	021/12I	1315
90	443	-4.9	022/12J	1323
93	451	-5.0	—	—

Final vol removed — 38,895 cuft

Run 019 1254
A-0014H-030215-IA-012G-FLR
pce 0.017 ppb

Run 020 1304
A-0014H-030215-IA-012H-FLR
pce 0.022 ppb

Run 021 1315
A-0014H-030215-IA-012I-FLR
pce 0.022 ppb

03/02/15 0014-H (106)

Run 022 1323
A-0014H-030215-IA-012J-FUR
pce 0.022 ppb

Dosimeter Pressure Test
Baseline — ~~-0.8~~ -0.7 pa

Run 023 1345
A-0014H-030215-IA-013A-FUR
pce 0.023 ppb

Run 024 1354
A-0014H-030215-IA-013B-FUR
pce 0.023 ppb

RUN 025 1403
A-0014H-030215-IA-013C-FUR
pce 0.022 ppb

Run 026 1413
A-0014H-030215-IA-013D-FUR
pce 0.021 ppb

Start 1343 End (107)

To	Flow	Pa	Run	type
5	507	4.3	023/13A	1345
10	516	4.7	024/13B	1354
15	498	4.9	———	~~1403~~
20	501	4.8	025/13C	1403
25	490	3.5	———	———
30	504	5.1	026/13D	1413
40	499	5.2	027/13E	1423
50	504	4.3	028/13F	1433
60	595	5.2	029/13G	1443
70	505	5.1	030/13H	~~1453~~
75	492	4.7	———	———

Final Volume 37,575 cuft

RUN 027 1423
A-0014H-030215-IA-013E-FUR
pce 0.019 ppb

RUN 028 1433
A-0014H-030215-IA-013F-FUR
pce 0.020 ppb

RUN 029 1443
A-0014H-030215-IA-013G-FUR
pce 0.020 ppb

03/02/15 0014-H (108)

Run 032 1453
A-0014H-030215-IA-013H-FAN
pce 0.021 ppb

Run 031 1501 5ppb ccv
vc 4.4 ppb
cis 4.0 ppb
tce 4.3 ppb
pce 4.0 ppb
> passed

Run 032 1509 0.5ppb ccv
vc 0.661 ppb - Not required
cis 0.521 ppb
tce 0.486 ppb
pce 0.475 ppb
> passed

Do Repeat

03/03/15 0026-H (109)

0830 Arrived onsite

Setup equipment Run Auto tune + core cleanout

Auto Tune ok 3/3/15 - 20:59:19
Core Cleanout ok 3/3/15 - 11:08:32
Final TIC - 271,336

Run 001 0917 Basement Family Room
A-0026H-030315-IA-001-FAM
pce 0.058 ppb

Run 002 0926 Basement Bedroom
A-0026H-030315-IA-002-BR2
pce 0.062 ppb

Run 003 0936 Laundry area
A-0026H-030315-IA-003-LAU
pce 0.071 ppb

Run 004 0944 Pantry
A-0026-030315-IA-004-PAN
pce 0.254 ppb

(14)

01/21/15 - Ellen Reid

CCV check on HAPSite H860
5 ppb run

RUN 001 - 5:07pm

VC	5.2	ppb
CIS	5.8	ppb
TCE	4.8	ppb
PCE	5.1	ppb

01/22/15 ISE A-0016H
ARRIVE at 0016H at 0830
Weather
TO 22°, 30.5 Pressure wind SE

Team: ISE, DAVID, Chris

0915 Run BAS
A-0016H-012215-IA-001-BAS-SO
PCE - 0.058

0925 A0016H - 012215 IA-002-COA
PCE .0.032

(15)

0933 A0016H-012215-IA-003-BAS-N
PCE - 0.013

0941 Survey
A0016H-012215-IA-001

0942 Survey 012215-H 002

D949 - A0016.H - 012215 - IA - 004 - OUT
H. Pressure

0959 - A0016-H - 012215 - IA - 005 - OUT
Full Hi Pressure

1003 - A0016H - 012215 - IA - 006 OUT
Lock - - Pull battery & Restrict

1025 A0016H - 012215 - IA - 007 KIT
PCE - 0.025

1033 A0016H - 012215 - IA - 008 ~~DFR~~ DRF
PCE - 0.023

1040 A0016H - 012215 - IA - 009 - UV/FAM
PCE - 0.023

1048 A0016-H - 012215-IA-010-BA1
PCE - Pressure - High

1054 A-0016-H - 012215-IA - 011 - BA1
PCE - Hi Press
AUTO TUNE

1105 A0016-H 012215-IA - 012 BA1
PCE Pull Battery

1130 A0016H - 012215 - IA - 013 - BA1
PCE - 0.045

1139 A0016H - 012215-IA-014-LAU
PCE 0.038

1149 A0016H - 012215 - IA - 015 - BA2
PCE Filament error

1204 A-0016H - 012215 - IA - 016 - BA2
PCE - Fail

1216 A-0016H - 012215-IA - 017 - BA2
PCE Front screen pulled out

1232 A-0016A - 012215-IA - 018 - BA2
PCE - 0029

1241 A0016H - 012215-IA - 019 - BR1
PCE - Filament Fail conc clean out
After battery reset

1314 A0016H - 012215-IA - 020 - 2LL
PCE - Pull Battery Full Autotune
WPH 5 days

1344 A0016H - 012215-IA - 021 - 2LW
PCE - 0.063

1352 A0016H - 012215-IA - 022 - 2LE
PCE - 0.121 Craft Room

Negative Pressures
5000 CFI LV/FAM

START TEST
1436 - A0016H 1203 012215 IA 023
CFM - 1200 PCE 0050

1447 A0016H 012215 IA 024
CFM 1240 PCE 0.071

1455 A0016-H 012215-IA - 025
CFM 1284 PCE 0.061

(18)

1523 A-0016H-012215-IA-026
CFM 1248 PCE 0,073

1511 A-0016H-012215-IA-027
CFM 1240 PCE 0.067

1519 A-0016H-012215-IA-028
CFM-1225 PCE-0,065

1526 END RUN

* Postive Pressure

1532 A 0016H - 012215 IA - 029
CFM 2794 PCE 0,027

1540 A 0016H - 012215 IA - 030
CFM 2784 PCE ~~EM FAILED~~

1546 A 0016H - 012215 IA - 031
CFM 2788

1612 A 0016H - 012215 IA - 032
PCE-0,038

(19)

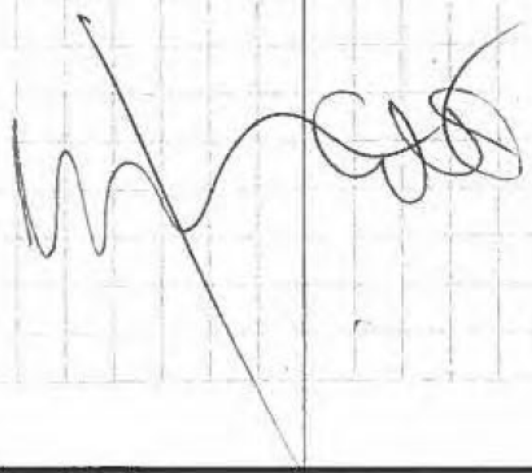
1621 A-0016H - 012215 IA - 033
SOIL GAS - SG001 - 4"
PCE 0,042

1629 A 0016H - 012215 SG - 034
SOIL GAS - SG001 - 4"
PCE 0.049

1637 A 0016H - 012215 SG 035
SOIL GAS - SG001 - 6"
PCE - 0,102

1647 A 0016H - 012215 IA 036 OUTDOOR AIR
PCE - 0,033

1655 A 0016H 012215 IA 037 CCV



02/24/15 0002H (84)

Run 031 1523
CCV run 5ppb
VC 5.2
CIS 4.8
TCE 5.2
PCE 4.7
passed

Run 032 1532
CCV run 0.5 ppb
CIS 0.531
TCE 0.520
PCE 0.508
passed

[signature]

02/25/15 0020-C (85)

0830 - Meet at Church
- Have them unlock doors to bldg - set up equipment close doors, look at area to do air door, soil vapor.

Auto tune 10:35:56 ok
conc cleanout ok TIC 328,584

RUN001 0904 Outdoor Ambient
A-0020C-022515-IA-001-out
pce 0.014 ppb

RUN002 0913 Kitchen
A-0020C-022515-IA-002-KIT
pce 0.027 ppb

RUN003 0921 Office-West
A-0020C-022515-IA-003-OFC1
pce 0.022 ppb

RUN004 0929 Westend of Hall
A-0020C-022515-IA-004-HAL1
pce ppb

02/25/15 0020-C

RUN005 0937 Room 109
A-0020C-022515-IA-005-R109
pce 0.021 ppb

RUN006 0945 Custodial closet
A-0020C-022515-IA-006-CL01
pce 0.017 ppb

RUN007 0953 Hall-East end near bathrooms
A-0020C-022515-IA-007-HAL2
pce 0.018 ppb

RUN008 1002 Women's bathroom
A-0020C-022515-IA-008-BA1
pce 0.016 ppb

RUN009 1010 Room 102
A-0020C-022515-IA-009-R102
pce 0.014 ppb

RUN010 1018 Capitol Kids class
A-0020C-022515-IA-010-CKC
pce 0.015 ppb

RUN011 1028 Room 105 office
A-0020C-022515-IA-011-OFC2
pce 0.018 ppb

RUN012 1043 Main Sanctuary
A-0020C-022515-IA-012-SAN
pce 0.018 ppb

RUN013 1053 Coffee Cafe
A-0020C-022515-IA-013-CAF
pce 0.019 ppb

RUN014 1101 Upstairs women's
A-0020C-022515-IA-014-BA2
pce 0.018 ppb

RUN015 1113 Boiler Room
A-0020C-022515-IA-015-BOI
pce 0.011 ppb

Survey001 1122 floor drain
Max TIC 112,750

Survey002 1126 old cleanout
Max TIC 126,000

02/25/15 0020-C

Survey 003 1129 old pipe penetration
MAX TIC 126,729

Survey 004 1132 staining along wall/floor on South wall in small room to west of door
MAX TIC 140,117

RUN016 1157 Soil gas 4'
A-0020C-022515-SG-001-4'
East side of bldg near steps
VC 0.154 cis 0.055 tce 0.015 pce 0.037

RUN017 1208 Soil gas 6'
A-0020C-022515-SG-001-6'
East side of bldg near steps
VC 0.172 cis 0.051 tce 0.011 pce 0.039

Neg Pressure testing
Set up on west door at Capitol Kids ~20'x20'x10'
Baseline 0.0
Removal Vol 10,000 cuft

RUN018 1222
A-0020C-022515-IA-016A-CKC
pce 0.012 ppb

START 1229 End 1259

T	Flow	Pa	Run	time
5	2120	-5.2	019/16B	1232
10	2099	-4.9	020/14C	1239
15	2107	-5.3	021/16D	1248
20	2132	-5.1		
25	2123	-5.6	022/16C	1256
30	2088	-4.3		

Total volume → 63,345 cuft

RUN019 1232
A-0020C-022515-IA-016B-CKC
pce 0.013 ppb

RUN020 1239
A-0020C-022515-IA-016C-CKC
pce 0.013 ppb

RUN021 1248
A-0020C-022515-IA-016D-CKC
pce 0.013 ppb

RUN022 1256
A-0020C-022515-IA-016C-CKC
pce 0.012 ppb

02/25/15 0020C

Positive Pressure Testing
Baseline -0.1

Run 023 1303
A-0020C-022515-IA-17A-CKC
pce 0.012 ppb

Run 024 1312
A-0020C-022515-IA-17B-CKC
pce 0.012 ppb

Run 025 1320
A-0020C-022515-IA-17C-CKC
pce 0.013 ppb

Run 026 1328
A-0020C-022515-IA-17D-CKC
pce 0.012 ppb

Run 027 1337 5ppb CCV check

VC	4.3	ppb
cis	4.0	ppb
TCE	4.5	ppb
PCE	4.0	ppb

passed

START 1303 END 1333

To	Flow	Pa	Run	Time
5	2582	4.2	23/17A	1303
10	2564	3.9	24/17B	1312
15	2511	4.2	25/17C	1320
20	2548	7.4	—	—
25	2600	5.9	26/17D	1328
30	2609	6.2	—	—

Vol added → 77,080 cuft

Run028 1345 0.5 ppb CCV Check

VC	0.458	ppb
cis	0.511	ppb
TCE	0.487	ppb
PCE	0.474	ppb

passed

(56) 0018H –

1820 A0018H 021815 041 COV ✓
5.0

CIS 4.6 TCE 4.1 PCE 3.8
Passed

Ina Eh[illegible]

6

(57)

- 2/19/15 0021~~C~~S

Weather: Sunny, T° -63
CREW FE 3, CH2M Hill 1
Eq Hapsite # H860

0800 Meet At Park

0830 ARRIVE At 00225
Our copy of
Autotune

0958 A0021~~C~~S 021915 IA 001 8th W Key
RUN001 PCE-0.045

1010 A0021~~C~~S 021915 IA 002 OUT
RUN002 PCE Battery Low, restart, Autotune

1032 A0021~~C~~S 021915 IA 003 4th W
RUN003 PCE-0.068

1043 A0021~~C~~S 021915 IA 004 OUT
RUN004 PCE 0.030

1057 A0021~~C~~S 021915 IA 005 STO
RUN005 PCE 0.047 Leprecon

02/19/15 0021S (58)

1112 A0021S 021915 IA 006 KIN
RUN006 PCE - 0.038

1126 A0021S 021915 IA 007 SUM STO
RUN007 PCE 0.048 Active Drain Basement

1147 A0021S 021915 IA 008 GYM
RUN008 PCE 0.055

1155 A0021S 021915 IA 009 STO
RUN009 PCE 0.047 UNDER STAGE

1208 A0021S 021915 IA 010 UTL
RUN010 PCE 0.075

1219 A0021S 021915 IA 011 CHE
RUN011 PCE 0.054 STAGE STE

1235 A0021S 021915 IA 012 KIT
RUN012 PCE - 0.080 FACULTY

1246 A0021S 021915 IA 013 STEM
RUN013 PCE 0.079

1303 A0021S 021915 IA 014 LIB
RUN014 PCE 0.120

0021S (59)

1317 A0021S 021915 IA 015 HAL-E
RUN015 PCE 0.070

1330 A0021S 021915 IA SG 001 SG
RUN016 PCE 0.110 4'

1338 A0021S 021915 IA SG 002 SG
RUN017 PCE 0.203 4'

1348 A0021S 021915 IA - 016 DIN
RUN018 PCE - 0.082 Rectory

1356 A0021S 021915 IA 017 FAM
RUN019 PCE 0.074 Rectory

1411 A0021S 021915 IA 018 BRI
RUN020 PCE 0.083 N SPIRAL STAIR

1424 A0021S 021915 IA 019 LAU
RUN021 PCE 0.069 Rectory

_____ A0021S 021915 IA Survey 001 LAU
Surv001 PCE Survey

69000 104000 TK

1505 A0021 021915 IA 020 HAL
RUN022 PCE 0.055 BDS

02/19/15 00215 (60)

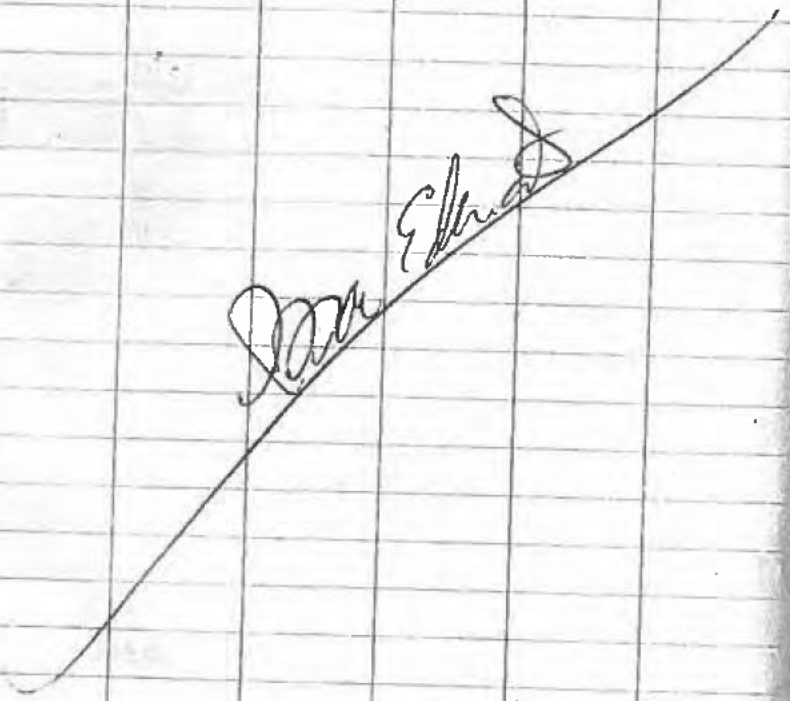
1519 A00215 021915 IA ~~023~~ 021 GAR
RW023 PCE 0.041

Survey002
A00215 021915 IA ~~024~~ GAR
Survey002 PCE

1539 A00215 021915 IA 024 CCV
RW024 CIS 0.57 TCE 0.447 PCE 0.421

Passed

[signature]



2/20/15 00215 (61)

weather ; Cloudy, Misty 45°F
CREW: FE 3, CH2M Hill 1
Eqi Hapsite # 860

0830 Site A00215

0936 A00215 022015 IA 001 FEL
PCE 0.018 Church

0946 A00215 022015 IA 002 BOI
PCE 0.012 Church

0954 A00215 022015 IA 003 KIT
PCE 0.015 Church

1007 A00215 022015 IA 004 MAN ~~DRA~~
PCE -0.015 Fellow

1017 A00215 022015 IA 005 OUT
PCE 0.006

(—) < Depressure Cycling
@ -3.3 PA Negative

1040 A00215 022015 IA 006A LAU
PCE 0.027 RW0 006

2/20/15 00215 (62)

1048 A00215 022015 IA 006B LAU
PCE 0.027 RUN 007

1057 A00215 022015 IA 006C LAU
PCE 0.026 RUN 008

1105 A00215 022015 IA 006D LAU
PCE 0.021 RUN 009

1113 A00215 022015 IA 006E LAU
PCE 0.021 RUN 010
(+) < Pressurize Positive

1123 A00215 022015 IA 007A LAU
PCE 0.016 RUN 011

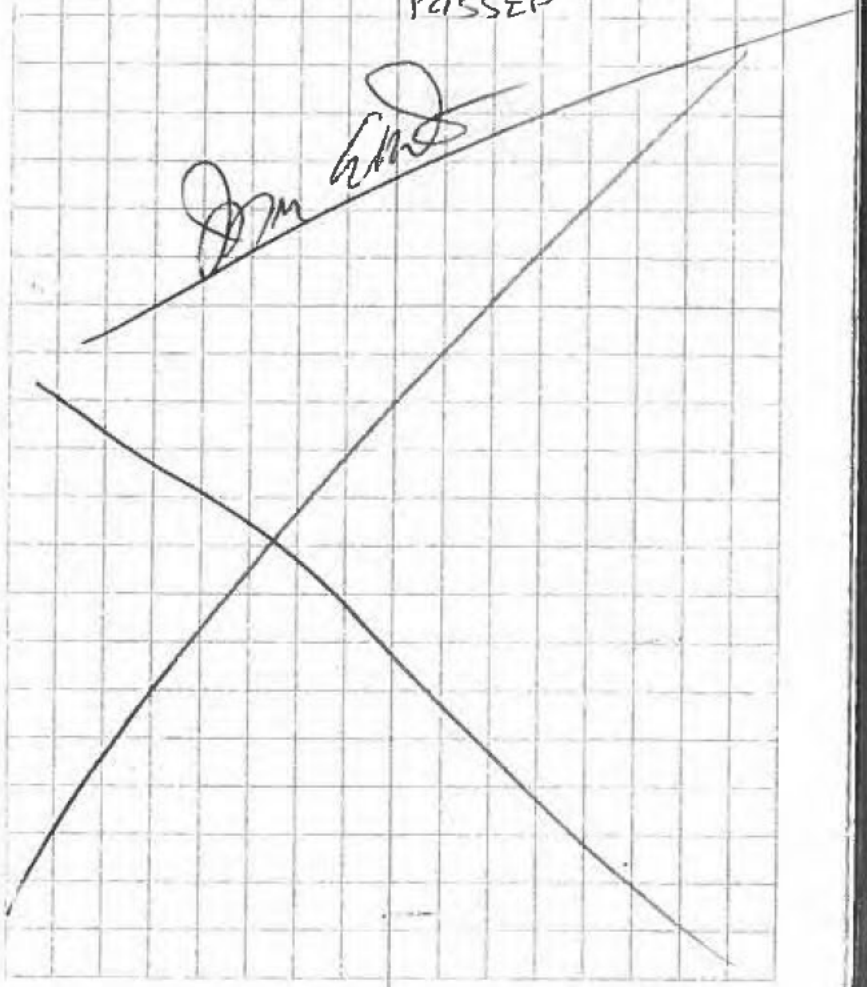
1131 A00215 022015 IA 007B LAU
PCE 0.006 RUN 012

1139 A00215 022015 IA 007E LAU
PCE 0.006 RUN 013

1150 A00215 022015 IA ~~007D~~ 014 ~~LAU~~ CCV
PCE 3.8 5.0 ppb ~~RUN 014~~
TCE 4.2
CIS 4.3 passed

00215 (63)

1158 A00215 022015 IA 015 CCV
PCE 0.453 0.5
TCE 0.473
CIS 0.624
PASSED



3/9/15 0023-H

Calibration Runs under Cal Method SIM 100PPB-VA-VI-LIST-03052015
Runs 001, 002, 004, 005 + 006 on 03/05/15 at 1830.

Auto tune - ok 3/9/15 09:05:30
Conc Cleanout ok 3/9/15 09:15:51
Final TIC - 458,916

CCV Checks

RUN001 0724 5 ppb

VC	6.2	ppb
CIS	5.1	ppb
tce	5.0	ppb
pce	4.9	ppb

passed

RUN 002 0732 0.5 ppb

VC	0.836	← not required
CIS	0.583	
tce	0.552	
pce	0.540	

passed

RUN 003 0909 - Furnace Room
A-0023H-030915-IA-001-FUR
pce 0.116 ppb

RUN 004 0918 - Sump
A-0023H-030915-IA-002-SUMP
pce 20.0 ppb
tce 0.650 ppb

Survey 001 0928 - 0930
Crack at bottom of stairs in furnance room
Max TIC 112,349

Survey 002 0931 - 0933
Sewer line penetration on S wall
Max TIC 137,307

Survey 003 - 0936 - 0938
paint cans on bottom shelf
MAX TIC - 150,938

Survey 004 - 0940 - 0942
Weed killer, bug spray, etc top of second shelf
Max TIC 142,346

3/9/15 0023H

RUN005 0948 - Garage
A-0023H-030915-IA-005-GAR
pce 0.128 ppb

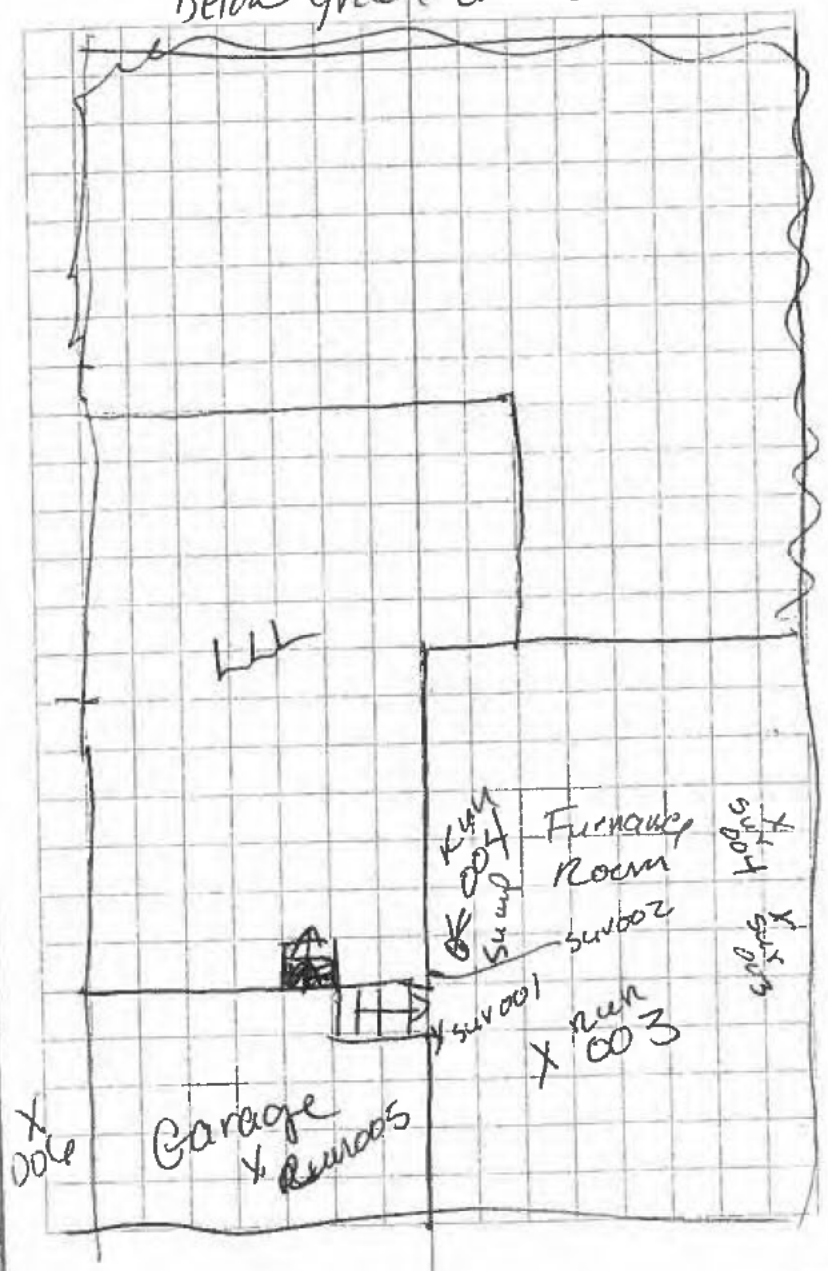
RUN006 0956 Outdoor sidewalk in front of garage
pce 0.022 ppb
A-0023H-030915-IA-004-OUT

RUN007 1008 - Family/Living
A-0023H-030915-IA-005-LL
pce 0.146 ppb

RUN008 1016 Playroom
A-0023H-030915-IA-006-PLA
pce 0.140 ppb

RUN 009 1024
A-0023H-030915-IA-007-BA1
pce 0.154 ppb
RUN 010 - Aborted 1032
RUN010 ~~1037~~ 1049
A-0023H-030915-IA-008-LAU
pce 0.173 ppb

Below grade area



Survey 005 1057 - 1059
pipe chase closet in laundry
Max TIC - 114,684

RUN 012 1105 Kitchen/Livie
A-0023H-030915-IA-009-OCL1
pce 0.146 ppb

RUN 013 1114 1st Floor Bath
A-0023H-030915-IA-010-BA2
pce 0.147 ppb

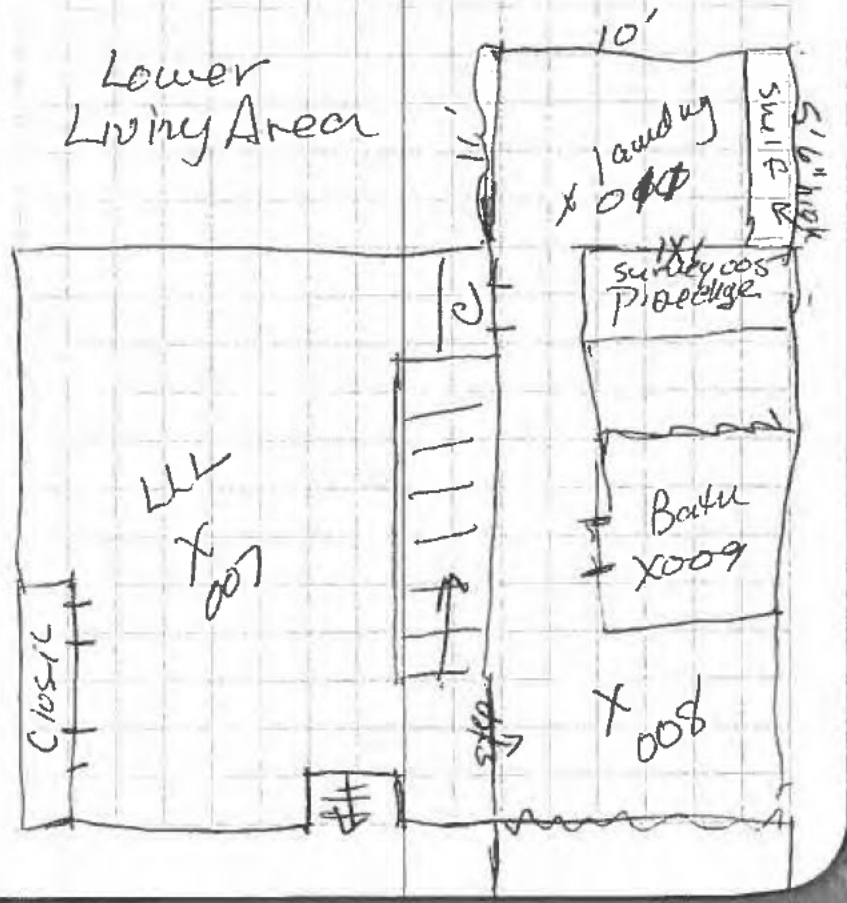
RUN 014 1122 - Formal Living
A-0023H-030915-IA-011-OCL2
pce 0.150 ppb

RUN 015 1130 Boy's Bedroom
A-0023H-030915-IA-012-BR1
pce 0.164 RPD

RUN 016 1144 Guest Bedroom
A-0023H-030915-IA-013-BR2
pce ~~0.166~~ ppb
0.169

RUN 017 1152 2nd floor bath
A-0023H-030915-IA-014-BA3
pce 0.149 RPD

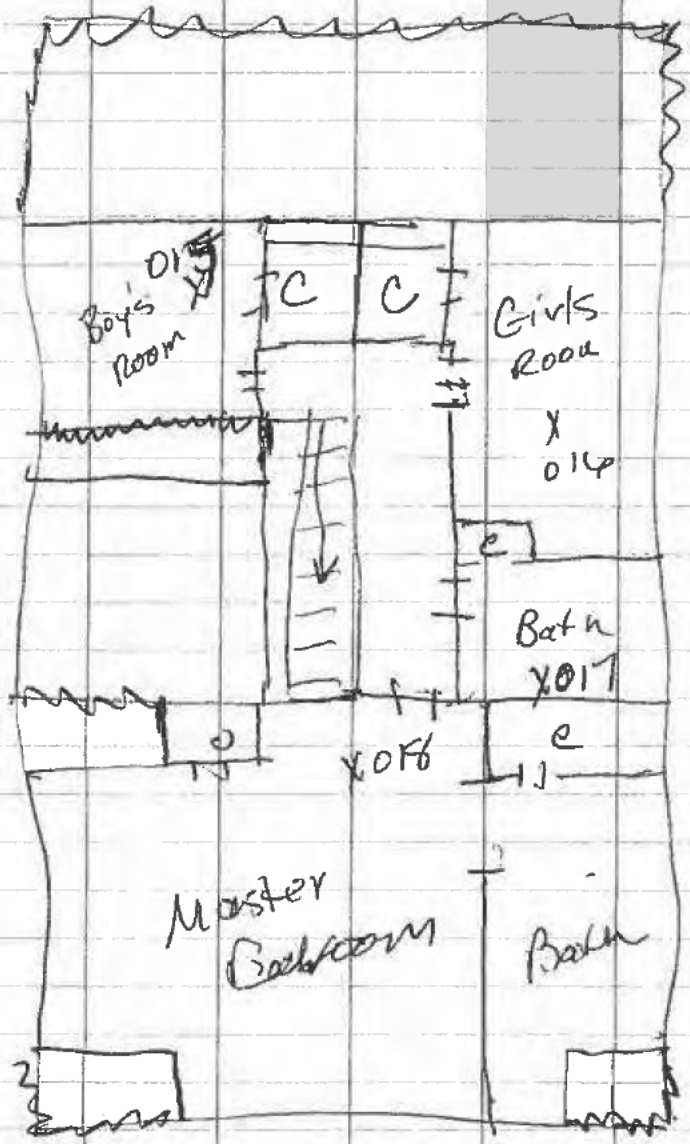
RUN 018 1201 Master Bedroom
A-0023H-030915-IA-015-MBR
pce 0.164 RPD



03/09/15 0023 H

132

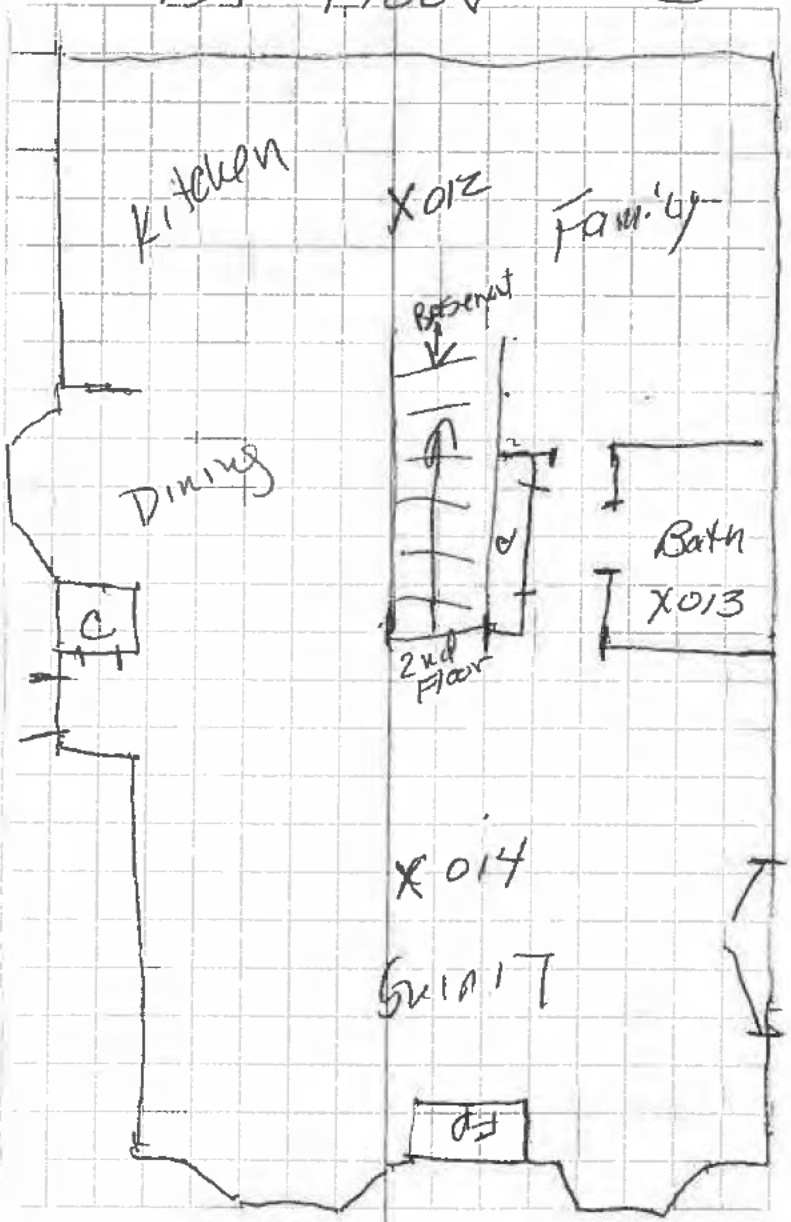
2nd Floor



0023H

133

1st Floor



03/09/15 0023-H

Negative Pressure Test

Baseline - -2.6 Pa

Removal Vol 80,000 cuft

Run 019 1325

IA-0023H-030915-IA-016A-PLA

Pce 0.112 ppb

Run 020 1333

IA-0023H-030915-IA-016B-PLA

Pce 0.104 ppb

Run 021 1341

IA-0023H-030915-IA-016C-PLA

Pce 0.107 ppb

Run 022 1350

IA-0023H-030915-IA-016D-PLA

Pce 0.108 ppb

Run 023 1400

IA-0023H-030915-IA-016E-PLA

Pce 0.104 ppb

Run 024 1415

IA-0023H-030915-IA-016F-PLA

Pce 0.104 ppb

Start 1320 End 1502

	Flow	Pa	Run	Time
0	764	-4.7	019/016A	1325
5	773	-5.5	—	—
10	805	-5.6	020/016B	1333
15	801	-4.1	021/016C	1341
20	813	-5.2	—	—
25	810	-4.7	022/016D	1350
30	789	-4.4	023/016E	1400
40	790	-5.4	—	—
50	732	-5.3	024/016F	1415
60	835	-5.2	025/016G	1430
70	808	-5.2	026/016H	1447
80	753	-4.2	—	—
90	799	-5.1	027/016I	1457
102	746	-4.9		

Final Volume 80,274 cuft

Run 025 1430

IA-0023H-030915-IA-016G-PLA

Pce 0.1006 ppb

Run 026 1447

IA-0023H-030915-IA-016H-PLA

Pce 0.097 ppb

Run 027 1457

~~1455~~ IA-0023H-030915-IA-016I-PLA

Pce ppb

03/09/15 0023H - Positive Test
Baseline -1.6 Pa
RUN028 1511
A-0023H-030915-IA-017A-PLA
pce 0.108 ppb

RUN029 1520
A-0023H-030915-IA-017B-PLA
pce 0.099 ppb

RUN030 1530
A-0023H-030915-IA-017C-PLA
pce 0.090 ppb

RUN031 1541
A-0023H-030915-IA-017D-PLA
pce 0.074 ppb

RUN032 1556
A-0023H-030915-IA-017E-PLA
pce 0.062 ppb

RUN033 1610
A-0023H-030915-IA-017F-PLA
pce 0.057 ppb

Run 034 1625
A-0023H 030915-IA-017G-PLA
pce 0.049 ppb

9.4 LPM
Start 1510 End

TD	Flow	Pa	Run	Time
5	1014	3.9	028/017A	1511
10	904	4.4	029/017B	1520
15	882	5.0	—	—
20	853	3.0	030/017C	1530
25	905	4.9	—	—
30	956	6.2	031/017D	1541
40	890	4.2	032/017E	1556
50	913	5.3	—	—
60	930	6.0	033/017F	1610
70	881	5.3	034/017G	1625
80	901	5.1	—	—
88	902	5.3	035/017H	1634

total volume 80,160 cuft

RUN035 1634
A-0023H-030915-IA-017H-PLA
pce-0.043 ppb

RUN036 1650 5ppb CCV Check
VC 42ppb cis 3.7ppb tce 4.4ppb pce 4.1 ppb
* PASSED *

Run 037 1659 0.5 ppb CCV Check
VC 0.108 cis 0.484 tce 0.493 pce 0.477 ppb
@ VC not required
* PASSED *

03/10/15 0023-H

Calibration Runs - 001, 002, 004, 005, & 006
Method - SIM_100PPB_VA_VI_LIST_03052015

Auto tune - ok - 03/10/15 11:51:38
Conc Cleanout ok - 03/10/15 12:00:50
Final TIC Count - 291,850

CCV Checks

RUN001 - 1043 5ppb

vc	5.5	ppb
cis	4.3	ppb
tce	4.7	ppb
pce	4.3	ppb

passed

RUN002 Aborted 0.5ppb

vc	low N_2
cis	
tce	
pce	

RUN003 11:09 0.5ppb

vc	0.635
cis	0.448
tce	0.443
pce	0.431

passed

RUN004 1120
A-0023H-031015-SG-001-4'
NE corner of house on east side. ~~near~~
pce - 0.667 ppb tce - 0.008 ppb

RUN005 1128
A-0023H-031015-SG-001-6.5'
NE corner of house on east side.
pce - ~~0.667 ppb~~ EKR 1.3ppb tce - 0.009 ppb

Co Reid

(38)

2-11-15 024H Pg 1

Weather: Sunny ~50°F

Crew: CHRM-2, FE-3 (then 1)

0800: Meet at Sunnyside Park.

0830: Arrive 0024H, meet resident Tim. Get hopsite unloaded and set up. Per direction from Ed we will start in basement and work up to second story.

0914: A024H-021115-IA-001-OUT
Run #001 PCE: 0.013
Home is 3,600 ft² w/ 8' ceilings So
28,800 ft³ x 2.5 = 72,000 ft³ per leg

0923: A024H-021115-IA-002-LAU
Run #002 PCE: 0.015
Will use "CRA" for crawl space per Ed Reid.

0937: A024H-021115-IA-003-BA1
Run #003 PCE: 0.009
Bathroom downstairs

0939: A024H-021115-IA-004-ST01
Run #004 PCE 0.011
Downstairs Storage/Kitchen/area

0947: A024H-021115-IA-005-ST02
Run #005 PCE: 0.012
Ski room downstairs.

2-11-15 024H (39)

pg 2

0955: A024H-021115-IA-006-ST03
Run #006 PCE: 0.017 ppb

1003: A024H-021115-IA-007-CRA
Run #007 PCE: 0.023

1018: Start 3 Ion PCE vapor entry point survey. No detections in Quant mode. Will start w/ floor drain in LAU, then floor drain in bathroom. Sample ID
A024H-021115-IA-008-Survey.
<Method Name>_<Date>_001

1027: Stop survey. Ions 164/166 flat ion 131 elevated. No entry points or interior sources found in basement. Move up to 1st floor.

2-11-15 (40)

~~1037~~ Dave pulls SG Sample

10:37 A024H-021115-SG-001 4' @ 10:30 Run #008 PCE: 0.070

1047: A024H-021115-IA-008-OCL
Run #009 PCE 0.012

1053: A024H-021115-IA-009-FAM
Run #010 PCE: 0.012

1103: A024H-021115-IA-010-BR1
Run #011 PCE: 0.009

11:11: A024H-021115-IA-011-BA2
Run #12 PCE: 0.011 ppb

(40) 024H 2-11-15 Pg 3

~~11:20~~ : A024H-021115-IA-012-OFC
Run #13 PCE: 0.016

11:31 A024H-021115-IA-013-HAL
Run #14 PCE: 0.014
Landing up Stairs @ 2-11-15

11:39 : A024H-021115-IA-014-MBR
Run #15 @ 2-11-15 PCE: 0.017 Pb6

11:47 : A024H-021115-IA-015-BR2
Run #16 @ 2-11-15 PCE: 0.013

11:55 : A024H-021115-IA-016-BR3
Run #17 @ 2-11-15
Ambient Survey complete, Begin setup for depress Cycling.

12:20 : All set up. Collect pressure baseline: -1.8Pa. All doors in house open. Need 72,000 ft³

12:21 : IA-010A-LAU @ 2-11-15 IA-017A LAU
Run #18 @ 2-11-15 PCE: 0.024

12:28 : IA-017B-LAU
Run #19 @ 2-11-15 PCE: 0.025
CFM: 2620 → Jumped to 800

12:36 IA-017C-LAU PCE 0.030
Run #20 CFM 650

12:44 IA-017D-LAU PCE: 0.030
Run #21 CFM: 757 →

024H 2-11-15 (41) Pg 4

12:51 : IA-017E-LAU PCE: 0.031
Run # 22 CFM: 768

1300 : IA-017F-LAU PCE: 0.032
Run # ~~22~~ 23 @ 2-11-15 CFM: 703

13:08 : IA-017G-LAU PCE: 0.033
Run # ~~23~~ 24 @ 2-11-15 CFM: 736

13:17 : IA-017H-LAU PCE: 0.033
Run # ~~24~~ 25 @ 2-11-15 CFM: 771

1327 IA-017I-LAU PCE 0.033
Run # ~~25~~ 26 @ 2-11-15 CFM: 765

1330 : IA-017J-LAU PCE 0.029
Run # ~~26~~ 27 @ 2-11-15 CFM 755

1338 : IA-017K-LAU PCE 0.028
Run # ~~27~~ 28 @ 2-11-15 CFM 793

1346 : IA-017L-LAU PCE: 0.026
Run # 29 CFM: 762

1354 : IA-017M-LAU PCE: 0.025
Run # 30 CFM: 745
Stop dep. test @ 100 min 40 sec w/ 72,643 ft³ removed, Switch.

1400 : Baseline: -2.8Pa; Fan switched prep to begin Pressure cycle

1402 IA-018A-LAU PCE: 0.019
Run # 31 CFM 877

1411 : IA-018B-LAU PCE: 0.015
Run # 32 CFM: 905

2-11-14 (42) 0024H

pg.5

14:19 : IA-018C-LAU PCE: 0.013
Run#33 CFM: 1008

1427 : IA-018D-LAU PCE: Abort
~~Run#34~~ N_2 Can Error CFM Abort

1435 : IA-018E-LAU PCE: 0.012
Run#34 CFM 866

14:43 : IA-018F-LAU PCE: 0.012
Run#35 CFM 881

1451 : IA-018G-LAU PCE: 0.010
Run#36 CFM 898

14591 IA-018H-LAU PCE: 0.011
Run#37 CFM: 838

1508 : IA-018I-LAU PCE: 0.014
Run#38 CFM 888

02-11-15
1517 : IA-018J-LAU PCE: 0.013
Run#39 CFM: 870

1524 : IA-018K-LAU PCE: 0.011
Run#40 CFM: 924

1526 02-11-15
~~1560~~ : Stop press. test. Added 75,426 ft3 of outdoor air. PCE stayed low and ended @ 0.013 ppb down from 0.025 ppb.

1534 : Run 0.5 ppb CCV as IA-019-CCV ; Run# 041
CIS - 0.515 ✓
TCE - 0.316 (36.8%) ↓
PCE - 0.356 (28.8%) ✓

0024-H 2/11/15 (43) pg6

1541: 50 ppb CCV as Sample #
IA-020-CCV-5
CIS: 3.4 ppb ✓
TCE: 2.6 TCE ↓
PCE: 2.7 ppb ↓
So, perform auto tune, try again.
Also perform conc. clean out.

1603: IA-021-CCV-0.5 Run #43
Run #42 was a clean out. 0.5 ppb
CIS: 0.566 ✓ Seems to have
TCE: 0.324 ↓ Skipped auto tune...?
PCE: 0.378 ✓

1623: IA-022-CCV-5 Run#44
CIS: 3.7 ppb
TCE: 2.6 ppb } Fail CCV
PCE: 2.8 ppb

1630: Call CCV into Ed Reid. He will work on CCV tonight.
End day.

[signature]

1742 IA CCV - 5.0 Run 45
After clean out and auto tune
CIS - 5.6
TCE - 3.5
PCE - 4.2

Run by ISE

[signature]

03/02/15 0014-H (108)

RUN032 1453
A-0014H-030215-IA-013H-FUE
pce 0.021 ppb

RUN031 1501 5ppb ccv
-ve 4.4 ppb
cis 4.0 ppb
-tce 4.3 ppb
pce 4.0 ppb
passed

RUN033 1509 0.5ppb ccv
VC 0.611 ppb - Not required
cis 0.521 ppb
-tce 0.486 ppb
pce 0.475 ppb
passed

Ld Read

03/03/15 0026-H (109)

0830 Arrived onsite

Setup equipment Run Auto tune + core cleanout

Autotune ok 3/3/15 - 80,59,19
Core Cleanout ok 3/3/15 11:08.32
Final TIC - 271,336

RUN001 0917 Basement Family Room
A-0026H-030315-IA-001-FAM
pce 0.058 ppb

RUN002 0926 Basement Bedroom
A-0026H-030315-IA-002-BR2
pce 0.042 ppb

RUN003 0936 Laundry area
A-0026H-030315-IA-003-LAU
pce 0.071 ppb

RUN004 0944 Pantry
A-0026-030315-IA-004-PAN
pce 0.254 ppb

03/03/15 0026H

RUN005 0952 Basement bath
A-0026H-030315-IA-005-BA1
pce 0.036 ppb

RUN006 1001 Storage Area
A-0026H-030315-IA-006-STO
pce 0.084 ppb

Survey001 - 1025 - Pantry area - cracks along foundation
MAX TIC 118,835

Survey002 - 1029 - sewer stack penetration in laundry area
MAX TIC 134,220

Note RUN007 & RUN008 were accidental runs in laundry area,

RUN009 1044 - Living Room
A-0026H-030315-IA-007-LIV
pce 0.054 ppb

RUN010 1056 Dining Room
A-0026H-030315-IA-008-DRF
pce 0.047 ppb

RUN011 1103 Library
A-0026H-030315-IA-009-LIB
pce 0.034 ppb

RUN012 1111 Master bedroom
A-0026H-030315-IA-010-MBR
pce 0.051 ppb

RUN013 1120 1st floor Bath
A-0026H-030315-IA-010-BA2
pce 0.048 ppb

RUN014 1128 Kitchen
A-0026H-030315-IA-012-KIT
pce 0.037 ppb

RUN015 1138 2nd floor Hall
A-0026H-030315-IA-013-HAL
pce 0.059 ppb

RUN016 1146 2nd floor bath
A-0026H-030315-IA-014-BA3
pce 0.061 ppb

3/3/15 0026H (112)

Neg Pressure Test
Baseline – 2.2 Pa
Vol to Remove – 77,000 cuft

RUN 017 1226
A-0026H-030315-IA-015A-LAL
pce 0.074 ppb

RUN 018 1234
A-0026H-030315-IA-015B-LAL
pce 0.064 ppb

RUN 019 1243
A-0026H-030315-IA-015C-LAL
pce 0.061 ppb

RUN 020 1251
A-0026H-030315-IA-015D-LAL
pce 0.067 ppb

RUN 021 1259
A-0026H-030315-IA-015E-LAL
pce 0.062 ppb

Start 1225 End 1328 (113)

TD	Flow	Pa	Run	Time
0	1530	-5.6	017/15A	1226
5	1527	-5.2	018/15B	1234
10	1525	-5.2	019/15C	1243
15	1589	-4.0	020/15D	1251
20	1523	-4.9	—	—
25	1539	-5.1	021/15C	1259
30	1530	-5.1	022/15F	1307
40	1462	-4.9	023/15C	1315
50	1538	-5.1		

Final volume – 81,048 cuft

RUN 022 1307
A-0026H-030315-IA-015F-LAL
pce 0.064 ppb

RUN 023 1315
A-0026H-030315-IA-015C-LAL
pce 0.058 ppb

03/03/15 0026-H (114) ~~H4,85~~

Positive Pressure
Baseline -1.3 pa

Run 024 1337
A-0026H-030315-IA-016A-LAM
pce 0.058 ppb

Run 025 1345
A-0026H-030515-IA-016B-LAM
pce 0.236 ppb

Run 026 1353
A-0026-030315-IA-016C-LAM
pce 0.032 ppb

Run 027 1401
A-0026-030315-IA-016D-LAM
pce ppb Aborted

~~Run 028~~ 1423
~~A-0026-030315-IA-016E-LAM~~
pce 0.018 ppb

Run 029 1430
A-0026-030315-IA-016F-LAM
pce 0.017 ppb

(115)

Start 1336 End 1436

TO	Flow	Pa	Run Time
5	1465	4.4	24/16A 1337
10	1822	7.7	25/16B 1345
15	1465	5.5	26/16C 1353
20	1414	5.1	— —
25	1410	5.8	27/16D 1401 Aborted
30	1397	5.4	
40	1442	4.9	28/16E 1423
50	1475	5.1	29/16F 1430
~~60~~ 60	892	4.9	

Total Vol - 88,546 cuft

Run 030 - 5 ppb ccv check
1445
vc 4.4
cis 3.8
tce 4.6
pce 4.0
} passed

Run 031 - 0.5 ppb ccv check
1453
ve 0.454
cis 0.435
tce 0.481
pce 0.441
} passed

Run 032 1502 - Outside
A-0026H-030315-IA-017-OUT
pce 0.011 ppb

02-12-15 - 0027-H (44) PM

Weather: Sunny 50°F

Crew: CH2M-2, FE-3 (then 1)

Eq: Hapsite H860 - CCV'ed by IE 2-11-15

0800: Meet at park

0830: Arrive @ 0027-H set-up, turn off heater, water heater. Owner is Katheleen (SP!)

0849: A0027H-021215-IA-001-OUT
Run#001 PCE: 0.034

0900: A0027H-021215-IA-002-LIV
Run#002 PCE: 0.056 ppb

0907: A0027H-021215-IA-003-DRF
Run#3 PCE: 0.055

0915: A0027H-021215-IA-004-BR1
Run#4 PCE: 0.074 ppb

0924: A0027H-021215-IA-005-MBR
Run#005 PCE: 0.055

0932: A0027H-021215-IA-006-BA1
Run#006 PCE: 0.060

0940: A0027H-021215-IA-007-MBA
Run#007 PCE: 0.058

0949: A0027H-021215-IA-008-~~0~~-KIT
Run#008 PCE: 0.055

0956: A0027H-021215-SG-001-4
Run#009 PCE: 0.060 ppb
Home is ~2,800 ft² w/ average 9 ceilings w/ 2.5 x ≈ 63,000 ft³ per leg.

0027-H 02/12/15 (45) Pg.2

10:04: A0027H-021215-SG-002-5.5
Run#010 PCE 0.046/DCA 0.2 ppb

1018: A0027H-021215-IA-009-STO
Run#011 PCE: 0.045

1026: A0027H-021215-IA-010-LAU
Run#12 PCE: 0.050

10:34: A0027H-021215-IA-011-BA2
Run#13 PCE 0.057

10:42: A0027H-021215-IA-012-BR2
Run#14 PCE: 0.055 ppb

10:50: A0027-021215-IA-013-STO2
Small crawl space in downstairs bedroom
Run#15 PCE: 0.045 ppb

1058: A0027H-021215-IA-014-FUR
Run#16 PCE: 0.041
Big furnace room w/ sump, downstairs.

1109: A0027H-021215-IA-015-STO3
Run#17 PCE: 0.037
Old coal chute room.
Ambient Quant Complete. Perform PCE 3-Ion survey @ entry and indoor source ID. ~~Not~~ 2-12-15
No detection to note from quant.

11:18: Begin 3-Ion Survey. Baseline TIC →

0027-H 2/12/15 Pg3

11:18 cont: TIC Base ~49,000,
A0027H-021215-IA-016-Survey
Run#001
Floor drain ~63,000
Sump ~56,000
Old Coal furnace footprint w/601l
@ 68,000
Paint/Chemical Storage ~72,000
Ions #164/166 flat line the entire run, Ion #131 peaked

11:22 : Stop Survey. Prep for Pressure cycling

11:50 : Start dep. cycling; baseline @ -0.5Pa. Begin.

IA-17A-HAL PCE: 0.048
Run#18 CFM: 800

11:58 : IA-17B-HAL PCE: 0.047
Run#19 CFM: 820

12:06 : IA-17C-HAL PCE: 0.045
Run#20 CFM: 830

12:15 : IA-17D-HAL Run#21 PCE: 0.046
CFM: 837

12:23 : IA-17E-HAL
Run#22

12:29 : IA-17F-HAL 0.48→PCE 0.045
Run#23 CFM: 850

0027-H 2/12/15 Pg. 4

12:39 : IA-17G-HAL PCE: 0.048
Run#24 CFM: 815

12:48 : IA-17H-HAL PCE: 0.048
Run#25 CFM 865

12:55 : IA-17I-HAL PCE: 0.045
Run#26 CFM 837

13:04 : IA-17J-HAL PCE: 0.045
Run#27 CFM 842

13:06 : Stop pressure (dep pressure) Sump fan Total Vol removed 1's 63,906ft³

13:08 : Baseline = -0.8Pa Start

13:12 : IA-18A-HAL PCE: 0.040
Run#28 CFM 1085

13:21 : IA-18B-HAL PCE: 0.033
Run#29 CFM 1104

13:28 : IA-18C-HAL 0.034 PCE: 0.035
Run#30 CFM 1100

13:37 : IA-18D-HAL PCE: 0.031 pdc
Run#31 CFM 1101

13:46 : IA-18E-HAL PCE: 0.022 pdc
Run#32 CFM 1014

13:52 : IA-18F-HAL PCE: 0.024 pdc
Run#33 CFM 1000

(48)

0027-H 2/12/14 Pg. 5

1400 : IA-18G-HAL PCE: 0038
Run #34 CFM 1004

1408 : IA-18H-HAL PCE: 0.030
Run #35 CFM: 999

1413 : Step pressitest: added 66,591 A3 of outdoor air into home. Duration ~63 minutes. Breakdown door and pack up. No Standards on-site for CCVs will be performed @ the FE office by Isaac Edwards

1440: Supplies packed up. All pilot lights lit and operational.

End of Day.

(49)

2/12/14

Time ~~ISE~~ 1600 CCV Run # 36 ~~1600~~

CIS 5.3 ppb
TCE 3.16 ppb
PCE 4.0 ppb

ISE

3/11/15 0029-H

Calibration Runs - 001, 002, 004, 005 thru -
Method - SIM_100PAB-VA.VE.LIST_03052015

Auto tune - ok - 09:24:00
Conc Cleanout - ok - 09:33:23
Final TIC Count - 344,036

CCV checks

Run001 0741 5ppb

VC	4.2
cis	4.9
tce	5.0
pce	4.7

> passed

Run002 0749 0.5ppb

VC	0.834 – not required
cis	0.570
tce	0.514
pce	0.514

> passed

RUN003 - 0857
A-0029H-031115-IA-001-OUT
pce 0.056 ppb

RUN004 0906 - Bet Living/Dining
A-0029H-031115-IA-002-OCC
pce 0.294 ppb

RUN005 0914 - 1st floor office
A-0029H-031115-IA-003-OFC
pce 0.280 ppb

RUN006 0923 kitchen
A-0029H-031115-IA-004-KIT
pce 0.326 ppb

RUN007 0932 Bedroom over Garage
A-0029H-031115-IA-005-BR1
pce 0.141 ppb

RUN008 0945 Girl's Bedroom
A-0029H-031115-IA-006-BR2
pce 0.291 ppb

Survey001 - Laundry Shoot
on 2nd floor 0953-0955
Max TIC - 122,399

03/11/15 0029-H

Run 009 1000 Guest Bedroom
A-0029H-031115-IA-007-BED
pce 0.284 ppb

Run 010 1008 Master bedroom
A-0029H-031115-IA-008-MBR
pce 0.281 ppb

Run 011 1016 2nd floor Bath
A-0029H-031115-IA-009-BA1
pce 0.255 ppb

Run 012 1031 Family Room
A-0029H-031115-IA-010-FAM
pce 0.284 ppb

Run 013 1045 Basement ~~Bath~~ laundry
A-0029H-031115-IA-011-~~BTR~~ LAU
pce ~~0.264~~ 0.112 ppb

Run 014 1056 Furnace Closet
A-0029H-031115-IA-012-FUR
pce 0.289 ppb

Run 015 1126 Basement Bath
A-0029H-031115-IA-013-BA2
pce 0.235 ppb

1105

Survey 002 1105 - Sewer cleanout in basement hallway.
Max TIC - 124,358

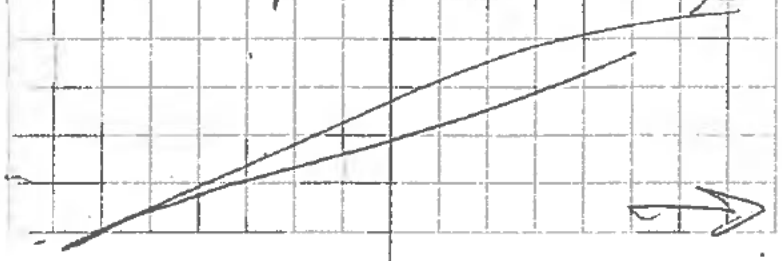
Survey 003 1112-1114 - laundry drain
Max TIC - 152,396

Survey 004 1117-1119 pipe chase overhead in laundry room
Max TIC - 157,434

Survey 005 1136-1138 crawl space off basement stairs
MAX TIC - 127,916

Survey 006 1140-1142 crawl space under kitchen MAX TIC 146,163

Survey 007 1146-1148 crawl space under front porch MAX TIC - 159,869



03/11/15 0029H

RUN 014 1216 (Aborted)
A-0029H-031115-1A-014A-FAM
pce rpb

~~RUN 017 1234~~ (Aborted)

RUN 018 1235
A-0029H-031115-1A-014B-FAM
pce 0.101 rpb

RUN 019 1242
A-0029H-031115-1A-014C-FAM
pce 0.074 rpb

Run 020 1250
A-0029H-031115-1A-014D-FAM
pce 0.059 rpb

Run 021 1258
A-0029H-031115-1A-014E-FAM
pce 0.053 ppb

41,400 1462.

Baseline -0.3
Neg Pressure

Start 1210 End 1304

To	Flow	Pa	Run Time
5	1475	-5.2	016/014A 1216
10	1488	-4.7	
15	1519	-5.1	
20	1483	-4.6	018/14B 1234
25	1476	-5.5	
30	1455	-5.5	019/14C 1242
40	1443	-4.7	020/14D 1250
50	1451	-5.0	021/14E 1258
54	1407	-5.4	

Final Removed Vol - 79,182 cuft

Daytime Pressure
Baseline -0.3 Pa

START 1310 END

TO	Flow	Pa	Run Time
5	1587	5.1	022/015A 1317
10	1712	5.3	— —
15	1631	5.9	023/015B 1325
20	1684	4.9	— —
25	1466	4.3	024/015C 1335
30	1433	4.6	025/015D 1343
40	1496	5.2	026/015E 1351

RUN022 1317
A-0029H-031115-IA-015A-EA4
pce 0.045 ppb

RUN023 1325
A-0029H-031115-IA-015B-EA4
pce 0.032 ppb

RUN024 1335
A-0029H-031115-IA-015C-EA4
pce 0.030 ppb

RUN025 1343
A-0029H-031115-IA-015D-EA4
pce 0.029 ppb

RUN026 1351
A-0029H-031115-IA-015E-EA4
pce 0.028 ppb

Soil gas

RUN027 1401
SE corner of house 4'
A-0029H-031115-SG-001-4'
VC 0.095 cis 0.013 tce 0.006 pce 0.040 ppb

RUN028 1409
SE corner of house @ 6'
A-0029H-031115-SG-001-6'
VC 0.146 cis 0.021 tce ND pce .084 ppb

RUN029 1417
NE corner off of garage near garbage cans
A-0029H-031115-SG-002-4'
VC 0.240 cis 0.041 tce 0.010 pce 0.549 ppb

OCV Checks

RUN030 1428 5 ppb
VC 5.0 cis 4.1 tce 4.4 pce 4.2
passed

RUN031 1436
VC 0.040 cis 0.512 tce 0.485 pce 0.471
↑ not required *passed*

03/12/15 0032-H

Calibration Runs 001, 002, 004, 005 + 006
Method - SIM - 100 PPB VA VI LSI 0305205
ok 03/05/15 at 1830

Auto tune - ok 03/12/15 09:33:00
Conc Cleanout - ok 03/12/15 09:42:13
Final TIC = 340,141

CCV Checks

RUN001 0752 5ppb

vc	5.7	passed
cis	4.6	
tcp	5.1	
pce	4.5	

RUN002 0758 0.5ppb

vc	0.866	not required
cis	0.515	passed
tcp	0.535	
pce	0.509	

RUN003 0852 - outdoor Ambient
A-0032H-031215-IA-001-OUT
pce 0.024 ppb

RUN004 0903 Living/Dining
A-0032H-031215-IA-002-DCL
pce 0.025 ppb

RUN005 0913 Kitchen
A-0032H-031215-IA-003-KIT
pce 0.023 ppb

RUN006 0921 Child's Bedroom
A-0032H-031215-IA-004-BC1
pce 0.023 ppb

RUN007 0929 Master Bedroom
A-0032H-031215-IA-005-MBR
pce 0.023 ppb

RUN008 0937 - 1st floor Bath
A-0032H-031215-IA-006-BA1
pce 0.021 ppb

RUN009 0950 Laundry
A-0032H-031215-IA007-LAU
pce 0.021 ppb

RUN010 0958 Basement Bath
A-0032H-031215-IA-008-BA2
pce 0.018 ppb

03/12/15 0032-IA

RUN 011 1004 Family Room
A-0032IA-031215-IA-009-FAM
pce 0.021 ppb

RUN 012 1015 Downstairs Bedroom
A-0032IA-031215-IA-010-DC2
pce 0.021 ppb

Survey001 - Furnace room access to crawl space / baseboard
MAX TIC 130,583
1031-1033

Survey002 - Drain on floor in laundry room
1034 - 1038
Max TIC - 159,902

Survey003 Sewer drain under laundry sink 1047-1049
Max TIC 156,057

Survey 004 - Crawl space off bathroom
1101-1103 Max TIC 17,954

Neg Pressure Test

Baseline -1.1
Removal vol = 34,000 cu ft

Run 013 1136
A-0032IA-031215-IA-011A-LAU
pce 0.024 ppb

Run014 1144
A-0032IA-031215-IA-011B-LAU
pce 0.018 ppb

RUN015 1153
A-0032IA-031215-IA-011C-LAU
pce 0.017 ppb

RUN016 1201
A-0032IA-031215-IA-011D-LAU
pce 0.018 ppb

RUN017 1211
A-0032IA-031215-IA-011E-LAU
pce 0.022 ppb

Run 018 1220
A-0032IA-031215-IA-011F-LAU
(pce 0.022 ppb

03/12/15 0032H

Start 1132 End 1245

TO	Flow	Pa	Run #	Time
5	441	-5.2	013/011A	1136
10	460	-4.7	014/011B	1144
15	456	-4.9	—	—
20	455	-5.0	015/011C	1153
25	460	-5.3	—	—
30	441	-5.3	016/011D	1201
40	460	-5.2	017/011E	1211
50	470	-5.2	018/011F	1220
60	471	-5.6	019/011G	1228
70	465	-5.1	020/011H	1237
73	474	-5.1	—	—

Total vol removed - 34,502 cuft

RUN 019 1228

A-0032H-031215-IA-011G-LAU

pce 0.025 ppb

RUN 020 1237

A-0032H-031215-IA-011H-LAU

pce 0.024 ppb

Positive Pressure test

Baseline -0.7pa

Start 1250 End 1352

To	Flow	Pa	Run #	Time
5	565	7.3	021/012A	1257
10	519	4.6	—	—
15	545	5.7	022/012B	1308
20	543	4.1	—	—
25	641	4.4	023/012C	1317
30	521	3.5	024/012D	1327
40	514	5.8	025/012E	1336
50	527	5.3	026/012F	1344
60	480	3.5	—	—
62	480	4.5	—	—

Total volume introduced - 33,201 cuft

RUN 021 1257

A-0032H-031215-IA-012A-LAU

pce 0.016 ppb

RUN 022 1308

A-0032H-031215-IA-012B-LAU

pce 0.009 ppb

RUN 023 1317

A-0032H-031215-IA-012C-LAU

pce 0.008 ppb

03/12/15 0032-H

RUN024 1327
A-0032H-031215-IA-012D-LAH
pce 0.008 ppb

RUN025 1336
A-0032H-031215-IA-012E-LAH
pce 0.008 ppb

RUN026 1344
A-0032H-031215-IA-012F-LAH
pce 0.0008 ppb

RUN027 1357 CCV 5ppb
vc 4.0
cis 3.4 – failed –
tce 4.2 bag not tight
pce 3.8 on probe-leaked

RUN028 1405 CCV 0.5ppb
vc 0.720 – not required
cis 0.405
tce 0.451 } passed
pce 0.439

RUN029 1413 CCV 5ppb
vc 4.4
cis 3.8 } passed
tce 4.4
pce 4.0

D Bent

APPENDIX

PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0001-H
Street Address: 803 S. 1100 E.
ZIP:
Property Contact:
Tel #:
Latitude: 40.751728
Longitude: -111.859211
Age of Property: 90 years
Number of Levels: 1
Basement? (•) Yes ( ) No
Basement Habitable? (•) Yes ( ) No
Sump? ( ) Yes ( ) No

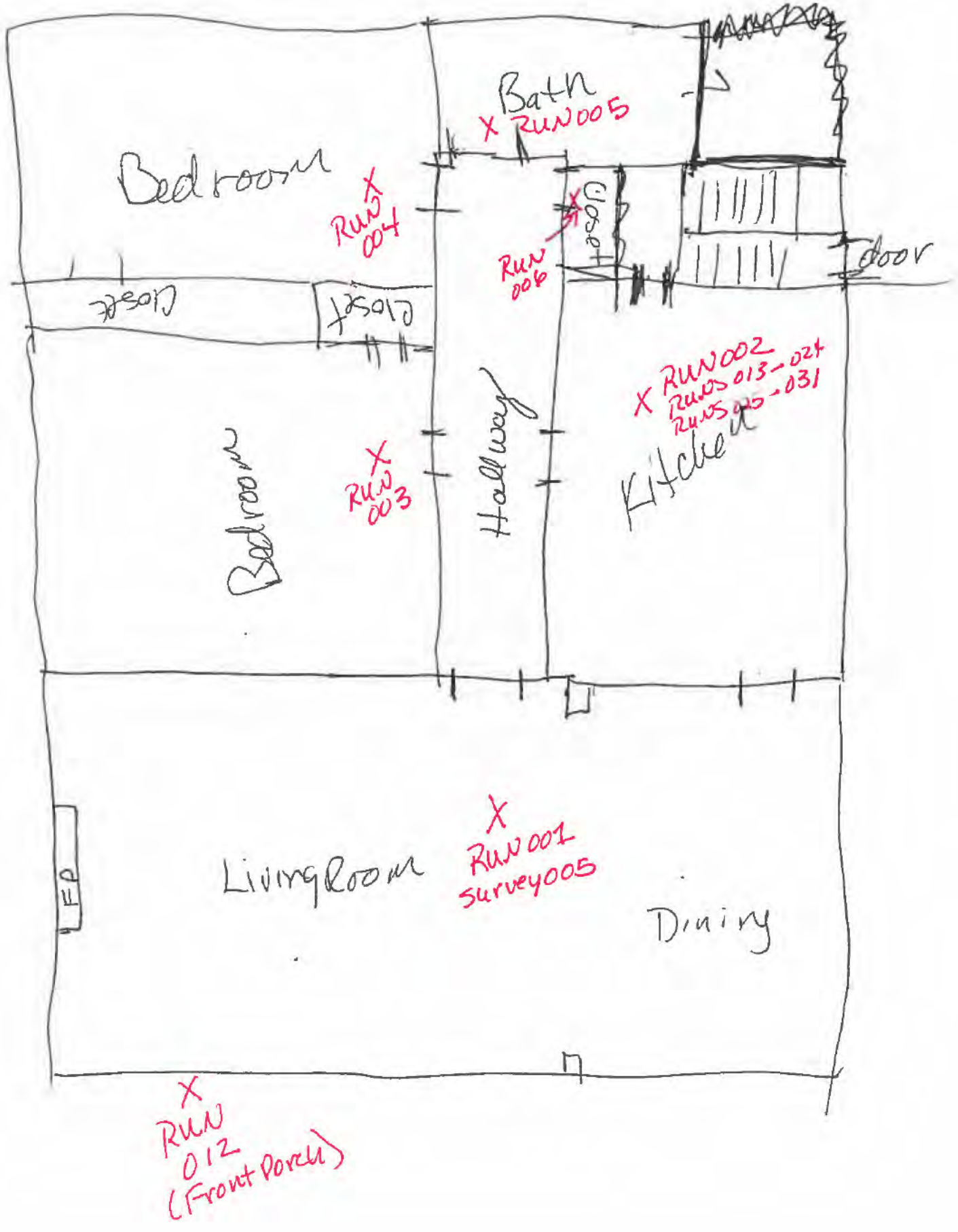
Completed by: ERR
Date: 11/26/2014

Comments

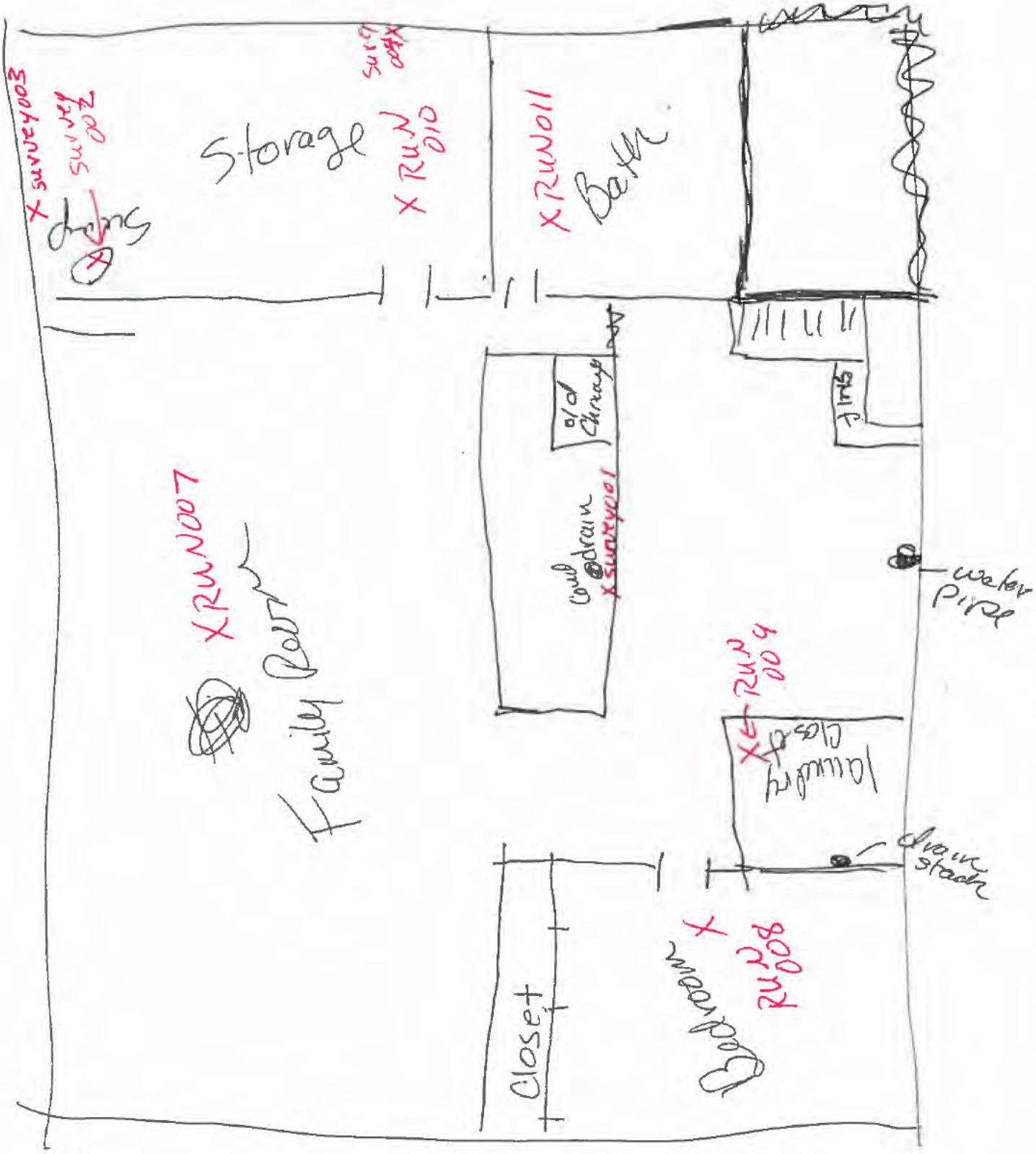
NOTE: THE ORIGINAL ELECTRONIC FIELD FORM FILE WAS CORRUPTED AND UNRECOVERABLE. THIS FILE IS A VERSION RECREATED FROM FIELD NOTES AND HAPSITE RUN DATA.
Mark Aguilar with USEPA and Weston team onsite to observe activities.
Elevation: 4405 ft MSL at bottom of steps at sidewalk.

Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.

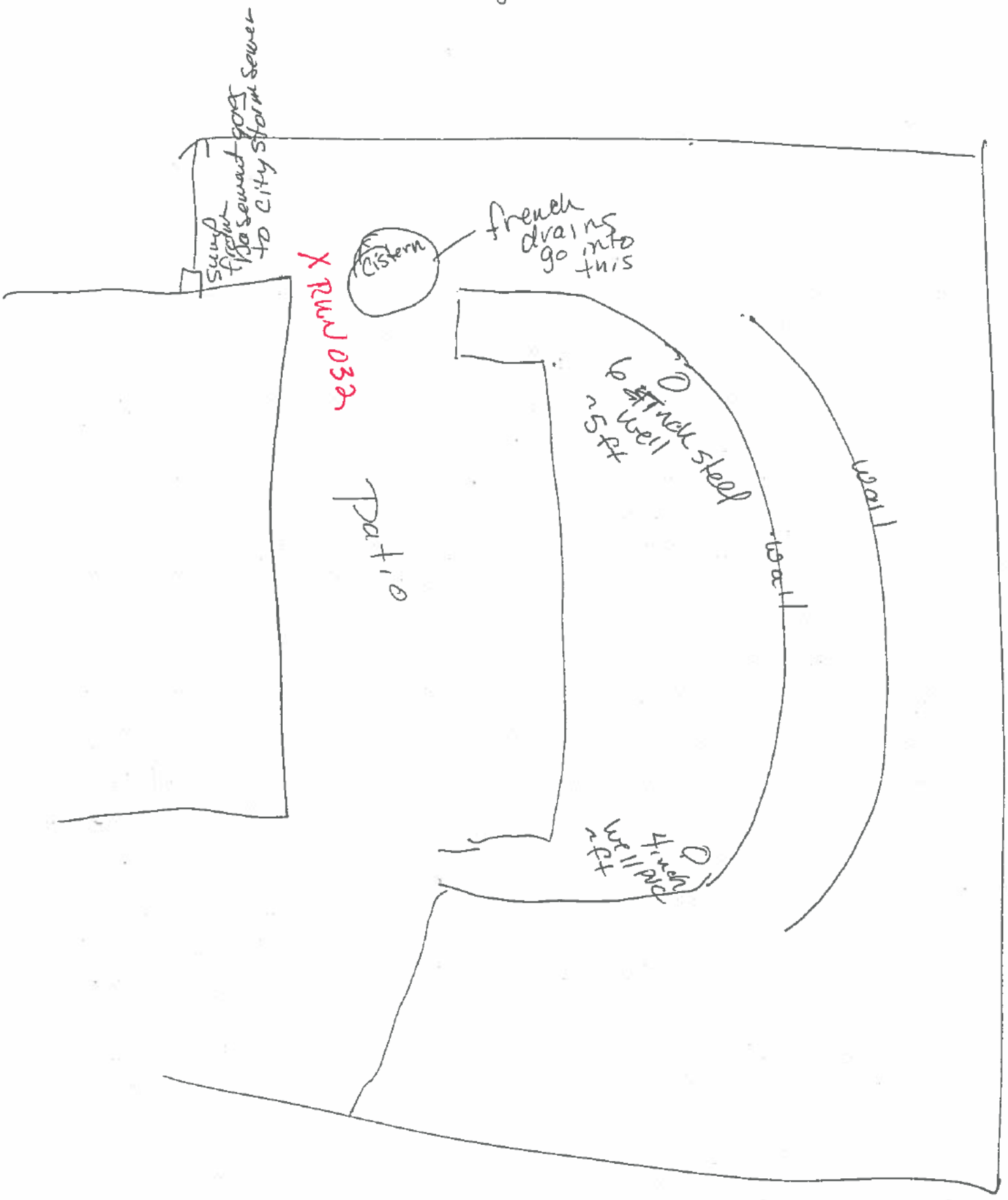
0001-H Upstairs



0001-H Basement



0001-A Backyard



PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 01/27/2015 Time of Arrival: 08:40

Weather Conditions: Cloudy

Temperature: 35 Barometric Pressure (inHg): 0 Wind Direction: W Speed: Light

Field Crew 1: ERR Role: HAPSITE Operator

Field Crew 2: EJR Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? ( ) Yes (●) No

If yes, have the materials been removed? ( ) Yes ( ) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

NOTE: THE ORIGINAL ELECTRONIC FIELD FORM FILE WAS CORRUPTED AND UNRECOVERABLE. THIS FILE IS A VERSION RECREATED FROM FIELD NOTES AND HAPSITE RUN DATA.
Mark Aguilar with USEPA and Weston team onsite to observe activities.

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time	
001 - 005	01/26/2015	18:15	
Instrument Performance Check Run Number	Time		(●) Pass ( ) Fail
Auto Tune	08:00		
Instrument Performance Check Re-run Number	Time		( ) Pass ( ) Fail
NA			
CCV Run Number	Time		(●) Pass ( ) Fail
001 (1/26/15)	18:30		
CCV Re-run Number	Time		(●) Pass ( ) Fail
001 (1/27/15)	20:35		

Operator's initials: ERR

Comments

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time: 11:37 End Time: 11:41

Location: Front porch steps on west side of house

Run Number: 012 Time: 11:37

Run Number: Time:

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time 11:20 End Time 11:25

Comments

Survey005 - Living/Dining Room

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time 11:00 End Time 11:20

Comments

Survey001 - Drain in Furnace closet-basement. Survey002 - sump pit opening - small circular hole. Survey003 - Crack at basement floor/wall junction - north wall in storeroom near sump. Survey004 - basement floor/wall junction - east wall of storeroom.

Pictures

PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	09:10	End Time	11:00		
Room/area	Main level living room	Run Number	001 (IA-001-LIV)	Time	09:13
Room/area	Kitchen	Run Number	002 (IA-002-KIT)	Time	09:23
Room/area	Baby's Bedroom	Run Number	003 (IA-003-BR1)	Time	09:32
Room/area	Master Bedroom	Run Number	004 (IA-004-MBR)	Time	09:41
Room/area	Main level Bathroom	Run Number	005 (IA-005-BA1)	Time	09:49
Room/area	Broom Closet in Hall	Run Number	006 (IA-006-CLO)	Time	09:58
Room/area	Basement Family Room	Run Number	007 (IA-007-FAM)	Time	10:18
Room/area	Basement Bedroom	Run Number	008 (IA-008-BR2)	Time	10:27
Room/area	Basement Laundry Closet	Run Number	009 (IA-009-LAU)	Time	10:38
Room/area	Basement Storeroom - with floor sump	Run Number	010 (IA-010-STO)	Time	10:49

Comments

Basement Bathroom - Run 011 (IA-011-BA2) - 10:58

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time: 13:38 | End Time: 15:31 | Room/Area: Kitchen-Living Area

T=	CFM	Pascals	Run No.	Time
			013 (IA-013A-LIV	13:41
			014 (IA-013B)	13:50
			015 (IA-013C)	13:59
			016 (IA-013D)	14:08
			017 (IA-013E)	14:17
			018 (IA-013F)	14:26
			019 (IA-013G)	14:35
			020 (IA-013H)	14:44
			021 (IA-013I)	14:53
			022 (IA-013J	15:03
			023 (IA-013K)	15:12
			024 (IA-013L)	15:21

Comments

Elapsed time, CFM, and pascal readings lost when VI form file corrupted and could not be replaced. Total volume removed was no less than 2.5x of home volume, but data was also lost with corrupt file.

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time: 15:46 | End Time: 16:49 | Room/Area: Kitchen-Living Area

T=	CFM	Pascals	Run No.	Time
			025 (IA-014A-KIT)	15:47
			026 (IA-014B)	15:57
			027 (IA-014C)	16:06
			028 (IA-014D)	16:17
			029 (IA-014E)	16:26
			030 (IA-014F)	16:36
			031 (IA-014G)	16:46

Comments

Elapsed time, CFM, and pascal readings lost when VI form file corrupted and could not be replaced. Total volume removed was no less than 2.5x of home volume, but data was also lost with corrupt file.

PART J
SUMMA CANISTERS

Location/ Area: NA

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

Comments

PART K
SOIL GAS

Date	01/27/2015	Time	16:55	Sample Depth	4		
Latitude	40.751783	Longitude	-111.859133			Elevation	4417
Run No		Run Time				Vacuum (in/Hg)	4

Comments

Backyard near NE corner of foundation wall. SG-001-4' Attempted deeper push, refused at 5.5', and probe was in either very tight or completely saturated soils.

12/4

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

0001-H

Doc 15
1.00

ACADEMIC/COMMERCIAL/INDUSTRIAL BUILDING QUESTIONNAIRE

Indoor Air Assessment Survey

Date: 11-26-14

1. Contact
   Address
   Phone 1
2. What is t
3. Are you
   this Build
   Owner N
   Address:

   Phone 1:_____ Phone 2:_____ Cell Phone: _____
4. Total number of occupants/persons at this location? 3
   Number of Children 1 Ages 5 months
5. How long have you occupied this location? 3 years
   How days per week is building occupied? 7
   How hours per day is building occupied? 24

General Building / Structure Description

6. Type of Building/Structure (check only one): Single Business ☐, Multiple Businesses ☐,
   Other Family residence
7. Building/Structure Description:
   Number of floors: 1 Area /square footage of main or ground floor: 1150 square feet
   Basement ☒ Area /square footage of Basement: 1150 square feet
   Crawlspace ☐ Area /square footage of Crawlspace:_____ square feet
   Partial crawlspace/basement ☐ % of each _____
   Slab on grade ☐ Area /square footage of Slab on grade:_____ square feet
   Other ☐ _____
8. Age of Building/Structure: 90 years, Not sure/Unknown ☐
9. General Above-Ground Building/Structure construction (check all that apply):
   Wood ☐, Brick ☒, Concrete ☐, Cement block ☐, Other ☐ _____
10. Foundation Construction (check all that apply):
    ☐

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

0001-H

Concrete Slab
Fieldstone ☐
Concrete block ☐
Elevated above ground/grade ☐
Other ☐ Don't know

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

11. Do you have private well ☒ or cistern ☐ ?
If yes, please describe location, use and current condition Back yard. Mi. of the spring water on our property flows into and we have a sump pump that gets the water to the gutter

12. Do you have a septic system? Yes ☐ No ☒ Not used ☐ Unknown ☐
If yes, what is construction type? _____
Where is it located? _____
When was the last time it was serviced? _____
Do you (or have you ever) use(d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your Building? (pond, ditch, etc.) Yes ☒ No ☐

Basement Description (please check all boxes that apply):

14. Is the basement finished ☒ or unfinished ☐ ?

15. If finished, how many rooms are in the basement? 1 2
What are rooms used for? Office ☐ Shop ☐ Storage ☒
Other guest room

16. If not finished, do you plan on finishing in the future? Yes ☐ No ☐

17. Is the basement floor (check all that apply) Concrete ☒, Tile ☐, Carpeted ☒, Dirt ☐,
Other ☐ _____

18. Are the basement walls poured Concrete ☐, Cement block ☐, Stone ☐, Wood ☐,
Brick ☐, Other ☐ _____

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☒
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☐
No ☐

Describe the moisture problem Our Storage room also has a small well with a sump pump. So the room is always moist. It also floods if the sump pump in the backyard stops working

20. Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☒
Yes, rarely (less than 1 time/year) ☐
No ☐

21. Does the basement have any of the following? Floor cracks ☐, Wall cracks ☐, Sump ☒
Floor drain ☒, Other hole/opening in floor ☐
describe _____

0001 - H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

22. Are any of the following used or stored in the basement (check all that apply):
Paint ☒ Paint Stripper/remover ☒ Paint thinner ☐ Metal degreaser/cleaner ☐
Gasoline ☐ Diesel fuel ☐ Solvents ☐ Glue ☐ Laundry spot removers ☒
Drain cleaners ☐ Pesticides ☐ Other equipment with fuel tanks (chain saw, lawn mower, snow blower, etc.) ☐ Other products with/containing Volatile Organic Compounds, describe:

_____

_____

23. Has the Building / structure recently (within the last six months) had any painting or remodeling?
Yes ☒ No ☐
If yes, specify what was done, where in the Building, and what month:
painted walls and trim this month

_____

24. Has new carpeting been installed in the Building / structure within the last year? Yes ☐ No ☒
If yes, when and where?_____

25. Do any occupants / employees regularly conduct or work in beauty / hair-dressing business?
Yes, work at a beauty / hair-dressing business ☐
Yes, store supplies for beauty / hair-dressing business ☐ Distance to sample point:_____
Yes, building contains beauty / hair-dressing business ☐ Distance to sample point: _____
Yes, building is near beauty / hair-dressing business ☐ Distance to sample point: _____
No ☒

26. Do any occupants / employees / anyone regularly use or work or conduct a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) ☐
Yes, use dry-cleaning infrequently (monthly or less) ☐
Yes, work at a dry cleaning service ☐
Yes, building contains or is near dry cleaning service ☐ Distance to sample point: _____
No ☒

27. Do any occupants / employees / anyone in the Building / structure use solvents at work?
Yes ☐ If yes, how many persons?
No ☒ If no, go to question 28

28. If yes for question 26, are the work clothes washed at Building? Yes ☐ No ☐

29. Does Building / Structure contain a washer/dryer? Yes ☒ No ☐
Where are they located?
Basement ☒
Upstairs ☐
Ground floor ☐
Garage ☐
Other, please specify ☐ _____

30. If Building / Structure contains a dryer, is it vented to the outdoors? Yes ☒ No ☐

31. What type (s) of Building heating do you have (check all that apply)
Fuel type: Gas ☒, Oil ☐, Electric ☐, Wood ☒, Coal ☐,
Other ☐ _____

Heat conveyance system: Forced hot air ☒ Forced hot water ☐ Steam ☐
Radiant floor heat ☐ Wood Stove ☐ Coal furnace ☒ Fireplace ☒
Other ☐ _____

0001-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

32. Does Building/Structure have (or had in the past) a storage tank for storage of gasoline ☐, fuel oil ☐, propane ☐ If yes, where is/was it located? NO

How is/was the tank filled? _____

Is there staining near the tank? Yes ☐ No ☐

33. Does Building/Structure have air conditioning? Yes ☒ No ☐
Central air conditioning ☒
Window air conditioning unit (s) ☐
Other (please specify) _____

34. Does Building / Structure have any: Room fans ☐, Ceiling fans ☒, Attic fan ☒

35. Does Building / Structure ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☒ No ☐

36. Has Building / Structure had termite or other pesticide treatment? Yes ☒ No ☐ Unknown ☐
If yes, please specify type of pest controlled termite
and approximate date of service May 2011

37. Water heater type: Gas ☒, Electric ☐, by Furnace ☐,
Other (please describe) _____

38. Water heater location: Basement ☒, Upstairs ☐, Ground Floor ☐, Attic ☐,
Other _____

39. Does Building/Structure have any cooking appliances? Electric ☒ Gas ☐,
Other _____

40. Is there a stove exhaust hood present? Yes ☒ No ☐
Does it vent to the outdoors? Yes ☐ No ☐ ?

41. Smoking in Building/Structure:
None ☒, Rare (only guests) ☐, Moderate (occupants, light smokers) ☐,
Heavy (at least one heavy smoker in Building/Structure) ☐

42. If yes to question 40, what do they smoke?
Cigarettes ☐, Cigars ☐, Pipe ☐, Other ☐

43. Does Building/Structure regularly contain/use air fresheners? Yes ☒ No ☐

44. Does anyone in the Building have indoor Building hobbies or crafts involving: No
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☐, spray paint ☐,
wood finishing ☐, Other ☐ _____

0001 - H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

45. General Building / Structure use of industrial / office /consumer products (circle as appropriate).
Assume that: Never = never used, Hardly ever = less that once/month,
Occasionally = about once/month, Regularly = about once/week,
and Often = more that once/week.

Product	Frequency of Use				
Solvents	(Never)	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	Never	Hardly ever	Occasionally	Regularly	(Often)
Insecticides	(Never)	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	Occasionally	Regularly	(Often)
Window cleaners	Never	Hardly ever	Occasionally	(Regularly)	Often
Ink / Toner Cartridge	Never	(Hardly ever)	Occasionally	Regularly	Often
Glue / Adhesives	Never	Hardly ever	(Occasionally)	Regularly	Often
Paint	Never	Hardly ever	(Occasionally)	Regularly	Often
Petroleum Fuel	(Never)	Hardly ever	Occasionally	Regularly	Often

46. Please check weekly Building/Structure maintenance, janitorial, and cleaning practices:
Dusting ☒
Dry Sweeping ☒
Vacuuming ☒
Polishing (furniture, etc.) ☐
Washing/waxing floors ☒
Other (describe) ☐

47. Other comments including items / subjects not covered in this questionnaire yet an issue or concern for the Building / Structure:

We have a lot of spring water on our property that surfaces. We would like to know if the PCE is negatively affecting us.

0001-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

48. **Chemical Inventory/Summary**

Chemical/Chemical Product (consumer name)	Amount present in Building / Structure

a) _____

b) _____

c) _____

d) _____

e) _____

f) _____

g) _____

h) _____

i) _____

j) _____

k) _____

l) _____

m) _____

n) _____

o) _____

PHOTO LOG FOR SLC VA CERCLA SITE

PARCEL IDENTIFIER: 0001-H **ADDRESS** 803 S. 1100 East

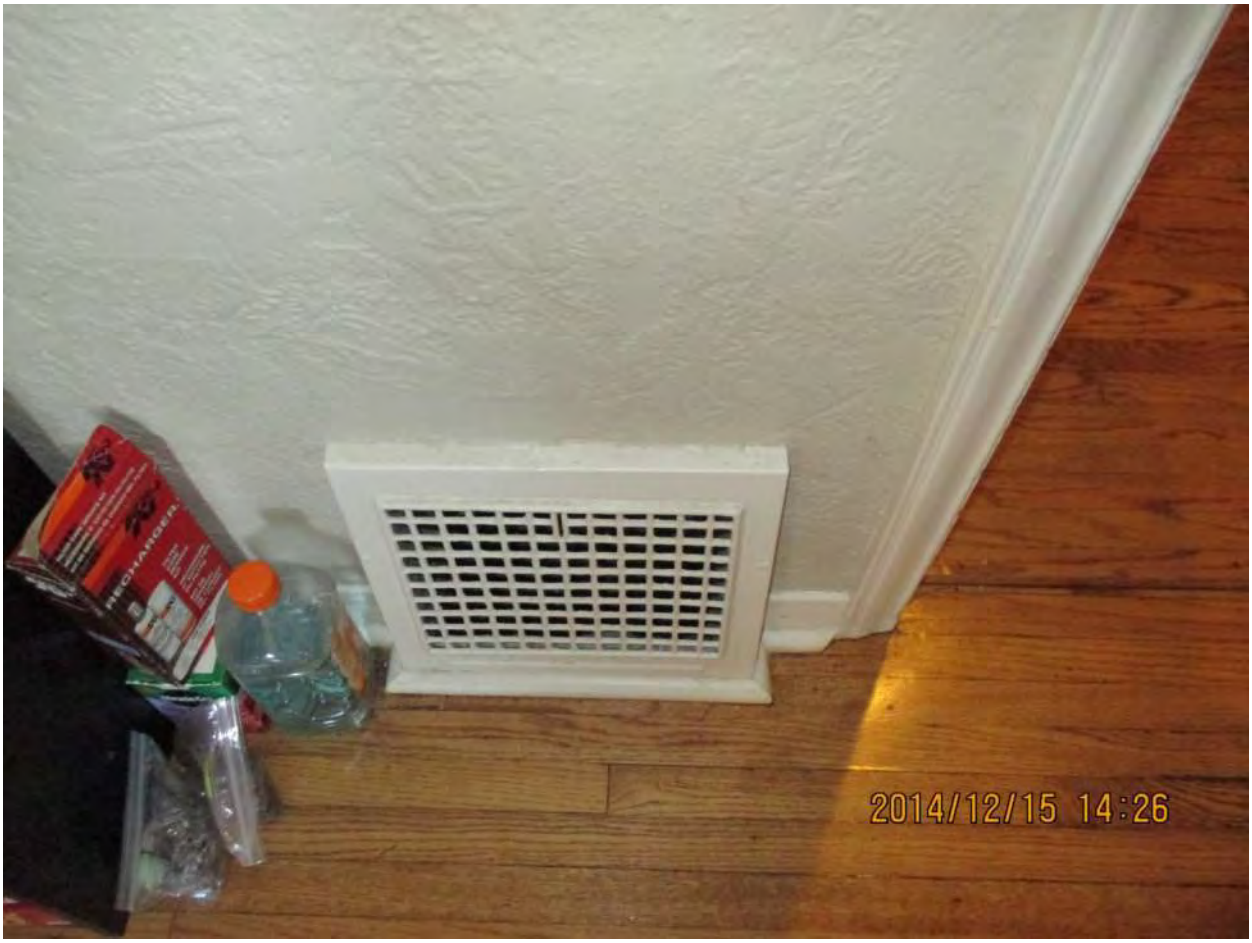
DATE: 12/15/14

Number	Camera Image#	Description of Photo
1	100-195	Fireplace in living room
2	100-196	Old cold air return in living room
3	100-198	Drain for washer in basement
4	100-199	sanitary sewer drain stack behind dryer
5	100-200	Sanitary sewer drain line through ceiling
6	100-201	Sump in corner of storage area in basement
7	100-202	Condensate drain in Furnance closet
8	100-203	Patched old furnance chimney in basement
9	100-204	Old expansion tank next to old chimney
10	100-205	Family room looking towards fireplace
11	100-206	Vent in family room
12	100-207	Cistern w/ pump in backyard
13	100-208	4 inch well connected to french drain + cistern in backyard
14	100-209	4 inch well connected to french drain + cistern in backyard
15	100-210	Cistern dumps to gutter along 800
16	* Note -	City of Salt Lake Storm Water Department
17		was working on connecting sumps
18		directly to storm sewer below grade
19		while I was onsite on 12/15/14.
20		
21		

0195



0196



0198



0199



0200



0201



0202



0203



0204



0205



0206



0207



0208



0209



0210



PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0002-H
Street Address: 1144 E. Sunnyside Dr
ZIP: 84105

Property Contact:
Tel #:

Latitude: 40.750665
Longitude: 111.858081
Age of Property: 100 years

Number of Levels: 2
Basement? (•) Yes ( ) No
Basement Habitable? ( ) Yes (•) No
Sump? ( ) Yes (•) No

Completed by: ERR
Date: 12/19/2014

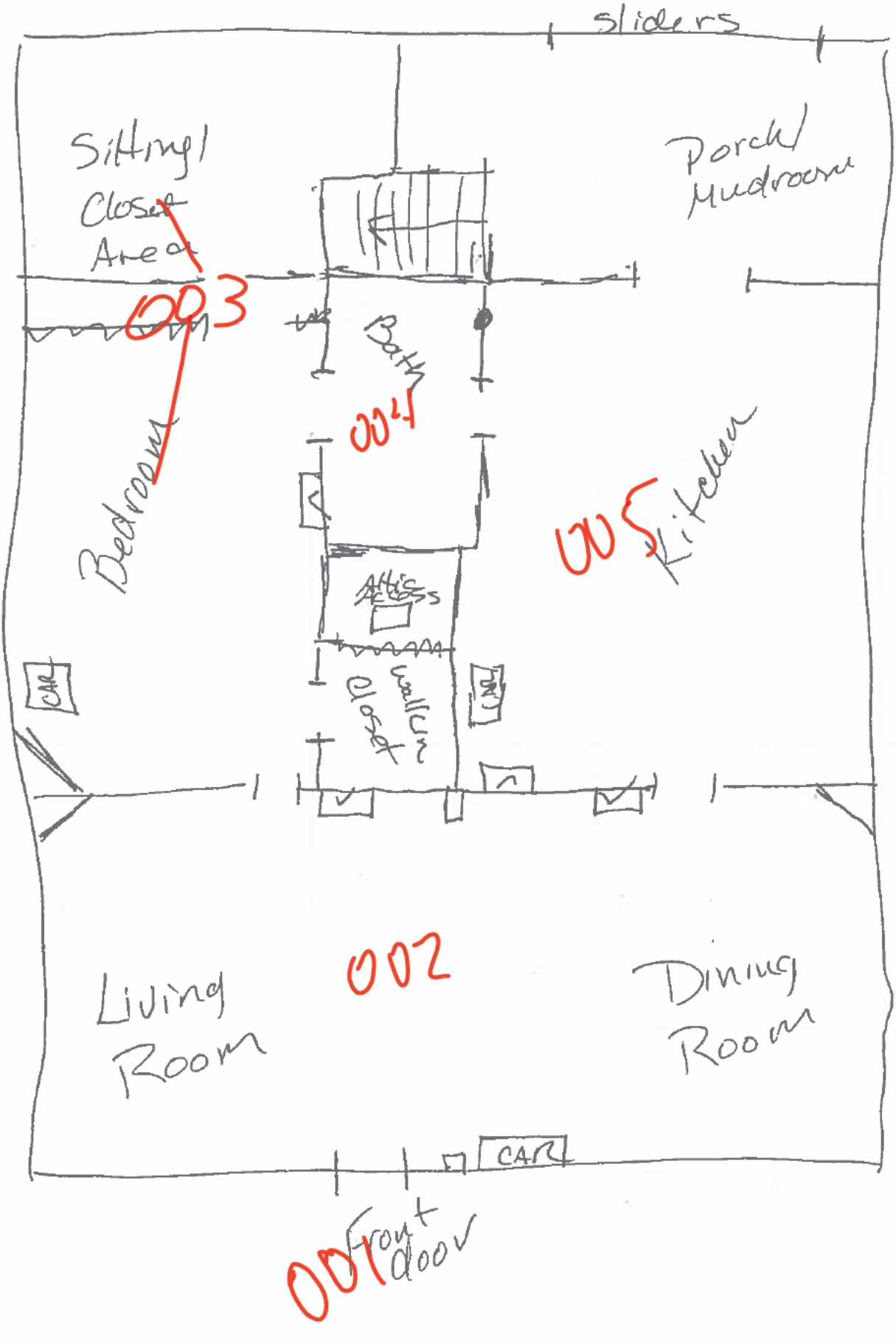
Comments

BASEMENT RANGES FROM ON GRADE AT SOUTH END TO 4' ON WEST, TO 6' ON EAST SIDE. ELEVATION AT STREET= 4439'. LARGE SPRING EAST FLOWS WEST-SOUTHWEST ACROSS SITE TO ALLEY.

Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.

0002-H 1144 E. Sunnyside

Main Floor



0002-H 1144 E. Sunnyside, Basement



PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 2\24\15 Time of Arrival: 0830

Weather Conditions: Sunny

Temperature: 45 Barometric Pressure (inHg): 30.31 Wind Direction: NW Speed: Light

Field Crew 1: ERR Role: HAPSITE Operator

Field Crew 2: AJC Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? ( ) Yes (●) No

If yes, have the materials been removed? ( ) Yes (●) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

ALSO CH IS AN ASSISTANT.

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time
002,003,004,005,006 ON 02\17\15	02\17\2015	11:00

Instrument Performance Check Run Number	Time	
AUTO TUNE	08:50	(•) Pass ( ) Fail

Instrument Performance Check Re-run Number	Time	
NA		(•) Pass ( ) Fail

CCV Run Number	Time	
030 on 2\23\15	14:35	(•) Pass ( ) Fail

CCV Re-run Number	Time	
End of day CCV 029 5ppb 2\24\15	1358	( ) Pass (•) Fail

Operator's initials: ERR

Comments

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time	09:07	End Time	09:14
Location	FRONT SIDEWALK 30 FT FROM FRONT DOOR		
Run Number	001(IA-001-OUT)	Time	09:07
Run Number	NA	Time	

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time 10:39 End Time 1056

Comments

001(IA001-SURVEY) AT 1039 W\ BASE TIC APPROX 88000; FLOOR DRAIN TIC @ 100,221. 002(IA-002-SURVEY) @10:42 LAUNDRY WALL PENETR
118,972. 003(IA-003-SURVEY) @ 1046 LAUNDRY FLOOR CRACK AT DOOR TO LLL TIC @ 116,977. 004(IA-004-SURVEY) 1050 MUD CLOSET BOTT
131,243.

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time 1039 End Time 1056

Comments

001(IA001-SURVEY) AT 1039 W\ BASE TIC APPROX 88000; FLOOR DRAIN TIC @ 100,221. 002(IA-002-SURVEY) @10:42 LAUNDRY WALL PENETRA 118,972. 003(IA-003-SURVEY) @ 1046 LAUNDRY FLOOR CRACK AT DOOR TO LLL TIC @ 116,977. 004(IA-004-SURVEY) 1050 MUD CLOSET BOTT 131,243.

Pictures

SEE PHOTOS TAKEN 2\24\15.

PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	0907	End Time	1034		
Room/area	FRONT LIVING ROOM	Run Number	002(IA-002-LIV)	Time	09:16
Room/area	UPSTAIRS MASTER BEDROOM	Run Number	003(IA-003-MBR)	Time	0924
Room/area	UPSTAIRS BATHROOM	Run Number	004(IA-004-BA1)	Time	0932
Room/area	UPSTAIRS KITCHEN	Run Number	005(IA-005-KIT)	Time	0940
Room/area	DOWNSTAIRS MUDROOM AND UTILITY, BOTTOM OF STAIRS	Run Number	006(IA-006-MUD)	Time	0951
Room/area	STORAGE BELOW STAIRS	Run Number	007(IA-007-STO)	Time	1002
Room/area	BASEMENT LIVING ROOM OPEN TO KITCHEN	Run Number	008(IA-008-LLL)	Time	1011
Room/area	DOWNSTAIRS BATH	Run Number	009(IA-009-BA2)	Time	1019
Room/area	DOWNSTAIRS BEDROOM	Run Number	010(IA-010-BR1)	Time	1027
Room/area		Run Number		Time	

Comments

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time: 1130 End Time: 1229 Room/Area: LLL

T=	5	CFM	371	Pascals	-5.1	Run No.	011(IA-011A-LLL)	Time	1130
T=	10	CFM	417	Pascals	-4.5	Run No.	012(IA-011B-LLL)	Time	1140
T=	15	CFM	438	Pascals	-5.0	Run No.	013(IA-011C-LLL)	Time	1148
T=	20	CFM	333	Pascals	-5.7	Run No.	014(IA-011D-LLL)	Time	1156
T=	25	CFM	430	Pascals	-4.9	Run No.	015(IA-011E-LLL)	Time	1203
T=	30	CFM	444	Pascals	-5.4	Run No.	016(IA-011F-LLL)	Time	1212
T=	35	CFM	436	Pascals	-5.2	Run No.	017(IA-011G-LLL)	Time	1220
T=	40	CFM	437	Pascals	-4.7	Run No.	018(IA-011H-LLL)	Time	1228
T=	45	CFM	449	Pascals	-5.4	Run No.		Time	
T=	50	CFM	424	Pascals	-4.8	Run No.		Time	
T=	55	CFM	396	Pascals	-4.6	Run No.		Time	
T=	59	CFM	446	Pascals	-5.6	Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

TARGET REMOVAL VOLUME 24,375CUBIC FEET. BASELINE @ -2.2Pa. REMOVED 24,539 CUBIC FEET. AIRDOOR BASEMENT DOOR TO BACK Y

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time: 1235 End Time: 1339 Room/Area: DOWNSTAIRS LIVING AREA

T=	CFM	Pascals	Run No.	Time
5	385	4.6	019(IA-012A-LLL)	1236
10	415	3.0	020(IA-012B-LLL)	1244
15	389	5.1	021(IA-012C-LLL)	1252
20	389	4.9	022(IA-012D-LLL)	1300
25	380	4.6	023(IA-012E-LLL)	1309
30	366	5.4	024(IA-012F-LLL)	1317
35	404	5.2	025(IA-012G-LLL)	1325
40	385	5.2	026(IA-012H-LLL)	1333
45	377	4.8		
50	377	5.1		
55	358	5.1		
64	361	4.6		

Comments

NEED TO ADD 24,375 CUBIC FEET. BASELINE @ -0.8Pa. ADDED 24,458 CUBIC FEET OF AIR TO HOME.

PART J
SUMMA CANISTERS

Location/ Area: NA

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

Comments

PART K
SOIL GAS

Date	2\24\15	Time	1030/1040	Sample Depth	4/8
Latitude	40.750617	Longitude	111.858142	Elevation	4436
Run No	027(SG-001-4) &028(SG-001-8')	Run Time	1341/1349	Vacuum (in/Hg)	3/4

Comments

samples at SW corner of home.

0002-14

Dec 19

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

Wrong one. I'll fill out another if needed. Just send it along. 2:30

Residential

ACADEMIC/COMMERCIAL/INDUSTRIAL BUILDING QUESTIONNAIRE

Date:

1. 1144 E. Sunnyside Dr.

2.

3.

Owner Name:

Address: City: State: Zip:

Phone 1: Phone 2: Cell Phone:

4. Total number of occupants/persons at this location? Two
Number of Children 0 Ages

5. How long have you occupied this location? 23 years
How days per week is building occupied? All.
How hours per day is building occupied? Most

General Building / Structure Description

6. Type of Building/Structure (check only one): Single Business ☐, Multiple Businesses ☐,
Other Home (Residential)

7. Building/Structure Description:
Number of floors: 2 Area /square footage of main or ground floor: 840 + 1125 ? square feet
Basement ☒ Area /square footage of Basement: 840 ? square feet
Crawlspace ☒ Area /square footage of Crawlspace: 1125 ? square feet
Partial crawlspace/basement ☐ % of each
Slab on grade ☐ Area /square footage of Slab on grade: square feet
Other ☐

8. Age of Building/Structure: ~100 years, Not sure/Unknown ☐

9. General Above-Ground Building/Structure construction (check all that apply):
Wood ☒, Brick ☐, Concrete ☐, Cement block ☐, Other ☐

10. Foundation Construction (check all that apply):
☐

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

11. Do you have private well ☐ or cistern ☐ ? No
If yes, please describe location, use and current condition_____

12. Do you have a septic system? Yes ☐ No ☒ Not used ☐ Unknown ☐
If yes, what is construction type?_____
Where is it located? _____
When was the last time it was serviced?_____
Do you (or have you ever) use(d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your Building? (pond, ditch, etc.) Yes ☒ No ☐

Basement Description (please check all boxes that apply):

14. Is the basement finished ☒ or unfinished ☐ ?

15. If finished, how many rooms are in the basement? _____
What are rooms used for? Office ☐ Shop ☐ Storage ☐
Other Bedroom, bath, Office

16. If not finished, do you plan on finishing in the future? Yes ☐ No ☐

17. Is the basement floor (check all that apply) Concrete ☒, Tile ☐, Carpeted ☐, Dirt ☐,
Other ☒ bamboo

18. Are the basement walls poured Concrete ☐, Cement block ☐, Stone ☐, Wood ☐,
Brick ☐, Other ☐ Don't know - probably cement block

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☐
No ☒

Describe the moisture problem_____

20. Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☐
No ☒

21. Does the basement have any of the following? Floor cracks ☐, Wall cracks ☐, Sump ☐,
Floor drain ☒, Other hole/opening in floor ☐
describe Main drain in in the living space downstairs (basement)

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

22. Are any of the following used or stored in the basement (check all that apply):
Paint ☒ Paint Stripper/remover ☐ Paint thinner ☐ Metal degreaser/cleaner ☐
Gasoline ☐ Diesel fuel ☐ Solvents ☐ Glue ☐ Laundry spot removers ☒
Drain cleaners ☒ Pesticides ☐ Other equipment with fuel tanks (chain saw, lawn mower, snow blower, etc.) ☐ Other products with/containing Volatile Organic Compounds, describe:
July 2014 new electric upstairs (ground floor)
Nov 2014 Painting

23. Has the Building / structure recently (within the last six months) had any painting or remodeling?
Yes ☒ No ☐
If yes, specify what was done, where in the Building, and what month:
_____
_____

24. Has new carpeting been installed in the Building / structure within the last year? Yes ☐ No ☒
If yes, when and where? _____

25. Do any occupants / employees regularly conduct or work in beauty / hair-dressing business?
Yes, work at a beauty / hair-dressing business ☐
Yes, store supplies for beauty / hair-dressing business ☐ Distance to sample point: _____
Yes, building contains beauty / hair-dressing business ☐ Distance to sample point: _____
Yes, building is near beauty / hair-dressing business ☐ Distance to sample point: _____
No ☒

26. Do any occupants / employees / anyone regularly use or work or conduct a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) ☐
Yes, use dry-cleaning infrequently (monthly or less) ☐
Yes, work at a dry cleaning service ☐
Yes, building contains or is near dry cleaning service ☐ Distance to sample point: _____
No ☒

27. Do any occupants / employees / anyone in the Building / structure use solvents at work?
Yes ☐ If yes, how many persons?
No ☒ If no, go to question 28

28. If yes for question 26, are the work clothes washed at Building? Yes ☐ No ☐

29. Does Building / Structure contain a washer/dryer? Yes ☒ No ☐
Where are they located?
Basement ☒
Upstairs ☐
Ground floor ☐
Garage ☐
Other, please specify ☐ _____

30. If Building / Structure contains a dryer, is it vented to the outdoors? Yes ☒ No ☐

31. What type (s) of Building heating do you have (check all that apply)
Fuel type: Gas ☒, Oil ☐, Electric ☐, Wood ☐, Coal ☐,
Other ☐ _____

Heat conveyance system: Forced hot air ☒ Forced hot water ☐ Steam ☐
Radiant floor heat ☐ Wood Stove ☐ Coal furnace ☐ Fireplace ☐
Other ☐ _____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

32. Does Building/Structure have (or had in the past) a storage tank for storage of gasoline ☐ (NO) If fuel oil ☐, propane ☐
yes, where is/was it located? _____
How is/was the tank filled? _____
Is there staining near the tank? Yes ☐ No ☐

33. Does Building/Structure have air conditioning? Yes ☐ No ☒
Central air conditioning ☐
Window air conditioning unit (s) ☐
Other (please specify) _____

34. Does Building / Structure have any: Room fans ☐, Ceiling fans ☐, Attic fan ☐ No

35. Does Building / Structure ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☐ No ☐

36. Has Building / Structure had termite or other pesticide treatment? Yes ☐ No ☒ Unknown ☐
If yes, please specify type of pest controlled _____
and approximate date of service _____

37. Water heater type: Gas ☒, Electric ☒, by Furnace ☐, 1. Not sure
Other (please describe) _____

38. Water heater location: Basement ☒, Upstairs ☐, Ground Floor ☐, Attic ☐,
Other _____

39. Does Building/Structure have any cooking appliances? Electric ☐, Gas ☒,
Other _____

40. Is there a stove exhaust hood present? Yes ☐ No ☒
Does it vent to the outdoors? Yes ☐ No ☐

41. Smoking in Building/Structure:
None ☒, Rare (only guests) ☐, Moderate (occupants, light smokers) ☐,
Heavy (at least one heavy smoker in Building/Structure) ☐

42. If yes to question 40, what do they smoke?
Cigarettes ☐, Cigars ☐, Pipe ☐, Other ☐

43. Does Building/Structure regularly contain/use air fresheners? Yes ☐ No ☒

44. Does anyone in the Building have indoor Building hobbies or crafts involving:
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☐, spray paint ☐, No
wood finishing ☐, Other ☐ _____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

45. General Building / Structure use of industrial / office /consumer products (circle as appropriate).
Assume that: Never = never used, Hardly ever = less that once/month,
Occasionally = about once/month, Regularly = about once/week,
and Often = more that once/week.

Product	Frequency of Use				
Solvents	Never	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	Never	Hardly ever	Occasionally	Regularly	Often
Insecticides	Never	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	Occasionally	Regularly	Often
Window cleaners	Never	Hardly ever	Occasionally	Regularly	Often
Ink / Toner Cartridge	Never	Hardly ever	Occasionally	Regularly	Often
Glue / Adhesives	Never	Hardly ever	Occasionally	Regularly	Often
Paint	Never	Hardly ever	Occasionally	Regularly	Often
Petroleum Fuel	Never	Hardly ever	Occasionally	Regularly	Often

46. Please check weekly Building/Structure maintenance, janitorial, and cleaning practices:
Dusting ☒
Dry Sweeping ☒
Vacuuming ☒
Polishing (furniture, etc.) ☐ biweekly (every 2 wk)
Washing/waxing floors ☒
Other (describe) ☐

47. Other comments including items / subjects not covered in this questionnaire yet an issue or concern for the Building / Structure:

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

48. **Chemical Inventory/Summary**

Chemical/Chemical Product (consumer name)	Amount present in Building / Structure

a) _____

b) _____

c) _____

d) _____

e) _____

f) _____

g) _____

h) _____

i) _____

j) _____

k) _____

l) _____

m) _____

n) _____

o) _____

PHOTO LOG FOR SLC VA CERCLA SITE

PARCEL IDENTIFIER: 0002-H **ADDRESS** 1144 E. Sunnyside

DATE: 12/19/14

Number	Camera Image#	Description of Photo
1	100-545	Vent in living room
2	100-546	Vent in dining room
3	100-547	Cold air return in dining room
4	100-548	Cold air return in bedroom
5	100-549	Vent in bathroom
6	100-550	Cold air return in kitchen
7	100-551	Vent in kitchen
8	100-552	Attic access in bedroom closet
9	100-553	Water seep along east property line in backyard
10	100-554	Boggy/muddy area in backyard
11	100-555	Small stream of water flowing through backyard
12	100-556	Water back SW corner of yard - onto neighbors
13	100-557	Backyard - possible soil probe if necessary
14	100-558	Storage room in basement
15	100-559	Drain in basement
16	100-560	Exhaust fan in basement bath
17	100-561	Piped ductwork in furnance area
18	100-562	General shot of basement area
19	100-563	Vent in kitchen area in basement
20	100-564	Old Chimney in living room of basement
21	100-565	Basement kitchen area

22	100-566	Vent in Bedroom of basement
23	100-567	Vent in bedroom of basement
24	100-568	Dryer vent through window
25	100-569	Dryer vent on outside of house
26	100-570	Swamp cooler on side of house
27		
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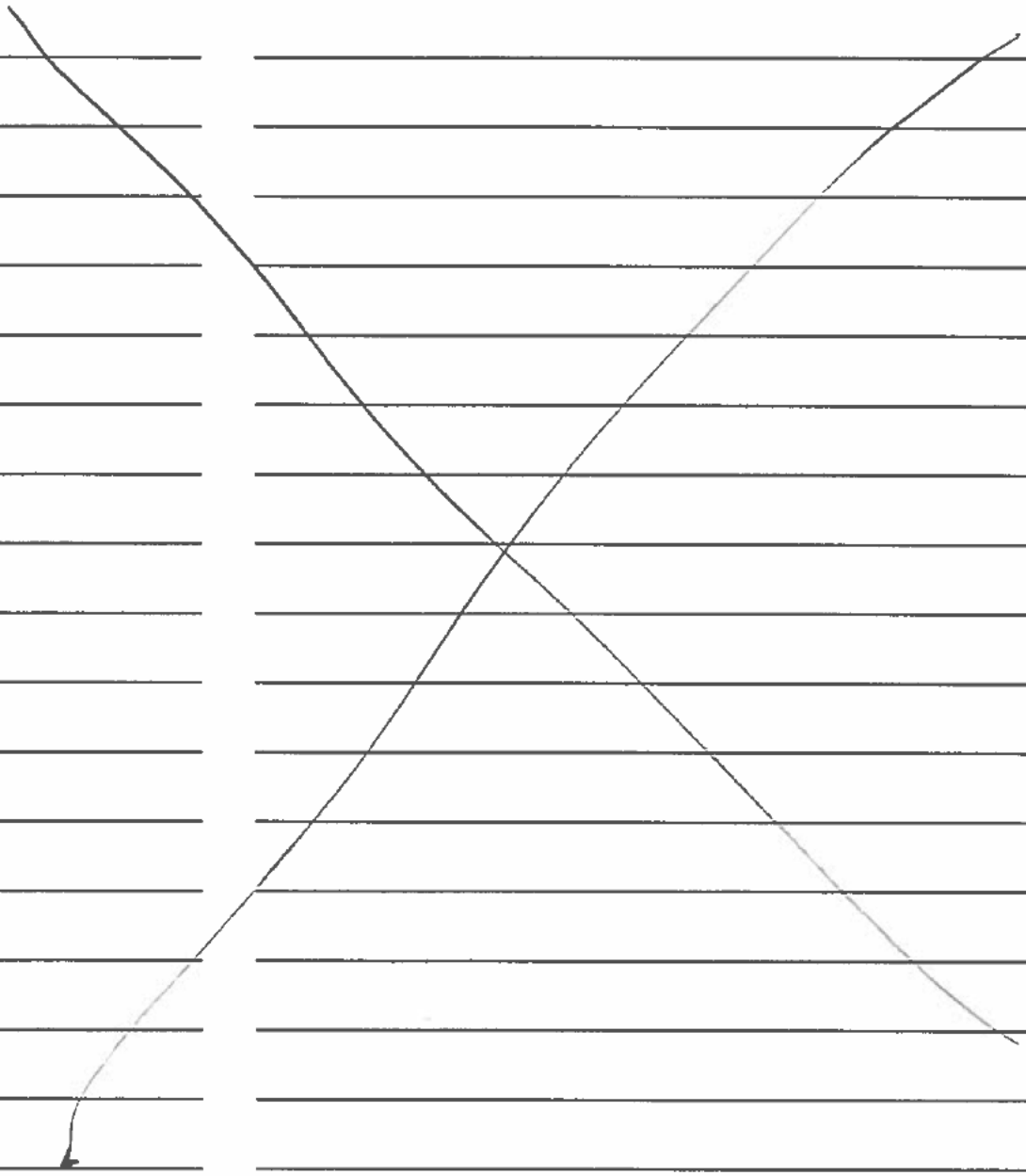


PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0003-H
Street Address: 1190 Gilmer Drive
ZIP: 84105

Property Contact:
Tel #:

Latitude: 40.748247
Longitude: -111.855953
Age of Property: 49 years

Number of Levels: 2
Basement? (•) Yes ( ) No
Basement Habitable? (•) Yes ( ) No
Sump? ( ) Yes (•) No

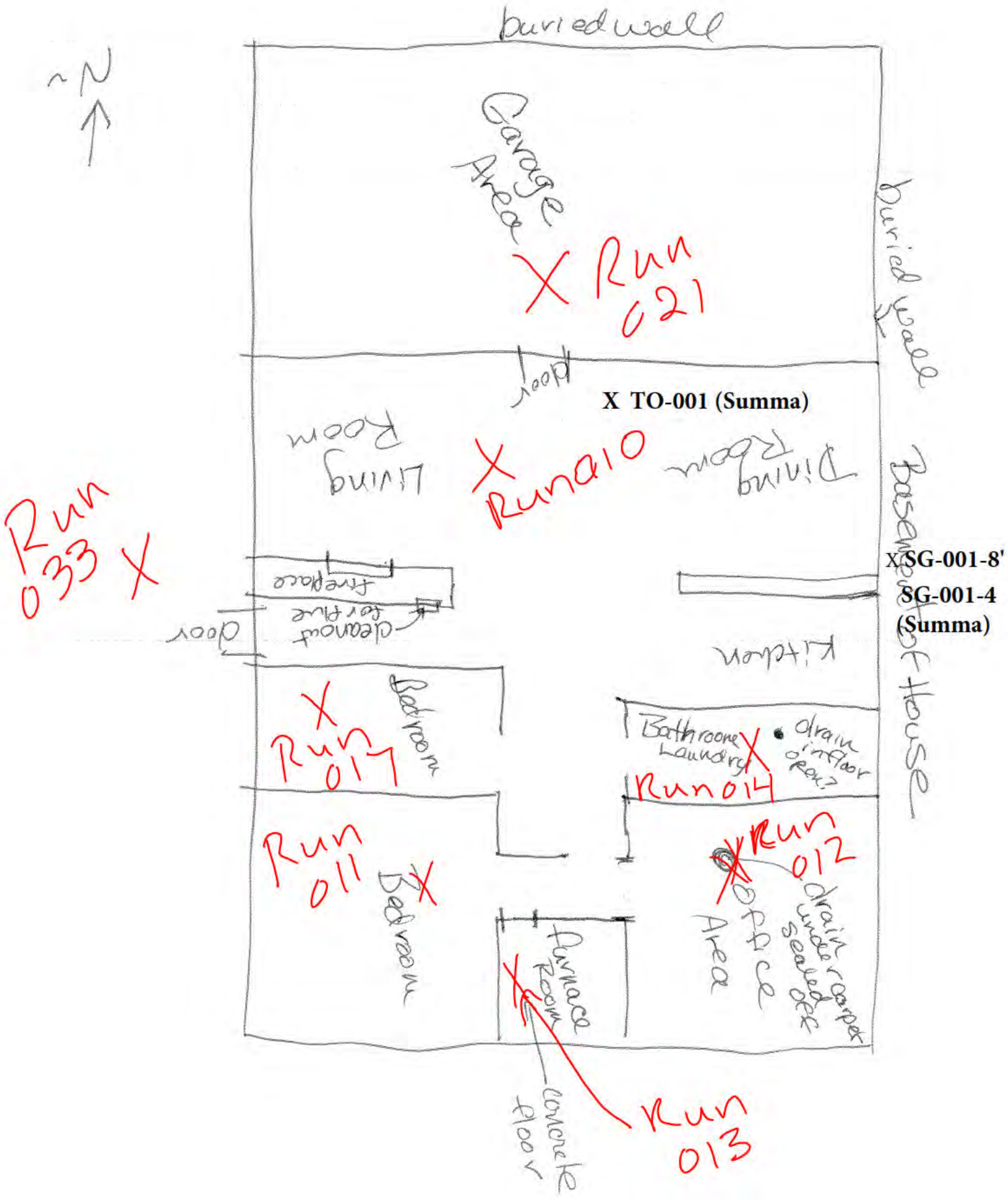
Completed by: ERR
Date: 12/09/2014

Comments

Elevation (ft-MSL) at edge of street: 4447.0'
Note: Main floor sketch attached as separate file - owner did not allow access during 12/09/2014 inspection.

Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.

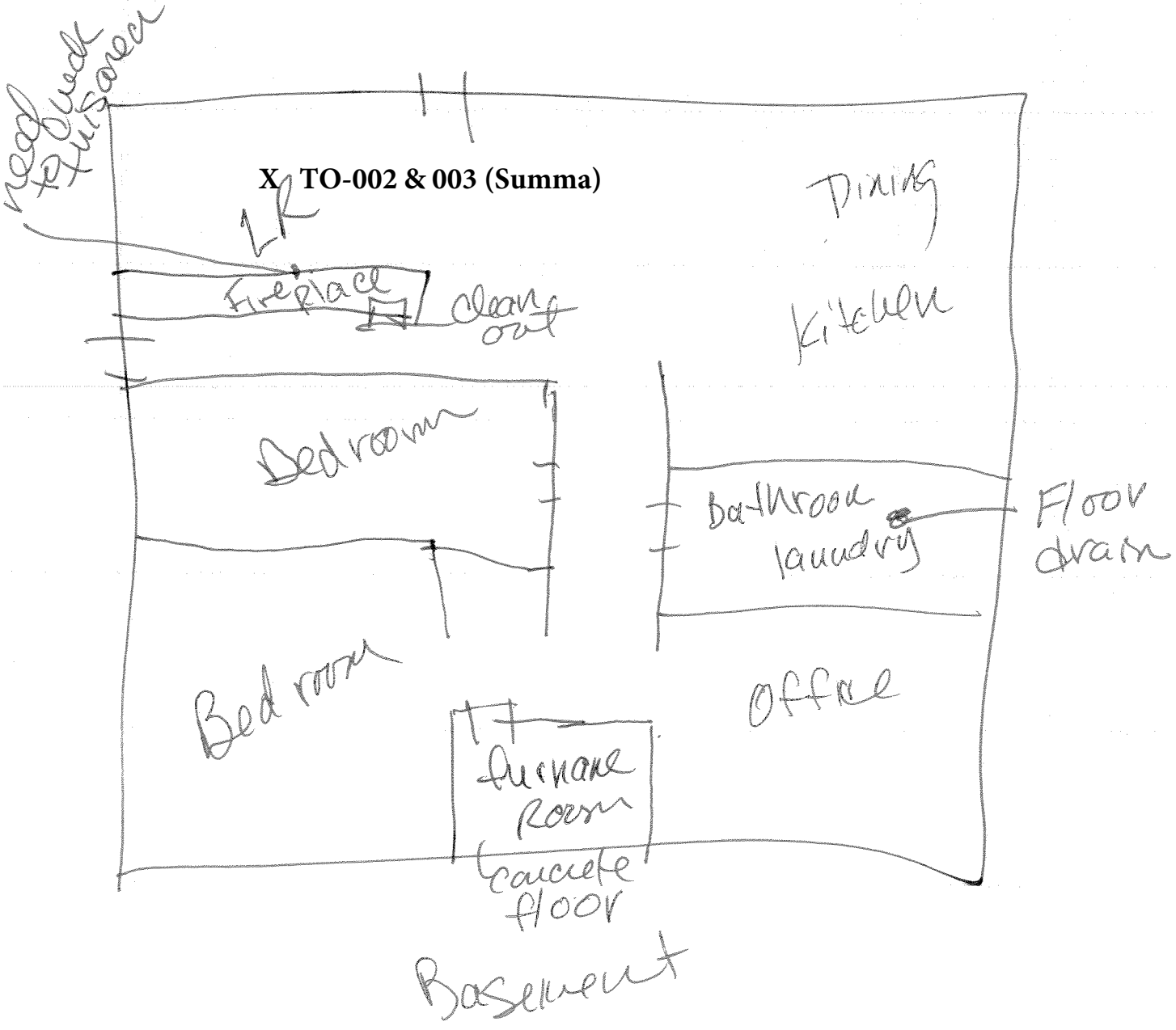
.0003-H 1190 Gilmer Drive 0003-H



0003-H

photos 1+2 garage
photo 3 drain in basement bathroom floor

SW corner of basement (room) has drain that was sealed off under carpet.
photo 4 - fp cleanout



PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 1/19/15 Time of Arrival: 0830

Weather Conditions: Cloudy

Temperature: 38 Barometric Pressure (inHg): 30.27 Wind Direction: Speed: Calm

Field Crew 1: er Role: HAPSITE Operator

Field Crew 2: ch Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? ( ) Yes (●) No

If yes, have the materials been removed? ( ) Yes ( ) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time	
001-005	01/18/2015	2130	
Instrument Performance Check Run Number	Time		○ Pass
NA - Tune check is pass/fail			○ Fail
Instrument Performance Check Re-run Number	Time		○ Pass
			○ Fail
CCV Run Number	Time		◉ Pass
001	1230		○ Fail
CCV Re-run Number	Time		○ Pass
			○ Fail

Operator's initials: err

Comments

sim100ppbvavilist_01192015. ccv results = vc=5.7, cis=5.3, tce=4.9, pce=5.1ppb

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time: 1309 End Time:

Location: front of house by entry to basement

Run Number: 022 Time: 1309

Run Number: Time:

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time | End Time

Comments

None - homeowner had removed most sources from house prior to test date.

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time 1238 End Time 1248

Comments

basement bathroom, floordrain laundry shoot , basement fireplace cleanout - No tics above background

Pictures

already have picture of floor drain and fire place clean out, laundry shoot file name =WIN_20150119_125847

PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	0850	End Time	1306		
Room/area	living,dining room/LIV	Run Number	002	Time	0850
Room/area	kitchen/KIT	Run Number	003	Time	0859
Room/area	upstairs bathroom/BA1	Run Number	004	Time	0907
Room/area	master bedroom/MBR	Run Number	005	Time	0915
Room/area	master bathroom/MBA	Run Number	006	Time	0923
Room/area	office/OFC	Run Number	007	Time	0931
Room/area	upstairs bedroom/BR1	Run Number	008	Time	0940
Room/area	entry hallway/ENT	Run Number	009	Time	0948
Room/area	basement living kitchen dining/OCL	Run Number	010	Time	1007
Room/area	basement bedroom south /BR2	Run Number	011	Time	1015

Comments

basement office /OFC, run# 012, time=1023; furnace room/FUR, run#013, time=1032; basement bathroom/BA2, run#014, time=1040, basement bedroom time=1144, garage, run #021, time=1300

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time 1403 End Time 1518 Room/Area fan in front door upstairs, hapsite in basement near door to c

T=	5	CFM	755	Pascals	-5.2	Run No.	023	Time	1408
T=	10	CFM	763	Pascals	-5.0	Run No.		Time	1413
T=	15	CFM	798	Pascals	-5.3	Run No.	024	Time	1418
T=	20	CFM	785	Pascals	-4.8	Run No.	025	Time	1423
T=	25	CFM	786	Pascals	-5.5	Run No.		Time	1428
T=	30	CFM	806	Pascals	-5.4	Run No.	026	Time	1433
T=	35	CFM	799	Pascals	-5.3	Run No.		Time	1438
T=	40	CFM	797	Pascals	-5.0	Run No.		Time	1443
T=	45	CFM	800	Pascals	-5.4	Run No.	028	Time	1448
T=	50	CFM	757	Pascals	-5.3	Run No.	029	Time	1453
T=	55	CFM	776	Pascals	-5.1	Run No.		Time	1458
T=	60	CFM	803	Pascals	-5.2	Run No.	030	Time	1503
T=	65	CFM	789	Pascals	-5.2	Run No.		Time	1508
T=	70	CFM	801	Pascals	-5.4	Run No.	031	Time	1513
T=	75	CFM	769	Pascals	-5.1	Run No.	final reading, shut down	Time	1518

Comments

Ambient pressure prior to test = -1.4 pascals. 2.5 air volumes of house is =55125 cubic ft. actual volume removed =58875 cubic feet

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time: 1532 End Time: 1624 Room/Area: fan in front door upstairs, hapsite

T=	5	CFM	1097	Pascals	5.2	Run No.	034	Time	1537
T=	10	CFM	1113	Pascals	6.3	Run No.	035	Time	1542
T=	15	CFM	1120	Pascals	6.6	Run No.	036	Time	1547
T=	20	CFM	1111	Pascals	6.7	Run No.		Time	1552
T=	25	CFM	1106	Pascals	5.4	Run No.	037	Time	1557
T=	30	CFM	1107	Pascals	5.8	Run No.	038	Time	1602
T=	35	CFM	1111	Pascals	6.5	Run No.		Time	1607
T=	40	CFM	1101	Pascals	5.1	Run No.		Time	1612
T=	45	CFM	1101	Pascals	5.6	Run No.	039	Time	1617
T=	50	CFM	1109	Pascals	4.6	Run No.	040	Time	1622
T=	55	CFM	1107	Pascals	5.0	Run No.	final reading shut down	Time	1624
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

2.5 air volumes of house is=55125 cubic ft. actual volume removed =57,564

PART J
SUMMA CANISTERS

Location/ Area: Main Level Living/Dining Area

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0003H-TO-001-LIV	0162	04/08/2015	09:45	26"	04/09/2105	09:30	2"

Location/ Area: Basement Kitchen/Dining/Living Area (Open)

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0003H-TO-002-BAS	0221	04/08/2015	09:50	28"	04/08/2015	09:45	1"

Location/ Area: Duplicate Sample of TO-002-BAS

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0003H-TO-003-BBB	0122	04/08/2015	10:00	24"	04/08/2015	09:40	0.5"

Location/ Area: Soil Gas Sample Point - Rear of House

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0003H-SG-001-4'	0144	04/08/2015	12:00	26"	04/08/2015	11:45	1"

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

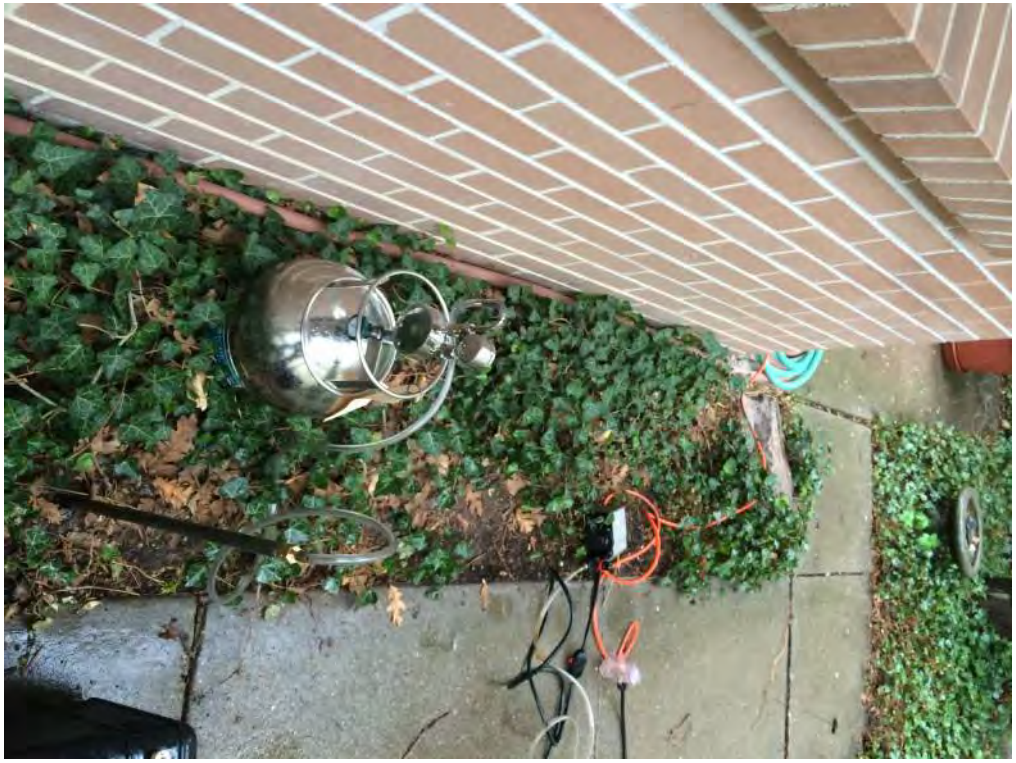
Photos:0003H-Summa SG-001-4'.jpg; IMG_0982_0003H-TO-001-LIV.JPG; IMG_0983_0003H-TO-002 & 003-BAS.JPG

Comments

Initial Testing with Hapsite indicated there was a potential indoor source for TCE, at the VAs request, summa canisters were placed on main level and in basement living areas to confirm results.
The soil gas confirmation sample was collected since the site was deemed a location near, if not within the PCE plume area, and suitable for a confirmation sample in accordance with the QAPP and Ammendment I.


2015/04/09 09:24


2015/04/09 09:26



PART K
SOIL GAS

Date	01/19/2015	Time	11:45	Sample Depth	8		
Latitude	40.748233	Longitude	-111.855892			Elevation	4459
Run No	020 (SG-001-8')	Run Time	1200			Vacuum (in/Hg)	1

Comments

Rear (north) of home, adjacent to foundation near kitchen window.

0003-H

Dec 9th
1:00

12/4

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

ACADEMIC/COMMERCIAL/INDUSTRIAL BUILDING QUESTIONNAIRE

Indoor Air Assessment Survey

Date: 11-19

1. Contact

   Address

   Phone 1

2. What is

3. Are you
   this Bui
   Owner

   Addres

   Phone 1:_____ Phone 2:_____ Cell Phone: _____

4. Total number of occupants/persons at this location? 4
   Number of Children NONE Ages N/A

5. How long have you occupied this location? 39 yrs
   How days per week is building occupied? 7
   How hours per day is building occupied? 20 to 24

General Building / Structure Description

6. Type of Building/Structure (check only one): Single Business ☐, Multiple Businesses ☑,
   Other Single family home

7. Building/Structure Description:
   Number of floors: 2 Area /square footage of main or ground floor: 1500 square feet
   Basement ☒ Area /square footage of Basement: 1200 square feet
   Crawlspace ☐ Area /square footage of Crawlspace:_____ square feet
   Partial crawlspace/basement ☐ % of each _____
   Slab on grade ☐ Area /square footage of Slab on grade:_____ square feet
   Other ☐ _____

8. Age of Building/Structure: 49 years, Not sure/Unknown ☐

9. General Above-Ground Building/Structure construction (check all that apply):
   Wood ☐, Brick ☒, Concrete ☒, Cement block ☐, Other ☐ _____

10. Foundation Construction (check all that apply):
    ☐

0003 - H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

11. Do you have private well ☐ or cistern ☐ ? NO
If yes, please describe location, use and current condition_____

12. Do you have a septic system? Yes ☐ No ☒ Not used ☐ Unknown ☐
If yes, what is construction type?_____
Where is it located? _____
When was the last time it was serviced?_____
Do you (or have you ever) use (d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your home? (pond) ditch, etc.) Yes ☑ No ☐

Basement Description (please check all boxes that apply):

14. Is the basement finished ☐ or unfinished ☑ ?

15. If finished, how many rooms are in the basement? _____
What are rooms used for? Bedrooms ☐ Family room ☐ Storage ☒
Other_____

16. If not finished, do you plan on finishing in the future? Yes ☐ No ☐ maybe

17. Is the basement floor (check all that apply) concrete ☒, tile ☐, carpeted ☐, dirt ☒,
other ☐ _____

18. Are the basement walls poured concrete ☑, cement block ☐, stone ☐, wood ☐,
Brick ☐, other ☐ _____

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☑
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less that 1 time/year) ☐
No ☐

Describe the moisture problem High humidity except when furnace is running in colder months

20. .Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☑
No ☐

21. Does the basement have any of the following? Floor cracks ☒, Wall cracks ☐, Sump ☐,
Floor drain ☒, Other hole/opening in floor ☐
describe_____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

11. Do you have private well ☐ or cistern ☐ ?
If yes, please describe location, use and current condition No

12. Do you have a septic system? Yes ☐ No ☒ Not used ☐ Unknown ☐
If yes, what is construction type?
Where is it located?
When was the last time it was serviced?
Do you (or have you ever) use(d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your Building? (pond, ditch, etc.) Yes ☐ No ☒

Basement Description (please check all boxes that apply):

14. Is the basement finished ☒ or unfinished ☐ ?

15. If finished, how many rooms are in the basement? 4
What are rooms used for? Office ☐ Shop ☐ Storage ☐
Other Family Room + Bed Rm

16. If not finished, do you plan on finishing in the future? Yes ☐ No ☐

17. Is the basement floor (check all that apply) Concrete ☒, Tile ☐, Carpeted ☒, Dirt ☐,
Other ☐

18. Are the basement walls poured Concrete ☒, Cement block ☐, Stone ☐, Wood ☐,
Brick ☒, Other ☐

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☒
No ☐

Describe the moisture problem Some Times After A Heavy Rain One Of The Window Wells Will Leak Into The Basement Bath Room / Laundry Room

20. Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☐
No ☒

21. Does the basement have any of the following? Floor cracks ☒, Wall cracks ☒, Sump ☐,
Floor drain ☒, Other hole/opening in floor ☐
describe

0003-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

22. Are any of the following used or stored in the basement (check all that apply):
Paint ☒ Paint Stripper/remover ☒ Paint thinner ☒ Metal degreaser/cleaner ☒
Gasoline ☒ Diesel fuel ☒ Solvents ☐ Glue ☒ Laundry spot removers ☒
Drain cleaners ☒ Pesticides ☒ Other equipment with fuel tanks (chain saw, lawn mower, snow blower, etc.) ☐ Other products with/containing Volatile Organic Compounds, describe:

_____

_____

23. Has the Building / structure recently (within the last six months) had any painting or remodeling?
Yes ☒ No ☐
If yes, specify what was done, where in the Building, and what month:
GARAGE DOORS SEPT 2014

_____

24. Has new carpeting been installed in the Building / structure within the last year? Yes ☐ No ☒
If yes, when and where? _____

25. Do any occupants / employees regularly conduct or work in beauty / hair-dressing business?
Yes, work at a beauty / hair-dressing business ☐
Yes, store supplies for beauty / hair-dressing business ☐ Distance to sample point: _____
Yes, building contains beauty / hair-dressing business ☐ Distance to sample point: _____
Yes, building is near beauty / hair-dressing business ☐ Distance to sample point: _____
No ☒

26. Do any occupants / employees / anyone regularly use or work or conduct a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) ☐
Yes, use dry-cleaning infrequently (monthly or less) ☐
Yes, work at a dry cleaning service ☐
Yes, building contains or is near dry cleaning service ☐ Distance to sample point: _____
No ☒

27. Do any occupants / employees / anyone in the Building / structure use solvents at work?
Yes ☐ If yes, how many persons?
No ☒ If no, go to question 28

28. If yes for question 26, are the work clothes washed at Building? Yes ☐ No ☐

29. Does Building / Structure contain a washer/dryer? Yes ☒ No ☐
Where are they located?
Basement ☒
Upstairs ☐
Ground floor ☒
Garage ☐
Other, please specify ☐ _____

30. If Building / Structure contains a dryer, is it vented to the outdoors? Yes ☒ No ☐

31. What type (s) of Building heating do you have (check all that apply)
Fuel type: Gas ☒, Oil ☐, Electric ☐, Wood ☐, Coal ☐,
Other ☐ _____

Heat conveyance system: Forced hot air ☒ Forced hot water ☐ Steam ☐
Radiant floor heat ☐ Wood Stove ☐ Coal furnace ☐ Fireplace ☐
Other ☐ _____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

32. Does Building/Structure have (or had in the past) a storage tank for storage of gasoline fuel oil ☐, propane ☐ No If yes, where is/was it located? Never

How is/was the tank filled? _____

Is there staining near the tank? Yes ☐ No ☒

33. Does Building/Structure have air conditioning? Yes ☒ No ☐
Central air conditioning ☒
Window air conditioning unit (s) ☐
Other (please specify) _____

34. Does Building / Structure have any: Room fans ☐, Ceiling fans ☒ ONE IN BATH RM, Attic fan ☐

35. Does Building / Structure ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☒ No ☐

36. Has Building / Structure had termite or other pesticide treatment? Yes ☐ No ☒ Unknown ☐
If yes, please specify type of pest controlled _____
and approximate date of service _____

37. Water heater type: Gas ☒, Electric ☐, by Furnace ☐,
Other (please describe) _____

38. Water heater location: Basement ☒, Upstairs ☐, Ground Floor ☒, Attic ☐,
Other _____

39. Does Building/Structure have any cooking appliances? Electric ☒, Gas ☐,
Other _____

40. Is there a stove exhaust hood present? Yes ☒ No ☐
Does it vent to the outdoors? Yes ☐ No ☒ ATTIC

41. Smoking in Building/Structure:
None ☒, Rare (only guests) ☐, Moderate (occupants, light smokers) ☐,
Heavy (at least one heavy smoker in Building/Structure) ☐

42. If yes to question 40, what do they smoke?
Cigarettes ☐, Cigars ☐, Pipe ☐, Other ☐

43. Does Building/Structure regularly contain/use air fresheners? Yes ☐ No ☒

44. Does anyone in the Building have indoor Building hobbies or crafts involving:
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☐, spray paint ☐,
wood finishing ☐, Other ☐ No

0003-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

45. General Building / Structure use of industrial / office /consumer products (circle as appropriate).
Assume that: Never = never used, Hardly ever = less that once/month,
Occasionally = about once/month, Regularly = about once/week,
and Often = more that once/week.

Product	Frequency of Use				
Solvents	Never	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	Never	Hardly ever	Occasionally	Regularly	Often
Insecticides	Never	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	Occasionally	Regularly	Often
Window cleaners	Never	Hardly ever	Occasionally	Regularly	Often
Ink / Toner Cartridge	Never	Hardly ever	Occasionally	Regularly	Often
Glue / Adhesives	Never	Hardly ever	Occasionally	Regularly	Often
Paint	Never	Hardly ever	Occasionally	Regularly	Often
Petroleum Fuel	Never	Hardly ever	Occasionally	Regularly	Often

46. Please check weekly Building/Structure maintenance, janitorial, and cleaning practices:
Dusting ☒
Dry Sweeping ☒
Vacuuming ☒
Polishing (furniture, etc.) ☐
Washing/waxing floors ☐
Other (describe) ☐

47. Other comments including items / subjects not covered in this questionnaire yet an issue or concern for the Building / Structure:

0003-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

48. **Chemical Inventory/Summary**

Chemical/Chemical Product (consumer name)	Amount present in Building / Structure

a) _____

b) _____

c) _____

d) _____

e) _____

f) _____

g) _____

h) _____

i) _____

j) _____

k) _____

l) _____

m) _____

n) _____

o) _____

See attched typed list
pg 8

7/8

0003-H

For: VASLCHCS (00PA) 500 Foothill Dr., SLC, UT 84148

Chemical Inventory Summary - Edwin and Anita (Davis) Cannon
Location of Home: 1190 Gilmer Drive, Salt Lake City, Utah 84105-1544

Garage:

Chemical Product	Consumer Name	Amt. Present
Unleaded gasoline (for mower)	Texaco	1 gallon
30 Wt. Motor Oil (for mower)		1 quart
10W-30 Motor Oil (Automotive)		10 quarts
Anti-freeze (Automotive)	Peak 50/50	5 gallons
Stain remover	Rug Doctor	1 quart
Glass cleaner	Kroger	1 quart
Plywood sealer	Safecoat	1 quart
Windshield washer fluid (Automotive)	Peak	1 gallon
Water sealer (wood)	Thompson	1 quart
Paint thinner	Klean Strong	1 quart
WD-40		small
Spray Paint (cannned)	5 cans	12oz
Tripple Expanding Foam	Touch n Foam	12oz
Insecticide	Hot Shot	12oz
Tire Cleaner	Meguiars	19oz
Car Wax	Various	
Rubbing Compound	3M	16oz
Kerosine (for emergecy space heater)		10 gallons
Used Motor Oil		3 gallons

Household Laundry

Chemical Product	Consumer Name	Amt. Present
Furniture Polish (Spray)	Pledge	9.7floz
Bleach		60floz
Laundry Detergent (Liquid)	Clorox2	33floz
Laundry Detergent (Liquid)	Arm&Hammer	7fl5oz
Laundry Detergent (Liquid)	Woolite	16floz
All purpose cleaner (liquid)	Lysol	32floz
Leather Protector (spray)	Scotch Guard	6floz
Drain opener	Ace	64floz

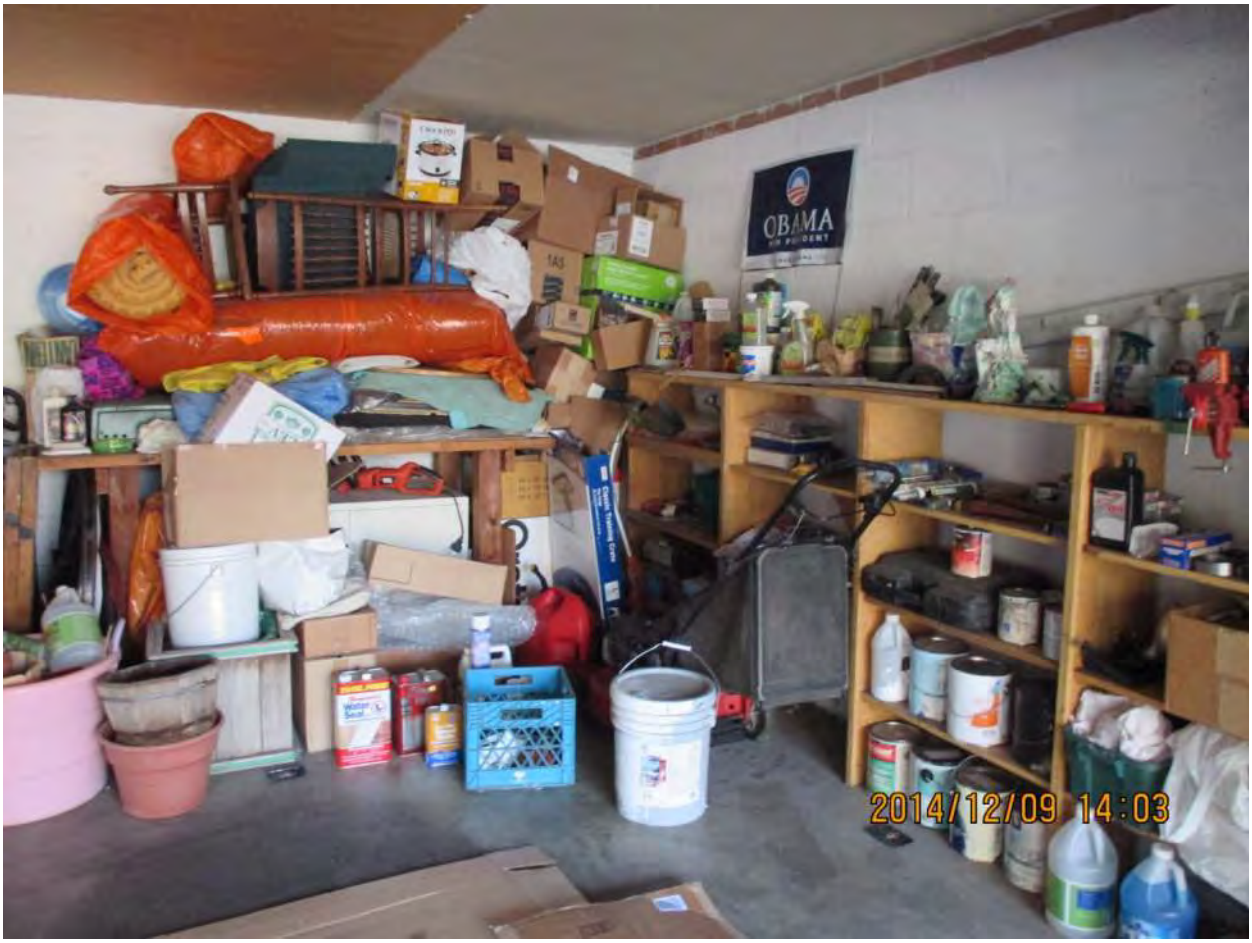
PHOTO LOG FOR SLC VA CERCLA SITE

PARCEL IDENTIFIER: 0003-H **ADDRESS** 1190 Gilmer Drive

DATE: 12/9/14

Number	Camera Image#	Description of Photo
1	100-0020	Chemical storage area in garage.
2	100-0021	Chemical storage area in garage.
3	100-0022	Floor drain in basement bathroom.
4	100-0023	Cleanout for basement fireplace flue
5	100-0024	Slope near corner of garage
6	100-0025	Retaining wall behind house
7	100-0026	Area along retaining wall base
8	100-0027	Plastic bag covering old drain that goes under house - Gutters no longer connected.
9	100-0028	Slope along south end of house
10	100-0029	Terraced area at top of retaining wall.
11	100-0030	Terraced area at top of retaining wall.
12	100-0031	View along top of retaining wall
13		
14		
15		
16		
17		
18		
19		
20		
21		

0020



0021



0022



0023



0024



0025



0026



0027



0028



0029



0030



0031



PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0004-H
Street Address: 1160 E. 700 So.
ZIP:
Property Contact:
Tel #:
Latitude: 40.753892
Longitude: -111.857711
Age of Property: 90 years
Number of Levels: 1
Basement? (•) Yes ( ) No
Basement Habitable? ( ) Yes (•) No
Sump? ( ) Yes ( ) No

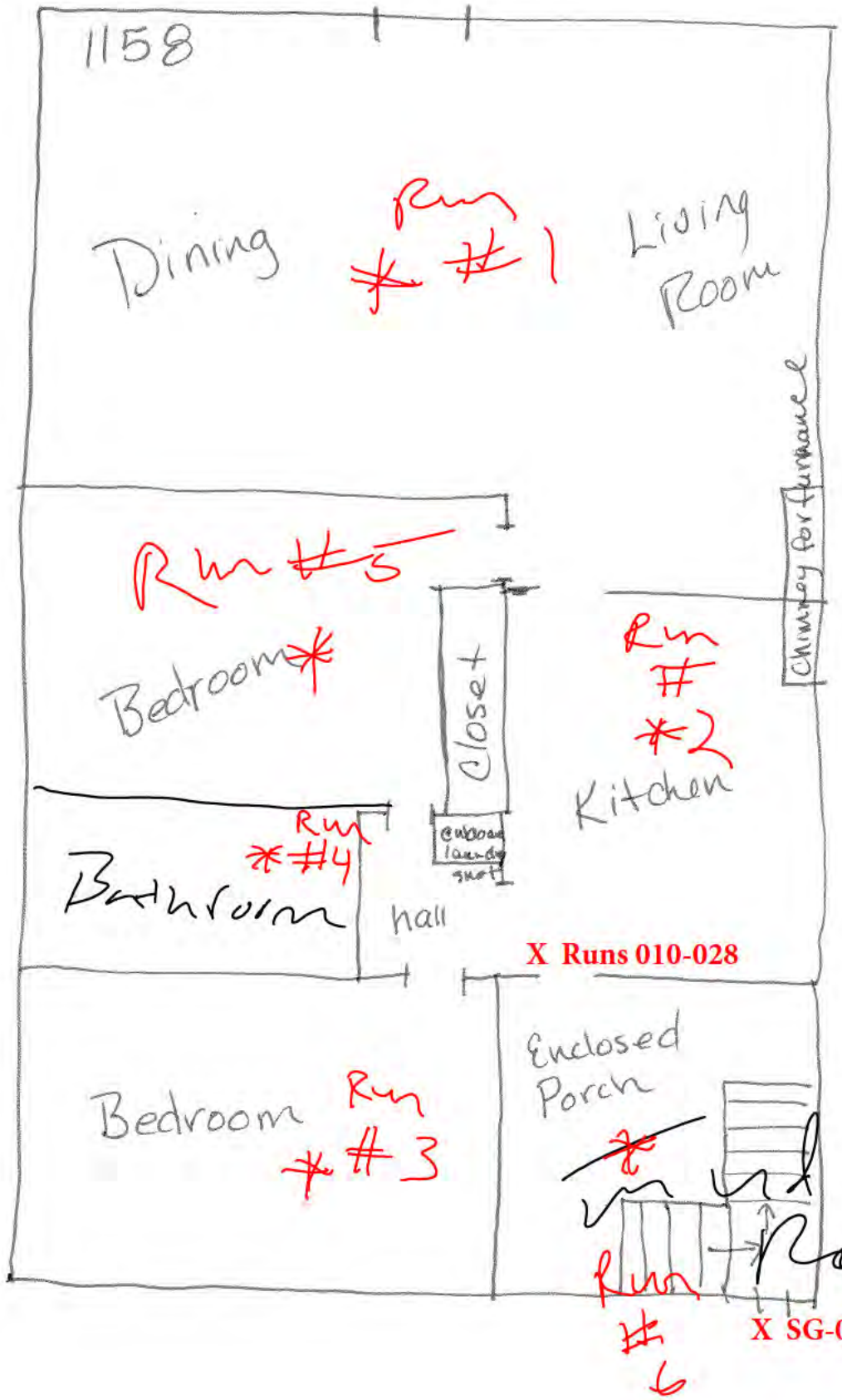
Completed by: ERR
Date: 12/11/2014

Comments

South half of duplex with partial basement and soil floor crawl space. GPS elevation at sidewalk in front of house is 4486.4
Sample IDs on the attached sketches refer to the Hapsite Run Number on data downloads - #1 = _001 (aka formal sample ID: A_0004H_011315_IA001).

Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.

0004-H 1158/1160 E. 700 South 0004-H



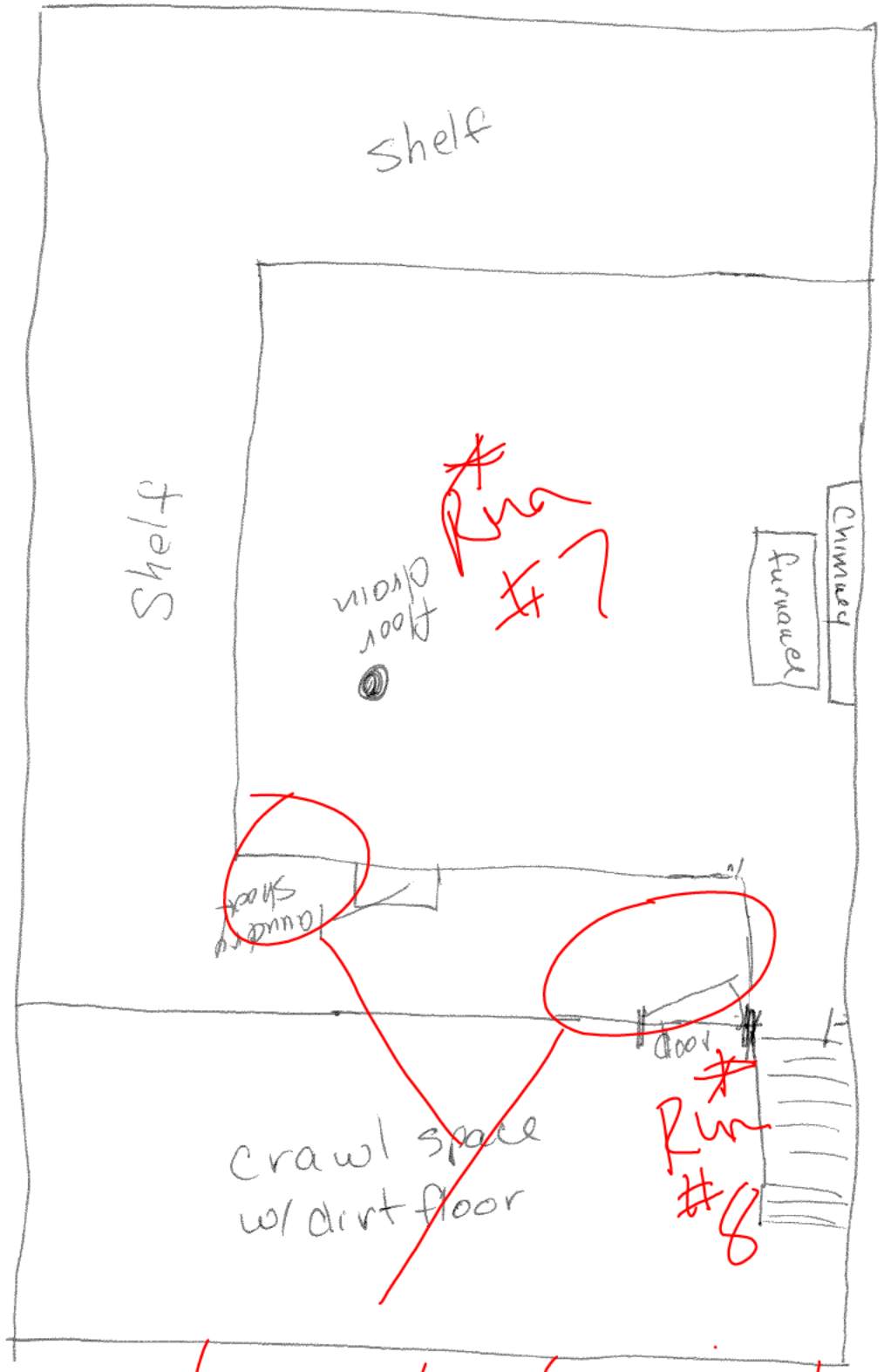
1160 is mirror image of 1158

Basement is shelf basement.

Back bedroom + porch has dirt floor crawl space under them that connects the 2 units

0004-H

0004-H 1158/1160 E. 700 South
Basement area



1160 is mirror image.

Crawl spaces are connected.

Locations of paint, cleaners & Paint Thinner

PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 1/13/15 Time of Arrival: 8:40

Weather Conditions: Cloudy

Temperature: 33 Barometric Pressure (inHg): 30.24 Wind Direction: W Speed: Calm

Field Crew 1: ac Role: HAPSITE Operator

Field Crew 2: cmh Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? ( ) Yes (●) No

If yes, have the materials been removed? ( ) Yes ( ) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

recently refinished furniture in basement

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time
001-005	1/13/15	6:00

Instrument Performance Check Run Number	Time	
Tune check is not Run - is P/F by machine	09:00	(•) Pass ( ) Fail

Instrument Performance Check Re-run Number	Time	
NA		( ) Pass ( ) Fail

CCV Run Number	Time	
032 -End of day CCV of 1 ppb	17:39	( ) Pass (•) Fail

CCV Re-run Number	Time	
034 - End of day CCV of 5 ppb	18:07	( ) Pass (•) Fail

Operator's initials: ac

Comments

The CCVs were run at the end of the day using the morning standard. CIS, TCE, and PCE were within the acceptable tolerance range. The exception was vinyl chloride which was biased slightly high.

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time: 15:34 End Time: 15:38

Location: front of house on sidewalk

Run Number: 030 (OU_001_OUT) Time: 15:34

Run Number: Time:

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time | End Time

Comments

after analysis run in each room there were no notable detections in concentrations that survey mode would be able to detect (low ppb). Ran ambient sample for basement adjacent to stored paint cans and thinners that were observed by sampling team (and not previously reported by owner.

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time 11:05 End Time 11:10

Comments

background tic count is 28000-30000. no detections (or increase in tics) in the basement or soil floor crawl space.

Pictures

2 photos of cleaning chemicals, paint, and paint thinners in the basement
photo of floor drain and crack on north part of shelf near floor

PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	9:30	End Time	11:00		
Room/area	living/dining room	Run Number	001 (IA001_LIV)	Time	9:30
Room/area	kitchen	Run Number	002 (IA002_KIT)	Time	9:37
Room/area	south bedroom	Run Number	003 (IA003_BR1)	Time	9:45
Room/area	bathroom	Run Number	004 (IA004_BA1)	Time	9:50
Room/area	north bedroom	Run Number	005 (IA005_BR2)	Time	10:05
Room/area	mudroom enclosed porch	Run Number	006 (IA006_MUD)	Time	10:14
Room/area	basement	Run Number	007 (IA007_BAS	Time	10:23
Room/area	crawlspace on basement under bedrooms	Run Number	008 (IA008_CRA)	Time	10:56
Room/area		Run Number		Time	
Room/area		Run Number		Time	

Comments

run # 001- cis fit of .89=0.18ppb, tce fit of .99=0.037ppb, pce fit of .99= .036 ppb; Run #002- tce fit of .98= 0.026ppb, pce fit of .99= .025ppb run #003- cis fit of .75=0.21ppb, tce fit of .99=0.019 , pce fit of .99=0.026ppb; Run #004- cis fit of .64=1.35ppb, tce fit of .99=0.019, pce fit of .99=0.022ppb; Run #005- cis fit of .67=0.22ppb, tce fit of .98=0.016ppb, tce fit of .99=.035ppb; Run #006- cis fit of .74=0.15ppb, tce fit of .99=0.015ppb, pce fit of .99=0.021ppb; Run #007- vc fit of .48=0.36ppb, cis fit of .79=0.092ppb, tce fit of .97=0.012ppb, pce fit of .99=0.017ppb

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time: 12:24 | End Time: 13:46 | Room/Area: upstairs hallway at Kitchen arch

T=	5	CFM	640	Pascals	-5.4	Run No.	010 (IA010_KIT)	Time	12:29
T=	10	CFM	648	Pascals	-5.1	Run No.		Time	12:34
T=	15	CFM	641	Pascals	-5.2	Run No.	011 (IA011_KIT)	Time	12:39
T=	20	CFM	622	Pascals	-5.0	Run No.		Time	12:44
T=	25	CFM	637	Pascals	-5.2	Run No.	012 (IA012_KIT)	Time	12:49
T=	30	CFM	621	Pascals	-5.2	Run No.		Time	12:54
T=	40	CFM	639	Pascals	-5.2	Run No.	013 (IA013_KIT)	Time	13:04
T=	50	CFM	643	Pascals	-5.1	Run No.	014 (IA014_KIT)	Time	13:14
T=	60	CFM	666	Pascals	-5.1	Run No.	015 (IA015_KIT)	Time	13:24
T=	70	CFM	653	Pascals	-5.3	Run No.	016 (IA016_KIT)	Time	13:34
T=	80	CFM	656	Pascals	-5.0	Run No.	017 (IA017_KIT	Time	13:44
T=	82	CFM	656	Pascals	-5.1	Run No.	018 (IA018_KIT)	Time	13:46
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

bldg baseline prior to start -1.7 pascals, air door installed in back door of unit. 2.5 air volumes is 50000 cubic ft, calculated volume removed based off air door interval readings = 52245 cubic ft - shut off blower at 13:46.

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time: 14:02 | End Time: 15:15 | Room/Area: in halfway at Kitchen entry

T=	5	CFM	698	Pascals	5.2	Run No.	020 (IA020_KIT)	Time	14:07
T=	10	CFM	713	Pascals	4.7	Run No.	021 (IA021_KIT_	Time	14:12
T=	15	CFM	703	Pascals	5.0	Run No.	022 (IA022_KIT)	Time	14:17
T=	20	CFM	714	Pascals	5.1	Run No.		Time	14:22
T=	25	CFM	706	Pascals	4.9	Run No.	023 (IA023_KIT	Time	14:27
T=	30	CFM	680	Pascals	5.1	Run No.		Time	14:32
T=	35	CFM	718	Pascals	5.2	Run No.	024 (IA024_KIT	Time	14:37
T=	40	CFM	729	Pascals	5.3	Run No.	025 (IA025_KIT	Time	14:42
T=	45	CFM	727	Pascals	5.0	Run No.		Time	14:47
T=	50	CFM	732	Pascals	5.3	Run No.	026 (IA026_KIT)	Time	14:52
T=	55	CFM	728	Pascals	5.0	Run No.		Time	14:57
T=	60	CFM	723	Pascals	5.1	Run No.	027 (IA027_KIT)	Time	15:02
T=	65	CFM	732	Pascals	5.0	Run No.	028 (IA028_KIT)	Time	15:07
T=	70	CFM	736	Pascals	5.2	Run No.		Time	15:12
T=	73	CFM	713	Pascals	5.5	Run No.	shut down	Time	15:15

Comments

Hapsite Run 019 (IA019_KIT was indoor ambient sample during switch over from negative to positive pressure testing. 2.5 air volumes is 50000 cubic ft, about 51903 cubic feet cycled through house during positive pressurization

PART J
SUMMA CANISTERS

Location/ Area: NA

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

Comments

PART K
SOIL GAS

Date	01/13/2015	Time	15:20	Sample Depth	4 & 7		
Latitude	40.753817	Longitude	-111.858781			Elevation	4486
Run No	029/031	Run Time	1600			Vacuum (in/Hg)	2

Comments

SG-001-4' and SG-001-7' - Located at rear (south) of duplex, adjacent to the foundation at rear entry.

0004-H

Thurs. Dec 11, 9:0

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

OCCUPIED DWELLING QUESTIONAIRE

Indoor Air Assessment Survey

Date: 11/29/14

1. [redacted]

mailing address

2. [redacted] ETIBER

3. [redacted] of SEE ABOVE

Physical Location

4. Total number of occupants/persons at this location? 4

Number of Children 1 Ages 3

5. How long have you lived at this location? OWNED 17 YEARS

General Home Description

6. Type of Home/Structure (check only one): Single Family Home ☐, Duplex ☒, Apartment ☐, Townhouse ☐ Other _____

7. Home/Structure Description:
Number of floors: ONE
Basement ☑
Crawlspace ☑
Partial crawlspace/basement ☒ % of each 20%
Slab on grade ☐
Other ☒ PARTIAL BASEMENT

8. Age of Home/Structure: 90 years, Not sure/Unknown ☐

9. General Above-Ground Home/Structure construction (check all that apply):
Wood ☒, Brick ☒, Concrete ☐, Cement block ☐, Other ☐ _____

10. Foundation Construction (check all that apply):
Concrete Slab ☐
Fieldstone ☐
Concrete block ☐
Elevated above ground/grade ☐
Other ☒ POURED CONCRETE

* Dirt area under stairs are connected between units.

0004-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

11. Do you have private well ☐ or cistern ☐ ?
If yes, please describe location, use and current condition N/A

12. Do you have a septic system? Yes ☐ No ☒ Not used ☐ Unknown ☐
If yes, what is construction type?
Where is it located?
When was the last time it was serviced?
Do you (or have you ever) use (d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your home? (pond, ditch, etc.) Yes ☐ No ☒

Basement Description (please check all boxes that apply):

14. Is the basement finished ☐ or unfinished ☒ ?

15. If finished, how many rooms are in the basement? N/A
What are rooms used for? Bedrooms ☐ Family room ☐ Storage ☐
Other

16. If not finished, do you plan on finishing in the future? Yes ☐ No ☒

17. Is the basement floor (check all that apply) concrete ☒, tile ☐, carpeted ☐, dirt ☒,
other ☐

18. Are the basement walls poured concrete ☒, cement block ☐, stone ☐, wood ☐,
Brick ☐, other ☐

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less that 1 time/year) ☐
No ☒

Describe the moisture problem

20. .Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☐
No ☒

21. Does the basement have any of the following? Floor cracks ☐, Wall cracks ☐, Sump ☐,
Floor drain ☒, Other hole/opening in floor ☐
describe

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

22. Are any of the following used or stored in the basement (check all that apply):
Paint ☒ Paint Stripper/remover ☒ Paint thinner ☒ Metal degreaser/cleaner ☐
Gasoline ☐ Diesel fuel ☐ Solvents ☐ Glue ☐ Laundry spot removers ☒ Drain cleaners
☐ Pesticides ☐ Other equipment with fuel tanks (chain saw, lawn mower, snow blower,etc.,)

23. Have you recently (within the last six months) done any painting or remodeling in your home?
Yes ☒ No ☐
If yes, specify what was done, where in the home, and what month:
CERAMIC TILE INSTALLED IN 1/2 BATH

24. Have you installed new carpeting in your home within the last year? Yes ☐ No ☒
If yes, when and where?_____

25. Do you regularly use or work in a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) ☐
Yes, use dry-cleaning infrequently (monthly or less) ☐
Yes, work at a dry cleaning service ☐
No ☒

26. Does anyone in your home use solvents at work?
Yes ☐ If yes, how many persons?
No ☒ If no, go to question 28

27. If yes for question 26, are the work clothes washed at home? Yes ☐ No ☐

28. Where is the washer/dryer located?
Basement ☒
Upstairs utility room ☐
Kitchen ☐
Garage ☐
Use a Laundromat ☐
Other, please specify ☐ _____

29. If you have a dryer, is it vented to the outdoors? Yes ☒ No ☐

30. What type (s) of home heating do you have (check all that apply)
Fuel type: Gas ☒, Oil ☐, Electric ☐, Wood ☐, Coal ☐,
Other ☐_____

Heat conveyance system:
Forced hot air ☒
Forced hot water ☐
Steam ☐
Radiant floor heat ☐
Wood Stove ☐
Coal furnace ☐
Fireplace ☐
Other ☐ _____

0004-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

31. Does your home have (or had in the past) a storage tank for storage of: gasoline ☐ fuel oil ☐ propane ☐
If yes, where is/was it located? N/A
How is/was the tank filled?
Is there staining near the tank? Yes ☐ No ☐

32. Do you have air conditioning? Yes ☐ No ☒
Central air conditioning ☐
Window air conditioning unit (s) ☐
Other (please specify) EVAPORATIVE COOLERS

33. Do you use any of the following? Room fans ☐, Ceiling fans ☒, Attic fan ☐

34. Do you ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☐ No ☒

35. Has your home had termite or other pesticide treatment? Yes ☒ No ☐ Unknown ☐
If yes, please specify type of pest controlled TERMITES
And approximate date of service PRIOR TO 1994

36. Water heater type: Gas ☒, Electric ☒ by Furnace ☐,
Other (please describe) ONE EACH

37. Water heater location: Basement ☒ Upstairs utility room ☐, Garage ☐,
Other (please specify)

38. What type of cooking appliance do you have? Electric ☒ Gas ☒
Other (please describe) ONE EACH

39. Is there a stove exhaust hood present? Yes ☐ No ☒
Does it vent to the outdoors? Yes ☐ No ☐

40. Smoking in Home:
None ☒, Rare (only guests) ☐, Moderate (residents, light smokers) ☐,
Heavy (at least one heavy smoker in household) ☐

41. If yes to question 40, what do they smoke?
Cigarettes ☐ Cigars ☐
Pipe ☐ Other ☐

42. Do you regularly use air fresheners? Yes ☐ No ☒

43. Does anyone in the home have indoor home hobbies or crafts involving:
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☒
Spray paint ☐, wood finishing ☒, Other ☐

0004-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

44. General family/home use of consumer products (please circle appropriate).
Assume that: Never = never used, Hardly ever = less that once/month,
Occasionally = about once/month, Regularly = about once/week,
and Often = more that once/week.

Product	Frequency of Use				
Spray-on deodorant	Never	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	Never	Hardly ever	Occasionally	Regularly	Often
Insecticides	Never	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	Occasionally	Regularly	Often
Window cleaners	Never	Hardly ever	Occasionally	Regularly	Often
Nail polish remover	Never	Hardly ever	Occasionally	Regularly	Often
Hair sprays	Never	Hardly ever	Occasionally	Regularly	Often
Candles	Never	Hardly ever	Occasionally	Regularly	Often
Incense	Never	Hardly ever	Occasionally	Regularly	Often

45. Please check weekly household cleaning practices:

Dusting ☐
Dry sweeping ☒
Vacuuming ☒
Polishing (furniture, etc.) ☐
Washing/waxing floors ☐
Other (describe) ☐ _____

46. Other comments:

_____
_____
_____
_____
_____
_____
_____
_____

0004-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

47. Chemical Inventory/Summary

Chemical/Chemical Product (consumer name)	Amount present in home
a) HOUSEHOLD CLEANSERS (BOTHUMS)	SEVERAL BOTTLES
b) PAINT (1158)	10-12 QUART CANS.
c)	
d)	
e)	
f)	
g)	
h)	
i)	
j)	
k)	
l)	
m)	
n)	
o)	

PHOTO LOG FOR SLC VA CERCLA SITE

PARCEL IDENTIFIER: 0004-H **ADDRESS** 1158/1160 E. 700 South

DATE: 12/11/14

Number	Camera Image#	Description of Photo
1	100-0081	Back area of house 2 (1160) best area for pictures
2	100-0082	Drain in basement floor (1158)
3	100-0083	Sewer drain stack in basement (1158
4	100-0084	General basement area
5	100-0085	Cap at bottom of wall - exposed dirt
6	100-0086	Dumbwaiter/laundry shoot in basement (1158)
7	100-0087	storage area (to L of stairs) w/dirt floor
8	100-0088	laundry shoot (1158)
9	100-0089	laundry shoot area (1158) bottom drawer
10	100-0090	Bumpout is old chimney for furnace has flue pipe inside it.
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		

0081



0082



0083



0084



0085



0086



0087



0088



0089



0090



PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0005-H
Street Address: 613 S. 1200 E
ZIP: 84102

Property Contact:
Tel #:

Latitude: 40.755853
Longitude: 111.856370
Age of Property: 101 years

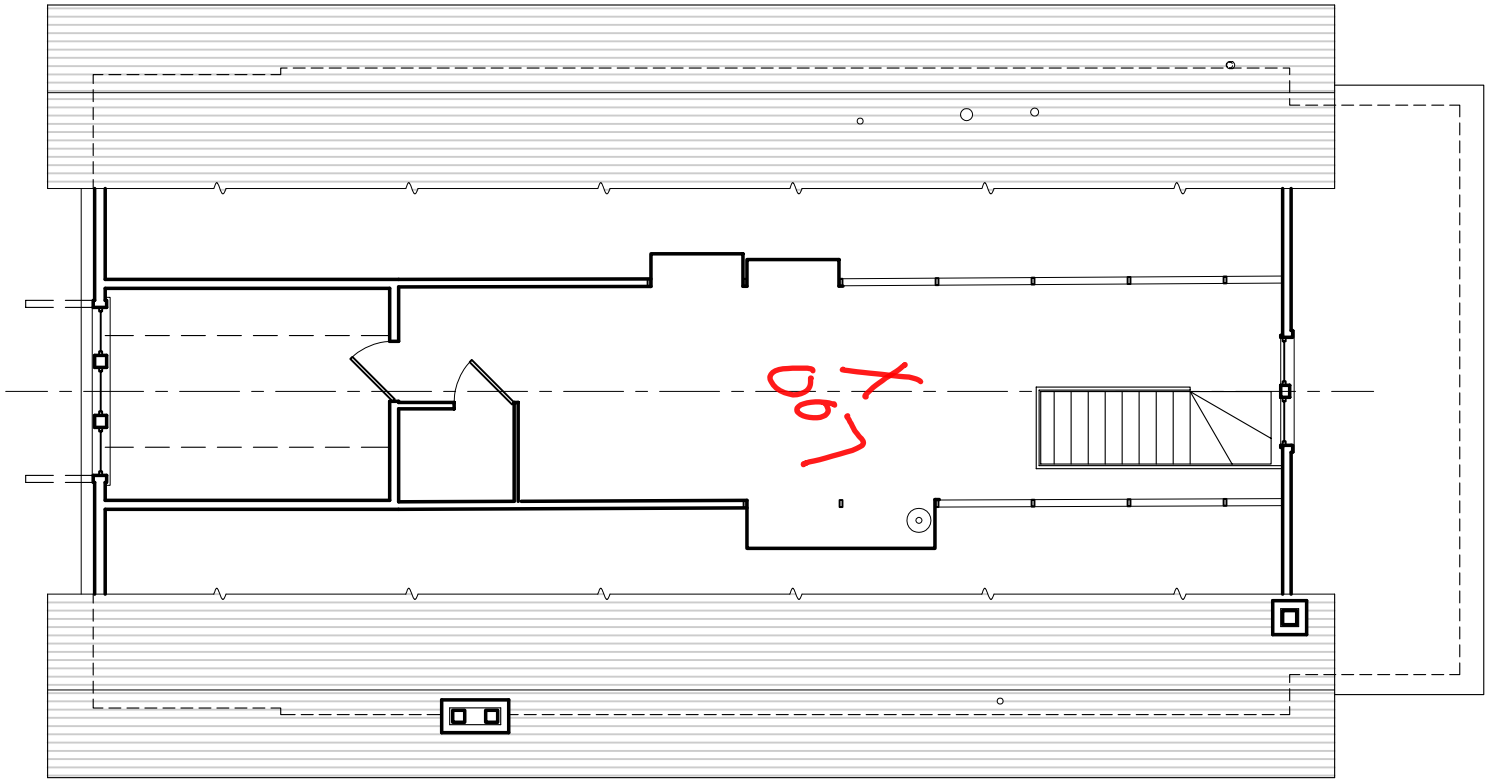
Number of Levels: 1
Basement? (•) Yes ( ) No
Basement Habitable? (•) Yes ( ) No
Sump? ( ) Yes (•) No

Completed by: ERR
Date: 11/18/2014

Comments

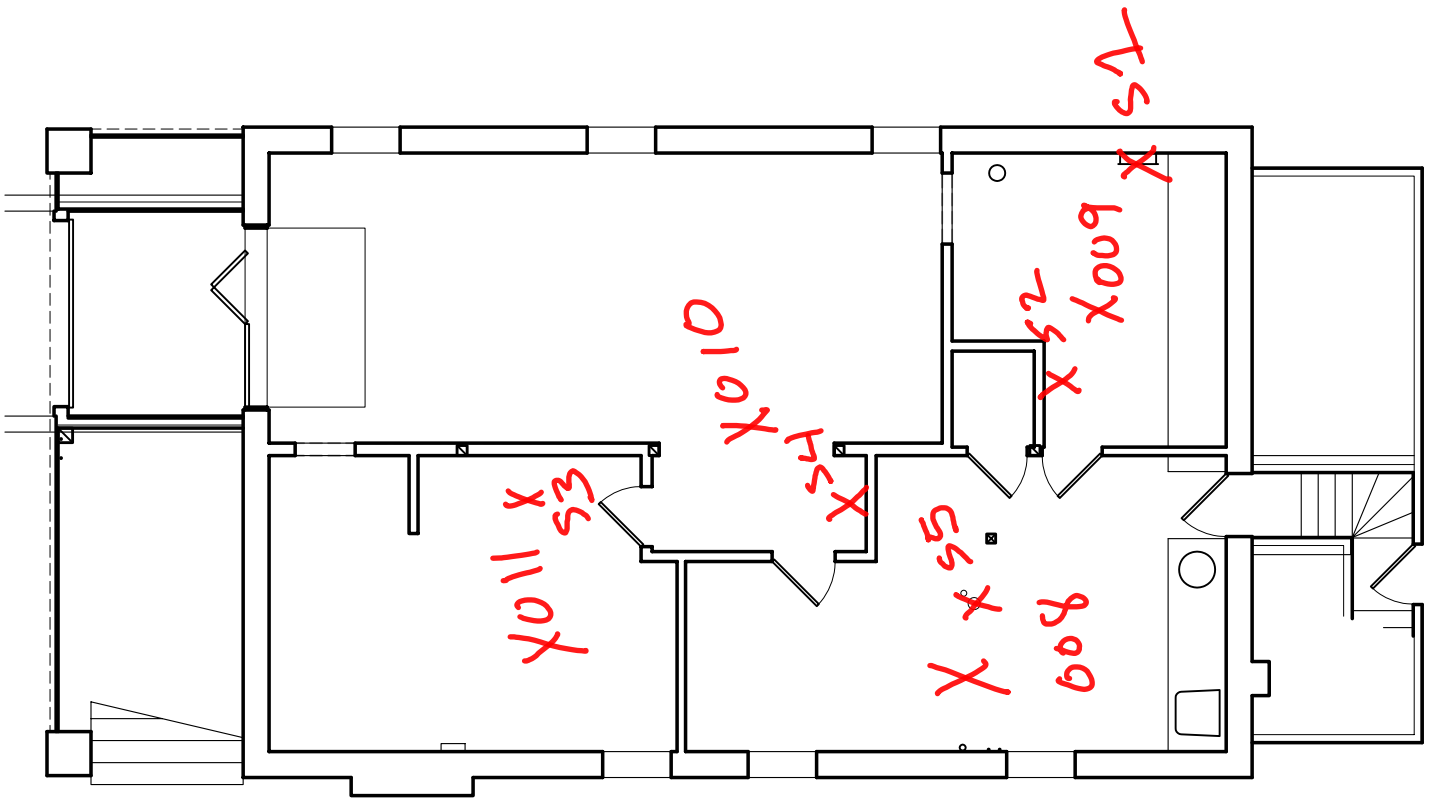
Elevation at foundation- 4519 ft MSL.

Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.



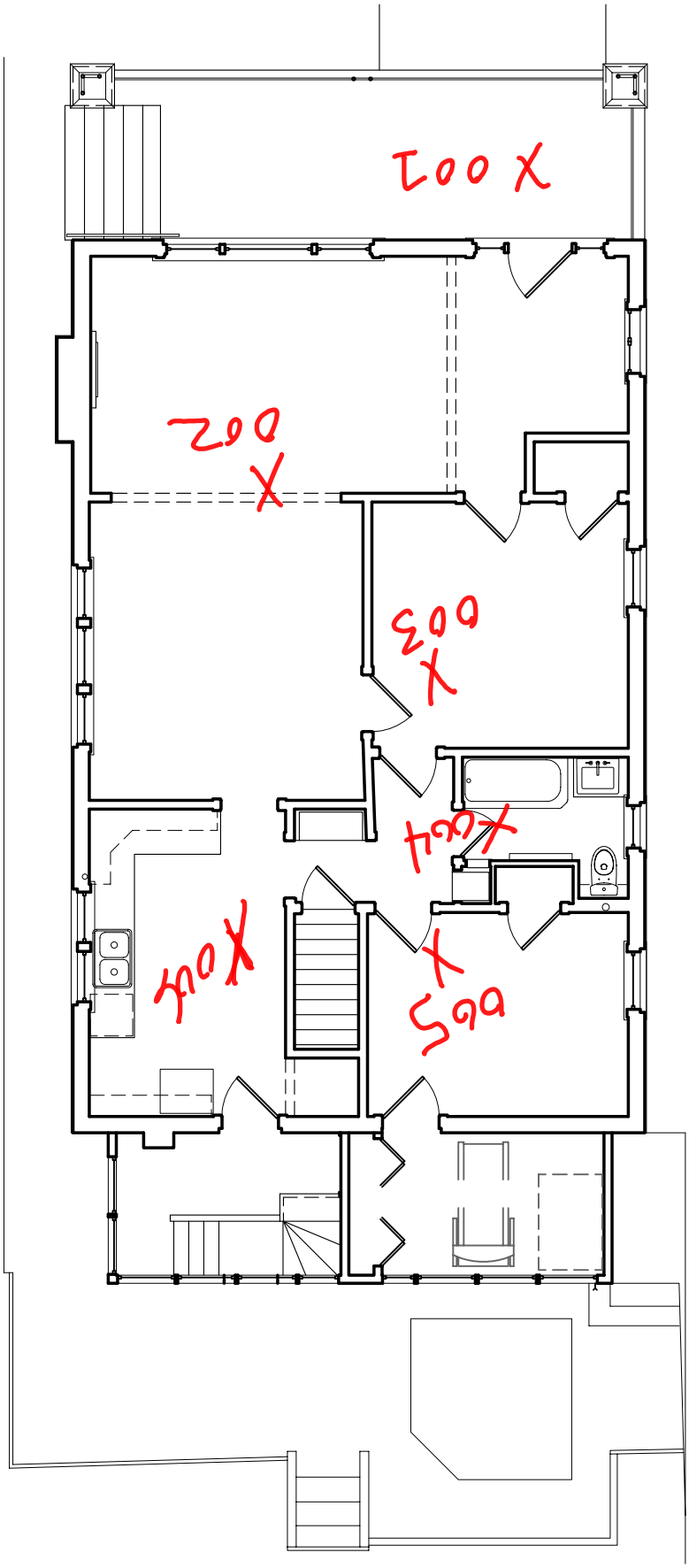
ATTIC

613 SOUTH 1200 EAST
SALT LAKE CITY, UTAH



BASEMENT

613 SOUTH 1200 EAST
SALT LAKE CITY, UTAH



MAIN FLOOR

613 SOUTH 1200 EAST
SALT LAKE CITY, UTAH

PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 04/10/15 Time of Arrival: 0840

Weather Conditions: Sunny

Temperature: 39 Barometric Pressure (inHg): 30.03 Wind Direction: SE Speed: Light

Field Crew 1: ERR Role: HAPSITE Operator

Field Crew 2: DED Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? (●) Yes ( ) No

If yes, have the materials been removed? ( ) Yes (●) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time	
044,003,005,006,008	04/01/15	0835	
Instrument Performance Check Run Number	**Time**		(●) Pass ( ) Fail
Auto tune	0746		
Instrument Performance Check Re-run Number	**Time**		( ) Pass ( ) Fail
NA			
CCV Run Number	**Time**		(●) Pass ( ) Fail
028 - 0.55 ppb- 04/09/15	1428		
CCV Re-run Number	**Time**		(●) Pass ( ) Fail
030 - 5.5 ppb - 04/09/15	1445		

Operator's initials: ERR

Comments

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time	0852	End Time	0854
Location	Front porch - West side of house.		
Run Number	001(IA-001-OUT)	Time	0852
Run Number	NA	Time	

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time 1020 End Time 1049

Comments

Survey 002 - 1020-1022 - Paint/chemical shelf in storage room- MAX TIC = 177,465. Survey 003 - 1043-1045 - Chemicals and glues on shelf in coal bin room- MAX TIC = 152,026. Survey 004 - 1047-1049 - Chemicals, oils, etc on garage shelf- MAX TIC = 177,165. PHOTOS: WIN_20150410_101229-Survey02; WIN_20150410_110519-Survey03; WIN_20150410_110538-Survey04.

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time 1017 End Time 1056

Comments

Survey 001 - 1017-1019 - NE corner of storage room- MAX TIC = 147,361. Survey 005 - 1052-1054 - Floor drain in laundry area- MAX TIC = 193,829.

Pictures

WIN_20150410_101210-Survey01; WIN_20150410_110603-Survey05

PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time: 0903 End Time: 1037

Room/area	Living/dining	Run Number	002(IA-002-OCL)	Time	0903
Room/area	Front bedroom	Run Number	003(IA-003-BR1)	Time	0911
Room/area	Upstairs bathroom	Run Number	004(IA-004-BA1)	Time	0918
Room/area	Back bedroom	Run Number	005(IA-005-BR2)	Time	0926
Room/area	Kitchen	Run Number	006(IA-006-KIT)	Time	0935
Room/area	Attic	Run Number	007(IA-007-ATT)	Time	0943
Room/area	Basement laundry area	Run Number	008(Ia-008-LAU)	Time	1000
Room/area	Basement storage room	Run Number	009(IA-009-STO)	Time	1008
Room/area	Garage	Run Number	010(IA-010-GAR)	Time	1022
Room/area	Basement coal bin room	Run Number	011(IA-011-COA)	Time	1035

Comments

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time: 1158 End Time: 1308 Room/Area: whole house, hapsite in bas

T=	5	CFM	749	Pascals	-4.6	Run No.	012(IA-012A-LAU)	Time	1202
T=	10	CFM	744	Pascals	-4.4	Run No.	013(IA-012B-LAU)	Time	1210
T=	15	CFM	729	Pascals	-4.7	Run No.		Time	
T=	20	CFM	753	Pascals	-5.4	Run No.	014(IA-012C-LAU)	Time	1219
T=	25	CFM	740	Pascals	-5.8	Run No.	015(IA-012D-LAU)	Time	1227
T=	30	CFM	753	Pascals	-4.1	Run No.	016(IA-012E-LAU)	Time	1235
T=	40	CFM	739	Pascals	-4.8	Run No.	017(IA-012F-LAU)	Time	1243
T=	50	CFM	751	Pascals	-5.1	Run No.	018(IA-012G-LAU)	Time	1251
T=	60	CFM	769	Pascals	-5.6	Run No.	019(IA-012H-LAU)	Time	1259
T=	70	CFM	767	Pascals	-5.1	Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

calculated removal volume = 50,000 cuft. Baseline = 0.4. ACTUAL VOLUME REMOVED = 52,458 CUFT. Air door located in rear entry near baement stair basement.

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time: 1315 End Time: 1310 Room/Area:

	T=	CFM	Pascals	Run No.	Time
1	5	900	6.2	020(IA-013A-LAU)	1319
2	10	895	6.2	021(IA-013B-LAU)	1327
3	15	1019	4.6		
4	20	933	6.5	022(IA-013C-LAU)	1337
5	25	848	6.4	023(IA-013D-LAU)	1345
6	30	952	4.8	024(IA-013E-LAU)	1353
7	40	831	5.5	025(IA-013F-LAU)	1402
8	50	926	5.4		
9	55	926	6.1		
10					
11					
12					
13					
14					
15					
16					

Comments

Baseline pressure =0 Pa. ACTUAL VOLUME INJECTED = 50,294 CUFT.

PART J
SUMMA CANISTERS

Location/ Area: NA

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

Comments

PART K
SOIL GAS

Date	04/10/15	Time	0855	Sample Depth	4'
Latitude	40.755822	Longitude	111.856517	Elevation	4519
Run No	026	Run Time	1409	Vacuum (in/Hg)	0

Comments

Adjacent to west front of house. PHOTOS: IMG_0987_Soil Gas Loc-0005H-SG-001-4' Attempted deeper push, but refused at 4.5'

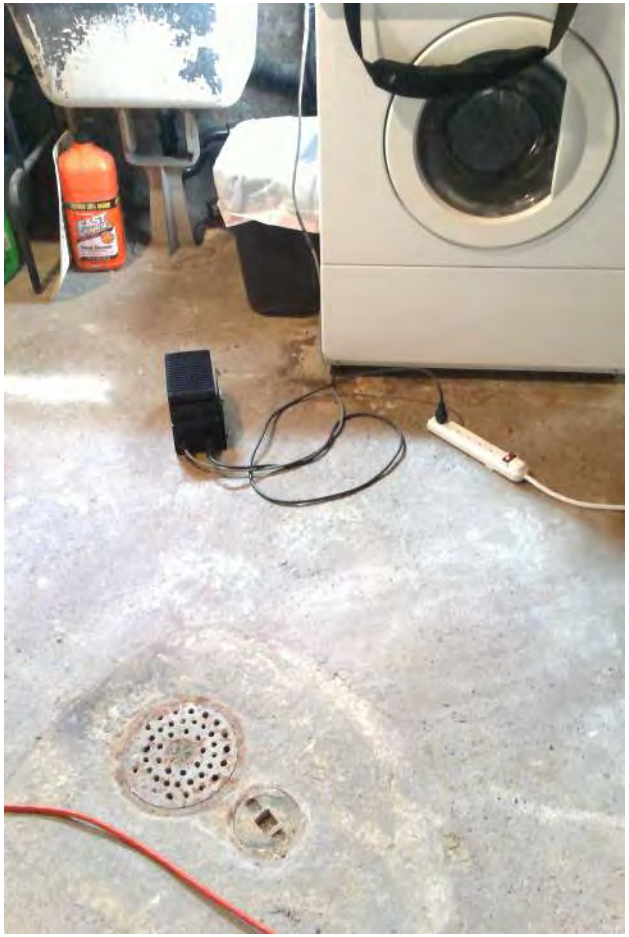

2015/04/10 10:00




Romex




Grout Sealer



Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

0005-H Dec 15 9:00

OCCUPIED DWELLING QUESTIONAIRE

Indoor Air Assessment Survey

Date: 11/18/2014

1. Name:
   Addres
   Home P
2. What is t
3. Are you t
   this Home

4. Total number of occupants/persons at this location? 2
   Number of Children Ø Ages

5. How long have you lived at this location? 9 YRS

General Home Description

6. Type of Home/Structure (check only one): Single Family Home ☒, Duplex ☐, Apartment ☐, Townhouse ☐ Other

7. Home/Structure Description:
   Number of floors: 1+ Attic
   Basement ☒
   Crawlspace ☐
   Partial crawlspace/basement ☐ % of each
   Slab on grade ☐
   Other ☐

8. Age of Home/Structure: 101 years, Not sure/Unknown ☐

9. General Above-Ground Home/Structure construction (check all that apply):
   Wood ☒, Brick ☒, Concrete ☒, Cement block ☐, Other ☐

10. Foundation Construction (check all that apply):
    Concrete Slab ☒
    Fieldstone ☐
    Concrete block ☐
    Elevated above ground/grade ☒
    Other ☐

0005 – H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

11. Do you have private well ☐ or cistern ☐ ? NO
If yes, please describe location, use and current condition_____

12. Do you have a septic system? Yes ☐ No ☒ Not used ☐ Unknown ☐
If yes, what is construction type?_____
Where is it located? _____
When was the last time it was serviced?_____
Do you (or have you ever) use (d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your home? (pond, ditch, etc.) Yes ☐ No ☒

Basement Description (please check all boxes that apply):

14. Is the basement finished ☐ or unfinished ☒ ?

15. If finished, how many rooms are in the basement? _____
What are rooms used for? Bedrooms ☐ Family room ☐ Storage ☐
Other_____

16. If not finished, do you plan on finishing in the future? Yes ☒ No ☐

17. Is the basement floor (check all that apply) concrete ☒, tile ☐, carpeted ☐, dirt ☐,
other ☐ _____

18. Are the basement walls poured concrete ☒, cement block ☐, stone ☐, wood ☐,
Brick ☐, other ☐ _____

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☒
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less that 1 time/year) ☐
No ☐

Describe the moisture problem WATER COMES IN THROUGH CRACKS IN FOUNDATION WALL. MOSTLY DURING RAIN OR SPRING SNOWMELT. SLAB WILL SHOW SIGNS OF MOISTURE.

20. .Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☐
No ☒

21. Does the basement have any of the following? Floor cracks ☒, Wall cracks ☒, Sump ☐,
Floor drain ☒, Other hole/opening in floor ☐
describe_____

0005-H

Return to: VASLCHCS (00PA)
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Salt Lake City, UT 84148

22. Are any of the following used or stored in the basement (check all that apply):
Paint ☒ Paint Stripper/remover ☐ Paint thinner ☒ Metal degreaser/cleaner ☐
Gasoline ☐ Diesel fuel ☐ Solvents ☒ Glue ☒ Laundry spot removers ☒ Drain cleaners ☒
☒ Pesticides ☒ Other equipment with fuel tanks (chain saw, lawn mower, snow blower,etc.,)

23. Have you recently (within the last six months) done any painting or remodeling in your home?
Yes ☐ No ☒
If yes, specify what was done, where in the home, and what month:
_____
_____

24. Have you installed new carpeting in your home within the last year? Yes ☐ No ☒
If yes, when and where? _____

25. Do you regularly use or work in a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) ☐
Yes, use dry-cleaning infrequently (monthly or less) ☐
Yes, work at a dry cleaning service ☐
No ☒

26. Does anyone in your home use solvents at work?
Yes ☐ If yes, how many persons?
No ☒ If no, go to question 28

27. If yes for question 26, are the work clothes washed at home? Yes ☐ No ☐

28. Where is the washer/dryer located?
Basement ☒
Upstairs utility room ☐
Kitchen ☐
Garage ☐
Use a Laundromat ☐
Other, please specify ☐ _____

29. If you have a dryer, is it vented to the outdoors? Yes ☒ No ☐

30. What type (s) of home heating do you have (check all that apply)
Fuel type: Gas ☒, Oil ☐, Electric ☐, Wood ☐, Coal ☐,
Other ☐ _____

Heat conveyance system:
Forced hot air ☐
Forced hot water ☒
Steam ☐
Radiant floor heat ☐
Wood Stove ☐
Coal furnace ☐
Fireplace ☐
Other ☐ _____

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Salt Lake City, UT 84148

31. Does your home have (or had in the past) a storage tank for storage of: gasoline ☐ fuel oil ☐ propane ☐ NO
If yes, where is/was it located? _____
How is/was the tank filled? _____
Is there staining near the tank? Yes ☐ No ☐

32. Do you have air conditioning? Yes ☒ No ☐
Central air conditioning ☐
Window air conditioning unit (s) ☐
Other (please specify) WINDOW EVAP. COOLER

33. Do you use any of the following? Room fans ☐, Ceiling fans ☐, Attic fan ☐ NO

34. Do you ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☐ No ☒ (YES IN SUMMER)

35. Has your home had termite or other pesticide treatment? Yes ☒ No ☐ Unknown ☐
If yes, please specify type of pest controlled SPIDERS
And approximate date of service 3½ YEARS AGO

36. Water heater type: Gas ☐, Electric ☐, by ~~Furnace~~ BOILER ☒
Other (please describe) _____

37. Water heater location: Basement ☒ Upstairs utility room ☐, Garage ☐,
Other (please specify) _____

38. What type of cooking appliance do you have? Electric ☐, Gas ☒
Other (please describe) _____

39. Is there a stove exhaust hood present? Yes ☒ No ☐
Does it vent to the outdoors? Yes ☐ No ☒

40. Smoking in Home:
None ☒ Rare (only guests) ☐, Moderate (residents, light smokers) ☐,
Heavy (at least one heavy smoker in household) ☐

41. If yes to question 40, what do they smoke?
Cigarettes ☐ Cigars ☐
Pipe ☐ Other ☐

42. Do you regularly use air fresheners? Yes ☒ No ☐

43. Does anyone in the home have indoor home hobbies or crafts involving:
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☒ WATER COLORS
Spray paint ☐, wood finishing ☐, Other ☒ MODEL CLAY - ie FIMO

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500 Foothill Drive
Salt Lake City, UT 84148

44. General family/home use of consumer products (please circle appropriate).
Assume that: Never = never used, Hardly ever = less that once/month,
Occasionally = about once/month, Regularly = about once/week,
and Often = more that once/week.

Product	Frequency of Use				
Spray-on deodorant	(Never)	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	Never	Hardly ever	Occasionally	Regularly	(Often)
Insecticides	Never	(Hardly ever)	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	(Occasionally)	Regularly	Often
Window cleaners	Never	(Hardly ever)	Occasionally	Regularly	Often
Nail polish remover	Never	(Hardly ever)	Occasionally	Regularly	Often
Hair sprays	(Never)	Hardly ever	Occasionally	Regularly	Often
Candles	Never	(Hardly ever)	Occasionally	Regularly	Often
Incense	Never	(Hardly ever)	Occasionally	Regularly	Often

45. Please check weekly household cleaning practices:

Dusting ☒
Dry sweeping ☒
Vacuuming ☒
Polishing (furniture, etc.) ☐
Washing/waxing floors ☐
Other (describe) ☐ _____

46. Other comments:

_____
_____
_____
_____
_____
_____
_____
_____

0005-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

47. Chemical Inventory/Summary

Chemical/Chemical Product (consumer name)	Amount present in home
a)	
b)	
c)	
d)	
e)	
f)	
g)	
h)	
i)	
j)	
k)	
l)	
m)	
n)	
o)	

PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0006-H
Street Address: 1234 E. Fenway
ZIP: 84105

Property Contact:
Tel #:

Latitude: 40.755330
Longitude: 111.855572
Age of Property: 85 years

Number of Levels: 1
Basement? (•) Yes ( ) No
Basement Habitable? (•) Yes ( ) No
Sump? ( ) Yes ( ) No

Completed by: ERR
Date: 12/19/2014

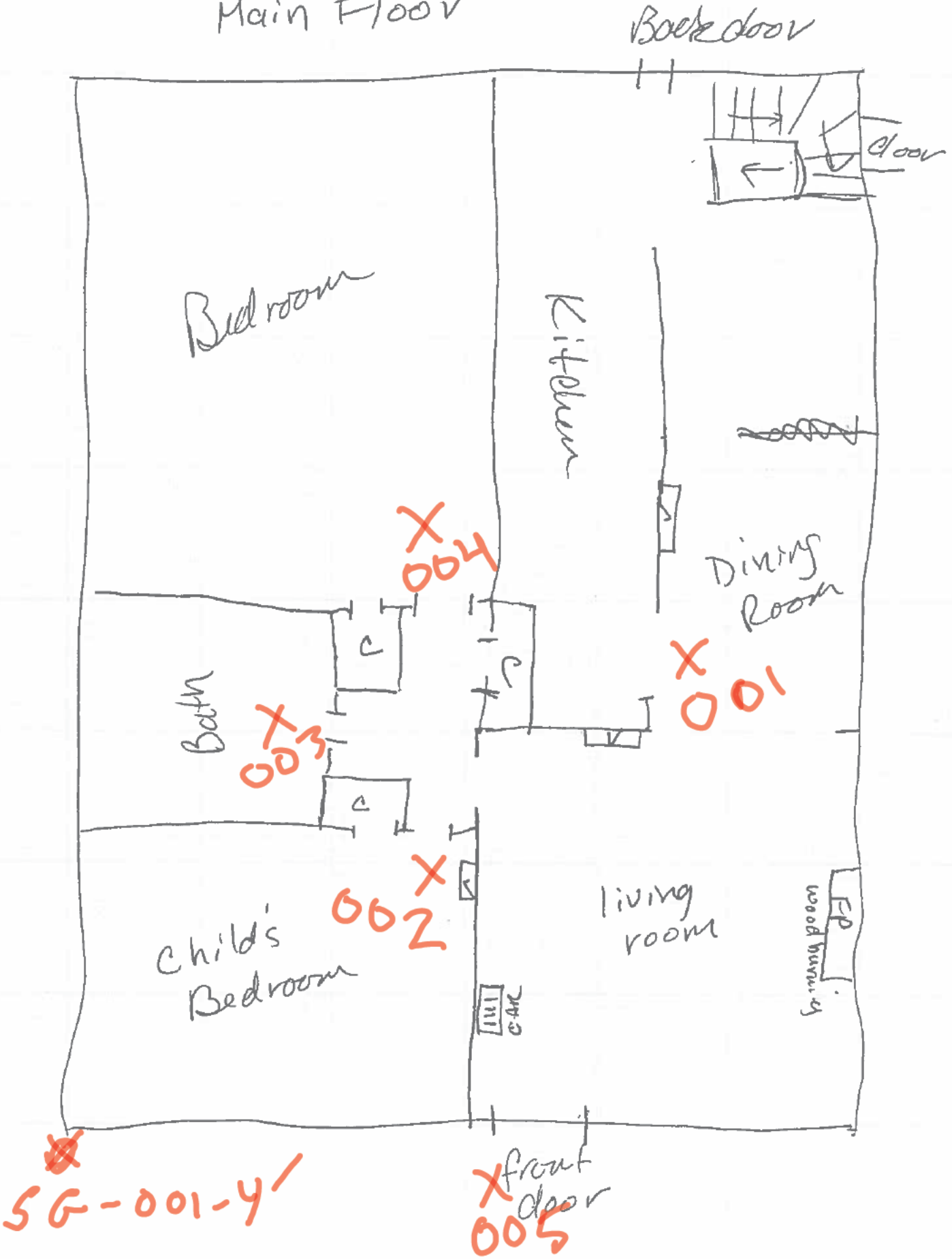
Comments

ELEVATION AT STREET SIDEWALK=4533'.

Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.

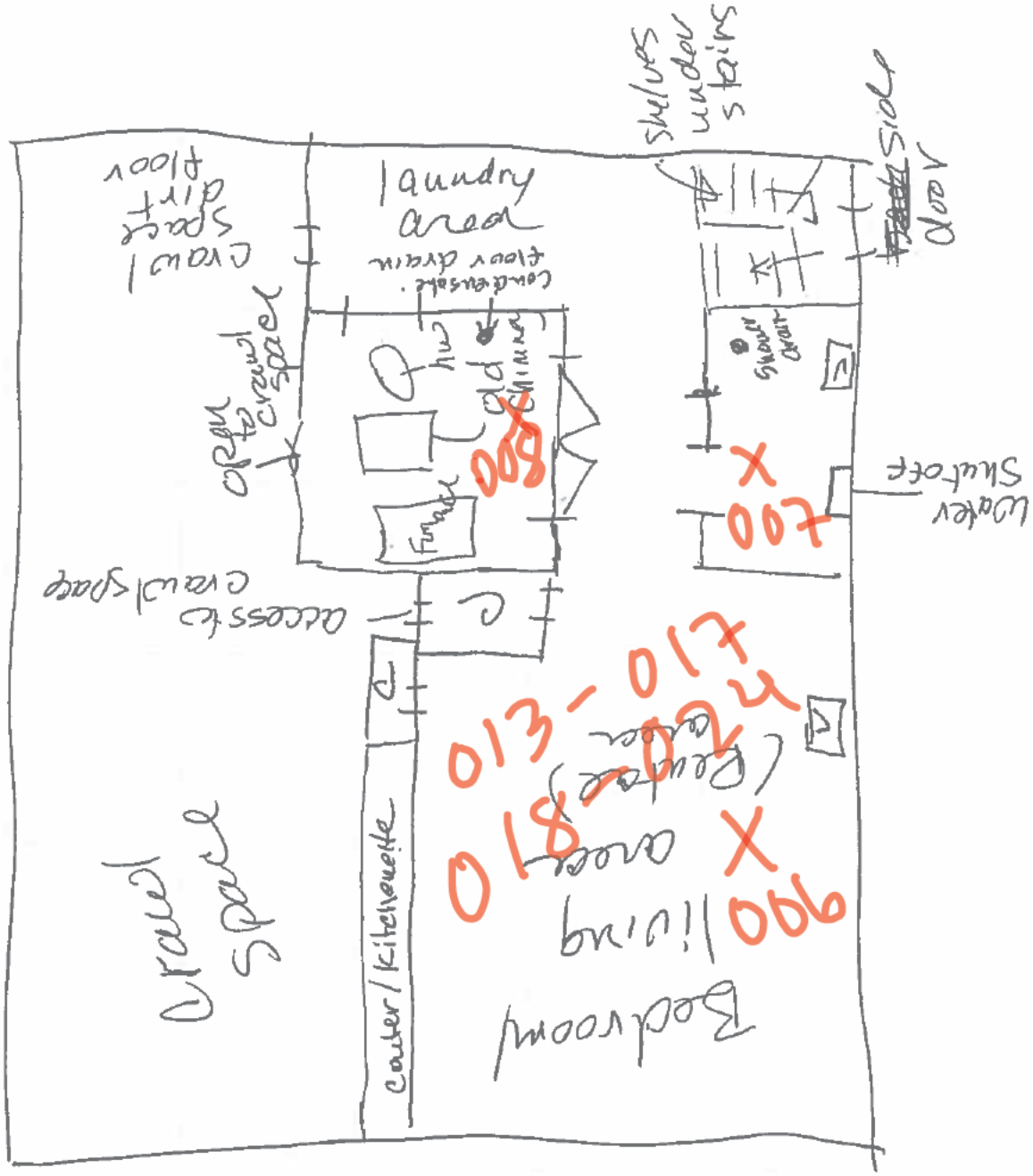
0006-1+ 1234 E. Fenway

Main Floor



0004-H 1234 E. Fenway

Basement



PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 03062015 Time of Arrival: 0845

Weather Conditions: Sunny

Temperature: 34 Barometric Pressure (inHg): 30.50 Wind Direction: E Speed: Light

Field Crew 1: ERR Role: HAPSITE Operator

Field Crew 2: DGC Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? (●) Yes ( ) No

If yes, have the materials been removed? ( ) Yes (●) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

Paint cans and cleaning chemicals in basement crawl space.

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time
001, 002, 004, 005, 006	03052015	1830

Instrument Performance Check Run Number	Time	
AUTO TUNE	0845	(•) Pass ( ) Fail

Instrument Performance Check Re-run Number	Time	
NA		(•) Pass ( ) Fail

CCV Run Number	Time	
001-5 ppb-03052015	1844	(•) Pass ( ) Fail

CCV Re-run Number	Time	
002-0.5 ppb-03052015	1854	(•) Pass ( ) Fail

Operator's initials: ERR

Comments

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time	0944	End Time	0952
Location	FRONT PORCH		
Run Number	005 (IA-005-OUT)	Time	0944
Run Number	NA	Time	

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time 1038 End Time 1045

Comments

Survey 001 - 1038 - Paint Cans and chemicals stored in crawl space. MAX TIC = 122,880; Survey 002 - 1043 - Laundry area shelf with cleaning supplies. I
Photo attached -crawl space entry.

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time 1049 End Time 1102

Comments

Survey 003 - 1049 - Floor drain in furnace room. MAX TIC = 148,048; Survey 004 - 1054 - Dirt floor crawl space near furnace room. MAX TIC = 143,092; S
Baseboard on south wall of laundry room. MAX TIC = 138,055.

Pictures

see pics from pre-screening interview form, attached.

PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time: 0910 End Time: 1037

Room/area	Living/dining kitchen	Run Number	001 (IA-001-OCL)	Time	0910
Room/area	CHILD'S BEDROOM	Run Number	002 (IA-002-BR1)	Time	0918
Room/area	BATHROOM	Run Number	003 (IA-003-BA1)	Time	0927
Room/area	MASTER BEDROOM	Run Number	004 (IA-004-MBR)	Time	0935
Room/area	LOWER LEVEL LIVING	Run Number	006 (IA-006-LLL)	Time	1004
Room/area	BASEMENT BATHROOM	Run Number	007 (IA-007-BA2)	Time	1013
Room/area	FURNACE AREA	Run Number	008 (IA-008-FUR)	Time	1021
Room/area	LAUNDRY AREA	Run Number	009 (IA-009-LAU)	Time	1029
Room/area		Run Number		Time	
Room/area		Run Number		Time	

Comments

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time	1140	End Time	1255	Room/Area	Lower Living Level

T=	5	CFM	442	Pascals	-5.3	Run No.	010 (IA-010A-LLL)	Time	1147
T=	10	CFM	414	Pascals	-4.8	Run No.	011 (IA-010B-LLL)	Time	1203
T=	15	CFM	415	Pascals	-5.2	Run No.	012 (IA-010C-LLL)	Time	1211
T=	20	CFM	388	Pascals	-4.2	Run No.	013 (IA-010D-LLL)	Time	1220
T=	25	CFM	445	Pascals	-5.0	Run No.	014 (IA-010E-LLL)	Time	1228
T=	30	CFM	385	Pascals	-4.8	Run No.	015 (IA-010F-LLL)	Time	1236
T=	40	CFM	407	Pascals	-5.2	Run No.	016 (IA-010G-LLL)	Time	1245
T=	50	CFM	407	Pascals	-4.5	Run No.	017 (IA-010H-LLL)	Time	1253
T=	60	CFM	436	Pascals	-5.3	Run No.		Time	
T=	70	CFM	432	Pascals	-5.2	Run No.		Time	
T=	75	CFM	399	Pascals	-4.5	Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

Calculated removal volume= 30,000 cuft. Baseline- -0.8 pa. 31,159 cuft. Air door placed in side door opposite of basement stairwell. Hapsite in basement

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time: 1325 | End Time: 1425 | Room/Area: Lower Level Living

T=	CFM	Pascals	Run No.	Time
5	514	4.6	018 (IA-011A-LLL)	1329
10	526	5.2	019 (IA-011B-LLL)	1338
15	537	4.3	020 (IA-011C-LLL)	1348
20	529	4.5	021 (IA-011D-LLL)	1357
25	520	5.3	022 (IA-011E-LLL)	1405
30	540	3.9	023 (IA-011F-LLL)	1414
40	504	4.9	024 (IA-011G-LLL)	1422
50	498	5.3		
60	520	4.1		

Comments

Baseline- -0.8, total air moved 31,253 cuft.

PART J
SUMMA CANISTERS

Location/ Area: NA

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

Comments

PART K
SOIL GAS

Date	03062015	Time	0930	Sample Depth	4 ft		
Latitude	40.755380	Longitude	111.855500			Elevation	4533'
Run No	025 (0006H-SG-001-4'	Run Time	1344			Vacuum (in/Hg)	5 in/Hg

Comments

Soil/Gas sample was collected at 4 ft bgs on the northeast corner of the front yard, 18" from foundation. Photo showing soil gas location attached.


2015/03/06 10:17

12/4

0006-H

Dec 19th 9:00 am

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

OCCUPIED DWELLING QUESTIONAIRE

Indoor Air Assessment Survey

Date: 11/

1. N A 1234. E. Fenway

Cell

2.

3. of

4. Total number of occupants/persons at this location? 2
Number of Children 1 Ages 11

5. How long have you lived at this location? 14 years

General Home Description

6. Type of Home/Structure (check only one): Single Family Home ☒, Duplex ☐, Apartment ☐, Townhouse ☐ Other _____

7. Home/Structure Description:
Number of floors: 1
Basement ☒
Crawlspace ☒
Partial crawlspace/basement ☒ % of each 50/50%
Slab on grade ☐
Other ☐ _____

8. Age of Home/Structure: 85 yrs years, Not sure/Unknown ☐ 1929

9. General Above-Ground Home/Structure construction (check all that apply):
Wood ☐, Brick ☒, Concrete ☐, Cement block ☐, Other ☐ _____

10. Foundation Construction (check all that apply):
Concrete Slab ☒
Fieldstone ☐
Concrete block ☐
Elevated above ground/grade ☐
Other ☐ _____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

11. Do you have private well ☐ or cistern ☐ ?
If yes, please describe location, use and current condition N/A

12. Do you have a septic system? Yes ☐ No ☒ Not used ☐ Unknown ☐
If yes, what is construction type?
Where is it located?
When was the last time it was serviced?
Do you (or have you ever) use (d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your home? (pond, ditch, etc.) Yes ☐ No ☒

Basement Description (please check all boxes that apply):

14. Is the basement finished ☒ or unfinished ☐ ? solo

15. If finished, how many rooms are in the basement? 1
What are rooms used for? Bedrooms ☒ Family room ☐ Storage ☐
Other

16. If not finished, do you plan on finishing in the future? Yes ☐ No ☒

17. Is the basement floor (check all that apply) concrete ☒, tile ☒, carpeted ☐, dirt ☒
other ☐

18. Are the basement walls poured concrete ☒ cement block ☐, stone ☐, wood ☐,
Brick ☒, other ☐

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less that 1 time/year) ☒
No ☒
Describe the moisture problem Had Northern/east wall lined b/c of seepage during heavy Storms 2013

20. .Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☐
No ☒

21. Does the basement have any of the following? Floor cracks ☐, Wall cracks ☐, Sump ☐,
Floor drain ☒, Other hole/opening in floor ☐
describe

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

22. Are any of the following used or stored in the basement (check all that apply): old cans in crawl space
Paint ☒ Paint Stripper/remover ☐ Paint thinner ☐ Metal degreaser/cleaner ☐
Gasoline ☐ Diesel fuel ☐ Solvents ☐ Glue ☐ Laundry spot removers ☐ Drain cleaners
☐ Pesticides ☐ Other equipment with fuel tanks (chain saw, lawn mower, snow blower,etc.,)

23. Have you recently (within the last six months) done any painting or remodeling in your home?
Yes ☐ No ☒
If yes, specify what was done, where in the home, and what month:
_____
_____

24. Have you installed new carpeting in your home within the last year? Yes ☒ No ☐
If yes, when and where? Basement April 2013

25. Do you regularly use or work in a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) ☐
Yes, use dry-cleaning infrequently (monthly or less) ☐
Yes, work at a dry cleaning service ☐
No ☒ Never

26. Does anyone in your home use solvents at work?
Yes ☐ If yes, how many persons?
No ☒ If no, go to question 28

27. If yes for question 26, are the work clothes washed at home? Yes ☐ No ☐

28. Where is the washer/dryer located?
Basement ☒
Upstairs utility room ☐
Kitchen ☐
Garage ☐
Use a Laundromat ☐
Other, please specify ☐ _____

29. If you have a dryer, is it vented to the outdoors? Yes ☒ No ☐

30. What type (s) of home heating do you have (check all that apply)
Fuel type: Gas ☒, Oil ☐, Electric ☐, Wood ☐, Coal ☐,
Other ☐ _____

Heat conveyance system:
Forced hot air ☒
Forced hot water ☐
Steam ☐
Radiant floor heat ☐
Wood Stove ☐
Coal furnace ☐
Fireplace ☒ Do not use
Other ☐ _____

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31. Does your home have (or had in the past) a storage tank for storage of: gasoline ☐ fuel oil ☐ propane ☐
If yes, where is/was it located? N/A
How is/was the tank filled? _____
Is there staining near the tank? Yes ☐ No ☐

32. Do you have air conditioning? Yes ☒ No ☐
Central air conditioning ☒
Window air conditioning unit (s) ☐
Other (please specify) _____

33. Do you use any of the following? Room fans ☐, Ceiling fans ☒, Attic fan ☐

34. Do you ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☐ No ☒

35. Has your home had termite or other pesticide treatment? Yes ☒ No ☒ Unknown ☐
If yes, please specify type of pest controlled _____
And approximate date of service _____

36. Water heater type: Gas ☒, Electric ☐, by Furnace ☐,
Other (please describe) _____

37. Water heater location: Basement ☒, Upstairs utility room ☐, Garage ☐,
Other (please specify) _____

38. What type of cooking appliance do you have? Electric ☒ Gas ☐
Other (please describe) _____

39. Is there a stove exhaust hood present? Yes ☒ No ☐
Does it vent to the outdoors? Yes ☐ No ☐

40. Smoking in Home:
None ☒, Rare (only guests) ☐, Moderate (residents, light smokers) ☐,
Heavy (at least one heavy smoker in household) ☐

41. If yes to question 40, what do they smoke?
Cigarettes ☐ Cigars ☐
Pipe ☐ Other ☐

42. Do you regularly use air fresheners? Yes ☐ No ☒

43. Does anyone in the home have indoor home hobbies or crafts involving:
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☐
Spray paint ☐, wood finishing ☐, Other ☐ N/A

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Salt Lake City, UT 84148

44. General family/home use of consumer products (please circle appropriate).
Assume that: Never = never used, Hardly ever = less that once/month,
Occasionally = about once/month, Regularly = about once/week,
and Often = more that once/week.

Product	Frequency of Use				
Spray-on deodorant	Never	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	Never	Hardly ever	Occasionally	Regularly	Often
Insecticides	Never	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	Occasionally	Regularly	Often
Window cleaners	Never	Hardly ever	Occasionally	Regularly	Often
Nail polish remover	Never	Hardly ever	Occasionally	Regularly	Often
Hair sprays	Never	Hardly ever	Occasionally	Regularly	Often
Candles	Never	Hardly ever	Occasionally	Regularly	Often
Incense	Never	Hardly ever	Occasionally	Regularly	Often

45. Please check weekly household cleaning practices:

Dusting ☑
Dry sweeping ☑
Vacuuming ☑
Polishing (furniture, etc.) ☐
Washing/waxing floors ☑ No wax
Other (describe) ☐ _____

46. Other comments:

_____
_____
_____
_____
_____
_____
_____
_____
_____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

47. Chemical Inventory/Summary

Chemical/Chemical Product (consumer name)	Amount present in home
a) Household Bleach	1 Bottle
b) Laundry Detergent-Liquid	1 Bottle
c) Window Cleaner	1 Bottle
d) General Disinfectant-Non-aerosol	1 Bottle
e)	
f)	
g)	
h)	
i)	
j)	
k)	
l)	
m)	
n)	
o)	

PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 007-H
Street Address: 1437 900 South
ZIP:
Property Contact:
Tel #:
Latitude: 40.749894
Longitude: -111.849769
Age of Property: 88 years
Number of Levels: 2
Basement? (•) Yes ( ) No
Basement Habitable? (•) Yes ( ) No
Sump? ( ) Yes (•) No

Completed by: ERR
Date: 11/25/2014

Comments

Soil gas sample 007H-SG-001-4' (made six attempts, but encountered rocks at 2' - 3'. sample point was located in front yard near SW corner of house.

Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.

0007-H

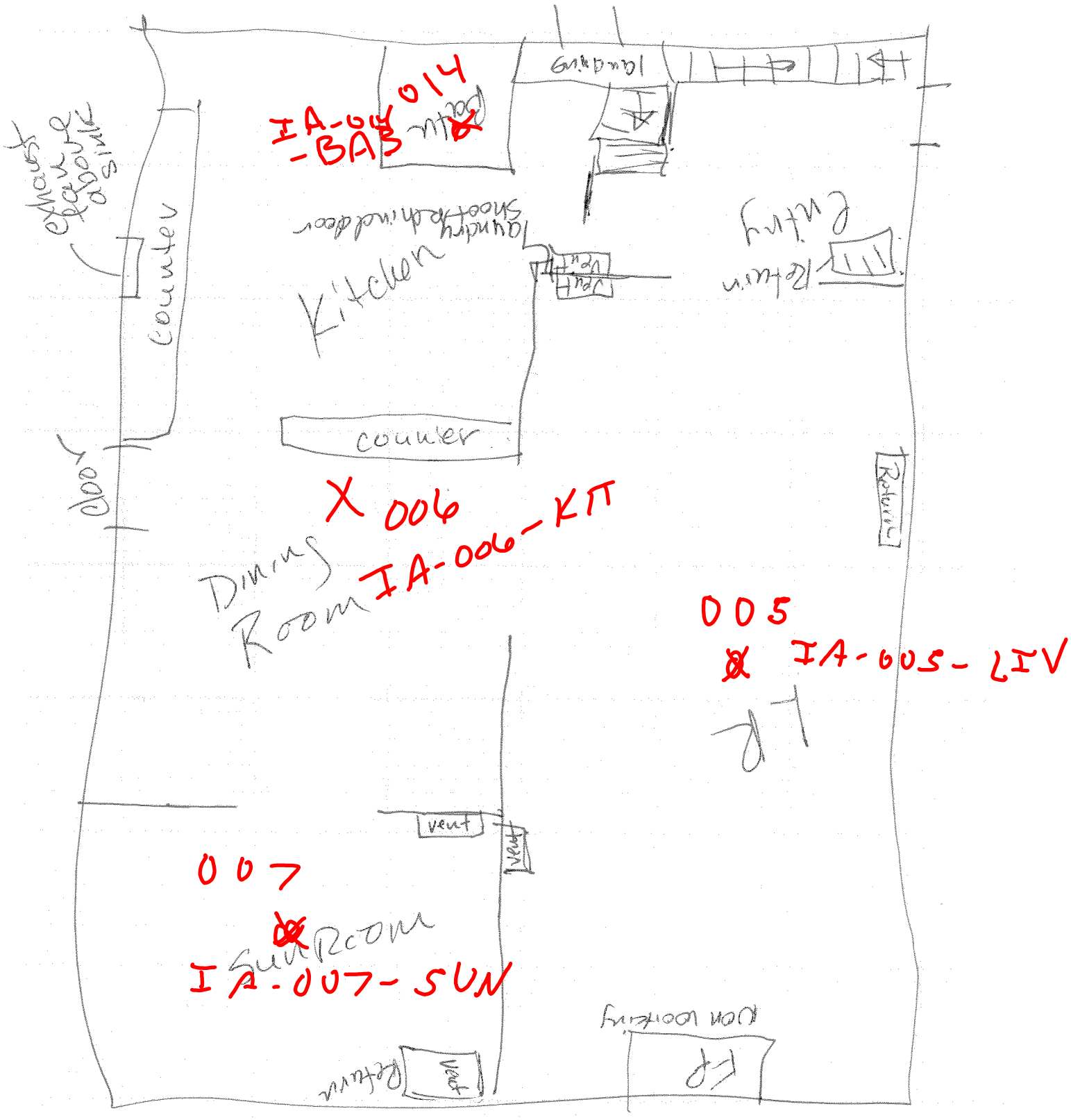
Basement



0007-H

0007-H

1st Floor



X 006
IA-006-KIT

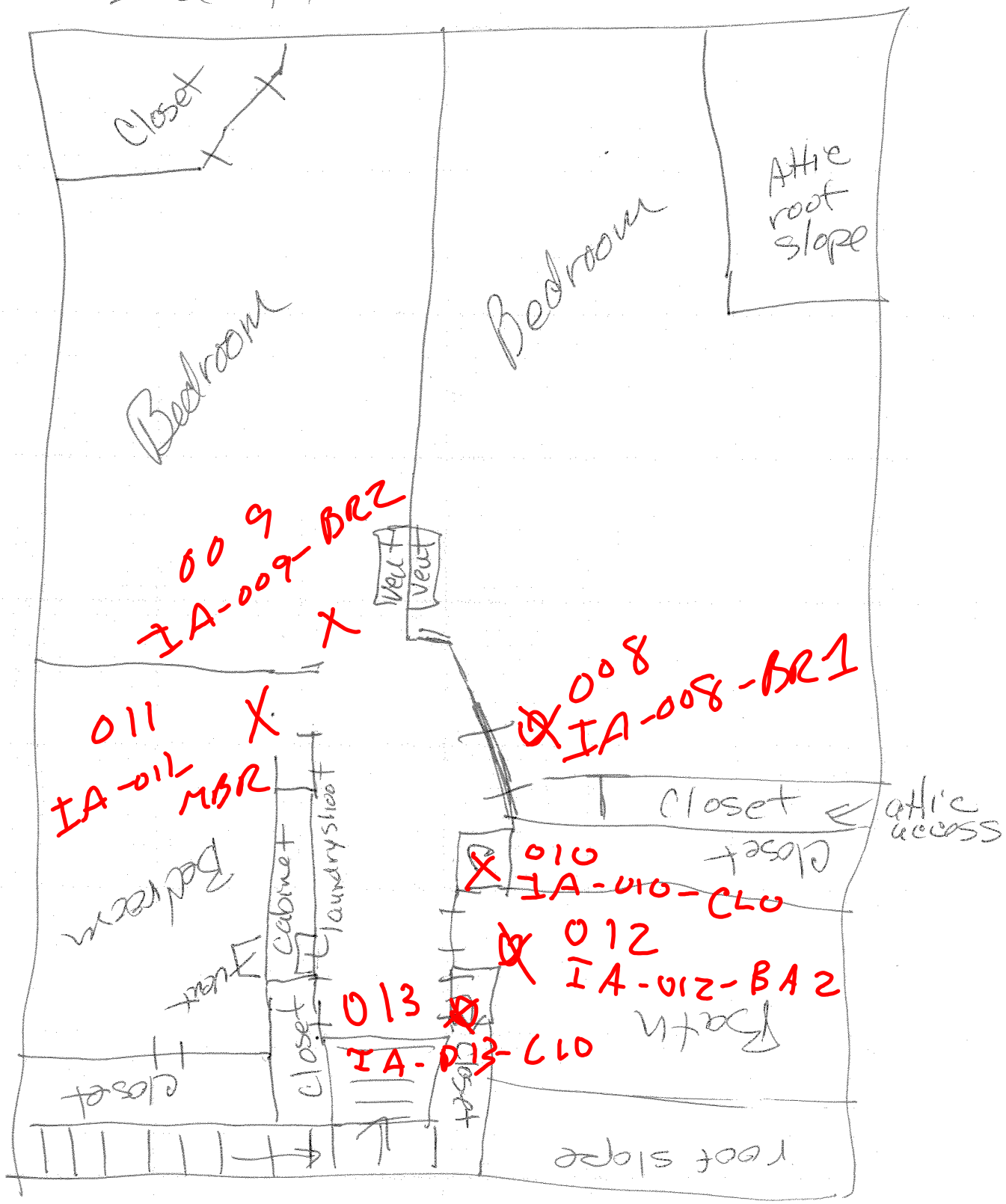
005
IA-005-LIV

007
IA-007-SUN

0007-H

0007-H

2nd Floor



PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 01/28/2015 Time of Arrival: 0830

Weather Conditions: Cloudy

Temperature: 40s Barometric Pressure (inHg): 30.11 Wind Direction: W Speed: Light

Field Crew 1: err Role: HAPSITE Operator

Field Crew 2: ac Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? (●) Yes ( ) No

If yes, have the materials been removed? ( ) Yes (●) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

Paint, thinners, and joint compound in furnace room.

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time	
034,035,036,037,038	01/27/15	2015	
Instrument Performance Check Run Number	**Time**		(•) Pass ( ) Fail
NA-pass/fail only			
Instrument Performance Check Re-run Number	**Time**		( ) Pass ( ) Fail
CCV Run Number	**Time**		(•) Pass ( ) Fail
001	2030		
CCV Re-run Number	**Time**		( ) Pass ( ) Fail

Operator's initials: ERR

Comments

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time | End Time

Location: Not collected, Initial sample collected in driveway, but Hapsite did not record data at end of run. homeowner needed to leave and secure house, and team had left property. An outdoor sample was collected at 0008-H in backyard near the 0007H property line the following week..

Run Number | Time

Run Number | Time

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time 1150 End Time 1155

Comments

ambient analyzis indicated no indoor sources other than possibly aged dry cleaning in closet, nothing detectable in survey mode.

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time 1155 End Time 1200

Comments

survey of floor drains in basement (see pre-testing photos attached) found no detections.

Pictures

PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	0910	End Time	1142		
Room/area	Family room in basement	Run Number	001 (IA-001-LLL	Time	0913
Room/area	Basement Bathroom	Run Number	002 (IA-002-BA1	Time	0921
Room/area	Laundry/store room in basement	Run Number	003 (IA-003-LAU	Time	0931
Room/area	Storage closet in basement (paint/chemicals)	Run Number	004 (IA-004-STO)	Time	0940
Room/area	Living room	Run Number	005 (IA-005-LIV)	Time	0949
Room/area	Kitchen/breakfast room	Run Number	006 (IA-006-KIT)	Time	0958
Room/area	Sunroom	Run Number	007 (IA-007-SUN)	Time	1008
Room/area	Back bedroom	Run Number	008 (IA-008-BR1)	Time	1022
Room/area	Front bedroom	Run Number	009 (IA-009-BR2)	Time	1031
Room/area	2nd fllor closet between bedroom and bath	Run Number	010 (IA-010-CLO)	Time	1040

Comments

Master bedroom, 011 (IA-011-MBR), 1107

2nd floor bath, 012 (IA-012-BA2), 1117

Closet at top of stairs (right side), 013 (IA-013-CLO), 1127

1st floor bath, 014 (IA-014-BA3), 1142

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time	13:29	End Time	14:52	Room/Area	basement family room

T=	0	CFM	675	Pascals	-4.8	Run No.	015 (IA-015A-LLL)	Time	1331
T=	5	CFM	720	Pascals	-5.1	Run No.		Time	
T=	10	CFM	709	Pascals	-4.8	Run No.	016 (IA-015B-LLL)	Time	13:39
T=	15	CFM	708	Pascals	-5.1	Run No.		Time	
T=	20	CFM	723	Pascals	-5.0	Run No.	017 (IA-015C-LLL)	Time	13:48
T=	25	CFM	671	Pascals	-4.8	Run No.		Time	
T=	30	CFM	710	Pascals	-5.2	Run No.	018 (IA-015D-LLL)	Time	1357
T=	40	CFM	722	Pascals	-4.7	Run No.	019 (IA-015E-LLL)	Time	14:06
T=	50	CFM	729	Pascals	-5.0	Run No.	020 (IA-015F-LLL)	Time	14:15
T=	60	CFM	696	Pascals	-5.1	Run No.	021 (IA-015G-LLL)	Time	14:24
T=	70	CFM	710	Pascals	-4.9	Run No.	022 (IA-015H-LLL)	Time	14:33
T=	80	CFM	725	Pascals	-5.1	Run No.	023 (IA-015I-LLL)	Time	14:42
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

total volume removed is 52,626 cubic feet. Baseline pressure was: -1.0 pascals

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time: 14:55 | End Time: 15:55 | Room/Area: basement family room

T=	0	CFM	940	Pascals	6.4	Run No.	024 (IA-016A-LLL)	Time	1459
T=	5	CFM	942	Pascals	4.7	Run No.		Time	
T=	10	CFM	954	Pascals	5.4	Run No.		Time	
T=	15	CFM	945	Pascals	6.6	Run No.	025 (IA-016B-LLL)	Time	1508
T=	20	CFM	950	Pascals	6.2	Run No.		Time	
T=	25	CFM	930	Pascals	5.4	Run No.	026 (IA-016C-LLL)	Time	15:17
T=	30	CFM	958	Pascals	4.0	Run No.		Time	
T=	40	CFM	957	Pascals	7.6	Run No.	027 (IA-016D-LLL)	Time	15:27
T=	50	CFM	949	Pascals	7.0	Run No.	028 (IA-016E-LLL)	Time	15:35
T=	60	CFM	960	Pascals	5.2	Run No.	029 (IA-016F-LLL)	Time	15:43
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

Baseline pressure was -1.3 Pa. Total volume was 56,850 cu ft.

PART J
SUMMA CANISTERS

Location/ Area: Basement - Living Room

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
A-0007H-TO-001-LLL	0499	03/18/2015	11:00	27	03/19/2015	10:50	2

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

Comments

PART K
SOIL GAS

Date	01/28/2015	Time	10:30	Sample Depth	4.0		
Latitude	40.749853	Longitude	-111.849839			Elevation	4600
Run No	030	Run Time	1600			Vacuum (in/Hg)	3

Comments

SG-001-4' - located near SW corner of home in front yard. Had to try multiple times to get probe deeper than 2 ft. Attempted deeper push, but could not go deeper.

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

0007 - H

Dec 16th
1:00

OCCUPIED DWELLING QUESTIONAIRE

Indoor Air Assessment Survey

Date: 11.25.2014

1. Na
   Ac
   Ho
2. Wh
3. Are
   this
   of
4. Total number of occupants/persons at this location? 2
   Number of Children 0 Ages
5. How long have you lived at this location? 26 years

General Home Description

6. Type of Home/Structure (check only one): Single Family Home ☒, Duplex ☐, Apartment ☐, Townhouse ☐ Other
7. Home/Structure Description:
   Number of floors: 2
   + Basement ☒
   Crawlspace ☐
   Partial crawlspace/basement ☐ % of each
   Slab on grade ☐
   Other ☐
8. Age of Home/Structure: 88 years years, Not sure/Unknown ☐
9. General Above-Ground Home/Structure construction (check all that apply):
   Wood ☒, Brick ☒, Concrete ☒, Cement block ☐, Other ☐
   Foundation above grade
10. Foundation Construction (check all that apply):
    Concrete Slab ☐
    Fieldstone ☐
    Concrete block ☐
    Elevated above ground/grade ☐
    Other ☒ Formed concrete

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Salt Lake City, UT 84148

11. Do you have private well ☐ or cistern ☐ ?
If yes, please describe location, use and current condition_____

12. Do you have a septic system? Yes ☐ No ☒ Not used ☐ Unknown ☐
If yes, what is construction type?_____
Where is it located? _____
When was the last time it was serviced?_____
Do you (or have you ever) use (d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your home? (pond, ditch, etc.) Yes ☐ No ☒

Basement Description (please check all boxes that apply):

14. Is the basement finished partially ☒ or unfinished ☐ ?

15. If finished, how many rooms are in the basement? 2 + unfinished laundry + storage
What are rooms used for? Bedrooms ☐ Family room ☒ Storage ☒
Other bathroom

16. If not finished, do you plan on finishing in the future? Yes ☐ No ☒

17. Is the basement floor (check all that apply) concrete ☒, tile ☒, carpeted ☒, dirt ☐,
other ☒ linoleum in bathroom

18. Are the basement walls poured concrete ☒, cement block ☐, stone ☐, wood ☐,
Brick ☐, other ☐ _____

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less that 1 time/year) ☐
No ☒

Describe the moisture problem_____

20. .Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☐
No ☒

21. Does the basement have any of the following? Floor cracks ☒, Wall cracks ☒, Sump ☐,
Floor drain ☒, Other hole/opening in floor ☐
describe_____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

22. Are any of the following used or stored in the basement (check all that apply):
Paint ☒ Paint Stripper/remover ☒ Paint thinner ☐ Metal degreaser/cleaner ☐
Gasoline ☐ Diesel fuel ☐ Solvents ☐ Glue ☒ Laundry spot removers ☒ Drain cleaners
☒ Pesticides ☐ Other equipment with fuel tanks (chain saw, lawn mower, snow blower,etc.,)

23. Have you recently (within the last six months) done any painting or remodeling in your home?
Yes ☐ No ☒
If yes, specify what was done, where in the home, and what month:
_____
_____

24. Have you installed new carpeting in your home within the last year? Yes ☐ No ☒
If yes, when and where?_____

25. Do you regularly use or work in a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) ☐
Yes, use dry-cleaning infrequently (monthly or less) ☒
Yes, work at a dry cleaning service ☐
No ☒

26. Does anyone in your home use solvents at work?
Yes ☒ If yes, how many persons? 1 — in garage only
No ☐ If no, go to question 28

27. If yes for question 26, are the work clothes washed at home? Yes ☒ No ☐

28. Where is the washer/dryer located?
Basement ☒
Upstairs utility room ☐
Kitchen ☐
Garage ☐
Use a Laundromat ☐
Other, please specify ☐ _____

29. If you have a dryer, is it vented to the outdoors? Yes ☒ No ☐

30. What type (s) of home heating do you have (check all that apply)
Fuel type: Gas ☒, Oil ☐, Electric ☐, Wood ☐, Coal ☐,
Other ☐_____

Heat conveyance system:
Forced hot air ☒
Forced hot water ☐
Steam ☐
Radiant floor heat ☐
Wood Stove ☐
Coal furnace ☐
Fireplace ☐
Other ☐ _____

0007-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

before we moved in

31. Does your home have (or had in the past) a storage tank for storage of: gasoline ☐ fuel oil ☒ propane ☐
If yes, where is/was it located? basement NW corner
How is/was the tank filled? filler pipe through foundation
Is there staining near the tank? Yes ☐ No ☐ tank no longer exists

32. Do you have air conditioning? Yes ☒ No ☐
Central air conditioning ☒
Window air conditioning unit (s) ☐
Other (please specify) _____

33. Do you use any of the following? Room fans ☐, Ceiling fans ☐, Attic fan ☐

34. Do you ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☒ No ☐ summertime

35. Has your home had termite or other pesticide treatment? Yes ☒ No ☐ Unknown ☐
If yes, please specify type of pest controlled termites
And approximate date of service 30+ years ago

36. Water heater type: Gas ☒, Electric ☐, by Furnace ☐,
Other (please describe) _____

37. Water heater location: Basement ☒, Upstairs utility room ☐, Garage ☐,
Other (please specify) _____

38. What type of cooking appliance do you have? Electric ☒, Gas ☐
Other (please describe) _____

39. Is there a stove exhaust hood present? Yes ☐ No ☒
Does it vent to the outdoors? Yes ☐ No ☐ a wall fan vents to outside

40. Smoking in Home:
None ☒, Rare (only guests) ☐, Moderate (residents, light smokers) ☐,
Heavy (at least one heavy smoker in household) ☐

41. If yes to question 40, what do they smoke?
Cigarettes ☐ Cigars ☐
Pipe ☐ Other ☐

42. Do you regularly use air fresheners? Yes ☐ No ☒

43. Does anyone in the home have indoor home hobbies or crafts involving:
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☐
Spray paint ☐, wood finishing ☐, Other ☐ NO

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

44. General family/home use of consumer products (please circle appropriate).
Assume that: Never = never used, Hardly ever = less that once/month,
Occasionally = about once/month, Regularly = about once/week,
and Often = more that once/week.

Product	Frequency of Use				
Spray-on deodorant	Never	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	Never	Hardly ever	Occasionally	Regularly	Often
Insecticides	Never	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	Occasionally	Regularly	Often
Window cleaners	Never	Hardly ever	Occasionally	Regularly	Often
Nail polish remover	Never	Hardly ever	Occasionally	Regularly	Often
Hair sprays	Never	Hardly ever	Occasionally	Regularly	Often
Candles	Never	Hardly ever	Occasionally	Regularly	Often
Incense	Never	Hardly ever	Occasionally	Regularly	Often

45. Please check weekly household cleaning practices:

Dusting ☐
Dry sweeping ☐
Vacuuming ☐
Polishing (furniture, etc.) ☐
Washing/waxing floors ☐
Other (describe) ☐ cleaning lady twice a month

46. Other comments:

We will be glad to remove any household chemicals that may skew test results.

0007-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

47. Chemical Inventory/Summary

Chemical/Chemical Product (consumer name)	Amount present in home
a) See attached - 5 pages	
b)	
c)	
d)	
e)	
f)	
g)	
h)	
i)	
j)	
k)	
l)	
m)	
n)	
o)	

Jon's bath

The Works – toilet cleaner
Comet – disinfectant bath cleanser powder

Laundry room shelves

Sawyer permethrin
" 20% picaridin (2 bottles 4 oz ea)

Leather cleaners:
Perma-Plate Leatherguard
12 oz

Hermance 900 South

Clorox wipes – bleach-free – 78 wet wipes
Woolite – Oxydeep stain remover spray
~~Bang bath/shower cleaner~~
The Works tub/shower cleaner

" " cupboard:
shoe polish (numerous), leather conditioners + sealers

Hagerty's silver polish
Brass cleaner

Citrus-Shield paste wax – 11 oz can

(over)

Laundry detergent
ECOS - coconut-oil based
1,4-Dioxane free

Surf powder detergent
Comet with bleach - powder

Spic + Span
Bounce dryer sheets
Lysol disinfectant - 2 spray
Shout stain remover
Woolite laundry liquid
Renuzit odor neutralizer
Kroger Home Sense bleach 64 oz
Porso Brite
Advantage wonder cleaner
Chem Dry spot remover
Neutral Ph adhesive - Lineco 8oz
Howard Feed-N-Wax 16 oz
Parsons ammonia cleaner
Home Patrol Insect Spray
Western Garden product
permethrin
Monster Screen Clean — 6.76 oz
Sherwin-Williams - auto acrylic
1 gal enamel ~~Ellen~~
2 Spray

Liquid nails - 4 oz tube
~~Household glue~~
Titebond wood glue
plastic wood - 2 small cans
color putty
Concrete glue - latex
Lime-away - 28 oz
511 stone impregnator
3M Patch + primer 2 oz tube

Paint room:
1 Roof patch tan
1 house paint (water-base)
1 stripper 32 oz
3M auto body filler, hardener
17 gal latex house paint
19 ~~12~~ spray cans - auto paint
5 - partial pint-size " "
1 can shellac - base primer (spray)
3 - 18 ml auto touch-up paint
8-oz MinWax wood finish
4 qt house paint - latex (one enamel)
Plastic pail - 5 gal - latex
7 caulk tubes - acrylic, silicone (clear)

900 South
Herriman

kitchen sink:

Clorox wipes
Windex - glass cleaner
409
Clorox-Clean-up spray
Kroger Home Sense - spray
Brasso
Murphy's soap oil
Lysol Disinfectant spray
Earthtone Insect Contral - spray
Seth's Liquid Mold 12 oz "
Woolite Heavy Traffic "
Gran Quartz Stone Care 18 oz "
Novus Plastic Clean + Shine 8 oz
Stainless Steel Magic
Lysol Antibacterial kitch Cleaner
Dishwasher Magic 2 - 12 oz
Bar keepers Friend
7th Generation Dish Liquid
Ivory hand soap liquid
Tarnishield silver cleaner

0007-H

5

Upstairs Bath:
Lysol BR cleaner spray
365 Toilet Bowl Cleaner
Lysol disinfectant
Bio-rooter / drain maintainer
Clorox wipes
~~St~~ Isopropyl alcohol
Hydrogen peroxide

Sealer's Choice - solvent free
Static Guard - spray
BathCrest Bath Cleaner pump

Nail polish / remover

900 South

Hermance

PHOTO LOG FOR SLC VA CERCLA SITE

PARCEL IDENTIFIER: 0007-H **ADDRESS** 1437 E. 900 South

DATE: 12/16/14

Number	Camera Image#	Description of Photo
1	100-249	Shower drain - basement bath
2	100-250	Fireplace in basement family room
3	100-251	Cold air returns in family room
4	100-252	Exposed block wall under basement stairs
5	100-253	Condensate line to floor drain
6	100-254	Capped old fuel oil line in wall
7	100-255	Old chimney w/ capped flue from former furnace
8	100-256	Flue for new furnace goes into old chimney
9	100-257	Floor drain near washer in basement
10	100-258	Drain line for washer
11	100-259	Dryer vent through basement window
12	100-260	Paint storage area in basement
13	100-261	Fireplace on main floor living room
14	100-262	Cold air return in sunroom
15	100-263	Exhaust fan in kitchen
16	100-264	Closet at top of stairs - opens to attic
17	100-265	Closet open to attic - backs up to bath - 2nd floor
18	100-266	Laundry shoot to basement - 2nd floor
19	100-267	Closet w/ attic access - 2nd floor
20	100-268	Laundry shoot to basement - main floor
21	100-269	Old coal shoot on side of house

22	100-270	Utilities coming into side of house
23	100-271	Old fuel oil line coming out of house
24	100-272	Cleanout on chimney
25		
26		
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44		
45		

0249



0250



0251



0252



0253



0254



0255



0256



0257



0258



0259



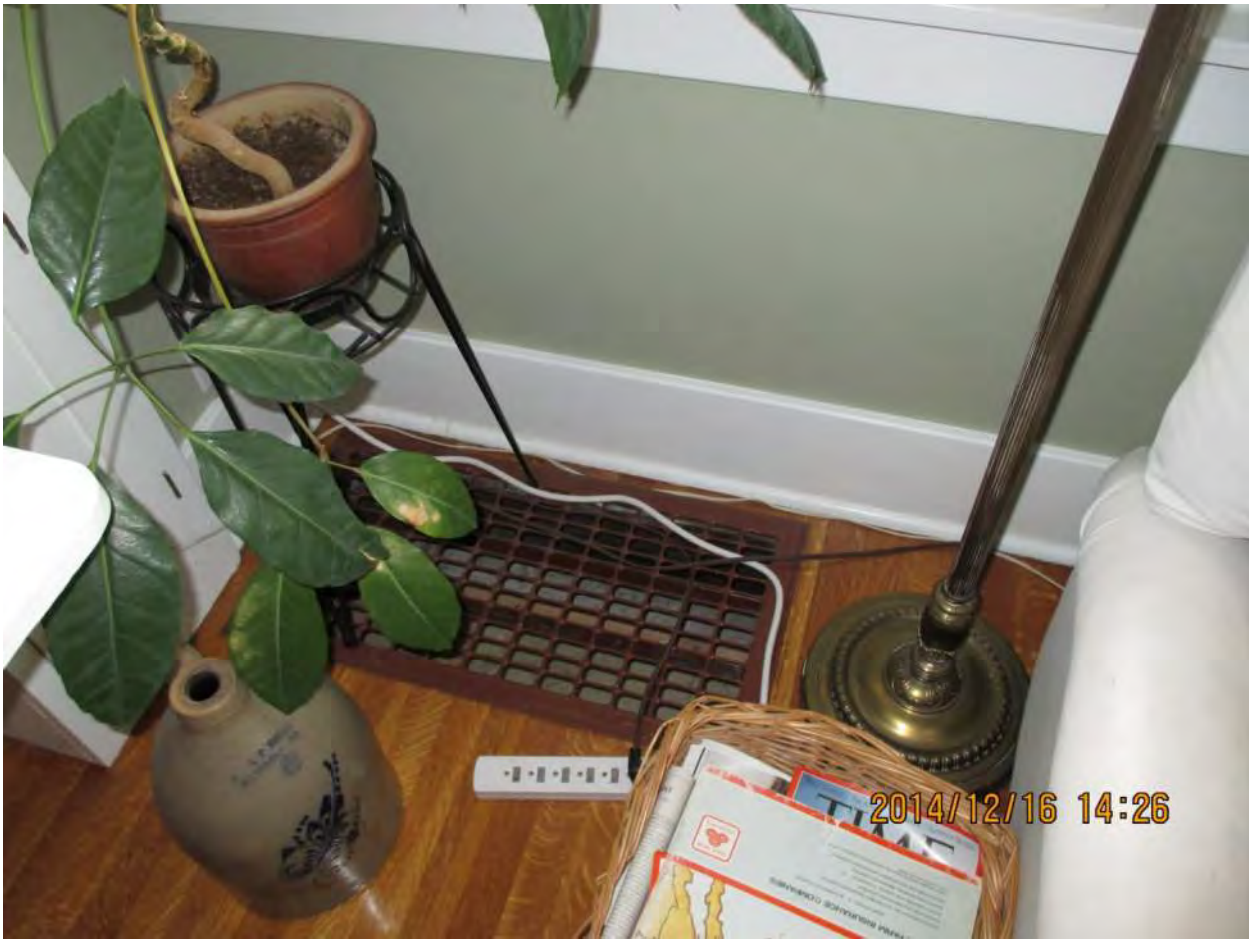
0260


valspar
valspar
Drywall Primer
Benjamin Moore
FRESH START
ALL-PURPOSE PRIMER
DRIVEWAY
COVER STAIN
PRIMER
3M
Lightweight Body Filler
2014/12/16 14:19

0261



0262



0263



0264



0265



0266



0267



0268



0269



0270



0271



0272



PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0008-H

Street Address: 1446 Sunnyside Ave

ZIP:

Property Contact:

Tel #:

Latitude: 40.750539

Longitude: -111.849592

Age of Property: 70 years

Number of Levels: 2

Basement? (•) Yes ( ) No

Basement Habitable? (•) Yes ( ) No

Sump? ( ) Yes (•) No

Completed by: ded

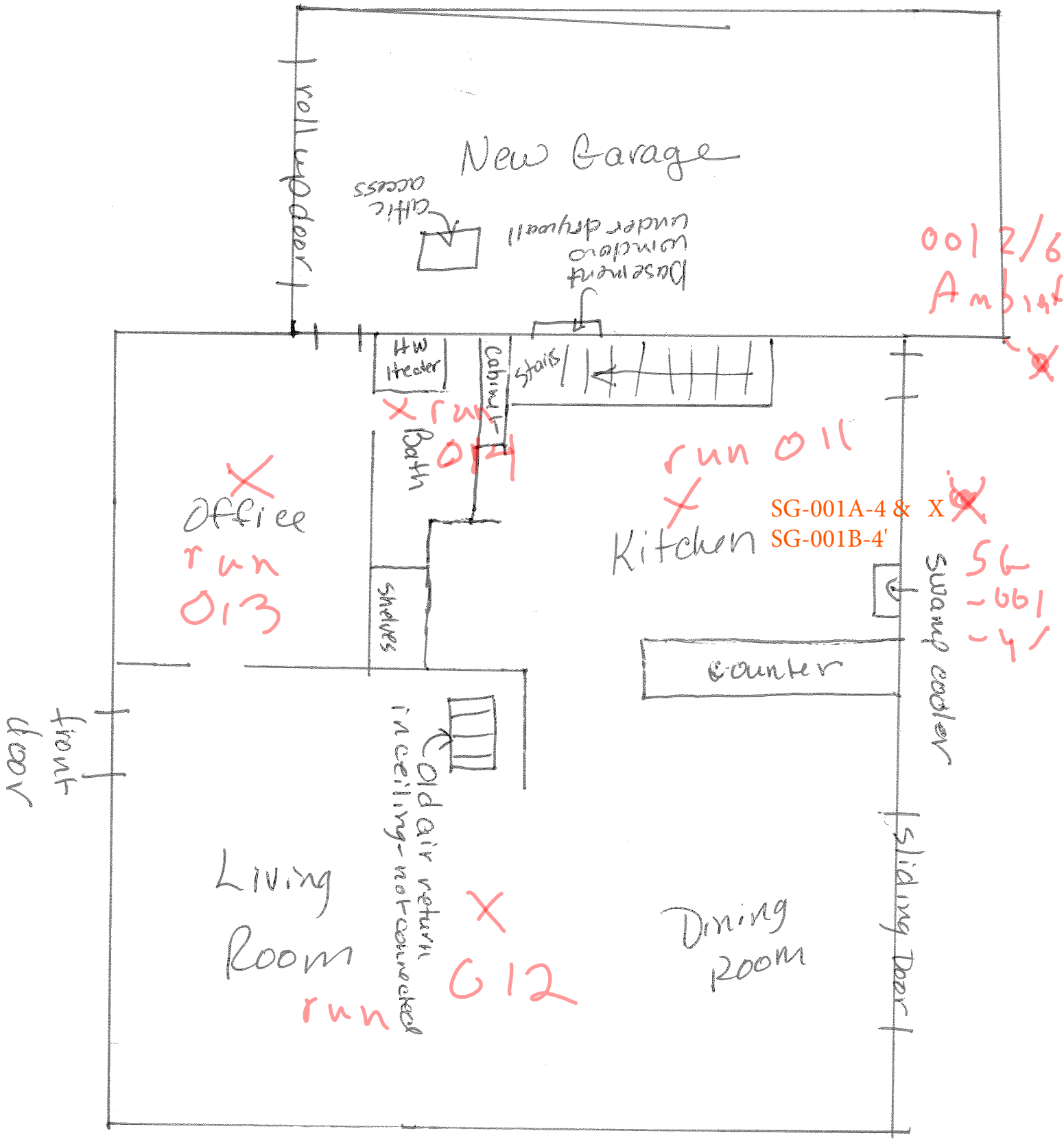
Date: 02052015

Comments

Property elevation at street - 4606'

Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.

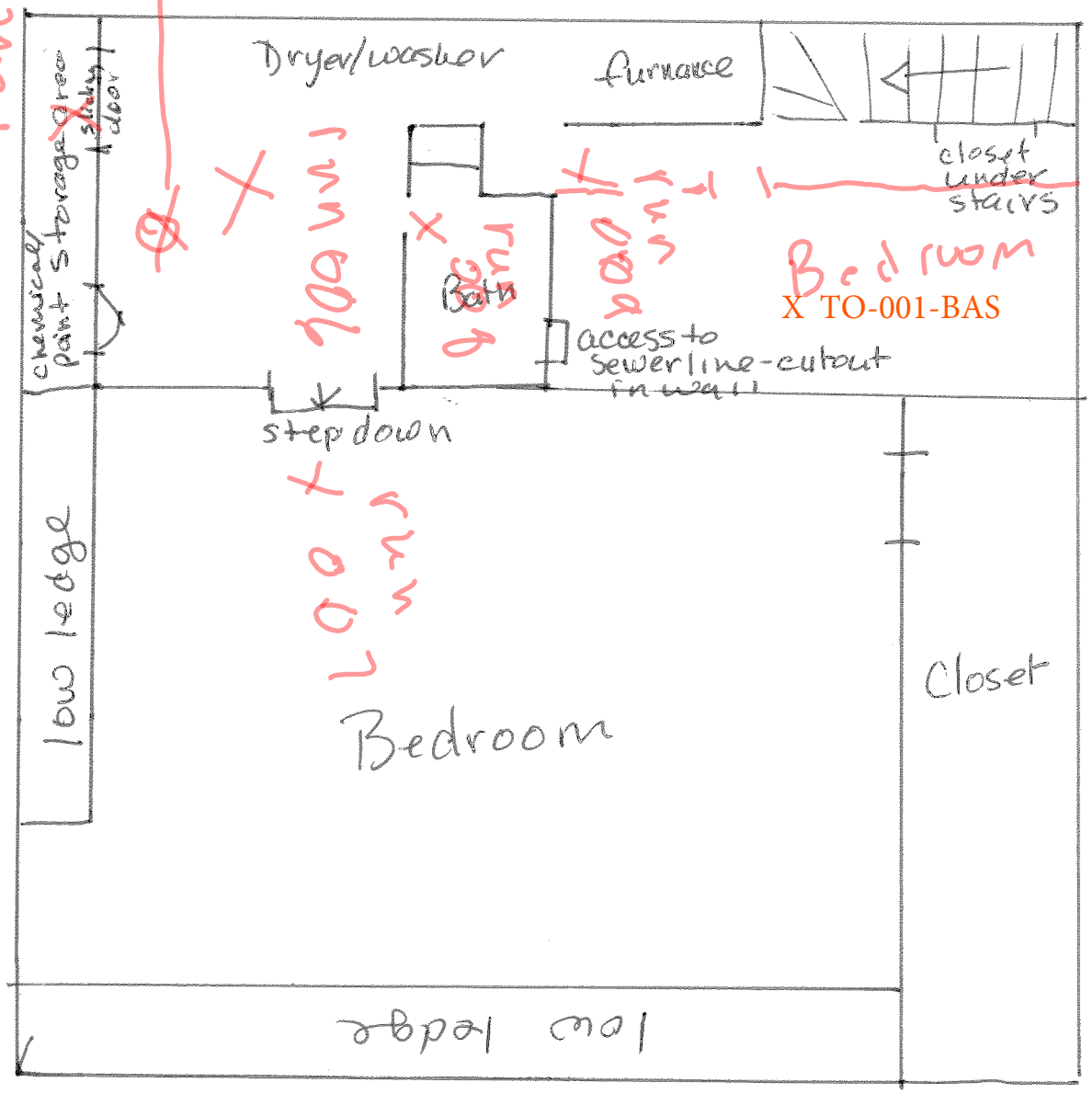
0008-1+ Main Floor 0008-1+



0008-H Basement

216-RUNO 662-009

run 610



X TO-001-BAS

PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 2/5/15 Time of Arrival: 0830

Weather Conditions: Partly Cloudy

Temperature: 46 Barometric Pressure (inHg): 30.17 Wind Direction: SE Speed: Light

Field Crew 1: ERR Role: HAPSITE Operator

Field Crew 2: DED Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? ( ) Yes (●) No

If yes, have the materials been removed? ( ) Yes (●) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time
2,3,4,8,9	2/4/15	1906

Instrument Performance Check Run Number	Time	
na-auto tune	0810	(●) Pass ( ) Fail

Instrument Performance Check Re-run Number	Time	
		( ) Pass ( ) Fail

CCV Run Number	Time	
002	1945	(●) Pass ( ) Fail

CCV Re-run Number	Time	
NA		( ) Pass ( ) Fail

Operator's initials: ERR

Comments

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time: 1737 End Time: 0856

Location: Backyard patio 0849 start time- 2/6/15

Run Number: 001 (2/6/15) Time: 0849

Run Number: Time:

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time 1600 End Time 1619

Comments

001- closet with old drycleaning

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time 1600 End Time 1619

Comments

001 closet in bedroom. Closet contains recent dry cleaned clothing items. TIC count = 37,228. 002 1603 General bedroom survey. TIC count 39,870. Smal
003 1608. TIC count 38,309. General laundry room 004 1612 TIC count 36,635. General storage 005 1617 TIC count 39,365.

Pictures

PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	1513	End Time			
Room/area	Laundry room	Run Number	006 (IA-001-LAU)	Time	1513
Room/area	Basement bedroom	Run Number	007 (IA-002-BR1)	Time	1522
Room/area	Basement bathroom	Run Number	008 (IA-003-BA1)	Time	1531
Room/area	Basement storage	Run Number	009 (IA-004-STO1)	Time	1540
Room/area	Storage/basement shelf	Run Number	010 (IA-005-STO2)	Time	1549
Room/area	Kitchen	Run Number	011 (IA-006-KIT	Time	1700
Room/area	Open concept room	Run Number	012 (IA-007-OCL)	Time	1710
Room/area	Upstairs office	Run Number	013 (IA-008-OFC)	Time	1718
Room/area	Upstairs bathroom	Run Number	014 (IA-009-BA2)	Time	1727
Room/area		Run Number		Time	

Comments

001 and 002 performed, but Hapsite MS not communicating properly, runs later scrapped and re-done. 003 and 004 aborted. 005 ccv run after repairs. 006 is first ambient indoor run.

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time: 0930 | End Time: | Room/Area: Basement laundry room

T=	5	CFM	658	Pascals	-5.2	Run No.	002 (IA011A-LAU)	Time	0932
T=	10	CFM	640	Pascals	-5.2	Run No.	003 (IA011B-LAU)	Time	0940
T=	15	CFM	653	Pascals	-5.3	Run No.		Time	
T=	20	CFM	659	Pascals	-4.9	Run No.	004 (IA011C-LAU)	Time	0950
T=	25	CFM	690	Pascals	-5.5	Run No.		Time	
T=	30	CFM	628	Pascals	-5.2	Run No.	005 (IA011D-LAU)	Time	1000
T=	35	CFM	607	Pascals	-5.0	Run No.		Time	
T=	40	CFM	471	Pascals	-5.2	Run No.	006 (IA011E-LAU)	Time	1010
T=	45	CFM	630	Pascals	-4.4	Run No.		Time	
T=	47	CFM	584	Pascals	-5.1	Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

26,250 = 2.5 air volumes. 29,234 total volume. Initial ambient pressure differential = -0.2 pascals

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time: 1026 | End Time: | Room/Area:

T=	5	CFM	1052	Pascals	8.1	Run No.	007 (IA012A-LAU)	Time	1031
T=	10	CFM	1102	Pascals	10.0	Run No.		Time	
T=	15	CFM	1221	Pascals	11.9	Run No.	008 (IA012B-LAU)	Time	1041
T=	20	CFM	1205	Pascals	10.0	Run No.		Time	
T=	25	CFM	1127	Pascals	9.3	Run No.	009 (IA012C-LAU)	Time	1051
T=	30	CFM	1234	Pascals	10.0	Run No.		Time	
T=	32	CFM	1239	Pascals	9.8	Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

Total volume = 37,394, Initial pressure differential = 0.00 pascals.

PART J
SUMMA CANISTERS

Location/ Area: Basement - small bedroom at bottom of stairs

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0008H-TO-001-BAS	0384	04/09/2015	13:00	28	04/10/2015	13:10	2

Location/ Area: Soil Gas Sample SG-001-4' - adjacent to south foundation

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0008H-SG-001A-4	0271	04/09/2015	13:00	27	04/10/2015	13:20	1

Location/ Area: Soil Gas Sample SG-001-4 - Duplicate Sample

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0008H-SG-001B-4'	0533	04/09/2015	13:20	27	04/10/2015	13:00	1

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

See following page

Comments

TO-001-BAS collected due to Hapsite Screening showing TCE level above the RSL- indoor source of TCE contaminated clothing was likely present in bedroom as room occupant is an aircraft mechanic that handles solvents.




2015/04/09 13:30

PART K
SOIL GAS

Date	2/6/15	Time		Sample Depth	4'		
Latitude	40.750489	Longitude	-111.843597			Elevation	4610'
Run No	010 (0007H-SG-001-4'	Run Time				Vacuum (in/Hg)	2

Comments

Include location of the probe relative to the structure.see site sketch - located just to left of back door, near south center of house wall.

0008-H

appt scheduled Dec. 16 4pm

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

OCCUPIED DWELLING QUESTIONAIRE

Indoor Air Assessment Survey

Date: 12.3.2014

1. Nar
Adc
Hon

2. Wha

3. Are
this
call anytime

4. Total number of occupants/persons at this location? 2
Number of Children 0 Ages

5. How long have you lived at this location? 7 years

General Home Description

6. Type of Home/Structure (check only one): Single Family Home ☒, Duplex ☐, Apartment ☐, Townhouse ☐ Other

7. Home/Structure Description:
Number of floors: 1
+ Basement ☒
Crawlspace ☐
Partial crawlspace/basement ☐ % of each
Slab on grade ☐
Other ☐

8. Age of Home/Structure: 60 + years, Not sure/Unknown ☐

9. General Above-Ground Home/Structure construction (check all that apply):
Wood ☒, Brick ☐, Concrete ☐, Cement block ☐, Other ☐

10. Foundation Construction (check all that apply):
Concrete Slab ☐
Fieldstone ☐
Concrete block ☐
Elevated above ground/grade ☐
Other ☒ poured concrete floor + walls

0008 - H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

11. Do you have private well ☐ or cistern ☐ ? NO
If yes, please describe location, use and current condition_____

12. Do you have a septic system? Yes ☐ No ☒ Not used ☐ Unknown ☐
If yes, what is construction type?_____
Where is it located? _____
When was the last time it was serviced?_____
Do you (or have you ever) use (d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your home? (pond, ditch, etc.) Yes ☐ No ☒

Basement Description (please check all boxes that apply):

14. Is the basement finished ☒ or unfinished ☐ ?

15. If finished, how many rooms are in the basement? 4
What are rooms used for? Bedrooms ☒ Family room ☐ Storage ☒
Other Bathroom, laundry room

16. If not finished, do you plan on finishing in the future? Yes ☐ No ☐

17. Is the basement floor (check all that apply) concrete ☒, tile ☒, carpeted ☒, dirt ☐,
other ☐ _____

18. Are the basement walls poured concrete ☒, cement block ☐, stone ☐, wood ☐,
Brick ☐, other ☐ _____

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less that 1 time/year) ☐
No ☒

Describe the moisture problem_____

20. .Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☐
No ☒

21. Does the basement have any of the following? Floor cracks ☐ ?, Wall cracks ☐, Sump ☐,
Floor drain ☐, Other hole/opening in floor ☐
describe_____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

22. Are any of the following used or stored in the basement (check all that apply):
Paint ☒ Paint Stripper/remover ☐ Paint thinner ☐ Metal degreaser/cleaner ☐
Gasoline ☐ Diesel fuel ☐ Solvents ☐ Glue ☐ Laundry spot removers ☐ Drain cleaners
☐ Pesticides ☐ Other equipment with fuel tanks (chain saw, lawn mower, snow blower,etc.,)

23. Have you recently (within the last six months) done any painting or remodeling in your home?
Yes ☒ No ☐
If yes, specify what was done, where in the home, and what month:
attached garage built; floor + trim painted

24. Have you installed new carpeting in your home within the last year? Yes ☐ No ☒
If yes, when and where?_____

25. Do you regularly use or work in a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) ☐
Yes, use dry-cleaning infrequently (monthly or less) ☒ much less
Yes, work at a dry cleaning service ☐
No ☐

26. Does anyone in your home use solvents at work?
Yes ☒ If yes, how many persons? 1
No ☐ If no, go to question 28

27. If yes for question 26, are the work clothes washed at home? Yes ☒ No ☐

28. Where is the washer/dryer located?
Basement ☒
Upstairs utility room ☐
Kitchen ☐
Garage ☐
Use a Laundromat ☐
Other, please specify ☐ _____

29. If you have a dryer, is it vented to the outdoors? Yes ☒ No ☐

30. What type (s) of home heating do you have (check all that apply)
Fuel type: Gas ☒, Oil ☐, Electric ☐, Wood ☐, Coal ☐,
Other ☐_____

Heat conveyance system:
Forced hot air ☐
Forced hot water ☒
Steam ☐
Radiant floor heat ☐
Wood Stove ☐
Coal furnace ☐
Fireplace ☐
Other ☐ _____

00008-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

31. Does your home have (or had in the past) a storage tank for storage of: gasoline ☐ fuel oil ☐ propane ☐
If yes, where is/was it located? _____
How is/was the tank filled? _____
Is there staining near the tank? Yes ☐ No ☐

32. Do you have air conditioning? Yes ☒ No ☐
Central air conditioning ☐
Window air conditioning unit (s) ☐
Other (please specify) swamp cooler ; air purifier

33. Do you use any of the following? Room fans ☐, Ceiling fans ☒, Attic fan ☐

34. Do you ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☐ No ☒

35. Has your home had termite or other pesticide treatment? Yes ☐ No ☒ Unknown ☐
If yes, please specify type of pest controlled _____
And approximate date of service _____

36. Water heater type: Gas ☒, Electric ☐, by Furnace ☐,
Other (please describe) _____

37. Water heater location: Basement ☐, Upstairs utility room ☒, Garage ☐,
Other (please specify) _____

38. What type of cooking appliance do you have? Electric ☒, Gas ☐
Other (please describe) _____

39. Is there a stove exhaust hood present? Yes ☒ No ☐
Does it vent to the outdoors? Yes ☐ No ☒

40. Smoking in Home:
None ☒, Rare (only guests) ☐, Moderate (residents, light smokers) ☐,
Heavy (at least one heavy smoker in household) ☐

41. If yes to question 40, what do they smoke?
Cigarettes ☐ Cigars ☐
Pipe ☐ Other ☐

42. Do you regularly use air fresheners? Yes ☐ No ☒

43. Does anyone in the home have indoor home hobbies or crafts involving:
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☐
Spray paint ☐, wood finishing ☐, Other ☐ _____

0008-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

44. General family/home use of consumer products (please circle appropriate).
Assume that: Never = never used, Hardly ever = less that once/month,
Occasionally = about once/month, Regularly = about once/week,
and Often = more that once/week.

Product	Frequency of Use				
Spray-on deodorant	Never	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	Never	Hardly ever	Occasionally	Regularly	Often
Insecticides	Never	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	Occasionally	Regularly	Often
Window cleaners	Never	Hardly ever	Occasionally	Regularly	Often
Nail polish remover	Never	Hardly ever	Occasionally	Regularly	Often
Hair sprays	Never	Hardly ever	Occasionally	Regularly	Often
Candles	Never	Hardly ever	Occasionally	Regularly	Often
Incense	Never	Hardly ever	Occasionally	Regularly	Often

45. Please check weekly household cleaning practices:

Dusting ☒
Dry sweeping ☐
Vacuuming ☒
Polishing (furniture, etc.) ☐
Washing/waxing floors ☐
Other (describe) ☐ _____

46. Other comments:

_____
_____
_____
_____
_____
_____
_____
_____

0008-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

47. Chemical Inventory/Summary

Chemical/Chemical Product (consumer name)	Amount present in home
Payless Rain + Stain Guard	3 oz
a) OFF Deep Woods aromatherapy Stress Relief Spritzer	
b) Hydrogen Peroxide Nature's Miracle Stain + Odor Remover	
c) Lysol Toilet Bowl Cleaner Lysol Power + Free w. Hydrogen Peroxide	
d) Clorox Wipes Hoover carpet shampoo	
e) Bar Keeper's Friend Cook Top Magic	
f) Dawn dish soap Home Sense Multi-surface Cleaner	
g) GoJo Cascade Complete dishwasher detergent	
h) Jet-Dry Dishwasher Magic	
i) Cascade powder Ceramabryte	
j) Western family dishwasher detergent Laundry detergent - Kirkland	
k) Shoe polish Oiler for furnace	
l) Water base paint Rustoleum (can)	
m) 7th Generation disinfecting cleaner Soft Scrub with bleach	
n) Nail polish / remover - lots (Cutex) Beauty products	
o) Dry cleaning - several items cleaned within past year	

There are other products in attached garage.

PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0009-H
Street Address: 871 S. 1400 E.
ZIP:
Property Contact:
Tel #:
Latitude: 40.750164
Longitude: -111.850781
Age of Property: 101 years
Number of Levels: 2
Basement? (•) Yes ( ) No
Basement Habitable? (•) Yes ( ) No
Sump? ( ) Yes (•) No

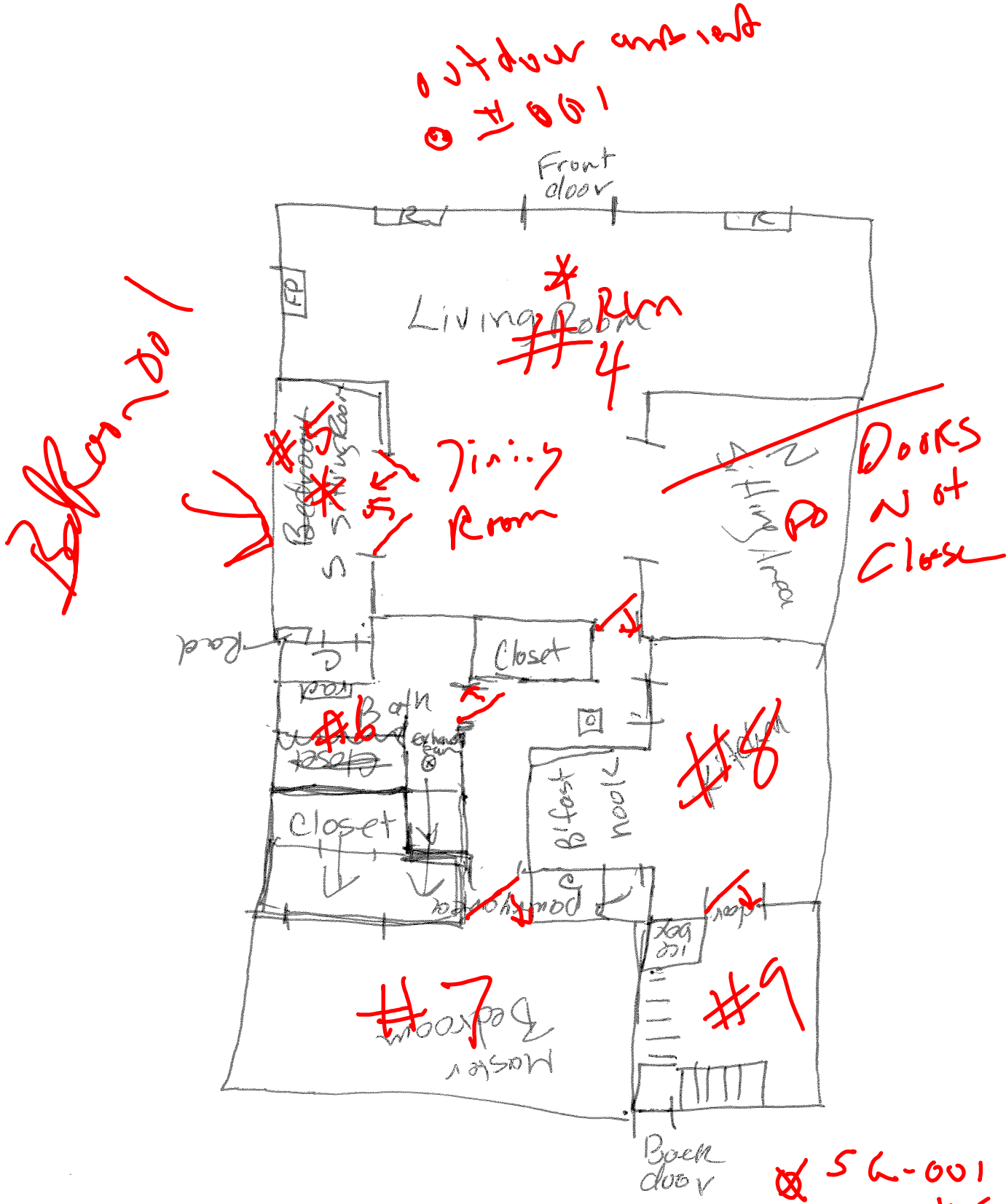
Completed by: ERR
Date: 11/19/2014

Comments

elevation at porch- 4574'

Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.

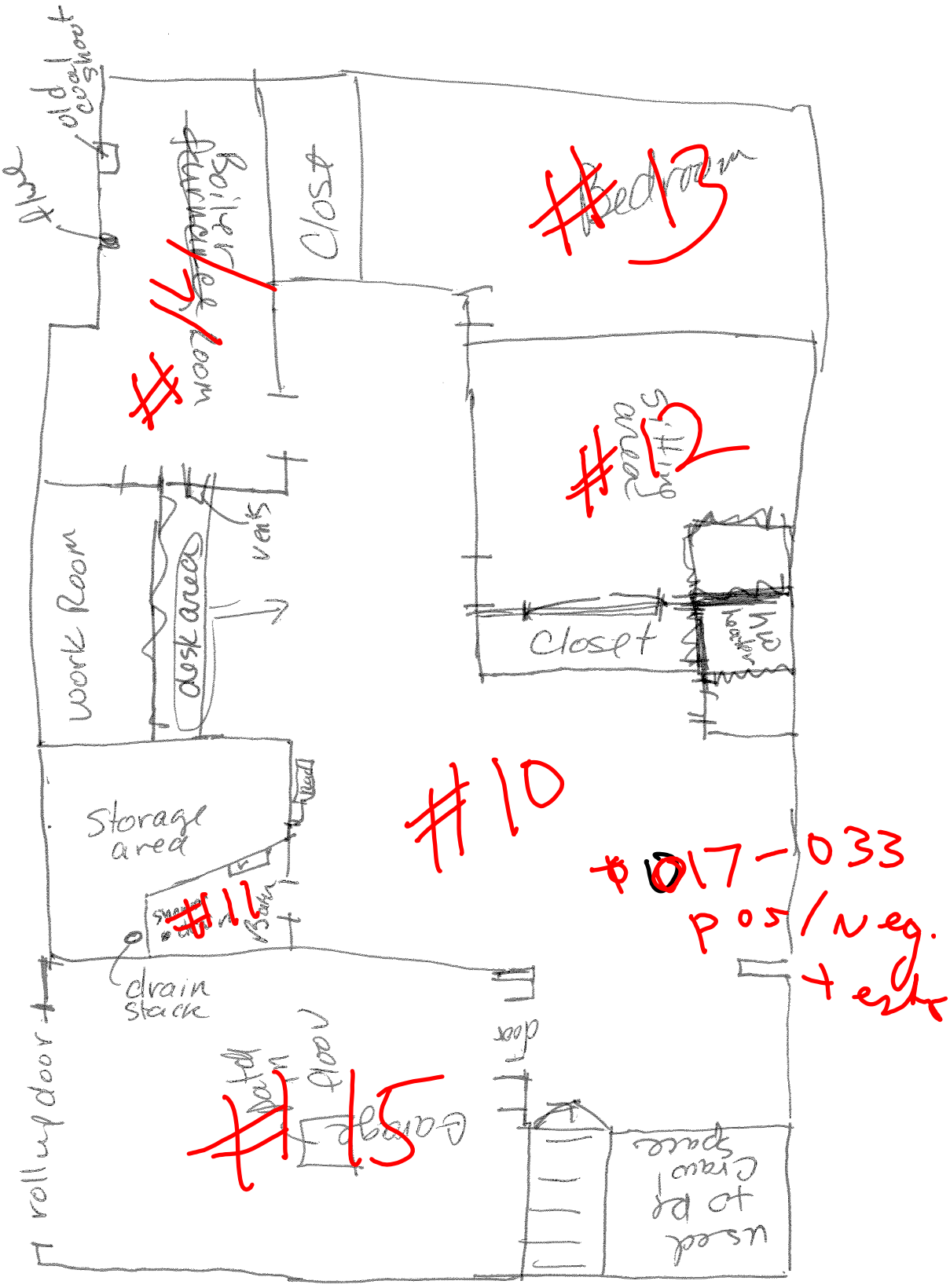
0009-H First Floor



...0009-H

Basement

0009-H



PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 2\10\15 Time of Arrival: 0830

Weather Conditions: Sunny

Temperature: 42 Barometric Pressure (inHg): 30.17 Wind Direction: NW Speed: Calm

Field Crew 1: ac Role: HAPSITE Operator

Field Crew 2: ch Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? ( ) Yes (●) No

If yes, have the materials been removed? ( ) Yes ( ) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time
1-5	2/9/15	1800

Instrument Performance Check Run Number	Time	
NA	0900	(•) Pass ( ) Fail

Instrument Performance Check Re-run Number	Time	
		( ) Pass ( ) Fail

CCV Run Number	Time	
034- 5ppbv standard	1456	(•) Pass ( ) Fail

CCV Re-run Number	Time	
035-0.5ppbv standard	1500	( ) Pass ( ) Fail

Operator's initials: AC

Comments

hapsite H860-smart plus

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time: 0912 End Time: 0915

Location: southwest corner portion of front porch, by stairs

Run Number: 001 (IA-001-OUT Time: 0912

Run Number: Time:

Comments

Note: Runs 002 and 003 aborted due nitrogen supply depletion

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time 1135 End Time 1143

Comments

paints glues solvents stains in for wood working in craft room- back ground tic readings , garage\storage area with lawn garden chemicals and automotive a
transmission fluid and oil tire cleaner- background tic readings. photo: WIN_20150210_133243.JPG, WIN_20150210_134607

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time 1135 End Time 1143

Comments

floor drain in laundry room- background tic readings , cracks in boiler room floor and wall- background tic readings ,crack\seam in cement floor of garage-

Pictures

WIN_20150210_133315, WIN_20150210_133305, WIN_20150210_133243

PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	0919	End Time	1130		
Room/area	living, n. sitting and formal dining combined room	Run Number	004(IA002-2LL)	Time	0951
Room/area	main floor bedroom south side by dining/living area	Run Number	005(IA003-BR1)	Time	1001
Room/area	mainfloor bathroom by kitchen	Run Number	006(IA004-BA1)	Time	1009
Room/area	master bedroom	Run Number	007(IA005-MBR)	Time	1017
Room/area	kitchen	Run Number	008(IA006-KIT)	Time	1025
Room/area	mudroom	Run Number	009(IA007-STO1)	Time	1033
Room/area	basement laundry utility room with computer desk area	Run Number	010(IA008-LAU)	Time	1043
Room/area	basement bathroom	Run Number	011(IA009-BA2)	Time	1051
Room/area	basement sitting/tv room	Run Number	012(IA010-LLL)	Time	1100
Room/area	basement bedroom	Run Number	013(IA011-BR2)	Time	1107

Comments

storage room with boiler and craft room 014(IA012-STO2) @1115, garage 015(IA013-GAR) @1124

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time 1221 End Time 1336 Room/Area air door in back door hapsite in basement in laundry room

T=	5	CFM	826	Pascals	-5.0	Run No.	017 IA-014A-LAU	Time	1226
T=	10	CFM	830	Pascals	-5.2	Run No.	018 (IA014B-LAU)	Time	1231
T=	15	CFM	873	Pascals	-5.0	Run No.		Time	1236
T=	20	CFM	864	Pascals	-4.9	Run No.	019 (IA014C-LAU)	Time	1241
T=	25	CFM	850	Pascals	-5	Run No.		Time	1246
T=	30	CFM	869	Pascals	-5.0	Run No.	020 (IA014D-LAU)	Time	1251
T=	35	CFM	870	Pascals	-5.1	Run No.	021 (IA014E-LAU)	Time	1256
T=	40	CFM	863	Pascals	-5.0	Run No.		Time	1301
T=	45	CFM	853	Pascals	-5.1	Run No.	022 (IA014F-LAU)	Time	1306
T=	50	CFM	847	Pascals	-5.6	Run No.		Time	1311
T=	55	CFM	845	Pascals	-5.2	Run No.	023 (IA014G-LAU)	Time	1316
T=	60	CFM	861	Pascals	-5.2	Run No.	024 (IA014H-LAU)	Time	1321
T=	65	CFM	822	Pascals	-5.3	Run No.		Time	1326
T=	70	CFM	832	Pascals	-5.3	Run No.	25 (IA014I-LAU)	Time	1331
T=	75	CFM	834%	Pascals	-5.1	Run No.	025-shut down	Time	1336

Comments

63000cubic ft is target volume of house, building baseline is -0.4pa. with an average of 849.27 cfm running for 75 mins total volume removed=63695.25 c

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time: 1343 End Time: Room/Area: blower door and hapsite in same locations as negtive survey

T=	5	CFM	1049	Pascals	7.1	Run No.	026 (IA015A-LAU)	Time	1348
T=	10	CFM	1080	Pascals	5.9	Run No.	027 (IA015B-LAU)	Time	1353
T=	15	CFM	1065	Pascals	5.5	Run No.		Time	1358
T=	20	CFM	1060	Pascals	6.9	Run No.	028 (IA015C-LAU)	Time	1403
T=	25	CFM	1067	Pascals	6.3	Run No.	029 (IA015D-LAU)	Time	1408
T=	30	CFM	1063	Pascals	6.3	Run No.		Time	1413
T=	35	CFM	1077	Pascals	5.6	Run No.	030 (IA015E-LAU)	Time	1418
T=	40	CFM	1076	Pascals	4.6	Run No.	031 (IA015F-LAU)	Time	1423
T=	45	CFM	1071	Pascals	5.4	Run No.		Time	1428
T=	50	CFM	1076	Pascals	6.0	Run No.	032 (IA015G-LAU)	Time	1433
T=	55	CFM	1073	Pascals	7.3	Run No.		Time	1438
T=	60	CFM	1080	Pascals	7.2	Run No.	033 (IA015H-LAU)	Time	1443
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

63000cubic ft is target volume of house, building baseline is -0.3pa. with an average of 1069.75 cfm running for 60 mins total volume added=64185 cubi

PART J
SUMMA CANISTERS

Location/ Area: NA

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

Comments

PART K
SOIL GAS

Date	02/10/2015	Time	10:00	Sample Depth	4'		
Latitude	40.750216	Longitude	-111.850633			Elevation	4582
Run No	016	Run Time	1135			Vacuum (in/Hg)	3

Comments

SG-001-4' Adjacent to basement foundation - NE corner of home.

L.M. 12/1

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

RECEIVED
NOV 2 1 2014
BY:_____

Dec 17
4:00

0009-H

OCCUPIED DWELLING QUESTIONAIRE

Indoor Air Assessment Survey

Date: 11/19/14

1. Nam
   Addr
   ____
   ____
   Home
2. What
3. Are yc
   this H
   ____

4. Total number of occupants/persons at this location? 2-3
   Number of Children 0 Ages _____

5. How long have you lived at this location? 22 years

General Home Description

6. Type of Home/Structure (check only one): Single Family Home ☒, Duplex ☐, Apartment ☐, Townhouse ☐ Other _____

7. Home/Structure Description:
   Number of floors: 2
   Basement ☒
   Crawlspace ☐
   Partial crawlspace/basement ☐ % of each _____
   Slab on grade ☐
   Other ☐ _____

8. Age of Home/Structure: 101 years, Not sure/Unknown ☐

9. General Above-Ground Home/Structure construction (check all that apply):
   Wood ☐, Brick ☒, Concrete ☐, Cement block ☐, Other ☐ _____

10. Foundation Construction (check all that apply):
    Concrete Slab ☒
    Fieldstone ☐
    Concrete block ☐
    Elevated above ground/grade ☐
    Other ☐ _____

3009-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

11. Do you have private well ☐ or cistern ☐ ? No
If yes, please describe location, use and current condition_____

12. Do you have a septic system? Yes ☐ No ☒ Not used ☐ Unknown ☐
If yes, what is construction type?_____
Where is it located? _____
When was the last time it was serviced?_____
Do you (or have you ever) use (d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your home? (pond, ditch, etc.) Yes ☐ No ☒

Basement Description (please check all boxes that apply):

14. Is the basement finished ☒ or unfinished ☐ ? mostly

15. If finished, how many rooms are in the basement? 3
What are rooms used for? Bedrooms ☒ Family room ☐ Storage ☐
Other_____

16. If not finished, do you plan on finishing in the future? Yes ☐ No ☒

17. Is the basement floor (check all that apply) concrete ☒, tile ☐, carpeted ☒, dirt ☐,
other ☒ some linoleum

18. Are the basement walls poured concrete ☒, cement block ☐, stone ☐, wood ☐,
Brick ☐, other ☐ _____

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less that 1 time/year) ☐
No ☒

Describe the moisture problem_____

20. .Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☒ - only from drainage problems
No ☐

21. Does the basement have any of the following? Floor cracks ☐, Wall cracks ☐, Sump ☐,
Floor drain ☒, Other hole/opening in floor ☐
describe_____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

22. Are any of the following used or stored in the basement (check all that apply):
Paint ☒ Paint Stripper/remover ☐ Paint thinner ☒ Metal degreaser/cleaner ☐
Gasoline ☐ Diesel fuel ☐ Solvents ☐ Glue ☒ Laundry spot removers ☒ Drain cleaners
☒ Pesticides ☐ Other equipment with fuel tanks (chain saw, lawn mower, snow blower,etc.,)

23. Have you recently (within the last six months) done any painting or remodeling in your home?
Yes ☐ No ☒
If yes, specify what was done, where in the home, and what month:
_____
_____

24. Have you installed new carpeting in your home within the last year? Yes ☐ No ☒
If yes, when and where?_____

25. Do you regularly use or work in a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) ☐
Yes, use dry-cleaning infrequently (monthly or less) ☒
Yes, work at a dry cleaning service ☐
No ☐

26. Does anyone in your home use solvents at work?
Yes ☐ If yes, how many persons?
No ☒ If no, go to question 28

27. If yes for question 26, are the work clothes washed at home? Yes ☐ No ☐

28. Where is the washer/dryer located?
Basement ☒
Upstairs utility room ☐
Kitchen ☐
Garage ☐
Use a Laundromat ☐
Other, please specify ☐ _____

29. If you have a dryer, is it vented to the outdoors? Yes ☒ No ☐

30. What type (s) of home heating do you have (check all that apply)
Fuel type: Gas ☒, Oil ☐, Electric ☐, Wood ☐, Coal ☐,
Other ☐_____

Heat conveyance system:
Forced hot air ☐
Forced hot water ☒ radiators
Steam ☐
Radiant floor heat ☐
Wood Stove ☐
Coal furnace ☐
Fireplace ☐
Other ☐ _____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

31. Does your home have (or had in the past) a storage tank for storage of: gasoline ☐ fuel oil ☐ propane ☐ No
If yes, where is/was it located? _____
_____
How is/was the tank filled? _____
_____
Is there staining near the tank? Yes ☐ No ☐

32. Do you have air conditioning? Yes ☐ No ☒
Central air conditioning ☐
Window air conditioning unit (s) ☐
Other (please specify) _____

33. Do you use any of the following? Room fans ☒, Ceiling fans ☒, Attic fan ☐

34. Do you ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☐ No ☐ N/A

35. Has your home had termite or other pesticide treatment? Yes ☐ No ☒ Unknown ☐
If yes, please specify type of pest controlled _____
And approximate date of service _____

36. Water heater type: Gas ☒, Electric ☐, by Furnace ☐,
Other (please describe) _____

37. Water heater location: Basement ☒, Upstairs utility room ☐, Garage ☐,
Other (please specify) _____

38. What type of cooking appliance do you have? Electric ☒, Gas ☐
Other (please describe) _____

39. Is there a stove exhaust hood present? Yes ☐ No ☒ – maybe very old / removed
Does it vent to the outdoors? Yes ☐ No ☐

40. Smoking in Home:
None ☒, Rare (only guests) ☐, Moderate (residents, light smokers) ☐,
Heavy (at least one heavy smoker in household) ☐

41. If yes to question 40, what do they smoke?
Cigarettes ☐ Cigars ☐
Pipe ☐ Other ☐

42. Do you regularly use air fresheners? Yes ☐ No ☒

43. Does anyone in the home have indoor home hobbies or crafts involving: No
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☐
Spray paint ☐, wood finishing ☐, Other ☐ _____
_____
_____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

44. General family/home use of consumer products (please circle appropriate).
Assume that: Never = never used, Hardly ever = less that once/month,
Occasionally = about once/month, Regularly = about once/week,
and Often = more that once/week.

Product	Frequency of Use				
Spray-on deodorant	Never	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	Never	Hardly ever	Occasionally	Regularly	Often
Insecticides	Never	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	Occasionally	Regularly	Often
Window cleaners	Never	Hardly ever	Occasionally	Regularly	Often
Nail polish remover	Never	Hardly ever	Occasionally	Regularly	Often
Hair sprays	Never	Hardly ever	Occasionally	Regularly	Often
Candles	Never	Hardly ever	Occasionally	Regularly	Often
Incense	Never	Hardly ever	Occasionally	Regularly	Often

45. Please check weekly household cleaning practices:

Dusting ☒
Dry sweeping ☒ about every 2 weeks
Vacuuming ☒
Polishing (furniture, etc.) ☐
Washing/waxing floors ☐
Other (describe) ☐ _____

46. Other comments:

_____
_____
_____
_____
_____
_____
_____
_____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

47. Chemical Inventory/Summary

Chemical/Chemical Product (consumer name)	Amount present in home
a) Standard household cleaning products	small quantities
b)	
c)	
d)	
e)	
f)	
g)	
h)	
i)	
j)	
k)	
l)	
m)	
n)	
o)	

PART K
SOIL GAS

Date	02/10/2015	Time	10:00	Sample Depth	4'		
Latitude	40.750216	Longitude	-111.850633			Elevation	4582
Run No	016	Run Time	1135			Vacuum (in/Hg)	3

Comments

SG-001-4' Adjacent to basement foundation - NE corner of home.

PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0010-H
Street Address: 1012 s 1100 e
ZIP:
Property Contact:
Tel #:
Latitude: 40.747075
Longitude: -111.859853
Age of Property: 90 years
Number of Levels: 2
Basement? (•) Yes ( ) No
Basement Habitable? (•) Yes ( ) No
Sump? ( ) Yes (•) No

Completed by: ERR
Date: 11/17/2014

Comments

Elevation at sidewalk at porch steps - 4378 ft MSL

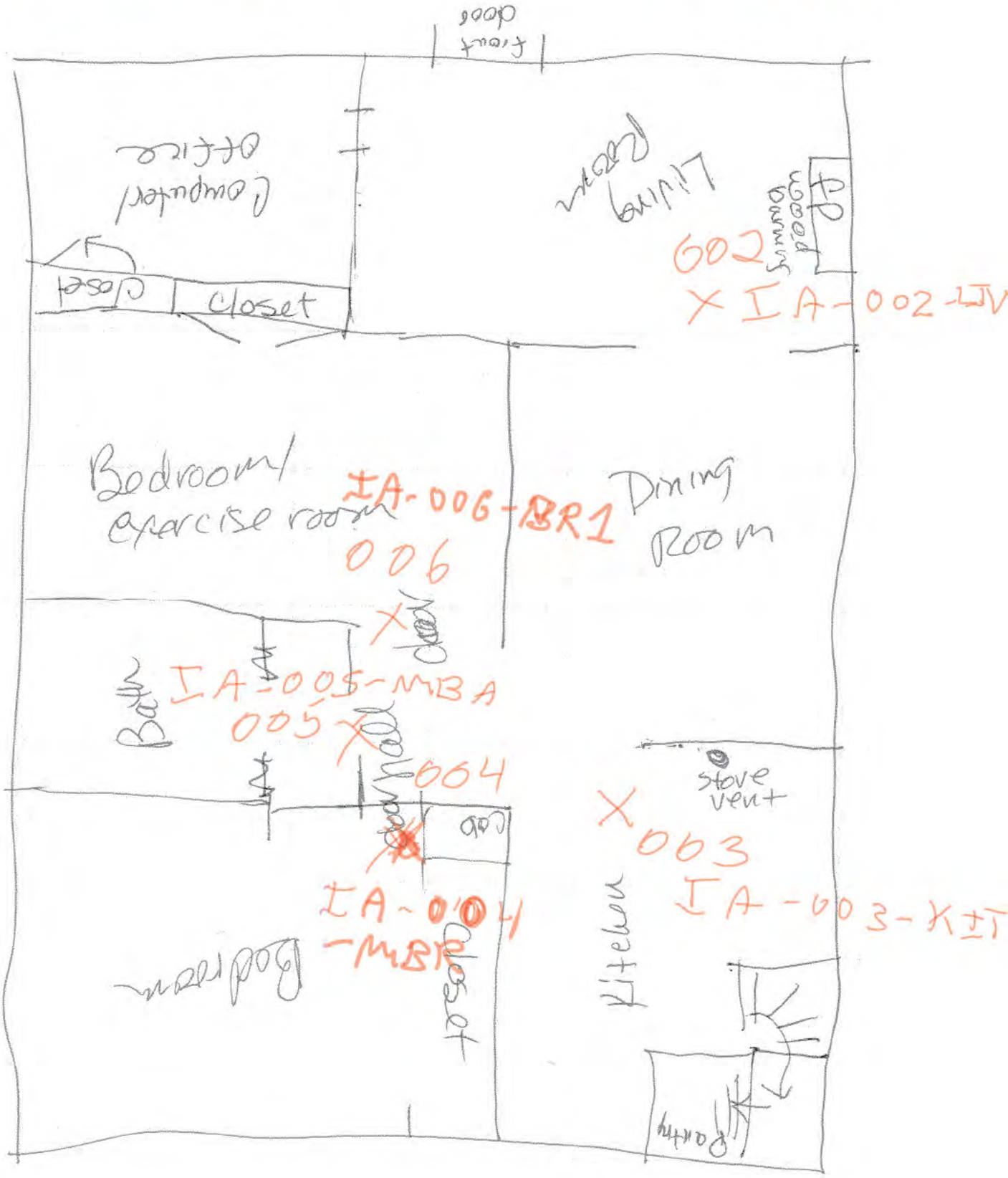
Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.

0010-H Up stairs

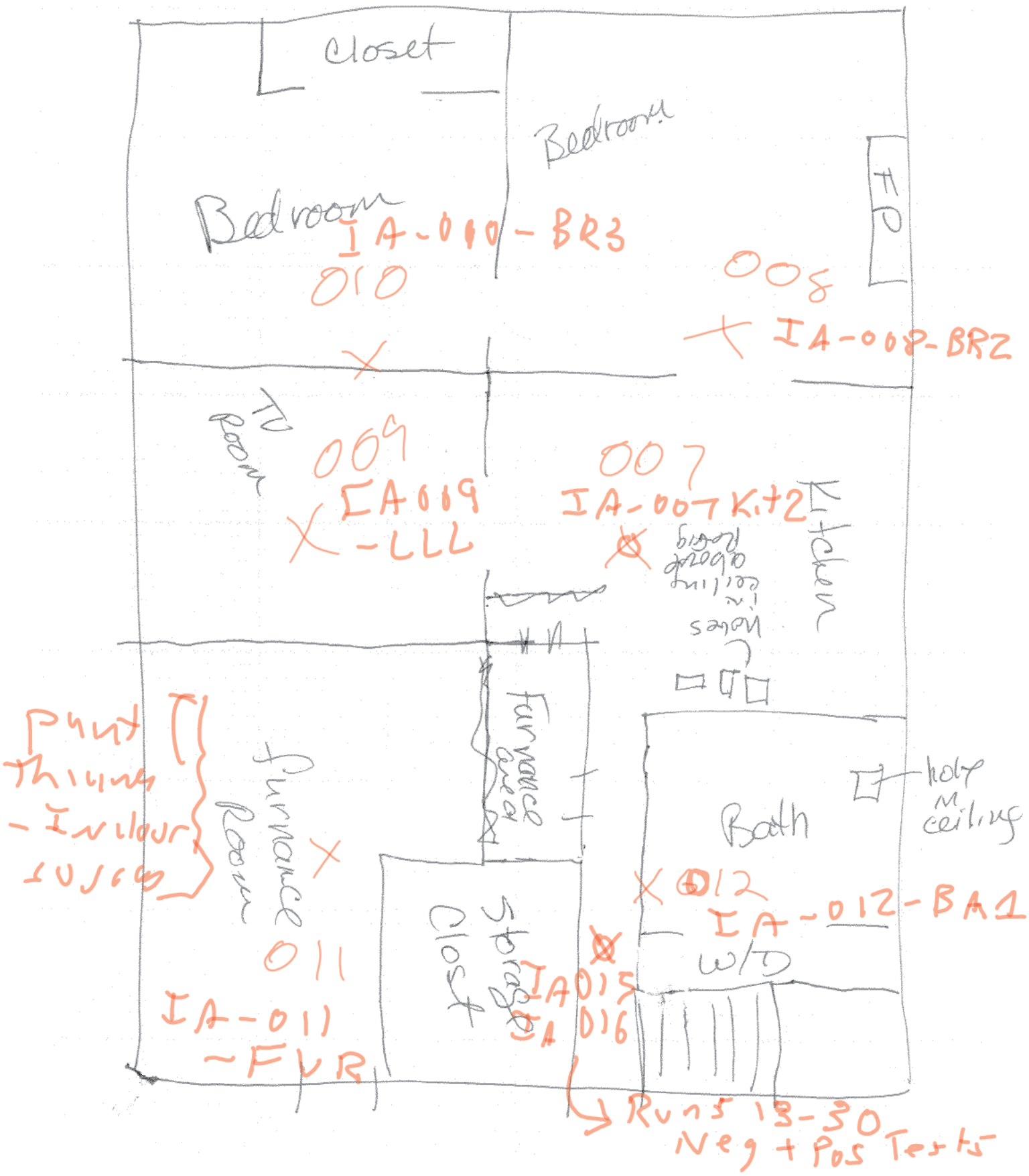
Ambient 0010-H IA001-OUT

Run # 001

SG-001-4'



0010-H Basement



PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 1/27/15 Time of Arrival: 0830

Weather Conditions: Partly Cloudy

Temperature: 36 Barometric Pressure (inHg): 30.20 Wind Direction: N Speed: Calm

Field Crew 1: AJC Role: HAPSITE Operator

Field Crew 2: DED Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? (●) Yes ( ) No

If yes, have the materials been removed? ( ) Yes (●) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

Materials such as paint/solvents are stored in the basement. 2,520 sq ft house.

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time
015,016, 017, 020, 021	1/26/15	1955

Instrument Performance Check Run Number	Time	
NA- tune is pass/fail	08:30	(●) Pass ( ) Fail

Instrument Performance Check Re-run Number	Time	
		( ) Pass ( ) Fail

CCV Run Number	Time	
001	1955	(●) Pass ( ) Fail

CCV Re-run Number	Time	
NA		( ) Pass ( ) Fail

Operator's initials: ERR

Comments

CIS-5.22 PPB. TCE - 4.86 PPB. PCE-5.83 PPB. 1/26/15

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time: 0927 End Time: 0930

Location: 30 feet to the east of the front steps

Run Number: 001 (A0010H-012715-001-OUT) Time: 0927

Run Number: Time:

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time 1215 End Time 1222

Comments

No background sources identified in MBR (Survey 001 A0010H013-MBR). 1235 ; survey 002 (A0010H-014-STO) 1242.

PART F

INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time | End Time

Comments

No visible areas of dntry and ambient quantitative indicates concentrations are barely above baseline

Pictures

PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	0935	End Time	11:23		
Room/area	Living room	Run Number	002 (0010-IA-002-LIV	Time	0935
Room/area	Kitchen	Run Number	003 (0010-IA-003-KIT	Time	0944
Room/area	Master bedroom	Run Number	004 (0010-IA-004-MBR	Time	0955
Room/area	Master Bath	Run Number	005 (0010-IA-005-MBA	Time	1005
Room/area	Bedroom 1	Run Number	006 (0010-IA-006-BR1	Time	1017
Room/area	Kitchen 2-basement	Run Number	007 (0010-IA-007-KIT2	Time	1033
Room/area	Bedroom in basement	Run Number	008 (0010-IA-008-BR2	Time	1043
Room/area	Basement living room	Run Number	009 (0010-IA-009-LLL	Time	1053
Room/area	Bedroom 2 in basement	Run Number	010 (0010-IA-010-BR3	Time	1103
Room/area	Furnace room	Run Number	011 (0010-IA-011-FUR	Time	1115

Comments

STO= furnace room (FUR) Cannot edit field above. Backround sources found in FUR (basement). Sources such as paint/paint thinners, concrete primer, c

Bathroom in basement (0010IA-012-BA1) time:1123.

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time 1312 End Time 1517 Room/Area Basement stairs

T=	5	CFM	208	Pascals	-5.1	Run No.	013 (0010H-IA-015A-LLL	Time	1317
T=	10	CFM	205	Pascals	-4.8	Run No.	013 A0010H-012715-015	Time	1322
T=	20	CFM	204	Pascals	-4.6	Run No.	013 A0010H-012715-015	Time	1332
T=	25	CFM	163	Pascals	-4.1	Run No.	014 A0010H-015B aborted	Time	1337
T=	30	CFM	180	Pascals	-5.1	Run No.	014 A0010H-012715-015 aborted	Time	1342
T=	35	CFM	183	Pascals	-5.1	Run No.	015 A0010H-015C aborted	Time	1347
T=	40	CFM	178	Pascals	-4.9	Run No.	016 A0010H-015D aborted	Time	1352
T=	45	CFM	182	Pascals	-4.7	Run No.	016 A0010H-012715-017 aborted	Time	1357
T=	55	CFM	202	Pascals	-5.7	Run No.	016 A0010H-012715-017 aborted	Time	1407
T=	65	CFM	181	Pascals	-5.8	Run No.	017 A0010H-012715-017	Time	1417
T=	75	CFM	187	Pascals	-6.7	Run No.	018 A0010H-015F	Time	1427
T=	85	CFM	183	Pascals	-6.0	Run No.	019 A0010H-015G	Time	1437
T=	95	CFM	185	Pascals	-5.2	Run No.	020 A0010H-015H	Time	1447
T=	105	CFM	178	Pascals	-4.8	Run No.	021 A0010H-015I	Time	1457
T=	115	CFM	186	Pascals	-4.1	Run No.	023 A0010H-015J	Time	1507

Comments

47,250. Baseline pressure= -3.9Will only run negative pressure test for two hours due to lack of flow through house as approved by ERR. T=120 Cfm = 17

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time: 1525 | End Time: 1615 | Room/Area: Basement stairs

	T=	CFM	Pascals	Run No.	Time
1	5	415	11.5	025 A0010H-016A	1525
2	10	419	7.3	025 A0010H-012715-025	1530
3	15	433	13.5	026 A0010H-016B	1535
4	20	427	11.7	026 A0010H-012715-026	1540
5	25	422	7.2	027 A0010H-016C	1545
6	30	427	6.8	027 A0010H-012715-027	1550
7	35	425	9.8	028 A0010H-016D	1555
8	40	424	10.0	028 A0010H-016D	1600
9	45	421	8.2	029 A0010H-016E	1605
10	50	430	10.6	030 A0010H-016F	1610
11	55	426	6.8	030 A0010H-016F	1615
12					
13					
14					
15					

Comments

23,345 total volume, baseline pressure= -3.9

PART J
SUMMA CANISTERS

Location/ Area: NA

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

Comments

PART K
SOIL GAS

Date	01/27/2015	Time	16:00	Sample Depth	4		
Latitude	40.747100	Longitude	-111859747			Elevation	4378
Run No	002	Run Time	1737			Vacuum (in/Hg)	2

Comments

Near the NE corner of the house in front yard. Sample ran at end of day on the Hapsite ER - at field office.

0010-H

Dec 16, 9:00

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

OCCUPIED DWELLING QUESTIONAIRE

Indoor Air Assessment Survey

Date: 11/17/14

1. Name: _____
   Address: _____
   _____
   Home Phone: _____ Work Phone: _____
2. What is the best time to call to speak with you? Anytime At: Work ☐ or Home ☐ ?
3. Are you the Owner ☒, Renter ☐, Other ☐ (please specify) _____ of this Home/Structure? If you are not the owner, please provide owner contact Information
   _____
   _____
4. Total number of occupants/persons at this location? 5
   Number of Children 3 Ages 8, 8, 11
5. How long have you lived at this location? 5 years

General Home Description

6. Type of Home/Structure (check only one): Single Family Home ☒, Duplex ☐, Apartment ☐, Townhouse ☐ Other _____
7. Home/Structure Description:
   Number of floors: 2
   Basement ☒
   Crawlspace ☐
   Partial crawlspace/basement ☐ % of each _____
   Slab on grade ☐
   Other ☐ _____
8. Age of Home/Structure: 90 years, Not sure/Unknown ☐
9. General Above-Ground Home/Structure construction (check all that apply):
   Wood ☐, Brick ☒, Concrete ☐, Cement block ☐, Other ☐ _____
10. Foundation Construction (check all that apply):
    Concrete Slab ☒
    Fieldstone ☐
    Concrete block ☐
    Elevated above ground/grade ☐
    Other ☐ _____

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11. Do you have private well ☐ or cistern ☐ ? No
If yes, please describe location, use and current condition_____

12. Do you have a septic system? Yes ☐ No ☒ Not used ☐ Unknown ☐
If yes, what is construction type?_____
Where is it located? _____
When was the last time it was serviced?_____
Do you (or have you ever) use (d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your home? (pond, ditch, etc.) Yes ☐ No ☒

Basement Description (please check all boxes that apply):

14. Is the basement finished ☒ or unfinished ☐ ?

15. If finished, how many rooms are in the basement? 5
What are rooms used for? Bedrooms ☒ Family room ☐ Storage ☒
Other Kitchen

16. If not finished, do you plan on finishing in the future? Yes ☐ No ☐

17. Is the basement floor (check all that apply) concrete ☒ tile ☒, carpeted ☐, dirt ☐,
other ☐ _____

18. Are the basement walls poured concrete ☒, cement block ☐, stone ☐, wood ☐,
Brick ☐, other ☐ _____

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less that 1 time/year) ☐
No ☒

Describe the moisture problem_____

20. .Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☐
No ☒

21. Does the basement have any of the following? Floor cracks ☐, Wall cracks ☐, Sump ☐,
Floor drain ☒, Other hole/opening in floor ☐
describe X also one under water in basement

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22. Are any of the following used or stored in the basement (check all that apply):
Paint ☒ Paint Stripper/remover ☐ Paint thinner ☐ Metal degreaser/cleaner ☐
Gasoline ☐ Diesel fuel ☑ Solvents ☒ Glue ☒ Laundry spot removers ☐ Drain cleaners
☒ Pesticides ☐ Other equipment with fuel tanks (chain saw, lawn mower, snow blower,etc.,)

23. Have you recently (within the last six months) done any painting or remodeling in your home?
Yes ☒ No ☐
If yes, specify what was done, where in the home, and what month:
Upstairs office paint

24. Have you installed new carpeting in your home within the last year? Yes ☐ No ☒
If yes, when and where?_____

25. Do you regularly use or work in a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) ☐
Yes, use dry-cleaning infrequently (monthly or less) ☐
Yes, work at a dry cleaning service ☐
No ☒

26. Does anyone in your home use solvents at work?
Yes ☐ If yes, how many persons?
No ☒ If no, go to question 28

27. If yes for question 26, are the work clothes washed at home? Yes ☒ No ☐

28. Where is the washer/dryer located?
Basement ☒
Upstairs utility room ☐
Kitchen ☐
Garage ☐
Use a Laundromat ☐
Other, please specify ☐ _____

29. If you have a dryer, is it vented to the outdoors? Yes ☒ No ☐

30. What type (s) of home heating do you have (check all that apply)
Fuel type: Gas ☒, Oil ☐, Electric ☐, Wood ☐, Coal ☐,
Other ☐_____

Heat conveyance system:
Forced hot air ☒
Forced hot water ☐
Steam ☐
Radiant floor heat ☐
Wood Stove ☐
Coal furnace ☐
Fireplace ☐
Other ☐ _____

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31. Does your home have (or had in the past) a storage tank for storage of: gasoline ☐ fuel oil ☐ No propane ☐
If yes, where is/was it located? _____
_____
How is/was the tank filled? _____
_____
Is there staining near the tank? Yes ☐ No ☐

32. Do you have air conditioning? Yes ☒ No ☐
Central air conditioning ☒
Window air conditioning unit (s) ☐
Other (please specify) _____

33. Do you use any of the following? Room fans ☐, Ceiling fans ☒, Attic fan ☐

34. Do you ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☐ No ☒

35. Has your home had termite or other pesticide treatment? Yes ☐ No ☒ Unknown ☐
If yes, please specify type of pest controlled _____
And approximate date of service _____

36. Water heater type: Gas ☒, Electric ☐, by Furnace ☐,
Other (please describe) _____

37. Water heater location: Basement ☒, Upstairs utility room ☐, Garage ☐,
Other (please specify) _____

38. What type of cooking appliance do you have? Electric ☒, Gas ☒
Other (please describe) gas up/electric in basement

39. Is there a stove exhaust hood present? Yes ☒ No ☐
Does it vent to the outdoors? Yes ☒ No ☐

40. Smoking in Home:
None ☒, Rare (only guests) ☐, Moderate (residents, light smokers) ☐,
Heavy (at least one heavy smoker in household) ☐

41. If yes to question 40, what do they smoke?
Cigarettes ☐ Cigars ☐
Pipe ☐ Other ☐

42. Do you regularly use air fresheners? Yes ☐ No ☒

43. Does anyone in the home have indoor home hobbies or crafts involving:
Heating ☐, soldering ☐, welding ☐, model glues ☒, paints ☒
Spray paint ☐, wood finishing ☐, Other ☐ _____
_____
_____

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44. General family/home use of consumer products (please circle appropriate).
Assume that: Never = never used, Hardly ever = less that once/month,
Occasionally = about once/month, Regularly = about once/week,
and Often = more that once/week.

Product	Frequency of Use				
Spray-on deodorant	Never	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	Never	Hardly ever	Occasionally	Regularly	Often
Insecticides	Never	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	Occasionally	Regularly	Often
Window cleaners	Never	Hardly ever	Occasionally	Regularly	Often
Nail polish remover	Never	Hardly ever	Occasionally	Regularly	Often
Hair sprays	Never	Hardly ever	Occasionally	Regularly	Often
Candles	Never	Hardly ever	Occasionally	Regularly	Often
Incense	Never	Hardly ever	Occasionally	Regularly	Often

45. Please check weekly household cleaning practices:

Dusting ☒
Dry sweeping ☒
Vacuuming ☒
Polishing (furniture, etc.) ☐
Washing/waxing floors ☐
Other (describe) ☐ _____

46. Other comments:

_____
_____
_____
_____
_____
_____
_____
_____
_____

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47. Chemical Inventory/Summary

Chemical/Chemical Product (consumer name)	Amount present in home
a) bleach	½ gallon
b) 409 cleaner	8 oz
c) Soft Scrub	24 oz
d) glass cleaner	128 oz
e)	
f)	
g)	
h)	
i)	
j)	
k)	
l)	
m)	
n)	
o)	

PHOTO LOG FOR SLC VA CERCLA SITE

PARCEL IDENTIFIER: 0010-H **ADDRESS** 1012 S. 1100 East

DATE: 12/16/14

Number	Camera Image#	Description of Photo
1	100-229	Drain - basement furnace room
2	100-230	Open pipe above furnace, air return.
3	100-231	Sewer stack - basement
4	100-232	Sewer stack - basement
5	100-233	Disconnected vent to storage area
6	100-235	Fireplace in basement bedroom
7	100-236	Drain under washer dryer area (per homeowner)
8	100-237	Drain pipes behind washer
9	100-238	hole in bath ceiling (basement)
10	100-239	holes in kitchen ceiling (basement
11	100-240	Doggie door in basement door
12	100-234	Chemical storage in furnace room
13	100-241	vent hood (vents to outside) in kitchen
14	100-242	Upstairs fireplace (wood burning)
15	100-243	Cleanout for fireplace
16	100-244	Dryers vents on outside of house
17	100-245	Vent in kitchen window area
18	100-246	Backyard
19	100-247	Back of house
20	100-248	Attic vents
21		

0229



0230



0231



0232



0233



0234



0235



0236


DRY LEVEL
TEMP. CONTROL
TIME DRY
BEEPER
OPTION
2014/12/16 10:23

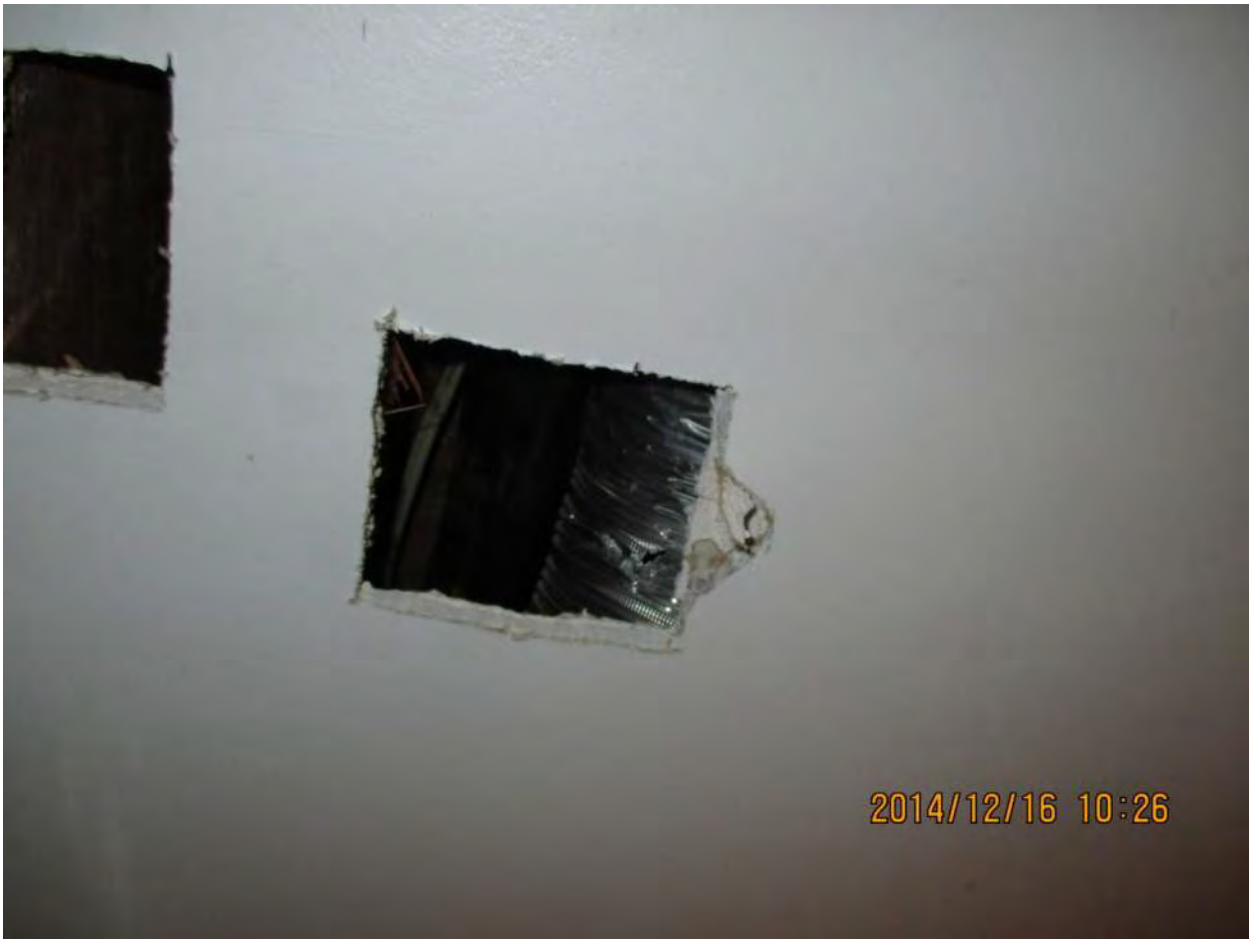
0237



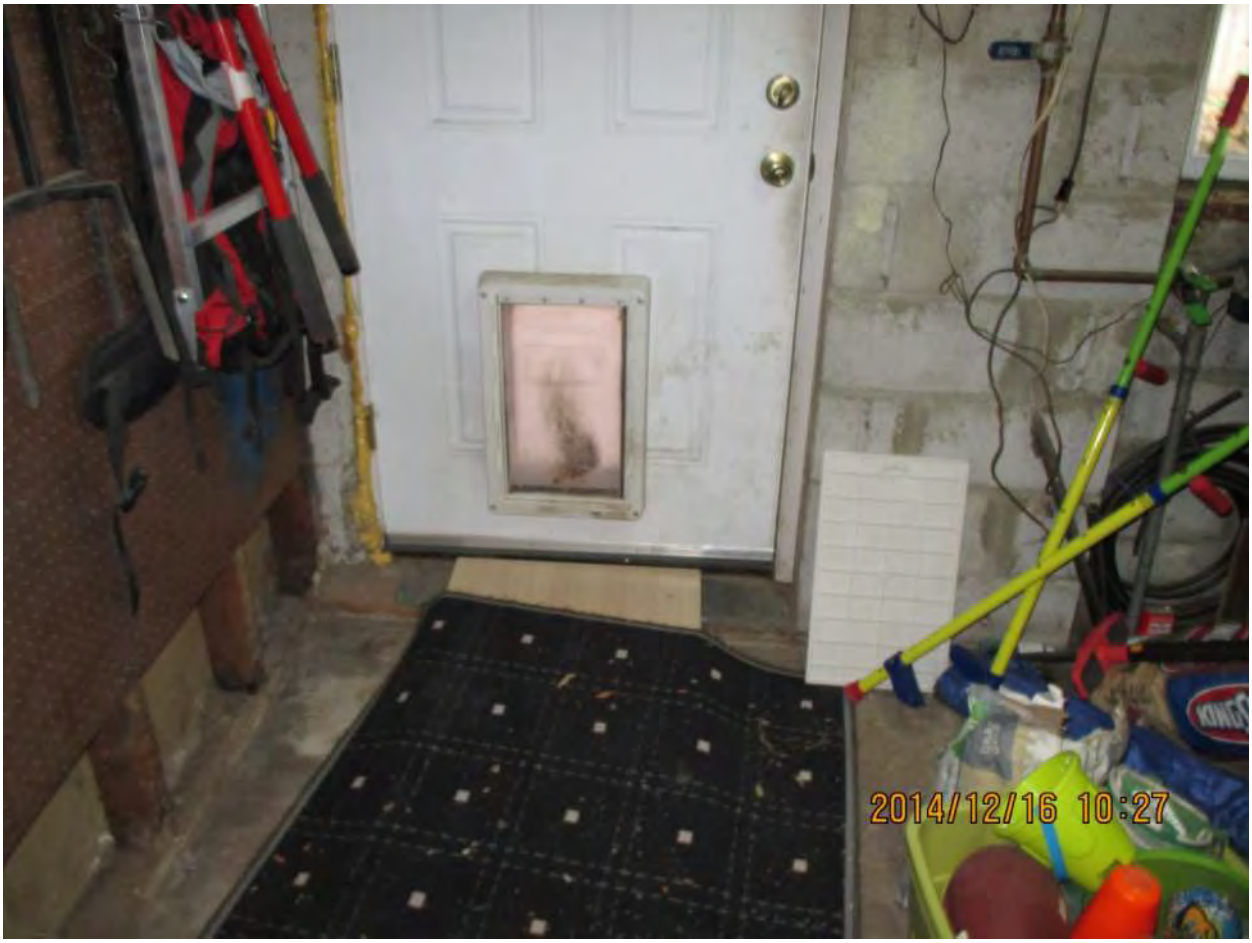
0238



0239



0240



0241



0242



0243



0244



0245



0246



0247



0248



PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0011-H
Street Address: 1169 E. 900 South
ZIP: 84105

Property Contact:
Tel #:

Latitude: 40.750128
Longitude: 111.857387
Age of Property: 100 years

Number of Levels: 2
Basement? (●) Yes ( ) No
Basement Habitable? (●) Yes ( ) No
Sump? ( ) Yes (●) No

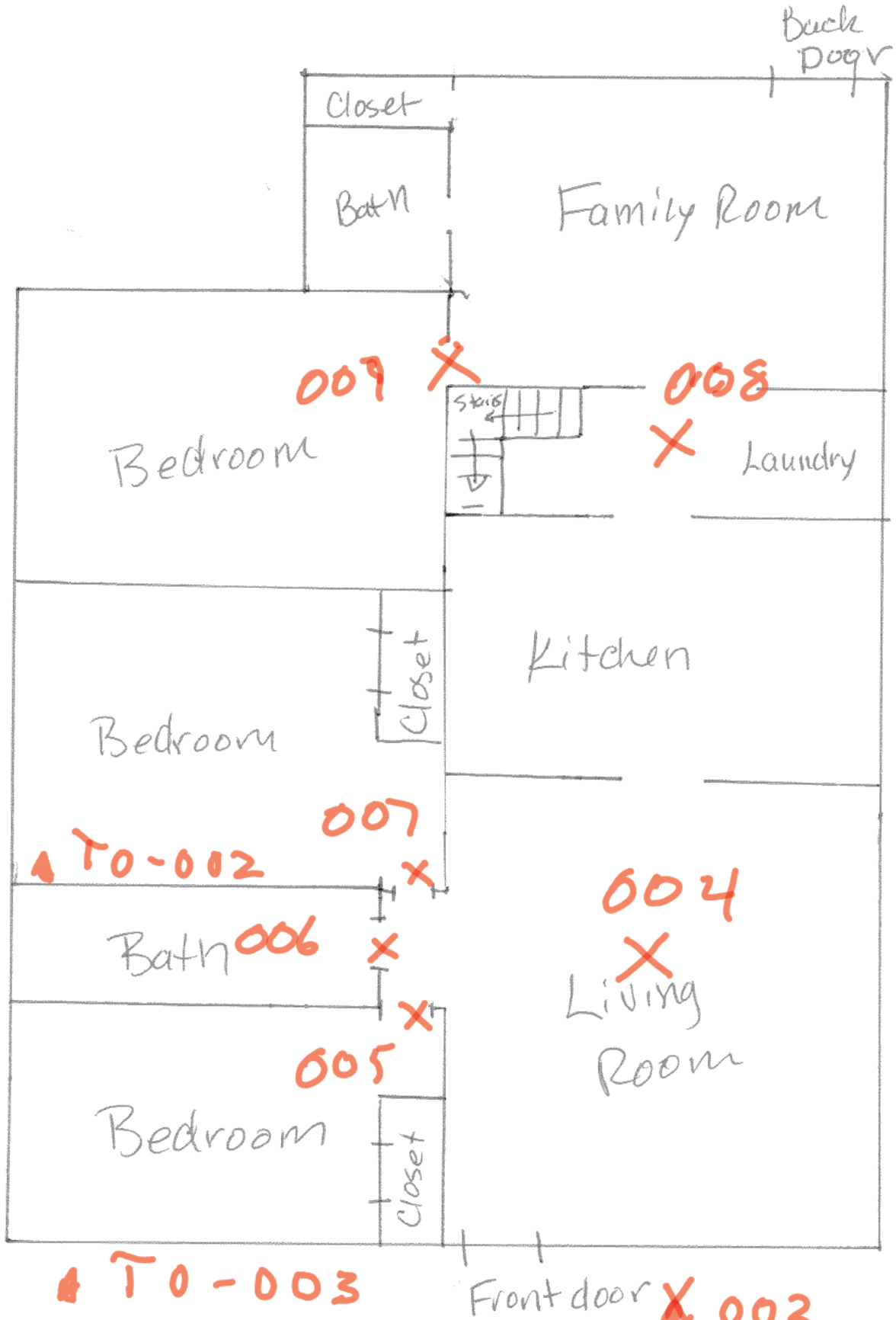
Completed by: ERR
Date: 12/10/2014

Comments

Elevation at base of porch: 4446' msl. The first attempt at testing at this site was on 1/15/15- but the Hapsite failed to operate properly. Two soil gas probes were also attempted on 1/15- SG-001 and SG-002. SG-001 was located on edge of City ROW by sidewalk. SG-002 was located approximately 5 ft north of sidewalk in front yard of home, just to left of walk to house. Both locations were pushed to 4 and 8', but the tight clay soil held a 10" hg vacuum and no gas samples could be collected. On 2/27/15, a third soil gas probe was installed just to left of the front porch steps, in the flower bed. SG-003 was pushed to 4' and 7'. THe 4' sample did not hold a vacuum for more than 20 seconds and a sample was successfully collected. The 7' sample refused on a hard surface in tight clay and held a 10" vacuum for over two minutes and no sample was collected.

Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.

0011-H 1169 E. 900 South 0011-H

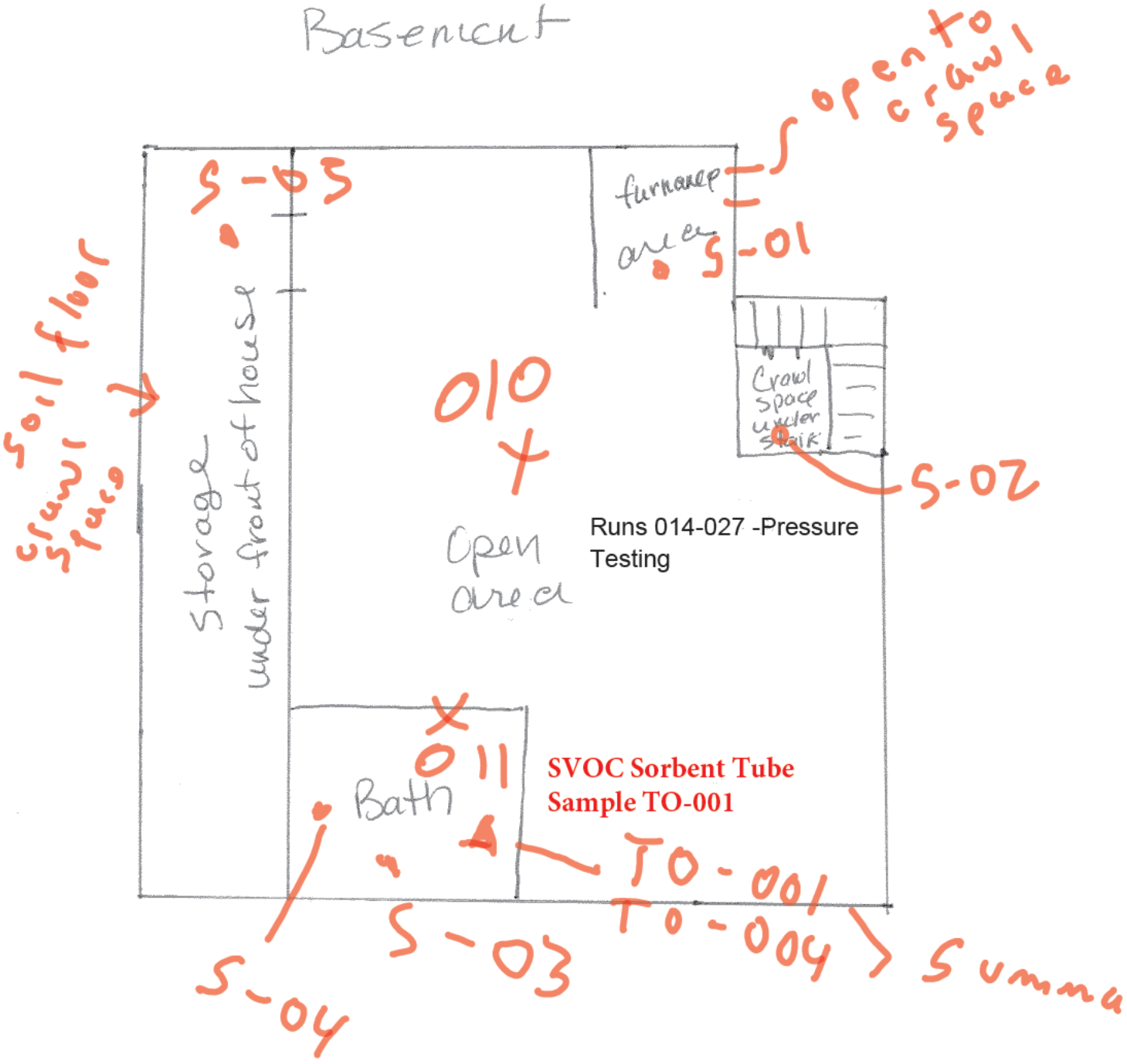


SG-001-8' (Summa and SVOC Tube Sample X

SG-003-4'

0011-H

0011-H 1169 E. 900 South



S = Survey Run

PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 2/27/15 Time of Arrival: 8:30

Weather Conditions: Partly Cloudy

Temperature: 34 Barometric Pressure (inHg): 29.90 Wind Direction: S Speed: Light

Field Crew 1: ERR Role: HAPSITE Operator

Field Crew 2: DED Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? ( ) Yes (●) No

If yes, have the materials been removed? ( ) Yes ( ) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

Team observed paints, lamp oil, and WD-40 in basement furnace room, paint on shelf under stairs.

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time
002, 003, 004, 005, 006	2/17/15	1100

Instrument Performance Check Run Number	Time	
AUTOTUNE	0723	(●) Pass ( ) Fail

Instrument Performance Check Re-run Number	Time	
NA		( ) Pass ( ) Fail

CCV Run Number	Time	
001 (5PPB)	0740	(●) Pass ( ) Fail

CCV Re-run Number	Time	
002 (0.5PPB)	0748	(●) Pass ( ) Fail

Operator's initials: ERR

Comments

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time: 0858 End Time: 0902

Location: in front of house on porch

Run Number: 003 (IA-001-OUT) Time: 0858

Run Number: NA Time:

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time 1040 End Time 1100

Comments

S-001= furnace room with WD-40, bug spray, lamp oil. max tic: 110187. S-002= paint on shelf near basement stairs. max tic: 131036. S-003= Dust off on shelf in bathroom. max tic: 151228. No detects of PCE ions 164 & 166.
Photos: IMG-0599, IMG-0600, IMG-0601, and IMG-0602.

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time 1100 End Time 1120

Comments

S-004=Drain penetration under basement bathroom sink. max tic: 148721. S-005= Foundation wall crack inside storage room. max tic: 278813, and ions 164 & 166 (pce) detected.

Pictures

Pics: IMG0598, IMG0608, IMG0609.

PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	0907	End Time	1030		
Room/area	Main Level -Living room	Run Number	004 (IA-002-LIV)	Time	0907
Room/area	Main Level-Bedroom	Run Number	005 (IA-003-BR1)	Time	0914
Room/area	Main Level - Bathroom	Run Number	006 (IA-004-BA1)	Time	09:22
Room/area	Main Level - Bedroom	Run Number	007 (IA-005-BR2)	Time	09:30
Room/area	Main Level - Laundry/Kitchen Area	Run Number	008 (IA-006-LAU)	Time	09:38
Room/area	Main Level -Master bedroom	Run Number	009 (IA-007-MBR)	Time	09:46
Room/area	Basement - Open Room	Run Number	010 (IA-008-LLL)	Time	10:03
Room/area	Basement - Bathroom	Run Number	011 (IA-009-BA2)	Time	10:11
Room/area	Basement Storage room - Crawl Space Shelf	Run Number	012(IA-010-STO)	Time	10:20
Room/area	Basement Furnace Room	Run Number	013(IA-011-FUR)	Time	10:28

Comments

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time: 1140 End Time: 1250 Room/Area: Basement living area

T=	5	CFM	923	Pascals	-4.1	Run No.	014 (IA-012A-LLL)	Time	1143
T=	10	CFM	853	Pascals	-4.0	Run No.	015 (IA-012B-LLL)	Time	1151
T=	15	CFM	1015	Pascals	-5.9	Run No.		Time	
T=	20	CFM	918	Pascals	-5.3	Run No.	016 (IA-012C-LLL)	Time	1159
T=	25	CFM	980	Pascals	-4.9	Run No.		Time	
T=	30	CFM	963	Pascals	-6.5	Run No.	017 (IA-012D-LLL)	Time	1208
T=	40	CFM	906	Pascals	-4.2	Run No.		Time	1216
T=	50	CFM	987	Pascals	-5.6	Run No.	019 (IA-012E-LLL)	Time	1224
T=	60	CFM	985	Pascals	-5.3	Run No.	020 (IA-012F-LLL)	Time	1232
T=	70	CFM	880	Pascals	-6.0	Run No.	021 (IA-012G-LLL)	Time	1240
T=		CFM		Pascals		Run No.		Time	1248
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

2.5 air volumes of house=64000 cubic ft. Toal volume = 65,870. air door located in front entry, whole house placed under neg pressure. baseline pressure

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time: 1300 | End Time: 1335 | Room/Area: Basement living area

	T=	CFM	Pascals	Run No.	Time
1	5	1115	5.0	023 (IA-013A-LLL)	1302
2	10	1795	9.9		
3	15	1968	10.1	024 (IA-013B-LLL)	1311
4	20	1972	9.8	025 (IA-013C-LLL)	1318
5	25	1902	10.2	026 (IA-013D-LLL)	1326
6	30	1852	9.9		
7	35	1935	8.6	027 (IA-013E-LLL)	1334
8	40	1855	9.6		
9					
10					
11					
12					
13					
14					
15					

Comments

total volume = 71,970. baseline pres.: -1.4 pascal.

PART J
SUMMA CANISTERS

Location/ Area: basement bathroom

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0011H-TO-001-BA2	0531	3/2/15	08:10	27	3/3/15	08:00	1

Location/ Area: main level - bedroom-back

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0011H-TO-002-BR1	0129	3/2/15	08:15	26	3/3/15	08:05	1

Location/ Area: Outdoor ambient- front porch

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0011H-TO-003-OUT	0250	3/2/15	08:20	27	3/3/15	08:10	2

Location/ Area: basement bathroom- duplicate sample

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0011H-TO-004-BAS	0579	3/2/15	08:10	26	3/3/15	08:00	1

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

See following page.

Comments

Returned to house on 4/13/2015 to collect a soil gas summa canister and soil gas SVOC (sorbent tube) sample, as well as a indoor SVOC air sample from the basement bathroom:
A-0011H-041415-SG-001A-8' Start:4/13/15-1020 - 25" Hg, End: 4/14/15-1019 - 0.5" Hg Summa ID# 0445.
A-0011H-041315-SG-001-8' - Collected 4/13/2015 - 0800 to 0900 at 4L/min (sorbent tube)
A-0011H-041315-TO-001-BAS - Collected from basement bathroom on 4/13/2015 - 0929 to 1029 at 4L/min.


2015/03/02 09:16


2015/03/02 09:17


2015/03/02 09:11



PART K
SOIL GAS

Date	02/27/2015	Time		Sample Depth	4/7'		
Latitude	40.750044	Longitude	-111.857398			Elevation	4445
Run No	028	Run Time	13:40			Vacuum (in/Hg)	3

Comments

A-0011H-022715-SG-003-4' - Located adjacent to front porch, south of structure. Also attempted collection of SG-001-7', but probe held a 10" Hg vacuum and no sample could be collected. (Photo IMG-0836)

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Salt Lake City, UT 84148

0071-14

OCCUPIED DWELLING QUESTIONAIRE

Indoor Air Assessment Survey

Date: 12-10-14

[illegible] Renter ☐, Other ☐ (please specify)_____of this Home/Structure? If you are not the owner, please provide owner contact Information

_____

_____

4. Total number of occupants/persons at this location? 5
   Number of Children 2 Ages 5 & 5

5. How long have you lived at this location? 37 years

General Home Description

6. Type of Home/Structure (check only one): Single Family Home ☒, Duplex ☐, Apartment ☐, Townhouse ☐ Other _____

7. Home/Structure Description:
   Number of floors: 2
   Basement ☒
   Crawlspace ☒
   Partial crawlspace/basement ☒ % of each _____
   Slab on grade ☐
   Other ☐ _____

8. Age of Home/Structure: 100 years, Not sure/Unknown ☐

9. General Above-Ground Home/Structure construction (check all that apply):
   Wood ☐, Brick ☒, Concrete ☐, Cement block ☐, Other ☐ _____

10. Foundation Construction (check all that apply):
    Concrete Slab ☒
    Fieldstone ☐
    Concrete block ☐
    Elevated above ground/grade ☐
    Other ☐ _____

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11. Do you have private well ☐ or cistern ☐ ? No
If yes, please describe location, use and current condition_____

12. Do you have a septic system? Yes ☐ No ☒ Not used ☐ Unknown ☐
If yes, what is construction type?_____
Where is it located? _____
When was the last time it was serviced?_____
Do you (or have you ever) use (d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your home? (pond, ditch, etc.) Yes ☐ No ☒

Basement Description (please check all boxes that apply):

14. Is the basement finished ☒ or unfinished ☐ ? partial

15. If finished, how many rooms are in the basement? _____
What are rooms used for? Bedrooms ☐ Family room ☒ Storage ☒
Other_____

16. If not finished, do you plan on finishing in the future? Yes ☐ No ☐

17. Is the basement floor (check all that apply) concrete ☐, tile ☐, carpeted ☒, dirt ☐,
other ☐ _____

18. Are the basement walls poured concrete ☐, cement block ☐, stone ☐, wood ☐,
Brick ☐, other ☐ _____

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less that 1 time/year) ☐
No ☐

Describe the moisture problem Damp - no standing water

20. .Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☐
No ☒

21. Does the basement have any of the following? Floor cracks ☐, Wall cracks ☐, Sump ☐,
Floor drain ☒, Other hole/opening in floor ☐
describe Shower connected to floor drain

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22. Are any of the following used or stored in the basement (check all that apply):
Paint ☒ Paint Stripper/remover ☐ Paint thinner ☐ Metal degreaser/cleaner ☐
Gasoline ☐ Diesel fuel ☐ Solvents ☐ Glue ☐ Laundry spot removers ☐ Drain cleaners
☐ Pesticides ☐ Other equipment with fuel tanks (chain saw, lawn mower, snow blower,etc.,)

23. Have you recently (within the last six months) done any painting or remodeling in your home?
Yes ☒ No ☐
If yes, specify what was done, where in the home, and what month:
Bathroom - painted May 2014

24. Have you installed new carpeting in your home within the last year? Yes ☐ No ☒
If yes, when and where?_____

25. Do you regularly use or work in a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) ☐
Yes, use dry-cleaning infrequently (monthly or less) ☐
Yes, work at a dry cleaning service ☐
No ☒

26. Does anyone in your home use solvents at work?
Yes ☐ If yes, how many persons?
No ☒ If no, go to question 28

27. If yes for question 26, are the work clothes washed at home? Yes ☐ No ☐

28. Where is the washer/dryer located?
Basement ☐
Upstairs utility room ☒
Kitchen ☐
Garage ☐
Use a Laundromat ☐
Other, please specify ☐ _____

29. If you have a dryer, is it vented to the outdoors? Yes ☒ No ☐

30. What type (s) of home heating do you have (check all that apply)
Fuel type: Gas ☒, Oil ☐, Electric ☐, Wood ☐, Coal ☐,
Other ☐_____

Heat conveyance system:
Forced hot air ☒
Forced hot water ☐
Steam ☐
Radiant floor heat ☐
Wood Stove ☐
Coal furnace ☐
Fireplace ☐
Other ☐ _____

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Salt Lake City, UT 84148

31. Does your home have (or had in the past) a storage tank for storage of: gasoline ☐ fuel oil ☐ propane ☐ NO
If yes, where is/was it located? _____
How is/was the tank filled? _____
Is there staining near the tank? Yes ☐ No ☐

32. Do you have air conditioning? Yes ☒ No ☐
Central air conditioning ☒
Window air conditioning unit (s) ☐
Other (please specify) _____

33. Do you use any of the following? Room fans ☒, Ceiling fans ☒, Attic fan ☐

34. Do you ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☐ No ☐

35. Has your home had termite or other pesticide treatment? Yes ☒ No ☐ Unknown ☐
If yes, please specify type of pest controlled _____
And approximate date of service 11/14

36. Water heater type: Gas ☒, Electric ☐, by Furnace ☐,
Other (please describe) _____

37. Water heater location: Basement ☒, Upstairs utility room ☐, Garage ☐,
Other (please specify) _____

38. What type of cooking appliance do you have? Electric ☒, Gas ☐
Other (please describe) _____

39. Is there a stove exhaust hood present? Yes ☒ No ☐
Does it vent to the outdoors? Yes ☐ No ☐ not sure

40. Smoking in Home:
None ☒, Rare (only guests) ☐, Moderate (residents, light smokers) ☐,
Heavy (at least one heavy smoker in household) ☐

41. If yes to question 40, what do they smoke?
Cigarettes ☐ Cigars ☐
Pipe ☐ Other ☐

42. Do you regularly use air fresheners? Yes ☒ No ☐

43. Does anyone in the home have indoor home hobbies or crafts involving:
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☐
Spray paint ☐, wood finishing ☐, Other ☐ NO

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44. General family/home use of consumer products (please circle appropriate). Assume that: Never = never used, Hardly ever = less that once/month, Occasionally = about once/month, Regularly = about once/week, and Often = more that once/week.

Product	Frequency of Use				
Spray-on deodorant	Never	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	Never	Hardly ever	Occasionally	Regularly	Often
Insecticides	Never	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	Occasionally	Regularly	Often
Window cleaners	Never	Hardly ever	Occasionally	Regularly	Often
Nail polish remover	Never	Hardly ever	Occasionally	Regularly	Often
Hair sprays	Never	Hardly ever	Occasionally	Regularly	Often
Candles	Never	Hardly ever	Occasionally	Regularly	Often
Incense	Never	Hardly ever	Occasionally	Regularly	Often

45. Please check weekly household cleaning practices:

Dusting ☒
Dry sweeping ☒
Vacuuming ☒
Polishing (furniture, etc.) ☒
Washing/waxing floors ☒
Other (describe) ☐ cleaning bathrooms

46. Other comments:

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0011-H

47. Chemical Inventory/Summary

Chemical/Chemical Product (consumer name)	Amount present in home
a) Laundry Soap	
b) Cleanser	
c) Window Cleaner	
d) Furniture oil	
e) Bleach	
f) Mildew Remover	
g) Soft Scrub	
h) Resolve Stain Remover	
i) Nail Polish Remover	
j) Paint	
k)	
l)	
m)	
n)	
o)	

PHOTO LOG FOR SLC VA CERCLA SITE

PARCEL IDENTIFIER: 0071-H **ADDRESS** 1169 E. 900 South

DATE: 12/11/14

Number	Camera Image#	Description of Photo
1	100-0091	Dirt crawl space under stairs
2	100-0092	Hole in basement wall for duct work into crawl space
3	100-0093	Coal pile in basement
4	100-0094	Pipes through basement floor near HW heater
5	100-0095	Opening into crawl space
6	100-0096	Furnace/HW heater room
7	100-0097	Drain in basement bathroom
8	100-0098	Storage area under front of house
9	100-0099	storage area under front of house
10	100-0100	" " " "
11	100-0101	Basement open area
12	100-0102	Basement open area
13	100-0103	Yard area for possible soil probe
14	100-0104	Side yard area
15		
16		
17		
18		
19		
20		
21		

0091



0092



0093



0094



0095



0096



0097



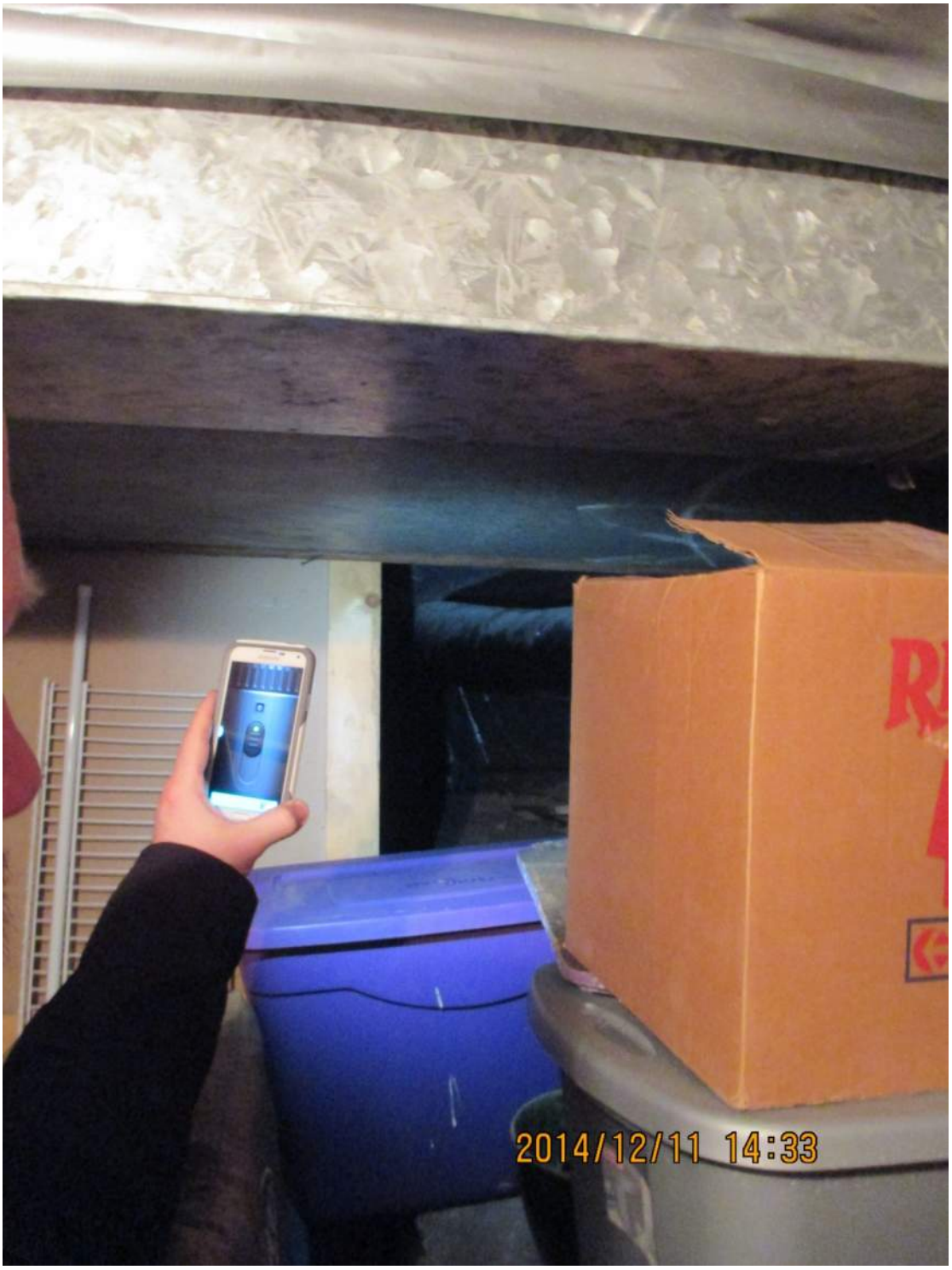
0098



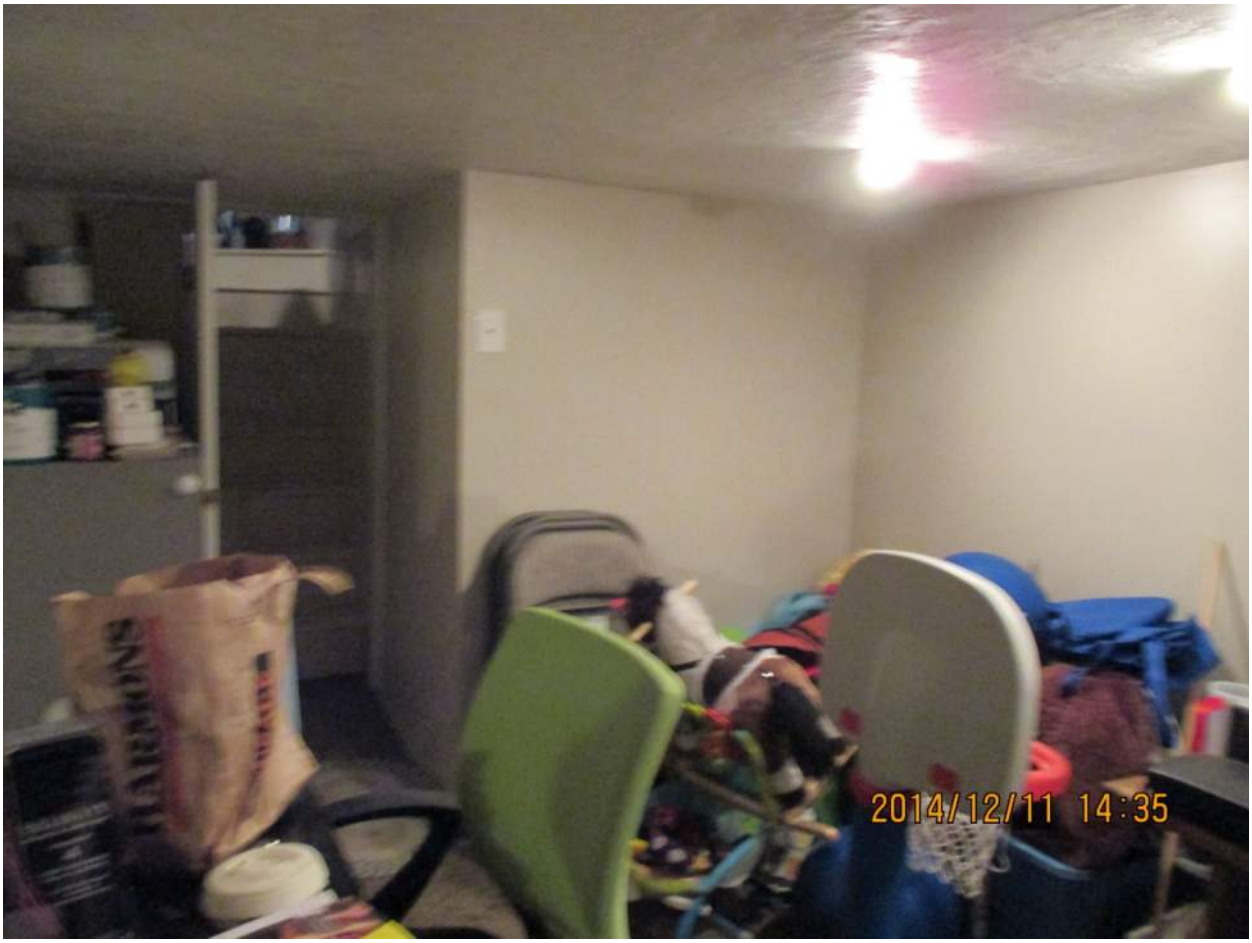
0099



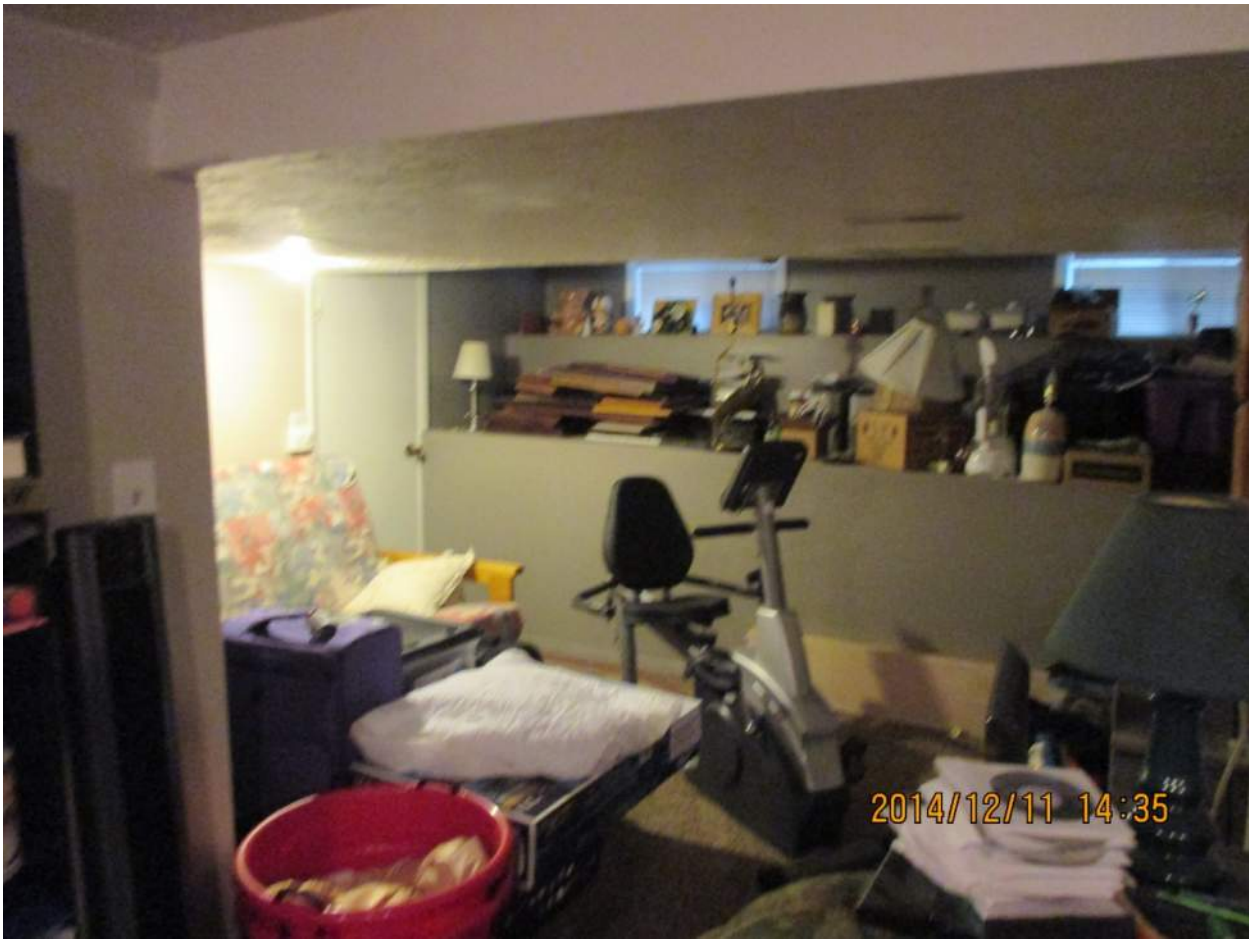
0100



0101



0102



0103



0104



PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0012-H

Street Address: 761 S. 1200 E

ZIP: 84105

Property Contact:

Tel #:

Latitude: 40.752571

Longitude: 111.856336

Age of Property: 80 years

Number of Levels: 1

Basement? (•) Yes ( ) No

Basement Habitable? (•) Yes ( ) No

Sump? ( ) Yes (•) No

Completed by: ERR

Date: 11/21/2014

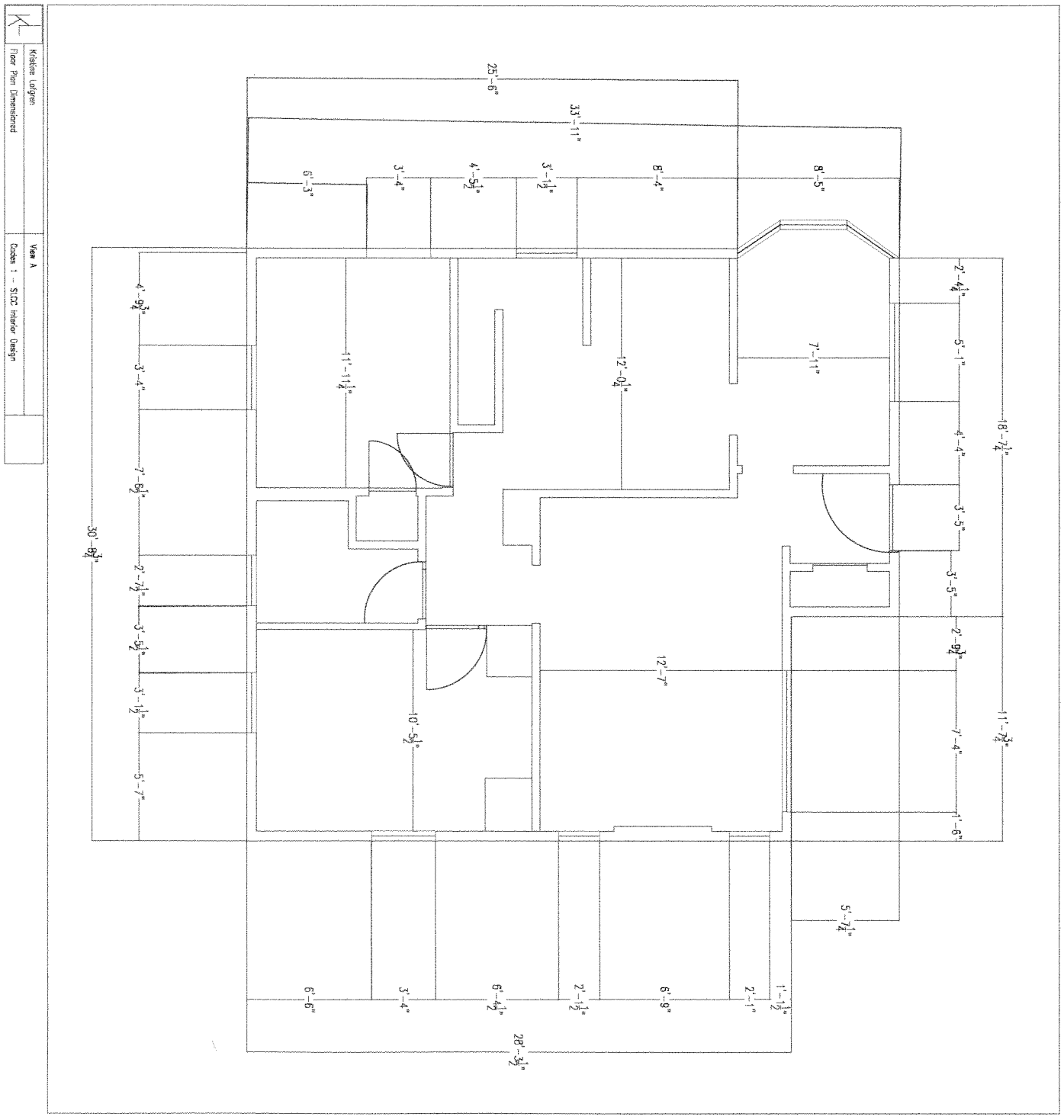
Comments

ELEVATION AT SOUTH SIDE OF HOUSE ON DRIVEWAY= 4497' MSL

Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.

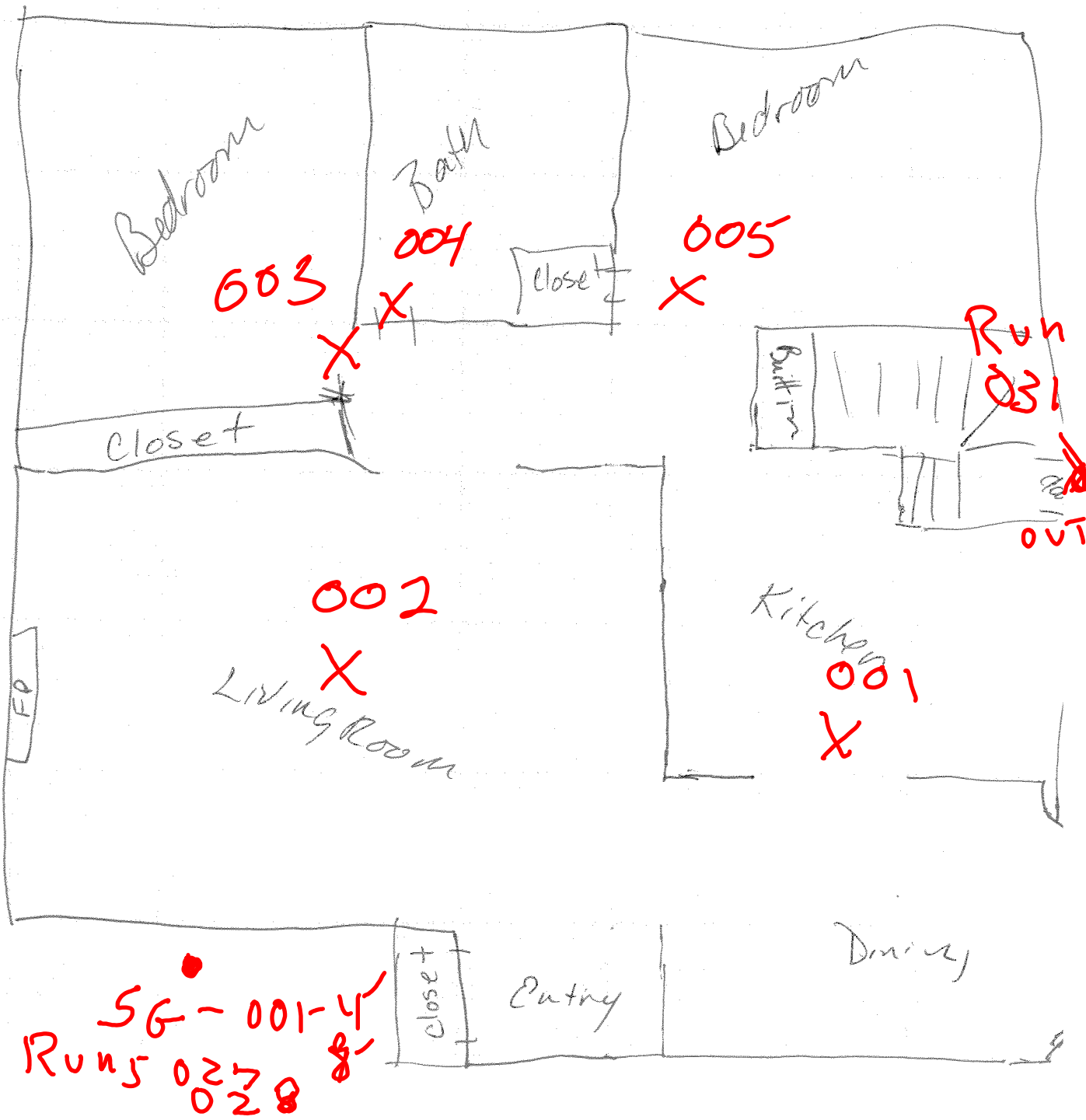
0012-H

0012-H Main Floor



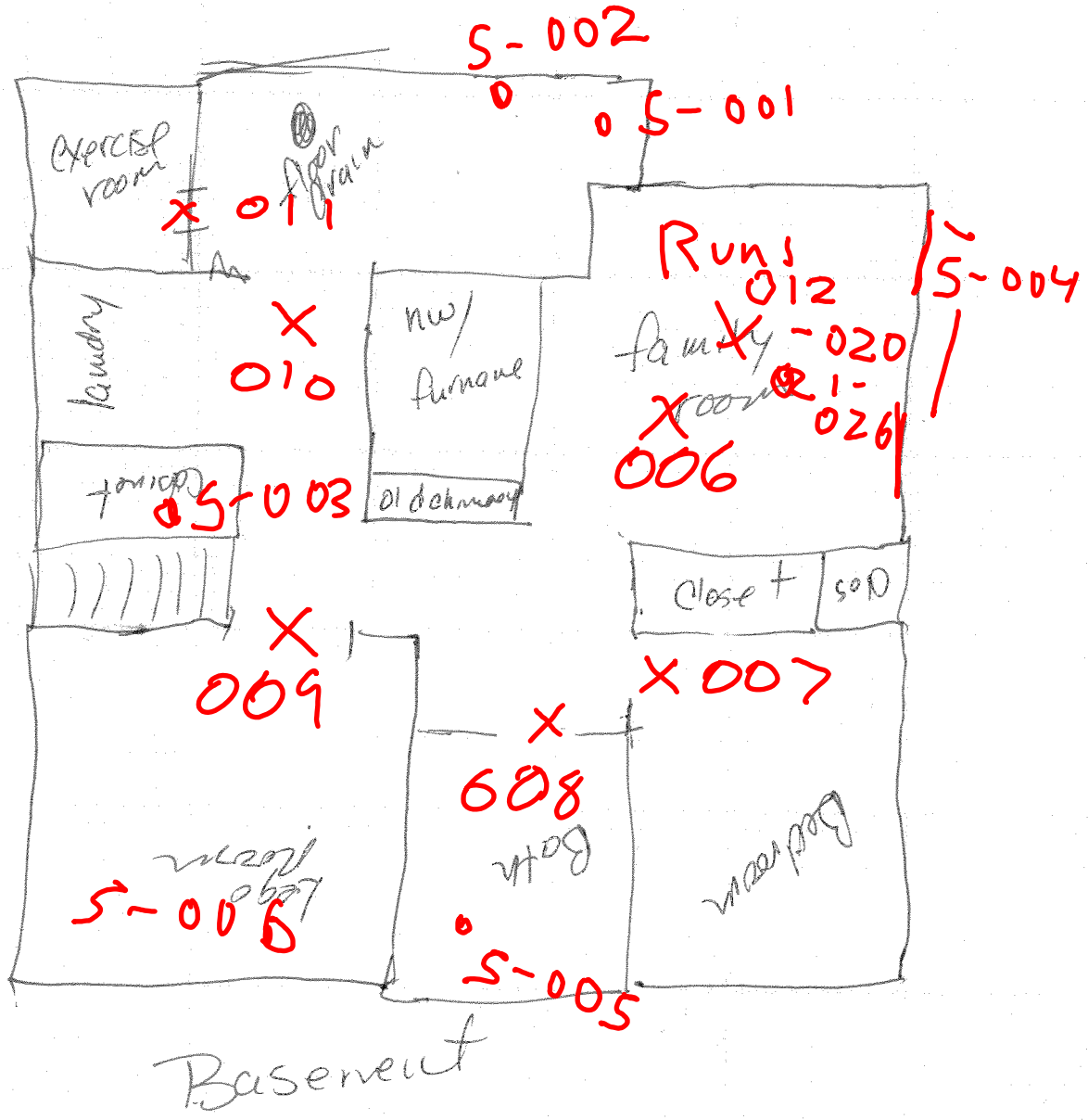
0012-H

0012-H Main Floor



0012-H

Big back yard - dry sprinkler system - will need to check w/ owners about probe locations



PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 12/23/15 Time of Arrival: 0830

Weather Conditions: Sunny

Temperature: 20 Barometric Pressure (inHg): 30.20 Wind Direction: E Speed: Strong

Field Crew 1: ERR Role: HAPSITE Operator

Field Crew 2: DED Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? (●) Yes ( ) No

If yes, have the materials been removed? ( ) Yes (●) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

SEE PHOTOS, CABINETS AND CLOSETS IN BASEMENT LAUNDRY ROOM CONTAIN A VARIETY OF PAINT, CLEANERS, LAUNDRY SUPPLIES, INC
STAIN REMOVER, JOINT COMPOUND, AND INSECT SPRAY.

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time	
002, 003, 004, 005, 006	2/17/15	NA	
Instrument Performance Check Run Number	Time		(•) Pass ( ) Fail
TUNE CHECK (2/23/15	0900		
Instrument Performance Check Re-run Number	Time		( ) Pass ( ) Fail
NA			
CCV Run Number	Time		(•) Pass ( ) Fail
001 5PPB (2/22/15)	1825		
CCV Re-run Number	Time		(•) Pass ( ) Fail
002 0.5PPB	1833		

Operator's initials: ERR

Comments

End of day CCV 030 (5 PPB) 1435 PASS.

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time: 1448 End Time: 1440

Location: Driveway south side of house.

Run Number: 031 IA-014-OUT Time: 1448

Run Number: NA Time:

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time 1045 End Time 1100

Comments

SURVEY 001 - BUILT IN CLOSET ON NORTH SIDE OF LAUNDRY AREA CONTAINS PAINT AND DRYWALL COMPOUND - MAX TIC =89,079.

SURVEY 002 - CABINETS IN LAUNDRY ROOM CONTAIN DOG SHAMPOOS, WD-40, LAUNDRY SUPPLIES, AND STAIN REMOVERS - MAX TIC=108

SURVEY 003 - CLOSET NEAR LAUNDRY AREA, EAST WALL NEAR STAIRS - MAX TIC = 100,646.

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time 1100 End Time 1115

Comments

SURVEY 004: NORTH BASEMENT WALL ALONG BASEBOARD NEAR FIREPLACE - MAX TIC = 116,800.
SURVEY-005: BASEMENT BATHROOM FLOOR DRAIN, WALL JOINT AT FLOOR, AND CRACK IN TILE. MAX TIC= .
SURVEY-006: BASEMENT OFFICE, ALONEG FLOOR AND WALL. MAX TIC= .

Pictures

SURVEY-005: BASEMENT BATHROOM FLOOR DRAIN, WALL JOINT AT FLOOR, AND CRACK IN TILE. MAX TIC= . SURVEY-006: BASEMENT O
FLOOR AND WALL. MAX TIC=. .

PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	0904	End Time	1040		
Room/area	Kitchen	Run Number	001 (IA-001-KIT)	Time	0904
Room/area	Living room	Run Number	002 (IA-002-LIV)	Time	0912
Room/area	Master Bedroom	Run Number	003 (IA-003-MBR)	Time	0920
Room/area	Bathroom	Run Number	004 (IA-004-BA1)	Time	0928
Room/area	Bedroom	Run Number	005 (IA-005-BR1)	Time	0936
Room/area	Family room - Basement	Run Number	006 (IA-006-FAM)	Time	0948
Room/area	Basement bedroom	Run Number	007 (IA-007-BR2)	Time	0957
Room/area	Basement bathroom	Run Number	008 (IA-008-BA2)	Time	1005
Room/area	Office/Lego room - Basement	Run Number	009 (IA-009-OFC)	Time	1013
Room/area	Laundry room-Basement	Run Number	010 (IA-010-LAU)	Time	1021

Comments

Exercise room 011 (IA-011-EXR)1033

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time: 1150 | End Time: 1305 | Room/Area: Basement family room

T=	5	CFM	395	Pascals	-6.0	Run No.	012 (IA-012A-FAM)	Time	1150
T=	10	CFM	432	Pascals	-4.8	Run No.	013 (IA-012B-FAM)	Time	1200
T=	15	CFM	490	Pascals	-6.6	Run No.		Time	
T=	20	CFM	441	Pascals	-7.3	Run No.	014 (IA-012C-FAM)	Time	1209
T=	25	CFM	463	Pascals	-6.3	Run No.	015 (IA-012D-FAM)	Time	1216
T=	30	CFM	675	Pascals	-13.1	Run No.		Time	
T=	40	CFM	620	Pascals	-13.2	Run No.	016 (IA-012E-FAM)	Time	1223
T=	50	CFM	676	Pascals	-13.5	Run No.	017 (IA-012F-FAM)	Time	1232
T=	60	CFM	622	Pascals	-11.0	Run No.	018 (IA-012G-FAM)	Time	1241
T=	70	CFM	690	Pascals	-15.3	Run No.	019 (IA-012H-FAM)	Time	1249
T=	75	CFM	695	Pascals	-12.5	Run No.	020 (IA-012I-FAM)	Time	1301
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

switched from -5.0 Pa to -15.0 Pa due to high winds outdoors which caused our flow/building pressure to rapidly fluctuate, and shut off fan. Initial ambient pressure was -7.9, but during higher gusts, reached -22.0. The higher negative pressure differential allowed the fan to maintain a steadier constant pressure in the home.42,265 total cfm through house during test.

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time: 1315 | End Time: 1410 | Room/Area: Basement family room

T=	5	CFM	721	Pascals	8.1	Run No.	021 (IA-013A-FAM)	Time	1317
T=	10	CFM	739	Pascals	8.6	Run No.	022 (IA-013B-FAM)	Time	1325
T=	15	CFM	757	Pascals	10.1	Run No.		Time	
T=	20	CFM	732	Pascals	9.8	Run No.	023 (IA-013C-FAM)	Time	1333
T=	25	CFM	739	Pascals	8.3	Run No.		Time	
T=	30	CFM	722	Pascals	13.1	Run No.	024 (IA-013D-FAM)	Time	1342
T=	40	CFM	715	Pascals	8.8	Run No.	025 (IA-013E-FAM)	Time	1350
T=	50	CFM	759	Pascals	11.7	Run No.	026 (IA-013F-FAM)	Time	1400
T=	55	CFM	741	Pascals	9.9	Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

40,486 total cfm. Ran test at +10 pascal to compensate for strong negative surges caused by high winds.

PART J
SUMMA CANISTERS

Location/ Area: NA

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

Comments

PART K
SOIL GAS

Date	2/23/15	Time	1030/1035	Sample Depth	4/8		
Latitude	40.752594	Longitude	111.856453			Elevation	4496'
Run No	027/028	Run Time	1407 / 1415			Vacuum (in/Hg)	6

Comments

3 feet off slab in north west corner of property. front yard near corner of entry hall.

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

0012-H

Dec 15th
4:00

OCCUPIED DWELLING QUESTIONAIRE

Indoor Air Assessment Survey

Date: 11.21.14

1. Na
Ad
Ho
2. Wh
3. Are
this
of
4. Total number of occupants/persons at this location? 2
Number of Children Ø Ages
5. How long have you lived at this location? 5 years

General Home Description

6. Type of Home/Structure (check only one): Single Family Home ☒, Duplex ☐, Apartment ☐, Townhouse ☐ Other
7. Home/Structure Description:
Number of floors: 1
Basement ☒
Crawlspace ☐
Partial crawlspace/basement ☐ % of each
Slab on grade ☐
Other ☐
8. Age of Home/Structure: 80 years, Not sure/Unknown ☐
9. General Above-Ground Home/Structure construction (check all that apply):
Wood ☐, Brick ☒, Concrete ☐, Cement block ☐, Other ☐
10. Foundation Construction (check all that apply):
Concrete Slab ☒
Fieldstone ☐
Concrete block ☐
Elevated above ground/grade ☐
Other ☐

0012-H

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Salt Lake City, UT 84148

11. Do you have private well ☐ or cistern ☐ ?
If yes, please describe location, use and current condition N/A

12. Do you have a septic system? Yes ☐ No ☒ Not used ☐ Unknown ☐
If yes, what is construction type?
Where is it located?
When was the last time it was serviced?
Do you (or have you ever) use (d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your home? (pond, ditch, etc.) Yes ☐ No ☐

Basement Description (please check all boxes that apply):

14. Is the basement finished ☒ or unfinished ☐ ?

15. If finished, how many rooms are in the basement? 4
What are rooms used for? Bedrooms ☒ Family room ☒ Storage ☒
Other

16. If not finished, do you plan on finishing in the future? Yes ☐ No ☐ N/A

17. Is the basement floor (check all that apply) concrete ☒, tile ☐, carpeted ☒, dirt ☐,
other ☐

18. Are the basement walls poured concrete ☒, cement block ☐, stone ☐, wood ☐,
Brick ☐, other ☐

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less that 1 time/year) ☒
No ☐

Describe the moisture problem Occassional seeping at the windows

20. .Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☐
No ☒

21. Does the basement have any of the following? Floor cracks ☒, Wall cracks ☐, Sump ☐,
Floor drain ☒, Other hole/opening in floor ☐
describe

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

22. Are any of the following used or stored in the basement (check all that apply):
Paint ☒ Paint Stripper/remover ☐ Paint thinner ☐ Metal degreaser/cleaner ☐
Gasoline ☐ Diesel fuel ☐ Solvents ☐ Glue ☒ Laundry spot removers ☐ Drain cleaners
☐ Pesticides ☐ Other equipment with fuel tanks (chain saw, lawn mower, snow blower,etc.,)

23. Have you recently (within the last six months) done any painting or remodeling in your home?
Yes ☐ No ☒
If yes, specify what was done, where in the home, and what month:
_____
_____

24. Have you installed new carpeting in your home within the last year? Yes ☐ No ☒
If yes, when and where?_____

25. Do you regularly use or work in a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) ☐
Yes, use dry-cleaning infrequently (monthly or less) ☐
Yes, work at a dry cleaning service ☐
No ☒

26. Does anyone in your home use solvents at work?
Yes ☐ If yes, how many persons?
No ☒ If no, go to question 28

27. If yes for question 26, are the work clothes washed at home? Yes ☐ No ☐

28. Where is the washer/dryer located?
Basement ☒
Upstairs utility room ☐
Kitchen ☐
Garage ☐
Use a Laundromat ☐
Other, please specify ☐ _____

29. If you have a dryer, is it vented to the outdoors? Yes ☒ No ☐

30. What type (s) of home heating do you have (check all that apply)
Fuel type: Gas ☒, Oil ☐, Electric ☐, Wood ☐, Coal ☐,
Other ☐_____

Heat conveyance system:
Forced hot air ☒
Forced hot water ☐
Steam ☐
Radiant floor heat ☐
Wood Stove ☐
Coal furnace ☐
Fireplace ☐
Other ☐ _____

0012-H

Return to: VASLCHCS (00PA)
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Salt Lake City, UT 84148

31. Does your home have (or had in the past) a storage tank for storage of: gasoline ☐ fuel oil ☐ propane ☐
If yes, where is/was it located? N/A
How is/was the tank filled? N/A
Is there staining near the tank? Yes ☐ No ☐

32. Do you have air conditioning? Yes ☒ No ☐
Central air conditioning ☒
Window air conditioning unit (s) ☐
Other (please specify) _____

33. Do you use any of the following? Room fans ☒, Ceiling fans ☐, Attic fan ☐

34. Do you ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☐ No ☒

35. Has your home had termite or other pesticide treatment? Yes ☐ No ☒ Unknown ☐
If yes, please specify type of pest controlled _____
And approximate date of service _____

36. Water heater type: Gas ☐, Electric ☒, by Furnace ☐,
Other (please describe) _____

37. Water heater location: Basement ☒, Upstairs utility room ☐, Garage ☐,
Other (please specify) _____

38. What type of cooking appliance do you have? Electric ☒, Gas ☐
Other (please describe) _____

39. Is there a stove exhaust hood present? Yes ☒ No ☐
Does it vent to the outdoors? Yes ☒ No ☐

40. Smoking in Home:
None ☒, Rare (only guests) ☐, Moderate (residents, light smokers) ☐,
Heavy (at least one heavy smoker in household) ☐

41. If yes to question 40, what do they smoke?
Cigarettes ☐ Cigars ☐
Pipe ☐ Other ☐

42. Do you regularly use air fresheners? Yes ☒ No ☐

43. Does anyone in the home have indoor home hobbies or crafts involving:
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☐
Spray paint ☐, wood finishing ☐, Other ☐ N/A

0012-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

44. General family/home use of consumer products (please circle appropriate).
Assume that: Never = never used, Hardly ever = less that once/month,
Occasionally = about once/month, Regularly = about once/week,
and Often = more that once/week.

Product	Frequency of Use				
Spray-on deodorant	(Never)	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	(Never)	Hardly ever	Occasionally	Regularly	Often
Insecticides	Never	Hardly ever	(Occasionally)	Regularly	Often
Disinfectants	Never	(Hardly ever)	Occasionally	Regularly	Often
Window cleaners	(Never)	Hardly ever	Occasionally	Regularly	Often
Nail polish remover	Never	Hardly ever	Occasionally	Regularly	(Often)
Hair sprays	Never	(Hardly ever)	Occasionally	Regularly	Often
Candles	Never	Hardly ever	Occasionally	Regularly	(Often)
Incense	(Never)	Hardly ever	Occasionally	Regularly	Often

45. Please check weekly household cleaning practices:

Dusting ☒
Dry sweeping ☒
Vacuuming ☒
Polishing (furniture, etc.) ☐
Washing/waxing floors ☐
Other (describe) ☐ _____

46. Other comments:

We have a distinct sweet smell in the basement family room. it starts mid-spring and fades in the late winter.

0012-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

47. Chemical Inventory/Summary

Chemical/Chemical Product (consumer name)	Amount present in home
a)	
b)	
c)	
d)	
e)	
f)	
g)	
h)	
i)	
j)	
k)	
l)	
m)	
n)	
o)	

PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0013-H
Street Address: 761 S. Douglas St.
ZIP:
Property Contact:
Tel #:
Latitude: 40.752578
Longitude: -111.854994
Age of Property: 88 years
Number of Levels: 2
Basement? (•) Yes ( ) No
Basement Habitable? (•) Yes ( ) No
Sump? ( ) Yes (•) No

Completed by: ERR
Date: 12/09/2014

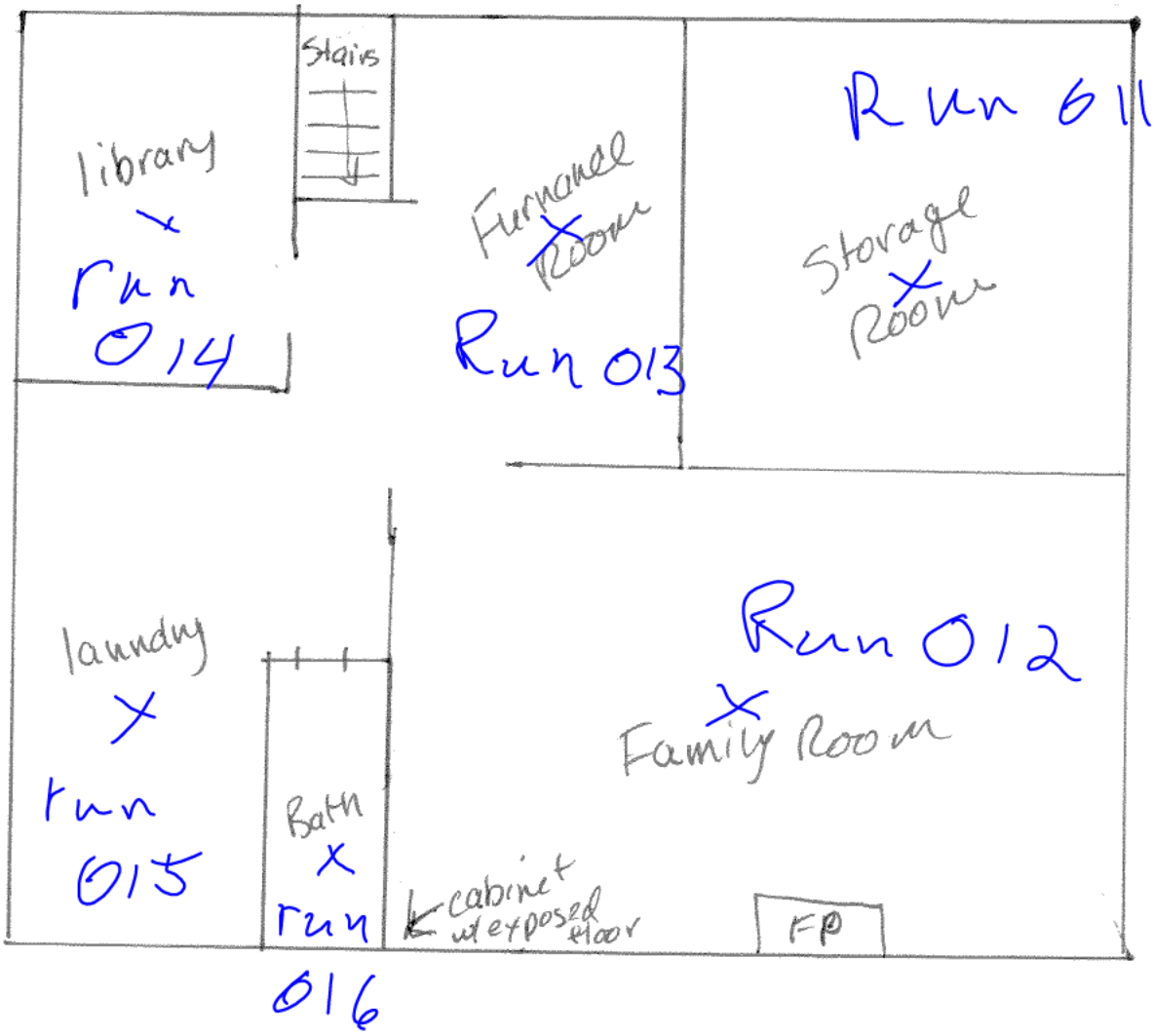
Comments

ground elev. at front wall of house= 4518.0' MSL

Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.

0013-H 761 South Douglas Street

Basement



Basement - Blue

5t Floor
Black

RUN 002

0013-4

Closet
Bedroom #2
Attic/ Storage
Run 003
Kitchen
Sitting Room
Run 004 X
Bedroom #1
Closet
Parlor
X run 009
Run 005
Hallway
Bathroom
Master Bedroom
Walk In Closet
Master Bathroom
X
008
Bath room
SE BR
run 006
X
NE BR
X 007

SG-001-4, 7,
Run 033 + 034

A Second Story Addition for
Jim Lumbeck and Julia Reed
761 South Douglas Street Salt Lake City, Utah

Project No.
0198
Sheet:
A2-2
Scale:

Date:
Revision:

SCHIELLER
COLLABORATIVE INC
ARCHITECT
341 SOUTH MAIN, SUITE 33
SALT LAKE CITY, UT 84111
TEL (801) - 575 - 8000
FAX (801) - 575 - 8007
EXPLANNER

0013-17

sloped/flat ceiling transistion.

3 / A4-1

DH1 DH1

MASTER BATH

1 / A4-1

DH7 23" DH7 DH7

BEDROOM #1

4'-9" clr.

4'-9" clr.

CLO.

CLO.

202 / 6

Sound wall. See detail.

209 / 3

208 / 6

5"

STOR./ MECH.

DH5

201 / 2

Display case.

32" x 30" attic access.

linen

3'-0" clr.

open to below

210 / 6

swamp cooler opening.

2 / A4-2

DH5

DH5

1'-10"

203 / 4

MASTER BEDROOM

shelving

5'-0" high walls.

3'-4" clr.

204 / 2

205 / 6

SITTING ROOM

7'-0" clr.

207 / 2

206 / 3

Sound wall. See detail.

BATH

Full-height storage cabinet.

align

1 / A4-2

DH6

DH6

CLO.

211 / 6

BEDROOM #2

4'-2" clr.

5'-0" high walls.

DH1 DH1 DH7 DH7 DH1 DH1

DH1 DH1

Remove existing masonry flue to a point just above existing main floor ceiling. Extend flue to above roof with

PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 1/16/15 Time of Arrival: 0830

Weather Conditions: Partly Cloudy

Temperature: 34 Barometric Pressure (inHg): 30.29 Wind Direction: NW Speed: Light

Field Crew 1: ERR Role: HAPSITE Operator

Field Crew 2: DED Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? (●) Yes ( ) No

If yes, have the materials been removed? (●) Yes ( ) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

Gerneral use household cleaners and paints.

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time	
	011215		

Instrument Performance Check Run Number	Time	
NA- Autotune - run numbers not assigned		(•) Pass ( ) Fail

Instrument Performance Check Re-run Number	Time	
NA		( ) Pass ( ) Fail

CCV Run Number	Time	
001		(•) Pass ( ) Fail

CCV Re-run Number	Time	
NA		( ) Pass ( ) Fail

Operator's initials: err

Comments

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time: 0919 End Time: 0922

Location: Middle of the front walkway, west of house.

Run Number: 002 (OA001_OUT) Time: 0919

Run Number: Time:

Comments

Run 001 was method ccv standard after concentrated clean out.

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time | End Time

Comments

none

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time 1303 End Time 1316

Comments

002 eastern closet in laundry room (old water line) 1303. 003 family room (northeast cabinet) 1309. 004 foundation bump out (access family room) 1313. F

Pictures

PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	0931	End Time	1250		
Room/area	living room/dining room	Run Number	003 (IA001_LIV)	Time	0931
Room/area	kitchen	Run Number	004	Time	0939
Room/area	hallway	Run Number	005	Time	0948
Room/area	southeast bedroom	Run Number	006	Time	0956
Room/area	northeast bedroom	Run Number	007	Time	1002
Room/area	bathroom	Run Number	008	Time	1012
Room/area	parlor	Run Number	009	Time	1020
Room/area	computer room - upstairs ambient	Run Number	010	Time	1030
Room/area	storage room	Run Number	011	Time	1203
Room/area	family room	Run Number	012	Time	1213

Comments

furnace room 013 1221. library 014 1230. laundry room 015 1240. basement bathroom 016 - final reading 1247.

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time: 1603 | End Time: 0735 | Room/Area: back hall 1st floor

T=	0	CFM	1000	Pascals	-4.9	Run No.	018	Time	1603
T=	5	CFM	1036	Pascals	-5.1	Run No.		Time	1608
T=	10	CFM	1037	Pascals	-5.0	Run No.	019	Time	1613
T=	15	CFM	958	Pascals	-4.8	Run No.		Time	1618
T=	20	CFM	980	Pascals	-4.7	Run No.	020	Time	1623
T=	25	CFM	985	Pascals	-4.8	Run No.	021	Time	1628
T=	30	CFM	997	Pascals	4.9	Run No.	022	Time	1633
T=	40	CFM	995	Pascals	-4.9	Run No.	023	Time	1643
T=	50	CFM	990	Pascals	-5.1	Run No.	024	Time	1653
T=	60	CFM	995	Pascals	-4.5	Run No.	025	Time	1703
T=	70	CFM	1000	Pascals	-4.8	Run No.	026,027	Time	1713
T=	80	CFM	985	Pascals	-4.6	Run No.	028	Time	1723
T=	90	CFM	980	Pascals	-4.6	Run No.	029	Time	1733
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

Baseline pressure diff= -2.6 pascals. ;total cfm=91241

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time: 1748 End Time: 1842 Room/Area: back hallway

T=	0	CFM	1080	Pascals	+5.6	Run No.	030 (aborted	Time	1748
T=	5	CFM	1085	Pascals	+4.9	Run No.		Time	1753
T=	10	CFM	1100	Pascals	+5.0	Run No.		Time	1758
T=	15	CFM	1094	Pascals	+4.6	Run No.	032	Time	1803
T=	20	CFM	1098	Pascals	+3.9	Run No.		Time	1808
T=	25	CFM	1095	Pascals	+4.1	Run No.		Time	1813
T=	30	CFM	1100	Pascals	+5.1	Run No.		Time	1818
T=	40	CFM	1099	Pascals	+4.3	Run No.		Time	1828
T=	50	CFM	1100	Pascals	+4.4	Run No.	033	Time	1838
T=	54	CFM	1100	Pascals	+4.5	Run No.		Time	1842
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

baseline= +1.7 pascal, total cfm= 59135. hapsite aborted run 030, then control panel froze at 1815; had to restart. only positive pressure samples were Runs 032 and 033

PART J
SUMMA CANISTERS

Location/ Area: NA

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

Comments

PART K
SOIL GAS

Date	01/16/2015	Time	16:45	Sample Depth	4/8		
Latitude	40.752633	Longitude	-111.854889			Elevation	4520
Run No	034	Run Time	18:55			Vacuum (in/Hg)	8/5

Comments

Soil gas samples 0013H-SG-001-4' and 8' collected at NE corner of house. SG-001-4' vaccum resulted in too little sample collected to run with Hapsite. Only have results for SG-001-8'

11/24

0013-H

Dec 9th
9:00

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

OCCUPIED DWELLING QUESTIONAIRE

Indoor Air Assessment Survey

Date: 11-24-14

1. Name:
Address
Home Ph
2. What is t ... , please.
3. Are you t
this Home

4. Total number of occupants/persons at this location? 2
Number of Children 0 Ages MOVED OUT

5. How long have you lived at this location? 21 YEARS, SINCE 1993

General Home Description

6. Type of Home/Structure (check only one): Single Family Home ☒, Duplex ☐, Apartment ☐, Townhouse ☐ Other

7. Home/Structure Description:
Number of floors: 2 FLOORS + BASEMENT
Basement ☒
Crawlspace ☐
Partial crawlspace/basement ☐ % of each
Slab on grade ☐
Other ☐

8. Age of Home/Structure: BUILT 1927 years, Not sure/Unknown ☐

9. General Above-Ground Home/Structure construction (check all that apply):
Wood ☐, Brick ☐, Concrete ☐, Cement block ☐, Other ☒ 1ST FLOOR: STRUCTURAL TILE
2ND FLOOR: WOOD-FRAMED

10. Foundation Construction (check all that apply):
Concrete Slab ☐
Fieldstone ☐
Concrete block ☐
Elevated above ground/grade ☐
Other ☒ UNREINFORCED CONCRETE - INNER WALLS ONLY WERE FORMED

0013-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

11. Do you have private well ☐ or cistern ☐ ? No
If yes, please describe location, use and current condition_____

12. Do you have a septic system? Yes ☐ No ☒ Not used ☐ Unknown ☐
If yes, what is construction type?_____
Where is it located? _____
When was the last time it was serviced?_____
Do you (or have you ever) use (d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your home? (pond, ditch, etc.) Yes ☐ No ☒

Basement Description (please check all boxes that apply):

14. Is the basement finished ☒ or unfinished ☒ ? Partially Finished in Places

15. If finished, how many rooms are in the basement? 5
What are rooms used for? Bedrooms ☐ Family room ☒ Storage ☒
Other Laundry Room

16. If not finished, do you plan on finishing in the future? Yes ☐ No ☒

17. Is the basement floor (check all that apply) concrete ☒, tile ☐, carpeted ☒, dirt ☐,
other ☐ Carpet over removed tile, mastic left below pad

18. Are the basement walls poured concrete ☒, cement block ☐, stone ☐, wood ☒,
Brick ☐, other ☐ Wood on stringers nailed to concrete walls where finished, some drywall

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less that 1 time/year) ☐
No ☒ - except during heavy rainfall when gutters ~~for~~ extensions are not put out (removed to mow lawn)
Describe the moisture problem_____

20. .Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☐
No ☒ - except from plumbing failure, or rarely gutter overflow

21. Does the basement have any of the following? Floor cracks ☐, Wall cracks ☐, Sump ☐,
Floor drain ☒, Other hole/opening in floor ☐
describe Floor Drain cemented shut, was connected to sewage line. May be inactive Floor cracks under carpet

0013-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

22. Are any of the following used or stored in the basement (check all that apply):
Paint [X] Paint Stripper/remover [ ] Paint thinner [X] Metal degreaser/cleaner [ ]
Gasoline [ ] Diesel fuel [ ] Solvents [ ] Glue [X] Laundry spot removers [X] Drain cleaners
[ ] Pesticides [ ] Other equipment with fuel tanks (chain saw, lawn mower, snow blower,etc.,)

23. Have you recently (within the last six months) done any painting or remodeling in your home?
Yes [X] No [ ]
If yes, specify what was done, where in the home, and what month:
ON UPPER FLOOR, CARPET REMOVED IN ONE BEDROOM, HICKORY FLOOR PUT IN, FINISHED W/ WATER-BASED POLYURETHANE, ROOM PAINTED WITH LATEX PAINT.

24. Have you installed new carpeting in your home within the last year? Yes [ ] No [X]
If yes, when and where? _____

25. Do you regularly use or work in a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) [ ]
Yes, use dry-cleaning infrequently (monthly or less) [X]
Yes, work at a dry cleaning service [ ]
No [ ]

26. Does anyone in your home use solvents at work?
Yes [ ] If yes, how many persons?
No [X] If no, go to question 28

27. If yes for question 26, are the work clothes washed at home? Yes [ ] No [ ]

28. Where is the washer/dryer located?
Basement [X]
Upstairs utility room [ ]
Kitchen [ ]
Garage [ ]
Use a Laundromat [ ]
Other, please specify [ ] _____

29. If you have a dryer, is it vented to the outdoors? Yes [X] No [ ]

30. What type (s) of home heating do you have (check all that apply)
Fuel type: Gas [X], Oil [ ], Electric [ ], Wood [ ], Coal [ ],
Other [ ] _____

Heat conveyance system:
Forced hot air [X]
Forced hot water [ ]
Steam [ ]
Radiant floor heat [ ]
Wood Stove [ ]
Coal furnace [ ]
Fireplace [ ]
Other [ ] _____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

31. Does your home have (or had in the past) a storage tank for storage of: gasoline ☐ fuel oil ☐ propane ☐ NO
If yes, where is/was it located? _____
How is/was the tank filled? _____
Is there staining near the tank? Yes ☐ No ☐

32. Do you have air conditioning? Yes ☐ No ☒ - SWAMP COOLER ONLY
Central air conditioning ☐
Window air conditioning unit (s) ☐
Other (please specify) _____

33. Do you use any of the following? Room fans ☒, Ceiling fans ☐, Attic fan ☐
OCCASIONALLY DURING SUMMER

34. Do you ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☐ No ☒

35. Has your home had termite or other pesticide treatment? Yes ☐ No ☐ Unknown ☒
If yes, please specify type of pest controlled _____
And approximate date of service _____

36. Water heater type: Gas ☒, Electric ☐, by Furnace ☐,
Other (please describe) _____

37. Water heater location: Basement ☒, Upstairs utility room ☐, Garage ☐,
Other (please specify) _____

38. What type of cooking appliance do you have? Electric ☐, Gas ☒
Other (please describe) ELECTRIC OVEN, GAS ~~BBQ~~ STOVETOP

39. Is there a stove exhaust hood present? Yes ☒ No ☐
Does it vent to the outdoors? Yes ☐ No ☒

40. Smoking in Home:
None ☒, Rare (only guests) ☐, Moderate (residents, light smokers) ☐,
Heavy (at least one heavy smoker in household) ☐

41. If yes to question 40, what do they smoke?
Cigarettes ☐ Cigars ☐
Pipe ☐ Other ☐

42. Do you regularly use air fresheners? Yes ☐ No ☒

43. Does anyone in the home have indoor home hobbies or crafts involving: NO
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☐
Spray paint ☐, wood finishing ☐, Other ☐ _____

0013-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

44. General family/home use of consumer products (please circle appropriate).
Assume that: Never = never used, Hardly ever = less that once/month,
Occasionally = about once/month, Regularly = about once/week,
and Often = more that once/week.

Product	Frequency of Use				
Spray-on deodorant	(Never)	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	(Never)	Hardly ever	Occasionally	Regularly	Often
Insecticides	Never	(Hardly ever)	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	(Occasionally)	Regularly	Often
Window cleaners	Never	(Hardly ever)	Occasionally	Regularly	Often
Nail polish remover	Never	Hardly ever	(Occasionally)	Regularly	Often
Hair sprays	(Never)	Hardly ever	Occasionally	Regularly	Often
Candles	(Never)	Hardly ever	Occasionally	Regularly	Often
Incense	(Never)	Hardly ever	Occasionally	Regularly	Often

45. Please check weekly household cleaning practices: ALL MORE LIKE MONTHLY NOW THAT CHILDREN HAVE MOVED OUT

Dusting ☒
Dry sweeping ☐
Vacuuming ☒
Polishing (furniture, etc.) ☒
Washing/waxing floors ☒
Other (describe) ☐ _____

46. Other comments:

_____
_____
_____
_____
_____
_____
_____
_____

0013-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

47. Chemical Inventory/Summary

Chemical/Chemical Product (consumer name)	Amount present in home
a) OIL PAINT	4 qts.
b) LACQUER	1 qt
c) PAINT THINNER	2 qts
d) LATEX PAINT	6 GALLONS
e) 409	2 qts
f) AMMONIA	2 qts
g) HARDWOOD FLOOR CLEANER	2 qts
h) BRASSO, SILVER POLISH	1 CUP
i) "GREEN" CLEANER	2 qts.
j) TOILET CLEANER	2 qts.
k) SHOE POLISH	½ CUP
l) CLOROX	1 qt.
m)	
n)	
o)	

ALL PAINT REMOVERS, INSECTICIDES, DANGEROUS CHEMICALS IN DETACHED GARAGE, BUILT 2005

PHOTO LOG FOR SLC VA CERCLA SITE

PARCEL IDENTIFIER: 0013-14 **ADDRESS** 761 S. Douglas St.

DATE: 12/9/14

Number	Camera Image#	Description of Photo
1	100-0011	SW corner of basement where water has come in before
2	100-0012	Fireplace in basement - had water seepage in past
3	~~100-0013~~	NE corner of family room - storage cabinet w/ exposed floor
4	100-0014	↳ Storage Cabinet w/ exposed floor
5	100-0015	same as above
6	100-0016	Pushed out foundation - accessible through window in family room - mostly concrete - possible dirt floor
7	100-0017	Floor drain in basement laundry - sealed w/ concrete
8	100-0018	Sewer drain coming through floor in laundry room
9	100-0019	old chimney for previous furnace in basement.
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		

0011



0012



0014



0015



0016



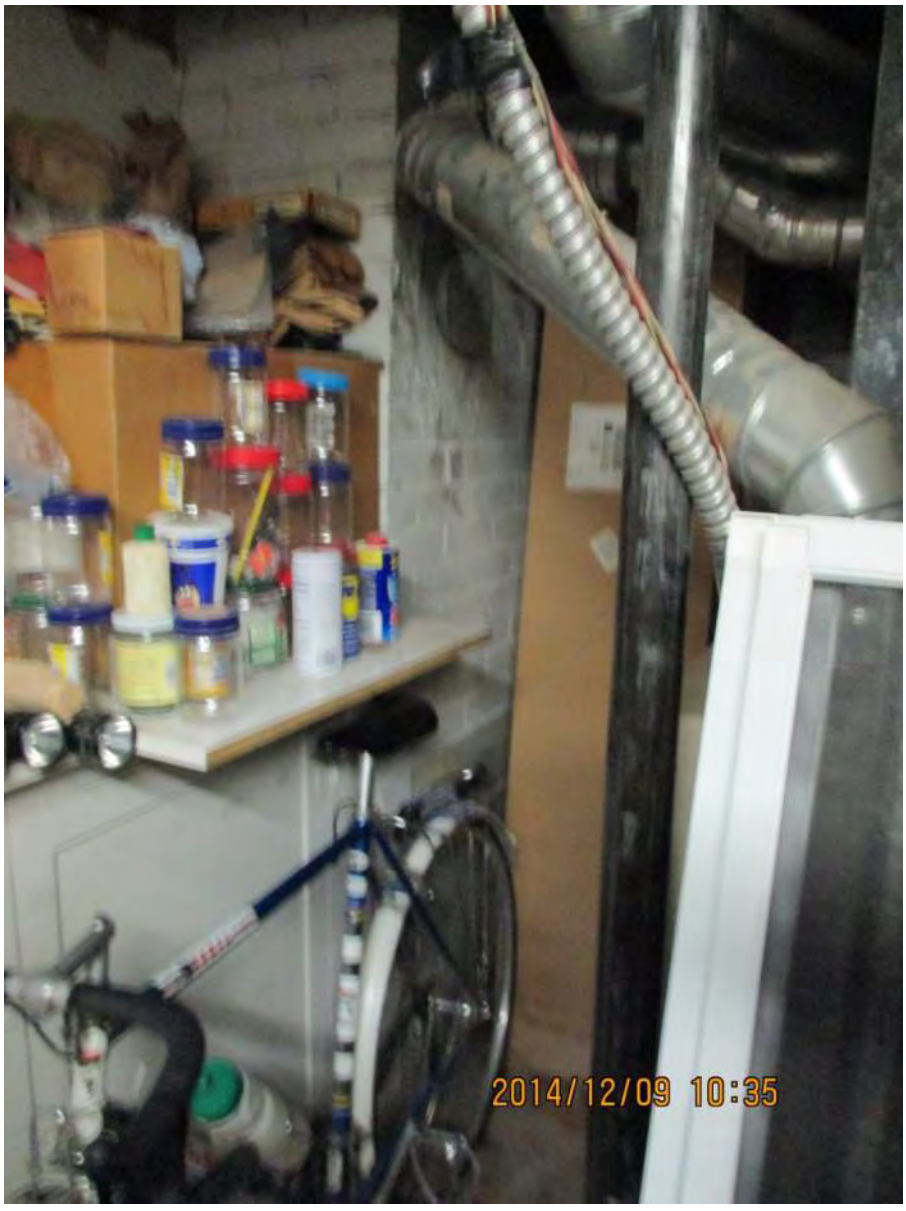
0017



0018



0019



PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0014-H
Street Address: 1636 E. 900 S.
ZIP: 84105

Property Contact: hnelson@xmission.com
Tel #:

Latitude: 40.749589
Longitude: 111.844184
Age of Property: 77 years

Number of Levels: 2
Basement? (•) Yes ( ) No
Basement Habitable? (•) Yes ( ) No
Sump? ( ) Yes (•) No

Completed by: ERR
Date: 12/11/2014

Comments

Elevation at bottom of front step= 4695' msl.

Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.

0014-H 1636 E. 900 South 0014-H

Upstairs / Main Floor



Run 012

0014-H Basement 0014-H



PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 3/2/15 Time of Arrival: 0830

Weather Conditions: Cloudy

Temperature: 37 Barometric Pressure (inHg): 29.80 Wind Direction: NW Speed: Calm

Field Crew 1: ERR Role: HAPSITE Operator

Field Crew 2: DED Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? ( ) Yes (●) No

If yes, have the materials been removed? ( ) Yes ( ) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

Hapsite Team observed shelf of paints, oil, and insecticide on shelf in basement. materials left in place

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time
002,003,004,005,006	2/17/15	1100

Instrument Performance Check Run Number	Time	
AUTOTUNE		○ Pass ○ Fail

Instrument Performance Check Re-run Number	Time	
NA		○ Pass ○ Fail

CCV Run Number	Time	
001 (5 PPB) 3/1/15	1822	◉ Pass ○ Fail

CCV Re-run Number	Time	
002 (0.5 ppb) 3/1/15	1830	◉ Pass ○ Fail

Operator's initials: ERR

Comments

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time	0947	End Time	0955
Location	Off of back door near garage (south side of house).		
Run Number	006 (IA-006-OUT)	Time	0947
Run Number	NA	Time	

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time 1046 End Time 1048

Comments

Fuel treatment, WD-40, bug spray, paint, etc stored in basement closet.

Survey 001 - 1046 - Max TIC 106,773.

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time 1051 End Time 1104

Comments

Survey 002 chimney cleanout 1051 max tic 131,735

Survey 003 dirt floor 1057 max tic 148,046

Survey 004 penetration in laundry area 1101 131,890

Pictures

PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	0906	End Time	1040		
Room/area	Living room	Run Number	001 (IA-001-LIV)	Time	0906
Room/area	Master bedroom	Run Number	002 (IA-002-MBR)	Time	0915
Room/area	HALL BATHROOM	Run Number	003 (IA-003-BA1)	Time	0923
Room/area	Bedroom	Run Number	004 (IA-004-BR1)	Time	0931
Room/area	Kitchen	Run Number	005 (IA-005-KIT)	Time	0939
Room/area	Bedroom	Run Number	007 (IA-007-BR2)	Time	1000
Room/area	Basement bathroom	Run Number	008 (IA-008-BA2)	Time	1008
Room/area	Furnace room	Run Number	009 (IA-009-FUR)	Time	1016
Room/area	Basement office	Run Number	010 (IA-010-OFC)	Time	1026
Room/area	Basement closet	Run Number	011 (IA-011-CLO)	Time	1034

Comments

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time: 1157 | End Time: 1330 | Room/Area: Furnace room

T=	5	CFM	418	Pascals	-6.4	Run No.	013 (IA-012A-FUR)	Time	1159
T=	10	CFM	375	Pascals	-4.9	Run No.	014 (IA-012B-FUR)	Time	1208
T=	15	CFM	377	Pascals	-5.2	Run No.	015 (IA-012C-FUR)	Time	1216
T=	20	CFM	383	Pascals	-3.4	Run No.	016 (IA-012D-FUR)	Time	1226
T=	25	CFM	350	Pascals	-5.1	Run No.	017 (IA-012E-FUR)	Time	1234
T=	30	CFM	354	Pascals	-4.8	Run No.	018 (IA-012F-FUR)	Time	1243
T=	40	CFM	443	Pascals	-4.8	Run No.	019 (IA-012G-FUR)	Time	1254
T=	50	CFM	441	Pascals	-5.1	Run No.	020 (IA-012H-FUR)	Time	1306
T=	60	CFM	468	Pascals	-5.3	Run No.	021 (IA-012I-FUR)	Time	1315
T=	70	CFM	464	Pascals	-5.0	Run No.	022 (IA-012J-FUR)	Time	1323
T=	80	CFM	470	Pascals	-4.9	Run No.		Time	
T=	90	CFM	443	Pascals	-4.9	Run No.		Time	
T=	93	CFM	451	Pascals	-5.0	Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

37,500 =2.5 AIR VOLUMES. 38,895 total volume. Air door in back door, samples collected in basement furnace room. Baseline pressure= -0.5 pascal

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time: 1343 End Time: 1458 Room/Area: Furnace room

T=	5	CFM	507	Pascals	6.3	Run No.	023 (IA-013A-FUR)	Time	1345
T=	10	CFM	516	Pascals	4.7	Run No.	024 (IA-013B-FUR)	Time	1354
T=	15	CFM	498	Pascals	4.9	Run No.	025 (IA-013C-FUR)	Time	1403
T=	20	CFM	501	Pascals	4.8	Run No.	026 (IA-013D-FUR)	Time	1413
T=	25	CFM	490	Pascals	3.5	Run No.	027 (IA-013E-FUR)	Time	1423
T=	30	CFM	504	Pascals	5.1	Run No.	028 (IA-013F-FUR)	Time	1433
T=	40	CFM	499	Pascals	5.2	Run No.	029 (IA-013G-FUR)	Time	1443
T=	50	CFM	504	Pascals	4.3	Run No.	030 (IA-013H-FUR)	Time	1453
T=	60	CFM	495	Pascals	5.2	Run No.		Time	
T=	70	CFM	505	Pascals	5.1	Run No.		Time	
T=	75	CFM	492	Pascals	4.7	Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

Total volume = 37,575, baseline pressure= -0.7 pascal

PART J
SUMMA CANISTERS

Location/ Area: NA

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

Comments

PART K
SOIL GAS

Date	03/02/2015	Time	10:00	Sample Depth	4		
Latitude	40.749650	Longitude	-111.844239			Elevation	4695
Run No	012	Run Time	11:38			Vacuum (in/Hg)	4

Comments

SG-001-4' collected near NW corner of house in landscape bed. Probe refused on cobble at 4'. Soil is sandy with cobbles. Lat= ; Long= ; Elevation= 4695'

0014-H

Dec 11th 4:00

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

OCCUPIED DWELLING QUESTIONAIRE

Indoor Air Assessment Survey

Date: 11/19/2014

1. email - hnelson@xmission.com

2.

3. ____of

4. Total number of occupants/persons at this location? 4
Number of Children 2 Ages 19, 15

5. How long have you lived at this location? 19 years

General Home Description

6. Type of Home/Structure (check only one): Single Family Home ☑, Duplex ☐, Apartment ☐, Townhouse ☐ Other _____

7. Home/Structure Description:
Number of floors: 2
Basement ☑
Crawlspace ☑
Partial crawlspace/basement ☑ % of each 50%/50% 1200 upstairs 600 downstairs
Slab on grade ☐
Other ☐ _____

8. Age of Home/Structure: 77 years, Not sure/Unknown ☐

9. General Above-Ground Home/Structure construction (check all that apply):
Wood ☐, Brick ☑, Concrete ☑, Cement block ☐, Other ☐ _____

10. Foundation Construction (check all that apply):
Concrete Slab ☑
Fieldstone ☐
Concrete block ☐
Elevated above ground/grade ☐
Other ☐ _____

0014-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

11. Do you have private well ☐ or cistern ☐ ? No
If yes, please describe location, use and current condition_____

12. Do you have a septic system? Yes ☐ No ☑ Not used ☐ Unknown ☐
If yes, what is construction type?_____
Where is it located? _____
When was the last time it was serviced?_____
Do you (or have you ever) use (d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your home? (pond, ditch, etc.) Yes ☐ No ☑

Basement Description (please check all boxes that apply):

14. Is the basement finished ☑ or unfinished ☑? ½ finished

15. If finished, how many rooms are in the basement? 3
What are rooms used for? Bedrooms ☑ Family room ☐ Storage ☑
Other UTILITY

16. If not finished, do you plan on finishing in the future? Yes ☐ No ☑

17. Is the basement floor (check all that apply) concrete ☑, tile ☐, carpeted ☑, dirt ☑,
other ☐ _____

18. Are the basement walls poured concrete ☑, cement block ☐, stone ☐, wood ☐,
Brick ☐, other ☐ _____

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less that 1 time/year) ☐
No ☑

Describe the moisture problem_____

20. .Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☐
No ☑

21. Does the basement have any of the following? Floor cracks ☐, Wall cracks ☐, Sump ☐,
Floor drain ☑, Other hole/opening in floor ☐
describe_____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

22. Are any of the following used or stored in the basement (check all that apply):
Paint ☑ Paint Stripper/remover ☐ Paint thinner ☐ Metal degreaser/cleaner ☐
Gasoline ☐ Diesel fuel ☐ Solvents ☐ Glue ☑ Laundry spot removers ☐ Drain cleaners
☐ Pesticides ☐ Other equipment with fuel tanks (chain saw, lawn mower, snow blower,etc.,)

23. Have you recently (within the last six months) done any painting or remodeling in your home?
Yes ☐ No ☑
If yes, specify what was done, where in the home, and what month:
_____
_____

24. Have you installed new carpeting in your home within the last year? Yes ☐ No ☑
If yes, when and where?_____

25. Do you regularly use or work in a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) ☐
Yes, use dry-cleaning infrequently (monthly or less) ☐
Yes, work at a dry cleaning service ☐
No ☑

26. Does anyone in your home use solvents at work?
Yes ☐ If yes, how many persons?
No ☑ If no, go to question 28

27. If yes for question 26, are the work clothes washed at home? Yes ☐ No ☐

28. Where is the washer/dryer located?
Basement ☑
Upstairs utility room ☐
Kitchen ☐
Garage ☐
Use a Laundromat ☐
Other, please specify ☐ _____

29. If you have a dryer, is it vented to the outdoors? Yes ☑ No ☐

30. What type (s) of home heating do you have (check all that apply)
Fuel type: Gas ☑, Oil ☐, Electric ☑, Wood ☑, Coal ☐,
Other ☐_____

Heat conveyance system:
Forced hot air ☑
Forced hot water ☐
Steam ☐
Radiant floor heat ☐
Wood Stove ☐
Coal furnace ☐
Fireplace ☐
Other ☐ _____

0014-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

31. Does your home have (or had in the past) a storage tank for storage of: gasoline ☐ fuel oil ☐ propane ☐ No
If yes, where is/was it located? _____
How is/was the tank filled? _____
Is there staining near the tank? Yes ☐ No ☐

32. Do you have air conditioning? Yes ☑ No ☐
Central air conditioning ☐
Window air conditioning unit (s) ☐
Other (please specify) _____

33. Do you use any of the following? Room fans ☐, Ceiling fans ☐, Attic fan ☑

34. Do you ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☐ No ☑

35. Has your home had termite or other pesticide treatment? Yes ☐ No ☑ Unknown ☐
If yes, please specify type of pest controlled _____
And approximate date of service _____

36. Water heater type: Gas ☑, Electric ☐, by Furnace ☐,
Other (please describe) _____

37. Water heater location: Basement ☑, Upstairs utility room ☐, Garage ☐,
Other (please specify) _____

38. What type of cooking appliance do you have? Electric ☑, Gas ☐
Other (please describe) _____

39. Is there a stove exhaust hood present? Yes ☑ No ☐
Does it vent to the outdoors? Yes ☐ No ☑

40. Smoking in Home:
None ☑, Rare (only guests) ☐, Moderate (residents, light smokers) ☐,
Heavy (at least one heavy smoker in household) ☐

41. If yes to question 40, what do they smoke?
Cigarettes ☐ Cigars ☐
Pipe ☐ Other ☐

42. Do you regularly use air fresheners? Yes ☐ No ☑

43. Does anyone in the home have indoor home hobbies or crafts involving:
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☐
Spray paint ☐, wood finishing ☐, Other ☐ No
_____
_____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

44. General family/home use of consumer products (please circle appropriate). Assume that: Never = never used, Hardly ever = less that once/month, Occasionally = about once/month, Regularly = about once/week, and Often = more that once/week.

Product	Frequency of Use				
Spray-on deodorant	Never	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	Never	Hardly ever	Occasionally	Regularly	Often
Insecticides	Never	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	Occasionally	Regularly	Often
Window cleaners	Never	Hardly ever	Occasionally	Regularly	Often
Nail polish remover	Never	Hardly ever	Occasionally	Regularly	Often
Hair sprays	Never	Hardly ever	Occasionally	Regularly	Often
Candles	Never	Hardly ever	Occasionally	Regularly	Often
Incense	Never	Hardly ever	Occasionally	Regularly	Often

45. Please check weekly household cleaning practices:

- Dusting ☑
- Dry sweeping ☑
- Vacuuming ☑
- Polishing (furniture, etc.) ☑
- Washing/waxing floors ☑
- Other (describe) ☐ _____

46. Other comments:

_____

_____

_____

_____

_____

_____

_____

_____

0014-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

47. Chemical Inventory/Summary

Chemical/Chemical Product (consumer name)	Amount present in home
a) WINDEX	1 bottle
b) Lysol Cleaner	"
c) CLOROX	1 Bottle
d)	
e)	
f)	
g)	
h)	
i)	
j)	
k)	
l)	
m)	
n)	
o)	

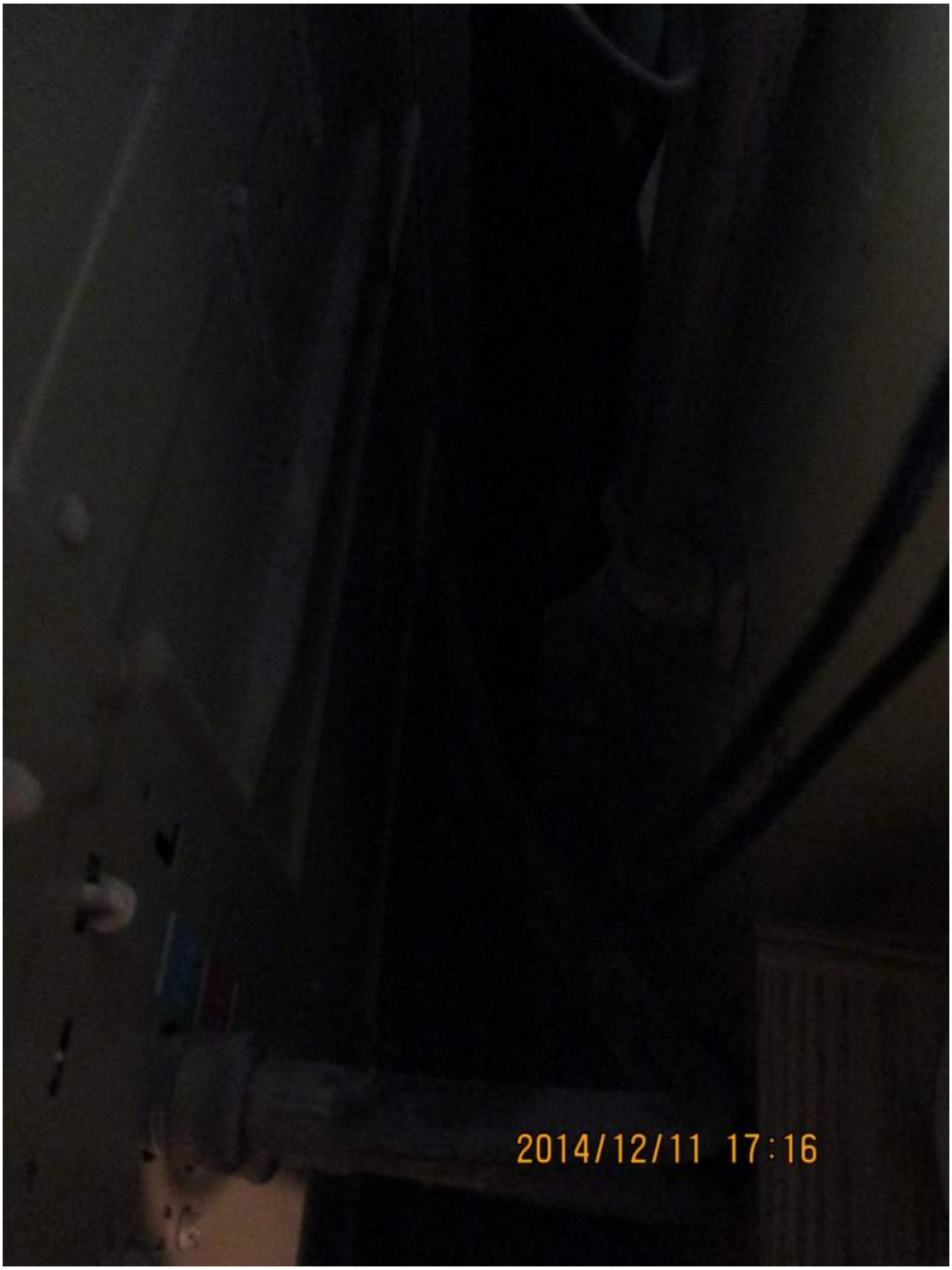
PHOTO LOG FOR SLC VA CERCLA SITE

PARCEL IDENTIFIER: 0014-H **ADDRESS** 1636 E. 900 South

DATE: 12/11/14

Number	Camera Image#	Description of Photo
1	100-105	Sewer drain stack
2	100-106	Sewer drain stack
3	100-107	Drain in basement floor
4	100-108	Crawl space w/ dirt floor
5	100-109	Old laundry shoot to basement
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		

0105



0106



0107



0108



0109



PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0015-H

Street Address: 1348 S. 1100 East

ZIP: 84104

Property Contact:

Tel #:

Latitude: 40.740506

Longitude: 111.859957

Age of Property: 94 years

Number of Levels: 3

Basement? (●) Yes ( ) No

Basement Habitable? (●) Yes ( ) No

Sump? ( ) Yes (●) No

Completed by: ERR

Date: 12/17/14

Comments

Notes: Basement level is separate apartment. First and second floors are pyschiatic counseling offices.

Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.

PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 3/30/15 Time of Arrival: 0830

Weather Conditions: Sunny

Temperature: 52 Barometric Pressure (inHg): 30.20 Wind Direction: W Speed: Light

Field Crew 1: ERR Role: HAPSITE Operator

Field Crew 2: DEG Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? ( ) Yes (●) No

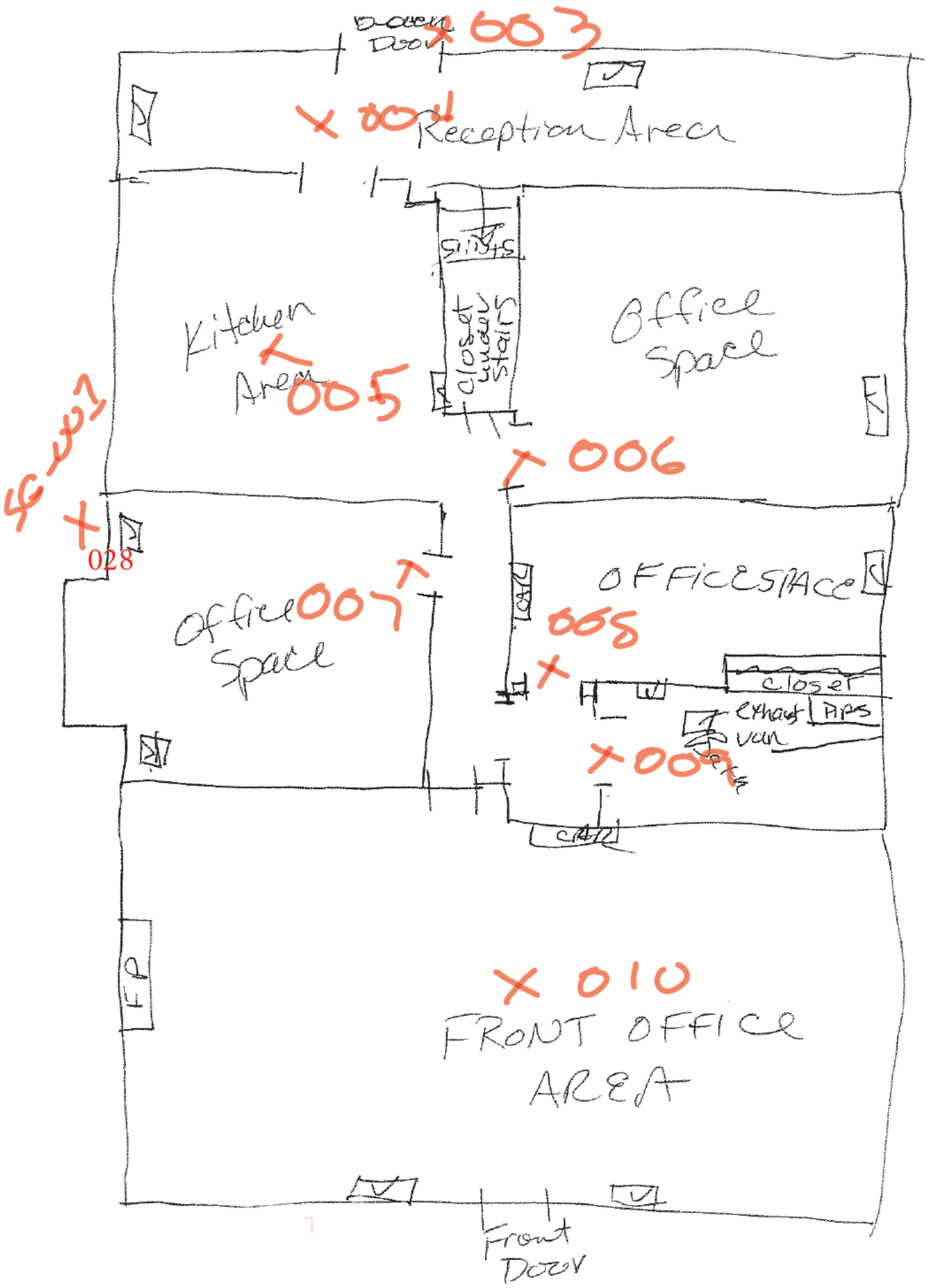
If yes, have the materials been removed? ( ) Yes (●) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

0015-It

Basement
is rental unit

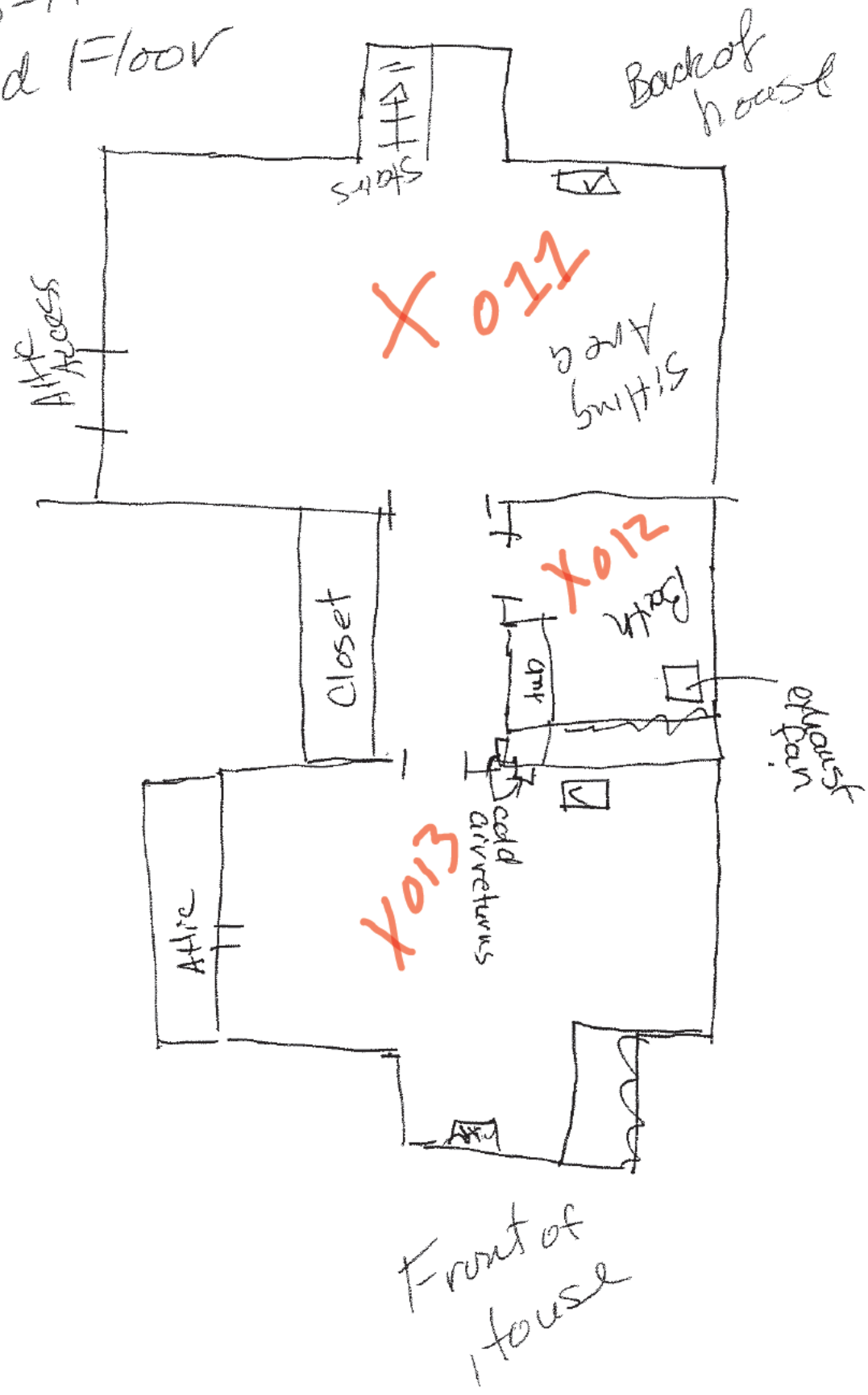




0015 - 1st Main Floor

0015-1+

2nd Floor



PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time
001,002,003,004,005	3/29/15	1830

Instrument Performance Check Run Number	Time	
Auto tune 3/30/15	0724	(•) Pass ( ) Fail

Instrument Performance Check Re-run Number	Time	
NA		( ) Pass ( ) Fail

CCV Run Number	Time	
001_5ppb-3/30/15	0741	(•) Pass ( ) Fail

CCV Re-run Number	Time	
002- 0.5ppb-3/30/15	0749	(•) Pass ( ) Fail

Operator's initials: ERR

Comments

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time: 0909 End Time: 0911

Location: WESTERN SIDE OF PROPERTY OFF BACK PORCH

Run Number: 003 (IA-001-OUT) Time: 0909

Run Number: NA Time:

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time 1215 End Time 1217

Comments

SURVEY 003 - PAINT, BRAKE FLUID, ARMOUR ALL, SPRAY ADHESIVE, ETC ON SHELF IN STORAGE ROOM - 1215-1217 - MAX TIC = 154,999.

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time 1155 End Time 1213

Comments

SURVEY 001- DIRT FLOOR IN CRAWL SPACE 1155-1157 - MAX TIC =139,116; SURVEY 002 - CRACKS IN FOUNDATION IN STORAGE ROOM 1211- 130,787.

Pictures

PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	0923	End Time	1205		
Room/area	Waiting room/sun room	Run Number	004(IA-002-SUN)	Time	0923
Room/area	Kitchen	Run Number	005(IA-003-KIT)	Time	0932
Room/area	Back office	Run Number	006(IA-004-OFC1)	Time	0940
Room/area	West office	Run Number	007(IA-005-OFC2)	Time	0948
Room/area	East office	Run Number	008(IA-006-OFC3)	Time	0956
Room/area	First floor bathroom	Run Number	009(IA-007-BA1)	Time	1004
Room/area	Front office	Run Number	010(IA-008-OFC4)	Time	1012
Room/area	Open area at top of stairs	Run Number	011(IA-009-2LL)	Time	1022
Room/area	Upstairs bathroom	Run Number	012(IA-010-BA2)	Time	1030
Room/area	2ND floor office	Run Number	013(IA-011-OFC5)	Time	1038

Comments

014(IA-012-OCL) 1053; 015(IA-013-BA3)1101; 016(IA-014-BR1)1111; 017(IA-015-CRA)1144; 018(IA-016-STO) 1203;

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time: 1233 End Time: 1314 Room/Area: Open concept living area

T=	5	CFM	953	Pascals	-6.2	Run No.	019(IA-017A-OCL)	Time	1237
T=	10	CFM	949	Pascals	-3.4	Run No.	020(IA-017B-OCL)	Time	1245
T=	15	CFM	1013	Pascals	-6.9	Run No.		Time	
T=	20	CFM	1046	Pascals	-4.3	Run No.	021(IA-017C-OCL)	Time	1253
T=	25	CFM	1058	Pascals	-4.2	Run No.	022(IA-017D-OCL)	Time	1301
T=	30	CFM	1054	Pascals	-4.2	Run No.	023(IA-017E-OCL)	Time	1309
T=	40	CFM	1044	Pascals	-3.8	Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

REMOVAL VOLUME =41,685CUBIC FEET, BASELINE PRESSURE= -0.5 PASCAL, AIR DOOR IN BASEMENT ENTRY, HAPSITE IN BASEMENT OPEN LIVING AREA.

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time: 1326 End Time: 1356 Room/Area:

	T=	CFM	Pascals	Run No.	Time
1	5	1863	5.9	024(IA-018A-OCL)	1326
2	10	2149	4.9	025(IA-018B-OCL)	1335
3	15	1672	4.5	026(IA-018C-OCL)	1343
4	20	1932	6.3		
5	25	1982	5.9	027(IA-018D-OCL)	1352
6	30	1902	5.3		
7					
8					
9					
10					
11					
12					
13					
14					
15					

Comments

CUBIC VOLUME = 57,500 cuft, BASELINE PRESSURE= 0.0 PASCAL.

PART J
SUMMA CANISTERS

Location/ Area: NA

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

Comments

PART K
SOIL GAS

Date	3/30/15	Time	10:00	Sample Depth	4.0'		
Latitude	40.740459	Longitude	111.859989			Elevation	4348
Run No	028	Run Time	1400			Vacuum (in/Hg)	2

Comments

SOUTH WALL 2' FROM FOUNDATION, CENTERED ON SIDE WALL PHOTO 0015H-SG-001 Soil Gas Location..

0015-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

OCCUPIED DWELLING QUESTIONAIRE

Indoor Air Assessment Survey

Date: 12-17-14

1. Name: [redacted]
Address:
1348 S. 1100 E.
Salt Lake City UT 84105
Home Phone: (801) 531-7195 Work Phone: (801) 599-5543

2. What is the best time to call to speak with you? All day At: Work ☐ or Home ☒?
Mon. and Thur.

3. Are you the Owner ☒, Renter ☐, Other ☐ (please specify)_____ of this Home/Structure? If you are not the owner, please provide owner contact Information

_____

_____

4. Total number of occupants/persons at this location? building is currently being used as a small office.
Number of Children 0 Ages NA

5. How long have you lived at this location?_____

General Home Description

6. Type of Home/Structure (check only one): Single Family Home ☐, Duplex ☐, Apartment ☐, Townhouse ☒ Other home converted to office space

7. Home/Structure Description:
Number of floors: 2
Basement ☒
Crawlspace ☐
Partial crawlspace/basement ☐ % of each _____
Slab on grade ☐
Other ☐_____

8. Age of Home/Structure: 94 years, Not sure/Unknown ☐

9. General Above-Ground Home/Structure construction (check all that apply):
Wood ☐, Brick ☒, Concrete ☐, Cement block ☐, Other ☐ _____

10. Foundation Construction (check all that apply):
Concrete Slab ☐
Fieldstone ☐
Concrete block ☐
Elevated above ground/grade ☒
Other ☐ _____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

11. Do you have private well ☐ or cistern ☐ ?
If yes, please describe location, use and current condition_____

12. Do you have a septic system? Yes ☐ No ☒ Not used ☐ Unknown ☐
If yes, what is construction type?_____
Where is it located? _____
When was the last time it was serviced?_____
Do you (or have you ever) use (d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your home? (pond, ditch, etc.) Yes ☐ No ☒

Basement Description (please check all boxes that apply):

14. Is the basement finished ☒ or unfinished ☐ ?

15. If finished, how many rooms are in the basement? 4
What are rooms used for? Bedrooms ☒ Family room ☒ Storage ☐
Other Kitchen, bathroom

16. If not finished, do you plan on finishing in the future? Yes ☐ No ☐

17. Is the basement floor (check all that apply) concrete ☒, tile ☒, carpeted ☒, dirt ☐,
other ☐ _____

18. Are the basement walls poured concrete ☒, cement block ☐, stone ☐, wood ☐,
Brick ☐, other ☐ _____

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less that 1 time/year) ☐
No ☒

Describe the moisture problem_____

20. .Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☒ Once when sprinkler broken
No ☐ Once when gutter broken

21. Does the basement have any of the following? Floor cracks ☐, Wall cracks ☐, Sump ☐,
Floor drain ☐, Other hole/opening in floor ☐
describe_____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

22. Are any of the following used or stored in the basement (check all that apply):
Paint ☒ Paint Stripper/remover ☐ Paint thinner ☐ Metal degreaser/cleaner ☐
Gasoline ☐ Diesel fuel ☐ Solvents ☐ Glue ☐ Laundry spot removers ☐ Drain cleaners
☐ Pesticides ☐ Other equipment with fuel tanks (chain saw, lawn mower, snow blower,etc.,)

23. Have you recently (within the last six months) done any painting or remodeling in your home?
Yes ☒ No ☐
If yes, specify what was done, where in the home, and what month:
1 wall painted, baseboard + trim painted basement in Aug. 2014
1 wall on main floor + 1 upstairs Nov. 2014

24. Have you installed new carpeting in your home within the last year? Yes ☐ No ☒
If yes, when and where?_____

25. Do you regularly use or work in a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) ☐
Yes, use dry-cleaning infrequently (monthly or less) ☐
Yes, work at a dry cleaning service ☐
No ☒

26. Does anyone in your home use solvents at work?
Yes ☐ If yes, how many persons?
No ☒ If no, go to question 28

27. If yes for question 26, are the work clothes washed at home? Yes ☐ No ☐

28. Where is the washer/dryer located?
Basement ☐
Upstairs utility room ☐
Kitchen ☐
Garage ☐
Use a Laundromat ☒
Other, please specify ☐ _____

29. If you have a dryer, is it vented to the outdoors? Yes ☐ No ☐ No dryer

30. What type (s) of home heating do you have (check all that apply)
Fuel type: Gas ☒, Oil ☐, Electric ☐, Wood ☐, Coal ☐,
Other ☐_____

Heat conveyance system:
Forced hot air ☒
Forced hot water ☐
Steam ☐
Radiant floor heat ☐
Wood Stove ☐
Coal furnace ☐
Fireplace ☐
Other ☐ _____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

31. Does your home have (or had in the past) a storage tank for storage of: gasoline ☐ fuel oil ☐ propane ☐
If yes, where is/was it located? _____
How is/was the tank filled? _____
Is there staining near the tank? Yes ☐ No ☐

32. Do you have air conditioning? Yes ☒ No ☐
Central air conditioning ☒
Window air conditioning unit (s) ☐
Other (please specify) _____

33. Do you use any of the following? Room fans ☒ occasionally, Ceiling fans ☐, Attic fan ☐

34. Do you ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☐ No ☒

35. Has your home had termite or other pesticide treatment? Yes ☐ No ☒ Unknown ☐
If yes, please specify type of pest controlled _____
And approximate date of service _____

36. Water heater type: Gas ☐, Electric ☐, by Furnace ☐,
Other (please describe) _____

37. Water heater location: Basement ☒, Upstairs utility room ☐, Garage ☐,
Other (please specify) _____

38. What type of cooking appliance do you have? Electric ☒, Gas ☐
Other (please describe) _____

39. Is there a stove exhaust hood present? Yes ☐ No ☒
Does it vent to the outdoors? Yes ☐ No ☐

40. Smoking in Home:
None ☒, Rare (only guests) ☐, Moderate (residents, light smokers) ☐,
Heavy (at least one heavy smoker in household) ☐

41. If yes to question 40, what do they smoke?
Cigarettes ☐ Cigars ☐
Pipe ☐ Other ☐

42. Do you regularly use air fresheners? Yes ☒ No ☐

43. Does anyone in the home have indoor home hobbies or crafts involving:
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☐
Spray paint ☐, wood finishing ☐, Other ☐ No _____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

44. General family/home use of consumer products (please circle appropriate).
Assume that: Never = never used, Hardly ever = less that once/month,
Occasionally = about once/month, Regularly = about once/week,
and Often = more that once/week.

Product	Frequency of Use				
Spray-on deodorant	Never	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	Never	Hardly ever	Occasionally	Regularly	Often
Insecticides	Never	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	Occasionally	Regularly	Often
Window cleaners	Never	Hardly ever	Occasionally	Regularly	Often
Nail polish remover	Never	Hardly ever	Occasionally	Regularly	Often
Hair sprays	Never	Hardly ever	Occasionally	Regularly	Often
Candles	Never	Hardly ever	Occasionally	Regularly	Often
Incense	Never	Hardly ever	Occasionally	Regularly	Often

45. Please check weekly household cleaning practices:

Dusting ☒
Dry sweeping ☒
Vacuuming ☒
Polishing (furniture, etc.) ☐
Washing/waxing floors ☒
Other (describe) ☐_____

46. Other comments:

_____
_____
_____
_____
_____
_____
_____
_____
_____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

47. Chemical Inventory/Summary

Chemical/Chemical Product (consumer name)	Amount present in home
a)	
b)	
c)	
d)	
e)	
f)	
g)	
h)	
i)	
j)	
k)	
l)	
m)	
n)	
o)	

PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0016-H
Street Address: 355 S. 1300 E
ZIP:
Property Contact:
Tel #:
Latitude: 40.761442
Longitude: -111.853533
Age of Property: 108 years
Number of Levels: 2
Basement? (•) Yes ( ) No
Basement Habitable? ( ) Yes (•) No
Sump? ( ) Yes (•) No

Completed by: ERR
Date: 12/09/2014

Comments

Elevation at sidewalk in front = 4593.0 ft msl.

Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.

0016-1t First Floor

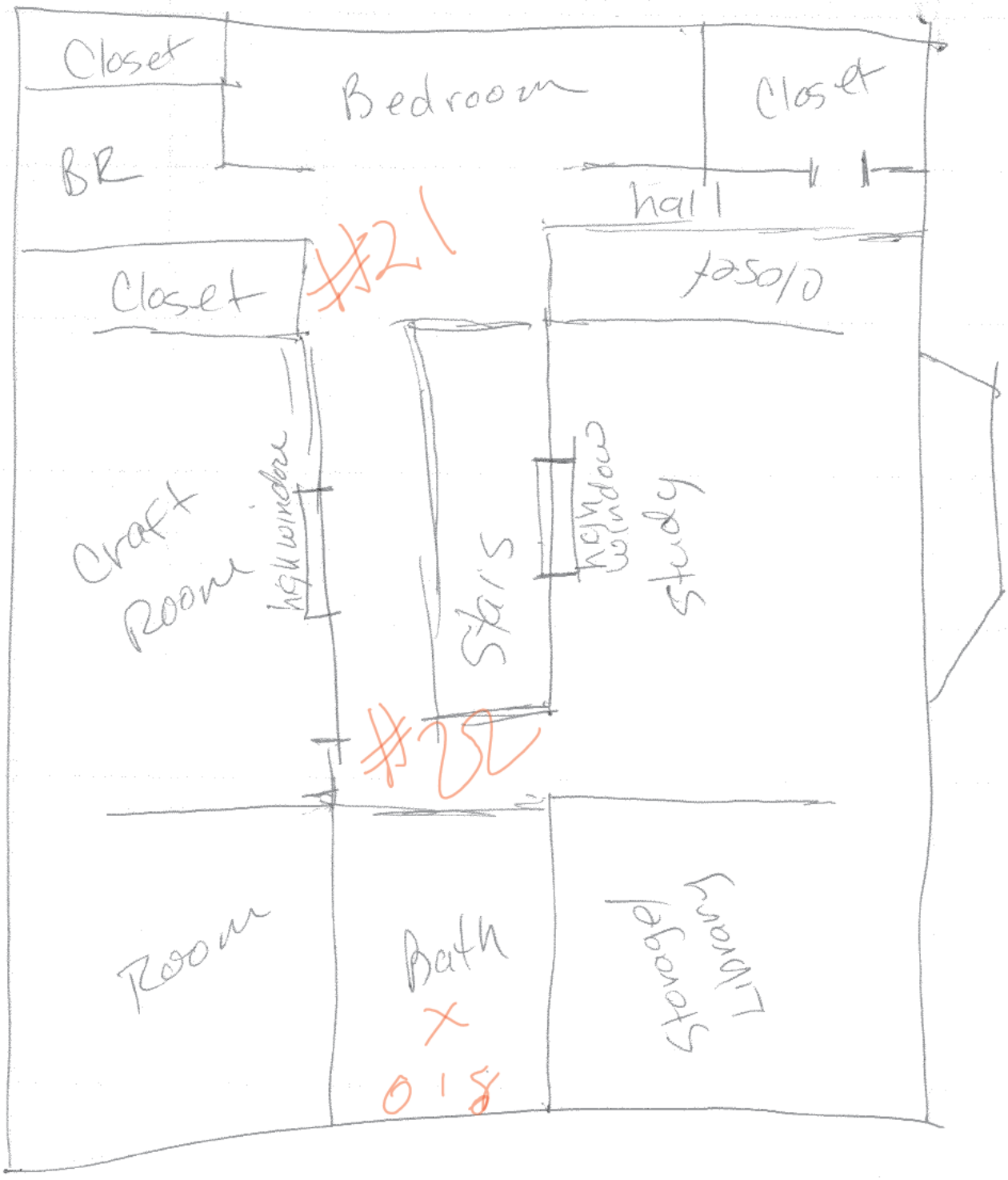
0016-H



Outdoor Ambient- Run 036 X

SG-001-4' (Run 034) X
SG-001-6' (Run 035)

0016-H 2nd Floor



PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 1/22/15 Time of Arrival: 0830

Weather Conditions: Sunny

Temperature: 22 Barometric Pressure (inHg): 30.51 Wind Direction: SE Speed: Light

Field Crew 1: ISE Role: HAPSITE Operator

Field Crew 2: DED Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? ( ) Yes (●) No

If yes, have the materials been removed? ( ) Yes ( ) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time	
001 -005	1/18/15	2330	
Instrument Performance Check Run Number	Time		(●) Pass ( ) Fail
NA - Tune check is pass/fail	09:00		
Instrument Performance Check Re-run Number	Time		( ) Pass ( ) Fail
CCV Run Number	Time		(●) Pass ( ) Fail
001 (1/21/15)	1707		
CCV Re-run Number	Time		( ) Pass ( ) Fail
037			

Operator's initials: ERR

Comments

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time: 16:47 End Time: 1653

Location: 20 feet from backdoor in backyard. southeast corner of driveway, east of house.

Run Number: 004 Time:

Run Number: 036 Time: 1647

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time _____ End Time _____

Comments

Survey suggests Craft Room on second floor contains indoor sources, inspection found multiple glues and fabric treatments throughout room.
Dozens of boxes in basement, but survey mode did not find any tics above background in basement

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time 0942 End Time 0945

Comments

Checked basement - chimney cleanout 002 0942. TIC =125,000. gas pipe meets floor - TIC = 102,000. sewer drain - TIC = 95,000. Nothing identified by hapsite. Note that basement is only partial, with a shelf of soil floor crawl space surrounding and open to the deeper basement area.

Pictures

WIN_20150122_093635, WIN_20150122_093642, WIN_20150122_093707

PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	0915	End Time	1344		
Room/area	BAS S	Run Number	001/A-0016H-012215	Time	0915
Room/area	COA	Run Number	002/A-0016H-012215	Time	0925
Room/area	BAS N	Run Number	003/A-0016H-012215	Time	0933
Room/area	KIT	Run Number	007/A-0016H-01221	Time	1025
Room/area	DRF	Run Number	008/A-0016H-01221	Time	1033
Room/area	LIV/FAM	Run Number	009/A-0016H-01221	Time	1040
Room/area	BA1	Run Number	013/A-0016H-01221	Time	1130
Room/area	LAU	Run Number	014/A-0016H-01221	Time	1139
Room/area	BA2	Run Number	018/A-0016H-01221	Time	1232
Room/area	2LL west	Run Number	021/A-0016H-01221	Time	1344

Comments

BA1 pressure too high run 010 failed. rerun # 011-fail. rerun 012 failed. Runs 015-017 failed. Run 019 failed. Run 020 failed. 2LL east run #022 time=1352/A-0016H-012215-IA-011-2LL-E

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time: 1432 End Time: 1520 Room/Area: fan at backdoor hapsite set up in front room by stairs

T=	5	CFM	1,292	Pascals	-5.2	Run No.	023/A-0016H-012215-IA-012A-L	Time	1437
T=	10	CFM	1,260	Pascals	-4.9	Run No.		Time	1442
T=	15	CFM	1,240	Pascals	-5.2	Run No.	024/A-0016H-012215-IA-012B-L	Time	1447
T=	20	CFM	1,231	Pascals	-5	Run No.		Time	1452
T=	25	CFM	1,277	Pascals	-5.2	Run No.	025/A-0016H-012215-IA-012C-L	Time	1457
T=	30	CFM	1,248	Pascals	-5.1	Run No.		Time	1502
T=	35	CFM	1,253	Pascals	-5.2	Run No.	026/A-0016H-012215-IA-012D-L	Time	1507
T=	40	CFM	1,245	Pascals	-5	Run No.	027/A-0016H-012215-IA-012E-L	Time	1512
T=	45	CFM	1,255	Pascals	-4.9	Run No.	028/A-0016H-012215-IA-012F-L	Time	1517
T=	48	CFM	1,244	Pascals	-5.2	Run No.	final reading shut down fan	Time	1520
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

Initial pre-test (ambient) pressure differential: -2.2 pascal. 2.5x air volume of house 55000 cubic ft, total calculated volume removed =60216 cubic ft

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time: 1528 End Time: 1551 Room/Area: fan in backdoor hapsite in frontroom near stairs upstairs

T=	5	CFM	2794	Pascals	6.5	Run No.	029/A-0016H-012215-IA-013A-L	Time	1533
T=	10	CFM	2821	Pascals	7.7	Run No.		Time	1538
T=	15	CFM	2844	Pascals	7.8	Run No.	031/A-0016H-012215-IA-013B-L	Time	1543
T=	20	CFM	2857	Pascals	7.4	Run No.	032/A-0016H-012215-IA-013C-L	Time	1548
T=	23	CFM	2850	Pascals	7.2	Run No.	final reading shutdown at end of hapsite sar	Time	1551
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

ection

Comments

2.5x air volume of house 55000 cubic ft, total calculated volume put into house =65163.6 cubic ft, cruse control of air door was set at 5pa but was self adjusting to slightly higher pressure.

PART J
SUMMA CANISTERS

Location/ Area: NA

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

Comments

PART K
SOIL GAS

Date	01/22/2015	Time	14:30	Sample Depth	4/6		
Latitude	40.761417	Longitude	-111.853661			Elevation	4595
Run No	034/035	Run Time	1629/1637			Vacuum (in/Hg)	3/5

Comments

0016H-SG-001-4' and SG-001-6' located adjacent to SW corner of house (by driveway). Soil gas sample @4ft collected at 1415 sample, soil gas sample collected at 6ft at 1430.

11/20

0016-14

Dec 9
4:00

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

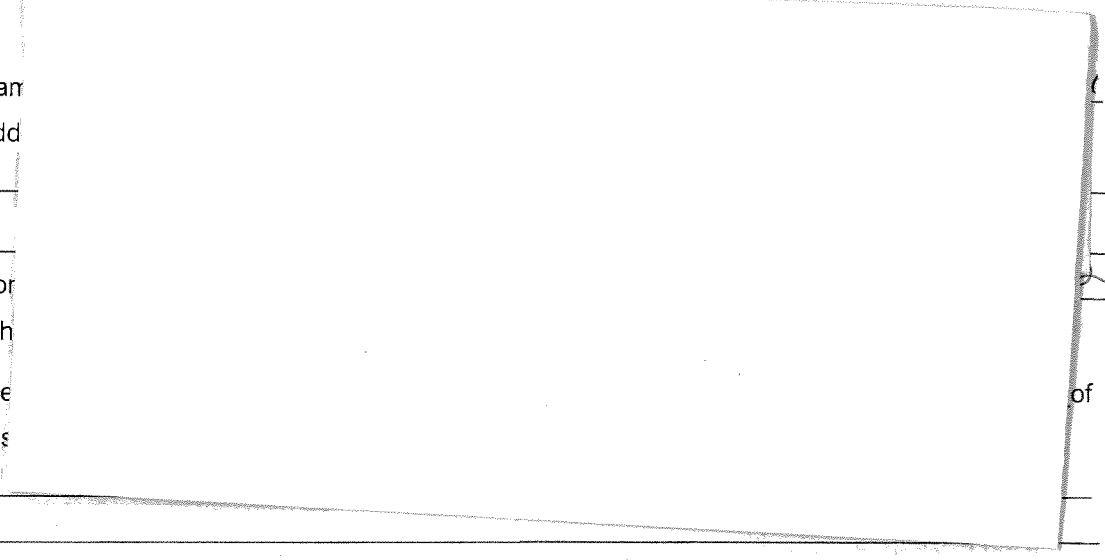
Park in driveway on S. side of house

OCCUPIED DWELLING QUESTIONAIRE

Indoor Air Assessment Survey

Date: 11/20/2014

1. Nam
Add
Hor
2. Wh
3. Are
this



4. Total number of occupants/persons at this location? 2
Number of Children 0 Ages _____

5. How long have you lived at this location? 28 years

General Home Description

6. Type of Home/Structure (check only one): Single Family Home ☒, Duplex ☐, Apartment ☐, Townhouse ☐ Other _____

7. Home/Structure Description:
Number of floors: 2
Basement ☑
Crawlspace ☐
Partial crawlspace/basement ☐ % of each _____
Slab on grade ☐
Other ☐ _____

8. Age of Home/Structure: 108 years years, Not sure/Unknown ☐

9. General Above-Ground Home/Structure construction (check all that apply):
Wood ☑, Brick ☑, Concrete ☑, Cement block ☐, Other ☐ _____

10. Foundation Construction (check all that apply):
Concrete Slab ☑
Fieldstone ☑
Concrete block ☐
Elevated above ground/grade ☐
Other ☐ _____

0016-H

Return to: VASLCHCS (00PA)
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Salt Lake City, UT 84148

22. Are any of the following used or stored in the basement (check all that apply):
Paint ☒ Paint Stripper/remover ☐ Paint thinner ☐ Metal degreaser/cleaner ☐
Gasoline ☐ Diesel fuel ☐ Solvents ☐ Glue ☐ Laundry spot removers ☐ Drain cleaners
☐ Pesticides ☐ Other equipment with fuel tanks (chain saw, lawn mower, snow blower,etc.,)

23. Have you recently (within the last six months) done any painting or remodeling in your home?
Yes ☒ No ☐
If yes, specify what was done, where in the home, and what month:
Summer 2014 Painted + laid flooring in laundry room of first flour of House

24. Have you installed new carpeting in your home within the last year? Yes ☐ No ☒
If yes, when and where?_____

25. Do you regularly use or work in a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) ☐
Yes, use dry-cleaning infrequently (monthly or less) ☐
Yes, work at a dry cleaning service ☐
No ☒

26. Does anyone in your home use solvents at work?
Yes ☐ If yes, how many persons?
No ☒ If no, go to question 28

27. If yes for question 26, are the work clothes washed at home? Yes ☐ No ☐

28. Where is the washer/dryer located?
Basement ☐
Upstairs utility room ☒
Kitchen ☐
Garage ☐
Use a Laundromat ☐
Other, please specify ☐ _____

29. If you have a dryer, is it vented to the outdoors? Yes ☒ No ☐

30. What type (s) of home heating do you have (check all that apply)
Fuel type: Gas ☒, Oil ☐, Electric ☐, Wood ☐, Coal ☐,
Other ☐_____

Heat conveyance system:
Forced hot air ☒
Forced hot water ☐
Steam ☐
Radiant floor heat ☐
Wood Stove ☐
Coal furnace ☐
Fireplace ☐
Other ☐ _____

0016-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

31. Does your home have (or had in the past) a storage tank for storage of: gasoline ☐ fuel oil ☐ NO propane ☐
If yes, where is/was it located? _____
_____
How is/was the tank filled? _____
_____
Is there staining near the tank? Yes ☐ No ☐

32. Do you have air conditioning? Yes ☐ No ☒
Central air conditioning ☐
Window air conditioning unit (s) ☐
Other (please specify) _____

33. Do you use any of the following? Room fans ☑, Ceiling fans ☑, Attic fan ☐

34. Do you ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☐ No ☒

35. Has your home had termite or other pesticide treatment? Yes ☐ No ☒ Unknown ☐
If yes, please specify type of pest controlled _____
And approximate date of service _____

36. Water heater type: Gas ☒, Electric ☐, by Furnace ☐,
Other (please describe) _____

37. Water heater location: Basement ☒, Upstairs utility room ☐, Garage ☐,
Other (please specify) _____

38. What type of cooking appliance do you have? Electric ☐, Gas ☒
Other (please describe) _____

39. Is there a stove exhaust hood present? Yes ☐ No ☒
Does it vent to the outdoors? Yes ☐ No ☐

40. Smoking in Home:
None ☒, Rare (only guests) ☐, Moderate (residents, light smokers) ☐,
Heavy (at least one heavy smoker in household) ☐

41. If yes to question 40, what do they smoke?
Cigarettes ☐ Cigars ☐
Pipe ☐ Other ☐

42. Do you regularly use air fresheners? Yes ☐ No ☒

43. Does anyone in the home have indoor home hobbies or crafts involving: NO
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☐
Spray paint ☐, wood finishing ☐, Other ☐ _____
_____
_____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

44. General family/home use of consumer products (please circle appropriate).
Assume that: Never = never used, Hardly ever = less that once/month,
Occasionally = about once/month, Regularly = about once/week,
and Often = more that once/week.

Product	Frequency of Use				
Spray-on deodorant	Never	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	Never	Hardly ever	Occasionally	Regularly	Often
Insecticides	Never	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	Occasionally	Regularly	Often
Window cleaners	Never	Hardly ever	Occasionally	Regularly	Often
Nail polish remover	Never	Hardly ever	Occasionally	Regularly	Often
Hair sprays	Never	Hardly ever	Occasionally	Regularly	Often
Candles	Never	Hardly ever	Occasionally	Regularly	Often
Incense	Never	Hardly ever	Occasionally	Regularly	Often

45. Please check weekly household cleaning practices:

- Dusting ☑
- Dry sweeping ☑
- Vacuuming ☑
- Polishing (furniture, etc.) ☐
- Washing/waxing floors ☐
- Other (describe) ☐ _____

46. Other comments:

_____

_____

_____

_____

_____

_____

_____

_____

0016-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

47. Chemical Inventory/Summary

Chemical/Chemical Product (consumer name)	Amount present in home
a) Laundry Detergent	1 box
b) Clorox Bleach	2 bottles
c) 409 cleaner	1
d) Windex	4
e) Ajax	3
f) Floor cleaner	3
g) Hydrogen Peroxide	3
h) Dishwasher Detugent	1 box
i) Shampo	4
j) Liraaway	2
k) Lemon oil for furniture	2
l) lighter fuel	1
m) Mr clean	1 bottle
n)	
o)	

PHOTO LOG FOR SLC VA CERCLA SITE

PARCEL IDENTIFIER: 00164 **ADDRESS** 355 S. 1300 East

DATE: 12/9/14

Number	Camera Image#	Description of Photo
1	100-0032	Trapdoor (outside) to basement
2	100-0033	Sewer stack pipe in basement
3	100-0034	shelf w/ dirt floor in basement
4	100-0035	water line coming into house
5	100-0036	Old chimney for old coal furnace
6	100-0037	w/ cleanout old coal bin room
7	100-0038	Side of old chimney for furnace
8	100-0039	Koi pond in backyard (man made/lined)
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		

PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0017-H
Street Address: 1119 E. Sunnyside Ave
ZIP: 84102

Property Contact:
Tel #:

Latitude: 40.751067
Longitude: -111.858819
Age of Property: 99 years

Number of Levels: 2
Basement? (•) Yes ( ) No
Basement Habitable? (•) Yes ( ) No
Sump? (•) Yes ( ) No

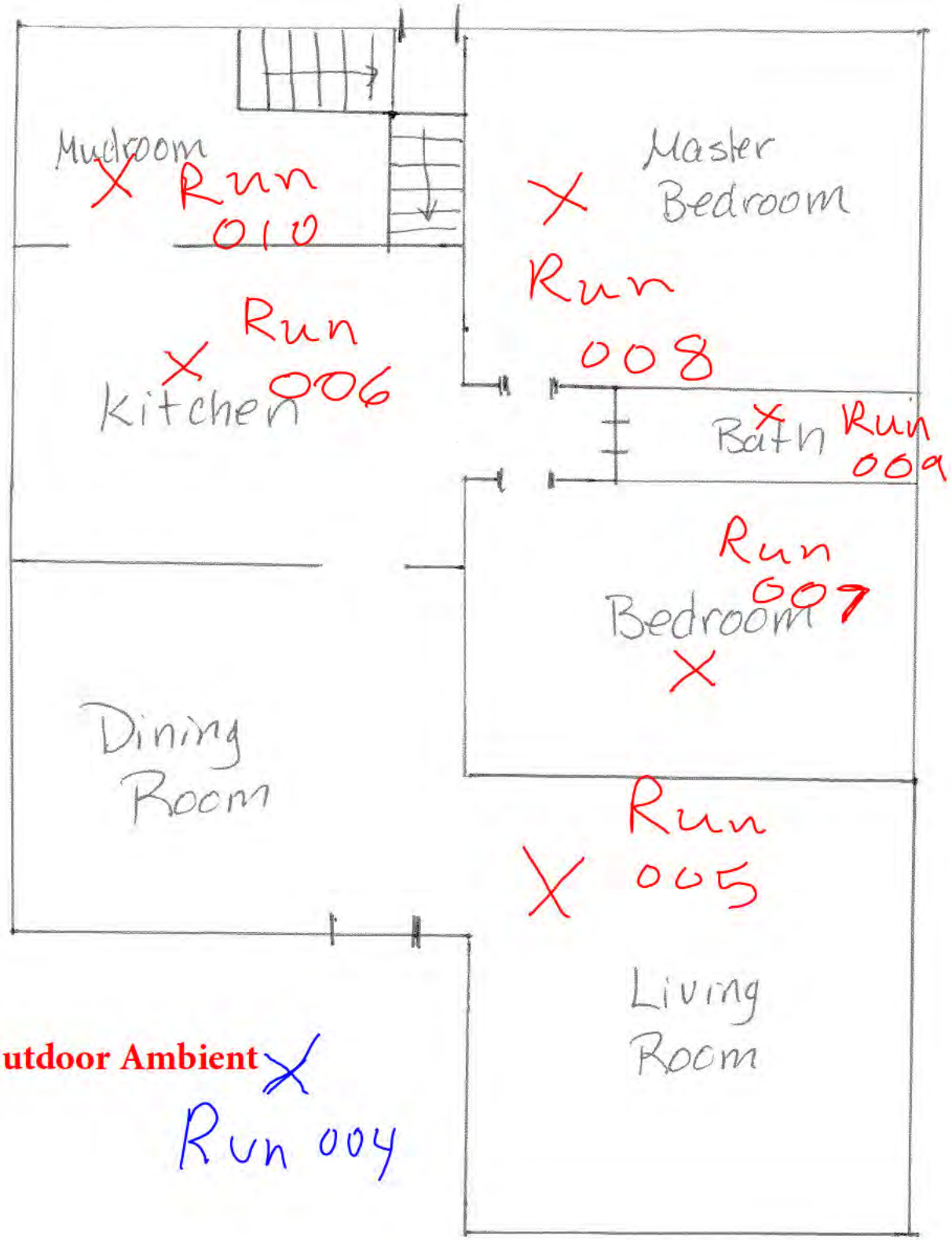
Completed by: ERR
Date: 12/08/14

Comments

Elevation of structure - 4417 ft MSL. Sub-slab sump pit and pump enclosed inside insulated box in basement closet. An open, but dry, attempted sump installation hole is located in the Furnace closet in basement as well.

Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.

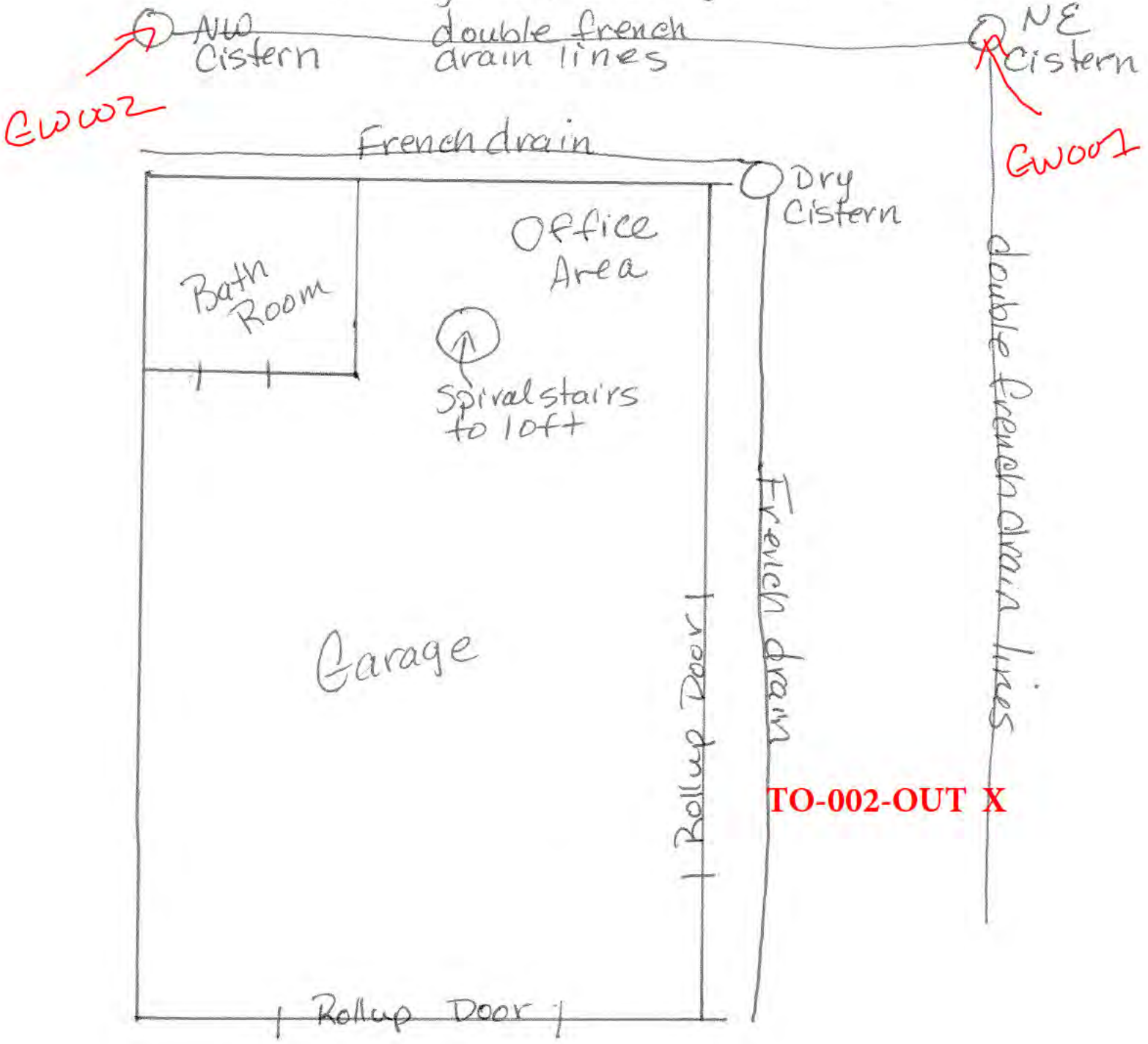
0017-1t 1119 E. Sunnyside Avenue 0017-H



TO-003-GAS SG-001 Run 036

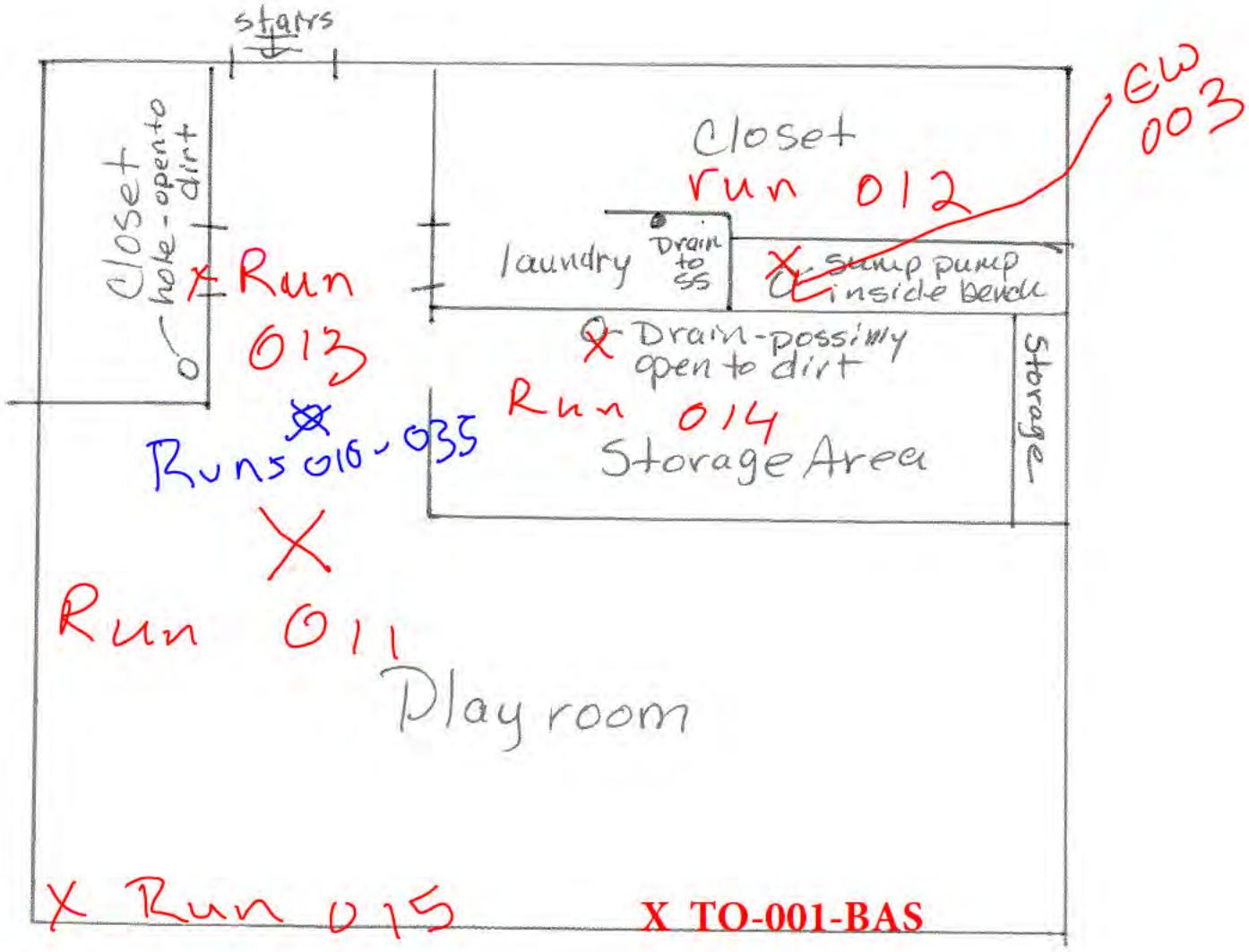
0017-A 1119 E. Sunnyside Avenue 0017-H

Backyard / Garage Area



0017-H 1119 E. Sunnyside Avenue

Basement



PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 1/14/15 Time of Arrival: 0830

Weather Conditions: Partly Cloudy

Temperature: 30 Barometric Pressure (inHg): 30.4 Wind Direction: N Speed: Calm

Field Crew 1: ERR Role: HAPSITE Operator

Field Crew 2: DED Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? ( ) Yes (●) No

If yes, have the materials been removed? ( ) Yes ( ) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time
001-006 001-006	01/12/15	15:05

Instrument Performance Check Run Number	Time	
NA-Autotune	0830	(•) Pass ( ) Fail

Instrument Performance Check Re-run Number	Time	
NA		( ) Pass ( ) Fail

CCV Run Number	Time	
003-1PPB	0945	(•) Pass ( ) Fail

CCV Re-run Number	Time	
002-5PPB	0930	(•) Pass ( ) Fail

Operator's initials: ERR

Comments

001-1 PPB dropped and rerun 1 ppb as Run003 due to cold machine temps causing suspect results.

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time: 1000 End Time: 1005

Location: Front yard. East of front steps on gravel walkway.

Run Number: 004 (OA001_OUT) Time: 1000

Run Number: Time:

Comments

Run #004 - VC 0.07 ppb. CIS 0.03 ppb. TCE 0.02 ppb. PCE 0.03 ppb.

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time | End Time

Comments

No indoor sources identified, very ambient similar results area to area.

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time | End Time

Comments

Survey run 001. Sump in basement walk in closet. Abort - heater not at temperature. Filament error in survey mode. reran area in analyze mode. sump in t in hvac closet seem to be entry points.

Pictures

PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	1023	End Time	1217		
Room/area	living/dining room	Run Number	005	Time	1023
Room/area	kitchen	Run Number	006	Time	1031
Room/area	children bedroom	Run Number	007	Time	1040
Room/area	master bedroom	Run Number	008	Time	1048
Room/area	bathroom	Run Number	009	Time	1056
Room/area	mudroom	Run Number	010	Time	1105
Room/area	basement/playroom	Run Number	011	Time	1115
Room/area	sump	Run Number	012	Time	1138
Room/area	utility closet	Run Number	013	Time	1151
Room/area	dog room	Run Number	014	Time	1202

Comments

Run #015 - time 1217 - water valve shut off closet SW corner of basement.

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time 1315 End Time 14:40 Room/Area basement-near laundry room (airdoor set up on front door)

T=	5	CFM	420	Pascals	-4.7	Run No.	016	Time	1320
T=	10	CFM	421	Pascals	-5.0	Run No.	017	Time	1325
T=	15	CFM	430	Pascals	-5.0	Run No.	017	Time	1330
T=	20	CFM	431	Pascals	-5.2	Run No.	018	Time	1335
T=	25	CFM	423	Pascals	-5.2	Run No.	018	Time	1340
T=	30	CFM	425	Pascals	-4.7	Run No.	019	Time	1345
T=	35	CFM	430	Pascals	-5.0	Run No.	020	Time	1350
T=	40	CFM	421	Pascals	-4.9	Run No.	020	Time	1355
T=	45	CFM	435	Pascals	-5.0	Run No.	021	Time	1400
T=	50	CFM	430	Pascals	-5.0	Run No.	022	Time	1405
T=	55	CFM	432	Pascals	-5.2	Run No.	022	Time	1410
T=	60	CFM	395	Pascals	-4.5	Run No.	023	Time	1415
T=	65	CFM	427	Pascals	-5.0	Run No.	023	Time	1420
T=	75	CFM	431	Pascals	-5.0	Run No.	024	Time	1430
T=	85	CFM	428	Pascals	-5.0	Run No.	025 final reading	Time	1440

Comments

Final reading taken at 1440. 36,147 cu ft.

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time: 14:55 | End Time: 16:15 | Room/Area: blower in front door, hapsite in basement near sump room

T=	CFM	Pascals	Run No.	Time
5	471	5.1	026	15:00
10	474	4.3	026	15:05
15	457	4.7	027	15:10
20	462	5.1	027	15:15
25	454	5.2	028	15:20
30	460	4.8	029	15:25
35	459	5.0	030	15:30
40	462	5.3	030	15:35
45	455	5.2	031	15:40
50	461	5.1	032	15:45
55	452	5.1	033	15:50
60	455	5.3	033	15:55
70	463	5.3	034	16:05
80	458	4.9	035	16:15

Comments

PART J
SUMMA CANISTERS

Location/ Area: Basement play area/family room

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0017H-TO001-BAS	0163	01/20/2015	1225	27	01/21/2015	12:05	1

Location/ Area: Outdoor ambient-east central backyard - east of garage

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0017H-TO002-OUT	0244	01/20/2015	12:55	26	01/21/2015	12:10	0.5

Location/ Area: Soil gas point SG-001-4' -in front yard

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0017H-TO003-GAS	0376	01/20/2015	12:45	27	01/21/2015	12:20	1

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

Comments

PART K
SOIL GAS

Date	01/14/2015	Time	16:00	Sample Depth	4		
Latitude	40.750975	Longitude	-111.862267			Elevation	4416
Run No	036	Run Time	16:20			Vacuum (in/Hg)	

Comments

Soil gas sample 0017H-SG001-4' - Located in front yard, near SE corner of house. Refused at 4'

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

RECEIVED
NOV 2 1 2014
BY:_____

0017-H LM 11/25
mm 8th Dec
4:00

OCCUPIED DWELLING QUESTIONAIRE

Indoor Air Assessment Survey

Date: 11-17-2014

1. N
A
H
2. W
3. A
thi
of

4. Total number of occupants/persons at this location? 3
Number of Children 1 Ages 5 yrs.

5. How long have you lived at this location? 10 yrs.

General Home Description

6. Type of Home/Structure (check only one): Single Family Home ☒, Duplex ☐, Apartment ☐, Townhouse ☐ Other _____

7. Home/Structure Description:
Number of floors: 2
Basement ☒
Crawlspace ☐
Partial crawlspace/basement ☐ % of each _____
Slab on grade ☐
Other ☐ _____

8. Age of Home/Structure: 99 yrs. years, Not sure/Unknown ☐

9. General Above-Ground Home/Structure construction (check all that apply):
Wood ☒, Brick ☒, Concrete ☒, Cement block ☐, Other ☐ _____

10. Foundation Construction (check all that apply):
Concrete Slab ☒
Fieldstone ☐
Concrete block ☐
Elevated above ground/grade ☒ West facing foundation is above/at ground level due to slope.
Other ☐ _____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

11. Do you have private well ☐ or cistern ☒ ?
If yes, please describe location, use and current condition 2 cisterns installed at North East and NorthWest corners of lot when drain was installed. Condition is excellent and would only be used to pump of extra water if needed.

12. Do you have a septic system? Yes ☐ No ☒ Not used ☐ Unknown ☐
If yes, what is construction type? _____
Where is it located? _____
When was the last time it was serviced? _____
Do you (or have you ever) use (d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your home? (pond, ditch, etc.) Yes ☐ No ☒
We installed a drain in 2013 which resolved standing water, however water flows continually through drain and is accessible.

Basement Description (please check all boxes that apply):

14. Is the basement finished ☒ or unfinished ☐ ?

15. If finished, how many rooms are in the basement? 3
What are rooms used for? Bedrooms ☐ Family room ☒ Storage ☒
Other Laundry Room

16. If not finished, do you plan on finishing in the future? Yes ☐ No ☐

17. Is the basement floor (check all that apply) concrete ☒, tile ☒, carpeted ☒, dirt ☐,
other ☐ _____

18. Are the basement walls poured concrete ☒, cement block ☐, stone ☐, wood ☒,
Brick ☐, other ☐ _____

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less that 1 time/year) ☐
No ☒

Describe the moisture problem Not in the past 3 years after pump istall and outside drain install.

20. .Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☒ Last flood in 2010
No ☐

21. Does the basement have any of the following? Floor cracks ☐, Wall cracks ☒, Sump ☒,
Floor drain ☒, Other hole/opening in floor ☐
describe _____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

22. Are any of the following used or stored in the basement (check all that apply):
Paint [X] Paint Stripper/remover [ ] Paint thinner [X] Metal degreaser/cleaner [ ]
Gasoline [ ] Diesel fuel [ ] Solvents [ ] Glue [X] Laundry spot removers [X] Drain cleaners
[ ] Pesticides [ ] Other equipment with fuel tanks (chain saw, lawn mower, snow blower,etc.,)

23. Have you recently (within the last six months) done any painting or remodeling in your home?
Yes [ ] No [X]
If yes, specify what was done, where in the home, and what month:
Not in the home, however unattached garage has had work done in past six mo.

24. Have you installed new carpeting in your home within the last year? Yes [ ] No [X]
If yes, when and where?_____

25. Do you regularly use or work in a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) [ ]
Yes, use dry-cleaning infrequently (monthly or less) [ ]
Yes, work at a dry cleaning service [ ]
No [X]

26. Does anyone in your home use solvents at work?
Yes [ ] If yes, how many persons?
No [X] If no, go to question 28

27. If yes for question 26, are the work clothes washed at home? Yes [ ] No [ ]

28. Where is the washer/dryer located?
Basement [X]
Upstairs utility room [ ]
Kitchen [ ]
Garage [ ]
Use a Laundromat [ ]
Other, please specify [ ] _____

29. If you have a dryer, is it vented to the outdoors? Yes [X] No [ ]

30. What type (s) of home heating do you have (check all that apply)
Fuel type: Gas [X], Oil [ ], Electric [ ], Wood [ ], Coal [ ],
Other [ ]_____

Heat conveyance system:
Forced hot air [X]
Forced hot water [ ]
Steam [ ]
Radiant floor heat [ ]
Wood Stove [ ]
Coal furnace [ ]
Fireplace [ ]
Other [ ] _____

0017-11

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

31. Does your home have (or had in the past) a storage tank for storage of: gasoline ☐ fuel oil ☐ propane ☐
No
If yes, where is/was it located? _____

How is/was the tank filled? _____

Is there staining near the tank? Yes ☐ No ☐

32. Do you have air conditioning? Yes ☒ No ☐
Central air conditioning ☒
Window air conditioning unit (s) ☐
Other (please specify) _____

33. Do you use any of the following? Room fans ☒, Ceiling fans ☐, Attic fan ☐

34. Do you ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☒ No ☐

35. Has your home had termite or other pesticide treatment? Yes ☐ No ☒ Unknown ☐
If yes, please specify type of pest controlled _____
And approximate date of service _____

36. Water heater type: Gas ☒, Electric ☐, by Furnace ☐,
Other (please describe) _____

37. Water heater location: Basement ☒, Upstairs utility room ☐, Garage ☐,
Other (please specify) _____

38. What type of cooking appliance do you have? Electric ☐, Gas ☒
Other (please describe) _____

39. Is there a stove exhaust hood present? Yes ☐ No ☒
Does it vent to the outdoors? Yes ☐ No ☐

40. Smoking in Home:
None ☒, Rare (only guests) ☐, Moderate (residents, light smokers) ☐,
Heavy (at least one heavy smoker in household) ☐

41. If yes to question 40, what do they smoke?
Cigarettes ☐ Cigars ☐
Pipe ☐ Other ☐

42. Do you regularly use air fresheners? Yes ☐ No ☒

43. Does anyone in the home have indoor home hobbies or crafts involving:
Heating ☒, soldering ☒, welding ☐, model glues ☒, paints ☒
Spray paint ☐, wood finishing ☐, Other ☐ _____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

44. General family/home use of consumer products (please circle appropriate). Assume that: Never = never used, Hardly ever = less that once/month, Occasionally = about once/month, Regularly = about once/week, and Often = more that once/week.

Product	Frequency of Use				
Spray-on deodorant	(Never)	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	(Never)	Hardly ever	Occasionally	Regularly	Often
Insecticides	(Never)	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	(Hardly ever)	Occasionally	Regularly	Often
Window cleaners	Never	(Hardly ever)	Occasionally	Regularly	Often
Nail polish remover	Never	(Hardly ever)	Occasionally	Regularly	Often
Hair sprays	Never	Hardly ever	Occasionally	Regularly	(Often)
Candles	(Never)	Hardly ever	Occasionally	Regularly	Often
Incense	(Never)	Hardly ever	Occasionally	Regularly	Often

45. Please check weekly household cleaning practices:

Dusting ☐
Dry sweeping ☐
Vacuuming ☐
Polishing (furniture, etc.) ☐
Washing/waxing floors ☐
Other (describe) ☐ None.

46. Other comments:

0017-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

47. Chemical Inventory/Summary

Chemical/Chemical Product (consumer name)	Amount present in home
a)	
b)	
c)	
d)	
e)	
f)	
g)	
h)	
i)	
j)	
k)	
l)	
m)	
n)	
o)	

0017-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

44. General family/home use of consumer products (please circle appropriate).
Assume that: Never = never used, Hardly ever = less that once/month,
Occasionally = about once/month, Regularly = about once/week,
and Often = more that once/week.

Product	Frequency of Use				
Spray-on deodorant	Never	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	Never	Hardly ever	Occasionally	Regularly	Often
Insecticides	Never	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	Occasionally	Regularly	Often
Window cleaners	Never	Hardly ever	Occasionally	Regularly	Often
Nail polish remover	Never	Hardly ever	Occasionally	Regularly	Often
Hair sprays	Never	Hardly ever	Occasionally	Regularly	Often
Candles	Never	Hardly ever	Occasionally	Regularly	Often
Incense	Never	Hardly ever	Occasionally	Regularly	Often

45. Please check weekly household cleaning practices:

Dusting ☒
Dry sweeping ☒
Vacuuming ☒
Polishing (furniture, etc.) ☐
Washing/waxing floors ☐
Other (describe) ☐ _____

46. Other comments:

_____
_____
_____
_____
_____
_____
_____
_____

0017-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

47. Chemical Inventory/Summary

Chemical/Chemical Product (consumer name)	Amount present in home
a) Laundry Detergent - Arm+Hammer	~1 gal
b) Spot Cleaner - Shout	22oz bottle
c) - Rug Doctor	~1 gal
d) - Simple Green	~1 gal
e) Window Cleaner - Windex	~1 gal
f) Insecticide - Ortho	~1 gal
g) Paint/Latex -	~10 gal
h) Paint thinner -	~1/2 gal
i) Cleaner - CLR	28 oz
j) Clorox - Cleaner	1 qt.
k)	
l)	
m)	
n)	
o)	

Thank you for your work and communication.



PHOTO LOG FOR SLC VA CERCLA SITE

PARCEL IDENTIFIER: ~~0017-11~~ 0017-4 **ADDRESS** 1119 E. Sunnyside Avenue

DATE: 12/8/14

Number	Camera Image#	Description of Photo
1	100-0004	Cored hole w/dirt bottom in water heater closet
2	100-0005	Sump pump in closet (left of basement stairs)
3	100-0006	@Drain cleanout - looking North along East property boundary towards NE cistern.
4	100-0007	Northeast corner cistern.
5	100-0008	Northwest Corner cistern
6	100-0009	Dry cistern located at NE. corner of garage
7	100-0010	Floor drain in garage bathroom (goes to sanitary sewer)
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		

0004



0005



0006



0007



0008



0009



0010



PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0018-H

Street Address: [redacted]

ZIP: 84115

Property Contact: NA

Tel #: NA

Latitude: 40.749466

Longitude: 111.857505

Age of Property: 30 years

Number of Levels: 3

Basement? (•) Yes ( ) No

Basement Habitable? (•) Yes ( ) No

Sump? ( ) Yes (•) No

Completed by: ERR

Date: 12/12/2014

Comments

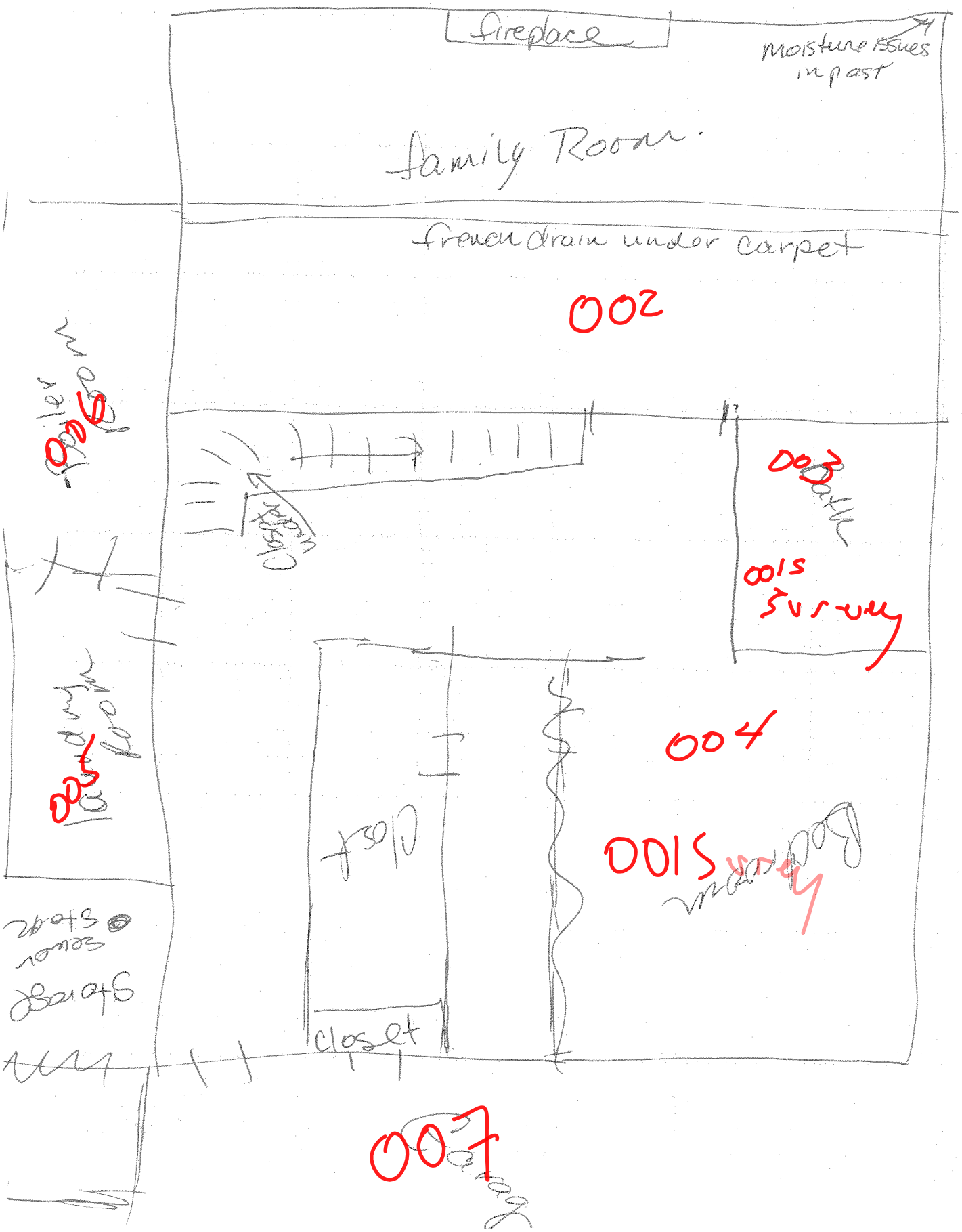
GW-001: elev=4420', lat= 40.749318, long= 111.857672. GW-002:elev= 4434', lat= 40.749542, long= 111.857597. Temp geoprobe well: TW-001 (screened 5-10' bls): elev= 4440', lat= 40.749479, long= 111.857299.

Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.

0018-H

0018-H

* Note have electronic floor plans *



118.16

GW-002

TO-001-OUT (2/6) X SG-002

SG-003-GAS (2/19)

51.11

100.

TW-001

SG-001

106.99

Steep Area

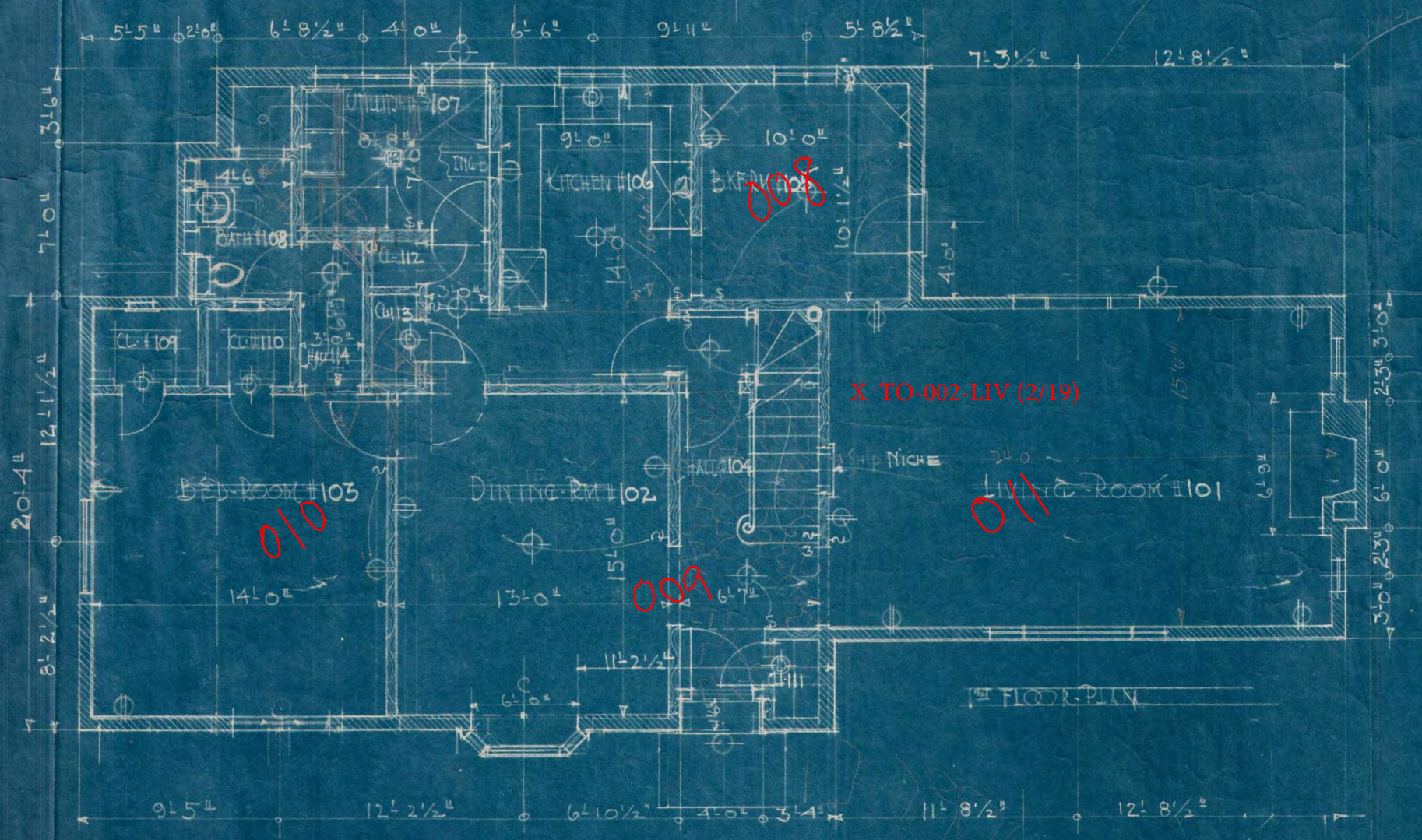
40.98

GW-001

ALPINE PLACE

A.E. JORGENSEN


STORAGE
WORK SHOP
GARAGE
18'-0"
CLOS
CLOS
9'-6" X 12'-6"
RUMPUS ROOM
23'-6" X 14'-6"
TO-001-BAS (2/19)
TO-002-BR1 (2/6)



X TO-002-LIV (2/19)

PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 02-18-2015 Time of Arrival: 0830

Weather Conditions: Sunny

Temperature: 55 Barometric Pressure (inHg): 30.08 Wind Direction: SE Speed: Light

Field Crew 1: IE Role: HAPSITE Operator

Field Crew 2: ajc Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? (●) Yes ( ) No

If yes, have the materials been removed? ( ) Yes (●) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

garage contains paints; various cleaners.

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time
002,003,004,005,006 on 02095012.mth	02-17-2015	1200

Instrument Performance Check Run Number	Time	
auto tune	0915	(•) Pass ( ) Fail

Instrument Performance Check Re-run Number	Time	
NA		(•) Pass ( ) Fail

CCV Run Number	Time	
001, 002	1800	(•) Pass ( ) Fail

CCV Re-run Number	Time	
NA		( ) Pass ( ) Fail

Operator's initials: ise

Comments

HAPSITE AND LAPTOP STOPPED COMMUNICATING AROUND 0950. IE PERFORMS A HARD REBOOT. SEEMS TO HAVE WORKED, HAPSITE AND
COMMUNICATING.

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time	0932	End Time	0938
Location	Front steps about 30ft from home.		
Run Number	001(IA-001-OUT)	Time	09:32
Run Number	NA	Time	

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time 1108 End Time 1120

Comments

NO INDOOR SOURCES FOUND IN GARAGE OR BASEMENT STORAGE AREAS, BASED ON AMBIENT RESULTS FOR THOSE AREAS HAVING LOWER AMBIENT READINGS THAN ROOMS WITH NO OBSERVED SOURCE MATERIALS.

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time 1108 End Time 1120

Comments

FINISHED BASEMENT. NO FLOOR DRAIN OBSERVED. WATER ENTERING THE BASEMENT BETWEEN THE FLOOR SLAB AND FOUNDATION WALL AT JOINT IN GARAGE. MAY BE OCCURRING IN OTHER ROOMS. BR1 HAS VISIBLE MOLD ON WALL AND MOISTURE DAMAGE TO PAINT. 0018H-021815-SURVEY RUN 001 ON PCE 3-ION SURVEY. BASE TIC AT 49000. BR1 TIC AT 120K BA1 AT 57K.

Pictures

SEE PHOTOS TAKEN ON 2-18-2015.

PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	0946	End Time	1309		
Room/area	DOWNSTAIRS FAMILY ROOM	Run Number	002(IA-002-LLL)	Time	0946
Room/area	DOWNSTAIRS BATHROOM	Run Number	003(IA-003-BA1)	Time	1020
Room/area	DOWNSTAIRS BEDROOM	Run Number	004(IA-004-BR1)	Time	1029
Room/area	LAUNDRY ROOM DOWNSTAIRS	Run Number	005(IA-005-LAU)	Time	1035
Room/area	UTILITY ROOM	Run Number	006(IA-006-UTL)	Time	1043
Room/area	GARAGE	Run Number	007(IA-007-GAR)	Time	1052
Room/area	KITCHEN	Run Number	008(IA-008-KIT)	Time	1138
Room/area	DINNING ROOM AND FRONT DOOR AREA	Run Number	009(IA-009-DRF)	Time	1145
Room/area	MASTER BEEDROOM	Run Number	010(IA-010-MBR)	Time	1154
Room/area	1ST LEVEL LIVING ROOM	Run Number	011(IA-011-LIV)	Time	1201

Comments

UPSTAIRS GIRLS ROOM BR2 012(IA-012-BR2) AT 1210. UPSTAIRS HALL 015(IA-015-HAL) AT 1259. SAMPLES IA- 013 &014 INSTRUMENT DID NOT

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time: 1354 | End Time: 1506 | Room/Area: BOTTOM OF STAIRS

T=	5	CFM	1235	Pascals	-5.7	Run No.	019 (IA-019A-BAS)	Time	1355
T=	10	CFM	1275	Pascals	-5.0	Run No.	020(IA-019B-BAS)	Time	1403
T=	15	CFM	1233	Pascals	-4.7	Run No.	021(IA-019C-BAS)	Time	1411
T=	20	CFM	1208	Pascals	-4.8	Run No.		Time	
T=	25	CFM	1229	Pascals	-4.5	Run No.	022(IA-019D-BAS)	Time	1420
T=	30	CFM	1252	Pascals	-5.8	Run No.		Time	
T=	40	CFM	1346	Pascals	-5.1	Run No.	023(IA-019E-BAS)	Time	1429
T=	50	CFM	1346	Pascals	-5.2	Run No.	024(IA-019F-BAS)	Time	1437
T=	60	CFM	1358	Pascals	-5.2	Run No.	025(IA-019G-BAS)	Time	1445
T=	70	CFM	1311	Pascals	-5.1	Run No.	026(IA-019H-BAS)	Time	1453
T=	72	CFM		Pascals		Run No.	027(IA-019I-BAS)	Time	1501
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

BASELINE AT -1.8PA. TARGET REMOVAL VOL IS 90,000 CUBIC FEET. ACTUAL VOL REMOVED IS 92,110 CUBIC FEET.

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time: 1510 | End Time: 1645 | Room/Area: BASEMENT BOTTOM OF STAIRS

T=	5	CFM	1284	Pascals	4.6	Run No.	028(IA-020A-BAS)	Time	1513
T=	10	CFM	1408	Pascals	4.6	Run No.	029(IA-020B-BAS)	Time	1543
T=	15	CFM	1455	Pascals	5.3	Run No.	030(IA-020C-BAS)	Time	1552
T=	20	CFM	1396	Pascals	5.1	Run No.	031(IA-020D-BAS)	Time	1600
T=	25	CFM	1420	Pascals	5.5	Run No.	032(IA-020E-BAS)	Time	1608
T=	30	CFM	1390	Pascals	4.9	Run No.	033(IA-020F-BAS)	Time	1616
T=	40	CFM	1434	Pascals	4.9	Run No.	034(IA-020G-BAS)	Time	1624
T=	50	CFM	1408	Pascals	5.0	Run No.	035(IA-020H-BAS)	Time	1632
T=	64	CFM	1354	Pascals	5.3	Run No.	036(IA-020I-BAS)	Time	1640
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

BASELINE AT -0.5 PA. IE ESTIMATES 5000 FT3 ADDED WHILE TROUBLESHOOTING BLOWER DOOR THEREFORE THIS WILL BE ACCOUNTED F
TARGET VOLUME OF 85000 FT3 FOR PRESSURIZATION. ADDED 90760 FT3.

PART J
SUMMA CANISTERS

Location/ Area: Basement bedroom

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0018H-TO-001-BAS	0443	02/18015	1655	26	02/19/15	1645	1

Location/ Area: main level living room

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0018H-TO-002-LIV	0227	02/18/15	1655	25	02/19/15	1645	2

Location/ Area: Soil gas probeSG-002-4' in backyard

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0018H-SG-003-GAS	0488	02/18/15	1558	26	02/19/15	1600	1

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

0018-H-Summa Canister in Basement Bedroom, 0018H-Summa Canister Living Room; 0018H-Soil Gas Summa Can

Comments

After aborted (Hapsite failure) on 1/23/2015 suggested possible RSL exceedance in basement, two Summa canisters placed onsite on 2/6/2015: 0018H-TO-001-OUT was outdoor air in backyard; 0018H-TO-BR1 was indoors-in basement bedroom. These samples were analyzed using TO-15 SIM, and the results were above the upper calibration limit, and deemed unreliable.


2015/02/19 18:06


2015/02/19 18:04



PART K
SOIL GAS

Date	02/18/2015	Time	10:00	Sample Depth	4		
Latitude		Longitude				Elevation	4428/4435
Run No	016, 017, 018	Run Time	1313-1333			Vacuum (in/Hg)	5/6

Comments

Two separate sample points placed onsite. 0018H-SG-001-4' was located adjacent to the basement family room window in the front yard, south of house. 0018H-SG-002-4 was located in backyard, approximately 10 ft from rear (north) center of house (distance from house due to french drain lines adjacent to rear of house. Sample SG-002-4' was analyzed diluted and undiluted.
SG-001 Lat: 40.749421; long: -111.857497. SG-002 Lat: 40.749544, Long: -111.857442.

0018-H

Dec 17
4:00

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

L.M
12/1

OCCUPIED DWELLING QUESTIONAIRE

Indoor Air Assessment Survey

Date: 11/20/2014

1. Name:
   Address
   Home P (cell)
2. What is
3. Are you
   this Hom
4. Total number of occupants/persons at this location? 4
   Number of Children 2 Ages 14 and 11
5. How long have you lived at this location? 8 years

General Home Description

6. Type of Home/Structure (check only one): Single Family Home [X], Duplex [ ], Apartment [ ], Townhouse [ ] Other _____
7. Home/Structure Description:
   Number of floors: 3
   Basement [X]
   Crawlspace [ ]
   Partial crawlspace/basement [ ] % of each _____
   Slab on grade [ ]
   Other [ ] _____
8. Age of Home/Structure: 73 years, Not sure/Unknown [ ]
9. General Above-Ground Home/Structure construction (check all that apply):
   Wood [X], Brick [X], Concrete [X], Cement block [ ], Other [ ] _____
10. Foundation Construction (check all that apply):
    Concrete Slab [X]
    Fieldstone [ ]
    Concrete block [ ]
    Elevated above ground/grade [ ]
    Other [ ] _____

0018-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

11. Do you have private well ☐ or cistern ☒ ?
If yes, please describe location, use and current condition Good Condition. Drain System on Property Fills the well, then it flows to the City storm drain. Well is on N.W. Corner of house.

12. Do you have a septic system? Yes ☐ No ☒ Not used ☐ Unknown ☐
If yes, what is construction type? _____
Where is it located? _____
When was the last time it was serviced? _____
Do you (or have you ever) use (d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your home? (pond, ditch, etc.) Yes ☒ No ☐

Basement Description (please check all boxes that apply):

14. Is the basement finished ☒ or unfinished ☐ ?

15. If finished, how many rooms are in the basement? 4
What are rooms used for? Bedrooms ☒ Family room ☒ Storage ☒
Other Laundry, Bathroom.

16. If not finished, do you plan on finishing in the future? Yes ☐ No ☐

17. Is the basement floor (check all that apply) concrete ☒, tile ☐, carpeted ☒, dirt ☐, other ☐ _____

18. Are the basement walls poured concrete ☒, cement block ☐, stone ☐, wood ☐, Brick ☐, other ☐ _____

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☒
Yes, rarely (less that 1 time/year) ☐
No ☐

Describe the moisture problem The spring water sometimes over comes the drain system in the South East corner of the house, and seeps in.

20. Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☒
No ☐

21. Does the basement have any of the following? Floor cracks ☒, Wall cracks ☐, Sump ☐, Floor drain ☐, Other hole/opening in floor ☐
describe _____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

22. Are any of the following used or stored in the basement (check all that apply):
Paint ☒ Paint Stripper/remover ☐ Paint thinner ☐ Metal degreaser/cleaner ☐
Gasoline ☐ Diesel fuel ☐ Solvents ☐ Glue ☐ Laundry spot removers ☐ Drain cleaners
☐ Pesticides ☐ Other equipment with fuel tanks (chain saw, lawn mower, snow blower, etc.,)

23. Have you recently (within the last six months) done any painting or remodeling in your home?
Yes ☐ No ☒
If yes, specify what was done, where in the home, and what month:
_____
_____

24. Have you installed new carpeting in your home within the last year? Yes ☐ No ☒
If yes, when and where?_____

25. Do you regularly use or work in a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) ☒
Yes, use dry-cleaning infrequently (monthly or less) ☐
Yes, work at a dry cleaning service ☐
No ☐

26. Does anyone in your home use solvents at work?
Yes ☐ If yes, how many persons?
No ☒ If no, go to question 28

27. If yes for question 26, are the work clothes washed at home? Yes ☐ No ☐

28. Where is the washer/dryer located?
Basement ☒
Upstairs utility room ☐
Kitchen ☐
Garage ☐
Use a Laundromat ☐
Other, please specify ☐ _____

29. If you have a dryer, is it vented to the outdoors? Yes ☒ No ☐

30. What type (s) of home heating do you have (check all that apply)
Fuel type: Gas ☒, Oil ☐, Electric ☐, Wood ☐, Coal ☐,
Other ☐_____

Heat conveyance system:
Forced hot air ☒
Forced hot water ☐
Steam ☐
Radiant floor heat ☐
Wood Stove ☐
Coal furnace ☐
Fireplace ☐
Other ☐ _____

0018-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

31. Does your home have (or had in the past) a storage tank for storage of: gasoline ☐ fuel oil ☐ propane ☐
If yes, where is/was it located? NO
How is/was the tank filled?
Is there staining near the tank? Yes ☐ No ☐

32. Do you have air conditioning? Yes ☒ No ☐
Central air conditioning ☒
Window air conditioning unit (s) ☐
Other (please specify)

33. Do you use any of the following? Room fans ☐, Ceiling fans ☐, Attic fan ☐ NO

34. Do you ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☒ No ☐

35. Has your home had termite or other pesticide treatment? Yes ☐ No ☒ Unknown ☐
If yes, please specify type of pest controlled
And approximate date of service

36. Water heater type: Gas ☒, Electric ☐, by Furnace ☐,
Other (please describe)

37. Water heater location: Basement ☒, Upstairs utility room ☐, Garage ☐,
Other (please specify)

38. What type of cooking appliance do you have? Electric ☐, Gas ☒
Other (please describe)

39. Is there a stove exhaust hood present? Yes ☐ No ☒
Does it vent to the outdoors? Yes ☐ No ☐

40. Smoking in Home:
None ☒, Rare (only guests) ☐, Moderate (residents, light smokers) ☐,
Heavy (at least one heavy smoker in household) ☐

41. If yes to question 40, what do they smoke?
Cigarettes ☐ Cigars ☐
Pipe ☐ Other ☐

42. Do you regularly use air fresheners? Yes ☒ No ☒ N/A

43. Does anyone in the home have indoor home hobbies or crafts involving:
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☒
Spray paint ☐, wood finishing ☐, Other ☐

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

44. General family/home use of consumer products (please circle appropriate).
Assume that: Never = never used, Hardly ever = less that once/month,
Occasionally = about once/month, Regularly = about once/week,
and Often = more that once/week.

Product	Frequency of Use				
Spray-on deodorant	Never	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	Never	Hardly ever	Occasionally	Regularly	Often
Insecticides	Never	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	Occasionally	Regularly	Often
Window cleaners	Never	Hardly ever	Occasionally	Regularly	Often
Nail polish remover	Never	Hardly ever	Occasionally	Regularly	Often
Hair sprays	Never	Hardly ever	Occasionally	Regularly	Often
Candles	Never	Hardly ever	Occasionally	Regularly	Often
Incense	Never	Hardly ever	Occasionally	Regularly	Often

45. Please check weekly household cleaning practices:

Dusting ☒
Dry sweeping ☒
Vacuuming ☒
Polishing (furniture, etc.) ☒
Washing/waxing floors ☒
Other (describe) ☐ _____

46. Other comments:

_____
_____
_____
_____
_____
_____
_____
_____
_____

0018-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

47. Chemical Inventory/Summary

Chemical/Chemical Product (consumer name)	Amount present in home
a) Meyers Multi Surface Cleaner	16 oz
b) Pine Sol	30 oz
c) Sprayway Glass Cleaner	7 oz
d) Hot Shot Flying Insect Killer	14 oz
e) Easy-Off Oven Cleaner	8 oz
f) Gumsol Mineral Spirit	2 oz
g) Blending & Glazing	75 ml
h) Swiffer Multi Surface Spray	9 oz
i) Lysol Disinfecting Wipes	20 oz
j) Scrubbing Bubbles	22 oz
k) Clorox Toilet Bowl Cleaner	24 oz
l) Windex w/ Disinfectant	26 oz
m) Febreze Fabric refresher	27 oz
n)	
o)	

PHOTO LOG FOR SLC VA CERCLA SITE

PARCEL IDENTIFIER: 0018-H **ADDRESS** #1123 E. Alpine Pl.

DATE: 12/12/14

Number	Camera Image#	Description of Photo
1	100 - 163	Fireplace in Basement.
2	100-164	Hot water heater area in basement
3	100-165	Old gas line coming through wall in boiler room
4	100-166	SS stack in storage room in basement
5	100-167	Ceiling in storage room
6	100-168	Seep in backyard - near SE corner
7	100-169	Seep in backyard - near SE corner
8	100-170	Sump in window well of family room
9	100-171	Washing well (cistern) - NW corner off house
10	100-1712	Washing well (cistern) - NW corner off house
11	100-1713	French drain hatch - end of driveway - emptying to storm sewer.
12	100-1714	French drain hatch and storm sewer grate.
13	100-1715	Neighbor's spring feed water feature in front yard of 1125 E. Alpine Drive
14	100-176	Neighbor's spring feed water feature looking towards 1123 E. Alpine Place
15		
16		
17		
18		
19		
20		
21		

0163



0164


problems with the installation
heater, please call the toll
assistance. Monday thru
EST or Sunday 9 am - 4:30
EGRESE
or de agua a la tienda.
blemas con la instalación o el fun-
e calentador de agua, por favor
número que aparece abajo. De
de 8 am - 8 pm EST y Domingos
n EST
0-431-1549
ON AND OPERATION DETAILS
TIC STORAGE WATER HEATER
2014/12/12 17:22

0165



0166



0167



0168



0169



0170



0171



0172



0173



0174



0175



0176



PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0019-B

Street Address: [redacted]

ZIP: 84102

Property Contact: [redacted]

Tel #: [redacted]

Latitude: 40.753028

Longitude: -111.852947

Age of Property: 100 years

Number of Levels: 3

Basement? (•) Yes ( ) No

Basement Habitable? ( ) Yes ( ) No

Sump? ( ) Yes (•) No

Completed by: ERR

Date: 12/10/2014

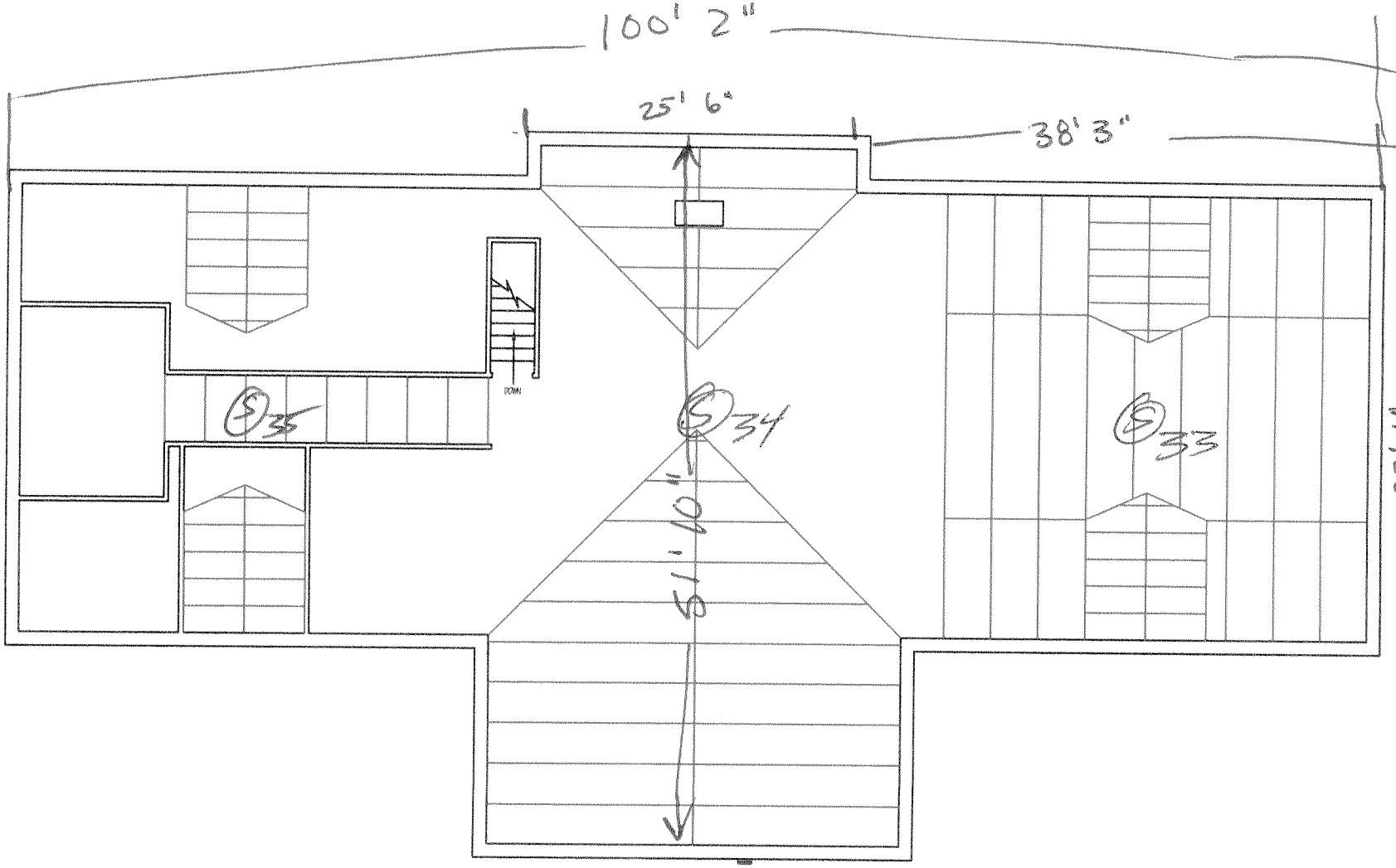
Comments

Non-Profit Assisted Living Facility. Elevation of Main Bldg Ground Floor =4555' msl.

Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.

0019-B

1913 Wing



ATTIC

1/8"=1'-0"

North

GRAPHIC SCALE: 1/8" = 1'-0"

0 1 2 4 8 12 16 20 24 FEET

NICET

CORY W. HAWS
Certification Number
112381

REVISIONS

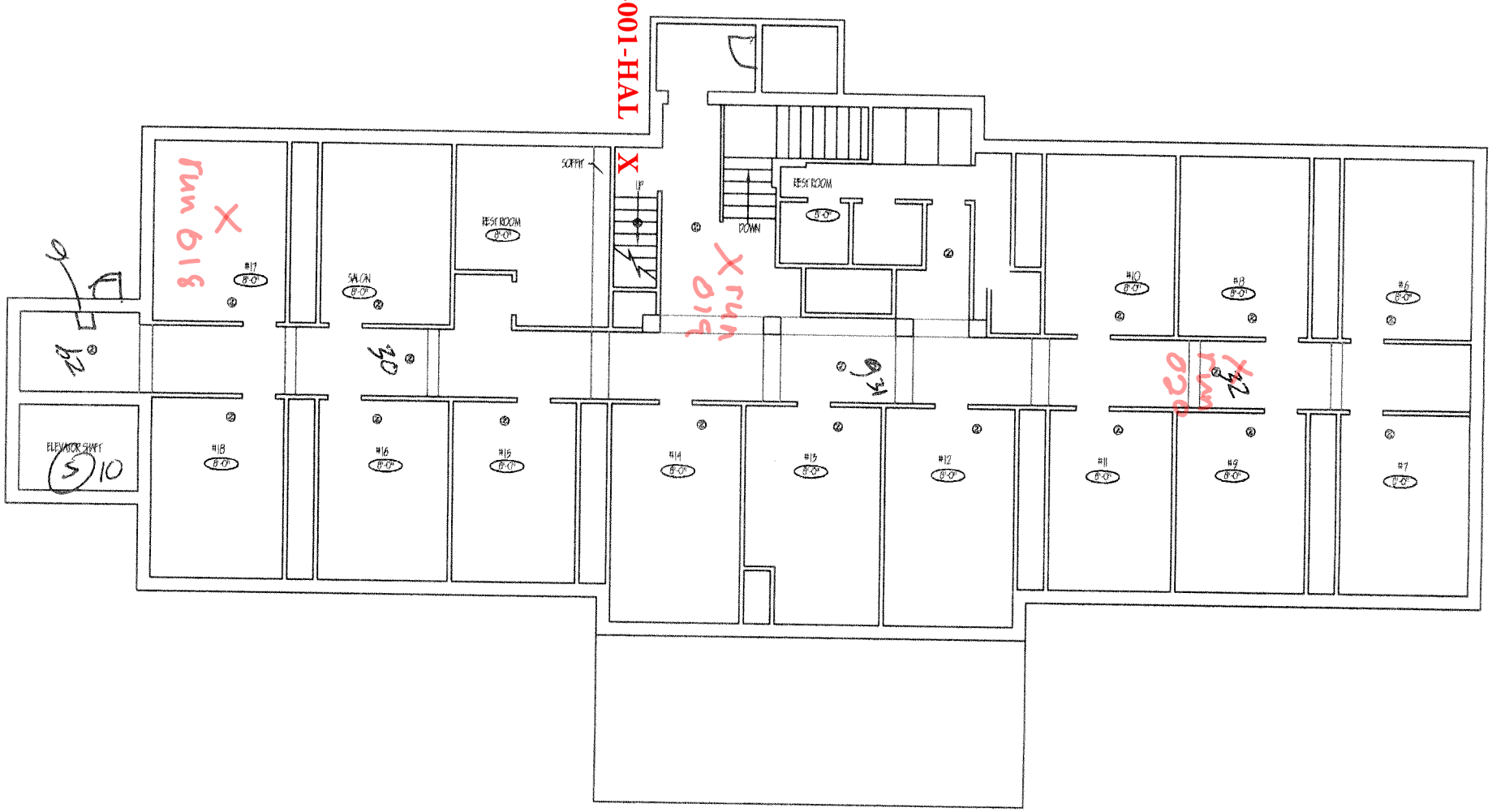
MA FIRE SAFETY & ALARM Inc.
PO BOX 741
LAYTON, UT
801-544-7545

FEE DETECTION PLAN

0019-B

0019-B

1913 Wing



2ND FLOOR

1/8"=1'-0"

North

GRAPHIC SCALE: 1/8" = 1'-0"

0 1 2 4 8 12 16 20 24 FEET

NICET

CORY W. HAWS
Certification Number
112381

REVISIONS

FIRE ALARM CONTROL PANEL
SMOKE DETECTOR
THERMAL DETECTOR
REMOTE POWER SUPPLY
FLOW SWITCH
TAMPER SWITCH
HORNS
HORN STROBE
STROBE
DOOR HUB

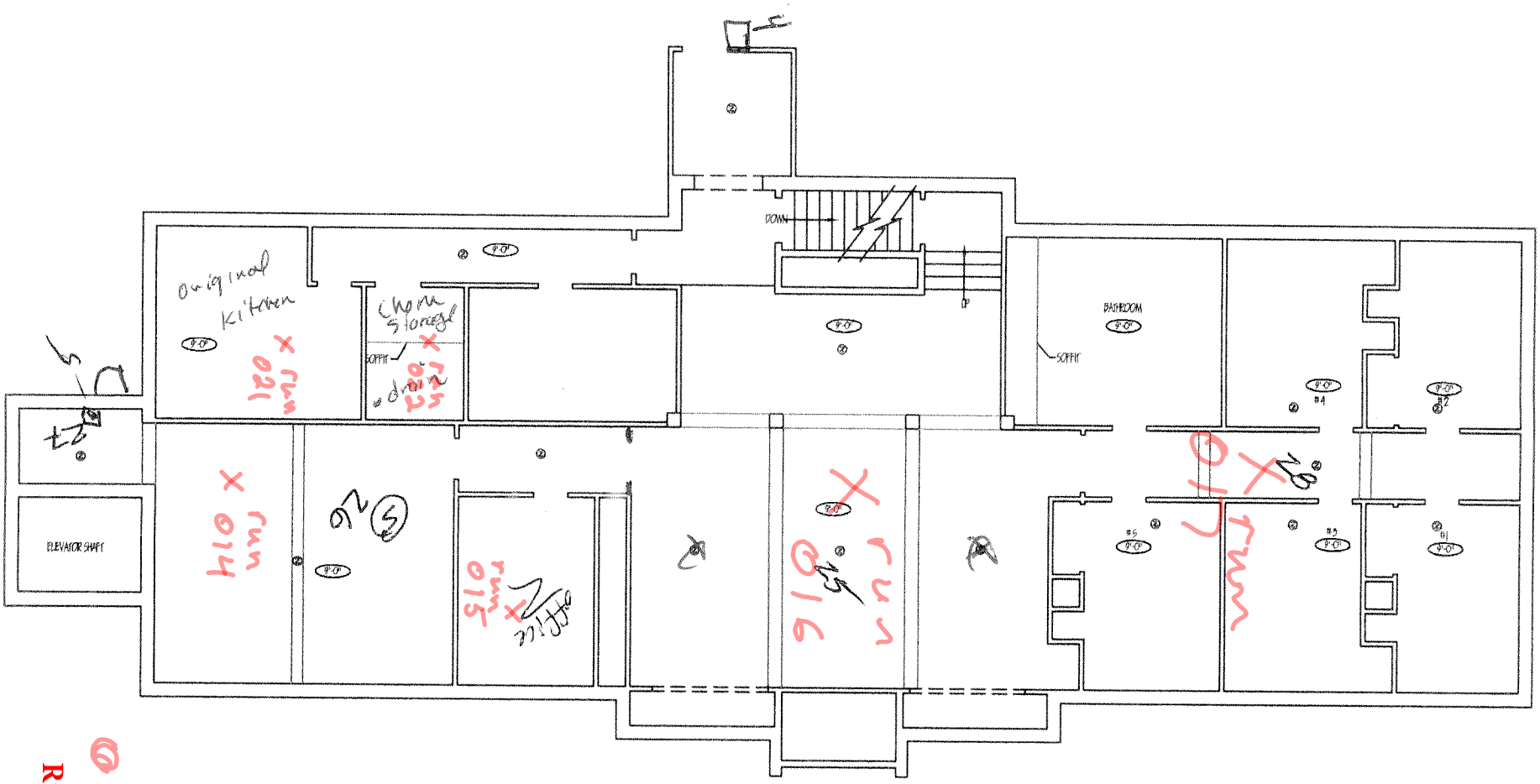
AAA FIRE SAFETY & ALARM Inc.
PO BOX 741
LAYTON, UT
801-544-7545

FIRE DETECTION PLAN

0019-B

0019-B

1913 Wing



MAIN FLOOR

1/8"=1'-0"

North

GRAPHIC SCALE: 1/8" = 1'-0"

0 1 2 4 8 12 16 20 24 FEET

NICET

CORY W. HAWS
Certification Number
112581

REVISIONS

FACP FIRE ALARM CONTROL PANEL
SMOKE DETECTOR
THERMAL DETECTOR
FCPS REMOTE POWER SUPPLY
FLOW SWITCH
TAMPER SWITCH
HORNS
HORN STROBE
STROBE
DOOR FILES

AM FIRE SAFETY & ALARM Inc.
PO BOX 741
LAYTON, UT
801-544-7345

FIRE DETECTION PLAN

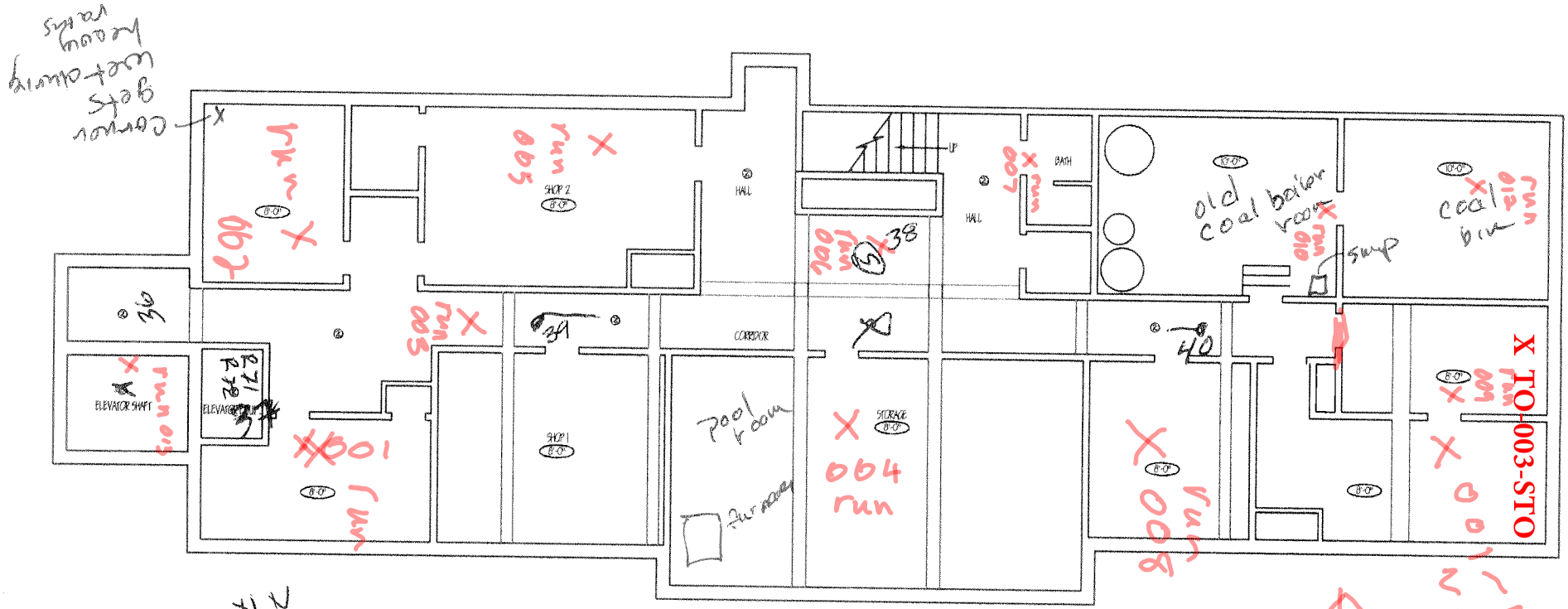
@ 56-003-4'
8'

Runs 037 & 038

0019-B

0019-B

1913 Wing



71 - Primary
72 - Alt

BASEMENT

1/8"=1'-0"

North

GRAPHIC SCALE: 1/8" = 1'-0"

0 1 2 4 8 12 16 20 24 FEET

NICET
CONY W. HAWS
Certification Number
112881

REVISIONS

FACE FIRE ALARM COMBINATION PANEL
SMOKE DETECTOR
THERMAL DETECTOR
REMOTE POWER SUPPLY
FLOW SWITCH
TAMPER SWITCH
HORNS
HORN STROBE
STROBE
DOOR FILLS

AMA FIRE SAFETY & ALARM Inc.
PO BOX 741
LAYTON, UT
801-544-7345

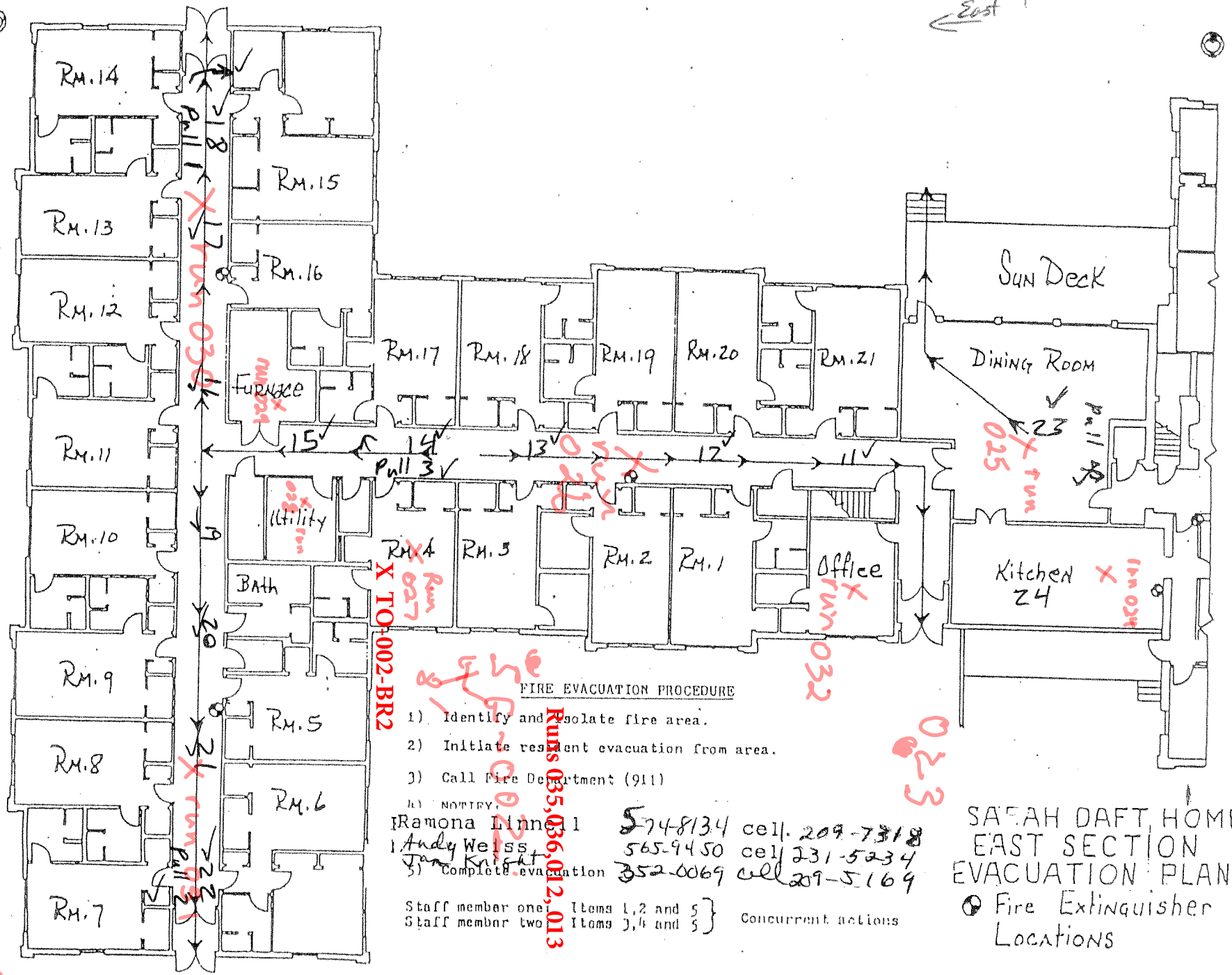
FIRE DETECTION PLAN

00A-B

00193

1980 Wing

East South



FIRE EVACUATION PROCEDURE

1) Identify and isolate fire area.

2) Initiate resident evacuation from area.

3) Call Fire Department (911)

4) NOTIFY:

Ramona Linnell	574-8134	cell 209-7318	
Andy Weiss,	565-9450	cell 231-5234	
Jan Knight	352-0069	cell 209-5169	

5) Complete evacuation

Staff member one: Items 1,2 and 5
Staff member two: Items 3,4 and 5
} Concurrent actions

SARAH DAFT HOME
EAST SECTION
EVACUATION PLAN
● Fire Extinguisher Locations

0193

13

PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 2/2/15 Time of Arrival: 0830

Weather Conditions: Rain

Temperature: 43 Barometric Pressure (inHg): 30.19 Wind Direction: SE Speed: Light

Field Crew 1: ERR Role: HAPSITE Operator

Field Crew 2: DED Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? (●) Yes ( ) No

If yes, have the materials been removed? ( ) Yes (●) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

Cleaning supplies in storage area (basement area). none specifically note cVOC content

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time	
001 - 005	1/31/15	1935	
Instrument Performance Check Run Number	Time		(•) Pass ( ) Fail
Auto tune	0907		
Instrument Performance Check Re-run Number	Time		( ) Pass ( ) Fail
CCV Run Number	Time		(•) Pass ( ) Fail
001(2/1/15)	1231		
CCV Re-run Number	Time		( ) Pass ( ) Fail

Operator's initials: ERR

Comments

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time: 1320 End Time: 1327

Location: Employee entrance on North side of building.

Run Number: 023 (IA-023-OUT) Time: 1320

Run Number: Time:

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time | End Time

Comments

none noted

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time 1053 End Time

Comments

Boiler room area - sump, cracks in concrete, and piping entry point. 1053 001 Sump TIC = 34,147. 1057 002 Cracks in concrete TIC = 35,911. 1103 003 Pi 180,000,000.

Pictures

PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	0922	End Time			
Room/area	Stoage room south of elevator	Run Number	001 (IA001-STO-1)	Time	0922
Room/area	cleaning product storage/northeast corner	Run Number	002 (IA002-STO-2)	Time	0931
Room/area	hallway in basement	Run Number	003 (IA003-HAL-1)	Time	0939
Room/area	Furnace room in basement	Run Number	004 (IA004-FUR-1)	Time	0948
Room/area	wood work shop	Run Number	005 (IA005-WOR-1)	Time	0957
Room/area	Laundry room	Run Number	006 (IA006-LAU-1)	Time	1005
Room/area	bathroom in basement	Run Number	007 (IA007-BA-1)	Time	1014
Room/area	west central basement storage room	Run Number	008 (IA008-STO-3)	Time	1022
Room/area	File/wheelchair storage -south end of hall	Run Number	009 (IA009-STO-4)	Time	1033
Room/area	Boiler room	Run Number	010 (IA010-FUR-2)	Time	1044

Comments

Run 011 nitrogen clean out. Coal room 012 (IA012-COA-1) 1135. Elevator 013 (IA013-ELE-1) 1146. Activity room 014 (IA014-LLL-1) 1155. Salon 015 (IA0
living room 016 (IA016-LLL-2) 1213. Main floor hallway 017 (IA017-HAL-2) 1222. Room 17 018 (IA018-BR-1) 1231. Top of stairs 2nd floor hallway 019 (IA0
end 2nd floor hallway 020 (IA020-HAL-4) 1250. Employee break room 021 (IA021-KIT-1) 1302. Main level chemical storage 022 (IA022-STO-5) 1311. Mai
(IA024-KIT-2) 1330. Formal dining room 025 (IA025-DRF-1) 1339. East/west new wing hallway 026 (IA026-HAL-5) 1348. Room 4 027 (IA027-BR-2) 1401.
028 (IA0028-LAU-2) 1410. Furnace room main level 029 (IA029-FUR-2) 1419. South end main level hallway 030 (IA030-HAL-6) 1429. Noth end main level
(IA031-HAL-7) 1438. Main office 032 (IA032-OFC) 1447.

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time: 0934 | End Time: 1006 | Room/Area: file/wheelchair storage room

T=	5	CFM	low	Pascals	-10.2	Run No.	001 (IA033A-STO-4)	Time	0935
T=	10	CFM	low	Pascals	-10.3	Run No.	002 (IA033B-STO-4)	Time	0944
T=	15	CFM	low	Pascals	-9.6	Run No.	002 (IA033B-STO-4)	Time	
T=	20	CFM	low	Pascals	-10.0	Run No.	003 (IA033C-STO-4)	Time	0955
T=	25	CFM	low	Pascals	-10.0	Run No.	003 (IA033C-STO-4)	Time	
T=	30	CFM	low	Pascals	-9.7	Run No.	004 (IA033D-STO-4)	Time	1003
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

6,000 cfm = 2.5 air volumes of file/wheelchair storage room. Approximately 300 square foot room with 8 foot ceiling. Due to room size cfm are too low to re
Will run air door at -10.0 Pa for 30 minutes. End time 1006.

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time: 1016 End Time: 10:45 Room/Area: file/wheelchair storage room

T=	5	CFM	LOW	Pascals	10.1	Run No.	005 (IA034A-STO-4)	Time	1016
T=	10	CFM	LOW	Pascals	10.2	Run No.	006 (IA034B-STO-4)	Time	1026
T=	15	CFM	LOW	Pascals	9.9	Run No.	006 (IA034B-STO-4)	Time	
T=	20	CFM	LOW	Pascals	10.1	Run No.	007 (IA034C-STO-4)	Time	1036
T=	25	CFM	LOW	Pascals	10.1	Run No.	007 (IA034C-STO-4)	Time	
T=	30	CFM	LOW	Pascals	10.0	Run No.	008 (IA034D-STO-4)	Time	1045
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

PART J
SUMMA CANISTERS

Location/ Area: Old Section - 2nd Floor in hall at top of stairwell

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0019B-TO-001-HAL	0224	02/03/2015	13:57	27	02/04/2015	13:35	2

Location/ Area: New Wing - 1st Floor - Client Room #4

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0019B-TO-002-BR2	0114	02/03/2015	13:46	28	02/04/2015	13:40	2

Location/ Area: Old Section Basement- Storage Room at south end

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0019B-TO-003-STO	0122	02/03/2015	14:43	25	02/04/2015	14:30	2

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

Comments

TO-15 SIM for COCs.

PART K
SOIL GAS

Date	02/02/2015	Time		Sample Depth	4'/8'
Latitude	See Below	Longitude	See Below	Elevation	See Below
Run No	2/2: 033-038, 2/3: 012 & 013	Run Time		Vacuum (in/Hg)	2 - 5"

Comments

Soil gas sample points initially installed and samples collected 01/29/2015, but Hapsite failed and samples could not be ran. Six samples were recollected on 2/02/2015 as follows:
SG-001-4' & 8' : Located at NE corner of new wing, lat: 40.753269, Long:-111.852556; elevation: 4557'
SG-002A-4' & 8': Located north of new wing, near center of bldg, Lat: 40.753144, Long: -111.852894; elev: 4556'
SG-003-4' & 8' : Located at NW corner of old building, Lat: 40.753167, Long: -111.853431; elev: 4554'
On 2/03/2015, SG-002B-4' & 8' were re-installed and sampled again for hapsite analysis.

0019-B

Doc 10th 9am

COMMERCIAL / INDUSTRIAL BUILDING QUESTIONNAIRE

Indoor Air Assessment Survey

Date: 12-10-14 Survey / questionnaire completed by: Marsha Naumba

[redacted] Marsha Naumba

Address: 737 South 1300 East City: SLC State: UT Zip: 84102

Phone 1: 801-582-5104 Phone 2: Ø Cell Phone: 801-809-7318

2. What is the best time to call to speak with you? 9:00-6:00 M-F

3. Are you the Owner ☐, Renter ☐, Other ☒ (please specify) Director of this Building/Structure? If you are not the owner, please provide owner contact information

Owner Name: Non-Profit Assisted Living - No Owner

Address: City: State: Zip:

Phone 1: Phone 2: Cell Phone:

4. Total number of occupants/persons at this location? 39 residents, 25 staff throughout the wee

Number of Children Ø Ages

5. How long have you occupied this location? Since 1913

How days per week is building occupied? 7 days

How hours per day is building occupied? 24 hours

General Building / Structure Description

6. Type of Building/Structure (check only one): Single Business ☒, Multiple Businesses ☐,

Other

7. Building/Structure Description:

Number of floors: 3 Area /square footage of main or ground floor: square feet

Basement ☒ Area /square footage of Basement: square feet

Crawlspace ☐ Area /square footage of Crawlspace: square feet

Partial crawlspace/basement ☐ % of each

Slab on grade ☒ Area /square footage of Slab on grade: square feet

Other ☐

8. Age of Building/Structure: 100 years + 34 years, Not sure/Unknown ☐

9. General Above-Ground Building/Structure construction (check all that apply):

Wood ☒, Brick ☐, Concrete ☒, Cement block ☐, Other ☐ 1913 side is cement 1980's side is wood

10. Foundation Construction (check all that apply):

Concrete Slab ☒ on 1980's side

Fieldstone ☐

Concrete block ☐

Elevated above ground/grade ☐

Other ☐ Poured cement on 1913 side

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11. Do you have private well ☐ or cistern ☐ ?
If yes, please describe location, use and current condition_____

12. Do you have a septic system? Yes ☐ No ☒ ? Not used ☐ Unknown ☒ There may have been a septic system in 1918?
If yes, what is construction type?_____
Where is it located? _____
When was the last time it was serviced?_____
Do you (or have you ever) use(d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your Building? (pond, ditch, etc.) Yes ☐ No ☒

Basement Description (please check all boxes that apply):

14. Is the basement finished ☐ or unfinished ☒ ?

15. If finished, how many rooms are in the basement? _____
What are rooms used for? Office ☐ Shop ☐ Storage ☐
Other_____

16. If not finished, do you plan on finishing in the future? Yes ☒ No ☐

17. Is the basement floor (check all that apply) Concrete ☒, Tile ☐, Carpeted ☐, Dirt ☐,
Other ☐ _____

18. Are the basement walls poured Concrete ☒, Cement block ☐, Stone ☐, Wood ☐,
Brick ☐, Other ☐ _____

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☒
Yes, rarely (less than 1 time/year) ☐
No ☐
Describe the moisture problem when Excessive rain storms happen we got water in one of the corner rooms in the basement.

20. Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☒ – not flood -- but we can get stand in water in about 12 square feet
Yes, rarely (less than 1 time/year) ☐
No ☐

21. Does the basement have any of the following? Floor cracks ☒, Wall cracks ☒, Sump ☒
Floor drain ☒, Other hole/opening in floor ☐
describe _____

0019-B

22. Are any of the following used or stored in the basement (check all that apply):
Paint ☒ Paint Stripper/remover ☒ Paint thinner ☒ Metal degreaser/cleaner ☒
Gasoline ☐ Diesel fuel ☐ Solvents ☐ Glue ☒ Laundry spot removers ☒
Drain cleaners ☐ Pesticides ☐ Other equipment with fuel tanks (chain saw, lawn mower, snow blower, etc.) ☐ Other products with/containing Volatile Organic Compounds, describe:

_____

_____

23. Has the Building / structure recently (within the last six months) had any painting or remodeling?
Yes ☒ No ☐
If yes, specify what was done, where in the Building, and what month:
The living areas were painted
_____

24. Has new carpeting been installed in the Building / structure within the last year? Yes ☒ No ☐
If yes, when and where? In residents rooms between clients

25. Do any occupants / employees regularly conduct or work in beauty / hair-dressing business?
Yes, work at a beauty / hair-dressing business ☐
Yes, store supplies for beauty / hair-dressing business ☒ Distance to sample point: _____
Yes, building contains beauty / hair-dressing business ☒ Distance to sample point: _____
Yes, building is near beauty / hair-dressing business ☐ Distance to sample point: _____
No ☐

26. Do any occupants / employees / anyone regularly use or work or conduct a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) ☐
Yes, use dry-cleaning infrequently (monthly or less) ☐
Yes, work at a dry cleaning service ☐
Yes, building contains or is near dry cleaning service ☐ Distance to sample point: _____
No ☒

27. Do any occupants / employees / anyone in the Building / structure use solvents at work?
Yes ☐ If yes, how many persons?
No ☒ If no, go to question 28

28. If yes for question 26, are the work clothes washed at Building? Yes ☐ No ☐

29. Does Building / Structure contain a washer/dryer? Yes ☒ No ☐
Where are they located?
Basement ☒ 1913 Bldg. is in basement
Upstairs ☐
Ground floor ☒ 1980 Bldg is on ground floor
Garage ☐
Other, please specify ☐ _____

30. If Building / Structure contains a dryer, is it vented to the outdoors? Yes ☒ No ☐

31. What type (s) of Building heating do you have (check all that apply)
Fuel type: Gas ☒, Oil ☐, Electric ☐, Wood ☐, Coal ☐,
Other ☐ _____

Heat conveyance system: Forced hot air ☒ Forced hot water ☒ Steam ☒
Radiant floor heat ☐ Wood Stove ☐ Coal furnace ☐ Fireplace ☐
Other ☐ _____

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32. Does Building/Structure have (or had in the past) a storage tank for storage of gasoline ☐, fuel oil ☐, propane ☐ If yes, where is/was it located? ND

How is/was the tank filled? _____

Is there staining near the tank? Yes ☐ No ☐

33. Does Building/Structure have air conditioning? Yes ☒ No ☐
Central air conditioning ☒
Window air conditioning unit (s) ☒
Other (please specify) 1980's side has central air 1913 side Central + windows

34. Does Building / Structure have any: Room fans ☐, Ceiling fans ☒, Attic fan ☒

35. Does Building / Structure ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☐ No ☐ ?

36. Has Building / Structure had termite or other pesticide treatment? Yes ☒ No ☐ Unknown ☐
If yes, please specify type of pest controlled monthly pesticide treatment + termite in about 2004
and approximate date of service _____

37. Water heater type: Gas ☒, Electric ☐, by Furnace ☐,
Other (please describe) _____

38. Water heater location: Basement ☒, Upstairs ☐, Ground Floor ☒, Attic ☐,
Other _____

39. Does Building/Structure have any cooking appliances? Electric ☒, Gas ☒,
Other _____

40. Is there a stove exhaust hood present? Yes ☒ No ☐
Does it vent to the outdoors? Yes ☒ No ☐

41. Smoking in Building/Structure:
None ☒, Rare (only guests) ☐, Moderate (occupants, light smokers) ☐,
Heavy (at least one heavy smoker in Building/Structure) ☐

42. If yes to question 40, what do they smoke?
Cigarettes ☐, Cigars ☐, Pipe ☐, Other ☐

43. Does Building/Structure regularly contain/use air fresheners? Yes ☐ No ☒

44. Does anyone in the Building have indoor Building hobbies or crafts involving:
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☐, spray paint ☐,
wood finishing ☐, Other ☐ ND

0019-B

45. General Building / Structure use of industrial / office /consumer products (circle as appropriate).
Assume that: Never = never used, Hardly ever = less that once/month,
Occasionally = about once/month, Regularly = about once/week,
and Often = more that once/week.

Product	Frequency of Use				
Solvents	Never	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	Never	Hardly ever	Occasionally	Regularly	Often
Insecticides	Never	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	Occasionally	Regularly	Often
Window cleaners	Never	Hardly ever	Occasionally	Regularly	Often
Ink / Toner Cartridge	Never	Hardly ever	Occasionally	Regularly	Often
Glue / Adhesives	Never	Hardly ever	Occasionally	Regularly	Often
Paint	Never	Hardly ever	Occasionally	Regularly	Often
Petroleum Fuel	Never	Hardly ever	Occasionally	Regularly	Often

46. Please check weekly Building/Structure maintenance, janitorial, and cleaning practices:
Dusting ☒
Dry Sweeping ☐
Vacuuming ☒
Polishing (furniture, etc.) ☒
Washing/waxing floors ☒
Other (describe) ☐

47. Other comments including items / subjects not covered in this questionnaire yet an issue or concern for the Building / Structure:

0019-B

48. **Chemical Inventory/Summary**

Chemical/Chemical Product (consumer name)	Amount present in Building / Structure
a)	
b)	
c)	
d)	
e)	
f)	
g)	
h)	
i)	
j)	
k)	
l)	
m)	
n)	
o)	

PHOTO LOG FOR SLC VA CERCLA SITE

PARCEL IDENTIFIER: 0019-B **ADDRESS** 737 S. 1300 East

DATE: 12/10/14

Number	Camera Image#	Description of Photo
1	100-0040	Drain set pipes in boiler/furnace room - 1980 bldg
2	100-0041	" " "
3	100-0042	" " "
4	100-0043	Floor drain in laundry roome - 1980 portion of bldg
5	100-0044	Floor drain in kitchen area - 1980 portion of bldg
6	100-0045	" " " "
7	100-0046	" " " "
8	100-0047	Floor drain in chemical storage area - 1913 part
9	100-0048	old original kitche area - 1913 part
10	100-0049	Sewer stack in old laundry area - Basement
11	100-0050	old chimney in basemout - cleanout behind counter
12	100-0051	Pipes in old laundry room in basement
13	100-0052	old flue in laundry room
14	100-0053	Exposed drain stack in bath off old laundry room
15	100-0054	Condensate drain in forced air furnace area (pool room)
16	100-0055	Sump pump in old coal fired boiler room
17	100-0056	Coal bin room wall
18	100-0057	Pipes coming through floor - boiler room
19	100-0058	Water line coming into coal bin room - west end
20	100-0059	Busted floor near boiler
21	100-0060	Lines for boiler coming through wall

0014-5 page 2 of 2

22	100-0061	NE corner of 1st floor that gets wet during heavy rains - appears to be from roof.
23	100-0062	cut-through foundation wall for elevator shaft bump out
24	100-0063	Elevator shaft area - Deep below original foundation
25	100-0064	Elevator shaft area
26	100-0065	old original steam pipes in attic - 1913 Bldg
27	100-0066	" " " " "
28	100-0067	water shut off in side yard - S side of bldg
29	100-0068	water shut off near drive to bldg.
30	100-0069	storm drains in parking lot.
31	100-0070	" " " " "
32	100-0071	" " " " "
33		
34		
35		
36		
37		
38		
39		
40		
41		
42		
43		
44		
45		

0040



0041



0042



0043



0044



0045



0046



0047



0048



0049



0050



0051



0052



0053



0054



0055



0056



0057



0058



0059



0060



0061


Wood To Wood
Portion Cups
Monogram
Plastic Spoons
Fabric Refresher
FRAGILE
HANDLE WITH CARE
TRE-007
TRE-009
TRE-007
2014/12/10 11:00

0062



0063



0064



0065



0066



0067



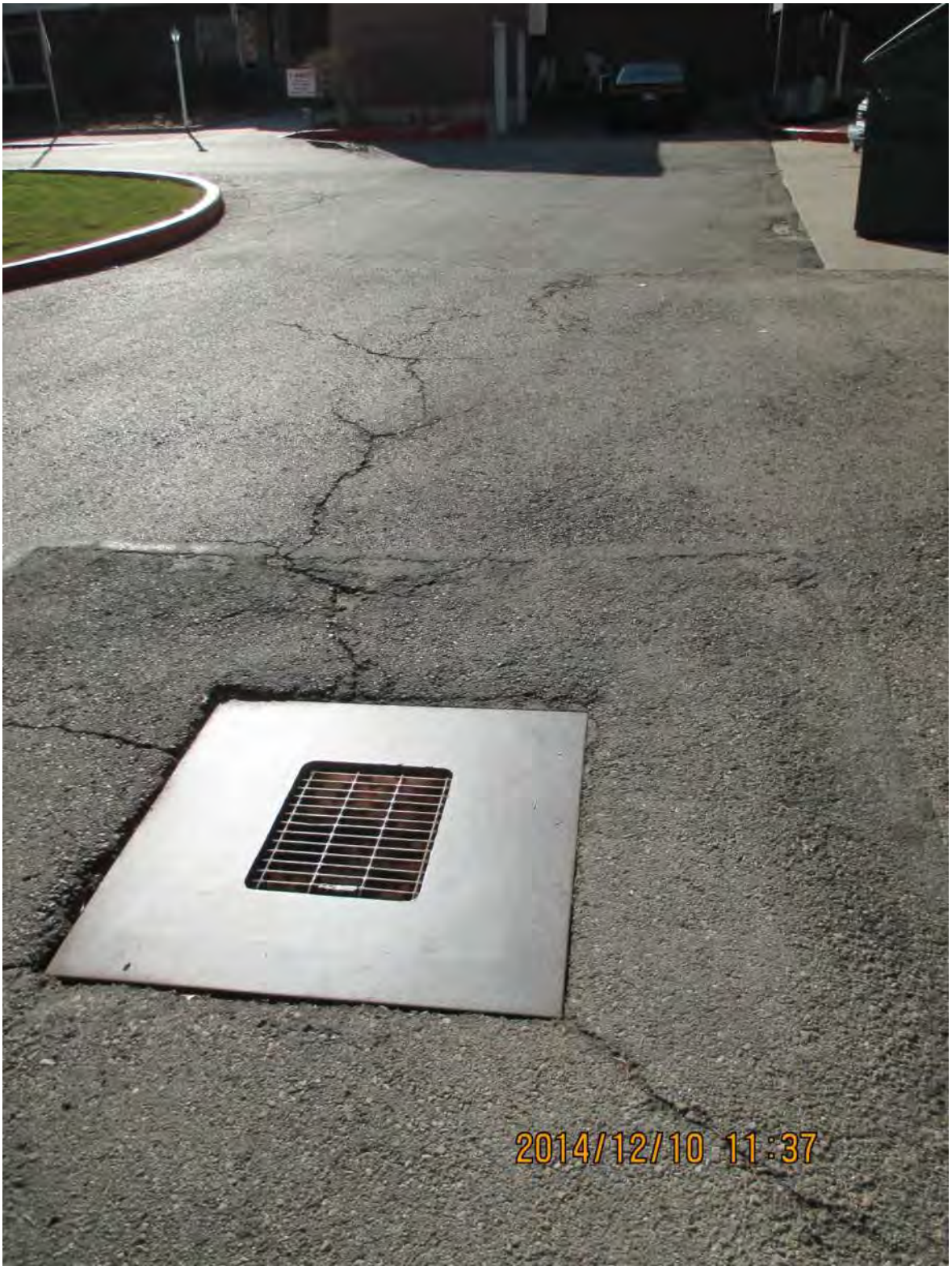
0068



0069



0070



0071



PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0020-C
Street Address: E. 700 S.-Capital Church
ZIP: 84105

Property Contact:
Tel #:

Latitude: 40.753739
Longitude: 111.861786
Age of Property: 50 years

Number of Levels: 2
Basement? (•) Yes ( ) No
Basement Habitable? (•) Yes ( ) No
Sump? ( ) Yes (•) No

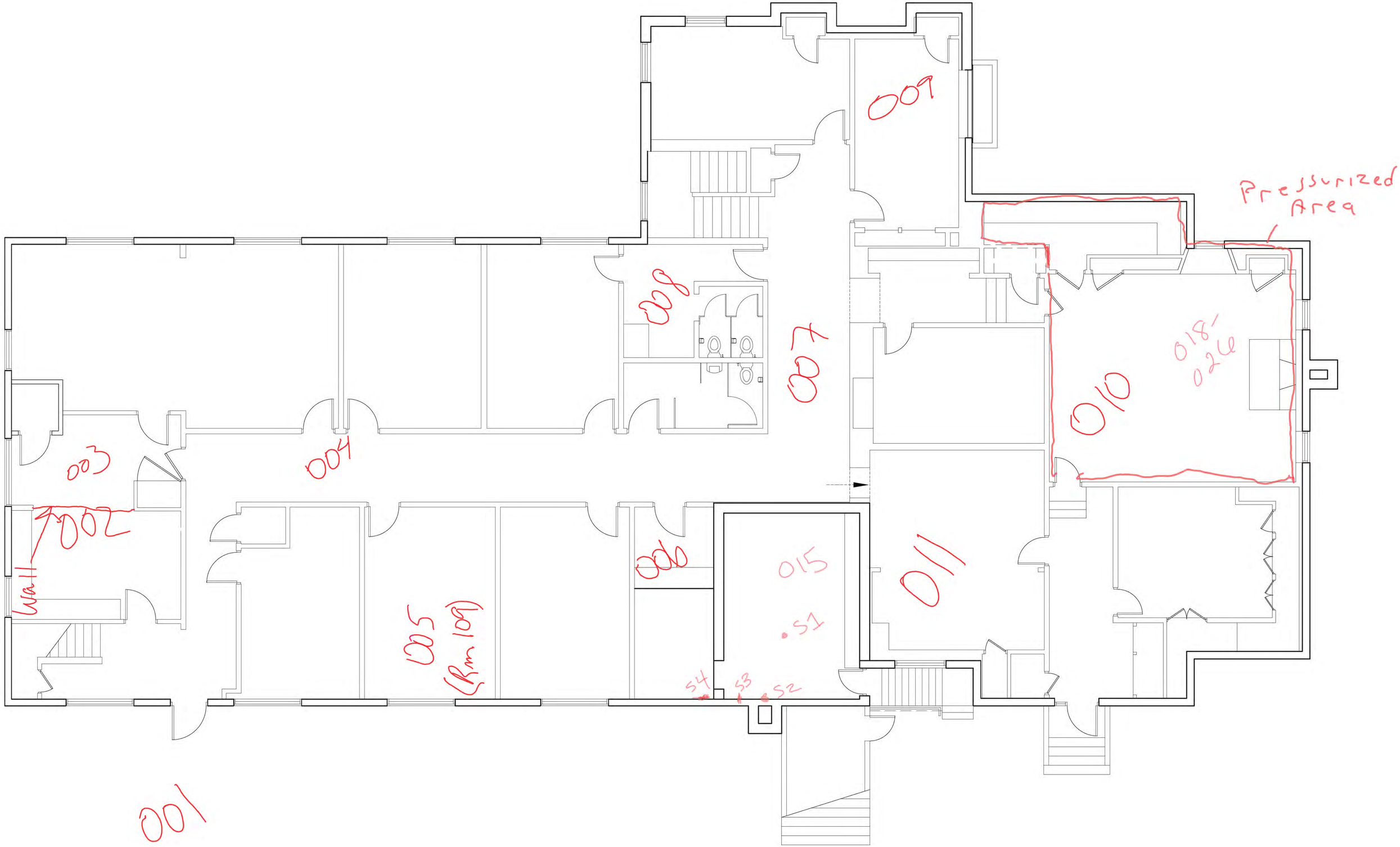
Completed by: ERR
Date: 11/26/2014

Comments

Basement, or lower level class rooms and offices, are mostly on grade, with only the boiler room, and the east end partially below grade.

ELEVATION AT PARKING LOT ON SOUTH CENTER OF BLDG= 4377'

Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.



Pressurized Area
009
008
007
010
018-026
003
004
002
Wall
006
015
011
005 (Rm 109)
S1
S4
S3
S2
001

X 014

MICRO

FRIDGE

SOUND BD

X 013

X 012

X SE001 4'x6'

PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 2\25\15 Time of Arrival: 0830

Weather Conditions: Sunny

Temperature: 45 Barometric Pressure (inHg): 30.11 Wind Direction: S Speed: Calm

Field Crew 1: ERR Role: HAPSITE Operator

Field Crew 2: AJC Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? (●) Yes ( ) No

If yes, have the materials been removed? ( ) Yes (●) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

Custodial closet in lower level hallway contains cleaners, insect sprays, and disinfectants. See pre-inspection questionnairre.

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time
002,003,004,005,006	2\17\15	1100

Instrument Performance Check Run Number	Time	
AUTO TUNE	0845	(•) Pass ( ) Fail

Instrument Performance Check Re-run Number	Time	
NA		( ) Pass ( ) Fail

CCV Run Number	Time	
031,032 ON 2\24\15	1523	(•) Pass ( ) Fail

CCV Re-run Number	Time	
RUN 027 - 5PPB CCV CHECK	1337	(•) Pass ( ) Fail

Operator's initials: ERR

Comments

RUN 028 - 0.5PPB CCV CHECK; 1345; PASS.

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time: 0904 End Time: 0910

Location: SW CORNER 30 FT FROM BUILDING IN PARKING LOT

Run Number: 001(IA-001-OUT) Time: 0904

Run Number: NA Time:

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time NA End Time NA

Comments

NO BACKGROUND SURVEY PERFORMED, NONE OF THE INTERIOR AIR SAMPLES WERE SIGNIFICANTLY ABOVE OUTDOOR AMBIENT BACKGI
INDICATION OF POTENTIAL INDOOR SOURCES.

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time 1122 End Time 1134

Comments

BOILER ROOM SURVEY 001(IA-001-SURVEY) FLOOR DRAIN AT 11:22 TIC @ 112750. OLD CLEAN OUT 002(IA-002-SURVEY) AT 11:26 W\TIC @ 12
003(IA-003-SURVEY) AT 1111:29 W\ TIC @ 126729. ALONG FLOOR CONCRETE SEAM 004(IA-004-SURVEY) AT 11:32 W\TIC @ 140117. SURVEY R
START.

Pictures

SEE PHOTOS TAKEN ON 2\25\15.









PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	0904	End Time	1303		
Room/area	LL KITCHEN	Run Number	002(IA-002-KIT)	Time	0913
Room/area	OFFICE 1	Run Number	003(IA-003-OFC1)	Time	0921
Room/area	HALLWAY WEST END NEAR ROOM 110 &108.	Run Number	004(IA-004-HAL1)	Time	0929
Room/area	ROOM 109 LL	Run Number	005(IA-005-R109)	Time	0937
Room/area	CUSTODIAL CLOSET LL	Run Number	006(IA-006-CLO1)	Time	0945
Room/area	HALLWAY EAST END NEAR ROOM 105	Run Number	007(IA-007-HAL2)	Time	0953
Room/area	LL WOMENS BATHROOM NEAR STAIRS	Run Number	008(IA-008-BA1)	Time	1002
Room/area	ROOM 102	Run Number	009(IA-009-R102)	Time	1010
Room/area	CAPITOL KIDS CLASSROOM LL	Run Number	010(IA-010-CKC)	Time	1018
Room/area	OFFICE 105 LL	Run Number	011(IA-011-OFC2)	Time	1028

Comments

MAIN SANCTUARY 012(IA-012-SAN) @ 1043. COFFEE SHOP IN SANCTUARY 013(IA-013-CAF) @ 1053. UPSTAIRS WOMENS BATHROOM 014(IA-014-BA2) @1101. OLD BOILER ROOM 015(IA-015-BOI) @ 1113.
RUNS 002 - 011 WERE PERFORMED IN THE LOWER LEVEL.

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time: 1229 End Time: 1259 Room/Area: CAPITOL KIDS CLASS(CKC)

T=	5	CFM	2120	Pascals	-5.2	Run No.	018(IA-016A-CKC)	Time	1222
T=	10	CFM	2099	Pascals	-4.9	Run No.	019(IA-016B-CHC)	Time	1232
T=	15	CFM	2107	Pascals	-5.3	Run No.	020(IA-016C-CKC)	Time	1239
T=	20	CFM	2132	Pascals	-5.1	Run No.	021(IA-016D-CKC)	Time	1248
T=	25	CFM	2123	Pascals	-5.6	Run No.	022(IA-016E-CKC)	Time	1256
T=	30	CFM	2088	Pascals	-4.3	Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

BASELINE 0.0Pa. NEED TO REMOVE 10000 CUBIC FEET FROM ROOM. ACTUAL VOLUME REMOVED 63,345 CUBIC FEET.

CONDUCTED PRESSURE TESTING IN THE PORTION OF THE LOWER LEVEL THAT WAS MOSTLY BELOW GRADE AND COULD BE ISOLATED FR
BUILDING BY DOORS.

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time: 1303 End Time: 1303 Room/Area: CKC

	T=	CFM	Pascals	Run No.	Time
1	5	2582	4.2	023(IA-017A-CKC)	1303
2	10	2566	3.9	024(IA-017B-CKC)	1312
3	15	2511	6.2	025(IA-017C-CKC)	1320
4	20	2548	7.4	026(IA-017D-CKC)	1328
5	25	2600	5.9		
6	30	2609	6.2		
7					
8					
9					
10					
11					
12					
13					
14					
15					

Comments

BASELINE AT -0.1 Pa. ADDED 77,080 CUBIC FFET TO THE ROOM.

PART J
SUMMA CANISTERS

Location/ Area: NA

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

Comments

PART K
SOIL GAS

Date	02\25\15	Time	0940/0945	Sample Depth	4 & 8		
Latitude	40.753684	Longitude	111.861600			Elevation	4380
Run No	016(SG-001-4) &017(SG-001-6')	Run Time	1157/1208			Vacuum (in/Hg)	2/2

Comments

SOIL PROBE INSTALLED 2' FROM FOUNDATION WALL AT EAST END OF BUILDING BY DOOR.

0020-C

Dec 17
9:00

COMMERCIAL / INDUSTRIAL BUILDING QUESTIONNAIRE

Indoor Air Assessment Survey

Date: Nov. 26, 2014 Survey / questionnaire completed by: [redacted]

1. Conta
   Addre
   Phon
2. What
3. Are y
   this B
   Owne
   Addre
   Phone 1: (801) 366-4220 Phone 2: _____ Cell Phone: (801) 209-1550
4. Total number of occupants/persons at this location? 850 - 900 DURING WEEKEND SERVICES
   Number of Children 200 Ages 0 - 18 YRS
5. How long have you occupied this location? 1998 - Present (16 yrs)
   How days per week is building occupied? 7
   How hours per day is building occupied? 8

General Building / Structure Description

6. Type of Building/Structure (check only one): Single Business ☐, Multiple Businesses ☐,
   Other Church
7. Building/Structure Description:
   Number of floors: 2 Area /square footage of main or ground floor: 7,000 square feet
   Basement ☑ Area /square footage of Basement: 600 square feet
   Crawlspace ☐ Area /square footage of Crawlspace: _____ square feet
   Partial crawlspace/basement ☐ % of each _____
   Slab on grade ☐ Area /square footage of Slab on grade: _____ square feet
   Other ☐ _____
8. Age of Building/Structure: _____ years, Not sure/Unknown ☑
9. General Above-Ground Building/Structure construction (check all that apply):
   Wood ☐, Brick ☑, Concrete ☐, Cement block ☐, Other ☐ _____
10. Foundation Construction (check all that apply):
    Concrete Slab ☑
    Fieldstone ☐
    Concrete block ☐
    Elevated above ground/grade ☐
    Other ☐ _____

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11. Do you have private well ☐ or cistern ☐ ? NO
If yes, please describe location, use and current condition_____
_____
_____ DNP

12. Do you have a septic system? Yes ☑ No ☑ Not used ☐ Unknown ☐
If yes, what is construction type?_____
Where is it located? _____
When was the last time it was serviced?_____
Do you (or have you ever) use(d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your Building? (pond, ditch, etc.) Yes ☐ No ☑

Basement Description (please check all boxes that apply):

14. Is the basement finished ☐ or unfinished ☑?

15. If finished, how many rooms are in the basement? _____
What are rooms used for? Office ☐ Shop ☐ Storage ☐
Other_____

16. If not finished, do you plan on finishing in the future? Yes ☐ No ☑

17. Is the basement floor (check all that apply) Concrete ☑, Tile ☐, Carpeted ☐, Dirt ☐,
Other ☐ _____

18. Are the basement walls poured Concrete ☑, Cement block ☐, Stone ☐, Wood ☐,
Brick ☐, Other ☐ _____

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☐
No ☑

Describe the moisture problem_____
_____
_____

20. Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☐
No ☑

21. Does the basement have any of the following? Floor cracks ☑, Wall cracks ☐, Sump ☐,
Floor drain ☐, Other hole/opening in floor ☐
describe Normal Settling

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22. Are any of the following used or stored in the basement (check all that apply): NO
Paint ☐ Paint Stripper/remover ☐ Paint thinner ☐ Metal degreaser/cleaner ☐
Gasoline ☐ Diesel fuel ☐ Solvents ☐ Glue ☐ Laundry spot removers ☐
Drain cleaners ☐ Pesticides ☐ Other equipment with fuel tanks (chain saw, lawn mower, snow blower, etc.) ☐ Other products with/containing Volatile Organic Compounds, describe:

_____

_____

23. Has the Building / structure recently (within the last six months) had any painting or remodeling?
Yes ☑ No ☐
If yes, specify what was done, where in the Building, and what month:
ROUTINE PAINTING OF CLASS ROOMS AND HALLWAY

24. Has new carpeting been installed in the Building / structure within the last year? Yes ☐ No ☑
If yes, when and where?_____

25. Do any occupants / employees regularly conduct or work in beauty / hair-dressing business? NO
Yes, work at a beauty / hair-dressing business ☐
Yes, store supplies for beauty / hair-dressing business ☐ Distance to sample point:_____
Yes, building contains beauty / hair-dressing business ☐ Distance to sample point: _____
Yes, building is near beauty / hair-dressing business ☐ Distance to sample point: _____
No ☐

26. Do any occupants / employees / anyone regularly use or work or conduct a dry cleaning service? NO
Yes, use dry-cleaning regularly (at least weekly) ☐
Yes, use dry-cleaning infrequently (monthly or less) ☐
Yes, work at a dry cleaning service ☐
Yes, building contains or is near dry cleaning service ☐ Distance to sample point: _____
No ☐

27. Do any occupants / employees / anyone in the Building / structure use solvents at work? NO
Yes ☐ If yes, how many persons?
No ☐ If no, go to question 28

28. If yes for question 26, are the work clothes washed at Building? Yes ☐ No ☐

29. Does Building / Structure contain a washer/dryer? Yes ☐ No ☑
Where are they located?
Basement ☐
Upstairs ☐
Ground floor ☐
Garage ☐
Other, please specify ☐ _____

30. If Building / Structure contains a dryer, is it vented to the outdoors? Yes ☐ No ☐

31. What type (s) of Building heating do you have (check all that apply)
Fuel type: Gas ☑, Oil ☐, Electric ☐, Wood ☐, Coal ☐,
Other ☐ _____

Heat conveyance system: Forced hot air ☑ Forced hot water ☐ Steam ☐
Radiant floor heat ☐ Wood Stove ☐ Coal furnace ☐ Fireplace ☐
Other ☐ _____

32. Does Building/Structure have (or had in the past) a storage tank for storage of gasoline ☐, fuel oil ☐, propane ☐ NO If yes, where is/was it located? _____

How is/was the tank filled? _____

Is there staining near the tank? Yes ☐ No ☐

33. Does Building/Structure have air conditioning? Yes ☑ No ☐
Central air conditioning ☑
Window air conditioning unit (s) ☐
Other (please specify) _____

34. Does Building / Structure have any: Room fans ☐, Ceiling fans ☐, Attic fan ☐ NO

35. Does Building / Structure ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☑ No ☐

36. Has Building / Structure had termite or other pesticide treatment? Yes ☐ No ☑ Unknown ☐
If yes, please specify type of pest controlled _____
and approximate date of service _____

37. Water heater type: Gas ☑, Electric ☐, by Furnace ☐,
Other (please describe) _____

38. Water heater location: Basement ☑, Upstairs ☐, Ground Floor ☐, Attic ☐,
Other _____

39. Does Building/Structure have any cooking appliances? Electric ☐, Gas ☑,
Other _____

40. Is there a stove exhaust hood present? Yes ☑ No ☐
Does it vent to the outdoors? Yes ☑ No ☐

41. Smoking in Building/Structure:
None ☑, Rare (only guests) ☐, Moderate (occupants, light smokers) ☐,
Heavy (at least one heavy smoker in Building/Structure) ☐

42. If yes to question 40, what do they smoke? No Smoking
Cigarettes ☐, Cigars ☐, Pipe ☐, Other ☐

43. Does Building/Structure regularly contain/use air fresheners? Yes ☐ No ☑

44. Does anyone in the Building have indoor Building hobbies or crafts involving: NO
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☐, spray paint ☐,
wood finishing ☐, Other ☐ _____

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45. General Building / Structure use of industrial / office /consumer products (circle as appropriate). Assume that: Never = never used, Hardly ever = less that once/month, Occasionally = about once/month, Regularly = about once/week, and Often = more that once/week.

Product	Frequency of Use				
Solvents	Never	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	Never	Hardly ever	Occasionally	Regularly	Often
Insecticides	Never	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	Occasionally	Regularly	Often
Window cleaners	Never	Hardly ever	Occasionally	Regularly	Often
Ink / Toner Cartridge	Never	Hardly ever	Occasionally	Regularly	Often
Glue / Adhesives	Never	Hardly ever	Occasionally	Regularly	Often
Paint	Never	Hardly ever	Occasionally	Regularly	Often
Petroleum Fuel	Never	Hardly ever	Occasionally	Regularly	Often

46. Please check weekly Building/Structure maintenance, janitorial, and cleaning practices:
Dusting ☑
Dry Sweeping ☑
Vacuuming ☑
Polishing (furniture, etc.) ☑
Washing/waxing floors ☐
Other (describe) ☑ CLEANING BATHROOMS, EMPTYING TRASH

47. Other comments including items / subjects not covered in this questionnaire yet an issue or concern for the Building / Structure:

We ARE A CHURCH - THROUGH THE WEEK WE HAVE STAFF AND SMALL GROUP GATHERINGS AT THE CHURCH.

WE HAVE (3) WEEKEND SERVICES:
SAT 6 PM AVG. ATTENDANCE 140
SUN 9:15 AM AVG ATTENDANCE 350
SUN 11 AM AVG ATTENDANCE 380

48. **Chemical Inventory/Summary**

Chemical/Chemical Product (consumer name)	Amount present in Building / Structure
a)	
b)	
c)	
d)	
e)	
f)	
g)	
h)	
i)	
j)	
k)	
l)	
m)	
n)	
o)	

PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0021-C
Street Address: 1065 E. 700 S.
ZIP: 84104

Property Contact: skip (maintenance)
Tel #:

Latitude: 40.754474
Longitude: 111.860751
Age of Property: 50 years

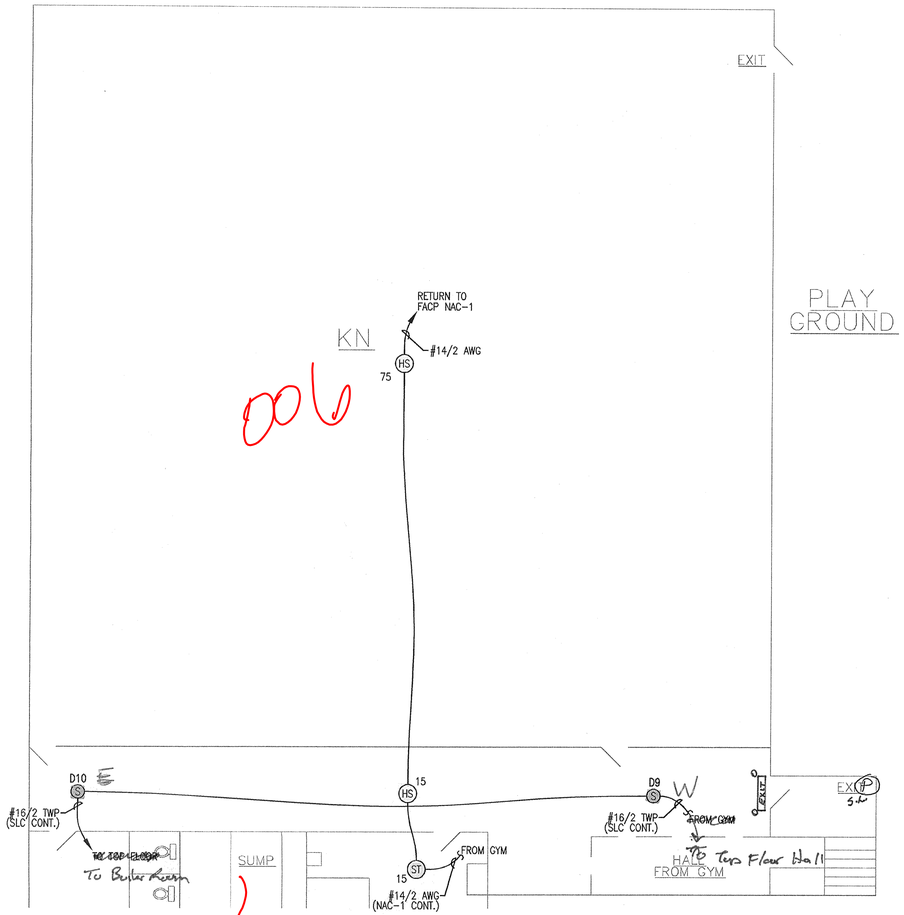
Number of Levels: 3
Basement? (●) Yes ( ) No
Basement Habitable? (●) Yes ( ) No
Sump? (●) Yes ( ) No

Completed by: ERR
Date: 12/12/2014

Comments

Building is stair-stepped into hillside, so levels that are above grade on west end become below grade to east. only a small portion of building rooms are completely below grade. Sumps on lowest levels convey water from french drain system to storm sewer via gravity flow.
Elevation of School Building at Main Entrance on 700 S = 4443' ft msl.
Water is accessible at grate in stairwell leading to rectory garage - grate accesses the french drain water conveyance line. Location ID: GW-001, Lat=40.754464, Long= 111.860363; Elev= 4445' estimated. GW also accessible at the outfall (solid steel manhole) to storm sewer in sidewalk near the SW corner of school. Location ID: GW-002, Lat= 40.754283, Long= 111.861227, Elev = 4413 msl.

Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.



PLAY GROUND

SCALE: NOT TO SCALE

GENERAL NOTES:

1. THESE DRAWINGS ARE DIAGRAMMATIC. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT DIMENSIONS.
2. INSTALLATION SHALL COMPLY WITH NEC, NFPA 72 AND ALL OTHER APPLICABLE CODES AS REQUIRED BY THE LOCAL AUTHORITY HAVING JURISDICTION.
3. WIRING DEPICTED ON THESE PLANS IS SCHEMATIC – ACTUAL WIRE LOCATIONS MAY DIFFER FROM THESE PLANS. WIRING SHALL BE PERFORMED AS ACTUAL BUILDING CONSTRUCTION CONDITIONS ALLOW AND TO MINIMIZE PENETRATIONS THROUGH AREA SEPARATION WALLS AND FIRE WALLS. THE USE OF A RACEWAY IS PERMITTED AS LONG AS NO 110V OR HIGHER VOLTAGE CABLES ARE IN THE SAME RACEWAY.
4. FIRE RATINGS SHALL BE MAINTAINED FOR ALL PENETRATIONS THROUGH FIRE-RATED CONSTRUCTION.
5. POWER FOR ALL FIRE ALARM PANELS AND FIRE ALARM POWER SUPPLIES MUST BE PROVIDED BY A DEDICATED AC BRANCH CIRCUIT.
6. POWER-LIMITED AND NONPOWER-LIMITED CIRCUIT WIRING MUST REMAIN SEPARATED IN CABINET. ALL POWER-LIMITED CIRCUIT WIRING MUST REMAIN AT LEAST 0.25" AWAY FROM ANY NONPOWER-LIMITED CIRCUIT WIRING. FURTHERMORE, ALL POWER-LIMITED AND NONPOWER-LIMITED CIRCUIT WIRING MUST ENTER AND EXIT THE CABINET THROUGH DIFFERENT KNOCK OUTS AND/OR SEPARATE CONDUITS.
7. WHEN UTILIZING CLASS "A" CIRCUITS, SEPARATE OUTGOING AND RETURN CONDUCTORS OF CLASS "A" CIRCUITS BY A MINIMUM OF 12" WHERE RUN VERTICALLY AND 48" WHERE RUN HORIZONTALLY.
8. WHEN UTILIZING SHIELDED CABLE TIE SHIELDS THROUGH AND INSULATE AT EACH JUNCTION BOX. INSULATE AND TAPE BACK AT END.
9. ALL FIRE ALARM CABLING SHALL BE ACCEPTABLE TO THE FIRE ALARM EQUIPMENT MANUFACTURER FOR THE INTENDED PURPOSE.
10. SMOKE DETECTORS SHALL NOT BE INSTALLED UNTIL AFTER CONSTRUCTION CLEAN-UP IS COMPLETED AND FINAL.
11. LOCATE SMOKE DETECTORS A MINIMUM OF THREE (3) FEET FROM MECHANICAL DIFFUSERS. WALL-MOUNTED SMOKE DETECTORS SHALL BE LOCATED A MINIMUM OF 4" AND A MAXIMUM OF 12" FROM CEILING. CEILING-MOUNTED SMOKE DETECTORS SHALL BE MOUNTED ON CEILINGS AND NOT ON THE BOTTOMS OF BEAMS OR JOISTS.
12. PROVIDE SYNCHRONIZATION OF ALL VISUAL NOTIFICATION APPLIANCE CIRCUITS. PROVIDE ALL REQUIRED SYNC MODULES. PROVIDE A MULTI-SYNC MODE SLAVE CONNECTION BETWEEN ALL SYNC MODULES.
13. VERIFY ALL FIELD SELECTABLE AUDIBILITY SETTINGS OF NOTIFICATION APPLIANCES WITH FIRE ALARM CONTRACTOR.
14. UPON COMPLETION OF THE FIRE ALARM SYSTEM INSTALLATION AND PROGRAMMING, THE INSTALLING CONTRACTOR SHALL PERFORM FINAL TESTING OF THE ENTIRE SYSTEM, PER ALL APPLICABLE CODES, AND SHALL COORDINATE AND PERFORM A FINAL FIRE ALARM SYSTEM INSPECTION.
15. PROVIDE OFF-SITE MONITORING AS REQUIRED BY THE INTERNATIONAL FIRE CODE, SECTION 907.15 AND THE LOCAL AUTHORITY HAVING JURISDICTION.
16. INSTALLING CONTRACTOR SHALL, PHYSICALLY, LABEL ALL INITIATING DEVICES AND NOTIFICATION APPLIANCE CIRCUIT END OF LINE (WHEN WIRING CLASS "B"). THESE LABELS SHALL BE IN PLACE PRIOR TO START-UP AND TESTING.

FIRE ALARM SYMBOL LEGEND

NOTE: ALL SYMBOLS MAY NOT BE USED ON THIS PROJECT

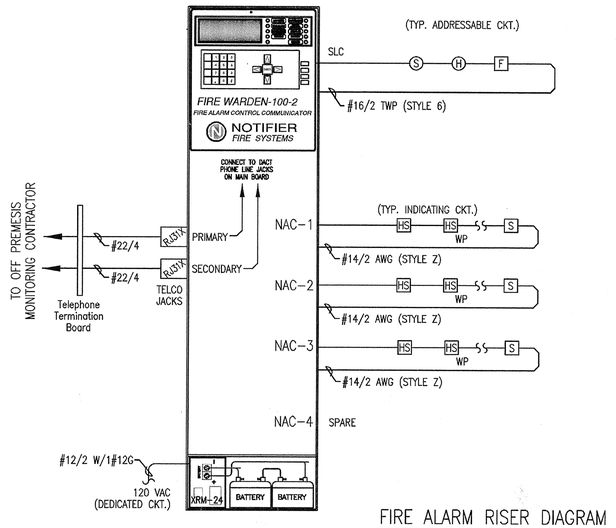
SYMBOL	DESCRIPTION	MOUNTING
FACP	FIRE ALARM CONTROL PANEL	WALL-TOP @ 66" AFF
FAPS	FIRE ALARM POWER SUPPLY	FIELD VERIFY
ANN	REMOTE ANNUNCIATOR	WALL-TOP @ 66" AFF
FSD	FIRE/SMOKE DAMPER	BY OTHERS
H	HEAT DETECTOR	CEILING
S	SMOKE DETECTOR	CEILING
DD	DUCT SMOKE DETECTOR	IN DUCT
PS	MANUAL PULL STATION	WALL @ 48" AFF
CM	CONTROL MODULE	FIELD VERIFY
DH	MAGNETIC DOOR HOLDER	FIELD VERIFY
MM	MONITOR MODULE	FIELD VERIFY
R	MULTI-VOLTAGE RELAY	FIELD VERIFY
RM	ADDRESSABLE RELAY MODULE	FIELD VERIFY
FS	FLOW SWITCH	BY OTHERS
TS	TAMPER SWITCH	BY OTHERS
ST	STROBE	CEILING
HS	HORN / STROBE	CEILING
SS	SPEAKER STROBE	CEILING
H	HORN	WALL @ 90" AFF
HS	HORN / STROBE	WALL 80"-96" AFF
S	STROBE	WALL 80"-96" AFF
SP	SPEAKER	WALL @ 90" AFF
SS	SPEAKER STROBE	WALL 80"-96" AFF
B	FIRE BELL (110V)	FIELD VERIFY

ABBREVIATION	DESCRIPTION
E	EXISTING
G	WITH GUARD
P	PENDENT MOUNT
R	RESIDENTIAL (110V)
S	SOUNDER BASE
WP	WEATHERPROOF
EX	EXPLOSION PROOF
EOL	END OF LINE RESISTOR
EOLR	END OF LINE RELAY
AWG	AMERICAN WIRE GAUGE
TWP	TWISTED PAIR
TWSP	TWISTED SHIELDED PAIR
FPLP	FIRE POWER LIMITED PLENUM
FPLR	FIRE POWER LIMITED RISER
AFF	ABOVE FINISHED FLOOR

SPEAKER WATTAGE – SS – (2W) 75 – STROBE CANDELA – HS – 30

S – DEVICE ADDRESS – H
L1D001 OR D01
(L – DENOTES LOOP #)
(D or M – DENOTES DETECTOR OR MODULE #)

1-#16/2 TWP
WIRE TYPE ABBREVIATED
CONDUCTOR COUNT
WIRE SIZE
OF CABLES (IF OMITTED ONLY 1 CABLE NEEDED)



FIRE ALARM RISER DIAGRAM

SCHEMATIC: NO SCALE

OPERATIONS MATRIX

FIRE ALARM INPUT	FIRE ALARM OUTPUT	ACTIVATE ALARM INDICATOR	ACTIVATE AUDIBLE ALARM	ACTIVATE SUPERVISORY INDICATOR	ACTIVATE AUDIBLE SUPERVISORY SIGNAL	ACTIVATE TROUBLE INDICATOR	ACTIVATE AUDIBLE TROUBLE INDICATOR	TRANSMIT ALARM SIGNAL	TRANSMIT SUPERVISORY SIGNAL	TRANSMIT TROUBLE SIGNAL
SMOKE DETECTORS		●	●					●		
HEAT DETECTORS		●	●					●		
PULL STATIONS		●	●					●		
FIRE ALARM AC POWER FAIL						●	●			●
FIRE ALARM LOW BATTERY						●	●			●
OPEN CIRCUIT						●	●			●
GROUND FAULT						●	●			●
NAC SHORT CIRCUIT						●	●			●
LOSS OF AC TO BUILDING						●	●			●

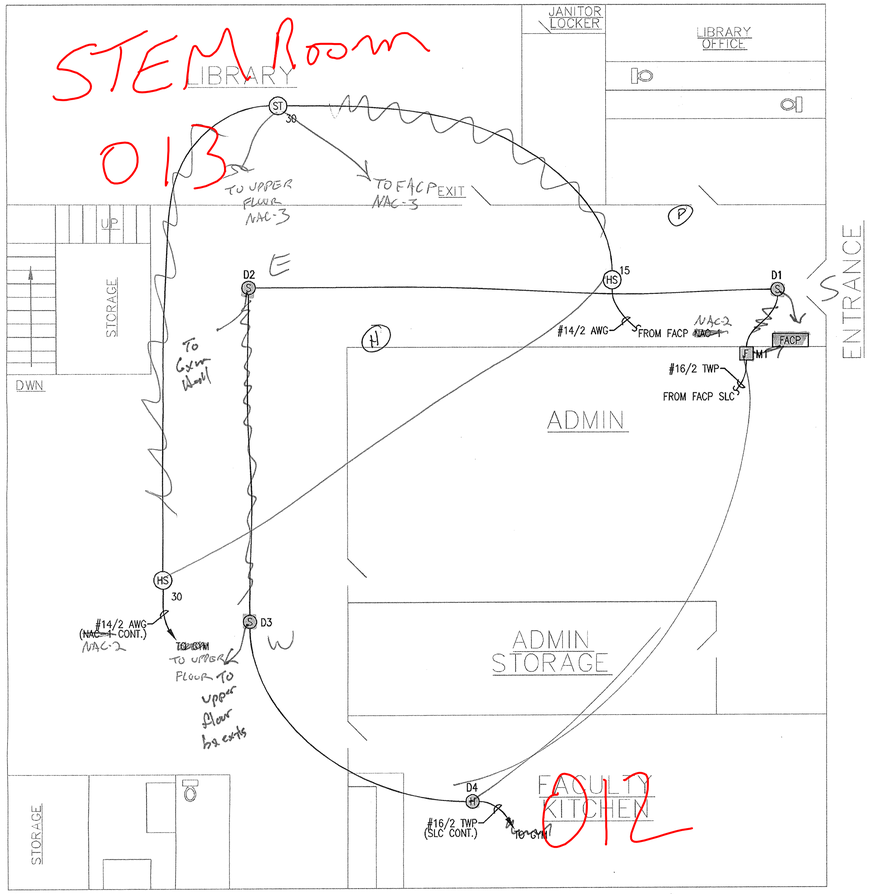
REVISION	DESCRIPTION	DATE
0	ISSUED FOR REVIEW & APPROVAL	8/05/09

LADY OF LOURDES

PLAY GROUND FIRE ALARM PLAN

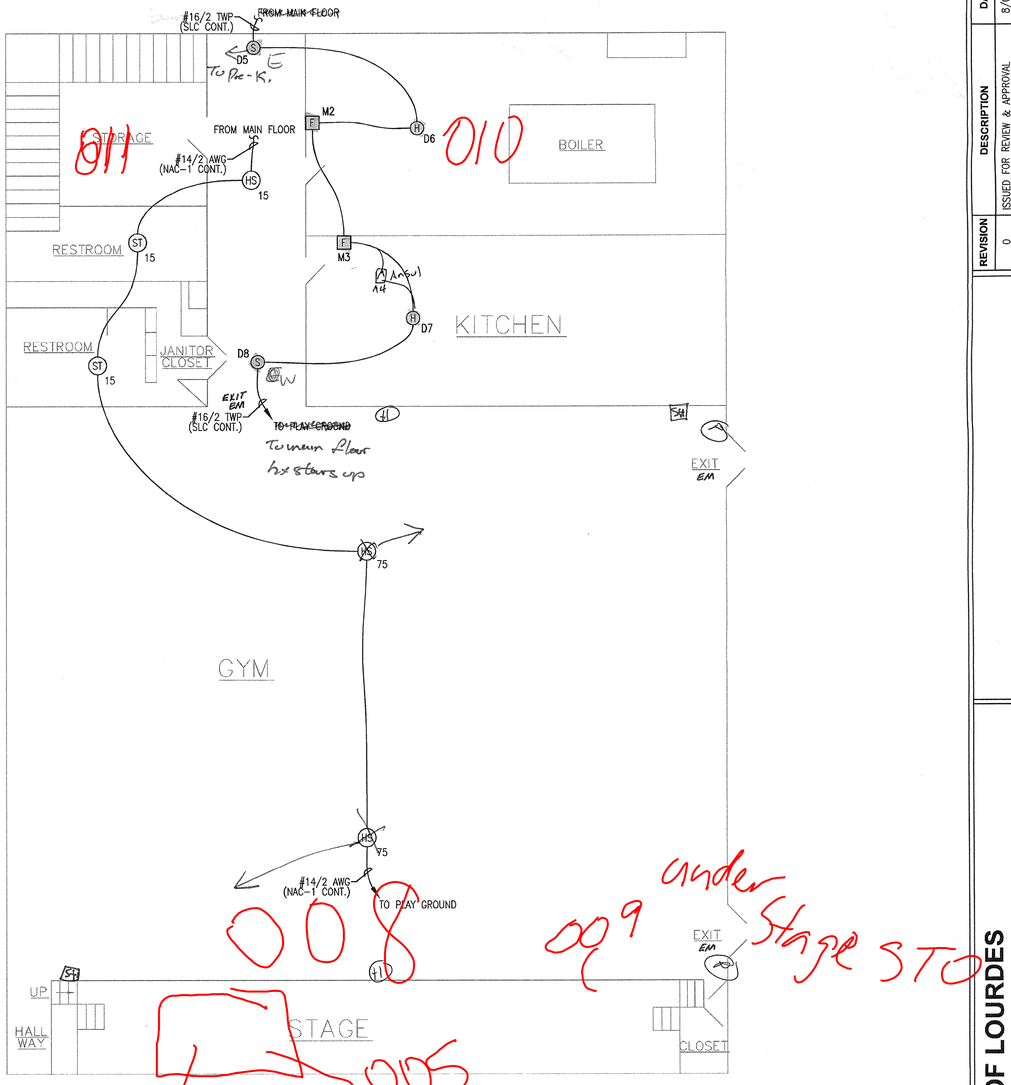
DRAWN	NAF MOUNTAIN ALARM/FPS
CHECKED	WAYNE B. HAWS NICET IV #90496
DATE	8/05/09
REVISION	0
SCALE	NTS

FA-1



MAIN FLOOR

SCALE: NOT TO SCALE



GYM

SCALE: NOT TO SCALE

System Power Requirements

NOTIFIER by Honeywell

NFW2-100 Fire Alarm Control Panel

Clear Project Information

AC Branch Current Requirements — 3.00 AMPS @ 120 VAC — Check
Current required by source to power the fire alarm system.

Primary Standby Load — 0.31 Amps — Check
Current load on the primary power supply during **non-alarm** conditions.

Primary Alarm Load — 2.84 Amps — Check
Current load on the primary power supply during **alarm** conditions.

Secondary Load Requirements — 7.78 Amp Hours — Check
Total Secondary Load from the calculation table below.

Current Draw		Time (hours)	Total (AH)
Seconday Standby Load 0.260 A	x	Required Standby Time 24 hours	6.24
Secondary Alarm Load 2.837 A	x	Required Alarm Time (hours) 0.084 hours	0.24
Auxiliary Power Supply Load 0.000 A	x	Required Alarm Time (hours) 0.084 hours	0.00
		Total Secondary Load	6.48
	USA Canada	Derating factor	x 1.2
		Secondary Load Requirements	**7.78** AH

Battery Selection — 18 Amp Hours — Check
Select batteries from the list below.

18 AH BAT-12180 Battery (12 volt)

(•) Two ( ) Four (two 12VDC sets in parallel)

System Current Draw - NFW2-100

NOTIFIER by Honeywell

Current Draw	
C1	0.305 A
C2	2.837 A
C3	0.260 A

Primary Non-Alarm - C1: 0.305 (0.0, 0.4, 0.8, 1.2, 1.6) Power Used (Amps)

Primary Alarm - C2: 2.837 (0.0, 1.2, 2.4, 3.6, 4.8, 6.0) Power Used (Amps)

	C1 - Non-Alarm Current			C2 - Alarm Current			C3 - Standby Current		
Device	Qty	Draw	Non-Alarm	Qty	Draw	Alarm	Qty	Draw	Standby
Main Circuit Board	1	0.30000	0.30000	1	0.32500	0.32500	1	0.25500	0.25500
XRM-24	1	0.00000	0.00000	1	0.00000	0.00000	1	0.00000	0.00000
PC2R15	6	0.00000	0.00000	6	0.00000	0.00000	6	0.00000	0.00000
PC2R30	10	0.00000	0.00000	10	0.11600	1.16000	10	0.00000	0.00000
PC2R75	3	0.00000	0.00000	3	0.17600	0.52800	3	0.00000	0.00000
SCR15	5	0.00000	0.00000	5	0.06600	0.33000	5	0.00000	0.00000
SCR30	1	0.00000	0.00000	1	0.08400	0.08400	1	0.00000	0.00000
NP-100	12	0.00030	0.00360				12	0.00030	0.00360
NH-100	3	0.00030	0.00090				3	0.00030	0.00090
NOT-BG12LX	3	0.00023	0.00069				3	0.00023	0.00069
				1	0.40000	0.40000			
		Total Non-Alarm Load:	0.305		Total Alarm Load:	2.837		Total Standby Load:	0.260

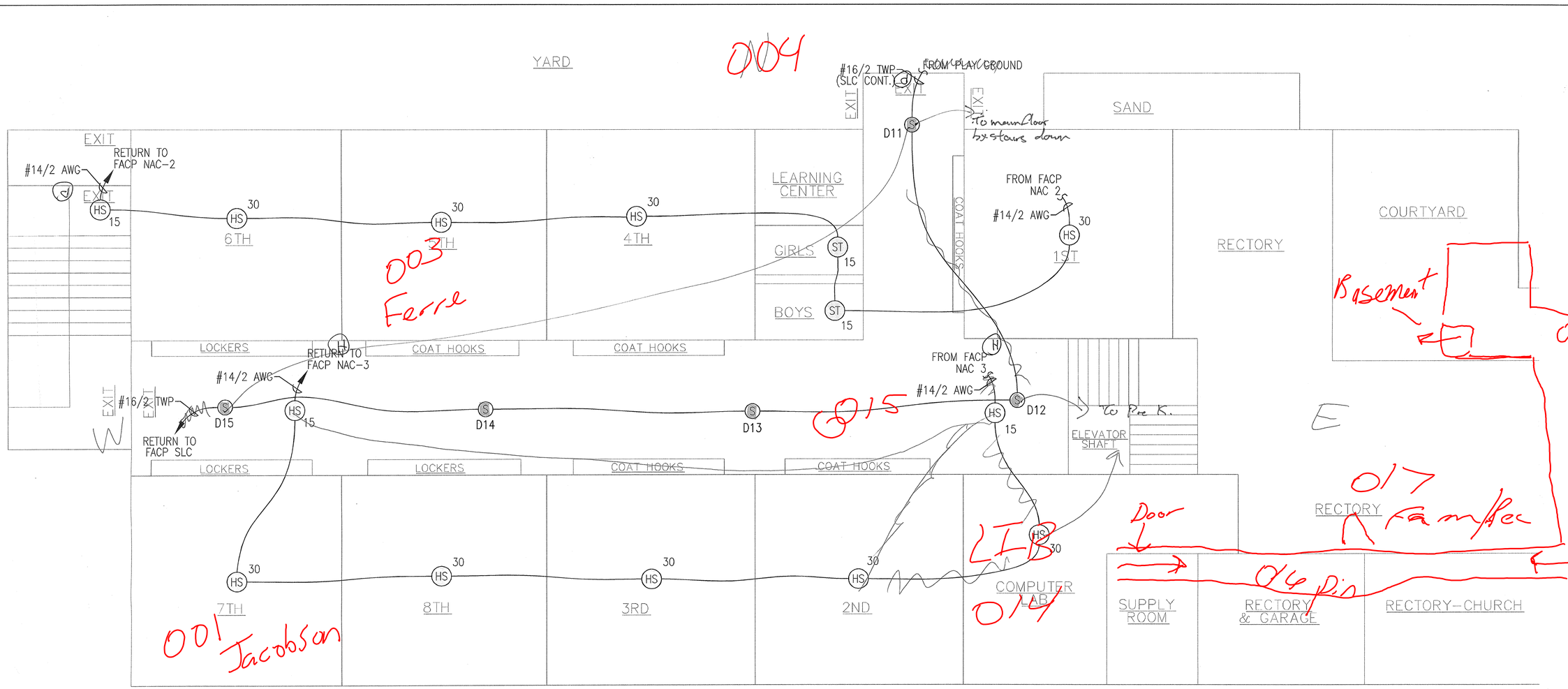
REVISION	DESCRIPTION	DATE
0	ISSUED FOR REVIEW & APPROVAL	8/05/09

LADY OF LOURDES

MAIN FLOOR & GYM FIRE ALARM PLAN

DRAWN	NAF MOUNTAIN ALARM/FPS
CHECKED	WAYNE B. HAWS NICET IV #90496
DATE	8/05/09
REVISION	0
SCALE	NTS

FA-2



TOP FLOOR

SCALE: NOT TO SCALE

002 not saved/Power out

NAC Circuit Voltage Drop Calculation						8/5/2009
Project Name		LADY OF LOURDES				
Circuit Number		NAC-1				
Nominal System Voltage		20.4	volts	Wire	Resistance	
Minimum Device Voltage		16	volts	Gauge	Per 1000	
Distance from source to 1st device		30		14	6.14	
Wire Gauge for balance of circuit				14	6.14	
Max Output Current		1.5	amps			
Total Circuit Current		1.164	amps			
Circuit is within limits		Distance				
	Device Current	previous device	Voltage at Device	Drop from source	Percent Drop	
Device 1	0.079		20.19	0.21	1%	
Device 2	0.094	45	19.89	0.51	3%	
Device 3	0.107	58	19.53	0.87	4%	
Device 4	0.079	60	19.21	1.19	6%	
Device 5	0.066	15	19.13	1.27	6%	
Device 6	0.066	13	19.07	1.33	6%	
Device 7	0.176	40	18.91	1.49	7%	
Device 8	0.176	30	18.82	1.58	8%	
Device 9	0.066	50	18.72	1.68	8%	
Device 10	0.079	7	18.71	1.69	8%	
Device 11	0.176	46	18.66	1.74	9%	
Totals	1.164	394				

NAC Circuit Voltage Drop Calculation						8/5/2009
Project Name		LADY OF LOURDES				
Circuit Number		NAC-2				
Nominal System Voltage		20.4	volts	Wire	Resistance	
Minimum Device Voltage		16	volts	Gauge	Per 1000	
Distance from source to 1st device		50		14	6.14	
Wire Gauge for balance of circuit				14	6.14	
Max Output Current		1.5	amps			
Total Circuit Current		0.639	amps			
Circuit is within limits		Distance				
	Device Current	previous device	Voltage at Device	Drop from source	Percent Drop	
Device 1	0.107		20.20	0.20	1%	
Device 2	0.066	25	20.12	0.28	1%	
Device 3	0.066	5	20.11	0.29	1%	
Device 4	0.107	21	20.08	0.34	2%	
Device 5	0.107	18	20.02	0.38	2%	
Device 6	0.107	19	20.00	0.40	2%	
Device 7	0.079	12	20.00	0.40	2%	
Totals	0.639	150				

NAC Circuit Voltage Drop Calculation						8/5/2009
Project Name		LADY OF LOURDES				
Circuit Number		NAC-3				
Nominal System Voltage		20.4	volts	Wire	Resistance	
Minimum Device Voltage		16	volts	Gauge	Per 1000	
Distance from source to 1st device		60		14	6.14	
Wire Gauge for balance of circuit				14	6.14	
Max Output Current		1.5	amps			
Total Circuit Current		0.693	amps			
Circuit is within limits		Distance				
	Device Current	previous device	Voltage at Device	Drop from source	Percent Drop	
Device 1	0.079		20.14	0.26	1%	
Device 2	0.107	12	20.10	0.30	1%	
Device 3	0.107	19	20.04	0.36	2%	
Device 4	0.107	19	19.99	0.41	2%	
Device 5	0.107	20	19.96	0.44	2%	
Device 6	0.107	19	19.94	0.46	2%	
Device 7	0.079	17	19.93	0.47	2%	
Totals	0.693	166				

REVISION	DESCRIPTION	DATE
0	ISSUED FOR REVIEW & APPROVAL	8/05/09

LADY OF LOURDES

TOP FLOOR FIRE ALARM PLAN

DRAWN	NAF MOUNTAIN ALARM/FPS
CHECKED	WAYNE B. HAWS NICET IV #90496
DATE	8/05/09
REVISION	0
SCALE	NTS

FA-3

PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 02/18/2015 Time of Arrival: 08:30

Weather Conditions: Sunny

Temperature: 63 Barometric Pressure (inHg): 30.95 Wind Direction: SE Speed: Light

Field Crew 1: IE Role: HAPSITE Operator

Field Crew 2: AJC Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? (●) Yes ( ) No

If yes, have the materials been removed? ( ) Yes (●) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

garage under rectory contains gasoline cans, gasoline powered snow blowers, caulks, cleaners, and paints. rectory laundry room contains, carpet cleaner spirits, and starches. Nothing was labeled specifically as pce or tce.

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time
002,003,004,005,006	02\17\15	11:00

Instrument Performance Check Run Number	Time	
AUTO TUNE 2-18-15	0900	(•) Pass ( ) Fail

Instrument Performance Check Re-run Number	Time	
NA		(•) Pass ( ) Fail

CCV Run Number	Time	
040 ON 2-18-15	1813	(•) Pass ( ) Fail

CCV Re-run Number	Time	
024 on 2\19\15	1539	(•) Pass ( ) Fail

Operator's initials: IE

Comments

ccv on 2\19\15 in the field 0.5ppb. PCE @0.421ppb, tce @ 0.447ppb, cis @ 0.571ppb; pass. 1\20\15 CCV PASSED WITHIN 24 HRS ON 2\19\15 RUN 024

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time: 1043 End Time: 1049

Location: NORTH SIDE ENTRANCE AT TEACHER PARKING LOT. 0021S-021915-004-IA-OUT

Run Number: 004 Time: 1043

Run Number: NA Time:

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time 1435 End Time 1447

Comments

LAUNDRY ROOM BASEMENT OF RECTORY. LOW ION COUNTS, BASE 69000. MINERAL SPIRITS 104,000 TIC. FOUND MINERAL SPIRITS AND WP
MAX TIC AT 104,000. NO ACUTE SOURCE FOUND. IONS 164 &166 (PCE) FLAT. 002(IA-002-SURVEY) IN RECTORY GARAGE, BASELINE TIC 87K.
WEED KILLER IS 97K, TIC ON SNOWBLOWER 94K, TIC IN CANDLE ROOM 96K. NO SOURCE FOUND. 7 MIN RUN.

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time 1435 End Time 1447

Comments

LAUNDRY ROOM BELOW RECTORY 3-ION PCE SURVEY 0021S-021915-IA-022-SURVEY, BASE TIC 69000. TIC IN LOWER CABINET 90000. CHEC DRAINS-TIC AT BASELINE, IONS 164 &166 FLAT LOW RESPONSE FOR PCE, TIC IN CANDLE ROOM BY GARAGE=96K. NO SOURCE FOUND. 7 M

Pictures

SEE PHOTOS TAKEN TODAY 2-19-15.






Cathedral

PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	0958 ON 1\19\15	End Time	1146 ON 2\20\15		
Room/area	8TH GRADE ROOM, JACOBSON	Run Number	001(IA-001-8THWEST)	Time	0958
Room/area	4TH GRADE MRS. FERRE	Run Number	003(IA-003-4THWEST)	Time	1032
Room/area	LEP. CAVE WESTERN STAIRWELL	Run Number	005(IA-005-STO)	Time	1047
Room/area	BASEMENT, MRS MAXWELL'S ROOM.	Run Number	006(IA-006-KEN)	Time	1112
Room/area	BASEMENT STORAGE CLOSET W/ACTIVE DRAIN	Run Number	007(IA-007-STO2)	Time	1126
Room/area	GYM BY THE STAGE	Run Number	008(IA-008-GYM)	Time	1147
Room/area	UNDER THE STAGE STORAGE IN GYM	Run Number	009(IA-009-STO3)	Time	1155
Room/area	BOILER ROOM\ SKIPS OFFICE	Run Number	010(IA-010-UTL)	Time	1208
Room/area	CHEMICAL STORAGE\PHOTO	Run Number	011(IA-011-STO4)	Time	1219
Room/area	TEACHERS KITCHEN	Run Number	012(IA-012-KIT)	Time	1235

Comments

RUN\SAMPLE ID 002 ABORTED, POWER WENT OUT ON HAPSITE H860. STEM ROOM\12:46\013(IA-013-STEM). LIBRARY 014(IA-014-LIB) AT 1303. EAST HALL TOP FLOOR 015(IA-015-HAL) AT 1317. RECTORY DINING ROOM 018(IA-016-DIN) AT 1348. TV ROOM RECTORY 019 (IA-017-FAM) AT 1356. RECTORY BEDROOM NORTH 020 (IA-018-BR1) AT 1411. BASEMENT LAUNDRY 021(IA-019-LAU) AT 1424. RECTORY DWNSTRS HALL NEAR OPEN DRAIN BEFORE GARAGE 022(IA-020-HAL) AT 1505. RECTORY GARAGE 023(IA-021-GAR) AT 1519. START 1\20\15 SOCAL HALL UNDER CHURCH 001(IA- 001-FEL) AT 0936. BOILER ROOM 002(IA-002-BOI) AT 0946. CHURCH KITCHEN 003(IA-003-KIT) AT 0954. 24" DIAMETER MANHOLE COVR IN SOCAL HALL 004(IA-004-MAN AT 1007. 005(IA-005-OUT) AT 1017.

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time: 1040 | End Time: 1118 | Room/Area: BASEMENT RECTORY LAUNDRY

T=	5	CFM	1269	Pascals	-5.4	Run No.	006(IA-006A-LAU)	Time	1040
T=	10	CFM	1950	Pascals	-5.2	Run No.	007(IA-006B-LAU)	Time	1048
T=	15	CFM	1932	Pascals	-4.2	Run No.	008(IA-006C-LAU)	Time	1057
T=	20	CFM	1858	Pascals	-8.4	Run No.	009(IA-006D-LAU)	Time	1105
T=	25	CFM	2032	Pascals	-4.2	Run No.	010(IA-006E-LAU)	Time	1113
T=	30	CFM	2163	Pascals	-6.3	Run No.		Time	
T=	35	CFM	1783	Pascals	-1.9	Run No.		Time	
T=	38	CFM	2183	Pascals	-5.6	Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

BASELINE -3.3Pa. AIR DOOR PLACED IN DOORWAY TO OUTDOOR COURTYARD ACROSS THE HALL WAY AND STAIRS TO THE RECTORY LAU
PRESSURE AREA INCLUDED THE RECTORY OFFICES, KITCHEN, SLEEPING ROOMS, LOUNGE, AND HALLWAYS ON MAIN FLOOR, AND THE BA
LAUNDRY AND STORE ROOMS. TARGET VOL PER ER IS 60K CUBIC FEET PER LEG. MOVE GREEN LINE RESET CRUISE W\ -2.4 Pa. BASELINE
CUBIC FEET.

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time: 1121 End Time: 1146 Room/Area: RECTORY BASEMENT LAUNDRY

	T=	CFM	Pascals	Run No.	Time
1	5	2546	5.3	011(IA-007A-LAU)	1123
2	10	2718	5.5	012(IA-007B-LAU)	1131
3	15	2836	4.5	013(IA-007C-LAU)	1139
4	20	2617	10.1		
5	25	2226	6.6		
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

Comments

BASELINE AT -1.2 Pa. ADDED IN 64715 CUBIC FEET OF OUTDOOR AIR. POSITIVE PRESSURIZATION AT SAME LOCATION AS NEG PRES.

PART J
SUMMA CANISTERS

Location/ Area: NA

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

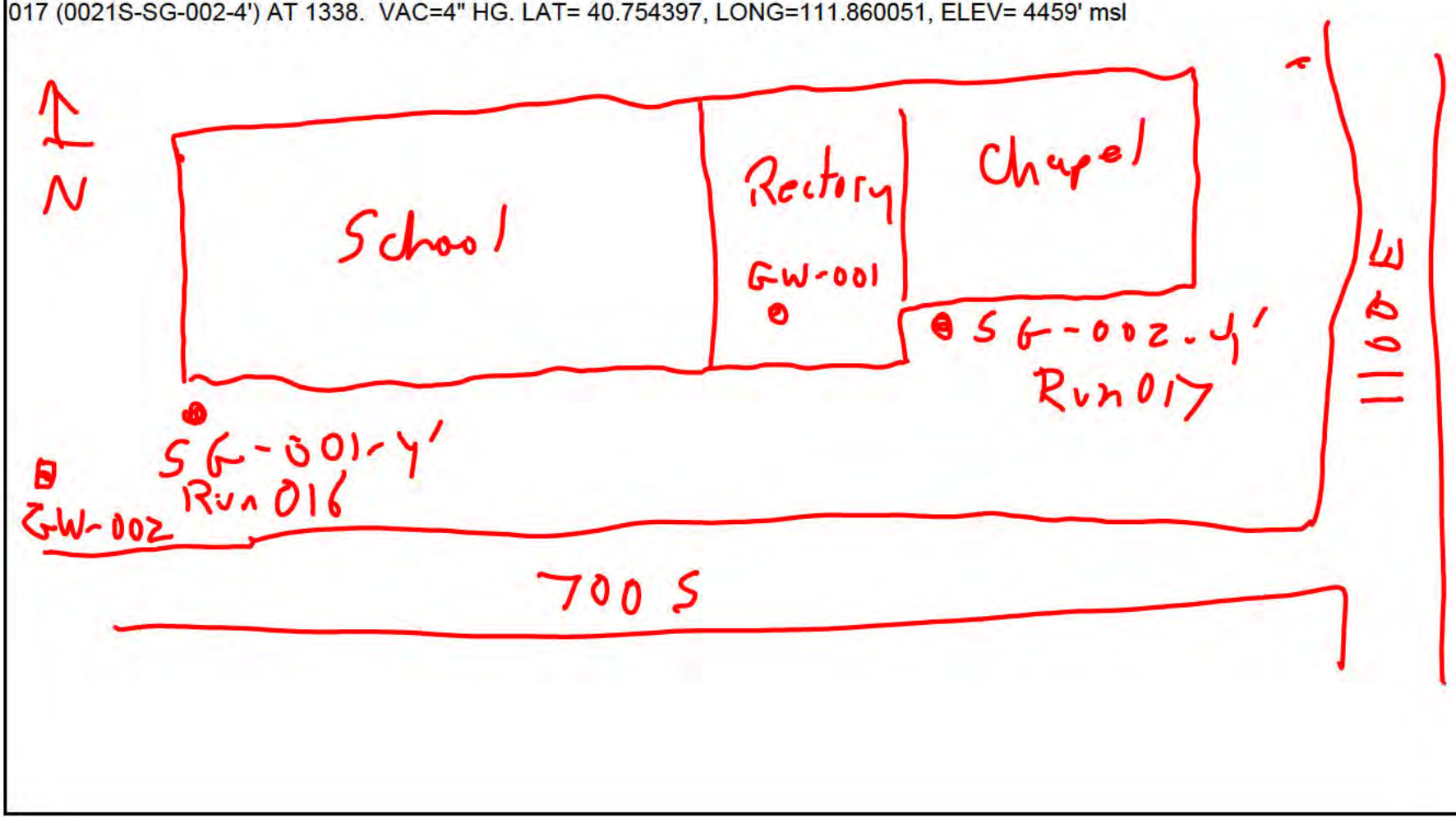
Comments

PART K
SOIL GAS

Date	02\19\15	Time	1330	Sample Depth	4FT		
Latitude	40.754336	Longitude	111.861099			Elevation	4418'
Run No	016 (SG-001-4)	Run Time	1330			Vacuum (in/Hg)	4

Comments

017 (0021S-SG-002-4') AT 1338. VAC=4" HG. LAT= 40.754397, LONG=111.860051, ELEV= 4459' msl



Dec 12th 1:02

0021-C

COMMERCIAL / INDUSTRIAL BUILDING QUESTIONNAIRE

Indoor Air Assessment Survey

Date: 19/2014 Survey / questionnaire completed by:

1. 4102

2.

3. of

84102

Phone 1: 801 364 5624 Phone 2: Cell Phone:

4. Total number of occupants/persons at this location? ~ 225

Number of Children Ages

5. How long have you occupied this location? Since 1964

How days per week is building occupied? 5 hrs

How hours per day is building occupied? 9 hrs

General Building / Structure Description

6. Type of Building/Structure (check only one): Single Business ☐, Multiple Businesses ☐,

Other School

7. Building/Structure Description:

Number of floors: 3 Area /square footage of main or ground floor: square feet

Basement ☐ Area /square footage of Basement: square feet

Crawlspace ☐ Area /square footage of Crawlspace: square feet

Partial crawlspace/basement ☐ % of each

Slab on grade ☒ Area /square footage of Slab on grade: square feet

Other ☐

8. Age of Building/Structure: 50 years, Not sure/Unknown ☐

9. General Above-Ground Building/Structure construction (check all that apply):

Wood ☐, Brick ☒, Concrete ☐, Cement block ☐, Other ☐

10. Foundation Construction (check all that apply):

Concrete Slab ☒

Fieldstone ☐

Concrete block ☐

Elevated above ground/grade ☐

Other ☐

002-C

11. Do you have private well ☐ or cistern ☐ ?
If yes, please describe location, use and current condition_____
_____
_____

12. Do you have a septic system? Yes ☒ No ☒ Not used ☐ Unknown ☐
If yes, what is construction type?_____
Where is it located? _____
When was the last time it was serviced?_____
Do you (or have you ever) use(d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your Building? (pond, ditch, etc.) Yes ☐ No ☐

Basement Description (please check all boxes that apply):

14. Is the basement finished ☐ or unfinished ☐ ? N/A

15. If finished, how many rooms are in the basement? _____
What are rooms used for? Office ☐ Shop ☐ Storage ☐
Other_____

16. If not finished, do you plan on finishing in the future? Yes ☐ No ☐

17. Is the basement floor (check all that apply) Concrete ☐, Tile ☐, Carpeted ☐, Dirt ☐,
Other ☐ _____

18. Are the basement walls poured Concrete ☐, Cement block ☐, Stone ☐, Wood ☐,
Brick ☐, Other ☐ _____

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☐
No ☐

Describe the moisture problem_____
_____
_____

20. Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☐
No ☐

21. Does the basement have any of the following? Floor cracks ☐, Wall cracks ☐, Sump ☐,
Floor drain ☐, Other hole/opening in floor ☐
describe _____

0021-C

22. Are any of the following used or stored in the basement (check all that apply):
Paint ☐ Paint Stripper/remover ☐ Paint thinner ☐ Metal degreaser/cleaner ☐
Gasoline ☐ Diesel fuel ☐ Solvents ☐ Glue ☐ Laundry spot removers ☐
Drain cleaners ☐ Pesticides ☐ Other equipment with fuel tanks (chain saw, lawn mower, snow blower, etc.) ☐ Other products with/containing Volatile Organic Compounds, describe:

_____

_____

23. Has the Building / structure recently (within the last six months) had any painting or remodeling?
Yes ☑ No ☐
If yes, specify what was done, where in the Building, and what month:
painted classroom

_____

_____

24. Has new carpeting been installed in the Building / structure within the last year? Yes ☐ No ☑
If yes, when and where?_____

25. Do any occupants / employees regularly conduct or work in beauty / hair-dressing business?
Yes, work at a beauty / hair-dressing business ☐
Yes, store supplies for beauty / hair-dressing business ☐ Distance to sample point:_____
Yes, building contains beauty / hair-dressing business ☐ Distance to sample point: _____
Yes, building is near beauty / hair-dressing business ☐ Distance to sample point: _____
No ☑

26. Do any occupants / employees / anyone regularly use or work or conduct a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) ☐
Yes, use dry-cleaning infrequently (monthly or less) ☐
Yes, work at a dry cleaning service ☐
Yes, building contains or is near dry cleaning service ☐ Distance to sample point: _____
No ☒

27. Do any occupants / employees / anyone in the Building / structure use solvents at work?
Yes ☐ If yes, how many persons?
No ☒ If no, go to question 28

28. If yes for question 26, are the work clothes washed at Building? Yes ☐ No ☐

29. Does Building / Structure contain a washer/dryer? Yes ☐ No ☒
Where are they located?
Basement ☐
Upstairs ☐
Ground floor ☐
Garage ☐
Other, please specify ☐ _____

30. If Building / Structure contains a dryer, is it vented to the outdoors? Yes ☐ No ☐

31. What type (s) of Building heating do you have (check all that apply)
Fuel type: Gas ☒, Oil ☐, Electric ☐, Wood ☐, Coal ☐,
Other ☐ _____

Heat conveyance system: Forced hot air ☒ Forced hot water ☐ Steam ☐
Radiant floor heat ☐ Wood Stove ☐ Coal furnace ☐ Fireplace ☐
Other ☐ _____

0021-C

32. Does Building/Structure have (or had in the past) a storage tank for storage of gasoline ☐, fuel oil ☐, propane ☐ If yes, where is/was it located? _____

How is/was the tank filled? _____

Is there staining near the tank? Yes ☐ No ☐

33. Does Building/Structure have air conditioning? Yes ☐ No ☒
Central air conditioning ☐
Window air conditioning unit (s) ☐
Other (please specify) _____

34. Does Building / Structure have any: Room fans ☐, Ceiling fans ☐, Attic fan ☐

35. Does Building / Structure ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☐ No ☐

36. Has Building / Structure had termite or other pesticide treatment? Yes ☒ No ☐ Unknown ☐
If yes, please specify type of pest controlled spiders
and approximate date of service yearly

37. Water heater type: Gas ☒, Electric ☐, by Furnace ☐,
Other (please describe) _____

38. Water heater location: Basement ☐, Upstairs ☐, Ground Floor ☒, Attic ☐,
Other _____

39. Does Building/Structure have any cooking appliances? Electric ☐, Gas ☒,
Other _____

40. Is there a stove exhaust hood present? Yes ☒ No ☐
Does it vent to the outdoors? Yes ☒ No ☐

41. Smoking in Building/Structure:
None ☒, Rare (only guests) ☐, Moderate (occupants, light smokers) ☐,
Heavy (at least one heavy smoker in Building/Structure) ☐

42. If yes to question 40, what do they smoke?
Cigarettes ☐, Cigars ☐, Pipe ☐, Other ☐

43. Does Building/Structure regularly contain/use air fresheners? Yes ☐ No ☐

44. Does anyone in the Building have indoor Building hobbies or crafts involving:
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☐, spray paint ☐,
wood finishing ☐, Other ☐ _____

45. General Building / Structure use of industrial / office /consumer products (circle as appropriate). Assume that: Never = never used, Hardly ever = less that once/month, Occasionally = about once/month, Regularly = about once/week, and Often = more that once/week.

Product	Frequency of Use				
Solvents	Never	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	Never	Hardly ever	Occasionally	Regularly	Often
Insecticides	Never	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	Occasionally	Regularly	Often
Window cleaners	Never	Hardly ever	Occasionally	Regularly	Often
Ink / Toner Cartridge	Never	Hardly ever	Occasionally	Regularly	Often
Glue / Adhesives	Never	Hardly ever	Occasionally	Regularly	Often
Paint	Never	Hardly ever	Occasionally	Regularly	Often
Petroleum Fuel	Never	Hardly ever	Occasionally	Regularly	Often

46. Please check weekly Building/Structure maintenance, janitorial, and cleaning practices:
Dusting ☒
Dry Sweeping ☒
Vacuuming ☒
Polishing (furniture, etc.) ☒
Washing/waxing floors ☒
Other (describe) ☐

47. Other comments including items / subjects not covered in this questionnaire yet an issue or concern for the Building / Structure:

_____

_____

_____

_____

_____

_____

_____

_____

0021-C

48. **Chemical Inventory/Summary**

	Chemical/Chemical Product (consumer name)	Amount present in Building / Structure
a)	Waxie Enzymatic Luster Cream	~ 2 cases
b)		
c)		
d)	Ecolab dishwashing detergents	~ 17 gals
e)		
f)	Kenstrip Lacquer thinner	
g)		
h)		
i)		
j)		
k)		
l)		
m)		
n)		
o)		

PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0022-S

Street Address: 650 S. 1100 E.

ZIP: 84105

Property Contact:

Tel #:

Latitude: 40.75005

Longitude: 111.860038

Age of Property: 55 years

Number of Levels: 4

Basement? (●) Yes ( ) No

Basement Habitable? ( ) Yes (●) No

Sump? ( ) Yes (●) No

Completed by: ERR

Date: 12/12/2014

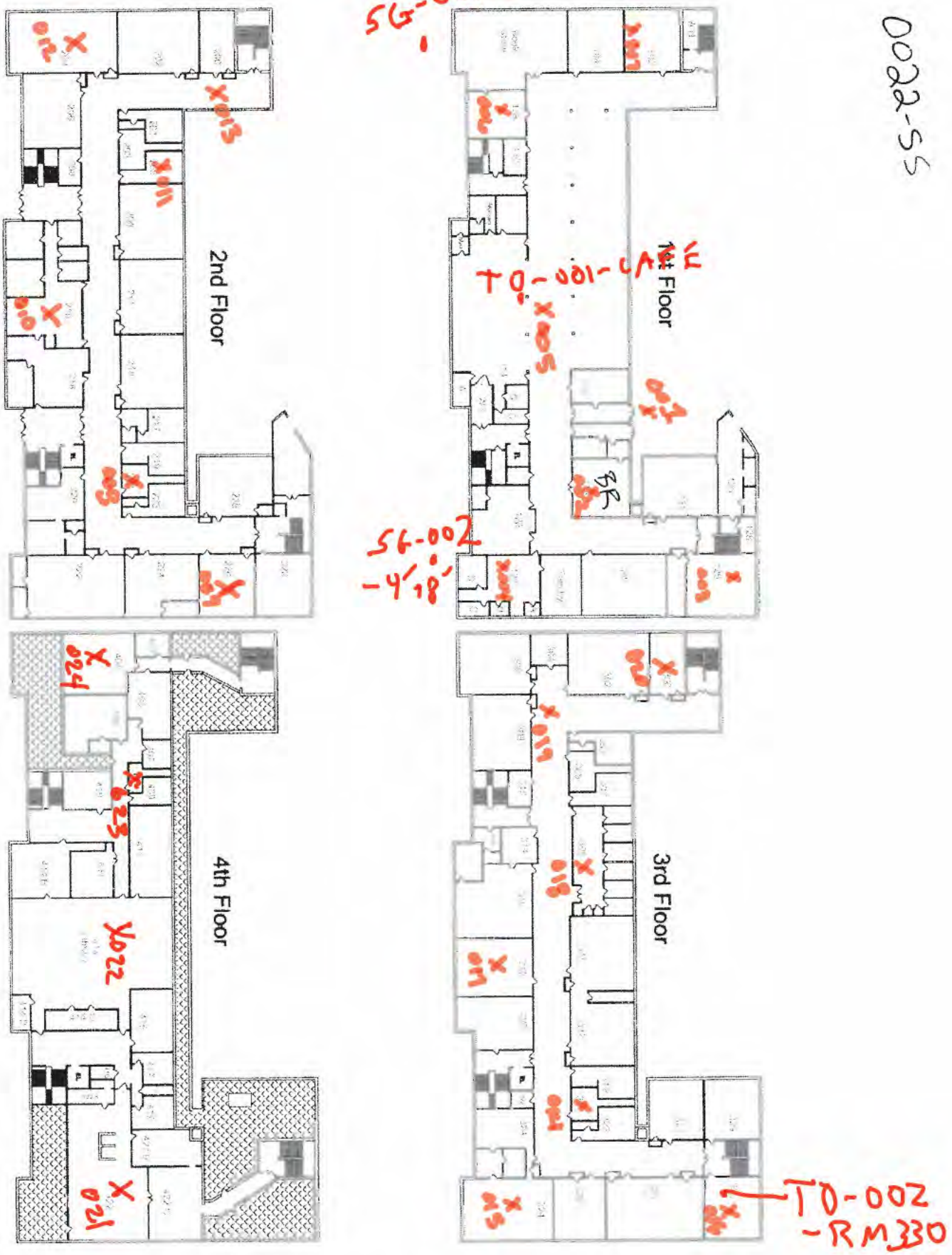
Comments

Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.

0022-55


X033
X031
Boys Locker Room
X035
X034
032
X029
Classroom lower level
Music Room 1st Floor
X028
X027
lower level
X025
1st Floor

0022-55



25,000 main bldg

PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 04/6/15 Time of Arrival: 0630

Weather Conditions: Cloudy

Temperature: 46 Barometric Pressure (inHg): 29.70 Wind Direction: SW Speed: Calm

Field Crew 1: ERR Role: HAPSITE Operator

Field Crew 2: DED Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? (●) Yes ( ) No

If yes, have the materials been removed? ( ) Yes (●) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time	
044,003,005,006,008	04/01/15	0835	
Instrument Performance Check Run Number	Time		(●) Pass ( ) Fail
auto tune 04/05/15	2047		
Instrument Performance Check Re-run Number	Time		( ) Pass ( ) Fail
NA			
CCV Run Number	Time		(●) Pass ( ) Fail
002-0.55ppb-04/05/15	2124		
CCV Re-run Number	Time		(●) Pass ( ) Fail
003-5.5ppb 04/05/15	2132		

Operator's initials: ERR

Comments

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time: 0650 End Time: 0652

Location: Between rear (west) of Main classroom building and Dance Hall Bldg.

Run Number: 001(IA-001-OUT) Time: 0650

Run Number: NA Time:

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

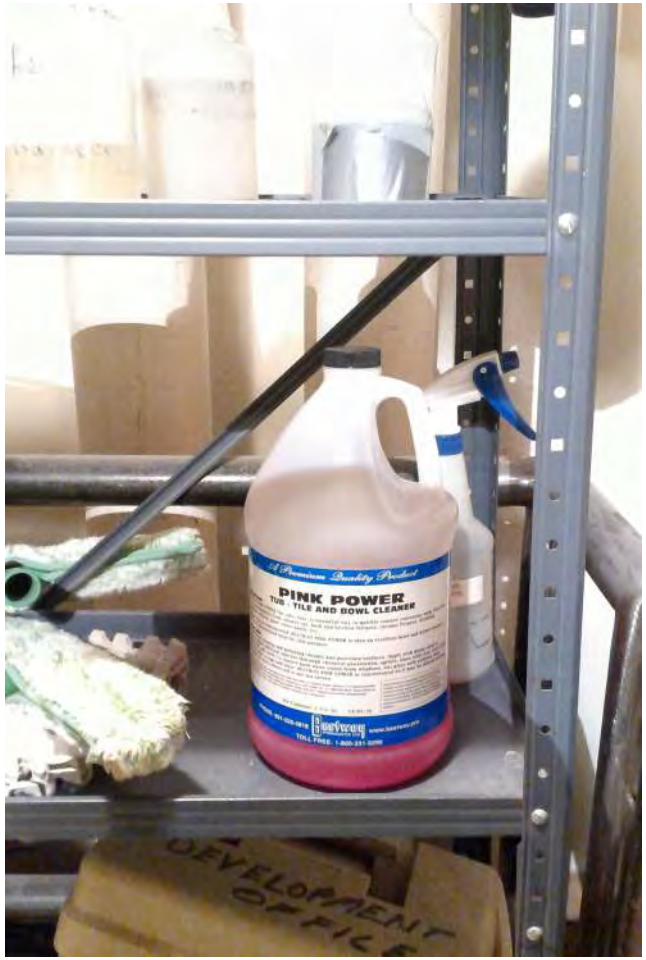
In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time 0901 End Time 0903

Comments

Survey 001 0901-0904 Room 221 - Cleaners and treatment tank for lab wastes - MAX TIC = 215,518, PCE ions present. Attempted survey of container labelled degreaser, but ion count quickly went into millions, incl PCE ions, and stopped survey before instrument was oversaturated. PHOTOS: WIN_20150406_Survey01-2nd floor closet; WIN_20150406_Survey01-PCE Source Mat; WIN_20150406_Survey01-Potential Source Mat.




A Premium Quality Product
PINK POWER
TUB / TILE AND BOWL CLEANER

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time NA End Time NA

Comments

No areas observed. Most of the buildings areas are above grade with well maintained floors with no entry points. Note that full analyze data runs were performed in boiler rooms and storage rooms with pipe chases to identify broad entry areas and associated concentrations.

Pictures

PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	0702	End Time	1359		
Room/area	BOILER ROOM/MAIN BUILDING	Run Number	002(IA-002-BOI1)	Time	0702
Room/area	Classroom 126/Main building	Run Number	003(IA-003-CR126)	Time	0710
Room/area	Campus ministry Room122	Run Number	004(IA-004-RM122)	Time	0718
Room/area	Cafeteria/Main building	Run Number	005(IA-005-CAFE)	Time	0726
Room/area	Room 108 student council/main building	Run Number	006(IA-006-RM108)	Time	0737
Room/area	Classroom 102/Main building	Run Number	007(IA-007-CR102)	Time	0744
Room/area	Room 221 2nd floor storage room/Main building	Run Number	008(IA-008-STO1)	Time	0758
Room/area	Classroom 226/Main building	Run Number	009(IA-009-CR226)	Time	0806
Room/area	2nd floor/main office, Rm 216	Run Number	010(IA-010-RM216)	Time	0814
Room/area	2ND Floor girls bathroom	Run Number	011(IA-011-RM205)	Time	0827

Comments

Run 012(IA-012-CR206) - Classroom 206/Main building- 0836; Run 013(IA-013-HAL1)- 2ND Floor hallway/southwest corner-0844; Run 014 (IA-014-STO2)-3RD Floor storage/RM321-0916; Run 015-(IA-015-CR324)-3RD Floor/Chemistry lab-0923; Run 016(IA-016-CR330)-3RD Floor/main building classroom 330-0932; Run 017(IA-017-CR318)-3RD Floor/main building classroom 318-0943; Run 018(IA-018-RM309)-3RD Floor/Counseling centerRM309-0952; Run 019(IA-019-HAL2)-3RD Floor hallway/southeast corner- 1000; Run 020(IA-020-CR300)-3RD Floor/Main building/classroom 300-1009; Run 021(IA-021-CR422)-4TH Floor/Main building/Art room-1025; Run 022(IA-022-RM414)-4th floor/Main building/Library-RM414-1033; Run 023(IA-023-STO3)-4th floor/Main building/storage RM413-1044; Run 024(IA-024-CR406)-4th floor/classroom

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time NA End Time NA Room/Area NA

T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
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T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

No suitable areas for conducting pressure testing, School buildings are too large volumetrically with no smaller doors that would work with the air door, or are single small rooms too small to test.

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time NA End Time NA Room/Area NA

T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

See note on negative pressure testing. Positive test was not necessary since negative pressure test was not conducted.

PART J
SUMMA CANISTERS

Location/ Area: Main classroom bldg, first floor, cafeteria

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0022S-TO-001-CAFE	0199	04/06/15	1200	25	04/07/15	11:55	4

Location/ Area: Main classroom bldg, third floor, room 330

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0022S-TO-002-RM330	0260	04/06/2015	12:40	27	04/07/2015	12:10	2

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

IMG_0263_TO-001-CAFE; IMG_0266_TO-002-RM330 See Next Page

Comments





PART K
SOIL GAS

Date	04/07/15	Time	0930-1030	Sample Depth	4,4,8		
Latitude	See below	Longitude				Elevation	
Run No	001, 002, 003	Run Time	1302-1318			Vacuum (in/Hg)	4,6, 7

Comments

.SG-001-4' located near SE corner of main building - Lat= 40.754680 , Long= 111.859855, Elev= 4467'. SG-002-4' and 8' located near the NE corner of the main building. Lat= 40.755309, Long= 111.859875, Elev= 4471'. Photos: IMG_0968-0022S-SG-001 Loc.jpg; IMG_0970_0022S-SG-002 Loc.jpg SEE NEXT PAGE.


2015/04/07 09:20


2015/04/07 10:08

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

022-55

ACADEMIC/COMMERCIAL/INDUSTRIAL BUILDING QUESTIONNAIRE

Indoor Air Assessment Survey

Date: 12/12/14 Survey / questionnaire completed by: Ellen Reid - First Env
Wrong form sent - filled out during interview + based on residential form

1. Contact Name: _____
   Address: _____ City: _____ State: _____ Zip: _____
   Phone 1: _____ Phone 2: _____ Cell Phone: _____
2. What is the best time to call to speak with you? _____
3. Are you the Owner ☐, Renter ☐, Other ☐ (please specify) _____ of this Building/Structure? If you are not the owner, please provide owner contact information
   Owner Name: _____
   Address: _____ City: _____ State: _____ Zip: _____
   Phone 1: _____ Phone 2: _____ Cell Phone: _____
4. Total number of occupants/persons at this location? 2825
   Number of Children 775 Ages 13-18
5. How long have you occupied this location? Since 1921?
   How days per week is building occupied? _____
   How hours per day is building occupied? _____

General Building / Structure Description

6. Type of Building/Structure (check only one): Single Business ☐, Multiple Businesses ☐,
   Other High School
7. Building/Structure Description:
   Number of floors: 4 Area /square footage of main or ground floor: _____ square feet
   Basement ☒ Area /square footage of Basement: _____ square feet
   Crawlspace ☒ Area /square footage of Crawlspace: _____ square feet
   Partial crawlspace/basement ☒ % of each _____
   Slab on grade ☒ Area /square footage of Slab on grade: _____ square feet
   Other ☐ _____
8. Age of Building/Structure: Built in 1960 54 years, Not sure/Unknown ☐
9. General Above-Ground Building/Structure construction (check all that apply):
   Wood ☐, Brick ☒, Concrete ☒, Cement block ☒, Other ☐ _____
10. Foundation Construction (check all that apply): ☒

022-55

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

Concrete Slab
Fieldstone ☐
Concrete block ☒
Elevated above ground/grade ☐
Other ☐ _____

022-55

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

11. Do you have private well ☐ or cistern ☐ ?
If yes, please describe location, use and current condition ND

12. Do you have a septic system? Yes ☐ No ☒ Not used ☐ Unknown ☐
If yes, what is construction type? _____
Where is it located? _____
When was the last time it was serviced? _____
Do you (or have you ever) use(d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your Building? (pond, ditch, etc.) Yes ☐ No ☒

Basement Description (please check all boxes that apply):

14. Is the basement finished ☒ or unfinished ☐ ?

15. If finished, how many rooms are in the basement? School
What are rooms used for? Office ☐ Shop ☐ Storage ☐
Other _____

16. If not finished, do you plan on finishing in the future? Yes ☐ No ☒

17. Is the basement floor (check all that apply) Concrete ☒, Tile ☒, Carpeted ☐, Dirt ☐,
Other ☐ _____

18. Are the basement walls poured Concrete ☒, Cement block ☒, Stone ☐, Wood ☐,
Brick ☐, Other ☐ _____

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☒
Yes, rarely (less than 1 time/year) ☐
No ☐

Describe the moisture problem from sprinkler

20. Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☐
No ☒

21. Does the basement have any of the following? Floor cracks ☒, Wall cracks ☒, Sump ☐,
Floor drain ☐, Other hole/opening in floor ☐
describe _____

022-55

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500 Foothill Drive
Salt Lake City, UT 84148

22. Are any of the following used or stored in the basement (check all that apply):
Paint ☐ Paint Stripper/remover ☐ Paint thinner ☐ Metal degreaser/cleaner ☐
Gasoline ☐ Diesel fuel ☐ Solvents ☐ Glue ☐ Laundry spot removers ☐
Drain cleaners ☐ Pesticides ☐ Other equipment with fuel tanks (chain saw, lawn mower, snow blower, etc.) ☐ Other products with/containing Volatile Organic Compounds, describe:

_____

_____

23. Has the Building / structure recently (within the last six months) had any painting or remodeling?
Yes ☒ No ☐
If yes, specify what was done, where in the Building, and what month:

_____

_____

24. Has new carpeting been installed in the Building / structure within the last year? Yes ☐ No ☒
If yes, when and where? _____

25. Do any occupants / employees regularly conduct or work in beauty / hair-dressing business?
Yes, work at a beauty / hair-dressing business ☐
Yes, store supplies for beauty / hair-dressing business ☐ Distance to sample point: _____
Yes, building contains beauty / hair-dressing business ☐ Distance to sample point: _____
Yes, building is near beauty / hair-dressing business ☐ Distance to sample point: _____
No ☒

26. Do any occupants / employees / anyone regularly use or work or conduct a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) ☐
Yes, use dry-cleaning infrequently (monthly or less) ☐
Yes, work at a dry cleaning service ☐
Yes, building contains or is near dry cleaning service ☐ Distance to sample point: _____
No ☒

27. Do any occupants / employees / anyone in the Building / structure use solvents at work?
Yes ☐ If yes, how many persons?
No ☒ If no, go to question 28

28. If yes for question 26, are the work clothes washed at Building? Yes ☐ No ☐

29. Does Building / Structure contain a washer/dryer? Yes ☐ No ☐
Where are they located?
Basement ☒
Upstairs ☐
Ground floor ☐
Garage ☐
Other, please specify ☐ _____

30. If Building / Structure contains a dryer, is it vented to the outdoors? Yes ☐ No ☒

31. What type (s) of Building heating do you have (check all that apply)
Fuel type: Gas ☒, Oil ☐, Electric ☐, Wood ☐, Coal ☐,
Other ☐ Boiler _____

Heat conveyance system: Forced hot air ☒ Forced hot water ☒ Steam ☒
Radiant floor heat ☐ Wood Stove ☐ Coal furnace ☐ Fireplace ☐
Other ☐ _____

022-55

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500 Foothill Drive
Salt Lake City, UT 84148

32. Does Building/Structure have (or had in the past) a storage tank for storage of gasoline ☐, fuel oil ☐, propane ☐
If yes, where is/was it located? No

How is/was the tank filled? _____

Is there staining near the tank? Yes ☐ No ☐

33. Does Building/Structure have air conditioning? Yes ☒ No ☐
Central air conditioning ☒
Window air conditioning unit (s) ☒
Other (please specify) Swamp cooler

34. Does Building / Structure have any: Room fans ☒, Ceiling fans ☒, Attic fan ☐

35. Does Building / Structure ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☐ No ☐

36. Has Building / Structure had termite or other pesticide treatment? Yes ☒ No ☐ Unknown ☐
If yes, please specify type of pest controlled _____
and approximate date of service _____

37. Water heater type: Gas ☒, Electric ☐, by Furnace ☒,
Other (please describe) _____

38. Water heater location: Basement ☒, Upstairs ☐, Ground Floor ☐, Attic ☐,
Other _____

39. Does Building/Structure have any cooking appliances? Electric ☒, Gas ☒,
Other _____

40. Is there a stove exhaust hood present? Yes ☒ No ☐
Does it vent to the outdoors? Yes ☒ No ☐

41. Smoking in Building/Structure: School
None ☒, Rare (only guests) ☐, Moderate (occupants, light smokers) ☐,
Heavy (at least one heavy smoker in Building/Structure) ☐

42. If yes to question 40, what do they smoke?
Cigarettes ☐, Cigars ☐, Pipe ☐, Other ☐

43. Does Building/Structure regularly contain/use air fresheners? Yes ☐ No ☒

44. Does anyone in the Building have indoor Building hobbies or crafts involving:
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☐, spray paint ☐,
wood finishing ☐, Other ☐ No

022-55

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

45. General Building / Structure use of industrial / office /consumer products (circle as appropriate).
Assume that: Never = never used, Hardly ever = less that once/month,
Occasionally = about once/month, Regularly = about once/week,
and Often = more that once/week.

Product	Frequency of Use				
Solvents	Never	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	Never	Hardly ever	Occasionally	Regularly	Often
Insecticides	Never	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	Occasionally	Regularly	Often
Window cleaners	Never	Hardly ever	Occasionally	Regularly	Often
Ink / Toner Cartridge	Never	Hardly ever	Occasionally	Regularly	Often
Glue / Adhesives	Never	Hardly ever	Occasionally	Regularly	Often
Paint	Never	Hardly ever	Occasionally	Regularly	Often
Petroleum Fuel	Never	Hardly ever	Occasionally	Regularly	Often

46. Please check weekly Building/Structure maintenance, janitorial, and cleaning practices:
Dusting ☒
Dry Sweeping ☒
Vacuuming ☒
Polishing (furniture, etc.) ☒
Washing/waxing floors ☒
Other (describe) ☐

47. Other comments including items / subjects not covered in this questionnaire yet an issue or concern for the Building / Structure:

022-55

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

48. **Chemical Inventory/Summary**

Chemical/Chemical Product (consumer name)	Amount present in Building / Structure

a) _____

b) _____

c) _____

d) _____

e) _____

f) _____

g) _____

h) _____

i) _____

j) _____

k) _____

l) _____

m) _____

n) _____

o) _____

PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0023-H
Street Address: 1211 Gilmer Dr.
ZIP: 84105

Property Contact:
Tel #:

Latitude: 40.749164
Longitude: 111.854789
Age of Property: 74 years

Number of Levels: 4
Basement? (•) Yes ( ) No
Basement Habitable? (•) Yes ( ) No
Sump? (•) Yes ( ) No

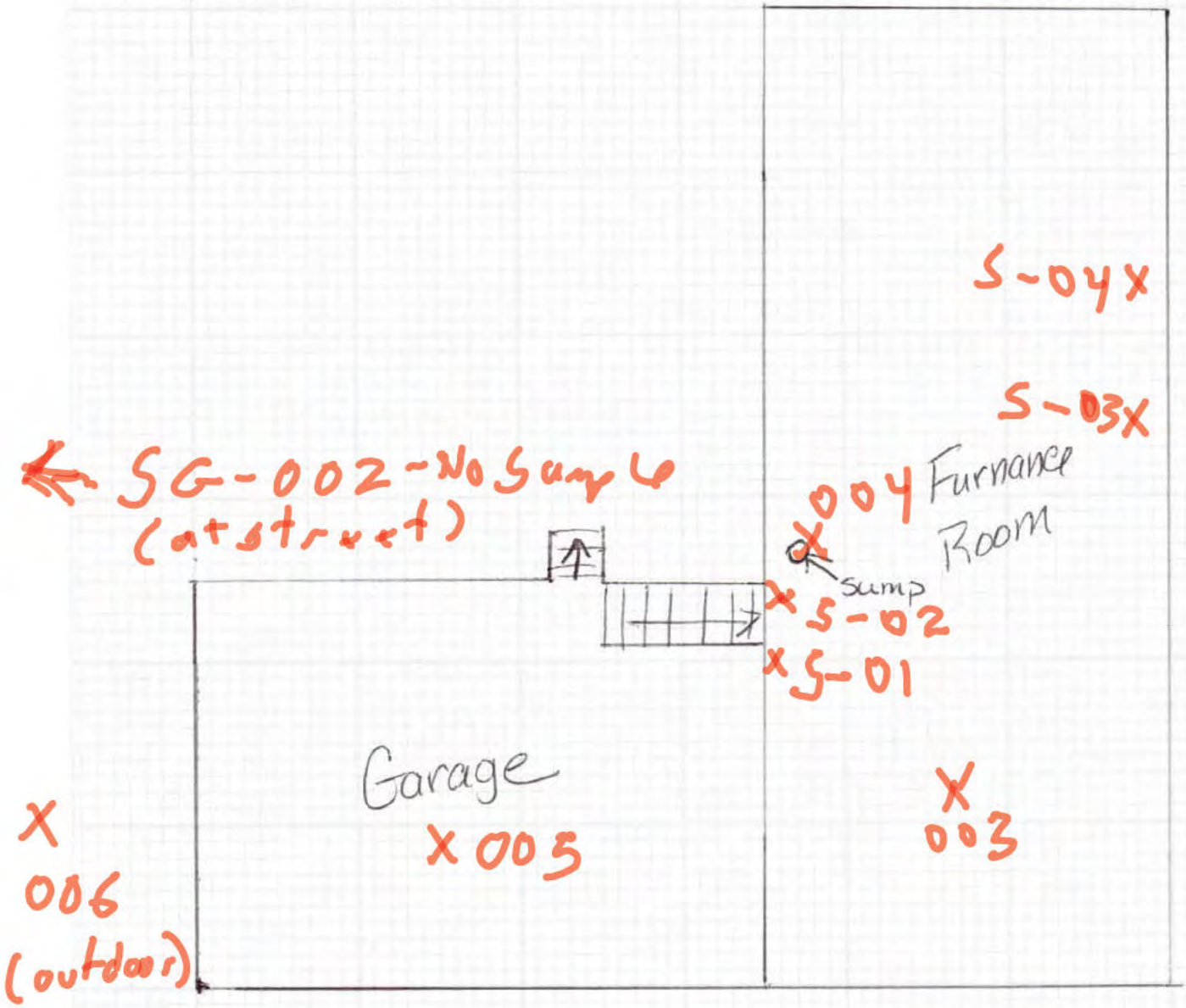
Completed by: ERR
Date: 12/08/2014

Comments

Elevation at street by drive = 4474' msl. Total topo relief onsite is about 30 ft, with the elevation at the rear (north) edge of property about 4505'. Furnace r
accessed thru garage) has a sump pit in floor. Total depth is 1.6', water level is controlled at 0.8' below floor level. Pump operates at least once a minute,
gpm. Homeowner reports that if pump fails the water will rise in a few hours to flood the basement with 2-3 ft of water. This home has two below grade ba
furnace room is not habitable and extends beneath part of the larger finished basement.

Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.

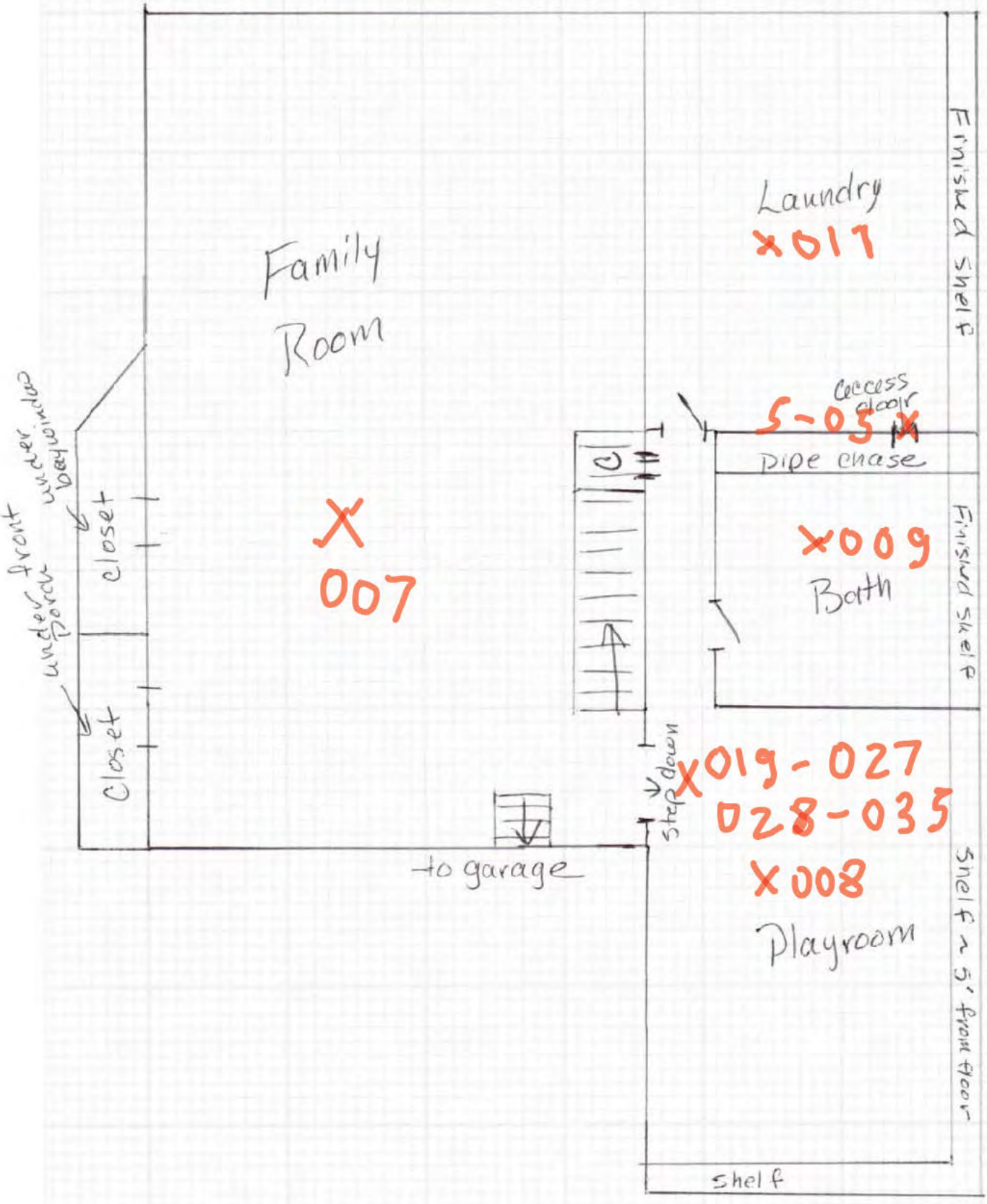
0023-H Garage and furnance room (below grade)



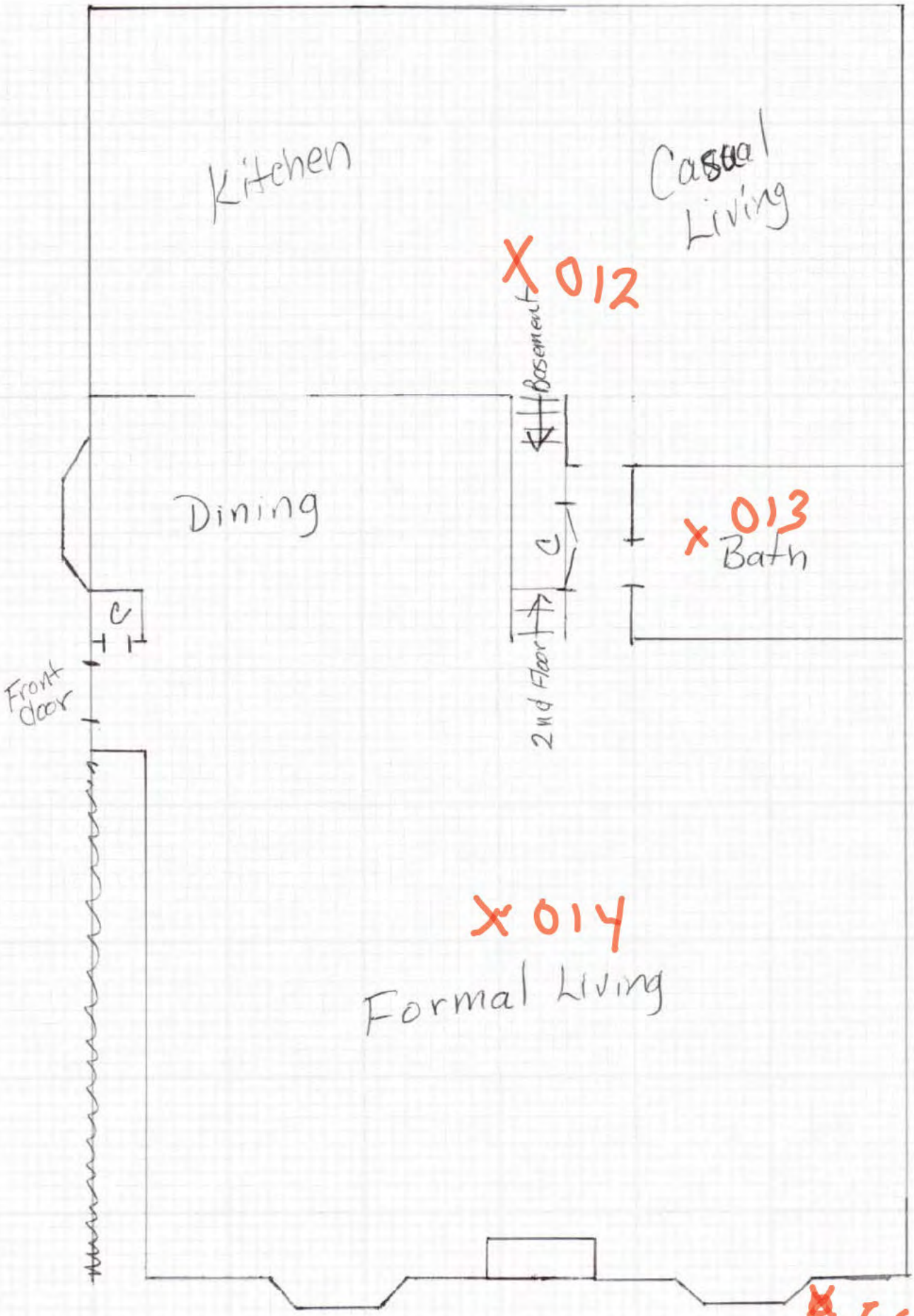
S = Survey

0023-H

Basement - Living Area

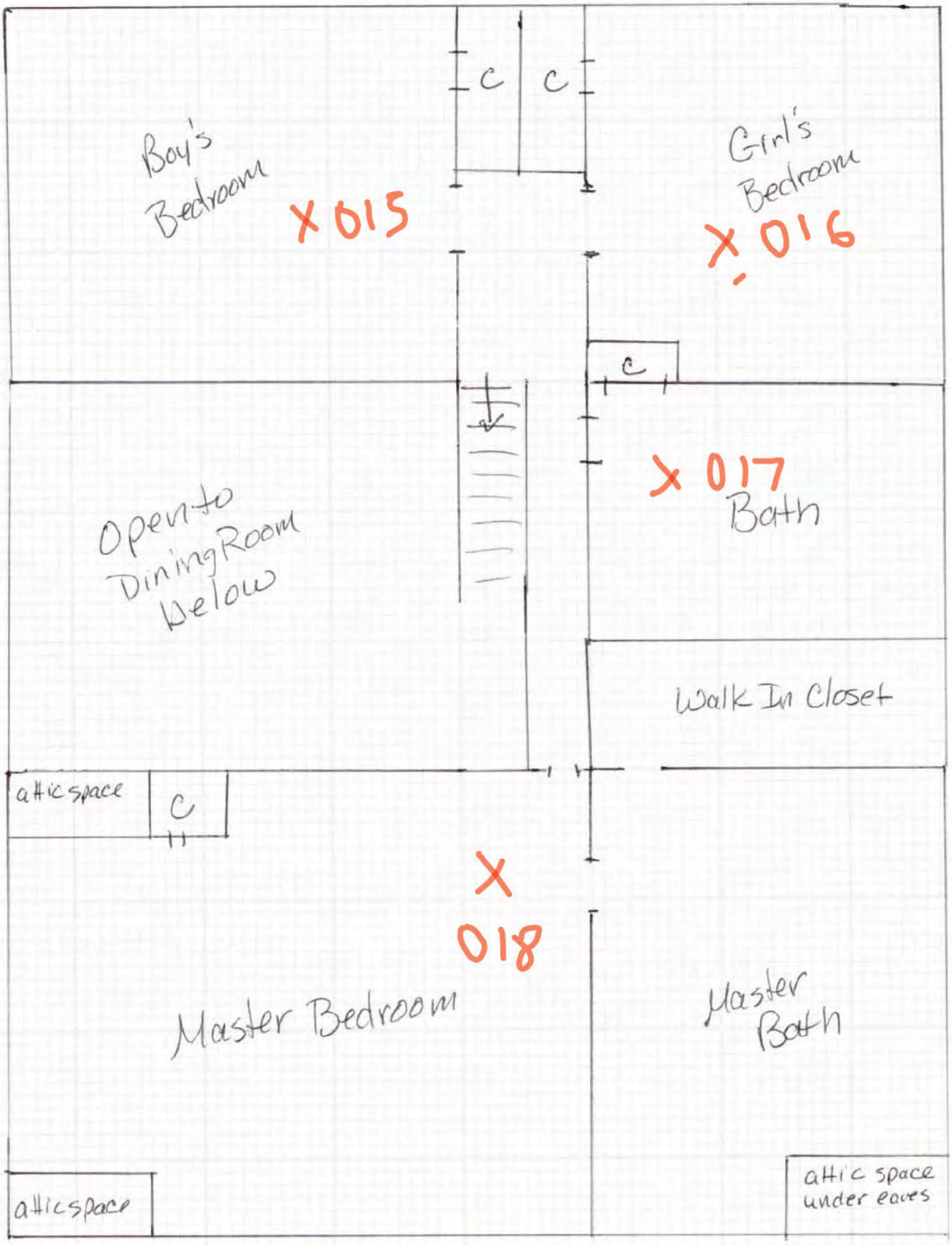


0023-H 1st Floor



5G-001-4'
+6.5
3/10 Runs 004 - 005

00 23-1+ 2nd Floor



PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 3/9/15 Time of Arrival: 0830

Weather Conditions: Sunny

Temperature: 36 Barometric Pressure (inHg): 30.10 Wind Direction: SE Speed: Calm

Field Crew 1: ERR Role: HAPSITE Operator

Field Crew 2: DED Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? (●) Yes ( ) No

If yes, have the materials been removed? ( ) Yes (●) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

Sources, including paint, drywall patch compound, insecticides, fertilizer, and caulks located in furnace basement.

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time	
001,002,004,005,006	3/5/15	1830	
Instrument Performance Check Run Number	Time	◉ Pass	
AUTOTUNE	0705	○ Fail	
Instrument Performance Check Re-run Number	Time	○ Pass	
NA		○ Fail	
CCV Run Number	Time	◉ Pass	
001 (5 ppb)	0724	○ Fail	
CCV Re-run Number	Time	◉ Pass	
002 (0.5 ppb)	0732	○ Fail	

Operator's initials: ERR

Comments

Collected and tested soil gas on 3/10. CCV Runs for 3/10 were runs 001 & 003 (002 aborted by machine) at 1043 & 1109; both CCV runs passed.

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time	0956	End Time	0958
Location	Sidewalk in front of garage.		
Run Number	006 (IA-004-OUT)	Time	0956
Run Number	NA	Time	

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time 0936 End Time 0942

Comments

Survey 003 Paint cans 0936 max TIC = 150,938. Survey 004 weed killer/bug spray 0940 max TIC = 142,346. Photos of shelves in furnace basement attac

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time 0928 End Time 0933

Comments

Survey 001 Crack at bottom of stairs in furnace room 0928 max TIC = 112,349. Survey 002 Sewer drain enters wall 0931 max TIC = 137,307. Survey 005 max TIC 114,684.

Pictures

Photos: basement sump, cracks at bottom of basement stairs.








Cuisinart

PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	0909	End Time	1203		
Room/area	Furnace Room	Run Number	003 (IA-001-FUR)	Time	0909
Room/area	Sump	Run Number	004 (IA-002-SUMP)	Time	0918
Room/area	Garage	Run Number	005 (IA-003-GAR)	Time	0948
Room/area	Lower level living area	Run Number	007 (IA-005-LLL)	Time	1008
Room/area	Basement play room	Run Number	008 (IA-006-PLA)	Time	1016
Room/area	Basement bathroom	Run Number	009 (IA-007-BA1)	Time	1024
Room/area	Laundry room	Run Number	011 (IA-008-LAU)	Time	1049
Room/area	Open concept living area	Run Number	012 (IA-009-OCL)	Time	1105
Room/area	Bathroom	Run Number	013 (IA-010-BA2)	Time	1114
Room/area	Open concept living area (2)	Run Number	014 (IA-011-OCL2)	Time	1122

Comments

Run 010 aborted. Boy's bedroom 015 (IA-012-BR1) 1136. Girl's bedroom 016 (IA-013-BR2) 1144. Upstairs bathroom 017 (IA-014-BA3) 1152. Master bedro
1201.

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time: 1320 | End Time: 1502 | Room/Area: Basement play room

T=	5	CFM	764	Pascals	-4.7	Run No.	019 (IA-016A-PLA)	Time	1325
T=	10	CFM	773	Pascals	-5.5	Run No.	020 (IA-016B-PLA)	Time	1333
T=	15	CFM	805	Pascals	-5.6	Run No.	021 (IA-016C-PLA)	Time	1341
T=	20	CFM	801	Pascals	-4.1	Run No.	022 (IA-016D-PLA)	Time	1350
T=	25	CFM	813	Pascals	-5.2	Run No.	023 (IA-016E-PLA)	Time	1400
T=	30	CFM	810	Pascals	-4.7	Run No.	024 (IA-016F-PLA)	Time	1415
T=	40	CFM	789	Pascals	-4.4	Run No.	025 (IA-016G-PLA)	Time	1430
T=	50	CFM	790	Pascals	-5.4	Run No.	026 (IA-016H-PLA)	Time	1447
T=	60	CFM	732	Pascals	-5.3	Run No.	027 (IA-016I-PLA)	Time	1457
T=	70	CFM	835	Pascals	-5.0	Run No.		Time	
T=	80	CFM	808	Pascals	-5.2	Run No.		Time	
T=	90	CFM	753	Pascals	-4.2	Run No.		Time	
T=	100	CFM	799	Pascals	-5.1	Run No.		Time	
T=	102	CFM	746	Pascals	-4.9	Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

80,000 = 2.5 air volumes. Total volume = 80,274 cuft, baseline pressure was -2.6 pascals. Air door installed in front door on first floor (only location it would finished basement at doorway to playroom.

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time: 1510 | End Time: | Room/Area: Basement play room

T=	5	CFM	1014	Pascals	3.9	Run No.	028 (IA-017A-PLA)	Time	1511
T=	10	CFM	904	Pascals	4.4	Run No.	029 (IA-017B-PLA)	Time	1520
T=	15	CFM	882	Pascals	5.0	Run No.	030 (IA-017C-PLA)	Time	1530
T=	20	CFM	853	Pascals	3.0	Run No.	031 (IA-017D-PLA)	Time	1541
T=	25	CFM	905	Pascals	4.9	Run No.	032 (IA-017E-PLA)	Time	1556
T=	30	CFM	956	Pascals	6.2	Run No.	033 (IA-017F-PLA)	Time	1610
T=	40	CFM	890	Pascals	4.2	Run No.	034 (IA-017G-PLA)	Time	1625
T=	50	CFM	913	Pascals	5.3	Run No.	035 (IA-017H-PLA)	Time	1634
T=	60	CFM	930	Pascals	6.0	Run No.		Time	
T=	70	CFM	881	Pascals	5.3	Run No.		Time	
T=	80	CFM	901	Pascals	5.1	Run No.		Time	
T=	88	CFM	902	Pascals	5.3	Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

80,160 total volume. baseline pressure= -1.6 pascals.

PART J
SUMMA CANISTERS

Location/ Area: NA

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

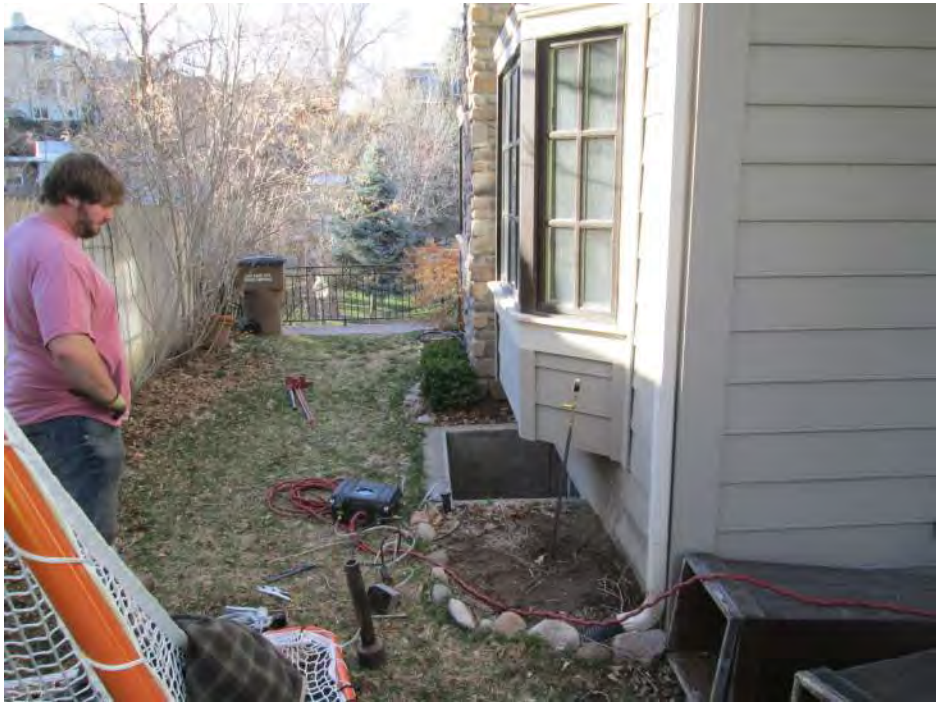
Comments

PART K
SOIL GAS

Date	3/10/15	Time	9:40	Sample Depth	4' & 6.5'
Latitude	40.749207	Longitude	111.854724	Elevation	4488'
Run No	004/005 (SG-001-4 and SG-001-6.5')	Run Time	1100/1110	Vacuum (in/Hg)	2" & 4"

Comments

SG-001-4' AND 6.5' LOCATED NEAR NORTHEAST CORNER OF HOUSE, ADJACENT TO EAST WALL BY BAY WINDOW. A SECOND LOCATI
ATTEMPTED NEAR THE DRIVEWAY AT GILMER DRIVE. THE PROBE WAS INSTALLED TO 3' AND ENCOUNTERED GROUNDWATER. THE
PULLED AND RE-INSTALLED TO 2', BUT THE SOIL WAS TIGHT CLAY AND HELD A 10" VACUUM, AND NO SAMPLE WAS COLLECTED. THI
LOCATED AT: Lat-40.749028; Long- 111.854747; Elevation-4475'. SEE ATTACHED PHOTOS.





Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

0023-H

OCCUPIED DWELLING QUESTIONAIRE

Indoor Air Assessment Survey

Date: 12/8/14

1. Name: _____

Address: [redacted]

Home Phone: _____ Work Phone: _____

2. What is the best time to call to speak with you? anytime At: Work [X] or Home [ ] ?

3. Are you the Owner [X], Renter [ ], Other [ ] (please specify) _____ of this Home/Structure? If you are not the owner, please provide owner contact Information

_____

_____

4. Total number of occupants/persons at this location? 4
Number of Children 2 Ages 14 and 11

5. How long have you lived at this location? since 1998

General Home Description

6. Type of Home/Structure (check only one): Single Family Home [X], Duplex [ ], Apartment [ ], Townhouse [ ] Other _____

7. Home/Structure Description:
Number of floors: 4
Basement [X]
Crawlspace [ ]
Partial crawlspace/basement [ ] % of each _____
Slab on grade [ ]
Other [ ] sub-basement

8. Age of Home/Structure: 1941 & 2007 years, Not sure/Unknown [ ]

9. General Above-Ground Home/Structure construction (check all that apply):
Wood [ ], Brick [ ], Concrete [X], Cement block [ ], Other [X] _____

10. Foundation Construction (check all that apply):
Concrete Slab [ ]
Fieldstone [ ]
Concrete block [ ]
Elevated above ground/grade [ ]
Other [ ] _____

023-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

11. Do you have private well ☐ or cistern ☐ ? Sump pump
If yes, please describe location, use and current condition_____

12. Do you have a septic system? Yes ☐ No ☒ Not used ☐ Unknown ☐
If yes, what is construction type?_____
Where is it located? _____
When was the last time it was serviced?_____
Do you (or have you ever) use (d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your home? (pond, ditch, etc.) Yes ☐ No ☒
Water comes inside the home.

Basement Description (please check all boxes that apply):

14. Is the basement finished ☐ or unfinished ☐ ? Both

15. If finished, how many rooms are in the basement? 3-4
What are rooms used for? Bedrooms ☐ Family room ☒ Storage ☒
Other Laundry

16. If not finished, do you plan on finishing in the future? Yes ☐ No ☒

17. Is the basement floor (check all that apply) concrete ☒, tile ☐, carpeted ☒, dirt ☐,
other ☒ wood

18. Are the basement walls poured concrete ☒, cement block ☐, stone ☐, wood ☐,
Brick ☐, other ☐ _____

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☒ 24 hrs a day in sub basement
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less that 1 time/year) ☐
No ☐

Describe the moisture problem French drain inside sub basement goes to a sump pump. 24 hrs a day.

20. .Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☐
No ☐
If pump goes off, it would.

21. Does the sub-basement have any of the following? Floor cracks ☒, Wall cracks ☒, Sump ☒,
Floor drain ☐, Other hole/opening in floor ☐
describe_____

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500 Foothill Drive
Salt Lake City, UT 84148

22. Are any of the following used or stored in the basement (check all that apply):
Paint ☒ Paint Stripper/remover ☐ Paint thinner ☐ Metal degreaser/cleaner ☐
Gasoline ☐ Diesel fuel ☐ Solvents ☐ Glue ☒ Laundry spot removers ☐ Drain cleaners
☒ Pesticides ☐ Other equipment with fuel tanks (chain saw, lawn mower, snow blower,etc.,)

23. Have you recently (within the last six months) done any painting or remodeling in your home?
Yes ☐ No ☒
If yes, specify what was done, where in the home, and what month:
_____
_____

24. Have you installed new carpeting in your home within the last year? Yes ☐ No ☒
If yes, when and where?_____

25. Do you regularly use or work in a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) ☐
Yes, use dry-cleaning infrequently (monthly or less) ☒
Yes, work at a dry cleaning service ☐
No ☐

26. Does anyone in your home use solvents at work?
Yes ☐ If yes, how many persons?
No ☒ If no, go to question 28

27. If yes for question 26, are the work clothes washed at home? Yes ☐ No ☐

28. Where is the washer/dryer located?
First Basement ☒ Not the sub-basement.
Upstairs utility room ☐
Kitchen ☐
Garage ☐
Use a Laundromat ☐
Other, please specify ☐ _____

29. If you have a dryer, is it vented to the outdoors? Yes ☐ No ☒

30. What type (s) of home heating do you have (check all that apply)
Fuel type: Gas ☒, Oil ☐, Electric ☐, Wood ☐, Coal ☐,
Other ☐_____

Heat conveyance system:
Forced hot air ☒
Forced hot water ☐
Steam ☐
Radiant floor heat ☐
Wood Stove ☐
Coal furnace ☐
Fireplace ☐
Other ☐ _____

023-H

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31. Does your home have (or had in the past) a storage tank for storage of: gasoline ☐ fuel oil ☐ propane ☐
If yes, where is/was it located? _____
_____
How is/was the tank filled? _____
_____
Is there staining near the tank? Yes ☐ No ☐

32. Do you have air conditioning? Yes ☒ No ☐
Central air conditioning ☒
Window air conditioning unit (s) ☐
Other (please specify) _____

33. Do you use any of the following? Room fans ☐, Ceiling fans ☐, Attic fan ☐

34. Do you ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☐ No ☐

35. Has your home had termite or other pesticide treatment? Yes ☐ No ☐ Unknown ☒
If yes, please specify type of pest controlled _____
And approximate date of service _____

36. Water heater type: Gas ☒, Electric ☐, by Furnace ☐,
Other (please describe) _____

37. Water heater location: Basement ☒, Upstairs utility room ☐, Garage ☐,
Other (please specify) _____

38. What type of cooking appliance do you have? Electric ☐, Gas ☒
Other (please describe) _____

39. Is there a stove exhaust hood present? Yes ☒ No ☐
Does it vent to the outdoors? Yes ☒ No ☐

40. Smoking in Home:
None ☒, Rare (only guests) ☐, Moderate (residents, light smokers) ☐,
Heavy (at least one heavy smoker in household) ☐

41. If yes to question 40, what do they smoke?
Cigarettes ☐ Cigars ☐
Pipe ☐ Other ☐

42. Do you regularly use air fresheners? Yes ☐ No ☒

43. Does anyone in the home have indoor home hobbies or crafts involving:
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☐
Spray paint ☐, wood finishing ☐, Other ☐ _____
_____
_____

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500 Foothill Drive
Salt Lake City, UT 84148

44. General family/home use of consumer products (please circle appropriate). Assume that: Never = never used, Hardly ever = less that once/month, Occasionally = about once/month, Regularly = about once/week, and Often = more that once/week.

Product	Frequency of Use				
Spray-on deodorant	Never	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	Never	Hardly ever	Occasionally	Regularly	Often
Insecticides	Never	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	Occasionally	Regularly	Often
Window cleaners	Never	Hardly ever	Occasionally	Regularly	Often
Nail polish remover	Never	Hardly ever	Occasionally	Regularly	Often
Hair sprays	Never	Hardly ever	Occasionally	Regularly	Often
Candles	Never	Hardly ever	Occasionally	Regularly	Often
Incense	Never	Hardly ever	Occasionally	Regularly	Often

45. Please check weekly household cleaning practices:

Dusting ☒
Dry sweeping ☒
Vacuuming ☒
Polishing (furniture, etc.) ☐
Washing/waxing floors ☐
Other (describe) ☐ Surface cleaning.

46. Other comments:

Given the water that comes into the home, we are anxious to have this addressed.

023-H

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500 Foothill Drive
Salt Lake City, UT 84148

47. Chemical Inventory/Summary

Chemical/Chemical Product (consumer name)	Amount present in home
a)	
b)	
c)	
d)	
e)	
f)	
g)	
h)	
i)	
j)	
k)	
l)	
m)	
n)	
o)	

PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0024-H
Street Address: 701 S. 1300 E.
ZIP:
Property Contact:
Tel #:
Latitude: 40.753888
Longitude: 111.853447
Age of Property: 86 years
Number of Levels: 2
Basement? (•) Yes ( ) No
Basement Habitable? (•) Yes ( ) No
Sump? ( ) Yes (•) No

Completed by: ERR
Date: 12/02/2014

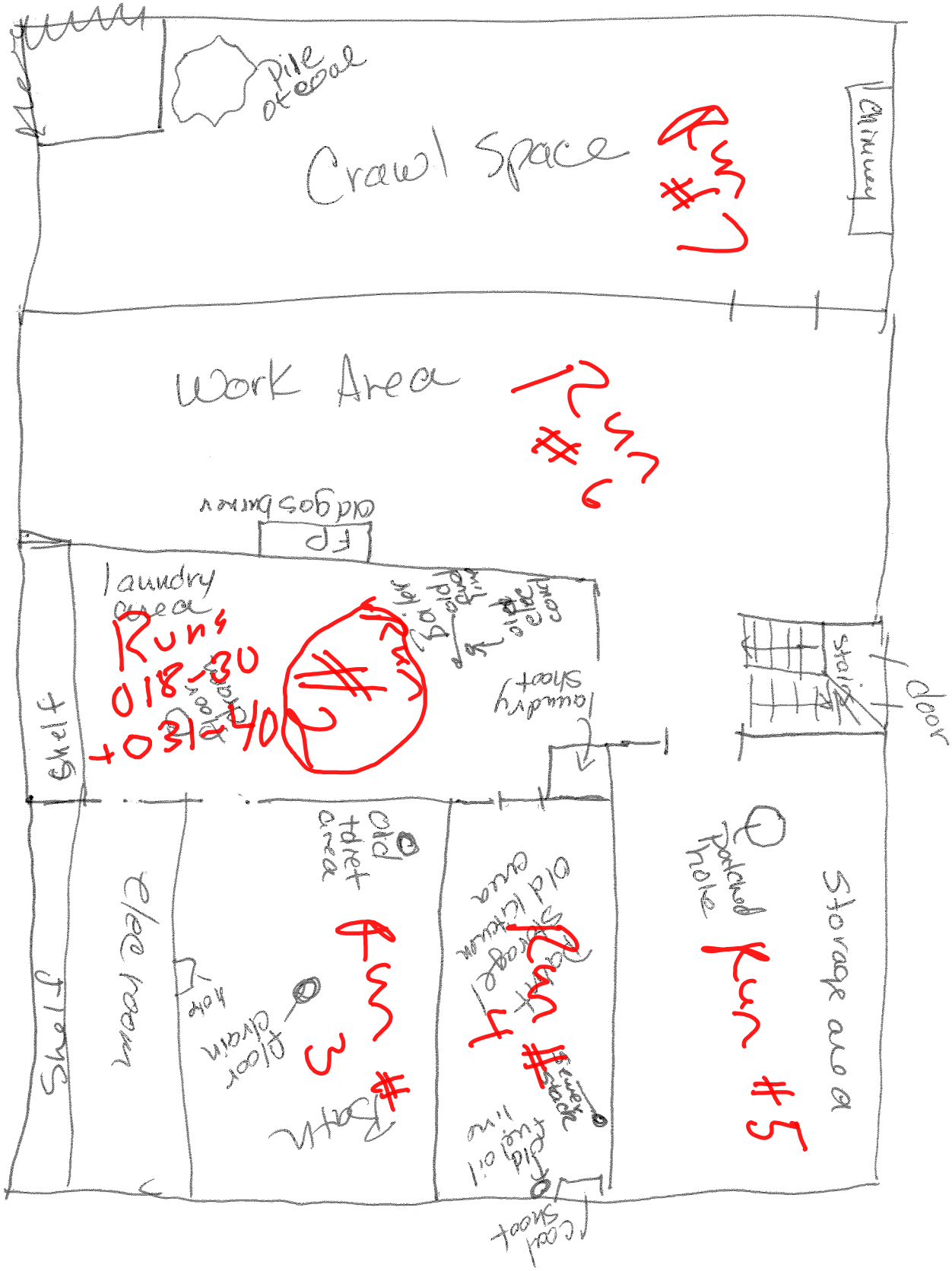
Comments

Elevation at 700 south entrance= 4550'

Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.

0024 - H

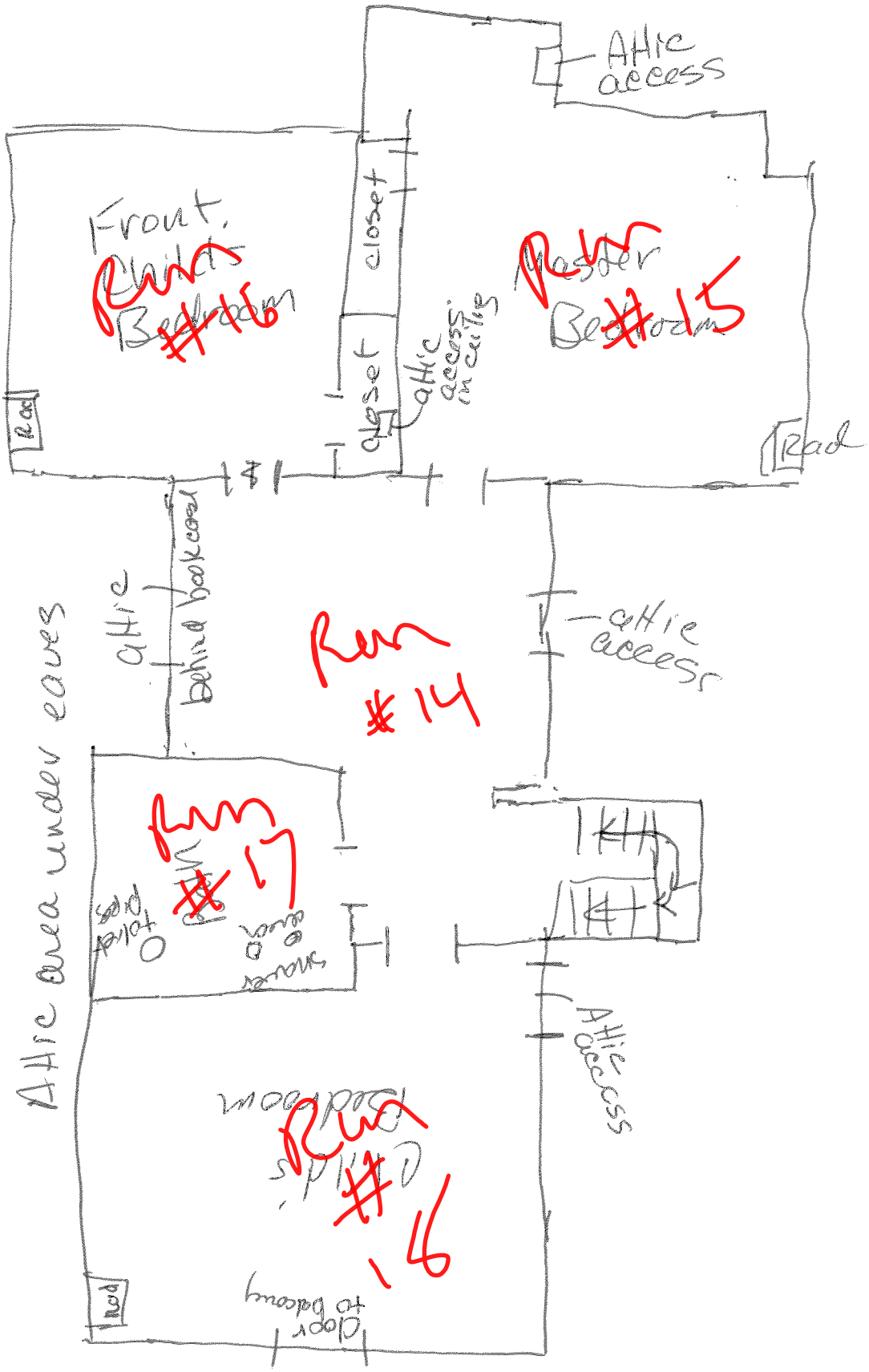
Basement



0024-H - Main Floor



0024-H - Upstairs



PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 2/11/15 Time of Arrival: 0830

Weather Conditions: Partly Cloudy

Temperature: 34 Barometric Pressure (inHg): 30.42 Wind Direction: NE Speed: Light

Field Crew 1: ac Role: HAPSITE Operator

Field Crew 2: ch Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? (●) Yes ( ) No

If yes, have the materials been removed? ( ) Yes (●) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

basement kitchen contains some paints, tire sealer, and carpet cleaner.

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time
1-5	2/9/15	1800

Instrument Performance Check Run Number	Time	
tunecheck	905	(•) Pass ( ) Fail

Instrument Performance Check Re-run Number	Time	
		( ) Pass ( ) Fail

CCV Run Number	Time	
041/045	1534	(•) Pass ( ) Fail

CCV Re-run Number	Time	
		(•) Pass ( ) Fail

Operator's initials: er

Comments

2/10/15 ccv run #s= 034, 035@ 1456, 1500

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time: 0914 End Time: 0918

Location: north side of house in parking strip about 30 ft from house

Run Number: 001(IA-001-OUT) Time: 0914

Run Number: Time:

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time 1018 End Time 1027

Comments

in basement kitchen area there is some paints, wood glue, caulk, dry wall materals, cleaners- tic count of 52000 near paint bucket sealed with plastic, other
around 46000, and basement storage work area some bike chain cleaner and tire sealent- tic count around 46000, for both pce ions 164 and 166 are flatlin

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time 1018 End Time 1027

Comments

floor drain in laundry room-nothing detected tic of 34000 , floor drain in basement bathroom- nothing detected tic of 46000, basement crawlspace with bare photo)-tic count 46000. for all locations pce main ions 164 and 166 are flatline.

Pictures

WIN_20150211_101013, WIN_20150211_101028, WIN_20150211_101122

PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	0923	End Time	1200		
Room/area	basement laundryroom/boiler room/electrical room	Run Number	002(0024-IA-002-LAU)	Time	0923
Room/area	basement old bathroom	Run Number	003(IA-003-BA1)	Time	0931
Room/area	old basement kitchen storage room east	Run Number	004(IA-004-STO1)	Time	0939
Room/area	basement storage ski storage room NE	Run Number	005(IA-005-STO2)	Time	0947
Room/area	basement storage work room NW	Run Number	006(IA-006-STO3)	Time	0955
Room/area	basement crawl space	Run Number	007(IA-007-CRA)	Time	1003
Room/area	kitchen dining and front room open area	Run Number	009(IA-008-OCL)	Time	1047
Room/area	main floor family room	Run Number	010(IA-009-FAM)	Time	1053
Room/area	main floor bedroom	Run Number	011(IA-010-BR1)	Time	1103
Room/area	mainfloor bathroom	Run Number	012(IA-011-BA2)	Time	1111

Comments

mainfloor office 013(IA-012-OFC) @1120 ;upstairs hallway and bathroom under construction with no door 014(IA-013-HAL)@1131 ; upstairs master bedro
015(IA-014-MBR)@1139 ; upstairs bedroom next to master bedroom, on Southwest 016(IA-015-BR2)@ 1147 ; upstairs bedroom on east 017(IA-016-BR3

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time 1217 End Time 1357 Room/Area air door in north side door hapsite in basement laundry room

T=	5	CFM	725	Pascals	-5.7	Run No.	018(IA-017A-LAU)	Time	1221
T=	10	CFM	811	Pascals	-5.0	Run No.	019 (IA-017B-LAU)	Time	1228
T=	15	CFM	711	Pascals	-5.2	Run No.		Time	1228
T=	20	CFM	598	Pascals	-5.1	Run No.	020 (IA-017C-LAU)	Time	1236
T=	26	CFM	685	Pascals	-5	Run No.	021 (IA-017D-LAU)	Time	1244
T=	30	CFM	757	Pascals	-5.7	Run No.		Time	1244
T=	35	CFM	741	Pascals	-5.5	Run No.	022(IA-017E-LAU)	Time	1251
T=	40	CFM	768	Pascals	-5.8	Run No.	023 (IA-017F-LAU)	Time	1251
T=	51	CFM	673	Pascals	-4.7	Run No.	024(IA-017G-LAU)	Time	1308
T=	60	CFM	759	Pascals	-5.6	Run No.	025(IA-017H-LAU)	Time	1317
T=	70	CFM	782	Pascals	-5.6	Run No.	026(IA-017I-LAU)	Time	1327
T=	80	CFM	765	Pascals	-5.0	Run No.	028(IA-017K-LAU)	Time	1338
T=	90	CFM	786	Pascals	-5.3	Run No.	029(IA-017L-LAU)	Time	1346
T=	100	CFM	609	Pascals	-4.8	Run No.	030(IA-017M-LAU)- shut down	Time	1354
T=		CFM		Pascals		Run No.		Time	

Comments

target volume is 72000 cubic feet. baseline -1.8 pascals, actual volume removed=72643 cubic ft ; with average of 726.43cfm at 100mins.

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time 1402 End Time 1526 Room/Area air door in nort side door hapsite in basement laundry room

T=	5	CFM	853	Pascals	5.9	Run No.	031(018A-LAU)	Time	1402
T=	10	CFM	946	Pascals	7.0	Run No.	032(018B-LAU)	Time	1411
T=	15	CFM	984	Pascals	6.9	Run No.		Time	1411
T=	20	CFM	928	Pascals	5.2	Run No.	033(018C-LAU)	Time	1419
T=	25	CFM	907	Pascals	5.8	Run No.	034(018D-LAU)-hapsite error not recorded	Time	1427
T=	30	CFM	927	Pascals	6.5	Run No.	034(018D-LAU)-hapsite error not recorded	Time	1427
T=	35	CFM	874	Pascals	5.2	Run No.	034(018E-LAU)	Time	1435
T=	41	CFM	879	Pascals	5.1	Run No.	035(018F-LAU)	Time	1443
T=	45	CFM	774	Pascals	5.2	Run No.	035(018F-LAU)	Time	1443
T=	50	CFM	903	Pascals	7.0	Run No.	036(018G-LAU)	Time	1451
T=	55	CFM	907	Pascals	8.2	Run No.		Time	1451
T=	60	CFM	858	Pascals	6.4	Run No.	037(018H-LAU)	Time	1459
T=	70	CFM	868	Pascals	6.0	Run No.	038(018I-LAU)	Time	1508
T=	80	CFM	928	Pascals	6.1	Run No.	039(018J-LAU)	Time	1517
T=	84	CFM	933	Pascals	6.3	Run No.	040(018K-LAU)shutdown	Time	1524

Comments

target volume is 72000 cubic feet. baseline -2.8 pascals, actual volume =75426.4cubic ft ; with average of 897.93 cfm at 84 mins.

PART J
SUMMA CANISTERS

Location/ Area: NA

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

Comments

PART K
SOIL GAS

Date	2/11/15	Time	1030	Sample Depth	4'		
Latitude	40.753932	Longitude	111.853352			Elevation	4552
Run No	008(A-0024H-021115-SG-001-4)	Run Time	1037			Vacuum (in/Hg)	0

Comments

Include location of the probe relative to the structure. backyard near NE corner of house- 2' from house

0024-1+

Dec 18

11:00am

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

OCCUPIED DWELLING QUESTIONAIRE

Indoor Air Assessment Survey

Date: 12/2/14

1. Name: [redacted]
Address: [redacted]
Home Phone [redacted] Work Phone: [redacted]

2. What is the best time to call to speak with you? _____ At: Work ☒ or Home ☒?

3. Are you the Owner ☒, Renter ☐, Other ☐ (please specify) _____ of this Home/Structure? If you are not the owner, please provide owner contact Information

4. Total number of occupants/persons at this location? 4
Number of Children 2 Ages 4 + 8

5. How long have you lived at this location? 5 yrs.

General Home Description

6. Type of Home/Structure (check only one): Single Family Home ☒, Duplex ☐, Apartment ☐, Townhouse ☐ Other _____

7. Home/Structure Description:
Number of floors: 2
Basement ☒
Crawlspace ☐
Partial crawlspace/basement ☒ % of each 30 %
Slab on grade ☐
Other ☐ _____

8. Age of Home/Structure: 86 years, Not sure/Unknown ☐

9. General Above-Ground Home/Structure construction (check all that apply):
Wood ☐, Brick ☒, Concrete ☐, Cement block ☐, Other ☐ _____

10. Foundation Construction (check all that apply):
Concrete Slab ☒
Fieldstone ☐
Concrete block ☐
Elevated above ground/grade ☐
Other ☐ _____

024-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

11. Do you have private well ☐ or cistern ☐ ?
If yes, please describe location, use and current condition_____

12. Do you have a septic system? Yes ☐ No ☒ Not used ☐ Unknown ☐
If yes, what is construction type?_____
Where is it located? _____
When was the last time it was serviced?_____
Do you (or have you ever) use (d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your home? (pond, ditch, etc.) Yes ☐ No ☒

Basement Description (please check all boxes that apply):

14. Is the basement finished ☐ or unfinished ☒ ?

15. If finished, how many rooms are in the basement? _____
What are rooms used for? Bedrooms ☐ Family room ☐ Storage ☐
Other_____

16. If not finished, do you plan on finishing in the future? Yes ☒ No ☐

17. Is the basement floor (check all that apply) concrete ☒, tile ☐, carpeted ☐, dirt ☐,
other ☐ _____

18. Are the basement walls poured concrete ☒, cement block ☐, stone ☐, wood ☐,
Brick ☐, other ☐ _____

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less that 1 time/year) ☒
No ☐

Describe the moisture problem We have had water come through the foundation 2x in 5 yrs. Those issues have been addressed.

20. .Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☐
No ☒

21. Does the basement have any of the following? Floor cracks ☐, Wall cracks ☐, Sump ☐,
Floor drain ☒, Other hole/opening in floor ☒
describe There is a ~~water~~ break in wall where oil pipes come in.

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

22. Are any of the following used or stored in the basement (check all that apply):
Paint ☒ Paint Stripper/remover ☐ Paint thinner ☐ Metal degreaser/cleaner ☐
Gasoline ☐ Diesel fuel ☐ Solvents ☐ Glue ☐ Laundry spot removers ☐ Drain cleaners
☐ Pesticides ☐ Other equipment with fuel tanks (chain saw, lawn mower, snow blower,etc.,)

23. Have you recently (within the last six months) done any painting or remodeling in your home?
Yes ☐ No ☐
If yes, specify what was done, where in the home, and what month:
_____
_____

24. Have you installed new carpeting in your home within the last year? Yes ☒ No ☐
If yes, when and where? upstairs bedroom

25. Do you regularly use or work in a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) ☐
Yes, use dry-cleaning infrequently (monthly or less) ☒
Yes, work at a dry cleaning service ☐
No ☐

26. Does anyone in your home use solvents at work?
Yes ☐ If yes, how many persons?
No ☒ If no, go to question 28

27. If yes for question 26, are the work clothes washed at home? Yes ☐ No ☐

28. Where is the washer/dryer located?
Basement ☒
Upstairs utility room ☐
Kitchen ☐
Garage ☐
Use a Laundromat ☐
Other, please specify ☐ _____

29. If you have a dryer, is it vented to the outdoors? Yes ☒ No ☐

30. What type (s) of home heating do you have (check all that apply)
Fuel type: Gas ☒, Oil ☐, Electric ☐, Wood ☐, Coal ☐,
Other ☐ _____

Heat conveyance system:
Forced hot air ☐
Forced hot water ☒
Steam ☐
Radiant floor heat ☐
Wood Stove ☐
Coal furnace ☐
Fireplace ☐
Other ☐ _____

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500 Foothill Drive
Salt Lake City, UT 84148

31. Does your home have (or had in the past) a storage tank for storage of: gasoline ☐ fuel oil ☒ propane ☐
If yes, where is/was it located? in backyard
How is/was the tank filled? N/a.
Is there staining near the tank? Yes ☐ No ☒

32. Do you have air conditioning? Yes ☒ No ☐
Central air conditioning ☐
Window air conditioning unit (s) ☒
Other (please specify) _____

33. Do you use any of the following? Room fans ☒, Ceiling fans ☒, Attic fan ☒

34. Do you ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☐ No ☒

35. Has your home had termite or other pesticide treatment? Yes ☐ No ☒ Unknown ☐
If yes, please specify type of pest controlled _____
And approximate date of service _____

36. Water heater type: Gas ☒, Electric ☐, by Furnace ☐,
Other (please describe) _____

37. Water heater location: Basement ☒, Upstairs utility room ☐, Garage ☐,
Other (please specify) _____

38. What type of cooking appliance do you have? Electric ☐, Gas ☒
Other (please describe) _____

39. Is there a stove exhaust hood present? Yes ☒ No ☐
Does it vent to the outdoors? Yes ☐ No ☒

40. Smoking in Home:
None ☒, Rare (only guests) ☐, Moderate (residents, light smokers) ☐,
Heavy (at least one heavy smoker in household) ☐

41. If yes to question 40, what do they smoke?
Cigarettes ☐ Cigars ☐
Pipe ☐ Other ☐

42. Do you regularly use air fresheners? Yes ☐ No ☒

43. Does anyone in the home have indoor home hobbies or crafts involving:
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☐
Spray paint ☐, wood finishing ☐, Other ☒ Ski waxing

024-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

44. General family/home use of consumer products (please circle appropriate). Assume that: Never = never used, Hardly ever = less that once/month, Occasionally = about once/month, Regularly = about once/week, and Often = more that once/week.

Product	Frequency of Use				
Spray-on deodorant	Never	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	Never	Hardly ever	Occasionally	Regularly	Often
Insecticides	Never	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	Occasionally	Regularly	Often
Window cleaners	Never	Hardly ever	Occasionally	Regularly	Often
Nail polish remover	Never	Hardly ever	Occasionally	Regularly	Often
Hair sprays	Never	Hardly ever	Occasionally	Regularly	Often
Candles	Never	Hardly ever	Occasionally	Regularly	Often
Incense	Never	Hardly ever	Occasionally	Regularly	Often

45. Please check weekly household cleaning practices:

Dusting ☒
Dry sweeping ☒
Vacuuming ☒
Polishing (furniture, etc.) ☐
Washing/waxing floors ☐
Other (describe) ☐ _____

46. Other comments:

_____
_____
_____
_____
_____
_____
_____
_____
_____

024-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

47. Chemical Inventory/Summary

Chemical/Chemical Product (consumer name)	Amount present in home
a)	
b)	
c)	
d)	
e)	
f)	
g)	
h)	
i)	
j)	
k)	
l)	
m)	
n)	
o)	

PART A
PROPERTY INFORMATION
(to be completed prior to survey)

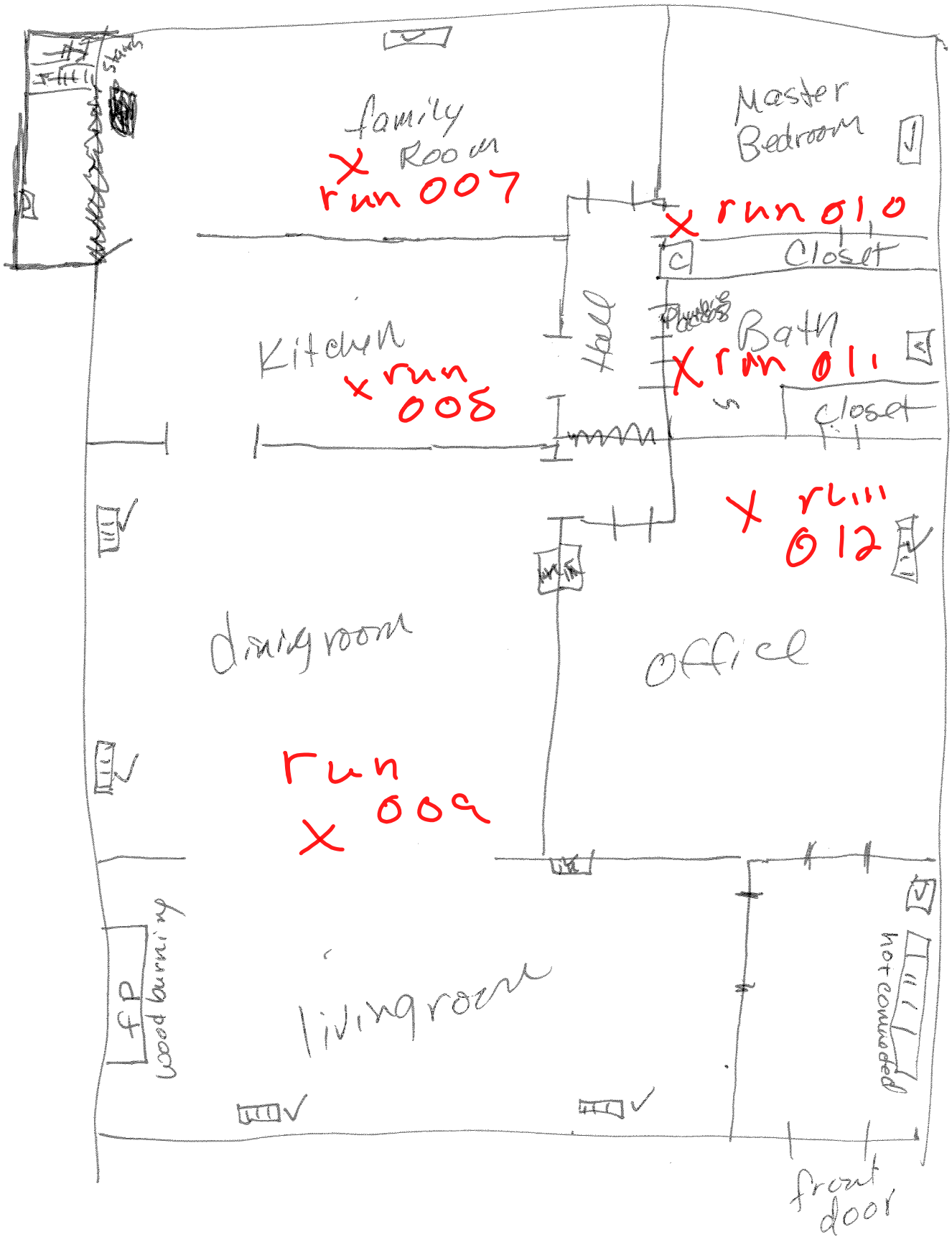
Property ID Number: 0025-H
Street Address: 956 S. 1300 E
ZIP:
Property Contact:
Tel #:
Latitude: 40.44.5414
Longitude: 111.51.1548
Age of Property: 92 years
Number of Levels: 2
Basement? (•) Yes ( ) No
Basement Habitable? ( ) Yes (•) No
Sump? ( ) Yes (•) No

Completed by: ERR
Date: 12/09/2014

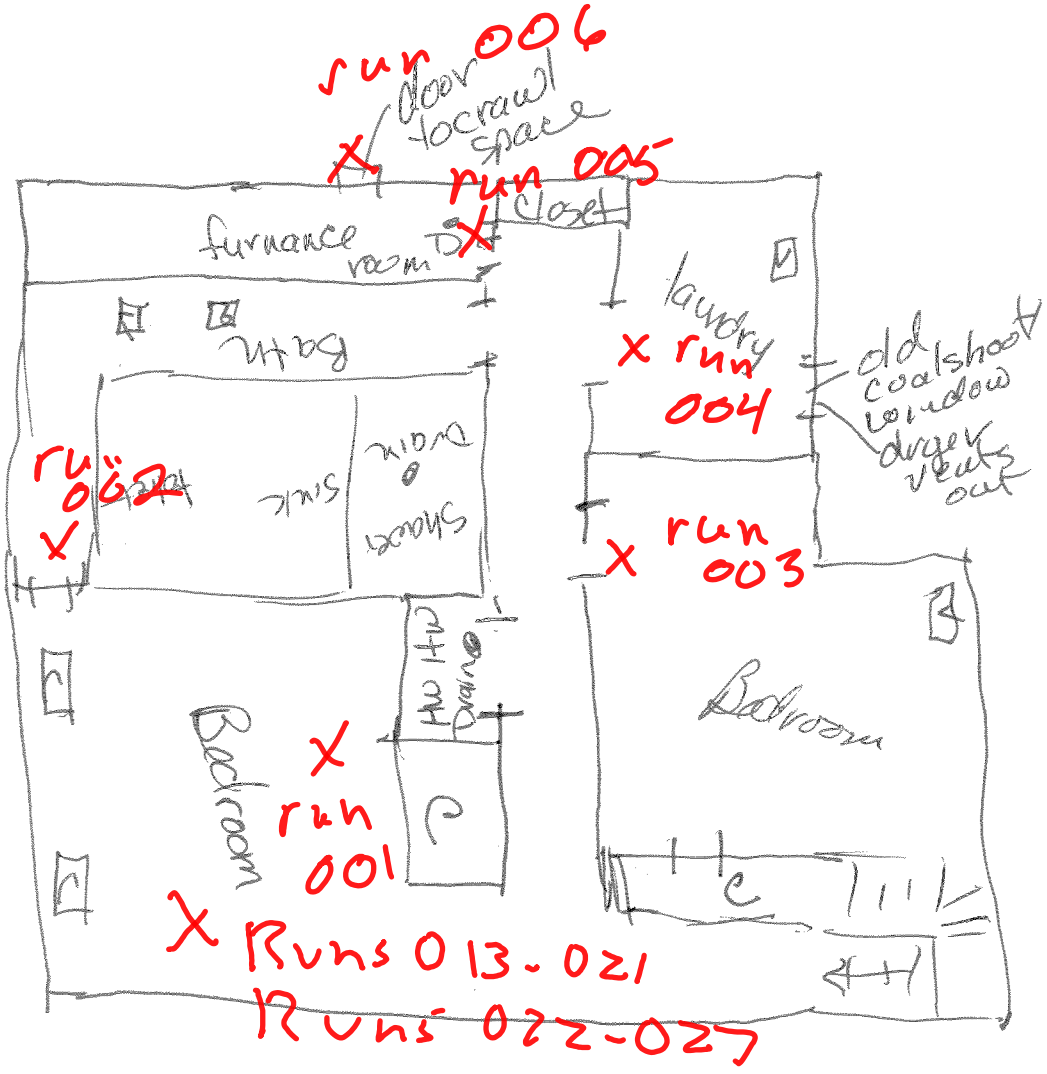
Comments

Elevation at front sidewalk- 4515'

Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.


x out-ambient Run 028
0025-H
Main floor
SG-061-4', 8'
x Run 29 + 30
family Room
x run 007
Master Bedroom
x run 010
Closet
Hall
Kitchen
x run 008
Bath
x rm 011
Closet
x rm 012
dining room
office
run x 009
fp
wood burning
living room
hot connected
front door

0025-H Basement



PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 2/9/15 Time of Arrival: 0830

Weather Conditions: Partly Cloudy

Temperature: 54 Barometric Pressure (inHg): 30.03 Wind Direction: S Speed: Moderate

Field Crew 1: ISE Role: HAPSITE Operator

Field Crew 2: DED Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? ( ) Yes (●) No

If yes, have the materials been removed? ( ) Yes ( ) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time
001-006	2/6/15	19:00

Instrument Performance Check Run Number	Time	
NA	0900	(•) Pass ( ) Fail

Instrument Performance Check Re-run Number	Time	
		( ) Pass ( ) Fail

CCV Run Number	Time	
032	1800	(•) Pass ( ) Fail

CCV Re-run Number	Time	
		( ) Pass ( ) Fail

Operator's initials: ISE

Comments

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time: 1523 End Time: 1527

Location: Near SW corner of house on driveway

Run Number: 028 (IA-015-OUT) Time: 1523

Run Number: Time:

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time [ ] End Time [ ]

Comments

No source materials indicated by ambient survey

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time 12:00 End Time 12:10

Comments

checked three basement floor drains (reportedly leading to sanitary sewer- no TICs.

Pictures

PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	0932	End Time	1145		
Room/area	Basement bedroom	Run Number	001 (IA001-BR1)	Time	0932
Room/area	Basement bathroom	Run Number	002 (IA002-BA1)	Time	0956
Room/area	Basement bedroom 2	Run Number	003 (IA003-BR2)	Time	1007
Room/area	Laundry room	Run Number	004 (IA004-LAU)	Time	1016
Room/area	Furnace room	Run Number	005 (IA005-FUR)	Time	1025
Room/area	Crawl space	Run Number	006 (IA006-STO1)	Time	1035
Room/area	Family room	Run Number	007 (IA007-2LL)	Time	1103
Room/area	Kitchen	Run Number	008 (IA008-KIT)	Time	1117
Room/area	Dining/living room	Run Number	009 (IA009-LIV)	Time	1127
Room/area	Master bedroom	Run Number	010 (IA010-BR3)	Time	1137

Comments

Upstairs bathroom 011 (IA011-BA2) 1147. Upstairs office 012 (IA012-OFC) 1157

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time: 1235 End Time: 1400 Room/Area: basement bedroom

T=	5	CFM	666	Pascals	-4.6	Run No.	013 (IA013A-BR1)	Time	1235
T=	10	CFM	676	Pascals	-6.9	Run No.	014 (IA013B-BR1)	Time	1246
T=	15	CFM	717	Pascals	-6.4	Run No.	014 (IA013B-BR1)	Time	
T=	20	CFM	645	Pascals	-5.0	Run No.	015 (IA013C-BR1)	Time	1255
T=	25	CFM	629	Pascals	-5.1	Run No.		Time	
T=	30	CFM	613	Pascals	-5.5	Run No.	016 (IA013D-BR1)	Time	1305
T=	40	CFM	630	Pascals	-5.1	Run No.	017 (IA013E-BR1)	Time	1314
T=	50	CFM	655	Pascals	-6.6	Run No.	018 (IA013F-BR1	Time	1324
T=	60	CFM	655	Pascals	-5.8	Run No.	019 (IA013G-BR1)	Time	1336
T=	70	CFM	650	Pascals	-5.2	Run No.	020 (IA013H-BR1)	Time	1344
T=	80	CFM	804	Pascals	-5.4	Run No.	021 (IA013I-BR1)	Time	1357
T=	86	CFM	667	Pascals	-5.5	Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

57,362 cfm total pulled through house, initial ambient pressure: -0.5 pascal

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time	1405	End Time	1500	Room/Area	basement bedroom

	T=	CFM	Pascals	Run No.	Time
1	5	1083	9.1	022 (IA014A-BR1)	1410
2	10	1078	9.6		
3	15	1103	9.5	023 (IA014B-BR1)	1419
4	20	1101	8.9		
5	25	1093	8.9	024 (IA014C-BR1)	1428
6	30	1061	9.4	025 (IA014D-BR1)	1438
7	40	1098	7.7		
8	50	1096	9.3	026 (IA014E-BR1)	1447
9	55	1069	10.6	027 (IA014F-BR1)	1456
10					
11					
12					
13					
14					
15					

Comments

59,778 total volume; ambient pressure: -0.2 pascal

PART J
SUMMA CANISTERS

Location/ Area: NA

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

Comments

PART K
SOIL GAS

Date	2/9/15	Time	1537/1547	Sample Depth	4/8		
Latitude	40.44.5425	Longitude	111.51.1603	Elevation			
Run No	029/030	Run Time		Vacuum (in/Hg)	2/5		

Comments

backyard 5 feet from slab 0025H-SG-001-4' and 8'

0025-H

Dec 17

1:00pm

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

OCCUPIED DWELLING QUESTIONAIRE

Indoor Air Assessment Survey

Date: 12-09-14

1. Name: [redacted]
   Address:
   Home Phon _____ Work Phone: _____
2. What is the best time to call to speak with you? _____ At: Work ☐ or Home ☒?
3. Are you the Owner ☒, Renter ☐, Other ☐ (please specify) _____ of this Home/Structure? If you are not the owner, please provide owner contact Information
4. Total number of occupants/persons at this location? 2
   Number of Children 0 Ages _____
5. How long have you lived at this location? 14 YEARS

General Home Description

6. Type of Home/Structure (check only one): Single Family Home ☒, Duplex ☐, Apartment ☐, Townhouse ☐ Other _____
7. Home/Structure Description:
   Number of floors: 2
   Basement ☒
   Crawlspace ☒
   Partial crawlspace/basement ☒ % of each @ 50%
   Slab on grade ☐
   Other ☐ _____
8. Age of Home/Structure: 92 years, Not sure/Unknown ☐
9. General Above-Ground Home/Structure construction (check all that apply):
   Wood ☐, Brick ☐, Concrete ☒, Cement block ☐, Other ☐ W/ BRICK
10. Foundation Construction (check all that apply):
    Concrete Slab ☐
    Fieldstone ☐
    Concrete block ☒
    Elevated above ground/grade ☐
    Other ☐ _____

025-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

11. Do you have private well ☐ or cistern ☐ ? No
If yes, please describe location, use and current condition_____

12. Do you have a septic system? Yes ☐ No ☒ Not used ☐ Unknown ☐
If yes, what is construction type?_____
Where is it located? _____
When was the last time it was serviced?_____
Do you (or have you ever) use (d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your home? (pond, ditch, etc.) Yes ☐ No ☒

Basement Description (please check all boxes that apply):

14. Is the basement finished ☒ or unfinished ☒ ?

15. If finished, how many rooms are in the basement? 5
What are rooms used for? Bedrooms ☒ Family room ☐ Storage ☒
Other LAUNDRY

16. If not finished, do you plan on finishing in the future? Yes ☒ No ☐

17. Is the basement floor (check all that apply) concrete ☒, tile ☐, carpeted ☐, dirt ☐,
other ☐ _____

18. Are the basement walls poured concrete ☐, cement block ☒, stone ☐, wood ☐,
Brick ☐, other ☐ _____

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less that 1 time/year) ☐
No ☒

Describe the moisture problem_____

20. .Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☐
No ☒

21. Does the basement have any of the following? Floor cracks ☐, Wall cracks ☐, Sump ☐,
Floor drain ☒, Other hole/opening in floor ☐
describe_____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

22. Are any of the following used or stored in the basement (check all that apply):
Paint ☐ Paint Stripper/remover ☐ Paint thinner ☐ Metal degreaser/cleaner ☐
Gasoline ☐ Diesel fuel ☐ Solvents ☐ Glue ☐ Laundry spot removers ☒ Drain cleaners
☐ Pesticides ☐ Other equipment with fuel tanks (chain saw, lawn mower, snow blower,etc.,)

23. Have you recently (within the last six months) done any painting or remodeling in your home?
Yes ☐ No ☒
If yes, specify what was done, where in the home, and what month:
_____
_____

24. Have you installed new carpeting in your home within the last year? Yes ☐ No ☒
If yes, when and where?_____

25. Do you regularly use or work in a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) ☐
Yes, use dry-cleaning infrequently (monthly or less) ☐
Yes, work at a dry cleaning service ☐
No ☒

26. Does anyone in your home use solvents at work?
Yes ☐ If yes, how many persons?
No ☒ If no, go to question 28

27. If yes for question 26, are the work clothes washed at home? Yes ☐ No ☐

28. Where is the washer/dryer located?
Basement ☒
Upstairs utility room ☐
Kitchen ☐
Garage ☐
Use a Laundromat ☐
Other, please specify ☐ _____

29. If you have a dryer, is it vented to the outdoors? Yes ☒ No ☐

30. What type (s) of home heating do you have (check all that apply)
Fuel type: Gas ☒, Oil ☐, Electric ☐, Wood ☐, Coal ☐,
Other ☐_____

Heat conveyance system:
Forced hot air ☒
Forced hot water ☐
Steam ☐
Radiant floor heat ☐
Wood Stove ☐
Coal furnace ☐
Fireplace ☐
Other ☐ _____

025-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

31. Does your home have (or had in the past) a storage tank for storage of: gasoline ☐ fuel oil ☐ propane ☐ N/A
If yes, where is/was it located? _____
How is/was the tank filled? _____
Is there staining near the tank? Yes ☐ No ☐

32. Do you have air conditioning? Yes ☒ No ☐
Central air conditioning ☒
Window air conditioning unit (s) ☒
Other (please specify) _____

33. Do you use any of the following? Room fans ☒, Ceiling fans ☐, Attic fan ☐

34. Do you ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☐ No ☒

35. Has your home had termite or other pesticide treatment? Yes ☐ No ☒ Unknown ☐
If yes, please specify type of pest controlled _____
And approximate date of service _____

36. Water heater type: Gas ☒, Electric ☐, by Furnace ☐,
Other (please describe) _____

37. Water heater location: Basement ☒, Upstairs utility room ☐, Garage ☐,
Other (please specify) _____

38. What type of cooking appliance do you have? Electric ☐, Gas ☒
Other (please describe) _____

39. Is there a stove exhaust hood present? Yes ☒ No ☐
Does it vent to the outdoors? Yes ☐ No ☒

40. Smoking in Home:
None ☒, Rare (only guests) ☐, Moderate (residents, light smokers) ☐,
Heavy (at least one heavy smoker in household) ☐

41. If yes to question 40, what do they smoke?
Cigarettes ☐ Cigars ☐
Pipe ☐ Other ☐

42. Do you regularly use air fresheners? Yes ☐ No ☒

43. Does anyone in the home have indoor home hobbies or crafts involving: No
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☐
Spray paint ☐, wood finishing ☐, Other ☐ _____

025-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

44. General family/home use of consumer products (please circle appropriate). Assume that: Never = never used, Hardly ever = less that once/month, Occasionally = about once/month, Regularly = about once/week, and Often = more that once/week.

Product	Frequency of Use				
Spray-on deodorant	Never	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	Never	Hardly ever	Occasionally	Regularly	Often
Insecticides	Never	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	Occasionally	Regularly	Often
Window cleaners	Never	Hardly ever	Occasionally	Regularly	Often
Nail polish remover	Never	Hardly ever	Occasionally	Regularly	Often
Hair sprays	Never	Hardly ever	Occasionally	Regularly	Often
Candles	Never	Hardly ever	Occasionally	Regularly	Often
Incense	Never	Hardly ever	Occasionally	Regularly	Often

45. Please check weekly household cleaning practices:

Dusting ☒
Dry sweeping ☒
Vacuuming ☒
Polishing (furniture, etc.) ☐
Washing/waxing floors ☐
Other (describe) ☐ _____

46. Other comments:

_____
_____
_____
_____
_____
_____
_____
_____
_____

025-H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

47. Chemical Inventory/Summary NONE

Chemical/Chemical Product (consumer name)	Amount present in home
a)	
b)	
c)	
d)	
e)	
f)	
g)	
h)	
i)	
j)	
k)	
l)	
m)	
n)	
o)	

PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0026-H
Street Address: 761 S. 1100 E.
ZIP: 84105

Property Contact:
Tel #:

Latitude: 40.752523
Longitude: 111.859080
Age of Property: 87 years

Number of Levels: 3
Basement? (●) Yes ( ) No
Basement Habitable? (●) Yes ( ) No
Sump? ( ) Yes (●) No

Completed by: ERR
Date: 12/11/2014

Comments

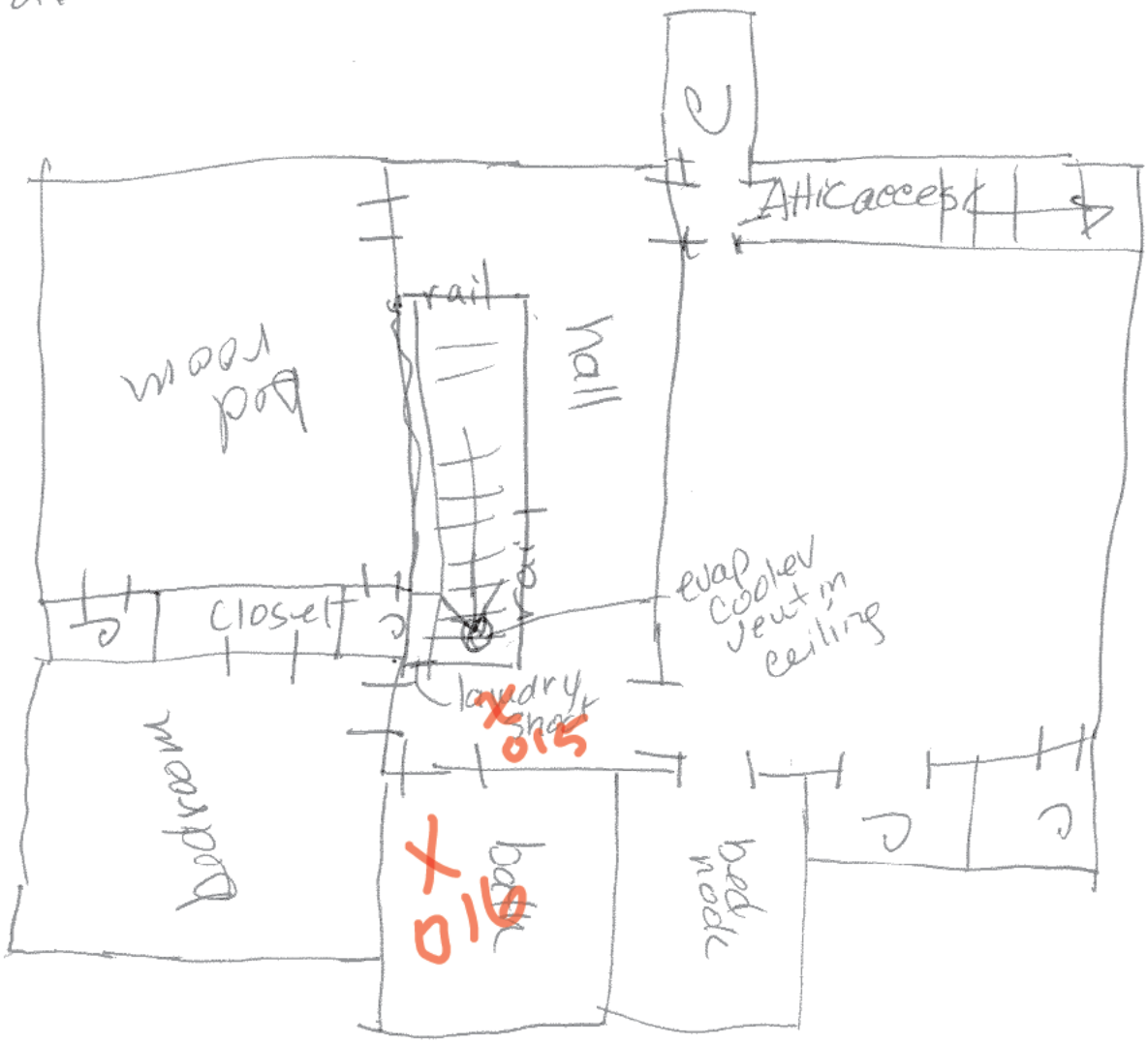
HOME IS DRY, INCL BASEMENT, BUT HILLSIDE BEHIND HOUSE HAS SMALL SEEPS, AND A PARTIALLY SPRING FED STREAM IS LOCATED JUST NORTH OF HOME. A FRENCH DRAIN COLLECTS WATER FROM BACK PATIO AREA, AND DISCHARGES TO STREAM. DURING AIR TESTING, HEAVY SNOW BEGAN AT 0830 AND CONTINUED UNTIL 1130, WITH 3" ACCUMULATION. COULD NOT INSTALL SOIL GAS PROBES ON 3/3/15. 0026-GW-001 COLLECTED FROM SEEP COLLECTION BOX (CIRCA 1937) ON SIDE OF RAVINE NE OF HOUSE. LAT=40.752828; LONG=111.858679; ELEV= 4432' MSL (APPROX- HEAVILY WOODED AREA IN STEEP RAVINE-GPS DIFFICULT). 0026H-COLLECTED FROM SOUTH WALL OF RAVINE 25 FT WEST OF SEEP BOX (APPROX LAT= 40.753822; APPROX LONG=111.858722, ELEV=4431'. 0026H-GW-003 COLLECTED AT PATIO FRENCH DRAIN OUTFALL INTO STREAM NORTH OF HOUSE. LAT=40.752731; LONG=111.859045; ELEV=4423' MSL. 0026H-SW-001 COLLECTED AT PIPE OUTFALL WHERE SPRING FED STREAM EXITS FROM UNDER ELIZABETH STREET. LAT=40.752999; LONG=111.858416; ELEV: 4433' MSL. NOTE THAT ACTUAL SPRING IS LOCATED EAST OF ELIZABETH ST.

Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.

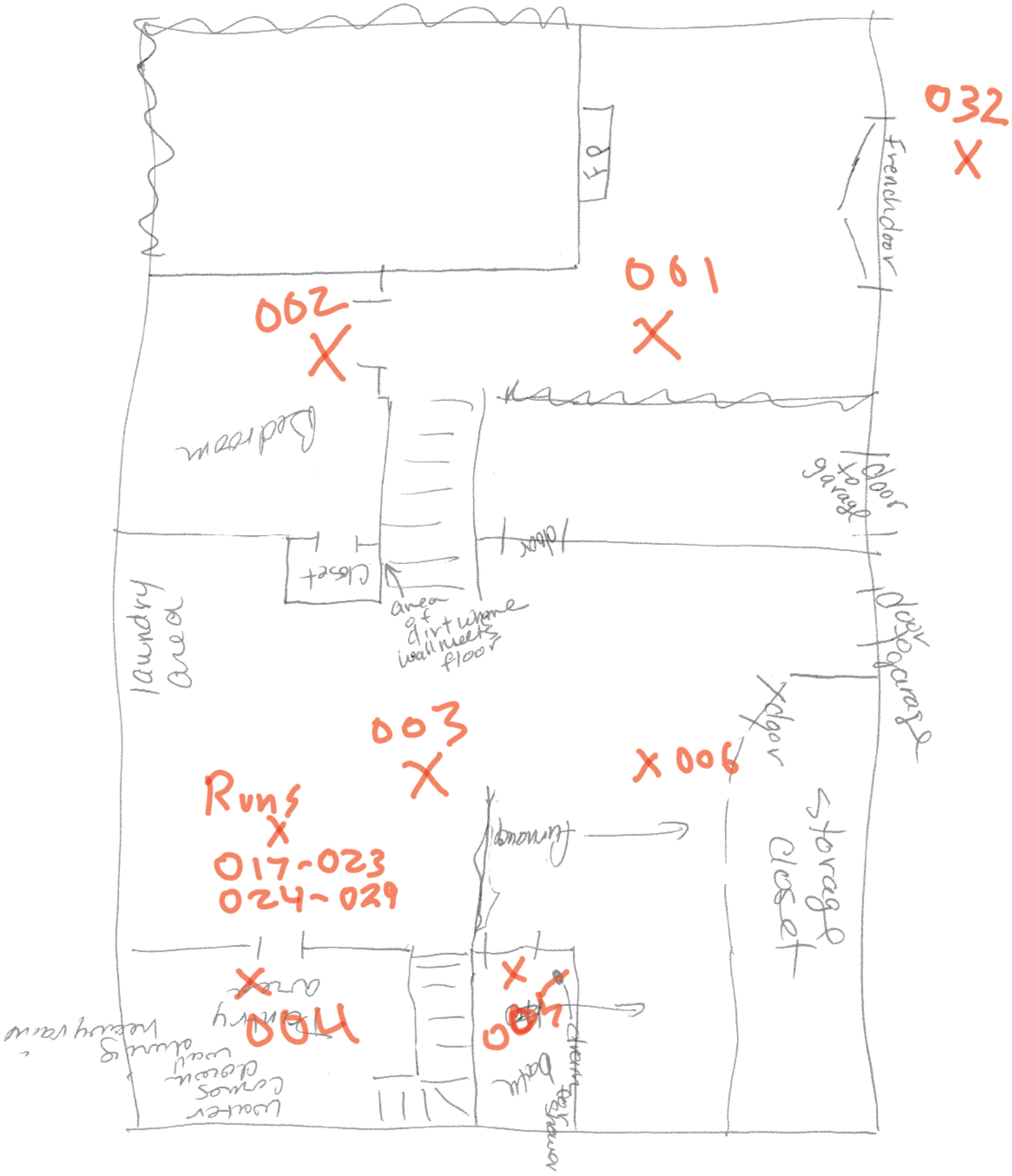
SG-002-4' X 0026-H

0026-H First Floor

0026-H 2nd floor



0026-H Basement



PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 3/3/2015 Time of Arrival: 0850

Weather Conditions: Snow

Temperature: 32 Barometric Pressure (inHg): 29.80 Wind Direction: NW Speed: Moderate

Field Crew 1: ERR Role: HAPSITE Operator

Field Crew 2: DGC Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? (●) Yes ( ) No

If yes, have the materials been removed? ( ) Yes (●) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

FLAMMABLES CABINET IN BASEMENT STOREROOM, ALONG WITH NUMEROUS PAINT CANS, SPRAY PAINTS, DRYWALL COMPOUNDS, AND CLEANERS. SEE INIITIAL INTERVIEW PHOTOS - IMG_0224, IMG_0225, IMG_0226, IMG_0229, IMG_0230, IMG_0231.

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time
002, 003, 004, 005, 006	2/17/2015	1100

Instrument Performance Check Run Number	Time	
Auto tune	0859	(●) Pass ( ) Fail

Instrument Performance Check Re-run Number	Time	
NA		( ) Pass ( ) Fail

CCV Run Number	Time	
031-5ppb-030215	1501	(●) Pass ( ) Fail

CCV Re-run Number	Time	
032-0.5ppb-030215	1501	(●) Pass ( ) Fail

Operator's initials: ERR

Comments

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time	1500	End Time	1506
Location	driveway in front of basement entry doors.		
Run Number	032 (0026H-IA-017-OUT)	Time	1502
Run Number	NA	Time	

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time 1001 End Time 1009

Comments

Storage area in basement is a large open area with multiple potential background sources. Ran full analyze mode in place of survey in this location, but did not detect VOCs above DLs.

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time 1025 End Time 1031

Comments

Survey 001 - 1025 - Cracks in foundation in pantry area. Max TIC - 118,835
Survey 002 - 1029 - Sewer stack penetration in laundry area. Max TIC - 136,220. These are insignificant numbers and indicate no detections.

Pictures

PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	0917	End Time	1150		
Room/area	Basement Family Room	Run Number	001 (IA-001-FAM)	Time	0917
Room/area	Basement bedroom	Run Number	002 (IA-002-BR1)	Time	0926
Room/area	Laundry room	Run Number	003 (IA-003-LAU)	Time	0936
Room/area	Pantry	Run Number	004 (IA-004-PAN)	Time	0944
Room/area	Basement bathroom	Run Number	005 (IA-005-BA1)	Time	0952
Room/area	Storage area (and furnace room in basement)	Run Number	006 (IA-006-STO)	Time	1001
Room/area	Living Room - First (Main) floor)	Run Number	009 (IA-007-LIV)	Time	1044
Room/area	Dining room (First Floor)	Run Number	010 (IA-008-DRF)	Time	1056
Room/area	Library (First Floor)	Run Number	011 (IA-009-LIB)	Time	1103
Room/area	Master bedroom (First Floor)	Run Number	012 (IA-010-MBR)	Time	1111

Comments

Run 007 and 008 were accidental runs in laundry area. BATHROOM RUN 013 (IA-011-BA2) - 1120; KITCHEN RUN 014 (IA-012-KIT) -1128; SECOND FLOOR HALLWAY RUN 015 (IA-013-HAL) - 1138; SECOND FLOOR BATHROOM RUN 016 (IA-014-BA3) - 1146;

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time: 1225 | End Time: 1318 | Room/Area: Laundry

T=	5	CFM	1530	Pascals	-5.6	Run No.	017 (IA-015A-LAU)	Time	1226
T=	10	CFM	1527	Pascals	-5.2	Run No.	018 (IA-015B-LAU)	Time	1234
T=	15	CFM	1525	Pascals	-5.2	Run No.		Time	
T=	20	CFM	1589	Pascals	-6.0	Run No.	019 (IA-015C-LAU)	Time	1243
T=	25	CFM	1523	Pascals	-4.9	Run No.	020 (IA-015D-LAU)	Time	1251
T=	30	CFM	1539	Pascals	-5.1	Run No.	021 (IA-015E-LAU)	Time	1259
T=	40	CFM	1530	Pascals	-5.1	Run No.	022 (IA-015F-LAU)	Time	1307
T=	50	CFM	1462	Pascals	-4.9	Run No.	023 (IA-015G-LAU)	Time	1315
T=	53	CFM	1538	Pascals	-5.1	Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

2.5 air volumes = 77,000. total volume = 81,048. Baseline pressure= -2.2 Pa. Air door placed in back (kitchen) door, Hapsite placed in basement laundry r

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time: 1336 | End Time: 1435 | Room/Area: LAUNDRY

T=	5	CFM	1465	Pascals	4.4	Run No.	024 (IA-016A-LAU)	Time	1337
T=	10	CFM	1822	Pascals	7.7	Run No.	025 (IA-016B-LAU)	Time	1345
T=	15	CFM	1465	Pascals	5.5	Run No.	026 (IA-016C-LAU)	Time	1353
T=	20	CFM	1414	Pascals	5.1	Run No.		Time	
T=	25	CFM	1410	Pascals	5.8	Run No.	027 (IA-016D-LAU) Aborted	Time	1401
T=	30	CFM	1397	Pascals	5.4	Run No.		Time	
T=	40	CFM	1442	Pascals	4.9	Run No.	028 (IA-016E-LAU)	Time	1423
T=	50	CFM	1475	Pascals	5.1	Run No.	029 (IA-016F-LAU)	Time	1430
T=	60	CFM	1392	Pascals	4.9	Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

total volume = 88,546. Baseline =-1.7 pascals.

PART J
SUMMA CANISTERS

Location/ Area: Outdoor Ambient - East of House on patio wall

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0026H-TO-003-OUT	0143	04/07/2015	15:00	27	04/08/2015	14:45	4

Location/ Area: Basement Pantry

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0026H-TO-001-PAN	0262	04/07/2015	15:45	28	04/08/2015	15:40	1

Location/ Area: Soil Gas pt SG-001 (at SE corner of house by foundation

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0026H-SG-001-4'	0137	04/07/2015	14:30	26	04/08/2015	14:05	1

Location/ Area: Soil gas pt- in yard on hill east of house

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0026H-SG-002-4'	0097	04/07/2015	14:50	26	04/08/2015	14:10	0.5

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

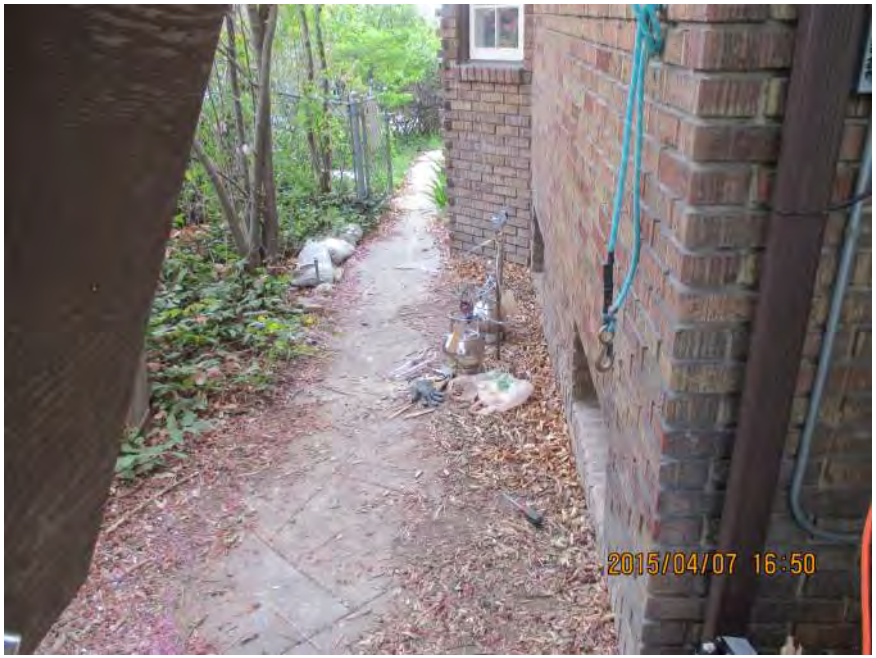
Photos

SEE NEXT PAGE

Comments

A duplicate summa was collected at SG-001-4' and labeled 0026H-SG-003-4': Set date=04/07/201, time=1430, End date=04/08/2015, time= 1410. Summa ID #0255, start pressure = 25" end pressure= 5"

In addition to the TO-15 Samples, SVOC in air samples (PUF sorbent tubes) were collected on 04/07/2015 from SG-001-4' (Also collected duplicate), from Ambient air location TO-003-OUT, and from the basement pantry at Summa location TO-001-PAN (Also collected duplicate). SVOC A total of five SVOC samples were submitted to ALS labs for TO-13A analysis.


2015/04/07 16:50


2015/04/07 14:48


2015/04/07 16:54


IPA
IPA
2015/04/07 16:59

PART K
SOIL GAS

Date	03/06/2015	Time	10:00	Sample Depth	4'		
Latitude	40.752481	Longitude	111.859034			Elevation	4435'
Run No	026 (3/6/15) - 0026H-SG-001-4'	Run Time	1510			Vacuum (in/Hg)	2

Comments

RETURNED TO SITE AFTER SNOW OF 3/3 MELTED. SOIL GAS PROBE INSTALLED NEAR SE CORNER OF HOUSE, 12" FOUNDATION (BETWEEN SIDEWALK AND FOUNDATION). SEE PHOTO 0026H-SG-001-4FT ATTACHED.
A SECOND SOIL GAS SAMPLE (OPEN FIELD) WAS INSTALLED ON 4/7/2015 30' EAST OF HOUSE ON HILLSIDE NEAR SEEPS. SG-002-4' LAT= 40.722515, LONG= -111.858890, ELEV= 4441' MSL, COLLECTED SAMPLE AT 1500 AND TOOK TO FIELD OFFICE FOR ANALYSIS.


2015/03/06 10:53


2015/04/07 14:49

0026-H

OCCUPIED DWELLING QUESTIONAIRE

Indoor Air Assessment Survey

Date: 12/11/2014

this Home/Structure? If you are not the owner, please provide owner contact Information

_____

_____

4. Total number of occupants/persons at this location? 4
   Number of Children 2 Ages 13 and 19

5. How long have you lived at this location? 5 years

General Home Description

6. Type of Home/Structure (check only one): Single Family Home ☒, Duplex ☐, Apartment ☐, Townhouse ☐ Other _____

7. Home/Structure Description:
   Number of floors: 3
   Basement ☒
   Crawlspace ☐
   Partial crawlspace/basement ☐ % of each _____
   Slab on grade ☐
   Other ☐ _____

8. Age of Home/Structure: 1928 years, Not sure/Unknown ☐

9. General Above-Ground Home/Structure construction (check all that apply):
   Wood ☐, Brick ☒, Concrete ☐, Cement block ☐, Other ☐ _____

10. Foundation Construction (check all that apply):
    Concrete Slab ☒
    Fieldstone ☐
    Concrete block ☐
    Elevated above ground/grade ☐
    Other ☐ _____

Natural Springs run the length of our property.

11. Do you have private well ☒ or cistern ☐ ?
If yes, please describe location, use and current condition unknown
There are also natural springs running alongside the house the entire length of the property.

12. Do you have a septic system? Yes ☐ No ☒ Not used ☐ Unknown ☐
If yes, what is construction type?
Where is it located?
When was the last time it was serviced?
Do you (or have you ever) use (d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your home? (pond, ditch, etc.) Yes ☒ No ☐

Basement Description (please check all boxes that apply):

14. Is the basement finished ☒ or unfinished ☐ ?

15. If finished, how many rooms are in the basement? 5
What are rooms used for? Bedrooms ☒ Family room ☒ Storage ☒ 1
Other laundry room

16. If not finished, do you plan on finishing in the future? Yes ☐ No ☐

17. Is the basement floor (check all that apply) concrete ☒, tile ☒, carpeted ☐, dirt ☐, other ☐

18. Are the basement walls poured concrete ☐, cement block ☐, stone ☐, wood ☐, Brick ☒, other ☐

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☒
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less that 1 time/year) ☐
No ☐

Describe the moisture problem rain water leaks into basement windows, down walls and onto floor

20. .Does the basement ever flood?
Yes, frequently (3 or more times/year) ☒
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☐
No ☐

21. Does the basement have any of the following? Floor cracks ☐, Wall cracks ☐, Sump ☐, Floor drain ☒, Other hole/opening in floor ☒
describe

22. Are any of the following used or stored in the basement (check all that apply):
Paint ☒ Paint Stripper/remover ☐ Paint thinner ☐ Metal degreaser/cleaner ☐
Gasoline ☐ Diesel fuel ☐ Solvents ☐ Glue ☐ Laundry spot removers ☐ Drain cleaners
☐ Pesticides ☐ Other equipment with fuel tanks (chain saw, lawn mower, snow blower,etc.,)

23. Have you recently (within the last six months) done any painting or remodeling in your home?
Yes ☐ No ☒
If yes, specify what was done, where in the home, and what month:
_____
_____

24. Have you installed new carpeting in your home within the last year? Yes ☐ No ☒
If yes, when and where?_____

25. Do you regularly use or work in a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) ☐
Yes, use dry-cleaning infrequently (monthly or less) ☐
Yes, work at a dry cleaning service ☐
No ☒

26. Does anyone in your home use solvents at work?
Yes ☐ If yes, how many persons?
No ☒ If no, go to question 28

27. If yes for question 26, are the work clothes washed at home? Yes ☐ No ☐

28. Where is the washer/dryer located?
Basement ☒
Upstairs utility room ☐
Kitchen ☐
Garage ☐
Use a Laundromat ☐
Other, please specify ☐ _____

29. If you have a dryer, is it vented to the outdoors? Yes ☒ No ☐

30. What type (s) of home heating do you have (check all that apply)
Fuel type: Gas ☒, Oil ☐, Electric ☐, Wood ☐, Coal ☐,
Other ☐_____

Heat conveyance system:
Forced hot air ☒
Forced hot water ☐
Steam ☐
Radiant floor heat ☐
Wood Stove ☐
Coal furnace ☐
Fireplace ☐
Other ☐ _____

31. Does your home have (or had in the past) a storage tank for storage of: gasoline ☐ fuel oil ☐ propane ☐
If yes, where is/was it located? n/a

How is/was the tank filled?

Is there staining near the tank? Yes ☐ No ☐

32. Do you have air conditioning? Yes ☒ No ☐
Central air conditioning ☐
Window air conditioning unit (s) ☐
Other (please specify) swamp coolers

33. Do you use any of the following? Room fans ☐, Ceiling fans ☐, Attic fan ☐

34. Do you ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☐ No ☐ n/a

35. Has your home had termite or other pesticide treatment? Yes ☐ No ☐ Unknown ☐
If yes, please specify type of pest controlled
And approximate date of service

36. Water heater type: Gas ☒, Electric ☐, by Furnace ☐,
Other (please describe)

37. Water heater location: Basement ☒, Upstairs utility room ☐, Garage ☐,
Other (please specify)

38. What type of cooking appliance do you have? Electric ☐, Gas ☒
Other (please describe)

39. Is there a stove exhaust hood present? Yes ☐ No ☒
Does it vent to the outdoors? Yes ☐ No ☒

40. Smoking in Home:
None ☒, Rare (only guests) ☐, Moderate (residents, light smokers) ☐,
Heavy (at least one heavy smoker in household) ☐

41. If yes to question 40, what do they smoke?
Cigarettes ☐ Cigars ☐
Pipe ☐ Other ☐

42. Do you regularly use air fresheners? Yes ☐ No ☒

43. Does anyone in the home have indoor home hobbies or crafts involving:
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☐
Spray paint ☐, wood finishing ☐, Other ☐ n/a

44. General family/home use of consumer products (please circle appropriate). Assume that: Never = never used, Hardly ever = less that once/month, Occasionally = about once/month, Regularly = about once/week, and Often = more that once/week.

Product	Frequency of Use				
Spray-on deodorant	(Never)	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	(Never)	Hardly ever	Occasionally	Regularly	Often
Insecticides	(Never)	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	(Hardly ever)	Occasionally	Regularly	Often
Window cleaners	Never	(Hardly ever)	Occasionally	Regularly	Often
Nail polish remover	(Never)	Hardly ever	Occasionally	Regularly	Often
Hair sprays	(Never)	Hardly ever	Occasionally	Regularly	Often
Candles	Never	(Hardly ever)	Occasionally	Regularly	Often
Incense	(Never)	Hardly ever	Occasionally	Regularly	Often

45. Please check weekly household cleaning practices:

Dusting ☒

Dry sweeping ☒

Vacuuming ☒

Polishing (furniture, etc.) ☐

Washing/waxing floors ☐ steam mop floors water only

Other (describe) ☐ _____

46. Other comments:

Natural springs run the length of our property and the water table is high throughout the yard. Some of the springs are diverted through a French drain since the property is sloped. This helps divert water from seeping into the house.

47. Chemical Inventory/Summary

Chemical/Chemical Product (consumer name)	Amount present in home
a) Clorox	½ gallon
b) Soft scrub	2 lbs.
c) Windex	93 oz
d) BioKleen Dishwasher Gel	64 oz
e) Latex paint (stored in commercial grade fire cabinet)	5 gallons
f) Finish Dishwasher Detergent	28 oz
g) Oil Paint (stored in commercial grade fire cabinet)	10 gallons
h) Seventh Generation Detergent	112 oz.
i) BioKleen Bac Out	32 oz
j) CLR	28 oz
k) Lime Away	16 oz
l) Borax	4 lbs.
m) Clorox Toilet Wands	6.74 oz
n) Spic N Span powder	27 oz
o) Seventh Generation Glass Cleaner	32 oz
Earthworm Drain Cleaner	32 oz

PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0027-H
Street Address: 1164 East 700 S.
ZIP: 84102

Property Contact:
Tel #:

Latitude: 40.753845
Longitude: 111.857440
Age of Property: 100 years

Number of Levels: 2
Basement? (•) Yes ( ) No
Basement Habitable? (•) Yes ( ) No
Sump? (•) Yes ( ) No

Completed by: ERR
Date: 11/22/2014

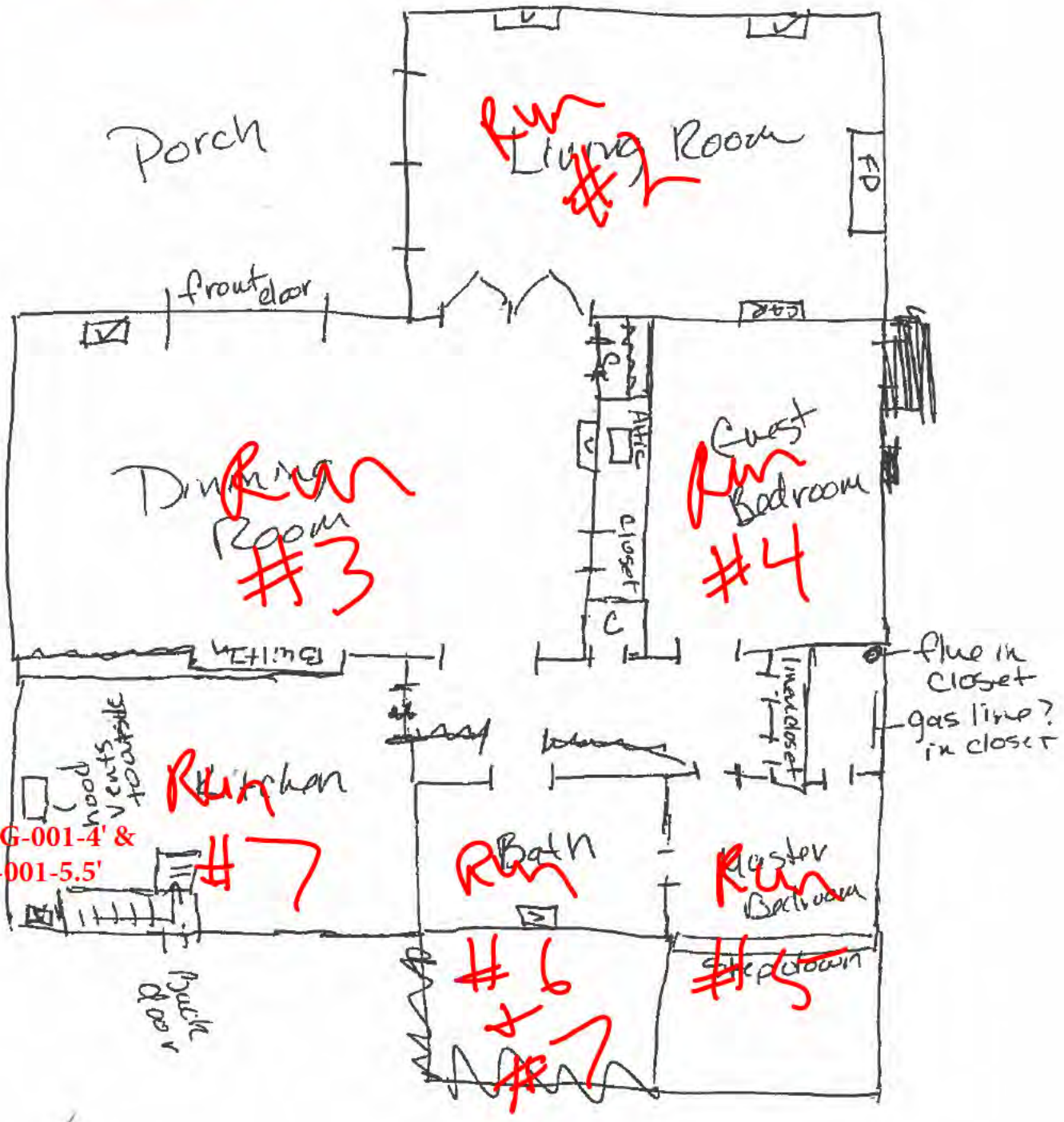
Comments

elevation at bottom of front steps= 4491'
Sump Pit in basement floor is for sanitary sewer collection from main floor and used to pump to sanitary sewer- not open to groundwater.

Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.

0027-H Main Floor

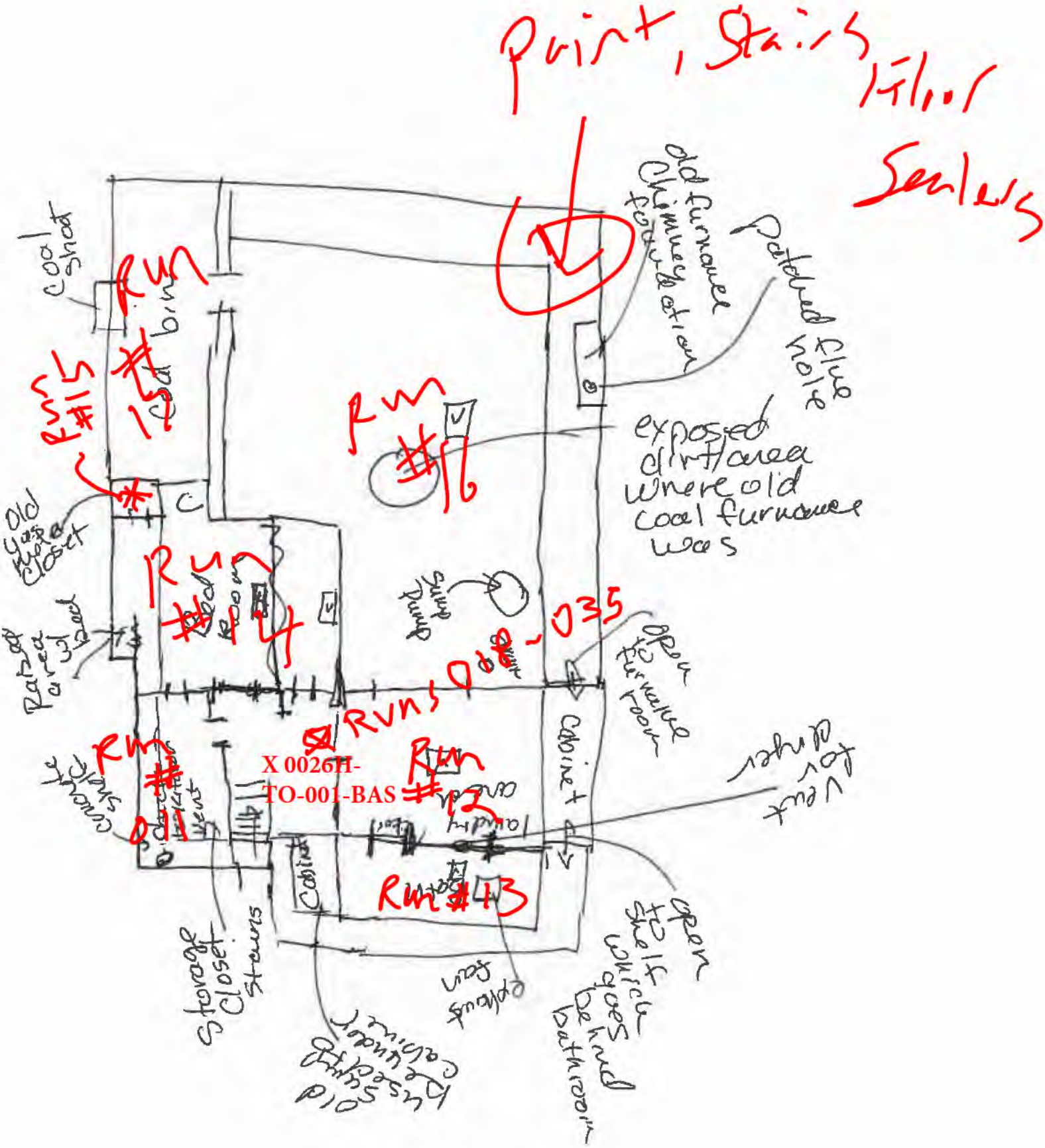
X Run 001- Outdoor Ambient



X SG-001-4' & SG-001-5.5'

X 0027H-TO-002-OUT (on patio)

0027-H Basement



PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 2/12/15 Time of Arrival: 0830

Weather Conditions: Sunny

Temperature: 37 Barometric Pressure (inHg): 30.42 Wind Direction: SE Speed: Light

Field Crew 1: ac Role: HAPSITE Operator

Field Crew 2: ch Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? (●) Yes ( ) No

If yes, have the materials been removed? ( ) Yes (●) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

in basement furnace room there in some house hold paints stains spray paint, cleaners and floor sealers

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time	
1-5	2/9/15	1800	
Instrument Performance Check Run Number	Time	(•) Pass	
auto tune	0845	( ) Fail	
Instrument Performance Check Re-run Number	Time	( ) Pass	
		( ) Fail	
CCV Run Number	Time	(•) Pass	
036	1600	( ) Fail	
CCV Re-run Number	Time	( ) Pass	
		( ) Fail	

Operator's initials: er

Comments

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time: 849 End Time: 854

Location: on side walk about 30' front from of house

Run Number: 001(IA-001-OUT) Time: 0849

Run Number: Time:

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time 1118 End Time 1122

Comments

base line tic count 49000: paints stains and sealer in basement furnace room-tic count 72000 main ion 164 and 1660no responce. photo WIN_20150212_

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time 1118 End Time 1122

Comments

tic base line about 49000; sewer lift sump -tic count 56000 , floor drain- tic count 63000, bare soil wher coal furnace was- tic count 68000. main ions 164 &

Pictures

WIN_20150212_130357, WIN_20150212_130403







PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	0900	End Time	1116		
Room/area	main floor living room	Run Number	002 A-0027H-IA-002-LIV)	Time	0900
Room/area	main floor dining room	Run Number	003(IA-003-DRF)	Time	0907
Room/area	main floor guest bedroom	Run Number	004(IA-004-BR1)	Time	0915
Room/area	main floor master bedroom	Run Number	005(IA-005-MBR)	Time	0924
Room/area	main floor bathroom	Run Number	006(IA-006-BA1)	Time	0932
Room/area	main floor bathroom, rerun because we thout that it was a master bat	Run Number	007(IA-007-BA1)	Time	0940
Room/area	main floor kitchen	Run Number	008(IA-008-KIT)	Time	0949
Room/area	basement storage room west side, door by stairs	Run Number	011(IA-009-STO1)	Time	1018
Room/area	basement laundry room	Run Number	012(IA-010-LAU)	Time	1026
Room/area	basement bathroom	Run Number	013(IA-011-BA2)	Time	1034

Comments

basement bedroom 014(IA-012-BR2) time=1042.. basement bedroom small crawl space\storage closet with pipes in it 015(IA-013-STO2) time=1050.. bas
016(IA-014-FUR) time=1058..basement old coal chute now storage 017(IA-015-STO3) time=1109

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time: 1150 End Time: 1306 Room/Area: hapsite in basement hallway air door in

T=	5	CFM	852	Pascals	-5.3	Run No.	018(IA-017A-HAL)	Time	1150
T=	10	CFM	838	Pascals	-5.0	Run No.	019(IA-017B-HAL)	Time	1158
T=	15	CFM	833	Pascals	-5.1	Run No.		Time	1158
T=	20	CFM	830	Pascals	-4.7	Run No.	020(IA-017C-HAL)	Time	1206
T=	25	CFM	814	Pascals	-5.0	Run No.	021(IA-017D-HAL)	Time	1215
T=	30	CFM	837	Pascals	-5.5	Run No.		Time	1215
T=	35	CFM	840	Pascals	-4.9	Run No.	022(IA-017E-HAL)	Time	1223
T=	40	CFM	841	Pascals	-5.0	Run No.	023(IA-017F-HAL)	Time	1229
T=	45	CFM	850	Pascals	-5.1	Run No.		Time	1229
T=	50	CFM	835	Pascals	-4.8	Run No.	024(IA-017G-HAL)	Time	1239
T=	55	CFM	843	Pascals	-5.6	Run No.		Time	1239
T=	60	CFM	815	Pascals	-4.9	Run No.	025(IA-017H-HAL)	Time	1248
T=	65	CFM	865	Pascals	-5.1	Run No.		Time	1248
T=	70	CFM	863	Pascals	-5.0	Run No.	026(IA-017I-HAL)	Time	1256
T=	76	CFM	857	Pascals	-5.2	Run No.	027(IA-017J-HAL) shut down	Time	1304

Comments

63000 cubic feet is the target volume of air removed. building baseline is -0.5pa. Actual volume removed= 63906.12 cubic ft, average of 840.87 CFM for 76

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time: 1308 End Time: 1413 Room/Area: air door in back south door hapsite in basement hall way

T=	5	CFM	1085	Pascals	4.8	Run No.	028(IA-018A-HAL)	Time	1312
T=	10	CFM	1104	Pascals	5.6	Run No.		Time	1312
T=	15	CFM	1088	Pascals	5.7	Run No.	029(IA-018B-HAL)	Time	1321
T=	20	CFM	1100	Pascals	5.0	Run No.	030(IA-018C-HAL)	Time	1328
T=	25	CFM	1101	Pascals	4.8	Run No.		Time	1328
T=	32	CFM	1063	Pascals	4.7	Run No.	031(IA-018D-HAL)	Time	1337
T=	35	CFM	1051	Pascals	4.9	Run No.		Time	1337
T=	40	CFM	1014	Pascals	4.9	Run No.	032(IA-018E-HAL)	Time	1346
T=	45	CFM	1060	Pascals	5.1	Run No.	033(IA-018F-HAL)	Time	1352
T=	50	CFM	1004	Pascals	5.3	Run No.		Time	1352
T=	55	CFM	1042	Pascals	4.8	Run No.	034(IA-018G-HAL)	Time	1400
T=	60	CFM	999	Pascals	5.0	Run No.	035(IA-018H-HAL)	Time	1408
T=	65	CFM	1030	Pascals	5.1	Run No.		Time	1408
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

at 1338 fan shut down to pressure issues removed B ring restarted at 1340 down for 2 mins. 63000 cubic feet is the target volume of air to be added. buildi
Actual volume added= 66591 cubic ft, average of 1057 CFM for 63mins

PART J
SUMMA CANISTERS

Location/ Area: Basement at bottom of stairs

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0027H-TO-001-BAS	0367	03/18/2015	11:20	28	03/19/2015	11:00	2

Location/ Area: Duplicate of basement sample

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0000H-TO-010-DUP	0499	03/18/2015	11:20	25	03/19/2015	11:00	0

Location/ Area: Outdoor Ambient - South of House at SE corner of patio

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0027H-TO-002-OUT	0100	03/18/2015	11:25	28	03/19/2015	11:05	1

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

Comments

PART K
SOIL GAS

Date	2/12/15	Time	0915	Sample Depth	4'
Latitude	40.753802	Longitude	111.857517	Elevation	4489
Run No	009(A0027H-SG-021215-001-4)	Run Time	0956	Vacuum (in/Hg)	0

Comments

2nd sample .collected at0920 5.5 bgs, 0 vacuum, sample id=A0027H-SG-021215-001-5.5 run # 010 run time-1004.
The sample point was located in the west side yard about 6' from sw corner of house and 1' from slab.

Dec 19th
11:00a.m

Return to: VASLCHCS (00PA) 0027-H
500 Foothill Drive
Salt Lake City, UT 84148

OCCUPIED DWELLING QUESTIONAIRE

Indoor Air Assessment Survey

Date: 22 March

1. Name: /
   Address: 1164 East 700 South
   Salt Lake City, Utah 84102
   Home Phone: ___ Work Phone: ___
2. What is the best time to call to speak with you? ___ At: Work ☐ or Home ☑ ?
3. Are you the Owner ☑, Renter ☐, Other ☐ (please specify) ___ of this Home/Structure? If you are not the owner, please provide owner contact Information
   ___
   ___
4. Total number of occupants/persons at this location? 1
   Number of Children ___ Ages ___
5. How long have you lived at this location? 4 yrs.

General Home Description

6. Type of Home/Structure (check only one): Single Family Home ☑, Duplex ☐, Apartment ☐, Townhouse ☐ Other ___
7. Home/Structure Description:
   Number of floors: one
   Basement ☑
   Crawlspace ☐
   Partial crawlspace/basement ☐ % of each ___
   Slab on grade ☐
   Other ☐ ___
8. Age of Home/Structure: 100 years, Not sure/Unknown ☐
9. General Above-Ground Home/Structure construction (check all that apply):
   Wood ☐, Brick ☑, Concrete ☐, Cement block ☐, Other ☐ and Stucco
10. Foundation Construction (check all that apply):
    Concrete Slab ☑
    Fieldstone ☐
    Concrete block ☐
    Elevated above ground/grade ☑
    Other ☐ ___

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

11. Do you have private well ☐ or cistern ☐ ? NO
If yes, please describe location, use and current condition_____

12. Do you have a septic system? Yes ☐ No ☑ Not used ☐ Unknown ☐
If yes, what is construction type?_____
Where is it located? _____
When was the last time it was serviced?_____
Do you (or have you ever) use (d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your home? (pond, ditch, etc.) Yes ☐ No ☑

Basement Description (please check all boxes that apply):

14. Is the basement finished ☑ or unfinished ☐ ? partial

15. If finished, how many rooms are in the basement? 3
What are rooms used for? Bedrooms ☑ Family room ☐ Storage ☐
Other Bathroom, laundry room

16. If not finished, do you plan on finishing in the future? Yes ☐ No ☑

17. Is the basement floor (check all that apply) concrete ☑, tile ☑, carpeted ☐, dirt ☐,
other ☐ _____

18. Are the basement walls poured concrete ☑, cement block ☐, stone ☐, wood ☐,
Brick ☐, other ☐ _____

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☑
Yes, rarely (less that 1 time/year) ☐
No ☐

Describe the moisture problem small amt. standing water – north east part of floor

20. .Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☐
No ☑

21. Does the basement have any of the following? Floor cracks ☑, Wall cracks ☑, Sump ☑,
Floor drain ☑, Other hole/opening in floor ☑
describe openings with rubble + dirt where old coal furnace stood

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

22. Are any of the following used or stored in the basement (check all that apply):
Paint ☑ Paint Stripper/remover ☐ Paint thinner ☑ Metal degreaser/cleaner ☐
Gasoline ☑ Diesel fuel ☐ Solvents ☐ Glue ☐ Laundry spot removers ☑ Drain cleaners
☐ Pesticides ☑ Other equipment with fuel tanks (chain saw, lawn mower, snow blower,etc.,)

23. Have you recently (within the last six months) done any painting or remodeling in your home?
Yes ☐ No ☑
If yes, specify what was done, where in the home, and what month:
_____
_____

24. Have you installed new carpeting in your home within the last year? Yes ☐ No ☑
If yes, when and where?_____

25. Do you regularly use or work in a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) ☐
Yes, use dry-cleaning infrequently (monthly or less) ☑
Yes, work at a dry cleaning service ☐
No ☐

26. Does anyone in your home use solvents at work?
Yes ☐ If yes, how many persons?
No ☑ If no, go to question 28

27. If yes for question 26, are the work clothes washed at home? Yes ☐ No ☐

28. Where is the washer/dryer located?
Basement ☑
Upstairs utility room ☐
Kitchen ☐
Garage ☐
Use a Laundromat ☐
Other, please specify ☐ _____

29. If you have a dryer, is it vented to the outdoors? Yes ☑ No ☐

30. What type (s) of home heating do you have (check all that apply)
Fuel type: Gas ☑, Oil ☐, Electric ☐, Wood ☐, Coal ☐,
Other ☐_____

Heat conveyance system:
Forced hot air ☑
Forced hot water ☐
Steam ☐
Radiant floor heat ☐
Wood Stove ☐
Coal furnace ☐
Fireplace ☐
Other ☐ _____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

31. Does your home have (or had in the past) a storage tank for storage of: gasoline ☐ fuel oil ☐ propane ☐
If yes, where is/was it located? ND
How is/was the tank filled?
Is there staining near the tank? Yes ☐ No ☐

32. Do you have air conditioning? Yes ☑ No ☐
Central air conditioning ☑
Window air conditioning unit (s) ☐
Other (please specify)

33. Do you use any of the following? Room fans ☑, Ceiling fans ☐, Attic fan ☐

34. Do you ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☐ No ☑ ?

35. Has your home had termite or other pesticide treatment? Yes ☐ No ☑ Unknown ☐
If yes, please specify type of pest controlled
And approximate date of service

36. Water heater type: Gas ☑, Electric ☐, by Furnace ☐,
Other (please describe)

37. Water heater location: Basement ☑, Upstairs utility room ☐, Garage ☐,
Other (please specify)

38. What type of cooking appliance do you have? Electric ☐, Gas ☑
Other (please describe)

39. Is there a stove exhaust hood present? Yes ☑ No ☐
Does it vent to the outdoors? Yes ☑ No ☐

40. Smoking in Home:
None ☑, Rare (only guests) ☐, Moderate (residents, light smokers) ☐,
Heavy (at least one heavy smoker in household) ☐

41. If yes to question 40, what do they smoke?
Cigarettes ☐ Cigars ☐
Pipe ☐ Other ☐

42. Do you regularly use air fresheners? Yes ☐ No ☑

43. Does anyone in the home have indoor home hobbies or crafts involving: NO
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☐
Spray paint ☐, wood finishing ☐, Other ☐

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

44. General family/home use of consumer products (please circle appropriate). Assume that: Never = never used, Hardly ever = less that once/month, Occasionally = about once/month, Regularly = about once/week, and Often = more that once/week.

Product	Frequency of Use				
Spray-on deodorant	Never	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	Never	Hardly ever	Occasionally	Regularly	Often
Insecticides	Never	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	Occasionally	Regularly	Often
Window cleaners	Never	Hardly ever	Occasionally	Regularly	Often
Nail polish remover	Never	Hardly ever	Occasionally	Regularly	Often
Hair sprays	Never	Hardly ever	Occasionally	Regularly	Often
Candles	Never	Hardly ever	Occasionally	Regularly	Often
Incense	Never	Hardly ever	Occasionally	Regularly	Often

45. Please check weekly household cleaning practices:

- Dusting ☑
- Dry sweeping ☑
- Vacuuming ☑
- Polishing (furniture, etc.) ☐
- Washing/waxing floors ☑
- Other (describe) ☐ _____

46. Other comments:

_____

_____

_____

_____

_____

_____

_____

_____

_____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

47. Chemical Inventory/Summary

Chemical/Chemical Product (consumer name)	Amount present in home
a)	
b)	
c)	
d)	
e)	
f)	
g)	
h)	
i)	
j)	
k)	
l)	
m)	
n)	
o)	

PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0028-S

Street Address: 780 Guardsman Way

ZIP: 84105

Property Contact:

Tel #:

Latitude: 40.751356

Longitude: 111.845914

Age of Property: 15 years

Number of Levels: 2

Basement? ○ Yes ◉ No

Basement Habitable? ○ Yes ○ No

Sump? ○ Yes ◉ No

Completed by: ERR

Date: 2/18/15

Comments

Modern slab on grade structure. School facility constructed of concrete, concrete block, and steel.

Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.

REFERENCE NOTES

1. SEMI-RECESSED FIRE EXTINGUISHER CABINET
2. ELECTRIC WATER COOLER
3. CASEWORK
4. TOILET PARTITION, TALL (OVERALL HEIGHT)
5. TOILET PARTITION, SHORT (OVERALL HEIGHT)
6. CORNER GUARD
7. IMPERVIOUS PARTITION TYPICAL ABOVE
8. PIPE CHASE
9. ROOF ACCESS LADDER
10. OVERHEAD DOOR OPENING
11. ROOF ACCESS LADDER
12. PENTAGONAL MULLION
13. FOOTBALL FOR DIMENSIONS & WALL BRACKET

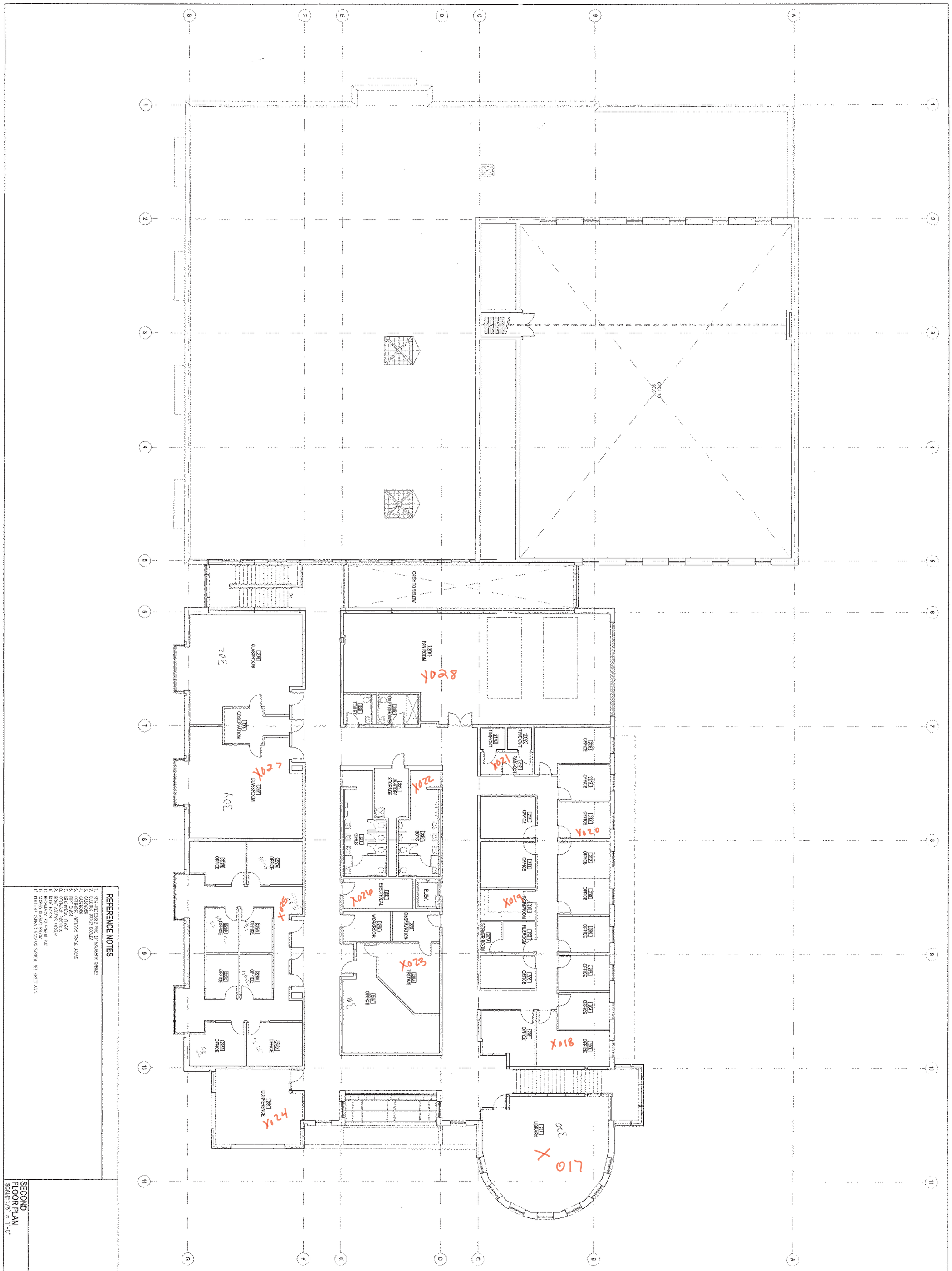
FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"

A2.1

MJSA
337 West Pierpont Avenue ▫ Salt Lake City Utah 84101
Telephone 801 364 5161 ▫ Facsimile 801 364 5167
ARCHITECTURE INTERIOR DESIGN

CARMEN B. PINGREE SCHOOL
GUARDSMAN WAY, SALT LAKE CITY, UTAH

ADDENDUM 2 04.19.2011
ADDENDUM 1 04.08.2011



REFERENCE NOTES

1. NON-RECESSED FIRE EXTINGUISHER CABINET
2. ELECTRIC WATER COOLER
3. CASEWORK
4. CASEWORK PARTITION TRACK ABOVE
5. PIPE CHASE
6. MECHANICAL CHASE
7. DOUBLE DOORS
8. ROOF ACCESS HATCH
9. MECHANICAL EQUIPMENT PAD
10. ROOF ACCESS LADDER
11. SUSPEND DURING EQUIP. INSTALL
12. ELECT.-IP ADDRESS RESPONSE SYSTEM, SEE SHEET A3.1

SECOND FLOOR PLAN
SCALE: 1/8" = 1'-0"

A2.2

MJSA
357 West Pierpont Avenue • Salt Lake City, Utah 84101
Telephone 801 364 5161 • Facsimile 801 364 5157
ARCHITECTURE INTERIOR DESIGN

CARMEN B. PINGREE SCHOOL
GUARDSMAN WAY, SALT LAKE CITY, UTAH

PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 3/31/15 Time of Arrival: 0830

Weather Conditions: Sunny

Temperature: 52 Barometric Pressure (inHg): 30.00 Wind Direction: SE Speed: Calm

Field Crew 1: ERR Role: HAPSITE Operator

Field Crew 2: DED Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? ( ) Yes (●) No

If yes, have the materials been removed? ( ) Yes ( ) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time	
001,002,003,004,005	3/29/15	1830	
Instrument Performance Check Run Number	Time	(●) Pass	
Auto tune	0738	( ) Fail	
Instrument Performance Check Re-run Number	Time	( ) Pass	
NA		( ) Fail	
CCV Run Number	Time	(●) Pass	
029-0.5PPB-3/30/15	1412	( ) Fail	
CCV Re-run Number	Time	(●) Pass	
030-5PPB-3/30/15	1507	( ) Fail	

Operator's initials: ERR

Comments

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time	1233	End Time	1235
Location	sidewalk near front entrance, on N side of bldg.		
Run Number	016(IA-016-OUT)	Time	1233
Run Number	NA	Time	

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time 1109 End Time 1144

Comments

Survey 001,chemicals stored in RM116,1109-1111,Max TIC =131,108; 003, Hazardous materials closet in kitchen RM118F,1142-1144, Max TIC =172,012. PHOTO IMG_20150331-Survey001, PHOTO IMG_20150331-Survey003.

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time 1114 End Time 1116

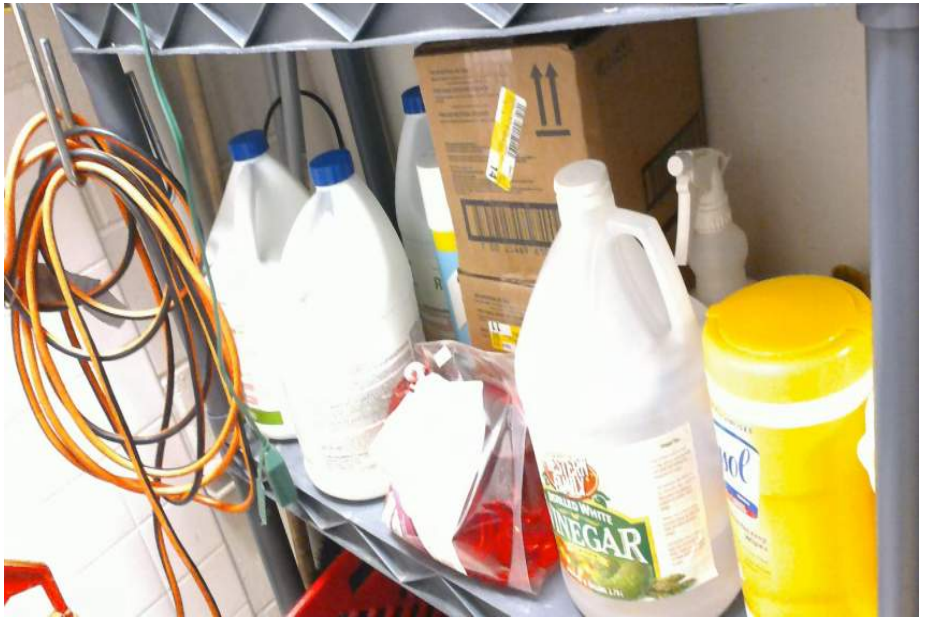
Comments

002 pipe run in room 116 1114-1116, max TIC =163,497; 004 drain in floor of dishwasher room, 1146-1148,max TIC =149,631; 005, floor drain near steam TIC =161,660;

Pictures

PHOTO: IMG_20150331-Survey004.




INEGAR



PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	0908	End Time	1140		
Room/area	Central hallway - room 110	Run Number	001(IA-001-HAL1)	Time	0908
Room/area	Mechanical room-119A	Run Number	002(IA-002-RM119A)	Time	0916
Room/area	Classroom 106	Run Number	003(IA-003-CR106)	Time	0924
Room/area	Elevator Equipment room 104	Run Number	004(IA-004-RM104	Time	0933
Room/area	Front Office room 102	Run Number	005(IA-005-RM102)	Time	0941
Room/area	Day care	Run Number	006(IA-006-CR139)	Time	0954
Room/area	Class room137	Run Number	007(IA-007-CR137)	Time	1002
Room/area	Class room 133	Run Number	008(IA-008-CR133)	Time	1010
Room/area	Class room 128	Run Number	009(IA-009-CR128)	Time	1019
Room/area	Observation room 124	Run Number	010(IA-010-RM124)	Time	1027

Comments

CLASSROOM 122,011(IA-011-RM122)1035; CLASSROOM 119,012(IA-0112-CR119)1044; MECHANICAL ROOM 116,013(IA-013-RM116)1058; Cafeteria-RM113,014(IA-014-RM113)1120; KITCHEN Area RM118,015(IA-015-RM118)1129; ROOM 201,017(IA-017-RM201)1254; Office Room 203,018(IA-018-RM203)1305; Workroom 210,019(IA-019-RM210)1314; Office RM213,020(IA-020-RM213)1325; Timeout RM217,021 (IA-021-RM217)1333; 2ND Floor boys bathroom 022,(IA-022-BA1)1341; Class room 228,023(IA-023-CR228)1350; Conference room224,024 (IA-024-RM224)1358; Class room 227, 025(IA-025-CR227)1406; Telephone room230,026(IA-026-RM230)1415; Class room 232,027 (IA-027-CR232)1423; Mechanical room 218,028(IA-028-RM218)1432;

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time: 0955 | End Time: 1145 | Room/Area: Kitchen-RM118

T=	5	CFM	476	Pascals	-4.9	Run No.	003(IA-029A-RM118)	Time	0958
T=	10	CFM	444	Pascals	-4.7	Run No.	004(IA-029B-RM118)	Time	1005
T=	15	CFM	464	Pascals	-4.9	Run No.	005(IA-029C-RM118)	Time	1013
T=	20	CFM	381	Pascals	-4.8	Run No.		Time	
T=	25	CFM	385	Pascals	-4.7	Run No.	006(IA-029D-RM118)	Time	1022
T=	30	CFM	475	Pascals	-4.7	Run No.	007(IA-029E-RM118)	Time	1034
T=	40	CFM	568	Pascals	-5.1	Run No.	008(IA-029F-RM118)	Time	1045
T=	50	CFM	387	Pascals	-5.2	Run No.	009(IA-029G-RM118)	Time	1054
T=	60	CFM	LOW	Pascals	-5.5	Run No.	010(IA-029H-RM118)	Time	1104
T=	70	CFM	388	Pascals	-4.7	Run No.	011(IA-029I-RM118)	Time	1113
T=	80	CFM	340	Pascals	-4.8	Run No.	012(IA-029J-RM118)	Time	1122
T=	90	CFM	LOW	Pascals	-4.8	Run No.	013(IA-029K-RM118)	Time	1130
T=	100	CFM	LOW	Pascals	-5.2	Run No.	014(IA-029L-RM118)	Time	1141
T=	110	CFM	LOW	Pascals	-5.0	Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

45,000 = 2.5 air volumes. Baseline pressure=.7.8 pascal . Total volume removed =45,848cuft. Air door in entrance to food service area (Room 118); Hapsite in rear prep room. Pressure testing conducted on 4/1/15.

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time: 1148 End Time: 1230 Room/Area:

	T=	CFM	Pascals	Run No.	Time
1	5	1051	4.9	015(IA-030A-RM118)	1150
2	10	1052	7.3	016(IA-030B-RM118)	1202
3	15	1057	3.4		
4	20	1062	6.5		
5	25	1061	9.0		
6	30	1053	7.9	017(IA-030C-RM118)	1220
7	40	1063	8.7	018(IA-030D-RM118)	1228
8	44	1063	6.9		
9					
10					
11					
12					
13					
14					
15					

Comments

BASELINE =4.8 Total volume =46,486 cuft. Testing conducted on 4/1/15.

PART J
SUMMA CANISTERS

Location/ Area: First floor maintenace storage off of boys bathroom

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
A-0028-S-TO-001-STO	0379	4/1/15	0945	26	4/2/15	1000	1

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

Comments

PART K
SOIL GAS

Date	3/31/15	Time	1030/1045	Sample Depth	4/8		
Latitude	40.751356	Longitude	111.845914			Elevation	4648
Run No	030/031	Run Time	1448/1456			Vacuum (in/Hg)	0/4

Comments

Noth side of building, closer to northeastern corner about 10 feet from slab. 0028S-SG-001-4 1030 0028S-SG-001-8 1045. Run 029 aborted. PHOTO: 0028S-SG001 Loc.



0028-S

Carmen B. Pingree

COMMERCIAL / INDUSTRIAL BUILDING QUESTIONNAIRE

Indoor Air Assessment Survey

Date: 12/29/14 Survey / questionnaire completed by: Julia Hood

1. Contact Name: ~~[illegible]~~ Blane Anderson
   Address: 780 S. guardsman City: SLC State: UT Zip: 84108
   Phone 1: 801-581-0194 ~~Phone 2~~ Cell: 801-209-0087 Cell Phone: _____

2. What is the best time to call to speak with you? Day before 3P

3. Are you the Owner ☐, Renter ☐, Other ☒ (please specify) Manager of this Building/Structure? If you are not the owner, please provide owner contact information
   Owner Name: Valley Behavioral Health - Ivanna Taylor
   Address: 5695 S. 900 E City: Murray State: UT Zip: _____
   Phone 1: 801-263-7100 Phone 2: _____ Cell Phone: _____

4. Total number of occupants/persons at this location? 200-300
   Number of Children 200 Ages 2y-16y

5. How long have you occupied this location? 15 y ?
   How days per week is building occupied? 5
   How hours per day is building occupied? 10-12

General Building / Structure Description

6. Type of Building/Structure (check only one): Single Business ☒, Multiple Businesses ☐,
   Other _____

7. Building/Structure Description:
   Number of floors: 2 Area /square footage of main or ground floor: _____ square feet
   Basement ☐ Area /square footage of Basement: _____ square feet No basement
   Crawlspace ☐ Area /square footage of Crawlspace: _____ square feet
   Partial crawlspace/basement ☐ % of each _____
   Slab on grade ☐ Area /square footage of Slab on grade: _____ square feet
   Other ☐ _____

8. Age of Building/Structure: _____ years, Not sure/Unknown ☒

9. General Above-Ground Building/Structure construction (check all that apply):
   Wood ☐, Brick ☐, Concrete ☒, Cement block ☒, Other ☐ _____

10. Foundation Construction (check all that apply):
    Concrete Slab ☐
    Fieldstone ☐
    Concrete block ☐
    Elevated above ground/grade ☒
    Other ☐ _____

11. Do you have private well ☐ or cistern ☐ ?
If yes, please describe location, use and current condition no

12. Do you have a septic system? Yes ☐ No ☐ Not used ☐ Unknown ☒
If yes, what is construction type?
Where is it located?
When was the last time it was serviced?
Do you (or have you ever) use(d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your Building? (pond, ditch, etc.) Yes ☐ No ☒

Basement Description (please check all boxes that apply):

14. Is the basement finished ☐ or unfinished ☐ ? no basement

15. If finished, how many rooms are in the basement?
What are rooms used for? Office ☐ Shop ☐ Storage ☐
Other

16. If not finished, do you plan on finishing in the future? Yes ☐ No ☐

17. Is the basement floor (check all that apply) Concrete ☐, Tile ☐, Carpeted ☐, Dirt ☐,
Other ☐

18. Are the basement walls poured Concrete ☐, Cement block ☐, Stone ☐, Wood ☐,
Brick ☐, Other ☐

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☐
No ☐

Describe the moisture problem

20. Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☐
No ☒

21. Does the basement have any of the following? Floor cracks ☐, Wall cracks ☐, Sump ☐,
Floor drain ☐, Other hole/opening in floor ☐
describe

22. Are any of the following used or stored in the basement (check all that apply):
Paint ☐ Paint Stripper/remover ☐ Paint thinner ☐ Metal degreaser/cleaner ☐
Gasoline ☐ Diesel fuel ☐ Solvents ☐ Glue ☐ Laundry spot removers ☐
Drain cleaners ☐ Pesticides ☐ Other equipment with fuel tanks (chain saw, lawn mower, snow blower, etc.) ☐ Other products with/containing Volatile Organic Compounds, describe:

_____

_____

23. Has the Building / structure recently (within the last six months) had any painting or remodeling?
Yes ☐ No ☒
If yes, specify what was done, where in the Building, and what month:

_____

_____

24. Has new carpeting been installed in the Building / structure within the last year? Yes ☐ No ☒
If yes, when and where?_____

25. Do any occupants / employees regularly conduct or work in beauty / hair-dressing business?
Yes, work at a beauty / hair-dressing business ☐
Yes, store supplies for beauty / hair-dressing business ☐ Distance to sample point:_____
Yes, building contains beauty / hair-dressing business ☐ Distance to sample point: _____
Yes, building is near beauty / hair-dressing business ☐ Distance to sample point: _____
No ☒

26. Do any occupants / employees / anyone regularly use or work or conduct a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) ☐
Yes, use dry-cleaning infrequently (monthly or less) ☐
Yes, work at a dry cleaning service ☐
Yes, building contains or is near dry cleaning service ☐ Distance to sample point: _____
No ☒

27. Do any occupants / employees / anyone in the Building / structure use solvents at work?
Yes ☐ If yes, how many persons?
No ☒ If no, go to question 28

28. If yes for question 26, are the work clothes washed at Building? Yes ☐ No ☒

29. Does Building / Structure contain a washer/dryer? Yes ☒ No ☐
Where are they located?
Basement ☐
Upstairs ☐
Ground floor ☒
Garage ☐
Other, please specify ☐ _____

30. If Building / Structure contains a dryer, is it vented to the outdoors? Yes ☐ No ☐

31. What type (s) of Building heating do you have (check all that apply)
Fuel type: Gas ☐, Oil ☐, Electric ☒, Wood ☐, Coal ☐,
Other ☐ _____

Heat conveyance system: Forced hot air ☐ Forced hot water ☒ Steam ☐
Radiant floor heat ☐ Wood Stove ☐ Coal furnace ☐ Fireplace ☐
Other ☐ _____

32. Does Building/Structure have (or had in the past) a storage tank for storage of gasoline ☐, fuel oil ☐, propane ☐ If yes, where is/was it located? NO

How is/was the tank filled? _____

Is there staining near the tank? Yes ☐ No ☐

33. Does Building/Structure have air conditioning? Yes ☒ No ☐
Central air conditioning ☒
Window air conditioning unit (s) ☐
Other (please specify) _____

34. Does Building / Structure have any: Room fans ☐, Ceiling fans ☐, Attic fan ☐ ?

35. Does Building / Structure ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☒ No ☐

36. Has Building / Structure had termite or other pesticide treatment? Yes ☒ No ☐ Unknown ☐
If yes, please specify type of pest controlled Rodents, insects
and approximate date of service ** quarterly

37. Water heater type: Gas ☐, Electric ☐, by Furnace ☒,
Other (please describe) _____

38. Water heater location: Basement ☐, Upstairs ☐, Ground Floor ☒, Attic ☐,
Other _____

39. Does Building/Structure have any cooking appliances? Electric ☒, Gas ☐,
Other _____

40. Is there a stove exhaust hood present? Yes ☐ No ☐ ?
Does it vent to the outdoors? Yes ☐ No ☐

41. Smoking in Building/Structure:
None ☒, Rare (only guests) ☐, Moderate (occupants, light smokers) ☐,
Heavy (at least one heavy smoker in Building/Structure) ☐

42. If yes to question 40, what do they smoke?
Cigarettes ☐, Cigars ☐, Pipe ☐, Other ☐ NO

43. Does Building/Structure regularly contain/use air fresheners? Yes ☒ No ☐

44. Does anyone in the Building have indoor Building hobbies or crafts involving:
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☐, spray paint ☐,
wood finishing ☐, Other ☒ School age activities

45. General Building / Structure use of industrial / office /consumer products (circle as appropriate).
Assume that: Never = never used, Hardly ever = less that once/month,
Occasionally = about once/month, Regularly = about once/week,
and Often = more that once/week.

Product	Frequency of Use				
Solvents	Never	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	Never	Hardly ever	Occasionally	Regularly	Often
Insecticides	Never	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	Occasionally	Regularly	Often
Window cleaners	Never	Hardly ever	Occasionally	Regularly	Often
Ink / Toner Cartridge	Never	Hardly ever	Occasionally	Regularly	Often
Glue / Adhesives School > Exits	Never	Hardly ever	Occasionally	Regularly	Often
Paint	Never	Hardly ever	Occasionally	Regularly	Often
Petroleum Fuel	Never	Hardly ever	Occasionally	Regularly	Often

46. Please check weekly Building/Structure maintenance, janitorial, and cleaning practices:
Dusting ☑
Dry Sweeping ☑
Vacuuming ☑
Polishing (furniture, etc.) ☑
Washing/waxing floors ☑
Other (describe) ☐ > Full janitorial

47. Other comments including items / subjects not covered in this questionnaire yet an issue or concern for the Building / Structure:

48. **Chemical Inventory/Summary**

Chemical/Chemical Product (consumer name)	Amount present in Building / Structure
a) Lysol wipes	20 jars
b) Lysol spray	20 cans
c) disinfectant soln.	10 gallons
d) Salt (De-Ice)	20 lb.
e)	
f)	
g)	
h)	
i)	
j)	
k)	
l)	
m)	
n)	
o)	

PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0029-H
Street Address: 1119 E Alpine Place
ZIP: 84105

Property Contact:
Tel #:

Latitude: 40.749444
Longitude: 111.858000
Age of Property: unk years

Number of Levels: 2
Basement? (•) Yes ( ) No
Basement Habitable? (•) Yes ( ) No
Sump? ( ) Yes (•) No

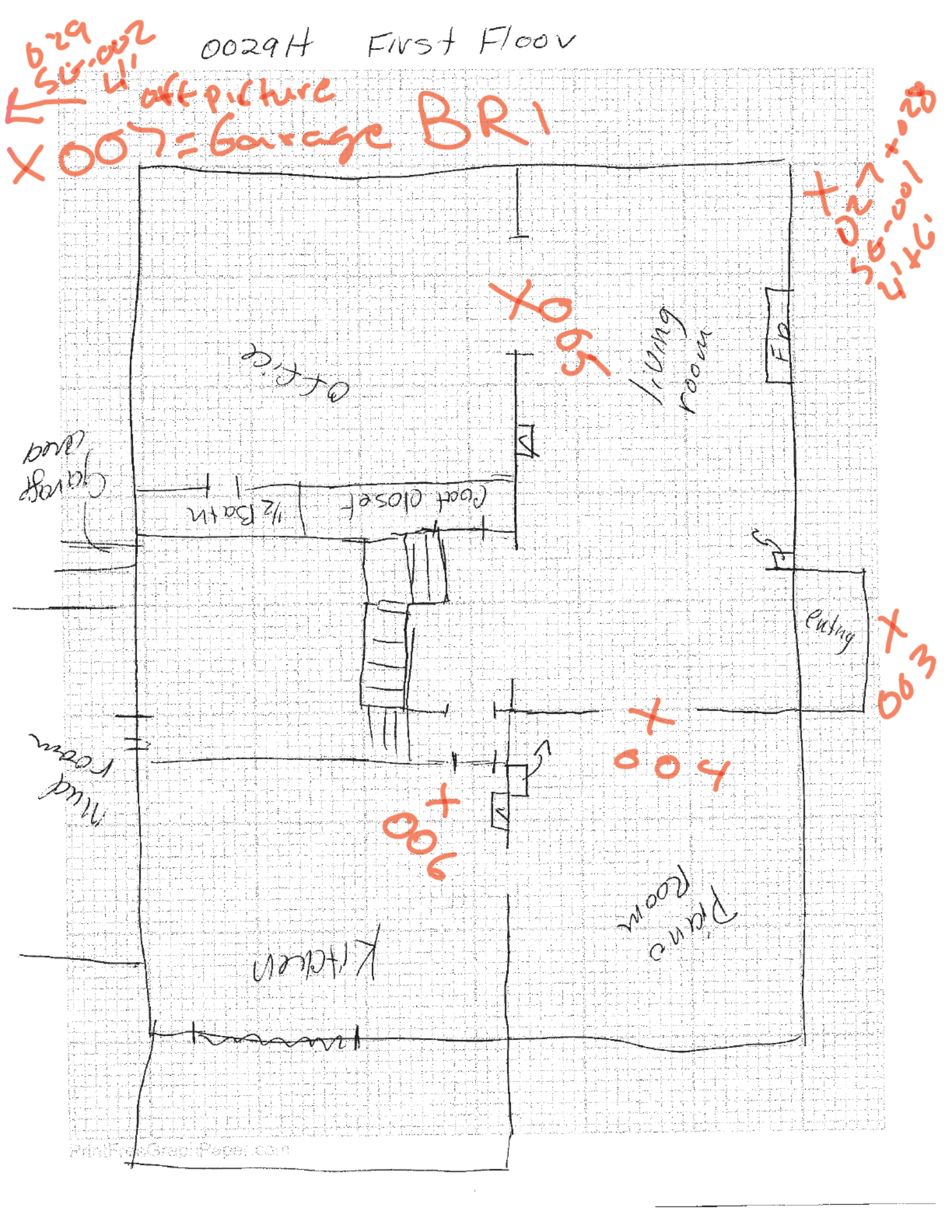
Completed by: ERR
Date: 12/18/2014

Comments

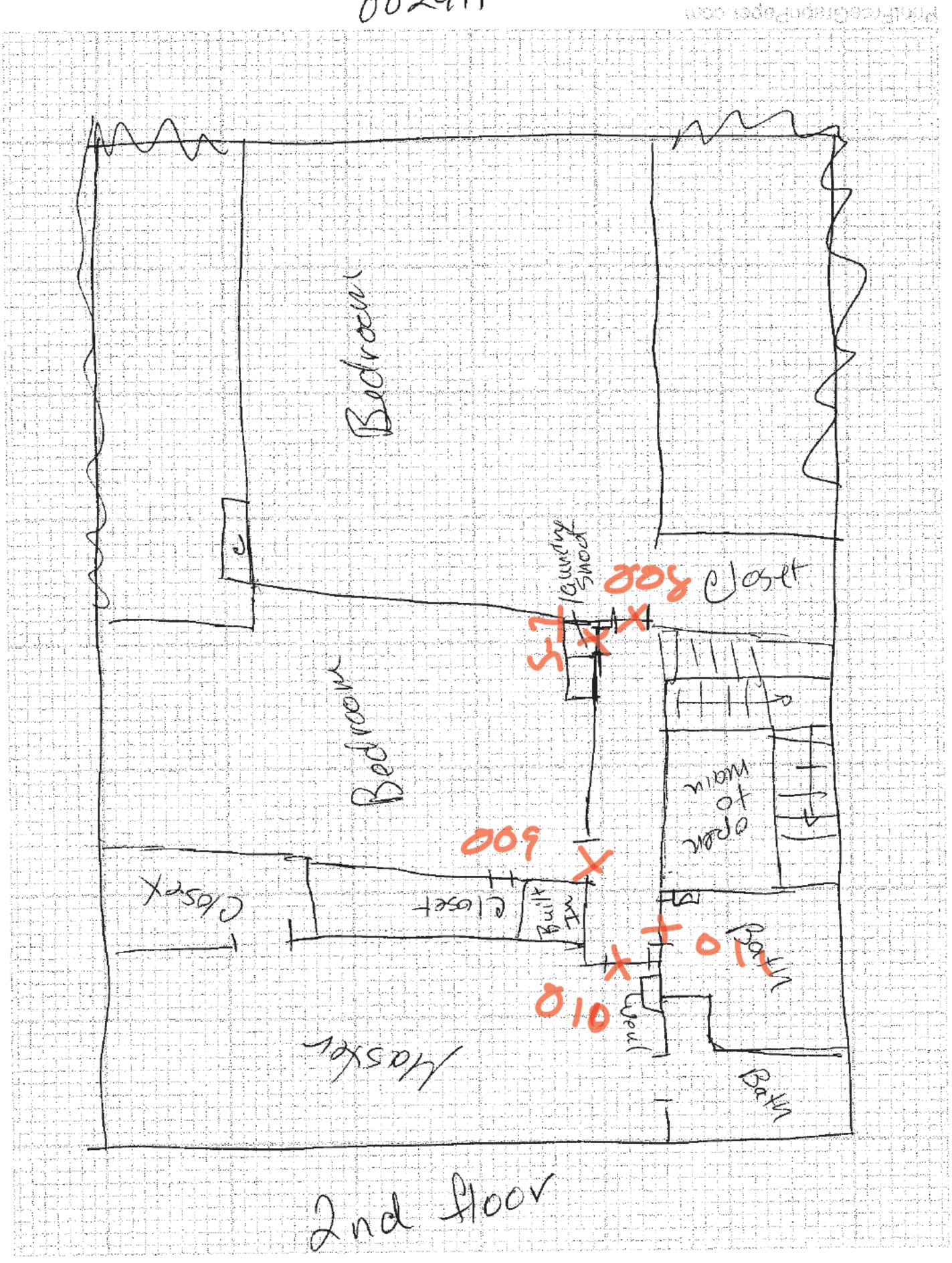
80/20 Crawlspace/basement area. Elevation at front steps= 4418' msl

Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.

0029H First Floor



00291t


Bedroom
Bedroom
Closet
Closet
Closet
Built In
Master
Bath
Bath
open to main
Weul
Laundry Shoot
008
009
010
011
2nd floor

0029 H

Basement



PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 3/11/15 Time of Arrival: 0830

Weather Conditions: Cloudy

Temperature: 46 Barometric Pressure (inHg): 30.10 Wind Direction: SE Speed: Light

Field Crew 1: ERR Role: HAPSITE Operator

Field Crew 2: DED Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? ( ) Yes (●) No

If yes, have the materials been removed? ( ) Yes ( ) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time
001,002,004,005,006	3/5/15	1830

Instrument Performance Check Run Number	Time	
AUTOTUNE	0721	(●) Pass ( ) Fail

Instrument Performance Check Re-run Number	Time	
NA		( ) Pass ( ) Fail

CCV Run Number	Time	
001 (5 ppb)	0741	(●) Pass ( ) Fail

CCV Re-run Number	Time	
002 (0.5 ppb)	0749	(●) Pass ( ) Fail

Operator's initials: ERR

Comments

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time: 0857 End Time: 0859

Location: Front of house on south side.

Run Number: 003 (IA-001-OUT) Time: 0857

Run Number: NA Time:

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time NA End Time

Comments

No source material surveys conducted - low ambient readings and visual inspection of storage areas did not find suspect source materials.

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time 0953 End Time 0955

Comments

Laundry chutet 2nd floor - 001- 0953 - max TIC = 122,399. Sewer cleanout in basement hallway floor- has dirt bottom -002 - 1105- max TIC=124,358. Drain/laundry room floor-003 - 1112- max TIC=152,396; pipe chase in laundry room-004-1117- max TIC=157,434; crawl space off of basement stairs -005-1136- max TIC =127,966; crawl space under kitchen-006-1140- max TIC =146,663; crawl space under front porch-007-1146- max TIC =159,869. Crawl spaces are concrete floored rather than dirt.

Pictures

See attached photos: WIN03112015 showing survey locations.

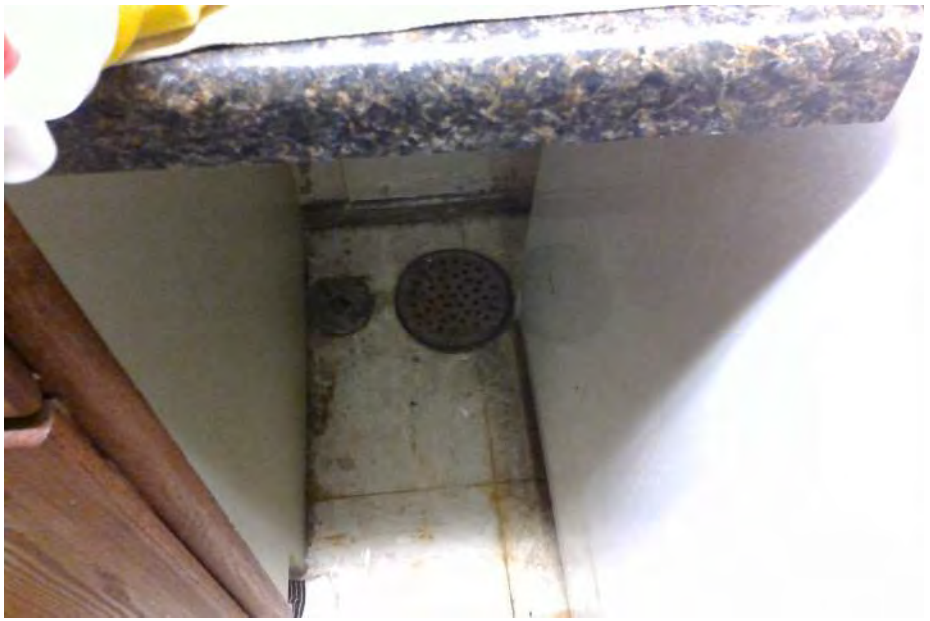





12


APPLE
HAND PICKED







PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	0906	End Time	1130		
Room/area	Open concept living area	Run Number	004 (IA-002-OCL)	Time	0906
Room/area	Office	Run Number	005 (IA-003-OFC)	Time	0914
Room/area	KITCHEN	Run Number	006 (IA-004-KIT)	Time	0923
Room/area	GARAGE BEDROOM	Run Number	007 (IA-005-BR1)	Time	0932
Room/area	Upstairs bedroom	Run Number	008 (IA-006-BR2)	Time	0945
Room/area	Guest bedroom	Run Number	009 (IA-007-BR3)	Time	1000
Room/area	Master bedroom	Run Number	010 (IA-008-MBR)	Time	1008
Room/area	upstairs bathroom	Run Number	011 (IA-009-BA1)	Time	1016
Room/area	downstairs family room	Run Number	012 (IA-010-fam)	Time	1031
Room/area	downstairs laundry	Run Number	013(IA-011-LAU)	Time	1045

Comments

Furnace closet 014 (IA-012-FUR) 1056; BASEMENT bathroom 015(IA-013-BA2)1126;

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time: 1210 | End Time: 1304 | Room/Area: basement family room

T=	5	CFM	1475	Pascals	-5.2	Run No.	016 (IA-014A-FAM)	Time	1216
T=	10	CFM	1488	Pascals	-4.7	Run No.		Time	
T=	15	CFM	1519	Pascals	-5.1	Run No.		Time	
T=	20	CFM	1483	Pascals	-4.6	Run No.	018 (IA-014B-FAM)	Time	1234
T=	25	CFM	1476	Pascals	-5.5	Run No.		Time	
T=	30	CFM	1455	Pascals	-5.5	Run No.	019 (IA-014C-FAM)	Time	1242
T=	40	CFM	1443	Pascals	-4.7	Run No.	020 (IA-014D-FAM)	Time	1250
T=	50	CFM	1451	Pascals	-5.0	Run No.	021 (IA-014E-FAM)	Time	1258
T=	54	CFM	1407	Pascals	-5.4	Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

57,000 cf = 2.5 air volumes. Run 016 and 017 aborted due to nitrogen levels. Total volume = 79,182. Baseline pressure = -0.3 pascal., Air door placed in back door to deck opposite the basement stairwell. Hapsite located in the basement family room.

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time: 1310 End Time: 1358 Room/Area: basement family room

T=	5	CFM	1587	Pascals	5.1	Run No.	022(IA-015A-FAM)	Time	1317
T=	10	CFM	1712	Pascals	5.3	Run No.		Time	
T=	15	CFM	1631	Pascals	5.9	Run No.	023(IA-015B-FAM)	Time	13:25
T=	20	CFM	1684	Pascals	4.9	Run No.		Time	
T=	25	CFM	1666	Pascals	4.3	Run No.	024(IA-015C-FAM)	Time	13:35
T=	30	CFM	1633	Pascals	4.6	Run No.	025 (IA-015D-FAM)	Time	13:43
T=	40	CFM	1696	Pascals	5.2	Run No.	026 (IA-015E-FAM)	Time	13:51
T=	48	CFM	1672	Pascals	5.7	Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

79,686 total volume

PART J
SUMMA CANISTERS

Location/ Area: NA

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

Comments

PART K
SOIL GAS

Date	3/11/15	Time	1100	Sample Depth	see below		
Latitude	see below	Longitude				Elevation	
Run No	027; 028; 029	Run Time	1401;1409;1417			Vacuum (in/Hg)	2;";4";10"

Comments

SG-001-4' and 6' - located at SE corner of house - 18" of foundation wall. Lat=40.749419; Long=111.857943; Elev= 4420'. SG-002-4' - located nea
garage at edge of driveway - approx 48" from slab. Lat=40.749519; Long=111.857909; Elevation= 4422'.

00294 2/10 Tues 11am

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

OCCUPIED DWELLING QUESTIONNAIRE

Indoor Air Assessment Survey

Date: 12-18-2014

1. Name: _Address: 1119 E Alpine Place SLC UT 84105

_ Home Phone: _ Work Phone:

2. What is the best time to call to speak with you? At: Work or Home ? Anytime until 5pm

3. Are you the Owner , Renter , Other (please specify) of this Home/Structure? If you are not the owner, please provide owner contact Information

_____

_____ –

4. Total number of occupants/persons at this location? 5 3_ Number of Children Ages 19, 16, 15

5. How long have you lived at this location? 23 years

General Home Description

6. Type of Home/Structure (check only one): ~~Single Family Home~~ , Duplex , Apartment , Townhouse Other

7. Home/Structure Description:
Number of floors: 2 + ✓ Basement
Crawlspace – yes
Partial crawlspace/basement % of each 80/20 crawl Slab on grade
Other

8. Age of Home/Structure: years, Not sure/Unknown
@ 1925

9. General Above-Ground Home/Structure construction (check all that apply):

Wood (Brick) , Concrete , Cement block , Other -

10. Foundation Construction (check all that apply): (Concrete Slab)
Fieldstone
Concrete block
Elevated above ground/grade

Other -

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

11. Do you have private well or cistern ? No

If yes, please describe location, use and current condition -

-

-

12. Do you have a septic system? Yes No Not used Unknown (city)

If yes, what is construction type? _ Where is it located? _When was the last time it was serviced? _ Do you (or have you ever) use (d) any degreaser for your septic system? Yes No

13. Do you have standing water outside of your home? (pond, ditch, etc.) Yes (No)

Basement Description (please check all boxes that apply):

14. Is the basement (finished) or unfinished ?

15. If finished, how many rooms are in the basement? 3 What are rooms used for?

Bedrooms Family room Storage

Other -

tv room
bathroom
laundry room

16. If not finished, do you plan on finishing in the future? Yes No

17. Is the basement floor (check all that apply) concrete (tile) bathroom

carpeted , dirt , other

fr room parquet - laundry

18. Are the basement walls poured concrete , cement block , stone ,

wood ,

Brick , other

19. Does the basement have a moisture problem? Not usually
Yes, frequently (3 or more times/year)
Yes, occasionally (1-2 times/year)
Yes, rarely (less that 1 time/year)
No

Describe the moisture problem

20. .Does the basement ever flood?
Yes, frequently (3 or more times/year)
Yes, occasionally (1-2 times/year)
Yes, rarely (less than 1 time/year)
No

21. Does the basement have any of the following? Floor cracks , Wall cracks , Sump ,

Floor drain , Other hole/opening in floor

describe_

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

22. Are any of the following used or stored in the basement (check all that apply):

(Paint) Paint Stripper/remover Paint thinner Metal degreaser/cleaner

Gasoline Diesel fuel (Solvents) Glue (Laundry spot)

removers Drain cleaners Pesticides Other equipment with fuel tanks (chain saw, lawn mower, snow blower,etc.,)

23. Have you recently (within the last six months) done any painting or remodeling in your home? (Yes) No

If yes, specify what was done, where in the home, and what month:
From Fall 2013 - Spring 2014 We re-painted the 1st and 2nd Floors excluding the Kitchen

24. Have you installed new carpeting in your home within the last year? (Yes) No

If yes, when and where? September stairs on 1st Floor to 2nd, 2nd hallway, 2 bedrooms on 2nd Floor

25. Do you regularly use or work in a dry cleaning service? Yes, use dry-cleaning regularly (at least weekly) No
Yes, use dry-cleaning infrequently (monthly or less) No
Yes, work at a dry cleaning service
No

26. Does anyone in your home use solvents at work? Yes If yes, how many persons? No

No If no, go to question 28

27. If yes for question 26, are the work clothes washed at home? Yes No

28. Where ~~is the washer~~/dryer located? ~~Basement~~
Upstairs utility room
Kitchen
Garage
Use a Laundromat

Other, please specify

29. If you have a dryer, is it vented to the outdoors? Yes No

30. What type (s) of home heating do you have (check all that apply) Fuel type: Gas , Oil , Electric ,

Wood , Coal ,

Other

Heat conveyance system: Forced hot air

Forced hot water
Steam
Radiant floor heat
Wood Stove
Coal furnace
Fireplace
Other

gas

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

31. Does your home have (or had in the past) a storage tank for storage of: gasoline No fuel oil propane

If yes, where is/was it located?

__ How is/was the tank filled? _

_ Is there staining near the tank? Yes No

32. Do you have air conditioning?

(Yes) No Central air conditioning

Window air conditioning unit (s)

Other (please specify) – unit outside rarely used

33. Do you use any of the following? (Room fans yes), (Ceiling fans all bedrooms), Attic fan

34. Do you ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes No Not sure but forced air I think

35. Has your home had termite or other pesticide treatment? (Yes) No Unknown

If yes, please specify type of pest controlled Carpenter ants _ And approximate date of service @2006

36. Water heater type: Gas , Electric , (by Furnace) ,

Other (please describe) _

37. Water heater location: (Basement) , Upstairs utility room , Garage ,

Other (please specify)

38. What type of cooking appliance do you have? (Electric) , Gas

Other (please describe)

39.	Is there a stove exhaust hood present? Yes Yes No Does it vent to the outdoors? ~~I don't know~~ Yes Yes No	
40.	Smoking in Home: Never None , Rare (only guests) , Moderate (residents, light smokers) Heavy (at least one heavy smoker in household)	
41.	If yes to question 40, what do they smoke?	

Cigarettes Cigars

Pipe Other

42. Do you regularly use air fresheners? Yes No

43. Does anyone in the home have indoor home hobbies or crafts involving: Heating , soldering , welding , model glues , paints

Spray paint , wood finishing , Other

–

–

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

44. General family/home use of consumer products (please circle appropriate). Assume that: Never = never used, Hardly ever = less that once/month, Occasionally = about once/month, Regularly = about once/week, and Often = more that once/week.

Product	Frequency of Use				
Spray-on deodorant Aerosol deodorizers	Never Never	Hardly ever Hardly ever	Occasionally Occasionally	Regularly Regularly	Often Often
Insecticides	Never	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	Occasionally	Regularly	Often
Window cleaners	Never	Hardly ever	Occasionally	Regularly	Often
Nail polish remover	Never	Hardly ever	Occasionally	Regularly	Often
Hair sprays	Never	Hardly ever	Occasionally	Regularly	Often
Candles	Never	Hardly ever	Occasionally	Regularly	Often
Incense	Never	Hardly ever	Occasionally	Regularly	Often

bathrooms

45. Please check weekly household cleaning practices:
Dusting
Dry sweeping ✓
Vacuuming ✓
Polishing (furniture, etc.)
Washing/waxing floors

(others are 0 every 2 weeks)

Other (describe)

46. Other comments:

I have no idea if this has anything to do with the plume or just air quality, but I've developed a seasonal cardiovascular deficiency (close to asthma but not quite with a nasty cough). However, it only happens in the winter so it probably has more to do with air quality than a plume effect. I had the house tested for radon last month and we don't have a radon problem.

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

47. Chemical Inventory/Summary

What kind are we talking about? Cleaning products?

Chemical/Chemical Product (consumer name) **Amount present in home**

a) 409
b) Clorox
c) toilet cleaners
d)
e)
f)
g)
h)
i)
j)
k)
l)
m)
n)
o)

PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0030-H
Street Address: 673 S. 1300 West
ZIP: 84105

Property Contact:
Tel #:

Latitude: 40.754441
Longitude: 111.853577
Age of Property: 100 years

Number of Levels: 2
Basement? (•) Yes ( ) No
Basement Habitable? (•) Yes ( ) No
Sump? ( ) Yes (•) No

Completed by: ERR
Date: 02/09/2015

Comments

Elevation at base of porch steps= 4553'

Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.

PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 03/17/15 Time of Arrival: 0835

Weather Conditions: Partly Cloudy

Temperature: 55 Barometric Pressure (inHg): 30.00 Wind Direction: SE Speed: Moderate

Field Crew 1: ERR Role: HAPSITE Operator

Field Crew 2: DED Role: Assistant

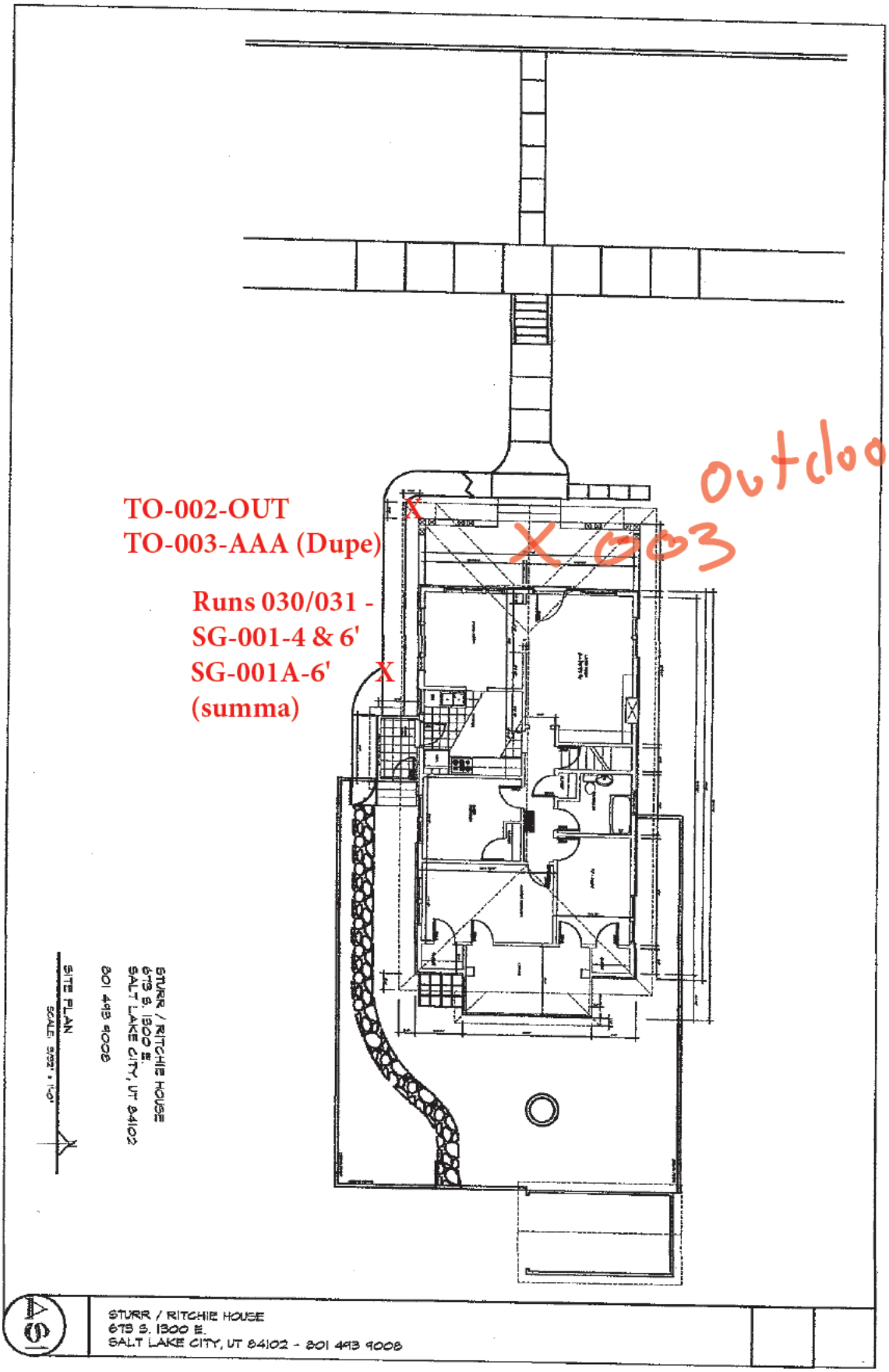
Is a property representative present? ○ Yes ○ No

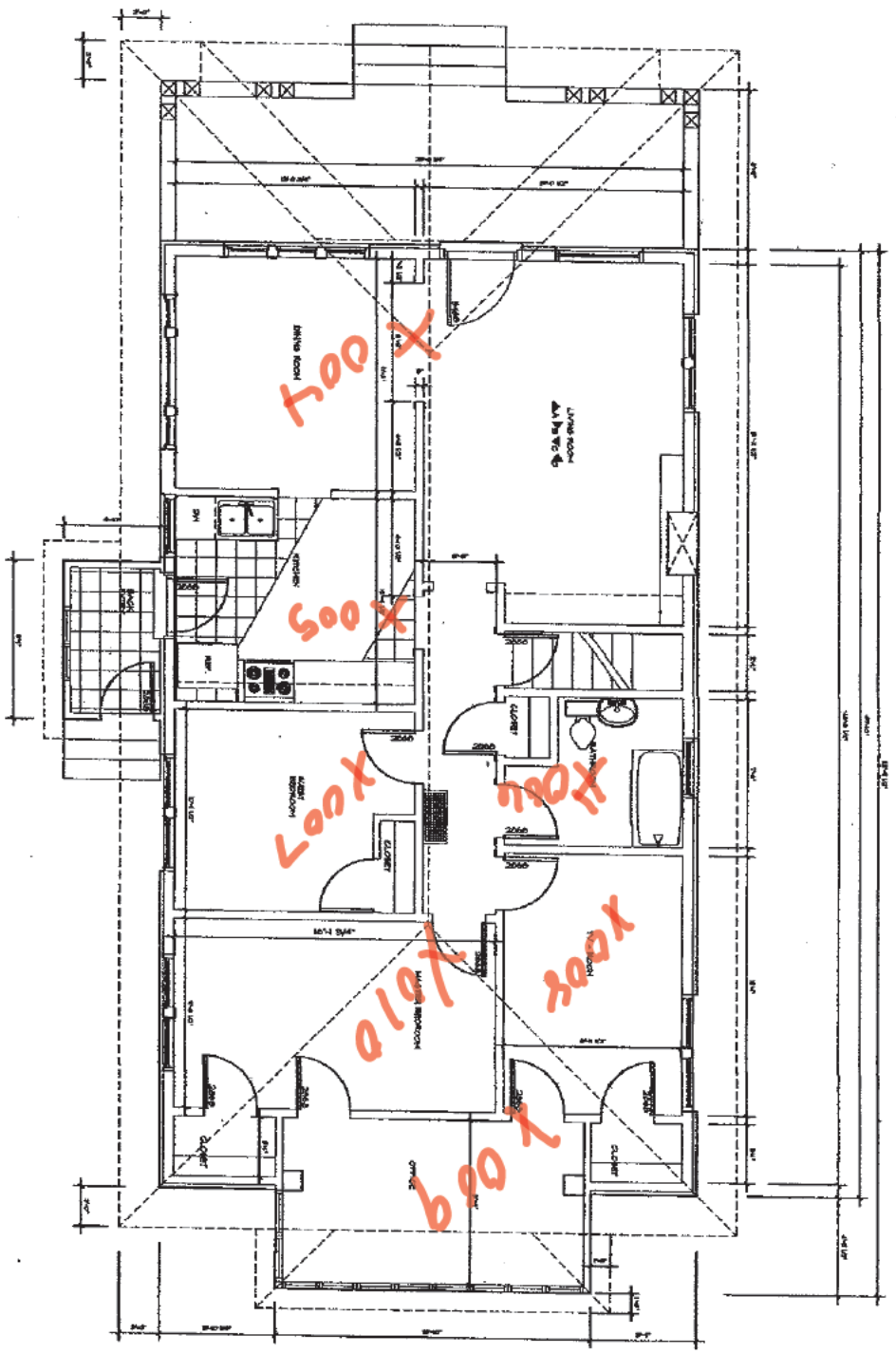
Has the property representative identified any potential background sources? ○ Yes ◉ No

If yes, have the materials been removed? ○ Yes ◉ No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

0030H


TO-002-OUT
TO-003-AAA (Dupe)
X
Runs 030/031 -
SG-001-4 & 6'
SG-001A-6'
(summa)
X
X 003
outdoor
SITE PLAN
SCALE: 3/32" = 1'-0"
STURR / RITCHIE HOUSE
673 S. 1300 E.
SALT LAKE CITY, UT 84102
801 493 9008
STURR / RITCHIE HOUSE
673 S. 1300 E.
SALT LAKE CITY, UT 84102 - 801 493 9008



FIRST FLOOR PLAN

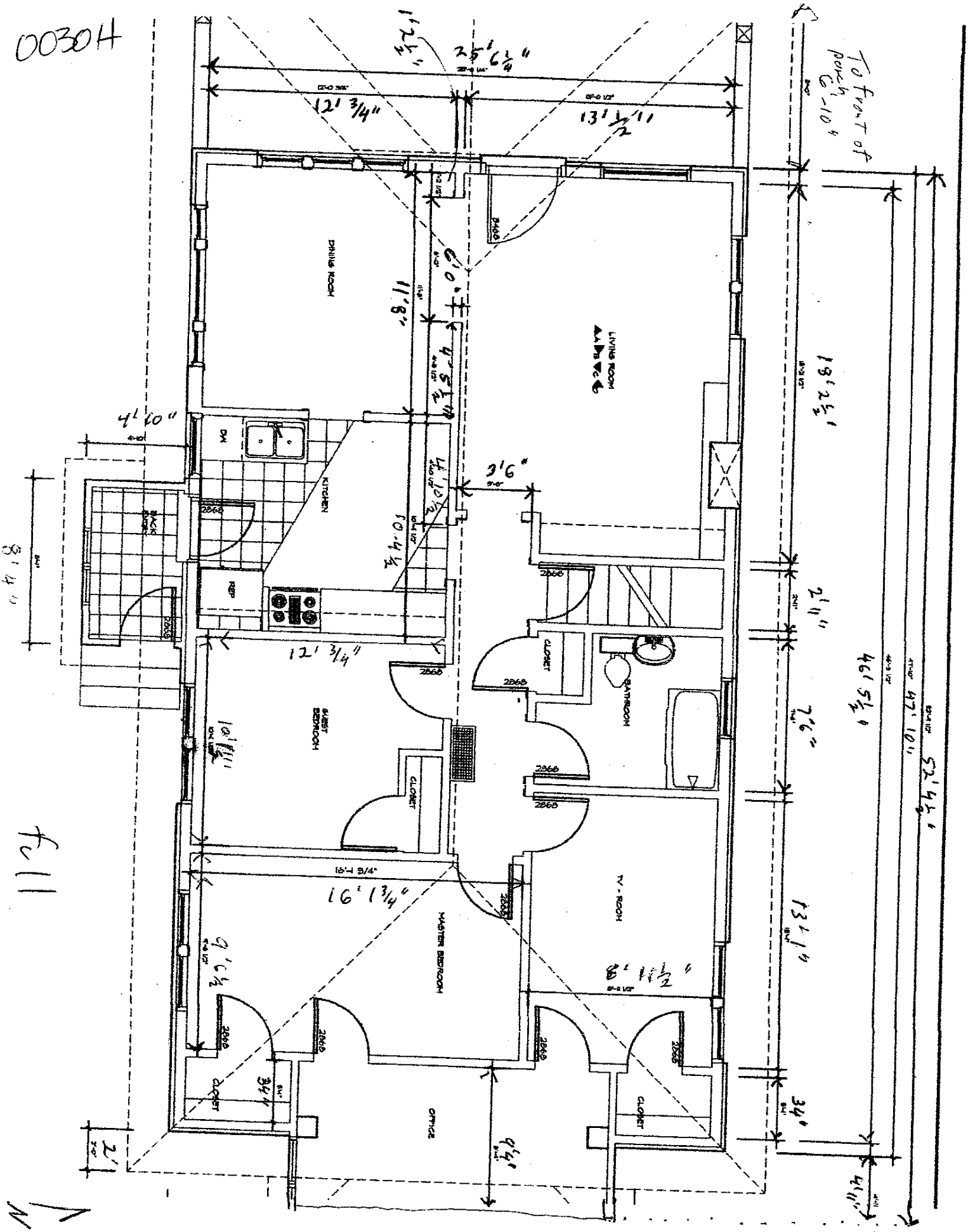
SCALE: 1/4" = 1'-0"

AREA = 1800 SQ. FT. +/-

STURR / RITCHIE HOUSE
673 S. 1300 E.
SALT LAKE CITY, UT 84102 - 801 443 9008

H0500

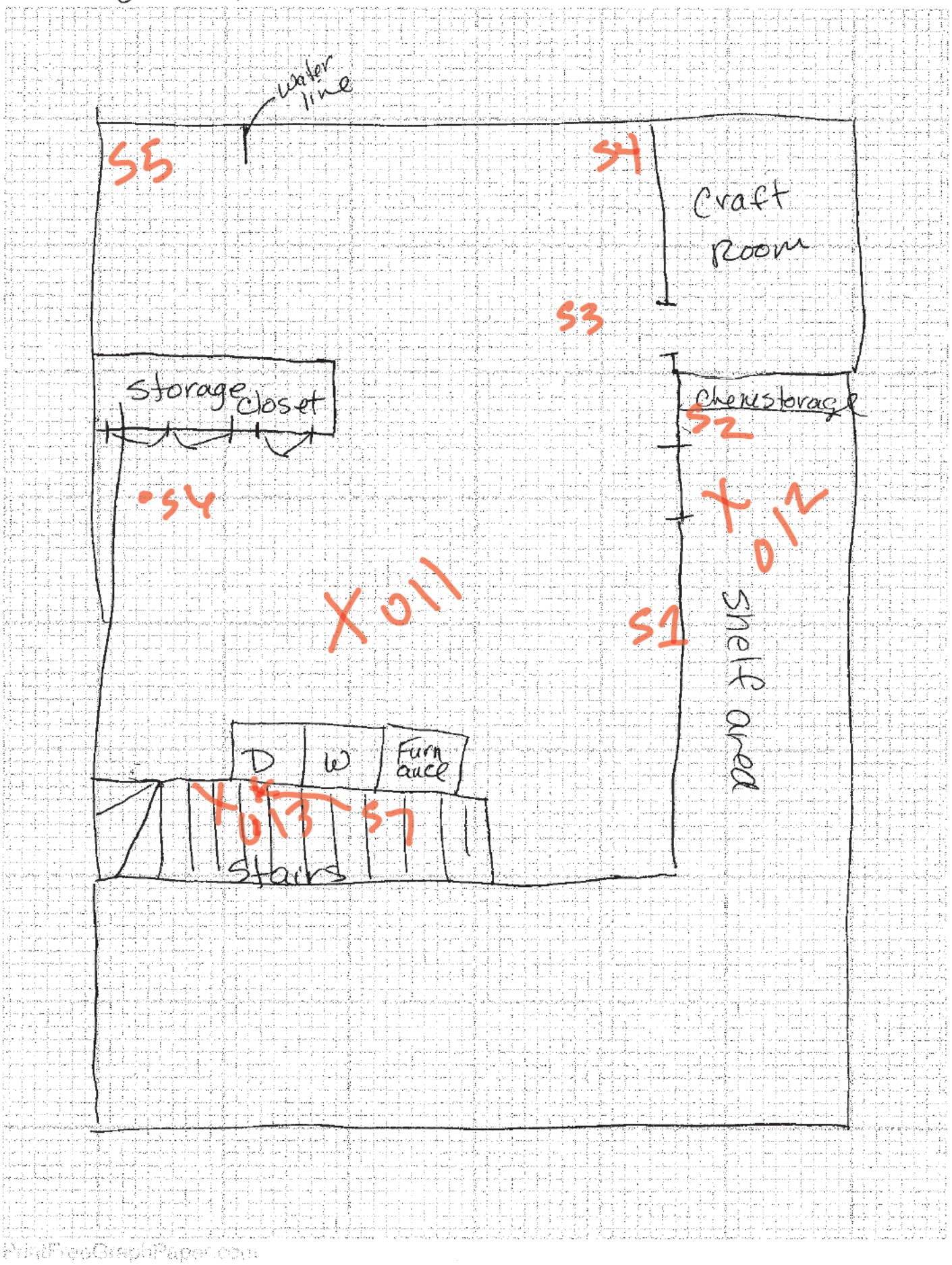
0030H



To front of porch 6'-10"
25' 6 1/4"
12' 3/4"
13' 1/2"
1' 2 1/2"
DINING ROOM
LIVING ROOM
KITCHEN
DW
REF
BACK ENTRY
GUEST BEDROOM
CLOSET
BATHROOM
MASTER BEDROOM
TV - ROOM
OFFICE
2868
4' 10"
8' 4"
3' 6"
11' 8"
6' 0"
4' 5 1/2"
4' 10 1/2"
10' 4 1/2"
12' 3/4"
10' 1 1/2"
16' 1 3/4"
9' 6 1/2"
8' 11 1/2"
34"
9' 4"
2'
18' 2 1/2"
2' 11"
7' 6"
13' 1"
34"
4' 11"
46' 5 1/2"
47' 10"
52' 4 1/2"
N

fc 11

0030 H



PrintableGraphPaper.com

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time
001,002,004,005,006	03/05/15	1830

Instrument Performance Check Run Number	Time	
AUTO TUNE-03/17/15	0727	(•) Pass ( ) Fail

Instrument Performance Check Re-run Number	Time	
NA		(•) Pass ( ) Fail

CCV Run Number	Time	
001-5PPB-03/17/15	0745	(•) Pass ( ) Fail

CCV Re-run Number	Time	
002-0.5PPB-03/17/15	0754	(•) Pass ( ) Fail

Operator's initials: ERR

Comments

"

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time	0854	End Time	0902
Location	FRONT PORCH		
Run Number	003(IA-001-OUT)	Time	0854
Run Number	NA	Time	

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time 1040 End Time 1047

Comments

Survey 001-1040-1042-Basement laundry area/Paint and cleaning supplies on shelves, max TIC =125,739; Survey 002- 1045-1047-Paint on shelf in storage room, max TIC =161,326; PHOTOS - Survey01, Survey02 attached.

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time 1053 End Time 1115

Comments

Survey 003-1053-1055- eastern post/basement floor- max TIC =170,389; Survey 004- 1057-1059-southeast corner/basement floor-max TIC =168,780; Sur Northeast corner/ basement shelves- max TIC =169,000; Survey 006- 1107-1109- Sewer drain/basement floor-max TIC = 151,554; Survey 007-1111-1113 stairs/basement- max TIC =158,185;

Pictures

Survey03, Survey04, Survey05, Survey06, and Survey07 - attached.


Raid
CARPET CLEANER













PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	0913	End Time	1120		
Room/area	Living Room -First Floor	Run Number	004(IA-002-LIV)	Time	0913
Room/area	Kitchen -First Floor	Run Number	005(IA-003-KIT)	Time	0921
Room/area	Upstairs BATHROOM -First Floor	Run Number	006(IA-004-BA1)	Time	0929
Room/area	Guest BEDROOM -First Floor	Run Number	007(IA-005-BR1)	Time	0937
Room/area	FAMILY ROOM -First Floor	Run Number	008(IA-006-FAM)	Time	0945
Room/area	OFFICE AREA -First Floor	Run Number	009(IA-007-OFC)	Time	0956
Room/area	MASTER BEDROOM-First Floor	Run Number	010(IA-008-MBR)	Time	1005
Room/area	Basement Laundry	Run Number	011(IA-009-LAU)	Time	1019
Room/area	Storage room/Shelf area	Run Number	012(IA-010-STO)	Time	1031
Room/area	Crawl space under stairs to basement	Run Number	013(IA-011-CRA)	Time	1117

Comments

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time: 1153 End Time: 1321 Room/Area: Laundry room

T=	5	CFM	393	Pascals	-4.8	Run No.	014(IA-012A-LAU)	Time	1202
T=	10	CFM	384	Pascals	-5.0	Run No.		Time	
T=	15	CFM	378	Pascals	-5.2	Run No.	015(IA-012B-LAU)	Time	1212
T=	20	CFM	322	Pascals	-4.4	Run No.		Time	
T=	25	CFM	604	Pascals	-9.0	Run No.	016(IA-012C-LAU)	Time	1221
T=	30	CFM	553	Pascals	-11.5	Run No.	017(IA-012D-LAU)	Time	1230
T=	40	CFM	642	Pascals	-10.2	Run No.	018(IA-012E-LAU)	Time	1239
T=	50	CFM	680	Pascals	-9.9	Run No.	019(IA-12F-LAU)	Time	1247
T=	60	CFM	631	Pascals	-10.1	Run No.	020(IA-12G-LAU)	Time	1255
T=	70	CFM	654	Pascals	-12.0	Run No.	021(IA-12H-LAU)	Time	1306
T=	80	CFM	679	Pascals	-12.9	Run No.		Time	
T=	88	CFM	642	Pascals	-10.8	Run No.	022(IA-12I-LAU)	Time	1317
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

Final volume 50,607.5 cu ft, baseline pressure= 0.1 pascals. After 20 minutes, wind from southwest increased and caused large swings in ambient pressur
Increased indoor pressure to -10 pascal to stabilize fan operation.

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time	1329	End Time	1425	Room/Area	Laundry room

T=	5	CFM	804	Pascals	10.3	Run No.	023(IA-13A-LAU)	Time	1336
T=	10	CFM	829	Pascals	11.0	Run No.		Time	
T=	15	CFM	905	Pascals	11.8	Run No.	024(IA-13B-LAU)	Time	1344
T=	20	CFM	896	Pascals	9.3	Run No.		Time	
T=	25	CFM	1034	Pascals	13.5	Run No.	025(IA-13C-LAU)	Time	1355
T=	30	CFM	883	Pascals	11.8	Run No.	026(IA-13D-LAU)	Time	1405
T=	40	CFM	965	Pascals	12.4	Run No.	027(IA-13E-LAU)	Time	1415
T=	50	CFM	870	Pascals	10.3	Run No.	028(IA-13F-LAU)	Time	1424
T=	56	CFM	799	Pascals	18.2	Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

Final volume 49,684 cu ft. baseline pressure= 1.5 pascal, but with large swings due to breezy conditions.

PART J
SUMMA CANISTERS

Location/ Area: Basement Laundry Room

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0030H-TO-001-LAU	0493	04/10/2015	10:32	25	04/11/2015	10:15	0.5

Location/ Area: Outdoor Ambient - on SW corner of front porch

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0030H-TO-002-OUT	0284	04/10/2015	10:20	26	04/11/2015	10:10	1

Location/ Area: Outdoor Ambient (Duplicate)

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0030H-TO-003-AAA	0196	04/10/2015	10:20	27	04/11/2015	10:10	1

Location/ Area: Soil Gas Location SG-001 - South wall along foundation

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0030H-SG-001-6'	0369	04/10/2015	10:30	27	04/11/2015	10:00	2

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

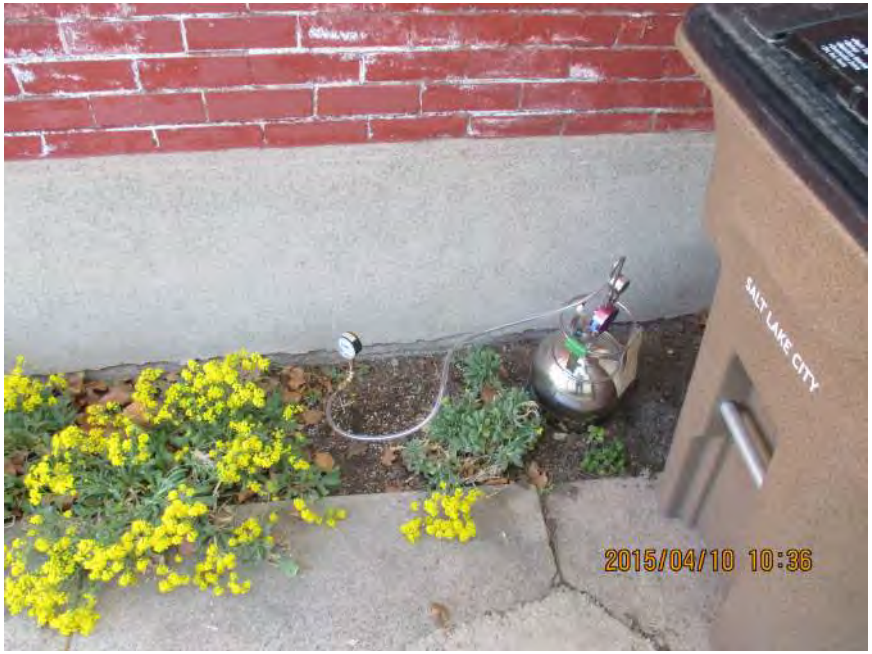
Photos

SEE NEXT PAGE

Comments


DELL
2015/04/10 10:35


2015/04/10 10:36


SALT LAKE CITY
2015/04/10 10:36

PART K
SOIL GAS

Date	03/17/15	Time	0900/0910	Sample Depth	4'/6'		
Latitude	40.754450	Longitude	111.853528			Elevation	4553
Run No	030/031	Run Time	1442; 1449			Vacuum (in/Hg)	6" / 10"

Comments

0030H-SG-001-4' and 6' located along south side of house, along center of south wall.

00301H

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

[redacted]

OCCUPIED DWELLING QUESTIONA

Indoor Air Assessment Survey

Date: 12-2-2014

1. Name: [redacted]
Address: 6735 1300 W SLC

his cell ~~Home~~ Phone:_ her cell ~~Work~~ Phone:_

2. What is the best time to call to speak with you? 7am-10pm At: Work ☐ or Home ☐ ?

3. Are you the Owner ☑, Renter ☐, Other ☐ (please specify)_____ of this Home/Structure? If you are not the owner, please provide owner contact Information
N/A

4. Total number of occupants/persons at this location? 2
Number of Children -0- Ages N/A

5. How long have you lived at this location? 1 year - seasonal - winters only

General Home Description

6. Type of Home/Structure (check only one): Single Family Home ☑, Duplex ☐, Apartment ☐, Townhouse ☐ Other _____

7. Home/Structure Description:
Number of floors: 1
Basement ☐
Crawlspace ☐
Partial crawlspace/basement ☑ % of each 75% basement 25% crawl (estimate from memory)
Slab on grade ☐
Other ☐ _____

8. Age of Home/Structure: 100 yrs (exactly) years, Not sure/Unknown ☐

9. General Above-Ground Home/Structure construction (check all that apply):
Wood ☐, Brick ☑, Concrete ☐, Cement block ☐, Other ☐ _____

10. Foundation Construction (check all that apply):
Concrete Slab ☐
Fieldstone ☐
Concrete block ☐
Elevated above ground/grade ☐
Other ☑ No knowledge

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

11. Do you have private well ☐ or cistern ☐ ?
If yes, please describe location, use and current condition No

12. Do you have a septic system? Yes ☐ No ☑ Not used ☐ Unknown ☐
If yes, what is construction type? N/A
Where is it located? N/A
When was the last time it was serviced? N/A
Do you (or have you ever) use (d) any degreaser for your septic system? Yes ☐ No ☐ N/A

13. Do you have standing water outside of your home? (pond, ditch, etc.) Yes ☐ No ☑

Basement Description (please check all boxes that apply):

14. Is the basement finished ☑ or unfinished ☑ ? 75%/25% estimate from memory

15. If finished, how many rooms are in the basement? ____
What are rooms used for? Bedrooms ☐ Family room ☐ Storage ☑
Other Washer/Dryer/Utilities/"hobby room"

16. If not finished, do you plan on finishing in the future? Yes ☐ No ☐

17. Is the basement floor (check all that apply) concrete ☑, tile ☐, carpeted ☐, dirt ☐,
other ☐ ____ that's a guess

18. Are the basement walls poured concrete ☑, cement block ☑, stone ☐, wood ☐,
Brick ☐, other ☐ not sure

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less that 1 time/year) ☐
No ☑

Describe the moisture problem ____

20. .Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☐
No ☐
} we've been through less than 1 year but there are no obvious signs of past flooding

21. Does the basement have any of the following? Floor cracks ☐, Wall cracks ☐, Sump ☐,
Floor drain ☐, Other hole/opening in floor ☐
describe just plain "don't know"

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

22. Are any of the following used or stored in the basement (check all that apply):
Paint ☑ Paint Stripper/remover ☐ Paint thinner ☐ Metal degreaser/cleaner ☐
Gasoline ☐ Diesel fuel ☑ Solvents ☐ Glue ☑ Laundry spot removers ☐ Drain cleaners
☐ Pesticides ☐ Other equipment with fuel tanks (chain saw, lawn mower, snow blower,etc.,)

23. Have you recently (within the last six months) done any painting or remodeling in your home?
Yes ☐ No ☐
If yes, specify what was done, where in the home, and what month:
_____
_____

24. Have you installed new carpeting in your home within the last year? Yes ☐ No ☐ ?
If yes, when and where? some large area rugs – no wall-to-wall or nailed down carpets

25. Do you regularly use or work in a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) ☐
Yes, use dry-cleaning infrequently (monthly or less) ☐
Yes, work at a dry cleaning service ☐
No ☑

26. Does anyone in your home use solvents at work?
Yes ☐ If yes, how many persons?
No ☑ If no, go to question 28

27. If yes for question 26, are the work clothes washed at home? Yes ☐ No ☐

28. Where is the washer/dryer located?
Basement ☑
Upstairs utility room ☐
Kitchen ☐
Garage ☐
Use a Laundromat ☐
Other, please specify ☐ _____

29. If you have a dryer, is it vented to the outdoors? Yes ☑ No ☐

30. What type (s) of home heating do you have (check all that apply)
Fuel type: Gas ☑, Oil ☐, Electric ☐, Wood ☐, Coal ☐,
Other ☐ pretty sure / not positive

Heat conveyance system:
Forced hot air ☑
Forced hot water ☐
Steam ☐
Radiant floor heat ☐
Wood Stove ☐
Coal furnace ☐
Fireplace ☑
Other ☐ wood fireplace with fan circulation – part-time and "for effect" mostly

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

31. Does your home have (or had in the past) a storage tank for storage of: gasoline ☐ fuel oil ☐ propane ☐
If yes, where is/was it located? probably "No"
How is/was the tank filled?
Is there staining near the tank? Yes ☐ No ☐

32. Do you have air conditioning? Yes ☑ No ☐
Central air conditioning ☑
Window air conditioning unit (s) ☐
Other (please specify)

33. Do you use any of the following? Room fans ☑, Ceiling fans ☐, Attic fan ☐

34. Do you ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☑ No ☐ we really have been in full time residence in The last winter and have not set pattern yet.

35. Has your home had termite or other pesticide treatment? Yes ☑ No ☐ Unknown ☐
If yes, please specify type of pest controlled don't know
And approximate date of service don't know - more than 1yr ago

36. Water heater type: Gas ☑, Electric ☐, by Furnace ☐,
Other (please describe) "on demand" type

37. Water heater location: Basement ☑, Upstairs utility room ☐, Garage ☐,
Other (please specify)

38. What type of cooking appliance do you have? Electric ☐, Gas ☑
Other (please describe)

39. Is there a stove exhaust hood present? Yes ☑ No ☐
Does it vent to the outdoors? Yes ☐ No ☐ don't know - but may be into attic

40. Smoking in Home:
None ☑, Rare (only guests) ☐, Moderate (residents, light smokers) ☐,
Heavy (at least one heavy smoker in household) ☐

41. If yes to question 40, what do they smoke?
Cigarettes ☐ Cigars ☐
Pipe ☐ Other ☐

42. Do you regularly use air fresheners? Yes ☐ No ☑

43. Does anyone in the home have indoor home hobbies or crafts involving:
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☐
Spray paint ☐, wood finishing ☐, Other ☐ Not as hobby but we are painting to redecorate some rooms

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

44. General family/home use of consumer products (please circle appropriate).
Assume that: Never = never used, Hardly ever = less that once/month,
Occasionally = about once/month, Regularly = about once/week,
and Often = more that once/week.

Product	Frequency of Use				
Spray-on deodorant	(Never)	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	Never	Hardly ever	(Occasionally)	Regularly	Often
Insecticides	(Never)	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	(Hardly ever)	Occasionally	Regularly	Often
Window cleaners	Never	Hardly ever	(Occasionally)	Regularly	Often
Nail polish remover	(Never)	Hardly ever	Occasionally	Regularly	Often
Hair sprays	(Never)	Hardly ever	Occasionally	Regularly	Often
Candles	Never	Hardly ever	(Occasionally)	Regularly	Often
Incense	(Never)	Hardly ever	Occasionally	Regularly	Often

45. Please check weekly household cleaning practices:

Dusting ☐
Dry sweeping ☐
Vacuuming ☐
Polishing (furniture, etc.) ☐
Washing/waxing floors ☐

every other week or so

note that [redacted] we are gone 6 months of the year

Other (describe) ☐ _____

46. Other comments:

We're in residence only during winter + spring. Will move in sometime befor X mas and leave sometime in June.

You can reach us on our cell phone wherever we may be.

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

47. Chemical Inventory/Summary

Chemical/Chemical Product (consumer name)	Amount present in home
a)	
b)	
c)	
d)	
e)	
f)	
g)	
h)	
i)	
j)	
k)	
l)	
m)	
n)	
o)	

PART A
PROPERTY INFORMATION
(to be completed prior to survey)

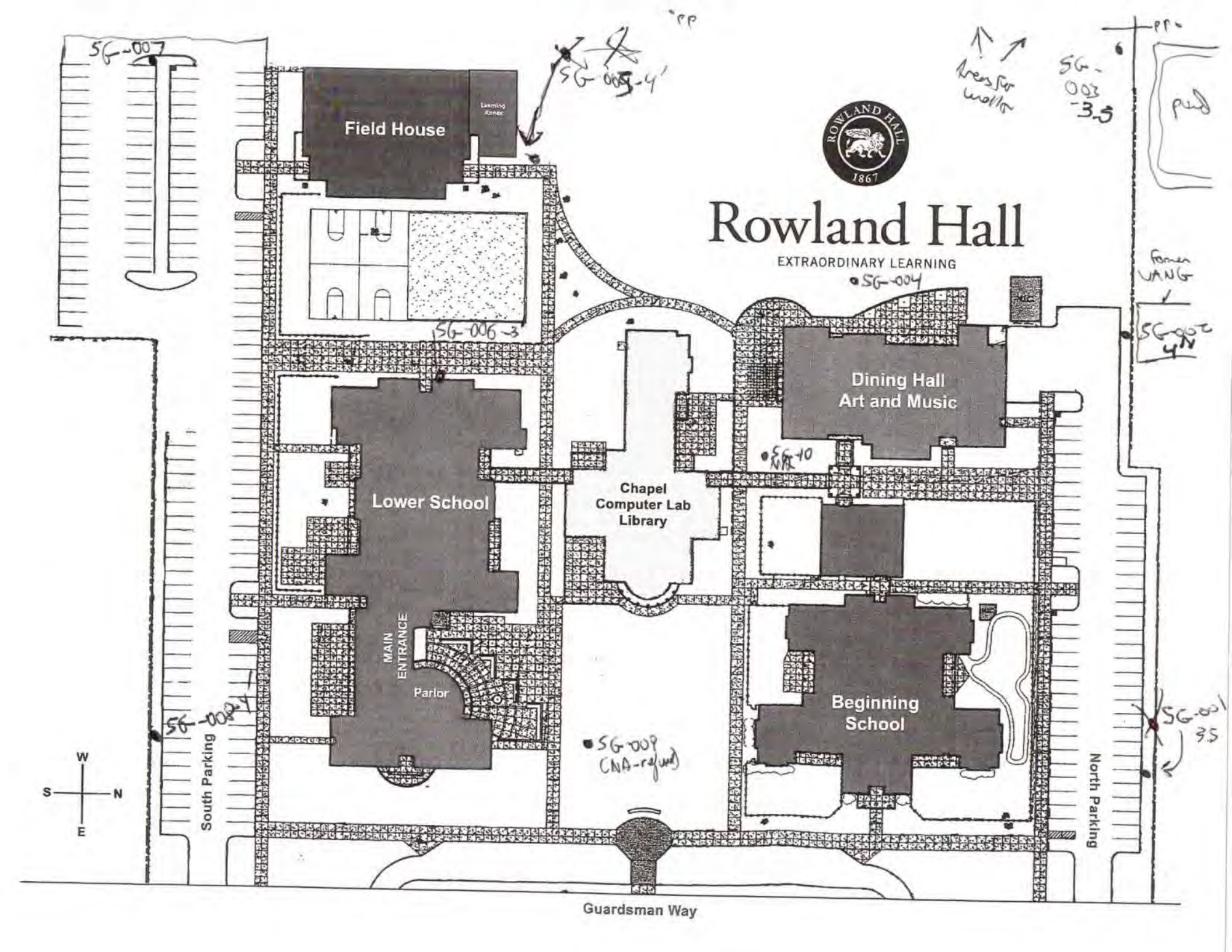
Property ID Number: 0031-S
Street Address: 720 S. Guardsman Way
ZIP:
Property Contact: Rowland Hall Principal
Tel #:
Latitude:
Longitude:
Age of Property: years
Number of Levels:
Basement? ○ Yes ○ No
Basement Habitable? ○ Yes ○ No
Sump? ○ Yes ○ No

Completed by: EJR
Date: 03/16/2015

Comments

NO INDOOR VI SURVEY WAS CONDUCTED AT THE ROWLAND HALL SCHOOL COMPLEX. THE SCHOOL DID NOT GRANT INTERIOR ACCESS BECAUSE THEY HAD CONDUCTED INDOOR SUMMA TESTING IN 2012. VA REQUESTED PERMISSION TO CONDUCT SOIL GAS SAMPLING WHICH WAS CONDUCTED 03/16/2015. THESE SAMPLES WERE RETURNED TO THE FE FIELD OFFICE FOR HAPSITE ANALYSIS.
THE SCHOOL SITE WAS SUBSEQUENTLY SELECTED FOR CONFIRMATORY SOIL GAS VOC (SUMMA CANS) AND SVOC (SORBENT TUBE) SAMPLING CONDUCTED ON 04/12-13/2015.

Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.


Rowland Hall
EXTRAORDINARY LEARNING
ROWLAND HALL
1867
Field House
Learning Annex
Lower School
MAIN ENTRANCE
Parlor
Chapel
Computer Lab
Library
Dining Hall
Art and Music
Beginning School
South Parking
North Parking
Guardsman Way
W
S
N
E

AOU-1, 700 South
1600 East PCE Plume,
Salt Lake City, UT

Vapor Probe Installation Record 0031-5

Site Address: Rowland Hall - St Marks School, Guardsman Way
Date: 3/16/2015
Company: First Environment
Arrival Time: 0845
Field Rep(s): Reid, DeGhetto, Cunningham
Departure Time: 1600

	Point ID	Date	Time Placed	Probe Depth (ft)	Tubing Length (ft)	Sand Pack Dia (in.)	Sand Pack Ht (in.)	Filter Type: Air stone	Filter Type: Slotted SS	Tubing (Nylaflow, Teflon, Stainless Steel): 1/8" OD	1/4" OD	N	T	SS	Probe Termination: 1-way Valve	Swagelok 1/8"	Swagelok 1/4"	Field Notes: (Surface cover drilled through, Moisture, DPT Equipment used, PRT Sampling, Refusals, Well Box size, concrete diameter, etc.)
1	SG-001	3/16	1055	3.5	2'	–	–		✓	X		X		X		X		Mulch - Refusal on rock
2	SG-002	"	0945	4	2'	–	–		✓	X		X		X		X		Soil - Refused 4.1' on rock
3	SG-003	"	1010	3.5	2'	–	–		✓	X		X		X		X		Grass - Refusal - 3.5' on rock.
4	SG-004	"	1200	4.0'	2'	–	–		✓	X		X		X		X		Grass - Refused 4.1' on rock
5	SG-005	"	1310	4.0'	2'	–	–		✓	X		X		X		X		Mulch Refusal at 4'
6	SG-006	"	1325	3.0'	2'	–	–		✓	X		X		X		X		Mulch - Refused at 3'
7	SG-007	"	1350	4.0'	2'	–	–		✓	X		X		X		X		Mulch - Refusal 4'
8	SG-008	"	1430	4.0	2'	–	–		✓	X		X		X		X		Mulch - Refusal - 4'
9	SG-009	"	—															Grass - Refused - 12" multiple
10	SG-010	"	—															Grass - Refused
11																		
12																		
13																		
14																		
15																		

Additional Site Notes: (e.g. weather, visitors, scope deviations, Health & Safety Issues, etc.)
Ptly Cloudy, Warm, Lt Breeze
Lynne Welsch onsite - 1030-1045

Broken/Unrecovered Tools: None

FTL Review:

AOU-1, 700 South
1600 East PCE Plume,
Salt Lake City, UT

Vapor Sampling with HAPSITE (Tedlar Bag)

Site Address: Rowland Hall St Marks School - 00315 Date: 3/16/15

Company: First Environment, Inc Arrival Time: 0845

Field Rep(s): Rady, DeGhetto, Cunningham Departure Time: 1600

				Probe Specs					Sample Information				
	Point ID	Tedlar ID / size	Sample Time	Probe Depth (ft)	Tubing Length (ft)	Tubing Dia (in.)	Sand Pack Dia (in.)	Sand Pack Ht (in.)	Purge Vol (mL)	Flow Rate (mL/min)	Shut-in Test (✓=Pass)	Probe Pressure (" Hg)	Field Notes:
1	SG-001-3.5	1 Liter	1130	4'	5'	1/2 OD	—	—	1L	500/ml	✓	1"	Direct Drive Steel Rod
2	SG-002-4'	1 L	1000	4'	5'	1/2 OD	—	—	1L	500/ml	✓	3"	"
3	SG-003-3.5'	1 L	1050	3.5'	5'	1/2 OD	—	—	1L	500/ml	✓	2"	"
4	SG-004-4.0'	1 L	1215	4'	5'	1/2 OD	—	—	1L	500/ml	✓	1"	"
5	SG-005-4.0	1 L	1330	4'	5'	1/2 OD	—	—	1L	500/ml	✓	6"	"
6	SG-006-3.0'	1 L	1350	3	5	1/2 OD	—	—	1L	500/ml	✓	4"	"
7	SG-007-4.0'	1 L	1410	4	5'	1/2 OD	—	—	1L	500ml	✓	3"	"
8	SG-008-4.0'	1 L	1445	4	5	1/2 OD	—	—	1L	500ml	✓	2"	"
9													
10													
11													
12													
13													
14													
15													

Purge Volume Test (PVT) Information			
PVT performed on Probe ID:	SG-002		
Tubing:	Length: 5	Diameter: 1/4	1 Volume:
Sand Pack (if included in purge volume calculation):	Length:	Diameter:	1 Volume:
PVT Increments:	___PV =	PV=	PV =
PV Amount Selected:	1 Liter	*Selected by:* EJR	

Leak Check Information

FTL Review: _____

PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 03/16/2015 Time of Arrival: 08:00

Weather Conditions: Sunny

Temperature: 65 Barometric Pressure (inHg): 30.03 Wind Direction: W Speed: Moderate

Field Crew 1: EJR Role:

Field Crew 2: DE[illegible] Role:

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? ( ) Yes ( ) No

If yes, have the materials been removed? ( ) Yes ( ) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

NA-NO INDOOR WORK

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time	
001-005	03/05/2015	1840	
Instrument Performance Check Run Number	Time		(•) Pass ( ) Fail
Autotune			
Instrument Performance Check Re-run Number	Time		( ) Pass ( ) Fail
CCV Run Number	Time		(•) Pass ( ) Fail
001 (0.5 ppb)	15:39		
CCV Re-run Number	Time		(•) Pass ( ) Fail
002 (5 ppb)`	15:48		

Operator's initials: ERR

Comments

SOIL GAS SAMPLES ANALYZED AT FIELD OFFICE

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time | End Time

Location: NA

Run Number | Time

Run Number | Time

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time | End Time

Comments

NA

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time | End Time

Comments

NA

Pictures

PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	NA	End Time			
Room/area		Run Number		Time	
Room/area		Run Number		Time	
Room/area		Run Number		Time	
Room/area		Run Number		Time	
Room/area		Run Number		Time	
Room/area		Run Number		Time	
Room/area		Run Number		Time	
Room/area		Run Number		Time	
Room/area		Run Number		Time	
Room/area		Run Number		Time	

Comments

NO INDOOR WORK

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time NA End Time Room/Area

T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time NA End Time Room/Area

T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

PART J
SUMMA CANISTERS

Location/ Area: Soil sample loc SG-002 - north P/L opposite UANG 515

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
0031S-SG-001A-4'	0287	04/14/2015	11:00	27	04/15/2015	10:45	1

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

Comments

Also collected Soil Gas SVOC sample with PUF Sorbent tube at same soil gas location as the Summa - Sample ID- 0031S-SG-002A-4'. Submitted to ALS labs for TO-13A analysis.
In addition, a grab sample was collected prior to conducting SVOC sampling in a 1 liter Tedlar Bag for TO-15 analysis and also submitted tot ALS.





PART K
SOIL GAS

Date	03/16/2015	Time		Sample Depth			
Latitude	Multiple	Longitude	Multiple			Elevation	Multiple
Run No	003 - 006, 012, 013	Run Time				Vacuum (in/Hg)	

Comments

Attempted 10 open field samples through school campus. Successfully reached 3' or greater at 8 locations. Refer to site plans and sampling records on Pages 2 thru 4. Sample IDs - SG-001 thru SG-008.
Probe locations required multiple attempts to reach at least 3' at all locations.





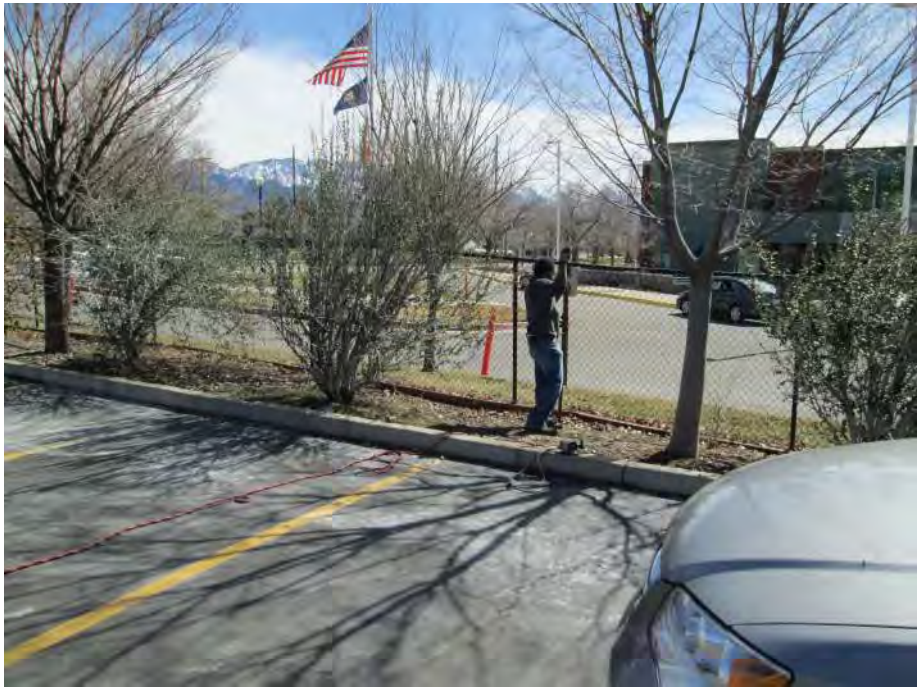












PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0032-H
Street Address: 1219 Fenway Ave
ZIP: 84105

Property Contact:
Tel #:

Latitude: 40.755573
Longitude: 111.856021
Age of Property: 86 years

Number of Levels: 2
Basement? (•) Yes ( ) No
Basement Habitable? ( ) Yes (•) No
Sump? ( ) Yes ( ) No

Completed by: ERR
Date: 01/15/2015

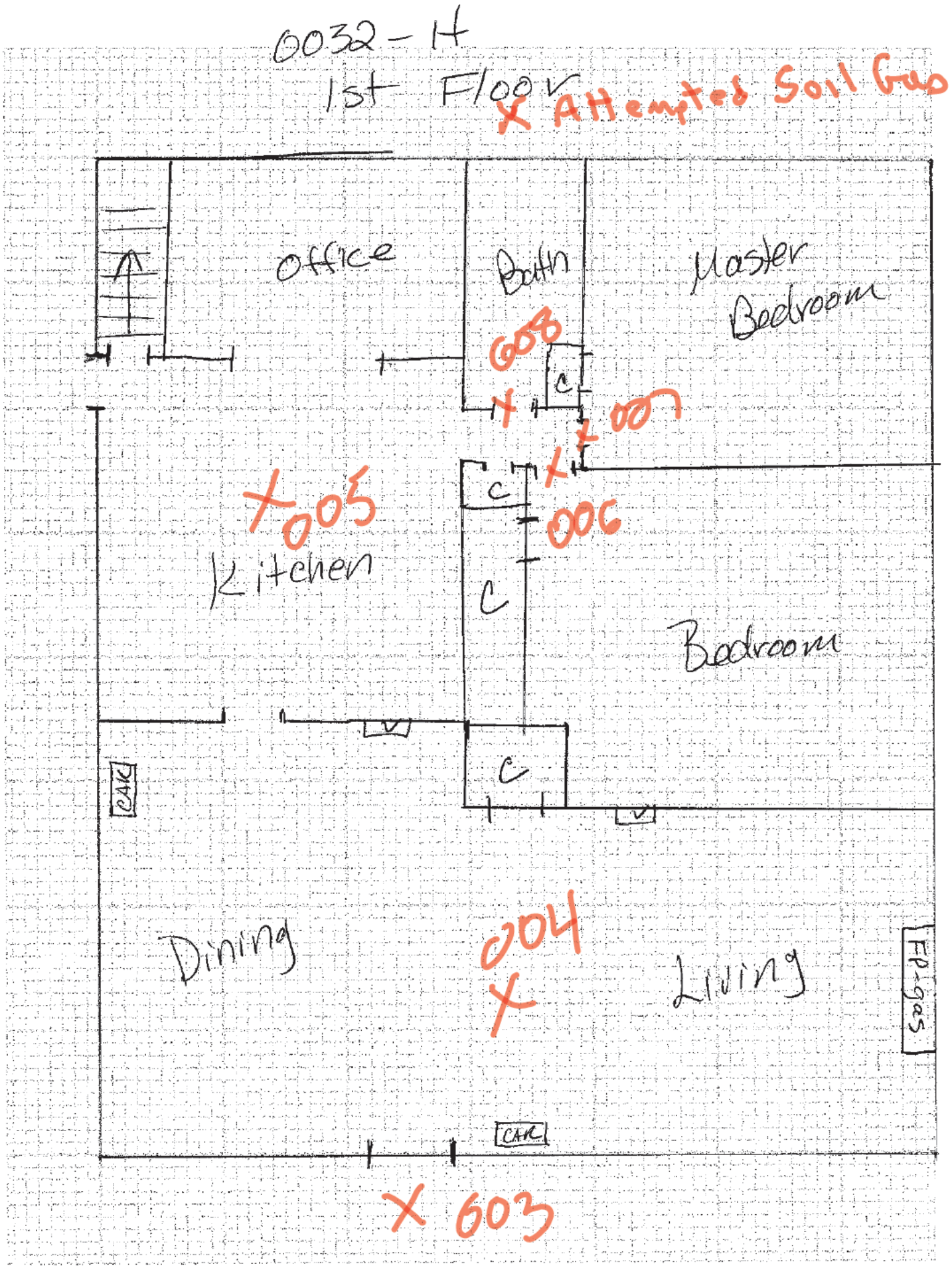
Comments

Elevation at front sidewalk= 4526' msl

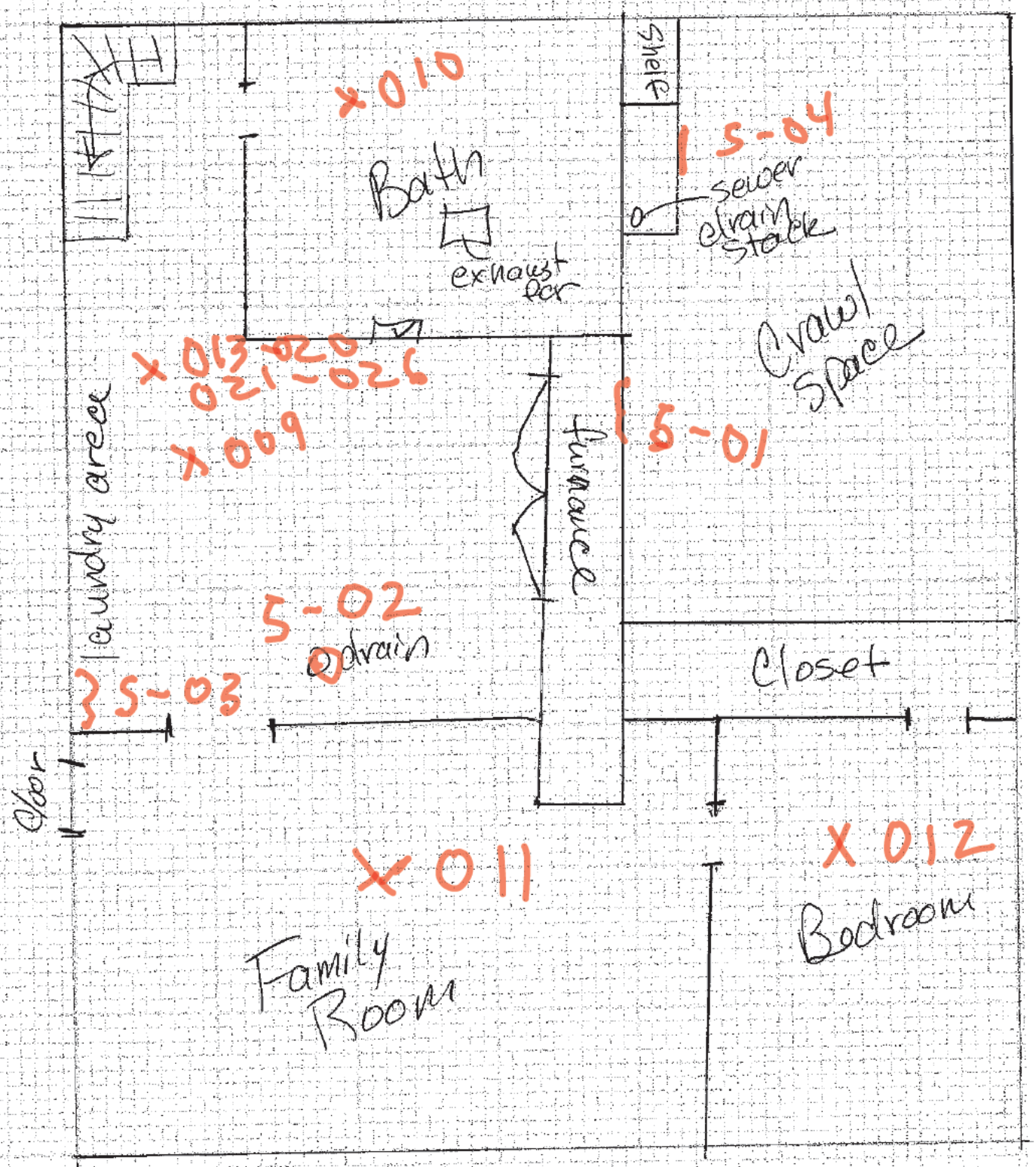
Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.

0032-H

1st Floor



0032-H
Basement



PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 3/12/15 Time of Arrival: 830

Weather Conditions: Rain

Temperature: 46 Barometric Pressure (inHg): 30.30 Wind Direction: SW Speed: Calm

Field Crew 1: ERR Role: HAPSITE Operator

Field Crew 2: JMC Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? ( ) Yes (●) No

If yes, have the materials been removed? ( ) Yes ( ) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time
001,002,004,005,006	03/05/15	1830

Instrument Performance Check Run Number	Time	
AUTO TUNE	0733	(•) Pass ( ) Fail

Instrument Performance Check Re-run Number	Time	
NA		( ) Pass ( ) Fail

CCV Run Number	Time	
001-5PBB-03/12/15	0750	(•) Pass ( ) Fail

CCV Re-run Number	Time	
002-0.5PPB-03/12/15	0758	(•) Pass ( ) Fail

Operator's initials: ERR

Comments

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time	0852	End Time	0855
Location	Front steps - Southern side of house		
Run Number	003 (IA-001-OUT)	Time	0853
Run Number	NA	Time	

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time NA End Time NA

Comments

Ambient readings throughout home were below detection limits, and no likely sources were visually observed in the home.

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time 1031 End Time 1103

Comments

survey 001-1031-1033 access to crawl space in furnace room- max TIC =130,583; survey 002-1036-1038 floor drain in laundry room- max TIC =159,902; s sewer drain pipe under laundry sink- max TIC =156,057; survey 004- 1101-1103 crawl space off of bathroom closet- max TIC =177,954;

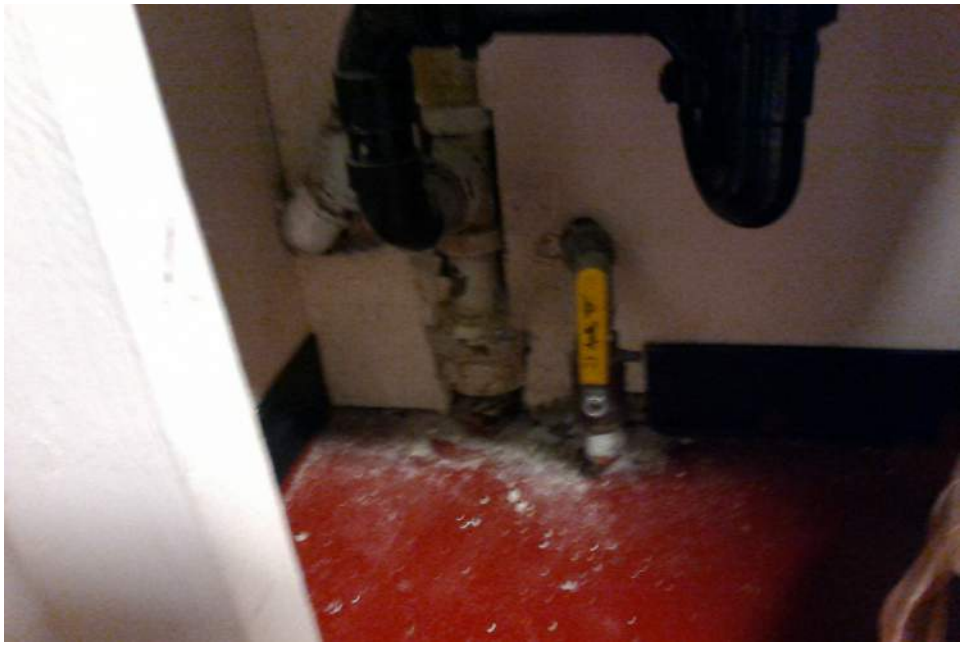
Pictures

See Photos: WIN 20150312 Survey Run locations









PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	0903	End Time	1020		
Room/area	open concept living	Run Number	004(IA-002-OCL)	Time	0903
Room/area	Kitchen	Run Number	005(IA-003-KIT)	Time	0913
Room/area	Childs BEDROOM	Run Number	006(IA-004-BR1)	Time	0921
Room/area	Master Bedroom	Run Number	007(IA-005-MBR)	Time	0929
Room/area	1st Floor Bathroom	Run Number	008(IA-006-BA1)	Time	0937
Room/area	Basement Laundry	Run Number	009(IA-007-LAU)	Time	0950
Room/area	Basement Bathroom	Run Number	010(IA-008-BA2)	Time	0958
Room/area	Basement family room	Run Number	011(IA-009-FAM)	Time	1006
Room/area	Basement Bedroom	Run Number	012(IA-010-BR2)	Time	1015
Room/area		Run Number		Time	

Comments

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time: 1132 | End Time: 1245 | Room/Area: Laundry room - basement

T=	5	CFM	461	Pascals	-5.2	Run No.	013 (IA-011A-LAU)	Time	1136
T=	10	CFM	460	Pascals	-4.7	Run No.	014 (IA-011B-LAU)	Time	1144
T=	15	CFM	456	Pascals	-4.9	Run No.		Time	
T=	20	CFM	455	Pascals	-5.0	Run No.	015 (IA-011C-LAU)	Time	11:53
T=	25	CFM	460	Pascals	-5.3	Run No.		Time	
T=	30	CFM	461	Pascals	-5.3	Run No.	016(IA-011D-LAU)	Time	12:01
T=	40	CFM	466	Pascals	-5.2	Run No.	017(IA-011E-LAU)	Time	12:11
T=	50	CFM	470	Pascals	-5.2	Run No.	018(IA-011F-LAU)	Time	12:20
T=	60	CFM	471	Pascals	-5.6	Run No.	019 (IA-011G-LAU)	Time	12:28
T=	70	CFM	465	Pascals	-5.1	Run No.	020 (IA-011H-LAU)	Time	12:37
T=	73	CFM	474	Pascals	-5.1	Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

total volume to be removed-34,000cuft.-total volume removed =34,502cuft. Baseline pressure= -1.1 pascal. Air door in basement entrance, Hapsite locate area in center of basement.

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time: 1250 | End Time: 1352 | Room/Area: Laundry Room - Basement

T=	5	CFM	565	Pascals	7.3	Run No.	021 (IA-012A-LAU)	Time	1257
T=	10	CFM	519	Pascals	4.6	Run No.		Time	
T=	15	CFM	545	Pascals	5.7	Run No.	022 (IA-012B-LAU)	Time	13:08
T=	20	CFM	543	Pascals	4.1	Run No.		Time	
T=	25	CFM	661	Pascals	4.4	Run No.	023 (IA-012C-LAU)	Time	13:17
T=	30	CFM	521	Pascals	3.5	Run No.	024 (IA-012D-LAU)	Time	13:27
T=	40	CFM	514	Pascals	5.8	Run No.	025 (IA-012E-LAU)	Time	13:36
T=	50	CFM	527	Pascals	5.3	Run No.	026 (IA-012F-LAU)	Time	13:44
T=	60	CFM	480	Pascals	3.5	Run No.		Time	
T=	62	CFM	480	Pascals	4.5	Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

33,201 toal volume. Baseline pressure= -0.7 pascal.

PART J
SUMMA CANISTERS

Location/ Area: NA

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

Comments

PART K
SOIL GAS

Date	3/12/15	Time	1030	Sample Depth	NA		
Latitude	40.755665	Longitude	411.856017			Elevation	4528'
Run No	NA			Run Time	NA	Vacuum (in/Hg)	NA

Comments

No soil gas sample collected. The property was almost entirely covered by the home, concrete driveways, a patio, and thick landscaping. Undergro
sprinkler lines also limited suitable probe locations. A small area of soil and grass near the patio in back.of the house (North side) was determined t
installation of a soil gas probe was attempted. Refusal on rocky material was encountered at 12" or less during multiple attempts and ultimately no s
collected.

0032H 2/10/15 (Tues) 4:30pm

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

OCCUPIED DWELLING QUESTIONAIRE

Indoor Air Assessment Survey

Date: 1/15/15

1. Name: _____

Address:
1219 Fenway Avenue
SLC, UT 84102

Home Phone:_ Work Phone:_

2. What is the best time to call to speak with you? evening At: Work ☐ or Home ☐ ?

3. Are you the Owner ☒, Renter ☐, Other ☐ (please specify)_____of this Home/Structure? If you are not the owner, please provide owner contact Information

_____

_____

4. Total number of occupants/persons at this location? 3
Number of Children 1 Ages 6 months

5. How long have you lived at this location? 7½ years - June 2007

General Home Description

6. Type of Home/Structure (check only one): Single Family Home ☒, Duplex ☐, Apartment ☐, Townhouse ☐ Other _____

7. Home/Structure Description:
Number of floors: 2
Basement ☒
Crawlspace ☒
Partial crawlspace/basement ☐ % of each _____
Slab on grade ☐
Other ☐ _____

8. Age of Home/Structure: 1929, 86 years, Not sure/Unknown ☐

9. General Above-Ground Home/Structure construction (check all that apply):
Wood ☐, Brick ☒, Concrete ☐, Cement block ☐, Other ☐ _____

10. Foundation Construction (check all that apply):
Concrete Slab ☒
Fieldstone ☐
Concrete block ☐
Elevated above ground/grade ☐
Other ☐ _____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

11. Do you have private well ☐ or cistern ☐ ?
If yes, please describe location, use and current condition
No

12. Do you have a septic system? Yes ☐ No ☒ Not used ☐ Unknown ☐
If yes, what is construction type?
Where is it located?
When was the last time it was serviced?
Do you (or have you ever) use (d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your home? (pond, ditch, etc.) Yes ☐ No ☒

Basement Description (please check all boxes that apply):

14. Is the basement finished ☒ or unfinished ☐ ?

15. If finished, how many rooms are in the basement? 4
What are rooms used for? Bedrooms ☒ Family room ☒ Storage ☒
Other laundry room, bathroom
0

16. If not finished, do you plan on finishing in the future? Yes ☐ No ☐

17. Is the basement floor (check all that apply) concrete ☒, tile ☐, carpeted ☒, dirt ☒, ← unfinished portion
other ☐

18. Are the basement walls poured concrete ☒, cement block ☐, stone ☐, wood ☒,
Brick ☒, other ☐

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less that 1 time/year) ☒ ← Due to irrigation-1x and rain event-2x
No ☒

Describe the moisture problem

20. .Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☒
No ☒

21. Does the basement have any of the following? Floor cracks ☒ ← Likely, Wall cracks ☐, Sump ☐,
Floor drain ☒, Other hole/opening in floor ☐
describe

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

22. Are any of the following used or stored in the basement (check all that apply):
Paint ☐ Paint Stripper/remover ☐ Paint thinner ☐ Metal degreaser/cleaner ☐
Gasoline ☐ Diesel fuel ☒ Solvents ☒ Glue ☒ Laundry spot removers ☒ Drain cleaners
☐ Pesticides ☐ Other equipment with fuel tanks (chain saw, lawn mower, snow blower,etc.,)

23. Have you recently (within the last six months) done any painting or remodeling in your home?
Yes ☒ No ☐
If yes, specify what was done, where in the home, and what month:
Last Spring/Summer - painted upstairs rooms - 2x, Replaced a square of basement carpet

24. Have you installed new carpeting in your home within the last year? Yes ☒ No ☒
If yes, when and where? Just a replacement square in the basement

25. Do you regularly use or work in a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) ☐
Yes, use dry-cleaning infrequently (monthly or less) ☒
Yes, work at a dry cleaning service ☐
No ☒ - very rarely

26. Does anyone in your home use solvents at work?
Yes ☐ If yes, how many persons?
No ☒ If no, go to question 28

27. If yes for question 26, are the work clothes washed at home? Yes ☐ No ☐

28. Where is the washer/dryer located?
Basement ☒
Upstairs utility room ☐
Kitchen ☐
Garage ☐
Use a Laundromat ☐
Other, please specify ☐ _____

29. If you have a dryer, is it vented to the outdoors? Yes ☒ No ☐

30. What type (s) of home heating do you have (check all that apply)
Fuel type: Gas ☒ Oil ☐, Electric ☐, Wood ☐, Coal ☐,
Other ☐ gas furnace electric a/c gas hot water heater

Heat conveyance system:
Forced hot air ☒
Forced hot water ☐
Steam ☐
Radiant floor heat ☐
Wood Stove ☐
Coal furnace ☐
Fireplace ☐
Other ☐ _____

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31. Does your home have (or had in the past) a storage tank for storage of: gasoline ☐ fuel oil ☐ propane ☐
If yes, where is/was it located? Not that I am aware of.
How is/was the tank filled?
Is there staining near the tank? Yes ☐ No ☐

32. Do you have air conditioning? Yes ☒ No ☐
Central air conditioning ☒
Window air conditioning unit (s) ☐
Other (please specify)

33. Do you use any of the following? Room fans ☐, Ceiling fans ☒, Attic fan ☐

34. Do you ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☒ No ☐

35. Has your home had termite or other pesticide treatment? Yes ☐ No ☐ Unknown ☒
If yes, please specify type of pest controlled Some evidence.
And approximate date of service Not that I know of -

36. Water heater type: Gas ☒, Electric ☐, by Furnace ☐,
Other (please describe)

37. Water heater location: Basement ☒, Upstairs utility room ☐, Garage ☐,
Other (please specify)

38. What type of cooking appliance do you have? Electric ☐, Gas ☒
Other (please describe) Gas - stove & oven

39. Is there a stove exhaust hood present? Yes ☒ No ☐
Does it vent to the outdoors? Yes ☒ No ☐

40. Smoking in Home:
None ☒, Rare (only guests) ☐, Moderate (residents, light smokers) ☐,
Heavy (at least one heavy smoker in household) ☐

41. If yes to question 40, what do they smoke?
Cigarettes ☐ Cigars ☐
Pipe ☐ Other ☐

42. Do you regularly use air fresheners? Yes ☐ No ☒

43. Does anyone in the home have indoor home hobbies or crafts involving:
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☐
Spray paint ☐, wood finishing ☐, Other ☐

Done - outside
Sewing - minor glues on fabric

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Salt Lake City, UT 84148

44. General family/home use of consumer products (please circle appropriate).
Assume that: Never = never used, Hardly ever = less that once/month,
Occasionally = about once/month, Regularly = about once/week,
and Often = more that once/week.

Product	Frequency of Use				
Spray-on deodorant	(Never)	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	(Never)	Hardly ever	Occasionally	Regularly	Often
Insecticides	(Never)	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	(Occasionally)	Regularly	Often
Window cleaners	Never	Hardly ever	(Occasionally)	Regularly	Often
Nail polish remover	Never	(Hardly ever)	Occasionally	Regularly	Often
Hair sprays	(Never)	Hardly ever	Occasionally	Regularly	Often
Candles	Never	Hardly ever	(Occasionally)	Regularly	Often
Incense	(Never)	Hardly ever	Occasionally	Regularly	Often

45. Please check weekly household cleaning practices:

Dusting ☐ ← bi weekly
Dry sweeping ☒
Vacuuming ☒ ← monthly
Polishing (furniture, etc.) ☐ Never
Washing/waxing floors ☐ Never
Other (describe) ☐ _____

46. Other comments:

_____
_____
_____
_____
_____
_____
_____
_____
_____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

47. Chemical Inventory/Summary

Chemical/Chemical Product (consumer name)	Amount present in home
a)	
b)	
c)	
d)	
e)	
f)	
g)	
h)	
i)	
j)	
k)	
l)	
m)	
n)	
o)	

PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0033-H
Street Address: 1249 Gilmer Dr
ZIP: 84105

Property Contact:
Tel #:

Latitude: 40.748140
Longitude: 111.855012
Age of Property: 89 years

Number of Levels: 3
Basement? ○ Yes ◉ No
Basement Habitable? ○ Yes ◉ No
Sump? ○ Yes ◉ No

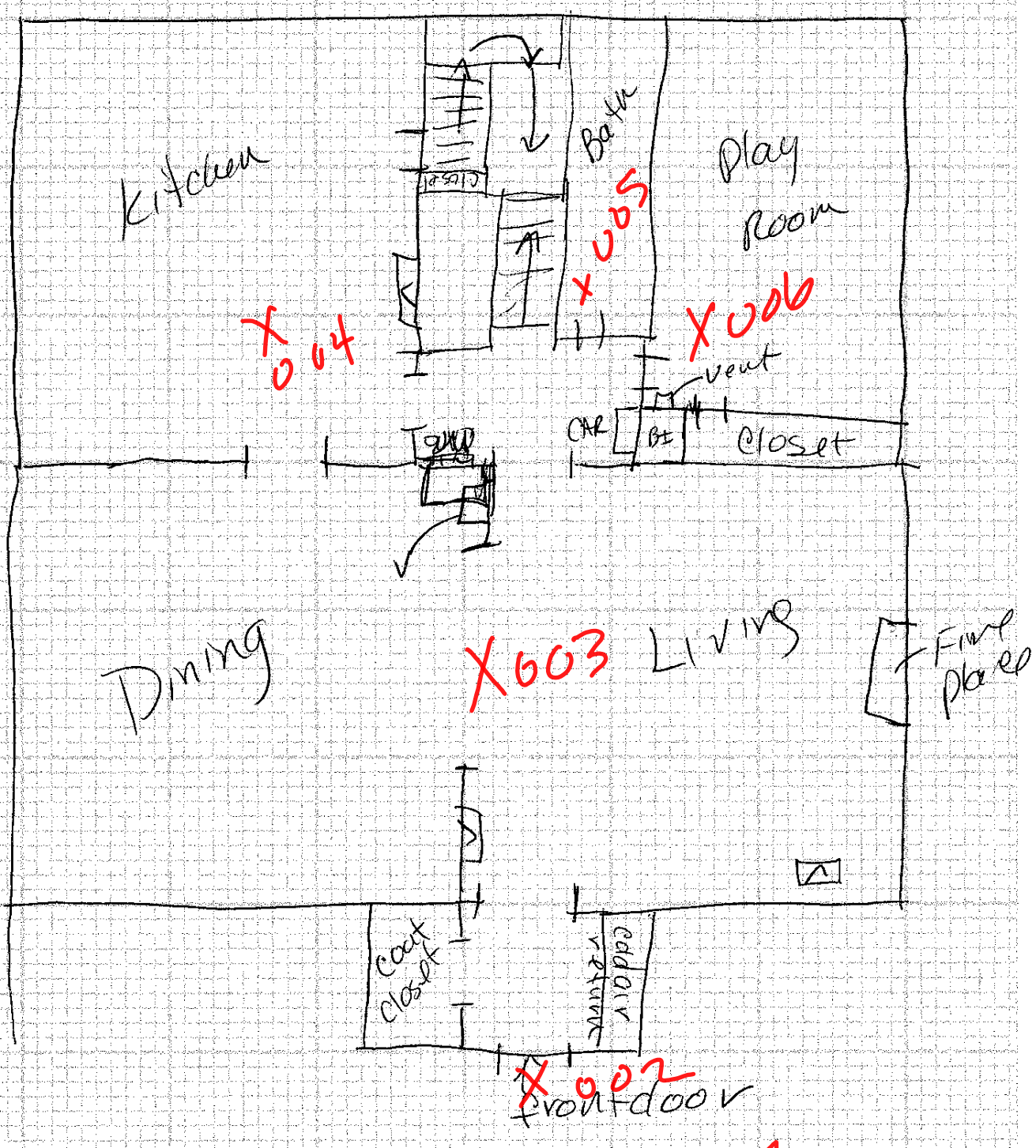
Completed by: ERR
Date: 02/02/2015

Comments

House Elevation 4495' MSL

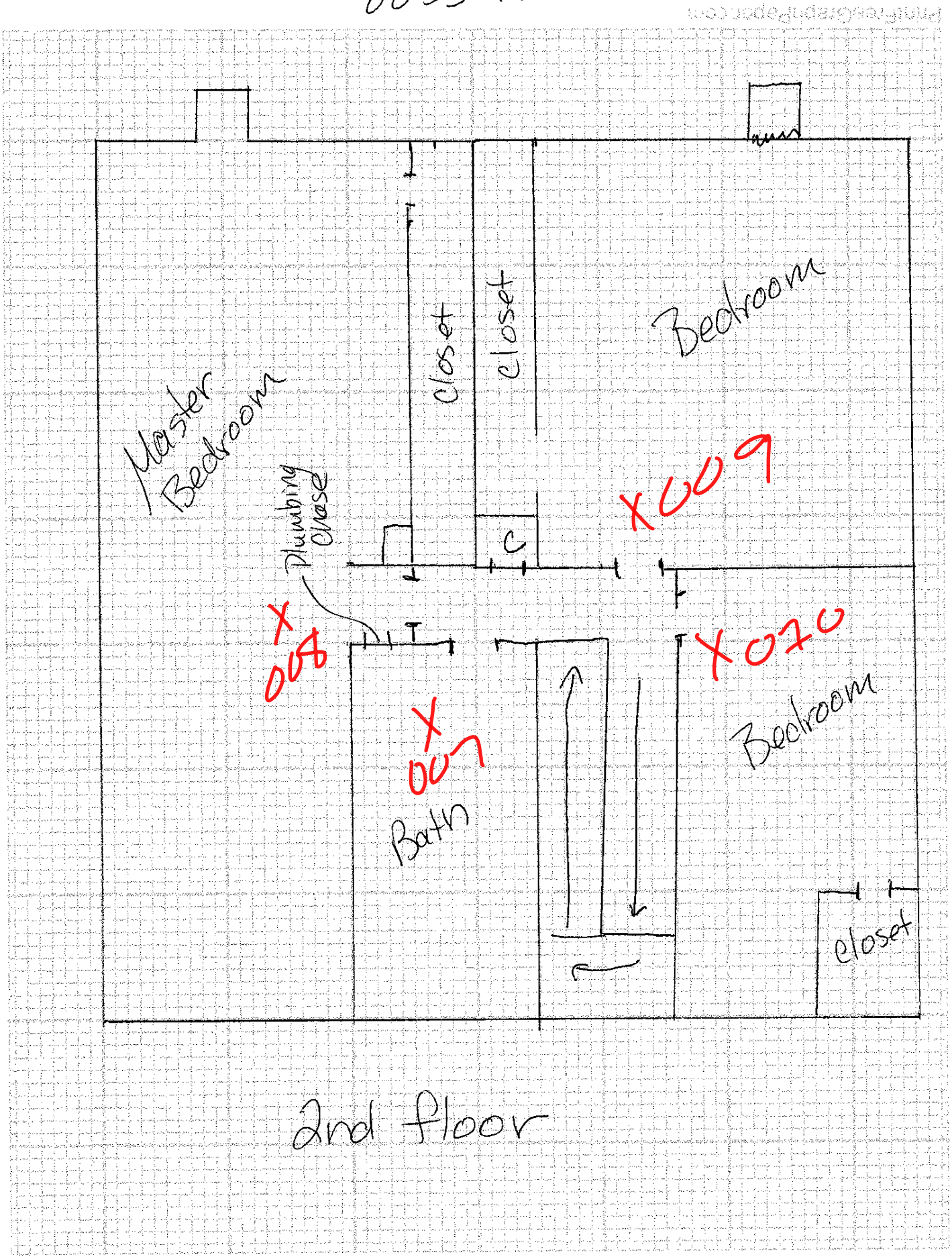
Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.

0033-1f

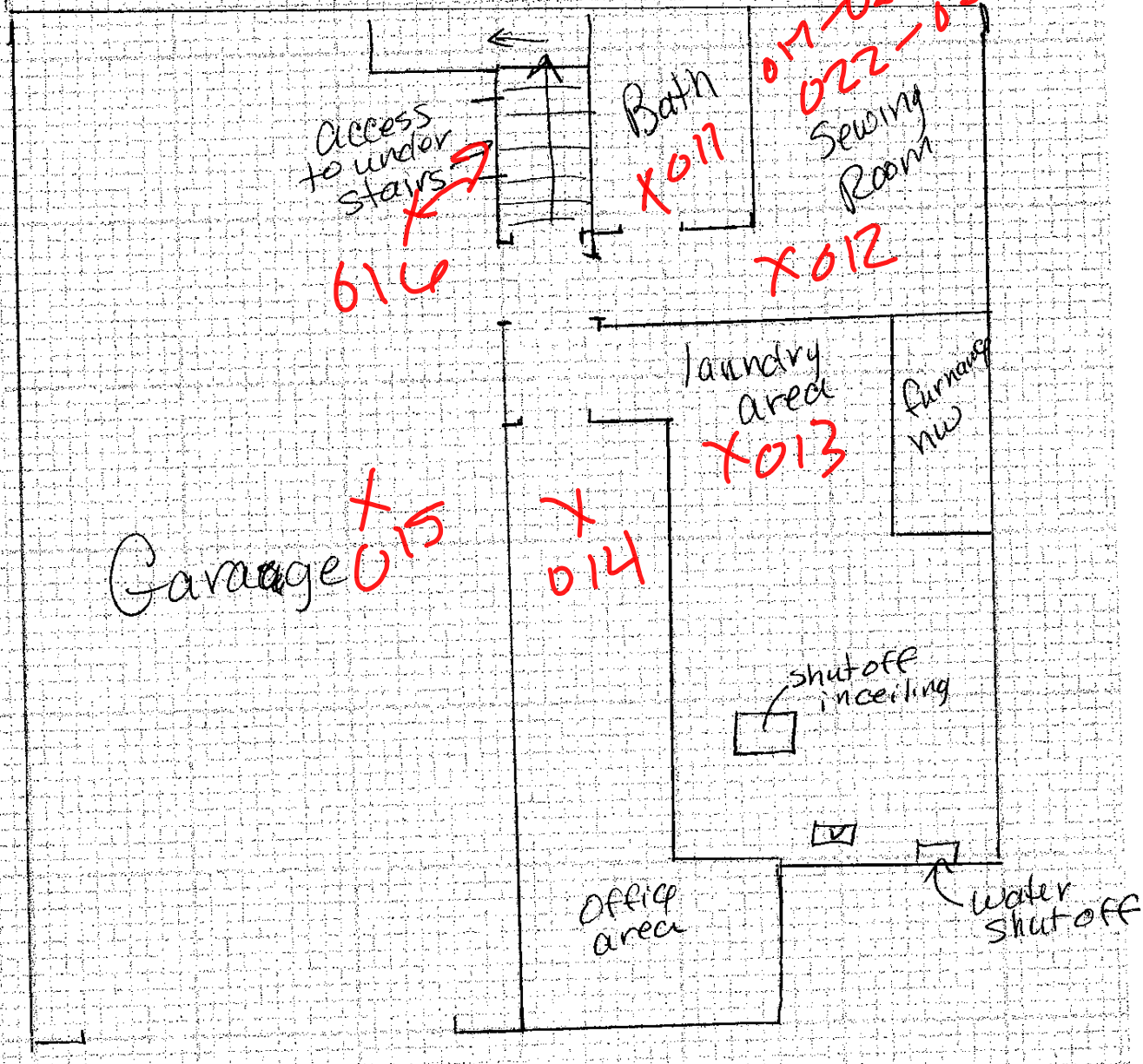


1st floor X SC-001

0033-H


Master Bedroom
closet
closet
Bedroom
Plumbing Chase
C
X009
X008
X007
X010
Bath
Bedroom
closet
2nd floor

0033-1+



Basement

PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 4/8/15 Time of Arrival: 0900

Weather Conditions: Rain

Temperature: 45 Barometric Pressure (inHg): 29.70 Wind Direction: SW Speed: Moderate

Field Crew 1: ERR Role: HAPSITE Operator

Field Crew 2: DED Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? ( ) Yes (●) No

If yes, have the materials been removed? ( ) Yes (●) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time	
044,003,005,006,008	04/01/15	0835	
Instrument Performance Check Run Number	**Time**		(●) Pass ( ) Fail
Auto tune 04/08/15	0750		
Instrument Performance Check Re-run Number	**Time**		( ) Pass ( ) Fail
NA			
CCV Run Number	**Time**		(●) Pass ( ) Fail
001,0.55PPB 04/08/15	0804		
CCV Re-run Number	**Time**		( ) Pass ( ) Fail
NA			

Operator's initials

Comments

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time	0924	End Time	0926
Location	Front porch on west side of the house		
Run Number	002(IA-001-OUT)	Time	0924
Run Number	NA	Time	

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

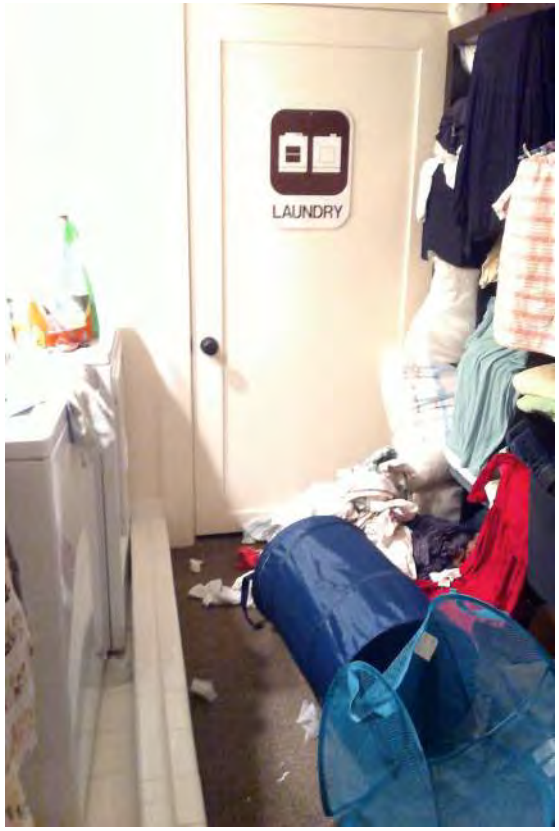
In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time NA End Time

Comments

The most likely areas for conducting background surveys were the laundry room (observed fresh dry cleaning) and the sewing craft room in basement. These rooms were crammed full of clothing, fresh cloth, and general clutter that lined walls and floors. Ran full ambient air analyses in lieu of surveys. PHOTOS: WIN_20150408_113230-Sewing Room; WIN_20150408_113259-Sewing Room2; WIN_20150408_113351-Laundry Room; WIN_20150408_113620-Dry Cleaning-Laundry.




LAUNDRY


03-001642
Continental Cleaners
Paul Adam
(801) 699-5050
2 PIECES
Sat 03/21 3:00 PM
383



PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time NA End Time

Comments

The basement walls are essentially lined with boxes and bolts of fabric from a home sewing business, and from general clutter. Could not access the basement wall-floor joining to look for or survey cracks or holes.

Pictures

See photos of cluttered basement under indoor source survey

PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	0941	End Time	1157		
Room/area	Living/dinning	Run Number	003(IA-002-OCL)	Time	0941
Room/area	KITCHEN	Run Number	004(IA-003-KIT)	Time	0950
Room/area	First floor bathroom	Run Number	005(IA-004-BA1)	Time	0958
Room/area	First floor play room	Run Number	006(IA-005-PLA)	Time	1005
Room/area	2nd floor bathroom	Run Number	007(IA-006-BA2)	Time	1016
Room/area	Master bedroom	Run Number	008(IA-007-MBR)	Time	1025
Room/area	2nd floor front bedroom	Run Number	009(IA-008-BR1)	Time	1034
Room/area	2nd floor north bedroom	Run Number	010(IA-009-BR2)	Time	1043
Room/area	Basement bathroom	Run Number	011(IA-010-BA3)	Time	1104
Room/area	Basement Craft room	Run Number	012(IA-011-CRA)	Time	1112

Comments

Basement laundry room,013(IA-012-LAU)1120; Basement office, 014(IA-013-OFC)1129; Garage,015(IA-014-GAR)1141; Storage under stairs off of garage

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time: 1300 | End Time: 1350 | Room/Area: Craft room in basement

T=	5	CFM	1020	Pascals	-6.6	Run No.		Time	
T=	10	CFM	1005	Pascals	-5.6	Run No.	017(IA-016A-CRA)	Time	1310
T=	15	CFM	1004	Pascals	-6.2	Run No.	018(IA-16B-CRA)	Time	1318
T=	20	CFM	1012	Pascals	-.60	Run No.		Time	
T=	25	CFM	1007	Pascals	-5.8	Run No.	019(IA-16C-CRA)	Time	1326
T=	30	CFM	999	Pascals	-7.7	Run No.	020(IA-16D-CRA)	Time	1334
T=	40	CFM	1002	Pascals	-6.1	Run No.	021(IA-16E-CRA)	Time	1342
T=	50	CFM	1012	Pascals	-6.7	Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

BASELINE PRESSURE WAS - 2.4Pa. Removal volume =50,000. TOTAL VOLUME REMOVED = 50,381 cubic feet. Airdoor located in back entry door o
basement. Hapsite located in hall/entry to craft room in basement.

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time: 1355 | End Time: 1445 | Room/Area: Craft room in basement

T=	5	CFM	1080	Pascals	3.2	Run No.	022(IA-017A-CRA)	Time	1401
T=	10	CFM	1080	Pascals	5.9	Run No.		Time	
T=	15	CFM	1063	Pascals	2.0	Run No.	023(IA-17B-CRA)	Time	1409
T=	20	CFM	1085	Pascals	1.6	Run No.	024(IA-17C-CRA)	Time	1417
T=	25	CFM	1074	Pascals	1.5	Run No.		Time	
T=	30	CFM	1091	Pascals	1.4	Run No.	025(IA-17D-CRA)	Time	1426
T=	40	CFM	1062	Pascals	3.3	Run No.	026(IA-17E-CRA)	Time	1434
T=	50	CFM	1096	Pascals	3.5	Run No.	027(IA-17F-CRA)	Time	1442
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

Baseline pressure was -4.0. Total volume injected = 53,943 cubic feet.

PART J
SUMMA CANISTERS

Location/ Area: NA

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

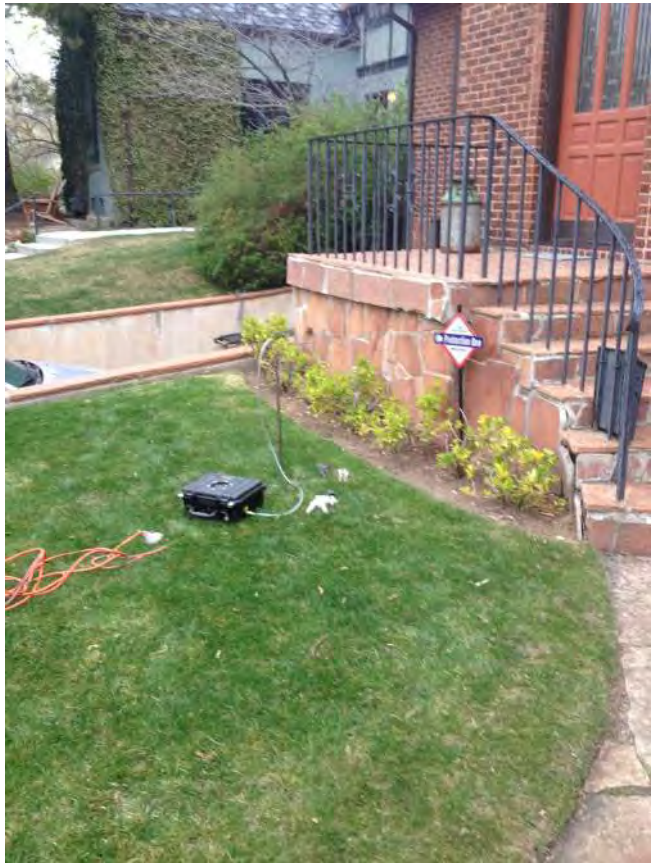
Comments

PART K
SOIL GAS

Date	4/8/15	Time	11:20	Sample Depth	4		
Latitude	40.748141	Longitude	111.856517			Elevation	4494
Run No	028	Run Time	11:40			Vacuum (in/Hg)	4"

Comments

Front yard (west side of house). See photo: 0033H-SG-001-4 Location



0033 H

2/10/15 (Tues.)
9:00 am

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

OCCUPIED DWELLING QUESTIONNAIRE

Indoor Air Assessment Survey

Date: Feb 2, 2015

1. Name: David Adam Paul

Address:
1249 Gilmer Dr.
SLC, UT 84105

Home Phone: 801-699-5050 Work Phone: _____

2. What is the best time to call to speak with you? 6PM At: Work ☒ or Home ☐?

3. Are you the Owner ☒ Renter ☐, Other ☐ (please specify) _____ of this Home/Structure? If you are not the owner, please provide owner contact Information

_____

_____

4. Total number of occupants/persons at this location? 5
Number of Children 3 Ages 6, 5, 3

5. How long have you lived at this location? 9 yrs

General Home Description

6. Type of Home/Structure (check only one): Single Family Home ☒, Duplex ☐, Apartment ☐, Townhouse ☐ Other _____

7. Home/Structure Description:
Number of floors: 3
Basement ☒
Crawlspace ☐
Partial crawlspace/basement ☐ % of each _____
Slab on grade ☐
Other ☐ _____

8. Age of Home/Structure: 89 yrs years, Not sure/Unknown ☐

9. General Above-Ground Home/Structure construction (check all that apply):
Wood ☒, Brick ☒, Concrete ☒, Cement block ☐, Other ☐ _____

10. Foundation Construction (check all that apply):
Concrete Slab ☒
Fieldstone ☐
Concrete block ☐
Elevated above ground/grade ☐
Other ☐ _____

Return to: VASLCHCS (00PA)
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Salt Lake City, UT 84148

11. Do you have private well ☐ or cistern ☐ ?
If yes, please describe location, use and current condition None

12. Do you have a septic system? Yes ☐ No ☒ Not used ☐ Unknown ☐
If yes, what is construction type?
Where is it located?
When was the last time it was serviced?
Do you (or have you ever) use (d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your home? (pond, ditch, etc.) Yes ☐ No ☒

Basement Description (please check all boxes that apply):

14. Is the basement finished ☒ or unfinished ☐ ?

15. If finished, how many rooms are in the basement? 2
What are rooms used for? Bedrooms ☐ Family room ☐ Storage ☒
Other Sewing, laundry, sleeping occasionally

16. If not finished, do you plan on finishing in the future? Yes ☐ No ☐

17. Is the basement floor (check all that apply) concrete ☒, tile ☐, carpeted ☐, dirt ☐,
other ☐

18. Are the basement walls poured concrete ☒, cement block ☐, stone ☐, wood ☐,
Brick ☐, other ☐

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less that 1 time/year) ☒
No ☐

Describe the moisture problem Rain water gets in when the downspouts are not cleared.

20. .Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☐
No ☐

See #19

21. Does the basement have any of the following? Floor cracks ☐, Wall cracks ☐, Sump ☐,
Floor drain ☒, Other hole/opening in floor ☐
describe Was covered and redirected to W/D when basement was finished

Return to: VASLCHCS (00PA)
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Salt Lake City, UT 84148

22. Are any of the following used or stored in the basement (check all that apply):
Paint ☐ Paint Stripper/remover ☐ Paint thinner ☐ Metal degreaser/cleaner ☐
Gasoline ☐ Diesel fuel ☐ Solvents ☐ Glue ☒ Laundry spot removers ☒ Drain cleaners
☐ Pesticides ☐ Other equipment with fuel tanks (chain saw, lawn mower, snow blower,etc.,)

23. Have you recently (within the last six months) done any painting or remodeling in your home?
Yes ☒ No ☐
If yes, specify what was done, where in the home, and what month:
_____
_____

24. Have you installed new carpeting in your home within the last year? Yes ☐ No ☒
If yes, when and where?_____

25. Do you regularly use or work in a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) ☐
Yes, use dry-cleaning infrequently (monthly or less) ☐
Yes, work at a dry cleaning service ☐
No ☒

26. Does anyone in your home use solvents at work?
Yes ☐ If yes, how many persons?
No ☒ If no, go to question 28

27. If yes for question 26, are the work clothes washed at home? Yes ☐ No ☐

28. Where is the washer/dryer located?
Basement ☒
Upstairs utility room ☐
Kitchen ☐
Garage ☐
Use a Laundromat ☐
Other, please specify ☐ _____

29. If you have a dryer, is it vented to the outdoors? Yes ☒ No ☐

30. What type (s) of home heating do you have (check all that apply)
Fuel type: Gas ☒, Oil ☐, Electric ☐, Wood ☐, Coal ☐,
Other ☐_____

Heat conveyance system:
Forced hot air ☒
Forced hot water ☐
Steam ☐
Radiant floor heat ☐
Wood Stove ☐
Coal furnace ☐
Fireplace ☒ gas
Other ☐ _____

Return to: VASLCHCS (00PA)
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Salt Lake City, UT 84148

31. Does your home have (or had in the past) a storage tank for storage of: gasoline ☐ fuel oil ☐ propane ☐
If yes, where is/was it located? _____
How is/was the tank filled? _____
Is there staining near the tank? Yes ☐ No ☐

32. Do you have air conditioning? Yes ☒ No ☐
Central air conditioning ☒
Window air conditioning unit (s) ☐
Other (please specify) _____

33. Do you use any of the following? Room fans ☐, Ceiling fans ☒, Attic fan ☐

34. Do you ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☐ No ☒

35. Has your home had termite or other pesticide treatment? Yes ☐ No ☐ Unknown ☒
If yes, please specify type of pest controlled _____
And approximate date of service _____

36. Water heater type: Gas ☒, Electric ☐, by Furnace ☐,
Other (please describe) _____

37. Water heater location: Basement ☒ Upstairs utility room ☐, Garage ☐,
Other (please specify) _____

38. What type of cooking appliance do you have? Electric ☒ Gas ☐
Other (please describe) _____

39. Is there a stove exhaust hood present? Yes ☐ No ☒
Does it vent to the outdoors? Yes ☒ No ☐

40. Smoking in Home:
None ☒, Rare (only guests) ☐, Moderate (residents, light smokers) ☐,
Heavy (at least one heavy smoker in household) ☐

41. If yes to question 40, what do they smoke?
Cigarettes ☐ Cigars ☐
Pipe ☐ Other ☐

42. Do you regularly use air fresheners? Yes ☐ No ☒

43. Does anyone in the home have indoor home hobbies or crafts involving:
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☐
Spray paint ☐, wood finishing ☐, Other ☒ some fabric and leather gluing

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

44. General family/home use of consumer products (please circle appropriate).
Assume that: Never = never used, Hardly ever = less that once/month,
Occasionally = about once/month, Regularly = about once/week,
and Often = more that once/week.

Product	Frequency of Use				
Spray-on deodorant	Never	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	Never	Hardly ever	Occasionally	Regularly	Often
Insecticides	Never	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	Occasionally	Regularly	Often
Window cleaners	Never	Hardly ever	Occasionally	Regularly	Often
Nail polish remover	Never	Hardly ever	Occasionally	Regularly	Often
Hair sprays	Never	Hardly ever	Occasionally	Regularly	Often
Candles	Never	Hardly ever	Occasionally	Regularly	Often
Incense	Never	Hardly ever	Occasionally	Regularly	Often

45. Please check weekly household cleaning practices:

Dusting ☒
Dry sweeping ☒
Vacuuming ☒
Polishing (furniture, etc.) ☐
Washing/waxing floors ☐
Other (describe) ☐ _____

46. Other comments:

_____
_____
_____
_____
_____
_____
_____
_____
_____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

47. Chemical Inventory/Summary

Chemical/Chemical Product (consumer name)	Amount present in home
a)	
b)	
c)	
d)	
e)	
f)	
g)	
h)	
i)	
j)	
k)	
l)	
m)	
n)	
o)	

PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0036-H
Street Address: 1123 E. Sunnyside Ave
ZIP: 84105

Property Contact:
Tel #:

Latitude: 40.751067
Longitude: 111.858721
Age of Property: 100 years

Number of Levels: 2
Basement? ○ Yes ◉ No
Basement Habitable? ○ Yes ◉ No
Sump? ○ Yes ◉ No

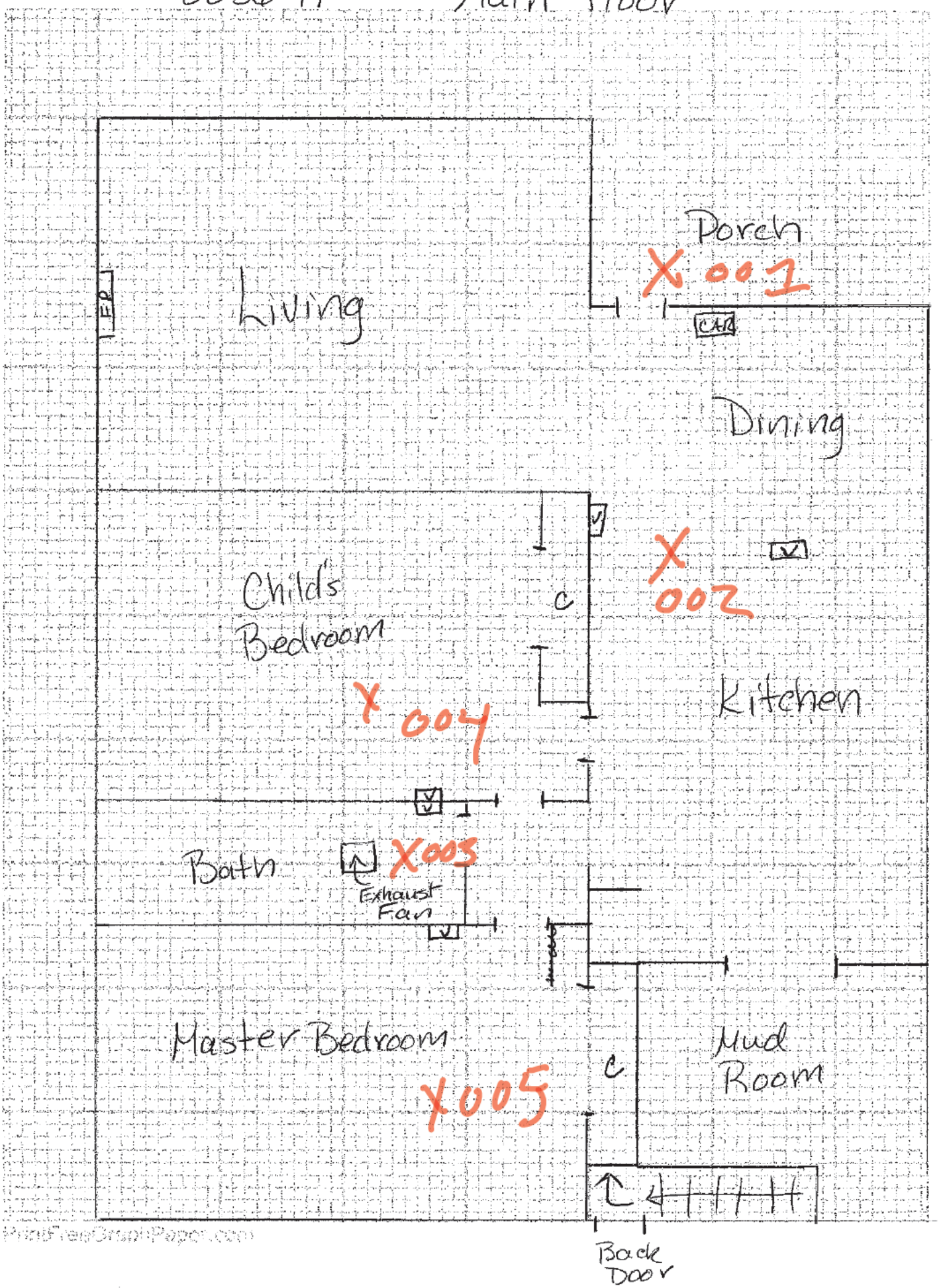
Completed by: ERR
Date: 02/20/2015

Comments

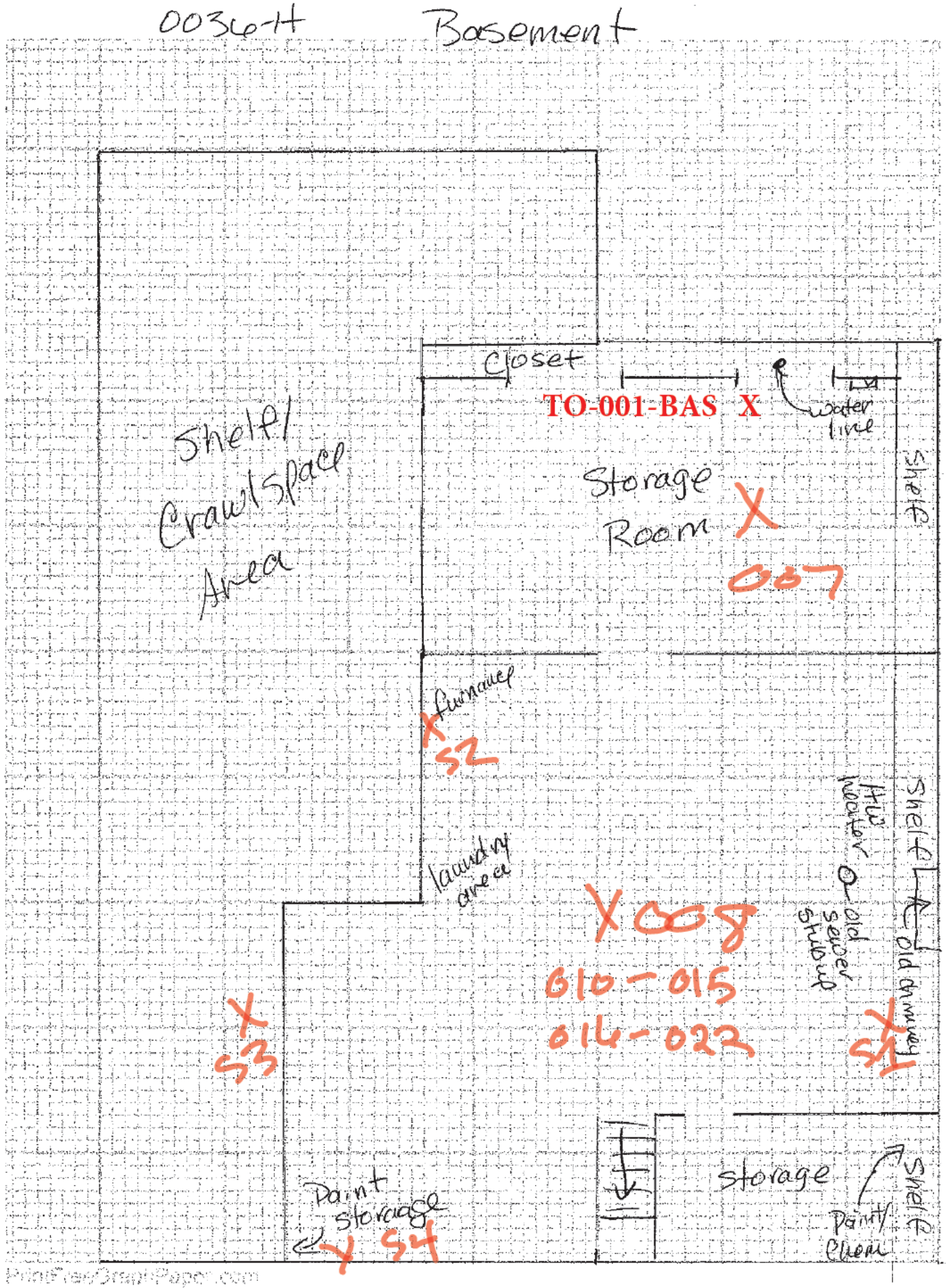
French drain system along entire east property line and north property line. The east line drains to storm drain at Sunnyside Ave. The north line drains into a french drain line on the property adjacent to the west. At least two seeps are present on the hillside between the east drain line and the eastern property line.

Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.

0036-H Main floor



0036-H Basement



PrintFreeGraphPaper.com

0036-H
Backyard
Trench drain to SS
House
Level
Level
Deck Area
X
Sc-001
Rock Patio
Connected to 1119
seep in bank
cistern ~ 9'
cistern ~15'

PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 4/3/15 Time of Arrival: 0830

Weather Conditions: Sunny

Temperature: 28 Barometric Pressure (inHg): 30.40 Wind Direction: SE Speed: Calm

Field Crew 1: ERR Role: HAPSITE Operator

Field Crew 2: DED Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? ( ) Yes (●) No

If yes, have the materials been removed? ( ) Yes ( ) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time
044,003,005,006,008	04/01/2015	0835

Instrument Performance Check Run Number	Time	
Auto tune-4/3/15	0721	(•) Pass ( ) Fail

Instrument Performance Check Re-run Number	Time	
NA		( ) Pass ( ) Fail

CCV Run Number	Time	
036-0.55PPB-04/02/15	1534	(•) Pass ( ) Fail

CCV Re-run Number	Time	
037-5.5PPB-04/02/15	1548	(•) Pass ( ) Fail

Operator's initials: ERR

Comments

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time: 0845 End Time: 0847

Location: Front porch on southern side of property

Run Number: 001(IA-001-OUT) Time: 0845

Run Number: NA Time:

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time 1008 End Time 1010

Comments

Survey 001 - Work bench in furnace room with WD-40, bug spray, etc. 1008-1010 MAX TIC = 138,467. PHOTO: WIN_20150403_Basement Workbench Survey001;

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time 1016 End Time 1025

Comments

Survey 002 - Base of wall behind furnace- 1016-1018 - MAX TIC = 182,028. Survey 003 - Dirt crawl space on East side of basement- MAX TIC = 205,723 wall near NE corner of basement 1023-1025 max tic = 171,892.

Pictures

PHOTOS: WIN_20150403_Wall cracks at furnace-Survey002; WIN_20150403_Soil-floored Crawl Space-Survey003






MR. GRIP
RESOLVE

PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time: 0854 End Time: 0958

Room/area	Open concept/living/dining/kitchen	Run Number	002(IA-002-OCL)	Time	0854
Room/area	Upstairs bathroom	Run Number	003(IA-003-BA1)	Time	0910
Room/area	Kids bedroom	Run Number	004(IA-004-BR1)	Time	0919
Room/area	Master bedroom	Run Number	005(IA-005-MBR)	Time	0927
Room/area	Storage room -south end of basement	Run Number	007(IA-007-STO)	Time	0947
Room/area	Furnace room -east half of basement	Run Number	008(IA-008-FUR)	Time	0956
Room/area		Run Number		Time	
Room/area		Run Number		Time	
Room/area		Run Number		Time	
Room/area		Run Number		Time	

Comments

Run 006 - Accidental run occurred when carrying HAPSite to basement.

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time: 1045 End Time: 1145 Room/Area: Furnace room

T=	5	CFM	435	Pascals	-5.1	Run No.	009(IA-009A-FUR)	Time	1050
T=	10	CFM	449	Pascals	-5.4	Run No.	010(IA-009B-FUR)	Time	1059
T=	15	CFM	432	Pascals	-5.1	Run No.		Time	
T=	20	CFM	439	Pascals	-5.5	Run No.	011(IA-009C-FUR)	Time	1107
T=	25	CFM	449	Pascals	-5.1	Run No.		Time	
T=	30	CFM	420	Pascals	-5.1	Run No.	012(IA-009D-FUR)	Time	1115
T=	40	CFM	446	Pascals	-4.8	Run No.	013(IA-009E-FUR)	Time	1123
T=	50	CFM	439	Pascals	-5.0	Run No.	014(IA-009F-FUR)	Time	1131
T=	60	CFM	443	Pascals	-5.3	Run No.	015(IA-009G-FUR)	Time	1139
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

2.5 air volumes = 26,000. 26,346 total volume pulled Baseline =-0.9 pa. Air door located in back door of home, opposite basement stairwell, Hapsite located in the basement near the entry to the storage room.

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time: 1150 | End Time: 1248 | Room/Area: Furnace room

T=	5	CFM	461	Pascals	4.6	Run No.	016(IA-010A-FUR)	Time	1152
T=	10	CFM	476	Pascals	4.9	Run No.	017(IA-010B-FUR)	Time	1201
T=	15	CFM	450	Pascals	5.5	Run No.		Time	
T=	20	CFM	457	Pascals	4.1	Run No.	018(IA-010C-FUR)	Time	1210
T=	25	CFM	440	Pascals	4.5	Run No.		Time	
T=	30	CFM	430	Pascals	4.0	Run No.	019(IA-010D-FUR)	Time	1220
T=	40	CFM	461	Pascals	5.1	Run No.	020(IA-010E-FUR)	Time	1228
T=	50	CFM	460	Pascals	5.5	Run No.	021(IA-010F-FUR)	Time	1238
T=	60	CFM	444	Pascals	5.1	Run No.	022(IA-010G-FUR)	Time	1246
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

Total volume =26,286. Baseline = -0.5 pa.

PART J
SUMMA CANISTERS

Location/ Area: Basement

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
A-0036H-TO-001-BAS	0017	4/3/15	1315	25	04/04/2015	12:50	1

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

IMG_0950_Summa 0036H-TO-001

Comments

PART K
SOIL GAS

Date	4/3/15	Time	0950/1005	Sample Depth	4/8		
Latitude	40.751143	Longitude	111.858659			Elevation	4424
Run No	023/024	Run Time	1255/1304			Vacuum (in/Hg)	10/11

Comments

Off of the Northeast corner of the house. PHOTO: IMG_0948_Soil Gas 0036H-SG-001-4&8 ft


2015/04/03 09:55


2015/04/03 13:18

0036-H

9am
3/18/15

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

OCCUPIED DWELLING QUESTIONNAIRE

Indoor Air Assessment Survey

Date: 2/20/15

1. Name: [redacted]
   Address: 1123 East Sunnyside Ave
   SLC, UT 84102
   Home Phone: 201 673 7356 Work Phone: 801 924 5938
2. What is the best time to call to speak with you? 9-5 At: Work ☒ or Home ☒ ?
3. Are you the Owner ☒, Renter ☐, Other ☐ (please specify)_____ of this Home/Structure? If you are not the owner, please provide owner contact Information
   _____
   _____
4. Total number of occupants/persons at this location? 3
   Number of Children 1 Ages 5
5. How long have you lived at this location? December 2004

General Home Description

6. Type of Home/Structure (check only one): Single Family Home ☒, Duplex ☐, Apartment ☐, Townhouse ☐ Other _____
7. Home/Structure Description:
   Number of floors: 2
   Basement ☒
   Crawlspace ☒
   Partial crawlspace/basement ☒ % of each 50/50
   Slab on grade ☐
   Other ☐ _____
8. Age of Home/Structure: 100 years, Not sure/Unknown ☐
9. General Above-Ground Home/Structure construction (check all that apply):
   Wood ☐, Brick ☐, Concrete ☒, Cement block ☐, Other ☐ _____
10. Foundation Construction (check all that apply):
    Concrete Slab ☒
    Fieldstone ☐
    Concrete block ☐
    Elevated above ground/grade ☐
    Other ☐ _____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

11. Do you have private well ☐ or cistern ☐ ?
If yes, please describe location, use and current condition_____

12. Do you have a septic system? Yes ☐ No ☑ Not used ☐ Unknown ☐
If yes, what is construction type?_____
Where is it located? _____
When was the last time it was serviced?_____
Do you (or have you ever) use (d) any degreaser for your septic system? Yes ☐ No ☑

13. Do you have standing water outside of your home? (pond, ditch, etc.) Yes ☑ No ☐

Basement Description (please check all boxes that apply):

14. Is the basement finished ☐ or unfinished ☑ ?

15. If finished, how many rooms are in the basement? 2
What are rooms used for? Bedrooms ☐ Family room ☐ Storage ☑
Other Laundry

16. If not finished, do you plan on finishing in the future? Yes ☑ No ☐

17. Is the basement floor (check all that apply) concrete ☑, tile ☐, carpeted ☐, dirt ☐, other ☐ _____

18. Are the basement walls poured concrete ☑, cement block ☐, stone ☐, wood ☐, Brick ☐, other ☐ _____

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less that 1 time/year) ☑
No ☐

Describe the moisture problem Humid

20. Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☐
No ☑

21. Does the basement have any of the following? Floor cracks ☐, Wall cracks ☐, Sump ☐, Floor drain ☑, Other hole/opening in floor ☐
describe_____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

22. Are any of the following used or stored in the basement (check all that apply):
Paint ☑ Paint Stripper/remover ☐ Paint thinner ☐ Metal degreaser/cleaner ☐
Gasoline ☐ Diesel fuel ☐ Solvents ☐ Glue ☐ Laundry spot removers ☐ Drain cleaners
☐ Pesticides ☐ Other equipment with fuel tanks (chain saw, lawn mower, snow blower, etc.,)

23. Have you recently (within the last six months) done any painting or remodeling in your home?
Yes ☐ No ☑
If yes, specify what was done, where in the home, and what month:
_____
_____

24. Have you installed new carpeting in your home within the last year? Yes ☐ No ☑
If yes, when and where? _____

25. Do you regularly use or work in a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) ☐
Yes, use dry-cleaning infrequently (monthly or less) ☑
Yes, work at a dry cleaning service ☐
No ☐

26. Does anyone in your home use solvents at work?
Yes ☐ If yes, how many persons?
No ☑ If no, go to question 28

27. If yes for question 26, are the work clothes washed at home? Yes ☐ No ☐

28. Where is the washer/dryer located?
Basement ☑
Upstairs utility room ☐
Kitchen ☐
Garage ☐
Use a Laundromat ☐
Other, please specify ☐ _____

29. If you have a dryer, is it vented to the outdoors? Yes ☑ No ☐

30. What type (s) of home heating do you have (check all that apply)
Fuel type: Gas ☑, Oil ☐, Electric ☐, Wood ☐, Coal ☐,
Other ☐ _____

Heat conveyance system:
Forced hot air ☑
Forced hot water ☐
Steam ☐
Radiant floor heat ☐
Wood Stove ☐
Coal furnace ☐
Fireplace ☐
Other ☐ _____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

31. Does your home have (or had in the past) a storage tank for storage of: gasoline ☐ fuel oil ☐ propane ☐
If yes, where is/was it located? _____
How is/was the tank filled? _____
Is there staining near the tank? Yes ☐ No ☐

32. Do you have air conditioning? Yes ☐ No ☑
Central air conditioning ☐
Window air conditioning unit (s) ☑
Other (please specify) _____

33. Do you use any of the following? Room fans ☐, Ceiling fans ☑, Attic fan ☐

34. Do you ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☐ No ☑

35. Has your home had termite or other pesticide treatment? Yes ☐ No ☑ Unknown ☐
If yes, please specify type of pest controlled _____
And approximate date of service _____

36. Water heater type: Gas ☑, Electric ☐, by Furnace ☐,
Other (please describe) _____

37. Water heater location: Basement ☑, Upstairs utility room ☐, Garage ☐,
Other (please specify) _____

38. What type of cooking appliance do you have? Electric ☑, Gas ☐
Other (please describe) _____

39. Is there a stove exhaust hood present? Yes ☑ No ☐
Does it vent to the outdoors? Yes ☐ No ☐

40. Smoking in Home:
None ☑, Rare (only guests) ☐, Moderate (residents, light smokers) ☐,
Heavy (at least one heavy smoker in household) ☐

41. If yes to question 40, what do they smoke?
Cigarettes ☐ Cigars ☐
Pipe ☐ Other ☐

42. Do you regularly use air fresheners? Yes ☐ No ☑

43. Does anyone in the home have indoor home hobbies or crafts involving:
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☐
Spray paint ☐, wood finishing ☐, Other ☐ _____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

44. General family/home use of consumer products (please circle appropriate). Assume that: Never = never used, Hardly ever = less that once/month, Occasionally = about once/month, Regularly = about once/week, and Often = more that once/week.

Product	Frequency of Use				
Spray-on deodorant	(Never)	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	(Never)	Hardly ever	Occasionally	Regularly	Often
Insecticides	(Never)	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	(Occasionally)	Regularly	Often
Window cleaners	Never	Hardly ever	(Occasionally)	Regularly	Often
Nail polish remover	Never	(Hardly ever)	Occasionally	Regularly	Often
Hair sprays	(Never)	Hardly ever	Occasionally	Regularly	Often
Candles	(Never)	Hardly ever	Occasionally	Regularly	Often
Incense	(Never)	Hardly ever	Occasionally	Regularly	Often

45. Please check weekly household cleaning practices:

Dusting ☑
Dry sweeping ☑
Vacuuming ☑
Polishing (furniture, etc.) ☐
Washing/waxing floors ☐
Other (describe) ☐ _____

46. Other comments:

_____
_____
_____
_____
_____
_____
_____
_____
_____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

47. Chemical Inventory/Summary.

Chemical/Chemical Product (consumer name)	Amount present in home
a)	
b)	
c)	
d)	
e)	
f)	
g)	
h)	
i)	
j)	
k)	
l)	
m)	
n)	
o)	

PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0037-H
Street Address: 1121 E. Alpine Place
ZIP: 84105

Property Contact:
Tel #:

Latitude: 40.749457
Longitude: 111.857804
Age of Property: 86 years

Number of Levels: 3
Basement? (•) Yes ( ) No
Basement Habitable? (•) Yes ( ) No
Sump? ( ) Yes (•) No

Completed by: ERR
Date: 02/24/2015

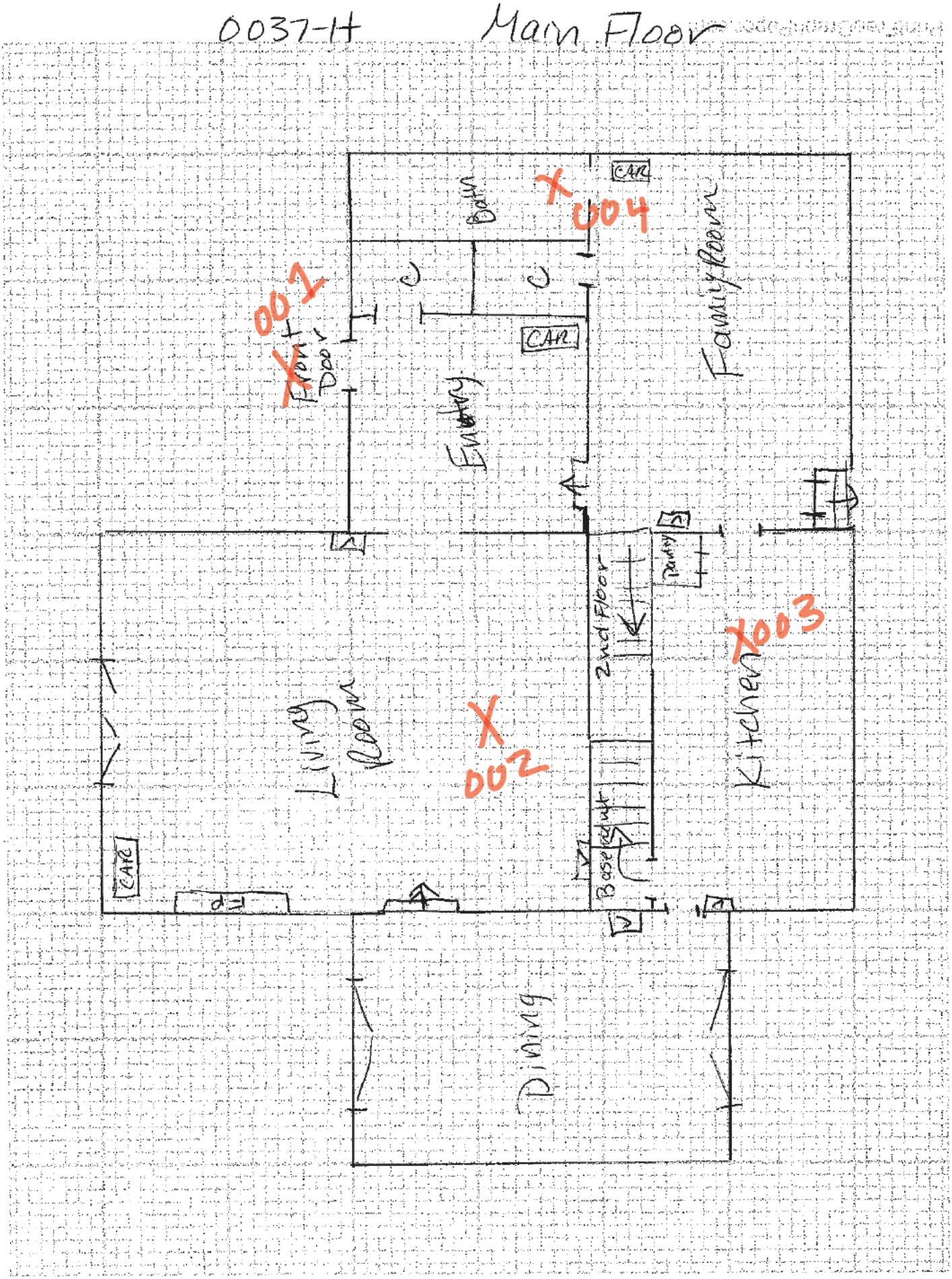
Comments

sump in yard that collects and moves water from french drains along east wall of house and from downspouts, and then pumps to storm sewer.
Sample location 0037H-GW-001: Lat=40.749408; Long=111.857699, Elev= 4421' msl.

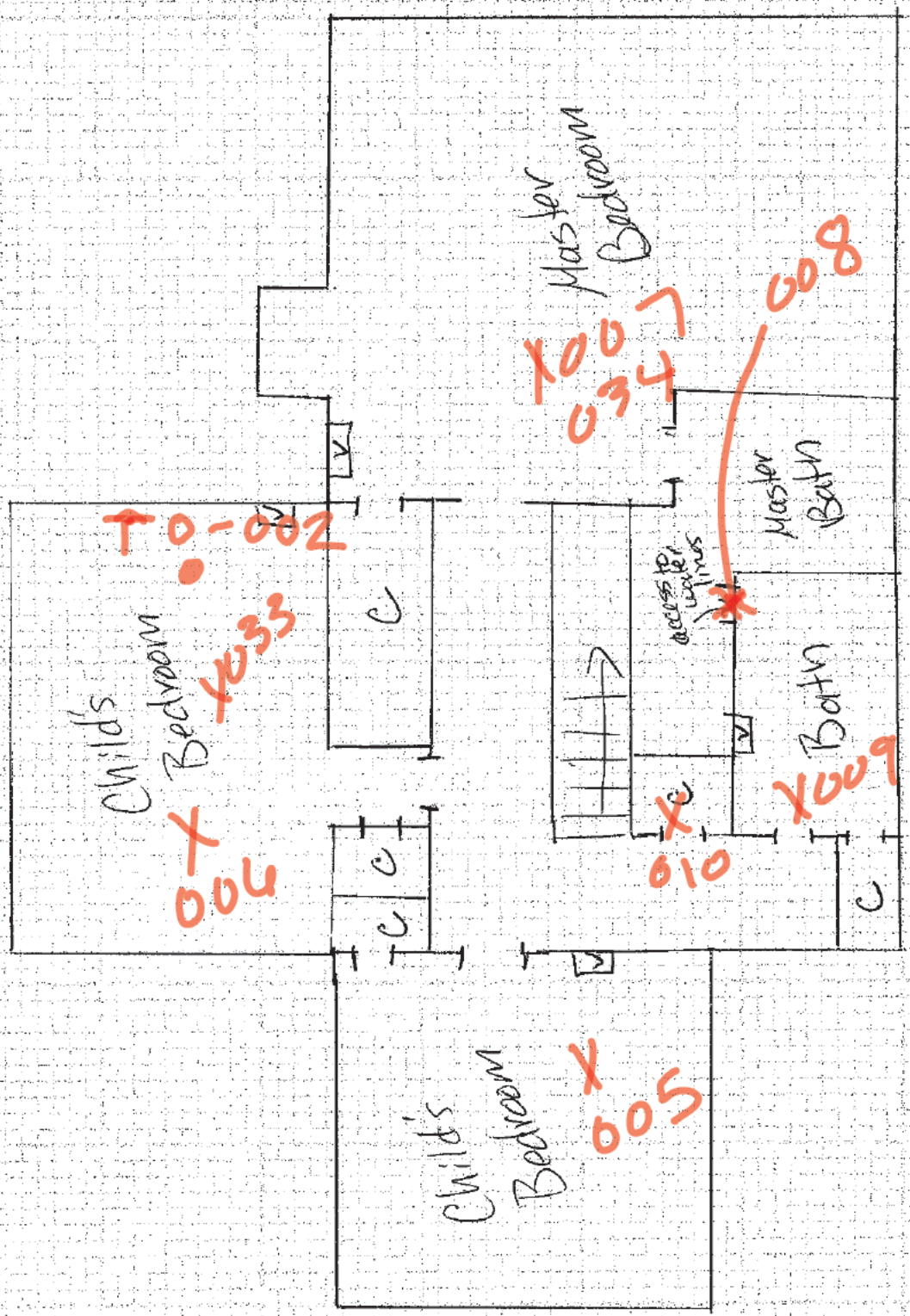
Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.

0037-H Basement

0037-H Main Floor



0037-H 2nd Floor



PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 04/02/2015 Time of Arrival: 0815

Weather Conditions: Cloudy

Temperature: 40 Barometric Pressure (inHg): 30.06 Wind Direction: W Speed: Light

Field Crew 1: ERR Role: HAPSITE Operator

Field Crew 2: DED Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? ( ) Yes (●) No

If yes, have the materials been removed? ( ) Yes ( ) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time
044, 003, 005, 006, 008	04012015	0835

Instrument Performance Check Run Number	Time	
Auto tune- 04022015	0712	(●) Pass ( ) Fail

Instrument Performance Check Re-run Number	Time	
NA		( ) Pass ( ) Fail

CCV Run Number	Time	
019 - 04012015 - 0.55 ppb	1240	(●) Pass ( ) Fail

CCV Re-run Number	Time	
020- 04012015 - 5.5 ppb	1248	(●) Pass ( ) Fail

Operator's initials: ERR

Comments

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time: 0900 End Time: 0902

Location: Front porch on South side of house.

Run Number: 001 Time: 0900

Run Number: NA Time:

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time 1212 End Time 1214

Comments

SURVEY 001 Closet in laundry room with cleaning supplies max TIC = 129,280. PHOTO: WIN_20150402_Survey01.

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

Start Time 1215 End Time 1221

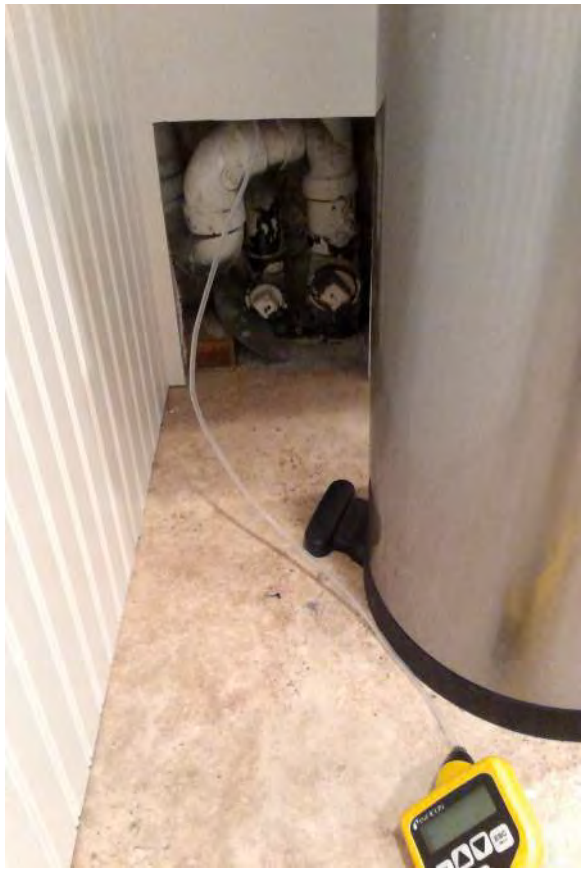
Comments

Survey 002 sewer line through slab near laundry room shelf 1215-1217 max TIC 147,789. Survey 003 floor drain in laundry room max TIC 158,835. Ran a full analyze mode at several locations to identify specific concentrations of vapor entry - storage closet/furnace room; large floor cracks in basement.

Pictures

PHOTO: WIN_20150402_Survey02; WIN_20150402_Survey03; WIN_20150402_Large Floor Crack-Furnace Rm; WIN_20150402_Wall Crack-furnace Rm










DANG
HOT
Water temperature over
can cause severe burns
instantly or death from
Children, disabled and
are at highest risk of
scalded.
See instruction manual
setting temperature at
heater.
Feel water before bathing
showering.
Temperature limiting
available, see manual.
FOR YOUR SAFETY
READ BEFORE
CAUTION

PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time	0910	End Time	1200		
Room/area	Living Room	Run Number	002 (IA-002-LIV)	Time	0910
Room/area	Kitchen	Run Number	003 (IA-003-KIT)	Time	0919
Room/area	1st Floor Bathroom	Run Number	004 (IA-004-BA1)	Time	0928
Room/area	2nd Floor East Bedroom	Run Number	005 (IA-005-BR1)	Time	0937
Room/area	2nd Floor Front Bedroom	Run Number	006 (IA-006-BR2)	Time	0946
Room/area	2nd Floor Master Bedroom	Run Number	007 (IA-007-MBR)	Time	0955
Room/area	Pipechase closet in master bedroom	Run Number	008 (IA-008-CLO1)	Time	1003
Room/area	2nd floor bathroom	Run Number	009 (IA-009-BA2)	Time	1011
Room/area	2ND floor hall closet	Run Number	010 (IA-010-CLO2)	Time	1021
Room/area	Basement bathroom	Run Number	011 (IA-011-BA3)	Time	1038

Comments

Basement bedroom 012 (IA-012-BR3) 1048. Basement bedroom closet 013 (IA-013-CLO3) 1057. Storage room 014 (IA-014-STO) 1106. Laundryroom 015 (IA-015-LAU) 1115. Play room 016 (IA-016-PLA) 1129. Furnace room 017 (IA-017-FUR1) 1142. Large crack on wall behind furnace 018 (IA-018-FUR2) 1150. Crack in concrete floor 019 (IA-019-FUR3) 1159.

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time: 1250 End Time: 1345 Room/Area: Basement laundry room

T=	5	CFM	1052	Pascals	-3.5	Run No.	020(IA-020A-LAU)	Time	1253
T=	10	CFM	1045	Pascals	-5.4	Run No.	021(IA-020B-LAU)	Time	1302
T=	15	CFM	1039	Pascals	-6.6	Run No.		Time	
T=	20	CFM	1042	Pascals	-3.3	Run No.	022(IA-020C-LAU	Time	1310
T=	25	CFM	1045	Pascals	-4.0	Run No.	023(IA-020D-LAU)	Time	1318
T=	30	CFM	1003	Pascals	-3.6	Run No.	024(IA-020E-LAU)	Time	1326
T=	40	CFM	1046	Pascals	-4.5	Run No.	025(IA-020F-LAU)	Time	1334
T=	50	CFM	1044	Pascals	-3.5	Run No.	026(IA-020G-LAU)	Time	1343
T=	55	CFM	1035	Pascals	-4.0	Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

BUILDING BASELINE =-3.1 pascal. 56,000=2.5AIR VOLUME. 57,145 cubic feet of air removed. Air door in front entry on first floor, Hapsite in basement laundry room.

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time: 1359 | End Time: 1455 | Room/Area: Basement Laundry

T=	5	CFM	1105	Pascals	5.5	Run No.	027(IA-021A-LAU)	Time	1405
T=	10	CFM	1042	Pascals	4.2	Run No.		Time	
T=	15	CFM	1043	Pascals	4.7	Run No.	028(IA-021B-LAU)	Time	1417
T=	20	CFM	1054	Pascals	5.0	Run No.		Time	
T=	25	CFM	1036	Pascals	4.6	Run No.	029(IA-021C-LAU)	Time	1425
T=	30	CFM	1058	Pascals	2.9	Run No.	030(IA-021D-LAU)	Time	1434
T=	40	CFM	1050	Pascals	5.1	Run No.	031(IA-021E-LAU)	Time	1443
T=	50	CFM	1073	Pascals	5.7	Run No.	032(IA-021F-LAU)	Time	1451
T=	54	CFM	1073	Pascals	3.3	Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

BUILDING BASELINE =-1.7 pascal. 57,204 total volume removed. Tested second floor master bedroom and front bedroom to confirm that pressure tests had not increased concentrations in living area: Run 033 (IA-022-BR2A) at 1506. Run 034 (IA-023-MBRA at 1514.

PART J
SUMMA CANISTERS

Location/ Area: Basement laundry room

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
A-0037H-TO-001-LAU	0216	4/6/15	08:12	25	4/7/15	08:00	1

Location/ Area: Soil gas probe at SW corner of house

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
A-0037H-SG-001-4'	0119	4/2/15	1700	26	4/3/15	16:45	1

Location/ Area: Second Floor - Front Bedroom

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
A-0037H-TO-002-BR1	0133	4/6/15	08:13	27	4/7/15	07:50	0.5

Location/ Area: Blind Duplicate - of TO-001 (Laundry)

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P
A-0037H-TO-003-BAS	0089	4/6/15	08:00	26	4/7/15	08:00	1

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

IMG_0262_SG-001-4ft_Summa

Comments

PART K
SOIL GAS

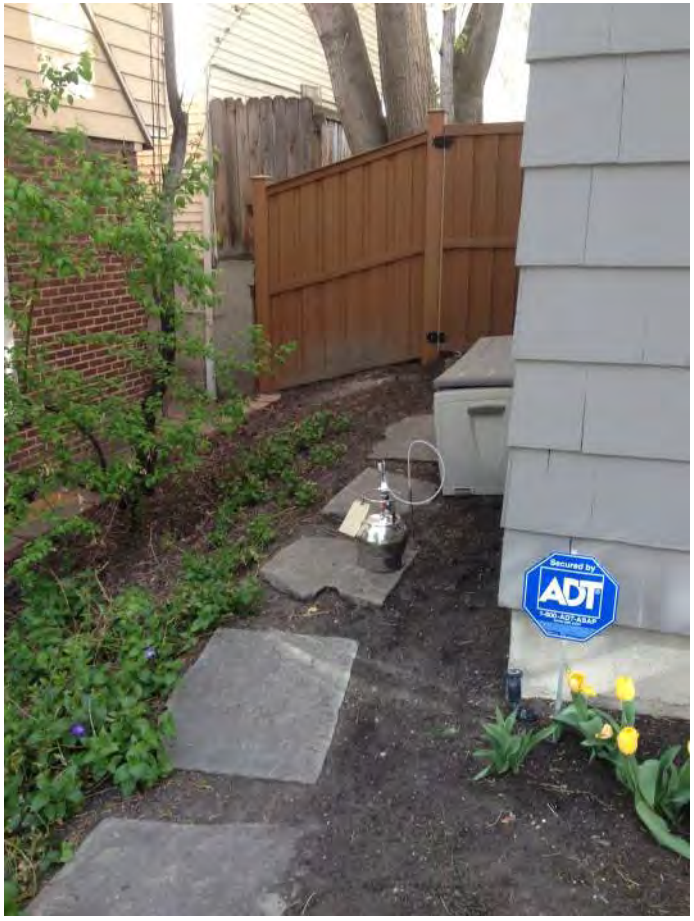
Date	4/2/15	Time	1110	Sample Depth	4		
Latitude	40.749441	Longitude	111.857883			Elevation	4421
Run No	035	Run Time	1526			Vacuum (in/Hg)	

Comments

WEST WALL CLOSE TO SW CORNER. PHOTO: IMG_0258_SG-001-4ft_SW corner






Secured by
ADT



0037-14

10:30 am
3/18/15

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

OCCUPIED DWELLING QUESTIONNAIRE

SLV

Indoor Air Assessment Survey

Date: 2/24/15

1. Name: [redacted]

Address:
1121 E. Alpine Pl
SLC, UT 84105

Josh → Home Phone: CELL: 801-556-2758 Work Phone: _____

2. What is the best time to call to speak with you? 9-5 At Work ☒ or Home ☐ ?

3. Are you the Owner ☒, Renter ☐, Other ☐ (please specify): X _____ of this Home/Structure? If you are not the owner, please provide owner contact Information

_____

_____

4. Total number of occupants/persons at this location? 4
Number of Children 2 Ages 4 3 1 1/2

5. How long have you lived at this location? SINCE JUNE 2014

General Home Description

6. Type of Home/Structure (check only one): Single Family Home ☒, Duplex ☐, Apartment ☐, Townhouse ☐ Other _____

7. Home/Structure Description:
Number of floors: 2
Basement ☒
Crawlspace ☐
Partial crawlspace/basement ☐ % of each _____
Slab on grade ☐
Other ☐ _____

8. Age of Home/Structure: 1929 years, Not sure/Unknown ☐

9. General Above-Ground Home/Structure construction (check all that apply): ?
Wood ☒, Brick ☒, Concrete ☐, Cement block ☐, Other ☐ _____

10. Foundation Construction (check all that apply):
Concrete Slab ☒ ?
Fieldstone ☐
Concrete block ☐
Elevated above ground/grade ☐
Other ☐ _____

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Salt Lake City, UT 84148

11. Do you have private well ☐ or cistern ☐ ? No
If yes, please describe location, use and current condition _____

12. Do you have a septic system? Yes ☐ No ☐ Not used ☐ Unknown ☒
If yes, what is construction type? _____
Where is it located? _____
When was the last time it was serviced? _____
Do you (or have you ever) use (d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your home? (pond, ditch etc.) Yes ☐ No ☒

Basement Description (please check all boxes that apply):

14. Is the basement finished ☒ or unfinished ☐ ?

15. If finished, how many rooms are in the basement? 4
What are rooms used for? Bedrooms ☒ Family room ☐ Storage ☒
Other _____

16. If not finished, do you plan on finishing in the future? Yes ☐ No ☐

17. Is the basement floor (check all that apply) concrete ☐, tile ☐, carpeted ☒, dirt ☐, other ☒ LINOLEUM

18. Are the basement walls poured concrete ☐, cement block ☐, stone ☐, wood ☐, Brick ☐, other ☐ ?

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less that 1 time/year) ☐
No ☒
Describe the moisture problem NOT THAT WE'VE NOTICED THOUGH WE'VE ONLY BEEN IN THE HOUSE A RELATIVELY SHORT TIME.

20. .Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☐
No ☒

21. Does the basement have any of the following? Floor cracks ☐, Wall cracks ☐, Sump ☐, Floor drain ☐, Other hole/opening in floor ☐
describe _____

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22. Are any of the following used or stored in the basement (check all that apply):
Paint ☐ Paint Stripper/remover ☐ Paint thinner ☐ Metal degreaser/cleaner ☐
Gasoline ☐ Diesel fuel ☐ Solvents ☐ Glue ☒ Laundry spot removers ☐ Drain cleaners
☐ Pesticides ☐ Other equipment with fuel tanks (chain saw, lawn mower, snow blower, etc.)

FEW PAINT SUPPLIES IN GARAGE WHICH IS ATTACHED TO BASEMENT

23. Have you recently (within the last six months) done any painting or remodeling in your home?
Yes ☒ No ☐
If yes, specify what was done, where in the home, and what month:
PAINTED MAIN FLOOR + UPSTAIRS IN JUNE 2014

24. Have you installed new carpeting in your home within the last year? Yes ☐ No ☒
If yes, when and where? _____

25. Do you regularly use or work in a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) ☐
Yes, use dry-cleaning infrequently (monthly or less) ☐
Yes, work at a dry cleaning service ☐
No ☒

26. Does anyone in your home use solvents at work?
Yes ☐ If yes, how many persons?
No ☒ If no, go to question 28

27. If yes for question 26, are the work clothes washed at home? Yes ☐ No ☐

28. Where is the washer/dryer located?
Basement ☒
Upstairs utility room ☐
Kitchen ☐
Garage ☐
Use a Laundromat ☐
Other, please specify ☐ _____

29. If you have a dryer, is it vented to the outdoors? Yes ☒ No ☐

30. What type (s) of home heating do you have (check all that apply)
Fuel type: Gas ☒, Oil ☐, Electric ☐, Wood ☐, Coal ☐,
Other ☐ _____

Heat conveyance system:
Forced hot air ☒
Forced hot water ☐
Steam ☐
Radiant floor heat ☐
Wood Stove ☐
Coal furnace ☐
Fireplace ☐
Other ☐ _____

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Salt Lake City, UT 84148

31. Does your home have (or had in the past) a storage tank for storage of: gasoline ☐ fuel oil ☐ propane ☐
If yes, where is/was it located? _____
How is/was the tank filled? _____
Is there staining near the tank? Yes ☐ No ☐

32. Do you have air conditioning? Yes ☒ No ☐
Central air conditioning ☒
Window air conditioning unit (s) ☐
Other (please specify) _____

33. Do you use any of the following? Room fans ☒, Ceiling fans ☐, Attic fan ☐ OCCASIONALLY UPSTAIRS

34. Do you ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☐ No ☒

35. Has your home had termite or other pesticide treatment? Yes ☒ No ☒ Unknown ☐
If yes, please specify type of pest controlled WE HAVE A PREVENTATIVE SPIDER TREATMENT QUARTERLY
And approximate date of service _____

36. Water heater type: Gas ☒, Electric ☐, by Furnace ☐,
Other (please describe) _____

37. Water heater location: Basement ☒, Upstairs utility room ☐, Garage ☐,
Other (please specify) _____

38. What type of cooking appliance do you have? Electric ☐, Gas ☒
Other (please describe) _____

39. Is there a stove exhaust hood present? Yes ☐ No ☒
Does it vent to the outdoors? Yes ☐ No ☐

40. Smoking in Home:
None ☒, Rare (only guests) ☐, Moderate (residents, light smokers) ☐,
Heavy (at least one heavy smoker in household) ☐

41. If yes to question 40, what do they smoke?
Cigarettes ☐ Cigars ☐
Pipe ☐ Other ☐

42. Do you regularly use air fresheners? Yes ☐ No ☒

43. Does anyone in the home have indoor home hobbies or crafts involving:
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☐
Spray paint ☐, wood finishing ☐, Other ☐ _____

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Salt Lake City, UT 84148

44. General family/home use of consumer products (please circle appropriate). Assume that: Never = never used, Hardly ever = less that once/month, Occasionally = about once/month, Regularly = about once/week, and Often = more that once/week.

Product	Frequency of Use				
Spray-on deodorant	Never	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	Never	Hardly ever	Occasionally	Regularly	Often
Insecticides	Never	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	Occasionally	Regularly	Often
Window cleaners	Never	Hardly ever	Occasionally	Regularly	Often
Nail polish remover	Never	Hardly ever	Occasionally	Regularly	Often
Hair sprays	Never	Hardly ever	Occasionally	Regularly	Often
Candles	Never	Hardly ever	Occasionally	Regularly	Often
Incense	Never	Hardly ever	Occasionally	Regularly	Often

45. Please check weekly household cleaning practices:

Dusting ☒
Dry sweeping ☒
Vacuuming ☒
Polishing (furniture, etc.) ☒
Washing/waxing floors ☐
Other (describe) ☐_____

46. Other comments:

_____
_____
_____
_____
_____
_____
_____
_____
_____

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

47. Chemical Inventory/Summary

Chemical/Chemical Product (consumer name)	Amount present in home
a)	
b)	
c)	
d)	
e)	
f)	
g)	
h)	
i)	
j)	
k)	
l)	
m)	
n)	
o)	

PART A
PROPERTY INFORMATION
(to be completed prior to survey)

Property ID Number: 0038-H
Street Address: 1071 Yale Ave
ZIP: 84102

Property Contact:
Tel #:

Latitude: 40.745992
Longitude: 111.860219
Age of Property: 94 years

Number of Levels: 1
Basement? (•) Yes ( ) No
Basement Habitable? (•) Yes ( ) No
Sump? ( ) Yes (•) No

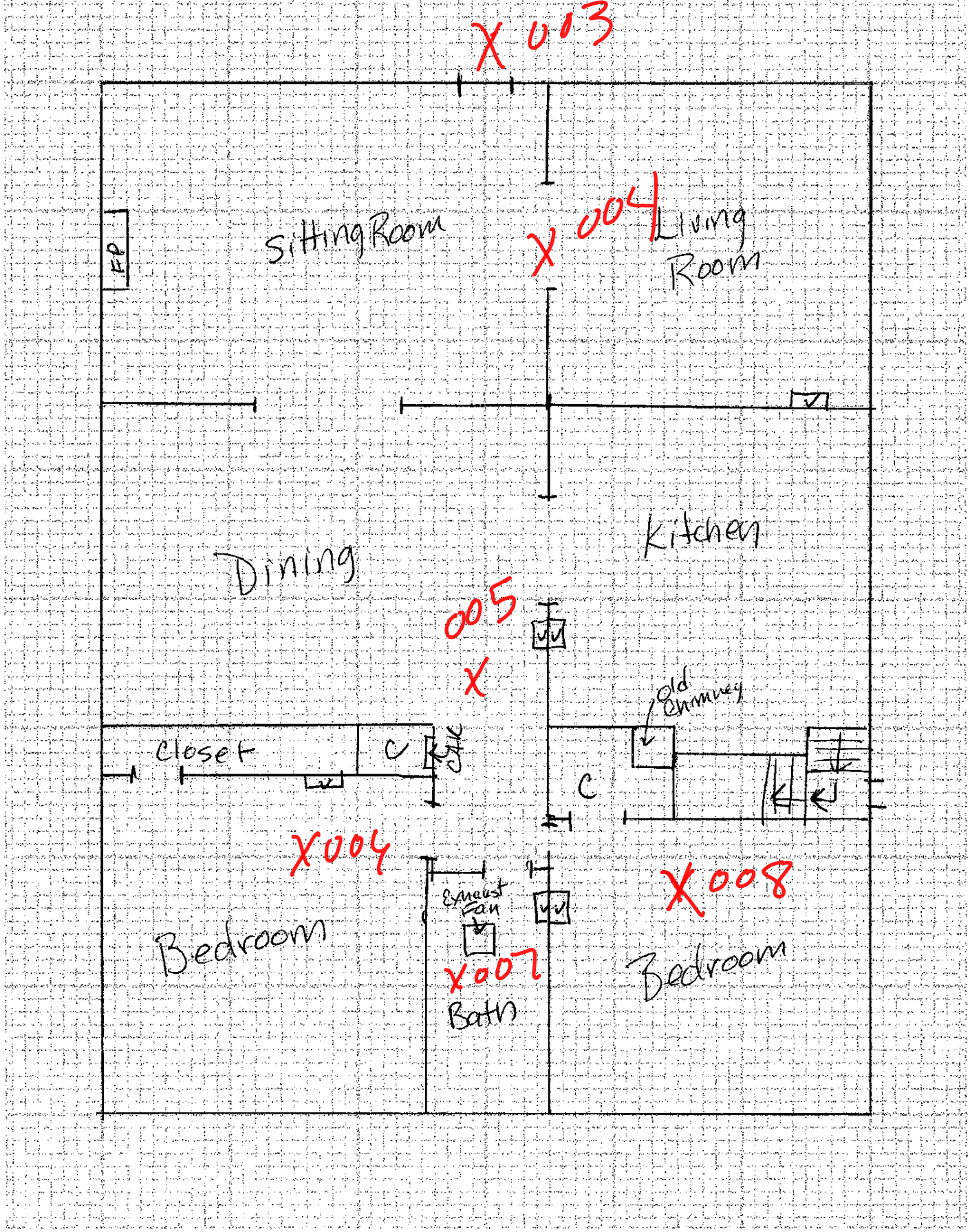
Completed by: ERR
Date: 02/09/2015

Comments

Elevation at bottom of front step - 4373 ft msl.

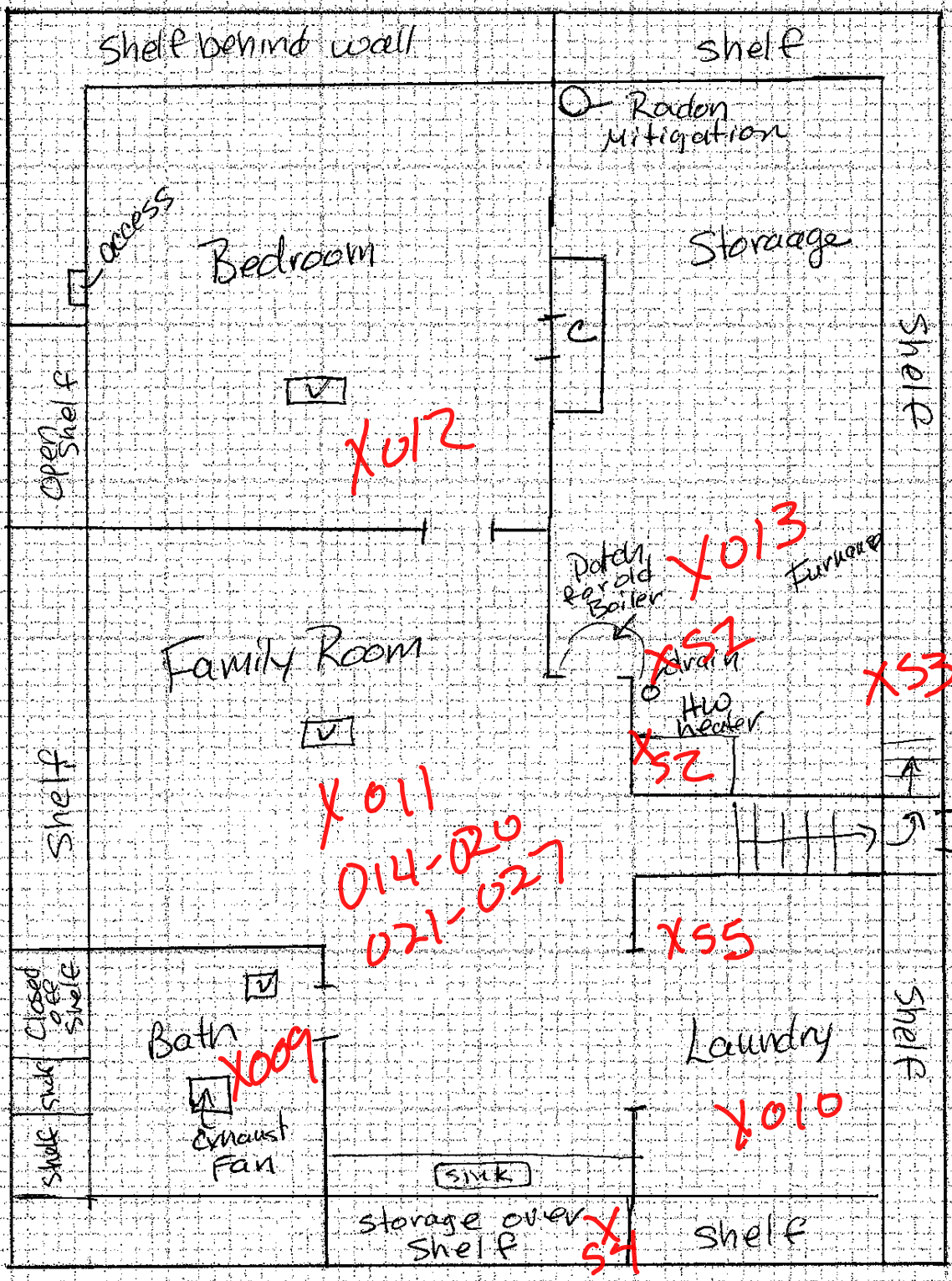
Notes: (1) Attach diagram(s) of structure after Part A.
(2) Attach questionnaire and photos at the end of the form package.

0038-H Main Floor



0038-H Basement

No Soil Gas Sample - Refusal



PART B
SITE ARRIVAL PRE SAMPLING ACTIVITIES

Date of Arrival: 04/09/15 Time of Arrival: 0900

Weather Conditions: Partly Cloudy

Temperature: 41 Barometric Pressure (inHg): 30.11 Wind Direction: S Speed: Light

Field Crew 1: ERR Role: HAPSITE Operator

Field Crew 2: DED Role: Assistant

Is a property representative present? (●) Yes ( ) No

Has the property representative identified any potential background sources? (●) Yes ( ) No

If yes, have the materials been removed? ( ) Yes (●) No

If materials identified, but not removed, indicate location on drawings and identify type in comments box below.

PART C
QC CHECKS

Initial Calibration Curve Run Number	Date	Time
044,003,005,006,008,	04/1/15	0835

Instrument Performance Check Run Number	Time	
Auto tune 04/09/15	0740	(●) Pass ( ) Fail

Instrument Performance Check Re-run Number	Time	
NA		( ) Pass ( ) Fail

CCV Run Number	Time	
029-0.55PPB-04/08/15	1513	(●) Pass ( ) Fail

CCV Re-run Number	Time	
NA		( ) Pass ( ) Fail

Operator's initials: ERR

Comments

PART D
OUTDOOR QUANTITATIVE SAMPLING

Start Time: 0923 End Time: 0925

Location: Front porch on South side of house,

Run Number: 003(IA-001-OUT) Time: 0923

Run Number: NA Time:

Comments

PART E
INDOOR QUALITATIVE BACKGROUND SOURCE IDENTIFICATION

In Survey Mode, move from room-to-room, and note any ion tics on the structural drawings, and indicate in the comments box below.

Start Time 1113 End Time 1124

Comments

Survey 003 - 1113-1115 - Paint on shelf in furnace room - MAX TIC = 190,580. Survey 005 - 1122-1124 - Laundry room supplies- MAX TIC = 200,079. PHOTOS: WIN_20150409_112505_Survey03; WIN_20150409_112600-Survey05.

PART F
INDOOR QUALITATIVE VAPOR POINT ENTRY SURVEY

In Survey Mode, identify potential vapor entry points (sumps, foundation cracks, exposed soil) on the lowest level of the structure and note any ion tics on the structural drawings, and indicate in the comments box below. Attach pictures if applicable.

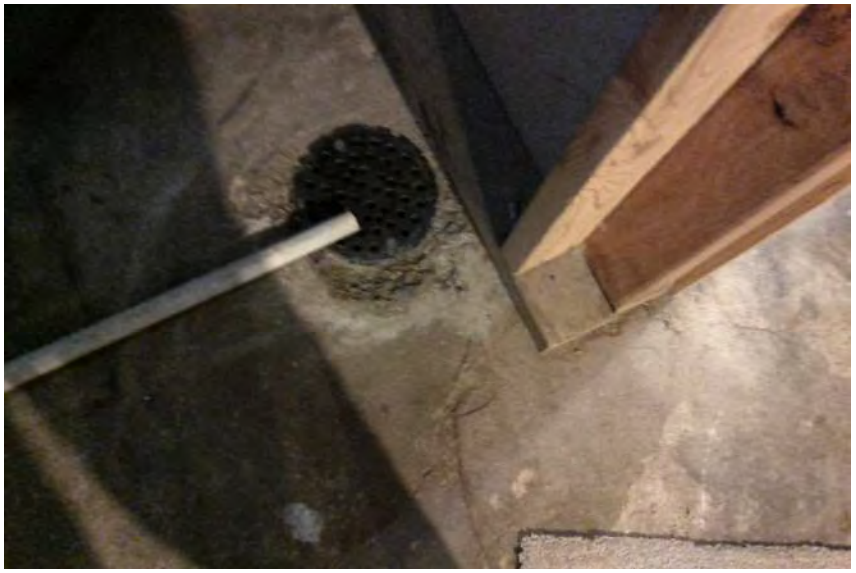
Start Time 1106 End Time 1124

Comments

Survey 001 - 1106-1108 - Drain near hot water heater - MAX TIC = 153,953. Survey 002 - 1109-1111 - Old chimney near floor- MAX TIC = 181,131. Surv
Water line access near sink in family room - MAX TIC = 190,118.

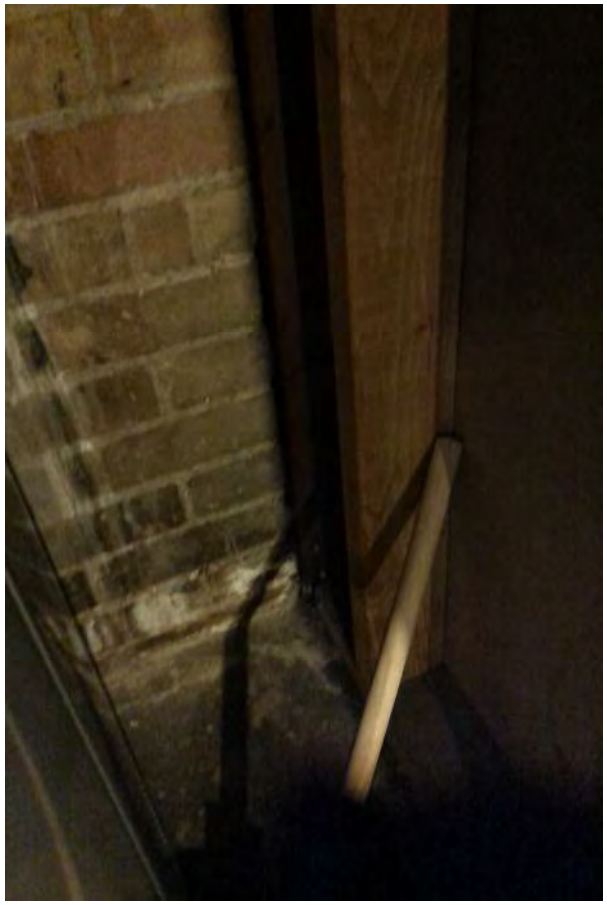
Pictures

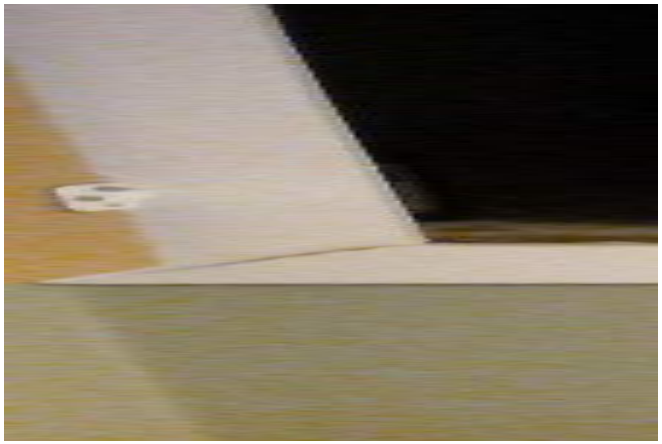
WIN_20150409_112434-Survey01; WIN_20150409_112451-Survey02; WIN_20150409_112545-Survey04




ULTRA









PART G
INDOOR QUANTITATIVE AMBIENT SURVEY

Start Time: 0934 End Time: 1055

Room/area	Living/sitting room	Run Number	004(IA-002-OCL)	Time	0934
Room/area	Dinning room	Run Number	005(IA-003-DRF)	Time	0943
Room/area	East bedroom	Run Number	006(IA-004-BR1)	Time	0952
Room/area	Upstairs bathroom	Run Number	007(IA-005-BA1)	Time	1000
Room/area	West bedroom	Run Number	008(IA-006-BR2)	Time	1009
Room/area	Basement bathroom	Run Number	009(IA-007-BA2)	Time	1020
Room/area	Basement Laundry Closet	Run Number	010(IA-008-LAU)	Time	1029
Room/area	Basement family room	Run Number	011(IA-009-FAM)	Time	1037
Room/area	Basement master bedroom	Run Number	012(IA-010-MBR)	Time	1044
Room/area	Basement furnace room	Run Number	013(IA-011-FUR)	Time	1053

Comments

PART H
INDOOR QUANTITATIVE NEGATIVE PRESSURE SURVEY

Start Time: 1210 End Time: 1310 Room/Area: Family Room

T=	5	CFM	612	Pascals	-3.9	Run No.	014(IA-012A-FAM)	Time	1212
T=	10	CFM	606	Pascals	-5.6	Run No.	015(IA-012B-FAM)	Time	1220
T=	15	CFM	575	Pascals	-6.4	Run No.	016(IA-012C-FAM)	Time	1229
T=	20	CFM	613	Pascals	-5.3	Run No.		Time	
T=	25	CFM	601	Pascals	-5.4	Run No.	017(IA-12D-FAM)	Time	1237
T=	30	CFM	605	Pascals	-5.1	Run No.	018(IA-012E-FAM)	Time	1245
T=	40	CFM	610	Pascals	-5.6	Run No.	019(IA-012F-FAM)	Time	1254
T=	50	CFM	606	Pascals	-4.7	Run No.	020(IA-012G-FAM)	Time	1303
T=	60	CFM	618	Pascals	-4.9	Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

total removal volume =36,000 -CUFT Baseline -1.6 pascal. Actual volume removed =36,306. Air door in side entry door opposite basement stairwell, haps room.

PART I
INDOOR QUANTITATIVE POSITIVE PRESSURE SURVEY

Start Time: 1320 | End Time: 1420 | Room/Area: Family Room

T=	5	CFM	831	Pascals	0..8	Run No.	021(IA-013A-FAM)	Time	1322
T=	10	CFM	621	Pascals	5.6	Run No.		Time	
T=	15	CFM	608	Pascals	3.7	Run No.	022(IA-013B-FAM)	Time	1335
T=	20	CFM	650	Pascals	4.1	Run No.	023(IA-013C-FAM)	Time	1343
T=	25	CFM	646	Pascals	5.4	Run No.	024(IA-013D-FAM)	Time	1351
T=	30	CFM	643	Pascals	5.2	Run No.	025(IA-013E-FAM)	Time	1359
T=	40	CFM	645	Pascals	6.3	Run No.	026(IA-013F-FAM)	Time	1410
T=	50	CFM	644	Pascals	6.4	Run No.	027(IA-013G-FAM)	Time	1418
T=	60	CFM	625	Pascals	4.9	Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	
T=		CFM		Pascals		Run No.		Time	

Comments

Baseline = -0.7 , Actual volume =39,420

PART J
SUMMA CANISTERS

Location/ Area: NA

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Location/ Area:

Sample No.	SUMMA ID	Date In	Time In	Start P	Date Out	Time Out	End P

Include locations of SUMMA(s) on structural drawings. Take pictures of SUMMA(s) and include on next page along with comments.

PART J
SUMMA CANISTERS (continued)

Photos

Comments

PART K
SOIL GAS

Date	4/9/15	Time	0900	Sample Depth	NA		
Latitude	NA	Longitude	NA			Elevation	NA
Run No	NA			Run Time	NA	Vacuum (in/Hg)	NA

Comments

Attempted probe installation at over 28 locations in front and back yard. Encountered refusal on hard surface at 8-12" at all locations. Either layer o
boulders. NO SOIL GAS SAMPLE.

0038-1H
4/1/15
4 pm

Return to: VASLCHCS (00PA)
500 Foothill Drive
Salt Lake City, UT 84148

OCCUPIED DWELLING QUESTIONNAIRE

Indoor Air Assessment Survey

Date: 2/9/15

1. Name: ___
   Address: 1071 Yale Ave
   SLC, UT 84105
   Home Phone: 801-746-9550 Work Phone: SAME
2. What is the best time to call to speak with you? 8-5 At: Work ☒ or Home ☒?
3. Are you the Owner ☒, Renter ☐, Other ☐ (please specify) _____ of this Home/Structure? If you are not the owner, please provide owner contact Information
   _____
   _____
4. Total number of occupants/persons at this location? 4
   Number of Children 2 Ages 4, 8 months
5. How long have you lived at this location? 5 yrs

General Home Description

6. Type of Home/Structure (check only one): Single Family Home ☒, Duplex ☐, Apartment ☐, Townhouse ☐ Other _____
7. Home/Structure Description:
   Number of floors: 1
   Basement ☒
   Crawlspace ☐
   Partial crawlspace/basement ☐ % of each _____
   Slab on grade ☐
   Other ☐ _____
8. Age of Home/Structure: 1921 years, Not sure/Unknown ☐
9. General Above-Ground Home/Structure construction (check all that apply):
   Wood ☐, Brick ☒, Concrete ☐, Cement block ☐, Other ☐ _____
10. Foundation Construction (check all that apply):
    Concrete Slab ☒
    Fieldstone ☐
    Concrete block ☐
    Elevated above ground/grade ☐
    Other ☐ _____

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11. Do you have private well ☐ or cistern ☐ ?
If yes, please describe location, use and current condition NO

12. Do you have a septic system? Yes ☐ No ☒ Not used ☐ Unknown ☐
If yes, what is construction type?
Where is it located?
When was the last time it was serviced?
Do you (or have you ever) use (d) any degreaser for your septic system? Yes ☐ No ☐

13. Do you have standing water outside of your home? (pond, ditch, etc.) Yes ☐ No ☒

Basement Description (please check all boxes that apply):

14. Is the basement finished ☒ or unfinished ☐ ?

15. If finished, how many rooms are in the basement? 2
What are rooms used for? Bedrooms ☒ Family room ☒ Storage ☐
Other

16. If not finished, do you plan on finishing in the future? Yes ☐ No ☐

17. Is the basement floor (check all that apply) concrete ☒ tile ☐, carpeted ☒ dirt ☐,
other ☐

18. Are the basement walls poured concrete ☒ cement block ☐, stone ☐, wood ☐,
Brick ☐, other ☐

19. Does the basement have a moisture problem?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less that 1 time/year) ☐
No ☒

Describe the moisture problem

20. .Does the basement ever flood?
Yes, frequently (3 or more times/year) ☐
Yes, occasionally (1-2 times/year) ☐
Yes, rarely (less than 1 time/year) ☒
No ☐

Our main sewer line is old, occasionally in the fall there is a slight amnt of flooding in basement from floor drain.

21. Does the basement have any of the following? Floor cracks ☒, Wall cracks ☒ Sump ☐,
Floor drain ☒ Other hole/opening in floor ☐
describe

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22. Are any of the following used or stored in the basement (check all that apply):
Paint ☒ Paint Stripper/remover ☐ Paint thinner ☐ Metal degreaser/cleaner ☐
Gasoline ☐ Diesel fuel ☐ Solvents ☐ Glue ☒ Laundry spot removers ☒ Drain cleaners
☐ Pesticides ☐ Other equipment with fuel tanks (chain saw, lawn mower, snow blower,etc.,)

23. Have you recently (within the last six months) done any painting or remodeling in your home?
Yes ☒ No ☐
If yes, specify what was done, where in the home, and what month:

New carpet in basement

24. Have you installed new carpeting in your home within the last year? Yes ☒ No ☐
If yes, when and where? Basement

25. Do you regularly use or work in a dry cleaning service?
Yes, use dry-cleaning regularly (at least weekly) ☐
Yes, use dry-cleaning infrequently (monthly or less) ☐
Yes, work at a dry cleaning service ☐
No ☒

26. Does anyone in your home use solvents at work?
Yes ☐ If yes, how many persons?
No ☒ If no, go to question 28

27. If yes for question 26, are the work clothes washed at home? Yes ☐ No ☐

28. Where is the washer/dryer located?
Basement ☒
Upstairs utility room ☐
Kitchen ☐
Garage ☐
Use a Laundromat ☐
Other, please specify ☐ _____

29. If you have a dryer, is it vented to the outdoors? Yes ☒ No ☐

30. What type (s) of home heating do you have (check all that apply)
Fuel type: Gas ☒, Oil ☐, Electric ☐, Wood ☐, Coal ☐,
Other ☐ _____

Heat conveyance system:
Forced hot air ☒
Forced hot water ☐
Steam ☐
Radiant floor heat ☐
Wood Stove ☐
Coal furnace ☐
Fireplace ☐
Other ☐ _____

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31. Does your home have (or had in the past) a storage tank for storage of: gasoline ☐ fuel oil ☐ propane ☐
If yes, where is/was it located? _____
How is/was the tank filled? _____
Is there staining near the tank? Yes ☐ No ☐

32. Do you have air conditioning? Yes ☒ No ☐
Central air conditioning ☒
Window air conditioning unit (s) ☐
Other (please specify) _____

33. Do you use any of the following? Room fans ☐, Ceiling fans ☐, Attic fan ☐

34. Do you ventilate using the fan-only mode of your central air conditioning or forced air heating system? Yes ☐ No ☒

35. Has your home had termite or other pesticide treatment? Yes ☐ No ☐ Unknown ☒
If yes, please specify type of pest controlled _____
And approximate date of service _____

36. Water heater type: Gas ☒, Electric ☐, by Furnace ☐,
Other (please describe) _____

37. Water heater location: Basement ☒, Upstairs utility room ☐, Garage ☐,
Other (please specify) _____

38. What type of cooking appliance do you have? Electric ☐, Gas ☒
Other (please describe) _____

39. Is there a stove exhaust hood present? Yes ☒ No ☐
Does it vent to the outdoors? Yes ☐ No ☒

40. Smoking in Home:
None ☒, Rare (only guests) ☐, Moderate (residents, light smokers) ☐,
Heavy (at least one heavy smoker in household) ☐

41. If yes to question 40, what do they smoke?
Cigarettes ☐ Cigars ☐
Pipe ☐ Other ☐

42. Do you regularly use air fresheners? Yes ☐ No ☒

43. Does anyone in the home have indoor home hobbies or crafts involving:
Heating ☐, soldering ☐, welding ☐, model glues ☐, paints ☐
Spray paint ☐, wood finishing ☐, Other ☐ NO

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44. General family/home use of consumer products (please circle appropriate). Assume that: Never = never used, Hardly ever = less that once/month, Occasionally = about once/month, Regularly = about once/week, and Often = more that once/week.

Product	Frequency of Use				
Spray-on deodorant	Never	Hardly ever	Occasionally	Regularly	Often
Aerosol deodorizers	Never	Hardly ever	Occasionally	Regularly	Often
Insecticides	Never	Hardly ever	Occasionally	Regularly	Often
Disinfectants	Never	Hardly ever	Occasionally	Regularly	Often
Window cleaners	Never	Hardly ever	Occasionally	Regularly	Often
Nail polish remover	Never	Hardly ever	Occasionally	Regularly	Often
Hair sprays	Never	Hardly ever	Occasionally	Regularly	Often
Candles	Never	Hardly ever	Occasionally	Regularly	Often
Incense	Never	Hardly ever	Occasionally	Regularly	Often

45. Please check weekly household cleaning practices:

Dusting ☐
Dry sweeping ☒
Vacuuming ☐
Polishing (furniture, etc.) ☐
Washing/waxing floors ☐
Other (describe) ☐ _____

46. Other comments:

Our main concern is air quality in basement. Both adults in the house moved into the basement bedroom Oct 1, 2014. Both children sleep on the main floor.

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500 Foothill Drive
Salt Lake City, UT 84148

47. Chemical Inventory/Summary

Chemical/Chemical Product (consumer name)	Amount present in home
a) Paint	10-15 gallons
b)	
c)	
d)	
e)	
f)	
g)	
h)	
i)	
j)	
k)	
l)	
m)	
n)	
o)	

APPENDIX D

Note: Laboratory Data Reports removed from report and provided separately.

Salt Lake City VA Medical Center

Final

700 South 1600 East PCE Plume
AOU-1: East Side Springs
2016 Groundwater and Surface Water Sampling Technical Memorandum

Volume 1 of 2

SEPTEMBER 2016

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FINAL

Salt Lake City VA Medical Center
CERCLA Environmental Assessment and Clean-Up

700 South 1600 East PCE Plume AOU-1: East Side Springs 2016 Groundwater, Surface Water, and Soil Sampling Technical Memorandum

Contract No: GS-10F-0228J
Order No: VA259-15-F-3886

Prepared for:
VA Salt Lake City Health Care System
500 Foothill Drive
Salt Lake City, Utah 84148

Prepared by:
EA Engineering, Science, and Technology, Inc., PBC
2363 N. Hill Field Road, Suite 104
Layton, Utah 84041

September 2016

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Acronyms and Abbreviations

AOU	Accelerated Operable Unit
ASTM	ASTM International
CLP	Contract Laboratory Program
EA	EA Engineering, Science, and Technology, Inc., PBC
EPA	U.S. Environmental Protection Agency
FE	First Environment, Inc.
MS	Matrix spike
MSD	Matrix spike duplicate
PCE	Tetrachloroethylene
PVC	Polyvinyl chloride
QAPP	Quality Assurance Project Plan
RI	Remedial investigation
SVOC	Semi-volatile organic compound
TAL	Target analyte list
TCE	Trichloroethylene
TDS	Total dissolved solids
VOC	Volatile organic compound

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1.0 Introduction

The purpose of this memorandum is to present a summary of the groundwater, surface water (including stormwater), and soil samples collected during the February through May 2016 investigations performed in support of the ongoing Remedial Investigation (RI) for Accelerated Operable Unit 1 (AOU-1) at 700 South 1600 East tetrachloroethylene (PCE) Plume Site, Salt Lake City, Utah. The field activities were initiated to help define the southwestern downgradient and western and southern cross-gradient extents of the PCE Plume in surface water and in the shallow groundwater within AOU-1. This memorandum also presents the field logs and validated Geoprobe® groundwater screening analytical results, and documents any variances to the RI Work Plan (First Environment, Inc. [FE] 2015) and Quality Assurance Project Plan (QAPP) (EA Engineering, Science, and Technology, Inc., PBC [EA] 2016a) with regard to groundwater, surface water, and soil sampling. Additional data reports are currently being prepared to summarize the indoor air sampling and TO-15 analysis performed in support of the AOU-1 RI. The data collected during the investigation at AOU-1 will be evaluated in a future AOU-1 RI report. The resultant groundwater and surface water data will also be used to guide additional groundwater characterization and placement of permanent monitoring wells during the subsequent site-wide PCE Plume RI.

The PCE Plume was first identified in 1990 during routine monitoring of the Mt. Olivet irrigation well. The 700 South 1600 East PCE Plume Site is located on east side of Salt Lake City, Utah, with AOU-1 generally centered within the general residential area bounded by 500 South and Michigan Avenue between 1300 East and 1100 East. AOU-1 includes a portion of the East Side Springs area, an area that runs along the East Bench Fault, and the dry gulch area which is located perpendicular to and mostly east of the East Side Springs area.

In June 2010, a release of crude oil from a pipeline in the area near the mouth of Red Butte Canyon, northeast of the Veterans Affairs Medical Center, resulted in an investigation at the East Side Springs area. Chlorinated volatile organic compounds (VOCs), including PCE and trichloroethylene (TCE) were detected in the surface water associated with seeps and springs along the fault in AOU-1. The location of the seeps and springs near residences and other occupied structures and the shallow depth to groundwater has raised concerns regarding potential vapor intrusion into occupied spaces. Additionally, the relationship of the PCE and TCE contamination to the larger groundwater Plume has not been investigated.

In light of the limited groundwater analytical data for AOU-1 and the concern for impacts from vapor intrusion, this sampling event helps to evaluate the vapor intrusion pathway. Data collected during this segment of the RI includes shallow groundwater sampling from temporary groundwater monitoring points, surface water, and stormwater.

The 2016 groundwater, surface water and soil sampling was conducted in accordance with the following planning and procedural documents:

- RI Work Plan (FE 2015)
- QAPP (EA 2016a)
- Sampling and Analysis Plan (Attachment A of the RI Work Plan, FE 2015); and
- Minor Field Modifications
    - Minor Field Modifications #3 - #6 to the RI Work Plan (EA 2016b);
    - Minor Field Modifications #7 - #13 to the Sampling and Analysis Plan (EA 2016c)
    - Minor Field Modification #16 to the RI Work Plan (EA 2016d); and
    - Minor Field Modification #17 to the Sampling and Analysis Plan (EA 2016e).

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2.0 Geoprobe® Assessment of Groundwater

2.1 Introduction

To assess the nature and extent of the 700 South 1600 East PCE Plume and to characterize vapor intrusion potential, temporary small-diameter groundwater monitoring points were installed throughout the East Side Springs area of AOU-1. Temporary groundwater monitoring points were installed via a Geoprobe® rig and sampled from 22 February to 6 April 2016. Thirty-four of the temporary groundwater monitoring points were abandoned immediately after sampling and the remaining ten temporary monitoring points were left in place as piezometers to enable future groundwater sampling.

Depth to groundwater was approximately 36 feet below ground surface near the intersection 1300 East and 900 South, and the presence of seeps and springs between 1300 East and 900 East indicates that groundwater intersects the topographic surface within AOU-1. Depth to groundwater at some locations adjacent to the Wasatch Fault line exceeds 45 feet below ground surface. The potentiometric surface for AOU-1 indicates that groundwater generally flows west-southwest.

Daily information and notations of observations associated with field activities in support of AOU-1 were documented in the field notebooks and are included in Attachment A. Photographs documenting temporary groundwater monitoring point installation and sampling are located in Attachment B.

2.2 Screening Samples

Groundwater screening samples were collected during the Geoprobe® investigation to direct the placement of Geoprobe® drilling locations. The screening results were utilized in consultation with the U.S. Department of Veterans Affairs to select placement of temporary groundwater monitoring points GW-27 through GW-62 (stepping out further from the East Side Springs area if preliminary VOCs are detected or stepping in if preliminary VOCs are not detected) in order to best delineate the PCE Plume. Samples were collected in certified clean containers in accordance with U.S. Environmental Protection Agency (EPA) specifications with appropriate preservative and delivered to ALS Environmental in Salt Lake City for expedited analysis of a short list of VOCs (PCE, TCE, cis-1,2-dichloroethene, and vinyl chloride). Low groundwater yield at temporary groundwater monitoring points GW-07 and GW-17 provided enough sample volume for analysis via the EPA Contract Laboratory Program (CLP), but not enough sample for screening purposes. A summary of the screening groundwater sample results is included in Table 2-1.

2.3 Temporary Groundwater Monitoring Point Installation

Blue Stakes of Utah was notified at least two full business days prior to any subsurface installations to allow utility companies to mark their lines. The Utah Division of Water Rights was notified prior to drilling temporary groundwater monitoring points to a depth greater than 30 feet via a Start Card (Attachment C). The official well driller's reports were filed with the Utah Division of Water Rights within 30 days of the completion of regulated work on the temporary groundwater monitoring points (Attachment C).

A total of 50 boring locations were drilled in public right-of-ways and private property using a GeoProbe® 6620DT drill rig with 2.25-inch rods during the period of 22 February to 8 March 2016. Two of the borings, GW-01 and GW-15, were installed manually via hand auger since the parcels were inaccessible to a drill rig. The first 26 boring locations were loosely positioned based on recommendations in the RI Work Plan (FE 2015) to screen the area for the presence of chlorinated organic compounds and were either shifted to avoid underground utilities or to refine the groundwater sampling area. The remaining 24 locations were positioned in order to determine the extent of the PCE Plume. Based on the first round of groundwater screening data, twelve of these borings were renumbered and repositioned in order to refine the PCE Plume. Borings were drilled until the first saturated interval was encountered. Due to gravel and cobbles at depth at 6 of the locations (GW-02, GW-33, GW-35, GW-42, GW-57, and GW-58), the drill rig hit refusal prior to reaching groundwater. At these locations, no temporary groundwater monitoring points were installed and the boreholes were backfilled with soil cuttings. Detailed lithologies were recorded on soil boring logs for 26 of the locations (boring locations GW-01 through GW-26) where PCE was previously detected above the screening level in indoor air samples and shallow groundwater. Fifty (50) percent of the remaining 24 boring locations, and were recorded on soil boring logs (Attachment D).

The temporary groundwater monitoring points were constructed of three-quarter inch diameter Schedule 40 polyvinyl chloride (PVC) flush-thread-jointed casing and screen with PVC end caps. The temporary groundwater monitoring point screens were machine-slotted with a slot size of 0.010 inches and were 5 feet in length. The filter pack consisted of 10/20 silica sand and was poured into the annular space to approximately 1 foot above the top of the temporary groundwater monitoring point screen. After the sandpack was placed, approximately 1 foot of bentonite chips were placed in a similar manner on top of the sand pack and was allowed to hydrate naturally. The remaining borehole annular space was backfilled with soil cuttings. Individual temporary groundwater monitoring point construction details are included on the boring logs and summarized in Table 2-2.

2.4 Groundwater Sample Collection

Temporary groundwater monitoring points were purged and sampled using a peristaltic pump with three-eighths inch diameter polyethylene tubing in accordance with the RI Work Plan and QAPP. Low-flow purging and sampling techniques were utilized however, depth to groundwater was not measured during purging due to the small diameter of the temporary groundwater monitoring point precluding insertion of the water level indicator. When the temporary groundwater monitoring points yielded insufficient water to pump or the groundwater depth was deeper than that of which a peristaltic pump could operate, a dedicated one-half inch diameter polyethylene bailer was used to purge and sample the temporary groundwater monitoring point.

During purging, water quality parameters (temperature, specific conductivity, dissolved oxygen, oxygen-reduction potential, pH, and turbidity) were measured using a portable water quality meter (Table 2-3). Field data for pH was not collected at temporary groundwater monitoring points GW-23 and GW-39 due to a water quality meter malfunction. Purging was complete after the water quality parameters stabilized (FE 2015) or if a minimum of three well volumes were removed. Details regarding the purge method, water quality measurements, purge volumes, and samples collected were recorded on groundwater sampling forms (Attachment E).

Once water quality parameters stabilized, or three well volumes of water had been purged from the temporary groundwater monitoring point, groundwater samples were collected for laboratory analysis in appropriate sample containers and preserved on ice. Groundwater at 2 of the 44 temporary groundwater

monitoring points (GW-19 and GW-54) did not recharge after purging; therefore, no groundwater samples were collected from these temporary groundwater monitoring points.

2.5 Analytical

Groundwater samples were collected in certified clean containers in accordance with EPA specifications with appropriate preservative and shipped to the EPA designated CLP laboratory (Chemtech Consulting Group) for analysis of VOCs in accordance with CLP method protocol. Samples from a subset (10 percent) of these locations were also analyzed for semivolatile organic compounds (SVOCs), target analyte list (TAL) total and dissolved metals at the CLP laboratory. Samples from the same locations were also shipped to the EPA Region 8 laboratory for total dissolved solids (TDS), anions (chloride, nitrate, and sulfate), and pH analysis. Total alkalinity was analyzed at ALS Environmental. Samples collected for stable isotope analysis (hydrogen and oxygen) were collected from groundwater sampling points GW-11 and GW-20 and were submitted to the University of Utah Stable Isotope Ratio Facility for Environmental Research. A summary of the groundwater sampling and analysis is included in Table 2-4.

Eight of the 42 locations showed no detections of PCE or TCE. PCE and degradation product concentrations were highest directly south and east of East High School (Figure 2-1). The concentrations of PCE decrease as groundwater in the East Side Springs Area flows west-southwest.

2.6 Surveying

Locations (northing and easting) and elevations (ground surface and top of casing) for the temporary groundwater monitoring points were surveyed by a licensed land surveyor in the State of Utah from 4 to 9 March 2016. The survey was performed using a Trimble R-8 Model 2 Global Positioning System receiver and a Trimble TSC3 data collector. The northing and easting were surveyed to ±0.1 feet using North American Datum 83 Zone 12 and the ground surface and top of casing elevations were surveyed to ±0.01 feet in accordance with National Geodetic Vertical Datum 29. Locations and elevations for the groundwater monitoring points are provided in Table 2-2. Locations for surface water, stormwater, and soil sampling locations were identified on Figure 3-1 using Google Earth due to locations on resident's properties and access issues.

2.7 Site Inspection

The 44 borings that were placed in public right-of-ways required a Permit to Work in the Public Way from the Salt Lake City Division of Engineering prior to drilling. In accordance with the Permit, an assigned inspector was contacted prior to commencing work and was updated regularly on the status of the project. The permit also specified that the permittee would restore all public way facilities modified by the permittee to a condition that is comparable to or better than the condition that existed prior to the commencement of the work. After installation, the assigned inspector deemed the final site conditions at all of the boring locations to be acceptable and in compliance with Salt Lake City standards (Attachment F).

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TABLE 2-1
Volatile Organic Compound Screening Level Results for Groundwater
2016 Groundwater, Surface Water and Soil Sampling Technical Memorandum
700 South 1600 East PCE Plume, AOU-1: East Side Springs

		cis-1,2-dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl Chloride
EPA Analytical Method		SW8260C	SW8260C	SW8260C	SW8260C
Screening Level[1]		2.8	3.5	0.26	0.015
Unit of Measure		µg/L	µg/L	µg/L	µg/L
Location ID	**Sample Collection Date**				
GW-01	03/04/16	<0.3 U	0.74 J	<0.3 U	<0.3 U
GW-03	02/26/16	<0.3 U	0.43 J	<0.3 U	<0.3 U
GW-04	02/26/16	<0.3 U	11	0.3 J	<0.3 U
GW-05	02/26/16	<0.3 U	1.4	<0.3 U	<0.3 U
GW-06	02/26/16	0.48 J	3	1.1	<0.3 U
GW-07	-	-	-	-	-
GW-08	02/27/16	<0.3 U	4.7	1.3	<0.3 U
GW-09	02/26/16	0.64 J	0.72 J	2.2	<0.3 U
GW-10	02/27/16	<0.3 U	1.3	<0.3 U	<0.3 U
GW-11	02/27/16	0.45 J	41	0.89 J	<0.3 U
GW-12	03/02/16	<0.3 U	3.9	<0.3 U	<0.3 U
GW-13	03/04/16	<0.3 U	17	<0.3 U	<0.3 U
GW-14	03/02/16	<0.3 U	1.3	1.2	<0.3 U
GW-15	02/29/16	<0.3 U	26	0.51 J	<0.3 U
GW-16	02/28/16	<0.3 U	17	0.5 J	<0.3 U
GW-17	-	-	-	-	-
GW-18	03/02/16	<0.3 U	6.6	2	<0.3 U
GW-20	03/01/16	<0.3 U	46	1.3	<0.3 U
GW-21	03/01/16	<0.3 U	<0.3 U	<0.3 U	<0.3 U
GW-22	03/01/16	<0.3 U	<0.3 U	<0.3 U	<0.3 U
GW-23	02/22/16	<0.3 U	<0.3 U	<0.3 U	<0.3 U
GW-24	02/25/16	<0.3 U	<0.3 U	<0.3 U	<0.3 U
GW-25	02/29/16	<0.3 U	<0.3 U	<0.3 U	<0.3 U
GW-26	02/28/16	<0.3 U	<0.3 U	<0.3 U	<0.3 U
GW-27	03/05/16	<0.3 U	20	<0.3 U	<0.3 U
GW-28	03/05/16	<0.3 U	42	0.45 J	<0.3 U
GW-31	02/28/16	<0.3 U	<0.3 U	<0.3 U	<0.3 U
GW-39	02/23/16	<0.3 U	<0.3 U	<0.3 U	<0.3 U
GW-40	03/03/16	<0.3 U	<0.3 U	<0.3 U	<0.3 U
GW-43	03/03/16	<0.3 U	<0.3 U	<0.3 U	<0.3 U
GW-46	02/24/16	<0.3 U	<0.3 U	<0.3 U	<0.3 U
GW-48	03/03/16	<0.3 U	<0.3 U	<0.3 U	<0.3 U

TABLE 2-1
Volatile Organic Compound Screening Level Results for Groundwater
2016 Groundwater, Surface Water and Soil Sampling Technical Memorandum
700 South 1600 East PCE Plume, AOU-1: East Side Springs

		cis-1,2-dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl Chloride
EPA Analytical Method		SW8260C	SW8260C	SW8260C	SW8260C
Screening Level[(1)]		2.8	3.5	0.26	0.015
Unit of Measure		µg/L	µg/L	µg/L	µg/L
Location ID	**Sample Collection Date**				
GW-49	02/25/16	<0.3 U	0.92 J	<0.3 U	<0.3 U
GW-50	02/29/16	1	2.4	1.6	<0.3 U
GW-51	03/04/16	<0.3 U	18	<0.3 U	<0.3 U
GW-52	03/03/16	<0.3 U	43	0.54 J	<0.3 U
GW-53	03/03/16	<0.3 U	34	0.78 J	<0.3 U
GW-55	03/05/16	<0.3 U	<0.3 U	<0.3 U	<0.3 U
GW-59	03/05/16	49	0.31 J	6.5	<0.3 U
GW-60	03/08/16	<0.3 U	7.6	0.96 J	<0.3 U
GW-61	03/05/16	<0.3 U	2.5	<0.3 U	<0.3 U
GW-62	03/08/16	<0.3 U	16	<0.3 U	<0.3 U

NOTES:
[(1)] EPA Regional Screening Levels for tap water. Regional Screening Levels corresponding to an Excess Lifetime Cancer Risk of 1 x 10^{-6} and a health quotient of 0.1 were used.
- = Location not sampled for screening analyses.
EPA = U.S. Environmental Protection Agency.
ID = Identification.
J = Estimated value.
µg/L = Microgram(s) per liter.
U = Compound was analyzed for, but not detected.
Values exceeding the Screening Level are shaded gray.

TABLE 2-2
Temporary Groundwater Monitoring Point Construction Information
2016 Groundwater, Surface Water and Soil Sampling Technical Memorandum, 700 South 1600 East PCE Plume, AOU-1: East Side Springs

Location ID	Installation Date	Abandonment Date	Well Completion Date	Latitude[1]	Longitude[1]	Elevation Top of Casing[2] (ft amsl)	Depth to Groundwater[2] (ft amsl)	Screen Interval (ft)	Total Boring Depth (ft bgs)	Well Diameter[3] (inches)	Slot Size[4]	Backfill Interval (ft bgs)	Seal	Bentonite Seal Interval (ft bgs)	Filter Pack	Filter Pack Interval (ft bgs)	Location Deviates From RIWP?[5]
GW-01	03/2/2016	04/05/16	NA	40.7489943	-111.853302	4486.95	4475.02	8.0 – 13.0	13.0	0.75	0.010	0.0 – 6.0	Bentonite	6.0 – 7.0	10-20 Silica Sand	7.0 – 13.0	Yes
GW-02	02/24/16	Drilled to refusal, groundwater not reached - no temporary groundwater monitoring point set						NA	40.0	NA	NA	0.0 – 40.0	NA	NA	NA	NA	Yes
GW-03	02/24/16	04/05/16	NA	40.7481034	-111.855183	4484.03	4455.63	28.0 – 33.0	35.0	0.75	0.010	0.0 – 26.0 33.0 – 35.0	Bentonite	26.0 – 27.0	10-20 Silica Sand	27.0 – 33.0	No
GW-04	02/26/16	04/06/16	NA	40.7482076	-111.857389	4415.71	4398.45	20.0 – 25.0	25.0	0.75	0.010	0.0 – 18.0	Bentonite	18.0 – 19.0	10-20 Silica Sand	19.0 – 25.0	Yes
GW-05	02/25/16	04/05/16	NA	40.7490131	-111.854764	4465.01	4462.55	3.5 – 8.5	15.0	0.75	0.010	0.0 – 1.5 8.5 – 15.0	Bentonite	1.5 – 2.5	10-20 Silica Sand	2.5 – 8.5	No
GW-06	02/25/16	04/06/16	NA	40.7487218	-111.855318	4455.29	4450.63	5.0 – 10.0	10.0	0.75	0.010	0.0 – 3.0	Bentonite	3.0 – 4.0	10-20 Silica Sand	4.0 – 10.0	No
GW-07	02/25/16	04/06/16	NA	40.7489754	-111.856326	4456.07	4447.44	4.0 – 9.0	10.0	0.75	0.010	0.0 – 2.0 9.0 – 10.0	Bentonite	2.0 – 3.0	10-20 Silica Sand	3.0 – 9.0	Yes
GW-08	02/27/16	04/05/16	NA	40.7498921	-111.857694	4430.31	4423.35	10.0 – 15.0	15.0	0.75	0.010	0.0 – 8.0	Bentonite	8.0 – 9.0	10-20 Silica Sand	9.0 – 15.0	Yes
GW-09	02/26/16	04/06/16	NA	40.7493292	-111.857562	4416.96	4412.05	5.0 – 10.0	10.0	0.75	0.010	0.0 – 3.0	Bentonite	3.0 – 4.0	10-20 Silica Sand	4.0 – 10.0	No
GW-10	02/26/16	NA	04/05/16	40.7496230	-111.859130	4382.52	4370.30	13.0 – 18.0	20.0	0.75	0.010	0.0 – 11.0 18.0 – 20.0	Bentonite	11.0 – 12.0	10-20 Silica Sand	12.0 – 18.0	No
GW-11	02/25/16	NA	04/05/16	40.7503997	-111.857826	4437.77	4435.21	10.0 – 15.0	15.0	0.75	0.010	0.0 – 8.0	Bentonite	8.0 – 9.0	10-20 Silica Sand	9.0 – 15.0	No
GW-12	03/01/16	04/05/16	NA	40.7504542	-111.859407	4382.57	4378.22	5.0 – 10.0	10.0	0.75	0.010	0.0 – 3.0	Bentonite	3.0 – 4.0	10-20 Silica Sand	4.0 – 10.0	Yes
GW-13	03/04/16	04/05/16	NA	40.7508103	-111.856415	4489.66	4468.22	20.0 – 25.0	25.0	0.75	0.010	0.0 – 18.0	Bentonite	18.0 – 19.0	10-20 Silica Sand	19.0 – 25.0	Yes
GW-14	03/02/16	04/05/16	NA	40.7504123	-111.858828	4399.05	4389.05	15.0 – 20.0	20.0	0.75	0.010	0.0 – 13.0	Bentonite	13.0 – 14.0	10-20 Silica Sand	14.0 – 20.0	Yes
GW-15	02/27/16	03/08/16	NA	40.7511576	-111.857964	4443.22	4442.72	0.0 – 5.0	5.0	0.75	0.010	0.0 – 0.5	Bentonite	0.5 – 1.0	10-20 Silica Sand	1.0 – 5.0	No
GW-16	02/27/16	NA	04/05/16	40.7509267	-111.858417	4422.96	4420.96	3.0 – 8.0	10.0	0.75	0.010	0.0 – 1.0 8.0 – 10.0	Bentonite	1.0 – 2.0	10-20 Silica Sand	2.0 – 8.0	No
GW-17	03/01/16	04/05/16	NA	40.7515298	-111.859403	4395.42	4381.02	10.0 – 15.0	15.0	0.75	0.010	0.0 – 8.0	Bentonite	8.0 – 9.0	10-20 Silica Sand	9.0 – 15.0	No
GW-18	03/01/16	04/05/16	NA	40.7518339	-111.858680	4433.39	4425.24	5.0 – 10.0	10.0	0.75	0.010	0.0 – 3.0	Bentonite	3.0 – 4.0	10-20 Silica Sand	4.0 – 10.0	No
GW-19	02/29/16	03/08/16	NA	Well set, but groundwater did not recharge. Not sampled or surveyed.				7.0 – 12.0	30.0	0.75	0.010	0.0 – 5.0 12.0 – 30.0	Bentonite	5.0 – 6.0	10-20 Silica Sand	6.0 – 12.0	Yes
GW-20	02/29/16	NA	04/05/16	40.7525556	-111.859404	4417.16	4405.69	11.5 – 16.5	20.0	0.75	0.010	0.0 – 9.5 16.5 – 20.0	Bentonite	9.5 – 16.5	10-20 Silica Sand	10.5 – 16.5	No
GW-21	02/29/16	03/08/16	NA	40.7540186	-111.858996	4462.16	4452.19	12.0 – 17.0	20.0	0.75	0.010	0.0 – 10.0 17.0 – 20.0	Bentonite	10.0 – 11.0	10-20 Silica Sand	11.0 – 17.0	Yes
GW-22	02/29/16	04/05/16	NA	40.7536645	-111.860744	4406.25	4400.92	10.0 – 15.0	15.0	0.75	0.010	0.0 – 8.0	Bentonite	8.0 – 9.0	10-20 Silica Sand	9.0 – 15.0	No
GW-23	02/22/16	03/08/16	NA	40.7549456	-111.858090	4480.78	4471.88	8.5 – 13.5	20.0	0.75	0.010	0.0 – 6.5 13.5 – 20.0	Bentonite	6.5 – 7.5	10-20 Silica Sand	7.5 – 13.5	No
GW-24	02/23/16	03/08/16	NA	40.7542761	-111.861584	4394.76	4377.86	13.0 – 18.0	20.0	0.75	0.010	0.0 – 11.0 18.0 – 20.0	Bentonite	11.0 – 12.0	10-20 Silica Sand	12.0 – 18.0	Yes
GW-25	02/29/16	04/05/16	NA	40.7521000	-111.861190	4368.33	4345.23	25.0 – 30.0	30.0	0.75	0.010	0.0 – 23.0	Bentonite	23.0 – 24.0	10-20 Silica Sand	24.0 – 30.0	Yes
GW-26	02/26/16	04/06/16	NA	40.7476847	-111.859216	4376.06	4359.58	15.0 – 20.0	20.0	0.75	0.010	0.0 – 13.0	Bentonite	13.0 – 14.0	10-20 Silica Sand	14.0 – 20.0	No
GW-27	03/04/16	04/05/16	NA	40.7517325	-111.855656	4493.18	4472.95	25.0 – 30.0	30.0	0.75	0.010	0.0 – 23.0	Bentonite	23.0 – 24.0	10-20 Silica Sand	24.0 – 30.0	NA
GW-28	03/04/16	04/05/16	NA	40.7499706	-111.855680	4491.28	4472.83	20.0 – 25.0	25.0	0.75	0.010	0.0 – 18.0	Bentonite	18.0 – 19.0	10-20 Silica Sand	19.0 – 25.0	NA

TABLE 2-2
Temporary Groundwater Monitoring Point Construction Information
2016 Groundwater, Surface Water and Soil Sampling Technical Memorandum, 700 South 1600 East PCE Plume, AOU-1: East Side Springs

Location ID	Installation Date	Abandonment Date	Well Completion Date	Latitude[1]	Longitude[1]	Elevation Top of Casing[2] (ft amsl)	Depth to Groundwater[2] (ft amsl)	Screen Interval (ft)	Total Boring Depth (ft bgs)	Well Diameter[3] (inches)	Slot Size[4]	Backfill Interval (ft bgs)	Seal	Bentonite Seal Interval (ft bgs)	Filter Pack	Filter Pack Interval (ft bgs)	Location Deviates From RIWP?[5]
GW-29	Boring not drilled. Location repositioned based on first round of analytical data.																NA
GW-30	Boring not drilled. Location repositioned based on first round of analytical data.																NA
GW-31	02/27/16	03/08/16	NA	40.7504814	-111.862766	4334.23	4302.36	30.0 – 35.0	35.0	0.75	0.010	0.0 – 28.0	Bentonite	28.0 – 29.0	10-20 Silica Sand	29.0 – 35.0	NA
GW-32	Boring not drilled. Location repositioned based on first round of analytical data.																NA
GW-33	02/23/16	Drilled to refusal, groundwater not reached - no temporary groundwater monitoring point set						NA	40.0	NA	NA	0.0 – 40.0	NA	NA	NA	NA	NA
GW-34	Boring not drilled. Location repositioned based on first round of analytical data.																NA
GW-35	02/23/16	Drilled to refusal, groundwater not reached - no temporary groundwater monitoring point set						NA	45.0	NA	NA	0.0 – 45.0	NA	NA	NA	NA	NA
GW-36	Boring not drilled. Location repositioned based on first round of analytical data.																NA
GW-37	Boring not drilled. Location repositioned based on first round of analytical data.																NA
GW-38	Boring not drilled. Location repositioned based on first round of analytical data.																NA
GW-39	02/22/16	03/08/16	NA	40.7529075	-111.862650	4349.59	4333.11	17.7 – 22.7	25.0	0.75	0.010	0.0 – 15.5 22.7 – 25.0	Bentonite	15.5 – 16.5	10-20 Silica Sand	16.5 – 22.7	NA
GW-40	03/01/16	04/05/16	NA	40.7513409	-111.860866	4366.97	4332.44	35.0 – 40.0	40.0	0.75	0.010	0.0 – 33.0	Bentonite	33.0 – 34.0	10-20 Silica Sand	34.0 – 40.0	NA
GW-41	Boring not drilled. Location repositioned based on first round of analytical data.																NA
GW-42	03/01/16	Drilled to refusal, groundwater not reached - no temporary groundwater monitoring point set						NA	40.0	NA	NA	0.0 – 40.0	NA	NA	NA	NA	NA
GW-43	03/03/16	04/05/16	NA	40.7471177	-111.855858	4471.03	4440.53	28.0 – 33.0	35.0	0.75	0.010	0.0 – 26.0 33.0 – 35.0	Bentonite	26.0 – 27.0	10-20 Silica Sand	27.0 – 33.0	NA
GW-44	Boring not drilled. Location repositioned based on first round of analytical data.																NA
GW-45	Boring not drilled. Location repositioned based on first round of analytical data.																NA
GW-46	02/24/16	03/08/16	NA	40.7462486	-111.856967	4418.18	4388.60	30.0 – 35.0	35.0	0.75	0.010	0.0 – 28.0	Bentonite	28.0 – 29.0	10-20 Silica Sand	29.0 – 35.0	NA
GW-47	Boring not drilled. Location repositioned based on first round of analytical data.																NA
GW-48	02/24/16	03/08/16	NA	40.7473947	-111.853223	4511.11	4474.77	35.0 – 40.0	40.0	0.75	0.010	0.0 – 33.0	Bentonite	33.0 – 34.0	10-20 Silica Sand	34.0 – 40.0	NA
GW-49	02/25/16	NA	04/05/16	40.7489291	-111.854616	4465.84	4458.27	7.5 – 12.5	15.0	0.75	0.010	0.0 – 5.0 12.5 – 15.0	Bentonite	5.0 – 6.0	10-20 Silica Sand	6.0 – 12.5	NA
GW-50	02/26/16	NA	04/06/16	40.7483434	-111.856004	4445.12	4442.43	4.0 – 9.0	10.0	0.75	0.010	0.0 – 2.0 9.0 – 10.0	Bentonite	2.0 – 3.0	10-20 Silica Sand	3.0 – 9.0	NA
GW-51	03/04/16	04/05/16	NA	40.7513681	-111.856637	4480.08	4467.61	10.0 – 15.0	15.0	0.75	0.010	0.0 – 8.0	Bentonite	8.0 – 9.0	10-20 Silica Sand	9.0 – 15.0	NA
GW-52	03/02/16	NA	04/06/16	40.7496775	-111.855253	4490.60	4467.76	25.0 – 30.0	30.0	0.75	0.010	0.0 – 23.0	Bentonite	23.0 – 24.0	10-20 Silica Sand	24.0 – 30.0	NA
GW-53	03/02/16	NA	04/05/16	40.7496231	-111.856746	4459.05	4448.29	10.0 – 15.0	15.0	0.75	0.010	0.0 – 8.0	Bentonite	8.0 – 9.0	10-20 Silica Sand	9.0 – 15.0	NA
GW-54	03/03/16	03/08/16	NA	Well set, but groundwater did not recharge. Not sampled or surveyed.				8.3 – 13.3	13.3	0.75	0.010	0.0 – 6.0	Bentonite	6.0 – 7.0	10-20 Silica Sand	7.0 – 13.3	NA
GW-55	03/03/16	04/06/16	NA	40.7476446	-111.856747	4429.71	4407.74	10.0 – 15.0	15.0	0.75	0.010	0.0 – 8.0	Bentonite	8.0 – 9.0	10-20 Silica Sand	9.0 – 15.0	NA
GW-56	Boring not drilled. Location repositioned based on first round of analytical data.																NA
GW-57	03/05/16	Drilled to refusal, groundwater not reached - no temporary groundwater monitoring point set						NA	33.0	NA	NA	0.0 – 33.0	NA	NA	NA	NA	NA
GW-58	03/05/16	Drilled to refusal, groundwater not reached - no temporary groundwater monitoring point set						NA	40.0	NA	NA	0.0 – 40.0	NA	NA	NA	NA	NA
GW-59	03/04/16	NA	04/05/16	40.7507703	-111.859399	4385.84	4377.26	10.0 – 15.0	15.0	0.75	0.010	0.0 – 8.0	Bentonite	8.0 – 9.0	10-20 Silica Sand	9.0 – 15.0	NA

TABLE 2-2
Temporary Groundwater Monitoring Point Construction Information
2016 Groundwater, Surface Water and Soil Sampling Technical Memorandum, 700 South 1600 East PCE Plume, AOU-1: East Side Springs

Location ID	Installation Date	Abandonment Date	Well Completion Date	Latitude[1]	Longitude[1]	Elevation Top of Casing[2] (ft amsl)	Depth to Groundwater[2] (ft amsl)	Screen Interval (ft)	Total Boring Depth (ft bgs)	Well Diameter[3] (inches)	Slot Size[4]	Backfill Interval (ft bgs)	Seal	Bentonite Seal Interval (ft bgs)	Filter Pack	Filter Pack Interval (ft bgs)	Location Deviates From RIWP?[5]
GW-60	03/08/16	04/05/16	NA	40.7498778	-111.858728	4394.15	4384.45	10.0 – 15.0	15.0	0.75	0.010	0.0 – 8.0	Bentonite	8.0 – 9.0	10-20 Silica Sand	9.0 – 15.0	NA
GW-61	03/05/16	NA	04/06/16	40.7475988	-111.858042	4399.80	4388.09	15.0 – 20.0	20.0	0.75	0.010	0.0 – 13.0	Bentonite	13.0 – 14.0	10-20 Silica Sand	14.0 – 20.0	NA
GW-62	03/08/16	04/05/16	NA	40.7524309	-111.858097	4455.16	4442.34	15.0 – 20.0	20.0	0.75	0.010	0.0 – 13.0	Bentonite	13.0 – 14.0	10-20 Silica Sand	14.0 – 20.0	NA

NOTES:
[1] Coordinate system is North American Datum of 1983 High Accuracy Reference Network.
[2] Coordinate system is National Geodetic Vertical Datum of 1929 (feet).
[3] Schedule 40 PVC casing.
[4] Schedule 40 PVC screen.
[5] First Environment. 2015. Final Remedial Investigation Work Plan, AOU-1: East Side Springs, 700 South 1600 East PCE Plume, Salt Lake City, Utah. July.
amsl = Above mean sea level.
bgs = Below ground surface.
ft = Foot (feet).
ID = Identification.
NA = Not applicable.
PVC = Polyvinyl chloride.
RIWP = Remedial Investigation Work Plan.

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TABLE 2-3
Groundwater Quality Measurements
2016 Groundwater, Surface Water and Soil Sampling Technical Memorandum
700 South 1600 East PCE Plume, AOU-1: East Side Springs

Location ID	Temperature (°C)	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	pH	Turbidity (NTU)
GW-01	10.99	1303	4.54	134.6	6.38	620
GW-03	10.07	1520	9.90	211.9	6.98	>1000
GW-04	12.90	1567	10.10	86.4	7.06	>1000
GW-05	12.35	1566	5.45	52.9	6.93	>1000
GW-06	10.18	1448	10.81	63.4	7.35	395
GW-07	11.15	966	8.45	140.0	6.98	393
GW-08	15.67	1639	4.92	111.2	7.36	>1000
GW-09	15.57	1281	7.80	56.6	7.46	213
GW-10	13.60	2526	2.10	121.5	6.85	4.17
GW-11	12.26	1444	3.11	864.0	6.85	>1000
GW-12	13.70	2302	7.56	55.0	7.50	>1000
GW-13	16.42	1456	4.35	30.0	7.00	149
GW-14	13.86	1968	0.13	-74.6	6.71	369
GW-15	10.63	1422	1.35	99.8	6.45	6.77
GW-16	11.01	1513	8.80	100.7	6.86	>1000
GW-17	--	--	--	--	--	--
GW-18	11.85	1728	10.42	135.8	7.50	>1000
GW-20	12.87	1516	1.71	60.2	6.81	276
GW-21	12.30	1557	4.52	-81.4	6.96	102
GW-22	9.73	1106	5.50	57.6	7.04	>1000
GW-23	11.33	1.648	2.43	3.3	--	>1000
GW-24	11.16	1191	7.21	181.2	7.40	9.24
GW-25	15.94	1352	5.71	99.0	7.02	>1000
GW-26	15.08	2091	7.22	96.1	7.15	>1000
GW-27	13.62	1580	5.36	79.9	6.81	72.4
GW-28	14.80	1639	4.00	-26.0	6.96	>1000
GW-31	15.62	2057	5.91	19.1	6.67	838
GW-39	12.81	1984	4.40	107.8	--	51.8
GW-40	16.95	1480	6.81	46.1	7.15	>1000
GW-43	12.34	1458	5.27	138.8	6.51	170
GW-46	17.69	1638	5.78	55.3	7.08	>1000
GW-48	12.10	1529	11.00	43.2	7.24	>1000
GW-49	9.69	1764	4.77	81.9	6.85	4.64
GW-50	8.28	1699	0.52	22.3	6.61	165
GW-51	12.25	1495	3.59	-13.9	6.80	6.12
GW-52	16.26	1593	6.20	83.5	6.62	55.4

TABLE 2-3
Groundwater Quality Measurements
2016 Groundwater, Surface Water and Soil Sampling Technical Memorandum
700 South 1600 East PCE Plume, AOU-1: East Side Springs

Location ID	Temperature (°C)	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	pH	Turbidity (NTU)
GW-53	11.68	1507	2.00	26.8	6.56	428
GW-55	15.50	1645	7.50	85.5	6.94	>1000
GW-59	13.17	1590	0.25	-3.3	6.86	25.5
GW-60	13.73	1778	3.99	130.4	6.70	441
GW-61	13.14	1664	3.85	9.0	6.51	44.1
GW-62	13.57	1429	5.10	121.6	6.87	42.6

NOTES:

-- = Not measured.
> = Greater than.
°C = Degrees Centigrade.
µS/cm = Microsiemen(s) per centimeter.
ID = Identification.
mg/L = Milligram(s) per liter.
mV = Millivolt.
NTU = Nephelometric Turbidity Unit.
ORP = Oxidation-reduction potential.

TABLE 2-4
Groundwater Sampling Summary
2016 Groundwater, Surface Water and Soil Sampling Technical Memorandum, 700 South 1600 East PCE Plume, AOU-1: East Side Springs

Location ID	Date Sampled	Time Sampled	Sample ID	CLP Sample ID	Analyses									Quality Control	
					CLP Lab				EPA Region 8 Lab			ALS Environmental	SIRFER		
					VOCs	SVOCs	Metals		pH	TDS	Anions	Alkalinity	Isotopes[1]	Duplicate	MS/MSD
							Total	Dissolved							
GW-01	03/04/16	1310	A-GW-001	H0009	X										
			A-GW-001-D	H0304	X									X	
GW-03	02/26/16	1010	A-GW-003	H0011	X										
GW-04	02/26/16	1500	A-GW-004	H0015	X										
GW-05	02/26/16	1120	A-GW-005	H0012	X										
GW-06	02/26/16	1205	A-GW-006	H0014	X										
GW-07	02/28/16	0900	A-GW-007	H0016	X										
GW-08	02/27/16	1600	A-GW-008	H0021	X										
GW-09	02/26/16	1620	A-GW-009	H0019	X										
GW-10	02/27/16	1110	A-GW-010	H0020	X										
			A-GW-010-D	H0AA5	X									X	
GW-11	02/27/16	1220	A-GW-011	H0022	X										
				-									X		
GW-12	03/02/16	1000	A-GW-012	H0029	X										
GW-13	03/04/16	1545	A-GW-013	H0025	X										
GW-14	03/02/16	1345	A-GW-014	H0028	X										
				H0203		X									
				MH0202			X								
				MH0201				X							
				-					X	X	X	X			
GW-15	02/29/16	1000	A-GW-015	H0023	X										X
				H0087		X									X
				MH0088			X								X
				MH0095				X							X
				-					X	X	X	X			X
			A-GW-015-D	H1001	X									X	
				H0081		X								X	
				MH0082			X							X	
				MH0089				X						X	
				-					X	X	X	X		X	
GW-16	02/28/16	1135	A-GW-016	H0024	X										
GW-17	03/02/16	1200	A-GW-017	H0044	X										
GW-18	03/02/16	1130	A-GW-018	H0043	X										
GW-20	03/01/16	1110	A-GW-020	H0040	X										

TABLE 2-4
Groundwater Sampling Summary
2016 Groundwater, Surface Water and Soil Sampling Technical Memorandum, 700 South 1600 East PCE Plume, AOU-1: East Side Springs

Location ID	Date Sampled	Time Sampled	Sample ID	CLP Sample ID	Analyses									Quality Control	
					CLP Lab				EPA Region 8 Lab			ALS Environmental	SIRFER	Duplicate	MS/MSD
					VOCs	SVOCs	Metals		pH	TDS	Anions	Alkalinity	Isotopes[1]		
							Total	Dissolved							
GW-20	03/01/16	1110	A-GW-020	H0099		X									
				MH0100			X								
				MH0107				X							
				-					X	X	X	X	X		
GW-21	03/01/16	1525	A-GW-021	H0031	X										
GW-22	03/01/16	0930	A-GW-022	H0039	X										
GW-23	02/22/16	1425	A-GW-023	H0001	X										X
GW-24	02/25/16	0920	A-GW-024	H0002	X										
GW-25	02/29/16	1505	A-GW-025	H0041	X										
GW-26	02/28/16	1045	A-GW-026	H0018	X										
GW-27	03/05/16	1115	A-GW-027	H0027	X										X
GW-28	03/05/16	1310	A-GW-028	H0026	X										
GW-31	02/28/16	1000	A-GW-031	H0004	X										
GW-39	02/23/16	1115	A-GW-039	H0003	X										
GW-40	03/03/16	1220	A-GW-040	H0042	X										
GW-43	03/03/16	1630	A-GW-043	H0046	X										
GW-46	02/24/16	1520	A-GW-046	H0007	X										
GW-48	03/03/16	1015	A-GW-048	H0008	X										
GW-49	02/25/16	1325	A-GW-049	H0013	X										
				H0075		X									X
				MH0076			X								X
				MH0083				X							X
				-					X	X	X	X			X
			A-GW-049-D	H0051										X	
GW-50	02/29/16	1330	A-GW-050	H0017	X										
				H0093		X									
				MH0094			X								
				MH0101				X							
				-					X	X	X	X			
GW-51	03/04/16	1840	A-GW-051	H0401	X										
GW-52	03/03/16	1350	A-GW-052	H0302	X										X
			A-GW-052-D	H0303	X									X	
GW-53	03/03/16	1605	A-GW-053	H0301	X										
GW-55	03/05/16	0800	A-GW-055	H0402	X										

TABLE 2-4
Groundwater Sampling Summary
2016 Groundwater, Surface Water and Soil Sampling Technical Memorandum, 700 South 1600 East PCE Plume, AOU-1: East Side Springs

Location ID	Date Sampled	Time Sampled	Sample ID	CLP Sample ID	Analyses									Quality Control	
					CLP Lab				EPA Region 8 Lab			ALS Environmental	SIRFER		
					VOCs	SVOCs	Metals		pH	TDS	Anions	Alkalinity	Isotopes[1]	Duplicate	MS/MSD
							Total	Dissolved							
GW-59	03/05/16	1620	A-GW-059	H0403	X										
GW-60	03/08/16	1330	A-GW-060	H0405	X										
GW-61	03/05/16	1505	A-GW-061	H0404	X										
GW-62	03/08/16	1425	A-GW-062	H0406	X										

NOTES:
[1] Analyzed for deuterium and oxygen-18.
- = Not applicable.
CLP = EPA Contract Laboratory Program.
EPA = U.S. Environmental Protection Agency.
ID = Identification.
MS/MSD = Matrix spike/matrix spike duplicate.
SIRFER = University of Utah Stable Isotope Ratio Facility for Environmental Research.
SVOC = Semi-volatile organic compound.
TDS = Total dissolved solids.
VOC = Volatile organic compound.

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Legend

GW-06
PCE = 3.0 ug/L
TCE = 1.1 ug/L
DCE = 0.48J ug/L — Direct push groundwater sampling location with sample ID, PCE, TCE, and DCE concentrations

GW-16
PCE = 20 ug/L
TCE = 0.61 ug/L
DCE = 0.26J ug/L — Direct push groundwater sampling location converted to long-term temporary piezometer

Wasatch Fault line

Inferred PCE contour

PCE contour

Groundwater flow direction

Note(s) :
PCE, TCE, and DCE are displayed by each sample location under the location identifier.
When a PCE concentration is listed and TCE and/or DCE concentrations are not listed, TCE and/or DCE were not detected in the sample.
Samples were collected between 2/22/16 and 3/8/16
PCE contour labels are in ug/L

Source(s) :
Utah Automated Geographic Reference Center (AGRC)
AOU-1 Source - Figure 2 of 2014 RIWP from First Environment

Acronym(s) and Abbreviation(s) :
ug/L = micrograms per liter
AOU = Accelerated Operable Unit
DCE = *cis*-1,2-dichloroethylene
J = estimated value
NA = not applicable
ND = non-detect
PCE = tetrachloroethylene
RIWP = Remedial Investigation Work Plan
TCE = trichloroethylene

Figure 2-1 - Shallow Groundwater Sampling Locations with Chlorinated Ethene Detections
AOU-1 RI, 700 South 1600 East PCE Plume, Salt Lake City, Utah

US Department of Veterans Affairs

DATUM: NAD83	DATE 5-25-16	SHEET 1
PROJECTION: Transverse Mercator	DWN. NL	of 1
	SCALE 1" = 500'	
	APPRVD. SS	

0 125 250 500 Feet

File: Albuquerque EA \\DENVER\Projects\GIS\VA SLC\Shallow Groundwater Sampling Locations with Cl Eth Detections_9062016_10.2.mxd elundvall 9/6/2016 1:08:35 PM

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3.0 Surface Water and Stormwater Survey and Characterization

3.1 Introduction

PCE-impacted groundwater daylights in the form of several springs and seeps in the East Side Springs area, potentially contributing to PCE-impacted surface water (e.g., drains, ponds, overland flow, and sumps). Collection of surface water samples from identified and accessible seeps, springs, sumps, and Red Butte Creek within AOU-1 was performed to assess the lateral extent of PCE contamination. Several of the springs discharge to the municipal stormwater system, therefore water samples were collected from selected Salt Lake City stormwater sewer manholes, located in and downgradient of AOU-1, to determine if groundwater seepage and discharge from foundation drains is impacting stormwater lines. Surface water and stormwater were collected from 26 February to 11 May 2016.

The first 19 surface water and stormwater locations (SW-01 through SW-19) were positioned based on recommendations in the RI Work Plan (FE 2015). Several of these locations were repositioned where seeps and springs were not present on the property, if access was not granted from property owners, or to fill data gaps. Surface water and stormwater sampling locations are presented on Table 3-1 and Table 3-2.

Photographs documenting surface water and stormwater sampling activities are located in Attachment B.

3.2 Surface Water Sampling

Several seeps and springs in AOU-1 emerge as diffuse wet areas that form small trickling streams on slopes, while others have been altered by property owners to collect and channel flowing water into landscape features or into the street away from their homes. Surface water locations are shown on Figure 3-1.

Surface water samples were collected using a peristaltic pump with three-eighths inch diameter polyethylene tubing, or as a grab sample by filling containers directly, or, if seep discharge was low, with a decontaminated stainless steel sampling syringe. Table 3-1 summarizes the type of surface water that was sampled. Prior to collecting a sample, water quality parameters (temperature, specific conductivity, dissolved oxygen, oxygen-reduction potential, pH, and turbidity) were measured using a portable water quality meter (Table 3-3). Details regarding the collection method, water quality measurements, and samples collected were recorded on surface water sampling forms (Attachment G).

3.3 Stormwater Sampling

Several seeps and springs in AOU-1 are mitigated and discharged to stormwater lines; therefore, Salt Lake City stormwater sewer manholes, located in and downgradient of AOU-1, were sampled. Stormwater sample locations consisted of mitigated spring water storm drains, stormwater lines, and the Jordan and Salt Lake City Canal (Table 3-2). Stormwater locations are shown on Figure 3-1.

Stormwater samples were collected at least 24 hours after any precipitation. Stormwater samples were collected using a peristaltic pump with three-eighths inch diameter polyethylene tubing. When stormwater was moving rapidly, a decontaminated bucket was lowered directly into the flow of the storm drain. The grab sample was then decanted into appropriate containers for analysis by the laboratory. Prior to collecting a sample, water quality parameters (temperature, specific conductivity, dissolved oxygen, oxygen-reduction potential, pH, and turbidity) were measured using a portable water quality meter (Table 3-3). Details regarding the collection method, water quality measurements, and samples collected were recorded on stormwater sampling forms (Attachment G).

3.4 Analytical

Surface water and stormwater samples for laboratory analysis were collected in certified clean containers in accordance with EPA specifications with appropriate preservative and stored on ice for transport to the laboratory. Surface water and stormwater samples were sent to the EPA designated CLP laboratory (Chemtech Consulting Group) for analysis of VOCs in accordance with CLP method protocol. Samples from a random subset (20 percent) of these locations were analyzed for SVOCs, TAL total and dissolved metals, alkalinity, total dissolved solids, and anions at the EPA CLP laboratory and the EPA Region 8 laboratory. Ten percent confirmation splits of the surface water and stormwater samples were collected and shipped to two different CLP laboratories (Shealy Environmental Services and Bonner Analytical Testing Company) to be analyzed for VOCs, SVOCs, and TAL total metals for independent quality assurance. Samples for stable isotopes (hydrogen and oxygen) were collected from all surface water and stormwater sampling locations and are being stored at 4 degrees centigrade until the surface water and stormwater data is received from the CLP laboratory at which time additional samples may be selected for isotope analysis at the University of Utah Stable Isotope Ratio Facility for Environmental Research. A summary of the surface water and stormwater sampling and associated analyses is included in Table 3-4. Validated surface water and stormwater analytical results will be included in the RI Report.

3.5 Ecological Survey

An ecological checklist (Attachment H) was completed for each surface water and stormwater location in order to obtain qualitative information about ecological components (terrestrial and aquatic life). The results from the ecological survey will be provided in the RI Report.

TABLE 3-1
Surface Water Sampling Locations
2016 Groundwater, Surface Water, and Soil Sampling Technical Memorandum, 700 South 1600 East PCE Plume. AOU-1: East Side Springs

Location ID	Type of Surface Water	Sample Location Specified in RIWP[(1)]	Sample Location Deviates From RIWP[(1)]?	Reason For Moving Sample Location
SW-01	Seep	Spring SL33	Yes	Homeowner indicated there were no seeps or springs on property
SW-04	Spring-fed ponds	Spring SL30	No	NA
SW-06	Spring-fed sump	Spring SL28	No	NA
SW-07	Spring box	Spring SL85	Yes	Homeowner indicated there were no seeps or springs on property
SW-08	Seep	Spring SL25	Yes	Homeowner indicated there were no seeps or springs on property
SW-09	Seep	Spring SL28, near residential sampling location IA-13/SG-13	Yes	Based on the RIWP figure, this location should be collocated with SL23 or SL24
SW-11	Seep	Spring SL82, near residential sampling location IA-15/SG-15	No	NA
SW-12	Spring	Spring SL18, near residential sampling location IA-14/SG-14	No	NA
SW-13	Seep	Spring SL88, near residential sampling location IA-16/SG-16	Yes	Closer to indoor air sampling location 0001H on parcel to the north - moved sample near SL27
SW-14	Spring-fed sump	Spring SL100	No	NA
SW-15	Seep	Benson Spring	No	NA
SW-16	Spring (Our Lady of Lourdes)	Our Lady of Lourdes Spring	No	NA
SW-19	Spring (Bowen)	Spring SL35	Yes	Request to sample Bowen Spring - not collocated with SL35
SW-21	Spring-fed sump	NA	NA	NA
SW-22	Spring-fed sump	NA	NA	NA
SW-23	Spring-fed sump	NA	NA	NA
SW-26	Seep	NA	NA	NA
SW-27	Seep	NA	NA	NA
SW-29	Spring	NA	NA	NA
SW-30	Spring (Smith)	NA	NA	NA
SW-31	Seep	NA	NA	NA
SW-33	Seep	NA	NA	NA

TABLE 3-1
Surface Water Sampling Locations
2016 Groundwater, Surface Water, and Soil Sampling Technical Memorandum, 700 South 1600 East PCE Plume. AOU-1: East Side Springs

Location ID	Type of Surface Water	Sample Location Specified in RIWP[(1)]	Sample Location Deviates From RIWP[(1)]?	Reason For Moving Sample Location
SW-34	Spring	NA	NA	NA
SW-35	Seep	NA	NA	NA
SW-36	Seep	NA	NA	NA
SW-40	Spring-fed sump	NA	NA	NA
SW-42	Spring	NA	NA	NA
SW-43	Spring	NA	NA	NA
SW-44	Spring	NA	NA	NA
SW-46	Spring	NA	NA	NA
SW-47	Creek (Red Butte)	NA	NA	NA
SW-48	Spring (Benson)	NA	NA	NA
SW-50	Spring	NA	NA	NA

NOTES:
[(1)] First Environment. 2015. Final Remedial Investigation Work Plan, AOU-1: East Side Springs, 700 South 1600 East PCE Plume, Salt Lake City, Utah. July.
ID = Identification.
NA = Not applicable.
RIWP = Remedial Investigation Work Plan.

TABLE 3-2
Stormwater Sampling Locations
2016 Groundwater, Surface Water, and Soil Sampling Technical Memorandum, 700 South 1600 East PCE Plume, AOU-1: East Side Springs

Location ID	Type of Stormwater	Flow Direction	Sample Location Specified in RIWP[(1)]	Sample Location Deviates From RIWP[(1)]?	Reason For Moving Sample Location
SW-02	Stormwater and mitigated spring water	East to West	Spring SL34	Yes	Due to close proximity to SW-01, this location was allocated to stormwater line sampling
SW-03	Stormwater and mitigated spring water	East to West	Spring SL32	Yes	Homeowner indicated there were no seeps or springs on property
SW-05	Stormwater and mitigated spring water	East to West	Storm sewer manhole	Yes	Location was moved to manhole or grate near 1100 East and 900 South for better distribution along stormwater line
SW-10	Stormwater	East to West	Spring SL86	Yes	Homeowner indicated there were no seeps or springs on property
SW-17	Jordan and Salt Lake City Canal	Southwest to Northeast	Spring SL11	Yes	No tetrachloroethylene contamination in this area, so location was reallocated to assess stormwater
SW-18	Mitigated spring water	North to South	Spring SL77	Yes	Location outside of tetrachloroethylene impacted area, therefore reallocated to assess stormwater
SW-20	Stormwater	East to West	NA	NA	NA
SW-24	Stormwater	East to West	NA	NA	NA
SW-25	Mitigated spring water	North to South	NA	NA	NA
SW-28	Mitigated spring water	North to South	NA	NA	NA
SW-32	Mitigated spring water	Northeast to Southwest	NA	NA	NA
SW-37	Mitigated spring water	Southeast to Northwest	NA	NA	NA
SW-38	Stormwater and mitigated spring water	East to West	NA	NA	NA
SW-39	Mitigated spring water	North to South	NA	NA	NA
SW-41	Mitigated spring water	South to North	NA	NA	NA
SW-45	Jordan and Salt Lake City Canal	Southwest to Northeast	NA	NA	NA
SW-49	Jordan and Salt Lake City Canal	South to North	NA	NA	NA

NOTES:
(1) First Environment. 2015. Final Remedial Investigation Work Plan, AOU-1: East Side Springs, 700 South 1600 East PCE Plume, Salt Lake City, Utah. July.
ID = Identification.
NA = Not applicable.
RIWP = Remedial Investigation Work Plan.

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TABLE 3-3
Surface Water and Stormwater Quality Measurements
2016 Groundwater, Surface Water and Soil Sampling Technical Memorandum
700 South 1600 East PCE Plume, AOU-1: East Side Springs

Location ID	Temperature (°C)	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	pH	Turbidity (NTU)
Surface Water						
SW-01	16.9	1779	5.78	236.2	7.24	0.91
SW-04	19.6	654	8.38	258.1	7.37	3.38
SW-06	17.7	1262	9.84	218.0	7.36	1.43
SW-07	15.2	1216	5.61	269.1	7.59	3.98
SW-08	12.6	898	10.00	260.5	7.45	5.42
SW-09	11.4	1552	8.72	254.0	7.75	79.4
SW-11	19.7	1235	9.14	241.3	7.59	93.4
SW-12	14.4	1278	11.92	254.9	7.57	0.41
SW-13	21.2	1217	5.41	90.7	7.95	727
SW-14	12.6	1113	1.75	262.7	7.42	0.94
SW-15	16.4	1224	6.19	265.4	7.63	512
SW-16	19.8	1147	9.19	259.8	7.58	1.24
SW-19	13.1	1403	7.82	249.2	7.39	46.7
SW-21	17.2	979	11.41	218.3	8.04	0.23
SW-22	17.5	1031	8.72	113.3	7.69	0.65
SW-23	12.4	1354	4.71	256.5	7.26	4.5
SW-26	16.4	1405	6.62	236.8	7.43	0.39
SW-27	15.4	1323	7.54	263.5	7.39	0.69
SW-29	12.6	1311	8.43	240.6	7.43	1.53
SW-30	23.5	1320	8.03	191.7	8.35	1.15
SW-31	15.5	1283	10.00	257.1	7.92	91.2
SW-33	16.9	1372	9.21	256.1	7.35	1.44
SW-34	14.3	1214	7.90	250.7	7.36	0.64
SW-35	12.9	1106	8.16	260.4	7.44	542
SW-36	20.1	1128	20.50	214.5	8.20	1.43
SW-40	15.5	1266	8.61	240.4	7.31	844
SW-42	15.1	1259	10.34	252.7	7.83	6.37
SW-43	17.3	1225	9.83	267.1	7.98	3.21
SW-44	18.2	1235	10.41	197.6	8.18	36.1
SW-46	18.6	1211	9.90	239.8	8.13	0.96
SW-47	10.7	435.2	10.11	242.0	8.41	16.1
SW-48	13.3	1191	8.48	274.3	7.64	2.61
SW-50	10.2	1220	8.01	248.6	7.40	0.61
Stormwater						
SW-02	15.3	564	8.00	219.3	8.49	59.8

TABLE 3-3
Surface Water and Stormwater Quality Measurements
2016 Groundwater, Surface Water and Soil Sampling Technical Memorandum
700 South 1600 East PCE Plume, AOU-1: East Side Springs

Location ID	Temperature (°C)	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	pH	Turbidity (NTU)
SW-03	17.2	630	6.50	219.2	8.52	48.2
SW-05	15.3	1026	8.94	245.8	8.01	32.4
SW-10	18.2	523	8.17	219.7	8.55	38.4
SW-17	14.6	1092	7.65	233.7	8.08	5.63
SW-18	14.4	1328	8.36	242.8	7.78	179
SW-20	16.9	1144	8.79	256.7	8.39	0.44
SW-24	17.1	559	5.74	207.4	8.36	542
SW-25	15.2	1394	7.05	255.8	7.28	1.14
SW-28	21.8	1279	9.69	233.0	7.60	0.44
SW-32	16.0	1154	9.47	242.2	7.80	0.91
SW-37	15.2	1206	9.76	256.6	7.81	2.75
SW-38	17.5	1154	8.71	247.2	8.11	17.6
SW-39	15.8	1275	10.15	207.4	7.65	1.34
SW-41	16.1	1290	8.22	240.3	7.61	2.15
SW-45	15.9	1260	8.92	255.4	8.27	5.39
SW-49	16.9	1165	4.80	219.0	8.02	0.92

NOTES:

°C = Degrees Centigrade.
µS/cm = Microsiemen(s) per centimeter.
ID = Identification.
mg/L = Milligram(s) per liter.
mV = Millivolt.
NTU = Nephelometric Turbidity Unit.
ORP = Oxidation-reduction potential.

TABLE 3-4
Surface Water and Stormwater Sampling Summary
2016 Groundwater, Surface Water and Soil Sampling Technical Memorandum, 700 South 1600 East PCE Plume, AOU-1: East Side Springs

Location ID	Date Sampled	Time Sampled	Sample ID	CLP Sample ID	Analyses									Quality Control	
					CLP Lab			EPA Region 8 Lab		CLP Confirmation Labs			SIRFER	Duplicate	MS/MSD
					VOCs	SVOCs	Total Metals	TDS	Anions	VOCs	SVOCs	Total Metals	Isotopes[(1)]		
Surface Water															
SW-01	05/04/16	1400	A-SW-001	H4091	X										
				-									X		
			A-SW-001-D	H4019	X									X	
SW-04	05/02/16	1340	A-SW-004	H4094	X										
				-									X		
SW-06	05/04/16	1700	A-SW-006	H4096	X										
				-									X		
			A-SW-006-D	H4018	X									X	
SW-07	05/04/16	1100	A-SW-007	H4097	X	X									
				MH4097			X								
				-				X	X				X		
			A-SW-007-D	H4013	X	X								X	
				MH4005			X							X	
				-				X	X					X	
SW-08	05/04/16	1010	A-SW-008	H4098	X										
				-									X		
			A-SW-008-D	H4016	X									X	
SW-09	05/03/16	0855	A-SW-009	H4099	X										
				-									X		
SW-11	05/03/16	1230	A-SW-011	H4101	X										
				-									X		
SW-12	05/03/16	1030	A-SW-012	H4102	X	X									
				H4202						X					
				MH4202			X								
				-				X	X				X		
SW-13	05/03/16	1430	A-SW-013	H4103	X										
				-									X		
SW-14	05/04/16	0900	A-SW-014	H4104	X										
				-									X		
SW-15	05/04/16	1130	A-SW-015	H4105	X	X									
				MH4107			X								
				-				X	X				X		
SW-16	05/04/16	1320	A-SW-016	H4106	X	X									
				MH4106			X								

TABLE 3-4
Surface Water and Stormwater Sampling Summary
2016 Groundwater, Surface Water and Soil Sampling Technical Memorandum, 700 South 1600 East PCE Plume, AOU-1: East Side Springs

Location ID	Date Sampled	Time Sampled	Sample ID	CLP Sample ID	Analyses									Quality Control	
					CLP Lab			EPA Region 8 Lab		CLP Confirmation Labs			SIRFER	Duplicate	MS/MSD
					VOCs	SVOCs	Total Metals	TDS	Anions	VOCs	SVOCs	Total Metals	Isotopes[1]		
SW-16	05/04/16	1320	A-SW-016	-				X	X				X		
SW-19	05/04/16	0820	A-SW-019	H4109	X										
				-									X		
SW-21	05/03/16	1320	A-SW-021	H4111	X	X									
				H4211						X					
				MH4211			X								
				-				X	X				X		
SW-22	05/03/16	1550	A-SW-022	H4112	X										
				-									X		
SW-23	05/03/16	0930	A-SW-023	H4113	X	X									
				H4213						X	X				
				MH4213								X			
				MH4113			X								
				-				X	X				X		
			A-SW-023-MS	H4113MS	X	X									X
				H4213MS						X	X				X
				MH4113S			X								X
				MH4213S								X			X
				-				X	X						X
			A-SW-023-MSD	H4113MSD	X	X									X
				H4213MSD						X	X				X
				MH4113D			X								X
				MH4213D								X			X
				-				X	X						X
SW-26	05/03/16	1345	A-SW-026	H4116	X	X									
				H4216						X					
				MH4116			X								
				-				X	X				X		
SW-27	05/03/16	1120	A-SW-027	H4117	X	X									
				H4217						X					
				MH4217			X								
				-				X	X				X		
SW-29	05/11/16	0935	A-SW-029	H4119	X										
				-									X		
SW-30	05/03/16	1630	A-SW-030	H4120	X										

TABLE 3-4
Surface Water and Stormwater Sampling Summary
2016 Groundwater, Surface Water and Soil Sampling Technical Memorandum, 700 South 1600 East PCE Plume, AOU-1: East Side Springs

Location ID	Date Sampled	Time Sampled	Sample ID	CLP Sample ID	Analyses									Quality Control	
					CLP Lab			EPA Region 8 Lab		CLP Confirmation Labs			SIRFER	Duplicate	MS/MSD
					VOCs	SVOCs	Total Metals	TDS	Anions	VOCs	SVOCs	Total Metals	Isotopes[1]		
SW-30	05/03/16	1630	A-SW-030	-									X		
SW-31	05/02/16	1510	A-SW-031	H4121	X										
				-									X		
SW-33	05/02/16	1400	A-SW-033	H4123	X										
				-									X		
SW-34	05/02/16	1430	A-SW-034	H4124	X										
				-									X		
SW-35	05/04/16	0930	A-SW-035	H4125	X										
				-									X		
SW-36	05/03/16	1730	A-SW-036	H4126	X										
				-									X		
SW-40	05/05/16	1745	A-SW-040	H4130	X										
				-									X		
SW-42	05/02/16	1420	A-SW-042	H4132	X										
				-									X		
SW-43	05/02/16	1315	A-SW-043	H4133	X										
				-									X		
SW-44	05/04/16	1430	A-SW-044	H4134	X										
				-									X		
			A-SW-044-MS	H4134MS	X										X
			A-SW-044-MSD	H4134MSD	X										X
SW-46	05/05/16	1730	A-SW-046	H4136	X										
				-									X		
SW-47	05/04/16	0840	A-SW-047	H4137	X	X									
				MH4137			X								
				-				X	X				X		
SW-48	05/04/16	0950	A-SW-048	H4138	X										
				-									X		
			A-SW-048-MS	H4138MS	X										X
			A-SW-048-MSD	H4138MSD	X										X
SW-50	02/26/16	1515	A-SW-001	H0901	X										
				-									X		
Stormwater															
SW-02	05/11/16	0910	A-SW-002	H4092	X										
				-									X		

TABLE 3-4
Surface Water and Stormwater Sampling Summary
2016 Groundwater, Surface Water and Soil Sampling Technical Memorandum, 700 South 1600 East PCE Plume, AOU-1: East Side Springs

Location ID	Date Sampled	Time Sampled	Sample ID	CLP Sample ID	Analyses									Quality Control	
					CLP Lab			EPA Region 8 Lab		CLP Confirmation Labs			SIRFER	Duplicate	MS/MSD
					VOCs	SVOCs	Total Metals	TDS	Anions	VOCs	SVOCs	Total Metals	Isotopes[1]		
SW-03	05/11/16	0920	A-SW-003	H4093	X										
				-									X		
SW-05	05/11/16	0757	A-SW-005	H4095	X										
				-									X		
SW-10	05/11/16	0840	A-SW-010	H4100	X										
				-									X		
SW-17	05/11/16	1018	A-SW-017	H4107	X										
				-									X		
			A-SW-017-MS	H4107MS	X										X
			A-SW-017-MSD	H4107MSD	X										X
SW-18	05/05/16	0910	A-SW-018	H4108	X										
				-									X		
			A-SW-018-D	H4021	X									X	
SW-20	05/05/16	1030	A-SW-020	H4110	X										
				-									X		
SW-24	05/11/16	0925	A-SW-024	H4114	X										
				-									X		
SW-25	05/05/16	1800	A-SW-025	H4115	X										
				-									X		
SW-28	05/03/16	1200	A-SW-028	H4118	X	X									
				H4218						X					
				MH4218			X								
				-				X	X				X		
SW-32	05/05/16	1120	A-SW-032	H4122	X										
				-									X		
SW-37	05/05/16	1815	A-SW-037	H4127	X										
				-									X		
SW-38	05/11/16	0810	A-SW-038	H4128	X										
				-									X		
SW-39	05/03/16	1700	A-SW-039	H4129	X										
				-									X		
SW-41	05/05/15	1100	A-SW-041	H4131	X										
				-									X		
SW-45	05/05/16	1000	A-SW-045	H4135	X										
				-									X		

TABLE 3-4
Surface Water and Stormwater Sampling Summary
2016 Groundwater, Surface Water and Soil Sampling Technical Memorandum, 700 South 1600 East PCE Plume, AOU-1: East Side Springs

Location ID	Date Sampled	Time Sampled	Sample ID	CLP Sample ID	Analyses									Quality Control	
					CLP Lab			EPA Region 8 Lab		CLP Confirmation Labs			SIRFER	Duplicate	MS/MSD
					VOCs	SVOCs	Total Metals	TDS	Anions	VOCs	SVOCs	Total Metals	Isotopes[(1)]		
SW-49	05/05/16	1040	A-SW-049	H4139	X										
				-									X		

NOTES:
[(1)] Analyzed for deuterium and oxygen-18.
- = Not applicable.
CLP = EPA Contract Laboratory Program.
EPA = U.S. Environmental Protection Agency.
ID = Identification.
MS/MSD = Matrix spike/matrix spike duplicate.
SIRFER = University of Utah Stable Isotope Ratio Facility for Environmental Research.
SVOC = Semi-volatile organic compound.
TDS = Total dissolved solids.
VOC = Volatile organic compound.

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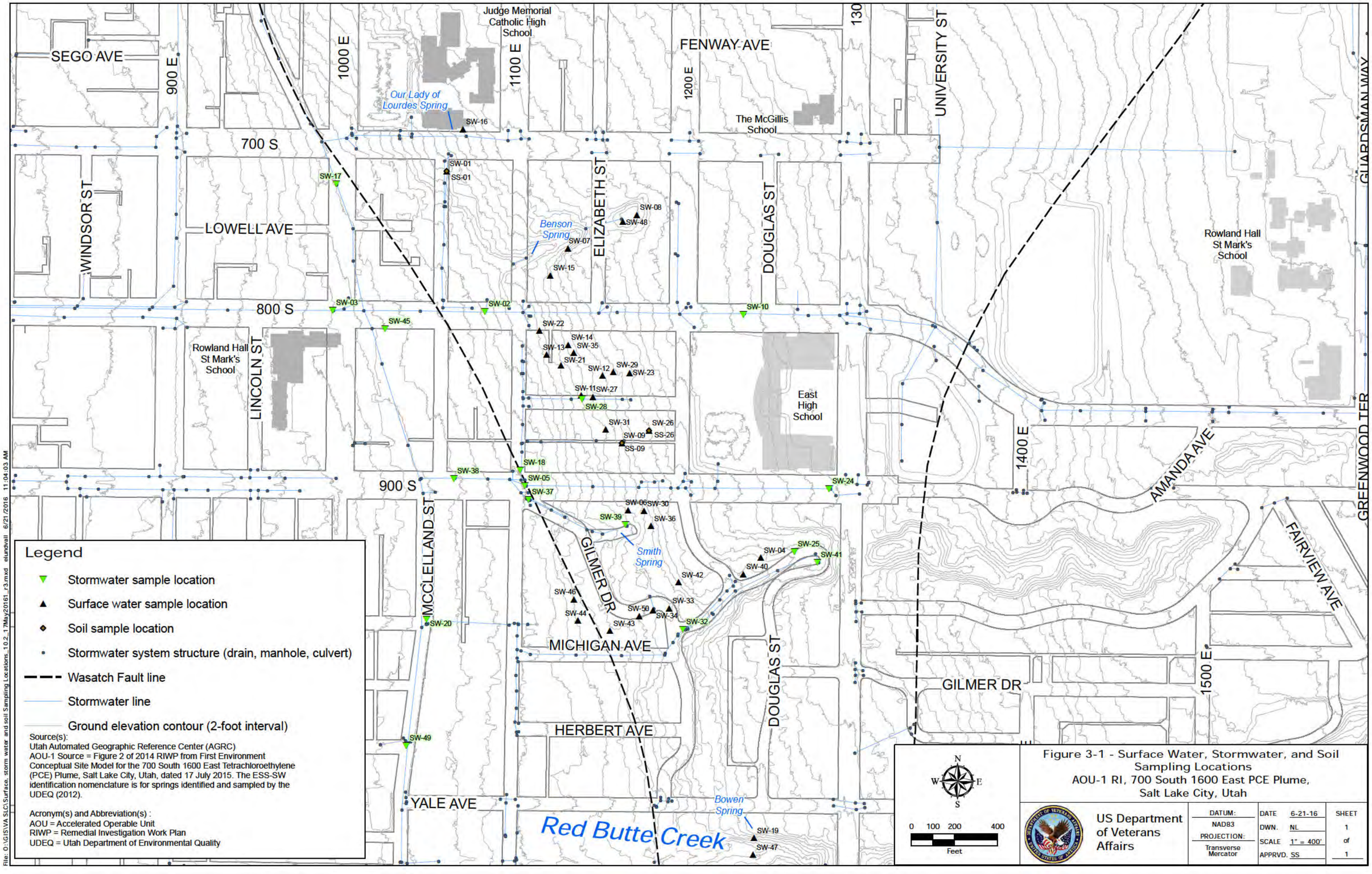

Legend

- Stormwater sample location
- Surface water sample location
- Soil sample location
- Stormwater system structure (drain, manhole, culvert)
- Wasatch Fault line
- Stormwater line
- Ground elevation contour (2-foot interval)

Source(s):
Utah Automated Geographic Reference Center (AGRC)
AOU-1 Source = Figure 2 of 2014 RIWP from First Environment Conceptual Site Model for the 700 South 1600 East Tetrachloroethylene (PCE) Plume, Salt Lake City, Utah, dated 17 July 2015. The ESS-SW identification nomenclature is for springs identified and sampled by the UDEQ (2012).

Acronym(s) and Abbreviation(s) :
AOU = Accelerated Operable Unit
RIWP = Remedial Investigation Work Plan
UDEQ = Utah Department of Environmental Quality

N W E S

0 100 200 400
Feet

Figure 3-1 - Surface Water, Stormwater, and Soil Sampling Locations
AOU-1 RI, 700 South 1600 East PCE Plume, Salt Lake City, Utah

US Department of Veterans Affairs

DATUM: NAD83	DATE	6-21-16	SHEET 1
PROJECTION: Transverse Mercator	DWN.	NL	of 1
	SCALE	1" = 400'	
	APPRVD.	SS	

File: O:\GIS\VA SLC\Surface, storm water and soil Sampling Locations_10.2_17May20161_r3.mxd elundvall 6/21/2016 11:04:03 AM

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4.0 Soil Sampling

Surface soil samples were collected at AOU-1 to aid in the baseline human health risk assessment. The samples were collected from areas with highest potential for residual soil contaminants.

4.1 Surface Soil Sampling

A total of 3 surface soil samples were collected from the 0 to 0.5-foot interval at locations adjacent to seeps or springs (surface water locations). Two soil samples, SS-09 (adjacent to SW-09) and SS-26 (adjacent to SW-26), were collected at locations where groundwater exhibited the highest PCE concentrations along Sunnyside Avenue. One soil sample, SS-01 (adjacent to SW-01), was collected at a location where PCE was not detected in the groundwater. Soil sampling locations are presented on Figure 3-1 and Table 4-1.

Surface soil samples were collected using dedicated stainless steel spoons and soil was homogenized in dedicated stainless steel bowls. Soil for VOC analysis was not homogenized in order to prevent volatilization and was collected using 5-gram core samplers.

4.2 Analytical

Soil samples for laboratory analysis were collected in certified clean containers in accordance with EPA specifications and preserved on ice. Soil samples were shipped to the CLP laboratory (Chemtech Consulting Group) for analysis of VOCs, SVOCs, and TAL metals in accordance with CLP method protocol. A summary of the surface soil sampling and associated analyses is included on Table 4-2. Validated soil analytical results will be included in the RI Report.

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TABLE 4-1
Soil Sampling Locations
2016 Groundwater, Surface Water, and Soil Sampling Technical Memorandum, 700 South 1600 East PCE Plume, AOU-1: East Side Springs

Location ID	Adjacent Surface Water	Sample Location Deviates From RIWP[(1)]?	Reason For Moving Sample Location
SS-01	Seep	Yes	Collected at a location where PCE was not detected in the groundwater to serve as a baseline sample.
SS-09	Seep	No	NA
SS-26	Seep	No	NA

NOTES:
[(1)] First Environment. 2015. Final Remedial Investigation Work Plan, AOU-1: East Side Springs, 700 South 1600 East PCE Plume, Salt Lake City, Utah. July.
ID = Identification.
NA = Not applicable.
RIWP = Remedial Investigation Work Plan.

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TABLE 4-2
Soil Sampling Summary
2016 Groundwater, Surface Water and Soil Sampling Technical Memorandum, 700 South 1600 East PCE Plume, AOU-1: East Side Springs

Location ID	Date Sampled	Time Sampled	Sample ID	CLP Sample ID	Analyses			Quality Control	
					CLP Lab			Duplicate	MS/MSD
					VOCs	SVOCs	Total Metals		
SS-01	05/04/16	1340	A-SS-01	H4086	X	X			
				MH4030			X		
			A-SS-01-D	H4082	X	X		X	
				MH4029			X	X	
SS-09	05/03/16	0855	A-SS-09	H4061	X	X			
				MH4025			X		
			A-SS-09-MS	H4061MS	X	X			X
				MH4025S			X		X
			A-SS-09-MSD	H4061MSD	X	X			X
				MH4025D			X		X
SS-26	05/03/16	1345	A-SS-26	H4076	X	X			
				MH4028			X		

NOTES:
CLP = EPA Contract Laboratory Program.
ID = Identification.
MS/MSD = Matrix spike/matrix spike duplicate.
SVOC = Semi-volatile organic compound.
VOC = Volatile organic compound.

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5.0 Data Verification

Data verification was conducted for the groundwater, surface water and soil sampling field documentation. Verification included peer review of the field notebook information, information included on field forms, drilling information and chain of custody forms. In addition, verification for completeness was performed on the analytical data received from the three CLP laboratories, the EPA Region 8 laboratory and ALS Environmental. Any noted discrepancies in documentation or missing information was identified and rectified prior to this reporting.

In addition to verification of the analytical laboratory data, the data will undergo validation by an independent validation subcontractor. Validation will be performed in accordance with EPA Stage 2B (90 percent of data) and Stage 4 (10 percent of data) following the EPA CLP National Functional Guidelines for Superfund Organic Methods Data Review (EPA 2014a) and EPA CLP National Functional Guidelines for Superfund Inorganic Data Review (EPA 2014b). Results of the validation will be provided in the data validation summary report and final validated data will be included in the RI Report.

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TABLE 5-1
Field Deviations from the RI Work Plan
2016 Groundwater, Surface Water, and Soil Sampling Technical Memorandum
700 South 1600 East PCE Plume, AOU-1: East Side Springs

Deviation	Reference	Rationale
Proposed locations for temporary groundwater monitoring points GW-01 through GW-26	RIWP[(1)]	Temporary groundwater monitoring points GW-01, GW-02, GW-04, GW-07, GW-08, GW-12, GW-13, GW-14, GW-19, GW-21, GW-24, and GW-25 were shifted from their proposed locations to either avoid underground utilities or to refine the groundwater sampling area.
"The field investigation for surface water and very shallow groundwater will commence in the vicinity of the 11 spring and seep locations (pending owner approval to access) previously sampled in 2010 and 2011, then proceed to spring and seep locations identified, but not tested during previous investigations (pending access approval), and for groundwater continue at properties whose owners have already requested indoor air pathway evaluation."	QAPP[(2)]	The timeline for groundwater and surface water sampling was based on access and availability of properties.
"Up to 25 shallow temporary groundwater sample points will be manually installed through the water table near ponds, seeps, or springs adjacent to residences or occupied structures...An additional 35 temporary shallow groundwater sampling points will be installed mechanically to depths up to 50 ft using a truck or tractor-mounted GeoProbe™ Tool."	RIWP[(1)]	Only two temporary groundwater monitoring points were installed via hand auger due to the depth of groundwater at the proposed locations. The remaining temporary groundwater monitoring points were installed via a remotely operated GeoProbe™ drill rig.
"Monitor static water level to ensure that the drawdown is minimal, preferably less than 0.3 foot at a purge rate of 0.2 to 2 liters per minute."	RIWP[(1)]	The depth to groundwater was not measured during purging of temporary groundwater monitoring points due to the small diameter of the well precluding insertion of the water level indicator while the tubing is present.
"To the extent possible, the purge water will be routed through a flow cell to measure pH, electrical conductivity, oxygen-reduction potential, turbidity, and dissolved oxygen with field water quality meters."	RIWP[(1)]	Field data for pH was not collected at temporary groundwater monitoring points GW-23 and GW-39 due to a malfunction of the pH probe on the water quality meter.
"Expedited turn-around time will be requested for analysis of preliminary COPCs in groundwater from the CLP laboratory during GeoProbe™ investigation in order to select additional groundwater sampling locations…"	QAPP[(2)]	Low groundwater yield at temporary groundwater monitoring points GW-07 and GW-17 provided enough sample volume for analysis via the EPA Contract Laboratory Program (CLP), but not enough sample for screening purposes.

TABLE 5-1
Field Deviations from the RI Work Plan
2016 Groundwater, Surface Water, and Soil Sampling Technical Memorandum
700 South 1600 East PCE Plume, AOU-1: East Side Springs

Deviation	Reference	Rationale
Proposed locations for surface water locations SW-01 through SW-19	RIWP[(1)]	Surface water locations SW-01, SW-02, SW-03, SW-05, SW-07, SW-08, SW-09, SW-10, SW-13, SW-17, SW-18, and SW-19 were repositioned if seeps and springs were not present on the property, if access was not granted from property owners, or to fill data gaps.
"Three soil samples will be collected from the 0 to 0.5 ft soil interval at locations determined to be associated with elevated soil gas levels or near surface water springs/seeps containing elevated target cVOC concentrations."	RIWP[(1)]	Only two soil samples were collected at locations where groundwater exhibited the highest PCE concentrations along Sunnyside Avenue. The third soil sample was collected at a location where PCE was not detected in the groundwater to serve as a baseline sample.
"All outdoor sampling locations will be located for GIS input using GPS survey techniques. A GPS with sub-meter accuracy and software to perform post-processing data correction will be used to survey soil gas sampling locations, surface water sampling locations; temporary groundwater monitoring points, and surface soil sample locations."	RIWP[(1)]	Surface soil and surface water samples were not surveyed due to access issues.
"Sample identification and tracking procedures will incorporate the sample numbering system outlined in Table 3. "	RIWP[(1)]/SAP	The sample numbering system was used with exception of the parcel code and the date code which were not included with the groundwater, surface water, or soil sample identification. The sample identification included the "A" for AOU-1, the sample type "GW, SW, or SS" and a sequential number-01, -02, etc., with the exception of soil samples. Soil sample identification used a number that corresponded to the adjacent surface water sample number.

NOTES:
[(1)] First Environment. 2015. Final Remedial Investigation Work Plan, AOU-1: East Side Springs, 700 South 1600 East PCE Plume, Salt Lake City, Utah. July.
[(2)] EA Engineering, Science, and Technology, Inc. 2016a. Final Quality Assurance Project Plan for 700 South 1600 East Tetrachloroethylene Plume, Accelerated Operable Unit 1: East Side Springs, Revision 1, Salt Lake City, Utah. February.

CLP = Contract Laboratory Program.
COPC = Contaminants of potential concern.
cVOC = Chlorinated volatile organic compound.
EPA = U.S. Environmental Protection Agency.
ft = Foot (feet).
GIS = Geographic Information System.
GPS = Global Positioning System.

TABLE 5-1
Field Deviations from the RI Work Plan
2016 Groundwater, Surface Water, and Soil Sampling Technical Memorandum
700 South 1600 East PCE Plume, AOU-1: East Side Springs

PCE = Tetrachloroethylene.
QAPP = Quality Assurance Project Plan.
RIWP = Remedial Investigation Work Plan.

TABLE 5-1
Field Deviations from the RI Work Plan
2016 Groundwater, Surface Water, and Soil Sampling Technical Memorandum
700 South 1600 East PCE Plume, AOU-1: East Side Springs

PCE = Tetrachloroethylene.
QAPP = Quality Assurance Project Plan.
RIWP = Remedial Investigation Work Plan.

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6.0 Deviations to the Remedial Investigation Work Plan

During the implementation of the 2016 Geoprobe®, surface water and soil sampling activities, situations occurred that required deviation from the RI Work Plan and/or its appendices. The deviations, work plan reference, and rationale for the deviation are included in Table 5-1.

In addition to deviations associated with the field activities, deviations occurred during the sample analyses at the CLP laboratory (Chemtech Consulting Group), EPA Region 8 laboratory and ALS Environmental. These deviations are noted below.

1. 1,4-dioxane was analyzed using the CLP SVOC method. The validation of the data resulted in rejection of the 1,4-dioxane results in the groundwater samples based on the associated quality control data. This potentially presents a data gap for the groundwater data as 1,4-dioxane was requested to be included with the analysis by the EPA due to its use as a stabilizer for 1,1,1-trichloroethane.
2. Analytical method deviations were noted from those listed in the QAPP.
    a. The CLP laboratories implemented the more current versions of the CLP Statement of Work analytical methods for VOCs, SVOCs, and metals than were included in the QAPP. The methods SOM02.3 and ISM02.3 were used in lieu of SOM02.2 and ISM02.2 however, this does not impact the data quality or usability.
    b. Nitrate nitrogen was requested for analysis for the groundwater samples by EPA Method 300.0 to be analyzed at the EPA Region 8 laboratory. The data reported was analyzed for nitrate/nitrite nitrogen by EPA Method 300.0. The data may be biased slightly high due to inclusion of nitrite however, is still usable to achieve project objectives.
    c. TDS was requested for analysis at the EPA Region 8 laboratory by Standard Methods SM 2540C, however the laboratory reported the data by EPA Method 160.1. The data is still usable to achieve the project objectives.
    d. Alkalinity was requested to be analyzed at ALS Environmental using Standard Methods SM2320B however, upon receipt of the data report it was learned that ALS Environmental ran the samples using EPA Method 310.1. This data is still usable to achieve project objectives.

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7.0 References

EA Engineering, Science, and Technology, Inc. (EA). 2016a. Final Quality Assurance Project Plan for 700 South 1600 East Tetrachloroethylene (PCE) Plume, Accelerated Operable Unit 1: East Side Springs, Revision 1, Salt Lake City, Utah. February.

EA. 2016b. Minor Field Modifications #3 - #6. Remedial Investigation Work Plan, AOU-1: East Side Springs 700 South 1600 East Street PCE Plume Salt Lake City, Utah. March.

EA. 2016c. Minor Field Modifications #7 - #13. Sampling and Analysis Plan, AOU-1: East Side Springs 700 South 1600 East Street PCE Plume Salt Lake City, Utah. March.

EA. 2016d. Minor Field Modification #16. Remedial Investigation Work Plan, AOU-1: East Side Springs 700 South 1600 East Street PCE Plume Salt Lake City, Utah. April.

EA. 2016e. Minor Field Modification #17. Sampling and Analysis Plan, AOU-1: East Side Springs 700 South 1600 East Street PCE Plume Salt Lake City, Utah. April.

U.S. Environmental Protection Agency (EPA). 2014a. EPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review. EPA/540/R-014-002. August.

EPA. 2014b. EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review. EPA/540/R-13-001. August.

First Environment, Inc. (FE). 2015. Final Remedial Investigation Work Plan, AOU-1: East Side Springs, 700 South 1600 East PCE Plume, Salt Lake City, Utah. July.

Utah Department of Environmental Quality. 2012. Site Investigation Analytical Results Report, East Side Springs, Salt Lake County, Utah UTN000802825, prepared by Craig Barnitz, Utah Department of Environmental Quality, Division of Environmental Response and Remediation. May.

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Salt Lake City VA Medical Center

Final

700 South 1600 East PCE Plume
AOU-1: East Side Springs
2016 Groundwater and Surface Water Sampling Technical Memorandum

Volume 2 of 2

SEPTEMBER 2016

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Attachment A
Field Notebooks

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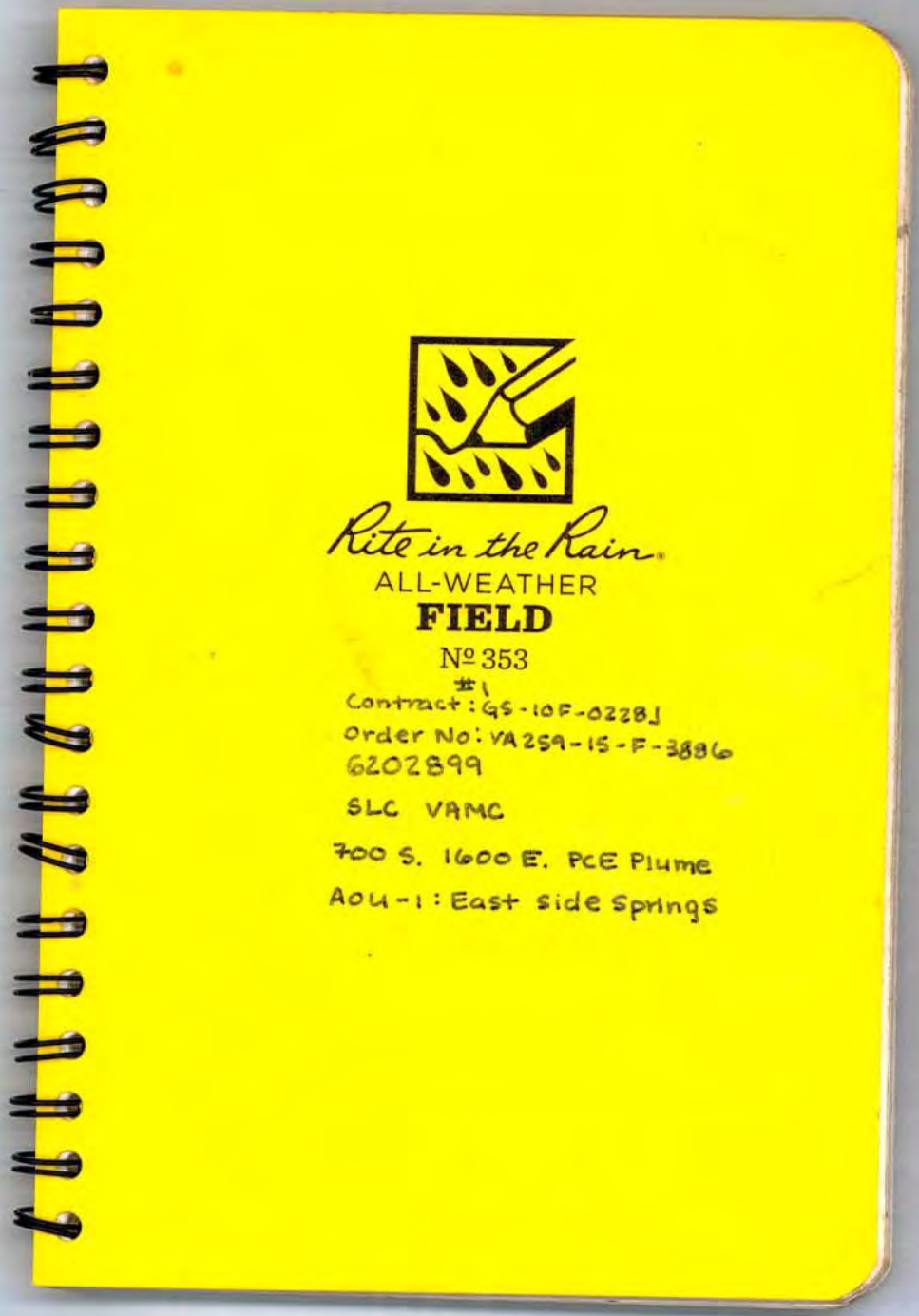

Rite in the Rain
ALL-WEATHER
FIELD
№ 353
#1
Contract: GS-10F-0228J
Order No: VA259-15-F-3886
6202899
SLC VAMC
700 S. 1600 E. PCE Plume
AOU-1: East side Springs

CONTENTS

PAGE	REFERENCE	DATE

2/22/16

0800	Meet w/ A. Bugher to load up equipment
0850	At Sunnyside Park to meet up with drillers
1000	Have tailgate meeting
	weather: 40°F, drizzly
	On site: EA Engineering (K. Lizzeri, A. Bugher, S. Stringer)
	Cascade (D. Morlock, O. Waters)
	VA (N. Kirkham, J. Laird)
	Tailgate H&S meeting - review HASP, directions to
	Hospital, emergency contacts
	Leave Park to setup at GW-23 (651 Elizabeth)
1045	Setup at GW-23
1100	Begin hand augering GW-23
	CERCLA EPA ID # WTD 980 154 385
	IDW Identification:
	Date of accumulation:
	Awaiting TCLP
1211	Hand auger to 7 ft. Begin drilling
	water encountered at 8.99 Feet. Drill to 20 ft bgs
	screen 8.5 - 13.5 Ft deep
	sand to ~~8~~ 7.5 Ft. Bentonite to ~~8~~ 6.5 Ft. Topped with
	soil cuttings.
1320	well completed. Details on well log.
	Move over to GW-39 (750 S 1100 E)
1420	Start drilling at GW-39

KP 2-22-16

Rite in the Rain.

2/22/16

Drill to 25'. Water at 18.5 Feet

Screen well 17.7 - 22.7 Ft bgs

Sand ~~21.5~~ ~~16~~ KL - 22.7, bentonite ~~20.5 - 21.5'~~ ~~13 - 16~~ KL, soil ~~0 - 20.5'~~ ~~0 - 13~~ KL

16.5' 15.5 - 16.5' 0 - 15.5'

1538 Well completed

1601 Leave GW-39. Details on well log.

1624 Try to start hand augering GW-24

1721 Able to get about 5 feet down. Will drill tomorrow

1730 End for day

KR
2-22-16

2/23/16

0800 K. Lazzeri meets with Cascade Drillers at Sunnyside Park. Drop off labels at IDW storage area

0820 Meet up at GW-33 (471 S. McClelland)

Conduct tailgate H&S meeting - go over slips, trips, falls and crossing the street safely

0839 Begin drilling at GW-33. M. Aguilar and R. Lange on site

1010 Hit refusal at 40 Ft bgs. Abandon hole - Do not set well. 30 - 40 Ft gravelly sand - dry

1032 Move to GW-24

1111 Begin drilling at GW-24 - hand augered to 5 feet yesterday

Water at 13.5 Feet. Total depth of 20 feet

Well screened from 13 - 18 Ft

Sand from ~~13 - 18~~ 12-16 KL, bentonite 11-12'

1223 Well completed. Details on boring log.

Drillers grab lunch

1356 Relocate to GW-35. Drillers on site

1402 Begin drilling GW-35

1500 M. Aguilar on site

1537 Reached refusal - soil dry, no water in hole

1545 M. Aguilar off site

1547 Abandon hole. ~~tt~~ KL

1602 Leave site. Scout out GW-46 for tomorrow

1615 Done for day - off site

KR
2/23/16

Rite in the Rain

2/24/16

0801 K. Lazzen, S. Staigerwald, Cascade crew meet at Sunnyside Park. Plan to start earlier tomorrow

0815 Relocate to first location (GW-46 1044 1200 E)
Set up ~~[illegible]~~ KL road signs and barricades
Weather: 40°F, clear, sunny
Tailgate H/S meeting - road work, driving a trailer in the city (narrow roads)

0900 Begin pushing at GW-46

0914 N. Kirkham on site
Access to GW-01 (925 S 1300 E)
Groundwater encountered at ~~~29~~ KL ~30 ft
Well screened 30-35 feet
Sand: 35-29 Bentonite: 29-28 Soil: 28-surface

1040 Leave site. Move to GW-48

1059 Setup at GW-48 (1317 Gilmer Drive)

1103 M. Aguilar on site. Begin drilling.

1121 S. Staigewald arrives on site.

1146 S. Staigewald off site

1215 ~~1230~~ KL J. Laird on site

1230 J. Laird and N. Kirkham off site
O. Waters and K. Lazzen check out GW-02.

1232 Break for lunch

1300 M. Aguilar on site
GW measured at 36.4 feet
Screen 35-40 ft Bentonite: ~~36-34~~ 33-34 ft KL
Sand: 34-40 ft Soil: 0-33 ft

KL 2/24/16

2/24/16

1415 Move over to GW-02

1427 Begin drilling GW-02

1544 Drill to 40 feet - hit refusal, no water

1549 Abandon hole with soil cuttings

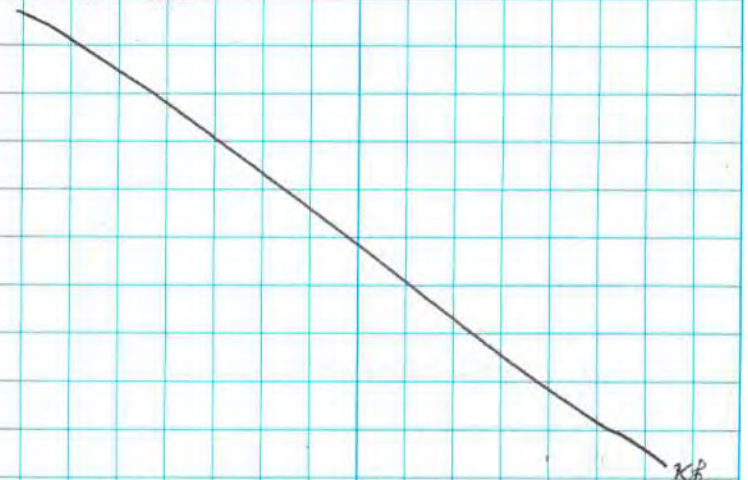
1558 Move over to GW-03

1618 Begin drilling GW-03
Drill to 35'. Water level ~29 feet
Set well: screen 28-33 ft
Sand: 27-33 bentonite: 26-27 Soil: 0-26
dtw - 28.4 ft

1745 Complete well. Details on boring log.

1752 Clean up site

1801 Off site



KL 2/24/16

Rite in the Rain

2/25/16

0736 K. Lizzen and [illegible] Stangerwald meet cascade in morning

0740 Move over to GW-49 (Gilmer Drive)

0750 Tailgate H&S Meeting: Placing caution tape around cones.

0805 Set up at GW-49

0813 Begin drilling GW-49
Water ~7.5 Ft
Screen: 7.5-12.5 Ft Sand: 6-12.5
bentonite: 5-6 feet Soil: 0-5 Feet

0851 Complete GW-49

0910 Move across street to GW-05

0921 begin drilling GW-05
water at about 3.5 feet
Screen: 3.5-8.5 Ft Sand: 2.5-8.5'
bentonite: 1.5-2.5' Soil: 0-1.5'

1000 complete well

1040 Move over to GW-06

1050 Begin drilling GW-06
water level ~7 Ft
Screen: 5-10

1130 Well completed

1200 Take lunch. Bottle Run for Aaron

1301 At GW-07

1329 Begin drilling
Water at ~5 Feet. Drill to 10 feet

2/25/16

Screen 4-9 Feet

1407 Complete well

1415 Move to GW-11 (alleyway). Scout out drilling location.

1435 R. Lange on site

1440 Set up exclusion zone

1450 Begin drilling at GW-11

1552 Complete well
dtw: 9.2 ft screened: 10-15 Ft

1602 Pickup/cleanup site

1614 OFF site - done for day

KR 2/25/16

Rite in the Rain.

2/26/16

0730 K. Lizzen and S. Stangerwald on site - waiting for drillers at Sunnyside Park

0743 Notify city inspector what wells will be done today

0807 Cascade on site. Drop off soil IDW

0821 Setup at GW-09 (Alpine place)

0830 J. Lund stops by site to talk to home owners

0855 Begin drilling GW-09

well screen: 5-10 ft sand: 4-10'

bentonite: 3-4' soil: 0-3'

0925 complete well

0936 Move to GW-04

1014 Begin drilling GW-04

Hit refusal ~16 ft. Try to shift location 1 ft to the west

Screen well: 20-25 ft sand: 19-25 ft

bentonite: 18-19 ft soil: 0-18

1143 well completed. GW ≈ 22.3 ft bgs

Move over to GW-50

1155 Begin drilling GW-50

dtw: 4 feet

well screened 4-9 feet

1226 well completed

1234 Break for lunch

1325 Setup at GW-10

1354 Begin drilling at GW-10

2/26/16

well screened: 13-18 feet

water level at 11.98 feet

1458 well completed

1510 Move to site GW-26

1533 Begin drilling GW-26

water level ~31' screen: 30-35'

1621 complete well

~~Move over to GW-08~~ KL

~~Begin drilling GW-08~~ KL

1640 Pack up. Off site

2/26/16
KR

Rite in the Rain.

2/27/16

0824 K. Lazzen and S. Staigerwald meet drillers at Sunnyside Park. Weather: 60°F, sunny

Drive over to GW-31 - campus of Rolland Hall

0900 K. Laird on site. Conduct Tailgate H&S meeting. Mentions that location for GW-14 will need to be moved to rear of home

0917 Begin drilling GW-31

Well screened ~~11-10'~~ KL

1130 Well completed. Details on boring log

1232 KL Drill GW-08 Details on boring log

1320 Drillers break for lunch

1411 Gain access to backyard for GW-15

Hand auger to 5.5', water ~ 1'

1440 Set well 0-5' screen

1511 Move over to GW-16

1528 Begin drilling GW-16

1610 Complete well - see boring logs

1628 Pack up for day. Off site

KR 2/27/16

2/29/16

0730 K. Lazzen and S. Staigerwald meet at Sunnyside Park. Meet with Cascade Drilling

Weather: 40°F, partly cloudy

0749 Drive over to 7005. Set up at GW-21

Call century link to double check lines are just overhead.

0810 Conduct tailgate H&S meeting. Slips, trips, falls and Hearing protection

0835 Begin drilling

Need to move over ~1' due to refusal at 10'

Set screen from 12-17'. Water ~12'

0940 Well completed. Details on boring log

Pack up - move to next location (GW-22)

1025 Begin drilling GW-22

No recovery 0-5' ~~GW~~ KL

Set well 10-15'

1101 Well completed - details on boring log

1109 Move over to location GW-25

1115 Begin drilling

Set well screen 25'-30'. Water @ 26'

1230 Well completed - details on boring log

1245 Break for lunch

1340 Move over to GW-20 - set up

1351 Begin drilling

KR 2/29/16

Rite in the Rain

2/29/16

Screen well from ~~12-17~~ KL 11.5-16.5'

Water: ~ 11.5'

Pack up - move to GW-19

1522 Begin drilling GW-19

Screen well 7-12'

1631 complete well - details on boring log

1650 Pack up. off site

1701 Pick up permit From SLC Enginaering Dept.

KR 2/29/16

3/1/16

0730 K. Lazzeri and S. Staigerwald meet drillers at Sunnyside Park. S. Staigerwald drops off IDW.

0746 Drive over to GW-18

0811 Find parking and have tailgate H&S meeting

0830 speak with SLC corporation about water lines. No need to mark in road if in parkstrip

0834 Begin drilling, GW-18

screen well 5-10', GW ~ 8'

0901 complete well - details on boring log

Set up at GW-17

0925 Begin drilling GW-17

Set well From 10-15', dtw ~ 11'

0956 complete well - details on boring log

Set up at GW-12

1028 Begin drilling GW-12

Screen well 5-10'

dtw: ~ 2'

1054 well completed - details on boring log

1102 Leave site. Drillers break for lunch

1204 Set up on GW-40

1227 Begin drilling GW-40

J. Townsend w/ Cascade on site

well screened 35-40

dtw ~ 34.6'

3/1/16 KR

Rite in the Rain

3/1/16

1359	Well completed - details on boring log
	Move over to GW-42
1410	J. Laird on site
1425	Start drilling GW-42
	Hit refusal at ~~35'~~ ±40'
1549	Backfill hole
	walking back to truck
1600	Finish for day - off site

KR 3/1/16

3/2/16

0730	K. Lazzeri and A. Bugher meet drillers at Sunnyside Park. A. Bugher drops off IDW.
	weather: 40°F, sunny
0736	Move to GW-14 - in alley way. Tailgate
0750	J. Laird stops by site to discuss schedule.
0800	Begin drilling GW-14
	soil wet ~15'. Set screen 15-20'
0830	complete well - details on boring log
	dtw: 10.6'
0900	Try location at GW-01. J. Laird and N. Kirkham unable to get access to house. Will try later
0921	Move to GW-53
	Call ELM locate about GW-52. Gas is clear
0947	Begin drilling GW-53. Lithology will not be logged.
	screen well from 10-15' dtw ~ 9.98 ft
1013	well completed - see boring log for details
	Move to GW-52
1021	Begin drilling GW-52
	water ~26' set screen from 25-30'
	dtw: 22.9'
1100	well completed
1110	Break for lunch
	Meet back up at GW-01

Rite in the Rain.

3/2/16

1230 Begin hand augering

Screened 8-13'

1334 well completed

1358 Move over to GW-48 to redo well (bailer stuck). Will redrill and reset casing

1430 ~~1440~~ KL Finish redrilling.

1445 Drillers leave early to pick up more 55-gal drums.

KR
3/2/16

3/3/16

0730 K. Lazzeri meets Cascade drillers at Sunnyside Park.

Weather: 43°F, cloudy

0735 Tailgate H&S meeting

0801 Move over to ~~GW-44~~ KL GW-43

0824 Begin drilling GW-43

Screen well from ~~27-32'~~ KL 28'-33' dtw: 30.5'

0917 Complete well - Details on well log

Move over to GW-55

0937 Need to wait till gas line can be marked - ask for expedited service.

1022 Gas line marker on site

1048 location cleared

1056 Begin drilling GW-55. No lithology logged

well screened 17-22'

1152 well completed

1208 Move to GW-54

1215 Break for lunch

1310 Back on site

1335 Begin drilling GW-54

1351 Hit refusal - move over 2 Ft to South

Hit refusal again at 13' move 4 Ft to South

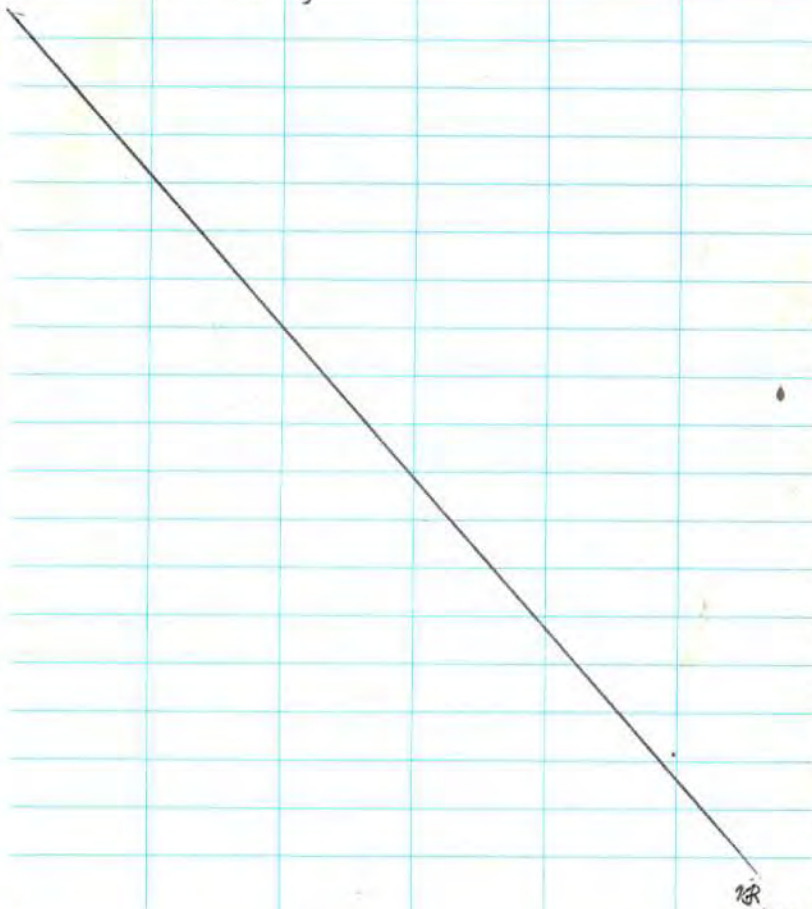
Hit refusal at 13' another time. Stop drilling

Sand saturated enough - set well

Rite in the Rain

3/3/16

	set screen ~~8-13'~~ KL 8.3'-13.3'
1443	Complete well
1500	Discuss whether or not to drill GW-56.
1530	VA decides to cut GW-56 from plan
	will move location to north side
	Finish early



KR
3/3/16

3/4/16

0715	K. Lazzeri meets surveyor at sunnyside Park
0725	Drillers arrive on site
0734	Move over to East High School. N. Kirkham and J. Laird on site.
0740	Tailgate H&S meeting
0801	Begin drilling GW-13
	DTW ~ 21.46'
	Screened 20-25'
0856	well completed
0900	Move over to GW-27
0919	Begin drilling GW-27
	DTW ~ 20.26
	Screened 25'-30'
1022	well completed
1050	setup on GW-28
1101	Begin drilling GW-28. No lithology logged
	DTW ~18.5'
	screened 20-25'
1145	well completed
1205	Break for lunch
1311	Meet at GW-51
1323	Begin drilling GW-51. No lithology logged
	DTW ~ 12.60'
	Screen well 10-15'

Rite in the Rain.

3/4/16

1400 Well completed

1406 J. Laird stops by site for 10 minutes

Setup on GW-59

1436 Begin drilling GW-59

DTW 8.89'

Screen 10-15'

1503 well completed

1530 OFF site.

KR 3/4/16

3/5/16

0830 K. Lazzen meets drillers at Sunnyside Park

0851 Arrived at GW-57

Weather: 40°F, overcast

0855 Have tailgate H&S meeting. J. Laird on site

0910 Begin drilling GW-57. No lithology logged

Hit refusal at 33' - too gravelly, starts at about 27'

1015 Abandon hole

1020 Set up on GW-58. Hand auger first few inches

1037 Begin drilling GW-58

Hit refusal at 40' - too gravelly. No well set

1140 Abandon hole

1200 Break for lunch

1300 At GW-61

1319 Begin drilling GW-61

dtw: 11.7'

screen 15-20'

1348 well completed

1400 Drillers done for day - off site

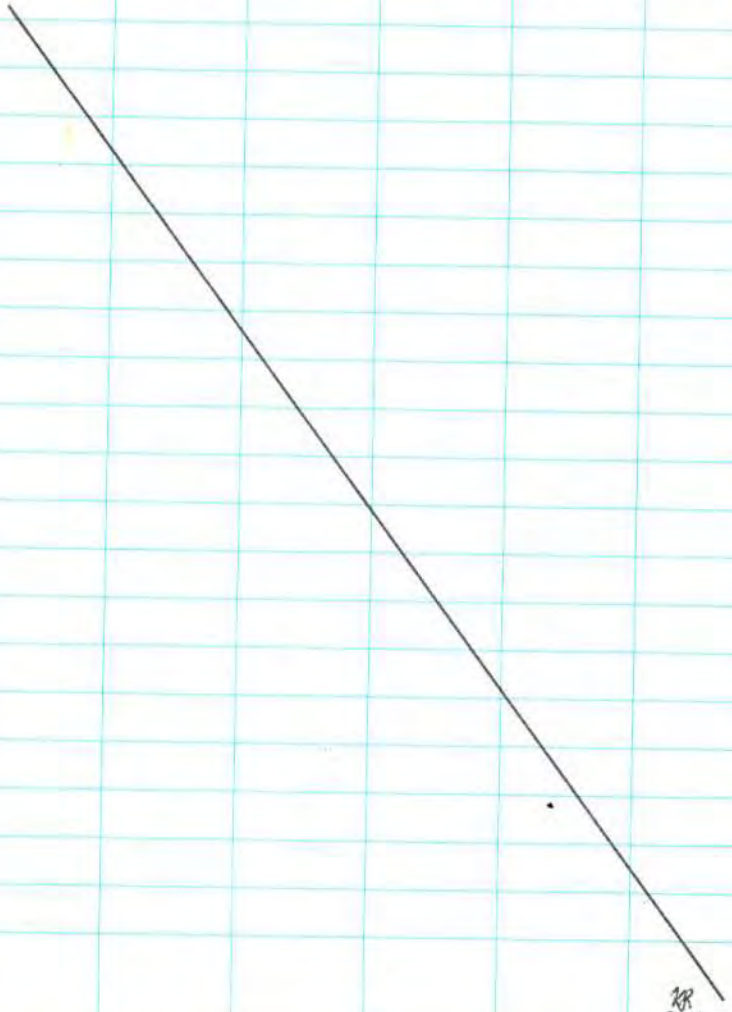
KR 3/5/16

Rite in the Rain

3/~~7~~/16

0800 Drop off IDW at disposal site

1100
~~1000~~ KL Call to determine which wells to abandon:
GW-15, GW-19, GW-22, GW-23, GW-24, GW-31,
GW-39, GW-46, GW-48, GW-54, and GW-21



KR
3/7/16

3/8/16

0700	K. Lazzen meets Cascade Drillers at Sunnyside Park
	weather: sunny, 45°F
	Tailgate H&S meeting
0713	Pull out casing for GW-46
	Fill with bentonite
0721	Pull out casing for GW-48
	Fill with bentonite
0735	Pull out casing for GW-54
	Fill with bentonite
0747	Pull out casing for GW-19
	Fill with bentonite
0755	Pull out casing for GW-23
	Fill with bentonite
0807	Pull out casing for GW-21
	Fill with bentonite
0811	Pull out casing for GW-24
	Fill with bentonite
0815	Pull out casing for GW-39
	Fill with bentonite
0827	Pull out casing for GW-15
	Fill with bentonite
0900	Back at park to grab signs/delineators
0930	K. Lazzen and A. Bugher run to Wasatch Barricade to return rentals

Rite in the Rain

3/8/16

1100	Back at park. Calibrate sampling equipment
1151	Drive over to GW-60
1208	Begin drilling GW-60
	DTW ~10'
	~~Screen 5-15' KL~~
	~~Screen 10-15' KL~~ Screen 10-15'
1236	well completed
1249	Drive over to GW-62
1301	Begin drilling GW-62
	DTW ~13'
	Screen well 15-20'
1345	well completed
1359	Pull out casing for GW-31
	Fill up with bentonite
1430	OFF site. Drillers demobe

KR 3/8/16

MW Sampling

4/25/16

0830	N. Lundvall and K. Lazzeri on site MW-05
0845	M. Aguilar and S. Thiros on site
	Download transducer data (USGS)
	measure dtw: 211.46'. Rolf Lange on site
0852	Conduct H&S tailgate meeting. Review
	HASP, directions to hospital
0956	Place pump in well. Intake at 217'
	turn on pump - circuit breaker tripped
1039	Run to Home Depot for larger generator
1116	Back on site. Start running ~~well~~ KL pump
	water running at 0.40 L/min
1145	parameters stabilized, collect sample
	A-GW-MW-05 for VOCs, SVOCs, and metals
1225	Turn off pump
	Pull pump/water level meter out of ~~pump~~ well KL
	Decontaminate equipment with detergent (liquinox)
	and water rinse
1311	Leave site

KR 4/25/16

Rite in the Rain

4/26/16 MW Sampling

0800 K. Lazzeri and N. Lundvall meet at Sunnyside Park. calibrate field equipment
set up equipment on MW-06
0830 R. Lange arrives on site.
0837 conduct tailgate H&S meeting - slips, trips, falls
download data from transducer/barometer
dtw: 123.43' From TOC
Set pump intake at 127' btoc
0913 Start pumping well at ~~0.40~~ 0.45 L/min
0924 M. Aguilar on site
0945 Parameters stabilized. collect sample A-GW-MW-06
Sample for VOCs, SVOCs, and metals (~~total~~ diss.)
1010 Turn off pump
Remove pump from well, decon equipment
1039 Leave site
1043 Move to ~~GW-01D~~ MW-01D
dtw: 173.02' btoc
download data from transducer/barometer
set pump at 300' btoc
1133 Begin pumping at 0.50 L/min
1215 parameters stabilized, collect sample A-GW-MW-01D
and duplicate A-GW-MW-01D-D
Sample for VOCs, SVOCs, metals, and isotopes
1258 Turn off pump
1339 Pack up/clean up site. Drop off IDW

KR 4/26/16

MW Sampling 4/27/16

0755 K. Lazzeri and N. Lundvall meet at Sunnyside Park. Calibrate field equipment
set up equipment on MW-04
0825 R. Lange arrives on site - M. Aguilar on site
0835 Tailgate H&S meeting - proper lifting techniques
MW-04 dtw: 136.62' from TOC
download data from transducer/barometer
set pump intake at 155' btoc
0910 start pumping at 0.40 L/min
Parameters stabilized, collect sample A-~~GW~~GW-MW-04
0950 sample for VOCs, SVOCs, and metals (total + diss.)
1010 Turn off pump
1029 Pack up and leave site
1034 Set up on MW-02
dtw: 171.25' btoc download transducer/barometer
Set up pump intake at 191' btoc
1100 Turn on pump. Pumping 0.22 L/min
Bump up to 0.40 L/min
Parameters stabilized, collect sample A-GW-MW-02
1135 Sample for VOCs, SVOCs, and metals
1203 Turn off pump
Collect equipment rinsate
1259 Pack up site. Drop off IDW

KR 4/27/16

Rite in the Rain

4/28/16

0845 ~~0900~~ KL Meet with E. Ferguson of Salt Lake City at SLC-18
K. Lazzeri, N. Lundvall, and R. Lange on site
Well pump has been pumping since 0850 and pumps at a rate of ~ 3028 L/min
sample collected off spigot in well vault

0900 A-GW-SLC-18 collected for VOCs, SVOCs, total + dissolved metals, and isotopes
Depth of pump intake unknown

0930 Pump turned off

0950 Leave site

1000 Relocate to U of U #1. Meet with Jim Staples from plumbing shop
Spigot located in underground vault

1005 collect A-GW-UU1 for VOCs, SVOCs, trace + total metal
Depth of pump intake unknown

1015 Leave site

1020 Move to MW-01S
dtW: 156.97' btoc
download data from baromeler/transducer
set pump at 200' btoc

1111 Begin pumping at 0.35 L/min
Parameters stabilized, collect sample A-GW-MW-01S
sample for VOCs, SVOCs, total and dissolved metals, isotopes

1235 Turn off pump

1240 Pack up/clean up site. Drop off IDW and ship samples. Return rental generator

KR 4/28/16

5/2/16

0850 K. Lazzeri, N. Lundvall, and J. Laird meet at Mt. Olivet cemetary. Meet with grounds keeper D. Valdez to access pump house
well pumping since ~~0900~~ 0705 KL. Unable to place anything in well, water collected off standpipe.

0900 A-GW-MTO collected (w/ MS/MSD) for VOCs, SVOCs, metals (dissolved + total), and isotopes

1000 Leave site

1100 Drop off isotope samples to SIRFER lab
Pack up groundwater samples

1300 Meet up with J. Laird at SW-43

1315 A-SW-043 collected from spring in backyard (VOCs and isotopes) - peristaltic pump

1330 Leave site

1335 At SW-~~33~~ 04 KL. Ponds in Front yard. Spring-fed ~~Seep coming out of curb onto Gilmer Ave.~~ KL

1340 Collect A-SW-~~033~~ 004 KL for VOCs and isotopes

1358 At SW-33. Seep coming from curb on Gilmer Ave.

1400 collect A-SW-033 for VOCs and isotopes

1415 At SW-42. Spring in backyard

1420 collect sample A-SW-042 for VOCs and isotopes

1429 At SW-34. Springs in Front Yard.

1430 collect sample A-SW-034 for VOCs and isotopes

1500 At SW-31. Seep in backyard

1510 collect sample A-SW-031 for VOCs and isotopes

KR 5/2/16

Rite in the Rain.

5/3/16

0830 K. Lazzeri, N. Lundvall, and J. Laird meet at SW-09 seep in backyard

0855 collect ~~SW~~ A-SW-009 for VOCs and isotopes and A-SS-09 (MS/MSD) for VOCs, SVOCs, & metals

0925 At SW-23 - sump in backyard

0930 collect A-SW-023 for VOCs, SVOCs, metals, anions, TDs, and isotopes (MS/MSD)

1028 At SW-12. Spring in backyard

1030 collect A-SW-012 for VOCs, SVOCs, metals, anions, TDs, and isotopes

1118 At SW-27. Seep coming out of retaining wall

1120 collect A-SW-027 for VOCs, SVOCs, metals, anions, TDs, and isotopes

~~1157~~ ~~1227~~ KL At SW-28. Mitigated spring water

~~1200~~ ~~1230~~ KL collect A-SW-028 for VOCs, SVOCs, metals, anions, TDs, and isotopes

1225 At SW-11. Seep in front yard

1230 collect A-SW-011 for VOCs and isotopes

1315 At SW-21. Cistern in backyard.

1320 collect A-SW-021 for VOCs, SVOCs, metals, anions, TDs, and isotopes

1339 At SW-26. Seep in backyard

1345 collect A-SW-026 for VOCs, SVOCs, metals, anions, TDs, and isotopes. Collect A-SS-26

1428 At SW-13

1430 collect A-SW-013 for VOCs and isotopes

5/3/16

1545 At SW-22. Sump in backyard

1550 collect A-SW-022 for VOCs and isotopes

1628 At SW-30. Spring in backyard

1630 collect A-SW-030 for VOCs and isotopes

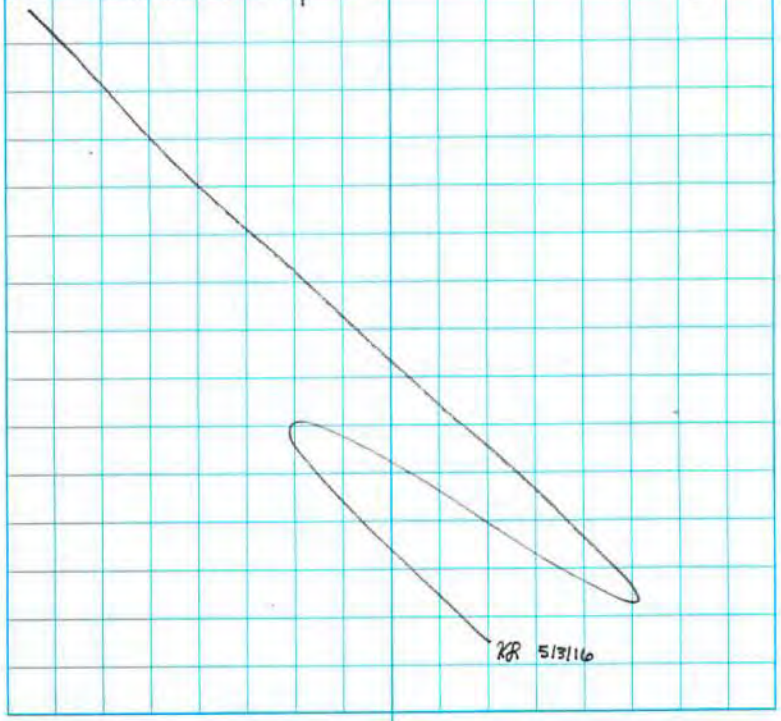
1655 At SW-39. Mitigated spring water

1700 collect A-SW-039 for VOCs and isotopes

1728 At SW-36. Seep in backyard

1730 collect A-SW-036

Finish for day



Rite in the Rain

5/4/16

0800 K. Lazzeri, N. Lundvall, & R. Lange meet at SW-19

0820 collect ~~A~~-SW-019. For VOCs and isotopes
location is a spring in backyard

0835 At SW-47. Red Butte Creek on same property

0840 collect A-SW-047 for VOCs, SVOCs, metals, anions, TDS, and isotopes

0855 At SW-14. Sump on east side of property.

0900 Collect A-SW-014 for VOCs and isotopes

0924 At SW-35. Seep in backyard
J. Laird stops by site

0930 Collect A-SW-035 for VOCs and isotopes

0945 At SW-48. Spring in backyard.

0950 collect A-SW-048 (MS/MSD) for VOCs and isotopes

1008 At SW-08. Seep in backyard

1010 collect A-SW-008 and A-SW-008-D for VOCs and isotopes

1050 At SW-07. Spring box in backyard

1100 collect A-SW-007 and A-SW-007-D for VOCs, SVOCs, metals, anions, TDS, and isotopes.

1125 At SW-15. Seep in backyard.

1130 collect A-SW-015 for VOCs, SVOCs, metals, anions, TDS, and isotopes.

1310 At SW-16. Spring at our Lady of Lourdes. Meet with ~~1315~~ KL building manager.

1320 Collect A-SW-016 for VOCs, SVOCs, metals, anions, TDS, and isotopes.

1335 At SW-01. Seep onto sidewalk

KR 5/4/16

5/4/16

1340 collect soil samples A-SS-01 and A-SS-01-D

1400 collect ~~groundwater~~ A-SW-001 KL and A-SW-001-D for VOCs and isotopes

1420 At SW-44. Spring in backyard.

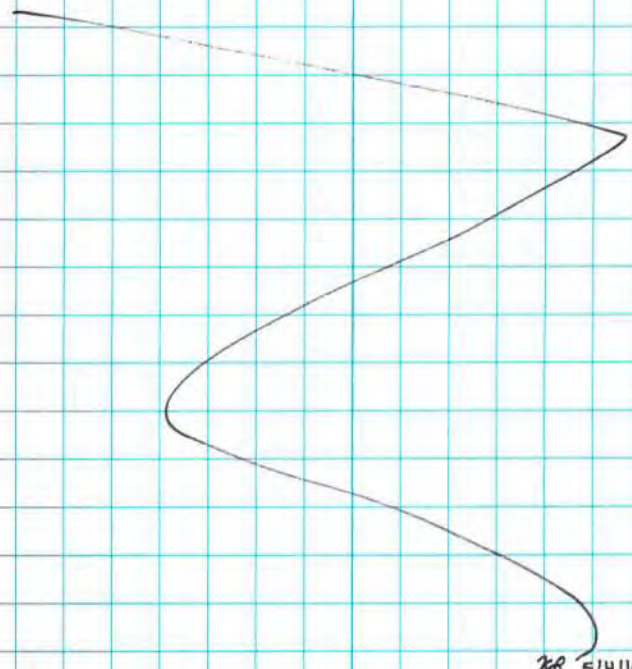
1430 Collect A-SW-044 (MS/MSD) for VOCs and isotopes.

1445 Meet up and pack up samples

1650 At SW-06. Sump that looks like well.

1700 collect A-SW-006 and A-SW-006-D for VOCs and isotopes

1710 Finish for day



KR 5/4/16

Rite in the Rain.

5/5/16

0900 K. Lazzeri, N. Lundvall, and R. Lange meet at SW-18.

0910 collect A-SW-018 and A-SW-018-D for VOCs and isotopes

Location is a storm drain w/ spring water

0950 ~~1050~~ KL At SW-45. Salt Lake & Jordan Canal

1000 collect A-SW-045 for VOCs and isotopes

1025 At SW-20. Storm drain w/ spring water

1030 Collect A-SW-020 for VOCs and isotopes

1039 At SW-49. Salt Lake & Jordan Canal

1040 Collect A-SW-049 for VOCs and isotopes

1058 At SW-41. storm drain with spring water

1100 collect A-SW-041 for VOCs and isotopes

1118 At SW-32. storm drain with spring water

1120 Collect A-SW-032 for VOCs and isotopes

1130 Pack up samples for lab

1400 collect soil IDW sample. AOU-1-IDW-SOIL

Soil from different locations in two 55 gal drums

composite samples. Drop off at ALS Environmental

1728 Meet N. Kirkham at SW-46. spring in backyard

1730 Collect A-SW-046 for VOCs and isotopes

1741 At SW-40. Sump underneath house

1745 Collect A-SW-040 for VOCs and isotopes

1758 At SW-25. Mitigated spring water into storm drain

1800 collect A-SW-025 for VOCs and isotopes

1813 At SW-37. storm drain with spring water

1815 Collect A-SW-037 for VOCs and isotopes

RR 5/5/16

5/11/16

0730 K. Lazzeri and R. Lange meet with SLC stormwater maintenance

0750 At SW-05. storm drain

0757 collect A-SW-005 for VOCs and isotopes

0806 At SW-38. storm drain

0810 collect A-SW-038 for VOCs and isotopes

0836 At SW-10. storm drain

0840 collect A-SW-010 for VOCs and isotopes

0908 At SW-02. storm drain.

0910 collect A-SW-002 for VOCs and isotopes

0923 At SW-24. storm drain.

0925 collect A-SW-024 for VOCs and isotopes

0933 At SW-29. spring in backyard ~~storm drain~~ KL

0935 Collect A-SW-029 for VOCs and isotopes

1015 At SW-17. Salt Lake & Jordan Canal

1018 collect A-SW-017 (MS/MSD) for VOCs and isotopes

1030 Pack samples for lab

RR 5/11/16

Rite in the Rain

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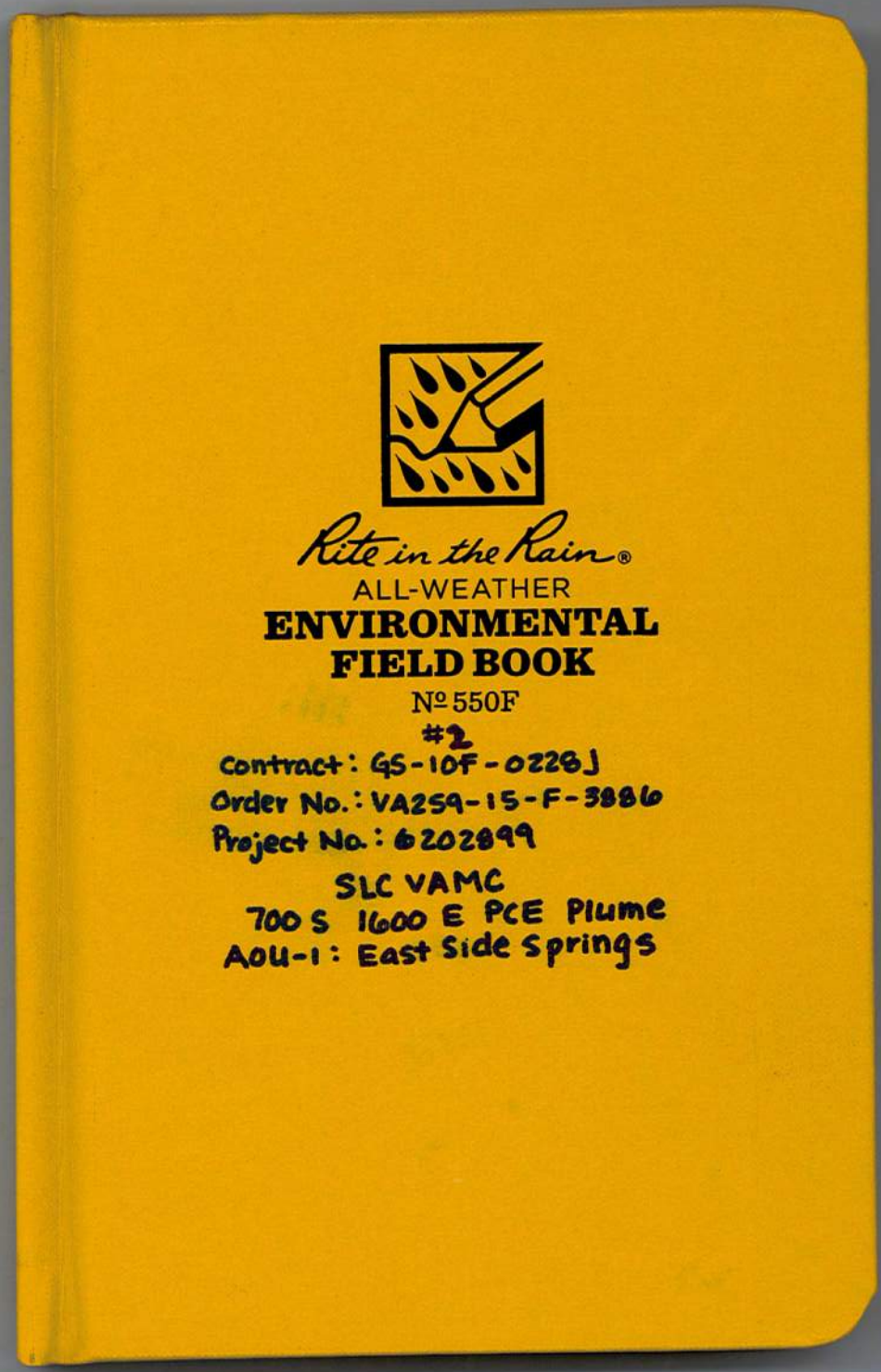
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ALL-WEATHER

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Project SLC VAMC

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150 Approximate Volume of Water in Casing or Hole, Ground Water Monitoring Well
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153 Soil Classification
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155 Conversions (Concentrations, Volume/Flow or Time, Velocity, Acceleration)
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CONTENTS

PAGE	REFERENCE	DATE

Location Salt Lake City, UT Date 2-22-16

Project / Client 700S. 1600E. PCE Plume site VA

A. Bugher (AMB)

0800 Meet w/ K. Lazzeri to load up equipment. This is the MW sampling book.
0850 Arrive at Sunnyside Park
On site: EA Engineering (A. Bugher, K. Lazzeri, S. Staigerwald)
Cascade (D. Morlock, O. waters)
VA (N. Kirkham, J. Laird)
0900 Calibrate YSI, turbidity meter
1000 Tailgate meeting conducted by K. Lazzeri: review HASP, hospital route, emergency contacts.
Depart to location for GW-23 (651 Elizabeth).
1045 Observe drilling, prep for ground water sampling.
Weather: 40°F, light snow/sleet.
1355 Pump started (Peristaltic)
1358 Field Measurements: pH, Specific conductivity, Turbidity, Dissolved Oxygen, Temperature, Oxidation Reduction Potential, Flow rate.
These will be measured every 3-5 minutes until stabilization occures.

2-22-16 AMB

Rite in the Rain

Location Salt Lake City, UT Date 2-22-16 Cont.

Project / Client 700 S. 1600 E. PCE Plume site VA

A. Bugher (AMB)

Depth to water will be measured before pumping begins as well as after the sample tubing is removed. Continuous depth to water cannot be measured due to the well casing diameter. (0.75")

1425 Sample time. A-GW-023 is the sample Identification number. A MS/MSD was collected at this location for the VOC analysis for the EPA Region 8 CLP Laboratory. A second set of VOA vials were collected for the VOC analysis for a quick turnaround private lab.

* The turbidity for this location was above the range of the meter.
* The pH probe was not working correctly.

1431 Stop pump, decon and depart for GW-39 (750 S. 1100 E.)

1630 Started pump. pH probe not working.

* Battery died, decon and pack.

2-22-16 AMB

Location Salt Lake City, UT Date 2-23-16

Project / Client 700 S. 1600 E. PCE Plume site VA

A. Bugher (AMB)

0730 Depart hotel after calibrating YSI, turbidity. Drop off sample at private lab. Depart for GW-39 to sample.

1020 Pump started, pH not working and still waiting on replacement.

1044 Started Field Measurements

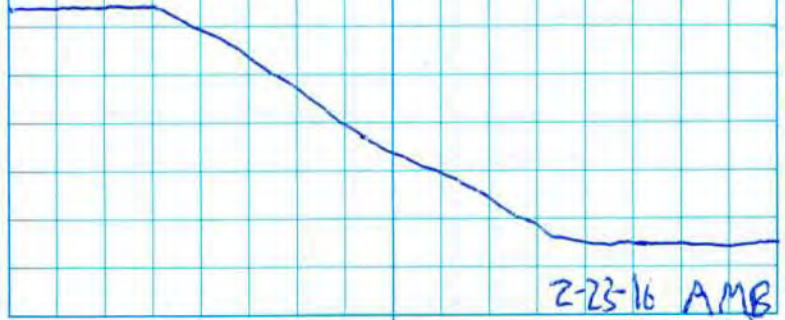
1115 Sample collected A-GW-039, Duplicate was planned but there was not enough water.

* No headspace was collected.

1128 Pump off. Depart for errands and GW-24. New YSI Calibrated.

1350 Start pump at GW-24.

1400 Well ran dry after pumping 300 mL. Decon. Depart for errands, private lab, and FedEx to ship CLP samples.



2-23-16 AMB

Rite in the Rain

6

Location Salt Lake City, UT Date 2-24-16

Project / Client 700 S. 1600 E. PCE Plume site VA

A. Bugher (AMB)

0730	Calibrate turbidity meter. Depart hotel to GW-24.
0850	Pump on, ran dry after 700mL. Calibrate YSI, pack old YSI for shipment. Depart for GW-46.
1135	GW-46 water Level (WL) = 29.58' Bailer purged ≈ 1.5L. Took 1 single reading for parameters.
1520	Sample time A-GW-046. Sampled for VOCs for CLP + Private lab. Depart for errands, private lab, and FedEx.



2-24-16 AMB

2-25-16 AMB 2-25-16

Location Salt Lake City, UT Date ~~2-24-16~~

Project / Client 700 S. 1600 E. PCE Plume site VA

Aaron Bugher (AMB)

0730	Depart ~~E~~ AMB 2-25-16 Hotel for VA (IDW Disposal). Depart for ~~GW-24~~ AMB 2-25-16 GW-24.
0830	Calibrate YSI + Turbidity
0910	WL = 10.71', Headspace + one parameter reading was taken for GW-24, due to low recharge.
0920	Sample time for the two sets of VOCs, sample taken w/ disposable bailer. Depart for GW-048.
1030	WL = 36.34
1205	Parameters collected with disposable bailer.
1210	Sample time for private lab VOCs. * The bailer got stuck in the well and the CLP VOCs could not be collected. Depart for GW-049. WL = 7.57'
1310	Peristaltic pump started.
1325	Sample time. A-GW-049 for VOCs, SVOCs, Metals, Anions, Alkalinity, TDS, pH all are CLP m/s/msD. VOCs for private

2-25-16 AMB

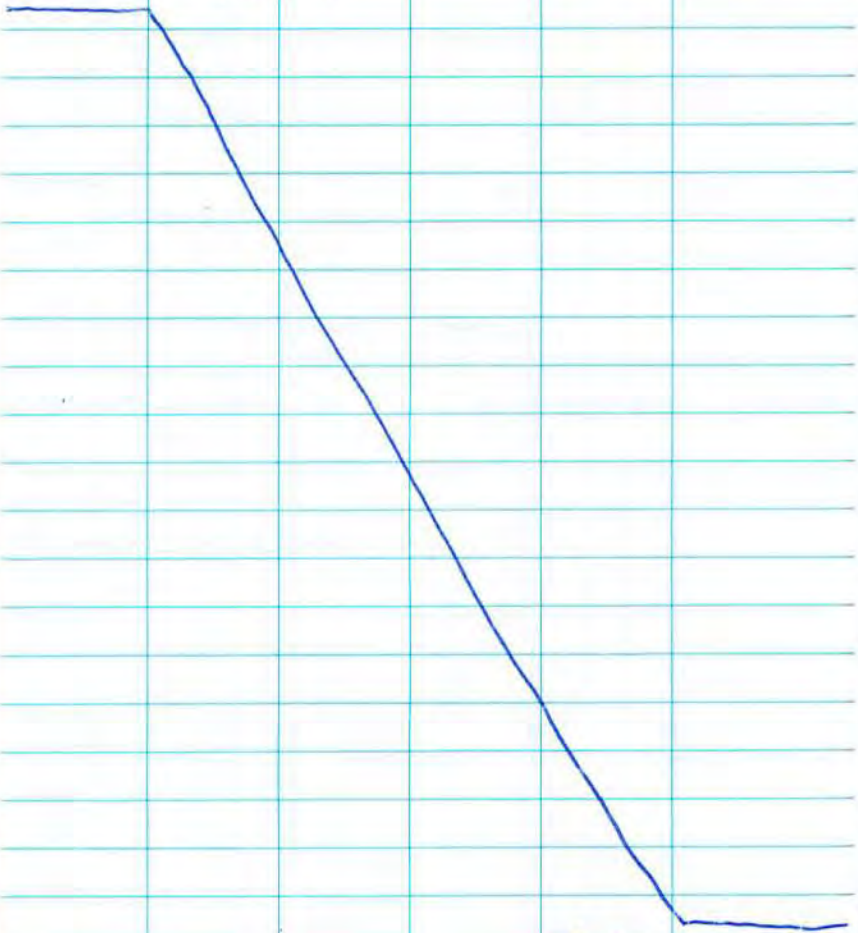
Rite in the Rain

Location Salt Lake City, UT Date 2-25-16 cont.

Project / Client 700 S. 1600 E. PCE Plume site VA

A. Bugher (AMB)

Lab were collected.
Depart for GW-003, WL=28.38'
Depart for errands, private lab, and FedEx.



2-25-16 AMB

Location Salt Lake City, UT Date 2-26-16

Project / Client 700 S. 1600 E. PCE Plume site VA

A. Bugher (AMB)

0745	Depart Hotel for GW-003 WL=28.40'
0836	Peristaltic pump started. After 400mL purged the pump could not produce water from that depth. Purging with a disposable bailer.
1010	Sample time A-GW-003, both sets of VOCs. Sample collected with disposable bailer as was the parameters. Depart for GW-005, WL=2.46'
1050	Pump started. S. Striegerwald on site.
1101	Parameters started.
1120	Sample time, A-GW-005, both sets of VOCs.
1125	Pump shut off. Depart for GW-006, WL=4.66'
1128	Pump on, well dry (5 min.)
1145	Pump on, well dry (2 min)
1205	Pump on, sample time for A-GW-006, both sets of VOCs collected.

2-26-16 AMB

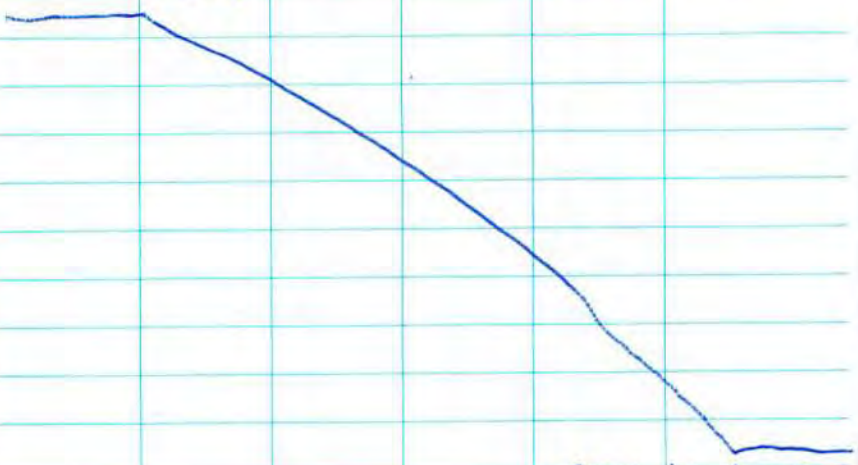
Rite in the Rain

Location Salt Lake City, UT Date 2-26-16 Cont.

Project / Client 700 S. 1600 E. PCE Plume site VA

A. Bugher (AMB)

	Depart GW-007, WL = 8.63'
1237	pump on, dry after 50 mL
1247	pump on, dry after 10 mL
	Depart for GW-004, WL = 17.26'
1355	pump on, very turbid waters.
1440	parameters started.
1500	Sample time, A-GW-004, both VOCs.
	Depart for GW-009, WL = 4.91'
1535	Pump on, slow to recharge, dry every ≈5 min.
1610	One set of parameters collected.
1620	Sample time, A-GW-009 for both VOCs.
	Depart for errands, private lab, and FedEx.



2-26-16 AMB

Location Salt Lake City, UT Date 2-27-16

Project / Client 700 S. 1600 E. PCE Plume site VA

A. Bugher (AMB)

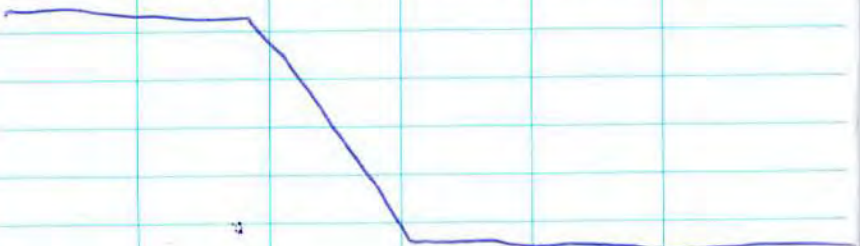
0745	Depart hotel, errands, depart to GW-048. Could not pull the stuck bailer out of the well.
	Depart for GW-007, WL = 8.63'
0931	Collected one parameter reading. Dry well. Will collected VOCs when well is recharged.
	Depart for GW-026, WL = 16.48'
0950	S. Stalgerwald on site.
0954	Pump on, dry well ≈ 200 mL. parameters collected at a later time if possible.
1032	Depart for GW-010, WL = 12.22'
1037	pump on
1050	parameters taken.
1110	sample time, A-GW-010, Duplicate collected for CLP. Private lab collected as normal.
	Depart for GW-011
1145	WL = 2.56'
1150	pump on.
1155	Parameters started.
1220	Sample time, A-GW-011 for both VOCs.

2-27-16 AMB Rite in the Rain

Location Salt Lake City, UT Date 2-27-16 cont.

Project / Client 700 S. 1600 E. PCE Plume site VA
A. Bugher (AMB)

	Depart for GW-007
1252	WL=8.72', bailed out water fill dry.
	Depart for GW-026
1350	Collected 2 vials for private lab.
	Depart for GW-008
1450	WL=6.96
1507	pump on. Dry after 500 mL.
1517	pump on, dry after 200 mL.
1527	pump on, dry after 100 mL.
1543	pump on, dry after 300 mL.
1550	Collected parameters.
1600	Sample time A-GW-008 for both VOCs.
1637	pump off.
	Depart for GW-026
1700	Collected final private lab VOCs.
	Depart for errands and Hotel.

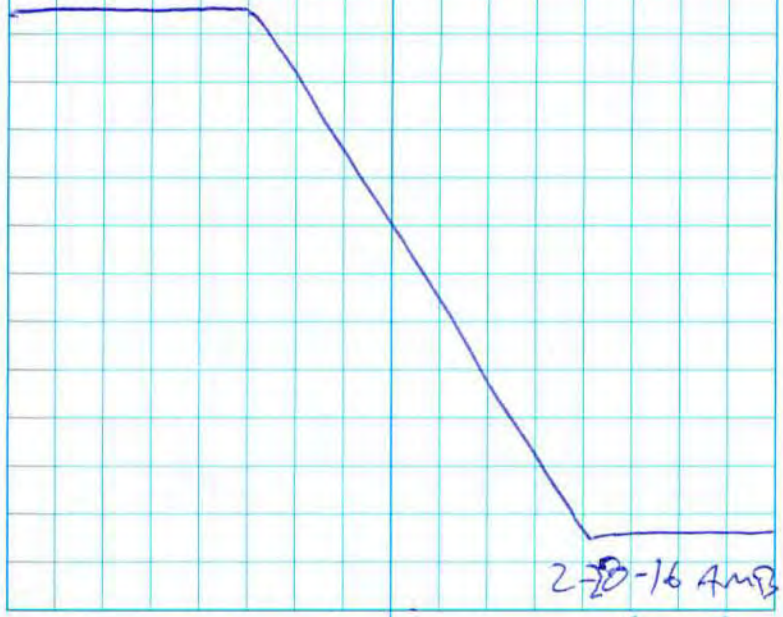


2-27-16 AMB

Location Salt Lake City, UT Date 2-28-16

Project / Client 700 S. 1600 E. PCE Plume site VA
A Bugher (AMB)

0900	Depart for errands and GW-031, WL=31.87
1008	Parameters taken with bailer.
1010	Sample collected A-GW-031, both VOCs.
	Depart for GW-016
1050	WL=2.00'
1100	Pump start.
1113	Parameters collected.
1135	Sample time.
1150	Pump off.



2-28-16 AMB

Rite in the Rain

Location Salt Lake City, UT Date 2-29-16

Project / Client 700 S. 1600 E. PCE Plume site VA

A. Bugher (AMB)

0800	Depart hotel for errands and
	GW-015, WL ≈ 0.5'
0915	Pump on. S. Staigerwald on site.
0941	Parameters started.
1000	Sample time A-GW-015 CLP:
	VOCs, SVOCs, Metals, Anions, Alkalinity,
	TDS, pH (ms/msD & Duplicate for
	all analyses). VOCs for private
	lab as normal.
1205	Field Blank collected.
	Depart for GW-050, WL = 2.69'
1246	Pump on.
1257	parameters started.
1330	Sample time A-GW-050
	VOCs, SVOCs, Anions, Metals, TDS,
	pH, Alkalinity for CLP. VOCs for
	private Labs
	Depart for GW-025, WL = 23.10'
1458	Disposable bailer collected readings.
1505	Sample time for both VOCs.
	Depart for lab and FedEx

2-29-16 AMB

Location Salt Lake City, UT Date 03-01-16

Project / Client 700 S. 1600 E. PCE Plume site VA

A. Bugher (AMB)

0730	Depart for GW-22, WL = 5.33
0836	Pump on
0908	parameters started.
0930	Sample time A-GW-22, both
	VOCs
0932	pump off
	Depart GW-19
	WL = 11.17'
0950	pump on, Dry after 10 min
	Depart GW-020 WL = 11.47'
1035	pump on
1045	parameters started
1110	Sample time A-GW-020 for
	private VOCs and CLP
	VOCs, SVOCs, TDS, Metals, Alkalinity,
	pH, Anions.
1145	pump off.
	Depart for GW-012
1210	WL = 4.35'
1212	pump on, Dry at 1400 mL
1227	pump off
	Depart for GW-017
	WL = 14.40, Disposable
	bailer. Depart GW-018

3-1-16 AMB Rite in the Rain

Location Salt Lake City, UT Date 3-1-16 cont.

Project / Client 700 S. 1600 E. PCE Plume site VA

A. Bugher (AMB)

1408	pump on At GW-018
	WL = 8.15', Dry after 4000 mL
	Depart for GW-021
1443	pump on
1505	parameters started.
1525	Sample time A-GW-021, both VOCs
1553	pump off
	Depart for lab and Fed Ex



3-1-16 AMB

Location Salt Lake City, UT Date 3-2-16

Project / Client 700 S. 1600 E. PCE Plume site VA

A Bugher (AMB)

0700	Depart to VA for IDW disposal. Depart for GW-012.
0930	WL = 7.69'
1000	Sample time for both VOCs. (only 2 vials)
1030	Field Blank
	Calibrate YSI
	Depart GW-017, WL = 14.32
	Purged with bailer, no water quality collected.
1200	Sample time for CLP VOCs.
	Depart for GW-014, WL = 10.00'
1254	Pump on
1322	Parameters collected
1345	Sample time, VOCs for private, Full sweep for CLP.
1432	pump off
	Depart for GW ~~-022~~ -012 AMB 3-2-16
	to collect final Vial.
1500	Final vial collected.
	Depart for Lab & FedEx.



3-2-16 AMB

Rite in the Rain

Location Salt Lake City, UT Date 3-3-16

Project / Client 700 S. 1600 E PCE plume site VA

A. Bugher (AMB)

0715	Depart for IDW disposal and GW-019, Calibrate YSI/turb.
	* Ground water never recovered.
	Depart GW-048, WL = 35.79
1005	parameters collected
1015	Sample time for CLP VOCs.
	Depart for GW-040
	WL = 34.53'
	purged w/ bailer.
1209	Parameters collected.
1220	Sample time.
	Depart GW-52, WL = 22.84'
1320	pump on
1333	parameters read.
1350	Sample time ms/msd & Dup for CLP VOCs. Normal VOCs for
	private.
1408	pump off.
	~~Depart GW-040~~ KEL 6/28/16
1415	WL = 35.80'
	Depart GW-053, WL
1527	pump on
1546	parameters started

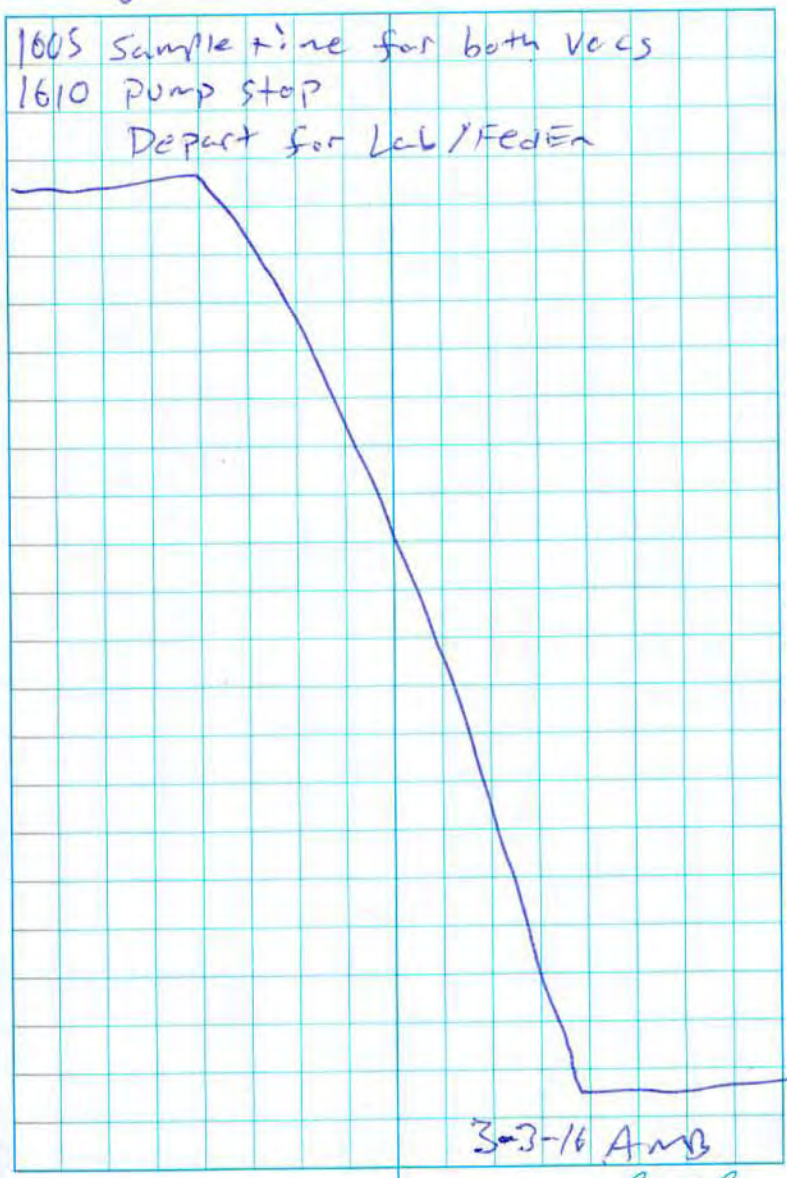
AMB 3-3-16

Location Salt Lake City, UT Date 3-3-16 cont.

Project / Client 700 S. 1600 E. PCE Plume site VA

A. Bugher (AMB)

1605	Sample time for both VOCs
1610	Pump stop
	Depart for Lab/FedEx



3-3-16 AMB

Rite in the Rain

Location Salt Lake City, UT Date 3-4-16

Project / Client 700 S. 1600 E. PCE Plume site VA

A Bugher (AMB)

0730	Depart hotel for IDW disposal
	Depart for GW-043 and
0930	collected parameters
	Depart for GW-55, WL=21.97
	purged with bailer
1100	well Dry, only collected
	headspace.
	Depart GW-054, NO water
	Depart GW-001, WL=11.93'
1235	pump on
1248	parameters collected
1310	sample time, Dup for CLP VOCs
1315	pump stopped.
	Depart to GW-013, WL=21.44
1440	pump on, ran dry in 15 min.
1530	took readings for second time.
1545	Sample time for VOCs.
	Depart for GW-051, WL=12.47'
1810	pump on
1820	parameters collected.
1840	Sample time for VOCs.
1850	pump off.
	Depart for errands

3-4-16 AMB

Location Salt Lake City, UT Date 3-5-16

Project / Client 700 S. 1600 E. PCE Plume site VA

A Bugher (AMB)

0800	Depart for IDW, errands, and
	GW027, WL=21.73'
1030	pump on
1056	parameters collected
1115	Sample time, ms/ms5 for
	CLP VOCs.
1130	pump off
	Depart GW-028, WL=18.45
1217	pump start
1244	Parameters started
1310	Sample time VOCs collected
1320	pump stop
	Depart GW-061, WL=11.71
1430	AMB 3-5-16 pump on
~~145~~ 1447	parameters collected.
1505	Sample time for VOCs
1515	pump off
	Depart GW-059, WL=8.18
1548	pump on
1557	parameters started
1620	Sample time for VOCs
1625	pump off
	Depart for errands

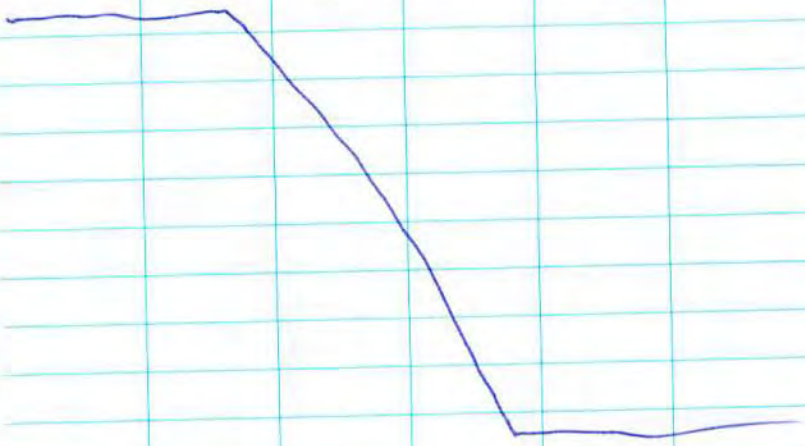
3-5-16 AMB

Rite in the Rain

Location Salt Lake City, UT Date 3-8-16

Project / Client 700 S. 1600 E. PCE Plume site VA
A Bugher (AmB)

0830	Depart to drop off traffic signs and wait for GW-060 to be drilled. GW-060, WL = 9.70'
1258	pump on
1300	Field Blank
1313	parameters started
1330	Sample time
	Depart GW-062, WL = 12.82'
1350	pump on ~~parameters started~~ AmB 3-2-16
1408	parameters started
1425	Sample time
1430	pump stop.
	Depart for lab and FedEx



Location _____ Date _____

Project / Client _____

Rite in the Rain

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Attachment B
Photographic Log

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Photograph No. 1 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-01 using low flow purge methods.
Date: 03-04-16 Direction: Southeast



Photograph No. 2 Site: 700 South 1600 East PCE Plume
Description: Location of temporary groundwater monitoring point GW-01 after abandonment.
Date: 04-05-16 Direction: Southeast



Photograph No. 3 Site: 700 South 1600 East PCE Plume
Description: Installing temporary groundwater monitoring point GW-03 with Geoprobe® rig.
Date: 02-24-16 Direction: South



Photograph No. 4 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-03 using low flow purge methods.
Date: 02-26-16 Direction: North



Photograph No. 5 Site: 700 South 1600 East PCE Plume
Description: Location of temporary groundwater monitoring point GW-03 after abandonment.
Date: 04-05-16 Direction: North



Photograph No. 6 Site: 700 South 1600 East PCE Plume
Description: Installing temporary groundwater monitoring point GW-04 with Geoprobe® rig.
Date: 02-26-16 Direction: East



Photograph No. 7 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-04 using low flow purge methods.
Date: 02-26-16 Direction: Southeast



Photograph No. 8 Site: 700 South 1600 East PCE Plume
Description: Location of temporary groundwater monitoring point GW-04 after abandonment.
Date: 04-06-16 Direction: East



Photograph No. 9 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-05 using low flow purge methods.
Date: 02-26-16 Direction: Northeast



Photograph No. 10 Site: 700 South 1600 East PCE Plume
Description: Location of temporary groundwater monitoring point GW-05 after abandonment.
Date: 04-05-16 Direction: West



Photograph No. 11 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-06 using low flow purge methods.
Date: 02-26-16 Direction: Northeast



Photograph No. 12 Site: 700 South 1600 East PCE Plume
Description: Location of temporary groundwater monitoring point GW-06 after abandonment.
Date: 04-06-16 Direction: East



Photograph No. 13 Site: 700 South 1600 East PCE Plume
Description: Installing temporary groundwater monitoring point GW-07 with Geoprobe® rig.
Date: 02-25-16 Direction: South



Photograph No. 14 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-07 using low flow purge methods.
Date: 02-26-16 Direction: Southeast



Photograph No. 15 Site: 700 South 1600 East PCE Plume
Description: Location of temporary groundwater monitoring point GW-07 after abandonment.
Date: 04-06-16 Direction: Northeast



Photograph No. 16 Site: 700 South 1600 East PCE Plume
Description: Installing temporary groundwater monitoring point GW-08 with Geoprobe® rig.
Date: 02-27-16 Direction: East



Photograph No. 17 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-08 using low flow purge methods.
Date: 02-27-16 Direction: West



Photograph No. 18 Site: 700 South 1600 East PCE Plume
Description: Location of temporary groundwater monitoring point GW-08 after abandonment.
Date: 04-05-16 Direction: North



Photograph No. 19 Site: 700 South 1600 East PCE Plume
Description: Location of temporary groundwater monitoring point GW-09 prior to drilling with Geoprobe® rig.
Date: 02-26-16 Direction: North



Photograph No. 20 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-09 using low flow purge methods.
Date: 02-26-16 Direction: North



Photograph No. 21 Site: 700 South 1600 East PCE Plume
Description: Location of temporary groundwater monitoring point GW-09 after abandonment.
Date: 04-06-16 Direction: Northwest



Photograph No. 22 Site: 700 South 1600 East PCE Plume
Description: Installing temporary groundwater monitoring point GW-10 with Geoprobe® rig.
Date: 02-26-16 Direction: North



Photograph No. 23 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-10 using low flow purge methods.
Date: 02-27-16 Direction: Northwest



Photograph No. 24 Site: 700 South 1600 East PCE Plume
Description: Surface completion of piezometer GW-10.
Date: 04-05-16 Direction: East



Photograph No. 25 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-11 using low flow purge methods.
Date: 02-27-16 Direction: Southwest



Photograph No. 26 Site: 700 South 1600 East PCE Plume
Description: Surface completion of piezometer GW-11.
Date: 04-05-16 Direction: Northeast



Photograph No. 27 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-12 using low flow purge methods.
Date: 03-01-16 Direction: East



Photograph No. 28 Site: 700 South 1600 East PCE Plume
Description: Installing temporary groundwater monitoring point GW-13 with Geoprobe® rig.
Date: 03-04-16 Direction: South



Photograph No. 29 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-13 using low flow purge methods.
Date: 03-04-16 Direction: Northwest



Photograph No. 30 Site: 700 South 1600 East PCE Plume
Description: Location of temporary groundwater monitoring point GW-13 after abandonment.
Date: 04-05-16 Direction: South



Photograph No. 31 Site: 700 South 1600 East PCE Plume
Description: Temporary groundwater monitoring point GW-15 installed via hand auger.
Date: 02-27-16 Direction: Northwest



Photograph No. 32 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-16 using low flow purge methods.
Date: 02-28-16 Direction: East



Photograph No. 33 Site: 700 South 1600 East PCE Plume
Description: Surface completion of piezometer GW-16.
Date: 04-05-16 Direction: East



Photograph No. 34 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-17 using low flow purge methods.
Date: 03-01-16 Direction: Southeast



Photograph No. 35 Site: 700 South 1600 East PCE Plume
Description: Installing temporary groundwater monitoring point GW-18 with Geoprobe® rig.
Date: 03-01-16 Direction: West



Photograph No. 36 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-18 using low flow purge methods.
Date: 03-01-16 Direction: South



Photograph No. 37 Site: 700 South 1600 East PCE Plume
Description: Location of temporary groundwater monitoring point GW-19 prior to abandonment.
Date: 03-08-16 Direction: North



Photograph No. 38 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-20 using low flow purge methods.
Date: 03-01-16 Direction: West



Photograph No. 39 Site: 700 South 1600 East PCE Plume
Description: Surface completion of piezometer GW-20.
Date: 04-06-16 Direction: Northeast



Photograph No. 40 Site: 700 South 1600 East PCE Plume
Description: Location of temporary groundwater monitoring point GW-21 prior to drilling with Geoprobe® rig.
Date: 02-29-16 Direction: East



Photograph No. 41 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-21 using low flow purge methods.
Date: 03-01-16 Direction: South



Photograph No. 42 Site: 700 South 1600 East PCE Plume
Description: Location of temporary groundwater monitoring point GW-21 after abandonment.
Date: 03-08-16 Direction: East



Photograph No. 43 Site: 700 South 1600 East PCE Plume
Description: Installing temporary groundwater monitoring point GW-22 with Geoprobe® rig.
Date: 02-29-16 Direction: North



Photograph No. 44 Site: 700 South 1600 East PCE Plume
Description: Location of temporary groundwater monitoring point GW-22 prior to abandonment.
Date: 04-05-16 Direction: North



Photograph No. 45 Site: 700 South 1600 East PCE Plume
Description: Location of temporary groundwater monitoring point GW-23 prior to drilling with Geoprobe® rig.
Date: 02-22-16 Direction: Southeast



Photograph No. 46 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-23 using low flow purge methods.
Date: 02-22-16 Direction: East



Photograph No. 47 Site: 700 South 1600 East PCE Plume
Description: Location of temporary groundwater monitoring point GW-23 after abandonment.
Date: 03-08-16 Direction: North



Photograph No. 48 Site: 700 South 1600 East PCE Plume
Description: Installing temporary groundwater monitoring point GW-24 with Geoprobe® rig.
Date: 02-23-16 Direction: North



Photograph No. 49 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-24 using low flow purge methods.
Date: 02-23-16 Direction: Northwest



Photograph No. 50 Site: 700 South 1600 East PCE Plume
Description: Location of temporary groundwater monitoring point GW-24 after abandonment.
Date: 03-08-16 Direction: East



Photograph No. 51 Site: 700 South 1600 East PCE Plume
Description: Installing temporary groundwater monitoring point GW-25 with Geoprobe® rig.
Date: 02-29-16 Direction: East



Photograph No. 52 Site: 700 South 1600 East PCE Plume
Description: Installing temporary groundwater monitoring point GW-26 with Geoprobe® rig.
Date: 02-26-16 Direction: East



Photograph No. 53 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-26 using low flow purge methods.
Date: 02-27-16 Direction: West



Photograph No. 54 Site: 700 South 1600 East PCE Plume
Description: Installing temporary groundwater monitoring point GW-27 with Geoprobe® rig.
Date: 03-04-16 Direction: East



Photograph No. 55 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-27 using low flow purge methods.
Date: 03-05-16 Direction: North



Photograph No. 56 Site: 700 South 1600 East PCE Plume
Description: Location of temporary groundwater monitoring point GW-27 after abandonment.
Date: 04-05-16 Direction: North



Photograph No. 57 Site: 700 South 1600 East PCE Plume
Description: Installing temporary groundwater monitoring point GW-28 with Geoprobe® rig.
Date: 03-04-16 Direction: North



Photograph No. 58 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-28 using low flow purge methods.
Date: 03-05-16 Direction: Northeast



Photograph No. 59 Site: 700 South 1600 East PCE Plume
Description: Location of temporary groundwater monitoring point GW-28 after abandonment.
Date: 04-05-16 Direction: Northwest



Photograph No. 60 Site: 700 South 1600 East PCE Plume
Description: Installing temporary groundwater monitoring point GW-31 with Geoprobe® rig.
Date: 02-27-16 Direction: West



Photograph No. 61 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-31 using low flow purge methods.
Date: 02-28-16 Direction: West



Photograph No. 62 Site: 700 South 1600 East PCE Plume
Description: Drilling boring GW-33 with Geoprobe® rig.
Date: 02-23-16 Direction: South



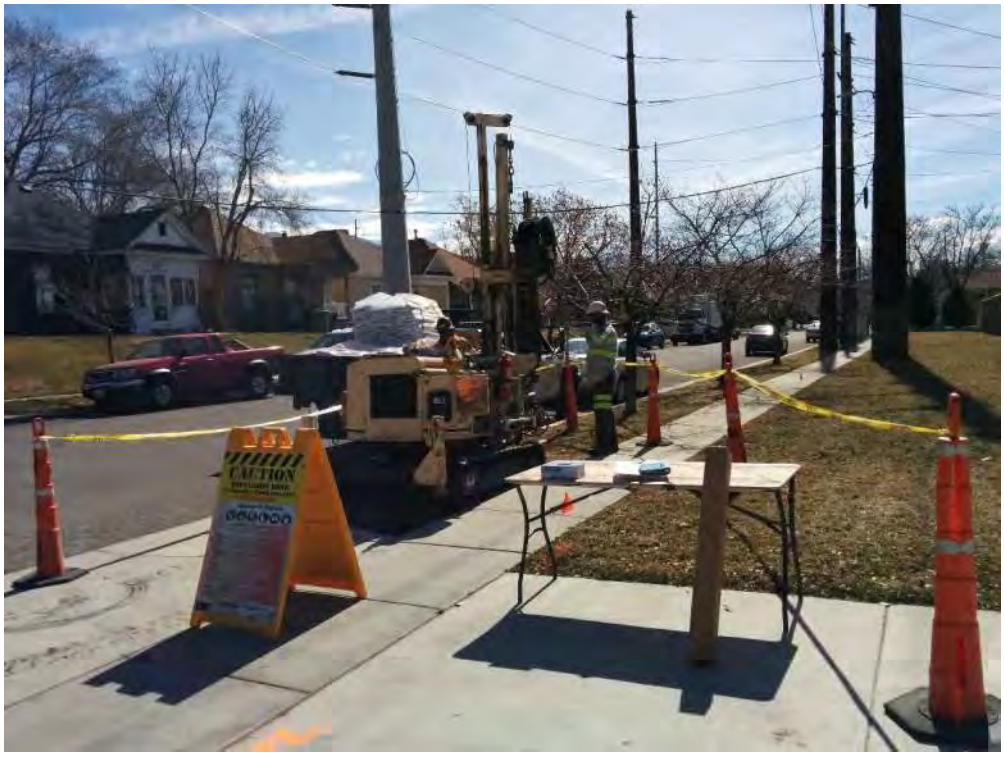
Photograph No. 63 Site: 700 South 1600 East PCE Plume
Description: Drilling boring GW-35 with Geoprobe® rig.
Date: 02-23-16 Direction: East



Photograph No. 64 Site: 700 South 1600 East PCE Plume
Description: Installing temporary groundwater monitoring point GW-39 with Geoprobe® rig.
Date: 02-22-16 Direction: North



Photograph No. 65 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-39 using low flow purge methods.
Date: 02-23-16 Direction: West



Photograph No. 66 Site: 700 South 1600 East PCE Plume
Description: Installing temporary groundwater monitoring point GW-40 with Geoprobe® rig.
Date: 03-01-16 Direction: Southeast



Photograph No. 67 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-40 using low flow purge methods.
Date: 03-03-16 Direction: Northwest



Photograph No. 68 Site: 700 South 1600 East PCE Plume
Description: Location of temporary groundwater monitoring point GW-40 after abandonment.
Date: 04-05-16 Direction: West



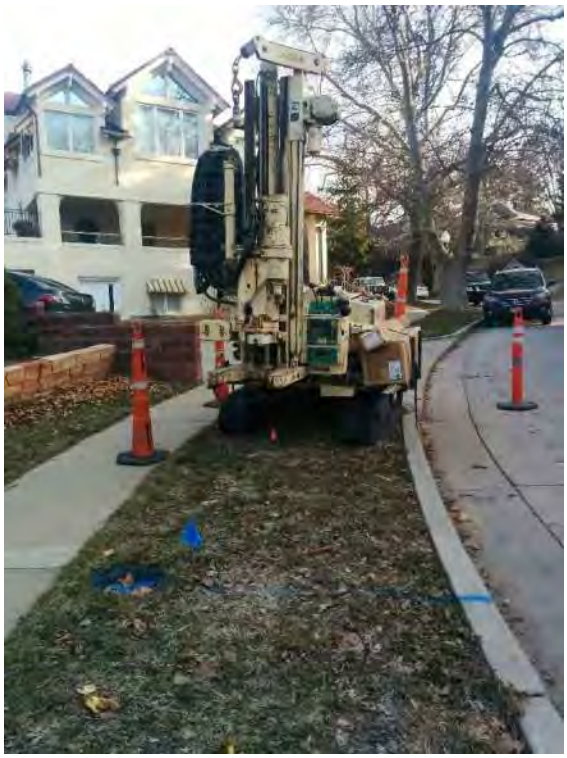
Photograph No. 69 Site: 700 South 1600 East PCE Plume
Description: Drilling boring GW-42 with Geoprobe® rig.
Date: 03-01-16 Direction: West



Photograph No. 70 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-43 using low flow purge methods.
Date: 03-04-16 Direction: Southeast



Photograph No. 71 Site: 700 South 1600 East PCE Plume
Description: Location of temporary groundwater monitoring point GW-43 after abandonment.
Date: 04-05-16 Direction: East



Photograph No. 72 Site: 700 South 1600 East PCE Plume
Description: Installing temporary groundwater monitoring point GW-46 with Geoprobe® rig.
Date: 02-24-16 Direction: Northeast



Photograph No. 73 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-46 using low flow purge methods.
Date: 02-24-16 Direction: West



Photograph No. 74 Site: 700 South 1600 East PCE Plume
Description: Location of temporary groundwater monitoring point GW-46 after abandonment.
Date: 03-08-16 Direction: Southwest



Photograph No. 75 Site: 700 South 1600 East PCE Plume
Description: Location of temporary groundwater monitoring point GW-48 prior to drilling with Geoprobe® rig.
Date: 02-24-16 Direction: East



Photograph No. 76 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-48 using low flow purge methods.
Date: 02-25-16 Direction: West



Photograph No. 77 Site: 700 South 1600 East PCE Plume
Description: Location of temporary groundwater monitoring point GW-48 after abandonment.
Date: 03-08-16 Direction: North



Photograph No. 78 Site: 700 South 1600 East PCE Plume
Description: Installing temporary groundwater monitoring point GW-49 with Geoprobe® rig.
Date: 02-25-16 Direction: West



Photograph No. 79 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-49 using low flow purge methods.
Date: 02-25-16 Direction: South



Photograph No. 80 Site: 700 South 1600 East PCE Plume
Description: Surface completion of piezometer GW-49.
Date: 04-05-16 Direction: West



Photograph No. 81 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-50 using low flow purge methods.
Date: 02-29-16 Direction: Southwest



Photograph No. 82 Site: 700 South 1600 East PCE Plume
Description: Surface completion of piezometer GW-50.
Date: 04-06-16 Direction: South



Photograph No. 83 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-52 using low flow purge methods.
Date: 03-03-16 Direction: South



Photograph No. 84 Site: 700 South 1600 East PCE Plume
Description: Surface completion of piezometer GW-52.
Date: 04-06-16 Direction: West



Photograph No. 85 Site: 700 South 1600 East PCE Plume
Description: Location of temporary groundwater monitoring point GW-53 prior to drilling with Geoprobe® rig.
Date: 03-02-16 Direction: Southwest



Photograph No. 86 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-53 using low flow purge methods.
Date: 03-03-16 Direction: Northeast



Photograph No. 87 Site: 700 South 1600 East PCE Plume
Description: Surface completion of piezometer GW-53.
Date: 04-05-16 Direction: East



Photograph No. 88 Site: 700 South 1600 East PCE Plume
Description: Location of temporary groundwater monitoring point GW-54 after abandonment.
Date: 03-08-16 Direction: North



Photograph No. 89 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-55 using low flow purge methods.
Date: 03-04-16 Direction: Southwest



Photograph No. 90 Site: 700 South 1600 East PCE Plume
Description: Location of temporary groundwater monitoring point GW-55 after abandonment.
Date: 03-08-16 Direction: South



Photograph No. 91 Site: 700 South 1600 East PCE Plume
Description: Drilling boring GW-57 with Geoprobe® rig.
Date: 03-05-16 Direction: North



Photograph No. 92 Site: 700 South 1600 East PCE Plume
Description: Installing temporary groundwater monitoring point GW-59 with Geoprobe® rig.
Date: 03-04-16 Direction: North



Photograph No. 93 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-49 using low flow purge methods.
Date: 03-05-16 Direction: West



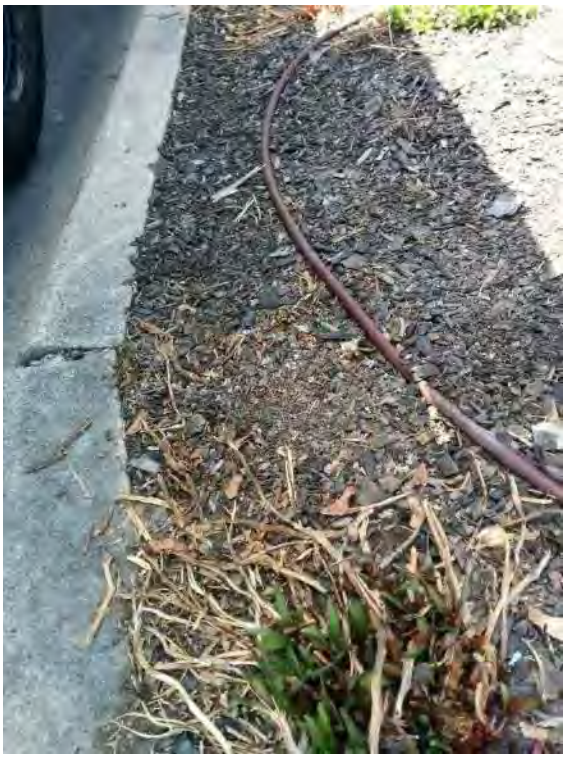
Photograph No. 94 Site: 700 South 1600 East PCE Plume
Description: Surface completion of piezometer GW-59.
Date: 04-05-16 Direction: North



Photograph No. 95 Site: 700 South 1600 East PCE Plume
Description: Installing temporary groundwater monitoring point GW-60 with Geoprobe® rig.
Date: 03-08-16 Direction: Southwest



Photograph No. 96 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-60 using low flow purge methods.
Date: 03-08-16 Direction: North



Photograph No. 97 Site: 700 South 1600 East PCE Plume
Description: Location of temporary groundwater monitoring point GW-60 after abandonment.
Date: 04-05-16 Direction: West



Photograph No. 98 Site: 700 South 1600 East PCE Plume
Description: Installing temporary groundwater monitoring point GW-61 with Geoprobe® rig.
Date: 03-05-16 Direction: West



Photograph No. 99 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-61 using low flow purge methods.
Date: 03-05-16 Direction: South



Photograph No. 100 Site: 700 South 1600 East PCE Plume
Description: Surface completion of piezometer GW-61.
Date: 04-06-16 Direction: West



Photograph No. 101 Site: 700 South 1600 East PCE Plume
Description: Installing temporary groundwater monitoring point GW-62 with Geoprobe® rig.
Date: 03-08-16 Direction: North



Photograph No. 102 Site: 700 South 1600 East PCE Plume
Description: Sampling temporary groundwater monitoring point GW-62 using low flow purge methods.
Date: 03-08-16 Direction: North



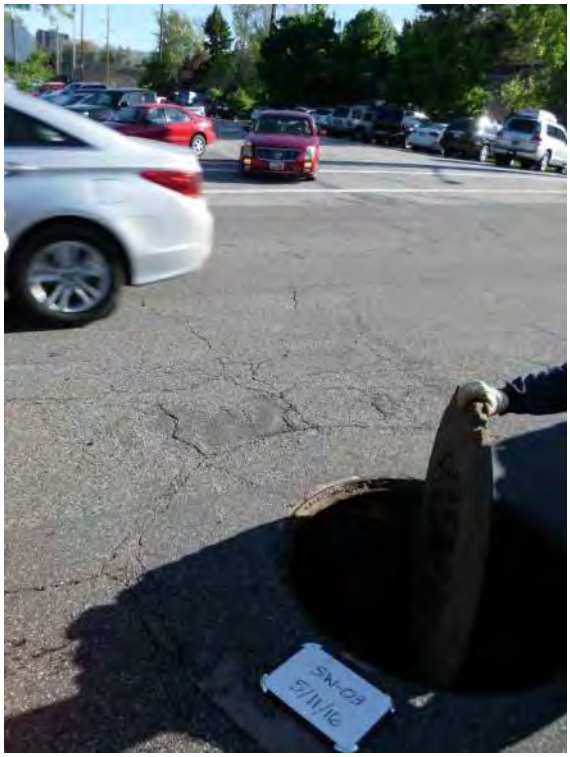
Photograph No. 103 Site: 700 South 1600 East PCE Plume
Description: Location of temporary groundwater monitoring point GW-62 after abandonment.
Date: 04-05-16 Direction: South



Photograph No. 104 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from seep at location SW-01.
Date: 05-04-16 Direction: East



Photograph No. 105 Site: 700 South 1600 East PCE Plume
Description: Stormwater sample location SW-02.
Date: 05-11-16 Direction: North



Photograph No. 106 Site: 700 South 1600 East PCE Plume
Description: Stormwater sample location SW-03.
Date: 05-11-16 Direction: North



Photograph No. 107 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from pond at location SW-04.
Date: 05-02-16 Direction: West



Photograph No. 108 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from pond at location SW-04.
Date: 05-02-16 Direction: North



Photograph No. 109 Site: 700 South 1600 East PCE Plume
Description: Stormwater sample location SW-05.
Date: 05-11-16 Direction: Northwest



Photograph No. 110 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from sump at location SW-06.
Date: 05-04-16 Direction: East



Photograph No. 111 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from spring box at location SW-07.
Date: 05-04-16 Direction: East



Photograph No. 112 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from seep at location SW-08.
Date: 05-04-16 Direction: East



Photograph No. 113 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from seep at location SW-09.
Date: 05-03-16 Direction: East



Photograph No. 114 Site: 700 South 1600 East PCE Plume
Description: Stormwater sample location SW-10.
Date: 05-11-16 Direction: South



Photograph No. 115 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from seep at location SW-11.
Date: 05-03-16 Direction: West



Photograph No. 116 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from spring at location SW-12.
Date: 05-03-16 Direction: South



Photograph No. 117 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from seep at location SW-13.
Date: 05-03-16 Direction: Northeast



Photograph No. 118 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from sump at location SW-14.
Date: 05-04-16 Direction: West



Photograph No. 119 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from seep at location SW-15.
Date: 05-04-16 Direction: North



Photograph No. 120 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from spring at location SW-16.
Date: 05-04-16 Direction: West



Photograph No. 121 Site: 700 South 1600 East PCE Plume
Description: Stormwater sample location SW-17.
Date: 05-11-16 Direction: West



Photograph No. 122 Site: 700 South 1600 East PCE Plume
Description: Stormwater sample location SW-18.
Date: 05-05-16 Direction: North



Photograph No. 123 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from spring at location SW-19.
Date: 05-04-16 Direction: Northeast



Photograph No. 124 Site: 700 South 1600 East PCE Plume
Description: Stormwater sample location SW-20.
Date: 05-05-16 Direction: North



Photograph No. 125 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from sump at location SW-21.
Date: 05-03-16 Direction: Northeast



Photograph No. 126 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from sump at location SW-22.
Date: 05-03-16 Direction: Southeast



Photograph No. 127 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from sump at location SW-23.
Date: 05-03-16 Direction: South



Photograph No. 128 Site: 700 South 1600 East PCE Plume
Description: Stormwater sample location SW-24.
Date: 05-11-16 Direction: East



Photograph No. 129 Site: 700 South 1600 East PCE Plume
Description: Stormwater sample location SW-25.
Date: 05-05-16 Direction: North



Photograph No. 130 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from seep at location SW-26.
Date: 05-03-16 Direction: North



Photograph No. 131 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from seep at location SW-27.
Date: 05-03-16 Direction: North



Photograph No. 132 Site: 700 South 1600 East PCE Plume
Description: Stormwater sample location SW-28.
Date: 05-03-16 Direction: North



Photograph No. 133 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from spring at location SW-29.
Date: 05-11-16 Direction: Northwest



Photograph No. 134 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from spring at location SW-30.
Date: 05-03-16 Direction: North



Photograph No. 135 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from seep at location SW-31.
Date: 05-02-16 Direction: East



Photograph No. 136 Site: 700 South 1600 East PCE Plume
Description: Stormwater sample location SW-32.
Date: 05-05-16 Direction: North



Photograph No. 137 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from seep at location SW-33.
Date: 05-02-16 Direction: East



Photograph No. 138 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from spring at location SW-34.
Date: 05-02-16 Direction: East



Photograph No. 139 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from seep at location SW-35.
Date: 05-04-16 Direction: Northeast



Photograph No. 140 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from seep at location SW-36.
Date: 05-03-16 Direction: Northeast



Photograph No. 141 Site: 700 South 1600 East PCE Plume
Description: Stormwater sample location SW-37.
Date: 05-05-16 Direction: North



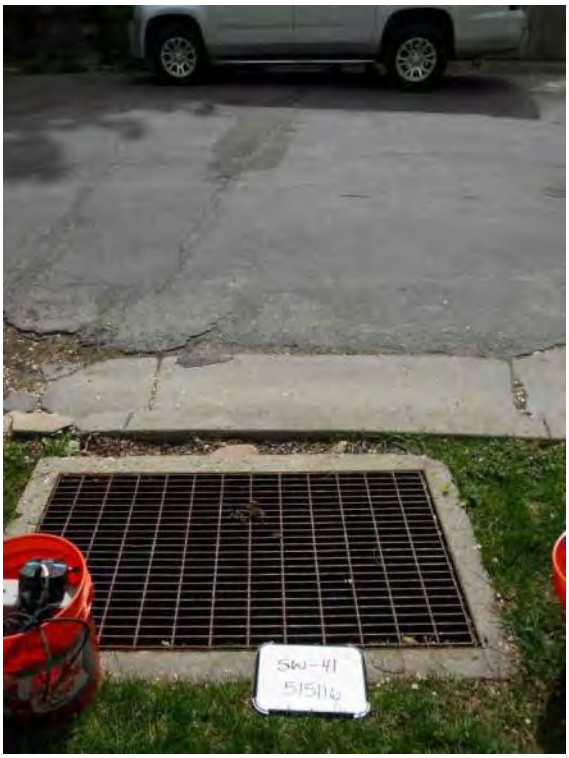
Photograph No. 142 Site: 700 South 1600 East PCE Plume
Description: Stormwater sample location SW-38.
Date: 05-11-16 Direction: North



Photograph No. 143 Site: 700 South 1600 East PCE Plume
Description: Stormwater sample location SW-39.
Date: 05-03-16 Direction: North



Photograph No. 144 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from sump at location SW-40.
Date: 05-05-16 Direction: West



Photograph No. 145 Site: 700 South 1600 East PCE Plume
Description: Stormwater sample location SW-41.
Date: 05-05-16 Direction: East



Photograph No. 146 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from spring at location SW-42.
Date: 05-02-16 Direction: West



Photograph No. 147 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from spring at location SW-43.
Date: 05-02-16 Direction: North



Photograph No. 148 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from spring at location SW-44.
Date: 05-04-16 Direction: East



Photograph No. 149 Site: 700 South 1600 East PCE Plume
Description: Stormwater sample location SW-45.
Date: 05-05-16 Direction: Southeast



Photograph No. 150 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from spring at location SW-46.
Date: 05-05-16 Direction: West



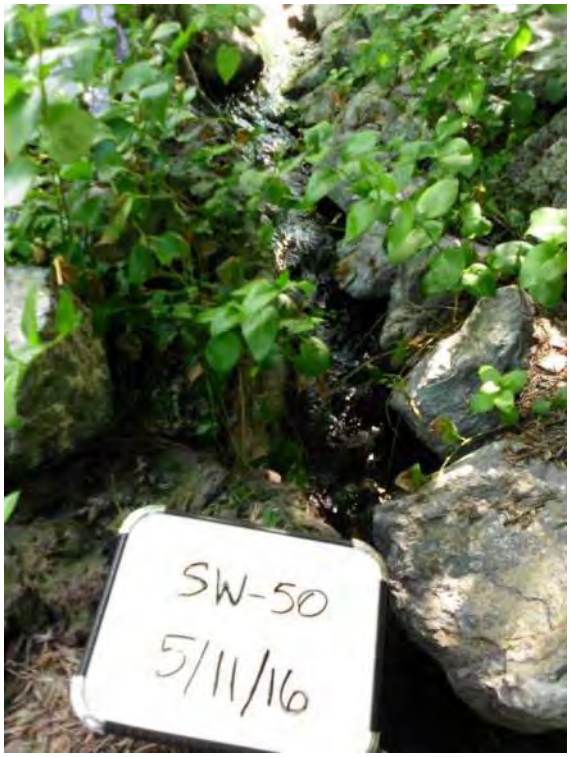
Photograph No. 151 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from Red Butte Creek at location SW-47.
Date: 05-04-16 Direction: East



Photograph No. 152 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from spring at location SW-48.
Date: 05-04-16 Direction: Southeast



Photograph No. 153 Site: 700 South 1600 East PCE Plume
Description: Stormwater sample location SW-49.
Date: 05-05-16 Direction: North



Photograph No. 154 Site: 700 South 1600 East PCE Plume
Description: Surface water sampling from spring at location SW-50.
Date: 05-11-16 Direction: Southeast

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Attachment C
Driller Start Card and Well Driller's Reports

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C-1
Driller Start Card

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GARY R. HERBERT
Governor
SPENCER J. COX
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
Division of Water Rights

MICHAEL R. STYLER
Executive Director
KENT L. JONES
State Engineer/Division Director

February 10, 2016

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

Dear Applicant: **RE: MONITOR WELL#: 1657001M00**

Regarding your request to drill **50 MONITOR WELL(S),** the anticipated drilling depths will exceed the minimum regulated and reporting depth of 30 feet, thereby requiring permission from the Division of Water Rights to proceed with this project.

The specifications outlined in your non-production well project application meet the State Engineer's requirements and permission is **HEREBY GRANTED.** Therefore, this letter is your authorization to proceed with the construction of the well(s) in accordance with those specifications and with respect to the following provisions:

1) Small diameter casing is to be used in the construction of the well(s) and no more water is to be diverted than is necessary to determine the quality of the groundwater by obtaining representative samples as required by the project.

2) The well(s) must be drilled by a currently licensed Utah driller and must be drilled in a manner consistent with the construction standards cited in the Utah State Administrative Rules for Well Drillers (R655-4 UAC).

3) The enclosed Driller (START) Card form must be given to the licensed driller for his submittal prior to commencing well construction. The other enclosed form is the 'Applicant Card.' It is **YOUR RESPONSIBILITY** to sign and return this Applicant Card form to our office upon well completion.

4) At such time as the well(s) are no longer utilized to monitor ground water or the intent of the project is terminated, the well(s) must be permanently abandoned in a manner consistent with the Administrative Rules (R655-4 UAC).

5) **THIS PERMIT MAY NOT BE THE ONLY AUTHORIZATION NEEDED TO DRILL A WELL.** The applicant is responsible for obtaining other permits/authorizations from federal agencies, other state agencies, and/or local jurisdictions as applicable. Moreover, if the applicant is not the landowner, it is the applicant's responsibility to ensure that approvals/permissions have been obtained to trespass and drill a well(s) on the property. **THIS PERMIT DOES NOT GIVE AUTHORIZATION TO TRESPASS ON PRIVATE PROPERTY.**

NOTE: Please be aware that your permission to proceed with the drilling under this authorization expires June 10, 2016.

Sincerely,

Jim V. Goddard, P.G.
Well Drilling Program

APPLICANT CARD for MONITOR WELL#: 1657001M00

IMPORTANT: THIS CARD MUST BE COMPLETED, SIGNED AND RETURNED BY THE WELL OWNER/APPLICANT AS SOON AS THE WELL IS DRILLED BY A LICENSED UTAH WATER WELL DRILLER.

OWNER/APPLICANT NAME: DEPT OF VETERANS AFFAIRS

MAILING ADDRESS: C/O LYNNE WELSH, 500 FOOTHILL DRIVE, SALT LAKE CITY, UT

PHONE NUMBER: 801-582-1565

WELL LOCATION: You are authorized to drill 50 MONITOR WELLs. SEE BELOW.

WELL UTM COORDINATES:

WELL ACTIVITY: NEW (X) REPAIR ( ) REPLACE ( ) ABANDON ( )
CLEAN ( ) DEEPEN ( )

WELL COMPLETION DATE: April 6, 2016

NAME OF DRILLING COMPANY/LICENSEE: Tim Stine/Cascade Drilling

Owner/Applicant Signature Date

***COMPLETE, SIGN AND RETURN THIS PORTION UPON FINAL WELL COMPLETION - DO NOT GIVE THIS CARD TO LICENSED WELL DRILLER - YOU MUST RETURN IT.
STATE OF UTAH DIVISION OF WATER RIGHTS Phone No. 801-538-7416 Fax No. 801-538-7467

COMMENTS:

MONITOR WELL LOCATIONS:

(1)	N	353	W	380	S4 cor S05	T	1S	R	1E	SL	**(2)**	S	1940	E	670	N4 cor S08	T	1S	R	1E	SL
(3)	S	229	W	779	E4 cor S08	T	1S	R	1E	SL	**(4)**	S	698	W	302	E4 cor S08	T	1S	R	1E	SL
(5)	S	680	W	1888	E4 cor S08	T	1S	R	1E	SL	**(6)**	S	524	W	1067	E4 cor S08	T	1S	R	1E	SL
(7)	N	664	E	1858	W4 cor S08	T	1S	R	1E	SL	**(8)**	S	1011	E	990	NW cor S08	T	1S	R	1E	SL
(9)	N	39	E	2273	W4 cor S08	T	1S	R	1E	SL	**(10)**	S	756	W	7	N4 cor S08	T	1S	R	1E	SL
(11)	S	1339	E	462	N4 cor S08	T	1S	R	1E	SL	**(12)**	S	118	W	43	E4 cor S08	T	1S	R	1E	SL
(13)	N	423	W	402	E4 cor S08	T	1S	R	1E	SL	**(14)**	N	214	W	792	E4 cor S08	T	1S	R	1E	SL
(15)	N	241	W	181	E4 cor S08	T	1S	R	1E	SL	**(16)**	N	131	W	574	E4 cor S08	T	1S	R	1E	SL
(17)	N	222	W	1167	E4 cor S08	T	1S	R	1E	SL	**(18)**	N	484	W	446	E4 cor S08	T	1S	R	1E	SL
(19)	N	381	W	613	E4 cor S08	T	1S	R	1E	SL	**(20)**	N	437	W	860	E4 cor S08	T	1S	R	1E	SL
(21)	N	825	W	1019	E4 cor S08	T	1S	R	1E	SL	**(22)**	N	575	W	1202	E4 cor S08	T	1S	R	1E	SL
(23)	N	700	W	1646	E4 cor S08	T	1S	R	1E	SL	**(24)**	N	964	W	1248	E4 cor S08	T	1S	R	1E	SL
(25)	S	1712	E	886	N4 cor S08	T	1S	R	1E	SL	**(26)**	N	1108	W	952	E4 cor S08	T	1S	R	1E	SL
(27)	S	1548	E	905	N4 cor S08	T	1S	R	1E	SL	**(28)**	N	1177	W	1335	E4 cor S08	T	1S	R	1E	SL
(29)	S	1394	E	1142	N4 cor S08	T	1S	R	1E	SL	**(30)**	S	1313	E	903	N4 cor S08	T	1S	R	1E	SL
(31)	S	1180	E	1071	N4 cor S08	T	1S	R	1E	SL	**(32)**	S	858	W	1224	NE cor S08	T	1S	R	1E	SL
(33)	S	843	E	891	N4 cor S08	T	1S	R	1E	SL	**(34)**	S	361	E	1036	N4 cor S08	T	1S	R	1E	SL
(35)	S	486	E	540	N4 cor S08	T	1S	R	1E	SL	**(36)**	S	29	E	1258	N4 cor S08	T	1S	R	1E	SL
(37)	S	263	E	337	N4 cor S08	T	1S	R	1E	SL	**(38)**	S	1035	E	398	N4 cor S08	T	1S	R	1E	SL
(39)	N	14	W	1644	E4 cor S08	T	1S	R	1E	SL	**(40)**	S	1192	W	712	NE cor S08	T	1S	R	1E	SL
(41)	N	800	W	691	E4 cor S08	T	1S	R	1E	SL	**(42)**	S	338	W	820	N4 cor S08	T	1S	R	1E	SL

(43) S 1189 W 322--N4 cor S08 T 1S R 1E SL **(44)** S 1938 E 114--N4 cor S08 T 1S R 1E SL
(45) N 1764 W 646--S4 cor S08 T 1S R 1E SL **(46)** N 125 W 2168--E4 cor S08 T 1S R 1E SL
(47) S 1086 W 1121--E4 cor S08 T 1S R 1E SL **(48)** S 336 W 1719--E4 cor S08 T 1S R 1E SL
(49) S 355 E 583--W4 cor S09 T 1S R 1E SL **(50)** N 460 E 287--W4 cor S09 T 1S R 1E SL

START/APPLICANT CARD INSTRUCTIONS: First, for each well, you must give a Driller (Start) Card to the licensed driller with whom you contract to construct the well. Second, it is your responsibility to sign and return this Applicant Card to this office immediately after completion of the well. **CAUTION: There may be local health requirements for the actual siting of your well. Please check with the proper local authority before construction begins. See the enclosed sheet addressing construction information.**

DRILLER (START) CARD for MONITOR WELL#: 1657001M00

IMPORTANT: THIS CARD MUST BE RECEIVED BY THE DIVISION OF WATER RIGHTS PRIOR TO THE BEGINNING OF WELL CONSTRUCTION -- REQUIRED ONLY FOR WELLS DEEPER THAN 30 FT.

OWNER/APPLICANT NAME: DEPT OF VETERANS AFFAIRS

MAILING ADDRESS: C/O LYNNE WELSH, 500 FOOTHILL DRIVE, SALT LAKE CITY, UT

PHONE NUMBER: 801-582-1565

WELL LOCATION: You are authorized to drill 50 MONITOR WELLs. SEE BELOW.

WELL UTM COORDINATES:

WELL ACTIVITY: NEW (X) REPAIR ( ) REPLACE ( ) ABANDON ( )
CLEAN ( ) DEEPEN ( )

For surface seals in unconsolidated formations (clay, silt, sand, and gravel), will you be using a temporary conductor casing or other formation stabilizer (e.g., drilling mud) in the surface seal interval to maintain the required annular space?

(YES) or NO (Circle one).

Answering 'NO' suggests that you will be placing the surface seal in an open and unstabilized annular space, which may require onsite inspection of seal placement by the State Engineer's Office.

PROPOSED START DATE: 02-22-16

PROJECTED COMPLETION DATE: 03-22-16

LICENSE #: 626 LICENSEE/COMPANY: Tim Stine / Cascade Drilling

Licensee Signature — Date: 02-16-16

NOTICE TO APPLICANT: THIS CARD IS TO BE GIVEN TO A UTAH LICENSED WATER WELL DRILLER FOR SUBMITTAL TO THE DIVISION OF WATER RIGHTS PRIOR TO WELL CONSTRUCTION.

STATE OF UTAH DIVISION OF WATER RIGHTS Phone No. 801-538-7416
Fax No. 801-538-7467

MONITOR WELL LOCATIONS:

(1)	N	353	W	380	--S4 cor S05	T	1S	R	1E	SL	**(2)**	S	1940	E	670	--N4 cor S08	T	1S	R	1E	SL
(3)	S	229	W	779	--E4 cor S08	T	1S	R	1E	SL	**(4)**	S	698	W	302	--E4 cor S08	T	1S	R	1E	SL
(5)	S	680	W	1888	--E4 cor S08	T	1S	R	1E	SL	**(6)**	S	524	W	1067	--E4 cor S08	T	1S	R	1E	SL
(7)	N	664	E	1858	--W4 cor S08	T	1S	R	1E	SL	**(8)**	S	1011	E	990	--NW cor S08	T	1S	R	1E	SL
(9)	N	39	E	2273	--W4 cor S08	T	1S	R	1E	SL	**(10)**	S	756	W	7	--N4 cor S08	T	1S	R	1E	SL
(11)	S	1339	E	462	--N4 cor S08	T	1S	R	1E	SL	**(12)**	S	118	W	43	--E4 cor S08	T	1S	R	1E	SL
(13)	N	423	W	402	--E4 cor S08	T	1S	R	1E	SL	**(14)**	N	214	W	792	--E4 cor S08	T	1S	R	1E	SL
(15)	N	241	W	181	--E4 cor S08	T	1S	R	1E	SL	**(16)**	N	131	W	574	--E4 cor S08	T	1S	R	1E	SL
(17)	N	222	W	1167	--E4 cor S08	T	1S	R	1E	SL	**(18)**	N	484	W	446	--E4 cor S08	T	1S	R	1E	SL
(19)	N	381	W	613	--E4 cor S08	T	1S	R	1E	SL	**(20)**	N	437	W	860	--E4 cor S08	T	1S	R	1E	SL
(21)	N	825	W	1019	--E4 cor S08	T	1S	R	1E	SL	**(22)**	N	575	W	1202	--E4 cor S08	T	1S	R	1E	SL
(23)	N	700	W	1646	--E4 cor S08	T	1S	R	1E	SL	**(24)**	N	964	W	1248	--E4 cor S08	T	1S	R	1E	SL
(25)	S	1712	E	886	--N4 cor S08	T	1S	R	1E	SL	**(26)**	N	1108	W	952	--E4 cor S08	T	1S	R	1E	SL
(27)	S	1548	E	905	--N4 cor S08	T	1S	R	1E	SL	**(28)**	N	1177	W	1335	--E4 cor S08	T	1S	R	1E	SL
(29)	S	1394	E	1142	--N4 cor S08	T	1S	R	1E	SL	**(30)**	S	1313	E	903	--N4 cor S08	T	1S	R	1E	SL
(31)	S	1180	E	1071	--N4 cor S08	T	1S	R	1E	SL	**(32)**	S	858	W	1224	--NE cor S08	T	1S	R	1E	SL
(33)	S	843	E	891	--N4 cor S08	T	1S	R	1E	SL	**(34)**	S	361	E	1036	--N4 cor S08	T	1S	R	1E	SL
(35)	S	486	E	540	--N4 cor S08	T	1S	R	1E	SL	**(36)**	S	29	E	1258	--N4 cor S08	T	1S	R	1E	SL

(37) S 263 E 337--N4 cor S08 T 1S R 1E SL **(38)** S 1035 E 398--N4 cor S08 T 1S R 1E SL
(39) N 14 W 1644--E4 cor S08 T 1S R 1E SL **(40)** S 1192 W 712--NE cor S08 T 1S R 1E SL
(41) N 800 W 691--E4 cor S08 T 1S R 1E SL **(42)** S 338 W 820--N4 cor S08 T 1S R 1E SL
(43) S 1189 W 322--N4 cor S08 T 1S R 1E SL **(44)** S 1938 E 114--N4 cor S08 T 1S R 1E SL
(45) N 1764 W 646--S4 cor S08 T 1S R 1E SL **(46)** N 125 W 2168--E4 cor S08 T 1S R 1E SL
(47) S 1086 W 1121--E4 cor S08 T 1S R 1E SL **(48)** S 336 W 1719--E4 cor S08 T 1S R 1E SL
(49) S 355 E 583--W4 cor S09 T 1S R 1E SL **(50)** N 460 E 287--W4 cor S09 T 1S R 1E SL

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C-2
Well Driller's Reports

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WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439334

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

WD Drill

Contact Person/Engineer: _____

Well Location *Note any changes*

N 131 W 574 from the E4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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WATER RIGHTS
SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439333

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

No Drill

Contact Person/Engineer: _____

Well Location *Note any changes*

N 241 W 181 from the E4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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WATER RIGHTS
SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439317

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

Drill, Sample, Abandon

Contact Person/Engineer: _____

Well Location *Note any changes*

N 460 E 287 from the W4 corner of section 09, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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WATER RIGHTS
SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439335

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

NO Drill

Contact Person/Engineer: _____

Well Location *Note any changes*

N 222 W 1167 from the E4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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WATER RIGHTS
SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439336

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

No Drill

Contact Person/Engineer: _____

Well Location *Note any changes*

N 484 W 446 from the E4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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APR 26 2016
WATER RIGHTS
SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439337

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

No Drill

Contact Person/Engineer: _____

Well Location *Note any changes*

N 381 W 613 from the E4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439338

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

NO Drill

Contact Person/Engineer: _____

Well Location *Note any changes*

N 437 W 860 from the E4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439339

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

No Drill

Contact Person/Engineer: _____

Well Location *Note any changes*

N 825 W 1019 from the E4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439340

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

No Drill

Contact Person/Engineer: _____

Well Location *Note any changes*

N 575 W 1202 from the E4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439341

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

No Drill

Contact Person/Engineer: _____

Well Location *Note any changes*

N 700 W 1646 from the E4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439342

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

No Drill

Contact Person/Engineer: _____

Well Location *Note any changes*

N 964 W 1248 from the E4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439343

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

no Drill

Contact Person/Engineer: _____

Well Location *Note any changes*

S 1712 E 886 from the N4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439344

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

NO Drill

Contact Person/Engineer: _____

Well Location *Note any changes*

N 1108 W 952 from the E4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No
Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI
Point to Which Water Level Measurement was Referenced_____ Elevation_____
Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439345

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

No Drill

Contact Person/Engineer: _____

Well Location *Note any changes*

S 1548 E 905 from the N4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439346

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

No Drill

Contact Person/Engineer: _____

Well Location *Note any changes*

N 1177 W 1335 from the E4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439347

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

No Drill

Contact Person/Engineer: _____

Well Location *Note any changes*

S 1394 E 1142 from the N4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439348

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

No Drill

Contact Person/Engineer: _____

Well Location *Note any changes*

S 1313 E 903 from the N4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439349

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

NO Drill

Contact Person/Engineer: _____

Well Location *Note any changes*

S 1180 E 1071 from the N4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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WATER RIGHTS
SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439350

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

No Drill

Contact Person/Engineer: _____

Well Location *Note any changes*

S 858 W 1224 from the NE corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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WATER RIGHTS
SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439351

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

WS Drill

Contact Person/Engineer: _____

Well Location *Note any changes*

S 843 E 891 from the N4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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WATER RIGHTS
SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439352

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

NDDC.1C

Contact Person/Engineer: _____

Well Location *Note any changes*

S 361 E 1036 from the N4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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WATER RIGHTS
SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439353

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

NO Drill

Contact Person/Engineer: _____

Well Location *Note any changes*

S 486 E 540 from the N4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439354

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

NoDrill

Contact Person/Engineer: _____

Well Location *Note any changes*

S 29 E 1258 from the N4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439355

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

NoDrill

Contact Person/Engineer: _____

Well Location *Note any changes*

S 263 E 337 from the N4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439321

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

Drill, Jayk, Stanton

Contact Person/Engineer: _____

Well Location *Note any changes*

S 756 W 7 from the N4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439357

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

NO DRILL

Contact Person/Engineer: _____

Well Location *Note any changes*

N 14 W 1644 from the E4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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WATER RIGHTS
SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439324

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

Drill, Sample, Abandon

Contact Person/Engineer: _____

Well Location *Note any changes*

S 1940 E 670 from the N4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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WATER RIGHTS
SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439362

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

Contact Person/Engineer: _____

Well Location *Note any changes*

S 1938 E 114 from the N4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439318

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

Drill, Jarph, Abandon

Contact Person/Engineer: _____

Well Location *Note any changes*

N 664 E 1858 from the W4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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WATER RIGHTS
SALT LAKE
KH

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439364

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

No Drill

Contact Person/Engineer: _____

Well Location *Note any changes*

N 125 W 2168 from the E4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439366

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

N20Drill

Contact Person/Engineer: _____

Well Location *Note any changes*

S 336 W 1719 from the E4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439356

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

No Drill

Contact Person/Engineer: _____

Well Location *Note any changes*

S 1035 E 398 from the N4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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WATER RIGHTS
SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439322

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

Drill, Cap, Abandon

Contact Person/Engineer: _____

Well Location *Note any changes*

S 1339 E 462 from the N4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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WATER RIGHTS
SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No
Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI
Point to Which Water Level Measurement was Referenced_____ Elevation_____
Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439358

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

no Dr. ll

Contact Person/Engineer: _____

Well Location *Note any changes*

S 1192 W 712 from the NE corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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WATER RIGHTS
SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439325

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

Dall, Sept, Abandon

Contact Person/Engineer: _____

Well Location *Note any changes*

S 229 W 779 from the E4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439328

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

Dan, Steph, Steven

Contact Person/Engineer: _____

Well Location *Note any changes*

S 524 W 1067 from the E4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439319

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

Drill, Sample, Obsrvn

Contact Person/Engineer: _____

Well Location *Note any changes*

S 1011 E 990 from the NW corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439331

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

NO Drill

Contact Person/Engineer: _____

Well Location *Note any changes*

N 423 W 402 from the E4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439332

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

No Drill

Contact Person/Engineer: _____

Well Location *Note any changes*

N 214 W 792 from the E4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439362

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

NDDiff

Contact Person/Engineer: _____

Well Location *Note any changes*

S 1938 E 114 from the N4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439359

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

Contact Person/Engineer: Kristin Lazzeri / EA Engineering

Well Location *Note any changes*

N 800 W 691 from the E4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #) C-W-52

Drillers Activity Start Date: 02-22-16 Completion Date: 04-06-16

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use: monitor well

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID
0	30	2"	DPT	N/A

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)
0	26			X	X	X	X						Brown	
26	30	X	X		X	X	X						"	

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SALT LAKE

Static Water Level

Date 03-22-16 Water Level 26 feet Flowing? ☐ Yes ☒ No

Method of Water Level Measurement WLI If Flowing, Capped Pressure N/A PSI

Point to Which Water Level Measurement was Referenced ground level Elevation N/A

Height of Water Level reference point above ground surface N/A feet Temperature N/A degrees ☐ C ☐ F

Construction Information

DEPTH (feet) FROM	TO	CASING: CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	DEPTH (feet) FROM	TO	☒SCREEN ☐PERFORATIONS ☐OPEN BOTTOM: SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)
0	25	3/4" Sch. 40 PVC	40	3/4"	25	30	.010	3/4"	Factory Slot

Well Head Configuration: Flush mount Access Port Provided? ☒Yes ☐No

Casing Joint Type: Flush Thread Perforator Used: N/A

Was a Surface Seal Installed? ☒Yes ☐No Depth of Surface Seal: 24 feet Drive Shoe? ☒Yes ☐No

Surface Seal Material Placement Method: Tremie Bentonite chips

Was a temporary surface casing used? ☒Yes ☐No If yes, depth of casing: 30 feet diameter: 2 inches

DEPTH (feet) FROM	TO	SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION: SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	Quantity of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)
0	23	Bentonite	4 bags	5 lbs each
23	24	Bentonite chips	1 Bag	" "
24	30	10-20 Sand	2 bags	" "

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One GPM	CFS	DRAWDOWN (ft)	TIME PUMPED (hrs & min)
	N/A					

Pump (Permanent)

Pump Description: N/A Horsepower: Pump Intake Depth: feet

Approximate Maximum Pumping Rate: Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

N/A

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. (Person, Firm, or Corporation - Print or Type) License No. 626

Signature (Licensed Well Driller) Date 04-26-16

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439361

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

NoDrill

Contact Person/Engineer: _____

Well Location *Note any changes*

S 1189 W 322 from the N4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439363

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

NO DRILL

Contact Person/Engineer: _____

Well Location *Note any changes*

N 1764 W 646 from the S4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABILITY High	PERMEABILITY Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439365

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

No Drill

Contact Person/Engineer: _____

Well Location *Note any changes*

S 1086 W 1121 from the E4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No
Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI
Point to Which Water Level Measurement was Referenced_____ Elevation_____
Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439329

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

No drill

Contact Person/Engineer: _____

Well Location *Note any changes*

S 355 E 583 from the W4 corner of section 09, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439354

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

NoDrill

Contact Person/Engineer: _____

Well Location *Note any changes*

S 29 E 1258 from the N4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439320

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

Drill, Sample, Abandon

Contact Person/Engineer: _____

Well Location *Note any changes*

N 39 E 2273 from the W4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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KH

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439323

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

Drill, Sample, Abandon

Contact Person/Engineer: _____

Well Location *Note any changes*

N 353 W 380 from the S4 corner of section 05, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439326

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

Drill, Sample, Abandon

Contact Person/Engineer: _____

Well Location *Note any changes*

S 698 W 302 from the E4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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SALT LAKE

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

WELL DRILLER'S REPORT
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification

Non-Production Well: 1657001M00 WIN: 439327

Owner *Note any changes*

DEPT OF VETERANS AFFAIRS
C/O LYNNE WELSH
500 FOOTHILL DRIVE
SALT LAKE CITY, UT 84102

Drill, Sample, Abandon

Contact Person/Engineer: _____

Well Location *Note any changes*

S 680 W 1888 from the E4 corner of section 08, Township 1S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

Drillers Activity Start Date:_____ Completion Date:_____

Check all that apply: ☒ New ☐ Repair ☐ Deepen ☐ Clean ☐ Replace ☐ Public Nature of Use:_____

If a replacement well, provide location of new well. _____ feet north/south and _____ feet east/west of the existing well.

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE High	PERMEABLE Low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTION AND REMARKS (e.g., relative %, grain size, sorting, angularity, bedding, grain composition density, plasticity, shape, cementation, consistancy, water bearing, odor, fracturing, minerology, texture,degree of weathering, hardness, water quality, etc.)

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APR 26 2016
WATER RIGHTS
SALT LAKE
KH

Static Water Level

Date_____ Water Level_____ feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement_____ If Flowing, Capped Pressure_____ PSI

Point to Which Water Level Measurement was Referenced_____ Elevation_____

Height of Water Level reference point above ground surface_____ feet Temperature_____ degrees ☐ C ☐ F

Construction Information

DEPTH (feet)		CASING			DEPTH (feet)		☐SCREEN ☐PERFORATIONS ☐OPEN BOTTOM		
FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	FROM	TO	SCREEN SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)

Well Head Configuration:_____ Access Port Provided? ☐Yes ☐No

Casing Joint Type:_____ Perforator Used:_____

Was a Surface Seal Installed? ☐Yes ☐No Depth of Surface Seal:_____ feet Drive Shoe? ☐Yes ☐No

Surface Seal Material Placement Method:_____

Was a temporary surface casing used? ☐Yes ☐No If yes, depth of casing:_____ feet diameter:_____ inches

DEPTH (feet)		SURFACE SEAL / INTERVAL SEAL / FILTER PACK / PACKER INFORMATION		
FROM	TO	SEAL MATERIAL, FILTER PACK and PACKER TYPE and DESCRIPTION	**Quantity** of Material Used (if applicable)	GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.)

Well Development and Well Yield Test Information

DATE	METHOD	YIELD	Units Check One		DRAWDOWN (ft)	TIME PUMPED (hrs & min)
			GPM	CFS		

Pump (Permanent)

Pump Description:_____ Horsepower:_____ Pump Intake Depth:_____ feet

Approximate Maximum Pumping Rate:_____ Well Disinfected upon Completion? ☐Yes ☐No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary Circumstances, abandonment procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled and constructed under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name CASCADE DRILLING, L.P. License No. 626

(Person, Firm, or Corporation - Print or Type)

Signature_____ Date_____

(Licensed Well Driller)

Attachment D
Soil Boring Logs

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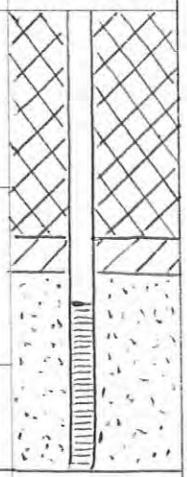
BORING/WELL CONSTRUCTION LOG

Project: AOU-1: East side springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Hand Auger
Driller: O. Waters
Boring/Well ID: GW-01

Project Number: 0202899
Start Time/Date: 1230 3/2/16
Completion Time/Date: 1334 3/2/16
Final Depth: 13'
Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	Sample Interval Recovery	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
HAND AUGER	NA	NA	NA	ML	1–5	0-7' silt, 7.5YR 2.5/1 (black), medium stiff, nonplastic, moist, 15% sand (fine to medium grained sand)	
				CL	6–13	7'-13' clay, 7.5YR 2.5/1 (black), medium stiff, plastic, moist, 20% fine grained sand, trace subrounded gravel	

3/4" diameter Sch 40 PVC
PVC 0.010" slot screen: 8-13'

Backfill: 0-6'
Bentonite: 6-7'
Sand: 7-13'

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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BORING/WELL CONSTRUCTION LOG

Project: AOU-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620DT 2"
Driller: O. Waters
Boring Well ID: GW-02

Project Number: 6202899
Start Time/Date: 1427 2/24/16
Completion Time/Date: 1549 2/24/16
Final Depth: 40'
Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	Sample Interval	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE	NA	31/60	NA	SM	1	0-5" topsoil, some wood fragments	
					2	5"-1' silty sand, 7.5YR 5/6 (strong brown), medium dense, dry,	
				CL	3	fine grained sand	
					4	1'-2' clay, 10YR 5/6 (yellowish brown), medium stiff, slightly plastic,	
				SP	5	dry, trace fine grained sand	
					6	2'-5' poorly graded sand, 7.5YR 5/4 (brown), loose, dry, very fine	
					7	to fine grained sand (qtz)	
		48/60		CL	8	5'-5.5' sandy clay, 10YR 5/6 (yellowish brown), medium dense,	
					9	slightly plastic, dry, fine grained sand	
				SP	10	5.5'-10' poorly graded sand, 7.5YR 5/6 (strong brown), loose, dry,	
					11	fine grained sand (qtz)	
				SC	12	10'-11' clayey sand, 10YR 5/6 (yellowish brown), medium dense,	
					13	dry, very fine grained sand	
		55/60		SP	14	11'-16' poorly graded sand, 7.5YR 5/6 (~~yellowish~~ strong brown), loose,	
					15	dry, fine grained quartz sand, <5% fines, silt lenses (1" thick) at	
					16	14' and 15.1', fining downwards at 15' to very fine grained sand (some lithics)	
				SM	17	16'-16.5' silty sand	
		60/60		GC	18	16.5'-20' clayey gravel, 7.5YR 4/6 (strong brown), medium	
					19	dense, dry, fine to coarse grained sand (20%), gravel angular -	
					20	subrounded (lithics, S.S. up to 3"), 15% clay (7.5YR 4/6 strong brown)	
				SC	21	20'-20.5' ~~sandy~~ clayey sand, 7.5YR 4/6 (strong brown), medium	
		57/60		GC	22	dense, dry, fine grained sand, few gravel (subangular, lithics, up to	
					23	0.25"), wood fibers	
					24	20.5'-~~30~~ 40' clayey gravel, 7.5YR 4/4 (brown), loose, dry, angular to	
					25	subrounded gravel (lithics, S.S, qtz, up to 2.5"), fine to coarse grained	
		58/60			26	sand, 20% clay	
					27		
					28		
					29		
					30		
		51/60			31		
					32		
					33		
					34		
					35		
		53/60			36	~~37~~ KL Refusal at 40' - No well set	
					37		
					38		
					39		
					40		

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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BORING/WELL CONSTRUCTION LOG

Project: AOU1 East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: 6620 DT - Geoprobe 2"
Driller: O. Waters
Boring/Well ID: GW-03

Project Number: 602089.99
Start Time/Date: 1618 2/24/16
Completion Time/Date: 1745 2/24/16
Final Depth: 35'
Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	~~Sample Interval~~ Recovery	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE		31/60		SP	1–5	0-3" topsoil 3"-11' poorly graded sand, 7.5 YR 5/6 (strong brown), loose, moist, fine grained sand, 5% silt, trace gravel (lithics, subangular, up to .25"), tree roots	
		45/60			6–10	7': lamination of clay (7.5 YR 7/4 pink)	
		52/60		SP SW SP	11–15	11'-12' poorly graded sand, 7.5 YR 5/6 (strong brown), medium dense, wet, very fine grained sand, 10% silt, qtz grains 12'-13' well graded sand, 10 YR 4/6 (dark yellowish brown), loose, dry, fine to coarse grained, qtz and lithics, <5% silt 13'-15' poorly graded sand, 7.5 YR 6/6 (reddish yellow), loose, dry, fine grained sand, quartz	
	NA	50/60	NA	SP SW SP GC	16–20	15'-16.5' poorly graded sand, 7.5 YR 5/6 (strong brown), medium dense, moist, very fine grained sand, 16.5'-17' well graded sand, 7.5 YR 4/4 (brown), loose, moist, fine to coarse grained, lithics and quartz 17'-17.5', same as 15'-16.5' 17.5'-~~27~~ KL clayey gravel: 7.5 YR 4/6 (strong brown), medium dense, dry, 20% fine to coarse grained sand, 15% clay (10 YR 6/4, light brown), angular to subrounded gravel (S.S., quartz, lithics)	
		49/60			21–25		
		54/60		GC	26–28	24 moist at 24 feet 27'-~~35~~ KL 33' same as above, color change to 7.5 YR 5/6 (strong brown)	
		50/60		ML	29–35	wet at 30' 33'-35' sandy silt, 5YR 4/6 (yellowish red), medium stiff, slightly plastic, wet, fine grained sand	
					—	3/4" PVC Sch. 40 PVC .010" well screen: 28-33 Backfill: 0-26', ~~27~~ KL 33-35' Bentonite: 26-27' Sand: 27-33'	

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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BORING/WELL CONSTRUCTION LOG

Project: AOU-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620 DT 2"
Driller: O. Waters
Boring/Well ID: GW-04

Project Number: 602028994
Start Time/Date: 1014 2/26/16
Completion Time/Date: 1143 2/26/16
Final Depth: 25'
Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	~~Sample Interval~~ Recovery	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE	NA	24/60	NA	ML	1–5	0-6" topsoil 6"-6' silt, 7.5YR 2.5/1 (black), stiff, slightly plastic, moist, few fine grained sand	
		36/60		ML	6–10	6'-11' clayey silt, 7.5 YR 4/1 (dark gray), stiff, slightly plastic, moist, few fine- medium grained sand	
		49/60		CL	11–14	11'-14' sandy clay, 10YR 5/4 (yellowish brown), soft, slightly plastic, moist, 15% fine to medium grained sand	
		58/60		CL GC	14–20	14'-15' sandy clay, 7.5 YR 4/6 (strong brown), medium stiff, nonplastic, moist, fine to medium grained sand, trace gravel (subrounded, lithics) 15'-~~17~~20' clayey gravel, 7.5 YR 4/6 (strong brown), medium dense, dry, fine to coarse grained sand, gravel angular-subangular (lithics, s.s., limestone) up to 2.5", 15% clay	
		59/60		SC	20–25	20-25' clayey sand, 2.5Y 6/4 (light yellowish brown), dense, wet, fine to medium grained sand	
						3/4" Sch. 40 PVC PVC 0.010" slot screen: 20-25' Backfill: 0-18' Bentonite: 18-19' Sand: 19-25'	

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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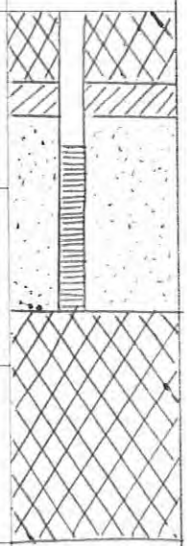
BORING/WELL CONSTRUCTION LOG

Project: AOU-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620 - DT 2"
Driller: O. Waters
Boring/Well ID: GW-05

Project Number: 6202899
Start Time/Date: 0921 2/25/16
Completion Time/Date: 1000 2/25/16
Final Depth: 15'
Logged By: K. Lazzeri 2/25/16

Sample Type	Blow Counts/6"	~~Sample~~ Interval/ Recovery	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE		31/60		SC	1 2 3 4 5	0-6" topsoil KL 6" - 6' ~~silty~~ clayey sand, 10YR 5/4 (yellowish brown), medium dense, moist, fine grained sand KL wet @ 3.5' 4' color change to 10YR 5/4 (yellowish brown)	
~~NA~~ KL	NA	46/60	NA		6 7 8 9 10	6'-15' clayey sand, 7.5YR 5/6 (strong brown), medium dense, moist, fine to medium grained sand	
		50/60		SC	11 12 13 14 15		



3/4" dia. Sch. 40 PVC
3/4" PVC screen 0.010" slot: 3.5 - 8.5'

Backfill: 0-1.5', 8.5-15'
Bentonite: 1.5 - 2.5'
Sand: 2.5 - 8.5'

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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BORING/WELL CONSTRUCTION LOG

Project: AOC-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620DT 2"
Driller: O. Waters
Boring/Well ID: GW-06

Project Number: 6202899
Start Time/Date: 2/25/16 1050
Completion Time/Date: 1130 2/25/16
Final Depth: 10'
Logged By: K. Lazzen

Sample Type	Blow Counts/6"	~~Sample Interval~~ Recovery	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE	NA	31/60	NA	SC	1 2 3 4 ▼ 5	0-5" topsoil 5"-6' clayey sand, 10YR 6/2 (light brownish gray), medium dense, moist, fine grained sand 3.5' - color change to 10YR 5/4 (yellowish brown)	
		49/60		SC	6 7 8 9 10	6'-10' clayey sand, 7.5YR 5/6 (strong brown), medium dense, wet, fine to medium grained	

3/4" dia. Sch. 40 PVC
PVC 0.010" slot screen: 5-10'

Backfill: 0-3'
Bentonite: 3-4'
Sand: 4-10'

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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BORING/WELL CONSTRUCTION LOG

Project: AOU-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620-DT 2"
Driller: O Waters
Boring/Well ID: GW-07

Project Number: 0202899
Start Time/Date: 1329 2/25/16
Completion Time/Date: 1407 2/25/16
Final Depth: 10'
Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	Sample Interval / Recovery	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
SLEEVE / ~~NA~~ KL ACETATE	NA	41/60	NA	SP	1	0-6" topsoil	
					2	6"-3.5' poorly graded sand, 10YR 6/3 (pale brown), dense, moist,	
					3	fine grained sand.	
					4	3.5'-6.5' clayey sand, 2.5Y KL 6/4 (light yellowish brown), dense,	
				SC	5	wet, fine grained sand, 15% clay	
					6		
		53/60		CL	7	6.5'-7' clay, 2.5Y 6/4 (light yellowish brown), soft, plastic,	
					8	wet, trace fine grained sand	
				CL	9	7'-10' sandy clay, 7.5YR 5/6 (strong brown), medium stiff,	
					10	slightly plastic, wet, fine grained sand	
					~~11~~ KL		
					~~12~~ KL		
					~~13~~ KL		
					~~14~~ KL		
					~~15~~ KL	3/4-inch diameter Schedule 40 PVC	
						3/4-inch PVC screen 0.010" slot: 4'-9'	
						Backfill: 0-2', 9-10'	
						Bentonite: 2-3'	
						Sand: 3-9'	

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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BORING/WELL CONSTRUCTION LOG

Project: AOU-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620 DT 2"
Driller: O. Waters
Boring/Well ID: GW-08

Project Number: 6202899
Start Time/Date: 1231 2/27/16
Completion Time/Date: 1305 2/27/16
Final Depth: 15'
Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	~~Sample Interval~~ Recovery	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE	NA	21/60	NA	ML	1–5	0-4" topsoil 4" - 5' sandy silt, 10YR 3/3 (dark brown), medium stiff, nonplastic, dry, fine grained sand	
		41/60		SC	6–10	5' - 11' clayey sand, 7.5 YR 5/4 (brown), medium dense, moist, fine grained sand	
		60/60		SP	11–15	11' - 15' poorly graded sand, 7.5 YR 5/2 (brown), medium dense, wet, fine grained sand, 10% fines	
						3/4" dia. Sch. 40 PVC PVC 0.010" slot screen: 10-15' Backfill: 0-8' Bentonite: 8-9' Sand: 9-15'	

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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BORING/WELL CONSTRUCTION LOG

Project: AOU-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620-DT 2"
Driller: ~~Cascade~~ KL O. Waters
Boring/Well ID: GW-09

Project Number: 6202899
Start Time/Date: 0855 2/26/16
Completion Time/Date: 0925 2/26/16
Final Depth: 10'
Logged By: K. Lazzell

Page 1 of 1

Sample Type	Blow Counts/6"	~~Sample Interval~~ Recovery	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE	NA	40/60	NA	ML	1	0-5" topsoil	
					2	5"-4' silt, 7.5 YR 2.5/1 (black), stiff, slightly plastic, moist, trace fine grained sand	
					3		
					4	mottled → 5Y 6/3 (pale olive)	
				CL	5	4'-6.5' sandy clay, GLEY 1 6/10Y (greenish gray), medium stiff, plastic, moist, fine grained sand	
					6		
		51/60		SC	7	6.5'-8' clayey sand, GLEY 1 6/10Y (greenish gray), ~~dense~~ medium dense	
					8		
				CL	9	8'-10' clay, 2.5Y 6/4 (light ~~gray~~ yellowish brown) KL soft, plastic, wet, trace fine grained sand	
					10		

3/4" dia. Sch. 40 PVC
3/4" PVC screen: 0.010" slot: 5-10'

Backfill: 0-3'
Bentonite: 3-4'
Sand: 4-10'

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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BORING/WELL CONSTRUCTION LOG

Project: AOU - 1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620DT 2"
Driller: O. Waters
Boring/Well ID: GW-10

Project Number: 6202899
Start Time/Date: 1354 ~~1307~~ KL 2/26/16
Completion Time/Date: 1458 2/26/16
Final Depth: 20'
Logged By: K. Lazzeri

Page 1 of 1

Sample Type	Blow Counts/6"	~~Sample Interval~~ Recovery	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE	NA	26/60	NA	ML	1	0-6" ~~silt~~ KL topsoil	
					2	6"-1.5' silt, 10YR 3/3 (dark brown), medium stiff, nonplastic, dry, few fine grained sand	
				CH	3	1.5'-6' clay, 2.5Y 7/2 (light gray) with 10YR 6/6 (brownish yellow) mottling, medium stiff, plastic, moist	
					4		
					5		
		41/60			6	6'-11' sandy clay, 2.5Y 7/2 (light gray) with 10 YR 6/6 (brownish yellow) mottling, medium stiff, moist, very fine grained sand, trace gravel (subangular to subrounded, up to 0.25"), slightly plastic	
					7		
					8		
				CL	9		
					10		
					11		
				CL	12	11'-13' ~~clayey sand~~ sandy clay, KL 10YR 6/6 (brownish yellow), medium ~~dense~~ stiff, slightly plastic, very fine grained sand	
		53/60			13	▽	
				SC	14	13'-15' clayey sand, 7.5YR 6/6 (reddish yellow), medium dense, moist, fine grained sand	
					15		
					16		
		56/60		SW	17	16'-18' well graded sand, 7.5YR 6/6 (reddish yellow), loose, wet, fine to coarse grained sand	
					18		
				CL	19	18'-~~20~~ 19' KL clay, 2.5Y 6/4 (light yellowish brown), ~~soft~~ stiff KL, plastic, slightly plastic, moist	
				GC	20		
						19'-20' clayey gravel, 7.5YR 4/6 (strong brown), medium dense, dry, fine to coarse grained sand, gravel to angular-subangular (lithics, S.S), up to 3", 15% clay	
						3/4" Sch. 40 PVC PVC 0.010" slot screen: 13-18' Backfill: 0-11', 18-20' Bentonite: 11-12' Sand: 12-18'	
						Well completed with monitoring well manhole and concrete apron	

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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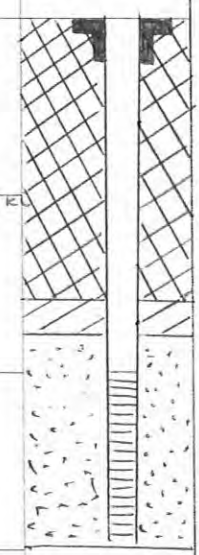
BORING/WELL CONSTRUCTION LOG

Project: A04-1: East Side Springs	Project Number: 6202899
Drilling Company: Cascade Drilling	Start Time/Date: 1450 2/25/16
Drilling Rig/Bit: Geoprobe 6620 DT 2"	Completion Time/Date: 1552 2/25/16
Driller: O. Waters	Final Depth: 15'
Boring/Well ID: GW-11	Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	~~Sample Interval~~ Recovery	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE	NA	0/60	NA		1	0-6" topsoil ~~6"- sandy clay, GLEY1 5/10Y (greenish gray), medium stiff,~~ 6"-5' No Recovery	
					2		
					▽ 3		
					4		
					5		
		41/60		SC	6	5'-10' ~~sandy clay~~ clayey sand KL, GLEY1 5/10Y (greenish gray), medium ~~stiff~~ dense KL, ~~slightly plastic~~ KL, moist, fine grained sand, root fibers	
					7		
					8		
					9		
					10	10-15' KL	
		53/60		CL	11	~~10'-12'~~ sandy clay, 2.5Y 5/2 (grayish brown), medium stiff, slightly plastic, wet, fine to medium grained sand.	
				KL	12		
					13		
					14		
					15		
						3/4" Sch. 40 PVC PVC 0.010" slot screen: 10-15' BackFill: 0-8' Bentonite: 8-9' Sand: 9-15' Well completed with monitoring well manhole and concrete apron	

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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BORING/WELL CONSTRUCTION LOG

Project: AOI-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620DT 2"
Driller: O. Waters
Boring/Well ID: GW-12

Project Number: 6202899
Start Time/Date: 1028 3/1/16
Completion Time/Date: 1054 3/1/16
Final Depth: 15'
Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	~~Sample Interval~~ Recovery	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE	NA	31/60	NA	CL	1	0-6" topsoil, roots, glass fragments	
					2	6"-4' clay 10 YR 6/3 (pale brown), medium stiff, moist, plastic	
					3		
					4		
				CL	5	4'-9' sandy clay, mottled GLEY 1 6/10Y (greenish gray) and 5Y 6/3 (pale olive), medium stiff, plastic, moist, fine grained sand	
		43/60			6		
					7		
					8		
					9		
				CL	10	9'-10' sandy clay, 10 YR 6/4 (light yellowish brown), medium stiff, slightly plastic, wet, fine to medium grained sand	

3/4" dia. Sch. 40 PVC
PVC 0.010" slot screen: 5-10'

Backfill: 0-3'
Bentonite: 3-4'
Sand: 4-10'

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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BORING/WELL CONSTRUCTION LOG

Project: AOU-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620 DT 2"
Driller: O. Waters
Boring/Well ID: GW-13

Project Number: 0202899
Start Time/Date: 0801 3/4/16
Completion Time/Date: 0856 3/4/16
Final Depth: 25'
Logged By: K. Lazzeri

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Sample Type	Blow Counts/6"	~~Sample Interval~~ Recovery	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE	NA	21/60	NA	ML	1–5	0-4" topsoil 4"-6' sandy silt, 7.5YR 4/2 (brown), stiff, nonplastic, dry, 30% sand (fine to medium grained), 10% gravel (subangular - subrounded, lithics, up to 0.5")	
		30/60		CH	6–10	6'-13.5' clay, mottled 7.5YR 3/2 (dark brown) and 7.5YR 7/4 (pink), medium stiff, plastic, moist	
		43/60			11–15	13.5'-20' clayey sand, 7.5YR 5/4 (brown), dense, moist, fine grained sand	
		51/60		SC	16–20		
		54/60		SP	21–24	20'-~~24~~ 24' poorly graded sand, 7.5YR 6/6 (reddish yellow), loose, wet, fine grained sand	
				SW	25	24'-25' well graded sand, 7.5YR 4/4 (brown), loose, wet, fine to coarse grained, subangular to rounded gravel (20%, lithics, up to 0.5"), qtz and lithic grains	

3/4" PVC Sch. 40
PVC 0.010" slot screen: 20-25'

Backfill: 0-18'
Bentonite: 18-19'
Sand: 19-25'

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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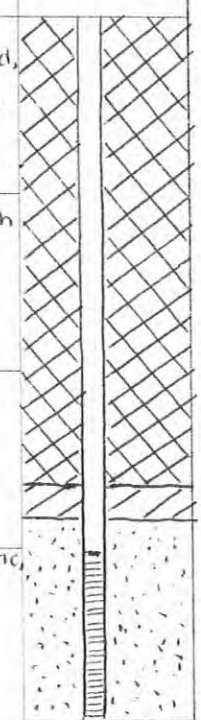
BORING/WELL CONSTRUCTION LOG

Project: AOU-1: East Side Springs	Project Number: 6202899
Drilling Company: Cascade Drilling	Start Time/Date: 0800 3/2/16
Drilling Rig/Bit: Geoprobe 6620DT 2"	Completion Time/Date: 0830 3/2/16
Driller: O. Waters	Final Depth: 20'
Boring/Well ID: GW-14	Logged By: K. Lazzen

Sample Type	Blow Counts/6"	~~Sample Interval~~ Recovery	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)
ACETATE SLEEVE ~~NA~~ KL	NA	45/60	NA	ML	1, 2, 3	0-3" topsoil 3"-3' sandy silt, 7.5 YR 3/2 (dark brown), medium stiff, nonplastic, dry, fine to coarse grained sand, 15% gravel (angular to subrounded, lithics & qtz., up to 1")
				CL	4, 5	3'-6' clay, 2.5 Y 7/2 (light gray), stiff, plastic, dry, trace rounded gravel up to 0.5"
		48/60		CH	6, 7, 8, 9, 10	6'-15.5' ~~sand~~ KL clay, mottled 10YR 7/2 (light gray) and 10YR 5/6 (yellowish brown), medium dense, nonplastic, wet
		60/60			11, 12, 13, 14, 15	
		60/60		SC	16, 17, 18, 19, 20	15.5'-20' clayey sand, 7.5 YR 5/6 (strong brown), soft, slightly plastic, wet, fine grained sand

Boring and/or Well Details



3/4" PVC (Sch. 40)
PVC 0.010" slot screen: 15-20'

Backfill: 0-13'
Bentonite: 13-14'
Sand: 14-20'

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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BORING/WELL CONSTRUCTION LOG

Project: AOU-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: ~~Geoprobe 6620 DT~~ Hand Augered 2" KL
Driller: O. Waters
Boring/Well ID: GW-15

Project Number: 6202899
Start Time/Date: 1411 2/27/16
Completion Time/Date: 1440 2/27/16
Final Depth: 5'
Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	Sample Interval	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
HAND AUGER	NA	NA	NA	ML	▽ 1	0-3" topsoil	
					2	3"-4' sandy silt, ~~7.5~~ 10YR 2.5/1 (black), medium stiff, nonplastic, wet, fine to medium grained	
					3		
					4		
				SC	5	4'-5' clayey sand, ~~SYR 4KL~~ 10YR 5/2 (grayish brown), medium dense, wet, fine grained sand, 15% fines	

3/4" PVC Sch. 40
PVC 0.010" slotted screen: 0-5'

Backfill: 0-0.5' *
Bentonite: 0.5'-1'*
Sand: 1-5'

* Bentonite and backfill in part of screen in order to prevent spring from popping up

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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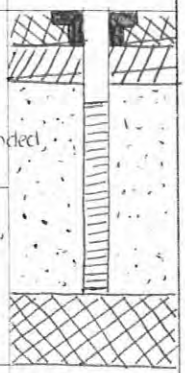
BORING/WELL CONSTRUCTION LOG

Project: Acu-1 : East side Spnngs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620DT 2"
Driller: O. Waters
Boring/Well ID: GW-16

Project Number: 62028991
Start Time/Date: 1528 2/27/16
Completion Time/Date: 1610 2/27/16
Final Depth: 10'
Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	Sample Interval	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
HAND AUGER	NA	20/60	NA	ML	1	0-4 topsoil	
					2	4"- 2' sandy silt, 10YR 3/3 (dark brown), soft, nonplastic, moist, fine to coarse grained sand. Few gravel (subangular, up to 0.25")	
				GC	3	2'-6' clayey gravel, 10YR 5/4 (yellowish brown), loose, wet, fine to coarse grained sand (25%), 20% fines, gravel angular to subrounded, up to 0.5"	
					4		
					5		
					6		
					7	~~dk~~ kl 6'-9' clayey sand, 10YR 5/2 (~~brn~~ kl grayish brown), medium dense, wet, fine to medium grained sand, 25% fines	
		51/60		SC	8		
					9		
				SC	10	9'-10' clayey sand, 5YR 4/6 (yellowish red), medium dense, wet, fine grained sand, 15% fines	

3/4" PVC Sch. 40

PVC 0.010" slot well screen: 3-8'

Backfill: 0-1'; 8-10'
Bentonite: 1-2'
Sand: 2-8'

Well completed with monitoring well manhole and concrete apron

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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BORING/WELL CONSTRUCTION LOG

Project: AOU-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620DT 2"
Driller: O. Waters
Boring/Well ID: GW-17

Project Number: 62028991
Start Time/Date: 0925 3/1/16
Completion Time/Date: 0956 3/1/16
Final Depth: 15'
Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	~~Sample Interval~~ Recovery	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE	NA	31/60	NA	SC	1–5	0'-4" topsoil 4"- 4' clayey sand, 7.5 YR 6/4 (light brown), medium stiff, moist, slightly plastic 4'-12' poorly graded sand, 5YR 5/4 (reddish brown), medium dense, moist, fine grained sand	
		45/60		SP	6–10		
		54/60		CL	11–15	12'-15' sandy clay, 5 YR 5/4 (reddish brown), medium stiff, slightly plastic, wet, fine to medium grained sand	

3/4" PVC Sch. 40
PVC 0.010" slot screen: 10-15'

Backfill: 0-8'
Bentonite: 8-9'
Sand: 9-15'

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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BORING/WELL CONSTRUCTION LOG

Project: Act-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620DT 2"
Driller: C. Waters
Boring/Well ID: GW-18

Project Number: 6202899
Start Time/Date: 0834 3/1/16
Completion Time/Date: 0901 3/1/16
Final Depth: 10'
Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	~~Sample Interval~~ Recovery	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE	NA	30/60	NA	CL	1	0-4" topsoil	
					2	4"- 7' sandy clay, 10YR 6/4 (light yellowish brown), medium stiff,	
					3	moist, slightly plastic, fine grained sand	
					4		
					5		
		41/60		GC	6		
					7		
					8 ▽	7'-10' clayey gravel, 7.5 YR 4/6 (strong brown), medium dense,	
					9	wet, fine to coarse grained sand, gravel angular - subangular,	
					10	up to 2.5", 10% clay	

3/4" PVC Sch. 40
PVC 0.010" slot screen: 5-10'

Backfill: 0-3'
Bentonite: 3-4'
Sand: 4-10'

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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BORING/WELL CONSTRUCTION LOG

Project: ACU-1 : East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620DT 2"
Driller: C. Walters
Boring/Well ID: GW-104

Project Number: 620.28.04
Start Time/Date: 1522 2/29/16
Completion Time/Date: 1631 2/29/16
Final Depth: 30'
Logged By: K. Lazzeri

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Sample Type	Blow Counts/6"	Sample Interval	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE	NA	45/60	NA	ML	1	0-6" topsoil	3/4" PVC Sch. 40
					2	6"-2' silt, 7.5 YR 4/2 (brown), medium stiff, nonplastic, clay, 15% sand (fine to medium grained)	PVC 0.010" slot screen: 7-12'
				CL	3	2'-7' sandy clay, mottled 10 YR 7/2 (light gray) and 10 YR 5/6 (yellowish brown), medium stiff, slightly plastic, moist, fine grained sand	
					4		
					5		
		54/60			6		Backfill: 0-5', 12-30'
					7		
				SC	8	7'-9' clayey sand, mottled 10 YR 7/2 (light gray) and 10 YR 5/6 (yellowish brown), medium dense, moist, fine grained sand	Bentonite: 5-6'
					9		
				SW	10	9'-10' well graded sand, 7.5 YR 4/6 (strong brown), loose, moist, fine to medium grained	Sand: 6-12'
				SP	11	10'-12' poorly graded sand, 5 YR 4/4 (reddish brown), medium dense, moist, fine grained sand	
		56/60			12		
				CL	13	12'-23' sandy clay, 7.5 YR 5/6 (strong brown), medium stiff, slightly plastic, moist	
					14		
					15		
					16		
		50/60			17		
					18		
					19		
					20		
					21		
					22		
		59/60			23		
				SC	24	23'-27' clayey sand, 5 YR 4/4 (reddish brown), medium dense, dry, fine grained sand	
					25		
					26		
					27		
		52/60			28		
				GC	29	27'-30' clayey gravel, 7.5 YR 4/4 (brown), loose, dry, angular to subrounded, gravel (lithics up to 2"), fine to coarse grained sand, 20% clay	
					30		

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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BORING/WELL CONSTRUCTION LOG

Project: AOU-1 : East side springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620DT 2"
Driller: O. Waters
Boring/Well ID: GW-20

Project Number: 602899
Start Time/Date: 1351 2/29/16
Completion Time/Date: 1430 2/29/16
Final Depth: 20'
Logged By: K. Lazzen

Sample Type	Blow Counts/6"	Sample Interval	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE	NA	25/60	NA	ML	1–5	0-3" topsoil 3"-6' sandy silt, 10 YR 3/3 (dark brown), medium stiff, slightly plastic, moist, few gravel (subrounded to rounded, quartz and lithics, up to 0.3"), fine to medium grained sand.	
		30/60		-CL- CL	6–10	6'-6.5' clay, 5Y 7/2 (light gray), stiff, plastic, dry, trace fine grained sand 6.5'-9' sandy clay, 7.5 YR 4/6 (strong brown), lamination of clay above, stiff, ~~plastic~~ CL slightly plastic, 10% fine to medium grained sand, 5% subangular-subrounded gravel (lithics, up to 0.25")	
		22/60		CL GC	11–15	9'-12' sandy clay, 7.5 YR 2.5/1 (black), stiff, ~~plastic~~ slightly CL, moist, trace angular to subrounded gravel (lithics, up to 0.25") 12'-17' clayey gravel, 5YR 5/4 (reddish brown), loose, wet, fine to coarse grained sand, angular to subangular gravel (lithics, up to 2")	
		60/60		CL	16–20	17'-20' clay 5Y 8/1 (white) mottled with 5 Y 7/6 (yellow), stiff, plastic, moist	
						3/4" PVC Sch. 40 PVC 0.010" slot screen: 11.5-16.5' Backfill: 0-9.5'; 16.5-20' Bentonite: 9.5-10.5' Sand: 10.5-16.5' well completed with monitoring well manhole and concrete apron	

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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BORING/WELL CONSTRUCTION LOG

Project: AOU-1: East Side Springs	Project Number: 6202894
Drilling Company: Cascade Drilling	Start Time/Date: 0835 2/29/16
Drilling Rig/Bit: Geoprobe 6620DT 2"	Completion Time/Date: 0940 2/29/16
Driller: O. Waters	Final Depth: 20'
Boring/Well ID: GW-21	Logged By: K. Lazzen

Sample Type	Blow Counts/6"	Sample Interval	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
Acetate Sleeve	NA	50/60	NA	GW	1	0-6" topsoil 6"-1" sandy gravel, 10YR 6/4 (light yellowish brown), loose, dry, gravel subangular to rounded (lithics, up to 2"), fine to coarse grained sand, 10% clay	
				CL	2		
					3	1'-6' sandy clay, 7.5YR 4/6 (strong brown), dry, stiff, slightly plastic, fine to coarse grained sand (25%), trace gravel up to 0.1" (rounded)	
					4		
					5		
		58/60			6	very tough drilling starting around 4'	
				CL	7	6'-13' sandy clay, 5YR 4/6 (yellowish red), medium stiff, slightly plastic, dry, fine grained sand (35%)	
					8	moist at 12'	
					9		
					▽ 10		
		59/60			11		
					12		
					13		
					14	13'-20' clayey sand, 5YR 4/6 (yellowish red), medium dense, wet, fine grained sand	
					15		
		60/60		SC	16		
					17		
					18	18'- trace gravel (subangular, lithics, up to 0.5")	
					19		
					20		
						3/4" PVC Sch. 40 PVC 0.010" slot screen. 12-17' Backfill: 0-10'; 17-20' Bentonite: 10-11' Sand: 11-17'	

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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BORING/WELL CONSTRUCTION LOG

Project: AOU-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620DT 2"
Driller: O. Waters
Boring/Well ID: GW-22

Project Number: 6202894
Start Time/Date: 1025 2/29/16
Completion Time/Date: 1101 2/29/16
Final Depth: 15'
Logged By: K. Lazzeri

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Sample Type	Blow Counts/6"	Sample Interval	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE	ND	0/60	ND		1–5	0-6" topsoil 6"-5' ~~Se~~ no recovery "too rocky	
		30/60		~~SC~~ KL CL	6–10	5'-8' ~~clayey sand~~ KL sandy clay, 5YR 4/6 (yellowish red), medium stiff, slightly plastic, moist, fine grained sand 8'-13' clayey gravel, 5YR 5/4 (reddish brown), loose, moist, fine to coarse grained sand, angular to subangular gravel (lithics, up to 3")	
		54/60		GC SC	11–15	13'-15' clayey sand, 5YR 4/6 (yellowish red), medium dense, wet, fine grained sand	
						3/4" PVC Sch. 40 PVC 0.010" slot screen: 10-15' Backfill: 0-8' Bentonite: 8-9' Sand: 9-15'	

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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BORING/WELL CONSTRUCTION LOG

Project: AOU-1 : East Side Sprays
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620 DT
Driller: O. Waters
Boring/Well ID: GW-23

Project Number: 60628994
Start Time/Date: 1101 2/22/16
Completion Time/Date: 1320 2/22/16
Final Depth: 20'
Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	~~Sample Interval~~ Recovery	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE	NA	HAND AUGERED	NA	ML	1	0-4" topsoil clayey silt, 7.5 YR 3/1 (very dark gray), medium stiff, plastic, moist, fines, some very fine grained sand lens (10 YR 6/4 - light yellowish brown) 4"-3'	
					2		
					3		-3
				CL	4	3-6.5': clay, 7.5 YR 4/6 (very strong brown), medium stiff, plastic, moist, fines, trace subangular gravel up to 2".	
					5		
					6		
					7	6.5'-10': clayey sand, 10 YR 6/2 (light brownish gray), stiff, slightly plastic, dry, very fine grained sand	-7.5
				SC	8		
		30/36			9		-8.5
					10	water at 9.5'	
				CL	11	10'-12': clay, 10 YR 5/6 (yellowish brown), stiff, slightly plastic, ~~slty~~ moist	
					12		
		50/60		CL	13	12'-~~13~~ 14': clay, 7.5 YR 5/6 (strong brown), medium stiff, plastic, moist, fines, trace gravel up to 1" (subrounded sandstone)	-13.5
					14		
				SM	15	14'-20' silty sand ~~+ gravel~~ with gravel: 7.5 YR 4/6 (strong brown), loose, moist (wet at 15'), gravel (subangular - subrounded, lithics and sandstone)	
		40/60			16	fine grained - medium grained sand	
					17		
					18		
					19		
					20		

3/4" PVC Sch. 40
PVC .010" slot screen: 8.5'-13.5'
Backfill: 0-6.5'; 13.5-20'
Bentonite: 6.5'-7.5'
Sand: 7.5-13.5'

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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BORING/WELL CONSTRUCTION LOG

Project: AOU-1 : East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe - 6620 DT 2"
Driller: G. Waters
Boring/Well ID: GW-24

Project Number: 6202899
Start Time/Date: 1111 2/23/16
Completion Time/Date: 1223 2/23/16
Final Depth: 20'
Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	~~Sample Interval~~ Recovery	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE	NA	31/60	NA	CL	1–5	0-4" topsoil 4" - 7' silty clay: 10 YR 3/3 (dark brown), medium STIFF, slightly plastic, moist, fines, trace subangular gravel up to 1inch (S.S)	
		49/60		ML	6–10	7'-11' sandy silt: 10 YR 7/3 (very pale brown), soft, slightly plastic, moist, very fine grained sand, few gravel up to 1 inch (subrounded, lithics).	
		54/60		CL	11–15	11'-13' clay, GLEY 1 5/10Y (greenish gray), STIFF, plastic, moist, trace gravel up to 1" (subangular, S.S.) 13'-20' clay, 10 YR 3/3 (dark brown), STIFF, plastic, moist w/24 at 13.5'	
		45/60		CL	16–20	Few ~~fine~~ fine very coarse grained sand	

3/4" PVC Sch. 40

PVC .010" slot screen: 13-18

backfill: 0-11', 18-20'
bentonite: 11'-12'
sand: 12-18'

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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BORING/WELL CONSTRUCTION LOG

Project: AOU-1: East Side Springs
Project Number: 62026899
Drilling Company: Cascade Drilling
Start Time/Date: 1115 2/29/16
Drilling Rig/Bit: Geoprobe 6620DT 2"
Completion Time/Date: 1230 2/29/16
Driller: O. Waters
Final Depth: 30'
Boring/Well ID: GW-25
Logged By: K. Lazzen

Sample Type	Blow Counts/6"	Sample Interval Recovery	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE	NA	25/60	NA	ML	1–5	0-5" topsoil 5" - 5' silt, 7.5YR 2.5/3 (very dark brown), soft, nonplastic, dry, 15% fine grained sand	
		43/60		CL	6–9	5'-9' sandy clay, 7.5YR 4/6 (strong brown), medium stiff, slightly plastic, dry, fine to medium grained sand	
					8	8' moist	
		51/60		GC	9–15	9'-15' clayey gravel, 7.5YR 4/4 (brown), loose, dry, angular to subangular gravel (lithics, SS., up to 2"), fine to coarse grained sand, 15% clay (2.5Y 7/2 light gray)	
				CH	15–19	15'-19' sandy clay, 7.5YR 4/6 (strong brown), soft, plastic, moist, fine to medium grained sand	
		50/60		GC	19–21	19'-21' clayey gravel, 7.5YR 4/4 (brown), loose, dry, angular to subrounded gravel (lithics, S.S. up to 3"), fine to medium grained sand, 25% clay	
		56/60		CH	21–30	21'-30' sandy clay, 5YR 4/6 (yellowish red), soft, plastic, wet, fine grained sand, lenses of clay sand (5" thick)	
		60/60					
						3/4" dia. Sch 40 PVC 3/4" PVC screen 0.010" slot: 25-30' Backfill: 0-23' Bentonite: 23-24' Sand: 24-30'	

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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BORING/WELL CONSTRUCTION LOG

Project: AOI-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620DT 2"
Driller: O. Waters
Boring Well ID: GW-20

Project Number: 6202899
Start Time/Date: 1533 2/26/16
Completion Time/Date: 1621 2/26/16
Final Depth: 20'
Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	Sample Interval	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE	NA	25/60	NA	GC	1	0-4" topsoil	
					2	4"-4.5' clayey gravel, clay 10YR 7/3 (very pale brown), loose, moist, 25% sand (fine-coarse grained), 15% fines, 60% gravel (angular to subrounded, lithics, up to 1.5")	
					3		
					4		
					5	4.5'-13' clay, 2.5Y 7/2 (light gray) with 10YR 6/6 (brownish yellow)	
		36/60		CL	6	mottling, medium stiff, moist, plastic	
					7		
					8		
					9		
					10		
		41/60			11		
					12		
					13		
				SP	14	13'-15' poorly graded sand, 7.5YR 5/6 (strong brown), lamination of clay (7.5YR 5/4 brown), medium dense, moist, fine grained	
					15		
				SW	16	15'-17' well graded sand, 7.5YR 5/6 (strong brown), medium dense, moist, fine grained sand to coarse grained	
		58/60			17		
				CL	18	17-18' clay, 7.5YR 6/4 (light brown), medium stiff, plastic, moist	
				SC	19	18-18.5' clayey sand, 7.5YR 6/4 (light brown), medium dense, moist, fine grained sand	
				GC SEKL	20	18.5-20' clayey gravel, 7.5YR 4/4 (brown), loose, dry, angular to subrounded gravel (lithics, S.S up to 3"), fine to medium grained sand, 25% clay	

3/4" PVC Sch. 40
PVC 0.010" slot screen: 15-20'

Backfill: 0-13'
Bentonite: 13-14'
Sand: 14-20'

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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BORING/WELL CONSTRUCTION LOG

Project: AOU-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620DT 2"
Driller: O. Waters
Boring/Well ID: GW-27

Project Number: 6202899
Start Time/Date: 0919 3/4/16
Completion Time/Date: 1022 3/4/16
Final Depth: 30'
Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	Sample Interval	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE	NA	21/60	NA	ML	1–5	3-4" topsoil 4"-5' sandy silt, 7.5YR 4/2 (brown), stiff, nonplastic, dry, 30% sand (fine-medium grained), 15% gravel (subrounded, lithics, up to 0.5")	
		57/60		SP	6–10	5'-12' poorly graded sand, 10YR 5/8 (yellowish brown), medium dense, dry, fine grained, qtz grains	
		48/60		CL	11–13	12'-13.5' sandy clay, 10YR 5/8 (yellowish brown), medium stiff, slightly plastic, moist, fine grained sand	
				~~CL~~ GC	14–15	13.5-17' clayey gravel, 7.5YR 4/6 (strong brown), medium dense, dry, fine to coarse grained, gravel angular to subrounded (lithics, up to 3")	
		58/60		CH	16–18	17'-18' clay, 7.5YR 4/6 (strong brown), medium stiff, plastic, moist, trace sand (fine to medium grained)	
				CL	19–20	18'-23' sandy clay, 5YR 6/4 (light reddish brown), medium stiff, nonplastic, moist, 15% sand (fine to medium grained sand)	
		49/60		GC	21–25	23'-30' clayey gravel, 7.5YR 4/6 (strong brown), medium dense, wet, fine to medium grained, angular to subangular gravel (lithics, 2.5")	
		50/60			26–30		
						3/4" PVC Sch. 40 PVC 0.010" slot screen: ~~30-35~~ RL 25-30' Backfill: 0-23' Bentonite: 23-24' Sand: 24-30'	

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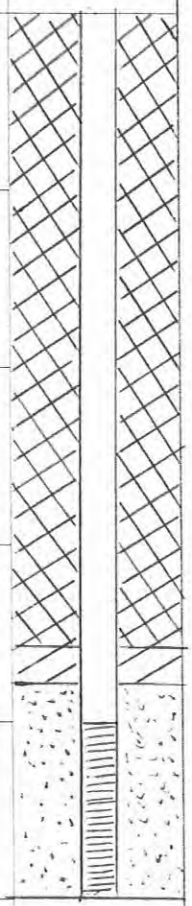
BORING/WELL CONSTRUCTION LOG

Project: AOU-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620 DT 2"
Driller: C. Waters
Boring/Well ID: GW-28

Project Number: 6202899
Start Time/Date: 1101 3/4/16
Completion Time/Date: 1145 3/4/16
Final Depth: 25'
Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	Sample Interval	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
					1 KL	No lithology logged	
					2 KL		
					~~3~~ KL		
					4 KL	3/4" PVC Sch. 40	
					5	PVC 0.010" slot screen: 20-25'	
					6		
					7	Backfill: ~~0-13'~~ KL 0-18'	
					8	Bentonite: ~~13-14'~~ KL 18-19'	
						Sand: ~~14-20'~~ KL 19-25'	
					9		
					10		
					11		
					12		
					13		
					14		
					15		
					16		
					17		
					18		
					▽ 19		
					20		
					21		
					22		
					23		
					24		
					25		

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BORING/WELL CONSTRUCTION LOG

Project: AOC-1 : East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620 DT 2"
Driller: O. Waters
Boring/Well ID: GW-31

Project Number: W2028899
Start Time/Date: 0917 2/27/16
Completion Time/Date: 1130 2/27/16
Final Depth: 35'
Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	Sample Interval Recovery	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE	NA	20/60	NA	ML	1–5	0-5" topsoil 5"-4' sandy silt, 7.5 YR 4/2 (brown), medium stiff, slightly plastic, moist, fine to medium grained sand, trace gravel up to 0.5" (subangular - subrounded) 4'-7.5' sandy clay, 7.5YR 5/4 (brown), soft, plastic, moist, 20% fine grained sand	
		49/60		CL	6–10	7.5'-15' clay, 7.5 YR 7/4 (pink) mottled with 7.5 YR 7/8 (reddish yellow), very stiff, plastic, dry	
		58/60		CL	11–15		
		59/60		CH	16–20	15'-~~17.5'~~ 20' sandy clay, mottled 2.5 Y 7/4 (pale yellow) and 7.5 YR 6/8 (reddish yellow), stiff, dry, plastic, very fine grained sand 17.5' same as above, medium stiff, moist	
		60/60		CH	21–25		
		60/60		CH	26–29	25'-29' clay, GLEY 1 5/10Y (greenish gray), medium stiff, plastic, moist,	
		50/60		SC/SW SC CL	30–35	29'-29.5' ~~sandy clay~~ clayey sand, mottled 10 YR 7/3 (very pale brown) and 10 YR 5/6 (yellowish brown), medium dense, moist, fine grained sand 29.5'-30' well graded sand, 10 YR 4/4 (dark yellowish brown), loose, moist, fine to coarse grained, few gravel (subangular - subrounded, up to 0.5", lithics), 15% silt 30'-33' clayey sand, 7.5 YR 5/6 (strong brown), loose, wet, fine to coarse grained sand, trace gravel up to 0.25" 33'-35' sandy clay, 5YR 5/4 (reddish brown), medium stiff, wet, slightly plastic, fine grained sand	
						3/4" PVC Sch. 40 PVC 0.010" slot well screen: 30-35' Backfill: 0-28' Bentonite: 28-29' Sand: 29-35'	

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BORING/WELL CONSTRUCTION LOG

Project: ADU-1: East Side Springs
Drilling Company: Cascade
Drilling Rig/Bit: Geoprobe 6620DT 2"
Driller: D. Waters
Boring/Well ID: GW-33

Project Number: 62026899
Start Time/Date: 0839 2/23/16
Completion Time/Date: 1010 2/23/16
Final Depth: 40'
Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	Sample Interval	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
					1	Lithology not logged	
					2	Hit refusal at 40' - no well set	
					3		
					4		
					5		
					6		
					7		
					8		
					9		
					10		
					11		
					12		
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					39		
					40		

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BORING/WELL CONSTRUCTION LOG

Project: AOU-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620DT 2"
Driller: O. Waters
Boring/Well ID: GW-35

Project Number: 6202899
Start Time/Date: 1402 2/23/10
Completion Time/Date: 1547 2/23/10
Final Depth: 45'
Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	Sample Interval	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE	NA	21/60	NA	SM	1–5	0-3" Topsoil 3"-7.5' silty sand, 7.5YR 3/4 (dark brown), loose, ~~normal~~ dry, KL fine to coarse grained sand, few subangular - subrounded gravel (SS, and lithics)	
		35/60		ML	6–10	7.5'-10.5' silt, 10YR 5/6 (yellowish brown), soft, plastic, moist, few subangular gravel (0.25-1")	
		54/60		SW CL	11–13	10.5-11' well graded sand, 7.5YR 4/6 (strong brown), loose, dry, ~~fine~~ to coarse grained sand, 10% fines, few gravel 0.25"-0.5" (subrounded, lithic) 11'-13' sandy clay, 10YR 5/6 (yellowish brown), soft, plastic, wet, very fine grained sand	
				CL	14–15	13'-16' same as above, moist, medium stiff	
		56/60		SW SP	16–20	16'-16.5' well graded sand, 5YR 4/6 (yellowish red), loose, dry, fine to coarse grained sand, 10% fines, trace subangular gravel up to 0.5" (lithics) 16.5'-19.5' poorly graded sand, 5YR 4/6 (yellowish red), ~~tan~~ KL dense, dry, fine grained sand 19'-22' sandy clay, 10YR 5/6 (yellowish brown), soft, plastic, moist, very fine grained sand	
		60/60		CL CL CL	21–25	& mottled 10YR 6/6 (brownish yellow) 22'-24' clay, 10YR 5/6 (yellowish brown), stiff, plastic, dry, 10% very fine grained sand 24'-26' silty clay, 10YR 5/4 (yellowish brown), soft, plastic, moist, 5% very fine grained sand	
		51/60		GC	26–30	26'-37' ~~gravel with sand and clay~~ clayey gravel KL, 7.5YR 4/6 (strong brown), medium dense, dry, fine to coarse grained sand, 20% clay (10YR 5/6 - brownish yellow), >20% angular - subrounded gravel (0.25-2", lithics)	
		58/60			31–35		
		47/60		CL	36–40	37'-45' sandy clay, 5YR 5/4 (reddish brown), medium stiff, moist, 10% very fine grained sand	

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BORING/WELL CONSTRUCTION LOG

Project: AOU-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620DT 2"
Driller: O. Waters
Boring/Well ID: GW-35

Project Number: 62026099
Start Time/Date: 1402 2/23/16
Completion Time/Date: 1547 2/23/16
Final Depth: 45'
Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	Sample Interval	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE	NA	58/60	NA		41 42 43 44 45		
						Refusal @ 45' - No well set	

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BORING/WELL CONSTRUCTION LOG

Project: AOI-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: 6620 DT - Geoprobe 2"
Driller: O. Waters
Boring/Well ID: GW-39

Project Number: 602878.19
Start Time/Date: 1420 2/22/16
Completion Time/Date: 1538 2/22/16
Final Depth: 25'
Logged By: K. Lazzeri

Page 1 of 1

Sample Type	Blow Counts/6"	Sample Interval / Recovery	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
HAND AUGER		HAND AUGERED KL		CL	1–5	0-4" topsoil 4"-8' clay, 7.5YR 5/4 (brown), stiff, plastic, moist, fines, occasional iron staining, very fine sand layer at 7.5'	
ACETATE SLEEVE	NA	24/36	NA	CL	8–10	8'-14' sandy clay, 7.5YR 5/3 (brown), medium soft, slightly plastic, moist, fines, very fine grained sand, trace subrounded gravel up to 0.25" (lithics), orange mottling	
		59/60			11–14		
				ML	14–15	14'-25' sandy silt, 7.5YR 4/6 (brown), medium stiff, slightly plastic, moist, fine grained sand, trace subangular - subrounded gravel (up to 0.25", lithics)	
		46/60			16–18		
					19	▽ wet at 18.5'	
		51/60			20–25		
						3/4" PVC PVC 010 Slot Screen: 17.7 - 22.7 Backfill: 0 - 15.5', 22.7 - 25' Bentonite: 15.5 - 16.5' Sand: 16.5 - 22.7'	

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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BORING/WELL CONSTRUCTION LOG

Project: AOU-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620-DT 2"
Driller: D. Waters
Boring/Well ID: GW-40

Project Number: 6202699
Start Time/Date: 1227 3/1/16
Completion Time/Date: 1359 3/1/16
Final Depth: 40'
Logged By: K. Lazzen

Sample Type	Blow Counts/6"	~~Sample Interval~~ Recovery	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE	NA	52/60	NA	CL	1–5	0'-3" topsoil 3"-9' clay, 7.5YR 5/3 (brown), very stiff, plastic, dry	
		69/60			6–9		
				SP	10	9'-10' poorly graded sand, 10YR 6/6 (brownish yellow), loose, dry, quartz grains, fine grained	
		59/60		CL	11	10'-11' clay, 10YR 4/4 (yellowish dark brown), stiff, plastic, dry	
				SP CH	12	11'-12' poorly graded sand, 10YR 6/6 (brownish yellow), loose, dry, fine grained	
				CL	13	12'-14' sandy clay, 7.5YR 5/6 (strong brown), medium stiff, slightly plastic, moist, fine grained sand.	
				SC	14–15	14'-15' clayey sand, 7.5YR 4/6 (strong brown), medium dense, moist, fine grained sand	
		56/60		CH	16–17	15'-17' clay 7.5YR 5/4 (brown), soft, plastic, moist grading to clayey sand	
	NA		NA	SP	18–20	17'-20' poorly graded sand, 7.5YR 4/6 (strong brown), medium dense, mottled w/ 7.5YR 6/8 (reddish yellow	
		59/60		CH	21–25	20'-25' clay 7.5YR 5/6 (strong brown), medium stiff, plastic, moist	
		60/60		SP/CL	26–30	25'-29' interbedded poorly graded sand and sandy clay, 7.5YR 5/6 (strong brown), layers 4-6" thick, sand (medium dense, moist, fine grained sand), sandy clay (medium stiff, slightly plastic, moist) 29'-40' interbedded poorly graded sand, sandy clay, and clay, 7.5YR 4/6 (strong brown)	
		57/60		SP/CL/SC	31–35		
		58/60			36–40	3/4" PVC Sch. 40 PVC 0.010" slot screen: 35-40' Backfill: 0-33' Bentonite: 33-34' Sand: 34-40'	

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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BORING/WELL CONSTRUCTION LOG

Project: AOU-1: East Side
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620DT 2"
Driller: O. Waters
Boring/Well ID: GW-42

Project Number: 6202899
Start Time/Date: 1425 3/1/16
Completion Time/Date: 1549 3/1/16
Final Depth: 40'
Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	Sample Interval	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE	NA	48/60	NA	ML	1–5	0-4" topsoil 4" - 7' silt, 7.5 YR 4/6 (brown), stiff, nonplastic, dry, 15% sand (fine to medium grained), 20% gravel (up to 0.5", subangular to rounded, lithics)	
		50/60		CL	6–10	7' - 13' clay, mottled 10YR 7/2 (light gray) and 10YR 5/6 (yellowish brown), medium dense, moist, plastic	
		60/60		SC	11–15	13' - 18' clayey sand, 7.5 YR 4/8 ~~(brown)~~ strong brown, medium stiff, moist, fine grained sand	
		59/60		GC	16–20	18' - 23' clayey gravel, 7.5 YR 4/4 (brown), loose, dry, angular to subrounded gravel (lithics up to 2"), fine to coarse grained sand, 20% clay	
		38/60		SC	21–25	23' - ~~40'~~ 25' clayey sand, 7.5 YR 4/6 (strong brown), medium stiff, moist, fine to coarse grained sand, few gravel (subangular - rounded, lithics, up to 0.5")	
		54/60		GC	26–30	25 - 40' clayey gravel, 7.5 YR 4/4 (brown), loose, dry, angular to subangular gravel (lithics, s.s. up to 2.5"), fine to coarse grained sand	
		36/60			31–35		
		55/60			36–40	Refusal @ 40' - No well set	

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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BORING/WELL CONSTRUCTION LOG

Project: AOU-1: East Side Springs	Project Number: 6202899
Drilling Company: Cascade Drilling	Start Time/Date: 0824 3/3/16
Drilling Rig/Bit: Geoprobe 6620DT 2"	Completion Time/Date: 0917 3/3/16
Driller: C. Waters	Final Depth: 35'
Boring/Well ID: GW-43	Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	Sample Interval	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE	NA	19/60	NA	ML	1–4	0-4' sandy silt, 7.5YR 3/3 (dark brown), medium stiff, nonplastic, dry, fine grained sand, 15% gravel (angular to subrounded, lithics, up to .")	
		50/60		SP	5–10	4'-10' poorly graded sand, 7.5YR 5/6 (strong brown), medium dense, dry, fine grained sand, no gravel, primarily qtz grains	
		51/60		SP	11–15	10'-16' poorly graded sand, 7.5YR 4/6 (strong brown), medium dense, dry, fine to medium grained sand, qtz and lithic grains, few gravel at 15' (lithics, rounded, up to 0.25")	
		56/60		SP/SC	16–20	16'-28' interbedded poorly graded sand and clayey sand, 7.5YR 4/6 (strong brown), medium dense, moist, fine to medium grained sand wet ~27'	
		52/60			21–25		
		54/60			26–30		
		56/60		CL	▽ 31–35	28'-35 clay, 2.5Y 8/2 (pale yellow), medium stiff, plastic, wet	
						3/4" PVC Sch. 40 PVC 0.010" slot screen: 28-33' Backfill: 0-26'; 33-35' Bentonite: 26-27' Sand: 27-33'	

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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BORING/WELL CONSTRUCTION LOG

Project: A04-1 : East side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620 DT 2"
Driller: D. Waters
Boring/Well ID: GW-46

Project Number: 6202899
Start Time/Date: 0900 2/24/16
Completion Time/Date: 1040 2/24/16
Final Depth: 35'
Logged By: K. Lazzen

Sample Type	Blow Counts/6"	Sample Interval	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE	NA	31/60	NA	SC	1–5	0-4" Topsoil 4"-8' clayey sand, 7.5YR 4/6 (strong brown), medium ~~dense~~ loose, moist, fine to medium grained sand	
		43/60		SW	6–10	8'-10' well graded sand: 7.5YR 4/6 (strong brown), loose, dry, fine to very coarse grained (qtz, mafics), trace subrounded gravel up to 0.25" Sandy gravel or very coarse grained sand at 9'.	
		52/60		SM SP	11–15	10'-11' silty sand, 7.5YR 4/3 (brown), medium dense, wet, fine grained sand 11'-15' poorly graded sand, 7.5YR 6/6 (strong brown), laminated with clay (7.5YR 7/1 light gray), dense, moist, fine grained sand (qtz)	
		51/60		SM SP	16–20	15-16' silty sand, 7.5YR 4/3 (brown), medium dense, moist, fine grained sand 25' 16'-~~25~~ poorly graded sand, 7.5YR 6/6 (strong brown), laminated with clay (7.5YR 7/1 light gray), dense, moist, very fine to fine grained sand (qtz) ~~Silty~~ Clayey sand lenses at 23' and 24' (1" thick) 7.5YR 7/2 pinkish gray)	
		60/60			21–25	color change to 7.5YR 6/6 (reddish yellow)	
		52/60		SM SP	26–30	25-26' silty sand, 7.5YR 5/6 (strong brown), medium dense, moist, fine grained sand 26'-35' poorly graded sand, 7.5YR 6/6 (reddish yellow), dense, moist, fine grained sand ▽ wet at 29'	
		49/60			31–35		
						3/4" PVC Sch. 40 PVC 0.010" slot screen: 30-35' Backfill: 0-26' Bentonite: 26-29' Sand: 29-35'	

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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BORING/WELL CONSTRUCTION LOG

Project: AOU-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620DT 2"
Driller: C. Waters
Boring/Well ID: GW-48

Project Number: 0202899
Start Time/Date: 1103 2/24/16
Completion Time/Date: 1350 2/24/16
Final Depth: ~~40~~'
Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	Sample Interval Recovery	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE				SM	1	0-4" Topsoil	
					2	4"-1' silty sand, 7.5YR 2.5/1 (black), medium dense, ~~moist~~, fine grained sand	
		16/60			3	1'-15.5' ~~silty sand~~ peaty gluded sand, 7.5YR 5/8 (strong brown), medium dense, moist,	
					4	very fine grained sand, 10% fines, quartz grains, 2" silty sand lenses	
					5	at 10', 12', and 13' (7.5YR 5/8, strong brown, moist, fine grained sand, 15% silt)	
					6		
					7		
		31/60		SP	8		
					9		
					10		
					11		
					12		
		45/60			13		
					14		
					15		
	NA		NA	~~SP~~ SW	16	15.5'-16' sand with gravel, 7.5YR 5/6 (strong brown), dry, loose,	
					17	fine to coarse grained sand, 20% gravel (angular - subangular, qtz,	
		51/60		CL	18	lithics, up to 2")	
					19	16'-20' ~~sandy~~ KL clay, 7.5YR 8/4 (pink), medium STIFF, plastic, dry,	
					20	Fine grained quartz sand (10%)	
					21		
					22		
				CH	23		
		55/60			24	20'-~~28~~ 24' ~~same as above~~ sandy ~~clay~~ silty clay KL, 7.5YR 6/4 (light brown), moist, soft, slightly	
					25	plastic, 20% quartz sand (fine grained), few gravel (subangular -	
				SM	26	subrounded, lithics, up to 2")	
					27	24'-26 silty sand, 7.5YR 5/6 (strong brown), medium dense, dry,	
					28	very fine grained sand, 15% silt	
		59/60		GC	29		
					30	26'-31' ~~silty sand~~ KL clayey gravel, 7.5YR 4/6 (strong brown),	
					31	medium dense, dry, fine to coarse grained sand, 15% clay	
				ML	32	(7.5YR 6/4 light brown) ~20%	
					33	30'-32' ~~silt~~ KL sandy silt grading to silty sand, medium stiff/medium dense,	
		60/60		GM	34	dry, fine grained sand	
					35	32'-34.5' silty gravel, 7.5YR 5/6 (strong brown), ~~loose~~ KL medium	
					36	dense, dry, fine to coarse grained sand (25%), gravel subangular to	
				CL	37	subrounded (lithics, up to 2.5"), 20% silt	
					38	34.5'-37' sandy clay, 7.5YR 5/6 (strong brown), medium ~~dense~~ STIFF KL	
		54/60			39	wet, fine grained sand	
					40	37'-40' clayey sand, 7.5YR 5/6 (strong brown), medium dense, wet,	
				SC		fine grained sand	
						3/4" PVC Sch. 40 PVC 0.010" slot screen: 35-40'	
						Backfill: 0-33' sand: 34-40' bentonite: 33-34'	

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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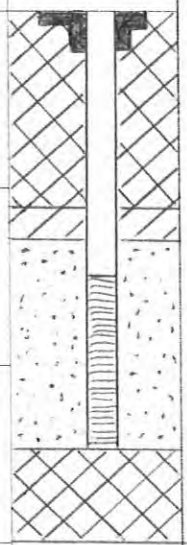
BORING/WELL CONSTRUCTION LOG

Project: AOU-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620 DT 2"
Driller: O. Waters
Boring/Well ID: GW-49

Project Number: 6202899
Start Time/Date: 0813 2/25/16
Completion Time/Date: 0851 2/25/16
Final Depth: 15'
Logged By: K. Lazzen

Sample Type	Blow Counts/6"	Sample Interval	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
					1	No lithology logged	
					2		
					3	3/4" PVC Sch. 40	
					4	PVC 0.010" slot screen: 7.5'-12.5'	
					5		
					6	Backfill: 0-5', 12.5-15'	
					7	Bentonite: 5'-6'	
					▽ 8	Sand: 6-12.5'	
					9		
					10	Well completed with monitoring well manhole and concrete apron	
					11		
					12		
					13		
					14		
					15		

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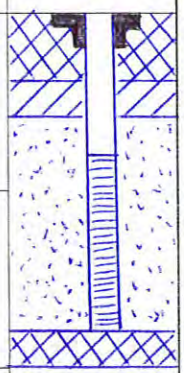
BORING/WELL CONSTRUCTION LOG

Project: AOU-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620DT 2"
Driller: O. Waters
Boring/Well ID: GW-56

Project Number: 6202899
Start Time/Date: 1155 2/26/16
Completion Time/Date: 1226 2/26/16
Final Depth: 10'
Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	Sample Interval	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
					1	No lithology logged	
					2		
					▽ 3	3/4" PVC Sch. 40	
					4	PVC 0.010" slot screen: 4-9'	
					5	Backfill: 0-2'; 9-10'	
					6	Bentonite: 2'-3'	
					7	Sand: 3-9'	
					8		
					9	well completed with monitoring well manhole and concrete apron	
					10		

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BORING/WELL CONSTRUCTION LOG

Project: AOU-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620DT 2"
Driller: O. Waters
Boring/Well ID: GW-51

Project Number: 6202899
Start Time/Date: 1311 3/4/16
Completion Time/Date: 1400 3/4/16
Final Depth: 15'
Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	Sample Interval	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
					1	No lithology logged	
					2		
					3		
					4		
					5		
					6	3/4" PVC Sch. 40	
					7	PVC 0.010" slot screen: 10-15'	
					8		
					9	Backfill: 0-8' Bentonite: 8-9'	
					10	Sand: 9-15'	
					11		
					12		
					▽ 13		
					14		
					15		

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BORING/WELL CONSTRUCTION LOG

Project: AOU-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620 DT 2"
Driller: O. Waters
Boring/Well ID: GW-52

Project Number: 6202899
Start Time/Date: 1021 3/2/16
Completion Time/Date: 1100 3/2/16
Final Depth: 30'
Logged By: K. Lazzeri

Page 1 of 1

Sample Type	Blow Counts/6"	~~Sample Interval~~ Recovery	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE	NA	0/60	NA		1–5	0-4" topsoil 4"-5' No Recovery	
		58/60		CL	6–10	5'-6' clay, 2.5Y 7/2 (light gray), medium stiff, slightly plastic, dry, 15% fine grained sand 6'-16' poorly graded sand with interbedded, sandy clay layers, 7.5YR 6/6 (reddish yellow), dense, moist, fine grained sand, sandy clay layers ~1" thick.	
		54/60		SP	11–15		
		48/60		SW	16–17	16'-17' well graded sand, 10YR 4/6 (dark yellowish brown), loose, dry, fine to coarse grained, qtz and lithic grains	
				CL	18–20	17'-25' Sandy clay, 5YR 4/6 (yellowish red), medium stiff, slightly plastic, moist, fine ~~grained sand~~ to medium grained sand, trace gravel up to 0.25" (subrounded to rounded)	
		58/60			21–25 ▽		
		59/60		SC	26–30	25'-30' clayey sand, 5YR 4/6 (yellowish red), medium dense, wet, fine grained sand	
						3/4" PVC Sch. 40 PVC 0.010" slot screen: 25-30' Backfill: 0-23' Bentonite: 23-24' Sand: 24-30' Well completed with monitoring well manhole and concrete apron	

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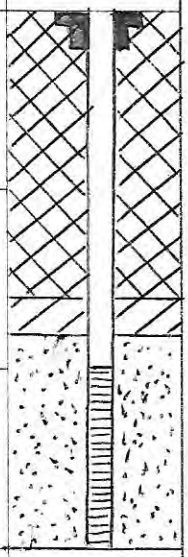
BORING/WELL CONSTRUCTION LOG

Project: AOU-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620 DT 2"
Driller: O. Waters
Boring/Well ID: GW-~~53~~ 53

Project Number: 6202899
Start Time/Date: 0947 3/2/16
Completion Time/Date: 1013 3/2/16
Final Depth: 15'
Logged By: K. Lazzen

Sample Type	Blow Counts/6"	~~Sample Interval~~ Recovery	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE	NA	NA	NA	NA	1	Lithology not logged	
					2		
					3		
					4		
					5		
					6	3/4" PVC Sch. 40	
					7	PVC 0.010" slot screen: 10-15'	
					8		
					9	Backfill: 0-8'	
					10	Bentonite: 8-9'	
					11	Sand: 9-15'	
					12		
					13		
					14		
					15	Well completed with monitoring well manhole and concrete apron	

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BORING/WELL CONSTRUCTION LOG

Project: AOU-1 · East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620DT 2"
Driller: ~~Cascade Drilling~~ KL. O. Waters
Boring/Well ID: GW-54

Project Number: 6202899
Start Time/Date: 1335 3/3/16
Completion Time/Date: 1443 3/3/16
Final Depth: 13.3'
Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	~~Sample Interval~~ Recovery	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE		0/60			1	0-4" topsoil 4"-5' No recovery	
					2		
					3		
					4		
					5		
	NA	56/60	NA	CH	6	5'-12.5' clay, 10YR 6/3 (pale brown), soft, plastic, moist, trace fine grained sand, mottled 10YR 5/8 (yellowish brown)	
					7		
					8		
					9		
					10		
		34/36			11		
					12		
				SC	13	12.5' - 13.3' clayey sand, 7.5YR 5/6 (strong brown), medium dense, wet, fine grained sand	
				~~SC~~ KL			

3/4" PVC - Sch. 40
PVC 0.010" slot screen: ~~8-3~~ KL 8.3 - 13.3'

Backfill: 0-6'
Bentonite: 6-7'
Sand: 7-13.3'

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BORING/WELL CONSTRUCTION LOG

Project: AOU-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620DT 2"
Driller: O. Waters
Boring/Well ID: GW-55

Project Number: 6202879
Start Time/Date: 1056 3/3/16
Completion Time/Date: 1152 3/3/16
Final Depth: 25'
Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	Sample Interval	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
					1	No lithology logged	
					2		
					3		
					4		
					5		
					6	3/4" PVC Sch. 40.	
					7	PVC 0.010" slot screen: 17-22'	
					8		
					9	Backfill: 0-15'; 22-25'	
					10	Bentonite: 15-16'	
					11	Sand: 16-22'	
					12		
					13		
					14		
					15		
					16		
					17		
					18		
					19		
					20		
					21		
					22		
					23		
					24		
					25		

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BORING/WELL CONSTRUCTION LOG

Project: AOU-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620DT 2"
Driller: O. Waters
Boring/Well ID: GW-57

Project Number: 6202899
Start Time/Date: 0910 3/5/16
Completion Time/Date: 1015 3/5/16
Final Depth: 33'
Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	Sample Interval	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
					1	No lithology logged	
					2		
					3	Hit refusal at 33' - no well set	
					4		
					5		
					6		
					7		
					8		
					9		
					10		
					11		
					12		
					13		
					14		
					15		
					16		
					17		
					18		
					19		
					20		
					21		
					22		
					23		
					24		
					25		
					26		
					27		
					28		
					29		
					30		
					31		
					32		
					33		

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BORING/WELL CONSTRUCTION LOG

Project: AOI-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620DT 2"
Driller: O. Waters
Boring/Well ID: GW-58

Project Number: 602B894
Start Time/Date: 1037 3/5/16
Completion Time/Date: 1140 3/5/16
Final Depth: 40'
Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	Sample Interval Recovery	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
		33/60		CL	1–5	0-5" topsoil 5" - 10' clay, stiff, slightly plastic, dry, 2.5 Y 7/1 (light gray), some mottling 10YR 5/8 (yellowish brown)	
		46/60			6–10		
		47/60		CH	11–14	10'-14' clay, mottled 2.5Y 6/3 (light yellowish brown) and 10YR 6/6 (brownish yellow), medium stiff, plastic, moist	
				CL	15	14'-15' sandy clay, 10YR 6/4 (light yellowish brown), medium stiff, slightly plastic, moist, fine grained sand	
		56/60		CH	16–17	15'-17.5' clay, 2.5Y 5/3 (light olive brown), medium stiff, plastic, moist	
				SC	18–20	17.5'-20' clayey sand, dense, moist, 7.5YR 5/6 (strong brown), fine grained sand	
		54/60		CL	21–25	20'-21 clay, 2.5Y 6/2 (light brownish gray), stiff, plastic, moist 21'-40' clayey gravel, 7.5 YR 4/6 (strong brown), medium dense, dry, fine to coarse grained sand (20%), gravel angular to subangular (lithics, limestone, up to 2.5")	
		46/60		GC	26–30		
		51/60			31–35		
		49/60			36–40	Refusal at 40' - no well set	

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BORING/WELL CONSTRUCTION LOG

Project: AOU-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig Bit: Geoprobe 6620DT 2"
Driller: O. Waters
Boring Well ID: GW-59

Project Number: 6202899
Start Time Date: 1436 3/4/16
Completion Time Date: 1503 3/4/16
Final Depth: 15'
Logged By: K. Lazzeri

Page 1 of 1

Sample Type	Blow Counts/6"	Sample Interval	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density consistency, plasticity, moisture, grain size, angularity mineralogy, other)	Boring and or Well Details
					1	No lithology logged	
					2		
					3	3/4" PVC Sch. 40	
					4	PVC 0.010" slot screen: 10-15'	
					5		
					6	Backfill: 0-8'	
					7	Bentonite: 8-9'	
					8	Sand: 9-15'	
					▽ 9		
					10	Well completed with monitoring well manhole and concrete apron	
					11		
					12		
					13		
					14		
					15		

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings or Core

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BORING/WELL CONSTRUCTION LOG

Project: AOU-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620 DT
Driller: O. Waters
Boring/Well ID: GW-60

Project Number: 60288991
Start Time/Date: 1108 3/8/16
Completion Time/Date: 1236 3/8/16
Final Depth: 15'
Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	~~Sample Interval~~ Recovery	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE		31/60		ML	1–5	0-4" topsoil 4"-5' sandy silt, 10YR 3/3 (dark brown), medium stiff, nonplastic, dry, fine grained sand	
	NA	47/60	NA	SC	6–10	5'-10' clayey sand, 10YR 7/3 (very pale brown), medium dense, moist, fine grained sand	
		56/60		SC	10–15	10'-15' ~~poorly graded sand~~ clayey sand, 7.5YR 5/2 (brown), medium ~~dense~~ dense, wet, fine grained sand, 25% fines	

3/4" PVC Sch. 40
PVC 0.010" slot screen: 10-15'

Backfill: 0-8'
Bentonite: 8-9'
Sand: 9-15'

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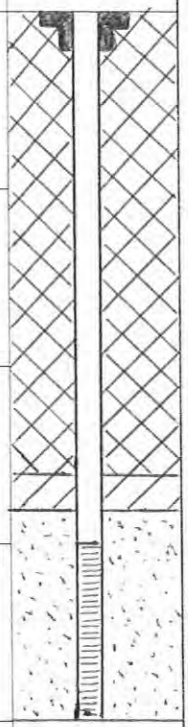
BORING/WELL CONSTRUCTION LOG

Project: Acu-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620DT 2"
Driller: O. Waters
Boring/Well ID: GW-01

Project Number: 60285999
Start Time/Date: 1319 3/5/16
Completion Time/Date: 1348 3/5/16
Final Depth: 20'
Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	Sample Interval / Recovery	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE	NA	45/60	NA	ML	1	0-5" topsoil 5"-1.5' silt, 10YR 2/2 (very dark brown), soft, plastic, moist,	
					2	15% Fine-medium grained sand	
				SC	3	1.5'-5' clayey sand, 10YR 7/3 (very pale brown), medium dense,	
					4	moist, fine grained sand	
					5		
		58/60			6	5'-15' clay, 2.5Y 6/4 (light yellowish brown), stiff, plastic, moist,	
					7	trace rounded gravel	
					8		
					9		
				CH	10		
		59/60			11		
					12		
					13		
					14		
					15		
		60/60		SC	16	15-19' clayey sand, 10YR 6/3 (pale brown), medium dense, wet, fine grained sand	
					17		
					18		
					19		
				SC	20	19-20' clayey sand, 10YR 5/2 (grayish brown), medium dense, wet, fine grained sand	
						3/4" PVC Sch. 40 PVC 0.010" slot screen: 15-20'	
						Backfill: 0-13' Bentonite: 13-14' Sand: 14-20'	
						well completed with monitoring well manhole and concrete apron	

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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BORING/WELL CONSTRUCTION LOG

Project: AOI-1: East Side Springs
Drilling Company: Cascade Drilling
Drilling Rig/Bit: Geoprobe 6620 DT
Driller: O. Waters
Boring/Well ID: GW-62

Project Number: 6202899
Start Time/Date: 1301 3/8/16
Completion Time/Date: 1345 3/8/16
Final Depth: 20
Logged By: K. Lazzeri

Sample Type	Blow Counts/6"	~~Sample Interval~~ Recovery	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (Order: soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
ACETATE SLEEVE	NA	31/60	NA	ML	1	0-5" topsoil 5"-2' silt, 7.5YR 4/2 (brown), medium stiff, nonplastic, dry, 20% sand (fine-medium grained)	
					2		
					3	2'-7' silty sandy clay, 7.5YR 4/6 (strong brown), medium stiff, plastic, dry, fine to medium grained sand	
				CL	4		
					5		
					6		
					7		
		49/60			8	7'-10' clayey gravel, 7.5YR 4/6 (strong brown), medium dense, dry, fine to coarse grained sand, angular to subangular gravel (lithics, up to 2")	
				GC	9		
					10		
				CL	11	10'-11' sandy clay, 7.5YR 4/6 (strong brown), medium stiff, plastic, moist, fine grained sand	
					12		
		54/60			13	11'-20' clayey gravel, 7.5YR 4/6 (strong brown), medium dense, wet, fine to medium grained sand, angular to subangular gravel (lithics, limestone, 2.5")	
				GC	14		
					15		
					16		
					17		
		55/60			18		
					19		
					20		
						3/4" PVC Sch. 40 PVC 0.010" slot screen: 15-20' Backfill: 0-13' Bentonite: 13-14' Sand: 14-20'	

SS = Split Spoon, ST = Shelby Tube, CUT = Drill Cuttings, or Core

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Attachment E
Groundwater Sampling Forms

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S. 1600 E. PCE prone Project Number: 6202899 Location ID: A-GW-001
Date: 3-4-16 Field Team: A.B.

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-GW-001 Sample Time: 13:10

- ☒ Blind Duplicate: A-GW-001-D
- ☐ MS/MSD
- ☑ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☐ _____
- ☐ Anions/Alkalinity/TDS
- ☐ _____

Well/Purge

Well Casing: (Stick-up) / ~~Flush Mount~~ KL

Well Depth: 15 Screen Length: 5'

Casing Diam: 0.75" Borehole Diam.: 1.75"

Depth to Water: 11.93' / 11.94

Measuring Point: TOC

Calculated Purge Volume: 6700

Pump Start: 12:35 Pump Stop: 13:15

☐ **Well Pumped Dry**

Pumped Dry (date/time): _____ Pump restarted (date/time): _____

Initial Purge (gal): _____ Recovered Water Level: _____

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (~~gal~~) mL	Flow Rate (~~gal~~/min)	Comments
12:48	6.84	1305	—	5.00	10.91	134.4	-	2500	200	
12:51	6.60	1305	223	4.86	10.92	133.3	-	3100	200	
12:54	6.40	1305	152	4.71	11.07	129.6	-	3700	200	
12:57	6.35	1304	587	4.69	11.12	131.5	-	4300	200	
13:00	6.36	1304	808	4.59	10.90	133.9	-	4900	200	
13:03	6.36	1303	—	4.57	10.95	134.0	-	5500	200	
13:06	6.38	1303	620	4.54	10.99	134.6	-	6100	200	
								6700		

Medspace ~~0.0~~ 0.2

AMB 3-4-16

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S. 1600 E. PCE Plume Project Number: 6202899 Location ID: GW-003

Date: 2-26-16 Field Team: A. Butler

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☒ Disposable Bailer 800mL
- ☒ Peristaltic 400 mL took sample
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-GW-003 Sample Time: 10:16

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ SVOCs
- ☐ Cations
- ☐ Trace Metals
- ☐ Anions/Alkalinity/TDS
- ☐ Sulfate/Nitrite/Nitrate
- ☐ TOC
- ☐ Sulfide
- ☐ _____
- ☐ _____

Well/Purge

Well Casing: Stick-up | (Flush Mount)

Well Depth: 33 Screen Length: 33-28=5

Casing Diam: 0.75 Borehole Diam.: ~~0~~ 1.75

Depth to Water: 28.40'

Measuring Point: TOC

Calculated Purge Volume: 400mL + 800mL 1200mL

Pump Start: 08:36 Pump Stop: 8:40

☐ **Well Pumped Dry**

Pumped Dry (date/time): Pump restarted (date/time):

Initial Purge (gal): Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. ~~(gal)~~ mL	Flow Rate (gal/min)	Comments
• TOOK out readings on back - TRANSCRIBED BELOW K.L. 2/29/16										
• pump could not reach that depth										
0956	6.98	1520	–	9.90	10.67	211.9	–	1200	– K.L.	

2-26-16 AMB

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S. 1600 E PCE Plume Project Number: 6202899 Location ID: A-6U-004
Date: 2-26-16 Field Team: A. Byler

Purge Method

☐ Dedicated Submersible ☐ Portable Bladder ☒ Peristaltic
☐ Portable Submersible ☐ Dedicated Bailer ☐ Grab
☐ Dedicated Bladder ☐ Disposable Bailer ☐ Other:

Sample Analyses
Sample ID: A-6U-004 Sample Time: 15:00
☐ Blind Duplicate: ☐ MS/MSD
☒ VOCs ☐ Sulfate/Nitrite/Nitrate
☐ SVOCs ☐ TOC
☐ Cations ☐ Sulfide
☐ Trace Metals ☐
☐ Anions/Alkalinity/TDS ☐

Well/Purge
Well Casing: Stick-up | Flush Mount
Well Depth: 25.1' Screen Length: 5'
Casing Diam: 0.75" Borehole Diam.: 1.75"
Depth to Water: 17.26 / 19.85
Measuring Point: TOC
Calculated Purge Volume: ~~3250 mL~~ 2050 mL
Pump Start: 13:55 Pump Stop: 14:55

☐ **Well Pumped Dry**
Pumped Dry (date/time): Pump restarted (date/time):
Initial Purge (gal): Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal) mL	Flow Rate (~~gal~~/min)	Comments
14:40	7.20	1569	—	10.53	12.55	94.0	-	1200mL	200	
14:43	7.08	1562	—	10.22	12.92	86.7	-	1600	150	
14:46	7.11	1555	—	10.38	12.87	86.3	-	2050	150	
14:49	7.12	1563	—	10.23	13.02	86.1	-	2500	125	
14:52	7.06	1567	—	10.10	12.90	86.4	-	2875	125	
								3250		

2-26-16 AmB

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S. 1600 E PCE Plume Project Number: 6202595 Location ID: A-GW-05

Date: 26 FEB 2016 Field Team: S. S A.B

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☑ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-GW-005 Sample Time: 11:20

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☑ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☐
- ☐ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | (Flush Mount)

Well Depth: 8.50 Silty Screen Length: 5 ft

Casing Diam: 0.75 in Borehole Diam.: 1.75 in

Depth to Water: 2.46

Measuring Point: Top of casing

Calculated Purge Volume: ~~2850 mL + 600 mL~~ 1581 mL 3450

Pump Start: 1050 Pump Stop: 11:25

☐ **Well Pumped Dry**

Pumped Dry (date/time): Pump restarted (date/time):

Initial Purge (gal): Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. ~~(gal)~~ mL KL	Flow Rate ~~(gal~~/min)	Comments
11:01	6.95	1566	—	5.51	12.37	115.0	-	0	150	
11:04	6.95	1567	-	5.45	12.31	88.7	-	450	200	
11:07	6.94	1566	—	5.45	12.32	70.9	-	1050	200	
11:10	6.94	1566	—	5.45	12.34	62.0	-	1650	200	
11:13	6.93	1566	-	5.44	12.32	56.1	-	2250	200	
11:16	6.93	1566	—	5.45	12.35	52.9	-	2850	200	
								3450		

Headspace = 0.2

2-26-16 AmB

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S 1600 E PCE Plume Project Number: 6202877 Location ID: A-GW-06

Date: 26 FEB 2016 Field Team: A. Byde

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-GW-06 Sample Time: 12:05

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☑ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☐
- ☐ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: 10.1 Screen Length: 5 ft

Casing Diam: 0.75 in Borehole Diam.: 1.75 in

Depth to Water: 4.66 ft

Measuring Point: TOC

Calculated Purge Volume: ~~≈ 1200 mL~~ 1424 mL KL

Pump Start: 11:28 Pump Stop: 12:15

☑ **Well Pumped Dry** 02-26-16

Pumped Dry (date/time): 11:28-11:33 / 11:44-11:46

Initial Purge ~~(gal)~~ mL: 43 gal / 400 mL

Pump restarted (date/time):

Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. ~~(gal)~~ mL	Flow Rate (gal/min)	Comments
•	Slow	recharge								
•	Single	reading on bulk - TRANSCRIBED BELOW - KLAZZERI								
1205	7.35	1448	395	10.81	10.18	603.4	- KL	1900		

Headspace 0.2

2-26-16 AMB

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S. 1600 E. PCE Plume Project Number: 6202899 Location ID: A-GW-007

Date: 2/26/16 Field Team: A. Bugher, S. S

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☒ Disposable Bailer
- ☐ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-GW-007 Sample Time: 09:00

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☐ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☐
- ☐ Anions/Alkalinity/TDS
- ☐

2/28/16

Well/Purge

Well Casing: Stick-up | ~~Flush Mount~~

Well Depth: 8.98 Screen Length: 5'

Casing Diam: 0.75" Borehole Diam.: 1.75"

Depth to Water: 8.63

Measuring Point: TOC

Calculated Purge Volume: 91.7 mL

Pump Start: NA Pump Stop: NA

☑ **Well Pumped Dry** BAILED

Pumped Dry (date/time): 12:27 / 12:47

Pump restarted (date/time):

Initial Purge (~~gal~~ mL): 50. / 10

Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. ~~(gal)~~ mL	Flow Rate (gal/min)	Comments
0931	6.98	966	393	8.45	11.15	140.0	—	200		
*First collected on 2/26										
*Second VOA 2/29										
*Third VOA 3/01										
Sample not collected for screening level										

Headspace : 0.2 ppmV

2-26-16 AMB

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S. 1600 E PWE Plume Project Number: 6202899 Location ID: A-GW-008

Date: 2-27-16 Field Team: A. Bugher, S. Stringham

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-GW-008 Sample Time: 16:00

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ SVOCs
- ☐ Cations
- ☐ Trace Metals
- ☐ Anions/Alkalinity/TDS
- ☐ Sulfate/Nitrite/Nitrate
- ☐ TOC
- ☐ Sulfide
- ☐
- ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: 16.04 Screen Length: 5'

Casing Diam: 0.75" Borehole Diam.: 1.75"

Depth to Water: 6.96 / 9.62

Measuring Point: TOC

Calculated Purge Volume: ~~1500mL~~ KL 372 mL

Pump Start: 15:07 Pump Stop: 16:30

☐ **Well Pumped Dry**

Pumped Dry (date/time): Pump restarted (date/time):

Initial Purge (gal): Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (~~gal~~) mL	Flow Rate (gal/min)	Comments
15:50	7.36	1639	—	4.92	15.67	111.2	—	1400	≈125	
• Recharge		≈	250 mL/10 min							

Headspace = 0.0

2-27-16 AMB

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S. 1600 E. PCE Plume Project Number: G202899 Location ID: A-GW-009
Date: 2-26-16 Field Team: A. Bugler

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-GW-009 Sample Time: 16:20

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☐
- ☐ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up / Flush Mount

Well Depth: 10.10 Screen Length: 5

Casing Diam: 0.75" Borehole Diam.: 1.75"

Depth to Water: 4.91

Measuring Point: TOC

Calculated Purge Volume: ~~600 + 500 + 500~~ KL 1360mL

Pump Start: ~~13:34~~ 15:35 AMB Pump Stop: 16:35

☒ **Well Pumped Dry**

Pumped Dry (date/time): 13:43

Initial Purge (~~gal~~ mL): ≈ 600

Pump restarted (date/time):

Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. ~~(gal)~~ mL	Flow Rate (gal/min)	Comments
16:10	7.46	1281	213	7.80	15.57	56.6	–	1600		

- Slow to recharge
- pumped 5 min at a time

Head space < 0.4 ppm

2-26-16
AMB

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S. 1600 E. PCB Plume Project Number: 6202899 Location ID: A-GW-010

Date: 7-27-16 Field Team: A. Bugher S. Staigerwald

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-GW-010 Sample Time: 11:10

- ☒ Blind Duplicate: A-GW-010-1 ☐ MS/MSD
- ☒ VOCs
- ☐ SVOCs
- ☐ Cations
- ☐ Trace Metals
- ☐ Anions/Alkalinity/TDS
- ☐ Sulfate/Nitrite/Nitrate
- ☐ TOC
- ☐ Sulfide
- ☐ _____
- ☐ _____

Well/Purge

Well Casing: Stick-up | (Flush Mount)

Well Depth: 17.85 Screen Length: 5'

Casing Diam: 0.75" Borehole Diam.: 1.75"

Depth to Water: 12.22

Measuring Point: TOC

Calculated Purge Volume: ~~3400 mL~~ KL 1475 mL

Pump Start: 10:37 Pump Stop: 11:20

☐ **Well Pumped Dry**

Pumped Dry (date/time): _____ Pump restarted (date/time): _____

Initial Purge (gal): _____ Recovered Water Level: _____

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (~~gal~~) mL	Flow Rate (~~gal~~/min) mL	Comments
1050	6.97	2520	535	2.85	13.51	154.8	-	300	200	
1052	6.90	2517	163	2.02	13.52	143.7	-	~~200~~ 900	200	
1056	6.88	2523	30	1.65	13.53	135.1	-	1500	150	
1059	6.86	2524	10.8	1.74	13.53	130.0	-	1950	150	
1102	6.87	2522	4.32	1.84	13.70	125.6	-	2400	150	
1105	6.85	2526	4.19	2.10	13.60	121.5	-	2950	150	
								3400		

Headspace 0.0

2-27-16 AMB

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S. Clover E. PCE Plume Project Number: 6202899 Location ID: A-GW-011
Date: 2-27-16 Field Team: A. Bugher S. Staigerwald

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-GW-011 Sample Time: 12:20

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☐
- ☐ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: 14.45 Screen Length: 5'

Casing Diam: 0.75" Borehole Diam.: 1.75"

Depth to Water: 2.56 / 7.08

Measuring Point: TOC

Calculated Purge Volume: ~~5100~~ KL 1930 mL

Pump Start: 11:50 Pump Stop: 12:35

☐ **Well Pumped Dry**

Pumped Dry (date/time): Pump restarted (date/time):

Initial Purge (gal): Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. mL ~~(gal)~~	Flow Rate mL ~~(gal/min)~~	Comments
11:55	7.05	1448	—	2.58	12.18	109.7	-	500	300	
11:58	6.99	1451	—	2.27	12.26	101.0	-	1400	200	
12:01	6.93	1450	—	2.03	12.52	97.8	-	2000	200	
12:04	6.99	1444	—	3.25	12.95	95.7	-	2600	200	
12.07	6.88	1446	—	2.39	12.48	86.8	-	3200	150	
12.10	6.88	1446	—	2.73	12.50	86.8	-	3650	150	
12.13	6.88	1445	—	3.01	12.28	86.5	-	4200	150	
12.16	6.86	1444	—	3.11	12.26	86.4	-	4650	150	
								5100		

Head Space 0.9 ppm

2-27-16 AMB

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GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1: East Side Springs Project Number: 6202899 Location ID: ~~SW~~ KL GW-11

Date: 5/3/16 Field Team: K. Lazzeri, N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-GW-11 Sample Time: 1800

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☐ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☒ Isotope (O,H)
- ☐ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | (Flush Mount)

Well Depth: 15' Screen Length: 5'

Casing Diam: 0.75" Borehole Diam.: 2.5"

Depth to Water: 2.51'

Measuring Point: TOC

Calculated Purge Volume: ~~5.1~~ KL 5.1 L

Pump Start: 1745 Pump Stop: 1801

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
1750	7.68	1011	>1000	7.11	13.9	219.4	—	2.0 ~~0.5~~ KL	0.4	—
1755	7.44	1198	>1000	6.85	13.8	216.1	—	4.0 ~~1.0~~ KL	0.4	—
1800	7.30	1234	>1000	6.01	13.8	214.9	—	6.0 ~~1.5~~ KL	0.4	—
								~~2.0~~ KL		
								~~2.5~~ KL		
								~~3.0~~ KL		
										KR

KR 5/3/16

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments

Final Parameters

Time	pH	SC	Turb.	DO	Temp	ORP	DTW	Vol Evac.	Flow Rate
1800	7.30	1234	>1000	6.01	13.8	214.9	–	6.0	0.4
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

KR

Sampling Comments: Purged 3 well volumes, parameters not stabilized

Well Specific Observations/Access Issues:

Kristy Rizzo 5/31/16

GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 - 1600 E DCE Plume Project Number: 60702819 Location ID: A-Gw-017
Date: 3-1-16 Field Team: AB SS.

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☒ Disposable Bailer
- ☑ Peristaltic 3-1-16 1420mL sample 250mL 3-2-16
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-Gw-017 Sample Time: 10:00

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate 3-2-16
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☐
- ☐ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: 9.67' Screen Length: 5'
Casing Diam: 0.75" Borehole Diam.: 1.75"
Depth to Water: 4.35'
Measuring Point: TOC
Calculated Purge Volume: ~~1420+250 mL~~ 1394 mL
Pump Start: 12:12 Pump Stop: 1223

☑ **Well Pumped Dry**

Pumped Dry (date/time): 12:23 / 1228 DSS / Bail
Initial Purge (~~gal~~ mL): 1400 / ~~220mL~~ 250mL
Pump restarted (date/time): 09:30 3-2-16 Bail
Recovered Water Level: 7.69'

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. ~~(gal)~~ mL	Flow Rate ~~(gal~~/min)	Comments
1537	7.50	2302	—	7.56	13.70	55.0	-	1400		

Head space 0.8

3-1-16 AMB

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S. 1600 E. PCE Plume Project Number: 620289 Location ID: A-GW-013

Date: 3-4-16 Field Team: A.B.

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-GW-013 Sample Time: 15:45

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☐
- ☐ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | (Flush Mount)

Well Depth: 25.04 Screen Length:

Casing Diam: 0.75' Borehole Diam.: 1.75'

Depth to Water: 21.44 / 22.50 Hand/Turbi/YSI

Measuring Point: TOC

Calculated Purge Volume: 1500mL + 250mL + 2000mL (second set)

Pump Start: 14:40 Pump Stop: 15:15

☐ **Well Pumped Dry**

Pumped Dry (date/time): 3-4-16 1515 / 3-4-16 1530

Initial Purge (gal): 1500mL / 2000

Pump restarted (date/time):

Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal) mL	Flow Rate (gal/min) mL	Comments
AMB 14:15							-			
3-4-16 15:16	7.12	1459	196	5.70	17.17	51.0	-	1500		
15:30	7.00	1456	149	4.35	16.42	30.0	-	3500 / 3750		

Headspace collected 3-4-16 14:15 = 0.0

AMB 3-4-16

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 7005. 160th ICE Plume Project Number: 6202899 Location ID: A-GW-014
Date: 3-2-16 Field Team: AD

Purge Method

☐ Dedicated Submersible ☐ Portable Bladder ☒ Peristaltic
☐ Portable Submersible ☐ Dedicated Bailer ☐ Grab
☐ Dedicated Bladder ☐ Disposable Bailer ☐ Other:

Sample Analyses
Sample ID: A-GW-014 Sample Time: 13:45
☐ Blind Duplicate: ☐ MS/MSD
☒ VOCs ☐ Sulfate/Nitrite/Nitrate
☒ SVOCs ☐ TOC
☐ Cations ☐ Sulfide
☒ Trace Metals ☒ pH
☒ Anions/Alkalinity/TDS ☐

Well/Purge
Well Casing: 20' ↑ Stick-up Flush Mount
Well Depth: ~~18.51~~ Screen Length: 5'
Casing Diam: 0.75" Borehole Diam.: 01.75"
Depth to Water: 10.00 / 12.03
Measuring Point: TOC
Calculated Purge Volume: ~~7050mL~~ KL 2619mL
Pump Start: ~~12:45~~ Pump Stop: 1'1:32
AD 12:54

☐ **Well Pumped Dry**
Pumped Dry (date/time):
Initial Purge (gal):
Pump restarted (date/time):
Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. ~~(gal)~~ mL	Flow Rate ~~(gal~~/min)	Comments
13:22	7.07	1968	524	1.10	13.98	12.4	-	3000	150	
13:25	6.94	1948	601	0.43	13.69	-27.9	-	3450	200	
13:28	6.90	1955	738	0.42	13.71	-48.3	-	4050	200	
13:31	6.86	1962	592	0.54	13.71	-59.4	-	4650	200	
13:34	6.82	1965	500	0.52	13.78	-66.4	-	5250	200	
13:37	6.81	1963	412	0.46	13.80	-70.3	-	5850	200	
13:40	6.81	1968	369	0.43	13.86	-74.6	-	6450	200	
								7050		

Headspace = 0.3

3-2-16
AMB

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700S, 1600 E PCE Plume Project Number: 6207899 Location ID: A-6w-015

Date: 2-29-16 Field Team: A. Bugler, S. Steigerwald

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-6w-015 Sample Time: 10:00

- ☒ Blind Duplicate: A-6w-015D
- ☒ MS/MSD
- ☒ VOCs
- ☒ SVOCs
- ☐ Cations
- ☒ Trace Metals
- ☒ Anions/Alkalinity/TDS
- ☐ Sulfate/Nitrite/Nitrate
- ☐ TOC
- ☐ Sulfide
- ☒ pH (collected at 12:00)
- ☐

Well/Purge

Well Casing: ~~Stick-up~~ | ~~Flush Mount~~

Well Depth: ~~70.5'~~ 5.0 Screen Length: 5'

Casing Diam: 0.75" Borehole Diam.: 9.75'

Depth to Water: 70.5'

Measuring Point: TOC

Calculated Purge Volume: ~5700 mL 1179mL

Pump Start: 09:15 Pump Stop: 12:02

☐ **Well Pumped Dry**

Pumped Dry (date/time):

Initial Purge (gal):

Pump restarted (date/time):

Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. ~~(gal)~~ mL	Flow Rate ~~(gal/min)~~ mL/min	Comments
09:41	7.17	1483	367	6.00	11.60	135.5	-	800	350	
09:44	6.70	1425	344	1.38	10.74	112.8	-	2150	300	
09:47	6.47	1422	17.3	1.36	10.64	105.1	-	3050	200	
09:51	6.48	1422	14.8	1.34	10.68	100.4	-	3650	125	
09:54	6.47	1422	10.5	1.34	10.70	99.7	-	4025	125	
09:57	6.45	1422	9.28	1.36	10.66	99.7	-	4400	125	
10:00	6.43	1422	6.77	1.35	10.63	99.8	-	~~4775~~ 5150	125	

Headspace 1.0 ppm

2-29-16 AMB

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S. 1600 E Pine Plume Project Number: 6202899 Location ID: A-GW-016

Date: 2-~~28~~-16 28 SMS Field Team: AB KL SS

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Bladder
- ☒ Peristaltic
- ☐ Portable Submersible
- ☐ Dedicated Bailer
- ☐ Grab
- ☐ Dedicated Bladder
- ☐ Disposable Bailer
- ☐ Other:

Sample Analyses

Sample ID: A-GW-016 Sample Time: 11:31

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☐
- ☐ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up / Flush Mount

Well Depth: 8' Screen Length: 5 ft

Casing Diam: 0.75" Borehole Diam.: 1.75"

Depth to Water: 2.00

Measuring Point: TOC

Calculated Purge Volume: ~~3825~~ KL 1572 mL

Pump Start: 11:00 Pump Stop: 11:50

☐ **Well Pumped Dry**

Pumped Dry (date/time): Pump restarted (date/time):

Initial Purge (gal): Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. ~~(gal)~~ mL	Flow Rate ~~(gal~~/min)	Comments
11:13	7.04	1501	—	10.00	10.67	118.4	-	1200	175	
11:16	6.94	1508	—	8.89	10.93	113.7	-	1725	175	
11:19	6.90	1512	—	8.85	11.00	105.6	-	2250	175	
11:21	6.88	1513	—	8.80	11.02	103.3	-	2775	175	
11:24	6.86	1513	—	8.80	11.01	100.7	-	3300	175	
								3825		

Headspace : 0.1 ppmV

2-28-16 AMB

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700S. 1600E - POE plume Project Number: 6202899 Location ID: A-GW-17
Date: 3-1-16 Field Team: AB SS

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Bladder
- ☐ Peristaltic
- ☐ Portable Submersible
- ☐ Dedicated Bailer
- ☐ Grab
- ☐ Dedicated Bladder
- ☒ Disposable Bailer
- ☐ Other: _____

Sample Analyses

Sample ID: A-GW-17 Sample Time: 12:00

- ☐ Blind Duplicate: _____
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☐ _____
- ☐ Anions/Alkalinity/TDS
- ☐ _____

3-2-16

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: 15.10' Screen Length: 5'

Casing Diam: 0.75" Borehole Diam.: 1.75"

Depth to Water: 14.40'

Measuring Point: TOC

Calculated Purge Volume: ~~175 mL~~ KL 183 mL

Pump Start: NA Pump Stop: NA

☐ **Well Pumped Dry**

Pumped Dry (date/time): 3-1-16

Initial Purge (~~gal~~ mL): 175 mL

~~Pump restarted~~ Bailer (date/time): 3-2-16 11:25

Recovered Water Level: 14.32

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
water quality measurements not taken due to low groundwater recharge										
• Bailed 3 well volumes at 13:30 3/1/16										
• Not collected for screening samples										

• Collected 2 VOA vials, ~~Bailer stuck~~ KL
• No water quality
Headspace oil

3-1-16 AMB

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S. 16th E. PCE Plume Project Number: 6202699 Location ID: A-6L-018

Date: 3-1-16 Field Team: AB, SS

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☒ Disposable Bailer
- ☑ Peristaltic (400mL) 3-1-16
- ☐ Grab
- ☐ Other:

3-2-16 200mL sample

Sample Analyses

Sample ID: A-6L-018 Sample Time: 11:30

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☐
- ☐ Anions/Alkalinity/TDS
- ☐

3-2-16

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: 10.10 Screen Length: 5'

Casing Diam: 0.75" Borehole Diam.: 3.75"

Depth to Water: 8.15'

Measuring Point: TOC

Calculated Purge Volume: 3-1-16 400mL + 3-2-16 200 = 510mL

Pump Start: 14:08 Pump Stop: 14:10

☑ **Well Pumped Dry**

Pumped Dry (date/time): 14:08 to 14:10 (400mL)

Pump restarted (date/time):

Initial Purge (gal): 400mL

Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. ~~(gal)~~ mL	Flow Rate (gal/min)	Comments
1130	7.50	~~1.728~~ 1728 KL	—	10.42	11.85	135.8	8.27	~~0.085~~ 640 KL	—	

Headspace collected 3-1-16 = 0.3ppm

3-1-16 AMB

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S. 1600 E PCE Plume Project Number: 6202899 Location ID: A-Gw-019

Date: 3-1-16 Field Team: A.B. S.S.

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☒ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

3-1-16 350mL Sample 3-3-16 250mL

Sample Analyses

Sample ID: A-Gw-019 Sample Time: :

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ~~☒ VOCs~~ KL
- ☐ SVOCs
- ☐ Cations
- ☐ Trace Metals
- ☐ Anions/Alkalinity/TDS
- ☐ Sulfate/Nitrite/Nitrate
- ☐ TOC
- ☐ Sulfide
- ☐ _____
- ☐ _____

Well/Purge

Well Casing: Stick-up | ~~Flush Mount~~

Well Depth: 12.53' Screen Length: 5'

Casing Diam: 0.75" Borehole Diam.: 1.45"

Depth to Water: 11.17'

Measuring Point: TOC

Calculated Purge Volume: 600mL

Pump Start: 09:56 Pump Stop: _____

☐ **Well Pumped Dry**

Pumped Dry (date/time): 09.59 / 10:09 10:09:30

Initial Purge (~~gal~~ mL): 300 / 750mL

Pump restarted (date/time): _____

Recovered Water Level: _____

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
water did not recharge in well KL, not sampled										

WL=12.48' @ 9:00 3-3-16

WL=12.53' @ 16:45 3-3-16

Gw-001 3-1-16 AMB

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S 1600 E. PCE Plume Project Number: B202899 Location ID: A-GW-020

Date: 3-1-16 Field Team: AB SS

Purge Method

☐ Dedicated Submersible ☐ Portable Bladder ☒ Peristaltic

☐ Portable Submersible ☐ Dedicated Bailer ☐ Grab

☐ Dedicated Bladder ☐ Disposable Bailer ☐ Other:

Sample Analyses

Sample ID: A-GW-020 Sample Time: 11:10

☐ Blind Duplicate: ☐ MS/MSD

☒ VOCs ☐ Sulfate/Nitrite/Nitrate

☒ SVOCs ☐ TOC

☐ Cations ☐ Sulfide

☒ Trace Metals ☒ pH

☒ Anions/Alkalinity/TDS ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: 16.60' Screen Length: 5'

Casing Diam: 0.75" Borehole Diam.: 1.75"

Depth to Water: 11.47' / 11.53

Measuring Point: TOC

Calculated Purge Volume: ~~3700 mL~~ 1327 mL

Pump Start: 10:35 Pump Stop: 11:45

☐ **Well Pumped Dry**

Pumped Dry (date/time): Pump restarted (date/time):

Initial Purge (gal): Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. ~~(gal)~~ mL	Flow Rate ~~(gal~~/min)	Comments
10:46	6.84	1520	127	1.83	12.57	85.9	-	1000	200	
10:49	6.84	1518	140	1.70	12.64	75.8	-	1600	200	
10:52	6.83	1516	226	1.63	12.76	67.9	-	2200	200	
10:55	6.82	1514	501	1.66	12.86	60.5	-	2800	150	
10:58	6.81	1516	276	1.71	12.87	60.2	-	3250	150	
								3700		

Headspace 0.1

3-1-16 AMB

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GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1: East Side Springs Project Number: 6202899 Location ID: GW-20

Date: 5/4/16 Field Team: K. Lazzeri / N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-GW-20 Sample Time: 1520

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☐ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☒ Isotope (O, H)
- ☐ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | (Flush Mount)

Well Depth: 16.5' Screen Length: 5'

Casing Diam: 0.75" Borehole Diam.: 2.5"

Depth to Water: 11.25'

Measuring Point: TOC

Calculated Purge Volume: ~~37 mL~~ 3.7 L

Pump Start: 1510 Pump Stop: 1522

☐ **Well Pumped Dry**

Pumped Dry (date/time): – Pump restarted (date/time): –

Initial Purge (gal): – Recovered Water Level: –

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
1515	7.16	1336	>1000	4.07	17.1	187.6	–	2.0	0.4	–
1520	7.16	1340	>1000	4.60	16.2	173.3	–	4.0	0.4	–

KR

KR 5/4/16

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
										KR

Final Parameters

Time	pH	SC	Turb.	DO	Temp	ORP	DTW	Vol Evac.	Flow Rate
	7.16	1340	>1000	4.60	16.2	173.3	—	4.0	0.4
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: Purged 3 well volumes, parameters not stabilized

Well Specific Observations/Access Issues:

Kristi Pegg 5/4/16

GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S. 1600 E. PCE Plume Project Number: 6207899 Location ID: A-6w-021
Date: 3-1-16 Field Team: AB SS

Purge Method

☐ Dedicated Submersible ☐ Portable Bladder ☒ Peristaltic
☐ Portable Submersible ☐ Dedicated Bailer ☐ Grab
☐ Dedicated Bladder ☐ Disposable Bailer ☐ Other:

Sample Analyses
Sample ID: A-6w-021 Sample Time: 15:25
☐ Blind Duplicate: ☐ MS/MSD
☒ VOCs ☐ Sulfate/Nitrite/Nitrate
☐ SVOCs ☐ TOC
☐ Cations ☐ Sulfide
☐ Trace Metals ☐
☐ Anions/Alkalinity/TDS ☐

Well/Purge
Well Casing: Stick-up | Flush Mount
Well Depth: 16.45 Screen Length: 5'
Casing Diam: 0.75" Borehole Diam.: 1.75"
Depth to Water: 9.97' // 14.40
Measuring Point: TOC
Calculated Purge Volume: 4250 ~~mL~~ kL 16098 mL
Pump Start: 14:43 Pump Stop: 15:53

☐ **Well Pumped Dry**
Pumped Dry (date/time): Pump restarted (date/time):
Initial Purge (gal): Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. ~~(gal)~~ mL	Flow Rate (gal/min)	Comments
15:05	7.26	1537	432	6.18	13.68	10.0	–	2000	200	
							–	2600	150	
15:12	6.99	1564	250	3.73	12.32	-71.9	–	3050	100	
15:15	6.971	1554	180	4.34	12.28	-74.6	–	3350	100	
15:18	6.973	1553	113	4.76	12.26	-71.8	–	3650	100	
15:21	6.96	1557	102	4.52	12.30	-81.4	–	3950	100	
								4250		

Headspace = 3

3-1-16 AMB

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S. 1600 E. PCE Plume Project Number: 6202899 Location ID: A-GW-22
Date: 3-01-16 Field Team: A. Bugher

Purge Method

☐ Dedicated Submersible ☐ Portable Bladder ☒ Peristaltic
☐ Portable Submersible ☐ Dedicated Bailer ☐ Grab
☐ Dedicated Bladder ☐ Disposable Bailer ☐ Other:

Sample Analyses
Sample ID: A-GW-22 Sample Time: 09:30
☐ Blind Duplicate: ☐ MS/MSD
☒ VOCs ☐ Sulfate/Nitrite/Nitrate
☐ SVOCs ☐ TOC
☐ Cations ☐ Sulfide
☐ Trace Metals ☐
☐ Anions/Alkalinity/TDS ☐

Well/Purge
Well Casing: Stick-up | Flush Mount
Well Depth: 15.22' Screen Length: 5'
Casing Diam: 0.75" Borehole Diam.: 1.75"
Depth to Water: 5.33' / 5.96
Measuring Point: TOC
Calculated Purge Volume: ~~4860 mL~~ 2590 mL
Pump Start: 08:36 Pump Stop: 09:32

☐ **Well Pumped Dry**
Pumped Dry (date/time): Pump restarted (date/time):
Initial Purge (gal): Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. ~~(gal)~~ (mL)	Flow Rate ~~(gal~~/min)	Comments
09:08	6.90	1202	791	5.45	9.73	87.9	-	2000mL	200	
09:11	6.97	1215	—	5.16	9.69	70.4	-	2600mL	150	
09:14	7.01	1193	-	5.58	9.72	66.4	-	3250	150	
09:17	7.02	1189	-	5.51	9.72	62.6	-	3500	150	
09:20	7.03	1189	-	5.46	9.75	60.6	-	3950	150	
09:23	7.04	1186	-	5.50	9.73	57.6	-	4400	150	
								4850		

Headspace 0.2 ppm

3-1-16 AMB

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S. 1600 E. PCE Plume Project Number: 6202899 Location ID: A-GW-023
Date: 02/22/16 Field Team: A. Bigler, K. Lazzeri, S. Staigerwald

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-GW-023 Sample Time: 14:25

- ☐ Blind Duplicate:
- ☒ MS/MSD
- ☒ VOCs
- ☐ SVOCs
- ☐ Cations
- ☐ Trace Metals
- ☐ Anions/Alkalinity/TDS
- ☐ Sulfate/Nitrite/Nitrate
- ☐ TOC
- ☐ Sulfide
- ☐ _____
- ☐ _____

Well/Purge

Well Casing: Stick-up | Flush Mount
Well Depth: 13.5 Screen Length: 5.0
Casing Diam.: .75" Borehole Diam.: 1.75"
Depth to Water: 8.90 / Set 11.2
Measuring Point: TOC
Calculated Purge Volume: ~~2 gal~~ KL 1204 mL ~~8.32 gal~~ KL
Pump Start: 13:55 Pump Stop: 14:31

☐ **Well Pumped Dry**

Pumped Dry (date/time):
Pump restarted (date/time):
Initial Purge (gal):
Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. ~~(gal)~~ mL	Flow Rate (~~gal~~ mL/min)	Comments
13:58	~~6.6~~ 12 AMB	1.374	BLR	5.36	10.76	111.5	-	600	200	
14:02	BLR	1.484		2.89	10.87	64.5	-	1100 ~~500~~ KL	125	
14:05	BLR	1.558		2.78	11.06	47.9	-	1700 ~~600~~ KL	200	
14:09	11.68	1.627		3.87	11.43	39.9	-	2700 ~~1000~~ KL	250	
14:12	BLR	1.644		2.44	11.52	20.7	-	3450 ~~750~~ KL	250	
14:15	BLR	1.647		2.42	11.41	12.5	-	3900 ~~450~~ KL	150	
14:18	BLR	1.648		2.50	11.30	8.0	-	4350 ~~450~~ KL	150	
14:21	—	1.648		2.43	11.33	3.3	-	4800 ~~450~~ KL	150	
	• YSI not working (pH)							~~4800~~ KL	~~4800~~ KL ~~1475~~ KL	
	• Turbidity out of range									

2-22-16 AMB Headspace: 0.0 ppmV

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S. 1600 E. PCE Plume Project Number: 6202899 Location ID: A-GW-024
Date: 2-23-16 Field Team: A. Bugher

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☒ Disposable Bailer Sample
- ☒ Peristaltic Purge
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-GW-024 Sample Time: 09:20

- ☐ Blind Duplicate: ☐ MS/MSD 2-23-16 (25 AMB)
- ☒ VOCs ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs ☐ TOC
- ☐ Cations ☐ Sulfide
- ☐ Trace Metals ☐ _____
- ☐ Anions/Alkalinity/TDS ☐ _____

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: 18.5' Screen Length: 18'-13' = 5'

Casing Diam: 0.75" Borehole Diam.: 1.75"

Depth to Water: 16.9 / 17.1 (Pumpset / End) 2-23: 10.71 - 12.39

Measuring Point: TOC

Calculated Purge Volume: ~~1000 mL~~ KL 419 mL

Pump Start: 13:50 / 08:50 Pump Stop: 14:00 / 08:56

☑ **Well Pumped Dry**

Pumped Dry (date/time): 2-23-16 14:00 / 2-24-16 08:50 Pump restarted (date/time):

Initial Purge ~~(gal)~~ mL: 300 / ~~700 mL~~ 700 mL Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. ~~(gal)~~ mL	Flow Rate (gal/min)	Comments
~~• Single Reading on Batt~~					SEE BELOW K.LAZZERI					
• Recharge Rate too slow										
0915	7.40	1191	9.24	7.21	11.16	181.2	–	700 (2-24-16)		

1 of 21 KL

AMB 2-23-16

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700S 1600E PCE PLUME Project Number: 6202897 Location ID: A-GW-025

Date: 29 FEB 2016 Field Team: AB SS

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☑ Dedicated Bailer
- ☒ Disposable Bailer
- ☐ Peristaltic
- ☐ Grab
- ☐ Other: _____

Sample Analyses

Sample ID: A-GW-025 Sample Time: 15:05

- ☐ Blind Duplicate: _____
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☐ _____
- ☐ Anions/Alkalinity/TDS
- ☐ _____

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: 30.10 Screen Length: 5 ft

Casing Diam: 0.75 in Borehole Diam.: 9.75 in

Depth to Water: 23.10 / 24.22

Measuring Point: Top of Casing

Calculated Purge Volume: 1800 mL

Pump Start: _____ Pump Stop: _____

☐ **Well Pumped Dry**

Pumped Dry (date/time): _____ Pump restarted (date/time): _____

Initial Purge (gal): _____ Recovered Water Level: _____

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (~~gal~~) mL	Flow Rate (gal/min)	Comments
14:58	7.02	1352	—	5.71	15.94	99	—	1800	—	

Headspace: 0.0 ppm V

2-29-16 AMB

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700S. 1600E PCE Plume Project Number: 6202899 Location ID: A-GW-026
Date: 2-27-16 Field Team: A. Bugher, S. Stangerwald

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☒ Disposable Bailer 14:00 and to sample
- ☒ Peristaltic 9:54
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-GW-026 Sample Time: 10:45

- ☐ Blind Duplicate:
- ☐ MS/MSD 2-28-16
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☐
- ☐ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | ~~Flush Mount~~

Well Depth: 17.65 Screen Length: 5 ft

Casing Diam: 0.75" Borehole Diam.: 1.75"

Depth to Water: 16.48 1003 17.64 1013 17.51

Measuring Point: TOC

Calculated Purge Volume: 307 mL

Pump Start: 9:54 Pump Stop: 9:57

☒ **Well Pumped Dry**

Pumped Dry (date/time): 9:57 Pump restarted (date/time):

Initial Purge (~~gal~~ mL): >200 mL Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (~~gal~~ mL)	Flow Rate (gal/min)	Comments
1400	7.15	2091	>1000	7.22	15.08	96.1	–	~~200~~ KL 440		~~WQ at~~ Sample Collection SMS

- Collected AIS VOA 2/27
  2 at 13:50, 1 at 17:00
- CIP at 10:45 2-28-16
- ~~pump cover~~
- Slow to recharge

Headspace: 0.0 ppmV

2-27-16 AB

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 7005-1600 PCE Plume Project Number: G202899 Location ID: A-6w-027
Date: 2-5-16 Field Team: _____

Purge Method

☐ Dedicated Submersible ☐ Portable Bladder ☒ Peristaltic
☐ Portable Submersible ☐ Dedicated Bailer ☐ Grab
☐ Dedicated Bladder ☐ Disposable Bailer ☐ Other: _____

Sample Analyses

Sample ID: A-6w-027 Sample Time: 11:15
☐ Blind Duplicate: _____ ☒ MS/MSD
☒ VOCs ☐ Sulfate/Nitrite/Nitrate
☐ SVOCs ☐ TOC
☐ Cations ☐ Sulfide
☐ Trace Metals ☐ _____
☐ Anions/Alkalinity/TDS ☐ _____

Well/Purge

Well Casing: Stick-up | Flush Mount
Well Depth: 30.17 Screen Length: 5'
Casing Diam: 0.75' Borehole Diam.: 1.75"
Depth to Water: 20.23 / 21.24
Measuring Point: TOC
Calculated Purge Volume: 5200
Pump Start: 10:30 Pump Stop: 11:30

☐ **Well Pumped Dry**

Pumped Dry (date/time): _____ Pump restarted (date/time): _____
Initial Purge (gal): _____ Recovered Water Level: _____

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. ~~(gal)~~ mL	Flow Rate ~~(gal~~/min)	Comments
10:56	6.74	1640	137	4.66	13.03	112.7	-	2500	150	
10:59	6.75	1600	85.4	4.90	13.45	90.2	-	2950	150	
11:02	6.78	1596	116	5.05	13.50	83.8	-	3400	150	
11:05	6.79	1588	60.6	5.20	13.59	80.6	-	3850	150	
11:08	6.80	1584	82.1	5.36	13.62	79.4	-	4300	150	
11:11	6.81	1580	72.4	5.36	13.62	79.9	-	4750	150	
								5200		

1% 3% 10% .3mg 3% 10mV

Headspace 0.7

AMB 3-5-16

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S. 1600 E. PCE Plume Project Number: 6202899 Location ID: A-GW-028
Date: 3-5-16 Field Team: AB

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Bladder
- ☒ Peristaltic
- ☐ Portable Submersible
- ☐ Dedicated Bailer
- ☐ Grab
- ☐ Dedicated Bladder
- ☐ Disposable Bailer
- ☐ Other:

Sample Analyses
Sample ID: A-GW-028 Sample Time: 13:10

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☐ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☐
- ☐ Anions/Alkalinity/TDS
- ☐

Well/Purge
Well Casing: Stick-up | Flush Mount
Well Depth: 24.20' Screen Length:
Casing Diam: 0.75" Borehole Diam.: 1.75"
Depth to Water: 18.45' / 22.50'
Measuring Point: TOC
Calculated Purge Volume: 6500
Pump Start: 12:17 Pump Stop: 13:20

☐ **Well Pumped Dry**
Pumped Dry (date/time): Pump restarted (date/time):
Initial Purge (gal): Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. ~~(gal)~~ mL	Flow Rate ~~(gal~~ mL/min)	Comments
12:44	7.07	1654	—	5.17	14.88	70.8	-	3500	150	
12:47	6.93	1633	—	5.27	15.15	56.9	-	3950	150	
12:50	6.92	1619	—	5.20	15.22	40.6	-	4400	150	
12:53	6.95	1626	—	5.29	14.86	40.6	-	4850	150	
12:56	6.92	1604	—	5.54	15.17	20.8	-	5300	100	
12:59	6.93	1629	—	5.22	14.83	20.6	-	5600	100	
13:02	6.93	1629	—	5.27	15.20	7.9	-	5900	100	
13:05	6.96	1639	—	4.00	14.80	-26.0	-	6200	>100	
								6500		

Empty YSI →
Running out of water →

Headspace = 1.0

AMB 3-5-16

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 760 S 1600E PCE PLUME Project Number: 6202899 Location ID: A-BW-31

Date: 28 FEB 2016 Field Team: A. BUCHER

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☒ Disposable Bailer
- ☐ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-BW-31 Sample Time: 1010

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☑ VOCs
- ☐ SVOCs
- ☐ Cations
- ☐ Trace Metals
- ☐ Anions/Alkalinity/TDS
- ☐ Sulfate/Nitrite/Nitrate
- ☐ TOC
- ☐ Sulfide
- ☐ _____
- ☐ _____

Well/Purge

Well Casing: Stick-up | (Flush Mount)

Well Depth: 35 Screen Length: 5 ft

Casing Diam: 0.75 in Borehole Diam.: ~~8~~ 5"

Depth to Water: 31.87 / 31.86

Measuring Point: TOP OF CASING

Calculated Purge Volume:

Pump Start: NA Pump Stop: NA

CASING VOL = 0.2719 L x 3 casing vol = 816 mL

☐ **Well Pumped Dry**

Pumped Dry (date/time):

Initial Purge (gal):

Pump restarted (date/time):

Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (~~gal~~ mL)	Flow Rate (gal/min)	Comments
		2057								
1008	6.67	~~2.057~~ KL	838	5.91	15.62	19.1	–	1200		

Headspace 0.0 ppm

2-28-16 AMB

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 7005 1600 PCE Plume Project Number: 6202899 Location ID: A-GW-039

Date: 2/23/16 Field Team: A Boyle

Purge Method

☐ Dedicated Submersible ☐ Portable Bladder ☒ Peristaltic

☐ Portable Submersible ☐ Dedicated Bailer ☐ Grab

☐ Dedicated Bladder ☐ Disposable Bailer ☐ Other:

Sample Analyses

Sample ID: A-GW-039 Sample Time: 10:15

☒ ~~Blind Duplicate: A-GW-039D~~ ☐ MS/MSD

☒ VOCs ☐ Sulfate/Nitrite/Nitrate

☐ SVOCs ☐ TOC

☐ Cations ☐ Sulfide

☐ Trace Metals ☐ _____

☐ Anions/Alkalinity/TDS ☐ _____

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: 22.7' Screen Length: 22.7-17.7 = 5'

Casing Diam: 0.75" Borehole Diam.: 1.75"

Depth to Water: 16.48' pump set 19.50

Measuring Point: TOC.

Calculated Purge Volume: ~~~3 gal~~ KL 1629 mL Final 1810

Pump Start: 10:20 Pump Stop: 11:28

☐ **Well Pumped Dry**

Pumped Dry (date/time): _____ Pump restarted (date/time): _____

Initial Purge (gal): _____ Recovered Water Level: _____

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (~~gal~~/min)	Comments
10:44	~~6.94~~	2.038	—	6.35	14.67	166.3	-	2975 ~~3425~~ KL	150	
10:47	~~7.35~~	2.040	—	6.52	14.71	165.9	-	3375	150	—
10:50		2.043	469	6.61	14.70	165.4	-	4325	150	
10:53		2.043	225	6.66	14.76	165.1	-	4775	150	
10:56		2.044	155	6.74	14.73	164.9	-	5225	150	
10:59		2.044	72.9	6.84	14.66	164.7	-	5675	150	
11:02		2.044	56.0	6.85	14.74	164.4	-	6125	150	
11:05		2.043	52.9	6.75	14.80	164.0	-	6575	150	
11:08		2.044	51.7	6.73	14.75	163.8	-	7025	150	
11:11	↓	2.044	48.1	6.63	14.64	163.6	-	7475	150	
	• YSI	Not	working	(pH only)				~~7475~~ ~~6125~~ KL		

2975 mL purged ~~collected~~ KL the day before

~~Head space = 0.0 ppm~~ AMB

* Ran out of water, did not collect Dup, did not collect headspace

1 of 2 KL

2-23-16 AMB

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700S.1600E PCE Plume Project Number: 202959 Location ID: A-GW-040

Date: 3-3-16 Field Team: AB

Purge Method

☐ Dedicated Submersible ☐ Portable Bladder ☐ Peristaltic

☐ Portable Submersible ☐ Dedicated Bailer ☐ Grab

☐ Dedicated Bladder ☒ Disposable Bailer ☐ Other: _____

Sample Analyses

Sample ID: A-GW-040 Sample Time: 12:20

☐ Blind Duplicate: _____ ☐ MS/MSD

☒ VOCs ☐ Sulfate/Nitrite/Nitrate

☐ SVOCs ☐ TOC

☐ Cations ☐ Sulfide

☐ Trace Metals ☐ _____

☐ Anions/Alkalinity/TDS ☐ _____

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: 38.90 Screen Length: 5

Casing Diam: 0.75" Borehole Diam.: 1.75

Depth to Water: 34.53

Measuring Point: TOC

Calculated Purge Volume: 1200mL

Pump Start: _____ Pump Stop: _____

☐ **Well Pumped Dry**

Pumped Dry (date/time): _____ Pump restarted (date/time): _____

Initial Purge (gal): _____ Recovered Water Level: _____

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. ~~(gal)~~ mL	Flow Rate (gal/min)	Comments
12:09	7.15	1480	—	6.21	16.95	46.1	-	1200		

purge 1125mL Headspace 0.1

AMB 3-3-16

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S. 1600 E DCE Plume Project Number: 6202899 Location ID: A-GW-043
Date: 3-3-16 Field Team: A.B.

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☒ Disposable Bailer
- ☐ Peristaltic
- ☐ Grab
- ☐ Other:

~~Purged on 3-3~~ KL ~~Sampled on 3-4~~

Sample Analyses
Sample ID: A-GW-043 Sample Time: 16:30

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ SVOCs
- ☐ Cations
- ☐ Trace Metals
- ☐ Anions/Alkalinity/TDS
- ☐ Sulfate/Nitrite/Nitrate
- ☐ TOC
- ☐ Sulfide
- ☐
- ☐

Well/Purge
Well Casing: Stick-up | Flush Mount
Well Depth: 35' Screen Length: 5'
Casing Diam: 0.75" Borehole Diam.: 1.75"
Depth to Water: 30.5'
Measuring Point: TOC
Calculated Purge Volume: 650mL + 250 = 900mL
Pump Start: NA Pump Stop: NA

☐ **Well Pumped Dry**
Pumped Dry (date/time):
Initial Purge (gal):
Pump restarted (date/time):
Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. ~~(gal)~~ mL	Flow Rate (gal/min)	Comments
~~0930~~ 1630 KL	6.51	1458	170	5.27	12.34	138.8	-	250	-	
Sampled 3/3 and water quality measured on 3/4										
water quality parameters taken the following day due to low recharge										

Headspace = 0.7

AMB 3-3-16

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S. 1600E. PCE Plume Project Number: 6202899 Location ID: A-GW-046

Date: 02-24-16 Field Team: A. Bogher

Purge Method

☐ Dedicated Submersible ☐ Portable Bladder ☐ Peristaltic

☐ Portable Submersible ☐ Dedicated Bailer ☐ Grab

☐ Dedicated Bladder ☒ Disposable Bailer ☐ Other:

Sample Analyses

Sample ID: A-GW-046 Sample Time: 15:20

☐ Blind Duplicate: ☐ MS/MSD

☒ VOCs ☐ Sulfate/Nitrite/Nitrate

☐ SVOCs ☐ TOC

☐ Cations ☐ Sulfide

☐ Trace Metals ☐

☐ Anions/Alkalinity/TDS ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: 35' Screen Length: 30-35'

Casing Diam: 0.75" Borehole Diam.: 1.75"

Depth to Water: 29.58' / Final 29.8'

Measuring Point: TOC

Calculated Purge Volume: 1500mL KL 1420mL

Pump Start: NA Pump Stop: NA

☐ **Well Pumped Dry**

Pumped Dry (date/time): Pump restarted (date/time):

Initial Purge (gal): Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
• Recharge	rate	too	slow,	single	reading			~~Bailer~~	SEE BELOW K.LAZZERI	
• Lost	Bailers	twice,	fished	it	out					
1110	7.08	1.638	>1000	5.78	17.69	55.3	29.81	1500mL	-	

2-24-16 AMB

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S. 1600 E. PCE Plume Project Number: 6202899 Location ID: A-GW-048
Date: 2-25-16 Field Team: A. Bugbee

Purge Method

☐ Dedicated Submersible ☐ Portable Bladder ☐ Peristaltic
☐ Portable Submersible ☐ Dedicated Bailer ☐ Grab
☐ Dedicated Bladder ☒ Disposable Bailer ☐ Other:

Sample Analyses
Sample ID: A-GW-048 Sample Time: 12:10
☐ Blind Duplicate: ☐ MS/MSD
☒ VOCs ☐ Sulfate/Nitrite/Nitrate
☐ SVOCs ☐ TOC
☐ Cations ☐ Sulfide
☐ Trace Metals ☐
☐ Anions/Alkalinity/TDS ☐

Well/Purge
Well Casing: Stick-up | Flush Mount
Well Depth: 40.10' Screen Length: 40-35=5'
Casing Diam: 0.75" Borehole Diam.: 1.75"
Depth to Water: 36.34'
Measuring Point: TOC
Calculated Purge Volume: ~~1000mL~~ KL 984mL
Pump Start: NA Pump Stop: NA

☐ **Well Pumped Dry**
Pumped Dry (date/time): Pump restarted (date/time):
Initial Purge (gal): Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
1205	7.24	1529	>1000	11.0	12.10	43.2	-	1000mL		
	*CLP never sampled, bailer stuck in well ~30'									
	ATTEMPTED MULTIPLE TIMES OVER COURSE OF THREE DAYS TO DISLODGE BAILER (COULD NOT DISLODGE. ABANDONED AND RE-POSITIONED WELL POINT/NEW)									

2-25-16 AMB

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S. 1600 E. PCE Plume Project Number: 6202899 Location ID: A-6U-04S Redrill

Date: 3-3-16 Field Team: AD

Purge Method

☐ Dedicated Submersible ☐ Portable Bladder ☐ Peristaltic

☐ Portable Submersible ☐ Dedicated Bailer ☐ Grab

☐ Dedicated Bladder ☒ Disposable Bailer ☐ Other:

Sample Analyses

Sample ID: A-6U-04S Sample Time: 10:15

☐ Blind Duplicate: ☐ MS/MSD 3-3-16

☒ VOCs ☐ Sulfate/Nitrite/Nitrate

☐ SVOCs ☐ TOC

☐ Cations ☐ Sulfide

☐ Trace Metals ☐ _____

☐ Anions/Alkalinity/TDS ☐ _____

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: 37.0' Screen Length: 5'

Casing Diam: 0.75" Borehole Diam.: 1.75'

Depth to Water: ~~36.79~~ 35.79'

Measuring Point: TOC

Calculated Purge Volume: 325mL

Pump Start: _____ Pump Stop: _____

☐ **Well Pumped Dry**

Pumped Dry (date/time): _____

Initial Purge (gal): _____

Pump restarted (date/time): _____

Recovered Water Level: _____

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
10:05	6.93	0.753	–	8.00	14.97	131.2				
• Collected water quality, headspace, 1 CLP VOA										
• Kristin collected 1VOA ≈ 12:00										
• AB collected final VOA 15:15										

water ~~colum~~ 0.27'

3 well volumes = ~~300mL~~ 325

Headspace = 0.2

AMB 3-3-16

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S. 1600 E. PCE Plume Project Number: 6102879 Location ID: A-GW-49

Date: 25 FEB 2016 Field Team: A. Bigler, SStaigerwald

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☑ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-GW-49 Sample Time: 13:25

~~☑ Blind Duplicate: A-GW-49~~ ☒ MS/MSD

- ☑ VOCs
- ☑ SVOCs
- ☐ Cations
- ☑ Trace Metals
- ☑ Anions/Alkalinity/TDS
- ☑ Sulfate/Nitrite/Nitrate
- ☐ TOC
- ☐ Sulfide
- ☒ pH
- ☐ _____

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: 12.75 Screen Length: 5 ft

Casing Diam: 0.75 in Borehole Diam.: 1.75"

Depth to Water: 7.57 7.49

Measuring Point: Top of casing

Calculated Purge Volume: ~~≈4300~~ KL 1380 mL

Pump Start: ~~13:10~~ 13:10 AMB Pump Stop: 14:00

☐ **Well Pumped Dry**

Pumped Dry (date/time): _____

Initial Purge (gal): _____

Pump restarted (date/time): _____

Recovered Water Level: _____

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. mL ~~(gal)~~	Flow Rate mL ~~(gal/min)~~	Comments
13:11	6.92	1775	~~3~~	6.20	9.63	81.6	-	0	325	
13:14	6.90	1766	36.8	5.26	9.77	80.8	-	975	300	
13:17	6.87	1761	12.9	4.97	9.78	81.6	-	1875	300	
13:20	6.85	1762	7.33	~~4~~ 4.89	9.68	81.7	-	2775	275	
13:23	6.85	1764	4.64	4.77	9.69	81.9	-	3600	225	
								4275		
• Did not take Dup, needed volume for alkalinity.										

Head space = 0.3 ppm

2-25-16 AMB

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S. 1600 E. PCE Plume Project Number: 6702 899 Location ID: A-GW-050
Date: 2-29-16 Field Team: A. Bugler, S. Staigerwald

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-GW-050 Sample Time: 13:30

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☒ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☒ Trace Metals
- ☒ pH
- ☒ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: 9.09' Screen Length: 5'

Casing Diam: 0.75" Borehole Diam.: 1.75"

Depth to Water: 2.69 ; 3.28

Measuring Point: TOC

Calculated Purge Volume: ~~5000 mL~~ KL 1522 mL

Pump Start: 12:46 Pump Stop: 13:35

☐ **Well Pumped Dry**

Pumped Dry (date/time): Pump restarted (date/time):

Initial Purge (gal): Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. ~~(gal)~~ mL	Flow Rate ~~(gal~~/min)	Comments
12:57	6.79	1591	—	1.10	8.52	53.2	-	2000mL	350	
13:00	6.73	1619	290	0.92	8.49	47.1	-	2950	150	
13:03	6.70	1648	263	0.77	8.45	38.1	-	3300	150	
13:06	6.65	1674	243	0.63	8.46	28.8	-	3750	150	
13:09	6.62	1697	201	0.56	8.39	25.1	-	4100	150	
13:12	6.61	1699	165	0.52	8.28	22.3	-	4550	150	
								5000		

Head space = 0.1 ppm

2-29-16
AMB

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 7005.1608E. PCE Plume Project Number: 6202899 Location ID: A-GW-051
Date: 3-4-16 Field Team: A.B.

Purge Method

☐ Dedicated Submersible ☐ Portable Bladder ☒ Peristaltic
☐ Portable Submersible ☐ Dedicated Bailer ☐ Grab
☐ Dedicated Bladder ☐ Disposable Bailer ☐ Other:

Sample Analyses
Sample ID: A-GW-051 Sample Time: 18:40
☐ Blind Duplicate: ☐ MS/MSD
☒ VOCs ☐ Sulfate/Nitrite/Nitrate
☐ SVOCs ☐ TOC
☐ Cations ☐ Sulfide
☐ Trace Metals ☐
☐ Anions/Alkalinity/TDS ☐

Well/Purge
Well Casing: Stick-up | Flush Mount
Well Depth: 15.10' Screen Length: 5'
Casing Diam: 0.75" Borehole Diam.: 1.75"
Depth to Water: 12.47' / 12.62'
Measuring Point: TOC
Calculated Purge Volume: 4650
Pump Start: 18:10 Pump Stop: 18:50

☐ **Well Pumped Dry**
Pumped Dry (date/time): Pump restarted (date/time):
Initial Purge (gal): Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. mL ~~(gal)~~	Flow Rate mL ~~(gal~~/min)	Comments
18:20	6.86	1492	631	4.67	12.20	14.5	-	1500	150	
18:23	6.83	1493	60.6	3.85	12.12	0.5	-	1950	150	
18:26	6.84	1493	27.8	3.63	12.23	-16.5	-	2400	150	
18:29	6.87	1493	18.7	3.67	12.26	-19.3	-	2850	150	
18:32	6.80	1494	15.2	3.60	12.26	-15.0	-	3300	150	
18:35	6.78	1493	7.90	3.55	12.27	-17.5	-	3750	150	
18:38	6.80	1495	6.12	3.59	12.25	-13.9	-	4200	150	
								4650		

Headspace 0.6

AMB 3-4-16

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S. 1600 E. PCE Plume Project Number: 6202895 Location ID: A-GW-052

Date: 3-3-16 Field Team: AD

Purge Method

☐ Dedicated Submersible ☐ Portable Bladder ☒ Peristaltic

☐ Portable Submersible ☐ Dedicated Bailer ☐ Grab

☐ Dedicated Bladder ☐ Disposable Bailer ☐ Other:

Sample Analyses

Sample ID: A-GW-052 Sample Time: 13:50

☒ Blind Duplicate: A-GW-052-B ☒ MS/MSD

☒ VOCs ☐ Sulfate/Nitrite/Nitrate

☐ SVOCs ☐ TOC

☐ Cations ☐ Sulfide

☐ Trace Metals ☐ _____

☐ Anions/Alkalinity/TDS ☐ _____

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: 30.09 Screen Length: 5'

Casing Diam: 0.75" Borehole Diam.: 1.75"

Depth to Water: 22.84 / 22.84

Measuring Point: TOC

Calculated Purge Volume: ~~6000 mL~~ KL 19000 mL

Pump Start: 13:20 Pump Stop: 14:08

☐ **Well Pumped Dry**

Pumped Dry (date/time): _____ Pump restarted (date/time): _____

Initial Purge (gal): _____ Recovered Water Level: _____

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (~~gal~~) mL	Flow Rate (~~gal~~/min) mL/min	Comments
13:33	7.04	1600	275	6.20	16.53	99.7	-	3000	150	
13:36	7.02	1598	165	6.21	16.27	88.7	-	3450	200	
13:39	6.97	1598	107	6.29	16.24	86.0	-	4050	200	
13:42	6.95	1597	71.5	6.15	16.24	84.4	-	4650	150	
13:45	6.91	1594	63.5	6.16	16.08	84.2	-	5100	150	
13:48	6.62	1593	55.4	6.20	16.26	83.5	-	5550	150	
								6000		
	±0.1	±3%	±10%	±0.3	±3%	±10				

Headspace = 1.1

AMB 3-3-16

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S. 1600 E. PCE Plume Project Number: 6202899 Location ID: A-GW-053
Date: 3-3-16 Field Team: AB

Purge Method

☐ Dedicated Submersible ☐ Portable Bladder ☒ Peristaltic
☐ Portable Submersible ☐ Dedicated Bailer ☐ Grab
☐ Dedicated Bladder ☐ Disposable Bailer ☐ Other:

Sample Analyses
Sample ID: A-GW-053 Sample Time: 16:05

☐ Blind Duplicate: ☐ MS/MSD
☒ VOCs ☐ Sulfate/Nitrite/Nitrate
☐ SVOCs ☐ TOC
☐ Cations ☐ Sulfide
☐ Trace Metals ☐
☐ Anions/Alkalinity/TDS ☐

Well/Purge
Well Casing: Stick-up | Flush Mount
Well Depth: 14.94' Screen Length: 5'
Casing Diam: 0.75" Borehole Diam.: 1.75"
Depth to Water: 10.76 / 10.90
Measuring Point: TOC
Calculated Purge Volume: ~~7100 mL~~ KL 1095mL
Pump Start: 15:27 Pump Stop: 16:10

☐ **Well Pumped Dry**
Pumped Dry (date/time): Pump restarted (date/time):
Initial Purge (gal): Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal) ~~mL~~	Flow Rate (~~gal~~ mL/min)	Comments
15:46	6.58	1538	—	2.19	11.94	35.1	-	~~3~~500	200	
15:49	6.53	1517	—	2.08	11.81	30.6	-	4100	200	
15:51	6.54	1511	—	2.05	11.78	28.7	-	4700	200	
15:54	6.55	1508	996	2.04	11.73	27.1	-	5300	200	
15:57	6.53	1507	674	2.02	11.67	27.1	-	5900	200	
16:00	6.56	1507	428	2.00	11.68	26.8	-	6500	200	
								7100		
	±0.1	± 3%	± 10%	± 0.3	± 3%	± 10				

Head space = 1.3

AMB

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S. 1200 E PCE Plume Project Number: 6202879 Location ID: A-GW-054

Date: 3-4-16 Field Team: A.B.

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☒ Disposable Bailer
- ☐ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

AMB No Sample

Sample ID: ~~A-GW-054~~ Sample Time:

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☐ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☐
- ☐ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up (Flush Mount)

Well Depth: 13.741 Screen Length: 5'

Casing Diam: 0.75" Borehole Diam.: 1.75"

Depth to Water: No water

Measuring Point: TOC

Calculated Purge Volume:

Pump Start: Pump Stop:

☐ **Well Pumped Dry**

Pumped Dry (date/time): Pump restarted (date/time):

Initial Purge (gal): Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
No water in well, not sampled EL										

AMB 3-4-16

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700S.1600E. PCE Plume Project Number: 6202899 Location ID: AGW ~~005~~ 055 AB

Date: 3-4-16 Field Team: A.B.

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☒ Disposable Bailer
- ~~☒ Peristaltic~~
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-GW-055 Sample Time: 15:30

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☐
- ☐ Anions/Alkalinity/TDS
- ☐

↓ ALS

08:00 3-5-16 CLP

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: 22.90 Screen Length: 5'

Casing Diam: 0.75" Borehole Diam.: 1.75"

Depth to Water: 21.97

Measuring Point: TOC

Calculated Purge Volume: 250 mL

Pump Start: NA Pump Stop: NA

☑ **Well ~~Pumped~~ BAILED Dry** 3-4-16

Pumped Dry (date/time): 11:00

Initial Purge (gal): 250 mL

Pump restarted (date/time):

Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. ~~(gal)~~ mL	Flow Rate (gal/min)	Comments
~~3-5-16~~ KL 1545 ~~17.02~~ KL	6.94	1645	~	7.50	15.50	85.5	-	200		

Headspace = 0.0

↑ collected

~~14:00 3-5-16~~ KL

Next 240 mL purge

AMB 3-4-16

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 7005. 1600 E PCE PLUME Project Number: 6202899 Location ID: A-GW-059

Date: 3-5-16 Field Team: AB KL

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-GW-059 Sample Time: 16:20

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ SVOCs
- ☐ Cations
- ☐ Trace Metals
- ☐ Anions/Alkalinity/TDS
- ☐ Sulfate/Nitrite/Nitrate
- ☐ TOC
- ☐ Sulfide
- ☐ _____
- ☐ _____

Well/Purge

Well Casing: Stick-up | (Flush Mount)

Well Depth: 15' Screen Length: 5'

Casing Diam: 0.75" Borehole Diam.: 1.75"

Depth to Water: 3.59' / 11.22'

Measuring Point: TOC

Calculated Purge Volume: 4150

Pump Start: 15:48 Pump Stop: 16:25

☐ **Well Pumped Dry**

Pumped Dry (date/time): Pump restarted (date/time):

Initial Purge (gal): Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. ~~(gal)~~ mL	Flow Rate ~~(gal~~/min)	Comments
15:57	6.90	1607	—	0.76	13.10	26.3	—	500	150	
16:00	6.80	1595	—	0.56	13.09	21.2	—	950		
16:03	6.83	1596	—	0.39	13.24	11.4	—	1400		
16:06	6.83	1597	78.2	0.40	13.03	6.7	—	1850		
16:09	6.85	1588	24	0.28	13.17	1.4	—	2300		
16:12	6.86	1591	27.5	0.26	13.22	-2.6	—	2750		
16:15	6.87	1591	28.3	0.25	13.22	-2.9	—	3250		
16:18	6.86	1590	25.5	0.25	13.17	-3.3	—	3700	↓	
								4150		

Headspace: 0.3 ppmV

AMB 3-5-16

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S 600 E, PCE plume Project Number: 6202899 Location ID: A-6w-60

Date: 3-8-16 Field Team: AS KL

Purge Method

☐ Dedicated Submersible ☐ Portable Bladder ☒ Peristaltic

☐ Portable Submersible ☐ Dedicated Bailer ☐ Grab

☐ Dedicated Bladder ☐ Disposable Bailer ☐ Other:

Sample Analyses

Sample ID: A-6w-060 Sample Time: 13:30

☐ Blind Duplicate: ☐ MS/MSD

☑ VOCs ☐ Sulfate/Nitrite/Nitrate

☐ SVOCs ☐ TOC

☐ Cations ☐ Sulfide

☐ Trace Metals ☐

☐ Anions/Alkalinity/TDS ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: 15' Screen Length: 5'

Casing Diam: 0.75" Borehole Diam.: 1.75"

Depth to Water: 9.70' / 9.96'

Measuring Point: TOC

Calculated Purge Volume: 6000 mL

Pump Start: 12:58 Pump Stop:

☐ **Well Pumped Dry**

Pumped Dry (date/time): Pump restarted (date/time):

Initial Purge (gal): Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. ~~(gal)~~ mL	Flow Rate ~~(gal/min)~~ mL/min	Comments
YSI moved up 13:10										
13:13	6.94	1874	—	8.83	15.72	184.0	—	3000	200	
13:16	6.79	1794	—	4.01	14.10	135.5	—	3600	200	
13:19	6.76	1786	—	3.87	13.77	131.1	—	4200	200	
13:22	6.72	1779	960	3.90	13.69	130.4	—	4800	200	
13:25	6.70	1775	441	3.99	13.73	130.4	—	5400	200	
								6000		
	0.1	3%	10%	0.3	3%	10 mV				

* Field Blank COC @ 13:00 Headspace = 0

AMB 3-8-16

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S. 1600 E. PCE Plume Project Number: 6202859 Location ID: A-6u-061

Date: 3-5-16 Field Team: AB . KL

Purge Method

☐ Dedicated Submersible ☐ Portable Bladder ☒ Peristaltic

☐ Portable Submersible ☐ Dedicated Bailer ☐ Grab

☐ Dedicated Bladder ☐ Disposable Bailer ☐ Other:

Sample Analyses

Sample ID: A-6u-061 Sample Time: 15:05

☐ Blind Duplicate: ☐ MS/MSD

☒ VOCs ☐ Sulfate/Nitrite/Nitrate

☐ SVOCs ☐ TOC

☐ Cations ☐ Sulfide

☐ Trace Metals ☐ _____

☐ Anions/Alkalinity/TDS ☐ _____

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: 20' Screen Length: 5'

Casing Diam: 0.75" Borehole Diam.: 1.75"

Depth to Water: 11.71' / 11.77'

Measuring Point: TOC

Calculated Purge Volume: 6450

Pump Start: 14:30 Pump Stop: 15:15

☐ **Well Pumped Dry**

Pumped Dry (date/time): Pump restarted (date/time):

Initial Purge (gal): Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
14:47	6.51	1665	666	4.43	13.73	80.4	-	3000 → 3950	150	
14:50	6.49	1665	340	4.10	13.57	82.9	-	4050	200	
14:53	6.50	1665	201	4.07	13.49	89.5	-	4650	200	
14:56	6.53	1665	95.7	3.98	13.40	92.6	-	5250	200	
14:59	6.53	1663	62.4	3.97	13.36	94.3	-	5850	200	
15:02	6.51	1664	44.1	3.89	13.34	96.4	-	6450	200	
~~15:05~~ Pump										

AMB 3-5-16

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GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: 700 S. 600 E. PCE Plume Project Number: 6202879 Location ID: A-6w-062
Date: 3-8-16 Field Team: AB. KL

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-6w-062 Sample Time: 14:25

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ SVOCs
- ☐ Cations
- ☐ Trace Metals
- ☐ Anions/Alkalinity/TDS
- ☐ Sulfate/Nitrite/Nitrate
- ☐ TOC
- ☐ Sulfide
- ☐ _____
- ☐ _____

Well/Purge

Well Casing: Stick-up | Flush Mount
Well Depth: 26.05' Screen Length: 5'
Casing Diam: 0.75" Borehole Diam.: 1.95"
Depth to Water: 12.82' / 12.83'
Measuring Point: TOC
Calculated Purge Volume: 5 L
Pump Start: 13:50 Pump Stop: 14:30

☐ **Well Pumped Dry**

Pumped Dry (date/time): Pump restarted (date/time):
Initial Purge (gal): Recovered Water Level:

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
14:08	6.89	1439	504	5.07	14.03	127.1	-	2500	200	
14:11	6.86	1437	187	4.99	13.93	126.0	-	3100	200	
14:14	6.86	1434	115	5.05	13.76	124.1	-	3700	200	
14:17	6.86	1431	57.0	5.11	13.63	122.5	-	4300	200	
14:20	6.87	1429	42.6	5.10	13.57	121.6	-	4900	200	
								5500		

0.1 3% 10% 0.2 3% 10 mV

Head Space = 0.1

AMB 3-8-16

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Attachment F
Temporary Groundwater Monitoring Point Installation Inspection Memorandum

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EA Engineering, Science, and Technology, Inc., PBC

2363 N. Hill Field Road, Suite 104
Layton, Utah 84041
Telephone: 385-393-4982
Fax: 801-779-0294
www.eaest.com

MEMORANDUM

TO: Lynne Welsh, Susanne Kayser, Jeremy Laird

FROM: Pam Moss-EA Project Manager, Sandy Staigerwald-EA Program Manager

DATE: 22 April 2016

SUBJECT: Accelerated Operable Unit 1 (AOU-1), East Side Springs 700 South 1600 East PCE Plume Salt Lake City, Utah – Temporary Groundwater Well Installation Inspection Memorandum

Introduction

This memorandum has been prepared for the Department of Veterans Affairs (VA) by EA Engineering, Science and Technology, Inc., PBC (EA) to document the final site conditions of borings/temporary groundwater wells installed in public right-of-ways in support of the Geoprobe® shallow groundwater investigation at AOU-1. The site conditions for the borings/temporary groundwater wells have been inspected by Salt Lake City Public Way Construction Inspector, Kevin Liptrot, and have been deemed acceptable by the inspector.

To assess the nature and extent of the 700 South 1600 East PCE Plume and to characterize vapor intrusion potential, temporary small-diameter groundwater monitoring points were installed throughout the East Side Springs area of AOU-1. A total of 50 boring locations were drilled in public right-of-ways and private property using a GeoProbe® drill rig with manual driven 2.25-inch rods during the period of 22 February to 8 March 2016. Of these 50 borings, 44 locations were converted to temporary groundwater monitoring points. After an initial round of groundwater sampling, 10 of the 44 points were completed as temporary monitoring wells to accomodate two additional groundwater sampling events. The remaining 34 monitoring points were abandonend and the sites were restored to their original condition (8 March to 6 April 2016).

All boring locations were drilled in soft surfaces (i.e. grass, dirt, and gravel), therefore no asphalt or concrete work was required to restore the locations. The top foot of the abandoned boreholes was filled with topsoil to match the surrounding area.

Site Inspection

Six of the 50 borings were located on private property. The remaining 44 borings were located in public right-of-ways and required a Permit to Work in the Public Way from the Division of Engineering prior to drilling. Per the Permit to Work on the Public Way, an assigned inspector would be contacted prior to commencing work and would be updated regularly on the status of the project. The permit also specifies that the permitee will restore all public way facilities modified by the permittee to a condition that is comparable to or better than the condition that existed prior to the commencement of the work.

The Construction Inspector was contacted daily regarding the quantity and locations of borings completed. Mr. Liptrot inspected the locations daily and deemed the final site conditions at all of the boring locations to be acceptable and comply with Salt Lake City standards. The Salt Lake City Division of Engineering does not have an official form that they provide to permitees stating that the work has

been inspected, however an email was received from Mr. Liptrot on 15 April 2016 stating that he approved the final restored condition of the Geoprobe® boring locations (Attachment 1).

Attachment

1 Email Correspondance from Salt Lake City – Final Site Inspection Approval

Lazzeri, Kristin

From: Liptrot, Kevin <Kevin.Liptrot@slcgov.com>
Sent: Friday, April 15, 2016 7:32 AM
To: Lazzeri, Kristin
Cc: Weiler, Scott
Subject: sample wells VA Project.

All the drill sites have been complete 34 ea. This sites are all acceptable for SLC standards and restoration is complete.

Kevin Liptrot
Inspector
Cell 801-419-5668
Kevin.Liptrot@slcgov.com

SLC Engineering CED
Salt Lake City

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Attachment G
Surface Water and Stormwater Sampling Forms

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GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1 : East Side Springs Project Number: 6202899 Location ID: SW-01

Date: 5/4/16 Field Team: K. Lazzeri, N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-SW-001 Sample Time: 1400

- ☒ Blind Duplicate: A-SW-001-D
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☒ Isotopes (O, H)
- ☐ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 1400 Pump Stop: 1403

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
1400	7.24	1779	0.91	5.78	16.9	236.2	—	0.28 ~~0.16~~ KL	0.20	—

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments

Final Parameters

Time	pH	SC	Turb.	DO	Temp	ORP	DTW	Vol Evac.	Flow Rate
1400	7.24	1779	0.91	5.78	16.9	236.2	–	0.16	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: sample collected from seep coming out of driveway/retaining wall of residence

Well Specific Observations/Access Issues: No access to property needed

Kristin Rogers 5/4/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: BAU-1: East Side Springs Project Number: 60202899 Location ID: SW-02

Date: 5/11/16 Field Team: K. Lazzeri

Purge Method

☐ Dedicated Submersible	☐ Portable Bladder	☐ Peristaltic
☐ Portable Submersible	☐ Dedicated Bailer	☒ Grab
☐ Dedicated Bladder	☐ Disposable Bailer	☐ Other:

Sample Analyses

Sample ID: A-SW-002 Sample Time: 0910

☐ Blind Duplicate:	☐ MS/MSD
☒ VOCs	☐ Sulfate/Nitrite/Nitrate
☐ SVOCs	☐ TOC
☐ Cations	☐ Sulfide
☐ Trace Metals	☒ Isotope (O,H)
☐ Anions/Alkalinity/TDS	☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: — Pump Stop: —

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
0910	8.49	564	59.8	8.00	15.3	219.3	—	0.16	—	—
										KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
									KR	

Final Parameters

Time	**pH**	**SC**	**Turb.**	**DO**	**Temp**	**ORP**	**DTW**	**Vol Evac.**	**Flow Rate**
0910	8.49	564	59.8	8.00	15.3	219.3	—	0.16	—
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: Sample collected from storm drain

Well Specific Observations/Access Issues: Access needed from Salt lake city

Kristi Rogers 5/11/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1: East Side Springs Project Number: 60202899 Location ID: SW-03

Date: 5/11/16 Field Team: K. Lazzeri

Purge Method

☐ Dedicated Submersible	☐ Portable Bladder	☐ Peristaltic
☐ Portable Submersible	☐ Dedicated Bailer	☒ Grab
☐ Dedicated Bladder	☐ Disposable Bailer	☐ Other:

Sample Analyses

Sample ID: A-SW-003 Sample Time: 0920

☐ Blind Duplicate: ☐ MS/MSD

☒ VOCs	☐ Sulfate/Nitrite/Nitrate
☐ SVOCs	☐ TOC
☐ Cations	☐ Sulfide
☐ Trace Metals	☒ Isotope (O, H)
☐ Anions/Alkalinity/TDS	☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: — Pump Stop: —

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
0920	8.52	630	48.2	6.50	17.2	219.2	—	0.16	—	—
										KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments

KR

Final Parameters

Time	pH	SC	Turb.	DO	Temp	ORP	DTW	Vol Evac.	Flow Rate
0920	8.52	630	48.2	6.50	17.2	219.2	—	0.16	—
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: sample collected from storm line man hole

Well Specific Observations/Access Issues: Access needed from Salt Lake City

Kristi Rogers 5/4/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOI-1: East Side Springs Project Number: 6202894 Location ID: SW-04

Date: 5/2/16 Field Team: K. Lazzeri / N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-SW-004 Sample Time: 1340

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☒ Isotopes (O, H)
- ☐ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: – Screen Length: –

Casing Diam: – Borehole Diam.: –

Depth to Water: –

Measuring Point: –

Calculated Purge Volume: –

Pump Start: 1340 Pump Stop: 1343

☐ **Well Pumped Dry**

Pumped Dry (date/time): – Pump restarted (date/time): –

Initial Purge (gal): – Recovered Water Level: –

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
1340	7.37	654	3.38	8.38	19.6	258.1	–	0.16	0.20	–

KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
										KR

Final Parameters

Time	**pH**	**SC**	**Turb.**	**DO**	**Temp**	**ORP**	**DTW**	**Vol Evac.**	**Flow Rate**
1340	7.37	654	3.38	8.38	19.6	258.1	—	0.16	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: Sample collected from ponds in front yard of residence. Some algae and plant matter in water

Well Specific Observations/Access Issues: Access from horse owner needed

Kristin Popper 5/2/16

GROUNDWATER/SURFACE WATER SAMPLING FORM

STORMWATER

Project: AOU-1 : East Side Springs Project Number: 6202899 Location ID: SW-05

Date: 5/11/16 Field Team: K. Lazzeri

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-SW-005 Sample Time: 0757

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☒ Isotope (O,H)
- ☐ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 0757 Pump Stop: 0759

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
0757	8.01	1026	32.4	8.94	15.3	245.8	—	0.16	—	—

KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
									NR	

Final Parameters

Time	**pH**	**SC**	**Turb.**	**DO**	**Temp**	**ORP**	**DTW**	**Vol Evac.**	**Flow Rate**
0757	8.01	1026	32.4	8.94	15.3	245.8	—	0.16	—
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: Sample collected from storm line man hole

Well Specific Observations/Access Issues: Access needed from Salt Lake City

Kristi Rogers 5/11/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1: East Side Springs Project Number: 6202899 Location ID: SW-06

Date: 5/4/16 Field Team: K. Lazzeri, N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☐ Peristaltic
- ☒ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-SW-006 Sample Time: 1700

- ☒ Blind Duplicate: A-SW-006-D ☐ MS/MSD
- ☒ VOCs
- ☐ SVOCs
- ☐ Cations
- ☐ Trace Metals
- ☐ Anions/Alkalinity/TDS
- ☐ Sulfate/Nitrite/Nitrate
- ☐ TOC
- ☐ Sulfide
- ☒ Isotopes (O, H)
- ☐ _____

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: _____ Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: — — Pump Stop: —

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
1700	7.36	1262	1.43	9.84	17.7	218.0	—	1.0	—	—

KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments

KR

Final Parameters

Time	pH	SC	Turb.	DO	Temp	ORP	DTW	Vol Evac.	Flow Rate
1700	7.36	1262	1.43	9.84	17.7	218.0	—	1	—
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: sample collected from "well" on property - water collected from spring water collected by lowering glass bottle into "well" - too deep for peristaltic pump

Well Specific Observations/Access Issues: Access from homeowner needed

Krista Kepper 5/14/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1: East Side Springs Project Number: 6202899 Location ID: SW-07

Date: 5/4/16 Field Team: K. Lazzeri, N. Lundvall

Purge Method

☐ Dedicated Submersible	☐ Portable Bladder	☐ Peristaltic
☐ Portable Submersible	☐ Dedicated Bailer	☒ Grab
☐ Dedicated Bladder	☐ Disposable Bailer	☐ Other:

Sample Analyses

Sample ID: A-SW-007 Sample Time: 1100

- ☒ Blind Duplicate: A-SW-007-D ☐ MS/MSD
- ☒ VOCs ☐ Sulfate/Nitrite/Nitrate
- ☒ SVOCs ☐ TOC
- ☐ Cations ☐ Sulfide
- ☒ Trace Metals (total) ☒ Isotope (O, H)
- ☒ Anions/Alkalinity/TDS ☐ _____

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: – Screen Length: –

Casing Diam: – Borehole Diam.: –

Depth to Water: –

Measuring Point: –

Calculated Purge Volume: –

Pump Start: – Pump Stop: –

☐ **Well Pumped Dry**

Pumped Dry (date/time): – Pump restarted (date/time): –

Initial Purge (gal): – Recovered Water Level: –

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
1100	7.59	1216	3.98	9.45.61	15.2	269.1	–	7.8	–	–
									KR	

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
									KR	

Final Parameters

Time	**pH**	**SC**	**Turb.**	**DO**	**Temp**	**ORP**	**DTW**	**Vol Evac.**	**Flow Rate**
1100	7.59	1216	3.98	5.61	15.2	269.1	—	7.8	—
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: Sample collected From spring box on property

Well Specific Observations/Access Issues: Access From home owner needed

Kristi Rogers 5/4/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1 : East Side Springs Project Number: 6202899 Location ID: SW-08 ~~SW-48~~

Date: 5/4/16 Field Team: K. Lazzeri / N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-SW-008 Sample Time: 1010 ~~0956~~ KL

- ☒ Blind Duplicate: A-SW-008-D
- ☒ KL MS/MSD
- ☒ VOCs
- ☐ SVOCs
- ☐ Cations
- ☐ Trace Metals
- ☐ Anions/Alkalinity/TDS
- ☐ Sulfate/Nitrite/Nitrate
- ☐ TOC
- ☐ Sulfide
- ☒ Isotopes (O, H)
- ☐ _____

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 1010 Pump Stop: 1016

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
1010	7.45	898	5.42	10.00	12.6	260.5	—	0.28	0.20	—

KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments

Final Parameters

Time	pH	SC	Turb.	DO	Temp	ORP	DTW	Vol Evac.	Flow Rate
1010	7.45	898	5.42	10.00	12.6	260.5	—	0.28	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

KR

Sampling Comments: sample collected from seep in NW corner of yard

Well Specific Observations/Access Issues: Access from home owner needed

Kristi Rupp 5/4/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1: East Side Springs Project Number: 6202899 Location ID: SW-09

Date: 5/3/16 Field Team: K. Lazzeri, N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-SW-009 Sample Time: 0855

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☒ Isotope (O, H)
- ☐ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 0855 Pump Stop: 0858

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
0855	7.75	1552	79.4	8.72	11.4	254.0	—	0.116	0.20	—
										TOR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments

Final Parameters

Time	pH	SC	Turb.	DO	Temp	ORP	DTW	Vol Evac.	Flow Rate
0855	7.75	1552	79.4	8.72	11.4	254.0	—	0.16	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: sample collected from seep in back yard

Well Specific Observations/Access Issues: Access needed from home owner

Krista Angel 5/31/16

GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1: East Side Springs Project Number: 6202899 Location ID: SW-10

Date: 5/11/16 Field Team: K. Lazzeri

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☐ Peristaltic
- ☒ Grab
- ☐ Other: _____

Sample Analyses

Sample ID: A-SW-010 Sample Time: 0840

- ☐ Blind Duplicate: _____
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☒ Isotope (O, H)
- ☐ Anions/Alkalinity/TDS
- ☐ _____

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: — Pump Stop: —

☐ **Well Pumped Dry**

Pumped Dry (date/time): —

Initial Purge (gal): —

Pump restarted (date/time): —

Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
0840	8.55	523	38.4	8.17	18.2	219.7	—	0.16	—	—

KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments

KA

Final Parameters

Time	**pH**	**SC**	**Turb.**	**DO**	**Temp**	**ORP**	**DTW**	**Vol Evac.**	**Flow Rate**
0840	8.55	523	38.4	8.17	18.2	219.7	—	0.16	—
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: sample collected from stormdrain man hole

Well Specific Observations/Access Issues: Access needed from Salt Lake City

Kristi Rupp 5/11/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1: East Side Springs Project Number: 60202899 Location ID: SW-11

Date: 5/3/16 Field Team: K. Lazzeri, N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other: _____

Sample Analyses

Sample ID: A-SW-011 Sample Time: 1230

- ☐ Blind Duplicate: _____
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☒ Isotopes (O, H)
- ☐ Anions/Alkalinity/TDS
- ☐ _____

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 1230 Pump Stop: 1233

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
1230	7.59	1235	93.4	~~12~~ 9.14	19.7	251.3	—	0.16	0.20	—

KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
									KR	

Final Parameters

Time	**pH**	**SC**	**Turb.**	**DO**	**Temp**	**ORP**	**DTW**	**Vol Evac.**	**Flow Rate**
1230	7.59	1235	93.4	9.14	19.7	251.3	–	0.16	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: Sample collected from seep in front yard that runs onto sidewalk

Well Specific Observations/Access Issues: No access issues

Krista Rogers 5/13/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1: East Side Springs Project Number: 6202899 Location ID: SW-12

Date: 5/31/16 Field Team: K. Lazzeri, N. Lundvall

Purge Method

☐ Dedicated Submersible ☐ Portable Bladder ☒ Peristaltic

☐ Portable Submersible ☐ Dedicated Bailer ☐ Grab

☐ Dedicated Bladder ☐ Disposable Bailer ☐ Other: _____

Sample Analyses

Sample ID: A-SW-042 Sample Time: 1030

☐ Blind Duplicate: _____ ☐ MS/MSD

☒ VOCs ☐ Sulfate/Nitrite/Nitrate

☒ SVOCs ☐ TOC

☐ Cations ☐ Sulfide

☒ Trace Metals ☒ Isotope (O, H)

☒ Anions/Alkalinity/TDS ☐ _____

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 1030 Pump Stop: 1045

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
1030	7.57	1278	0.41	11.92	14.4	254.9	—	4.0	0.20	—

KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments

Final Parameters

Time	pH	SC	Turb.	DO	Temp	ORP	DTW	Vol Evac.	Flow Rate
1030	7.57	1278	0.41	11.92	14.4	254.9	–	4.0	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: sample collected from spring in backyard

Well Specific Observations/Access Issues: Access needed from homeowner

Kristie Rieger 5/3/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1: East Side Springs Project Number: 6202899 Location ID: SW-13

Date: 5/3/16 Field Team: K. Lazzeri, N. Lundvall

Purge Method

☐ Dedicated Submersible	☐ Portable Bladder	☒ Peristaltic
☐ Portable Submersible	☐ Dedicated Bailer	☐ Grab
☐ Dedicated Bladder	☐ Disposable Bailer	☐ Other:

Sample Analyses

Sample ID: A-SW-013 Sample Time: 1430

☐ Blind Duplicate: ☐ MS/MSD

☒ VOCs	☐ Sulfate/Nitrite/Nitrate
☐ SVOCs	☐ TOC
☐ Cations	☐ Sulfide
☐ Trace Metals	☒ Isotopes (O,H)
☐ Anions/Alkalinity/TDS	☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 1430 Pump Stop: 1435

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
1430	7.95	1217	727	5.41	21.2	90.7	—	0.16	0.20	—
										TGR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
									KR	

Final Parameters

Time	**pH**	**SC**	**Turb.**	**DO**	**Temp**	**ORP**	**DTW**	**Vol Evac.**	**Flow Rate**
1430	7.95	1217	727	5.41	21.2	90.7	—	0.116	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: Sample collected from seep in backyard

Well Specific Observations/Access Issues: Access needed from home owner

Kristin Rogers 5/31/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1: East Side Springs Project Number: 6202899 Location ID: SW-14

Date: ~~5/3/16~~ KL 5/4/16 Field Team: K. Lazzeri, N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other: _____

Sample Analyses

Sample ID: A-SW-014 Sample Time: 0900

- ☐ Blind Duplicate: _____
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☒ Isotopes (O, H)
- ☐ Anions/Alkalinity/TDS
- ☐ _____

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 0900 Pump Stop: 0903

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
0900	7.42	1113	0.94	11.75	12.6	262.7	—	0.16	0.20	—
										KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments

KR

Final Parameters

Time	**pH**	**SC**	**Turb.**	**DO**	**Temp**	**ORP**	**DTW**	**Vol Evac.**	**Flow Rate**
0900	7.42	1113	0.94	11.75	12.6	262.7	—	0.16	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: Sample collected from sump on east side of property

Well Specific Observations/Access Issues: Access needed from homeowner

Kristi Ringe: 5/4/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1: East Side Springs Project Number: 60202899 Location ID: SW-15

Date: 5/4/16 Field Team: K. Lazzeri, N. Lundvall

Purge Method

☐ Dedicated Submersible	☐ Portable Bladder	☒ Peristaltic
☐ Portable Submersible	☐ Dedicated Bailer	☐ Grab
☐ Dedicated Bladder	☐ Disposable Bailer	☐ Other:

Sample Analyses

Sample ID: AOU-SW-015 Sample Time: 1130

☐ Blind Duplicate: ☐ MS/MSD

☒ VOCs	☐ Sulfate/Nitrite/Nitrate
☒ SVOCs	☐ TOC
☐ Cations	☐ Sulfide
☒ Trace Metals	☒ Isotope (O, H)
☒ Anions/Alkalinity/TDS	☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 1130 Pump Stop: 1210

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
1130	7.63	1224	512	0.19	16.4	265.4	—	4.0	0.20	—

KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
									KR	

Final Parameters

Time	**pH**	**SC**	**Turb.**	**DO**	**Temp**	**ORP**	**DTW**	**Vol Evac.**	**Flow Rate**
1130	7.63	1224	512	6.19	16.4	265.4	-	4.0	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: Sample collected from seep in backyard

Well Specific Observations/Access Issues: Access from home owner needed

Kristie Rogers 5/4/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1: East Side Springs Project Number: 6202899 Location ID: SW-16

Date: 5/4/16 Field Team: K. Lazzeri, N. Lindvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-SW-016 Sample Time: 1320

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☒ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☒ Trace Metals
- ☒ Isotopes (O, H)
- ☒ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 1320 Pump Stop: 1330

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
1320	7.58	1147	1.24	9.19	19.8	259.8	—	4.0	0.2	—

KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
										KR

Final Parameters

Time	**pH**	**SC**	**Turb.**	**DO**	**Temp**	**ORP**	**DTW**	**Vol Evac.**	**Flow Rate**
1320	7.58	1147	1.24	9.19	19.8	259.8	–	4.0	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: Sample taken From spring on school property

Well Specific Observations/Access Issues: Access needed from school

Kristi Rupper 5/14/18

GROUNDWATER/SURFACE WATER SAMPLING FORM
STORMWATER

Project: AOU-1: East Side Springs Project Number: 6202899 Location ID: SW-17

Date: 5/11/16 Field Team: K. Lazzeri

Purge Method

☐ Dedicated Submersible	☐ Portable Bladder	☒ Peristaltic
☐ Portable Submersible	☐ Dedicated Bailer	☐ Grab
☐ Dedicated Bladder	☐ Disposable Bailer	☐ Other:

Sample Analyses

Sample ID: A-SW-017 Sample Time: 1018

☐ Blind Duplicate: ☒ MS/MSD

☒ VOCs	☐ Sulfate/Nitrite/Nitrate
☐ SVOCs	☐ TOC
☐ Cations	☐ Sulfide
☐ Trace Metals	☒ Isotope (O, H)
☐ Anions/Alkalinity/TDS	☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 1018 Pump Stop: 1025

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
1018	8.08	1092	5.63	7.65	14.6	233.7	—	0.4	—	—
										KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
									KR	

Final Parameters

Time	**pH**	**SC**	**Turb.**	**DO**	**Temp**	**ORP**	**DTW**	**Vol Evac.**	**Flow Rate**
1018	8.08	1092	5.63	7.65	14.6	233.7	—	0.40	—
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: Sample collected from Jordan and Salt Lake Canal

Well Specific Observations/Access Issues:

Kristin Rogers 5/11/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1. East Side Springs Project Number: 6202899 Location ID: SW-18

Date: 5/5/16 Field Team: K. Larsen, N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-SW-018 Sample Time: 0910

- ☒ Blind Duplicate: A-SW-018-D
- ☐ MS/MSD
- ☒ VOCs
- ☐ SVOCs
- ☐ Cations
- ☐ Trace Metals
- ☐ Anions/Alkalinity/TDS
- ☐ Sulfate/Nitrite/Nitrate
- ☐ TOC
- ☐ Sulfide
- ☒ Isotope (O, H)
- ☐ _____

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 0910 Pump Stop: 0913

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
0910	7.78	1328	179	8.36	14.4	242.8	—	0.28	0.20	—
										KB

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
									KR	

Final Parameters

Time	**pH**	**SC**	**Turb.**	**DO**	**Temp**	**ORP**	**DTW**	**Vol Evac.**	**Flow Rate**
0910	7.78	1328	179	8.36	14.4	242.8	—	0.28	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: Sample collected from manhole

Well Specific Observations/Access Issues:

KR 5/5/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOI-1: East Side Springs Project Number: 6202899 Location ID: SW-19

Date: 5/4/16 Field Team: K. Lazzeri, N. Lundvall

Purge Method

☐ Dedicated Submersible	☐ Portable Bladder	☒ Peristaltic
☐ Portable Submersible	☐ Dedicated Bailer	☐ Grab
☐ Dedicated Bladder	☐ Disposable Bailer	☐ Other:

Sample Analyses

Sample ID: A-SW-019 Sample Time: 0820

☐ Blind Duplicate:	☐ MS/MSD
☒ VOCs	☐ Sulfate/Nitrite/Nitrate
☐ SVOCs	☐ TOC
☐ Cations	☐ Sulfide
☐ Trace Metals	☒ Isotope (O, H)
☐ Anions/Alkalinity/TDS	☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 0820 Pump Stop: 0823

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
0820	7.39	1403	46.7	7.82	13.1	249.2	—	0.16	0.20	—

KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
										KR

Final Parameters

Time	**pH**	**SC**	**Turb.**	**DO**	**Temp**	**ORP**	**DTW**	**Vol Evac.**	**Flow Rate**
0820	7.39	1403	46.7	7.82	13.1	249.2	—	0.16	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: sample collected from Bowen Spring

Well Specific Observations/Access Issues: Access needed from home owner

Mark Rugger 5/4/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: Rou-1: East Side Springs Project Number: 60202899 Location ID: SW-20

Date: 5/5/16 Field Team: K. Lazzeri / N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-SW-020 Sample Time: 1030

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☒ Isotope (O, H)
- ☐ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 1030 Pump Stop: 1033

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
1030	8.39	1144	0.44	8.79	16.9	256.7	—	0.16	0.20	—

KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments

KR

Final Parameters

Time	**pH**	**SC**	**Turb.**	**DO**	**Temp**	**ORP**	**DTW**	**Vol Evac.**	**Flow Rate**
1030	8.39	1144	0.44	8.79	16.9	256.7	—	0.16	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: sample collected from manhole - sample from inlet

Well Specific Observations/Access Issues:

Kristi Sawyer 5/5/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1: East Side Springs Project Number: 62028899 Location ID: SW-21

Date: 5/3/16 Field Team: K. Lozzen, N. Lundvall

Purge Method

☐ Dedicated Submersible	☐ Portable Bladder	☒ Peristaltic
☐ Portable Submersible	☐ Dedicated Bailer	☐ Grab
☐ Dedicated Bladder	☐ Disposable Bailer	☐ Other:

Sample Analyses

Sample ID: A-SW-021 Sample Time: 1320

☐ Blind Duplicate:	☐ MS/MSD
☒ VOCs	☐ Sulfate/Nitrite/Nitrate
☒ SVOCs	☐ TOC
☐ Cations	☐ Sulfide
☒ Trace Metals	☒ Isotope (O, H)
☒ Anions/Alkalinity/TDS	☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 1320 Pump Stop: 1323

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
1320	8.09	979	0.23	11.41	17.2	218.3	—	0.16	0.20	—
										KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
									KR	

Final Parameters

Time	**pH**	**SC**	**Turb.**	**DO**	**Temp**	**ORP**	**DTW**	**Vol Evac.**	**Flow Rate**
1320	8.04	979	0.23	11.41	17.2	218.3	—	0.16	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: Sample collected from cistern in backyard

Well Specific Observations/Access Issues: Access from homeowner needed

Kristin Rogge 5/3/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1: East Side Springs Project Number: 6202899 Location ID: SW-22

Date: 5/3/10 Field Team: K. Lazzeri, N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-SW-022 Sample Time: 1550

- ☐ Blind Duplicate: ☐ MS/MSD
- ☒ VOCs ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs ☐ TOC
- ☐ Cations ☐ Sulfide
- ☐ Trace Metals ☒ Isotope (O, H)
- ☐ Anions/Alkalinity/TDS ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 1550 Pump Stop: 1553

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
1550	7.69	1031	0.65	8.72	17.5	113.3	—	0.16	0.20	—

KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
									KR	

Final Parameters

Time	pH	SC	Turb.	DO	Temp	ORP	DTW	Vol Evac.	Flow Rate
1550	7.69	1031	0.65	8.72	17.5	113.3	–	0.16	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	± 3%	± 10%	± 0.3 mg/L	± 3%	± 10 mV	Δ <0.3 ft		

Sampling Comments: sample collected from sump in backyard

Well Specific Observations/Access Issues: Access needed from home owner

Kristin Rapper 5/3/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1 East Side Springs Project Number: 6202899 Location ID: SW-23

Date: 5/3/16 Field Team: K. Lazzeri, N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-SW-023 Sample Time: 0930

- ☐ Blind Duplicate:
- ☒ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☒ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☒ Trace Metals
- ☒ Isotopes (O, H)
- ☒ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 0930 Pump Stop: 1000

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
0930	7.26	1354	4.50	4.71	12.4	256.5	—	12 ~~4.5~~ KL	0.4 ~~0.20~~ KL	—

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
									KR	

Final Parameters

Time	**pH**	**SC**	**Turb.**	**DO**	**Temp**	**ORP**	**DTW**	**Vol Evac.**	**Flow Rate**
0930	7.26	1354	4.50	4.71	12.4	256.5	–	~~4~~ 12 KR	0.4
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: sample collected from sump in backyard

Well Specific Observations/Access Issues: Access needed from home owner

Krista Rogge 5/13/16

GROUNDWATER/SURFACE WATER SAMPLING FORM
(STORMWATER)

Project: AOU-1: East Side Springs Project Number: 60202899 Location ID: SW-24

Date: 5/11/16 Field Team: K. Warren

Purge Method

☐ Dedicated Submersible	☐ Portable Bladder	☒ Peristaltic
☐ Portable Submersible	☐ Dedicated Bailer	☐ Grab
☐ Dedicated Bladder	☐ Disposable Bailer	☐ Other:

Sample Analyses

Sample ID: A-SW-024 Sample Time: 0925

☐ Blind Duplicate:	☐ MS/MSD
☒ VOCs	☐ Sulfate/Nitrite/Nitrate
☐ SVOCs	☐ TOC
☐ Cations	☐ Sulfide
☐ Trace Metals	☒ Isotope (O,H)
☐ Anions/Alkalinity/TDS	☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 0925 Pump Stop: 0930

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
0925	8.36	559	542	5.74	17.1	207.4	—	0.16	—	-

KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments

Final Parameters

Time	**pH**	**SC**	**Turb.**	**DO**	**Temp**	**ORP**	**DTW**	**Vol Evac.**	**Flow Rate**
0925	8.36	559	542	5.74	17.1	207.4	—	0.16	—
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: sample collected from storm drain manhole

Well Specific Observations/Access Issues: Access needed from Salt Lake City

Kristi Rizzi 5/11/16

GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1 East Side Springs Project Number: 6202899 Location ID: SW-25

Date: 5/5/16 Field Team: K. Lazzeri / N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-SW-025 Sample Time: 1800

- ☐ Blind Duplicate: ☐ MS/MSD
- ☒ VOCs ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs ☐ TOC
- ☐ Cations ☐ Sulfide
- ☐ Trace Metals ☒ Isotope (O,H)
- ☐ Anions/Alkalinity/TDS ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 1800 Pump Stop: 1803

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
1800	7.28	1394	1.14	7.05	15.2	255.8	—	0.16	0.20	—

KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
									XR	

Final Parameters

Time	pH	SC	Turb.	DO	Temp	ORP	DTW	Vol Evac.	Flow Rate
1800	7.28	1394	1.14	7.05	15.2	255.8	–	0.16	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: sample collected from storm drain. spring water mitigated from front yard and directed to drain

Well Specific Observations/Access Issues:

Kurt Roppel 5/5/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1: East Side Springs Project Number: 60202899 Location ID: SW-26

Date: 5/3/16 Field Team: K. Lazzeri / N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-SW-026 Sample Time: 1345

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☒ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☒ Trace Metals
- ☒ Isotope (O, H)
- ☒ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 1345 Pump Stop: 1405

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
1345	7.43	1405	0.39	6.62	16.4	236.8	—	~~3.9~~ 4 KL	0.2	—
										KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments

KR

Final Parameters

Time	pH	SC	Turb.	DO	Temp	ORP	DTW	Vol Evac.	Flow Rate
1345	7.43	1405	0.39	6.62	16.4	236.8	–	4	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: collect sample from seep in backyard

Well Specific Observations/Access Issues: Access needed from homeowner

Kristi Rapier 5/3/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1 - East Side Springs Project Number: 6202899 Location ID: SW-27

Date: 5/3/16 Field Team: K. Lazzeri / N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-SW-027 Sample Time: 1120

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☒ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☒ Trace Metals
- ☒ Isotope (O, H)
- ☒ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 1120 Pump Stop: 1135

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
1120	7.39	1323	0.69	7.54	15.4	263.5	—	4 ~~6~~	0.20	—
									KR	

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
								KR		

Final Parameters

Time	pH	SC	Turb.	DO	Temp	ORP	DTW	Vol Evac.	Flow Rate
1120	7.39	1323	0.69	7.54	15.4	263.5	—	4	0.2
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: sample collected from seep coming out of retaining wall

Well Specific Observations/Access Issues:

Kristy Rogge 5/13/10

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1: East Side Springs Project Number: 6202899 Location ID: EKL SW-28

Date: 5/3/16 Field Team: K. Lazzeri / N. Lindvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-SW-028 Sample Time: 1200

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☒ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☒ Trace Metals
- ☒ Isotope (O, H)
- ☒ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 1200 Pump Stop: 1225

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
1200	7.60	1279	0.44	9.69	21.8	233.0	—	4	0.20	—
									768	

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
									KB	

Final Parameters

Time	**pH**	**SC**	**Turb.**	**DO**	**Temp**	**ORP**	**DTW**	**Vol Evac.**	**Flow Rate**
1200	7.60	1279	0.44	9.69	21.8	233.0	—	4	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: Sample collected from storm drain - water mitigated from spring water in backyard

Well Specific Observations/Access Issues:

Kristy Rogge 5/3/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: Aqui-i East Springs Project Number: 6202899 Location ID: SW-29

Date: 5/4/16 Field Team: K. Lazzeri

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☐ Peristaltic
- ☒ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-SW-029 Sample Time: 0935

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☒ Isotope (δ, H)
- ☐ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: — Pump Stop: —

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
0935	7.43	1311	1.53	8.43	12.6	240.6	—	0.16	—	—

KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
									KB	

Final Parameters

Time	pH	SC	Turb.	DO	Temp	ORP	DTW	Vol Evac.	Flow Rate
0935	7.43	1311	1.53	8.43	12.6	240.6	–	–	–
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: sample collected from backyard of property

Well Specific Observations/Access Issues: Access needed from homeowner

Kristi Ryger 5/11/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1: East Side Springs Project Number: 6202899 Location ID: ~~SW-30 SW-39~~ KL ~~SW-06 KL~~ SW-30

Date: 5/3/16 Field Team: K. Lazzeri / N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Bladder
- ☒ Peristaltic
- ☐ Portable Submersible
- ☐ Dedicated Bailer
- ☐ Grab
- ☐ Dedicated Bladder
- ☐ Disposable Bailer
- ☐ Other: _____

Sample Analyses

Sample ID: A-SW-030 Sample Time: 1630

- ☐ Blind Duplicate: _____
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☒ Isotope (O, H)
- ☐ Anions/Alkalinity/TDS
- ☐ _____

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: – Screen Length: –

Casing Diam: – Borehole Diam.: –

Depth to Water: –

Measuring Point: –

Calculated Purge Volume: –

Pump Start: 1630 Pump Stop: 1633

☐ **Well Pumped Dry**

Pumped Dry (date/time): – Pump restarted (date/time): –

Initial Purge (gal): – Recovered Water Level: –

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
1630	8.35	1320	1.15	8.03	23.5	191.7	–	0.16	0.20	–

KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
									KR	

Final Parameters

Time	pH	SC	Turb.	DO	Temp	ORP	DTW	Vol Evac.	Flow Rate
1630	8.35	1320	1.15	8.03	23.5	191.7	-	0.16	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: sample collected from Smith spring in backyard

Well Specific Observations/Access Issues: Access needed from home owner

Kristi Rieger 5/31/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1: East Side Springs Project Number: 6202899 Location ID: ~~SW~~ KL SW-31

Date: 5/2/16 Field Team: K. Lozzen / N. Lundvall

Purge Method

☐ Dedicated Submersible ☐ Portable Bladder ☒ Peristaltic

☐ Portable Submersible ☐ Dedicated Bailer ☐ Grab

☐ Dedicated Bladder ☐ Disposable Bailer ☐ Other: _____

Sample Analyses

Sample ID: A-SW-031 Sample Time: 1510

☐ Blind Duplicate: _____ ☐ MS/MSD

☒ VOCs ☐ Sulfate/Nitrite/Nitrate

☐ SVOCs ☐ TOC

☐ Cations ☐ Sulfide

☐ Trace Metals ☒ Isotope (O, H)

☐ Anions/Alkalinity/TDS ☐ _____

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 1510 Pump Stop: 1513

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
1510	7.92	1283	91.2	10.00	15.5	257.1	—	0.16	0.20	—

KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments

Final Parameters

Time	**pH**	**SC**	**Turb.**	**DO**	**Temp**	**ORP**	**DTW**	**Vol Evac.**	**Flow Rate**
1510	7.92	1283	91.2	10.00	15.5	257.1	--	0.16	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: Sample collected from ~~standing water~~ seep in backyard

Well Specific Observations/Access Issues:

Kurt Rigger 5/2/16

GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: AOI-1: East Side Springs Project Number: 6202899 Location ID: SW-32

Date: 5/5/16 Field Team: K. Lazzeri / N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-SW-032 Sample Time: 1120

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ SVOCs
- ☐ Cations
- ☐ Trace Metals
- ☐ Anions/Alkalinity/TDS
- ☐ Sulfate/Nitrite/Nitrate
- ☐ TOC
- ☐ Sulfide
- ☒ Isotope (O, H)
- ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 1120 Pump Stop: 1123

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
1120	7.80	1154	0.91	9.47	16.0	242.2	—	0.16	0.20	—

KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
									KR	

Final Parameters

Time	**pH**	**SC**	**Turb.**	**DO**	**Temp**	**ORP**	**DTW**	**Vol Evac.**	**Flow Rate**
1120	7.80	1154	0.91	9.47	16.0	242.2	–	0.16	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: Sample collected from storm drain

Well Specific Observations/Access Issues:

Mark Lippert 5/5/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1 East Sidesprings Project Number: 60202899 Location ID: SW-33

Date: 5/2/16 Field Team: K. Lazzeri / N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-SW-033 Sample Time: 1400

- ☐ Blind Duplicate: ☐ MS/MSD
- ☒ VOCs ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs ☐ TOC
- ☐ Cations ☐ Sulfide
- ☐ Trace Metals ☒ Isotope (O, H)
- ☐ Anions/Alkalinity/TDS ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: – Screen Length: –

Casing Diam: – Borehole Diam.: –

Depth to Water: –

Measuring Point: –

Calculated Purge Volume: –

Pump Start: 1400 Pump Stop: 1403

☐ **Well Pumped Dry**

Pumped Dry (date/time): – Pump restarted (date/time): –

Initial Purge (gal): – Recovered Water Level: –

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
1400	7.35	1372	1.44	9.21	16.9	256.1	–	0.16	0.20	–

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments

Final Parameters

KR

Time	pH	SC	Turb.	DO	Temp	ORP	DTW	Vol Evac.	Flow Rate
1400	7.35	1372	1.44	9.21	16.9	256.1	—	0.16	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: seep coming out of curb onto street

Well Specific Observations/Access Issues:

Kristi Rupper 5/2/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1: East Side Springs Project Number: 6202899 Location ID: SW-34

Date: 5/2/16 Field Team: K. Lazzeri / N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☐ Peristaltic
- ☒ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-SW-034 Sample Time: 1430

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☒ Isotope (O,H)
- ☐ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: — Pump Stop: —

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
1430	7.36	1214	0.64	7.90	14.3	250.7	—	0.16	~~0.20~~ —	—

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments

Final Parameters

Time	pH	SC	Turb.	DO	Temp	ORP	DTW	Vol Evac.	Flow Rate	
1430	7.36	1214	0.64	7.90	14.3	250.7	—	0.16	~~0.20~~ KL	KR
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐	
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**			

Sampling Comments: Sample collected from one of the springs in front yard

Well Specific Observations/Access Issues: Access from home owner needed

Kristi Rogge 5/2/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1: East Side Springs Project Number: 6202899 Location ID: SW-35

Date: 5/4/16 Field Team: K. Lazzeri / N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-SW1-035 Sample Time: 0930

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☒ Isotopes (O, H)
- ☐ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 0930 Pump Stop: 0933

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
0930	7.44	1106	542	8.16	12.9	260.4	—	0.16	0.20	—

KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
									KL	

Final Parameters

Time	pH	SC	Turb.	DO	Temp	ORP	DTW	Vol Evac.	Flow Rate
0930	7.44	1106	542	8.16	12.9	260.4	—	0.16	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	± 3%	± 10%	± 0.3 mg/L	± 3%	± 10 mV	Δ <0.3 ft		

Sampling Comments: sample collected from seep in backyard

Well Specific Observations/Access Issues: Access needed from homeowner

Kurt Rogers 5/4/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1: East Side Springs Project Number: 6202899 Location ID: SW-36

Date: 5/3/16 Field Team: K. Lazzeri / N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-SW-036 Sample Time: 1730

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☒ Isotope (O, H)
- ☐ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 1730 Pump Stop:

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
1730	8.20	1128	1.43	20.5	20.1	214.5	—	0.16	0.20	—

KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
									KR	

Final Parameters

Time	pH	SC	Turb.	DO	Temp	ORP	DTW	Vol Evac.	Flow Rate
1730	8.20	1128	1.43	20.5	20.1	214.5	—	0.16	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: sample collected from seep in backyard

Well Specific Observations/Access Issues: Access needed from home owner

Kristin Riggs 5/31/16

GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1 : East Side Springs Project Number: 6202899 Location ID: SW-37

Date: 5/5/16 Field Team: K. Lazzeri / N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-SW-037 KL Sample Time: 1815

- ☐ Blind Duplicate: ☐ MS/MSD
- ☒ VOCs ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs ☐ TOC
- ☐ Cations ☐ Sulfide
- ☐ Trace Metals ☒ Isotope (O, H)
- ☐ Anions/Alkalinity/TDS ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 1815 Pump Stop: 1818

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
1815	7.81	1206	2.75	9.76	15.2	256.6	—	0.16	0.20	—

NR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments

KR

Final Parameters

Time	pH	SC	Turb.	DO	Temp	ORP	DTW	Vol Evac.	Flow Rate
1815	7.81	1206	2.75	9.76	15.2	256.6	—	0.16	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	± 3%	± 10%	± 0.3 mg/L	± 3%	± 10 mV	Δ <0.3 ft		

Sampling Comments: Sample collected from storm drain. Location is the confluence of 3 spring mitigation lines

Well Specific Observations/Access Issues:

Kristofferi 5/5/16

GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1 East Side Springs Project Number: 6202899 Location ID: SW-38

Date: 5/11/16 Field Team: K. Lazzeri

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: SW-038 Sample Time: 0810

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☒ Isotope (O,H)
- ☐ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length:

Casing Diam: — Borehole Diam.:

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 0810 Pump Stop: 0812

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
0810	8.11	1154	17.10	8.71	17.5	247.2	—	0.16	0.20	—
										KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
										KR

Final Parameters

Time	pH	SC	Turb.	DO	Temp	ORP	DTW	Vol Evac.	Flow Rate
0810	8.11	1154	17.6	8.71	17.5	247.2	—	0.16	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: sample collected from storm drain

Well Specific Observations/Access Issues: Access from Salt Lake City needed

Kristy Rigger 5/11/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1: East Side Springs Project Number: 60202899 Location ID: SW-39

Date: 5/3/16 Field Team: K. Lazzeri / N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-SW-039 Sample Time: 1700

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☒ Isotope (O, H)
- ☐ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 1700 Pump Stop: 1703

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
1700	7.65	1275	1.34	10.15	15.8	207.4	—	0.16	0.20	—
										KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
									KR	

Final Parameters

Time	**pH**	**SC**	**Turb.**	**DO**	**Temp**	**ORP**	**DTW**	**Vol Evac.**	**Flow Rate**
1700	7.65	1275	1.34	10.15	15.8	207.4	–	0.16	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: sample collected from storm drain that mitigates storm water from back yard

Well Specific Observations/Access Issues:

Kristi Rogers 5/3/16

GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1 : East Side Springs Project Number: 6202899 Location ID: SW ~~GW~~-40 KL

Date: 5/5/16 Field Team: K. Lazzeri / N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☐ Peristaltic
- ☒ Grab
- ☐ Other:

Sample Analyses

Sample ID: ~~GW-KL~~ A-SW-040 Sample Time: 1745

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☒ Isotope (O, H)
- ☐ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: ~~1745~~ KL Pump Stop: —

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
1745	7.31	12616	844	8.61	15.5	240.4	—	0.16	~~0.20~~ KL	—

KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments

Final Parameters

Time	**pH**	**SC**	**Turb.**	**DO**	**Temp**	**ORP**	**DTW**	**Vol Evac.**	**Flow Rate**
1745	7.31	1266	844	8.61	15.5	240.4	–	0.16	~~0.20~~ KR
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: Sample collected from pump that pulls water from under basement

Well Specific Observations/Access Issues: Access needed from home owner

Kristi Keyser 5/5/16

GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1: East Side Springs Project Number: 60202899 Location ID: SWEL-SW-041

Date: 5/5/16 Field Team: K. Lazzeri / N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-SW-041 Sample Time: 1100

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☒ Isotope (O, H)
- ☐ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 1100 Pump Stop: 1103

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
1100	7.61	1290	2.15	8.22	16.1	240.3	—	0.16	0.20	—

KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
									KR	

Final Parameters

Time	pH	SC	Turb.	DO	Temp	ORP	DTW	Vol Evac.	Flow Rate
1100	7.61	1290	2.15	8.22	16.1	240.3	—	0.16	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: sample from storm drain in Beatrice Evans Park

Well Specific Observations/Access Issues:

Kristy Riggs 5/5/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1: East Side Springs Project Number: 6202899 Location ID: SW-42

Date: 5/2/16 Field Team: K. Lazzeri/N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-SW-042 Sample Time: 1420

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☒ Isotope (O, H)
- ☐ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 1420 Pump Stop: 1423

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
1420	7.83	1259	6.37	10.34	15.1	252.7	—	0.16	0.20	—

KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments

TGR

Final Parameters

Time	**pH**	**SC**	**Turb.**	**DO**	**Temp**	**ORP**	**DTW**	**Vol Evac.**	**Flow Rate**
1420	7.83	1259	6.37	10.34	15.1	252.7	–	0.16	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: sample collected from spring in backyard

Well Specific Observations/Access Issues: access needed from home owner

Kristi Rezzer 5/2/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: Aou-1: East Side Springs Project Number: 60208991 Location ID: SW-43

Date: 5/2/16 Field Team: K. Lazzeri, N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-SW-043 Sample Time: 1315

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☒ Isotopes
- ☐ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: – Screen Length: –

Casing Diam: – Borehole Diam.: –

Depth to Water: –

Measuring Point: –

Calculated Purge Volume: –

Pump Start: 1315 Pump Stop: 1318

☐ **Well Pumped Dry**

Pumped Dry (date/time): – Pump restarted (date/time): –

Initial Purge (gal): – Recovered Water Level: –

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
1315	7.98	1225	3.21	9.83	17.3	267.1	–	.160	0.20	–

KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments

KK

Final Parameters

Time	pH	SC	Turb.	DO	Temp	ORP	DTW	Vol Evac.	Flow Rate
1315	7.98	1225	3.21	9.83	17.3	267.1	–	1.00	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: Sample collected from backyard - spring forms a small water feature. Some algae growing in water

Well Specific Observations/Access Issues: Need access through yard

Kristi Rozzi 5/21/19

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1: East Springs Project Number: 60028899 Location ID: SW-44

Date: 5/4/16 Field Team: K. Lazzeri / N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-SW-044 Sample Time: 1430

- ☐ Blind Duplicate:
- ☒ MS/MSD
- ☑ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☒ Isotope (O, H)
- ☐ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 1430 Pump Stop: 1439

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
1430	8.18	1235	36.1	10.41	18.2	197.6	—	0.40	0.20	—

KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments

Final Parameters

Time	**pH**	**SC**	**Turb.**	**DO**	**Temp**	**ORP**	**DTW**	**Vol Evac.**	**Flow Rate**
1430	8.18	1235	36.1	10.41	18.2	197.6	—	0.40	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: sample collected from spring in backyard

Well Specific Observations/Access Issues: Access needed from homeowner

Kristi Rozzi 5/4/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1: East Side Springs Project Number: 60202899 Location ID: SW-45

Date: 5/5/16 Field Team: K. Lazzeri / N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-SW-045 Sample Time: 1000

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☒ Isotope (O, H)
- ☐ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 1000 Pump Stop: 1003

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
1000	8.27	1260	5.39	8.92	15.9	255.4	—	0.16	0.20	—
									KR	

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments

KR

Final Parameters

Time	**pH**	**SC**	**Turb.**	**DO**	**Temp**	**ORP**	**DTW**	**Vol Evac.**	**Flow Rate**
1000	8.27	1260	5.39	8.92	15.9	255.4	—	0.16	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: sample collected from Jordan and Salt Lake canal

Well Specific Observations/Access Issues:

Kristi Apgar 5/5/16

GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1: East Side Springs Project Number: 6202899 Location ID: SN-46

Date: 5/5/16 Field Team: K. Lazzeri / N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-SW-046 Sample Time: 1730

- ☐ Blind Duplicate: ☐ MS/MSD
- ☒ VOCs ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs ☐ TOC
- ☐ Cations ☐ Sulfide
- ☐ Trace Metals ☒ Isotope (O, H)
- ☐ Anions/Alkalinity/TDS ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 1730 Pump Stop: 1733

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
1730	8.13	1211	0.96	9.90	18.6	239.8	—	0.16	0.20	—

KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments

Final Parameters

Time	pH	SC	Turb.	DO	Temp	ORP	DTW	Vol Evac.	Flow Rate
1730	8.13	1211	0.96	9.9	18.6	239.8	—	0.16	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	± 3%	± 10%	± 0.3 mg/L	± 3%	± 10 mV	Δ <0.3 ft		

Sampling Comments: Sample collected from spring running through backyard

Well Specific Observations/Access Issues: Access needed from homeowner

Kristi Rizzo 5/5/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1: East Side Springs Project Number: 60202899 Location ID: SW-47

Date: 5/4/16 Field Team: K. Lazzeri / N. Lundvall

Purge Method

☐ Dedicated Submersible	☐ Portable Bladder	☐ Peristaltic
☐ Portable Submersible	☐ Dedicated Bailer	☒ Grab
☐ Dedicated Bladder	☐ Disposable Bailer	☐ Other:

Sample Analyses

Sample ID: ~~5/4/16 KL~~ A-SW-047 Sample Time: 0840

☐ Blind Duplicate: ☐ MS/MSD

☒ VOCs	☐ Sulfate/Nitrite/Nitrate
☒ SVOCs	☐ TOC
☐ Cations	☐ Sulfide
☒ Trace Metals	☒ Isotope (O,H)
☒ Anions/Alkalinity/TDS	☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: — Pump Stop: —

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
0840	8.41	435.2	~~8.7~~ KL 16.1	10.11	10.7	242.0	—	4.0	~~0.20~~ KL —	—

KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments

KR

Final Parameters

Time	pH	SC	Turb.	DO	Temp	ORP	DTW	Vol Evac.	Flow Rate
0840	8.41	435.2	16.1	10.11	10.7	242	–	4.0	–
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	± 3%	± 10%	± 0.3 mg/L	± 3%	± 10 mV	Δ <0.3 ft		

Sampling Comments: sample collected from Red Butte Creek

Well Specific Observations/Access Issues: Access needed from home owner

Kristi Rogge 5/4/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1 : East Side Springs Project Number: 60202899 Location ID: SW-~~008~~ KL 048

Date: 5/4/16 Field Team: K. Luzzeri / N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-SW-~~008~~ 048 KL Sample Time: ~~1010~~ 0950 KL

- ☒ ~~☒~~ KL Blind Duplicate: A-SW-~~008~~ 048 ~~-D~~
- ☒ MS/MSD
- ☒ VOCs
- ☐ SVOCs
- ☐ Cations
- ☐ Trace Metals
- ☐ Anions/Alkalinity/TDS
- ☐ Sulfate/Nitrite/Nitrate
- ☐ TOC
- ☐ Sulfide
- ☒ Isotopes (O,H)
- ☐ _____

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: ~~1010~~ 0950 KL Pump Stop: ~~1010~~ 1001 KL

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
~~1010~~ 0950	7.64	1191	2.61	8.48	13.3	274.3	—	~~0.28~~ 0.40 KL	0.20	—
										KL

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
										KR

Final Parameters

Time	**pH**	**SC**	**Turb.**	**DO**	**Temp**	**ORP**	**DTW**	**Vol Evac.**	**Flow Rate**
0950 ~~1010~~ KL	7.64	1191	2.61	8.48	13.3	274.3	–	0.40 ~~0.28~~ KL	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: Sample collected from Benson Spring

Well Specific Observations/Access Issues: Access from home owner needed

Kristy Roper 5/4/16

GROUNDWATER/STORMWATER/SURFACE WATER SAMPLING FORM

Project: AOU-1: East Side Springs Project Number: 6202899 Location ID: SW-49

Date: 5/5/16 Field Team: K. Lazzeri / N. Lundvall

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other:

Sample Analyses

Sample ID: A-SW-049 Sample Time: 1040

- ☐ Blind Duplicate:
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☒ Isotope (O, H)
- ☐ Anions/Alkalinity/TDS
- ☐

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: – Screen Length: –

Casing Diam: – Borehole Diam.: –

Depth to Water: –

Measuring Point: –

Calculated Purge Volume: –

Pump Start: 1040 Pump Stop: 1043

☐ **Well Pumped Dry**

Pumped Dry (date/time): – Pump restarted (date/time): –

Initial Purge (gal): – Recovered Water Level: –

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (L)	Flow Rate (L/min)	Comments
1040	8.02	1165	0.92	4.80	16.9	219.0	–	0.16	0.20	–

KR

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments

Final Parameters

Time	pH	SC	Turb.	DO	Temp	ORP	DTW	Vol Evac.	Flow Rate
1040	8.02	1165	0.92	4.80	16.9	219.0	–	0.16	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

KR

Sampling Comments: sample collected from Jordan / Salt Lake canal

Well Specific Observations/Access Issues:

Kristi Rieger 5/3/16

GROUNDWATER/SURFACE WATER SAMPLING FORM

Project: ACU-1: East Side Springs Project Number: 6202899 Location ID: SW-50

Date: 2/26/16 Field Team: A. Bugher

Purge Method

- ☐ Dedicated Submersible
- ☐ Portable Submersible
- ☐ Dedicated Bladder
- ☐ Portable Bladder
- ☐ Dedicated Bailer
- ☐ Disposable Bailer
- ☒ Peristaltic
- ☐ Grab
- ☐ Other: _____

Sample Analyses

Sample ID: A-SW-001 * change to A-GW-050 Sample Time: 1515

- ☐ Blind Duplicate: _____
- ☐ MS/MSD
- ☒ VOCs
- ☐ Sulfate/Nitrite/Nitrate
- ☐ SVOCs
- ☐ TOC
- ☐ Cations
- ☐ Sulfide
- ☐ Trace Metals
- ☐ _____
- ☐ Anions/Alkalinity/TDS
- ☐ _____

Well/Purge

Well Casing: Stick-up | Flush Mount

Well Depth: — Screen Length: —

Casing Diam: — Borehole Diam.: —

Depth to Water: —

Measuring Point: —

Calculated Purge Volume: —

Pump Start: 1515 Pump Stop: 1517

☐ **Well Pumped Dry**

Pumped Dry (date/time): — Pump restarted (date/time): —

Initial Purge (gal): — Recovered Water Level: —

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments
1515	7.40	1220	0.61	8.01	10.2	248.6	—	0.12	0.20	—

GROUNDWATER/SURFACE WATER SAMPLING FORM (*CONTINUED*)

Time	pH	SC (µS/c)	Turb. (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	DTW (ft)	Vol Evac. (gal)	Flow Rate (gal/min)	Comments

Final Parameters

Time	**pH**	**SC**	**Turb.**	**DO**	**Temp**	**ORP**	**DTW**	**Vol Evac.**	**Flow Rate**
1515	7.40	~~1515~~ 1220 AB	0.61	8.01	10.2	248.6	—	0.12	0.20
Stable:	☐	☐	☐	☐	☐	☐	☐	☐	☐
	± 0.1	**± 3%**	**± 10%**	**± 0.3 mg/L**	**± 3%**	**± 10 mV**	**Δ <0.3 ft**		

Sampling Comments: Sample collected from Spring in front yard
Sample designation changed because sample was added on to surface water sampling effort

Well Specific Observations/Access Issues: Access needed from home owner

Kristi Rossi 2/26/16

Attachment H
Ecological Assessment Checklists

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CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume

Date: ~~5/3/16~~ KL 5/4/16 Time: 1400 Temperature: 82°F Precipitation (24 hr): 0

Surface Water Sample Location: SW-01

Sample location site use description (circle one): (residential parcel) commercial parcel, industrial, park, other: _____

Seep? (Y) / N

Spring? Y / (N)

Pond? Y / (N)

Creek/Stream? Y / (N)

Describe and estimate flow (i.e., (barely accumulating seep) spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : water accumulating at about 0.1L/min

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, (sidewalk), street, (ornamental planting/garden), wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: seep is coming out of sidewalk/front yard

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: (mowed lawn), (ornamental planting/garden), wild grass, brush, (sporadic/maintained tree plantings), unmaintained woods, other. Description: residential neighborhood

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y / (N) Describe: _____

Are there any wooded areas on the parcel? Y / (N) What percentage of the parcel is wooded? ____

What is dominant type of vegetation in wooded area (circle one): evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / N. What percentage of the parcel is shrub/scrub vegetation? —. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? Y / N. What percentage of the parcel is open field / lawn? 40%. What is the predominant height of field plants: 2" *lawn, right-of-way

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): man made

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? insects observed where seep emerges

Other notes/observations: seep runs across sidewalk into grass

Photo collected? Y / N

Kristi Rieger 5/4/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume

Date: 5/19/16 Time: 0910 Temperature: 53°F Precipitation (24 hr): 0

Surface Water Sample Location: SW-02

Sample location site use description (circle one): residential parcel, commercial parcel, industrial, park, (other: road)

Seep? Y / (N)

Spring? Y / (N)

Pond? Y / (N)

Creek/Stream? Y / (N)

*storm drain

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : water is moving very quickly - great quantity of water

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, (street,) ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: _____

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: (mowed lawn,) (ornamental planting/garden,) wild grass, brush, sporadic/maintained tree plantings, unmaintained woods, other. Description: street in city

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y / (N) Describe: _____

Are there any wooded areas on the parcel? Y / (N.) What percentage of the parcel is wooded? —

What is dominant type of vegetation in wooded area (circle one): NA evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / N. What percentage of the parcel is shrub/scrub vegetation? ___—___. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? Y / N. What percentage of the parcel is open field / lawn? ___—___. What is the predominant height of field plants: ___—___

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): ___—___

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? _____
No wildlife

Other notes/observations: _____

Photo collected? Y / N

Kristi Flagger 5/11/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume

Date: 5/11/16 Time: 0920 Temperature: 53°F Precipitation (24 hr): 0

Surface Water Sample Location: SW-03

Sample location site use description (circle one): residential parcel, commercial parcel, industrial, park, (other:) street

Seep? Y / (N)

Spring? Y / (N)

Pond? Y / (N)

Creek/Stream? Y / (N)

*storm drain

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : water is moving very quickly - great quantity of water

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, (street,) ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description:

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: (mowed lawn,) (ornamental planting/garden,) wild grass, brush, sporadic/maintained tree plantings, unmaintained woods, other. Description: City street

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y (N) Describe:

Are there any wooded areas on the parcel? Y / (N.) What percentage of the parcel is wooded? —

What is dominant type of vegetation in wooded area (circle one): NA evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / N What percentage of the parcel is shrub/scrub vegetation? ___—___. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? Y / N What percentage of the parcel is open field / lawn? ___—___. What is the predominant height of field plants: ___—___

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): ___—___

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? ___
No wildlife

Other notes/observations: ___

Photo collected? Y / N

Kirsh Rizzer 5/11/14

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/2/16 Time: 1340 Temperature: 65 Precipitation (24 hr): 0
Surface Water Sample Location: SW-04

Sample location site use description (circle one): residential parcel, commercial parcel, industrial, park, other: _____

Seep? Y / (N)
Spring? (Y) / N
Pond? (Y) / N
Creek/Stream? Y / (N)

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : Ponded spring with slight outflow

Describe area immediately surrounding the surface water location. Circle all that apply: (mowed) lawn, sidewalk, street, ornamental planting/garden, wild grass, brush, (maintained trees), unmaintained/undisturbed woods, ravine, other. Description: _____

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: (mowed) lawn, ornamental planting/garden, wild grass, brush, sporadic/maintained tree plantings, unmaintained woods, (other.) Description: _____
*IVY

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? (Y) / N Describe: "Pollinator Habitat" plants for pollinators across street

Are there any wooded areas on the parcel? (Y) / N. What percentage of the parcel is wooded? 15%

What is dominant type of vegetation in wooded area (circle one): evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / N. What percentage of the parcel is shrub/scrub vegetation? 15%. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? Y / N. What percentage of the parcel is open field / lawn? 70%. What is the predominant height of field plants: _____

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): _____
man made - homes, etc.

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? _____
Bees across the street
Birds in trees

Other notes/observations: spring formed into a series of ponds

Photo collected? Y / N

Kurt Pieper 5/2/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/11/16 Time: 0757 Temperature: Sunny 45°F Precipitation (24 hr): 0
Surface Water Sample Location: SW-05

Sample location site use description (circle one): residential parcel, commercial parcel, industrial, park, (other:) street

Seep? Y / (N)
Spring? Y / (N)
Pond? Y / (N)
Creek/Stream? Y / (N)
*storm drain

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : average flow of water

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, (street,) ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description:

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: (mowed lawn,) (ornamental planting/garden,) wild grass, brush, sporadic/maintained tree plantings, unmaintained woods, other. Description: city street

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y / (N) Describe:

Are there any wooded areas on the parcel? Y / (N). What percentage of the parcel is wooded? —

What is dominant type of vegetation in wooded area (circle one): NA evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y /(N) What percentage of the parcel is shrub/scrub vegetation? —. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? Y / N. What percentage of the parcel is open field / lawn? —. What is the predominant height of field plants: —

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): —

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.?
No wildlife.

Other notes/observations:

Photo collected?(Y)/ N

Kristi Hope 5/11/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/4/16 ~~SW-06~~ KL Time: 1700 Temperature: 81°F Precipitation (24 hr): 0
Surface Water Sample Location: SW-06

Sample location site use description (circle one) residential parcel, commercial parcel, industrial, park, other: _____

Seep? Y /(N)
Spring? Y /(N) *well on property (more like sump)
Pond? Y /(N)
Creek/Stream? Y /(N)

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : ~4' deep

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, street, ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: water not in direct contact with these surroundings - located in backyard

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: mowed lawn, ornamental planting/garden, wild grass, brush, sporadic/maintained tree plantings, unmaintained woods, other. Description: residential neighborhood

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y /(N) Describe: _____

Are there any wooded areas on the parcel? Y /(N) What percentage of the parcel is wooded? ____

What is dominant type of vegetation in wooded area (circle one): evergreen / (deciduous.)
What is predominant size of trees on the parcel (diameter at breast height) (circle one): (0-6 in.) 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / (N) What percentage of the parcel is shrub/scrub vegetation? —. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? (Y) / N. What percentage of the parcel is open field / lawn? 5% * lawn. What is the predominant height of field plants: 1"

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn):
manmade structures

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.?
Homeowners have chickens
Other birds in yard

Other notes/observations: water in well from spring in backyard

Photo collected? (Y) / N

Kristi Rizzo 5/14/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume

Date: 5/4/16 Time: 1100 Temperature: 82°F Precipitation (24 hr): 0

Surface Water Sample Location: SW-07

Sample location site use description (circle one): (residential parcel,) commercial parcel, industrial, park, other: _____

Seep? Y (N)

Spring? (Y) / N *spring box

Pond? Y / (N)

Creek/Stream? Y / (N)

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, (ponded area [depth],) creek [width, depth]. : 2" deep

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, street, ornamental planting/garden, wild grass, brush, maintained trees, (unmaintained/undisturbed woods,) ravine, (other.) Description: spring box is made of concrete

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: mowed lawn, ornamental planting/garden, wild grass, brush, sporadic/maintained tree plantings, (unmaintained woods,) other. Description: Backyard is wooded in residential neighborhood

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y / (N) Describe: _____

Are there any wooded areas on the parcel? (Y) N. What percentage of the parcel is wooded? 90%

What is dominant type of vegetation in wooded area (circle one): evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., ~~12 in.~~

Is shrub/scrub vegetation present at the parcel? Y / N What percentage of the parcel is shrub/scrub vegetation? —. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? Y / N What percentage of the parcel is open field / lawn? —. What is the predominant height of field plants: —

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn):
man made structures

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.?
Mosquitoes around water
Homeowner said a badger lives near the spring box

Other notes/observations:

Photo collected? Y / N

Kat Hoyt 5/4/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/4/16 Time: 1010 Temperature: 81°F Precipitation (24 hr): 0
Surface Water Sample Location: SW-08

Sample location site use description (circle one): (residential parcel,) commercial parcel, industrial, park, other: _____

Seep? (Y)/ N
Spring? Y /(N)
Pond? Y /(N)
Creek/Stream? Y /(N)

Describe and estimate flow (i.e., (barely accumulating seep,) spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : standing water about 2" deep, slowly flows into stream below

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, street, ornamental planting/garden, wild grass, brush, maintained trees, (unmaintained/undisturbed woods,) ravine, other. Description: small trees and small plants

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: mowed lawn, (ornamental planting/garden,) wild grass, brush, sporadic/maintained tree plantings, (unmaintained woods,) other. Description: _____

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y /(N) Describe: _____

Are there any wooded areas on the parcel? (Y)/ N. What percentage of the parcel is wooded? 60%

What is dominant type of vegetation in wooded area (circle one): evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., (6-12 in.) > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / (N) What percentage of the parcel is shrub/scrub vegetation? —. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? Y / (N) What percentage of the parcel is open field / lawn? —. What is the predominant height of field plants: —

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): —

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.?
Fish (koi) in ponded area below seep
Mosquitoes around water

Other notes/observations:

Photo collected? (Y) / N

5/4/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/3/16 Time: 0855 Temperature: 55° Precipitation (24 hr): 0
Surface Water Sample Location: SW-09

Sample location site use description (circle one): ~~residential parcel~~, commercial parcel, industrial, park, other: _____

Seep? (Y) / N
Spring? Y / (N)
Pond? Y / (N)
Creek/Stream? Y / (N)

Describe and estimate flow (i.e., ~~barely accumulating seep~~, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : _____

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, street, ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: lawn on one side, fence to alley on other

Describe surrounding habitat (within 200 feet of ~~sampling location~~), ~~circle all that apply~~: mowed lawn, ~~ornamental planting/garden~~, wild grass, brush, ~~sporadic/maintained tree plantings~~, unmaintained woods, other. Description: _____

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y / (N) Describe: _____

Are there any wooded areas on the parcel? (Y) N. What percentage of the parcel is wooded? ____

What is dominant type of vegetation in wooded area (circle one): evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / N. What percentage of the parcel is shrub/scrub vegetation? _____. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? Y / N. What percentage of the parcel is open field / lawn? 50%. What is the predominant height of field plants: _____

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): _____
patio

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? _____
Quail seen in next door yard

Other notes/observations: seep running along backyard fence

Photo collected? Y / N

Kurt Rogers 5/13/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/11/16 Time: 0840 Temperature: 50°F Precipitation (24 hr): 0
Surface Water Sample Location: SW-10

Sample location site use description (circle one): residential parcel, commercial parcel, industrial, park, (other): street

Seep? Y / (N)
Spring? Y / (N)
Pond? Y / (N)
Creek/Stream? Y / (N)
* storm drain

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : water is moving very quickly - great quantity of water

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, (street), ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description:

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: (mowed lawn), (ornamental planting/garden), wild grass, brush, sporadic/maintained tree plantings, unmaintained woods, other. Description: city street

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y / (N) Describe:

Are there any wooded areas on the parcel? Y / (N) What percentage of the parcel is wooded? —

What is dominant type of vegetation in wooded area (circle one): NA evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y /(N) What percentage of the parcel is shrub/scrub vegetation? —. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? Y / N. What percentage of the parcel is open field / lawn? —. What is the predominant height of field plants: —

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): ~~No~~ ~~wildlife~~ KL —

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? No wildlife

Other notes/observations:

Photo collected? (Y) / N

Kristin Hopper 5/11/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/31/16 Time: 1230 Temperature: 73°F Precipitation (24 hr): 0
Surface Water Sample Location: SW-11

Sample location site use description (circle one): (residential parcel) commercial parcel, industrial, park, other: _____

Seep? (Y)/ N
Spring? Y /(N)
Pond? Y /(N)
Creek/Stream? Y /(N)

Describe and estimate flow (i.e., (barely accumulating seep) spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : Flowing at about 0.5 L/min

Describe area immediately surrounding the surface water location. Circle all that apply: (mowed) lawn, (sidewalk), street, ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: located in front yard of residence and flows onto sidewalk

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: (mowed) lawn, (ornamental planting/garden), wild grass, brush, sporadic/maintained tree plantings, unmaintained woods, other. Description: about 10 feet from street/along sidewalk Residential neighborhood

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y /(N) Describe: _____

Are there any wooded areas on the parcel? Y /(N) What percentage of the parcel is wooded? 0

What is dominant type of vegetation in wooded area (circle one): evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / N. What percentage of the parcel is shrub/scrub vegetation? —. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? Y / N. *mowed lawn/right-of-way What percentage of the parcel is open field / lawn? 30%. What is the predominant height of field plants: 2"

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): man made (ie, homes)

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? No wildlife observed

Other notes/observations:

Photo collected? Y / N

Kristi Rogers 5/3/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/3/16 Time: 1030 Temperature: 60°F Precipitation (24 hr): 0
Surface Water Sample Location: SW-12

Sample location site use description (circle one): (residential parcel), commercial parcel, industrial, park, other: _____

Seep? Y / (N)
Spring? (Y) / N
Pond? Y / (N)
Creek/Stream? Y / (N)

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : spring flowing at about 1.5 L/min about 2" thick

Describe area immediately surrounding the surface water location. Circle all that apply: (mowed lawn), sidewalk, street, (ornamental planting/garden), wild grass, brush, (maintained trees), unmaintained/undisturbed woods, ravine, other. Description: _____

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: (mowed lawn), (ornamental planting/garden), wild grass, brush, (sporadic/maintained tree plantings), unmaintained woods, other. Description: neighboring backyards

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y / (N) Describe: _____

Are there any wooded areas on the parcel? Y / (N) What percentage of the parcel is wooded? ____

What is dominant type of vegetation in wooded area (circle one): evergreen / (deciduous.)
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., (6-12 in.) > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / (N) What percentage of the parcel is shrub/scrub vegetation? —. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? (Y) / N. What percentage of the parcel is open field / lawn? 70%. What is the predominant height of field plants: 5"

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn):
man made habitats - houses

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.?
some birds can be heard in yard

Other notes/observations: spring runs into sump

Photo collected? (Y) / N

Kristi Hopper 5/31/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/3/16 Time: 1430 Temperature: 75°F Precipitation (24 hr): 0
Surface Water Sample Location: SW-13

Sample location site use description (circle one): (residential parcel,) commercial parcel, industrial, park, other: _____

Seep? (Y) / N
Spring? Y / (N)
Pond? Y / (N)
Creek/Stream? Y / (N)

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : barely accumulating - almost standing water

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, street, ornamental planting/garden, (wild grass,) brush, maintained trees, unmaintained/undisturbed woods, ravine, (other.) Description: raspberry bushes

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: mowed lawn, ornamental planting/garden, (wild grass,) brush, sporadic/maintained tree plantings, unmaintained woods, other. Description: Grass not mowed

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y / (N) Describe: _____

Are there any wooded areas on the parcel? Y / (N) What percentage of the parcel is wooded? —

What is dominant type of vegetation in wooded area (circle one): evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / N. What percentage of the parcel is shrub/scrub vegetation? —. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? Y / N. What percentage of the parcel is open field / ~~lawn~~? 70%. What is the predominant height of field plants: 1'

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): man made (ie, homes)

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? No wildlife observed

Other notes/observations:

Photo collected? Y / N

Kristi Agger 5/3/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume

Date: ~~5/3/16~~ & 5/4/16 Time: 0900 Temperature: 71°F Precipitation (24 hr): 0

Surface Water Sample Location: SW-14

Sample location site use description (circle one): (residential parcel,) commercial parcel, industrial, park, other: _____

Seep? Y / (N) #sump

Spring? Y / (N)

Pond? Y / (N)

Creek/Stream? Y / (N)

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, (ponded area [depth],) creek [width, depth]. : ~3' deep

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, street, ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, (other) Description: gravel and driveway

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: (mowed) lawn, (ornamental planting/garden,) wild grass, brush, (sporadic/maintained tree plantings,) unmaintained woods, (other) Description: gravel, sidewalk/driveway

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y / (N) Describe: _____

Are there any wooded areas on the parcel? Y / (N) What percentage of the parcel is wooded? —

What is dominant type of vegetation in wooded area (circle one): NA evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y /(N.) What percentage of the parcel is shrub/scrub vegetation? —. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? (Y)/ N. What percentage of the parcel is open field /(lawn)? 30%. What is the predominant height of field plants: _____

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): man-made (ie. buildings)

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? _____
Birds heard in trees

Other notes/observations: _____

Photo collected? (Y)/ N

Kristen Rizzi 5/4/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/4/16 Time: 1130 Temperature: 75°F Precipitation (24 hr): 0
Surface Water Sample Location: SW-15

Sample location site use description (circle one): (residential parcel), commercial parcel, industrial, park, other: _____

Seep? (Y) / N
Spring? Y / (N)
Pond? Y / (N)
Creek/Stream? Y / (N)

Describe and estimate flow (i.e., (barely accumulating seep), spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : Flowing at a rate of 0.1 L/min

Describe area immediately surrounding the surface water location. Circle all that apply: (mowed) lawn, (sidewalk), street, ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, (other) Description: seep coming out of retaining wall in backyard. Water collects in small drain

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: (mowed) lawn, (ornamental planting/garden), wild grass, brush, (sporadic/maintained tree plantings), (unmaintained woods), other. Description: Mowed grass above retaining wall. woods start about 20' to north of seep

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y / (N) Describe: _____

Are there any wooded areas on the parcel? (Y) / N. What percentage of the parcel is wooded? 70%

What is dominant type of vegetation in wooded area (circle one): evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / N What percentage of the parcel is shrub/scrub vegetation? —. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? Y / N. What percentage of the parcel is open field / lawn? 5%. What is the predominant height of field plants: 1"

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): man made (ie. buildings)

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.?
Badger lives in woods

Other notes/observations:

Photo collected? Y / N

Kristi Rizzi 5/4/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/4/16 Time: 1320 Temperature: 80°F Precipitation (24 hr): 0
Surface Water Sample Location: SW-16

Sample location site use description (circle one): residential parcel, commercial parcel, industrial, park, (other:) our Lady of Lourdes

Seep? Y /(N)
Spring? (Y)/ N
Pond? Y /(N)
Creek/Stream? Y /(N)

Describe and estimate flow (i.e., barely accumulating seep, (spring with noticeably free flowing) water, ponded area [depth], creek [width, depth]. : spring is mitigated through underground piping

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, (sidewalk,) street, ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, (other.) Description: mulch/rocks

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: (mowed lawn,) (ornamental planting/garden,) wild grass, brush, sporadic/maintained tree plantings, unmaintained woods, (other.) Description: mulch/rocks/sidewalk

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y /(N) Describe:

Are there any wooded areas on the parcel? Y /(N) What percentage of the parcel is wooded? —

What is dominant type of vegetation in wooded area (circle one): NA evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / N What percentage of the parcel is shrub/scrub vegetation? — . Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? Y / N. What percentage of the parcel is open field / lawn? 30% . What is the predominant height of field plants: 1"

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): man made (ie. buildings, athletic fields)

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? No wildlife observed

Other notes/observations:

Photo collected? Y / N

Kristi Rogge 5/4/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/11/16 Time: 1018 Temperature: 55°F Precipitation (24 hr): 0
Surface Water Sample Location: SW-17

Sample location site use description (circle one): residential parcel, commercial parcel, industrial, park, (other:) Street

Seep? Y /(N)
Spring? Y /(N)
Pond? Y /(N)
Creek/Stream? Y /(N)
* Jordan and Salt Lake Canal

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : Noticeable flow, but not rushing

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, (street,) ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description:

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: (mowed lawn,) (ornamental planting/garden,) wild grass, brush, sporadic/maintained tree plantings, unmaintained woods, other. Description: city street near neighborhood

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y /(N) Describe:

Are there any wooded areas on the parcel? Y /(N,) What percentage of the parcel is wooded? —

What is dominant type of vegetation in wooded area (circle one): NA evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y /(N) What percentage of the parcel is shrub/scrub vegetation? ——. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? Y /(N) What percentage of the parcel is open field / lawn? ——. What is the predominant height of field plants: ——

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): —

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.?
No wildlife

Other notes/observations:

Photo collected?(Y)/ N

Kristofferson 5/11/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/5/16 Time: 0910 Temperature: 70°F Precipitation (24 hr): 0
Surface Water Sample Location: SW-10

Sample location site use description (circle one): residential parcel, commercial parcel, industrial, park, other: _____

Seep? Y / (N)
Spring? Y / (N) * mitigated spring water in storm drain
Pond? Y / (N)
Creek/Stream? Y / (N)

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : Flowing through storm drain. Flowing ~2 L/min

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, street, ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: _____

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: mowed lawn, ornamental planting/garden, wild grass, brush, sporadic/maintained tree plantings, unmaintained woods, other. Description: residential neighborhood with some businesses

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y / (N) Describe: _____

Are there any wooded areas on the parcel? Y / (N) What percentage of the parcel is wooded? —

What is dominant type of vegetation in wooded area (circle one): NA evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / (N) What percentage of the parcel is shrub/scrub vegetation? —. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? (Y) / N. What percentage of the parcel is open field /(lawn)? 10%. What is the predominant height of field plants: 1"

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): man made structures

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.?
Birds and insects observed

Other notes/observations:

Photo collected? (Y) N

Kristi Rogers 5/5/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/4/16 Time: 0820 Temperature: 71°F Precipitation (24 hr): 0
Surface Water Sample Location: SW-19

Sample location site use description (circle one): residential parcel, commercial parcel, industrial, park, other: _____

Seep? Y / (N)
Spring? (Y) / N Bowen Spring
Pond? Y / (N)
Creek/Stream? Y / (N)

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : Spring flowing at ~ 1L/min
Flows into water feature, then into Red Butte Creek

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, street, ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: dirt/rocks and ivy plants

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: mowed lawn, ornamental planting/garden, wild grass, brush, sporadic/maintained tree plantings, unmaintained woods, other. Description: Backyard has lawn and pathway surrounded by ivy

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y / (N) Describe: _____

Are there any wooded areas on the parcel? (Y) / N. What percentage of the parcel is wooded? 10%

What is dominant type of vegetation in wooded area (circle one): evergreen / deciduous
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y (N) What percentage of the parcel is shrub/scrub vegetation? —. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? (Y) N. What percentage of the parcel is open field / lawn? 15%. What is the predominant height of field plants: 1"

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): man made structures

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.?
Fish (koi) in small pond
Mallards in pond adjacent to property

Other notes/observations:

Photo collected? (Y) N

Kristofazzi 5/4/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/5/16 Time: 1020 Temperature: 71°F Precipitation (24 hr): 0
Surface Water Sample Location: SW-20

Sample location site use description (circle one): (residential parcel) commercial parcel, industrial, park, other: _____

Seep? Y / (N)
Spring? (Y) / N storm drain with mitigated spring water
Pond? Y / (N)
Creek/Stream? Y / (N)

Describe and estimate flow (i.e., barely accumulating seep, (spring with noticeably free flowing) water, ponded area [depth], creek [width, depth]. : Flowing at about 3L/min through storm drain

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, (sidewalk), (street), ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: _____

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: (mowed lawn), (ornamental planting/garden), wild grass, brush, sporadic/maintained tree plantings, unmaintained woods, other. Description: residential neighborhood

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y / (N) Describe: _____

Are there any wooded areas on the parcel? Y / (N) What percentage of the parcel is wooded? —

What is dominant type of vegetation in wooded area (circle one): NA evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y (N) What percentage of the parcel is shrub/scrub vegetation? —. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? (Y) N. What percentage of the parcel is open field /(lawn) 20%. What is the predominant height of field plants: 1"

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): man made structures

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.?
Birds observed

Other notes/observations:

Photo collected? (Y) N

Kristi Rogers 5/5/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/3/16 Time: 1320 Temperature: 65° Precipitation (24 hr): 0
Surface Water Sample Location: SW-21

Sample location site use description (circle one): residential parcel, commercial parcel, industrial, park, other: _____

Seep? Y / (N)
Spring? Y / (N)
Pond? Y / (N) cistern
Creek/Stream? Y / (N)

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : water flowing into cistern <5gal/min.

Describe area immediately ~~surrounding the surface~~ water location. Circle all that apply: (mowed) lawn, sidewalk, street, ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: _____

Describe ~~surrounding habitat~~ (within 200 feet of sampling ~~location), circle all that apply~~: (mowed) lawn, ornamental planting/garden, wild grass, brush, sporadic/maintained tree plantings, unmaintained woods, other. Description: _____

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y / (N) Describe: _____

Are there any wooded areas on the parcel? (Y) / N. What percentage of the parcel is wooded? <5%.
4 very small trees in yard.

What is dominant type of vegetation in wooded area (circle one): evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / N. What percentage of the parcel is shrub/scrub vegetation? _____. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? Y / N. What percentage of the parcel is open field / lawn? 10%. What is the predominant height of field plants: mowed lawn

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): _____

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? _____
Homeowners have pet rabbits, no wildlife observed

Other notes/observations: _____

Photo collected? Y / N

Kristi Rizzo 5/3/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/3/16 Time: 1550 Temperature: 72°F Precipitation (24 hr): 0
Surface Water Sample Location: SW-22

Sample location site use description (circle one): (residential parcel), commercial parcel, industrial, park, other: _____

Seep? Y /(N)
Spring? Y /(N) sump filled with spring water
Pond? Y / (N)
Creek/Stream? Y /(N)

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, (ponded area [depth]), creek [width, depth]. : water a couple of feet deep

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, (sidewalk), street, ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: sump surrounded by concrete (not in direct contact with water)

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: (mowed lawn), (ornamental planting/garden), wild grass, brush, (sporadic/maintained tree plantings), unmaintained woods, (other). Description: pavers, rocks

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y /(N) Describe: _____

Are there any wooded areas on the parcel? Y /(N) What percentage of the parcel is wooded? —

What is dominant type of vegetation in wooded area (circle one): NA evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / (N.) What percentage of the parcel is shrub/scrub vegetation? —. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? (Y) / N. What percentage of the parcel is open field (lawn)? 15%. What is the predominant height of field plants: 1"

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): man made structures

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? No animals observed

Other notes/observations:

Photo collected? (Y) / N

Kristen Rogers 5/13/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/3/16 Time: 0950 Temperature: 55° Precipitation (24 hr): 0
Surface Water Sample Location: SW-23

Sample location site use description (circle one): residential parcel, commercial parcel, industrial, park, other: _____

Seep? Y / (N)
Spring? Y / (N) French drain
Pond? Y / (N)
Creek/Stream? Y / (N)

Describe ~~and estimate flow~~ (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : _____
2 ft.

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, street, ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: _____

Describe ~~surrounding habitat~~ (within 200 feet of ~~sampling~~ location), circle all that apply: mowed lawn, ornamental planting/garden, wild grass, brush, sporadic/maintained tree plantings, unmaintained woods, other. Description: _____

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y (N) Describe: _____

Are there any wooded areas on the parcel? (Y) / N. What percentage of the parcel is wooded? 2%
5 trees

What is dominant type of vegetation in wooded area (circle one): evergreen / deciduous. What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / N. What percentage of the parcel is shrub/scrub vegetation? 20%. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? Y / N. What percentage of the parcel is open field / lawn? 50%. What is the predominant height of field plants: mowed lawn

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): No

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? Snails in well

Mourning doves heard

Other notes/observations:

Photo collected? Y / N

Kristi Rogers 5/3/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/11/16 Time: 0925 Temperature: 58°F Precipitation (24 hr): 0
Surface Water Sample Location: SW-24

Sample location site use description (circle one): residential parcel, commercial parcel, industrial, park, (other: street)

Seep? Y / (N)
Spring? Y / (N)
Pond? Y / (N)
Creek/Stream? Y / (N)
*storm drain

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : No flowing water, just some sitting at bottom of storm drain

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, (street), ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description:

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: (mowed lawn), (ornamental planting/garden), wild grass, brush, sporadic/maintained tree plantings, unmaintained woods, other. Description: located on city street

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y / (N) Describe:

Are there any wooded areas on the parcel? Y / (N) What percentage of the parcel is wooded? —

What is dominant type of vegetation in wooded area (circle one): NA evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / N What percentage of the parcel is shrub/scrub vegetation? — . Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? Y / N What percentage of the parcel is open field / lawn? — . What is the predominant height of field plants: —

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): —

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.?
No wildlife

Other notes/observations:

Photo collected? Y / N

Kristi Arzzi 5/11/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume

Date: 5/5/16 Time: 1200 Temperature: 75°F Precipitation (24 hr): 0

Surface Water Sample Location: SW-25

Sample location site use description (circle one): residential parcel, commercial parcel, industrial, park, other: _____

Seep? Y /(N)

Spring? Y /(N) storm drain with mitigated spring water

Pond? Y /(N)

Creek/Stream? Y /(N)

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : spring flowing at ~1.5L/min flows through storm drain

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, street, ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: _____

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: mowed lawn, ornamental planting/garden, wild grass, brush, sporadic/maintained tree plantings, unmaintained woods, other. Description: residential neighborhood

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y /(N) Describe: _____

Are there any wooded areas on the parcel? Y /(N) What percentage of the parcel is wooded? —

What is dominant type of vegetation in wooded area (circle one): NA evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / (N.) What percentage of the parcel is shrub/scrub vegetation? —. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? (Y) / N. What percentage of the parcel is open field (lawn)? 20%. What is the predominant height of field plants: —

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): man made structures

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? ~~man made structures~~ No wild life observed KL

Other notes/observations: ~~No wildlife observed.~~ KL

Photo collected? (Y) N

Kristi Rogers 5/5/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume

Date: 5/3/16 Time: 1345 Temperature: 71°F Precipitation (24 hr): 0

Surface Water Sample Location: SW-26

Sample location site use description (circle one): residential parcel, commercial parcel, industrial, park, other: _____

Seep? (Y) N

Spring? Y / (N)

Pond? Y / (N)

Creek/Stream? Y / (N)

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : water ponded up along green house

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, street, ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: soil/gravel

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: mowed lawn, ornamental planting/garden, wild grass, brush, sporadic/maintained tree plantings, unmaintained woods, other. Description: _____

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y / (N) Describe: _____

Are there any wooded areas on the parcel? Y / (N) What percentage of the parcel is wooded? —

What is dominant type of vegetation in wooded area (circle one): NA evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / (N) What percentage of the parcel is shrub/scrub vegetation? —. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? Y / (N) What percentage of the parcel is open field / lawn? —. What is the predominant height of field plants: —

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): man made structures

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? Neighbors have chickens (in contact with same water)

Other notes/observations:

Photo collected? (Y) / N

Kristi Lozier 5/31/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/3/16 Time: 1120 Temperature: 60°F Precipitation (24 hr): 0
Surface Water Sample Location: SW-27

Sample location site use description (circle one): (residential parcel) commercial parcel, industrial, park, other: _____

Seep? (Y) / N
Spring? Y / (N)
Pond? Y / (N)
Creek/Stream? Y / (N)

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : seep with good flow (~0.5 L/min) About 1" wide

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, (sidewalk) street, ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: located along sidewalk, seeping out of retention wall in front yard

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: (mowed lawn), (ornamental planting/garden) wild grass, brush, sporadic/maintained tree plantings, unmaintained woods, other. Description: about 10 feet from street / along sidewalk. ornamental trees and plantings above seep

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y / (N) Describe: _____

Are there any wooded areas on the parcel? Y / (N.) What percentage of the parcel is wooded? —

What is dominant type of vegetation in wooded area (circle one): evergreen / (deciduous.)
What is predominant size of trees on the parcel (diameter at breast height) (circle one) (0-6 in), 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / (N.) What percentage of the parcel is shrub/scrub vegetation? —. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? (Y) / N. * mowed lawn / right-of-way What percentage of the parcel is open field / lawn? 20%. What is the predominant height of field plants: 2"

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): man made - houses

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? No wildlife observed

Other notes/observations:

Photo collected? (Y) / N

Kurt Foppe 5/3/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/3/14 Time: 1200 Temperature: 65 Precipitation (24 hr): 0
Surface Water Sample Location: SW-28

Sample location site use description (circle one): residential parcel, commercial parcel, industrial, park, other: storm sewer/grate in road

Seep? Y / (N)
Spring? (Y) N
Pond? Y / (N)
Creek/Stream? Y / (N)

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : 5-10 gal/minute

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, street, ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/~~undisturbed~~ woods, ravine, other. Description:

Describe surrounding habitat (within 200 feet of sampling location), ~~circle all that apply~~ mowed lawn, ornamental planting/garden, wild grass, brush, sporadic/maintained tree plantings, unmaintained woods, other. Description:

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y / (N) Describe:

Are there any wooded areas on the parcel? Y / (N) What percentage of the parcel is wooded? ___

few trees along road

What is dominant type of vegetation in wooded area (circle one): evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / N. What percentage of the parcel is shrub/scrub vegetation? _____. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? Y / N. *lawns, right-of-ways What percentage of the parcel is open field / lawn? 20%. What is the predominant height of field plants: _____

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): _____
man made - houses

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? _____
No wildlife observed

Other notes/observations: mitigated spring water

Photo collected? Y / N

Knol Rogge 5/31/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/11/10 Time: 0935 Temperature: 52°F Precipitation (24 hr): 0
Surface Water Sample Location: SW-29

Sample location site use description (circle one): residential parcel, commercial parcel, industrial, park, other: _____

Seep? Y /(N)
Spring? (Y)/ N
Pond? Y /(N)
Creek/Stream? Y /(N)

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : water flowing out of pipe

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, street, ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: _____

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: mowed lawn, ornamental planting/garden, wild grass, brush, sporadic/maintained tree plantings, unmaintained woods, other. Description: located in residential neighborhood

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y /(N) Describe: _____

Are there any wooded areas on the parcel? Y /(N) What percentage of the parcel is wooded? —

What is dominant type of vegetation in wooded area (circle one): NA evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / N What percentage of the parcel is shrub/scrub vegetation? ___—___. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? Y / N. What percentage of the parcel is open field / lawn? 60%. What is the predominant height of field plants: 1"

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): man made structures

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? No wildlife

Other notes/observations:

Photo collected? Y / N

Kristi Rizzer 5/11/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/3/16 Time: 1630 Temperature: 74°F Precipitation (24 hr): 0
Surface Water Sample Location: SW-30

Sample location site use description (circle one): (residential parcel) commercial parcel, industrial, park, other: _____

Seep? Y / (N)
Spring? (Y) / N Smith Spring
Pond? Y / (N)
Creek/Stream? Y / (N)

Describe and estimate flow (i.e., barely accumulating seep, (spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : Flows at about 2 L/min

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, street, (ornamental planting/garden,) wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, (other) Description: rocks

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: (mowed lawn, (ornamental planting/garden, wild grass, brush, (sporadic/maintained tree plantings, unmaintained woods, other. Description: residennal neighborhood

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y / (N) Describe: _____

Are there any wooded areas on the parcel? Y / (N) What percentage of the parcel is wooded? —

What is dominant type of vegetation in wooded area (circle one): NA evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / (N) What percentage of the parcel is shrub/scrub vegetation? —. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? (Y) / N. *lawn What percentage of the parcel is open field / lawn? 5%. What is the predominant height of field plants: 1"

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): man made structures

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.?
Homeowners have chickens
other birds in yard

Other notes/observations:

Photo collected? (Y) N

Kristy Fazzari 5/31/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/2/16 Time: 1500 Temperature: 65° Precipitation (24 hr): 0
Surface Water Sample Location: SW-31

Sample location site use description (circle one): residential parcel, commercial parcel, industrial, park, other: _____

Seep? (Y) / N
Spring? Y / (N)
Pond? Y / (N)
Creek/Stream? Y / (N)

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : slow flowing seep, little to no accumulation

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, street, ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: _____

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: mowed lawn, ornamental planting/garden, wild grass, brush, sporadic/maintained tree plantings, unmaintained woods, other. Description: _____

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y (N) Describe: _____

Are there any wooded areas on the parcel? Y / N. What percentage of the parcel is wooded? ___
2 trees in back yard

What is dominant type of vegetation in wooded area (circle one): evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / N. What percentage of the parcel is shrub/scrub vegetation? 50%. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? Y / N. What percentage of the parcel is open field / lawn? 50%. What is the predominant height of field plants: 12"

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): _____

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? _____
man made - homes, etc.

Other notes/observations: _____

Photo collected? Y / N

Kristi Rizzi 5/2/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume

Date: 5/5/16 Time: 1120 Temperature: 75°F Precipitation (24 hr): 0

Surface Water Sample Location: SW-32

Sample location site use description (circle one): (residential parcel), commercial parcel, industrial, park, other: _____

Seep? Y / (N)

Spring? Y / (N) mitigated spring water into storm drain

Pond? Y / (N)

Creek/Stream? Y / (N)

Describe and estimate flow (i.e., barely accumulating seep, (spring with noticeably free flowing) water, ponded area [depth], creek [width, depth]. : flows at about 2 L/min

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, (sidewalk), (street), ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: _____

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: (mowed lawn), (ornamental planting/garden), wild grass, brush, (sporadic/maintained tree plantings), unmaintained woods, other. Description: residential neighborhood

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y / (N) Describe: _____

Are there any wooded areas on the parcel? Y / (N) What percentage of the parcel is wooded? —

What is dominant type of vegetation in wooded area (circle one): NA evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / (N) What percentage of the parcel is shrub/scrub vegetation? —. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? (Y) / N. What percentage of the parcel is open field / lawn? 10%. What is the predominant height of field plants: —

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): manmade structures

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.?
No wildlife observed

Other notes/observations:

Photo collected? (Y) / N

Kristi Riggen 5/5/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/2/16 Time: 1355 Temperature: 65 Precipitation (24 hr): 0
Surface Water Sample Location: SW-33

Sample location site use description (circle one): ~~residential parcel~~, commercial parcel, industrial, park, other: _____

Seep? (Y) N
Spring? Y / (N)
Pond? Y / (N)
Creek/Stream? Y / (N)

Describe and estimate flow (~~i.e., barely accumulating seep~~, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : 4" wide outflow < 1 cm deep

Describe area immediately surrounding the surface water location. Circle all that apply: (mowed lawn, sidewalk, street) ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: flowing out of lawn into street

Describe ~~surrounding habitat (within 200 feet of sampling location), circle all that apply~~: (mowed lawn, ornamental planting/garden, wild grass, brush, sporadic/maintained tree plantings, ~~unmaintained woods~~, other. Description: _____

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y / (N) Describe: _____

Are there any wooded areas on the parcel? (Y) / N. What percentage of the parcel is wooded? 5%
Trees in lawn

What is dominant type of vegetation in wooded area (circle one): evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / N. What percentage of the parcel is shrub/scrub vegetation? 10%. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? Y / N. What percentage of the parcel is open field / lawn? 80%. What is the predominant height of field plants: grass (mowed)

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): _____
man made - homes, etc.

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? _____
can hear birds

Other notes/observations: _____

Photo collected? Y / N

Kristi Rizzi 5/2/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/2/16 Time: 1430 Temperature: 65 Precipitation (24 hr): 0
Surface Water Sample Location: SW34

Sample location site use description (circle one): residential parcel, commercial parcel, industrial, park, other: _____

Seep? Y / (N)
Spring? (Y) / N
Pond? Y / (N)
Creek/Stream? Y / (N)

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : _____

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, street, ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: _____

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: mowed lawn, ornamental planting/garden, wild grass, brush, sporadic/maintained tree plantings, unmaintained woods, other. Description: _____
↓patio

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y / (N) Describe: _____

Are there any wooded areas on the parcel? (Y) / N. What percentage of the parcel is wooded? 15%

What is dominant type of vegetation in wooded area (circle one): evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / N. What percentage of the parcel is shrub/scrub vegetation? 20%. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

wy

Are there open field areas present on the parcel? Y / N. What percentage of the parcel is open field / lawn? 40%. What is the predominant height of field plants: lawn/wy

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): man made - homes, etc.

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? birds can be heard

Other notes/observations:

Photo collected? Y / N

Kristi Foggen 5/2/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/4/16 Time: 0930 Temperature: 76°F Precipitation (24 hr): 0
Surface Water Sample Location: SW-35

Sample location site use description (circle one): (residential parcel), commercial parcel, industrial, park, other: _____

Seep? (Y)/ N
Spring? Y /(N)
Pond? Y /(N)
Creek/Stream? Y /(N)

Describe and estimate flow (i.e., (barely accumulating seep), spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : _____

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, street, (ornamental planting/garden), wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: _____

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: (mowed lawn), (ornamental planting/garden), wild grass, brush, (sporadic/maintained tree plantings), unmaintained woods, (other) Description: pavers

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y /(N) Describe: _____

Are there any wooded areas on the parcel? Y /(N) What percentage of the parcel is wooded? -

What is dominant type of vegetation in wooded area (circle one): NA evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / (N) What percentage of the parcel is shrub/scrub vegetation? —. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? (Y) / N. What percentage of the parcel is open field (lawn)? 10%. What is the predominant height of field plants: 1"

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): man made structures

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.?
No wildlife observed

Other notes/observations:

Photo collected? (Y) / N

Kristi Fazzi 5/14/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/31/16 Time: 1730 Temperature: 74°F Precipitation (24 hr): 0
Surface Water Sample Location: SW-36

Sample location site use description (circle one): (residential parcel), commercial parcel, industrial, park, other: _____

Seep? (Y) / N
Spring? Y / (N)
Pond? Y / (N)
Creek/Stream? Y / (N)

Describe and estimate flow (i.e., (barely accumulating seep), spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : seep coming out of piping

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, street, (ornamental planting/garden), wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, (other) Description: concrete/rock

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: (mowed lawn), (ornamental planting/garden), wild grass, brush, (sporadic/maintained tree plantings), unmaintained woods, other. Description: residential neighborhood

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y / (N) Describe: _____

Are there any wooded areas on the parcel? Y / (N) What percentage of the parcel is wooded? —

What is dominant type of vegetation in wooded area (circle one): NA evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / N. What percentage of the parcel is shrub/scrub vegetation? — . Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? Y / N. What percentage of the parcel is open field / lawn? 20% . What is the predominant height of field plants: 1.5"

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): man made structures

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? No wildlife observed

Other notes/observations:

Photo collected? Y / N

Kristi Lagger 5/3/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/5/16 Time: 1815 Temperature: 75°F Precipitation (24 hr): 0
Surface Water Sample Location: SW-37

Sample location site use description (circle one): residential parcel, commercial parcel, industrial, park, other: _____

Seep? Y (N)
Spring? Y (N) mingated spring water in storm drain
Pond? Y /(N)
Creek/Stream? Y /(N)

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : confluence of 3 mitigation lines Flows at ~4L/min

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, street, ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: _____

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: mowed lawn, ornamental planting/garden, wild grass, brush, sporadic/maintained tree plantings, unmaintained woods, other. Description: residential neighborhood

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y /(N) Describe: _____

Are there any wooded areas on the parcel? Y /(N) What percentage of the parcel is wooded? ____

What is dominant type of vegetation in wooded area (circle one): NA evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / (N) What percentage of the parcel is shrub/scrub vegetation? —. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? (Y) / N. What percentage of the parcel is open field / lawn? 45%. What is the predominant height of field plants: 1"

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): man made structures

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? No wildlife observed

Other notes/observations:

Photo collected? (Y) N

Kristi Lozzi 5/5/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/11/16 Time: 0810 Temperature: 52°F Precipitation (24 hr): 0
Surface Water Sample Location: SW-38

Sample location site use description (circle one): residential parcel, commercial parcel, industrial, park, (other:) Street

Seep? Y /(N)
Spring? Y /(N)
Pond? Y /(N)
Creek/Stream? Y /(N)
* storm drain

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : Flowing at decent rate

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, (street,) ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description:

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: (mowed lawn,) (ornamental planting/garden,) wild grass, brush, sporadic/maintained tree plantings, unmaintained woods, other. Description: Located on city street

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y /(N) Describe: –

Are there any wooded areas on the parcel? Y /(N) What percentage of the parcel is wooded? –

What is dominant type of vegetation in wooded area (circle one): NR evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y (N) What percentage of the parcel is shrub/scrub vegetation? —. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? Y (N) What percentage of the parcel is open field / lawn? —. What is the predominant height of field plants: —

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): —

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.?
No wildlife

Other notes/observations:

Photo collected? (Y) N

Kristy Rogge 5/11/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume

Date: 5/3/16 Time: 1700 Temperature: 78° F Precipitation (24 hr): 0

Surface Water Sample Location: ~~SW-38~~ SW-39

Sample location site use description (circle one): (residential parcel), commercial parcel, industrial, park, other: _____

Seep? Y / (N)

Spring? Y / (N) Mitigated spring water in storm drain

Pond? Y / (N)

Creek/Stream? Y / (N)

Describe and estimate flow (i.e., barely accumulating seep, (spring with noticeably free flowing) water, ponded area [depth], creek [width, depth]. : mitigated water flowing at about 1.5 L/min

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, (sidewalk), (street), ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: _____

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: (mowed lawn), (ornamental planting/garden), wild grass, brush, (sporadic/maintained tree plantings), unmaintained woods, other. Description: residential neighborhood

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y / (N) Describe: _____

Are there any wooded areas on the parcel? Y / (N) What percentage of the parcel is wooded? —

What is dominant type of vegetation in wooded area (circle one): NA evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / (N.) What percentage of the parcel is shrub/scrub vegetation? —. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? (Y) / N. What percentage of the parcel is open field / lawn? 20%. What is the predominant height of field plants: 1"

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): man made structures

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? No wildlife observed

Other notes/observations:

Photo collected? (Y) / N

Kristy Rizzo 5/3/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/5/16 Time: 1745 Temperature: 76°F Precipitation (24 hr): 0
Surface Water Sample Location: SW-40

Sample location site use description (circle one): (residential parcel), commercial parcel, industrial, park, other: _____

Seep? Y / (N)
Spring? Y / (N) sump underneath house
Pond? Y / (N)
Creek/Stream? Y / (N)

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : unable to tell flow or depth of water

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, (sidewalk), street, ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: _____

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: (mowed lawn), (ornamental planting/garden), wild grass, brush, (sporadic/maintained tree plantings), unmaintained woods, other. Description: residential neighborhood

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y / (N) Describe: _____

Are there any wooded areas on the parcel? Y / (N) What percentage of the parcel is wooded? —

What is dominant type of vegetation in wooded area (circle one): NA evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y (N) What percentage of the parcel is shrub/scrub vegetation? —. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? (Y) N. What percentage of the parcel is open field (lawn)? 45%. What is the predominant height of field plants: 1"

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): man made structure

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? No wildlife observed

Other notes/observations:

Photo collected? (Y)/ N

Rustyfrazer 5/5/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/5/16 Time: 1100 Temperature: 76°F Precipitation (24 hr): 0
Surface Water Sample Location: SW-41

Sample location site use description (circle one): residential parcel, commercial parcel, industrial, park, other: Area located in Beatnce Evans Park

Seep? Y / (N)
Spring? Y / (N) mingated spring water in storm drain
Pond? Y / (N)
Creek/Stream? Y / (N)

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : water about 6" deep

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, street, ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: grass not in contact with storm drain

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: mowed lawn, ornamental planting/garden, wild grass, brush, sporadic/maintained tree plantings, unmaintained woods, other. Description: residential neighborhood

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y / (N) Describe:

Are there any wooded areas on the parcel? Y / (N) What percentage of the parcel is wooded? —

What is dominant type of vegetation in wooded area (circle one): NA evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y (N) What percentage of the parcel is shrub/scrub vegetation? —. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? (Y) N. What percentage of the parcel is open field / lawn? 55%. What is the predominant height of field plants: 1"

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): man made structures

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? No wildlife observed

Other notes/observations:

Photo collected? (Y) N

Kristi Boyer 5/5/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/2/16 Time: 1410 Temperature: 65 Precipitation (24 hr): 0
Surface Water Sample Location: SW-42

Sample location site use description (circle one): residential parcel, commercial parcel, industrial, park, other: _____

Seep? (Y) / N
Spring? Y / (N)
Pond? Y / (N)
Creek/Stream? Y / (N)

Describe and estimate flow (i.e., ~~barely accumulating~~ seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : _____

Describe area immediately surrounding the surface water location. ~~Circle all that apply~~: mowed lawn, sidewalk, street, ornamental planting/garden, wild grass, brush, ~~maintained~~ trees, unmaintained/undisturbed woods, ravine, other. Description: _____

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: mowed lawn, ornamental planting/garden, wild grass, brush, sporadic/maintained tree plantings, unmaintained woods, other. Description: _____

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y / (N) Describe: _____

Are there any wooded areas on the parcel? (Y) / N. What percentage of the parcel is wooded? 10%

What is dominant type of vegetation in wooded area (circle one): evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / N. What percentage of the parcel is shrub/scrub vegetation? 40%. Is the shrub/scrub ~~unmaintained~~ (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/~~shrub~~ dense, patchy or sparse (circle one). ivy in between

Are there open field areas present on the parcel? Y / N. What percentage of the parcel is open field / lawn? 0%. What is the predominant height of field plants: _____

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): No

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? some mosquitoes

Other notes/observations: Seep is channelized into concrete lined ditch

Photo collected? Y / N

Kristy Rizzo 5/2/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/2/15 Time: 1305 Temperature: 60° Precipitation (24 hr): 0
Surface Water Sample Location: A-SW-043

Sample location site use description (circle one): residential parcel, commercial parcel, industrial, park, other: _____

Seep? Y / N
Spring? (Y) / N → sample collected from spring
Pond? (Y) / N
Creek/Stream? Y / N

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : steady flow ~ 1 ft/sec with ponded area on side (~8" deep)

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, street, ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: waterway Cement bottom, fast flow area.

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: mowed lawn, ornamental planting/garden, wild grass, brush, sporadic/maintained tree plantings, unmaintained woods, other. Description: _____

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y (N) Describe: _____

Are there any wooded areas on the parcel? (Y) / N. What percentage of the parcel is wooded? 5%

What is dominant type of vegetation in wooded area (circle one): evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / N. What percentage of the parcel is shrub/scrub vegetation? 40%. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? Y / N. What percentage of the parcel is open field / lawn? 30%. What is the predominant height of field plants: Mowed lawn

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): No

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? Sprayed for mosquitos.

Other notes/observations: Sample collected from flowing water

Photo collected? Y / N

Kristi Ryan 5/2/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/4/16 Time: 1430 Temperature: 76°F Precipitation (24 hr): 0
Surface Water Sample Location: SW-44

Sample location site use description (circle one): (residential parcel), commercial parcel, industrial, park, other: _____

Seep? Y /(N)
Spring? (Y)/ N
Pond? Y /(N)
Creek/Stream? Y /(N)

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : Steady flow ~1 ft/sec
Water flows into ponded structures

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, street, (ornamental planting/garden), wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: _____

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: (mowed lawn), (ornamental planting/garden), wild grass, brush, (sporadic/maintained tree plantings), unmaintained woods, other. Description: _____

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y /(N) Describe: _____

Are there any wooded areas on the parcel? Y /(N) What percentage of the parcel is wooded? —

What is dominant type of vegetation in wooded area (circle one): NA evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / (N.) What percentage of the parcel is shrub/scrub vegetation? —. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? (Y) / N. What percentage of the parcel is open field / (lawn)? 10%. What is the predominant height of field plants: 1"

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): man made structures

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? some birds in trees

Other notes/observations:

Photo collected? (Y) / N

Kurt Fiege 5/4/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/5/16 Time: 1000 Temperature: 80°F Precipitation (24 hr): 0
Surface Water Sample Location: SW-45

Sample location site use description (circle one): (residential parcel) commercial parcel, industrial, park, other: _____

Seep? Y / (N)
Spring? Y / (N)
Pond? Y / (N)
Creek/Stream? Y / (N)

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : Jordan and Salt Lake canal Flowing at a great rate

Describe area immediately surrounding the surface water location. Circle all that apply: (mowed lawn) (sidewalk) street, ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: storm grate

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: (mowed lawn) (ornamental planting/garden) wild grass, brush, (sporadic/maintained tree plantings) unmaintained woods, other. Description: residential neighborhood

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y / (N) Describe: _____

Are there any wooded areas on the parcel? Y / (N) What percentage of the parcel is wooded? —

What is dominant type of vegetation in wooded area (circle one): NA evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / (N.) What percentage of the parcel is shrub/scrub vegetation? ___—___. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? (Y)/ N. What percentage of the parcel is open field / (lawn)? 60%. What is the predominant height of field plants: 1"

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): man made structures

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? No wildlife observed

Other notes/observations:

Photo collected? (Y)/ N

Kurt Page 5/5/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/5/16 Time: 1730 Temperature: 75°F Precipitation (24 hr): 0
Surface Water Sample Location: SW-46

Sample location site use description (circle one): residential parcel, commercial parcel, industrial, park, other: _____

Seep? Y (N)
Spring? (Y) / N
Pond? Y (N)
Creek/Stream? Y (N)

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : Flowing at about 2.5 L/min

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, street, ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: landscaped garden

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: mowed lawn, ornamental planting/garden, wild grass, brush, sporadic/maintained tree plantings, unmaintained woods, other. Description: residential neighborhood

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y /(N) Describe: _____

Are there any wooded areas on the parcel? Y /(N) What percentage of the parcel is wooded? —

What is dominant type of vegetation in wooded area (circle one): NA evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / N. What percentage of the parcel is shrub/scrub vegetation? ___—___. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? Y / N. What percentage of the parcel is open field / lawn? 30%. What is the predominant height of field plants: 1"

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): man made structures

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? No wildlife observed

Other notes/observations:

Photo collected? Y / N

Kristi Pappi 5/5/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/4/10 Time: 0840 Temperature: 75°F Precipitation (24 hr): 0
Surface Water Sample Location: SW-47

Sample location site use description (circle one): residential parcel, commercial parcel, industrial, park, other: _____

Seep? Y / (N)
Spring? Y / (N)
Pond? Y / (N)
Creek/Stream? (Y) / N

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : sample collected from Red Butte creek section 5' wide and 5" deep

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, street, ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: _____

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: mowed lawn, ornamental planting/garden, wild grass, brush, sporadic/maintained tree plantings, unmaintained woods, other. Description: Backyard had lawn and some landscaping

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y / (N) Describe: _____

Are there any wooded areas on the parcel? (Y) / (N) What percentage of the parcel is wooded? 10%

What is dominant type of vegetation in wooded area (circle one): evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / N What percentage of the parcel is shrub/scrub vegetation? —. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? Y / N. What percentage of the parcel is open field / lawn? 15%. What is the predominant height of field plants: 1"

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): man made structures

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.?
Fish (koi) in small pond
Mallards in pond adjacent to creek

Other notes/observations:

Photo collected? Y / N

Kristi Rizzo 5/4/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/4/16 Time: 0945 Temperature: 81°F Precipitation (24 hr): 0
Surface Water Sample Location: SW-48

Sample location site use description (circle one): residential parcel, commercial parcel, industrial, park, other: _____

Seep? Y / (N)
Spring? (Y) / N Benson Spring
Pond? Y / (N)
Creek/Stream? Y / (N)

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : water flowing about 0.2 b/min

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, street, ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: small trees and plants

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: mowed lawn, ornamental planting/garden wild grass, brush, sporadic/maintained tree plantings, unmaintained woods, other. Description: _____

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y / (N) Describe: _____

Are there any wooded areas on the parcel? (Y) / N. What percentage of the parcel is wooded? 60%

What is dominant type of vegetation in wooded area (circle one): evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., (6-12 in.) > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / (N) What percentage of the parcel is shrub/scrub vegetation? ___—___. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? Y / (N) What percentage of the parcel is open field / lawn? ___—___. What is the predominant height of field plants: ___—___

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): _____

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? _____
Fish (koi) in ponded area below spring
Mosquitoes around water

Other notes/observations: _____

Photo collected? (Y) / N

Kurt Rizzo 5/4/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/5/16 Time: 1040 Temperature: 75°F Precipitation (24 hr): 0
Surface Water Sample Location: SW-49

Sample location site use description (circle one): (residential parcel), commercial parcel, industrial, park, other: _____

Seep? Y /(N)
Spring? Y /(N)
Pond? Y /(N)
Creek/Stream? Y /(N)

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : Jordan and Salt Lake Canal Flowing at good rate

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, (street), ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: storm drain in road

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: (mowed lawn), (ornamental planting/garden), wild grass, brush, (sporadic/maintained tree plantings), unmaintained woods, other. Description: residential neighborhood

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y /(N) Describe: _____

Are there any wooded areas on the parcel? Y /(N) What percentage of the parcel is wooded? —

What is dominant type of vegetation in wooded area (circle one): NA evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y / N What percentage of the parcel is shrub/scrub vegetation? ___—___. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? Y / N What percentage of the parcel is open field / lawn? 25%. What is the predominant height of field plants: 1"

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): man made structures

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? No wildlife observed

Other notes/observations:

Photo collected? Y / N

Kristi Aizpei 5/5/16

CHECKLIST FOR ECOLOGICAL ASSESSMENT / SURFACE WATER SAMPLING

Site Name: 700 S 1600 East PCE Plume
Date: 5/11/16 Time: 1100 Temperature: 61°F Precipitation (24 hr): 0
Surface Water Sample Location: SW-SO

Sample location site use description (circle one): residential parcel, commercial parcel, industrial, park, other: _____

Seep? Y / (N)
Spring? (Y) / N
Pond? Y / (N)
Creek/Stream? Y / (N)

Describe and estimate flow (i.e., barely accumulating seep, spring with noticeably free flowing water, ponded area [depth], creek [width, depth]. : water flowing at about 1.5L/min

Describe area immediately surrounding the surface water location. Circle all that apply: mowed lawn, sidewalk, street, ornamental planting/garden, wild grass, brush, maintained trees, unmaintained/undisturbed woods, ravine, other. Description: _____

Describe surrounding habitat (within 200 feet of sampling location), circle all that apply: mowed lawn, ornamental planting/garden, wild grass, brush, sporadic/maintained tree plantings, unmaintained woods, other. Description: residential neighborhood

Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site? For example, flood plains, wetlands? Y / (N) Describe: _____

Are there any wooded areas on the parcel? Y / (N) What percentage of the parcel is wooded? —

What is dominant type of vegetation in wooded area (circle one): NA evergreen / deciduous.
What is predominant size of trees on the parcel (diameter at breast height) (circle one): 0-6 in., 6-12 in., > 12 in.

Is shrub/scrub vegetation present at the parcel? Y /(N) What percentage of the parcel is shrub/scrub vegetation? —. Is the shrub/scrub unmaintained (wild) or maintained (circle one). Average height of the shrub/scrub: 0-2ft, 2-2.5 ft, > 5 ft. Is scrub/shrub dense, patchy or sparse (circle one).

Are there open field areas present on the parcel? (Y)/ N. What percentage of the parcel is open field /(lawn)? 30%. What is the predominant height of field plants: 1'

Are there other types of terrestrial habitats present (other than woods, shrub, field/lawn): man made structures

Observations regarding the presence and/or absence of insects, fish, birds, mammals, etc.? some birds in trees

Other notes/observations:

Photo collected? (Y)/ N

Kristi Rozzen 5/11/16

Salt Lake City VA Medical Center, Utah

Final

700 South 1600 East PCE Plume
AOU 1: East Side Springs
2016 Vapor Intrusion Investigation Field Data Report

SEPTEMBER 2016 (UPDATED MAY 2018)

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FINAL

Salt Lake City VA Medical Center, Utah
CERCLA Environmental Assessment and Cleanup

700 South 1600 East PCE Plume AOU 1: East Side Springs 2016 Vapor Intrusion Investigation Field Data Report

Contract No: GS-10F-0228J
Order No: VA259-15-F-3886

Prepared for:
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SEPTEMBER 2016
(UPDATED MAY 2018)

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Acronyms and Abbreviations

µg/m^3	micrograms per cubic meter
AOU 1	Accelerated Operable Unit 1 East Side Springs
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DCE	Dichloroethene
EA	EA Engineering, Science, and Technology, Inc., PBC
EPA	U.S. Environmental Protection Agency
FE	First Environment
Pa	Pascal
PCE	Tetrachloroethene
RAL	Removal action level
RBSL	Risk-based screening level
RI	Remedial investigation
SAP	Sampling and analysis plan
TCE	Trichloroethene
UDEQ	Utah Department of Environmental Quality
VA	Department of Veterans Affairs
VI	Vapor intrusion
VOC	Volatile organic compound

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1.0 Introduction and Background

This report presents the analytical results from the 2016 vapor intrusion (VI) investigation for Accelerated Operable Unit 1 East Side Springs (AOU 1), which is part of the 700 South 1600 East Tetrachloroethene (PCE) Plume. This report is being submitted on behalf of the U.S. Department of Veterans Affairs (VA) Salt Lake City Health Care System, which is working cooperatively with the U.S. Environmental Protection Agency (EPA) and the Utah Department of Environmental Quality (UDEQ) to implement the remedial investigation (RI). The VI investigation results included in this report supplement the indoor air and soil gas sampling performed in 2015. The 2015 sampling was guided by the RI Work Plan (First Environment [FE] 2015), which included the sampling and analysis plan and quality assurance project plan attachments. The data collection activities briefly described in this report are based on those detailed in the *2016 VI Sampling Plan for Accelerated Operable Unit 1: 700 South 1600 East PCE Plume Technical Memorandum, Salt Lake City, Utah* (sampling plan) (EA Engineering, Science, and Technology, Inc., PBC [EA] 2015). The results of these data collection activities will help VA refine the conceptual site model describing the nature, extent, fate, and transport of PCE associated with the PCE plume, specifically with respect to the potential for impacts to indoor air through the subsurface-to-indoor-air VI pathway.

AOU 1 is located in Salt Lake City, Salt Lake County, Utah, along the Wasatch Fault scarp within the general residential area bounded by 500 South and Michigan Avenue between 1300 East and 1100 East (Figure 1). In 2010, chlorinated volatile organic compounds (VOCs), including PCE and trichloroethene (TCE), were detected in the surface water associated with seeps and springs along the fault in AOU 1. The location of the seeps and springs near residences and other occupied structures and the shallow depth to groundwater suggested the potential for VI into occupied spaces. AOU 1 is defined as the area where springs are known to have PCE contamination and where groundwater is within 50 feet of the ground surface, and includes a 100-foot buffer around that area.

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2.0 Summary of Previous Characterization Activities

VA began collecting site-specific VI data within AOU 1 (FE 2015) in January 2015. More than 1,000 soil gas and indoor air data points were collected from 35 structures consisting of private residences, schools, a church, and an elder-care facility. The structures represent a cross section of structure types, construction dates, depths to groundwater, and locations within AOU 1. The analytical results from those samples were used to update the conceptual site model for AOU 1, which in turn was used to identify data gaps and to prepare a sampling plan (EA 2015) to fill those data gaps.

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3.0 Summary of 2016 Characterization Activities

This section presents a summary of and rationale for the additional VI sampling activities conducted within AOU 1 from February 2016 to June 2016. Further detail regarding 2016 VI sampling activities can be found in the RI Work Plan (FE 2015) and sampling plan (EA 2015). Sampling 11 new (that is, not previously sampled as part of the 2015 effort) and five previously sampled structures in an area with higher potential for VI was proposed following the 2015 effort. In addition, indoor air samples were collected from three structures and analyzed by EPA Method TO-15 (EPA 1999) to confirm that vinyl chloride is not present. Details for each of these objectives are provided in the following subsections.

3.1 Focus Area for 2016 Sampling

The VI data collected in 2015 pointed to a portion of AOU 1 with a higher potential for VI to result in indoor air concentrations above risk-based screening levels (RBSLs). These data, combined with AOU 1 hydrogeological data, facilitated the delineation of a focus area for the 2016 VI sampling (Figure 2). In 2016, ten residential and one public structure (East High School) within this focus area underwent individual VI investigation. The locations of these structures are shown on Figure 2. Collection of additional VI data from these structures within this focus area was conducted to support preparation of the RI report, including refining the conceptual model of VI within AOU 1, evaluating potential risk, and helping focus future monitoring.

3.2 Locations and Methods

The following three sampling goals outlined in the RI Work Plan were to be satisfied with the additional 2016 sampling:

- Sampling indoor air with EPA Method TO-15 analysis at five previously sampled structures to assess temporal variability in potentially VI-related indoor air PCE concentrations

- Sampling 11 new (not previously sampled) structures within the focus area to assess spatial variability. This included screening indoor air and near-slab soil gas using a portable gas chromatograph/mass spectrometer called a INFICON HAPSITE® (HAPSITE). EPA Method TO-15 analysis of both indoor air and soil gas was also specified in the event an RBSL exceedance occurred during HAPSITE indoor air screening

- Collecting a limited number of indoor air samples to confirm the absence of vinyl chloride.

EPA Method TO-15 samples were analyzed for PCE, TCE, cis-1,2-dichloroethene (DCE), vinyl chloride, and 1,4-dioxane. HAPSITE samples were analyzed for PCE, TCE, and cis-1,2-DCE. The following subsections describe the locations and methods for each sampling goal.

3.2.1 Previously Sampled Structures

The goal of resampling structures was to assess temporal variability of indoor air and VI-related VOC concentrations. The three residences where PCE was detected above the residential screening levels were selected for this purpose because potential VI had been identified. In addition, the two residences where elevated PCE concentrations were detected in uninhabited breathing space in association with groundwater collection sumps were selected to provide information about variability where potential

vapor sources exist within the structure, but previous results were nondetect or below screening levels in the habitable areas.

Sampling at these structures consisted of 24-hour SUMMA™ canister samples of indoor air for EPA Method TO-15 analysis. Other components of the VI protocol (FE 2015), such as the HAPSITE data collection and detailed building surveys, were not repeated. An abbreviated interview and building survey was performed to identify major changes that could affect the sampling and data evaluation (recent remodels or changed basement moisture conditions, for example). Table 1 lists the numbers and types of samples collected at these five structures.

3.2.2 New Structures

The goal of sampling structures not previously sampled during 2015 was to gain a better understanding of the spatial extent of VI-related impacts associated with AOU 1 groundwater. The additional structures within the focus area are identified on Figure 2 and in Table 1. One of the targeted structures was East High School. The remainder were residences. The VI protocol (FE 2015) guided the data collection at these structures. This included HAPSITE screening of indoor air and near-slab soil gas and EPA Method TO-15 analysis of both indoor air and soil gas if screening levels were exceeded during HAPSITE screening of indoor air and soil gas.

Following the collection of additional information about the building layout and use, three individual rooms within East High School were selected for sampling following the VI protocol considering the following factors:

- Proximity to PCE-impacted groundwater: The available site information was evaluated to identify the portions of the building where the vadose zone is thinnest and which are closer to the approximate inferred axis of the PCE plume. These criteria were chosen to bias the samples to those zones nearest the highest vapor source strength and the smallest degree of subsurface vapor attenuation.

- Room characteristics: Smaller rooms were preferred over larger rooms because the air available for mixing and dilution in smaller rooms is less than in larger rooms. Only occupied or potentially habitable rooms were considered.

Table 1 shows the numbers and types of samples collected at East High School and the previously unsampled residences. Figure 2 shows the locations of East High School and the 10 sampled residences within the focus area.

3.2.3 Vinyl Chloride Nondetect Confirmation Sampling

During the 2015 indoor air and near-structure soil gas screening process, the field team discovered that the HAPSITE portable gas chromatograph/mass spectrometer was unable to reliably quantify vinyl chloride at concentrations below the 5 parts per billion by volume calibration level, which was greater than the RBSL (0.17 micrograms per cubic meter [$\mu g/m^3$]). Vinyl chloride was subsequently removed from the HAPSITE's calibration procedure (see Appendix L of the RI Work Plan [FE 2015]). EPA requested that the following four additional EPA Method TO-15 indoor air samples be collected from structures where two criteria were met:

- One sample outside the plume where PCE, TCE, and cis-1,2-DCE in the indoor air were below the RBSLs or the detection limit of the HAPSITE instrument.

- Three samples inside the area of the plume where PCE and TCE were equal to or less than their respective RBSLs, but above the instrument detection limits.

Sampling conducted at structure 0003-H in November 2015 satisfies the first requirement. Structures satisfying the second requirement are listed in Table 1.

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4.0 Results

The findings from the 2016 sampling are summarized in the following subsections. This section is divided into subsections based on the data collection activities outlined in Section 3 (previously sampled structures, new structures, and vinyl chloride nondetect confirmation sampling). Analytical results are compared to RBSLs and removal action levels (RALs) presented in Table 2.

4.1 Previously Sampled Structures

Table 3 contains the analytical results for the confirmation EPA Method TO-15 samples collected at 0003-H, 0011-H, 0017-H, 0018-H, 0023-H, and 0037-H. These samples were 24-hour indoor air samples collected in 6-liter SUMMA canisters that had been individually laboratory-certified clean. Each sample was analyzed using EPA Method TO-15. Validated analytical results are provided in Appendix A-1, laboratory data reports are in Appendix A-2, and laboratory sample receipt notifications are in Appendix A-3.

4.2 New Structures

The following subsections present the analytical results of the HAPSITE survey/pressure cycling along with sample location and sample condition descriptions for the 11 new structures sampled in 2016 (0040-H, 0041-H, 0045-S, 0047-H, 0050-H, 0051-H, 0052-H, 0053-H, 0054-H, 0055-H, and 0056-H). HAPSITE calibration reports are included in Appendix B and are organized by calibration date. HAPSITE calibration parameters were within the specifications defined in the RI Work Plan (FE 2015).

4.2.1 0040-H

The VI investigation at 0040-H was conducted on March 10, 2016. No interior background sources were identified within the residence during the HAPSITE survey. The three targeted differential pressures (-5, -10, and 5 pascals [Pa]) were achieved during pressure cycling. Approximately 2.5 air volumes were exchanged during each pressure step. Table 4 presents the HAPSITE analytical results from the HAPSITE survey and the pressure cycling event at this structure.

Indoor air concentrations of PCE and TCE exceeded their respective residential indoor air RBSLs and Tier 1 RALs in the northwest basement bedroom under baseline condition (that is, no building pressure manipulation) (Table 4). The indoor air PCE and TCE concentrations exceeded their respective RBSL during both negative pressure steps of the pressure cycling event at this structure (Table 4).

As specified in the VI protocol (FE, 2015), follow-up 24-hour indoor air EPA Method TO-15 samples were collected due to the residential indoor air screening level and removal action level exceedances on March 10, 2016. Three indoor air EPA Method TO-15 samples were collected at this structure on March 12, 2016: a parent and a field duplicate sample were collected from the northwest basement bedroom, and one sample was collected from the main level kitchen. Table 5 presents the analytical results for these samples. PCE was detected above the Tier 1 RAL in the kitchen and basement samples.

PCE was detected below the soil gas RBSL in the near-slab soil gas (Table 4).

4.2.2 0041-H

The VI investigation at 0041-H was conducted on March 9, 2016. No interior background sources were identified within the residence during the HAPSITE survey. The three targeted differential pressures (-5, -10, and 5 Pa) were achieved during pressure cycling. Approximately 2.5 air volumes were exchanged during each pressure step. Table 6 presents the HAPSITE analytical results from the HAPSITE survey and the pressure cycling event at this structure.

No target analytes exceeded indoor air RBSLs or RALs during the HAPSITE survey and pressure cycling event at this structure (Table 6). No indoor air samples were collected for EPA Method TO-15 analysis.

PCE was not detected in the near-slab soil gas (Table 6).

4.2.3 0047-H

The VI investigation at 0047-H was conducted on February 25, 2016. No interior background sources were identified within the residence during the HAPSITE survey. The three targeted differential pressures (-5, -10, and 5 Pa) were achieved during pressure cycling. Approximately 2.5 air volumes were exchanged during each pressure step. Table 7 presents the HAPSITE analytical results from the HAPSITE survey and the pressure cycling event at this structure.

No target analytes exceeded indoor air RBSLs or RALs during the HAPSITE survey and pressure cycling event at this structure. No indoor air samples were collected for EPA Method TO-15 analysis.

PCE was detected below the soil gas RBSL in the near-slab soil gas (Table 7).

4.2.4 0050-H

The VI investigation at 0050-H was conducted on March 23, 2016. No interior background sources were identified within the residence during the HAPSITE survey. The three targeted differential pressures (-5, -10, and 5 Pa) were achieved during pressure cycling. Approximately 2.5 air volumes were exchanged during each pressure step. No target analytes exceeded indoor air RBSLs or RALs during the HAPSITE survey and pressure cycling event at this structure (Table 8).

TCE and PCE were detected in the near-slab soil gas below their respective soil gas RBSLs (Table 8). No indoor air samples were collected for EPA Method TO-15 analysis.

On May 2, 2018 the sample identification numbers for 0050-H in Table 8 were updated as they were mislabeled in the September 2016 final version of this report. Previously, the location identifier (i.e., 0050H-) for each sample identification number used 0051H as the location identifier rather than 0050H. This mislabeling has been corrected in this version of the report and has no affect on the report results.

4.2.5 0051-H

The VI investigation at 0051-H was conducted on February 26, 2016. No interior background sources were identified within the residence during the HAPSITE survey. The three targeted differential pressures (-5, -10, and 5 Pa) were achieved during pressure cycling. Approximately 2.5 air volumes were exchanged during each pressure step. Table 9 presents the HAPSITE analytical results from the HAPSITE survey and the pressure cycling event at this structure.

Indoor air concentrations of PCE exceeded the PCE noncancer residential indoor air RBSL (11 µg/m^3) during both depressurization steps in the basement mechanical room (uninhabited space) (Table 9). PCE was not detected in indoor air during pressurization.

As specified in the VI protocol (FE 2015), follow-up 24-hour indoor air EPA Method TO-15 samples were collected due the residential indoor air RBSL exceedances on February 26, 2016. One parent and one field-duplicate EPA Method TO-15 sample were collected at this structure on March 16, 2016. Both samples were collected in the basement living room. Table 5 contains the analytical results of these samples. PCE was detected below the residential RBSL in these samples.

PCE was detected at a concentration below the residential soil gas RBSL in the near-slab soil gas (Table 9).

4.2.6 0052-H

The VI investigation at 0052-H was conducted on March 11, 2016. No interior background sources were identified within the residence during the HAPSITE survey. The three targeted differential pressures (-5, -10, and 5 Pa) were achieved during pressure cycling. Approximately 2.5 air volumes were exchanged during each pressure step. Table 10 presents the HAPSITE analytical results from the HAPSITE survey and the pressure cycling event at this structure. No target analytes exceeded indoor air RBSLs or RALs during the HAPSITE survey and pressure cycling event at this structure. No indoor air samples were collected for EPA Method TO-15 analysis.

PCE was detected at a concentrations below the residential soil gas RBSL in the near-slab soil gas (Table 10).

4.2.7 0053-H

The VI investigation at 0053-H was conducted on May 2, 2016. No interior background sources were identified within the residence during the HAPSITE survey. The three targeted differential pressures (-5, -10, and 5 Pa) were achieved during pressure cycling. Approximately 2.5 air volumes were exchanged during each pressure step. Table 11 presents the HAPSITE analytical results from the HAPSITE survey and the pressure cycling event at this structure.

Indoor air concentrations of PCE exceeded the residential indoor air RBSL during baseline sampling (HAPSITE survey), depressurization, and pressurization in the basement living room (Table 11). Indoor air PCE concentration decreased below the residential indoor air RBSL during pressurization (Table 11).

As specified in the VI protocol (FE 2015), follow-up 24-hour indoor air EPA Method TO-15 samples were collected due to the residential indoor air RBSL exceedances. One parent sample and one field duplicate indoor air EPA Method TO-15 sample were collected in the basement living room on May 24, 2016. Table 5 contains the analytical results of these samples. PCE was detected slightly above the residential RBSL but below the residential RAL in both samples.

Both TCE and PCE near-slab soil gas concentrations exceed their respective noncancer residential soil gas screening levels on May 2, 2016. As specified in the VI protocol (FE 2015), 5-minute soil gas EPA Method TO-15 samples were collected due to this residential soil gas RBSL exceedance. Two soil gas EPA Method TO-15 samples were collected at this structure on May 24, 2016. Both samples were collected from 6 feet below ground surface and 1 foot from the north exterior wall of the residence.

Table 5 contains the analytical results of these samples. PCE and TCE were detected above their respective residential soil gas RBSLs in the EPA Method TO-15 soil gas samples.

4.2.8 0054-H

Two VI investigations were conducted at 0054-H. These events took place on May 9, 2016, and June 3, 2016. These two investigations were needed due to detections of VOCs in and around a centrally located shop in the residence basement, which contained numerous chemical products. The initial investigation data suggested the presence of interior background sources in the shop. However, the number of items stored within this space made positively identifying a specific interior background source impractical. Additionally, the resident informed the sampling team that motorcycle and bicycle maintenance had historically taken place within this space. VA requested that the resident remove shop items before additional sampling could be performed. The resident was able to remove the majority of the shop items, and additional sampling was conducted on June 3, 2016. The following summarizes the result of the two sampling events at this structure.

May 9, 2016. The initial VI investigation at 0054-H was conducted on May 9, 2016. During baseline sampling, indoor air TCE concentrations throughout the residence exceeded the residential indoor air Tier 1 RAL. Indoor air TCE and PCE concentrations were highest in the shop (Table 12).

Only the initial depressurization of -5 Pa was completed on May 9, 2016, as the HAPSITE became inoperable. TCE indoor air concentrations remained near the residential indoor air RAL during the depressurization at -5 Pa (Table 12).

No near-slab soil gas sample was collected on May 9, 2016.

Following this first VI investigation, VA requested that the resident remove all items stored in the shop before a second VI investigation could be conducted.

June 3, 2016. The second VI investigation was conducted on June 3, 2016. Baseline TCE and PCE indoor air concentrations were lower throughout the residence than those measured on May 9, 2016. During baseline sampling, TCE indoor air concentrations in the basement exceeded the TCE RAL (2.2 µg/m^3), and PCE was detected below the RBSL in the basement (Table 13). No interior background sources were identified within the residence during the HAPSITE survey.

The three targeted differential pressures (-5, -10, and 5 Pa) were achieved during pressure cycling. Approximately 2.5 air volumes were exchanged during each pressure step. Table 13 presents the HAPSITE analytical results from the HAPSITE survey and the pressure cycling event at this structure. Indoor air TCE concentrations in the shop decreased during depressurization and remained steady during pressurization. The indoor air PCE concentration in the shop slightly increased during depressurization and was nondetect by the end of pressurization (Table 13).

TCE was not detected in near-slab soil gas, and PCE was detected at a concentrations below the residential soil gas RBSL in the near-slab soil gas (Table 13).

No 24-hour indoor air EPA Method TO-15 samples were collected at this structure as the data suggested that indoor air TCE concentrations resulted from an interior background source(s) or residual TCE from historical activities in the shop.

4.2.9 0055-H

The VI investigation at 0055-H was conducted on May 13, 2016. No interior background sources were identified within the residence during the HAPSITE survey. The three targeted differential pressures (-5, -10, and 5 Pa) were achieved during pressure cycling. Approximately 2.5 air volumes were exchanged during each pressure step. Table 14 presents the HAPSITE analytical results from the HAPSITE survey and the pressure cycling event at this structure.

No target analytes exceeded their respective indoor air RBSLs or RALs during the HAPSITE survey and pressure cycling event at this structure. No indoor air samples were collected for EPA Method TO-15 analysis.

TCE and PCE were not detected in the near-slab soil gas (Table 14).

4.2.10 0056-H

The VI investigation at 0055-H was conducted on May 3, 2016. No interior background sources were identified within the residence during the HAPSITE survey. The three targeted differential pressures (-5, -10, and 5 Pa) were achieved during pressure cycling. Approximately 2.5 air volumes were exchanged during each pressure step. Table 15 presents the HAPSITE analytical results from the HAPSITE survey and the pressure cycling event at this structure.

No target analytes exceeded their respective indoor air RBSLs or RALs during the HAPSITE survey and pressure cycling event at this structure. No indoor air samples were collected for EPA Method TO-15 analysis.

PCE was detected below its residential soil gas RBSL in near-slab soil gas (Table 15).

4.2.11 0045-S

The VI investigation at 0045-S (East High School) was completed in three individual sampling events: (1) HAPSITE survey (March 4, 2016), (2) first pressure cycling (March 21, 2016), and (3) second pressure cycling (March 22, 2016). The following paragraphs summarize the results of these sampling events.

HAPSITE Survey. Multiple indoor samples were collected and analyzed on the four levels of 0045-S during the HAPSITE survey. During this sampling event, effort was taken to achieve adequate spatial coverage on each level during sampling. TCE and PCE were detected only in the auto shop in the southwest corner of the main level (ground level), where interior sources of TCE and PCE (for example, brake cleaner) were positively identified in a chemical storage closet within the auto shop. The auto shop was the only location where target analytes were detected during the HAPSITE survey. The analytical results of the HAPSITE survey are presented in Table 16. No 24-hour indoor air EPA Method TO-15 samples were collected at this structure as the data suggested that TCE and PCE concentrations in indoor air resulted from an interior background source(s) or residual TCE from historical activities in the auto shop.

Pressure Cycling. Pressure cycling was conducted within three separate compartments: Room A203/ A205 and Room A213 on March 21, 2016 (first pressure cycling event), and Room A215 on March 22, 2016 (second event). These compartments are on the ground level toward the southwest area of 0045-S. The following summarizes the pressure cycling results for each compartment.

Room A203/A205. No interior background sources were identified within Room A203/A205 prior to pressure cycling. The three targeted differential pressures (-5, -10, and 5 Pa) were achieved during pressure cycling. Approximately 2.5 air volumes were exchanged during each pressure step. No target analytes were detected during the pressure cycling event at this location (Table 17). No indoor air samples were collected for EPA Method TO-15 analysis.

Room A213. No interior background sources were identified within Room A213 prior to pressure cycling. Only depressurization was achieved at this location because the sampling team was asked to leave so the facilities manager could set alarms and lock the building. Approximately 2.5 air volumes were exchanged during each depressurization step. No target analytes were detected during the pressure cycling event at this location (Table 18). No indoor air samples were collected for EPA Method TO-15 analysis.

Room A215. No interior background sources were identified within Room A215 prior to pressure cycling. The baseline differential pressure within Room A215 was -5 Pa prior to pressure cycling. Therefore, the three differential pressures targeted for this event were -10, -15, and 5 Pa, which were achieved. Approximately 2.5 air volumes were exchanged during each pressure step. No target analytes exceeded indoor air RBSLs or RALs during the pressure cycling event at this location (Table 19). No indoor air samples were collected for EPA Method TO-15 analysis.

4.2.12 Additional Information

Field notes were scribed in a spiral-bound Rite-in-the-Rain–type notebook during the 2016 sampling events. A scanned copy of the field notes is included in Appendix C. Chain-of-custody forms for the EPA Method TO-15 samples collected during the 2016 sampling events are included in Appendix D. Appendix E contains the native HAPSITE data reports for each sampled location.

4.3 Vinyl Chloride Nondetect Confirmation Sampling

Vinyl chloride was not detected at the three locations selected to confirm the absence of vinyl chloride. The analytical results for these three locations are presented in Table 3.

4.4 Deviations from Remedial Investigation Work Plan

During the 2016 VI investigative work, there was one deviation from the RI Work Plan (FE 2015) (from the Sampling and Analysis Plan [SAP], Appendix A of the RI Work Plan [FE 2015]). This deviation was regarding the sample naming convention outlined in SAP Table 3. This naming convention was not followed during 2016 VI sampling, although a similar sample naming convention was followed.

5.0 References

EA Engineering, Science, and Technology, Inc. (EA). 2015. *2016 VI Sampling Plan for Accelerated Operable Unit 1: 700 South 1600 East PCE Plume Technical Memorandum, Salt Lake City, Utah.* December.

(U.S.) Environmental Protection Agency (EPA). 1999. *Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, 2nd Edition.* January.

First Environment (FE). 2015. *Final Remedial Investigation Work Plan, AOU 1: East Side Springs, 700 South 1600 East PCE Plume, Salt Lake City, Utah.* July.

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Tables

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TABLE 1
Sample Purposes, Types, and Locations
700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

Sample Purpose	Structure Location ID	HAPSITE/ Pressure Control Protocol	HAPSITE Soil Gas	Full Interview and Building Survey	Abbreviated Interview and Building-survey Update	Time-weighted TO-15 Indoor Air	TO-15 Soil Gas
Resampling previously sampled structures	0011-H				x	x	
	0018-H				x	x	
	0037-H				x	x	
	0017-H				x	x	
	0023-H				x	x	
Sampling new structures	0045-S[(a)]	x	x	x			
	0040-H	x	x	x		x	
	0041-H	x	x	x			
	0047-H	x	x	x			
	0050-H	x	x	x			
	0051-H	x	x	x		x	
	0052-H	x	x	x			
	0053-H	x	x	x		x	x
	0054-H	x	x	x			
	0055-H	x	x	x			
	0056-H	x	x	x			
Confirming the absence of vinyl chloride[(b)]	0017-H				x	x	
	0023-H				x	x	
	0003-H[(c)]				x	x	

NOTES:
[(a)] "S" in location ID depicts school structure (see text for further information on East High School sampling).
[(b)] This purpose was satisfied through sampling and analysis for the other listed purposes.
[(c)] Indoor air samples collected in November 2015 from this residence were used to evaluate vinyl chloride.

AOU 1 = Accelerated Operable Unit 1 East Side Springs.
ID = Identification.
PCE = Tetrachloroethene.
TBD = To be determined.
VA = Department of Veterans Affairs.

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TABLE 2

Summary of Screening Levels and Removal Action Levels

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

CASRN	Chemical	Residential Indoor Air SL (µg/m^3)	Residential Indoor Air Tier 1 RAL (µg/m^3)	Residential Indoor Air Tier 2 RAL (µg/m^3)	Residential Soil Gas SL (µg/m^3)	Commercial/ Industrial Indoor Air SL (µg/m^3)	Commercial/ Industrial Indoor Air Tier 1 RAL (µg/m^3)	Commercial/ Industrial Indoor Air Tier 2 RAL (µg/m^3)	Commercial/ Industrial Soil Gas SL (µg/m^3)
75354	1,1-Dichloroethene	210	210	630	7,000	880	880	2,640	29,000
123911	1,4-Dioxane	0.56	5.6	56	19	2.5	130	390	83
156592	cis-1,2-Dichloroethene	--	--	--	--	--	--	--	--
127184	Tetrachloroethene	11	41	120	370	47	180	540	1,600
79016	Trichloroethene	0.48	2.1	6.3	16	3	8.8	26	100
75014	Vinyl chloride	0.17	1.7	17	5.7	2.8	440	1,320	93

NOTES:

-- = No screening or removal levels have been established for cis-1,2-Dichloroethene.

µg/m^3 = Microgram(s) per cubic meter.

AOU 1 = Accelerated Operable Unit 1 East Side Springs.

PCE = Tetrachloroethene.

RAL = Removal action level.

SL = Screening level.

VA = Department of Veterans Affairs.

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TABLE 3

2016 Confirmation EPA Method TO-15 Indoor Air Results for 2015 Previously Sampled Locations

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

Sample ID	Sample Location Description	Sample Date	Sample Type	Method	Units	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	1,4-Dioxane
						Res. IASL: 11 µg/m^3	0.48 µg/m^3	NA	0.17 µg/m^3	0.56 µg/m^3
						Tier 1 RAL: 41 µg/m^3	2.1 µg/m^3	NA	1.7 µg/m^3	5.6 µg/m^3
A-0003H-120415-TO-001-DIN	Basement Dining Room	12/3/2015	N	EPA TO-15 SIM	µg/m^3	**0.53**	0.27 U	0.2 U	0.13 U	0.18 U
A-0003H-120415-TO-002-BAS	Basement Bedroom	12/3/2015	N	EPA TO-15 SIM	µg/m^3	**0.82**	0.27 U	0.2 U	0.13 U	0.18 U
A-0003H-120415-TO-002-BAS-D	Basement Bedroom	12/3/2015	FD	EPA TO-15 SIM	µg/m^3	**0.83**	0.27 U	0.2 U	0.13 U	0.18 U
A-0003H-030316-IA-BAS	Basement Living Room	3/3/2016	N	EPA TO-15 SIM	µg/m^3	**1.3**	0.27 U	0.2 U	0.13 U	0.18 U
A-0011H-030116-IA-012A-LLL	Basement Living Room	3/1/2016	N	EPA TO-15 SIM	µg/m^3	**12 J**	0.27 U	0.2 U	0.13 U	0.18 U
A-0037H-030816-IA-LAU	Basement Laundry Room	3/8/2016	N	EPA TO-15 SIM	µg/m^3	**4**	0.27 U	0.2 U	0.13 U	**0.18**
A-0017H-031616-IA-BAS	Basement Living Room	3/16/2016	N	EPA TO-15 SIM	µg/m^3	**10 J**	**0.39**	0.2 U	0.13 U	0.18 U
A-0018H-031616-IA-BAS	Basement Living Room	3/16/2016	N	EPA TO-15 SIM	µg/m^3	**12 J**	**0.83**	0.2 U	0.13 U	0.18 U
A-0023-031616-IA-BA1	Storage Room off of Garage	3/16/2016	N	EPA TO-15 SIM	µg/m^3	**1.4**	0.27 U	0.2 U	0.13 U	0.18 U

NOTES:
µg/m^3 = Microgram(s) per cubic meter.
AOU 1 = Accelerated Operable Unit 1 East Side Springs.
EPA = U.S. Environmental Protection Agency.
FD = Field duplicate.
IASL = Residential indoor air screening level.
ID = Identification.
J = Estimated value. The result is estimated due to associated quality control problems.
N = Normal sample.
PCE = Tetrachloroethene.
RAL = Residential removal action level.
Res. = Residential.
U = Not detected. The analyte was analyzed for but not detected above the method detection limit.
VA = Department of Veterans Affairs.

Bolded values are detections.
Shaded values are screening level and/or removal action level exceedances.

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TABLE 4

0040-H HAPSITE Analytical Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

Date	Time	Sample ID	Sample Location Description	Differential Pressure Condition	cis-1,2-Dichloroethene (µg/m^3)	Tricholorethene (µg/m^3)	Tetrachloroethene
				IASL: NA		0.48 µg/m^3	11 µg/m^3
				Tier 1 RAL: NA		2.1 µg/m^3	41 µg/m^3
3/10/2016	8:20	0040H-OA-OA1-20160310-BL-004	Outside air sample (west side)	NA	<0.4	<0.5	<0.7
3/10/2016	8:31	0040H-IA-BBED-20160310-BL-005	Basement bedroom (NW corner)	BL	**0.52**	**2.1**	**32.2**
3/10/2016	8:48	0040H-IA-MR1-20160310-BL-006	Main level living room (NW corner)	BL	**0.75**	**2.8**	**42.8**
3/10/2016	8:57	0040H-IA-UBED-20160310-BL-007	Upstairs bedroom (SE corner)	BL	**0.67**	**2.6**	**39.3**
3/10/2016	9:06	0040H-IA-MR2-20160310-BL-008	Dining room main level (SW corner)	BL	**0.55**	**1.3**	**20.0**
3/10/2016	9:05	0040H-IA-MEC-20160310-BL-009	Mechanical room (basement)	BL	**0.39**	**1.5**	**22.8**
3/10/2016	9:15	0040H-IA-GAR-20160310-BL-011	Garage	BL	<0.4	<0.5	**7.6**
3/10/2016	9:39	0040H-IA-BBED-20160310-BL-012	Basement bedroom (NW corner)	BL	**0.55**	**3.0**	**51.7**
3/10/2016	9:50	0040H-IA-MR1-20160310-BL-013	Main level living room (NW corner)	BL	**0.48**	**2.0**	**34.5**
3/10/2016	10:25	0040H-IA-BBED-20160310-BL-014	Baseboard of basement bedroom	BL	<0.4	**1.7**	**27.6**
3/10/2016	10:49	0040H-IA-BBED-20160310-N5-015	Basement bedroom (NW corner)	N5	<0.4	**1.5**	**30.4**
3/10/2016	11:00	0040H-IA-HAL-20160310-N5-016	Hallway near basement mechanical room	N5	<0.4	**0.9**	**27.6**
3/10/2016	11:09	0040H-IA-STA-20160310-N5-017	Stairwell to basement	N5	<0.4	**0.8**	**18.6**
3/10/2016	11:19	0040H-IA-BBED-20160310-N5-018	Basement bedroom (NW corner)	N5	<0.4	**2.2**	**40.7**
3/10/2016	11:26	0040H-IA-HALL-20160310-N5-019	Hallway near basement mechanical room	N5	<0.4	**0.6**	**15.2**
3/10/2016	11:33	0040H-IA-STA-20160310-N5-020	Stairwell to basement	N5	<0.4	<0.5	**11.0**
3/10/2016	11:40	0040H-IA-BBED-20160310-N5-021	Basement bedroom (NW corner)	N5	<0.4	**1.7**	**32.4**
3/10/2016	11:51	0040H-IA-HALL-20160310-N5-022	Hallway near basement mechanical room	N5	<0.4	**0.7**	**15.9**
3/10/2016	12:00	0040H-IA-STA-20160310-N5-023	Stairwell to basement	N5	<0.4	<0.5	**7.6**
3/10/2016	12:15	0040H-IA-BBED-20160310-N10-024	Basement bedroom (NW corner)	N10	<0.4	**1.4**	**24.8**
3/10/2016	12:24	0040H-IA-HALL-20160310-N10-025	Hallway near basement mechanical room	N10	<0.4	**0.9**	**20.7**
3/10/2016	12:30	0040H-IA-STA-20160310-N10-026	Stairwell to basement	N10	<0.4	<0.5	**4.3**
3/10/2016	12:39	0040H-IA-BBED-20160310-N10-027	Basement bedroom (NW corner)	N10	<0.4	**1.5**	**25.5**
3/10/2016	12:49	0040H-IA-HALL-20160310-N10-028	Hallway near basement mechanical room	N10	<0.4	<0.5	**11.7**
3/10/2016	13:01	0040H-IA-SUM-20160310-BL-029	Exterior sump	NA	**0.52**	**12.6**	**153.1**
3/10/2016	13:08	0040H-IA-BBED-20160310-P5-030	Basement bedroom (NW corner)	P5	<0.4	<0.5	**2.6**
3/10/2016	13:18	0040H-IA-HALL-20160310-P5-031	Hallway near basement mechanical room	P5	<0.4	<0.5	**1.1**
3/10/2016	13:30	0040H-IA-STA-20160310-P5-032	Stairwell to basement	P5	<0.4	<0.5	**1.1**
3/10/2016	13:38	0040H-IA-BBED-20160310-P5-033	Basement bedroom (NW corner)	P5	<0.4	<0.5	**1.1**
3/10/2016	13:48	0040H-IA-HALL-20160310-P5-034	Hallway near basement mechanical room	P5	<0.4	<0.5	**0.8**
3/10/2016	13:57	0040H-IA-STA-20160310-P5-035	Stairwell to basement	P5	<0.4	<0.5	**0.8**
3/10/2016	14:05	0040H-IA-BBED-20160310-P5-036	Basement bedroom (NW corner)	P5	<0.4	<0.5	<0.7
3/10/2016	14:12	0040H-IA-HALL-20160310-P5-037	Hallway near basement mechanical room	P5	<0.4	<0.5	<0.7
3/10/2016	14:30	0040H-OA-OA1-20160310-BL-038	Outside air sample (west side)	BL	<0.4	<0.5	<0.7
3/10/2016	14:58	0040H-SG-SG1-20160310-039-6'	Soil gas sample (west side near basement bedroom) (6 ft bgs)	NA	<0.4	<0.5	<0.7

TABLE 4

0040-H HAPSITE Analytical Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

Date	Time	Sample ID	Sample Location Description	Differential Pressure Condition	cis-1,2-Dichloroethene (µg/m^3)		Tricholorethene (µg/m^3)	Tetrachloroethene
					IASL:	NA	0.48 µg/m^3	11 µg/m^3
					Tier 1 RAL:	NA	2.1 µg/m^3	41 µg/m^3
3/10/2016	15:07	0040H-SG-SG1-20160310-040-6'	Soil gas sample (west side near basement bedroom) (6 ft bgs)	NA	<0.4		<0.5	**1.4**
3/10/2016	15:20	0040H-SG-SG2-20160310-041-4'	Soil gas sample (west side near basement bedroom) (4 ft bgs)	NA	<0.4		<0.5	**4.6**

NOTES:

µg/m^3 = Microgram(s) per cubic meter.

' = Feet.
< = Less than.
AOU 1 = Accelerated Operable Unit 1 East Side Springs.
bgs = Below ground surface.
BL = Baseline.
ft = Feet(foot).
IA = Indoor air.
IASL = Residential indoor air screening level.
ID = Identification.
N5 = Negative 5 Pascal pressure step.
N10 = Negative 10 Pascal pressure step.
NA = Not applicable.
NW = Northwest.
OA = Outdoor air.
P5 = Positive 5 Pascal pressure step.
PCE = Tetrachloroethene.
RAL = Residential removal action level.
SE = Southeast.
SG = Soil gas.
SW = Southwest.
VA = Department of Veterans Affairs.

Bolded values are detections.
Shaded values are screening level and/or removal action level exceedances.

TABLE 5

2016 New Structure TO-15 Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

Sample ID	Sample Location Description	Sample Date	Sample Type	Sample Matrix	Method	Units	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	1,4-Dioxane
							Res. IASL: 11 µg/m^3	0.48 µg/m^3	NA	0.17 µg/m^3	0.56 µg/m^3
							Tier 1 RAL: 41 µg/m^3	2.1 µg/m^3	NA	1.7 µg/m^3	5.6 µg/m^3
A-0040H-031216-IA-BAS	Northwest Basement Bedroom	3/12/2016	N	IA	EPA TO-15 SIM	µg/m^3	**74 J**	**5.2**	**0.55**	0.13 U	0.18 U
A-0040H-031216-IA-BAS-D	Northwest Basement Bedroom	3/12/2016	FD	IA	EPA TO-15 SIM	µg/m^3	**78 J**	**5.4 J**	**0.58**	0.13 U	0.18 U
A-0040H-031216-IA-KIT	Main Level Kitchen	3/12/2016	N	IA	EPA TO-15 SIM	µg/m^3	**59 J**	**4.3**	**0.39**	0.13 U	0.18 U
A-0051-031616-IA-BAS	Basement Living Room	3/16/2016	N	IA	EPA TO-15 SIM	µg/m^3	**1.8**	0.27 U	0.2 U	0.13 U	0.18 U
A-0051-031616-IA-BAS-D	Basement Living Room	3/16/2016	FD	IA	EPA TO-15 SIM	µg/m^3	**2**	0.27 U	0.2 U	0.13 U	0.18 U
A-0053H-052416-IA-BAS	Basement Main Room	5/24/2016	N	IA	EPA TO-15 SIM	µg/m^3	**13 J**	0.27 U	0.2 U	0.13 U	0.18 U
A-0053H-052416-IA-BAS-D	Basement Main Room	5/24/2016	FD	IA	EPA TO-15 SIM	µg/m^3	**13 J**	0.27 U	0.2 U	0.13 U	0.18 U
A-0053H-052316-SG-001-6'(0037)	Near Slab North Side of Residence (6 ft bgs)	5/23/2016	N	SG	EPA TO-15	µg/m^3	**2000 J**	**18**	0.59 U	0.38 U	7.2 U
A-0053H-052316-SG-001-6'(0050)	Near Slab North Side of Residence (6 ft bgs)	5/23/2016	N	SG	EPA TO-15	µg/m^3	**1500 J**	**21**	0.59 U	0.38 U	7.2 U

NOTES:

µg/m^3 = Microgram(s) per cubic meter.
' = Feet.

AOU 1 = Accelerated Operable Unit 1 East Side Springs.
bgs = Below ground surface.
EPA = U.S. Environmental Protection Agency.
FD = Field duplicate.
ft = Feet(foot).
IA = Indoor air.
IASL = Residential indoor air screening level.
ID = Identification.
J = Estimated value. The result is estimated due to associated quality control problems.
N = Normal sample.
PCE = Tetrachloroethene.
RAL = Residential removal action level.
SG = Soil gas.
U = Not detected. The analyte was analyzed for but not detected above the method detection limit.
VA = Department of Veterans Affairs.

Bolded values are detections.
Shaded values are screening level and/or removal action level exceedances.

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TABLE 6

0041-H HAPSITE Analytical Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

Date	Time	Sample ID	Sample Location Description	Differential Pressure Condition	cis-1,2-Dichloroethene (µg/m^3)	Tricholorethene (µg/m^3)	Tetrachloroethene (µg/m^3)
				IASL: NA		0.48 µg/m^3	11 µg/m^3
				Tier 1 RAL: NA		2.1 µg/m^3	41 µg/m^3
3/8/2016	8:15	0041H-IA-OA1-20160308-BL-001	Outdoor air (north side)	BL	<0.4	<0.5	<0.7
3/8/2016	9:38	0041H-IA-LIV-20160308-BL-002	Living room (main level)	BL	**0.95**	<0.5	<0.7
3/8/2016	9:50	0041H-IA-HAL-20160308-BL-003	Hallway near basement office	BL	**0.75**	<0.5	<0.7
3/8/2016	10:00	0041H-IA-BAS-20160308-BL-004	Basement excavated area	BL	**0.59**	<0.5	<0.7
3/8/2016	10:07	0041H-IA-UBED-20160308-BL-005	Master bedroom (upstairs)	BL	**0.87**	<0.5	<0.7
3/8/2016	10:31	0041H-IA-KBED-20160308-BL-007	Upstairs kid bedroom	BL	**0.87**	<0.5	<0.7
3/8/2016	10:40	0041H-IA-KIT-20160308-BL-008	Kitchen (upstairs)	BL	**0.75**	<0.5	<0.7
3/8/2016	11:20	0041H-IA-HAL-20160308-N5-009	Hallway near basement office	N5	**0.52**	<0.5	<0.7
3/8/2016	11:29	0041H-IA-LAU-20160308-N5-010	Laundry room door	N5	<0.4	<0.5	**2.3**
3/8/2016	11:38	0041H-IA-STA-20160308-N5-011	Top of stairs (upstairs)	N5	**0.71**	<0.5	<0.7
3/8/2016	11:47	0041H-IA-HAL-20160308-N5-012	Hallway near basement office	N5	<0.4	<0.5	**1.8**
3/8/2016	11:56	0041H-IA-LAU-20160308-N5-013	Laundry room door	N5	<0.4	<0.5	**1.5**
3/8/2016	12:04	0041H-IA-STA-20160308-N5-014	Top of stairs (upstairs)	N5	**0.52**	<0.5	<0.7
3/8/2016	12:11	0041H-IA-HAL-20160308-N5-015	Hallway near basement office	N5	<0.4	<0.5	**1.7**
3/8/2016	12:20	0041H-IA-LAU-20160308-N5-016	Laundry room door	N5	<0.4	<0.5	**2.4**
3/8/2016	12:28	0041H-IA-STA-20160308-N5-017	Top of stairs (upstairs)	N5	**0.67**	<0.5	<0.7
3/8/2016	12:35	0041H-IA-HAL-20160308-N5-018	Hallway near basement office	N5	<0.4	<0.5	**2.6**
3/8/2016	12:47	0041H-IA-LAU-20160308-N5-019	Laundry room door	N5	<0.4	<0.5	**2.6**
3/8/2016	12:59	0041H-IA-HAL-20160308-N10-020	Hallway near basement office	N10	<0.4	<0.5	**2.0**
3/8/2016	13:09	0041H-IA-LAU-20160308-N10-021	Laundry room door	N10	<0.4	<0.5	**4.6**
3/8/2016	13:18	0041H-IA-STA-20160308-N10-022	Top of stairs (upstairs)	N10	**0.48**	<0.5	<0.7
3/8/2016	13:26	0041H-IA-HAL-20160308-N10-023	Hallway near basement office	N10	<0.4	<0.5	**1.9**
3/8/2016	13:42	0041H-IA-LAU-20160308-N10-025	Laundry room door	N10	<0.4	<0.5	**3.7**
3/8/2016	13:51	0041H-IA-STA-20160308-N10-026	Top of stairs (upstairs)	N10	**0.40**	<0.5	<0.7
3/8/2016	14:22	0041H-IA-HAL-20160308-P5-028	Hallway near basement office	P5	<0.4	<0.5	<0.7
3/8/2016	14:31	0041H-IA-LAU-20160308-P5-029	Laundry room door	P5	<0.4	<0.5	<0.7
3/8/2016	14:42	0041H-IA-STA-20160308-P5-033	Top of stairs (upstairs)	P5	<0.4	<0.5	<0.7
3/8/2016	14:53	0041H-IA-HAL-20160308-P5-034	Hallway near basement office	P5	<0.4	<0.5	<0.7
3/8/2016	15:08	0041H-IA-LAU-20160308-P5-035	Laundry room door	P5	<0.4	<0.5	<0.7
3/8/2016	15:18	0041H-IA-STA-20160308-P5-036	Top of stairs (upstairs)	P5	<0.4	<0.5	<0.7
3/8/2016	15:45	0041H-OA-OA1-20160308-BL-037	Outdoor air backyard	NA	<0.4	<0.5	<0.7
3/8/2016	16:10	0041H-SG-SG1-20160308-038-7'	Soil gas sample (south side near basement bedroom) (7 ft bgs)	NA	**0.59**	<0.5	<0.7

TABLE 6

0041-H HAPSITE Analytical Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

NOTES:

$\mu g/m^3$ = Microgram(s) per cubic meter.

' = Feet.

< = Less than.

AOU 1 = Accelerated Operable Unit 1 East Side Springs.

bgs = Below ground surface.

BL = Baseline.

ft = Feet(foot).

IA = Indoor air.

IASL = Residential indoor air screening level.

ID = Identification.

N5 = Negative 5 Pascal pressure step.

N10 = Negative 10 Pascal pressure step.

NA = Not applicable.

OA = Outdoor air.

P5 = Positive 5 Pascal pressure step.

PCE = Tetrachloroethene.

RAL = Residential removal action level.

SG = Soil gas.

VA = Department of Veterans Affairs.

Bolded values are detections.

TABLE 7

0047-H HAPSITE Analytical Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

Date	Time	Sample ID	Sample Location Description	Differential Pressure Condition	cis-1,2-Dichloroethene (µg/m^3)	Tricholorethene (µg/m^3)	Tetrachloroethene (µg/m^3)
				IASL:	NA	0.48 µg/m^3	11 µg/m^3
				Tier 1 RAL:	NA	2.1 µg/m^3	41 µg/m^3
2/25/2016	8:55	0047H-OA-OA1-20160225-BL-001	Outdoor air sample (south side)	BL	<0.4	<0.5	<0.7
2/25/2016	9:02	0047H-IA-LIV-20160225-BL-002	Upstairs living room	BL	<0.4	<0.5	**6.2**
2/25/2016	9:09	0047H-IA-LAU-20160225-BL-003	Downstairs laundry room	BL	**0.38**	<0.5	**3.9**
2/25/2016	9:17	0047H-IA-UOFF-20160225-BL-004	Upstairs office	BL	**0.87**	<0.5	**5.3**
2/25/2016	9:25	0047H-IA-REST-20160225-BL-005	Upstairs restroom	BL	**1.15**	<0.5	**6.8**
2/25/2016	9:32	0047H-IA-UBED-20160225-BL-006	Upstairs bedroom	BL	**2.14**	<0.5	**6.7**
2/25/2016	9:45	0047H-IA-BOFF-20160225-BL-008	Basement office/storage (SW corner)	BL	<0.4	<0.5	**7.6**
2/25/2016	10:03	0047H-IA-MEC-20160225-BL-010	Basement mechanical room	BL	**0.36**	<0.5	**9.0**
2/25/2016	10:27	0047H-IA-MEC-20160225-BL-011	Basement mechanical room (center)	BL	**0.36**	<0.5	**8.3**
2/25/2016	10:27	0047H-IA-MEC-20160225-BL-012	Basement Mechanical Room (south end)	BL	**0.36**	<0.5	**8.3**
2/25/2016	11:59	0047H-IA-MEC-20160225-N5-013	Basement mechanical room (center)	N5	**0.59**	<0.5	**4.7**
2/25/2016	12:08	0047H-IA-BLO-20160225-N5-014	Back door near blower	N5	<0.4	<0.5	**5.0**
2/25/2016	12:19	0047H-IA-LIV-20160225-N5-015	Upstairs living room	N5	**0.63**	<0.5	**3.2**
2/25/2016	12:26	0047H-IA-MEC-20160225-N5-016	Basement mechanical room (center)	N5	<0.4	<0.5	**4.4**
2/25/2016	12:34	0047H-IA-BLO-20160225-N5-017	Back door near blower	N5	<0.4	<0.5	**5.4**
2/25/2016	12:44	0047H-IA-LIV-20160225-N5-018	Upstairs living room	N5	<0.4	<0.5	**2.1**
2/25/2016	12:53	0047H-IA-MEC-20160225-N5-019	Basement mechanical room (center)	N5	<0.4	<0.5	**4.0**
2/25/2016	13:00	0047H-IA-BLO-20160225-N5-020	Back door near blower	N5	<0.4	<0.5	**5.0**
2/25/2016	13:10	0047H-IA-LIV-20160225-N5-021	Upstairs living room	N5	<0.4	<0.5	**1.7**
2/25/2016	13:19	0047H-IA-MEC-20160225-N10-022	Basement mechanical room (center)	N10	<0.4	<0.5	**5.4**
2/25/2016	13:28	0047H-IA-BLO-20160225-N10-023	Back door near blower	N10	<0.4	<0.5	**4.6**
2/25/2016	13:35	0047H-IA-LIV-20160225-N10-024	Upstairs living room	N10	<0.4	<0.5	**1.2**
2/25/2016	13:48	0047H-IA-MEC-20160225-N10-025	Basement mechanical room (center)	N10	<0.4	<0.5	**7.6**
2/25/2016	13:55	0047H-IA-BLO-20160225-N10-026	Back door near blower	N10	<0.4	<0.5	**5.8**
2/25/2016	14:04	0047H-IA-MEC-20160225-N10-027	Basement mechanical room (center)	N10	<0.4	<0.5	**9.0**
2/25/2016	14:11	0047H-IA-MEC-20160225-P5-028	Basement mechanical room (center)	P5	<0.4	<0.5	**3.4**
2/25/2016	14:25	0047H-IA-BLO-20160225-P5-029	Back door near blower	P5	<0.4	<0.5	<0.7
2/25/2016	14:34	0047H-IA-LIV-20160225-P5-030	Upstairs living room	P5	<0.4	<0.5	**0.7**
2/25/2016	14:44	0047H-IA-MEC-20160225-P5-031	Basement mechanical room (center)	P5	<0.4	<0.5	**1.3**
2/25/2016	14:53	0047H-IA-BLO-20160225-P5-032	Back door near blower	P5	<0.4	<0.5	<0.7
2/25/2016	15:00	0047H-IA-LIV-20160225-P5-033	Upstairs living room	P5	<0.4	<0.5	<0.7
2/25/2016	15:09	0047H-IA-MEC-20160225-P5-034	Basement mechanical room (center)	P5	<0.4	<0.5	<0.7
2/26/2016	14:48	0047H-SG-SG1-20160226-028-4.5'	Soil gas sample from 4.5 ft bgs	NA	<0.4	<0.5	**26.9**

TABLE 7
0047-H HAPSITE Analytical Results
700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

NOTES:
µg/m^3 = Microgram(s) per cubic meter.
' = Feet.
< = Less than.
AOU 1 = Accelerated Operable Unit 1 East Side Springs.
bgs = Below ground surface.
BL = Baseline.
ft = Feet (foot).
IA = Indoor air.
IASL = Residential indoor air screening level.
ID = Identification.
N5 = Negative 5 Pascal pressure step.
N10 = Negative 10 Pascal pressure step.
NA = Not applicable.
OA = Outdoor air.
P5 = Positive 5 Pascal pressure step.
PCE = Tetrachloroethene.
RAL = Residential removal action level.
SG = Soil gas.
SW = Southwest.
VA = Department of Veterans Affairs.

Bolded values are detections.

TABLE 8

0050-H HAPSITE Analytical Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

Date	Time	Sample ID[(1)]	Sample Location Description	Differential Pressure Condition	cis-1,2-Dichloroethene (µg/m^3)	Tricholorethene (µg/m^3)	Tetrachloroethene (µg/m^3)
				IASL:	NA	0.48 µg/m^3	11 µg/m^3
				Tier 1 RAL:	NA	2.1 µg/m^3	41 µg/m^3
3/23/2016	8:30	0050H-OA-OA1-20160323-BL-001	Outdoor air sample	BL	<0.4	<0.5	<0.7
3/23/2016	8:38	0050H-IA-ULIV-20160323-BL-002	Upstairs living room	BL	<0.4	<0.5	<0.7
3/23/2016	8:50	0050H-IA-BAS-20160323-BL-003	Downstairs	BL	<0.4	<0.5	<0.7
3/23/2016	9:44	0050H-IA-BLO-20160323-N5-004	Near blower door	N5	<0.4	<0.5	<0.7
3/23/2016	9:52	0050H-IA-NBAS-20160323-N5-005	North end of basement	N5	<0.4	<0.5	<0.7
3/23/2016	10:00	0050H-IA-BLO-20160323-N5-006	Near blower door	N5	<0.4	<0.5	<0.7
3/23/2016	10:09	0050H-IA-NBAS-20160323-N5-007	North end of basement	N5	<0.4	<0.5	<0.7
3/23/2016	10:18	0050H-IA-BLO-20160323-N10-008	Near blower door	N10	<0.4	<0.5	<0.7
3/23/2016	10:27	0050H-IA-NBAS-20160323-N10-009	North end of basement	N10	<0.4	<0.5	<0.7
3/23/2016	10:35	0050H-IA-BLO-20160323-N10-010	Near blower door	N10	<0.4	<0.5	<0.7
3/23/2016	10:43	0050H-IA-NBAS-20160323-N10-011	North end of basement	N10	<0.4	<0.5	<0.7
3/23/2016	10:53	0050H-IA-BLO-20160323-P5-012	Near blower door	P5	<0.4	<0.5	<0.7
3/23/2016	11:00	0050H-IA-NBAS-20160323-P5-013	North end of basement	P5	<0.4	<0.5	<0.7
3/23/2016	11:09	0050H-IA-BLO-20160323-P5-014	Near blower door	P5	<0.4	<0.5	<0.7
3/23/2016	11:18	0050H-IA-NBAS-20160323-P5-015	North end of basement	P5	<0.4	<0.5	<0.7
3/23/2016	11:58	0050H-SG-SG1-20160323-016-5'	Soil gas from approximately 5 ft bgs just outside basement entrance	NA	<0.4	**3.6**	**13.1**

NOTES:

(1) = Sample identifications were updated on May 2, 2018 since they were mislabeled in the September 2016 final version of this report.

µg/m^3 = Microgram(s) per cubic meter.

' = Feet.

< = Less than.

AOU 1 = Accelerated Operable Unit 1 East Side Springs.

bgs = Below ground surface.

BL = Baseline.

ft = Feet(foot).

IA = Indoor air.

IASL = Residential indoor air screening level.

ID = Identification.

N5 = Negative 5 Pascal pressure step.

N10 = Negative 10 Pascal pressure step.

NA = Not applicable.

OA = Outdoor air.

P5 = Positive 5 Pascal pressure step.

PCE = Tetrachloroethene.

RAL = Residential removal action level.

SG = Soil gas.

VA = Department of Veterans Affairs.

Bolded values are detections.

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TABLE 9

0051-H HAPSITE Analytical Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

Date	Time	Sample ID	Sample Location Description	Differential Pressure Condition	cis-1,2-Dichloroethene (µg/m^3)	Tricholorethene (µg/m^3)	Tetrachloroethene (µg/m^3)
				IASL:	NA	0.48 µg/m^3	11 µg/m^3
				Tier 1 RAL:	NA	2.1 µg/m^3	41 µg/m^3
2/26/2016	9:10	0051H-OA-OA1-20160226-BL-002	Outside sample	BL	<0.4	<0.5	<0.7
2/26/2016	9:20	0051H-IA-ULIV-20160226-BL-003	Main level living room	BL	<0.4	<0.5	**2.2**
2/26/2016	9:33	0051H-IA-BLIV-20160226-BL-004	Basement living room	BL	<0.4	<0.5	**2.4**
2/26/2016	9:43	0051H-IA-UBED-20160226-BL-005	Upstairs master bedroom	BL	<0.4	<0.5	**2.4**
2/26/2016	9:52	0051H-IA-MEC-20160226-BL-006	Mechanical room (basement)	BL	<0.4	<0.5	**3.8**
2/26/2016	10:02	0051H-IA-BLIV-20160226-BL-007	Basement living room	BL	<0.4	<0.5	**2.1**
2/26/2016	10:46	0051H-IA-BLIV-20160226-N5-008	Basement living room	N5	<0.4	<0.5	**2.1**
2/26/2016	10:54	0051H-IA-BLO-20160226-N5-009	Near blower door	N5	<0.4	<0.5	**1.3**
2/26/2016	11:03	0051H-IA-MEC-20160226-N5-010	Mechanical room (basement)	N5	<0.4	<0.5	**6.9**
2/26/2016	11:13	0051H-IA-ULIV-20160226-N5-011	Main level near stairs to blower door	N5	<0.4	<0.5	**1.0**
2/26/2016	11:33	0051H-IA-MEC-20160226-N5-012	Mechanical room (basement)	N5	<0.4	<0.5	**1.6**
2/26/2016	11:40	0051H-IA-BLO-20160226-N5-013	Near blower door	N5	<0.4	<0.5	**0.8**
2/26/2016	11:49	0051H-IA-MEC-20160226-N5-014	Mechanical room (basement)	N5	<0.4	<0.5	**13.8**
2/26/2016	12:00	0051H-IA-ULIV-20160226-N5-015	Main level near stairs to blower door	N5	<0.4	<0.5	<0.7
2/26/2016	12:15	0051H-IA-MEC-20160226-N10-016	Mechanical room (basement)	N10	<0.4	<0.5	**24.1**
2/26/2016	12:22	0051H-IA-BLO-20160226-N10-017	Near blower door	N10	<0.4	<0.5	<0.7
2/26/2016	12:30	0051H-IA-FLC-20160226-N10-018	Floor crack in mechanical room near floor drain	N10	<0.4	<0.5	**402.2**
2/26/2016	12:58	0051H-IA-MEC-20160226-N10-019	Mechanical room (basement)	N10	<0.4	<0.5	**13.1**
2/26/2016	12:58	0051H-IA-BLO-20160226-N10-020	Near blower door	N10	<0.4	<0.5	<0.7
2/26/2016	13:20	0051H-IA-ULIV-20160226-N10-021	Main level near stairs to blower door	N10	<0.4	<0.5	<0.7
2/26/2016	13:28	0051H-IA-MEC-20160226-N10-022	Mechanical room (basement)	N10	<0.4	<0.5	**1.2**
2/26/2016	13:39	0051H-IA-MEC-20160226-P5-023	Mechanical room (basement)	P5	<0.4	<0.5	<0.7
2/26/2016	13:49	0051H-IA-ULIV-20160226-P5-024	Main level near stairs to blower door	P5	<0.4	<0.5	<0.7
2/26/2016	13:59	0051H-IA-MEC-20160226-P5-025	Mechanical Room (basement)	P5	<0.4	<0.5	<0.7
2/26/2016	14:15	0051H-IA-STA-20160226-P5-026	Main level near stairs to blower door	P5	<0.4	<0.5	<0.7
2/26/2016	14:23	0051H-OA-SPR-20160226-027	Spring in front of 0051-H	NA	<0.4	<0.5	**75.9**
2/26/2016	14:48	0051H-SG-SG1-20160226-028-4.5'	Soil gas from 4.5 ft bgs (north side of residence)	NA	<0.4	<0.5	**26.9**
2/26/2016	14:59	0051H-SG-SG1-20160226-029-7.5'	Soil gas from 7.5 ft bgs (north side of residence)	NA	<0.4	<0.5	<0.7
2/26/2016	15:08	0051H-SG-SG1-20160226-030-7.5'	Soil gas from 7.5 ft bgs (north side of residence)	NA	**0.59**	<0.5	<0.7
2/26/2016	15:15	0051H-SG-SG2-20160226-031-8.5'	Soil gas from 8.5 ft bgs (north side of residence)	NA	<0.4	<0.5	**10.3**
2/26/2016	15:35	0051H-SG-SG2-20160226-032-7.5'	Soil gas from 7.5 ft bgs (north side of residence)	NA	<0.4	<0.5	**3.0**

TABLE 9

0051-H HAPSITE Analytical Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

NOTES:

$\mu g/m^3$ = Microgram(s) per cubic meter.

' = Feet.

< = Less than.

AOU 1 = Accelerated Operable Unit 1 East Side Springs.

bgs = Below ground surface.

BL = Baseline.

ft = Feet(foot).

IA = Indoor air.

IASL = Residential indoor air screening level.

ID = Identification.

N5 = Negative 5 Pascal pressure step.

N10 = Negative 10 Pascal pressure step.

NA = Not applicable.

OA = Outdoor air.

P5 = Positive 5 Pascal pressure step.

PCE = Tetrachloroethene.

RAL = Residential removal action level.

SG = Soil gas.

VA = Department of Veterans Affairs.

Bolded values are detections.

Shaded values are screening level and/or removal action level exceedances.

TABLE 10

0052-H HAPSITE Analytical Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

Date	Time	Sample ID	Sample Location Description	Differential Pressure Condition	cis-1,2-Dichloroethene (µg/m^3)	Tricholorethene (µg/m^3)	Tetrachloroethene (µg/m^3)
				IASL:	NA	0.48 µg/m^3	11 µg/m^3
				Tier 1 RAL:	NA	2.1 µg/m^3	41 µg/m^3
3/11/2016	8:50	0052H-OA-OA1-20160311-NA-003	Outside air (north side)	NA	<0.4	<0.5	<0.7
3/11/2016	9:14	0052H-IA-ENT-20160311-BL-004	Main level entrance	BL	**0.79**	<0.5	<0.7
3/11/2016	9:23	0052H-IA-UHAL-20160311-BL-005	Upstairs hallway	BL	**1.70**	<0.5	**1.0**
3/11/2016	9:44	0052H-IA-BLIV-20160311-BL-007	Basement living room	BL	**0.44**	<0.5	<0.7
3/11/2016	9:53	0052H-IA-UBEDN-20160311-BL-008	Upstairs master bedroom (north)	BL	**0.95**	<0.5	**1.9**
3/11/2016	10:05	0052H-IA-UDIN-20160311-BL-009	Main level dining room	BL	<0.4	<0.5	<0.7
3/11/2016	10:14	0052H-IA-UBEDS-20160311-BL-010	Upstairs master bedroom (south)	BL	**1.07**	<0.5	**1.4**
3/11/2016	10:23	0052H-IA-LAU-20160311-BL-011	Downstairs laundry room	BL	<0.4	<0.5	<0.7
3/11/2016	10:33	0052H-IA-OFF-20160311-BL-012	Upstairs office	BL	**0.83**	<0.5	**1.0**
3/11/2016	10:43	0052H-IA-BAT-20160311-BL-013	Upstairs bathroom	BL	**0.91**	<0.5	**1.9**
3/11/2016	11:22	0052H-IA-BSTA-20160311-N5-014	Bottom of basement stairwell	N5	<0.4	<0.5	<0.7
3/11/2016	11:31	0052H-IA-BLO-20160311-N5-015	In front of blower	N5	<0.4	<0.5	<0.7
3/11/2016	11:41	0052H-IA-TSTA-20160311-N5-016	Top of upstairs stairwell	N5	**0.40**	<0.5	**0.8**
3/11/2016	12:04	0052H-IA-BSTA-20160311-N5-019	Bottom of basement stairwell	N5	<0.4	<0.5	<0.7
3/11/2016	12:13	0052H-IA-TSTA-20160311-N5-020	Top of upstairs stairwell	N5	<0.4	<0.5	<0.7
3/11/2016	12:26	0052H-IA-BSTA-20160311-N10-021	Bottom of basement stairwell	N10	<0.4	<0.5	<0.7
3/11/2016	12:35	0052H-IA-BLO-20160311-N10-022	In front of blower	N10	<0.4	<0.5	<0.7
3/11/2016	12:43	0052H-IA-TSTA-20160311-N10-023	Top of upstairs stairwell	N10	<0.4	<0.5	<0.7
3/11/2016	12:50	0052H-IA-BSTA-20160311-N10-024	Bottom of basement stairwell	N10	<0.4	<0.5	<0.7
3/11/2016	12:59	0052H-IA-TSTA-20160311-N10-025	Top of upstairs stairwell	N10	<0.4	<0.5	<0.7
3/11/2016	13:13	0052H-IA-BSTA-20160311-P5-026	Bottom of basement stairwell	P5	<0.4	<0.5	<0.7
3/11/2016	13:22	0052H-IA-BLO-20160311-P5-027	In front of blower	P5	<0.4	<0.5	<0.7
3/11/2016	13:32	0052H-IA-TSTA-20160311-P5-028	Top of upstairs stairwell	P5	<0.4	<0.5	<0.7
3/11/2016	13:40	0052H-IA-BSTA-20160311-P5-029	Bottom of basement stairwell	P5	<0.4	<0.5	<0.7
3/11/2016	13:48	0052H-IA-BLO-20160311-P5-030	In front of blower	P5	<0.4	<0.5	<0.7
3/11/2016	13:58	0052H-IA-TSTA-20160311-P5-031	Top of upstairs stairwell	P5	<0.4	<0.5	<0.7
3/11/2016	14:42	0052H-SG-SG1-20160311-032-4.5'	Soil gas from 4.5 ft bgs (north side of residence)	NA	<0.4	<0.5	**10.3**

NOTES:

µg/m^3 = Microgram(s) per cubic meter.

' = Feet.

< = Less than.

Accelerated

bgs = Below ground surface.

BL = Baseline.

ft = Feet(foot).

IA = Indoor air.

IASL = Residential indoor air screening level.

ID = Identification.

N5 = Negative 5 Pascal pressure step.

N10 = Negative 10 Pascal pressure step.

NA = Not applicable.

OA = Outdoor air.

P5 = Positive 5 Pascal pressure step.

PCE = Tetrachloroethene.

RAL = Residential removal action level.

SG = Soil gas.

VA = Department of Veterans Affairs.

Bolded values are detections.

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TABLE 11

0053-H HAPSITE Analytical Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

Date	Time	Sample ID	Sample Location Description	Differential Pressure Condition	cis-1,2-Dichloroethene (µg/m^3)	Tricholorethene (µg/m^3)	Tetrachloroethene (µg/m^3)
				IASL:	NA	0.48 µg/m^3	11 µg/m^3
				Tier 1 RAL:	NA	2.1 µg/m^3	41 µg/m^3
5/2/2016	9:58	0053H-OA-OA1-20160502-BL-018	Outside air (south side)	BL	<0.4	<0.5	<0.7
5/2/2016	10:07	0053H-IA-KIT-20160502-BL-019	Upstairs kitchen area	BL	**0.71**	<0.5	**9.7**
5/2/2016	10:17	0053H-IA-LIV-20160502-BL-020	Living room (basement)	BL	**0.52**	<0.5	**11.0**
5/2/2016	10:25	0053H-IA-KIT-20160502-BL-021	Upstairs kitchen area	BL	**0.67**	<0.5	**9.0**
5/2/2016	10:34	0053H-IA-LIV-20160502-BL-022	Living room (basement)	BL	**0.55**	<0.5	**11.0**
5/2/2016	10:44	0053H-IA-CRWL-20160502-BL-023	Crawlspace access in basement	BL	<0.4	<0.5	**13.1**
5/2/2016	11:50	0053H-IA-LIV-20160502-N5-024	Living room (basement)	N5	<0.4	<0.5	**9.7**
5/2/2016	12:00	0053H-IA-BLO-20160502-N5-025	Blower door	N5	<0.4	<0.5	**8.3**
5/2/2016	12:10	0053H-IA-KIT-20160502-N5-026	Upstairs kitchen area	N5	<0.4	<0.5	**4.8**
5/2/2016	12:20	0053H-IA-LIV-20160502-N5-027	Living room (basement)	N5	<0.4	<0.5	**13.1**
5/2/2016	12:30	0053H-IA-BLO-20160502-N5-028	Blower door	N5	<0.4	<0.5	**7.6**
5/2/2016	12:38	0053H-IA-KIT-20160502-N5-029	Upstairs kitchen area	N5	<0.4	<0.5	**3.0**
5/2/2016	12:46	0053H-IA-LIV-20160502-N5-030	Living room (basement)	N5	<0.4	<0.5	**13.1**
5/2/2016	13:00	0053H-IA-BLO-20160502-N5-032	Blower door	N5	<0.4	<0.5	**2.8**
5/2/2016	13:10	0053H-IA-KIT-20160502-N5-034	Upstairs kitchen area	N5	<0.4	<0.5	**3.4**
5/2/2016	13:23	0053H-IA-LIV-20160502-N5-035	Living room (basement)	N5	<0.4	<0.5	**19.3**
5/2/2016	13:35	0053H-IA-LIV-20160502-N10-036	Living room (basement)	N10	<0.4	<0.5	**22.1**
5/2/2016	13:44	0053H-IA-BLO-20160502-N10-037	Blower door	N10	<0.4	<0.5	**11.7**
5/2/2016	13:53	0053H-IA-KIT-20160502-N10-038	Upstairs kitchen area	N10	<0.4	<0.5	**3.6**
5/2/2016	14:01	0053H-IA-LIV-20160502-N10-039	Living room (basement)	N10	<0.4	<0.5	**21.4**
5/2/2016	14:10	0053H-IA-BLO-20160502-N10-040	Blower door	N10	<0.4	<0.5	**9.0**
5/2/2016	14:20	0053H-IA-KIT-20160502-N10-041	Upstairs kitchen area	N10	<0.4	<0.5	**3.7**
5/2/2016	14:30	0053H-IA-LIV-20160502-N10-042	Living room (basement)	N10	<0.4	<0.5	**24.1**
5/2/2016	14:40	0053H-IA-BLO-20160502-N10-043	Blower door	N10	<0.4	<0.5	**8.6**
5/2/2016	14:48	0053H-IA-LIV-20160502-P5-044	Living room (basement)	P5	<0.4	<0.5	**21.4**
5/2/2016	14:57	0053H-IA-BLO-20160502-P5-045	Blower door	P5	<0.4	<0.5	<0.7
5/2/2016	15:05	0053H-IA-KIT-20160502-P5-046	Upstairs kitchen area	P5	<0.4	<0.5	<0.7
5/2/2016	15:20	0053H-IA-LIV-20160502-P5-047	Living room (basement)	P5	<0.4	<0.5	**5.7**
5/2/2016	15:29	0053H-IA-BLO-20160502-P5-048	Blower door	P5	<0.4	<0.5	<0.7
5/2/2016	15:38	0053H-IA-KIT-20160502-P5-049	Upstairs kitchen area	P5	<0.4	<0.5	<0.7
5/2/2016	16:08	0053H-IA-LIV-20160502-P5-053	Living room (basement)	P5	<0.4	<0.5	**2.6**

TABLE 11

0053-H HAPSITE Analytical Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

Date	Time	Sample ID	Sample Location Description	Differential Pressure Condition	cis-1,2-Dichloroethene (µg/m^3)		Tricholorethene (µg/m^3)	Tetrachloroethene (µg/m^3)
					IASL:	NA	0.48 µg/m^3	11 µg/m^3
					Tier 1 RAL:	NA	2.1 µg/m^3	41 µg/m^3
5/2/2016	16:20	0053H-IA-LIV-20160502-P5-054	Living room (basement)	P5	<0.4		<0.5	**2.0**
5/2/2016	16:29	0053H-IA-LIV-20160502-P5-055	Living room (basement)	P5	<0.4		<0.5	**2.6**
5/2/2016	16:45	0053H-SG-SG1-20160502-056-6.5'	soil gas from 6.5 ft bgs (north side of home)	NA	<0.4		**4.5**	**627.7**
5/2/2016	17:00	0053H-SG-SG1-20160502-058-6.5'	soil gas from 6.5 ft bgs (north side of home)	NA	<0.4		<0.5	**510.0**

NOTES:

µg/m^3 = Microgram(s) per cubic meter.

' = Feet.

< = Less than.

AOU 1 = Accelerated Operable Unit 1 East Side Springs.

bgs = Below ground surface.

BL = Baseline.

ft = Feet(foot).

IA = Indoor air.

IASL = Residential indoor air screening level.

ID = Identification.

N5 = Negative 5 Pascal pressure step.

N10 = Negative 10 Pascal pressure step.

NA = Not applicable.

OA = Outdoor air.

P5 = Positive 5 Pascal pressure step.

PCE = Tetrachloroethene.

RAL = Residential removal action level.

SG = Soil gas.

VA = Department of Veterans Affairs.

Bolded values are detections.

Shaded values are screening level and/or removal action level exceedances.

TABLE 12

0054-H HAPSITE Analytical Results (May 9, 2016)

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

Date	Time	Sample ID	Sample Location Description	Differential Pressure Condition	cis-1,2-Dichloroethene (µg/m^3)	Tricholorethene (µg/m^3)	Tetrachloroethene (µg/m^3)
				IASL: NA		0.48 µg/m^3	11 µg/m^3
				Tier 1 RAL: NA		2.1 µg/m^3	41 µg/m^3
5/9/2016	10:20	0054H-OA-OA1-20160509-NA-008	Outside air sample (east side)	NA	< 0.4	<0.5	< 0.7
5/9/2016	10:33	0054H-IA-LIV-20160509-BL-009	Upstairs living room	BL	< 0.4	**5.4**	**6.0**
5/9/2016	10:43	0054H-IA-LAU-20160509-BL-010	Downstairs laundry room	BL	< 0.4	**4.5**	**5.0**
5/9/2016	11:01	0054H-IA-GAR-20160509-BL-012	Garage	BL	< 0.4	**0.7**	< 0.7
5/9/2016	11:09	0054H-IA-SHOP-20160509-BL-014	Shop room (basement)	BL	< 0.4	**8.7**	**14.2**
5/9/2016	11:26	0054H-IA-BAT-20160509-BL-015	Bathroom (basement)	BL	< 0.4	**5.2**	**6.7**
5/9/2016	11:35	0054H-IA-TVR-20160509-BL-016	TV room (basement)	BL	< 0.4	**5.1**	**5.2**
5/9/2016	11:45	0054H-IA-LAU-20160509-BL-017	Downstairs laundry room	BL	< 0.4	**4.8**	**5.8**
5/9/2016	11:55	0054H-IA-LIV-20160509-BL-018	Upstairs living room	BL	< 0.4	**5.2**	**5.7**
5/9/2016	12:05	0054H-IA-SHOP-20160509-BL-019	Shop room (basement)	BL	< 0.4	**9.3**	**10.3**
5/9/2016	12:16	0054H-IA-SBED-20160509-BL-020	Southwest bedroom (basement)	BL	< 0.4	**5.4**	**6.9**
5/9/2016	13:59	0054H-IA-SHOP-20160509-N5-021	Shop room (basement)	N5	< 0.4	**8.7**	**21.4**
5/9/2016	14:09	0054H-IA-TVR-20160509-N5-022	TV room (basement)	N5	< 0.4	**5.5**	**5.4**
5/9/2016	14:18	0054H-IA-BLO-20160509-N5-023	Blower door	N5	< 0.4	**3.7**	**4.1**
5/9/2016	14:28	0054H-IA-LIV-20160509-N5-024	Upstairs living room	N5	< 0.4	**3.2**	**3.1**
5/9/2016	14:37	0054H-IA-SHOP-20160509-N5-025	Shop room (basement)	N5	< 0.4	**6.0**	**6.3**
5/9/2016	14:46	0054H-IA-TVR-20160509-N5-026	TV room (basement)	N5	< 0.4	**4.3**	**5.0**
5/9/2016	14:55	0054H-IA-BLO-20160509-N5-027	Blower door	N5	< 0.4	**1.4**	**2.6**

NOTES:

µg/m^3 = Microgram(s) per cubic meter.

< = Less than.

AOU 1 = Accelerated Operable Unit 1 East Side Springs.

BL = Baseline.

IA = Indoor air.

IASL = Residential indoor air screening level.

ID = Identification.

N5 = Negative 5 Pascal pressure step.

NA = Not applicable.

OA = Outdoor air.

PCE = Tetrachloroethene.

RAL = Residential removal action level.

VA = Department of Veterans Affairs.

Bolded values are detections.

Shaded values are screening level and/or removal action level exceedances.

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TABLE 13

0054-H HAPSITE Analytical Results (June 3, 2016)

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

Date	Time	Sample ID	Sample Location Description	Differential Pressure Condition	cis-1,2-Dichloroethene (µg/m^3)	Tricholorethene (µg/m^3)	Tetrachloroethene (µg/m^3)
				IASL: NA		0.48 µg/m^3	11 µg/m^3
				Tier 1 RAL: NA		2.1 µg/m^3	41 µg/m^3
6/3/2016	9:50	0054H-OA-OA1-20160603-BL-001	Front porch	BL	<0.4	<0.5	<0.7
6/3/2016	9:58	0054H-IA-LIV-20160603-BL-002	Upstairs living room	BL	<0.4	**1.0**	<0.7
6/3/2016	10:08	0054H-IA-LAU-20160603-BL-003	Downstairs laundry room	BL	<0.4	**0.7**	<0.7
6/3/2016	10:15	0054H-IA-SHOP-20160603-BL-004	Shop room (basement)	BL	<0.4	**1.6**	**1.0**
6/3/2016	10:23	0054H-IA-SHOP-20160603-BL-005	Shop room (basement)	BL	<0.4	**1.4**	<0.7
6/3/2016	10:31	0054H-IA-SHOP-20160603-BL-006	Shop room (basement)	BL	<0.4	**2.9**	**1.7**
6/3/2016	10:40	0054H-IA-SUM-20160603-BL-007	Sump in basement shop	BL	<0.4	**3.5**	**1.7**
6/3/2016	10:49	0054H-IA-LAU-20160603-BL-008	Downstairs laundry room	BL	<0.4	**1.7**	**1.3**
6/3/2016	10:58	0054H-IA-GAR-20160603-BL-009	Garage	BL	<0.4	<0.5	<0.7
6/3/2016	11:07	0054H-IA-TVR-20160603-BL-010	TV room (basement)	BL	<0.4	**1.6**	**1.1**
6/3/2016	11:17	0054H-IA-LIV-20160603-BL-011	Upstairs living room	BL	<0.4	**1.9**	**0.8**
6/3/2016	11:26	0054H-IA-SHOP-20160603-N5-012	Shop Room (basement)	N5	<0.4	**2.8**	**1.7**
6/3/2016	11:34	0054H-IA-TVR-20160603-N5-013	TV room (basement)	N5	<0.4	**1.8**	**1.2**
6/3/2016	11:42	0054H-IA-BLO-20160603-N5-014	Blower door	N5	<0.4	**1.1**	<0.7
6/3/2016	11:52	0054H-IA-LIV-20160603-N5-015	Upstairs living room	N5	<0.4	**1.3**	**0.6**
6/3/2016	12:04	0054H-IA-SHOP-20160603-N5-016	Shop Room (basement)	N5	<0.4	**1.2**	**1.7**
6/3/2016	12:13	0054H-IA-TVR-20160603-N5-017	TV room (basement)	N5	<0.4	**1.5**	**1.6**
6/3/2016	12:30	0054H-IA-BLO-20160603-N5-018	Blower door	N5	<0.4	**0.7**	<0.7
6/3/2016	12:38	0054H-IA-LIV-20160603-N5-019	Upstairs living room	N5	<0.4	**0.7**	<0.7
6/3/2016	12:44	0054H-IA-SHOP-20160603-N5-020	Shop Room (basement)	N5	<0.4	**0.8**	**2.3**
6/3/2016	12:55	0054H-IA-TVR-20160603-N5-021	TV room (basement)	N5	<0.4	**1.0**	**1.7**
6/3/2016	13:06	0054H-IA-SHOP-20160603-N10-022	Shop Room (basement)	N10	<0.4	**0.8**	**2.8**
6/3/2016	13:16	0054H-IA-TVR-20160603-N10-023	TV room (basement)	N10	<0.4	**0.9**	**1.9**
6/3/2016	13:26	0054H-IA-BLO-20160603-N10-024	Blower door	N10	<0.4	<0.5	<0.7
6/3/2016	13:46	0054H-IA-LIV-20160603-N10-026	Upstairs living room	N10	<0.4	<0.5	<0.7
6/3/2016	13:58	0054H-IA-SHOP-20160603-N10-027	Shop room (basement)	N10	<0.4	<0.5	**2.5**
6/3/2016	14:07	0054H-IA-TVR-20160603-N10-028	TV room (basement)	N10	<0.4	**0.7**	**2.1**
6/3/2016	14:16	0054H-IA-BLO-20160603-N10-029	Blower door	N10	<0.4	<0.5	<0.7
6/3/2016	14:25	0054H-IA-LIV-20160603-N10-030	Upstairs living room	N10	<0.4	<0.5	<0.7
6/3/2016	14:35	0054H-IA-SHOP-20160603-N10-031	Shop room (basement)	N10	<0.4	<0.5	**2.4**
6/3/2016	14:45	0054H-IA-TVR-20160603-N10-032	TV room (basement)	N10	<0.4	**0.5**	**2.1**
6/3/2016	14:58	0054H-IA-SHOP-20160603-P5-033	Shop room (basement)	P5	<0.4	**0.7**	**2.7**
6/3/2016	15:09	0054H-IA-TVR-20160603-P5-034	TV room (basement)	P5	<0.4	<0.5	**1.4**
6/3/2016	15:20	0054H-IA-BLO-20160603-P5-035	Blower door	P5	<0.4	<0.5	<0.7
6/3/2016	15:30	0054H-IA-LIV-20160603-P5-036	Upstairs living room	P5	<0.4	<0.5	<0.7
6/3/2016	15:40	0054H-IA-SHOP-20160603-P5-037	Shop room (basement)	P5	<0.4	**0.7**	**0.9**

TABLE 13

0054-H HAPSITE Analytical Results (June 3, 2016)

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

Date	Time	Sample ID	Sample Location Description	Differential Pressure Condition	cis-1,2-Dichloroethene (µg/m^3)	Tricholorethene (µg/m^3)	Tetrachloroethene (µg/m^3)
				IASL:	NA	0.48 µg/m^3	11 µg/m^3
				Tier 1 RAL:	NA	2.1 µg/m^3	41 µg/m^3
6/3/2016	15:48	0054H-IA-TVR-20160603-P5-038	TV room (basement)	P5	<0.4	<0.5	<0.7
6/3/2016	15:57	0054H-IA-SHOP-20160603-P5-039	Shop room (basement)	P5	<0.4	**0.8**	**0.7**
6/3/2016	16:07	0054H-IA-TVR-20160603-P5-040	TV room (basement)	P5	<0.4	<0.5	<0.7
6/3/2016	16:14	0054H-IA-SHOP-20160603-P5-041	Shop room (basement)	P5	<0.4	**0.8**	<0.7
6/3/2016	16:23	0054H-SG-SG1-20160603-042-7'	Soil gas sample from 7 ft bgs (north side near laundry room windows)	NA	<0.4	<0.5	**5.7**
6/3/2016	16:33	0054H-SG-SG1-20160603-043-7'	Soil gas sample from 7 ft bgs (north side near laundry room windows)	NA	<0.4	<0.5	**61.4**
6/3/2016	16:44	0054H-IA-CONT-20160603-BL-044	Inside hard plastic container full of bicycle drive train parts	BL	<0.4	**4.0**	**3.0**

NOTES:

µg/m^3 = Microgram(s) per cubic meter.

' = Feet.

< = Less than.

AOU 1 = Accelerated Operable Unit 1 East Side Springs.

bgs = Below ground surface.

BL = Baseline.

ft = Feet(foot).

IA = Indoor air.

IASL = Residential indoor air screening level.

ID = Identification.

N5 = Negative 5 Pascal pressure step.

N10 = Negative 10 Pascal pressure step.

NA = Not applicable.

OA = Outdoor air.

P5 = Positive 5 Pascal pressure step.

PCE = Tetrachloroethene.

RAL = Residential removal action level.

SG = Soil gas.

VA = Department of Veterans Affairs.

Bolded values are detections.

Shaded values are screening level and/or removal action level exceedances.

TABLE 14
0055-H HAPSITE Analytical Results
700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Uta

Date	Time	Sample ID	Sample Location Description	Differential Pressure Condition	cis-1,2-Dichloroethene (µg/m^3)	Tricholorethene (µg/m^3)	Tetrachloroethene (µg/m^3)
				IASL:	NA	0.48 µg/m^3	11 µg/m^3
				Tier 1 RAL:	NA	2.1 µg/m^3	41 µg/m^3
5/13/2016	9:55	0055H-OA-OA1-20160513-BL-013	Outdoor air (east side)	BL	< 0.4	< 0.5	< 0.7
5/13/2016	10:05	0055H-IA-KIT-20160513-BL-014	Kitchen (main level)	BL	**0.67**	< 0.5	**0.8**
5/13/2016	10:14	0055H-IA-UHAL-20160513-BL-015	Upper level hallway	BL	**0.52**	< 0.5	**0.9**
5/13/2016	10:23	0055H-IA-BHAL-20160513-BL-016	Basement hallway (near bathroom)	BL	< 0.4	< 0.5	**0.7**
5/13/2016	10:32	0055H-IA-LAU-20160513-BL-017	Basement laundry	BL	**0.55**	< 0.5	**0.7**
5/13/2016	11:08	0055H-IA-KIT-20160513-N5-018	Kitchen (main level)	N5	**0.79**	< 0.5	**1.1**
5/13/2016	11:16	0055H-IA-BHAL-20160513-N5-019	Basement hallway (near laundry room)	N5	**0.55**	< 0.5	**1.4**
5/13/2016	11:49	0055H-IA-BLO-20160513-N5-022	Near blower door (basement hallway near bathroom)	N5	< 0.4	< 0.5	**0.9**
5/13/2016	11:59	0055H-IA-KIT-20160513-N5-023	Kitchen (main level)	N5	< 0.4	< 0.5	< 0.7
5/13/2016	12:09	0055H-IA-BHAL-20160513-N5-024	Basement hallway (near laundry room)	N5	< 0.4	< 0.5	**1.5**
5/13/2016	12:18	0055H-IA-BLO-20160513-N5-025	Near blower door (basement hallway near bathroom)	N5	< 0.4	< 0.5	**0.8**
5/13/2016	12:29	0055H-IA-BHAL-20160513-N10-026	Basement hallway (near laundry room)	N10	< 0.4	< 0.5	< 0.7
5/13/2016	12:38	0055H-IA-BLO-20160513-N10-027	Near blower door (basement hallway near bathroom)	N10	< 0.4	< 0.5	**1.2**
5/13/2016	12:48	0055H-IA-KIT-20160513-N10-028	Kitchen (main level)	N10	< 0.4	< 0.5	< 0.7
5/13/2016	12:58	0055H-IA-BHAL-20160513-N10-029	Basement hallway (near laundry room)	N10	< 0.4	< 0.5	**0.8**
5/13/2016	13:08	0055H-IA-BLO-20160513-N10-030	Near blower door (basement hallway near bathroom)	N10	< 0.4	< 0.5	**0.9**
5/13/2016	13:17	0055H-IA-KIT-20160513-N10-031	Kitchen (main level)	N10	< 0.4	< 0.5	< 0.7
5/13/2016	13:27	0055H-IA-BHAL-20160513-P5-032	Basement hallway (near laundry room)	P5	< 0.4	< 0.5	**1.5**
5/13/2016	13:35	0055H-IA-BLO-20160513-P5-033	Near blower door (basement hallway near bathroom)	P5	< 0.4	< 0.5	< 0.7
5/13/2016	13:44	0055H-IA-KIT-20160513-P5-034	Kitchen (main level)	P5	< 0.4	< 0.5	< 0.7
5/13/2016	13:54	0055H-IA-BHAL-20160513-P5-035	Basement hallway (near laundry room)	P5	< 0.4	< 0.5	< 0.7
5/13/2016	14:02	0055H-IA-BLO-20160513-P5-036	Near blower door (basement hallway near bathroom)	P5	< 0.4	< 0.5	< 0.7
5/13/2016	14:12	0055H-IA-KIT-20160513-P5-037	Kitchen (main level)	P5	< 0.4	< 0.5	< 0.7
5/13/2016	14:20	0055H-SG-SG1-20160513--038	Soil gas sample from 5 ft bgs (west side of residence)	NA	< 0.4	< 0.5	< 0.7
5/13/2016	14:28	0055H-SG-SG1-20160513--039	Soil gas sample from 5 ft bgs (west side of residence)	NA	**0.48**	< 0.5	< 0.7

NOTES:
µg/m^3 = Microgram(s) per cubic meter.
< = Less than.
AOU 1 = Accelerated Operable Unit 1 East Side Springs.
bgs = Below ground surface.
BL = Baseline.
ft = Feet(foot).
IA = Indoor air.
IASL = Residential indoor air screening level.
ID = Identification.
N5 = Negative 5 Pascal pressure step.
N10 = Negative 10 Pascal pressure step.
NA = Not applicable.
OA = Outdoor air.
P5 = Positive 5 Pascal pressure step.
PCE = Tetrachloroethene.
RAL = Residential removal action.
SG = Soil gas.
VA = Department of Veterans Affairs.

Bolded values are detections.

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TABLE 15
0056-H HAPSITE Analytical Results
700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

Date	Time	Sample ID	Sample Location Description	Differential Pressure Condition	cis-1,2-Dichloroethene (µg/m³)	Tricholorethene (µg/m³)	Tetrachloroethene (µg/m³)
				IASL:	NA	0.48 µg/m³	11 µg/m³
				Tier 1 RAL:	NA	2.1 µg/m³	41 µg/m³
5/3/2016	9:15	0056H-OA-OA1-20160503-NA-002	Front porch	NA	<0.4	<0.5	<0.7
5/3/2016	9:25	0056H-IA-FRM-20160503-NA-003	First floor (front room)	NA	**3.05**	<0.5	**2.1**
5/3/2016	9:35	0056H-IA-BAS-20160503-NA-004	Basement	NA	**1.66**	<0.5	**4.0**
5/3/2016	9:44	0056H-IA-CRWL-20160503-NA-005	Crawl space	NA	**1.74**	<0.5	**4.9**
5/3/2016	9:56	0056H-IA-BBED-20160503-NA-006	Basement bedroom (northwest corner)	NA	**1.86**	<0.5	**4.1**
5/3/2016	10:33	0056H-IA-BLIV-20160503-N5-007	Basement main room	N5	**1.19**	<0.5	**3.3**
5/3/2016	10:41	0056H-IA-BLO-20160503-N5-008	Blower door	N5	**1.43**	<0.5	**3.5**
5/3/2016	10:51	0056H-IA-FRM-20160503-N5-009	First floor (front room)	N5	**1.31**	<0.5	**1.0**
5/3/2016	11:00	0056H-IA-BLIV-20160503-N5-010	Basement main room	N5	**0.48**	<0.5	**2.4**
5/3/2016	11:10	0056H-IA-BLO-20160503-N5-011	Blower door	N5	**0.71**	<0.5	**2.9**
5/3/2016	11:20	0056H-IA-FRM-20160503-N5-012	First floor (front room)	N5	**0.67**	<0.5	<0.7
5/3/2016	11:30	0056H-IA-BSTA-20160503-N5-013	Basement (by stairwell adjacent to crawlspace)	N5	<0.4	<0.5	**5.8**
5/3/2016	11:39	0056H-IA-CRWL-20160503-N5-014	Crawl space	N5	**0.44**	<0.5	**5.0**
5/3/2016	11:45	0056H-IA-BLIV-20160503-N10-015	Basement main room	N10	<0.4	<0.5	**2.3**
5/3/2016	11:56	0056H-IA-BSTA-20160503-N10-016	Basement (by stairwell adjacent to crawlspace)	N10	<0.4	<0.5	**6.9**
5/3/2016	12:05	0056H-IA-BLO-20160503-N10-017	Blower door	N10	<0.4	<0.5	**3.8**
5/3/2016	12:15	0056H-IA-FRM-20160503-N10-018	First floor (front room)	N10	<0.4	<0.5	<0.7
5/3/2016	12:25	0056H-IA-BLIV-20160503-N10-019	Basement main room	N10	**0.71**	<0.5	**2.4**
5/3/2016	12:35	0056H-IA-BSTA-20160503-N10-020	Basement (by stairwell adjacent to crawlspace)	N10	**0.75**	<0.5	**3.0**
5/3/2016	13:10	0056H-IA-BLIV-20160503-P5-023	Basement main room	P5	<0.4	<0.5	**2.1**
5/3/2016	13:20	0056H-IA-BSTA-20160503-P5-024	Basement (by stairwell adjacent to crawlspace)	P5	<0.4	<0.5	**1.6**
5/3/2016	13:30	0056H-IA-BLO-20160503-P5-025	Blower door	P5	<0.4	<0.5	<0.7
5/3/2016	13:37	0056H-IA-FRM-20160503-P5-026	First floor (front room)	P5	<0.4	<0.5	<0.7
5/3/2016	13:46	0056H-IA-BLIV-20160503-P5-027	Basement main room	P5	<0.4	<0.5	**1.2**
5/3/2016	13:55	0056H-IA-BSTA-20160503-P5-028	Basement (by stairwell adjacent to crawlspace)	P5	<0.4	<0.5	**1.1**
5/3/2016	14:04	0056H-IA-BLIV-20160503-P5-029	Basement main room	P5	<0.4	<0.5	**1.1**
5/3/2016	14:46	0056H-SG-SG1-20160503-031-5.5'	Soil gas sample from 5.5 ft bgs (west side of residence)	NA	<0.4	<0.5	<0.7
5/3/2016	15:02	0056H-SG-SG1-20160503-032-5.5'	Soil gas sample from 5.5 ft bgs (west side of residence)	NA	<0.4	<0.5	**3.2**

NOTES:
µg/m³ = Microgram per cubic meter.
' = Feet.
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bgs = Below ground surface.
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ft = Feet(foot).
IA = Indoor air.
IASL = Residential indoor air screening level.
ID = Identification.
N5 = Negative 5 Pascal pressure step.
N10 = Negative 10 Pascal pressure step.
NA = Not applicable.
OA = Outdoor air.
P5 = Positive 5 Pascal pressure step.
PCE = Tetrachloroethene.
RAL = Residential removal action level.
SG = Soil gas.
VA = Department of Veterans Affairs.

Bolded values are detections.

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TABLE 16

0045-S HAPSITE Survey Analytical Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

Date	Time	Sample ID	Sample Location Description	Differential Pressure Condition	cis-1,2-Dichloroethene (µg/m³)	Tricholorethene (µg/m³)	Tetrachloroethene (µg/m³)
				IASL:	NA	3.0 µg/m³	47 µg/m³
				Tier 1 RAL:	NA	8.8 µg/m³	180 µg/m³
3/4/2016	8:20	0045S-OA-OA1-20160304-BL-003	Outdoor air west side	BL	<0.4	<0.5	<0.7
3/4/2016	8:29	0045S-IA-CAF-A-20160304-BL-004	Cafeteria	BL	<0.4	<0.5	<0.7
3/4/2016	8:40	0045S-IA-A404-A-20160304-BL-005	Hallway near A404C/A405	BL	<0.4	<0.5	<0.7
3/4/2016	8:50	0045S-IA-A315-A-20160304-BL-006	Hallway near A315	BL	<0.4	<0.5	<0.7
3/4/2016	8:59	0045S-IA-A322-A-20160304-BL-007	Hallway near A322	BL	<0.4	<0.5	<0.7
3/4/2016	9:07	0045S-IA-A312-A-20160304-BL-008	Hallway near A312	BL	<0.4	<0.5	<0.7
3/4/2016	9:17	0045S-IA-A204-A-20160304-BL-009	Hallway near A204/A205	BL	<0.4	<0.5	<0.7
3/4/2016	9:26	0045S-IA-A219-A-20160304-BL-010	Hallway near A219/A206	BL	<0.4	<0.5	<0.7
3/4/2016	9:36	0045S-IA-HTHE-A-20160304-BL-011	Hallway near theater	BL	<0.4	<0.5	<0.7
3/4/2016	9:46	0045S-IA-THEA-A-20160304-BL-012	Theater	BL	<0.4	<0.5	<0.7
3/4/2016	9:56	0045S-IA-AUTO-A-20160304-BL-013	Autoshop	BL	<0.4	<0.5	**0.8**
3/4/2016	10:14	0045S-IA-CHEM-A-20160304-BL-014	Chemical storage room autoshop (northeast corner)	BL	<0.4	<0.5	**40.0**
3/4/2016	10:55	0045S-IA-AUDI-B-20160304-BL-017	Auditorium/B110	BL	<0.4	<0.5	<0.7
3/4/2016	13:30	0045S-IA-B215-B-20160304-BL-029	Hallway near B215	BL	<0.4	<0.5	<0.7
3/4/2016	13:45	0045S-IA-B208-B-20160304-BL-030	Hallway near B208	BL	<0.4	<0.5	<0.7
3/4/2016	14:19	0045S-IA-MENT-B-20160304-BL-033	Hallway near main entrance	BL	<0.4	<0.5	<0.7
3/4/2016	14:27	0045S-IA-B325-B-20160304-BL-034	Hallway near B325	BL	<0.4	<0.5	<0.7
3/4/2016	14:38	0045S-IA-LGYM-B-20160304-BL-035	Large northeastern gym	BL	<0.4	<0.5	<0.7
3/4/2016	14:48	0045S-IA-D210-D-20160304-BL-036	Hallway near D210	BL	<0.4	<0.5	<0.7
3/4/2016	14:58	0045S-IA-D202-D-20160304-BL-037	Hallway near D202	BL	<0.4	<0.5	<0.7
3/4/2016	15:07	0045S-IA-D305-D-20160304-BL-038	Hallway near D305	BL	<0.4	<0.5	<0.7
3/4/2016	15:17	0045S-IA-D311-D-20160304-BL-039	Hallway near D311	BL	<0.4	<0.5	<0.7
3/4/2016	15:28	0045S-IA-C406-C-20160304-BL-040	Hallway near C406	BL	<0.4	<0.5	<0.7
3/4/2016	15:38	0045S-IA-C317-C-20160304-BL-041	Hallway near C317	BL	<0.4	<0.5	<0.7
3/4/2016	15:50	0045S-IA-C305-C-20160304-BL-042	Hallway near C305	BL	<0.4	<0.5	<0.7
3/4/2016	16:45	0045S-OA-OA2-20160304-BL-045	Outside air just outside of autoshop (west side)	BL	<0.4	<0.5	<0.7
3/4/2016	17:00	0045S-IA-AUTO-A-20160304-BL-046	Autoshop	BL	<0.4	<0.5	**1.4**
3/4/2016	17:13	0045S-IA-B215-B-20160304-BL-047	Hallway near B215	BL	<0.4	<0.5	<0.7
3/4/2016	17:24	0045S-IA-C216-C-20160304-BL-048	Hallway near C216	BL	<0.4	<0.5	<0.7
3/4/2016	17:32	0045S-IA-C213-C-20160304-BL-049	Hallway near C213	BL	<0.4	<0.5	<0.7
3/4/2016	17:42	0045S-IA-C107-C-20160304-BL-050	Hallway near C107	BL	<0.4	<0.5	<0.7

NOTES:

µg/m³ = Microgram(s) per cubic meter.

< = Less than.

AOU 1 = Accelerated Operable Unit 1 East Side Springs.

BL = Baseline.

IA = Indoor air.

IASL = Commercial/industrial indoor air screening level.

ID = Identification.

OA = Outdoor air.

PCE = Tetrachloroethene.

RAL = Commercial/industrial removal action level.

VA = Department of Veterans Affairs.

Bolded values are detections.

Shaded values are screening level and/or removal action level exceedances.

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TABLE 17
0045-S Room A203/A205 Pressure Cycling Analytical Results
700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

Date	Time	Sample ID	Sample Location Description	Differential Pressure Condition	cis-1,2-Dichloroethene (µg/m^3)	Tricholorethene (µg/m^3)	Tetrachloroethene (µg/m^3)
				IASL:	NA	3.0 µg/m^3	47 µg/m^3
				Tier 1 RAL:	NA	8.8 µg/m^3	180 µg/m^3
3/21/2016	8:49	0045S-IA-CA203-20160321-BL-003	Center of Rooms A203 and A205	BL	<0.4	<0.5	<0.7
3/21/2016	9:12	0045S-OA-OA1-20160321-BL-004	Outdoor air (west side of building)	BL	<0.4	<0.5	<0.7
3/21/2016	9:55	0045S-IA-FLOB-20160321-BL-005	Front lobby (Level A)	BL	<0.4	<0.5	<0.7
3/21/2016	10:06	0045S-IA-SHAL-20160321-BL-006	South end of front hallway by staircase	BL	<0.4	<0.5	<0.7
3/21/2016	10:35	0045S-IA-SA203-20160321-N5-007	South end of Rooms A203 and A205	N5	<0.4	<0.5	<0.7
3/21/2016	10:45	0045S-IA-CA203-20160321-N5-008	Center of Rooms A203 and A205	N5	<0.4	<0.5	<0.7
3/21/2016	10:55	0045S-IA-BLO-20160321-N5-009	Near blower door	N5	<0.4	<0.5	<0.7
3/21/2016	11:05	0045S-IA-SA203-20160321-N5-010	South end of Rooms A203 and A205	N5	<0.4	<0.5	<0.7
3/21/2016	11:15	0045S-IA-CA203-20160321-N5-011	Center of Rooms A203 and A205	N5	<0.4	<0.5	<0.7
3/21/2016	11:25	0045S-IA-BLO-20160321-N5-012	Near blower door	N5	<0.4	<0.5	<0.7
3/21/2016	11:35	0045S-IA-SA203-20160321-N5-013	South end of Rooms A203 and A205	N5	<0.4	<0.5	<0.7
3/21/2016	11:45	0045S-IA-CA203-20160321-N5-014	Center of Rooms A203 and A205	N5	<0.4	<0.5	<0.7
3/21/2016	11:55	0045S-IA-BLO-20160321-N5-015	Near blower door	N5	<0.4	<0.5	<0.7
3/21/2016	12:05	0045S-IA-SA203-20160321-N10-016	South end of Rooms A203 and A205	N10	<0.4	<0.5	<0.7
3/21/2016	12:15	0045S-IA-CA203-20160321-N10-017	Center of Rooms A203 and A205	N10	<0.4	<0.5	<0.7
3/21/2016	12:20	0045S-IA-BLO-20160321-N10-018	Near blower door	N10	<0.4	<0.5	<0.7
3/21/2016	12:30	0045S-IA-SA203-20160321-N10-019	South end of Rooms A203 and A205	N10	<0.4	<0.5	<0.7
3/21/2016	12:40	0045S-IA-CA203-20160321-N10-020	Center of Rooms A203 and A205	N10	<0.4	<0.5	<0.7
3/21/2016	12:50	0045S-IA-BLO-20160321-N10-021	Near blower door	N10	<0.4	<0.5	<0.7
3/21/2016	13:00	0045S-IA-SA203-20160321-P5-022	South end of Rooms A203 and A205	P5	<0.4	<0.5	<0.7
3/21/2016	13:10	0045S-IA-CA203-20160321-P5-023	Center of Rooms A203 and A205	P5	<0.4	<0.5	<0.7
3/21/2016	13:20	0045S-IA-BLO-20160321-P5-024	Near blower door	P5	<0.4	<0.5	<0.7
3/21/2016	13:30	0045S-IA-SA203-20160321-P5-025	South end of Rooms A203 and A205	P5	<0.4	<0.5	<0.7
3/21/2016	13:40	0045S-IA-CA203-20160321-P5-026	Center of Rooms A203 and A205	P5	<0.4	<0.5	<0.7
3/21/2016	13:45	0045S-IA-BLO-20160321-P5-027	Near blower door	P5	<0.4	<0.5	<0.7
3/21/2016	14:05	0045S-IA-A215-20160321-028	Room A215 woodshop - near sink	BL	<0.4	<0.5	<0.7

NOTES:
µg/m^3 = Microgram(s) per cubic meter.
< = Less than.
AOU 1 = Accelerated Operable Unit 1 East Side Springs.
BL = Baseline.
IA = Indoor air.
IASL = Commercial/industrial indoor air screening level.
ID = Identification.
NA = Not applicable.
N5 = Negative 5 Pascal pressure step.
N10 = Negative 10 Pascal pressure step.
OA = Outdoor air.
P5 = Positive 5 Pascal pressure step.
PCE = Tetrachloroethene.
RAL = Commercial/industrial removal action level.
VA = Department of Veterans Affairs.

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TABLE 18

0045-S Room A213 Pressure Cycling Analytical Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

Date	Time	Sample ID	Sample Location Description	Differential Pressure Condition	cis-1,2-Dichloroethene (µg/m^3)		Tricholorethene (µg/m^3)	Tetrachloroethene (µg/m^3)
					IASL:	NA	3.0 µg/m^3	47 µg/m^3
					Tier 1 RAL:	NA	8.8 µg/m^3	180 µg/m^3
3/21/2016	14:15	0045S-IA-CA213-20160321-BL-029	Center of Room A213	BL	<0.4		<0.5	<0.7
3/21/2016	14:25	0045S-IA-HA215-20160321-BL-030	Hallway near Room A215	BL	<0.4		<0.5	<0.7
3/21/2016	15:00	0045S-IA-BLO-20160321-N5-031	Near blower door	N5	<0.4		<0.5	<0.7
3/21/2016	15:09	0045S-IA-CA213-20160321-N5-032	Center of Room A213	N5	<0.4		<0.5	<0.7
3/21/2016	15:18	0045S-IA-BLO-20160321-N5-033	Near blower door	N5	<0.4		<0.5	<0.7
3/21/2016	15:27	0045S-IA-CA213-20160321-N5-034	Center of Room A213	N5	<0.4		<0.5	<0.7
3/21/2016	15:38	0045S-IA-BLO-20160321-N10-035	Near blower door	N10	<0.4		<0.5	<0.7
3/21/2016	15:48	0045S-IA-CA213-20160321-N10-036	Center of Room A213	N10	<0.4		<0.5	<0.7
3/21/2016	15:57	0045S-IA-BLO-20160321-N10-037	Near blower door	N10	<0.4		<0.5	<0.7

NOTES:

µg/m^3 = Microgram(s) per cubic meter.

< = Less than.

AOU 1 = Accelerated Operable Unit 1 East Side Springs.

BL = Baseline.

IA = Indoor air.

IASL = Commercial/industrial indoor air screening level.

ID = Identification.

N5 = Negative 5 Pascal pressure step.

N10 = Negative 10 Pascal pressure step.

PCE = Tetrachloroethene.

RAL = Commercial/industrial removal action level.

VA = Department of Veterans Affairs.

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TABLE 19

0045-S Room A215 Pressure Cycling Analytical Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

Date	Time	Sample ID	Sample Location Description	Differential Pressure Condition	cis-1,2-Dichloroethene (µg/m^3)	Tricholorethene (µg/m^3)	Tetrachloroethene (µg/m^3)
				IASL:	NA	3.0 µg/m^3	47 µg/m^3
				Tier 1 RAL:	NA	8.8 µg/m^3	180 µg/m^3
3/22/2016	8:05	0045S-OA-OA1-20160322-NA-002	Outside Air (west side)	NA	<0.4	<0.5	<0.7
3/22/2016	8:16	0045S-IA-MLOB-20160322-BL-003	Main Lobby (Level A west entrance)	BL	<0.4	<0.5	<0.7
3/22/2016	8:25	0045S-IA-CA215-20160322-BL-004	Center of Room A215	BL	<0.4	<0.5	<0.7
3/22/2016	8:40	0045S-IA-CA219-20160322-BL-005	Center of Room A219	BL	<0.4	<0.5	<0.7
3/22/2016	8:48	0045S-IA-HAL-20160322-BL-006	Hallway near Rooms A219 and A215	BL	<0.4	<0.5	<0.7
3/22/2016	9:26	0045S-IA-WA215-20160322-N10-007	Room A215 west end	N10	<0.4	<0.5	<0.7
3/22/2016	9:35	0045S-IA-EA215-20160322-N10-008	Room A215 east end	N10	<0.4	<0.5	**1.79**
3/22/2016	9:44	0045S-IA-BLO-20160322-N10-009	Room A215 near blower door	N10	<0.4	<0.5	<0.7
3/22/2016	9:54	0045S-IA-WA215-20160322-N10-010	Room A215 west end	N10	<0.4	<0.5	<0.7
3/22/2016	10:02	0045S-IA-EA215-20160322-N10-011	Room A215 east end	N10	<0.4	<0.5	**2.21**
3/22/2016	10:31	0045S-IA-STOR-20160322-N10-014	Storage room southwest corner of Room A215	N10	<0.4	<0.5	**1.79**
3/22/2016	10:45	0045S-IA-BLO-20160322-N10-015	Room A215 near blower door	N10	<0.4	<0.5	**0.79**
3/22/2016	10:55	0045S-IA-WA215-20160322-N10-016	Room A215 west end	N10	<0.4	<0.5	**0.69**
3/22/2016	11:03	0045S-IA-EA215-20160322-N10-017	Room A215 east end	N10	<0.4	<0.5	**2.28**
3/22/2016	11:14	0045S-IA-BLO-20160322-N10-018	Room A215 near blower door	N10	<0.4	<0.5	**0.76**
3/22/2016	11:22	0045S-IA-WA215-20160322-N10-019	Room A215 west end	N10	<0.4	<0.5	**0.83**
3/22/2016	11:31	0045S-IA-EA215-20160322-N10-020	Room A215 east end	N10	<0.4	<0.5	**2.14**
3/22/2016	11:40	0045S-IA-BLO-20160322-N10-021	Room A215 near blower door	N10	<0.4	<0.5	**0.83**
3/22/2016	12:15	0045S-IA-EA215-20160322-N15-022	Room A215 east end	N15	<0.4	<0.5	**1.52**
3/22/2016	12:23	0045S-IA-WA215-20160322-N15-023	Room A215 west end	N15	<0.4	<0.5	<0.7
3/22/2016	12:31	0045S-IA-BLO-20160322-N15-024	Room A215 near blower door	N15	<0.4	<0.5	<0.7
3/22/2016	12:40	0045S-IA-EA215-20160322-N15-025	Room A215 east end	N15	<0.4	<0.5	**0.69**
3/22/2016	12:52	0045S-IA-UA219-20160322-N15-026	Under door separating Rooms A215 and A219	N15	<0.4	<0.5	<0.7
3/22/2016	13:00	0045S-IA-WA215-20160322-N15-027	Room A215 west end	N15	<0.4	<0.5	<0.7
3/22/2016	13:11	0045S-IA-BLO-20160322-N15-028	Room A215 near blower door	N15	<0.4	<0.5	<0.7
3/22/2016	13:20	0045S-IA-EA215-20160322-N15-029	Room A215 east end	N15	<0.4	<0.5	**0.69**
3/22/2016	13:35	0045S-IA-WA215-20160322-N15-030	Room A215 west end	N15	<0.4	<0.5	**0.76**
3/22/2016	13:44	0045S-IA-BLO-20160322-N15-031	Room A215 near blower door	N15	<0.4	<0.5	**0.76**
3/22/2016	13:53	0045S-IA-EA215-20160322-N15-032	Room A215 east end	N15	<0.4	<0.5	**0.83**
3/22/2016	14:00	0045S-IA-WA215-20160322-N15-033	Room A215 west end	N15	<0.4	<0.5	**0.69**
3/22/2016	14:22	0045S-IA-WA215-20160322-P5-034	Room A215 west end	P5	<0.4	<0.5	<0.7
3/22/2016	14:37	0045S-IA-BLO-20160322-P5-035	Room A215 near blower door	P5	<0.4	<0.5	<0.7
3/22/2016	15:04	0045S-IA-EA215-20160322-P5-038	Room A215 east end	P5	<0.4	<0.5	<0.7
3/22/2016	15:15	0045S-IA-HEXIT-20160322-BL-039	Hallway near Room A210/Exit/Near Autoshop	NA	<0.4	**1.3**	<0.7
3/22/2016	15:25	0045S-IA-TSTOR-20160322-BL-040	Theater storage room	NA	<0.4	<0.5	<0.7

TABLE 19

0045-S Room A215 Pressure Cycling Analytical Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

Date	Time	Sample ID	Sample Location Description	Differential Pressure Condition	cis-1,2-Dichloroethene (µg/m^3)		Tricholorethene (µg/m^3)	Tetrachloroethene (µg/m^3)
					IASL:	NA	3.0 µg/m^3	47 µg/m^3
					Tier 1 RAL:	NA	8.8 µg/m^3	180 µg/m^3
3/22/2016	15:45	0045S-IA-RB211-20160322- BL-041	Room B211/B211A	NA	<0.4		<0.5	<0.7
3/22/2016	16:16	0045S-SG-SG1-20160322-042-4'	Soil gas sample on south side of autoshop (collected from 4 ft bgs)	NA	<0.4		<0.5	<0.7
3/22/2016	16:29	0045S-SG-SG1-20160322-043-4'	Soil gas sample on south side of autoshop (collected from 4 ft bgs)	NA	<0.4		<0.5	**2.55**

NOTES:

µg/m^3 = Microgram(s) per cubic meter.

' = Feet.

< = Less than.

AOU 1 = Accelerated Operable Unit 1 East Side Springs.

bgs = Below ground surface.

BL = Baseline.

ft = Feet(foot).

IA = Indoor air.

IASL = Commercial/industrial indoor air screening level.

ID = Identification.

N10 = Negative 10 Pascal pressure step.

N15 = Negative 15 Pascal pressure step.

NA = Not applicable.

OA = Outdoor air.

P5 = Positive 5 Pascal pressure step.

PCE = Tetrachloroethene.

SG = Soil gas.

RAL = Commercial/industrial removal action level.

VA = Department of Veterans Affairs.

Bolded values are detections.

Shaded values are screening level and/or removal action level exceedances.

Figures

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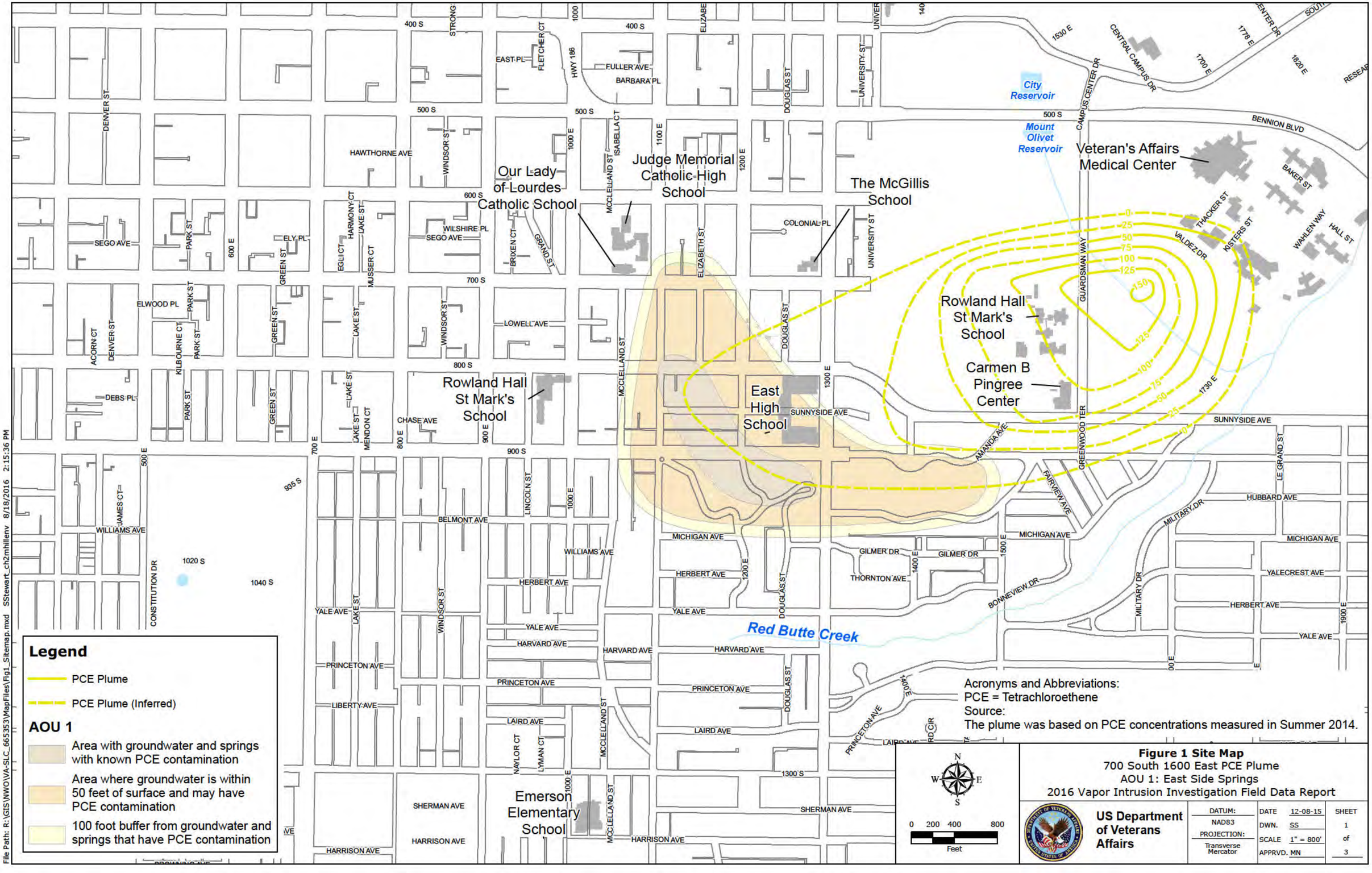

Figure 1 Site Map
700 South 1600 East PCE Plume
AOU 1: East Side Springs
2016 Vapor Intrusion Investigation Field Data Report

US Department of Veterans Affairs

DATUM: NAD83	DATE 12-08-15	SHEET 1 of 3
PROJECTION: Transverse Mercator	DWN. SS	
	SCALE 1" = 800'	
	APPRVD. MN	

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Legend

2016 Focus Area

Approximate Regional Groundwater Flow Direction

2016 New Sample Location

- □ PCE not detected above screening level in indoor air or near-slab soil gas
- ▲ PCE detected above screening level in indoor air. PCE not detectable above screening level in near-slab soil gas
- ■ PCE detected above screening level in indoor air and near-slab soil gas

AOU 1

- Area with groundwater and springs with known PCE contamination
- Area where groundwater is within 50 feet of surface and may have PCE contamination
- 100 foot buffer from groundwater and springs that have PCE contamination

0041-H, 0050-H, 0045-S, 0056-H, 0053-H, 0054-H, 0055-H, 0047-H, 0040-H, 0052-H, 0051-H

East High School

Emerson Elementary School

City Reservoir

Mount Olivet Reservoir

Veteran's Affairs Medical Center

Red Butte Creek

Acronyms and Abbreviations:
PCE = Tetrachloroethene

Source:
The plume was based on PCE concentrations measured in Fall 2015.

N W E S

0 200 400 800
Feet

Figure 2 2016 Focus Area and Sample Locations
700 South 1600 East PCE Plume
AOU 1: East Side Springs
2016 Vapor Intrusion Investigation Field Data Report

US Department of Veterans Affairs

DATUM: NAD83	DATE	07-26-16	SHEET
PROJECTION: Transverse Mercator	DWN.	SS	3
	SCALE	1" = 800'	of
	APPRVD.	QB	3

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Appendix A-1
Laboratory Validated Results

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APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
7747	293	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	ACE	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Acetone	21	E	0.3	ppb	67-64-1	1	0		161047			percent	N			1
7748	294	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	ACE	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Acetone	49	E	0.71	µg/m3	67-64-1	1	0		161047			percent	N			2.4
7749	310	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	ETACET	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Ethyl acetate	15		0.54	µg/m3	141-78-6	1	0		161047			percent	N			3.6
7750	312	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	HEXANE	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	n-Hexane	25		0.53	µg/m3	110-54-3	1	0		161047			percent	N			1.8
9517	332	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15 SIM	PCE	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	Tetrachloroethene	1.8			µg/m3	127-18-4	1	0		166977			percent	N			0.34
7751	342	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	BZME	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Toluene	25		0.57	µg/m3	108-88-3	1	0		161047			percent	N			1.9
7752	377	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	TIC-02	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Ethanol	600			ppb	TIC-01	1	0		161047			percent	N			
7753	379	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	TIC-03	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Isopropyl Alcohol	35			ppb	TIC-02	1	0		161047			percent	N			
7754	381	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	TIC-04	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Isobutane	11			ppb	TIC-49	1	0		161047			percent	N			
7756	276	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	FC12	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Dichlorodifluoromethane	2.4	J	0.74	µg/m3	75-71-8	1	0		161047			percent	N			2.5
7757	278	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	CLME	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Methyl chloride	1.3		0.31	µg/m3	74-87-3	1	0		161047			percent	N			1
7758	280	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	FC114	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Freon 114	1	U	1	µg/m3	76-14-2	1	0		161047			percent	N			3.5
7759	284	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	BRME	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Bromomethane	0.58	U	0.58	µg/m3	74-83-9	1	0		161047			percent	N			1.9
7760	286	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	CLEA	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Ethyl chloride	0.4	U	0.4	µg/m3	75-00-3	1	0		161047			percent	N			1.3
7761	288	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	FC11	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Freon 11	1.9	J	0.84	µg/m3	75-69-4	1	0		161047			percent	N			2.8
7762	290	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	FC113	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Freon 113	1.1	U	1.1	µg/m3	76-13-1	1	0		161047			percent	N			3.8
7763	292	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	DCE11	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	1,1-Dichloroethene	0.59	U	0.59	µg/m3	75-35-4	1	0		161047			percent	N			2
7764	296	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	CDS	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Carbon disulfide	0.47	U	0.47	µg/m3	75-15-0	1	0		161047			percent	N			1.6
7765	298	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	MTLNCL	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Methylene chloride	1.4	J	0.52	µg/m3	75-09-2	1	0		161047			percent	N			1.7
7766	300	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	DCE12T	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	trans-1,2-Dichloroethene	0.59	U	0.59	µg/m3	156-60-5	1	0		161047			percent	N			2
7767	302	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	MTBE	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Methyl t-butyl ether	0.54	U	0.54	µg/m3	1634-04-4	1	0		161047			percent	N			1.8
7768	304	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	VA	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Vinyl acetate	0.53	U	0.53	µg/m3	108-05-4	1	0		161047			percent	N			1.8
7769	306	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	MEK	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Methyl ethyl ketone	1.5	J	0.44	µg/m3	78-93-3	1	0		161047			percent	N			1.5
7770	308	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	DCA11	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	1,1-Dichloroethane	0.61	U	0.61	µg/m3	75-34-3	1	0		161047			percent	N			2
7771	309	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	ETACET	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Ethyl acetate	4.2		0.15	ppb	141-78-6	1	0		161047			percent	N			1
7772	311	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	HEXANE	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	n-Hexane	7		0.15	ppb	110-54-3	1	0		161047			percent	N			0.5
7773	314	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	TCLME	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Chloroform	3.1		0.73	µg/m3	67-66-3	1	0		161047			percent	N			2.4
7774	316	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	THF	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Tetrahydrofuran	0.44	U	0.44	µg/m3	109-99-9	1	0		161047			percent	N			1.5
7775	318	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	DCA12	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	1,2-Dichloroethane	0.61	U	0.61	µg/m3	107-06-2	1	0		161047			percent	N			2
7776	320	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	TCA111	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	1,1,1-Trichloroethane	0.82	U	0.82	µg/m3	71-55-6	1	0		161047			percent	N			2.7
7777	322	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	CTCL	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Carbon tetrachloride	0.94	U	0.94	µg/m3	56-23-5	1	0		161047			percent	N			3.1
7778	323	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	BZ	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Benzene	3.1		0.15	ppb	71-43-2	1	0		161047			percent	N			0.5
7779	324	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	BZ	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Benzene	9.9		0.48	µg/m3	71-43-2	1	0		161047			percent	N			1.6
7780	325	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	CYHEXANE	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Cyclohexane	2		0.15	ppb	110-82-7	1	0		161047			percent	N			0.5
7781	326	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	CYHEXANE	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Cyclohexane	6.7		0.52	µg/m3	110-82-7	1	0		161047			percent	N			1.7
7782	328	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	DCPA12	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	1,2-Dichloropropane	0.73	U	0.73	µg/m3	78-87-5	1	0		161047			percent	N			2.4
7783	330	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	BDCME	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Bromodichloromethane	1	U	1	µg/m3	75-27-4	1	0		161047			percent	N			3.4
7784	331	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	142-82-5	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Heptane	1.1		0.15	ppb	142-82-5	1	0		161047			percent	N			0.5
7785	332	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	142-82-5	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Heptane	4.7		0.61	µg/m3	142-82-5	1	0		161047			percent	N			2
7786	334	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	DCP13C	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	cis-1,3-Dichloropropene	0.68	U	0.68	µg/m3	10061-01-5	1	0		161047			percent	N			2.3
7787	336	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	MIBK	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Methyl isobutyl ketone	0.61	U	0.61	µg/m3	108-10-1	1	0		161047			percent	N			2
7788	338	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	DCP13T	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	trans-1,3-Dichloropropene	0.68	U	0.68	µg/m3	10061-02-6	1	0		161047			percent	N			2.3
7789	340	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	TCA112	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	1,1,2-Trichloroethane	0.82	U	0.82	µg/m3	79-00-5	1	0		161047			percent	N			2.7
7790	341	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	BZME	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Toluene	6.7		0.15	ppb	108-88-3	1	0		161047			percent	N			0.5
7791	343	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	HXO2	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	2-Hexanone	0.3	U	0.3	ppb	591-78-6	1	0		161047			percent	N			1
7792	344	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	HXO2	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	2-Hexanone	1.2	U	1.2	µg/m3	591-78-6	1	0		161047			percent	N			4.1
7793	346	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	DBCME	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Dibromochloromethane	1.3	U	1.3	µg/m3	124-48-1	1	0		161047			percent	N			4.3
7794	348	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	EDB	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	1,2-Dibromoethane	1.2	U	1.2	µg/m3	106-93-4	1	0		161047			percent	N			3.8
7795	350	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	CLBZ	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Chlorobenzene	0.69	U	0.69	µg/m3	108-90-7	1	0		161047			percent	N			2.3
7796	352	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	EBZ	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Ethyl benzene	1.3	J	0.65	µg/m3	100-41-4	1	0		161047			percent	N			2.2
7797	353	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	XYLENES1314	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	m,p-Xylene	1.5		0.15	ppb	179601-23-1	1	0		161047			percent	N			0.5
7798	354	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	XYLENES1314	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	m,p-Xylene	6.4		0.65	µg/m3	179601-23-1	1	0		161047			percent	N			2.2
7799	356	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	XYLO	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	o-Xylene	1.7	J	0.65	µg/m3	95-47-6	1	0		161047			percent	N			2.2
7800	358	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	STY	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Styrene	0.64	U	0.64	µg/m3	100-42-5	1	0		161047			percent	N			2.1
7801	360	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	TBME	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Bromoform	1.6	U	1.6	µg/m3	75-25-2	1	0		161047			percent	N			5.2
7802	362	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	PCA	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	1,1,2,2-Tetrachloroethane	1	U	1	µg/m3	79-34-5	1	0		161047			percent	N			3.4
7803	363	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	EBZME4	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	4-Ethyl toluene	0.15	U	0.15	ppb	622-96-8	1	0		161047			percent	N			1
7804	364	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	EBZME4	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	4-Ethyl toluene	0.74	U	0.74	µg/m3	622-96-8	1	0		161047			percent	N			4.9
7805	366	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	TMB135	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	1,3,5-Trimethylbenzene	0.74	U	0.74	µg/m3	108-67-8	1	0		161047			percent	N			2.5
7806	368	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	TMB124	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	1,2,4-Trimethylbenzene	2.8	J	0.74	µg/m3	95-63-6	1	0		161047			percent	N			4.9
7807	370	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	DCBZ13	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	1,3-Dichlorobenzene	0.9	U	0.9	µg/m3	541-73-1	1	0		161047			percent	N			3
7808	372	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	DCBZ14	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	1,4-Dichlorobenzene	0.9	U	0.9	µg/m3	106-46-7	1	0		161047			percent	N			3
7809	373	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	DCBZ12	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	1,2-Dichlorobenzene	0.3	U	0.3	ppb	95-50-1	1	0		161047			percent	N			1
7810	374	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	DCBZ12	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	1,2-Dichlorobenzene	1.8	U	1.8	µg/m3	95-50-1	1	0		161047			percent	N			6
7811	375	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	TIC-01	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Propene	9			ppb	TIC-63	1	0		161047			percent	N			
7816	383	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	TIC-05	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Butane	6.2			ppb	TIC-34	1	0		161047			percent	N			
7818	385	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	TIC-06	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Pentane	4.1			ppb	TIC-56	1	0		161047			percent	N			
7820	387	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	TIC-07	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Pentane, 2-methyl-	5.4			ppb	TIC-58	1	0		161047			percent	N			
7822	389	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	TIC-08	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Pentane, 3-methyl-	2.9			ppb	TIC-59	1	0		161047			percent	N			
7824	391	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	TIC-09	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Cyclopentane, methyl-	2.1			ppb	TIC-42	1	0		161047			percent	N			
7826	393	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	TIC-10	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Limonene	2.8			ppb	TIC-50	1	0		161047			percent	N			
7827	275	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	FC12	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Dichlorodifluoromethane	0.49	J	0.15	ppb	75-71-8	1	0		161047			percent	N			0.5
7828	277	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	CLME	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Methyl chloride	0.64		0.15	ppb	74-87-3	1	0		161047			percent	N			0.5
7829	279	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	FC114	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Freon 114	0.15	U	0.15	ppb	76-14-2	1	0		161047			percent	N			0.5
7830	281	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EP

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
7747	293	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	21	J	X	E			0.3	1	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7748	294	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	49	J	X	E			0.71	2.4	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7749	310	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	15		X	=			0.54	3.6	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7750	312	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	25		X	=			0.53	1.8	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
9517	332	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.8		X	=				0.34	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
7751	342	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	25		X	=			0.57	1.9	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7752	377	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	600	NJ	X	=					A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7753	379	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	35	NJ	X	=					A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7754	381	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	11	NJ	X	=					A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7756	276	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	2.4	J	X	J			0.74	2.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7757	278	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.3		X	=			0.31	1	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7758	280	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1	U	X	U			1	3.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7759	284	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.58	U	X	U			0.58	1.9	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7760	286	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.4	U	X	U			0.4	1.3	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7761	288	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.9	J	X	J			0.84	2.8	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7762	290	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.1	U	X	U			1.1	3.8	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7763	292	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	2	U	X	U			0.59	2	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7764	296	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.47	U	X	U			0.47	1.6	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7765	298	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.4	J	X	J			0.52	1.7	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7766	300	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.59	U	X	U			0.59	2	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7767	302	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.54	U	X	U			0.54	1.8	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7768	304	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.53	U	X	U			0.53	1.8	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7769	306	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.5	J	X	J			0.44	1.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7770	308	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	2	U	X	U			0.61	2	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7771	309	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	4.2		X	=			0.15	1	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7772	311	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	7		X	=			0.15	0.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7773	314	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	3.1		X	=			0.73	2.4	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7774	316	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.44	U	X	U			0.44	1.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7775	318	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.61	U	X	U			0.61	2	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7776	320	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	2.7	U	X	U			0.82	2.7	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7777	322	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.94	U	X	U			0.94	3.1	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7778	323	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	3.1		X	=			0.15	0.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7779	324	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	9.9		X	=			0.48	1.6	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7780	325	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	2		X	=			0.15	0.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7781	326	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	6.7		X	=			0.52	1.7	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7782	328	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.73	U	X	U			0.73	2.4	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7783	330	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1	U	X	U			1	3.4	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7784	331	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.1		X	=			0.15	0.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7785	332	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	4.7		X	=			0.61	2	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7786	334	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.68	U	X	U			0.68	2.3	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7787	336	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.61	U	X	U			0.61	2	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7788	338	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.68	U	X	U			0.68	2.3	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7789	340	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	2.7	U	X	U			0.82	2.7	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7790	341	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	6.7		X	=			0.15	0.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7791	343	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.3	U	X	U			0.3	1	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7792	344	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.2	U	X	U			1.2	4.1	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7793	346	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.3	U	X	U			1.3	4.3	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7794	348	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.2	U	X	U			1.2	3.8	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7795	350	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.69	U	X	U			0.69	2.3	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7796	352	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.3	J	X	J			0.65	2.2	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7797	353	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.5		X	=			0.15	0.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7798	354	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	6.4		X	=			0.65	2.2	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7799	356	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.7	J	X	J			0.65	2.2	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7800	358	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.64	U	X	U			0.64	2.1	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7801	360	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.6	U	X	U			1.6	5.2	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7802	362	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	3.4	U	X	U			1	3.4	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7803	363	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	1	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7804	364	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.74	U	X	U			0.74	4.9	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7805	366	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.74	U	X	U			0.74	2.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7806	368	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	2.8	J	X	J			0.74	4.9	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7807	370	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.9	U	X	U			0.9	3	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7808	372	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.9	U	X	U			0.9	3	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7809	373	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.3	U	X	U			0.3	1	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7810	374	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.8	U	X	U			1.8	6	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7811	375	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	9	R	X	=					A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7816	383	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	6.2	R	X	=					A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7818	385	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	4.1	NJ	X	=					A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7820	387	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	5.4	NJ	X	=					A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7822	389	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	2.9	NJ	X	=					A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7824	391	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	2.1	NJ	X	=					A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7826	393	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	2.8	NJ	X	=					A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7827	275	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.49	J	X	J			0.15	0.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7828	277	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.64		X	=			0.15	0.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7829	279	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7830	281	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.36	J	X	J			0.15	0.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7831	282	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.79	J	X	J			0.33	1.1	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7832	283	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12

APPENDIX A-1

Laboratory Validated Results

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
7747	293	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			1	1	J	>ICLinearRange	mfesler Tier 2B/Tier 4
7748	294	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			2.4	2.4	J	>ICLinearRange	mfesler Tier 2B/Tier 4
7749	310	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			3.6	3.6			mfesler Tier 2B/Tier 4
7750	312	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			1.8	1.8			mfesler Tier 2B/Tier 4
9517	332	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.34	0.34			jbeckett - Tier 2B
7751	342	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			1.9	1.9			mfesler Tier 2B/Tier 4
7752	377	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy					NJ	TIC	mfesler Tier 2B/Tier 4
7753	379	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy					NJ	TIC	mfesler Tier 2B/Tier 4
7754	381	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy					NJ	TIC	mfesler Tier 2B/Tier 4
7756	276	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			2.5	2.5			mfesler Tier 2B/Tier 4
7757	278	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			1	1			mfesler Tier 2B/Tier 4
7758	280	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			3.5	3.5			mfesler Tier 2B/Tier 4
7759	284	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			1.9	1.9			mfesler Tier 2B/Tier 4
7760	286	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			1.3	1.3			mfesler Tier 2B/Tier 4
7761	288	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			2.8	2.8			mfesler Tier 2B/Tier 4
7762	290	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			3.8	3.8			mfesler Tier 2B/Tier 4
7763	292	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			2	2			mfesler Tier 2B/Tier 4
7764	296	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			1.6	1.6			mfesler Tier 2B/Tier 4
7765	298	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			1.7	1.7			mfesler Tier 2B/Tier 4
7766	300	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			2	2			mfesler Tier 2B/Tier 4
7767	302	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			1.8	1.8			mfesler Tier 2B/Tier 4
7768	304	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			1.8	1.8			mfesler Tier 2B/Tier 4
7769	306	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			1.5	1.5			mfesler Tier 2B/Tier 4
7770	308	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			2	2			mfesler Tier 2B/Tier 4
7771	309	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			1	1			mfesler Tier 2B/Tier 4
7772	311	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7773	314	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			2.4	2.4			mfesler Tier 2B/Tier 4
7774	316	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			1.5	1.5			mfesler Tier 2B/Tier 4
7775	318	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			2	2			mfesler Tier 2B/Tier 4
7776	320	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			2.7	2.7			mfesler Tier 2B/Tier 4
7777	322	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			3.1	3.1			mfesler Tier 2B/Tier 4
7778	323	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7779	324	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			1.6	1.6			mfesler Tier 2B/Tier 4
7780	325	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7781	326	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			1.7	1.7			mfesler Tier 2B/Tier 4
7782	328	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			2.4	2.4			mfesler Tier 2B/Tier 4
7783	330	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			3.4	3.4			mfesler Tier 2B/Tier 4
7784	331	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7785	332	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			2	2			mfesler Tier 2B/Tier 4
7786	334	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			2.3	2.3			mfesler Tier 2B/Tier 4
7787	336	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			2	2			mfesler Tier 2B/Tier 4
7788	338	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			2.3	2.3			mfesler Tier 2B/Tier 4
7789	340	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			2.7	2.7			mfesler Tier 2B/Tier 4
7790	341	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7791	343	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			1	1			mfesler Tier 2B/Tier 4
7792	344	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			4.1	4.1			mfesler Tier 2B/Tier 4
7793	346	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			4.3	4.3			mfesler Tier 2B/Tier 4
7794	348	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			3.8	3.8			mfesler Tier 2B/Tier 4
7795	350	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			2.3	2.3			mfesler Tier 2B/Tier 4
7796	352	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			2.2	2.2			mfesler Tier 2B/Tier 4
7797	353	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7798	354	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			2.2	2.2			mfesler Tier 2B/Tier 4
7799	356	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			2.2	2.2			mfesler Tier 2B/Tier 4
7800	358	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			2.1	2.1			mfesler Tier 2B/Tier 4
7801	360	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			5.2	5.2			mfesler Tier 2B/Tier 4
7802	362	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			3.4	3.4			mfesler Tier 2B/Tier 4
7803	363	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			1	1			mfesler Tier 2B/Tier 4
7804	364	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			4.9	4.9			mfesler Tier 2B/Tier 4
7805	366	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			2.5	2.5			mfesler Tier 2B/Tier 4
7806	368	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			4.9	4.9			mfesler Tier 2B/Tier 4
7807	370	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			3	3			mfesler Tier 2B/Tier 4
7808	372	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			3	3			mfesler Tier 2B/Tier 4
7809	373	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			1	1			mfesler Tier 2B/Tier 4
7810	374	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			6	6			mfesler Tier 2B/Tier 4
7811	375	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy					R	TIC	mfesler Tier 2B/Tier 4
7816	383	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy					R	TIC	mfesler Tier 2B/Tier 4
7818	385	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy					NJ	TIC	mfesler Tier 2B/Tier 4
7820	387	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy					NJ	TIC	mfesler Tier 2B/Tier 4
7822	389	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy					NJ	TIC	mfesler Tier 2B/Tier 4
7824	391	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy					NJ	TIC	mfesler Tier 2B/Tier 4
7826	393	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy					NJ	TIC	mfesler Tier 2B/Tier 4
7827	275	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7828	277	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7829	279	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7830	281	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7831	282	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			1.1	1.1			mfesler Tier 2B/Tier 4
7832	283	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7833	285	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7834	287	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7835	289	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7836	291	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7837	295	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7838	297	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7839	299	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7840	301	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7841	303	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7842	305	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7843	307	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7844	313	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
7845	315	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	THF	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Tetrahydrofuran	0.15	U	0.15	ppb	109-99-9	1	0		161047			percent	N			0.5
7846	317	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	DCA12	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	1,2-Dichloroethane	0.15	U	0.15	ppb	107-06-2	1	0		161047			percent	N			0.5
7847	319	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	TCA111	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	1,1,1-Trichloroethane	0.15	U	0.15	ppb	71-55-6	1	0		161047			percent	N			0.5
7848	321	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	CTCL	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Carbon tetrachloride	0.15	U	0.15	ppb	56-23-5	1	0		161047			percent	N			0.5
7849	327	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	DCPA12	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	1,2-Dichloropropane	0.15	U	0.15	ppb	78-87-5	1	0		161047			percent	N			0.5
7850	329	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	BDCME	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Bromodichloromethane	0.15	U	0.15	ppb	75-27-4	1	0		161047			percent	N			0.5
7851	333	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	DCP13C	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	cis-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-01-5	1	0		161047			percent	N			0.5
7852	335	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	MIBK	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Methyl isobutyl ketone	0.15	U	0.15	ppb	108-10-1	1	0		161047			percent	N			0.5
7853	337	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	DCP13T	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	trans-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-02-6	1	0		161047			percent	N			0.5
7854	339	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	TCA112	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	1,1,2-Trichloroethane	0.15	U	0.15	ppb	79-00-5	1	0		161047			percent	N			0.5
7855	345	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	DBCME	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Dibromochloromethane	0.15	U	0.15	ppb	124-48-1	1	0		161047			percent	N			0.5
7856	347	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	EDB	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	1,2-Dibromoethane	0.15	U	0.15	ppb	106-93-4	1	0		161047			percent	N			0.5
7857	349	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	CLBZ	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Chlorobenzene	0.15	U	0.15	ppb	108-90-7	1	0		161047			percent	N			0.5
7858	351	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	EBZ	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Ethyl benzene	0.3	J	0.15	ppb	100-41-4	1	0		161047			percent	N			0.5
7859	355	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	XYLO	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	o-Xylene	0.4	J	0.15	ppb	95-47-6	1	0		161047			percent	N			0.5
7860	357	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	STY	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Styrene	0.15	U	0.15	ppb	100-42-5	1	0		161047			percent	N			0.5
7861	359	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	TBME	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Bromoform	0.15	U	0.15	ppb	75-25-2	1	0		161047			percent	N			0.5
7862	361	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	PCA	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	1,1,2,2-Tetrachloroethane	0.15	U	0.15	ppb	79-34-5	1	0		161047			percent	N			0.5
7863	365	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	TMB135	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	1,3,5-Trimethylbenzene	0.15	U	0.15	ppb	108-67-8	1	0		161047			percent	N			0.5
7864	367	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	TMB124	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	1,2,4-Trimethylbenzene	0.57	J	0.15	ppb	95-63-6	1	0		161047			percent	N			1
7865	369	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	DCBZ13	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	1,3-Dichlorobenzene	0.15	U	0.15	ppb	541-73-1	1	0		161047			percent	N			0.5
7866	371	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	DCBZ14	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	1,4-Dichlorobenzene	0.15	U	0.15	ppb	106-46-7	1	0		161047			percent	N			0.5
7867	406	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15	BR4FBZ	EPA TO-15	AIR	FD		12/3/2015	12/7/2015		12/10/2015	4-Bromofluorobenzene	102.29			PERCENT	460-00-4	1	0		161047	20	102.29	percent	Y			
7868	163	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	ACE	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Acetone	19		0.3	ppb	67-64-1	1	0		161047			percent	N			1
7869	164	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	ACE	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Acetone	45		0.71	µg/m3	67-64-1	1	0		161047			percent	N			2.4
7870	180	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	ETACET	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Ethyl acetate	15		0.54	µg/m3	141-78-6	1	0		161047			percent	N			3.6
7871	182	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	HEXANE	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	n-Hexane	24		0.53	µg/m3	110-54-3	1	0		161047			percent	N			1.8
7872	212	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	BZME	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Toluene	25		0.57	µg/m3	108-88-3	1	0		161047			percent	N			1.9
7873	247	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	TIC-02	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Ethanol	610			ppb	TIC-01	1	0		161047			percent	N			
7874	249	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	TIC-03	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Isopropyl Alcohol	36			ppb	TIC-02	1	0		161047			percent	N			
7875	251	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	TIC-04	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Isobutane	10			ppb	TIC-49	1	0		161047			percent	N			
7877	146	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	FC12	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Dichlorodifluoromethane	2.6		0.74	µg/m3	75-71-8	1	0		161047			percent	N			2.5
7878	148	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	CLME	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Methyl chloride	1.3		0.31	µg/m3	74-87-3	1	0		161047			percent	N			1
7879	150	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	FC114	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Freon 114	1	U	1	µg/m3	76-14-2	1	0		161047			percent	N			3.5
7880	154	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	BRME	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Bromomethane	0.58	U	0.58	µg/m3	74-83-9	1	0		161047			percent	N			1.9
7881	156	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	CLEA	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Ethyl chloride	0.4	U	0.4	µg/m3	75-00-3	1	0		161047			percent	N			1.3
7882	158	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	FC11	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Freon 11	1.9	J	0.84	µg/m3	75-69-4	1	0		161047			percent	N			2.8
7883	160	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	FC113	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Freon 113	1.1	U	1.1	µg/m3	76-13-1	1	0		161047			percent	N			3.8
7884	162	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	DCE11	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,1-Dichloroethene	0.59	U	0.59	µg/m3	75-35-4	1	0		161047			percent	N			2
7885	166	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	CDS	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Carbon disulfide	0.47	U	0.47	µg/m3	75-15-0	1	0		161047			percent	N			1.6
7886	168	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	MTLNCL	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Methylene chloride	1.2	J	0.52	µg/m3	75-09-2	1	0		161047			percent	N			1.7
7887	170	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	DCE12T	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	trans-1,2-Dichloroethene	0.59	U	0.59	µg/m3	156-60-5	1	0		161047			percent	N			2
7888	172	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	MTBE	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Methyl t-butyl ether	0.54	U	0.54	µg/m3	1634-04-4	1	0		161047			percent	N			1.8
7889	174	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	VA	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Vinyl acetate	0.53	U	0.53	µg/m3	108-05-4	1	0		161047			percent	N			1.8
7890	176	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	MEK	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Methyl ethyl ketone	1.8		0.44	µg/m3	78-93-3	1	0		161047			percent	N			1.5
7891	178	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	DCA11	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,1-Dichloroethane	0.61	U	0.61	µg/m3	75-34-3	1	0		161047			percent	N			2
7892	179	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	ETACET	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Ethyl acetate	4.3		0.15	ppb	141-78-6	1	0		161047			percent	N			1
7893	181	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	HEXANE	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	n-Hexane	6.9		0.15	ppb	110-54-3	1	0		161047			percent	N			0.5
7894	184	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	TCLME	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Chloroform	3.1		0.73	µg/m3	67-66-3	1	0		161047			percent	N			2.4
7895	186	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	THF	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Tetrahydrofuran	0.44	U	0.44	µg/m3	109-99-9	1	0		161047			percent	N			1.5
7896	188	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	DCA12	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,2-Dichloroethane	0.61	U	0.61	µg/m3	107-06-2	1	0		161047			percent	N			2
7897	190	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	TCA111	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,1,1-Trichloroethane	0.82	U	0.82	µg/m3	71-55-6	1	0		161047			percent	N			2.7
7898	192	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	CTCL	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Carbon tetrachloride	0.94	U	0.94	µg/m3	56-23-5	1	0		161047			percent	N			3.1
7899	193	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	BZ	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Benzene	3		0.15	ppb	71-43-2	1	0		161047			percent	N			0.5
7900	194	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	BZ	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Benzene	9.7		0.48	µg/m3	71-43-2	1	0		161047			percent	N			1.6
7901	195	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	CYHEXANE	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Cyclohexane	1.9		0.15	ppb	110-82-7	1	0		161047			percent	N			0.5
7902	196	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	CYHEXANE	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Cyclohexane	6.7		0.52	µg/m3	110-82-7	1	0		161047			percent	N			1.7
7903	198	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	DCPA12	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,2-Dichloropropane	0.73	U	0.73	µg/m3	78-87-5	1	0		161047			percent	N			2.4
7904	200	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	BDCME	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Bromodichloromethane	1	U	1	µg/m3	75-27-4	1	0		161047			percent	N			3.4
7905	201	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	142-82-5	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Heptane	1.1		0.15	ppb	142-82-5	1	0		161047			percent	N			0.5
7906	202	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	142-82-5	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Heptane	4.6		0.61	µg/m3	142-82-5	1	0		161047			percent	N			2
7907	204	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	DCP13C	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	cis-1,3-Dichloropropene	0.68	U	0.68	µg/m3	10061-01-5	1	0		161047			percent	N			2.3
7908	206	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	MIBK	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Methyl isobutyl ketone	0.61	U	0.61	µg/m3	108-10-1	1	0		161047			percent	N			2
7909	208	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	DCP13T	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	trans-1,3-Dichloropropene	0.68	U	0.68	µg/m3	10061-02-6	1	0		161047			percent	N			2.3
7910	210	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	TCA112	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,1,2-Trichloroethane	0.82	U	0.82	µg/m3	79-00-5	1	0		161047			percent	N			2.7
7911	211	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	BZME	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Toluene	6.7		0.15	ppb	108-88-3	1	0		161047			percent	N			0.5
7912	213	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	HXO2	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	2-Hexanone	0.3	U	0.3	ppb	591-78-6	1	0		161047			percent	N			1
7913	214	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	HXO2	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	2-Hexanone	1.2	U	1.2	µg/m3	591-78-6	1	0		161047			percent	N			4.1
7914	216	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	DBCME	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Dibromochloromethane	1.3	U	1.3	µg/m3	124-48-1	1	0		161047			percent	N			4.3
7915	218	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	EDB	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,2-Dibromoethane	1.2	U	1.2	µg/m3	106-93-4	1	0		161047			percent	N			3.8
7916	220	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	CLBZ	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Chlorobenzene	0.69	U	0.69	µg/m3	108-90-7	1	0		161047			percent	N			2.3
7917	222	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	EBZ	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Ethyl benzene	1.3	J	0.65	µg/m3	100-41-4	1	0		161047			percent	N			2.2
7918	223	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	XYLENES1314	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	m,p-Xylene	1.5		0.15	ppb	179601-23-1	1	0		161047			percent	N			0.5
7919	224	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	XYLENES1314	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	m,p-Xylene	6.4		0.65	µg/m3	179601-23-1	1	0		161047			percent	N			2.2
7920	226	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	XYLO	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	o-Xylene	1.7	J	0.65	µg/m3	95-47-6	1	0		161047			percent	N			2.2
7921	228	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA T

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
7845	315	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7846	317	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7847	319	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.5	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7848	321	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7849	327	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7850	329	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7851	333	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7852	335	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7853	337	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7854	339	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.5	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7855	345	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7856	347	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7857	349	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7858	351	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.3	J	X	J			0.15	0.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7859	355	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.4	J	X	J			0.15	0.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7860	357	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7861	359	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7862	361	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.5	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7863	365	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7864	367	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.57	J	X	J			0.15	1	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7865	369	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7866	371	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7867	406	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	102.29		X	=	67.698	129.86			A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161047		TRUE
7868	163	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	19		X	=			0.3	1	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7869	164	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	45		X	=			0.71	2.4	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7870	180	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	15		X	=			0.54	3.6	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7871	182	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	24		X	=			0.53	1.8	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7872	212	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	25		X	=			0.57	1.9	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7873	247	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	610	NJ	X	=					A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7874	249	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	36	NJ	X	=					A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7875	251	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	10	NJ	X	=					A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7877	146	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	2.6		X	=			0.74	2.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7878	148	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.3		X	=			0.31	1	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7879	150	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1	U	X	U			1	3.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7880	154	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.58	U	X	U			0.58	1.9	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7881	156	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.4	U	X	U			0.4	1.3	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7882	158	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.9	J	X	J			0.84	2.8	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7883	160	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.1	U	X	U			1.1	3.8	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7884	162	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.59	U	X	U			0.59	2	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7885	166	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.47	U	X	U			0.47	1.6	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7886	168	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.2	J	X	J			0.52	1.7	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7887	170	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.59	U	X	U			0.59	2	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7888	172	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.54	U	X	U			0.54	1.8	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7889	174	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.53	U	X	U			0.53	1.8	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7890	176	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.8		X	=			0.44	1.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7891	178	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.61	U	X	U			0.61	2	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7892	179	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	4.3		X	=			0.15	1	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7893	181	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	6.9		X	=			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7894	184	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	3.1		X	=			0.73	2.4	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7895	186	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.44	U	X	U			0.44	1.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7896	188	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.61	U	X	U			0.61	2	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7897	190	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.82	U	X	U			0.82	2.7	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7898	192	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.94	U	X	U			0.94	3.1	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7899	193	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	3		X	=			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7900	194	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	9.7		X	=			0.48	1.6	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7901	195	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.9		X	=			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7902	196	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	6.7		X	=			0.52	1.7	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7903	198	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.73	U	X	U			0.73	2.4	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7904	200	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1	U	X	U			1	3.4	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7905	201	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.1		X	=			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7906	202	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	4.6		X	=			0.61	2	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7907	204	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.68	U	X	U			0.68	2.3	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7908	206	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.61	U	X	U			0.61	2	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7909	208	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.68	U	X	U			0.68	2.3	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7910	210	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.82	U	X	U			0.82	2.7	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7911	211	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	6.7		X	=			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7912	213	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.3	U	X	U			0.3	1	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7913	214	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.2	U	X	U			1.2	4.1	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7914	216	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.3	U	X	U			1.3	4.3	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7915	218	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.2	U	X	U			1.2	3.8	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7916	220	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.69	U	X	U			0.69	2.3	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7917	222	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.3	J	X	J			0.65	2.2	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7918	223	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.5		X	=			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7919	224	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	6.4		X	=			0.65	2.2	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7920	226	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.7	J	X	J			0.65	2.2	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7921	228	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.64	U	X	U			0.64	2.1	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7922	230	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.6	U	X	U			1.6	5.2	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7923	232	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1	U	X	U			1	3.4	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TR

APPENDIX A-1

Laboratory Validated Results

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
7845	315	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7846	317	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7847	319	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7848	321	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7849	327	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7850	329	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7851	333	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7852	335	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7853	337	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7854	339	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7855	345	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7856	347	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7857	349	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7858	351	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7859	355	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7860	357	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7861	359	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7862	361	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7863	365	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7864	367	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			1	1			mfesler Tier 2B/Tier 4
7865	369	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7866	371	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7867	406	-1368717145	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy	20						mfesler Tier 2B/Tier 4
7868	163	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			1	1			mfesler Tier 2B/Tier 4
7869	164	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			2.4	2.4			mfesler Tier 2B/Tier 4
7870	180	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			3.6	3.6			mfesler Tier 2B/Tier 4
7871	182	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			1.8	1.8			mfesler Tier 2B/Tier 4
7872	212	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			1.9	1.9			mfesler Tier 2B/Tier 4
7873	247	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy					NJ	TIC	mfesler Tier 2B/Tier 4
7874	249	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy					NJ	TIC	mfesler Tier 2B/Tier 4
7875	251	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy					NJ	TIC	mfesler Tier 2B/Tier 4
7877	146	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			2.5	2.5			mfesler Tier 2B/Tier 4
7878	148	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			1	1			mfesler Tier 2B/Tier 4
7879	150	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			3.5	3.5			mfesler Tier 2B/Tier 4
7880	154	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			1.9	1.9			mfesler Tier 2B/Tier 4
7881	156	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			1.3	1.3			mfesler Tier 2B/Tier 4
7882	158	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			2.8	2.8			mfesler Tier 2B/Tier 4
7883	160	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			3.8	3.8			mfesler Tier 2B/Tier 4
7884	162	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			2	2			mfesler Tier 2B/Tier 4
7885	166	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			1.6	1.6			mfesler Tier 2B/Tier 4
7886	168	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			1.7	1.7			mfesler Tier 2B/Tier 4
7887	170	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			2	2			mfesler Tier 2B/Tier 4
7888	172	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			1.8	1.8			mfesler Tier 2B/Tier 4
7889	174	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			1.8	1.8			mfesler Tier 2B/Tier 4
7890	176	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			1.5	1.5			mfesler Tier 2B/Tier 4
7891	178	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			2	2			mfesler Tier 2B/Tier 4
7892	179	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			1	1			mfesler Tier 2B/Tier 4
7893	181	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7894	184	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			2.4	2.4			mfesler Tier 2B/Tier 4
7895	186	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			1.5	1.5			mfesler Tier 2B/Tier 4
7896	188	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			2	2			mfesler Tier 2B/Tier 4
7897	190	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			2.7	2.7			mfesler Tier 2B/Tier 4
7898	192	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			3.1	3.1			mfesler Tier 2B/Tier 4
7899	193	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7900	194	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			1.6	1.6			mfesler Tier 2B/Tier 4
7901	195	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7902	196	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			1.7	1.7			mfesler Tier 2B/Tier 4
7903	198	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			2.4	2.4			mfesler Tier 2B/Tier 4
7904	200	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			3.4	3.4			mfesler Tier 2B/Tier 4
7905	201	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7906	202	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			2	2			mfesler Tier 2B/Tier 4
7907	204	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			2.3	2.3			mfesler Tier 2B/Tier 4
7908	206	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			2	2			mfesler Tier 2B/Tier 4
7909	208	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			2.3	2.3			mfesler Tier 2B/Tier 4
7910	210	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			2.7	2.7			mfesler Tier 2B/Tier 4
7911	211	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7912	213	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			1	1			mfesler Tier 2B/Tier 4
7913	214	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			4.1	4.1			mfesler Tier 2B/Tier 4
7914	216	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			4.3	4.3			mfesler Tier 2B/Tier 4
7915	218	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			3.8	3.8			mfesler Tier 2B/Tier 4
7916	220	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			2.3	2.3			mfesler Tier 2B/Tier 4
7917	222	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			2.2	2.2			mfesler Tier 2B/Tier 4
7918	223	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7919	224	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			2.2	2.2			mfesler Tier 2B/Tier 4
7920	226	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			2.2	2.2			mfesler Tier 2B/Tier 4
7921	228	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			2.1	2.1			mfesler Tier 2B/Tier 4
7922	230	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			5.2	5.2			mfesler Tier 2B/Tier 4
7923	232	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			3.4	3.4			mfesler Tier 2B/Tier 4
7924	233	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			1	1			mfesler Tier 2B/Tier 4
7925	234	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			4.9	4.9			mfesler Tier 2B/Tier 4
7926	236	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			2.5	2.5			mfesler Tier 2B/Tier 4
7927	238	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			4.9	4.9			mfesler Tier 2B/Tier 4
7928	240	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			3	3			mfesler Tier 2B/Tier 4
7929	242	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			3	3			mfesler Tier 2B/Tier 4
7930	243	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			1	1			mfesler Tier 2B/Tier 4
7931	244	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			6	6			mfesler Tier 2B/Tier 4
7932	245	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy					R	TIC	mfesler Tier 2B/Tier 4
7937	253	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy					NJ	TIC	mfesler Tier 2B/Tier 4
7939	255	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy					NJ	TIC	mfesler Tier 2B/Tier 4

APPENDIX A-1

Laboratory Validated Results

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
7941	257	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	TIC-07	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Pentane, 3-methyl-	2.9			ppb	TIC-59	1	0		161047			percent	N			
7943	259	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	TIC-08	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Cyclopentane, methyl-	2.7			ppb	TIC-42	1	0		161047			percent	N			
7945	261	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	TIC-09	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Limonene	2.4			ppb	TIC-50	1	0		161047			percent	N			
7946	145	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	FC12	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Dichlorodifluoromethane	0.52		0.15	ppb	75-71-8	1	0		161047			percent	N			0.5
7947	147	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	CLME	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Methyl chloride	0.65		0.15	ppb	74-87-3	1	0		161047			percent	N			0.5
7948	149	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	FC114	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Freon 114	0.15	U	0.15	ppb	76-14-2	1	0		161047			percent	N			0.5
7949	151	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	ERYTHRENE	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,3-Butadiene	0.33	J	0.15	ppb	106-99-0	1	0		161047			percent	N			0.5
7950	152	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	ERYTHRENE	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,3-Butadiene	0.73	J	0.33	µg/m3	106-99-0	1	0		161047			percent	N			1.1
7951	153	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	BRME	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Bromomethane	0.15	U	0.15	ppb	74-83-9	1	0		161047			percent	N			0.5
7952	155	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	CLEA	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Ethyl chloride	0.15	U	0.15	ppb	75-00-3	1	0		161047			percent	N			0.5
7953	157	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	FC11	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Freon 11	0.34	J	0.15	ppb	75-69-4	1	0		161047			percent	N			0.5
7954	159	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	FC113	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Freon 113	0.15	U	0.15	ppb	76-13-1	1	0		161047			percent	N			0.5
7955	161	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	DCE11	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,1-Dichloroethene	0.15	U	0.15	ppb	75-35-4	1	0		161047			percent	N			0.5
7956	165	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	CDS	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Carbon disulfide	0.15	U	0.15	ppb	75-15-0	1	0		161047			percent	N			0.5
7957	167	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	MTLNCL	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Methylene chloride	0.33	J	0.15	ppb	75-09-2	1	0		161047			percent	N			0.5
7958	169	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	DCE12T	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	trans-1,2-Dichloroethene	0.15	U	0.15	ppb	156-60-5	1	0		161047			percent	N			0.5
7959	171	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	MTBE	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Methyl t-butyl ether	0.15	U	0.15	ppb	1634-04-4	1	0		161047			percent	N			0.5
7960	173	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	VA	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Vinyl acetate	0.15	U	0.15	ppb	108-05-4	1	0		161047			percent	N			0.5
7961	175	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	MEK	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Methyl ethyl ketone	0.61		0.15	ppb	78-93-3	1	0		161047			percent	N			0.5
7962	177	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	DCA11	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,1-Dichloroethane	0.15	U	0.15	ppb	75-34-3	1	0		161047			percent	N			0.5
7963	183	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	TCLME	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Chloroform	0.64		0.15	ppb	67-66-3	1	0		161047			percent	N			0.5
7964	185	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	THF	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Tetrahydrofuran	0.15	U	0.15	ppb	109-99-9	1	0		161047			percent	N			0.5
7965	187	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	DCA12	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,2-Dichloroethane	0.15	U	0.15	ppb	107-06-2	1	0		161047			percent	N			0.5
7966	189	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	TCA111	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,1,1-Trichloroethane	0.15	U	0.15	ppb	71-55-6	1	0		161047			percent	N			0.5
7967	191	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	CTCL	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Carbon tetrachloride	0.15	U	0.15	ppb	56-23-5	1	0		161047			percent	N			0.5
7968	197	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	DCPA12	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,2-Dichloropropane	0.15	U	0.15	ppb	78-87-5	1	0		161047			percent	N			0.5
7969	199	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	BDCME	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Bromodichloromethane	0.15	U	0.15	ppb	75-27-4	1	0		161047			percent	N			0.5
7970	203	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	DCP13C	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	cis-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-01-5	1	0		161047			percent	N			0.5
7971	205	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	MIBK	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Methyl isobutyl ketone	0.15	U	0.15	ppb	108-10-1	1	0		161047			percent	N			0.5
7972	207	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	DCP13T	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	trans-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-02-6	1	0		161047			percent	N			0.5
7973	209	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	TCA112	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,1,2-Trichloroethane	0.15	U	0.15	ppb	79-00-5	1	0		161047			percent	N			0.5
7974	215	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	DBCME	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Dibromochloromethane	0.15	U	0.15	ppb	124-48-1	1	0		161047			percent	N			0.5
7975	217	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	EDB	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,2-Dibromoethane	0.15	U	0.15	ppb	106-93-4	1	0		161047			percent	N			0.5
7976	219	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	CLBZ	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Chlorobenzene	0.15	U	0.15	ppb	108-90-7	1	0		161047			percent	N			0.5
7977	221	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	EBZ	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Ethyl benzene	0.3	J	0.15	ppb	100-41-4	1	0		161047			percent	N			0.5
7978	225	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	XYLO	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	o-Xylene	0.39	J	0.15	ppb	95-47-6	1	0		161047			percent	N			0.5
7979	227	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	STY	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Styrene	0.15	U	0.15	ppb	100-42-5	1	0		161047			percent	N			0.5
7980	229	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	TBME	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Bromoform	0.15	U	0.15	ppb	75-25-2	1	0		161047			percent	N			0.5
7981	231	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	PCA	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,1,2,2-Tetrachloroethane	0.15	U	0.15	ppb	79-34-5	1	0		161047			percent	N			0.5
7982	235	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	TMB135	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,3,5-Trimethylbenzene	0.15	U	0.15	ppb	108-67-8	1	0		161047			percent	N			0.5
7983	237	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	TMB124	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,2,4-Trimethylbenzene	0.56	J	0.15	ppb	95-63-6	1	0		161047			percent	N			1
7984	239	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	DCBZ13	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,3-Dichlorobenzene	0.15	U	0.15	ppb	541-73-1	1	0		161047			percent	N			0.5
7985	241	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	DCBZ14	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,4-Dichlorobenzene	0.15	U	0.15	ppb	106-46-7	1	0		161047			percent	N			0.5
7986	274	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15	BR4FBZ	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	4-Bromofluorobenzene	102.22			PERCENT	460-00-4	1	0		161047	20	102.22	percent	Y			
7987	264	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15 SIM	DIOXANE14	EPA TO-15 SIM	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,4-Dioxane	0.18	U		µg/m3	123-91-1	1	0		161510			percent	N			0.18
7988	266	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15 SIM	VC	EPA TO-15 SIM	AIR	N		12/3/2015	12/7/2015		12/10/2015	Vinyl chloride	0.13	U		µg/m3	75-01-4	1	0		161510			percent	N			0.13
7989	268	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15 SIM	DCE12C	EPA TO-15 SIM	AIR	N		12/3/2015	12/7/2015		12/10/2015	cis-1,2-Dichloroethene	0.2	U		µg/m3	156-59-2	1	0		161510			percent	N			0.2
7990	269	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15 SIM	PCE	EPA TO-15 SIM	AIR	N		12/3/2015	12/7/2015		12/10/2015	Tetrachloroethene	0.12			ppb	127-18-4	1	0		161510			percent	N			0.05
7991	270	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15 SIM	PCE	EPA TO-15 SIM	AIR	N		12/3/2015	12/7/2015		12/10/2015	Tetrachloroethene	0.82			µg/m3	127-18-4	1	0		161510			percent	N			0.34
7992	272	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15 SIM	TCE	EPA TO-15 SIM	AIR	N		12/3/2015	12/7/2015		12/10/2015	Trichloroethene	0.27	U		µg/m3	79-01-6	1	0		161510			percent	N			0.27
7993	273	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15 SIM	BR4FBZ	EPA TO-15 SIM	AIR	N		12/3/2015	12/7/2015		12/10/2015	4-Bromofluorobenzene	124.51			PERCENT	460-00-4	1	0		161510	1	124.51	percent	Y			
7994	263	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15 SIM	DIOXANE14	EPA TO-15 SIM	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,4-Dioxane	0.05	U		ppb	123-91-1	1	0		161510			percent	N			0.05
7995	265	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15 SIM	VC	EPA TO-15 SIM	AIR	N		12/3/2015	12/7/2015		12/10/2015	Vinyl chloride	0.05	U		ppb	75-01-4	1	0		161510			percent	N			0.05
7996	267	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15 SIM	DCE12C	EPA TO-15 SIM	AIR	N		12/3/2015	12/7/2015		12/10/2015	cis-1,2-Dichloroethene	0.05	U		ppb	156-59-2	1	0		161510			percent	N			0.05
7997	271	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	EPA TO-15 SIM	TCE	EPA TO-15 SIM	AIR	N		12/3/2015	12/7/2015		12/10/2015	Trichloroethene	0.05	U		ppb	79-01-6	1	0		161510			percent	N			0.05
7998	396	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15 SIM	DIOXANE14	EPA TO-15 SIM	AIR	FD		12/3/2015	12/7/2015		12/10/2015	1,4-Dioxane	0.18	U		µg/m3	123-91-1	1	0		161510			percent	N			0.18
7999	398	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15 SIM	VC	EPA TO-15 SIM	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Vinyl chloride	0.13	U		µg/m3	75-01-4	1	0		161510			percent	N			0.13
8000	400	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15 SIM	DCE12C	EPA TO-15 SIM	AIR	FD		12/3/2015	12/7/2015		12/10/2015	cis-1,2-Dichloroethene	0.2	U		µg/m3	156-59-2	1	0		161510			percent	N			0.2
8001	401	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15 SIM	PCE	EPA TO-15 SIM	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Tetrachloroethene	0.12			ppb	127-18-4	1	0		161510			percent	N			0.05
8002	402	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15 SIM	PCE	EPA TO-15 SIM	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Tetrachloroethene	0.83			µg/m3	127-18-4	1	0		161510			percent	N			0.34
8003	404	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15 SIM	TCE	EPA TO-15 SIM	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Trichloroethene	0.27	U		µg/m3	79-01-6	1	0		161510			percent	N			0.27
8004	405	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15 SIM	BR4FBZ	EPA TO-15 SIM	AIR	FD		12/3/2015	12/7/2015		12/10/2015	4-Bromofluorobenzene	120.68			PERCENT	460-00-4	1	0		161510	1	120.68	percent	Y			
8005	395	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15 SIM	DIOXANE14	EPA TO-15 SIM	AIR	FD		12/3/2015	12/7/2015		12/10/2015	1,4-Dioxane	0.05	U		ppb	123-91-1	1	0		161510			percent	N			0.05
8006	397	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15 SIM	VC	EPA TO-15 SIM	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Vinyl chloride	0.05	U		ppb	75-01-4	1	0		161510			percent	N			0.05
8007	399	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15 SIM	DCE12C	EPA TO-15 SIM	AIR	FD		12/3/2015	12/7/2015		12/10/2015	cis-1,2-Dichloroethene	0.05	U		ppb	156-59-2	1	0		161510			percent	N			0.05
8008	403	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	EPA TO-15 SIM	TCE	EPA TO-15 SIM	AIR	FD		12/3/2015	12/7/2015		12/10/2015	Trichloroethene	0.05	U		ppb	79-01-6	1	0		161510			percent	N			0.05
8009	143	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15 SIM	BR4FBZ	EPA TO-15 SIM	AIR	N		12/3/2015	12/7/2015		12/10/2015	4-Bromofluorobenzene	151.1			PERCENT	460-00-4	1	0		161510	1	151.1	percent	Y			
8010	134	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15 SIM	DIOXANE14	EPA TO-15 SIM	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,4-Dioxane	0.18	U		µg/m3	123-91-1	1	0		161510			percent	N			0.18
8011	136	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15 SIM	VC	EPA TO-15 SIM	AIR	N		12/3/2015	12/7/2015		12/10/2015	Vinyl chloride	0.13	U		µg/m3	75-01-4	1	0		161510			percent	N			0.13
8012	138	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15 SIM	DCE12C	EPA TO-15 SIM	AIR	N		12/3/2015	12/7/2015		12/10/2015	cis-1,2-Dichloroethene	0.2	U		µg/m3	156-59-2	1	0		161510			percent	N			0.2
8013	140	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15 SIM	PCE	EPA TO-15 SIM	AIR	N		12/3/2015	12/7/2015		12/10/2015	Tetrachloroethene	0.53			µg/m3	127-18-4	1	0		161510			percent	N			0.34
8014	142	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15 SIM	TCE	EPA TO-15 SIM	AIR	N		12/3/2015	12/7/2015		12/10/2015	Trichloroethene	0.27	U		µg/m3	79-01-6	1	0		161510			percent	N			0.27
8015	133	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15 SIM	DIOXANE14	EPA TO-15 SIM	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,4-Dioxane	0.05	U		ppb	123-91-1	1	0		161510			percent	N			0.05
8016	135	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15 SIM	VC	EPA TO-15 SIM	AIR	N		12/3/2015	12/7/2015		12/10/2015	Vinyl chloride	0.05	U		ppb	75-01-4	1	0		161510			percent	N			0.05
8017	137	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15 SIM	DCE12C	EPA TO-15 SIM	AIR	N		12/3/2015	12/7/2015		12/10/2015	cis-1,2-Dichloroethene	0.05	U		ppb	156-59-2	1	0		161510			percent	N			0.05
8018	139	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
7941	257	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	2.9	NJ	X	=					A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7943	259	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	2.7	NJ	X	=					A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7945	261	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	2.4	NJ	X	=					A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7946	145	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.52		X	=			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7947	147	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.65		X	=			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7948	149	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7949	151	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.33	J	X	J			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7950	152	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.73	J	X	J			0.33	1.1	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7951	153	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7952	155	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7953	157	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.34	J	X	J			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7954	159	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7955	161	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7956	165	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7957	167	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.33	J	X	J			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7958	169	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7959	171	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7960	173	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7961	175	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.61		X	=			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7962	177	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7963	183	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.64		X	=			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7964	185	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7965	187	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7966	189	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7967	191	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7968	197	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7969	199	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7970	203	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7971	205	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7972	207	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7973	209	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7974	215	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7975	217	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7976	219	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7977	221	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.3	J	X	J			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7978	225	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.39	J	X	J			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7979	227	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7980	229	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7981	231	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7982	235	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7983	237	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.56	J	X	J			0.15	1	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7984	239	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7985	241	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7986	274	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	102.22		X	=	67.698	129.86			A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161047		TRUE
7987	264	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.18	U	X	U				0.18	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161510		TRUE
7988	266	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.13	U	X	U				0.13	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161510		TRUE
7989	268	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.2	U	X	U				0.2	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161510		TRUE
7990	269	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.12		X	=				0.05	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161510		TRUE
7991	270	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.82		X	=				0.34	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161510		TRUE
7992	272	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.27	U	X	U				0.27	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161510		TRUE
7993	273	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	124.51		X	=	48.778	151.81			A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161510		TRUE
7994	263	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			3		TRUE	12/31/2015	mfesler	0.05	U	X	U				0.05	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161510		TRUE
7995	265	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			3		TRUE	12/31/2015	mfesler	0.05	U	X	U				0.05	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161510		TRUE
7996	267	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			3		TRUE	12/31/2015	mfesler	0.05	U	X	U				0.05	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161510		TRUE
7997	271	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002		1/0/1900	NONE			3		TRUE	12/31/2015	mfesler	0.05	U	X	U				0.05	A-0003H-120415-TO-002-BAS	4.30EPACLP	1/0/1900					161510		TRUE
7998	396	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.18	U	X	U				0.18	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161510		TRUE
7999	398	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.13	U	X	U				0.13	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161510		TRUE
8000	400	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.2	U	X	U				0.2	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161510		TRUE
8001	401	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.12		X	=				0.05	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161510		TRUE
8002	402	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.83		X	=				0.34	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161510		TRUE
8003	404	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.27	U	X	U				0.27	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161510		TRUE
8004	405	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	120.68		X	=	48.778	151.81			A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161510		TRUE
8005	395	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			3		TRUE	12/31/2015	mfesler	0.05	U	X	U				0.05	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161510		TRUE
8006	397	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			3		TRUE	12/31/2015	mfesler	0.05	U	X	U				0.05	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161510		TRUE
8007	399	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			3		TRUE	12/31/2015	mfesler	0.05	U	X	U				0.05	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161510		TRUE
8008	403	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003		1/0/1900	NONE			3		TRUE	12/31/2015	mfesler	0.05	U	X	U				0.05	A-0003H-120415-TO-002-BAS-D	4.30EPACLP	1/0/1900					161510		TRUE
8009	143	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	151.1		X	=	48.778	151.81			A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161510		TRUE
8010	134	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.18	U	X	U					A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161510		TRUE
8011	136	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.13	U	X	U				0.13	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161510		TRUE
8012	138	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.2	U	X	U				0.2	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161510		TRUE
8013	140	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.53		X	=				0.34	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161510		TRUE
8014	142	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.27	U	X	U				0.27	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161510		TRUE
8015	133	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			3		TRUE	12/31/2015	mfesler	0.05	U	X	U				0.05	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161510		TRUE
8016	135	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			3		TRUE	12/31/2015	mfesler	0.05	U	X	U				0.05	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161510		TRUE
8017	137	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			3		TRUE	12/31/2015	mfesler	0.05	U	X	U				0.05	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161510		TRUE
8018	139	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			3		TRUE	12/31/2015	mfesler	0.079		X	=				0.05	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161510		TRUE
8019	141	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			3		TRUE	12/31/2015	mfesler	0.05	U	X	U				0.05	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161510		TRUE
8020	19	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	21	J	X	E			0.3	1	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8021	20	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	51	J	X	E			0.71	2.4	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
7941	257	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy					NJ	TIC	mfesler Tier 2B/Tier 4
7943	259	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy					NJ	TIC	mfesler Tier 2B/Tier 4
7945	261	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy					NJ	TIC	mfesler Tier 2B/Tier 4
7946	145	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7947	147	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7948	149	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7949	151	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7950	152	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			1.1	1.1			mfesler Tier 2B/Tier 4
7951	153	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7952	155	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7953	157	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7954	159	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7955	161	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7956	165	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7957	167	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7958	169	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7959	171	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7960	173	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7961	175	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7962	177	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7963	183	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7964	185	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7965	187	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7966	189	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7967	191	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7968	197	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7969	199	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7970	203	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7971	205	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7972	207	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7973	209	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7974	215	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7975	217	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7976	219	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7977	221	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7978	225	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7979	227	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7980	229	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7981	231	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7982	235	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7983	237	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			1	1			mfesler Tier 2B/Tier 4
7984	239	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7985	241	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
7986	274	-137428975	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy	20						mfesler Tier 2B/Tier 4
7987	264	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.18	0.18			mfesler Tier 2B/Tier 4
7988	266	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.13	0.13			mfesler Tier 2B/Tier 4
7989	268	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.2	0.2			mfesler Tier 2B/Tier 4
7990	269	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.05	0.05			mfesler Tier 2B/Tier 4
7991	270	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.34	0.34			mfesler Tier 2B/Tier 4
7992	272	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.27	0.27			mfesler Tier 2B/Tier 4
7993	273	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy	1						mfesler Tier 2B/Tier 4
7994	263	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.05	0.05			mfesler Tier 2B/Tier 4
7995	265	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.05	0.05			mfesler Tier 2B/Tier 4
7996	267	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.05	0.05			mfesler Tier 2B/Tier 4
7997	271	-122533634	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS	A-0003H-120415-TO-002-BAS	1534300002	1/4/2016	mcichy			0.05	0.05			mfesler Tier 2B/Tier 4
7998	396	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.18	0.18			mfesler Tier 2B/Tier 4
7999	398	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.13	0.13			mfesler Tier 2B/Tier 4
8000	400	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.2	0.2			mfesler Tier 2B/Tier 4
8001	401	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.05	0.05			mfesler Tier 2B/Tier 4
8002	402	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.34	0.34			mfesler Tier 2B/Tier 4
8003	404	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.27	0.27			mfesler Tier 2B/Tier 4
8004	405	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy	1						mfesler Tier 2B/Tier 4
8005	395	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.05	0.05			mfesler Tier 2B/Tier 4
8006	397	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.05	0.05			mfesler Tier 2B/Tier 4
8007	399	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.05	0.05			mfesler Tier 2B/Tier 4
8008	403	-111767716	16	ALSS	1534300	1534300	A-0003H-120415-TO-002-BAS-D	A-0003H-120415-TO-002-BAS-D	1534300003	1/4/2016	mcichy			0.05	0.05			mfesler Tier 2B/Tier 4
8009	143	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy	1						mfesler Tier 2B/Tier 4
8010	134	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.18	0.18			mfesler Tier 2B/Tier 4
8011	136	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.13	0.13			mfesler Tier 2B/Tier 4
8012	138	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.2	0.2			mfesler Tier 2B/Tier 4
8013	140	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.34	0.34			mfesler Tier 2B/Tier 4
8014	142	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.27	0.27			mfesler Tier 2B/Tier 4
8015	133	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.05	0.05			mfesler Tier 2B/Tier 4
8016	135	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.05	0.05			mfesler Tier 2B/Tier 4
8017	137	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.05	0.05			mfesler Tier 2B/Tier 4
8018	139	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.05	0.05			mfesler Tier 2B/Tier 4
8019	141	1196464720	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.05	0.05			mfesler Tier 2B/Tier 4
8020	19	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			1	1	J	>ICLinearRange	mfesler Tier 2B/Tier 4
8021	20	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			2.4	2.4	J	>ICLinearRange	mfesler Tier 2B/Tier 4
8022	38	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			1.8	1.8			mfesler Tier 2B/Tier 4
8023	50	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			1.6	1.6			mfesler Tier 2B/Tier 4
8024	58	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			2	2			mfesler Tier 2B/Tier 4
8025	67	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8026	68	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			1.9	1.9			mfesler Tier 2B/Tier 4
8027	80	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			2.2	2.2			mfesler Tier 2B/Tier 4
8028	106	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			11	11			mfesler Tier 2B/Tier 4
8029	111	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy					NJ	TIC	mfesler Tier 2B/Tier 4
8030	113	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy					NJ	TIC	mfesler Tier 2B/Tier 4
8034	2	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			2.5	2.5			mfesler Tier 2B/Tier 4

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
8035	4	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	CLME	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Methyl chloride	1.2		0.31	µg/m3	74-87-3	1	0		161047			percent	N			
8036	6	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	FC114	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Freon 114	1	U	1	µg/m3	76-14-2	1	0		161047			percent	N			3.5
8037	10	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	BRME	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Bromomethane	0.58	U	0.58	µg/m3	74-83-9	1	0		161047			percent	N			1.9
8038	12	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	CLEA	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Ethyl chloride	0.4	U	0.4	µg/m3	75-00-3	1	0		161047			percent	N			1.3
8039	14	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	FC11	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Freon 11	2.2	J	0.84	µg/m3	75-69-4	1	0		161047			percent	N			2.8
8040	16	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	FC113	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Freon 113	1.1	U	1.1	µg/m3	76-13-1	1	0		161047			percent	N			3.8
8041	18	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	DCE11	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,1-Dichloroethene	0.59	U	0.59	µg/m3	75-35-4	1	0		161047			percent	N			2
8042	22	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	CDS	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Carbon disulfide	0.47	U	0.47	µg/m3	75-15-0	1	0		161047			percent	N			1.6
8043	24	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	MTLNCL	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Methylene chloride	1.7	J	0.52	µg/m3	75-09-2	1	0		161047			percent	N			1.7
8044	26	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	DCE12T	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	trans-1,2-Dichloroethene	0.59	U	0.59	µg/m3	156-60-5	1	0		161047			percent	N			2
8045	28	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	MTBE	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Methyl t-butyl ether	0.54	U	0.54	µg/m3	1634-04-4	1	0		161047			percent	N			1.8
8046	30	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	VA	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Vinyl acetate	0.53	U	0.53	µg/m3	108-05-4	1	0		161047			percent	N			1.8
8047	32	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	MEK	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Methyl ethyl ketone	1.4	J	0.44	µg/m3	78-93-3	1	0		161047			percent	N			1.5
8048	34	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	DCA11	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,1-Dichloroethane	0.61	U	0.61	µg/m3	75-34-3	1	0		161047			percent	N			2
8049	35	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	ETACET	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Ethyl acetate	2		0.15	ppb	141-78-6	1	0		161047			percent	N			1
8050	36	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	ETACET	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Ethyl acetate	7.1		0.54	µg/m3	141-78-6	1	0		161047			percent	N			3.6
8051	37	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	HEXANE	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	n-Hexane	9.7		0.15	ppb	110-54-3	1	0		161047			percent	N			0.5
8052	40	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	TCLME	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Chloroform	1.4	J	0.73	µg/m3	67-66-3	1	0		161047			percent	N			2.4
8053	42	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	THF	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Tetrahydrofuran	0.44	U	0.44	µg/m3	109-99-9	1	0		161047			percent	N			1.5
8054	44	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	DCA12	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,2-Dichloroethane	0.61	U	0.61	µg/m3	107-06-2	1	0		161047			percent	N			2
8055	46	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	TCA111	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,1,1-Trichloroethane	0.82	U	0.82	µg/m3	71-55-6	1	0		161047			percent	N			2.7
8056	48	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	CTCL	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Carbon tetrachloride	0.94	U	0.94	µg/m3	56-23-5	1	0		161047			percent	N			3.1
8057	49	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	BZ	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Benzene	3.6		0.15	ppb	71-43-2	1	0		161047			percent	N			0.5
8058	51	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	CYHEXANE	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Cyclohexane	2.2		0.15	ppb	110-82-7	1	0		161047			percent	N			0.5
8059	52	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	CYHEXANE	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Cyclohexane	7.5		0.52	µg/m3	110-82-7	1	0		161047			percent	N			1.7
8060	54	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	DCPA12	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,2-Dichloropropane	0.73	U	0.73	µg/m3	78-87-5	1	0		161047			percent	N			2.4
8061	56	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	BDCME	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Bromodichloromethane	1	U	1	µg/m3	75-27-4	1	0		161047			percent	N			3.4
8062	57	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	142-82-5	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Heptane	2.8		0.15	ppb	142-82-5	1	0		161047			percent	N			0.5
8063	60	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	DCP13C	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	cis-1,3-Dichloropropene	0.68	U	0.68	µg/m3	10061-01-5	1	0		161047			percent	N			2.3
8064	62	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	MIBK	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Methyl isobutyl ketone	0.61	U	0.61	µg/m3	108-10-1	1	0		161047			percent	N			2
8065	64	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	DCP13T	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	trans-1,3-Dichloropropene	0.68	U	0.68	µg/m3	10061-02-6	1	0		161047			percent	N			2.3
8066	66	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	TCA112	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,1,2-Trichloroethane	0.82	U	0.82	µg/m3	79-00-5	1	0		161047			percent	N			2.7
8067	69	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	HXO2	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	2-Hexanone	0.3	U	0.3	ppb	591-78-6	1	0		161047			percent	N			1
8068	70	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	HXO2	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	2-Hexanone	1.2	U	1.2	µg/m3	591-78-6	1	0		161047			percent	N			4.1
8069	72	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	DBCME	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Dibromochloromethane	1.3	U	1.3	µg/m3	124-48-1	1	0		161047			percent	N			4.3
8070	74	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	EDB	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,2-Dibromoethane	1.2	U	1.2	µg/m3	106-93-4	1	0		161047			percent	N			3.8
8071	76	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	CLBZ	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Chlorobenzene	0.69	U	0.69	µg/m3	108-90-7	1	0		161047			percent	N			2.3
8072	78	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	EBZ	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Ethyl benzene	3.4		0.65	µg/m3	100-41-4	1	0		161047			percent	N			2.2
8073	79	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	XYLENES1314	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	m,p-Xylene	3.9		0.15	ppb	179601-23-1	1	0		161047			percent	N			0.5
8074	81	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	XYLO	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	o-Xylene	1		0.15	ppb	95-47-6	1	0		161047			percent	N			0.5
8075	82	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	XYLO	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	o-Xylene	4.6		0.65	µg/m3	95-47-6	1	0		161047			percent	N			2.2
8076	84	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	STY	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Styrene	0.64	U	0.64	µg/m3	100-42-5	1	0		161047			percent	N			2.1
8077	86	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	TBME	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Bromoform	1.6	U	1.6	µg/m3	75-25-2	1	0		161047			percent	N			5.2
8078	88	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	PCA	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,1,2,2-Tetrachloroethane	1	U	1	µg/m3	79-34-5	1	0		161047			percent	N			3.4
8079	90	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	EBZME4	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	4-Ethyl toluene	1.9	J	0.74	µg/m3	622-96-8	1	0		161047			percent	N			4.9
8080	92	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	TMB135	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,3,5-Trimethylbenzene	1.7	J	0.74	µg/m3	108-67-8	1	0		161047			percent	N			2.5
8081	93	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	TMB124	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,2,4-Trimethylbenzene	1.4		0.15	ppb	95-63-6	1	0		161047			percent	N			1
8082	94	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	TMB124	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,2,4-Trimethylbenzene	6.7		0.74	µg/m3	95-63-6	1	0		161047			percent	N			4.9
8083	96	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	DCBZ13	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,3-Dichlorobenzene	0.9	U	0.9	µg/m3	541-73-1	1	0		161047			percent	N			3
8084	98	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	DCBZ14	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,4-Dichlorobenzene	0.9	U	0.9	µg/m3	106-46-7	1	0		161047			percent	N			3
8085	99	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	BZLCL	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Benzyl chloride	0.3	U	0.3	ppb	100-44-7	1	0		161047			percent	N			1
8086	100	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	BZLCL	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Benzyl chloride	1.6	U	1.6	µg/m3	100-44-7	1	0		161047			percent	N			5.2
8087	101	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	DCBZ12	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,2-Dichlorobenzene	0.3	U	0.3	ppb	95-50-1	1	0		161047			percent	N			1
8088	102	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	DCBZ12	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,2-Dichlorobenzene	1.8	U	1.8	µg/m3	95-50-1	1	0		161047			percent	N			6
8089	103	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	TCB124	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,2,4-Trichlorobenzene	0.3	U	0.3	ppb	120-82-1	1	0		161047			percent	N			1
8090	104	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	TCB124	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,2,4-Trichlorobenzene	2.2	U	2.2	µg/m3	120-82-1	1	0		161047			percent	N			7.4
8091	105	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	HCBU	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Hexachloro-1,3-butadiene	0.3	U	0.3	ppb	87-68-3	1	0		161047			percent	N			1
8092	107	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	TIC-01	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Norflurane	5.2			ppb	TIC-64	1	0		161047			percent	N			
8094	109	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	TIC-02	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Propene	7.3			ppb	TIC-63	1	0		161047			percent	N			
8098	115	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	TIC-05	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Isobutane	5.2			ppb	TIC-49	1	0		161047			percent	N			
8100	117	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	TIC-06	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Butane	7.6			ppb	TIC-34	1	0		161047			percent	N			
8102	119	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	TIC-07	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Pentane	5.6			ppb	TIC-56	1	0		161047			percent	N			
8104	121	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	TIC-08	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Pentane, 2-methyl-	5.8			ppb	TIC-58	1	0		161047			percent	N			
8106	123	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	TIC-09	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Pentane, 3-methyl-	3.1			ppb	TIC-59	1	0		161047			percent	N			
8108	125	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	TIC-10	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Cyclopentane, methyl-	2.5			ppb	TIC-42	1	0		161047			percent	N			
8110	127	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	TIC-11	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Hexane, 2-methyl-	3.1			ppb	TIC-46	1	0		161047			percent	N			
8111	129	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	TIC-12	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Hexane, 3-methyl-	3.3			ppb	TIC-47	1	0		161047			percent	N			
8112	131	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	TIC-13	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Cyclohexane, methyl-	3.7			ppb	TIC-41	1	0		161047			percent	N			
8113	1	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	FC12	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Dichlorodifluoromethane	0.47	J	0.15	ppb	75-71-8	1	0		161047			percent	N			0.5
8114	3	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	CLME	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Methyl chloride	0.6		0.15	ppb	74-87-3	1	0		161047			percent	N			0.5
8115	5	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	FC114	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Freon 114	0.15	U	0.15	ppb	76-14-2	1	0		161047			percent	N			0.5
8116	7	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	ERYTHRENE	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,3-Butadiene	0.42	J	0.15	ppb	106-99-0	1	0		161047			percent	N			0.5
8117	8	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	ERYTHRENE	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,3-Butadiene	0.92	J	0.33	µg/m3	106-99-0	1	0		161047			percent	N			1.1
8118	9	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	BRME	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Bromomethane	0.15	U	0.15	ppb	74-83-9	1	0		161047			percent	N			0.5
8119	11	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	CLEA	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Ethyl chloride	0.15	U	0.15	ppb	75-00-3	1	0		161047			percent	N			0.5
8120	13	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	FC11	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Freon 11	0.39	J	0.15	ppb	75-69-4	1	0

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
8035	4	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.2		X	=			0.31	1	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8036	6	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1	U	X	U			1	3.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8037	10	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.58	U	X	U			0.58	1.9	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8038	12	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.4	U	X	U			0.4	1.3	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8039	14	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	2.2	J	X	J			0.84	2.8	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8040	16	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.1	U	X	U			1.1	3.8	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8041	18	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.59	U	X	U			0.59	2	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8042	22	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.47	U	X	U			0.47	1.6	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8043	24	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.7	J	X	J			0.52	1.7	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8044	26	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.59	U	X	U			0.59	2	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8045	28	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.54	U	X	U			0.54	1.8	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8046	30	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.53	U	X	U			0.53	1.8	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8047	32	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.4	J	X	J			0.44	1.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8048	34	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.61	U	X	U			0.61	2	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8049	35	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	2		X	=			0.15	1	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8050	36	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	7.1		X	=			0.54	3.6	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8051	37	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	9.7		X	=			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8052	40	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.4	J	X	J			0.73	2.4	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8053	42	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.44	U	X	U			0.44	1.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8054	44	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.61	U	X	U			0.61	2	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8055	46	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.82	U	X	U			0.82	2.7	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8056	48	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.94	U	X	U			0.94	3.1	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8057	49	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	3.6		X	=			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8058	51	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	2.2		X	=			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8059	52	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	7.5		X	=			0.52	1.7	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8060	54	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.73	U	X	U			0.73	2.4	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8061	56	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1	U	X	U			1	3.4	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8062	57	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	2.8		X	=			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8063	60	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.68	U	X	U			0.68	2.3	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8064	62	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.61	U	X	U			0.61	2	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8065	64	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.68	U	X	U			0.68	2.3	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8066	66	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.82	U	X	U			0.82	2.7	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8067	69	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.3	U	X	U			0.3	1	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8068	70	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.2	U	X	U			1.2	4.1	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8069	72	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.3	U	X	U			1.3	4.3	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8070	74	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.2	U	X	U			1.2	3.8	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8071	76	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.69	U	X	U			0.69	2.3	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8072	78	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	3.4		X	=			0.65	2.2	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8073	79	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	3.9		X	=			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8074	81	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1		X	=			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8075	82	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	4.6		X	=			0.65	2.2	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8076	84	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.64	U	X	U			0.64	2.1	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8077	86	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.6	U	X	U			1.6	5.2	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8078	88	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1	U	X	U			1	3.4	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8079	90	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.9	J	X	J			0.74	4.9	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8080	92	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.7	J	X	J			0.74	2.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8081	93	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.4		X	=			0.15	1	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8082	94	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	6.7		X	=			0.74	4.9	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8083	96	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.9	U	X	U			0.9	3	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8084	98	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.9	U	X	U			0.9	3	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8085	99	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.3	U	X	U			0.3	1	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8086	100	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.6	U	X	U			1.6	5.2	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8087	101	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.3	U	X	U			0.3	1	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8088	102	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	1.8	U	X	U			1.8	6	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8089	103	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.3	U	X	U			0.3	1	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8090	104	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	2.2	U	X	U			2.2	7.4	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8091	105	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.3	U	X	U			0.3	1	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8092	107	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	5.2	NJ	X	=					A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8094	109	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	7.3	R	X	=					A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8098	115	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	5.2	NJ	X	=					A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8100	117	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	7.6	R	X	=					A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8102	119	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	5.6	NJ	X	=					A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8104	121	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	5.8	NJ	X	=					A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8106	123	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	3.1	NJ	X	=					A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8108	125	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	2.5	NJ	X	=					A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8110	127	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	3.1	NJ	X	=					A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8111	129	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	3.3	NJ	X	=					A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8112	131	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	3.7	NJ	X	=					A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8113	1	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.47	J	X	J			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8114	3	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.6		X	=			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8115	5	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8116	7	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.42	J	X	J			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8117	8	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.92	J	X	J			0.33	1.1	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8118	9	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8119	11	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8120	13	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.39	J	X	J			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8121	15	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8122	17	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8123	21	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
8035	4	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			1	1			mfesler Tier 2B/Tier 4
8036	6	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			3.5	3.5			mfesler Tier 2B/Tier 4
8037	10	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			1.9	1.9			mfesler Tier 2B/Tier 4
8038	12	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			1.3	1.3			mfesler Tier 2B/Tier 4
8039	14	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			2.8	2.8			mfesler Tier 2B/Tier 4
8040	16	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			3.8	3.8			mfesler Tier 2B/Tier 4
8041	18	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			2	2			mfesler Tier 2B/Tier 4
8042	22	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			1.6	1.6			mfesler Tier 2B/Tier 4
8043	24	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			1.7	1.7			mfesler Tier 2B/Tier 4
8044	26	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			2	2			mfesler Tier 2B/Tier 4
8045	28	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			1.8	1.8			mfesler Tier 2B/Tier 4
8046	30	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			1.8	1.8			mfesler Tier 2B/Tier 4
8047	32	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			1.5	1.5			mfesler Tier 2B/Tier 4
8048	34	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			2	2			mfesler Tier 2B/Tier 4
8049	35	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			1	1			mfesler Tier 2B/Tier 4
8050	36	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			3.6	3.6			mfesler Tier 2B/Tier 4
8051	37	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8052	40	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			2.4	2.4			mfesler Tier 2B/Tier 4
8053	42	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			1.5	1.5			mfesler Tier 2B/Tier 4
8054	44	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			2	2			mfesler Tier 2B/Tier 4
8055	46	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			2.7	2.7			mfesler Tier 2B/Tier 4
8056	48	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			3.1	3.1			mfesler Tier 2B/Tier 4
8057	49	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8058	51	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8059	52	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			1.7	1.7			mfesler Tier 2B/Tier 4
8060	54	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			2.4	2.4			mfesler Tier 2B/Tier 4
8061	56	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			3.4	3.4			mfesler Tier 2B/Tier 4
8062	57	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8063	60	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			2.3	2.3			mfesler Tier 2B/Tier 4
8064	62	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			2	2			mfesler Tier 2B/Tier 4
8065	64	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			2.3	2.3			mfesler Tier 2B/Tier 4
8066	66	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			2.7	2.7			mfesler Tier 2B/Tier 4
8067	69	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			1	1			mfesler Tier 2B/Tier 4
8068	70	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			4.1	4.1			mfesler Tier 2B/Tier 4
8069	72	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			4.3	4.3			mfesler Tier 2B/Tier 4
8070	74	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			3.8	3.8			mfesler Tier 2B/Tier 4
8071	76	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			2.3	2.3			mfesler Tier 2B/Tier 4
8072	78	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			2.2	2.2			mfesler Tier 2B/Tier 4
8073	79	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8074	81	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8075	82	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			2.2	2.2			mfesler Tier 2B/Tier 4
8076	84	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			2.1	2.1			mfesler Tier 2B/Tier 4
8077	86	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			5.2	5.2			mfesler Tier 2B/Tier 4
8078	88	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			3.4	3.4			mfesler Tier 2B/Tier 4
8079	90	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			4.9	4.9			mfesler Tier 2B/Tier 4
8080	92	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			2.5	2.5			mfesler Tier 2B/Tier 4
8081	93	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			1	1			mfesler Tier 2B/Tier 4
8082	94	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			4.9	4.9			mfesler Tier 2B/Tier 4
8083	96	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			3	3			mfesler Tier 2B/Tier 4
8084	98	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			3	3			mfesler Tier 2B/Tier 4
8085	99	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			1	1			mfesler Tier 2B/Tier 4
8086	100	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			5.2	5.2			mfesler Tier 2B/Tier 4
8087	101	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			1	1			mfesler Tier 2B/Tier 4
8088	102	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			6	6			mfesler Tier 2B/Tier 4
8089	103	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			1	1			mfesler Tier 2B/Tier 4
8090	104	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			7.4	7.4			mfesler Tier 2B/Tier 4
8091	105	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			1	1			mfesler Tier 2B/Tier 4
8092	107	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy					NJ	TIC	mfesler Tier 2B/Tier 4
8094	109	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy					R	TIC	mfesler Tier 2B/Tier 4
8098	115	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy					NJ	TIC	mfesler Tier 2B/Tier 4
8100	117	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy					R	TIC	mfesler Tier 2B/Tier 4
8102	119	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy					NJ	TIC	mfesler Tier 2B/Tier 4
8104	121	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy					NJ	TIC	mfesler Tier 2B/Tier 4
8106	123	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy					NJ	TIC	mfesler Tier 2B/Tier 4
8108	125	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy					NJ	TIC	mfesler Tier 2B/Tier 4
8110	127	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy					NJ	TIC	mfesler Tier 2B/Tier 4
8111	129	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy					NJ	TIC	mfesler Tier 2B/Tier 4
8112	131	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy					NJ	TIC	mfesler Tier 2B/Tier 4
8113	1	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8114	3	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8115	5	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8116	7	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8117	8	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			1.1	1.1			mfesler Tier 2B/Tier 4
8118	9	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8119	11	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8120	13	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8121	15	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8122	17	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8123	21	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8124	23	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8125	25	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8126	27	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8127	29	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8128	31	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8129	33	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8130	39	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8131	41	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8132	43	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8133	45	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
8134	47	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	CTCL	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Carbon tetrachloride	0.15	U	0.15	ppb	56-23-5	1	0		161047			percent	N			0.5
8135	53	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	DCPA12	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,2-Dichloropropane	0.15	U	0.15	ppb	78-87-5	1	0		161047			percent	N			0.5
8136	55	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	BDCME	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Bromodichloromethane	0.15	U	0.15	ppb	75-27-4	1	0		161047			percent	N			0.5
8137	59	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	DCP13C	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	cis-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-01-5	1	0		161047			percent	N			0.5
8138	61	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	MIBK	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Methyl isobutyl ketone	0.15	U	0.15	ppb	108-10-1	1	0		161047			percent	N			0.5
8139	63	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	DCP13T	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	trans-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-02-6	1	0		161047			percent	N			0.5
8140	65	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	TCA112	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,1,2-Trichloroethane	0.15	U	0.15	ppb	79-00-5	1	0		161047			percent	N			0.5
8141	71	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	DBCME	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Dibromochloromethane	0.15	U	0.15	ppb	124-48-1	1	0		161047			percent	N			0.5
8142	73	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	EDB	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,2-Dibromoethane	0.15	U	0.15	ppb	106-93-4	1	0		161047			percent	N			0.5
8143	75	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	CLBZ	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Chlorobenzene	0.15	U	0.15	ppb	108-90-7	1	0		161047			percent	N			0.5
8144	77	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	EBZ	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Ethyl benzene	0.79		0.15	ppb	100-41-4	1	0		161047			percent	N			0.5
8145	83	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	STY	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Styrene	0.15	U	0.15	ppb	100-42-5	1	0		161047			percent	N			0.5
8146	85	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	TBME	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	Bromoform	0.15	U	0.15	ppb	75-25-2	1	0		161047			percent	N			0.5
8147	87	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	PCA	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,1,2,2-Tetrachloroethane	0.15	U	0.15	ppb	79-34-5	1	0		161047			percent	N			0.5
8148	89	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	EBZME4	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	4-Ethyl toluene	0.39	J	0.15	ppb	622-96-8	1	0		161047			percent	N			1
8149	91	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	TMB135	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,3,5-Trimethylbenzene	0.35	J	0.15	ppb	108-67-8	1	0		161047			percent	N			0.5
8150	95	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	DCBZ13	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,3-Dichlorobenzene	0.15	U	0.15	ppb	541-73-1	1	0		161047			percent	N			0.5
8151	97	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	DCBZ14	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	1,4-Dichlorobenzene	0.15	U	0.15	ppb	106-46-7	1	0		161047			percent	N			0.5
8152	144	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	EPA TO-15	BR4FBZ	EPA TO-15	AIR	N		12/3/2015	12/7/2015		12/10/2015	4-Bromofluorobenzene	104.23			PERCENT	460-00-4	1	0		161047	20	104.23	percent	Y			
8153	416	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	ACE	EPA TO-15	AIR	LB					12/9/2015	Acetone	0.3	U	0.3	ppb	67-64-1	1	0		161047			percent	N			1
8154	424	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	ETACET	EPA TO-15	AIR	LB					12/9/2015	Ethyl acetate	0.15	U	0.15	ppb	141-78-6	1	0		161047			percent	N			1
8155	441	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	HXO2	EPA TO-15	AIR	LB					12/9/2015	2-Hexanone	0.3	U	0.3	ppb	591-78-6	1	0		161047			percent	N			1
8156	451	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	EBZME4	EPA TO-15	AIR	LB					12/9/2015	4-Ethyl toluene	0.15	U	0.15	ppb	622-96-8	1	0		161047			percent	N			1
8157	453	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	TMB124	EPA TO-15	AIR	LB					12/9/2015	1,2,4-Trimethylbenzene	0.15	U	0.15	ppb	95-63-6	1	0		161047			percent	N			1
8158	456	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	BZLCL	EPA TO-15	AIR	LB					12/9/2015	Benzyl chloride	0.3	U	0.3	ppb	100-44-7	1	0		161047			percent	N			1
8159	457	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	DCBZ12	EPA TO-15	AIR	LB					12/9/2015	1,2-Dichlorobenzene	0.3	U	0.3	ppb	95-50-1	1	0		161047			percent	N			1
8160	458	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	TCB124	EPA TO-15	AIR	LB					12/9/2015	1,2,4-Trichlorobenzene	0.3	U	0.3	ppb	120-82-1	1	0		161047			percent	N			1
8161	459	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	HCBU	EPA TO-15	AIR	LB					12/9/2015	Hexachloro-1,3-butadiene	0.3	U	0.3	ppb	87-68-3	1	0		161047			percent	N			1
8162	465	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	CLEA	EPA TO-15	AIR	BS					12/9/2015	Ethyl chloride	11		0.15	ppb	75-00-3	1	0		161047	10	109.51	percent	N			0.5
8163	480	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	THF	EPA TO-15	AIR	BS					12/9/2015	Tetrahydrofuran	11		0.15	ppb	109-99-9	1	0		161047	10	110.31	percent	N			0.5
8164	481	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	DCA12	EPA TO-15	AIR	BS					12/9/2015	1,2-Dichloroethane	10		0.15	ppb	107-06-2	1	0		161047	10	100.25	percent	N			0.5
8165	486	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	DCPA12	EPA TO-15	AIR	BS					12/9/2015	1,2-Dichloropropane	10		0.15	ppb	78-87-5	1	0		161047	10	100.18	percent	N			0.5
8166	491	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	DCP13T	EPA TO-15	AIR	BS					12/9/2015	trans-1,3-Dichloropropene	11		0.15	ppb	10061-02-6	1	0		161047	10	109.66	percent	N			0.5
8167	498	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	EBZ	EPA TO-15	AIR	BS					12/9/2015	Ethyl benzene	11		0.15	ppb	100-41-4	1	0		161047	10	110.15	percent	N			0.5
8168	500	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	XYLO	EPA TO-15	AIR	BS					12/9/2015	o-Xylene	11		0.15	ppb	95-47-6	1	0		161047	10	109.57	percent	N			0.5
8169	502	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	TBME	EPA TO-15	AIR	BS					12/9/2015	Bromoform	10		0.15	ppb	75-25-2	1	0		161047	10	100.2	percent	N			0.5
8170	504	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	EBZME4	EPA TO-15	AIR	BS					12/9/2015	4-Ethyl toluene	12		0.15	ppb	622-96-8	1	0		161047	10	120.4	percent	N			1
8171	529	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	DCA11	EPA TO-15	AIR	BD					12/9/2015	1,1-Dichloroethane	10		0.15	ppb	75-34-3	1	0		161047	10	100.16	percent	N			0.5
8172	540	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	BDCME	EPA TO-15	AIR	BD					12/9/2015	Bromodichloromethane	10		0.15	ppb	75-27-4	1	0		161047	10	100.43	percent	N			0.5
8173	558	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	TMB135	EPA TO-15	AIR	BD					12/9/2015	1,3,5-Trimethylbenzene	11		0.15	ppb	108-67-8	1	0		161047	10	110.49	percent	N			0.5
8174	561	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	DCBZ14	EPA TO-15	AIR	BD					12/9/2015	1,4-Dichlorobenzene	12		0.15	ppb	106-46-7	1	0		161047	10	119.65	percent	N			0.5
8175	407	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	FC12	EPA TO-15	AIR	LB					12/9/2015	Dichlorodifluoromethane	0.15	U	0.15	ppb	75-71-8	1	0		161047			percent	N			0.5
8176	408	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	CLME	EPA TO-15	AIR	LB					12/9/2015	Methyl chloride	0.15	U	0.15	ppb	74-87-3	1	0		161047			percent	N			0.5
8177	409	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	FC114	EPA TO-15	AIR	LB					12/9/2015	Freon 114	0.15	U	0.15	ppb	76-14-2	1	0		161047			percent	N			0.5
8178	410	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	ERYTHRENE	EPA TO-15	AIR	LB					12/9/2015	1,3-Butadiene	0.15	U	0.15	ppb	106-99-0	1	0		161047			percent	N			0.5
8179	411	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	BRME	EPA TO-15	AIR	LB					12/9/2015	Bromomethane	0.15	U	0.15	ppb	74-83-9	1	0		161047			percent	N			0.5
8180	412	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	CLEA	EPA TO-15	AIR	LB					12/9/2015	Ethyl chloride	0.15	U	0.15	ppb	75-00-3	1	0		161047			percent	N			0.5
8181	413	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	FC11	EPA TO-15	AIR	LB					12/9/2015	Freon 11	0.15	U	0.15	ppb	75-69-4	1	0		161047			percent	N			0.5
8182	414	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	FC113	EPA TO-15	AIR	LB					12/9/2015	Freon 113	0.15	U	0.15	ppb	76-13-1	1	0		161047			percent	N			0.5
8183	415	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	DCE11	EPA TO-15	AIR	LB					12/9/2015	1,1-Dichloroethene	0.15	U	0.15	ppb	75-35-4	1	0		161047			percent	N			0.5
8184	417	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	CDS	EPA TO-15	AIR	LB					12/9/2015	Carbon disulfide	0.15	U	0.15	ppb	75-15-0	1	0		161047			percent	N			0.5
8185	418	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	MTLNCL	EPA TO-15	AIR	LB					12/9/2015	Methylene chloride	0.15	U	0.15	ppb	75-09-2	1	0		161047			percent	N			0.5
8186	419	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	DCE12T	EPA TO-15	AIR	LB					12/9/2015	trans-1,2-Dichloroethene	0.15	U	0.15	ppb	156-60-5	1	0		161047			percent	N			0.5
8187	420	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	MTBE	EPA TO-15	AIR	LB					12/9/2015	Methyl t-butyl ether	0.15	U	0.15	ppb	1634-04-4	1	0		161047			percent	N			0.5
8188	421	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	VA	EPA TO-15	AIR	LB					12/9/2015	Vinyl acetate	0.15	U	0.15	ppb	108-05-4	1	0		161047			percent	N			0.5
8189	422	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	MEK	EPA TO-15	AIR	LB					12/9/2015	Methyl ethyl ketone	0.15	U	0.15	ppb	78-93-3	1	0		161047			percent	N			0.5
8190	423	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	DCA11	EPA TO-15	AIR	LB					12/9/2015	1,1-Dichloroethane	0.15	U	0.15	ppb	75-34-3	1	0		161047			percent	N			0.5
8191	425	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	HEXANE	EPA TO-15	AIR	LB					12/9/2015	n-Hexane	0.15	U	0.15	ppb	110-54-3	1	0		161047			percent	N			0.5
8192	426	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	TCLME	EPA TO-15	AIR	LB					12/9/2015	Chloroform	0.15	U	0.15	ppb	67-66-3	1	0		161047			percent	N			0.5
8193	427	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	THF	EPA TO-15	AIR	LB					12/9/2015	Tetrahydrofuran	0.15	U	0.15	ppb	109-99-9	1	0		161047			percent	N			0.5
8194	428	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	DCA12	EPA TO-15	AIR	LB					12/9/2015	1,2-Dichloroethane	0.15	U	0.15	ppb	107-06-2	1	0		161047			percent	N			0.5
8195	429	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	TCA111	EPA TO-15	AIR	LB					12/9/2015	1,1,1-Trichloroethane	0.15	U	0.15	ppb	71-55-6	1	0		161047			percent	N			0.5
8196	430	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	CTCL	EPA TO-15	AIR	LB					12/9/2015	Carbon tetrachloride	0.15	U	0.15	ppb	56-23-5	1	0		161047			percent	N			0.5
8197	431	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	BZ	EPA TO-15	AIR	LB					12/9/2015	Benzene	0.15	U	0.15	ppb	71-43-2	1	0		161047			percent	N			0.5
8198	432	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	CYHEXANE	EPA TO-15	AIR	LB					12/9/2015	Cyclohexane	0.15	U	0.15	ppb	110-82-7	1	0		161047			percent	N			0.5
8199	433	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	DCPA12	EPA TO-15	AIR	LB					12/9/2015	1,2-Dichloropropane	0.15	U	0.15	ppb	78-87-5	1	0		161047			percent	N			0.5
8200	434	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	BDCME	EPA TO-15	AIR	LB					12/9/2015	Bromodichloromethane	0.15	U	0.15	ppb	75-27-4	1	0		161047			percent	N			0.5
8201	435	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	142-82-5	EPA TO-15	AIR	LB					12/9/2015	Heptane	0.15	U	0.15	ppb	142-82-5	1	0		161047			percent	N			0.5
8202	436	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	DCP13C	EPA TO-15	AIR	LB					12/9/2015	cis-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-01-5	1	0		161047			percent	N			0.5
8203	437	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	MIBK	EPA TO-15	AIR	LB					12/9/2015	Methyl isobutyl ketone	0.15	U	0.15	ppb	108-10-1	1	0		161047			percent	N			0.5
8204	438	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	DCP13T	EPA TO-15	AIR	LB					12/9/2015	trans-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-02-6	1	0		161047			percent	N			0.5
8205	439	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	TCA112	EPA TO-15	AIR	LB					12/9/2015	1,1,2-Trichloroethane	0.15	U	0.15	ppb	79-00-5	1	0		161047			percent	N			0.5
8206	440	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	BZME	EPA TO-15	AIR	LB					12/9/2015	Toluene	0.15	U	0.15	ppb	108-88-3	1	0		161047			percent	N			0.5
8207	442	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	DBCME	EPA TO-15	AIR	LB					12/9/2015	Dibromochloromethane	0.15	U	0.15	ppb	124-48-1	1	0		161047			percent	N			0.5
8208	443	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	EDB	EPA TO-15	AIR	LB					12/9/2015	1,2-Dibromoethane	0.15	U	0.15	ppb	106-93-4	1	0		161047			percent	N			0.5
8209	444	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	CLBZ	EPA TO-15	AIR	LB					12/9/2015	Chlorobenzene	0.15	U	0.15	ppb	108-90-7	1	0		161047			percent	N			0.5
8210	445	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	EBZ	EPA TO-15	AIR	LB					12/9/2015	Ethyl benzene	0.15	U	0.15	ppb	100-41-4	1	0		161047			percent	N			0.5
8211	446	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	XYLENES1314	EPA TO-15	AIR	LB					12/9/2015	m,p-Xylene	0.15	U	0.15	ppb	179601-23-1	1	0		161047			percent	N			0.5
8212	447	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	XYLO	EPA TO-15	AIR	LB					12/9/2015	o-Xylene	0.15	U	0.15	ppb	95-47-6	1	0		161047			percent	N			0.5
8213	448	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	STY	EPA TO-15	AIR	LB					12/9/2015	Styrene	0.15	U	0.15	ppb	100-42-5	1	0		161047			percent	N			0.5
8214	449	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	TBME	EPA TO-15	AIR	LB					12/9/2015	Bromoform	0.15	U	0.15	ppb	75-25-2	1	0		161047			percent	N			0.5
8215	450	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	PCA	EPA TO-15	AIR	LB					12/9/2015	1,1,2,2-Tetrachloroethane	0.15	U	0.15	ppb	79-34-5	1	0		161047			percent	N			0.5
8216	452	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	TMB135	EPA TO-15	AIR	LB					12/9/2015	1,3,5-Trimethylbenzene	0.15	U	0.15	ppb	108-67-8	1	0		161047			percent	N			0.5
8217	454	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	DCBZ13	EPA TO-15	AIR	LB					12/9/2015	1,3-Dichlorobenzene	0.15	U	0.15	ppb	541-73-1	1	0		161047			percent	N			0.5
8218	455	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	DCBZ14	EPA TO-15	AIR	LB					12/9/2015	1,4-Dichlorobenzene	0.15	U	0.15	ppb	106-46-7	1	0		161047			percent	N			0.5
8219	460	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	FC12	EPA TO-15	AIR	BS					12/9/2015	Dichlorodifluoromethane	10.3		0.15	ppb	75-71-8	1	0		161047	10	103.19	percent	N			0.5
8220	461	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	CLME	EPA TO-15	AIR	BS					12/9/2015	Methyl chloride	10.6		0.15	ppb	74-87-3	1	0		161047	10	106.44	percent	N			0.5
8221	463	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	ERYTHRENE	EPA TO-15	AIR	BS					12/9/2015	1,3-Butadiene	10.5		0.15	ppb	106-99-0	1	0		161047	10	105.12	percent	N			0.5
8222	464	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	BRME	EPA TO-15	AIR	BS					12/9/2015	Bromomethane	10.7		0.15	ppb	74-83-9	1	0		161047	10	106.67	percent	N			0.5

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
8134	47	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8135	53	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8136	55	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8137	59	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8138	61	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8139	63	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8140	65	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8141	71	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8142	73	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8143	75	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8144	77	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.79		X	=			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8145	83	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8146	85	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8147	87	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8148	89	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.39	J	X	J			0.15	1	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8149	91	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.35	J	X	J			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8150	95	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8151	97	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8152	144	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	104.23		X	=	67.698	129.86			A-0003H-120415-TO-001-DIN	4.30EPACLP	1/0/1900					161047		TRUE
8153	416	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	0.3	U	X	U			0.3	1	480506	4.30EPACLP						161047		TRUE
8154	424	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	1	480506	4.30EPACLP						161047		TRUE
8155	441	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	0.3	U	X	U			0.3	1	480506	4.30EPACLP						161047		TRUE
8156	451	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	1	480506	4.30EPACLP						161047		TRUE
8157	453	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	1	480506	4.30EPACLP						161047		TRUE
8158	456	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	0.3	U	X	U			0.3	1	480506	4.30EPACLP						161047		TRUE
8159	457	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	0.3	U	X	U			0.3	1	480506	4.30EPACLP						161047		TRUE
8160	458	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	0.3	U	X	U			0.3	1	480506	4.30EPACLP						161047		TRUE
8161	459	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	0.3	U	X	U			0.3	1	480506	4.30EPACLP						161047		TRUE
8162	465	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	11		X	=	57.618	137.13	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8163	480	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	11		X	=	50.619	155.33	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8164	481	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	10		X	=	62.441	130.48	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8165	486	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	10		X	=	60.69	130.65	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8166	491	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	11		X	=	78.538	148.69	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8167	498	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	11		X	=	75.851	148.51	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8168	500	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	11		X	=	74.707	147.4	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8169	502	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	10		X	=	59.748	136.05	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8170	504	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	12		X	=	69.037	163.28	0.15	1	480507	4.30EPACLP						161047		TRUE
8171	529	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	10		X	=	67.712	123.62	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8172	540	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	10		X	=	62.886	128.34	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8173	558	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	11		X	=	64.237	155.06	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8174	561	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			0		TRUE	12/31/2015	mfesler	12		X	=	57.682	137.17	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8175	407	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8176	408	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8177	409	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8178	410	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8179	411	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8180	412	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8181	413	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8182	414	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8183	415	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8184	417	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8185	418	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8186	419	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8187	420	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8188	421	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8189	422	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8190	423	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8191	425	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8192	426	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8193	427	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8194	428	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8195	429	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8196	430	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8197	431	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8198	432	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8199	433	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8200	434	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8201	435	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8202	436	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8203	437	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8204	438	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8205	439	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8206	440	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8207	442	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8208	443	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8209	444	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8210	445	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8211	446	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8212	447	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8213	448	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8214	449	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8215	450	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8216	452	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8217	454	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8218	455	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	0.15	U	X	U			0.15	0.5	480506	4.30EPACLP						161047		TRUE
8219	460	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.3		X	=	59.255	135.13	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8220	461	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.6		X	=	55.169	137.44	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8221	463	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.5		X	=	57.992	138.25	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8222	464	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.7		X	=	63.318	129.94	0.15	0.5	480507	4.30EPACLP						161047		TRUE

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
8134	47	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8135	53	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8136	55	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8137	59	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8138	61	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8139	63	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8140	65	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8141	71	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8142	73	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8143	75	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8144	77	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8145	83	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8146	85	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8147	87	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8148	89	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			1	1			mfesler Tier 2B/Tier 4
8149	91	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8150	95	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8151	97	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8152	144	1450896363	16	ALSS	1534300	1534300	A-0003H-120415-TO-001-DIN	A-0003H-120415-TO-001-DIN	1534300001	1/4/2016	mcichy	20						mfesler Tier 2B/Tier 4
8153	416	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			1	1			mfesler Tier 2B/Tier 4
8154	424	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			1	1			mfesler Tier 2B/Tier 4
8155	441	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			1	1			mfesler Tier 2B/Tier 4
8156	451	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			1	1			mfesler Tier 2B/Tier 4
8157	453	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			1	1			mfesler Tier 2B/Tier 4
8158	456	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			1	1			mfesler Tier 2B/Tier 4
8159	457	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			1	1			mfesler Tier 2B/Tier 4
8160	458	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			1	1			mfesler Tier 2B/Tier 4
8161	459	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			1	1			mfesler Tier 2B/Tier 4
8162	465	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8163	480	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8164	481	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8165	486	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8166	491	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8167	498	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8168	500	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8169	502	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8170	504	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		1	1			mfesler Tier 2B/Tier 4
8171	529	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8172	540	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8173	558	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8174	561	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8175	407	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8176	408	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8177	409	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8178	410	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8179	411	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8180	412	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8181	413	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8182	414	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8183	415	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8184	417	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8185	418	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8186	419	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8187	420	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8188	421	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8189	422	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8190	423	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8191	425	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8192	426	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8193	427	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8194	428	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8195	429	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8196	430	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8197	431	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8198	432	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8199	433	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8200	434	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8201	435	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8202	436	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8203	437	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8204	438	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8205	439	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8206	440	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8207	442	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8208	443	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8209	444	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8210	445	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8211	446	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8212	447	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8213	448	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8214	449	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8215	450	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8216	452	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8217	454	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8218	455	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy			0.5	0.5			mfesler Tier 2B/Tier 4
8219	460	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8220	461	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8221	463	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8222	464	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4

APPENDIX A-1

Laboratory Validated Results

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
8223	468	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	DCE11	EPA TO-15	AIR	BS					12/9/2015	1,1-Dichloroethene	10.4		0.15	ppb	75-35-4	1	0		161047	10	103.68	percent	N			0.5
8224	469	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	ACE	EPA TO-15	AIR	BS					12/9/2015	Acetone	10.5		0.3	ppb	67-64-1	1	0		161047	10	105.4	percent	N			1
8225	471	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	MTLNCL	EPA TO-15	AIR	BS					12/9/2015	Methylene chloride	9.9		0.15	ppb	75-09-2	1	0		161047	10	98.985	percent	N			0.5
8226	473	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	MTBE	EPA TO-15	AIR	BS					12/9/2015	Methyl t-butyl ether	10.3		0.15	ppb	1634-04-4	1	0		161047	10	103.25	percent	N			0.5
8227	474	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	VA	EPA TO-15	AIR	BS					12/9/2015	Vinyl acetate	10.2		0.15	ppb	108-05-4	1	0		161047	10	102.15	percent	N			0.5
8228	475	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	MEK	EPA TO-15	AIR	BS					12/9/2015	Methyl ethyl ketone	10.9		0.15	ppb	78-93-3	1	0		161047	10	109.05	percent	N			0.5
8229	476	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	DCA11	EPA TO-15	AIR	BS					12/9/2015	1,1-Dichloroethane	10.2		0.15	ppb	75-34-3	1	0		161047	10	102.08	percent	N			0.5
8230	477	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	ETACET	EPA TO-15	AIR	BS					12/9/2015	Ethyl acetate	10.7		0.15	ppb	141-78-6	1	0		161047	10	106.76	percent	N			1
8231	478	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	HEXANE	EPA TO-15	AIR	BS					12/9/2015	n-Hexane	10.7		0.15	ppb	110-54-3	1	0		161047	10	106.95	percent	N			0.5
8232	487	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	BDCME	EPA TO-15	AIR	BS					12/9/2015	Bromodichloromethane	10.1		0.15	ppb	75-27-4	1	0		161047	10	101.07	percent	N			0.5
8233	488	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	142-82-5	EPA TO-15	AIR	BS					12/9/2015	Heptane	11.3		0.15	ppb	142-82-5	1	0		161047	10	112.92	percent	N			0.5
8234	489	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	DCP13C	EPA TO-15	AIR	BS					12/9/2015	cis-1,3-Dichloropropene	10.9		0.15	ppb	10061-01-5	1	0		161047	10	108.63	percent	N			0.5
8235	490	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	MIBK	EPA TO-15	AIR	BS					12/9/2015	Methyl isobutyl ketone	11.7		0.15	ppb	108-10-1	1	0		161047	10	117.08	percent	N			0.5
8236	492	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	TCA112	EPA TO-15	AIR	BS					12/9/2015	1,1,2-Trichloroethane	10.3		0.15	ppb	79-00-5	1	0		161047	10	102.73	percent	N			0.5
8237	493	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	BZME	EPA TO-15	AIR	BS					12/9/2015	Toluene	11.3		0.15	ppb	108-88-3	1	0		161047	10	112.61	percent	N			0.5
8238	494	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	HXO2	EPA TO-15	AIR	BS					12/9/2015	2-Hexanone	12.9		0.3	ppb	591-78-6	1	0		161047	10	128.54	percent	N			1
8239	495	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	DBCME	EPA TO-15	AIR	BS					12/9/2015	Dibromochloromethane	10.4		0.15	ppb	124-48-1	1	0		161047	10	104.05	percent	N			0.5
8240	496	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	EDB	EPA TO-15	AIR	BS					12/9/2015	1,2-Dibromoethane	10.8		0.15	ppb	106-93-4	1	0		161047	10	107.79	percent	N			0.5
8241	499	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	XYLENES1314	EPA TO-15	AIR	BS					12/9/2015	m,p-Xylene	21.9		0.15	ppb	179601-23-1	1	0		161047	20	109.48	percent	N			0.5
8242	501	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	STY	EPA TO-15	AIR	BS					12/9/2015	Styrene	11.8		0.15	ppb	100-42-5	1	0		161047	10	118.13	percent	N			0.5
8243	503	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	PCA	EPA TO-15	AIR	BS					12/9/2015	1,1,2,2-Tetrachloroethane	10.8		0.15	ppb	79-34-5	1	0		161047	10	108.07	percent	N			0.5
8244	505	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	TMB135	EPA TO-15	AIR	BS					12/9/2015	1,3,5-Trimethylbenzene	11.1		0.15	ppb	108-67-8	1	0		161047	10	110.92	percent	N			0.5
8245	506	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	TMB124	EPA TO-15	AIR	BS					12/9/2015	1,2,4-Trimethylbenzene	11.9		0.15	ppb	95-63-6	1	0		161047	10	118.71	percent	N			1
8246	507	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	DCBZ13	EPA TO-15	AIR	BS					12/9/2015	1,3-Dichlorobenzene	11.6		0.15	ppb	541-73-1	1	0		161047	10	115.92	percent	N			0.5
8247	508	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	DCBZ14	EPA TO-15	AIR	BS					12/9/2015	1,4-Dichlorobenzene	11.9		0.15	ppb	106-46-7	1	0		161047	10	118.78	percent	N			0.5
8248	509	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	BZLCL	EPA TO-15	AIR	BS					12/9/2015	Benzyl chloride	12.6		0.3	ppb	100-44-7	1	0		161047	10	125.8	percent	N			1
8249	510	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	DCBZ12	EPA TO-15	AIR	BS					12/9/2015	1,2-Dichlorobenzene	11.1		0.3	ppb	95-50-1	1	0		161047	10	111.49	percent	N			1
8250	511	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	TCB124	EPA TO-15	AIR	BS					12/9/2015	1,2,4-Trichlorobenzene	11.4		0.3	ppb	120-82-1	1	0		161047	10	114.1	percent	N			1
8251	513	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	FC12	EPA TO-15	AIR	BD					12/9/2015	Dichlorodifluoromethane	10.5		0.15	ppb	75-71-8	1	0		161047	10	104.65	percent	N			0.5
8252	514	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	CLME	EPA TO-15	AIR	BD					12/9/2015	Methyl chloride	10.6		0.15	ppb	74-87-3	1	0		161047	10	105.53	percent	N			0.5
8253	516	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	ERYTHRENE	EPA TO-15	AIR	BD					12/9/2015	1,3-Butadiene	10.5		0.15	ppb	106-99-0	1	0		161047	10	105.42	percent	N			0.5
8254	517	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	BRME	EPA TO-15	AIR	BD					12/9/2015	Bromomethane	10.6		0.15	ppb	74-83-9	1	0		161047	10	106.45	percent	N			0.5
8255	518	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	CLEA	EPA TO-15	AIR	BD					12/9/2015	Ethyl chloride	10.9		0.15	ppb	75-00-3	1	0		161047	10	108.7	percent	N			0.5
8256	521	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	DCE11	EPA TO-15	AIR	BD					12/9/2015	1,1-Dichloroethene	10.3		0.15	ppb	75-35-4	1	0		161047	10	103.38	percent	N			0.5
8257	522	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	ACE	EPA TO-15	AIR	BD					12/9/2015	Acetone	10.5		0.3	ppb	67-64-1	1	0		161047	10	105.03	percent	N			1
8258	526	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	MTBE	EPA TO-15	AIR	BD					12/9/2015	Methyl t-butyl ether	10.3		0.15	ppb	1634-04-4	1	0		161047	10	102.62	percent	N			0.5
8259	527	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	VA	EPA TO-15	AIR	BD					12/9/2015	Vinyl acetate	10.4		0.15	ppb	108-05-4	1	0		161047	10	104.03	percent	N			0.5
8260	528	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	MEK	EPA TO-15	AIR	BD					12/9/2015	Methyl ethyl ketone	10.9		0.15	ppb	78-93-3	1	0		161047	10	108.56	percent	N			0.5
8261	530	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	ETACET	EPA TO-15	AIR	BD					12/9/2015	Ethyl acetate	10.4		0.15	ppb	141-78-6	1	0		161047	10	103.5	percent	N			1
8262	531	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	HEXANE	EPA TO-15	AIR	BD					12/9/2015	n-Hexane	10.7		0.15	ppb	110-54-3	1	0		161047	10	107.16	percent	N			0.5
8263	533	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	THF	EPA TO-15	AIR	BD					12/9/2015	Tetrahydrofuran	10.9		0.15	ppb	109-99-9	1	0		161047	10	109.06	percent	N			0.5
8264	541	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	142-82-5	EPA TO-15	AIR	BD					12/9/2015	Heptane	11.2		0.15	ppb	142-82-5	1	0		161047	10	112.17	percent	N			0.5
8265	542	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	DCP13C	EPA TO-15	AIR	BD					12/9/2015	cis-1,3-Dichloropropene	10.7		0.15	ppb	10061-01-5	1	0		161047	10	107.43	percent	N			0.5
8266	543	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	MIBK	EPA TO-15	AIR	BD					12/9/2015	Methyl isobutyl ketone	11.6		0.15	ppb	108-10-1	1	0		161047	10	115.68	percent	N			0.5
8267	544	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	DCP13T	EPA TO-15	AIR	BD					12/9/2015	trans-1,3-Dichloropropene	10.8		0.15	ppb	10061-02-6	1	0		161047	10	107.97	percent	N			0.5
8268	545	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	TCA112	EPA TO-15	AIR	BD					12/9/2015	1,1,2-Trichloroethane	10.2		0.15	ppb	79-00-5	1	0		161047	10	101.66	percent	N			0.5
8269	546	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	BZME	EPA TO-15	AIR	BD					12/9/2015	Toluene	11.1		0.15	ppb	108-88-3	1	0		161047	10	111.3	percent	N			0.5
8270	547	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	HXO2	EPA TO-15	AIR	BD					12/9/2015	2-Hexanone	12.5		0.3	ppb	591-78-6	1	0		161047	10	125.49	percent	N			1
8271	548	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	DBCME	EPA TO-15	AIR	BD					12/9/2015	Dibromochloromethane	10.3		0.15	ppb	124-48-1	1	0		161047	10	103.04	percent	N			0.5
8272	549	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	EDB	EPA TO-15	AIR	BD					12/9/2015	1,2-Dibromoethane	10.7		0.15	ppb	106-93-4	1	0		161047	10	106.65	percent	N			0.5
8273	551	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	EBZ	EPA TO-15	AIR	BD					12/9/2015	Ethyl benzene	11.1		0.15	ppb	100-41-4	1	0		161047	10	110.64	percent	N			0.5
8274	552	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	XYLENES1314	EPA TO-15	AIR	BD					12/9/2015	m,p-Xylene	21.9		0.15	ppb	179601-23-1	1	0		161047	20	109.25	percent	N			0.5
8275	553	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	XYLO	EPA TO-15	AIR	BD					12/9/2015	o-Xylene	10.9		0.15	ppb	95-47-6	1	0		161047	10	108.88	percent	N			0.5
8276	554	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	STY	EPA TO-15	AIR	BD					12/9/2015	Styrene	11.8		0.15	ppb	100-42-5	1	0		161047	10	118.3	percent	N			0.5
8277	555	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	TBME	EPA TO-15	AIR	BD					12/9/2015	Bromoform	10.1		0.15	ppb	75-25-2	1	0		161047	10	101.07	percent	N			0.5
8278	556	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	PCA	EPA TO-15	AIR	BD					12/9/2015	1,1,2,2-Tetrachloroethane	10.7		0.15	ppb	79-34-5	1	0		161047	10	106.67	percent	N			0.5
8279	557	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	EBZME4	EPA TO-15	AIR	BD					12/9/2015	4-Ethyl toluene	11.9		0.15	ppb	622-96-8	1	0		161047	10	119.45	percent	N			1
8280	559	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	TMB124	EPA TO-15	AIR	BD					12/9/2015	1,2,4-Trimethylbenzene	11.8		0.15	ppb	95-63-6	1	0		161047	10	118.24	percent	N			1
8281	560	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	DCBZ13	EPA TO-15	AIR	BD					12/9/2015	1,3-Dichlorobenzene	11.7		0.15	ppb	541-73-1	1	0		161047	10	117.1	percent	N			0.5
8282	562	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	BZLCL	EPA TO-15	AIR	BD					12/9/2015	Benzyl chloride	12.8		0.3	ppb	100-44-7	1	0		161047	10	127.64	percent	N			1
8283	563	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	DCBZ12	EPA TO-15	AIR	BD					12/9/2015	1,2-Dichlorobenzene	11.3		0.3	ppb	95-50-1	1	0		161047	10	112.53	percent	N			1
8284	564	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	TCB124	EPA TO-15	AIR	BD					12/9/2015	1,2,4-Trichlorobenzene	11.8		0.3	ppb	120-82-1	1	0		161047	10	118.18	percent	N			1
8285	462	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	FC114	EPA TO-15	AIR	BS					12/9/2015	Freon 114	9.37		0.15	ppb	76-14-2	1	0		161047	10	93.705	percent	N			0.5
8286	466	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	FC11	EPA TO-15	AIR	BS					12/9/2015	Freon 11	9.61		0.15	ppb	75-69-4	1	0		161047	10	96.055	percent	N			0.5
8287	467	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	FC113	EPA TO-15	AIR	BS					12/9/2015	Freon 113	8.89		0.15	ppb	76-13-1	1	0		161047	10	88.936	percent	N			0.5
8288	470	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	CDS	EPA TO-15	AIR	BS					12/9/2015	Carbon disulfide	9.87		0.15	ppb	75-15-0	1	0		161047	10	98.715	percent	N			0.5
8289	472	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	DCE12T	EPA TO-15	AIR	BS					12/9/2015	trans-1,2-Dichloroethene	9.58		0.15	ppb	156-60-5	1	0		161047	10	95.768	percent	N			0.5
8290	479	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	TCLME	EPA TO-15	AIR	BS					12/9/2015	Chloroform	9.71		0.15	ppb	67-66-3	1	0		161047	10	97.063	percent	N			0.5
8291	482	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	TCA111	EPA TO-15	AIR	BS					12/9/2015	1,1,1-Trichloroethane	9.73		0.15	ppb	71-55-6	1	0		161047	10	97.332	percent	N			0.5
8292	483	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	CTCL	EPA TO-15	AIR	BS					12/9/2015	Carbon tetrachloride	9.63		0.15	ppb	56-23-5	1	0		161047	10	96.274	percent	N			0.5
8293	484	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	BZ	EPA TO-15	AIR	BS					12/9/2015	Benzene	9.93		0.15	ppb	71-43-2	1	0		161047	10	99.298	percent	N			0.5
8294	485	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	CYHEXANE	EPA TO-15	AIR	BS					12/9/2015	Cyclohexane	9.98		0.15	ppb	110-82-7	1	0		161047	10	99.839	percent	N			0.5
8295	497	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	CLBZ	EPA TO-15	AIR	BS					12/9/2015	Chlorobenzene	9.93		0.15	ppb	108-90-7	1	0		161047	10	99.297	percent	N			0.5
8296	512	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	HCBU	EPA TO-15	AIR	BS					12/9/2015	Hexachloro-1,3-butadiene	9.15		0.3	ppb	87-68-3	1	0		161047	10	91.473	percent	N			1
8297	515	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	FC114	EPA TO-15	AIR	BD					12/9/2015	Freon 114	9.36		0.15	ppb	76-14-2	1	0		161047	10	93.593	percent	N			0.5
8298	519	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	FC11	EPA TO-15	AIR	BD					12/9/2015	Freon 11	9.63		0.15	ppb	75-69-4	1	0		161047	10	96.31	percent	N			0.5
8299	520	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	FC113	EPA TO-15	AIR	BD					12/9/2015	Freon 113	8.98		0.15	ppb	76-13-1	1	0		161047	10	89.801	percent	N			0.5
8300	523	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	CDS	EPA TO-15	AIR	BD					12/9/2015	Carbon disulfide	9.92		0.15	ppb	75-15-0	1	0		161047	10	99.173	percent	N			0.5
8301	524	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	MTLNCL	EPA TO-15	AIR	BD					12/9/2015	Methylene chloride	9.84		0.15	ppb	75-09-2	1	0		161047	10	98.405	percent	N			0.5
8302	525	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	DCE12T	EPA TO-15	AIR	BD					12/9/2015	trans-1,2-Dichloroethene	9.66		0.15	ppb	156-60-5	1	0		161047	10	96.557	percent	N			0.5
8303	532	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	TCLME	EPA TO-15	AIR	BD					12/9/2015	Chloroform	9.71		0.15	ppb	67-66-3	1	0		161047	10	97.06	percent	N			0.5
8304	534	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	DCA12	EPA TO-15	AIR	BD					12/9/2015	1,2-Dichloroethane	9.92		0.15	ppb	107-06-2	1	0		161047	10	99.2	percent	N			0.5
8305	535	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	TCA111	EPA TO-15	AIR	BD					12/9/2015	1,1,1-Trichloroethane	9.68		0.15	ppb	71-55-6	1	0		161047	10	96.821	percent	N			0.5
8306	536	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	CTCL	EPA TO-15	AIR	BD					12/9/2015	Carbon tetrachloride	9.62		0.15	ppb	56-23-5	1	0		161047	10	96.184	percent	N			0.5
8307	537	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	BZ	EPA TO-15	AIR	BD					12/9/2015	Benzene	9.95		0.15	ppb	71-43-2	1	0		161047	10	99.457	percent	N			0.5
8308	538	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	CYHEXANE	EPA TO-15	AIR	BD					12/9/2015	Cyclohexane	9.96		0.15	ppb	110-82-7	1	0		161047	10	99.557	percent	N			0.5
8309	539	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	DCPA12	EPA TO-15	AIR	BD					12/9/2015	1,2-Dichloropropane	9.92		0.15	ppb	78-87-5	1	0		161047	10	99.216	percent	N			0.5
8310	550	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	CLBZ	EPA TO-15	AIR	BD					12/9/2015	Chlorobenzene	9.94		0.15	ppb	108-90-7	1	0		161047	10	99.376	percent	N			0.5
8311	565	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	HCBU	EPA TO-15	AIR	BD					12/9/2015	Hexachloro-1,3-butadiene	9.13		0.3	ppb	87-68-3	1	0		161047	10	91.34	percent	N			1

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
8223	468	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.4		X	=	67.174	125.1	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8224	469	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.5		X	=	42.491	145.96	0.3	1	480507	4.30EPACLP						161047		TRUE
8225	471	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	9.9		X	=	63.699	127.89	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8226	473	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.3		X	=	60.827	138.03	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8227	474	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.2		X	=	59.331	141.08	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8228	475	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.9		X	=	51.691	144.24	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8229	476	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.2		X	=	67.712	123.62	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8230	477	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.7		X	=	53.357	156.94	0.15	1	480507	4.30EPACLP						161047		TRUE
8231	478	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.7		X	=	62.414	129.54	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8232	487	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.1		X	=	62.886	128.34	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8233	488	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	11.3		X	=	59.499	133.39	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8234	489	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.9		X	=	64.079	133.63	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8235	490	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	11.7		X	=	73.471	149.97	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8236	492	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.3		X	=	64.985	126.62	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8237	493	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	11.3		X	=	75.551	139.43	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8238	494	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	12.9		X	=	80.836	158.78	0.3	1	480507	4.30EPACLP						161047		TRUE
8239	495	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.4		X	=	62.442	130.92	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8240	496	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.8		X	=	64.38	129.01	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8241	499	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	21.9		X	=	73.675	144.89	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8242	501	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	11.8		X	=	75.945	158.11	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8243	503	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.8		X	=	59.318	134.78	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8244	505	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	11.1		X	=	64.237	155.06	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8245	506	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	11.9		X	=	59.734	169.39	0.15	1	480507	4.30EPACLP						161047		TRUE
8246	507	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	11.6		X	=	58.55	157.62	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8247	508	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	11.9		X	=	57.682	137.17	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8248	509	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	12.6		X	=	60.08	182.54	0.3	1	480507	4.30EPACLP						161047		TRUE
8249	510	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	11.1		X	=	56.513	140.03	0.3	1	480507	4.30EPACLP						161047		TRUE
8250	511	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	11.4		X	=	0	235.7	0.3	1	480507	4.30EPACLP						161047		TRUE
8251	513	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.5		X	=	59.255	135.13	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8252	514	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.6		X	=	55.169	137.44	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8253	516	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.5		X	=	57.992	138.25	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8254	517	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.6		X	=	63.318	129.94	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8255	518	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.9		X	=	57.618	137.13	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8256	521	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.3		X	=	67.174	125.1	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8257	522	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.5		X	=	42.491	145.96	0.3	1	480508	4.30EPACLP						161047		TRUE
8258	526	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.3		X	=	60.827	138.03	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8259	527	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.4		X	=	59.331	141.08	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8260	528	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.9		X	=	51.691	144.24	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8261	530	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.4		X	=	53.357	156.94	0.15	1	480508	4.30EPACLP						161047		TRUE
8262	531	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.7		X	=	62.414	129.54	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8263	533	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.9		X	=	50.619	155.33	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8264	541	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	11.2		X	=	59.499	133.39	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8265	542	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.7		X	=	64.079	133.63	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8266	543	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	11.6		X	=	73.471	149.97	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8267	544	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.8		X	=	78.538	148.69	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8268	545	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.2		X	=	64.985	126.62	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8269	546	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	11.1		X	=	75.551	139.43	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8270	547	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	12.5		X	=	80.836	158.78	0.3	1	480508	4.30EPACLP						161047		TRUE
8271	548	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.3		X	=	62.442	130.92	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8272	549	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.7		X	=	64.38	129.01	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8273	551	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	11.1		X	=	75.851	148.51	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8274	552	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	21.9		X	=	73.675	144.89	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8275	553	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.9		X	=	74.707	147.4	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8276	554	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	11.8		X	=	75.945	158.11	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8277	555	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.1		X	=	59.748	136.05	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8278	556	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	10.7		X	=	59.318	134.78	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8279	557	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	11.9		X	=	69.037	163.28	0.15	1	480508	4.30EPACLP						161047		TRUE
8280	559	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	11.8		X	=	59.734	169.39	0.15	1	480508	4.30EPACLP						161047		TRUE
8281	560	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	11.7		X	=	58.55	157.62	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8282	562	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	12.8		X	=	60.08	182.54	0.3	1	480508	4.30EPACLP						161047		TRUE
8283	563	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	11.3		X	=	56.513	140.03	0.3	1	480508	4.30EPACLP						161047		TRUE
8284	564	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			1		TRUE	12/31/2015	mfesler	11.8		X	=	0	235.7	0.3	1	480508	4.30EPACLP						161047		TRUE
8285	462	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	9.37		X	=	64.568	128.04	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8286	466	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	9.61		X	=	58.928	132.84	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8287	467	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	8.89		X	=	68.501	120.04	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8288	470	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	9.87		X	=	63.855	128.75	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8289	472	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	9.58		X	=	68.113	124.64	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8290	479	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	9.71		X	=	67.344	121.81	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8291	482	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	9.73		X	=	60.42	127.68	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8292	483	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	9.63		X	=	58.158	130.61	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8293	484	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	9.93		X	=	64.138	127.27	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8294	485	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	9.98		X	=	61.913	123.55	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8295	497	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	9.93		X	=	62.845	126.85	0.15	0.5	480507	4.30EPACLP						161047		TRUE
8296	512	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	9.15		X	=	25.329	155.93	0.3	1	480507	4.30EPACLP						161047		TRUE
8297	515	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	9.36		X	=	64.568	128.04	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8298	519	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	9.63		X	=	58.928	132.84	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8299	520	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	8.98		X	=	68.501	120.04	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8300	523	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	9.92		X	=	63.855	128.75	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8301	524	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	9.84		X	=	63.699	127.89	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8302	525	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	9.66		X	=	68.113	124.64	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8303	532	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	9.71		X	=	67.344	121.81	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8304	534	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	9.92		X	=	62.441	130.48	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8305	535	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	9.68		X	=	60.42	127.68	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8306	536	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	9.62		X	=	58.158	130.61	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8307	537	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	9.95		X	=	64.138	127.27	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8308	538	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	9.96		X	=	61.913	123.55	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8309	539	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	9.92		X	=	60.69	130.65	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8310	550	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	9.94		X	=	62.845	126.85	0.15	0.5	480508	4.30EPACLP						161047		TRUE
8311	565	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	9.13		X	=	25.329	155.93	0.3	1	480508	4.30EPACLP						161047		TRUE

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
8223	468	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8224	469	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		1	1			mfesler Tier 2B/Tier 4
8225	471	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8226	473	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8227	474	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8228	475	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8229	476	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8230	477	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		1	1			mfesler Tier 2B/Tier 4
8231	478	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8232	487	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8233	488	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8234	489	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8235	490	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8236	492	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8237	493	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8238	494	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		1	1			mfesler Tier 2B/Tier 4
8239	495	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8240	496	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8241	499	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	20		0.5	0.5			mfesler Tier 2B/Tier 4
8242	501	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8243	503	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8244	505	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8245	506	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		1	1			mfesler Tier 2B/Tier 4
8246	507	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8247	508	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8248	509	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		1	1			mfesler Tier 2B/Tier 4
8249	510	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		1	1			mfesler Tier 2B/Tier 4
8250	511	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		1	1			mfesler Tier 2B/Tier 4
8251	513	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8252	514	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8253	516	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8254	517	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8255	518	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8256	521	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8257	522	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		1	1			mfesler Tier 2B/Tier 4
8258	526	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8259	527	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8260	528	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8261	530	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		1	1			mfesler Tier 2B/Tier 4
8262	531	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8263	533	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8264	541	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8265	542	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8266	543	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8267	544	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8268	545	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8269	546	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8270	547	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		1	1			mfesler Tier 2B/Tier 4
8271	548	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8272	549	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8273	551	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8274	552	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	20		0.5	0.5			mfesler Tier 2B/Tier 4
8275	553	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8276	554	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8277	555	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8278	556	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8279	557	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		1	1			mfesler Tier 2B/Tier 4
8280	559	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		1	1			mfesler Tier 2B/Tier 4
8281	560	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8282	562	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		1	1			mfesler Tier 2B/Tier 4
8283	563	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		1	1			mfesler Tier 2B/Tier 4
8284	564	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		1	1			mfesler Tier 2B/Tier 4
8285	462	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8286	466	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8287	467	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8288	470	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8289	472	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8290	479	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8291	482	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8292	483	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8293	484	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8294	485	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8295	497	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8296	512	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	10		1	1			mfesler Tier 2B/Tier 4
8297	515	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8298	519	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8299	520	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8300	523	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8301	524	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8302	525	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8303	532	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8304	534	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8305	535	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8306	536	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8307	537	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8308	538	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8309	539	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8310	550	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		0.5	0.5			mfesler Tier 2B/Tier 4
8311	565	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	10		1	1			mfesler Tier 2B/Tier 4

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
8312	579	0	16	ALSS	1534300	1534300	480506	480506	480506	EPA TO-15	BR4FBZ	EPA TO-15	AIR	LB					12/9/2015	4-Bromofluorobenzene	101.17			PERCENT	460-00-4	1	0		161047	20	101.17	percent	Y			
8313	580	0	16	ALSS	1534300	1534300	480507	480507	480507	EPA TO-15	BR4FBZ	EPA TO-15	AIR	BS					12/9/2015	4-Bromofluorobenzene	108.98			PERCENT	460-00-4	1	0		161047	20	108.98	percent	Y			
8314	581	0	16	ALSS	1534300	1534300	480508	480508	480508	EPA TO-15	BR4FBZ	EPA TO-15	AIR	BD					12/9/2015	4-Bromofluorobenzene	107.98			PERCENT	460-00-4	1	0		161047	20	107.98	percent	Y			
8315	566	0	16	ALSS	1534300	1534300	481809	481809	481809	EPA TO-15 SIM	DIOXANE14	EPA TO-15 SIM	AIR	LB					12/10/2015	1,4-Dioxane	0.05	U		ppb	123-91-1	1	0		161510			percent	N			0.05
8316	567	0	16	ALSS	1534300	1534300	481809	481809	481809	EPA TO-15 SIM	VC	EPA TO-15 SIM	AIR	LB					12/10/2015	Vinyl chloride	0.05	U		ppb	75-01-4	1	0		161510			percent	N			0.05
8317	568	0	16	ALSS	1534300	1534300	481809	481809	481809	EPA TO-15 SIM	DCE12C	EPA TO-15 SIM	AIR	LB					12/10/2015	cis-1,2-Dichloroethene	0.05	U		ppb	156-59-2	1	0		161510			percent	N			0.05
8318	569	0	16	ALSS	1534300	1534300	481809	481809	481809	EPA TO-15 SIM	TCE	EPA TO-15 SIM	AIR	LB					12/10/2015	Trichloroethene	0.05	U		ppb	79-01-6	1	0		161510			percent	N			0.05
8319	570	0	16	ALSS	1534300	1534300	481809	481809	481809	EPA TO-15 SIM	PCE	EPA TO-15 SIM	AIR	LB					12/10/2015	Tetrachloroethene	0.05	U		ppb	127-18-4	1	0		161510			percent	N			0.05
8320	583	0	16	ALSS	1534300	1534300	481810	481810	481810	EPA TO-15 SIM	BR4FBZ	EPA TO-15 SIM	AIR	BS					12/10/2015	4-Bromofluorobenzene	107.31			PERCENT	460-00-4	1	0		161510	1	107.31	percent	Y			
8321	584	0	16	ALSS	1534300	1534300	481811	481811	481811	EPA TO-15 SIM	BR4FBZ	EPA TO-15 SIM	AIR	BD					12/10/2015	4-Bromofluorobenzene	104.16			PERCENT	460-00-4	1	0		161510	1	104.16	percent	Y			
8322	571	0	16	ALSS	1534300	1534300	481810	481810	481810	EPA TO-15 SIM	VC	EPA TO-15 SIM	AIR	BS					12/10/2015	Vinyl chloride	0.458			ppb	75-01-4	1	0		161510	0.5	91.583	percent	N			0.05
8323	572	0	16	ALSS	1534300	1534300	481810	481810	481810	EPA TO-15 SIM	DCE12C	EPA TO-15 SIM	AIR	BS					12/10/2015	cis-1,2-Dichloroethene	0.458			ppb	156-59-2	1	0		161510	0.5	91.648	percent	N			0.05
8324	573	0	16	ALSS	1534300	1534300	481810	481810	481810	EPA TO-15 SIM	TCE	EPA TO-15 SIM	AIR	BS					12/10/2015	Trichloroethene	0.436			ppb	79-01-6	1	0		161510	0.5	87.178	percent	N			0.05
8325	574	0	16	ALSS	1534300	1534300	481810	481810	481810	EPA TO-15 SIM	PCE	EPA TO-15 SIM	AIR	BS					12/10/2015	Tetrachloroethene	0.436			ppb	127-18-4	1	0		161510	0.5	87.153	percent	N			0.05
8326	575	0	16	ALSS	1534300	1534300	481811	481811	481811	EPA TO-15 SIM	VC	EPA TO-15 SIM	AIR	BD					12/10/2015	Vinyl chloride	0.461			ppb	75-01-4	1	0		161510	0.5	92.22	percent	N			0.05
8327	576	0	16	ALSS	1534300	1534300	481811	481811	481811	EPA TO-15 SIM	DCE12C	EPA TO-15 SIM	AIR	BD					12/10/2015	cis-1,2-Dichloroethene	0.442			ppb	156-59-2	1	0		161510	0.5	88.432	percent	N			0.05
8328	577	0	16	ALSS	1534300	1534300	481811	481811	481811	EPA TO-15 SIM	TCE	EPA TO-15 SIM	AIR	BD					12/10/2015	Trichloroethene	0.453			ppb	79-01-6	1	0		161510	0.5	90.658	percent	N			0.05
8329	578	0	16	ALSS	1534300	1534300	481811	481811	481811	EPA TO-15 SIM	PCE	EPA TO-15 SIM	AIR	BD					12/10/2015	Tetrachloroethene	0.464			ppb	127-18-4	1	0		161510	0.5	92.871	percent	N			0.05
8330	582	0	16	ALSS	1534300	1534300	481809	481809	481809	EPA TO-15 SIM	BR4FBZ	EPA TO-15 SIM	AIR	LB					12/10/2015	4-Bromofluorobenzene	81.142			PERCENT	460-00-4	1	0		161510	1	81.142	percent	Y			
8331	108	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15 SIM	PCE	TO15SIM	AIR	N		3/1/2016	3/3/2016		3/11/2016	Tetrachloroethene	12	E		µg/m3	127-18-4	1	0		165702			percent	N			0.34
8332	107	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15 SIM	PCE	TO15SIM	AIR	N		3/1/2016	3/3/2016		3/11/2016	Tetrachloroethene	1.7	E		ppb	127-18-4	1	0		165702			percent	N			0.05
8333	102	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	N		3/1/2016	3/3/2016		3/11/2016	1,4-Dioxane	0.18	U		µg/m3	123-91-1	1	0		165702			percent	N			0.18
8334	104	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15 SIM	VC	TO15SIM	AIR	N		3/1/2016	3/3/2016		3/11/2016	Vinyl chloride	0.13	U		µg/m3	75-01-4	1	0		165702			percent	N			0.13
8335	106	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	N		3/1/2016	3/3/2016		3/11/2016	cis-1,2-Dichloroethene	0.2	U		µg/m3	156-59-2	1	0		165702			percent	N			0.2
8336	110	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15 SIM	TCE	TO15SIM	AIR	N		3/1/2016	3/3/2016		3/11/2016	Trichloroethene	0.27	U		µg/m3	79-01-6	1	0		165702			percent	N			0.27
8337	101	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	N		3/1/2016	3/3/2016		3/11/2016	1,4-Dioxane	0.05	U		ppb	123-91-1	1	0		165702			percent	N			0.05
8338	103	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15 SIM	VC	TO15SIM	AIR	N		3/1/2016	3/3/2016		3/11/2016	Vinyl chloride	0.05	U		ppb	75-01-4	1	0		165702			percent	N			0.05
8339	105	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	N		3/1/2016	3/3/2016		3/11/2016	cis-1,2-Dichloroethene	0.05	U		ppb	156-59-2	1	0		165702			percent	N			0.05
8340	109	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15 SIM	TCE	TO15SIM	AIR	N		3/1/2016	3/3/2016		3/11/2016	Trichloroethene	0.05	U		ppb	79-01-6	1	0		165702			percent	N			0.05
8341	111	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15 SIM	BR4FBZ	TO15SIM	AIR	N		3/1/2016	3/3/2016		3/11/2016	4-Bromofluorobenzene	97.211			PERCENT	460-00-4	1	0		165702	1	97.211	percent	Y			
8342	220	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15 SIM	PCE	TO15SIM	AIR	N		3/3/2016	3/3/2016		3/11/2016	Tetrachloroethene	1.3			µg/m3	127-18-4	1	0		165702			percent	N			0.34
8343	214	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	N		3/3/2016	3/3/2016		3/11/2016	1,4-Dioxane	0.18	U		µg/m3	123-91-1	1	0		165702			percent	N			0.18
8344	216	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15 SIM	VC	TO15SIM	AIR	N		3/3/2016	3/3/2016		3/11/2016	Vinyl chloride	0.13	U		µg/m3	75-01-4	1	0		165702			percent	N			0.13
8345	218	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	N		3/3/2016	3/3/2016		3/11/2016	cis-1,2-Dichloroethene	0.2	U		µg/m3	156-59-2	1	0		165702			percent	N			0.2
8346	219	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15 SIM	PCE	TO15SIM	AIR	N		3/3/2016	3/3/2016		3/11/2016	Tetrachloroethene	0.19			ppb	127-18-4	1	0		165702			percent	N			0.05
8347	222	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15 SIM	TCE	TO15SIM	AIR	N		3/3/2016	3/3/2016		3/11/2016	Trichloroethene	0.27	U		µg/m3	79-01-6	1	0		165702			percent	N			0.27
8348	223	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15 SIM	BR4FBZ	TO15SIM	AIR	N		3/3/2016	3/3/2016		3/11/2016	4-Bromofluorobenzene	116.22			PERCENT	460-00-4	1	0		165702	1	116.22	percent	Y			
8349	213	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	N		3/3/2016	3/3/2016		3/11/2016	1,4-Dioxane	0.05	U		µg/m3	123-91-1	1	0		165702			percent	N			0.05
8350	215	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15 SIM	VC	TO15SIM	AIR	N		3/3/2016	3/3/2016		3/11/2016	Vinyl chloride	0.05	U		ppb	75-01-4	1	0		165702			percent	N			0.05
8351	217	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	N		3/3/2016	3/3/2016		3/11/2016	cis-1,2-Dichloroethene	0.05	U		ppb	156-59-2	1	0		165702			percent	N			0.05
8352	221	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15 SIM	TCE	TO15SIM	AIR	N		3/3/2016	3/3/2016		3/11/2016	Trichloroethene	0.05	U		ppb	79-01-6	1	0		165702			percent	N			0.05
8353	2	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	FC12	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	Dichlorodifluoromethane	2.2	J	0.74	µg/m3	75-71-8	1	0		165682			percent	N			2.5
8354	6	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	DCTFA12	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	Freon 114	1	U	1	µg/m3	76-14-2	1	0		165682			percent	N			3.5
8355	14	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	FC11	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	Freon 11	1.1	J	0.84	µg/m3	75-69-4	1	0		165682			percent	N			2.8
8356	16	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	FC113	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	Freon 113	1.1	U	1.1	µg/m3	76-13-1	1	0		165682			percent	N			3.8
8357	19	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	ACE	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	Acetone	3.4		0.3	ppb	67-64-1	1	0		165682			percent	N			1
8358	20	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	ACE	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	Acetone	8.1		0.71	µg/m3	67-64-1	1	0		165682			percent	N			2.4
8359	23	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	MTLNCL	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	Methylene chloride	1.1		0.15	ppb	75-09-2	1	0		165682			percent	N			0.5
8360	24	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	MTLNCL	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	Methylene chloride	3.7		0.52	µg/m3	75-09-2	1	0		165682			percent	N			1.7
8361	36	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	ETACET	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	Ethyl acetate	1.6	J	0.54	µg/m3	141-78-6	1	0		165682			percent	N			3.6
8362	56	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	BDCME	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	Bromodichloromethane	1	U	1	µg/m3	75-27-4	1	0		165682			percent	N			3.4
8363	68	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	BZME	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	Toluene	1.4	J	0.57	µg/m3	108-88-3	1	0		165682			percent	N			1.9
8364	70	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	HXO2	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	2-Hexanone	1.2	U	1.2	µg/m3	591-78-6	1	0		165682			percent	N			4.1

APPENDIX A-1

Laboratory Validated Results

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
8312	579	0	16	ALSS	1534300	1534300	480506	480506	480506		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	101.17		X	=	67.698	129.86			480506	4.30EPACLP						161047		TRUE
8313	580	0	16	ALSS	1534300	1534300	480507	480507	480507		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	108.98		X	=	67.698	129.86			480507	4.30EPACLP						161047		TRUE
8314	581	0	16	ALSS	1534300	1534300	480508	480508	480508		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	107.98		X	=	67.698	129.86			480508	4.30EPACLP						161047		TRUE
8315	566	0	16	ALSS	1534300	1534300	481809	481809	481809		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.05	U	X	U			0.05	0.05	481809	4.30EPACLP						161510		TRUE
8316	567	0	16	ALSS	1534300	1534300	481809	481809	481809		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.05	U	X	U			0.05	0.05	481809	4.30EPACLP						161510		TRUE
8317	568	0	16	ALSS	1534300	1534300	481809	481809	481809		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.05	U	X	U			0.05	0.05	481809	4.30EPACLP						161510		TRUE
8318	569	0	16	ALSS	1534300	1534300	481809	481809	481809		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.05	U	X	U			0.05	0.05	481809	4.30EPACLP						161510		TRUE
8319	570	0	16	ALSS	1534300	1534300	481809	481809	481809		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	0.05	U	X	U			0.05	0.05	481809	4.30EPACLP						161510		TRUE
8320	583	0	16	ALSS	1534300	1534300	481810	481810	481810		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	107.31		X	=	48.778	151.81			481810	4.30EPACLP						161510		TRUE
8321	584	0	16	ALSS	1534300	1534300	481811	481811	481811		1/0/1900	NONE			2		TRUE	12/31/2015	mfesler	104.16		X	=	48.778	151.81			481811	4.30EPACLP						161510		TRUE
8322	571	0	16	ALSS	1534300	1534300	481810	481810	481810		1/0/1900	NONE			3		TRUE	12/31/2015	mfesler	0.458		X	=	17.533	153.67		0.05	481810	4.30EPACLP						161510		TRUE
8323	572	0	16	ALSS	1534300	1534300	481810	481810	481810		1/0/1900	NONE			3		TRUE	12/31/2015	mfesler	0.458		X	=	65.189	131.19		0.05	481810	4.30EPACLP						161510		TRUE
8324	573	0	16	ALSS	1534300	1534300	481810	481810	481810		1/0/1900	NONE			3		TRUE	12/31/2015	mfesler	0.436		X	=	68.353	123.42		0.05	481810	4.30EPACLP						161510		TRUE
8325	574	0	16	ALSS	1534300	1534300	481810	481810	481810		1/0/1900	NONE			3		TRUE	12/31/2015	mfesler	0.436		X	=	63.624	127.93		0.05	481810	4.30EPACLP						161510		TRUE
8326	575	0	16	ALSS	1534300	1534300	481811	481811	481811		1/0/1900	NONE			3		TRUE	12/31/2015	mfesler	0.461		X	=	17.533	153.67		0.05	481811	4.30EPACLP						161510		TRUE
8327	576	0	16	ALSS	1534300	1534300	481811	481811	481811		1/0/1900	NONE			3		TRUE	12/31/2015	mfesler	0.442		X	=	65.189	131.19		0.05	481811	4.30EPACLP						161510		TRUE
8328	577	0	16	ALSS	1534300	1534300	481811	481811	481811		1/0/1900	NONE			3		TRUE	12/31/2015	mfesler	0.453		X	=	68.353	123.42		0.05	481811	4.30EPACLP						161510		TRUE
8329	578	0	16	ALSS	1534300	1534300	481811	481811	481811		1/0/1900	NONE			3		TRUE	12/31/2015	mfesler	0.464		X	=	63.624	127.93		0.05	481811	4.30EPACLP						161510		TRUE
8330	582	0	16	ALSS	1534300	1534300	481809	481809	481809		1/0/1900	NONE			3		TRUE	12/31/2015	mfesler	81.142		X	=	48.778	151.81			481809	4.30EPACLP						161510		TRUE
8331	108	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			0		TRUE	3/23/2016	mfesler	12	J	X	E				0.34	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165702		TRUE
8332	107	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			1		TRUE	3/23/2016	mfesler	1.7	J	X	E				0.05	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165702		TRUE
8333	102	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/23/2016	mfesler	0.18	U	X	U				0.18	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165702		TRUE
8334	104	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/23/2016	mfesler	0.13	U	X	U				0.13	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165702		TRUE
8335	106	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/23/2016	mfesler	0.2	U	X	U				0.2	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165702		TRUE
8336	110	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/23/2016	mfesler	0.27	U	X	U				0.27	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165702		TRUE
8337	101	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			3		TRUE	3/23/2016	mfesler	0.05	U	X	U				0.05	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165702		TRUE
8338	103	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			3		TRUE	3/23/2016	mfesler	0.05	U	X	U				0.05	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165702		TRUE
8339	105	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			3		TRUE	3/23/2016	mfesler	0.05	U	X	U				0.05	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165702		TRUE
8340	109	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			3		TRUE	3/23/2016	mfesler	0.05	U	X	U				0.05	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165702		TRUE
8341	111	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			3		TRUE	3/23/2016	mfesler	97.211		X	=	48.778	151.81			A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165702		TRUE
8342	220	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			1		TRUE	3/23/2016	mfesler	1.3		X	=				0.34	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165702		TRUE
8343	214	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/23/2016	mfesler	0.18	U	X	U				0.18	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165702		TRUE
8344	216	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/23/2016	mfesler	0.13	U	X	U				0.13	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165702		TRUE
8345	218	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/23/2016	mfesler	0.2	U	X	U				0.2	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165702		TRUE
8346	219	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/23/2016	mfesler	0.19		X	=				0.05	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165702		TRUE
8347	222	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/23/2016	mfesler	0.27	U	X	U				0.27	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165702		TRUE
8348	223	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/23/2016	mfesler	116.22		X	=	48.778	151.81			A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165702		TRUE
8349	213	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			3		TRUE	3/23/2016	mfesler	0.05	U	X	U				0.05	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165702		TRUE
8350	215	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			3		TRUE	3/23/2016	mfesler	0.05	U	X	U				0.05	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165702		TRUE
8351	217	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			3		TRUE	3/23/2016	mfesler	0.05	U	X	U				0.05	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165702		TRUE
8352	221	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			3		TRUE	3/23/2016	mfesler	0.05	U	X	U				0.05	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165702		TRUE
8353	2	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	2.2	J	X	J			0.74	2.5	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8354	6	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	1	U	X	U			1	3.5	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8355	14	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	1.1	J	X	J			0.84	2.8	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8356	16	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	1.1	U	X	U			1.1	3.8	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8357	19	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	3.4		X	=			0.3	1	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8358	20	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	8.1		X	=			0.71	2.4	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8359	23	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	1.1		X	=			0.15	0.5	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8360	24	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	3.7		X	=			0.52	1.7	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8361	36	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	1.6	J	X	J			0.54	3.6	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8362	56	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	1	U	X	U			1	3.4	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8363	68	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	1.4	J	X	J			0.57	1.9	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8364	70	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	1.2	UJ	X	U			1.2	4.1

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Laboratory Validated Results

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
8312	579	0	16	ALSS	1534300	1534300	480506	480506	480506	1/4/2016	mcichy	20						mfesler Tier 2B/Tier 4
8313	580	0	16	ALSS	1534300	1534300	480507	480507	480507	1/4/2016	mcichy	20						mfesler Tier 2B/Tier 4
8314	581	0	16	ALSS	1534300	1534300	480508	480508	480508	1/4/2016	mcichy	20						mfesler Tier 2B/Tier 4
8315	566	0	16	ALSS	1534300	1534300	481809	481809	481809	1/4/2016	mcichy			0.05	0.05			mfesler Tier 2B/Tier 4
8316	567	0	16	ALSS	1534300	1534300	481809	481809	481809	1/4/2016	mcichy			0.05	0.05			mfesler Tier 2B/Tier 4
8317	568	0	16	ALSS	1534300	1534300	481809	481809	481809	1/4/2016	mcichy			0.05	0.05			mfesler Tier 2B/Tier 4
8318	569	0	16	ALSS	1534300	1534300	481809	481809	481809	1/4/2016	mcichy			0.05	0.05			mfesler Tier 2B/Tier 4
8319	570	0	16	ALSS	1534300	1534300	481809	481809	481809	1/4/2016	mcichy			0.05	0.05			mfesler Tier 2B/Tier 4
8320	583	0	16	ALSS	1534300	1534300	481810	481810	481810	1/4/2016	mcichy	1						mfesler Tier 2B/Tier 4
8321	584	0	16	ALSS	1534300	1534300	481811	481811	481811	1/4/2016	mcichy	1						mfesler Tier 2B/Tier 4
8322	571	0	16	ALSS	1534300	1534300	481810	481810	481810	1/4/2016	mcichy	0.5		0.05	0.05			mfesler Tier 2B/Tier 4
8323	572	0	16	ALSS	1534300	1534300	481810	481810	481810	1/4/2016	mcichy	0.5		0.05	0.05			mfesler Tier 2B/Tier 4
8324	573	0	16	ALSS	1534300	1534300	481810	481810	481810	1/4/2016	mcichy	0.5		0.05	0.05			mfesler Tier 2B/Tier 4
8325	574	0	16	ALSS	1534300	1534300	481810	481810	481810	1/4/2016	mcichy	0.5		0.05	0.05			mfesler Tier 2B/Tier 4
8326	575	0	16	ALSS	1534300	1534300	481811	481811	481811	1/4/2016	mcichy	0.5		0.05	0.05			mfesler Tier 2B/Tier 4
8327	576	0	16	ALSS	1534300	1534300	481811	481811	481811	1/4/2016	mcichy	0.5		0.05	0.05			mfesler Tier 2B/Tier 4
8328	577	0	16	ALSS	1534300	1534300	481811	481811	481811	1/4/2016	mcichy	0.5		0.05	0.05			mfesler Tier 2B/Tier 4
8329	578	0	16	ALSS	1534300	1534300	481811	481811	481811	1/4/2016	mcichy	0.5		0.05	0.05			mfesler Tier 2B/Tier 4
8330	582	0	16	ALSS	1534300	1534300	481809	481809	481809	1/4/2016	mcichy	1						mfesler Tier 2B/Tier 4
8331	108	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.34	0.34	J	>ICLinearRange	mfesler - Tier 4 validat
8332	107	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.05	0.05	J	>ICLinearRange	mfesler - Tier 4 validat
8333	102	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.18	0.18			mfesler - Tier 4 validat
8334	104	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.13	0.13			mfesler - Tier 4 validat
8335	106	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.2	0.2			mfesler - Tier 4 validat
8336	110	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.27	0.27			mfesler - Tier 4 validat
8337	101	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.05	0.05			mfesler - Tier 4 validat
8338	103	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.05	0.05			mfesler - Tier 4 validat
8339	105	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.05	0.05			mfesler - Tier 4 validat
8340	109	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.05	0.05			mfesler - Tier 4 validat
8341	111	-79044432	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler	1	ppb					mfesler - Tier 4 validat
8342	220	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.34	0.34			mfesler - Tier 4 validat
8343	214	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.18	0.18			mfesler - Tier 4 validat
8344	216	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.13	0.13			mfesler - Tier 4 validat
8345	218	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.2	0.2			mfesler - Tier 4 validat
8346	219	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.05	0.05			mfesler - Tier 4 validat
8347	222	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.27	0.27			mfesler - Tier 4 validat
8348	223	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler	1	ppb					mfesler - Tier 4 validat
8349	213	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.05	0.05			mfesler - Tier 4 validat
8350	215	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.05	0.05			mfesler - Tier 4 validat
8351	217	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.05	0.05			mfesler - Tier 4 validat
8352	221	-33988814	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.05	0.05			mfesler - Tier 4 validat
8353	2	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			2.5	2.5			mfesler - Tier 4 validat
8354	6	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			3.5	3.5			mfesler - Tier 4 validat
8355	14	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			2.8	2.8			mfesler - Tier 4 validat
8356	16	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			3.8	3.8			mfesler - Tier 4 validat
8357	19	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			1	1			mfesler - Tier 4 validat
8358	20	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			2.4	2.4			mfesler - Tier 4 validat
8359	23	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8360	24	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			1.7	1.7			mfesler - Tier 4 validat
8361	36	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			3.6	3.6			mfesler - Tier 4 validat
8362	56	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			3.4	3.4			mfesler - Tier 4 validat
8363	68	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			1.9	1.9			mfesler - Tier 4 validat
8364	70	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			4.1	4.1	UJ	LCS<LCL	mfesler - Tier 4 validat
8364	70	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			4.1	4.1	UJ	LCS<LCL	mfesler - Tier 4 validat
8364	70	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			4.1	4.1	UJ	CCV<LCL	mfesler - Tier 4 validat
8365	72	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			4.3	4.3			mfesler - Tier 4 validat
8366	74	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			3.8	3.8			mfesler - Tier 4 validat
8367	86	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			5.2	5.2			mfesler - Tier 4 validat
8368	88	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			3.4	3.4			mfesler - Tier 4 validat
8369	100	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			6	6			mfesler - Tier 4 validat
8370	1	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8371	3	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8372	4	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			1	1			mfesler - Tier 4 validat
8373	5	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8374	7	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8375	8	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			1.1	1.1			mfesler - Tier 4 validat
8376	9	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8377	10	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			1.9	1.9			mfesler - Tier 4 validat
8378	11	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8379	12	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			1.3	1.3			mfesler - Tier 4 validat
8380	13	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8381	15	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8382	17	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8383	18	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			2	2			mfesler - Tier 4 validat
8384	21	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8385	22	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			1.6	1.6			mfesler - Tier 4 validat
8386	25	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8387	26	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			2	2			mfesler - Tier 4 validat
8388	27	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8389	28	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			1.8	1.8			mfesler - Tier 4 validat
8390	29	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8391	30	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			1.8	1.8			mfesler - Tier 4 validat
8392	31	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8393	32	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			1.5	1.5			mfesler - Tier 4 validat
8394	33	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8395	34	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			2	2			mfesler - Tier 4 validat
8396	35	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			1	1			mfesler - Tier 4 validat
8397	37	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8398	38	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			1.8	1.8			mfesler - Tier 4 validat

APPENDIX A-1

Laboratory Validated Results

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
8399	39	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	TCLME	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	Chloroform	0.15	U	0.15	ppb	67-66-3	1	0		165682			percent	N			0.5
8400	40	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	TCLME	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	Chloroform	0.73	U	0.73	µg/m3	67-66-3	1	0		165682			percent	N			2.4
8401	41	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	THF	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	Tetrahydrofuran	0.15	U	0.15	ppb	109-99-9	1	0		165682			percent	N			0.5
8402	42	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	THF	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	Tetrahydrofuran	0.44	U	0.44	µg/m3	109-99-9	1	0		165682			percent	N			1.5
8403	43	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	DCA12	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	1,2-Dichloroethane	0.15	U	0.15	ppb	107-06-2	1	0		165682			percent	N			0.5
8404	44	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	DCA12	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	1,2-Dichloroethane	0.61	U	0.61	µg/m3	107-06-2	1	0		165682			percent	N			2
8405	45	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	TCA111	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	1,1,1-Trichloroethane	0.15	U	0.15	ppb	71-55-6	1	0		165682			percent	N			0.5
8406	46	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	TCA111	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	1,1,1-Trichloroethane	0.82	U	0.82	µg/m3	71-55-6	1	0		165682			percent	N			2.7
8407	47	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	CTCL	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	Carbon tetrachloride	0.15	U	0.15	ppb	56-23-5	1	0		165682			percent	N			0.5
8408	48	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	CTCL	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	Carbon tetrachloride	0.94	U	0.94	µg/m3	56-23-5	1	0		165682			percent	N			3.1
8409	49	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	BZ	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	Benzene	0.15	U	0.15	ppb	71-43-2	1	0		165682			percent	N			0.5
8410	50	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	BZ	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	Benzene	0.48	U	0.48	µg/m3	71-43-2	1	0		165682			percent	N			1.6
8411	51	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	CYHEXANE	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	Cyclohexane	0.15	U	0.15	ppb	110-82-7	1	0		165682			percent	N			0.5
8412	52	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	CYHEXANE	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	Cyclohexane	0.52	U	0.52	µg/m3	110-82-7	1	0		165682			percent	N			1.7
8413	53	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	DCPA12	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	1,2-Dichloropropane	0.15	U	0.15	ppb	78-87-5	1	0		165682			percent	N			0.5
8414	54	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	DCPA12	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	1,2-Dichloropropane	0.73	U	0.73	µg/m3	78-87-5	1	0		165682			percent	N			2.4
8415	55	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	BDCME	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	Bromodichloromethane	0.15	U	0.15	ppb	75-27-4	1	0		165682			percent	N			0.5
8416	57	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	C7N	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	Heptane	0.15	U	0.15	ppb	142-82-5	1	0		165682			percent	N			0.5
8417	58	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	C7N	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	Heptane	0.61	U	0.61	µg/m3	142-82-5	1	0		165682			percent	N			2
8418	59	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	DCP13C	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	cis-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-01-5	1	0		165682			percent	N			0.5
8419	60	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	DCP13C	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	cis-1,3-Dichloropropene	0.68	U	0.68	µg/m3	10061-01-5	1	0		165682			percent	N			2.3
8420	61	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	MIBK	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	Methyl isobutyl ketone	0.15	U	0.15	ppb	108-10-1	1	0		165682			percent	N			0.5
8421	62	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	MIBK	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	Methyl isobutyl ketone	0.61	U	0.61	µg/m3	108-10-1	1	0		165682			percent	N			2
8422	63	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	DCP13T	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	trans-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-02-6	1	0		165682			percent	N			0.5
8423	64	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	DCP13T	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	trans-1,3-Dichloropropene	0.68	U	0.68	µg/m3	10061-02-6	1	0		165682			percent	N			2.3
8424	65	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	TCA112	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	1,1,2-Trichloroethane	0.15	U	0.15	ppb	79-00-5	1	0		165682			percent	N			0.5
8425	66	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	TCA112	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	1,1,2-Trichloroethane	0.82	U	0.82	µg/m3	79-00-5	1	0		165682			percent	N			2.7
8426	67	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	BZME	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	Toluene	0.36	J	0.15	ppb	108-88-3	1	0		165682			percent	N			0.5
8427	69	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	EPA TO-15	HXO2	TO15	AIR	N		3/1/2016	3/3/2016		3/10/2016	2-Hexanone	0.3	U	0.3	ppb	591-78-6	1	0		165682			percent	N			1

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Laboratory Validated Results

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
8399	39	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8400	40	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.73	U	X	U			0.73	2.4	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8401	41	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8402	42	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.44	U	X	U			0.44	1.5	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8403	43	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8404	44	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.61	U	X	U			0.61	2	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8405	45	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8406	46	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.82	U	X	U			0.82	2.7	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8407	47	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8408	48	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.94	U	X	U			0.94	3.1	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8409	49	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8410	50	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.48	U	X	U			0.48	1.6	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8411	51	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8412	52	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.52	U	X	U			0.52	1.7	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8413	53	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8414	54	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.73	U	X	U			0.73	2.4	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8415	55	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8416	57	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8417	58	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.61	U	X	U			0.61	2	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8418	59	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8419	60	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.68	U	X	U			0.68	2.3	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8420	61	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8421	62	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.61	U	X	U			0.61	2	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8422	63	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8423	64	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.68	U	X	U			0.68	2.3	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8424	65	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8425	66	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.82	U	X	U			0.82	2.7	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8426	67	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.36	J	X	J			0.15	0.5	A-0011H-030116-IA-012A-LLL	4.30EPACLP	1/0/1900					165682		TRUE
8427	69	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.3	UJ	X	U			0.3	1

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
8399	39	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8400	40	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			2.4	2.4			mfesler - Tier 4 validat
8401	41	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8402	42	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			1.5	1.5			mfesler - Tier 4 validat
8403	43	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8404	44	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			2	2			mfesler - Tier 4 validat
8405	45	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8406	46	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			2.7	2.7			mfesler - Tier 4 validat
8407	47	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8408	48	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			3.1	3.1			mfesler - Tier 4 validat
8409	49	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8410	50	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			1.6	1.6			mfesler - Tier 4 validat
8411	51	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8412	52	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			1.7	1.7			mfesler - Tier 4 validat
8413	53	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8414	54	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			2.4	2.4			mfesler - Tier 4 validat
8415	55	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8416	57	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8417	58	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			2	2			mfesler - Tier 4 validat
8418	59	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8419	60	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			2.3	2.3			mfesler - Tier 4 validat
8420	61	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8421	62	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			2	2			mfesler - Tier 4 validat
8422	63	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8423	64	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			2.3	2.3			mfesler - Tier 4 validat
8424	65	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8425	66	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			2.7	2.7			mfesler - Tier 4 validat
8426	67	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8427	69	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			1	1	UJ	LCS<LCL	mfesler - Tier 4 validat
8427	69	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			1	1	UJ	LCS<LCL	mfesler - Tier 4 validat
8427	69	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			1	1	UJ	CCV<LCL	mfesler - Tier 4 validat
8428	71	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8429	73	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8430	75	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8431	76	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			2.3	2.3			mfesler - Tier 4 validat
8432	77	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8433	78	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			2.2	2.2			mfesler - Tier 4 validat
8434	79	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8435	80	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			2.2	2.2			mfesler - Tier 4 validat
8436	81	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8437	82	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			2.2	2.2			mfesler - Tier 4 validat
8438	83	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8439	84	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			2.1	2.1			mfesler - Tier 4 validat
8440	85	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8441	87	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8442	89	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			1	1			mfesler - Tier 4 validat
8443	90	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			4.9	4.9			mfesler - Tier 4 validat
8444	91	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8445	92	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			2.5	2.5			mfesler - Tier 4 validat
8446	93	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8447	94	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			2.5	2.5			mfesler - Tier 4 validat
8448	95	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8449	96	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			3	3			mfesler - Tier 4 validat
8450	97	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8451	98	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			3	3			mfesler - Tier 4 validat
8452	99	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler			1	1			mfesler - Tier 4 validat
8453	112	48015307	18	ALSS	1606379	1606379	A-0011H-030116-IA-012A-LLL	A-0011H-030116-IA-012A-LLL	1606379001	4/7/2016	mfesler		20 ppb					mfesler - Tier 4 validat
8454	131	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			1	1			mfesler - Tier 4 validat
8455	132	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			2.4	2.4			mfesler - Tier 4 validat
8456	150	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			1.8	1.8			mfesler - Tier 4 validat
8457	180	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			1.9	1.9			mfesler - Tier 4 validat
8458	192	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			2.2	2.2			mfesler - Tier 4 validat
8459	114	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			2.5	2.5			mfesler - Tier 4 validat
8460	116	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			1	1			mfesler - Tier 4 validat
8461	118	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			3.5	3.5			mfesler - Tier 4 validat
8462	126	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			2.8	2.8			mfesler - Tier 4 validat
8463	128	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			3.8	3.8			mfesler - Tier 4 validat
8464	144	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			1.5	1.5			mfesler - Tier 4 validat
8465	147	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			1	1			mfesler - Tier 4 validat
8466	148	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			3.6	3.6			mfesler - Tier 4 validat
8467	149	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8468	152	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			2.4	2.4			mfesler - Tier 4 validat
8469	161	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8470	162	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			1.6	1.6			mfesler - Tier 4 validat
8471	163	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8472	164	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			1.7	1.7			mfesler - Tier 4 validat
8473	168	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			3.4	3.4			mfesler - Tier 4 validat
8474	169	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8475	170	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			2	2			mfesler - Tier 4 validat
8476	179	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8477	182	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			4.1	4.1	UJ	LCS<LCL	mfesler - Tier 4 validat
8477	182	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			4.1	4.1	UJ	CCV<LCL	mfesler - Tier 4 validat
8477	182	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			4.1	4.1	UJ	LCS<LCL	mfesler - Tier 4 validat
8478	184	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			4.3	4.3			mfesler - Tier 4 validat
8479	186	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			3.8	3.8			mfesler - Tier 4 validat
8480	190	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			2.2	2.2			mfesler - Tier 4 validat
8481	191	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8482	193	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8483	194	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			2.2	2.2			mfesler - Tier 4 validat

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
8484	198	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	TBME	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	Bromoform	1.6	U	1.6	µg/m3	75-25-2	1	0		165682			percent	N			5.2
8485	200	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	PCA	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	1,1,2,2-Tetrachloroethane	1	U	1	µg/m3	79-34-5	1	0		165682			percent	N			3.4
8486	202	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	EBZME4	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	4-Ethyl toluene	2.2	J	0.74	µg/m3	622-96-8	1	0		165682			percent	N			4.9
8487	204	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	TMB135	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	1,3,5-Trimethylbenzene	1.8	J	0.74	µg/m3	108-67-8	1	0		165682			percent	N			2.5
8488	206	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	TMB124	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	1,2,4-Trimethylbenzene	4.4		0.74	µg/m3	95-63-6	1	0		165682			percent	N			2.5
8489	212	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	DCBZ12	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	1,2-Dichlorobenzene	1.8	U	1.8	µg/m3	95-50-1	1	0		165682			percent	N			6
8490	113	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	FC12	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	Dichlorodifluoromethane	0.41	J	0.15	ppb	75-71-8	1	0		165682			percent	N			0.5
8491	115	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	CLME	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	Methyl chloride	0.58		0.15	ppb	74-87-3	1	0		165682			percent	N			0.5
8492	117	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	DCTFA12	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	Freon 114	0.15	U	0.15	ppb	76-14-2	1	0		165682			percent	N			0.5
8493	119	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	ERYTHRENE	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	1,3-Butadiene	0.15	U	0.15	ppb	106-99-0	1	0		165682			percent	N			0.5
8494	120	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	ERYTHRENE	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	1,3-Butadiene	0.33	U	0.33	µg/m3	106-99-0	1	0		165682			percent	N			1.1
8495	121	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	BRME	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	Bromomethane	0.15	U	0.15	ppb	74-83-9	1	0		165682			percent	N			0.5
8496	122	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	BRME	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	Bromomethane	0.58	U	0.58	µg/m3	74-83-9	1	0		165682			percent	N			1.9
8497	123	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	CLEA	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	Ethyl chloride	0.15	U	0.15	ppb	75-00-3	1	0		165682			percent	N			0.5
8498	124	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	CLEA	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	Ethyl chloride	0.4	U	0.4	µg/m3	75-00-3	1	0		165682			percent	N			1.3
8499	125	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	FC11	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	Freon 11	0.25	J	0.15	ppb	75-69-4	1	0		165682			percent	N			0.5
8500	127	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	FC113	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	Freon 113	0.15	U	0.15	ppb	76-13-1	1	0		165682			percent	N			0.5
8501	129	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	DCE11	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	1,1-Dichloroethene	0.15	U	0.15	ppb	75-35-4	1	0		165682			percent	N			0.5
8502	130	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	DCE11	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	1,1-Dichloroethene	0.59	U	0.59	µg/m3	75-35-4	1	0		165682			percent	N			2
8503	133	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	CDS	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	Carbon disulfide	0.15	U	0.15	ppb	75-15-0	1	0		165682			percent	N			0.5
8504	134	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	CDS	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	Carbon disulfide	0.47	U	0.47	µg/m3	75-15-0	1	0		165682			percent	N			1.6
8505	135	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	MTLNCL	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	Methylene chloride	0.15	U	0.15	ppb	75-09-2	1	0		165682			percent	N			0.5
8506	136	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	MTLNCL	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	Methylene chloride	0.52	U	0.52	µg/m3	75-09-2	1	0		165682			percent	N			1.7
8507	137	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	DCE12T	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	trans-1,2-Dichloroethene	0.15	U	0.15	ppb	156-60-5	1	0		165682			percent	N			0.5
8508	138	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	DCE12T	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	trans-1,2-Dichloroethene	0.59	U	0.59	µg/m3	156-60-5	1	0		165682			percent	N			2
8509	139	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	TBUTMEE	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	Methyl t-butyl ether	0.15	U	0.15	ppb	1634-04-4	1	0		165682			percent	N			0.5
8510	140	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	TBUTMEE	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	Methyl t-butyl ether	0.54	U	0.54	µg/m3	1634-04-4	1	0		165682			percent	N			1.8
8511	141	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	VA	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	Vinyl acetate	0.15	U	0.15	ppb	108-05-4	1	0		165682			percent	N			0.5
8512	142	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	VA	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	Vinyl acetate	0.53	U	0.53	µg/m3	108-05-4	1	0		165682			percent	N			1.8
8513	143	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	MEK	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	Methyl ethyl ketone	0.36	J	0.15	ppb	78-93-3	1	0		165682			percent	N			0.5
8514	145	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	DCA11	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	1,1-Dichloroethane	0.15	U	0.15	ppb	75-34-3	1	0		165682			percent	N			0.5
8515	146	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	DCA11	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	1,1-Dichloroethane	0.61	U	0.61	µg/m3	75-34-3	1	0		165682			percent	N			2
8516	151	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	TCLME	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	Chloroform	0.41	J	0.15	ppb	67-66-3	1	0		165682			percent	N			0.5
8517	153	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	THF	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	Tetrahydrofuran	0.15	U	0.15	ppb	109-99-9	1	0		165682			percent	N			0.5
8518	154	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	THF	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	Tetrahydrofuran	0.44	U	0.44	µg/m3	109-99-9	1	0		165682			percent	N			1.5
8519	155	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	DCA12	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	1,2-Dichloroethane	0.15	U	0.15	ppb	107-06-2	1	0		165682			percent	N			0.5
8520	156	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	DCA12	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	1,2-Dichloroethane	0.61	U	0.61	µg/m3	107-06-2	1	0		165682			percent	N			2
8521	157	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	TCA111	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	1,1,1-Trichloroethane	0.15	U	0.15	ppb	71-55-6	1	0		165682			percent	N			0.5
8522	158	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	TCA111	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	1,1,1-Trichloroethane	0.82	U	0.82	µg/m3	71-55-6	1	0		165682			percent	N			2.7
8523	159	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	CTCL	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	Carbon tetrachloride	0.15	U	0.15	ppb	56-23-5	1	0		165682			percent	N			0.5
8524	160	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	CTCL	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	Carbon tetrachloride	0.94	U	0.94	µg/m3	56-23-5	1	0		165682			percent	N			3.1
8525	165	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	DCPA12	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	1,2-Dichloropropane	0.15	U	0.15	ppb	78-87-5	1	0		165682			percent	N			0.5
8526	166	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	DCPA12	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	1,2-Dichloropropane	0.73	U	0.73	µg/m3	78-87-5	1	0		165682			percent	N			2.4
8527	167	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	BDCME	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	Bromodichloromethane	0.15	U	0.15	ppb	75-27-4	1	0		165682			percent	N			0.5
8528	171	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	DCP13C	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	cis-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-01-5	1	0		165682			percent	N			0.5
8529	172	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	DCP13C	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	cis-1,3-Dichloropropene	0.68	U	0.68	µg/m3	10061-01-5	1	0		165682			percent	N			2.3
8530	173	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	MIBK	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	Methyl isobutyl ketone	0.15	U	0.15	ppb	108-10-1	1	0		165682			percent	N			0.5
8531	174	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	MIBK	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	Methyl isobutyl ketone	0.61	U	0.61	µg/m3	108-10-1	1	0		165682			percent	N			2
8532	175	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	DCP13T	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	trans-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-02-6	1	0		165682			percent	N			0.5
8533	176	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	DCP13T	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	trans-1,3-Dichloropropene	0.68	U	0.68	µg/m3	10061-02-6	1	0		165682			percent	N			2.3
8534	177	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	TCA112	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	1,1,2-Trichloroethane	0.15	U	0.15	ppb	79-00-5	1	0		165682			percent	N			0.5
8535	178	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	TCA112	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	1,1,2-Trichloroethane	0.82	U	0.82	µg/m3	79-00-5	1	0		165682			percent	N			2.7
8536	181	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	EPA TO-15	HXO2	TO15	AIR	N		3/3/2016	3/3/2016		3/10/2016	2-Hexanone	0.3	U	0.3	ppb	591-78-6	1	0		165682			percent	N			1

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
8484	198	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	1.6	U	X	U			1.6	5.2	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8485	200	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	1	U	X	U			1	3.4	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8486	202	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	2.2	J	X	J			0.74	4.9	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8487	204	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	1.8	J	X	J			0.74	2.5	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8488	206	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	4.4		X	=			0.74	2.5	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8489	212	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	1.8	U	X	U			1.8	6	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8490	113	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.41	J	X	J			0.15	0.5	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8491	115	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.58		X	=			0.15	0.5	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8492	117	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8493	119	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8494	120	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.33	U	X	U			0.33	1.1	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8495	121	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8496	122	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.58	U	X	U			0.58	1.9	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8497	123	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8498	124	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.4	U	X	U			0.4	1.3	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8499	125	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.25	J	X	J			0.15	0.5	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8500	127	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8501	129	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8502	130	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.59	U	X	U			0.59	2	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8503	133	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8504	134	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.47	U	X	U			0.47	1.6	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8505	135	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8506	136	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.52	U	X	U			0.52	1.7	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8507	137	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8508	138	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.59	U	X	U			0.59	2	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8509	139	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8510	140	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.54	U	X	U			0.54	1.8	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8511	141	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8512	142	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.53	U	X	U			0.53	1.8	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8513	143	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.36	J	X	J			0.15	0.5	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8514	145	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8515	146	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.61	U	X	U			0.61	2	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8516	151	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.41	J	X	J			0.15	0.5	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8517	153	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8518	154	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.44	U	X	U			0.44	1.5	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8519	155	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8520	156	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.61	U	X	U			0.61	2	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8521	157	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8522	158	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.82	U	X	U			0.82	2.7	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8523	159	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8524	160	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.94	U	X	U			0.94	3.1	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8525	165	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8526	166	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.73	U	X	U			0.73	2.4	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8527	167	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8528	171	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8529	172	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.68	U	X	U			0.68	2.3	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8530	173	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8531	174	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.61	U	X	U			0.61	2	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8532	175	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8533	176	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.68	U	X	U			0.68	2.3	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8534	177	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8535	178	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.82	U	X	U			0.82	2.7	A-0003H-030316-IA-BAS	4.30EPACLP	1/0/1900					165682		TRUE
8536	181	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.3	UJ	X	U			0.3	1

APPENDIX A-1

Laboratory Validated Results

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
8484	198	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			5.2	5.2			mfesler - Tier 4 validat
8485	200	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			3.4	3.4			mfesler - Tier 4 validat
8486	202	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			4.9	4.9			mfesler - Tier 4 validat
8487	204	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			2.5	2.5			mfesler - Tier 4 validat
8488	206	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			2.5	2.5			mfesler - Tier 4 validat
8489	212	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			6	6			mfesler - Tier 4 validat
8490	113	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8491	115	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8492	117	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8493	119	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8494	120	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			1.1	1.1			mfesler - Tier 4 validat
8495	121	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8496	122	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			1.9	1.9			mfesler - Tier 4 validat
8497	123	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8498	124	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			1.3	1.3			mfesler - Tier 4 validat
8499	125	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8500	127	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8501	129	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8502	130	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			2	2			mfesler - Tier 4 validat
8503	133	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8504	134	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			1.6	1.6			mfesler - Tier 4 validat
8505	135	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8506	136	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			1.7	1.7			mfesler - Tier 4 validat
8507	137	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8508	138	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			2	2			mfesler - Tier 4 validat
8509	139	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8510	140	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			1.8	1.8			mfesler - Tier 4 validat
8511	141	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8512	142	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			1.8	1.8			mfesler - Tier 4 validat
8513	143	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8514	145	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8515	146	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			2	2			mfesler - Tier 4 validat
8516	151	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8517	153	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8518	154	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			1.5	1.5			mfesler - Tier 4 validat
8519	155	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8520	156	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			2	2			mfesler - Tier 4 validat
8521	157	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8522	158	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			2.7	2.7			mfesler - Tier 4 validat
8523	159	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8524	160	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			3.1	3.1			mfesler - Tier 4 validat
8525	165	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8526	166	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			2.4	2.4			mfesler - Tier 4 validat
8527	167	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8528	171	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8529	172	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			2.3	2.3			mfesler - Tier 4 validat
8530	173	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8531	174	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			2	2			mfesler - Tier 4 validat
8532	175	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8533	176	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			2.3	2.3			mfesler - Tier 4 validat
8534	177	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8535	178	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			2.7	2.7			mfesler - Tier 4 validat
8536	181	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			1	1	UJ	LCS<LCL	mfesler - Tier 4 validat
8536	181	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			1	1	UJ	CCV<LCL	mfesler - Tier 4 validat
8536	181	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			1	1	UJ	LCS<LCL	mfesler - Tier 4 validat
8537	183	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8538	185	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8539	187	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8540	188	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			2.3	2.3			mfesler - Tier 4 validat
8541	189	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8542	195	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8543	196	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			2.1	2.1			mfesler - Tier 4 validat
8544	197	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8545	199	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8546	201	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			1	1			mfesler - Tier 4 validat
8547	203	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8548	205	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8549	207	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8550	208	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			3	3			mfesler - Tier 4 validat
8551	209	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8552	210	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			3	3			mfesler - Tier 4 validat
8553	211	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler			1	1			mfesler - Tier 4 validat
8554	224	1458594709	18	ALSS	1606379	1606379	A-0003H-030316-IA-BAS	A-0003H-030316-IA-BAS	1606379002	4/7/2016	mfesler	20	ppb					mfesler - Tier 4 validat
8555	283	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8556	289	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8557	316	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8558	327	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8559	339	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8560	360	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8561	361	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8562	366	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8563	234	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			1	1			mfesler - Tier 4 validat
8564	259	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			1	1			mfesler - Tier 4 validat
8565	274	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			1	1			mfesler - Tier 4 validat
8566	275	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8567	277	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8568	279	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8569	282	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8570	284	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		1	1			mfesler - Tier 4 validat

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
8571	288	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	TBUTMEE	TO15	AIR	BS					3/9/2016	Methyl t-butyl ether	10.5		0.15	ppb	1634-04-4	1	0		165682	10	105.11	percent	N			0.5
8572	293	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	C6N	TO15	AIR	BS					3/9/2016	n-Hexane	11.1		0.15	ppb	110-54-3	1	0		165682	10	110.54	percent	N			0.5
8573	294	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	TCLME	TO15	AIR	BS					3/9/2016	Chloroform	10.3		0.15	ppb	67-66-3	1	0		165682	10	102.63	percent	N			0.5
8574	295	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	THF	TO15	AIR	BS					3/9/2016	Tetrahydrofuran	10.7		0.15	ppb	109-99-9	1	0		165682	10	107.43	percent	N			0.5
8575	296	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	DCA12	TO15	AIR	BS					3/9/2016	1,2-Dichloroethane	11.2		0.15	ppb	107-06-2	1	0		165682	10	112.22	percent	N			0.5
8576	297	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	TCA111	TO15	AIR	BS					3/9/2016	1,1,1-Trichloroethane	10.9		0.15	ppb	71-55-6	1	0		165682	10	108.51	percent	N			0.5
8577	298	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	CTCL	TO15	AIR	BS					3/9/2016	Carbon tetrachloride	10.8		0.15	ppb	56-23-5	1	0		165682	10	108.48	percent	N			0.5
8578	299	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	BZ	TO15	AIR	BS					3/9/2016	Benzene	10.4		0.15	ppb	71-43-2	1	0		165682	10	103.82	percent	N			0.5
8579	300	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	CYHEXANE	TO15	AIR	BS					3/9/2016	Cyclohexane	10.8		0.15	ppb	110-82-7	1	0		165682	10	108.13	percent	N			0.5
8580	301	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	DCPA12	TO15	AIR	BS					3/9/2016	1,2-Dichloropropane	10.4		0.15	ppb	78-87-5	1	0		165682	10	103.8	percent	N			0.5
8581	302	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	BDCME	TO15	AIR	BS					3/9/2016	Bromodichloromethane	10.4		0.15	ppb	75-27-4	1	0		165682	10	104.11	percent	N			0.5
8582	303	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	C7N	TO15	AIR	BS					3/9/2016	Heptane	11.4		0.15	ppb	142-82-5	1	0		165682	10	114.11	percent	N			0.5
8583	304	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	DCP13C	TO15	AIR	BS					3/9/2016	cis-1,3-Dichloropropene	11.1		0.15	ppb	10061-01-5	1	0		165682	10	110.54	percent	N			0.5
8584	306	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	DCP13T	TO15	AIR	BS					3/9/2016	trans-1,3-Dichloropropene	11.4		0.15	ppb	10061-02-6	1	0		165682	10	113.57	percent	N			0.5
8585	307	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	TCA112	TO15	AIR	BS					3/9/2016	1,1,2-Trichloroethane	10.4		0.15	ppb	79-00-5	1	0		165682	10	104.05	percent	N			0.5
8586	308	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	BZME	TO15	AIR	BS					3/9/2016	Toluene	11.2		0.15	ppb	108-88-3	1	0		165682	10	112.09	percent	N			0.5
8587	310	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	DBCME	TO15	AIR	BS					3/9/2016	Dibromochloromethane	10.8		0.15	ppb	124-48-1	1	0		165682	10	108.25	percent	N			0.5
8588	311	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	EDB	TO15	AIR	BS					3/9/2016	1,2-Dibromoethane	10.7		0.15	ppb	106-93-4	1	0		165682	10	107.49	percent	N			0.5
8589	312	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	CLBZ	TO15	AIR	BS					3/9/2016	Chlorobenzene	11.3		0.15	ppb	108-90-7	1	0		165682	10	113.1	percent	N			0.5
8590	313	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	EBZ	TO15	AIR	BS					3/9/2016	Ethyl benzene	11.4		0.15	ppb	100-41-4	1	0		165682	10	113.94	percent	N			0.5
8591	314	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	XYLMP	TO15	AIR	BS					3/9/2016	m,p-Xylene	22.8		0.15	ppb	179601-23-1	1	0		165682	20	114.1	percent	N			0.5
8592	315	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	XYLO	TO15	AIR	BS					3/9/2016	o-Xylene	11.3		0.15	ppb	95-47-6	1	0		165682	10	113.07	percent	N			0.5
8593	318	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	PCA	TO15	AIR	BS					3/9/2016	1,1,2,2-Tetrachloroethane	10.2		0.15	ppb	79-34-5	1	0		165682	10	101.93	percent	N			0.5
8594	319	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	EBZME4	TO15	AIR	BS					3/9/2016	4-Ethyl toluene	11.6		0.15	ppb	622-96-8	1	0		165682	10	116.22	percent	N			1
8595	320	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	TMB135	TO15	AIR	BS					3/9/2016	1,3,5-Trimethylbenzene	11.3		0.15	ppb	108-67-8	1	0		165682	10	113.17	percent	N			0.5
8596	321	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	TMB124	TO15	AIR	BS					3/9/2016	1,2,4-Trimethylbenzene	11.5		0.15	ppb	95-63-6	1	0		165682	10	114.99	percent	N			0.5
8597	322	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	DCBZ13	TO15	AIR	BS					3/9/2016	1,3-Dichlorobenzene	11.7		0.15	ppb	541-73-1	1	0		165682	10	117.29	percent	N			0.5
8598	323	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	DCBZ14	TO15	AIR	BS					3/9/2016	1,4-Dichlorobenzene	11.8		0.15	ppb	106-46-7	1	0		165682	10	117.66	percent	N			0.5
8599	324	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	DCBZ12	TO15	AIR	BS					3/9/2016	1,2-Dichlorobenzene	11.6		0.3	ppb	95-50-1	1	0		165682	10	116.16	percent	N			1
8600	325	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	FC12	TO15	AIR	BD					3/9/2016	Dichlorodifluoromethane	10.2		0.15	ppb	75-71-8	1	0		165682	10	101.73	percent	N			0.5
8601	329	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	BRME	TO15	AIR	BD					3/9/2016	Bromomethane	10.1		0.15	ppb	74-83-9	1	0		165682	10	101.19	percent	N			0.5
8602	332	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	FC113	TO15	AIR	BD					3/9/2016	Freon 113	10.2		0.15	ppb	76-13-1	1	0		165682	10	101.63	percent	N			0.5
8603	334	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	ACE	TO15	AIR	BD					3/9/2016	Acetone	10.1		0.3	ppb	67-64-1	1	0		165682	10	100.9	percent	N			1
8604	338	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	TBUTMEE	TO15	AIR	BD					3/9/2016	Methyl t-butyl ether	10.5		0.15	ppb	1634-04-4	1	0		165682	10	104.9	percent	N			0.5
8605	343	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	C6N	TO15	AIR	BD					3/9/2016	n-Hexane	11.2		0.15	ppb	110-54-3	1	0		165682	10	111.85	percent	N			0.5
8606	344	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	TCLME	TO15	AIR	BD					3/9/2016	Chloroform	10.4		0.15	ppb	67-66-3	1	0		165682	10	103.62	percent	N			0.5
8607	345	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	THF	TO15	AIR	BD					3/9/2016	Tetrahydrofuran	10.7		0.15	ppb	109-99-9	1	0		165682	10	107.04	percent	N			0.5
8608	346	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	DCA12	TO15	AIR	BD					3/9/2016	1,2-Dichloroethane	11.3		0.15	ppb	107-06-2	1	0		165682	10	112.98	percent	N			0.5
8609	347	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	TCA111	TO15	AIR	BD					3/9/2016	1,1,1-Trichloroethane	10.9		0.15	ppb	71-55-6	1	0		165682	10	108.82	percent	N			0.5
8610	348	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	CTCL	TO15	AIR	BD					3/9/2016	Carbon tetrachloride	10.9		0.15	ppb	56-23-5	1	0		165682	10	109.02	percent	N			0.5
8611	349	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	BZ	TO15	AIR	BD					3/9/2016	Benzene	10.3		0.15	ppb	71-43-2	1	0		165682	10	102.71	percent	N			0.5
8612	350	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	CYHEXANE	TO15	AIR	BD					3/9/2016	Cyclohexane	10.9		0.15	ppb	110-82-7	1	0		165682	10	108.5	percent	N			0.5
8613	351	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	DCPA12	TO15	AIR	BD					3/9/2016	1,2-Dichloropropane	10.6		0.15	ppb	78-87-5	1	0		165682	10	106.28	percent	N			0.5
8614	352	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	BDCME	TO15	AIR	BD					3/9/2016	Bromodichloromethane	10.5		0.15	ppb	75-27-4	1	0		165682	10	105.47	percent	N			0.5
8615	353	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	C7N	TO15	AIR	BD					3/9/2016	Heptane	11.5		0.15	ppb	142-82-5	1	0		165682	10	115.45	percent	N			0.5
8616	354	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	DCP13C	TO15	AIR	BD					3/9/2016	cis-1,3-Dichloropropene	11.3		0.15	ppb	10061-01-5	1	0		165682	10	112.56	percent	N			0.5
8617	355	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	MIBK	TO15	AIR	BD					3/9/2016	Methyl isobutyl ketone	10.2		0.15	ppb	108-10-1	1	0		165682	10	101.92	percent	N			0.5
8618	356	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	DCP13T	TO15	AIR	BD					3/9/2016	trans-1,3-Dichloropropene	11.7		0.15	ppb	10061-02-6	1	0		165682	10	116.85	percent	N			0.5
8619	357	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	TCA112	TO15	AIR	BD					3/9/2016	1,1,2-Trichloroethane	10.6		0.15	ppb	79-00-5	1	0		165682	10	105.79	percent	N			0.5
8620	358	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	BZME	TO15	AIR	BD					3/9/2016	Toluene	11.4		0.15	ppb	108-88-3	1	0		165682	10	114.24	percent	N			0.5
8621	362	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	CLBZ	TO15	AIR	BD					3/9/2016	Chlorobenzene	11.3		0.15	ppb	108-90-7	1	0		165682	10	112.83	percent	N			0.5
8622	363	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	EBZ	TO15	AIR	BD					3/9/2016	Ethyl benzene	11.5		0.15	ppb	100-41-4	1	0		165682	10	114.76	percent	N			0.5
8623	364	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	XYLMP	TO15	AIR	BD					3/9/2016	m,p-Xylene	22.8		0.15	ppb	179601-23-1	1	0		165682	20	114.14	percent	N			0.5
8624	365	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	XYLO	TO15	AIR	BD					3/9/2016	o-Xylene	11.4		0.15	ppb	95-47-6	1	0		165682	10	113.69	percent	N			0.5
8625	368	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	PCA	TO15	AIR	BD					3/9/2016	1,1,2,2-Tetrachloroethane	10.2		0.15	ppb	79-34-5	1	0		165682	10	102.14	percent	N			0.5
8626	369	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	EBZME4	TO15	AIR	BD					3/9/2016	4-Ethyl toluene	11.6		0.15	ppb	622-96-8	1	0		165682	10	116.14	percent	N			1
8627	370	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	TMB135	TO15	AIR	BD					3/9/2016	1,3,5-Trimethylbenzene	11.3		0.15	ppb	108-67-8	1	0		165682	10	113.18	percent	N			0.5
8628	371	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	TMB124	TO15	AIR	BD					3/9/2016	1,2,4-Trimethylbenzene	11.4		0.15	ppb	95-63-6	1	0		165682	10	114.48	percent	N			0.5
8629	372	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	DCBZ13	TO15	AIR	BD					3/9/2016	1,3-Dichlorobenzene	11.8		0.15	ppb	541-73-1	1	0		165682	10	117.71	percent	N			0.5
8630	373	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	DCBZ14	TO15	AIR	BD					3/9/2016	1,4-Dichlorobenzene	11.8		0.15	ppb	106-46-7	1	0		165682	10	117.99	percent	N			0.5
8631	374	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	DCBZ12	TO15	AIR	BD					3/9/2016	1,2-Dichlorobenzene	11.7		0.3	ppb	95-50-1	1	0		165682	10	116.54	percent	N			1
8632	225	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	FC12	TO15	AIR	LB					3/9/2016	Dichlorodifluoromethane	0.15	U	0.15	ppb	75-71-8	1	0		165682			percent	N			0.5
8633	226	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	CLME	TO15	AIR	LB					3/9/2016	Methyl chloride	0.15	U	0.15	ppb	74-87-3	1	0		165682			percent	N			0.5
8634	227	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	DCTFA12	TO15	AIR	LB					3/9/2016	Freon 114	0.15	U	0.15	ppb	76-14-2	1	0		165682			percent	N			0.5
8635	228	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	ERYTHRENE	TO15	AIR	LB					3/9/2016	1,3-Butadiene	0.15	U	0.15	ppb	106-99-0	1	0		165682			percent	N			0.5
8636	229	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	BRME	TO15	AIR	LB					3/9/2016	Bromomethane	0.15	U	0.15	ppb	74-83-9	1	0		165682			percent	N			0.5
8637	230	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	CLEA	TO15	AIR	LB					3/9/2016	Ethyl chloride	0.15	U	0.15	ppb	75-00-3	1	0		165682			percent	N			0.5
8638	231	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	FC11	TO15	AIR	LB					3/9/2016	Freon 11	0.15	U	0.15	ppb	75-69-4	1	0		165682			percent	N			0.5
8639	232	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	FC113	TO15	AIR	LB					3/9/2016	Freon 113	0.15	U	0.15	ppb	76-13-1	1	0		165682			percent	N			0.5
8640	233	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	DCE11	TO15	AIR	LB					3/9/2016	1,1-Dichloroethene	0.15	U	0.15	ppb	75-35-4	1	0		165682			percent	N			0.5
8641	235	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	CDS	TO15	AIR	LB					3/9/2016	Carbon disulfide	0.15	U	0.15	ppb	75-15-0	1	0		165682			percent	N			0.5
8642	236	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	MTLNCL	TO15	AIR	LB					3/9/2016	Methylene chloride	0.15	U	0.15	ppb	75-09-2	1	0		165682			percent	N			0.5
8643	237	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	DCE12T	TO15	AIR	LB					3/9/2016	trans-1,2-Dichloroethene	0.15	U	0.15	ppb	156-60-5	1	0		165682			percent	N			0.5
8644	238	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	TBUTMEE	TO15	AIR	LB					3/9/2016	Methyl t-butyl ether	0.15	U	0.15	ppb	1634-04-4	1	0		165682			percent	N			0.5
8645	239	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	VA	TO15	AIR	LB					3/9/2016	Vinyl acetate	0.15	U	0.15	ppb	108-05-4	1	0		165682			percent	N			0.5
8646	240	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	MEK	TO15	AIR	LB					3/9/2016	Methyl ethyl ketone	0.15	U	0.15	ppb	78-93-3	1	0		165682			percent	N			0.5
8647	241	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	DCA11	TO15	AIR	LB					3/9/2016	1,1-Dichloroethane	0.15	U	0.15	ppb	75-34-3	1	0		165682			percent	N			0.5
8648	242	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	ETACET	TO15	AIR	LB					3/9/2016	Ethyl acetate	0.15	U	0.15	ppb	141-78-6	1	0		165682			percent	N			1
8649	243	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	C6N	TO15	AIR	LB					3/9/2016	n-Hexane	0.15	U	0.15	ppb	110-54-3	1	0		165682			percent	N			0.5
8650	244	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	TCLME	TO15	AIR	LB					3/9/2016	Chloroform	0.15	U	0.15	ppb	67-66-3	1	0		165682			percent	N			0.5
8651	245	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	THF	TO15	AIR	LB					3/9/2016	Tetrahydrofuran	0.15	U	0.15	ppb	109-99-9	1	0		165682			percent	N			0.5
8652	246	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	DCA12	TO15	AIR	LB					3/9/2016	1,2-Dichloroethane	0.15	U	0.15	ppb	107-06-2	1	0		165682			percent	N			0.5
8653	247	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	TCA111	TO15	AIR	LB					3/9/2016	1,1,1-Trichloroethane	0.15	U	0.15	ppb	71-55-6	1	0		165682			percent	N			0.5
8654	248	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	CTCL	TO15	AIR	LB					3/9/2016	Carbon tetrachloride	0.15	U	0.15	ppb	56-23-5	1	0		165682			percent	N			0.5
8655	249	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	BZ	TO15	AIR	LB					3/9/2016	Benzene	0.15	U	0.15	ppb	71-43-2	1	0		165682			percent	N			0.5
8656	250	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	CYHEXANE	TO15	AIR	LB					3/9/2016	Cyclohexane	0.15	U	0.15	ppb	110-82-7	1	0		165682			percent	N			0.5
8657	251	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	DCPA12	TO15	AIR	LB					3/9/2016	1,2-Dichloropropane	0.15	U	0.15	ppb	78-87-5	1	0		165682			percent	N			0.5
8658	252	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	BDCME	TO15	AIR	LB					3/9/2016	Bromodichloromethane	0.15	U	0.15	ppb	75-27-4	1	0		165682			percent	N			0.5
8659	253	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	C7N	TO15	AIR	LB					3/9/2016	Heptane	0.15	U	0.15	ppb	142-82-5	1	0		165682			percent	N			0.5

APPENDIX A-1

Laboratory Validated Results

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
8571	288	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	10.5		X	=	60.827	138.03	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8572	293	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	11.1		X	=	62.414	129.54	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8573	294	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	10.3		X	=	67.344	121.81	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8574	295	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	10.7		X	=	50.619	155.33	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8575	296	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	11.2		X	=	62.441	130.48	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8576	297	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	10.9		X	=	60.42	127.68	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8577	298	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	10.8		X	=	58.158	130.61	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8578	299	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	10.4		X	=	64.138	127.27	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8579	300	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	10.8		X	=	61.913	123.55	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8580	301	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	10.4		X	=	60.69	130.65	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8581	302	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	10.4		X	=	62.886	128.34	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8582	303	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	11.4		X	=	59.499	133.39	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8583	304	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	11.1		X	=	64.079	133.63	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8584	306	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	11.4		X	=	78.538	148.69	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8585	307	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	10.4		X	=	64.985	126.62	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8586	308	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	11.2		X	=	75.551	139.43	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8587	310	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	10.8		X	=	62.442	130.92	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8588	311	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	10.7		X	=	64.38	129.01	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8589	312	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	11.3		X	=	62.845	126.85	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8590	313	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	11.4		X	=	75.851	148.51	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8591	314	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	22.8		X	=	73.675	144.89	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8592	315	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	11.3		X	=	74.707	147.4	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8593	318	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	10.2		X	=	59.318	134.78	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8594	319	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	11.6		X	=	69.037	163.28	0.15	1	491963	4.30EPACLP						165682		TRUE
8595	320	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	11.3		X	=	64.237	155.06	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8596	321	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	11.5		X	=	59.734	169.39	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8597	322	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	11.7		X	=	58.55	157.62	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8598	323	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	11.8		X	=	57.682	137.17	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8599	324	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	11.6		X	=	56.513	140.03	0.3	1	491963	4.30EPACLP						165682		TRUE
8600	325	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	10.2		X	=	59.255	135.13	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8601	329	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	10.1		X	=	63.318	129.94	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8602	332	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	10.2		X	=	68.501	120.04	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8603	334	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	10.1		X	=	42.491	145.96	0.3	1	491964	4.30EPACLP						165682		TRUE
8604	338	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	10.5		X	=	60.827	138.03	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8605	343	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	11.2		X	=	62.414	129.54	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8606	344	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	10.4		X	=	67.344	121.81	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8607	345	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	10.7		X	=	50.619	155.33	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8608	346	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	11.3		X	=	62.441	130.48	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8609	347	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	10.9		X	=	60.42	127.68	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8610	348	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	10.9		X	=	58.158	130.61	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8611	349	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	10.3		X	=	64.138	127.27	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8612	350	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	10.9		X	=	61.913	123.55	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8613	351	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	10.6		X	=	60.69	130.65	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8614	352	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	10.5		X	=	62.886	128.34	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8615	353	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	11.5		X	=	59.499	133.39	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8616	354	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	11.3		X	=	64.079	133.63	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8617	355	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	10.2		X	=	73.471	149.97	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8618	356	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	11.7		X	=	78.538	148.69	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8619	357	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	10.6		X	=	64.985	126.62	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8620	358	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	11.4		X	=	75.551	139.43	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8621	362	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	11.3		X	=	62.845	126.85	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8622	363	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	11.5		X	=	75.851	148.51	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8623	364	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	22.8		X	=	73.675	144.89	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8624	365	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	11.4		X	=	74.707	147.4	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8625	368	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	10.2		X	=	59.318	134.78	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8626	369	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	11.6		X	=	69.037	163.28	0.15	1	491964	4.30EPACLP						165682		TRUE
8627	370	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	11.3		X	=	64.237	155.06	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8628	371	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	11.4		X	=	59.734	169.39	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8629	372	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	11.8		X	=	58.55	157.62	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8630	373	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	11.8		X	=	57.682	137.17	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8631	374	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			1		TRUE	3/22/2016	mfesler	11.7		X	=	56.513	140.03	0.3	1	491964	4.30EPACLP						165682		TRUE
8632	225	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8633	226	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8634	227	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8635	228	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8636	229	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8637	230	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8638	231	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8639	232	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8640	233	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8641	235	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8642	236	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8643	237	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8644	238	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8645	239	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8646	240	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8647	241	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8648	242	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	1	491962	4.30EPACLP						165682		TRUE
8649	243	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8650	244	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8651	245	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8652	246	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8653	247	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8654	248	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8655	249	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8656	250	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8657	251	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8658	252	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8659	253	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE

APPENDIX A-1

Laboratory Validated Results

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
8571	288	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8572	293	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8573	294	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8574	295	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8575	296	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8576	297	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8577	298	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8578	299	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8579	300	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8580	301	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8581	302	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8582	303	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8583	304	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8584	306	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8585	307	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8586	308	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8587	310	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8588	311	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8589	312	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8590	313	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8591	314	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	20		0.5	0.5			mfesler - Tier 4 validat
8592	315	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8593	318	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8594	319	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		1	1			mfesler - Tier 4 validat
8595	320	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8596	321	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8597	322	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8598	323	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8599	324	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		1	1			mfesler - Tier 4 validat
8600	325	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8601	329	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8602	332	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8603	334	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		1	1			mfesler - Tier 4 validat
8604	338	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8605	343	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8606	344	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8607	345	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8608	346	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8609	347	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8610	348	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8611	349	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8612	350	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8613	351	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8614	352	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8615	353	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8616	354	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8617	355	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8618	356	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8619	357	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8620	358	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8621	362	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8622	363	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8623	364	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	20		0.5	0.5			mfesler - Tier 4 validat
8624	365	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8625	368	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8626	369	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		1	1			mfesler - Tier 4 validat
8627	370	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8628	371	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8629	372	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8630	373	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8631	374	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		1	1			mfesler - Tier 4 validat
8632	225	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8633	226	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8634	227	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8635	228	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8636	229	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8637	230	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8638	231	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8639	232	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8640	233	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8641	235	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8642	236	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8643	237	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8644	238	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8645	239	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8646	240	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8647	241	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8648	242	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			1	1			mfesler - Tier 4 validat
8649	243	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8650	244	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8651	245	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8652	246	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8653	247	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8654	248	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8655	249	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8656	250	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8657	251	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8658	252	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8659	253	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat

APPENDIX A-1

Laboratory Validated Results

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
8660	254	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	DCP13C	TO15	AIR	LB					3/9/2016	cis-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-01-5	1	0		165682			percent	N			0.5
8661	255	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	MIBK	TO15	AIR	LB					3/9/2016	Methyl isobutyl ketone	0.15	U	0.15	ppb	108-10-1	1	0		165682			percent	N			0.5
8662	256	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	DCP13T	TO15	AIR	LB					3/9/2016	trans-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-02-6	1	0		165682			percent	N			0.5
8663	257	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	TCA112	TO15	AIR	LB					3/9/2016	1,1,2-Trichloroethane	0.15	U	0.15	ppb	79-00-5	1	0		165682			percent	N			0.5
8664	258	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	BZME	TO15	AIR	LB					3/9/2016	Toluene	0.15	U	0.15	ppb	108-88-3	1	0		165682			percent	N			0.5
8665	260	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	DBCME	TO15	AIR	LB					3/9/2016	Dibromochloromethane	0.15	U	0.15	ppb	124-48-1	1	0		165682			percent	N			0.5
8666	261	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	EDB	TO15	AIR	LB					3/9/2016	1,2-Dibromoethane	0.15	U	0.15	ppb	106-93-4	1	0		165682			percent	N			0.5
8667	262	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	CLBZ	TO15	AIR	LB					3/9/2016	Chlorobenzene	0.15	U	0.15	ppb	108-90-7	1	0		165682			percent	N			0.5
8668	263	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	EBZ	TO15	AIR	LB					3/9/2016	Ethyl benzene	0.15	U	0.15	ppb	100-41-4	1	0		165682			percent	N			0.5
8669	264	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	XYLMP	TO15	AIR	LB					3/9/2016	m,p-Xylene	0.15	U	0.15	ppb	179601-23-1	1	0		165682			percent	N			0.5
8670	265	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	XYLO	TO15	AIR	LB					3/9/2016	o-Xylene	0.15	U	0.15	ppb	95-47-6	1	0		165682			percent	N			0.5
8671	266	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	STY	TO15	AIR	LB					3/9/2016	Styrene	0.15	U	0.15	ppb	100-42-5	1	0		165682			percent	N			0.5
8672	267	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	TBME	TO15	AIR	LB					3/9/2016	Bromoform	0.15	U	0.15	ppb	75-25-2	1	0		165682			percent	N			0.5
8673	268	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	PCA	TO15	AIR	LB					3/9/2016	1,1,2,2-Tetrachloroethane	0.15	U	0.15	ppb	79-34-5	1	0		165682			percent	N			0.5
8674	269	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	EBZME4	TO15	AIR	LB					3/9/2016	4-Ethyl toluene	0.15	U	0.15	ppb	622-96-8	1	0		165682			percent	N			1
8675	270	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	TMB135	TO15	AIR	LB					3/9/2016	1,3,5-Trimethylbenzene	0.15	U	0.15	ppb	108-67-8	1	0		165682			percent	N			0.5
8676	271	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	TMB124	TO15	AIR	LB					3/9/2016	1,2,4-Trimethylbenzene	0.15	U	0.15	ppb	95-63-6	1	0		165682			percent	N			0.5
8677	272	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	DCBZ13	TO15	AIR	LB					3/9/2016	1,3-Dichlorobenzene	0.15	U	0.15	ppb	541-73-1	1	0		165682			percent	N			0.5
8678	273	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	DCBZ14	TO15	AIR	LB					3/9/2016	1,4-Dichlorobenzene	0.15	U	0.15	ppb	106-46-7	1	0		165682			percent	N			0.5
8679	276	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	CLME	TO15	AIR	BS					3/9/2016	Methyl chloride	9.51		0.15	ppb	74-87-3	1	0		165682	10	95.09	percent	N			0.5
8680	278	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	ERYTHRENE	TO15	AIR	BS					3/9/2016	1,3-Butadiene	9.39		0.15	ppb	106-99-0	1	0		165682	10	93.879	percent	N			0.5
8681	280	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	CLEA	TO15	AIR	BS					3/9/2016	Ethyl chloride	9.88		0.15	ppb	75-00-3	1	0		165682	10	98.784	percent	N			0.5
8682	281	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	FC11	TO15	AIR	BS					3/9/2016	Freon 11	9.83		0.15	ppb	75-69-4	1	0		165682	10	98.266	percent	N			0.5
8683	285	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	CDS	TO15	AIR	BS					3/9/2016	Carbon disulfide	9.25		0.15	ppb	75-15-0	1	0		165682	10	92.514	percent	N			0.5
8684	286	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	MTLNCL	TO15	AIR	BS					3/9/2016	Methylene chloride	9.29		0.15	ppb	75-09-2	1	0		165682	10	92.905	percent	N			0.5
8685	287	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	DCE12T	TO15	AIR	BS					3/9/2016	trans-1,2-Dichloroethene	9.46		0.15	ppb	156-60-5	1	0		165682	10	94.562	percent	N			0.5
8686	290	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	MEK	TO15	AIR	BS					3/9/2016	Methyl ethyl ketone	9.24		0.15	ppb	78-93-3	1	0		165682	10	92.379	percent	N			0.5
8687	291	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	DCA11	TO15	AIR	BS					3/9/2016	1,1-Dichloroethane	9.58		0.15	ppb	75-34-3	1	0		165682	10	95.785	percent	N			0.5
8688	292	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	ETACET	TO15	AIR	BS					3/9/2016	Ethyl acetate	9.19		0.15	ppb	141-78-6	1	0		165682	10	91.94	percent	N			1
8689	305	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	MIBK	TO15	AIR	BS					3/9/2016	Methyl isobutyl ketone	9.98		0.15	ppb	108-10-1	1	0		165682	10	99.777	percent	N			0.5
8690	309	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	HXO2	TO15	AIR	BS					3/9/2016	2-Hexanone	5.06		0.3	ppb	591-78-6	1	0		165682	10	50.605	percent	N			1
8691	317	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	TBME	TO15	AIR	BS					3/9/2016	Bromoform	9.85		0.15	ppb	75-25-2	1	0		165682	10	98.474	percent	N			0.5
8692	326	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	CLME	TO15	AIR	BD					3/9/2016	Methyl chloride	9.52		0.15	ppb	74-87-3	1	0		165682	10	95.185	percent	N			0.5
8693	328	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	ERYTHRENE	TO15	AIR	BD					3/9/2016	1,3-Butadiene	9.33		0.15	ppb	106-99-0	1	0		165682	10	93.323	percent	N			0.5
8694	330	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	CLEA	TO15	AIR	BD					3/9/2016	Ethyl chloride	9.81		0.15	ppb	75-00-3	1	0		165682	10	98.147	percent	N			0.5
8695	331	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	FC11	TO15	AIR	BD					3/9/2016	Freon 11	9.84		0.15	ppb	75-69-4	1	0		165682	10	98.367	percent	N			0.5
8696	333	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	DCE11	TO15	AIR	BD					3/9/2016	1,1-Dichloroethene	9.99		0.15	ppb	75-35-4	1	0		165682	10	99.853	percent	N			0.5
8697	335	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	CDS	TO15	AIR	BD					3/9/2016	Carbon disulfide	9.21		0.15	ppb	75-15-0	1	0		165682	10	92.081	percent	N			0.5
8698	336	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	MTLNCL	TO15	AIR	BD					3/9/2016	Methylene chloride	9.22		0.15	ppb	75-09-2	1	0		165682	10	92.214	percent	N			0.5
8699	337	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	DCE12T	TO15	AIR	BD					3/9/2016	trans-1,2-Dichloroethene	9.38		0.15	ppb	156-60-5	1	0		165682	10	93.836	percent	N			0.5
8700	340	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	MEK	TO15	AIR	BD					3/9/2016	Methyl ethyl ketone	9.12		0.15	ppb	78-93-3	1	0		165682	10	91.191	percent	N			0.5
8701	341	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	DCA11	TO15	AIR	BD					3/9/2016	1,1-Dichloroethane	9.55		0.15	ppb	75-34-3	1	0		165682	10	95.485	percent	N			0.5
8702	342	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	ETACET	TO15	AIR	BD					3/9/2016	Ethyl acetate	9.02		0.15	ppb	141-78-6	1	0		165682	10	90.175	percent	N			1
8703	359	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	HXO2	TO15	AIR	BD					3/9/2016	2-Hexanone	4.73		0.3	ppb	591-78-6	1	0		165682	10	47.296	percent	N			1
8704	367	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	TBME	TO15	AIR	BD					3/9/2016	Bromoform	9.88		0.15	ppb	75-25-2	1	0		165682	10	98.781	percent	N			0.5
8705	390	0	18	ALSS	1606379	1606379	491962	491962	491962	EPA TO-15	BR4FBZ	TO15	AIR	LB					3/9/2016	4-Bromofluorobenzene	98.076			PERCENT	460-00-4	1	0		165682	20	98.076	percent	Y			
8706	391	0	18	ALSS	1606379	1606379	491963	491963	491963	EPA TO-15	BR4FBZ	TO15	AIR	BS					3/9/2016	4-Bromofluorobenzene	98.984			PERCENT	460-00-4	1	0		165682	20	98.984	percent	Y			
8707	392	0	18	ALSS	1606379	1606379	491964	491964	491964	EPA TO-15	BR4FBZ	TO15	AIR	BD					3/9/2016	4-Bromofluorobenzene	98.967			PERCENT	460-00-4	1	0		165682	20	98.967	percent	Y			
8708	394	0	18	ALSS	1606379	1606379	492001	492001	492001	EPA TO-15 SIM	BR4FBZ	TO15SIM	AIR	BS					3/11/2016	4-Bromofluorobenzene	100.9			PERCENT	460-00-4	1	0		165702	1	100.9	percent	Y			
8709	375	0	18	ALSS	1606379	1606379	492000	492000	492000	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	LB					3/11/2016	1,4-Dioxane	0.05	U		ppb	123-91-1	1	0		165702			percent	N			0.05
8710	376	0	18	ALSS	1606379	1606379	492000	492000	492000	EPA TO-15 SIM	VC	TO15SIM	AIR	LB					3/11/2016	Vinyl chloride	0.05	U		ppb	75-01-4	1	0		165702			percent	N			0.05
8711	377	0	18	ALSS	1606379	1606379	492000	492000	492000	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	LB					3/11/2016	cis-1,2-Dichloroethene	0.05	U		ppb	156-59-2	1	0		165702			percent	N			0.05
8712	378	0	18	ALSS	1606379	1606379	492000	492000	492000	EPA TO-15 SIM	TCE	TO15SIM	AIR	LB					3/11/2016	Trichloroethene	0.05	U		ppb	79-01-6	1	0		165702			percent	N			0.05
8713	379	0	18	ALSS	1606379	1606379	492000	492000	492000	EPA TO-15 SIM	PCE	TO15SIM	AIR	LB					3/11/2016	Tetrachloroethene	0.05	U		ppb	127-18-4	1	0		165702			percent	N			0.05
8714	395	0	18	ALSS	1606379	1606379	492002	492002	492002	EPA TO-15 SIM	BR4FBZ	TO15SIM	AIR	BD					3/11/2016	4-Bromofluorobenzene	101.28			PERCENT	460-00-4	1	0		165702	1	101.28	percent	Y			
8715	380	0	18	ALSS	1606379	1606379	492001	492001	492001	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	BS					3/11/2016	1,4-Dioxane	0.426			ppb	123-91-1	1	0		165702	0.5	85.217	percent	N			0.05
8716	381	0	18	ALSS	1606379	1606379	492001	492001	492001	EPA TO-15 SIM	VC	TO15SIM	AIR	BS					3/11/2016	Vinyl chloride	0.471			ppb	75-01-4	1	0		165702	0.5	94.12	percent	N			0.05
8717	382	0	18	ALSS	1606379	1606379	492001	492001	492001	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	BS					3/11/2016	cis-1,2-Dichloroethene	0.453			ppb	156-59-2	1	0		165702	0.5	90.529	percent	N			0.05
8718	383	0	18	ALSS	1606379	1606379	492001	492001	492001	EPA TO-15 SIM	TCE	TO15SIM	AIR	BS					3/11/2016	Trichloroethene	0.496			ppb	79-01-6	1	0		165702	0.5	99.144	percent	N			0.05
8719	384	0	18	ALSS	1606379	1606379	492001	492001	492001	EPA TO-15 SIM	PCE	TO15SIM	AIR	BS					3/11/2016	Tetrachloroethene	0.484			ppb	127-18-4	1	0		165702	0.5	96.778	percent	N			0.05
8720	385	0	18	ALSS	1606379	1606379	492002	492002	492002	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	BD					3/11/2016	1,4-Dioxane	0.452			ppb	123-91-1	1	0		165702	0.5	90.375	percent	N			0.05
8721	386	0	18	ALSS	1606379	1606379	492002	492002	492002	EPA TO-15 SIM	VC	TO15SIM	AIR	BD					3/11/2016	Vinyl chloride	0.494			ppb	75-01-4	1	0		165702	0.5	98.875	percent	N			0.05
8722	387	0	18	ALSS	1606379	1606379	492002	492002	492002	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	BD					3/11/2016	cis-1,2-Dichloroethene	0.477			ppb	156-59-2	1	0		165702	0.5	95.421	percent	N			0.05
8723	388	0	18	ALSS	1606379	1606379	492002	492002	492002	EPA TO-15 SIM	TCE	TO15SIM	AIR	BD					3/11/2016	Trichloroethene	0.479			ppb	79-01-6	1	0		165702	0.5	95.804	percent	N			0.05
8724	389	0	18	ALSS	1606379	1606379	492002	492002	492002	EPA TO-15 SIM	PCE	TO15SIM	AIR	BD					3/11/2016	Tetrachloroethene	0.476			ppb	127-18-4	1	0		165702	0.5	95.225	percent	N			0.05
8725	393	0	18	ALSS	1606379	1606379	492000	492000	492000	EPA TO-15 SIM	BR4FBZ	TO15SIM	AIR	LB					3/11/2016	4-Bromofluorobenzene	83.505			PERCENT	460-00-4	1	0		165702	1	83.505	percent	Y			
8726	107	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15 SIM	PCE	TO15SIM	AIR	N		3/12/2016	3/14/2016		3/15/2016	Tetrachloroethene	11	E		ppb	127-18-4	1	0		165896			percent	N			0.05
8727	108	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15 SIM	PCE	TO15SIM	AIR	N		3/12/2016	3/14/2016		3/15/2016	Tetrachloroethene	74	E		µg/m3	127-18-4	1	0		165896			percent	N			0.34
8728	106	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15 SIM	TCE	TO15SIM	AIR	N		3/12/2016	3/14/2016		3/15/2016	Trichloroethene	5.2			µg/m3	79-01-6	1	0		165896			percent	N			0.27
8729	102	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15 SIM	VC	TO15SIM	AIR	N		3/12/2016	3/14/2016		3/15/2016	Vinyl chloride	0.13	U		µg/m3	75-01-4	1	0		165896			percent	N			0.13
8730	103	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	N		3/12/2016	3/14/2016		3/15/2016	cis-1,2-Dichloroethene	0.14			ppb	156-59-2	1	0		165896			percent	N			0.05
8731	104	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	N		3/12/2016	3/14/2016		3/15/2016	cis-1,2-Dichloroethene	0.55			µg/m3	156-59-2	1	0		165896			percent	N			0.2
8732	105	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15 SIM	TCE	TO15SIM	AIR	N		3/12/2016	3/14/2016		3/15/2016	Trichloroethene	0.96			ppb	79-01-6	1	0		165896			percent	N			0.05
8733	110	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	N		3/12/2016	3/14/2016		3/15/2016	1,4-Dioxane	0.18	U		µg/m3	123-91-1	1	0		165896			percent	N			0.18
8734	111	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15 SIM	BR4FBZ	TO15SIM	AIR	N		3/12/2016	3/14/2016		3/15/2016	4-Bromofluorobenzene	111.76			PERCENT	460-00-4	1	0		165896	1	111.76	percent	Y			
8735	101	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15 SIM	VC	TO15SIM	AIR	N		3/12/2016	3/14/2016		3/15/2016	Vinyl chloride	0.05	U		ppb	75-01-4	1	0		165896			percent	N			0.05
8736	109	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	N		3/12/2016	3/14/2016		3/15/2016	1,4-Dioxane	0.05	U		ppb	123-91-1	1	0		165896			percent	N			0.05
8737	19	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	ACE	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Acetone	17		0.3	ppb	67-64-1	1	0		165756			percent	N			1
8738	20	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	ACE	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Acetone	41		0.71	µg/m3	67-64-1	1	0		165756			percent	N			2.4
8739	40	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	THF	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Tetrahydrofuran	16		0.44	µg/m3	109-99-9	1	0		165756			percent	N			1.5
8740	66	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	BZME	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Toluene	16		0.57	µg/m3	108-88-3	1	0		165756			percent	N			1.9
8741	99	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	MTLNCL	TO15	AIR	N		3/12/2016	3/14/2016		3/15/2016	Methylene chloride	61		1.5	ppb	75-09-2	10	0		165756			percent	N			5
8742	100	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	MTLNCL	TO15	AIR	N		3/12/2016	3/14/2016		3/15/2016	Methylene chloride	210		5.2	µg/m3	75-09-2	10	0		165756			percent	N			17
8743	2	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	FC12	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Dichlorodifluoromethane	2.8		0.74	µg/m3	75-71-8	1	0		165756			percent	N			2.5
8744	3	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	CLME	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Methyl chloride	1.3		0.15	ppb	74-87-3	1	0		165756			percent	N			0.5
8745	4	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	CLME	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Methyl chloride	2.8		0.31	µg/m3	74-87-3	1	0		165756			percent	N			1
8746	6	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	DCTFA12	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Freon 114	1	U	1	µg/m3	76-14-2	1	0		165756			percent	N			3.5
8747	8	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	ERYTHRENE	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	1,3-Butadiene	1.2		0.33	µg/m3	106-99-0	1	0		165756			percent	N			1.1
8748	14	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	FC11	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Freon 11	1.9	J	0.84	µg/m3	75-69-4	1	0		165756			percent	N			2.8

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
8660	254	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8661	255	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8662	256	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8663	257	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8664	258	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8665	260	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8666	261	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8667	262	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8668	263	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8669	264	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8670	265	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8671	266	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8672	267	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8673	268	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8674	269	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	1	491962	4.30EPACLP						165682		TRUE
8675	270	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8676	271	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8677	272	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8678	273	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	0.15	U	X	U			0.15	0.5	491962	4.30EPACLP						165682		TRUE
8679	276	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	9.51		X	=	55.169	137.44	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8680	278	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	9.39		X	=	57.992	138.25	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8681	280	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	9.88		X	=	57.618	137.13	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8682	281	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	9.83		X	=	58.928	132.84	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8683	285	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	9.25		X	=	63.855	128.75	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8684	286	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	9.29		X	=	63.699	127.89	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8685	287	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	9.46		X	=	68.113	124.64	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8686	290	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	9.24		X	=	51.691	144.24	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8687	291	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	9.58		X	=	67.712	123.62	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8688	292	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	9.19		X	=	53.357	156.94	0.15	1	491963	4.30EPACLP						165682		TRUE
8689	305	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	9.98		X	=	73.471	149.97	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8690	309	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	5.06		X	=	80.836	158.78	0.3	1	491963	4.30EPACLP						165682		TRUE
8691	317	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	9.85		X	=	59.748	136.05	0.15	0.5	491963	4.30EPACLP						165682		TRUE
8692	326	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	9.52		X	=	55.169	137.44	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8693	328	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	9.33		X	=	57.992	138.25	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8694	330	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	9.81		X	=	57.618	137.13	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8695	331	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	9.84		X	=	58.928	132.84	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8696	333	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	9.99		X	=	67.174	125.1	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8697	335	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	9.21		X	=	63.855	128.75	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8698	336	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	9.22		X	=	63.699	127.89	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8699	337	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	9.38		X	=	68.113	124.64	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8700	340	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	9.12		X	=	51.691	144.24	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8701	341	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	9.55		X	=	67.712	123.62	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8702	342	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	9.02		X	=	53.357	156.94	0.15	1	491964	4.30EPACLP						165682		TRUE
8703	359	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	4.73		X	=	80.836	158.78	0.3	1	491964	4.30EPACLP						165682		TRUE
8704	367	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			2		TRUE	3/22/2016	mfesler	9.88		X	=	59.748	136.05	0.15	0.5	491964	4.30EPACLP						165682		TRUE
8705	390	0	18	ALSS	1606379	1606379	491962	491962	491962		1/0/1900	NONE			3		TRUE	3/22/2016	mfesler	98.076		X	=	67.698	129.86			491962	4.30EPACLP						165682		TRUE
8706	391	0	18	ALSS	1606379	1606379	491963	491963	491963		1/0/1900	NONE			3		TRUE	3/22/2016	mfesler	98.984		X	=	67.698	129.86			491963	4.30EPACLP						165682		TRUE
8707	392	0	18	ALSS	1606379	1606379	491964	491964	491964		1/0/1900	NONE			3		TRUE	3/22/2016	mfesler	98.967		X	=	67.698	129.86			491964	4.30EPACLP						165682		TRUE
8708	394	0	18	ALSS	1606379	1606379	492001	492001	492001		1/0/1900	NONE			1		TRUE	3/23/2016	mfesler	100.9		X	=	48.778	151.81			492001	4.30EPACLP						165702		TRUE
8709	375	0	18	ALSS	1606379	1606379	492000	492000	492000		1/0/1900	NONE			2		TRUE	3/23/2016	mfesler	0.05	U	X	U				0.05	492000	4.30EPACLP						165702		TRUE
8710	376	0	18	ALSS	1606379	1606379	492000	492000	492000		1/0/1900	NONE			2		TRUE	3/23/2016	mfesler	0.05	U	X	U				0.05	492000	4.30EPACLP						165702		TRUE
8711	377	0	18	ALSS	1606379	1606379	492000	492000	492000		1/0/1900	NONE			2		TRUE	3/23/2016	mfesler	0.05	U	X	U				0.05	492000	4.30EPACLP						165702		TRUE
8712	378	0	18	ALSS	1606379	1606379	492000	492000	492000		1/0/1900	NONE			2		TRUE	3/23/2016	mfesler	0.05	U	X	U				0.05	492000	4.30EPACLP						165702		TRUE
8713	379	0	18	ALSS	1606379	1606379	492000	492000	492000		1/0/1900	NONE			2		TRUE	3/23/2016	mfesler	0.05	U	X	U				0.05	492000	4.30EPACLP						165702		TRUE
8714	395	0	18	ALSS	1606379	1606379	492002	492002	492002		1/0/1900	NONE			2		TRUE	3/23/2016	mfesler	101.28		X	=	48.778	151.81			492002	4.30EPACLP						165702		TRUE
8715	380	0	18	ALSS	1606379	1606379	492001	492001	492001		1/0/1900	NONE			3		TRUE	3/23/2016	mfesler	0.426		X	=	70	130		0.05	492001	4.30EPACLP						165702		TRUE
8716	381	0	18	ALSS	1606379	1606379	492001	492001	492001		1/0/1900	NONE			3		TRUE	3/23/2016	mfesler	0.471		X	=	17.533	153.67		0.05	492001	4.30EPACLP						165702		TRUE
8717	382	0	18	ALSS	1606379	1606379	492001	492001	492001		1/0/1900	NONE			3		TRUE	3/23/2016	mfesler	0.453		X	=	65.189	131.19		0.05	492001	4.30EPACLP						165702		TRUE
8718	383	0	18	ALSS	1606379	1606379	492001	492001	492001		1/0/1900	NONE			3		TRUE	3/23/2016	mfesler	0.496		X	=	68.353	123.42		0.05	492001	4.30EPACLP						165702		TRUE
8719	384	0	18	ALSS	1606379	1606379	492001	492001	492001		1/0/1900	NONE			3		TRUE	3/23/2016	mfesler	0.484		X	=	63.624	127.93		0.05	492001	4.30EPACLP						165702		TRUE
8720	385	0	18	ALSS	1606379	1606379	492002	492002	492002		1/0/1900	NONE			3		TRUE	3/23/2016	mfesler	0.452		X	=	70	130		0.05	492002	4.30EPACLP						165702		TRUE
8721	386	0	18	ALSS	1606379	1606379	492002	492002	492002		1/0/1900	NONE			3		TRUE	3/23/2016	mfesler	0.494		X	=	17.533	153.67		0.05	492002	4.30EPACLP						165702		TRUE
8722	387	0	18	ALSS	1606379	1606379	492002	492002	492002		1/0/1900	NONE			3		TRUE	3/23/2016	mfesler	0.477		X	=	65.189	131.19		0.05	492002	4.30EPACLP						165702		TRUE
8723	388	0	18	ALSS	1606379	1606379	492002	492002	492002		1/0/1900	NONE			3		TRUE	3/23/2016	mfesler	0.479		X	=	68.353	123.42		0.05	492002	4.30EPACLP						165702		TRUE
8724	389	0	18	ALSS	1606379	1606379	492002	492002	492002		1/0/1900	NONE			3		TRUE	3/23/2016	mfesler	0.476		X	=	63.624	127.93		0.05	492002	4.30EPACLP						165702		TRUE
8725	393	0	18	ALSS	1606379	1606379	492000	492000	492000		1/0/1900	NONE			3		TRUE	3/23/2016	mfesler	83.505		X	=	48.778	151.81			492000	4.30EPACLP						165702		TRUE
8726	107	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			0		TRUE	3/31/2016	jbeckett	11	J	X	E				0.05	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165896		TRUE
8727	108	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			0		TRUE	3/31/2016	jbeckett	74	J	X	E				0.34	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165896		TRUE
8728	106	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	3/31/2016	jbeckett	5.2		X	=				0.27	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165896		TRUE
8729	102	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			2		TRUE	3/31/2016	jbeckett	0.13	U	X	U				0.13	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165896		TRUE
8730	103	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			2		TRUE	3/31/2016	jbeckett	0.14		X	=				0.05	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165896		TRUE
8731	104	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			2		TRUE	3/31/2016	jbeckett	0.55		X	=				0.2	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165896		TRUE
8732	105	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			2		TRUE	3/31/2016	jbeckett	0.96		X	=				0.05	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165896		TRUE
8733	110	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			2		TRUE	3/31/2016	jbeckett	0.18	U	X	U				0.18	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165896		TRUE
8734	111	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			2		TRUE	3/31/2016	jbeckett	111.76		X	=	48.778	151.81			A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165896		TRUE
8735	101	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			3		TRUE	3/31/2016	jbeckett	0.05	U	X	U				0.05	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165896		TRUE
8736	109	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			3		TRUE	3/31/2016	jbeckett	0.05	U	X	U				0.05	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165896		TRUE
8737	19	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	17		X	=			0.3	1	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8738	20	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	41		X	=			0.71	2.4	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8739	40	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	16		X	=			0.44	1.5	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8740	66	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	16		X	=			0.57	1.9	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8741	99	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	61	J	X	=			1.5	5	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8742	100	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	210	J	X	=			5.2	17	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8743	2	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	2.8	J	X	=			0.74	2.5	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8744	3	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.3		X	=			0.15	0.5	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8745	4	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	2.8		X	=			0.31	1	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8746	6	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1	U	X	U			1	3.5	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8747	8	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.2	J	X	=			0.33	1.1	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8748	14	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.9	J	X	J			0.84	2.8	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE

APPENDIX A-1

Laboratory Validated Results

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
8660	254	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8661	255	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8662	256	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8663	257	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8664	258	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8665	260	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8666	261	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8667	262	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8668	263	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8669	264	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8670	265	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8671	266	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8672	267	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8673	268	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8674	269	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			1	1			mfesler - Tier 4 validat
8675	270	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8676	271	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8677	272	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8678	273	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler			0.5	0.5			mfesler - Tier 4 validat
8679	276	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8680	278	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8681	280	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8682	281	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8683	285	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8684	286	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8685	287	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8686	290	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8687	291	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8688	292	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		1	1			mfesler - Tier 4 validat
8689	305	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8690	309	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		1	1			mfesler - Tier 4 validat
8691	317	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8692	326	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8693	328	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8694	330	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8695	331	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8696	333	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8697	335	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8698	336	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8699	337	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8700	340	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8701	341	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8702	342	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		1	1			mfesler - Tier 4 validat
8703	359	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		1	1			mfesler - Tier 4 validat
8704	367	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	10		0.5	0.5			mfesler - Tier 4 validat
8705	390	0	18	ALSS	1606379	1606379	491962	491962	491962	4/7/2016	mfesler	20	ppb					mfesler - Tier 4 validat
8706	391	0	18	ALSS	1606379	1606379	491963	491963	491963	4/7/2016	mfesler	20	ppb					mfesler - Tier 4 validat
8707	392	0	18	ALSS	1606379	1606379	491964	491964	491964	4/7/2016	mfesler	20	ppb					mfesler - Tier 4 validat
8708	394	0	18	ALSS	1606379	1606379	492001	492001	492001	4/7/2016	mfesler	1	ppb					mfesler - Tier 4 validat
8709	375	0	18	ALSS	1606379	1606379	492000	492000	492000	4/7/2016	mfesler			0.05	0.05			mfesler - Tier 4 validat
8710	376	0	18	ALSS	1606379	1606379	492000	492000	492000	4/7/2016	mfesler			0.05	0.05			mfesler - Tier 4 validat
8711	377	0	18	ALSS	1606379	1606379	492000	492000	492000	4/7/2016	mfesler			0.05	0.05			mfesler - Tier 4 validat
8712	378	0	18	ALSS	1606379	1606379	492000	492000	492000	4/7/2016	mfesler			0.05	0.05			mfesler - Tier 4 validat
8713	379	0	18	ALSS	1606379	1606379	492000	492000	492000	4/7/2016	mfesler			0.05	0.05			mfesler - Tier 4 validat
8714	395	0	18	ALSS	1606379	1606379	492002	492002	492002	4/7/2016	mfesler	1	ppb					mfesler - Tier 4 validat
8715	380	0	18	ALSS	1606379	1606379	492001	492001	492001	4/7/2016	mfesler	0.5		0.05	0.05			mfesler - Tier 4 validat
8716	381	0	18	ALSS	1606379	1606379	492001	492001	492001	4/7/2016	mfesler	0.5		0.05	0.05			mfesler - Tier 4 validat
8717	382	0	18	ALSS	1606379	1606379	492001	492001	492001	4/7/2016	mfesler	0.5		0.05	0.05			mfesler - Tier 4 validat
8718	383	0	18	ALSS	1606379	1606379	492001	492001	492001	4/7/2016	mfesler	0.5		0.05	0.05			mfesler - Tier 4 validat
8719	384	0	18	ALSS	1606379	1606379	492001	492001	492001	4/7/2016	mfesler	0.5		0.05	0.05			mfesler - Tier 4 validat
8720	385	0	18	ALSS	1606379	1606379	492002	492002	492002	4/7/2016	mfesler	0.5		0.05	0.05			mfesler - Tier 4 validat
8721	386	0	18	ALSS	1606379	1606379	492002	492002	492002	4/7/2016	mfesler	0.5		0.05	0.05			mfesler - Tier 4 validat
8722	387	0	18	ALSS	1606379	1606379	492002	492002	492002	4/7/2016	mfesler	0.5		0.05	0.05			mfesler - Tier 4 validat
8723	388	0	18	ALSS	1606379	1606379	492002	492002	492002	4/7/2016	mfesler	0.5		0.05	0.05			mfesler - Tier 4 validat
8724	389	0	18	ALSS	1606379	1606379	492002	492002	492002	4/7/2016	mfesler	0.5		0.05	0.05			mfesler - Tier 4 validat
8725	393	0	18	ALSS	1606379	1606379	492000	492000	492000	4/7/2016	mfesler	1	ppb					mfesler - Tier 4 validat
8726	107	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.05	0.05	J	>ICLinearRange	jbeckett - Tier 2B
8727	108	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.34	0.34	J	>ICLinearRange	jbeckett - Tier 2B
8728	106	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.27	0.27			jbeckett - Tier 2B
8729	102	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.13	0.13			jbeckett - Tier 2B
8730	103	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
8731	104	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.2	0.2			jbeckett - Tier 2B
8732	105	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
8733	110	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.18	0.18			jbeckett - Tier 2B
8734	111	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler	1	ppb					jbeckett - Tier 2B
8735	101	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
8736	109	-746949026	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
8737	19	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			1	1	None	LB>MDL	jbeckett - Tier 2B
8738	20	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			2.4	2.4	None	LB>MDL	jbeckett - Tier 2B
8739	40	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			1.5	1.5			jbeckett - Tier 2B
8740	66	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			1.9	1.9			jbeckett - Tier 2B
8741	99	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			5	5	J	FD>RPD	jbeckett - Tier 2B
8742	100	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			17	17	J	FD>RPD	jbeckett - Tier 2B
8743	2	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			2.5	2.5	J	FD>RPD	jbeckett - Tier 2B
8744	3	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8745	4	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
8746	6	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			3.5	3.5			jbeckett - Tier 2B
8747	8	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			1.1	1.1	J	FD>RPD	jbeckett - Tier 2B
8748	14	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			2.8	2.8			jbeckett - Tier 2B

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
8749	16	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	FC113	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Freon 113	1.1	U	1.1	µg/m3	76-13-1	1	0		165756			percent	N			3.8
8750	29	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	MEK	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Methyl ethyl ketone	3		0.15	ppb	78-93-3	1	0		165756			percent	N			0.5
8751	30	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	MEK	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Methyl ethyl ketone	8.9		0.44	µg/m3	78-93-3	1	0		165756			percent	N			1.5
8752	35	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	C6N	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	n-Hexane	1.2		0.15	ppb	110-54-3	1	0		165756			percent	N			0.5
8753	36	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	C6N	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	n-Hexane	4.4		0.53	µg/m3	110-54-3	1	0		165756			percent	N			1.8
8754	38	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	TCLME	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Chloroform	4.8		0.73	µg/m3	67-66-3	1	0		165756			percent	N			2.4
8755	39	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	THF	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Tetrahydrofuran	5.4		0.15	ppb	109-99-9	1	0		165756			percent	N			0.5
8756	44	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	TCA111	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	1,1,1-Trichloroethane	1.4	J	0.82	µg/m3	71-55-6	1	0		165756			percent	N			2.7
8757	48	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	BZ	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Benzene	2.4		0.48	µg/m3	71-43-2	1	0		165756			percent	N			1.6
8758	54	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	BDCME	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Bromodichloromethane	1	U	1	µg/m3	75-27-4	1	0		165756			percent	N			3.4
8759	56	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	C7N	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Heptane	2	J	0.61	µg/m3	142-82-5	1	0		165756			percent	N			2
8760	65	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	BZME	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Toluene	4.3		0.15	ppb	108-88-3	1	0		165756			percent	N			0.5
8761	68	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	HXO2	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	2-Hexanone	1.2	U	1.2	µg/m3	591-78-6	1	0		165756			percent	N			4.1
8761	68	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	HXO2	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	2-Hexanone	1.2	U	1.2	µg/m3	591-78-6	1	0		165756			percent	N			4.1
8762	70	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	DBCME	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Dibromochloromethane	1.3	U	1.3	µg/m3	124-48-1	1	0		165756			percent	N			4.3
8763	72	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	EDB	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	1,2-Dibromoethane	1.2	U	1.2	µg/m3	106-93-4	1	0		165756			percent	N			3.8
8764	76	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	EBZ	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Ethyl benzene	2.2		0.65	µg/m3	100-41-4	1	0		165756			percent	N			2.2
8765	77	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	XYLMP	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	m,p-Xylene	1.8		0.15	ppb	179601-23-1	1	0		165756			percent	N			0.5
8766	78	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	XYLMP	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	m,p-Xylene	7.9		0.65	µg/m3	179601-23-1	1	0		165756			percent	N			2.2
8767	80	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	XYLO	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	o-Xylene	2.3		0.65	µg/m3	95-47-6	1	0		165756			percent	N			2.2
8768	84	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	TBME	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Bromoform	1.6	U	1.6	µg/m3	75-25-2	1	0		165756			percent	N			5.2
8769	86	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	PCA	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	1,1,2,2-Tetrachloroethane	1	U	1	µg/m3	79-34-5	1	0		165756			percent	N			3.4
8770	88	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	EBZME4	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	4-Ethyl toluene	1.3	J	0.74	µg/m3	622-96-8	1	0		165756			percent	N			4.9
8771	90	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	TMB135	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	1,3,5-Trimethylbenzene	1.1	J	0.74	µg/m3	108-67-8	1	0		165756			percent	N			2.5
8772	92	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	TMB124	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	1,2,4-Trimethylbenzene	4.1		0.74	µg/m3	95-63-6	1	0		165756			percent	N			2.5
8773	98	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	DCBZ12	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	1,2-Dichlorobenzene	1.8	U	1.8	µg/m3	95-50-1	1	0		165756			percent	N			6
8774	1	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	FC12	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Dichlorodifluoromethane	0.57		0.15	ppb	75-71-8	1	0		165756			percent	N			0.5
8775	5	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	DCTFA12	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Freon 114	0.15	U	0.15	ppb	76-14-2	1	0		165756			percent	N			0.5
8776	7	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	ERYTHRENE	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	1,3-Butadiene	0.55		0.15	ppb	106-99-0	1	0		165756			percent	N			0.5
8777	9	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	BRME	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Bromomethane	0.15	U	0.15	ppb	74-83-9	1	0		165756			percent	N			0.5
8778	10	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	BRME	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Bromomethane	0.58	U	0.58	µg/m3	74-83-9	1	0		165756			percent	N			1.9
8779	11	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	CLEA	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Ethyl chloride	0.15	U	0.15	ppb	75-00-3	1	0		165756			percent	N			0.5
8780	12	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	CLEA	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Ethyl chloride	0.4	U	0.4	µg/m3	75-00-3	1	0		165756			percent	N			1.3
8781	13	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	FC11	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Freon 11	0.34	J	0.15	ppb	75-69-4	1	0		165756			percent	N			0.5
8782	15	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	FC113	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Freon 113	0.15	U	0.15	ppb	76-13-1	1	0		165756			percent	N			0.5
8783	17	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	DCE11	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	1,1-Dichloroethene	0.15	U	0.15	ppb	75-35-4	1	0		165756			percent	N			0.5
8784	18	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	DCE11	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	1,1-Dichloroethene	0.59	U	0.59	µg/m3	75-35-4	1	0		165756			percent	N			2
8785	21	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	CDS	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Carbon disulfide	0.15	U	0.15	ppb	75-15-0	1	0		165756			percent	N			0.5
8786	22	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	CDS	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Carbon disulfide	0.47	U	0.47	µg/m3	75-15-0	1	0		165756			percent	N			1.6
8787	23	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	DCE12T	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	trans-1,2-Dichloroethene	0.15	U	0.15	ppb	156-60-5	1	0		165756			percent	N			0.5
8788	24	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	DCE12T	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	trans-1,2-Dichloroethene	0.59	U	0.59	µg/m3	156-60-5	1	0		165756			percent	N			2
8789	25	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	TBUTMEE	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Methyl t-butyl ether	0.15	U	0.15	ppb	1634-04-4	1	0		165756			percent	N			0.5
8790	26	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	TBUTMEE	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Methyl t-butyl ether	0.54	U	0.54	µg/m3	1634-04-4	1	0		165756			percent	N			1.8
8791	27	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	VA	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	Vinyl acetate	0.15	U	0.15	ppb	108-05-4	1	0		165756			percent	N			0.5

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
8749	16	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.1	U	X	U			1.1	3.8	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8750	29	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	3		X	=			0.15	0.5	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8751	30	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	8.9		X	=			0.44	1.5	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8752	35	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.2		X	=			0.15	0.5	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8753	36	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	4.4		X	=			0.53	1.8	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8754	38	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	4.8		X	=			0.73	2.4	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8755	39	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	5.4		X	=			0.15	0.5	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8756	44	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.4	J	X	J			0.82	2.7	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8757	48	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	2.4		X	=			0.48	1.6	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8758	54	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1	U	X	U			1	3.4	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8759	56	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	2	J	X	J			0.61	2	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8760	65	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	4.3		X	=			0.15	0.5	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8761	68	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.2	U	X	U			1.2	4.1	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8761	68	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.2	U	X	U			1.2	4.1	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8762	70	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.3	U	X	U			1.3	4.3	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8763	72	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.2	U	X	U			1.2	3.8	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8764	76	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	2.2		X	=			0.65	2.2	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8765	77	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.8		X	=			0.15	0.5	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8766	78	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	7.9		X	=			0.65	2.2	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8767	80	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	2.3		X	=			0.65	2.2	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8768	84	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.6	U	X	U			1.6	5.2	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8769	86	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1	U	X	U			1	3.4	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8770	88	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.3	J	X	J			0.74	4.9	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8771	90	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.1	J	X	J			0.74	2.5	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8772	92	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	4.1	J	X	=			0.74	2.5	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8773	98	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.8	U	X	U			1.8	6	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8774	1	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.57	J	X	=			0.15	0.5	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8775	5	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8776	7	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.55	J	X	=			0.15	0.5	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8777	9	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8778	10	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.58	U	X	U			0.58	1.9	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8779	11	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8780	12	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.4	U	X	U			0.4	1.3	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8781	13	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.34	J	X	J			0.15	0.5	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8782	15	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8783	17	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8784	18	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.59	U	X	U			0.59	2	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8785	21	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8786	22	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.47	U	X	U			0.47	1.6	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8787	23	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8788	24	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.59	U	X	U			0.59	2	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8789	25	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8790	26	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.54	U	X	U			0.54	1.8	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8791	27	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
8749	16	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			3.8	3.8			jbeckett - Tier 2B
8750	29	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8751	30	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			1.5	1.5			jbeckett - Tier 2B
8752	35	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8753	36	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			1.8	1.8			jbeckett - Tier 2B
8754	38	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			2.4	2.4			jbeckett - Tier 2B
8755	39	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8756	44	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			2.7	2.7			jbeckett - Tier 2B
8757	48	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			1.6	1.6			jbeckett - Tier 2B
8758	54	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			3.4	3.4			jbeckett - Tier 2B
8759	56	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
8760	65	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8761	68	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			4.1	4.1	NONE	CCV>UCL	jbeckett - Tier 2B
8761	68	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			4.1	4.1	none	LCS>UCL	jbeckett - Tier 2B
8762	70	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			4.3	4.3			jbeckett - Tier 2B
8763	72	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			3.8	3.8			jbeckett - Tier 2B
8764	76	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			2.2	2.2			jbeckett - Tier 2B
8765	77	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8766	78	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			2.2	2.2			jbeckett - Tier 2B
8767	80	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			2.2	2.2			jbeckett - Tier 2B
8768	84	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			5.2	5.2	none	LCSD>UCL	jbeckett - Tier 2B
8769	86	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			3.4	3.4			jbeckett - Tier 2B
8770	88	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			4.9	4.9			jbeckett - Tier 2B
8771	90	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			2.5	2.5			jbeckett - Tier 2B
8772	92	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			2.5	2.5	J	FD>RPD	jbeckett - Tier 2B
8773	98	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			6	6			jbeckett - Tier 2B
8774	1	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5	J	FD>RPD	jbeckett - Tier 2B
8775	5	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8776	7	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5	J	FD>RPD	jbeckett - Tier 2B
8777	9	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8778	10	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			1.9	1.9			jbeckett - Tier 2B
8779	11	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8780	12	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			1.3	1.3			jbeckett - Tier 2B
8781	13	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8782	15	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8783	17	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8784	18	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
8785	21	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8786	22	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			1.6	1.6			jbeckett - Tier 2B
8787	23	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8788	24	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
8789	25	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8790	26	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			1.8	1.8			jbeckett - Tier 2B
8791	27	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5	none	LCSD>UCL	jbeckett - Tier 2B
8791	27	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5	none	LCS>UCL	jbeckett - Tier 2B
8791	27	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5	NONE	CCV>UCL	jbeckett - Tier 2B
8792	28	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			1.8	1.8	NONE	CCV>UCL	jbeckett - Tier 2B
8792	28	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			1.8	1.8	none	LCSD>UCL	jbeckett - Tier 2B
8792	28	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			1.8	1.8	none	LCS>UCL	jbeckett - Tier 2B
8793	31	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8794	32	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
8795	33	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
8796	34	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			3.6	3.6			jbeckett - Tier 2B
8797	37	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8798	41	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8799	42	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
8800	43	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8801	45	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8802	46	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			3.1	3.1			jbeckett - Tier 2B
8803	47	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8804	49	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8805	50	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			1.7	1.7			jbeckett - Tier 2B
8806	51	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8807	52	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			2.4	2.4			jbeckett - Tier 2B
8808	53	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8809	55	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8810	57	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8811	58	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			2.3	2.3			jbeckett - Tier 2B
8812	59	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8813	60	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
8814	61	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5	none	LCSD>UCL	jbeckett - Tier 2B
8815	62	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			2.3	2.3	none	LCSD>UCL	jbeckett - Tier 2B
8816	63	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8817	64	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			2.7	2.7			jbeckett - Tier 2B
8818	67	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			1	1	none	LCS>UCL	jbeckett - Tier 2B
8818	67	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			1	1	NONE	CCV>UCL	jbeckett - Tier 2B
8819	69	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8820	71	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8821	73	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8822	74	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			2.3	2.3			jbeckett - Tier 2B
8823	75	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8824	79	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8825	81	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8826	82	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			2.1	2.1			jbeckett - Tier 2B
8827	83	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5	none	LCSD>UCL	jbeckett - Tier 2B
8828	85	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8829	87	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
8830	89	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8831	91	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5	J	FD>RPD	jbeckett - Tier 2B

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
8832	93	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	DCBZ13	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	1,3-Dichlorobenzene	0.15	U	0.15	ppb	541-73-1	1	0		165756			percent	N			0.5
8833	94	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	DCBZ13	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	1,3-Dichlorobenzene	0.9	U	0.9	µg/m3	541-73-1	1	0		165756			percent	N			3
8834	95	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	DCBZ14	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	1,4-Dichlorobenzene	0.15	U	0.15	ppb	106-46-7	1	0		165756			percent	N			0.5
8835	96	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	DCBZ14	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	1,4-Dichlorobenzene	0.9	U	0.9	µg/m3	106-46-7	1	0		165756			percent	N			3
8836	97	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	DCBZ12	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	1,2-Dichlorobenzene	0.3	U	0.3	ppb	95-50-1	1	0		165756			percent	N			1
8837	112	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	EPA TO-15	BR4FBZ	TO15	AIR	N		3/12/2016	3/14/2016		3/14/2016	4-Bromofluorobenzene	102.86			PERCENT	460-00-4	1	0		165756	20	102.86	percent	Y			
8838	176	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	TBUTMEE	TO15	AIR	BS					3/14/2016	Methyl t-butyl ether	12		0.15	ppb	1634-04-4	1	0		165756	10	119.59	percent	N			0.5
8839	178	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	MEK	TO15	AIR	BS					3/14/2016	Methyl ethyl ketone	11		0.15	ppb	78-93-3	1	0		165756	10	110.48	percent	N			0.5
8840	179	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	DCA11	TO15	AIR	BS					3/14/2016	1,1-Dichloroethane	11		0.15	ppb	75-34-3	1	0		165756	10	109.8	percent	N			0.5
8895	220	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	FC113	TO15	AIR	BD					3/14/2016	Freon 113	11.3		0.15	ppb	76-13-1	1	0		165756	10	113.19	percent	N			0.5
8896	221	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	DCE11	TO15	AIR	BD					3/14/2016	1,1-Dichloroethene	11.5		0.15	ppb	75-35-4	1	0		165756	10	114.92	percent	N			0.5
8897	222	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	ACE	TO15	AIR	BD					3/14/2016	Acetone	11.3		0.3	ppb	67-64-1	1	0		165756	10	112.67	percent	N			1
8898	223	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	CDS	TO15	AIR	BD					3/14/2016	Carbon disulfide	10.8		0.15	ppb	75-15-0	1	0		165756	10	108.07	percent	N			0.5
8899	224	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	MTLNCL	TO15	AIR	BD					3/14/2016	Methylene chloride	10.8		0.15	ppb	75-09-2	1	0		165756	10	107.63	percent	N			0.5
8900	225	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	DCE12T	TO15	AIR	BD					3/14/2016	trans-1,2-Dichloroethene	11.1		0.15	ppb	156-60-5	1	0		165756	10	110.57	percent	N			0.5
8901	226	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	TBUTMEE	TO15	AIR	BD					3/14/2016	Methyl t-butyl ether	12.3		0.15	ppb	1634-04-4	1	0		165756	10	123.12	percent	N			0.5
8902	227	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	VA	TO15	AIR	BD					3/14/2016	Vinyl acetate	30.8		0.15	ppb	108-05-4	1	0		165756	10	307.54	percent	N			0.5
8903	228	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	MEK	TO15	AIR	BD					3/14/2016	Methyl ethyl ketone	11.4		0.15	ppb	78-93-3	1	0		165756	10	113.76	percent	N			0.5
8904	229	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	DCA11	TO15	AIR	BD					3/14/2016	1,1-Dichloroethane	11.3		0.15	ppb	75-34-3	1	0		165756	10	112.5	percent	N			0.5
8905	231	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	C6N	TO15	AIR	BD					3/14/2016	n-Hexane	11.4		0.15	ppb	110-54-3	1	0		165756	10	114.14	percent	N			0.5
8906	232	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	TCLME	TO15	AIR	BD					3/14/2016	Chloroform	11.3		0.15	ppb	67-66-3	1	0		165756	10	112.75	percent	N			0.5
8907	233	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	THF	TO15	AIR	BD					3/14/2016	Tetrahydrofuran	11.6		0.15	ppb	109-99-9	1	0		165756	10	116.43	percent	N			0.5
8908	234	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	DCA12	TO15	AIR	BD					3/14/2016	1,2-Dichloroethane	12.3		0.15	ppb	107-06-2	1	0		165756	10	123.05	percent	N			0.5
8909	235	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	TCA111	TO15	AIR	BD					3/14/2016	1,1,1-Trichloroethane	12.1		0.15	ppb	71-55-6	1	0		165756	10	121.1	percent	N			0.5
8910	236	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	CTCL	TO15	AIR	BD					3/14/2016	Carbon tetrachloride	12.1		0.15	ppb	56-23-5	1	0		165756	10	120.5	percent	N			0.5
8911	237	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	BZ	TO15	AIR	BD					3/14/2016	Benzene	10.9		0.15	ppb	71-43-2	1	0		165756	10	108.62	percent	N			0.5
8912	238	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	CYHEXANE	TO15	AIR	BD					3/14/2016	Cyclohexane	11.4		0.15	ppb	110-82-7	1	0		165756	10	113.84	percent	N			0.5
8913	239	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	DCPA12	TO15	AIR	BD					3/14/2016	1,2-Dichloropropane	11.3		0.15	ppb	78-87-5	1	0		165756	10	113.1	percent	N			0.5
8841	185	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	TCA111	TO15	AIR	BS					3/14/2016	1,1,1-Trichloroethane	12		0.15	ppb	71-55-6	1	0		165756	10	119.51	percent	N			0.5
8842	194	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	DCP13T	TO15	AIR	BS					3/14/2016	trans-1,3-Dichloropropene	13		0.15	ppb	10061-02-6	1	0		165756	10	129.98	percent	N			0.5
8843	198	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	DBCME	TO15	AIR	BS					3/14/2016	Dibromochloromethane	12		0.15	ppb	124-48-1	1	0		165756	10	120.13	percent	N			0.5
8844	201	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	EBZ	TO15	AIR	BS					3/14/2016	Ethyl benzene	12		0.15	ppb	100-41-4	1	0		165756	10	120.37	percent	N			0.5
8845	219	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	FC11	TO15	AIR	BD					3/14/2016	Freon 11	11		0.15	ppb	75-69-4	1	0		165756	10	110.49	percent	N			0.5
8846	243	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	MIBK	TO15	AIR	BD					3/14/2016	Methyl isobutyl ketone	12		0.15	ppb	108-10-1	1	0		165756	10	119.87	percent	N			0.5
8847	252	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	XYLMP	TO15	AIR	BD					3/14/2016	m,p-Xylene	24		0.15	ppb	179601-23-1	1	0		165756	20	119.76	percent	N			0.5
8848	255	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	TBME	TO15	AIR	BD					3/14/2016	Bromoform	13		0.15	ppb	75-25-2	1	0		165756	10	130.15	percent	N			0.5
8849	122	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	ACE	TO15	AIR	LB					3/14/2016	Acetone	0.318	J	0.3	ppb	67-64-1	1	0		165756			percent	N			1
8850	147	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	HXO2	TO15	AIR	LB					3/14/2016	2-Hexanone	0.3	U	0.3	ppb	591-78-6	1	0		165756			percent	N			1
8851	162	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	DCBZ12	TO15	AIR	LB					3/14/2016	1,2-Dichlorobenzene	0.3	U	0.3	ppb	95-50-1	1	0		165756			percent	N			1
8852	163	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	FC12	TO15	AIR	BS					3/14/2016	Dichlorodifluoromethane	11.5		0.15	ppb	75-71-8	1	0		165756	10	114.89	percent	N			0.5
8853	165	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	DCTFA12	TO15	AIR	BS					3/14/2016	Freon 114	10.3		0.15	ppb	76-14-2	1	0		165756	10	102.84	percent	N			0.5
8854	167	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	BRME	TO15	AIR	BS					3/14/2016	Bromomethane	10.6		0.15	ppb	74-83-9	1	0		165756	10	105.69	percent	N			0.5
8855	168	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	CLEA	TO15	AIR	BS					3/14/2016	Ethyl chloride	9.8		0.15	ppb	75-00-3	1	0		165756	10	97.964	percent	N			0.5
8856	169	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	FC11	TO15	AIR	BS					3/14/2016	Freon 11	10.8		0.15	ppb	75-69-4	1	0		165756	10	108.02	percent	N			0.5
8857	170	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	FC113	TO15	AIR	BS					3/14/2016	Freon 113	11.1		0.15	ppb	76-13-1	1	0		165756	10	110.8	percent	N			0.5
8858	171	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	DCE11	TO15	AIR	BS					3/14/2016	1,1-Dichloroethene	11.2		0.15	ppb	75-35-4	1	0		165756	10	112.37	percent	N			0.5
8859	172	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	ACE	TO15	AIR	BS					3/14/2016	Acetone	10.9		0.3	ppb	67-64-1	1	0		165756	10	109.36	percent	N			1
8860	173	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	CDS	TO15	AIR	BS					3/14/2016	Carbon disulfide	10.6		0.15	ppb	75-15-0	1	0		165756	10	106.03	percent	N			0.5
8861	174	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	MTLNCL	TO15	AIR	BS					3/14/2016	Methylene chloride	10.5		0.15	ppb	75-09-2	1	0		165756	10	105.39	percent	N			0.5
8862	175	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	DCE12T	TO15	AIR	BS					3/14/2016	trans-1,2-Dichloroethene	10.7		0.15	ppb	156-60-5	1	0		165756	10	107.46	percent	N			0.5
8863	177	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	VA	TO15	AIR	BS					3/14/2016	Vinyl acetate	29.7		0.15	ppb	108-05-4	1	0		165756	10	296.8	percent	N			0.5
8864	181	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	C6N	TO15	AIR	BS					3/14/2016	n-Hexane	11.4		0.15	ppb	110-54-3	1	0		165756	10	113.68	percent	N			0.5
8865	182	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	TCLME	TO15	AIR	BS					3/14/2016	Chloroform	11.2		0.15	ppb	67-66-3	1	0		165756	10	111.56	percent	N			0.5
8866	183	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	THF	TO15	AIR	BS					3/14/2016	Tetrahydrofuran	11.6		0.15	ppb	109-99-9	1	0		165756	10	115.55	percent	N			0.5
8867	184	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	DCA12	TO15	AIR	BS					3/14/2016	1,2-Dichloroethane	12.1		0.15	ppb	107-06-2	1	0		165756	10	121.27	percent	N			0.5
8868	186	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	CTCL	TO15	AIR	BS					3/14/2016	Carbon tetrachloride	11.8		0.15	ppb	56-23-5	1	0		165756	10	118.43	percent	N			0.5
8869	187	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	BZ	TO15	AIR	BS					3/14/2016	Benzene	10.8		0.15	ppb	71-43-2	1	0		165756	10	107.74	percent	N			0.5
8870	188	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	CYHEXANE	TO15	AIR	BS					3/14/2016	Cyclohexane	11.2		0.15	ppb	110-82-7	1	0		165756	10	112.13	percent	N			0.5
8871	189	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	DCPA12	TO15	AIR	BS					3/14/2016	1,2-Dichloropropane	11.3		0.15	ppb	78-87-5	1	0		165756	10	112.9	percent	N			0.5
8872	190	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	BDCME	TO15	AIR	BS					3/14/2016	Bromodichloromethane	11.4		0.15	ppb	75-27-4	1	0		165756	10	114.14	percent	N			0.5
8873	191	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	C7N	TO15	AIR	BS					3/14/2016	Heptane	11.8		0.15	ppb	142-82-5	1	0		165756	10	117.84	percent	N			0.5
8874	192	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	DCP13C	TO15	AIR	BS					3/14/2016	cis-1,3-Dichloropropene	12.3		0.15	ppb	10061-01-5	1	0		165756	10	122.7	percent	N			0.5
8875	193	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	MIBK	TO15	AIR	BS					3/14/2016	Methyl isobutyl ketone	11.8		0.15	ppb	108-10-1	1	0		165756	10	118.19	percent	N			0.5
8876	195	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	TCA112	TO15	AIR	BS					3/14/2016	1,1,2-Trichloroethane	11.2		0.15	ppb	79-00-5	1	0		165756	10	112.11	percent	N			0.5
8877	196	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	BZME	TO15	AIR	BS					3/14/2016	Toluene	11.8		0.15	ppb	108-88-3	1	0		165756	10	117.67	percent	N			0.5
8878	197	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	HXO2	TO15	AIR	BS					3/14/2016	2-Hexanone	13.8		0.3	ppb	591-78-6	1	0		165756	10	137.9	percent	N			1
8879	199	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	EDB	TO15	AIR	BS					3/14/2016	1,2-Dibromoethane	11.7		0.15	ppb	106-93-4	1	0		165756	10	117.46	percent	N			0.5
8880	200	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	CLBZ	TO15	AIR	BS					3/14/2016	Chlorobenzene	11.6		0.15	ppb	108-90-7	1	0		165756	10	116.42	percent	N			0.5
8881	202	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	XYLMP	TO15	AIR	BS					3/14/2016	m,p-Xylene	23.7		0.15	ppb	179601-23-1	1	0		165756	20	118.75	percent	N			0.5
8882	203	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	XYLO	TO15	AIR	BS					3/14/2016	o-Xylene	11.8		0.15	ppb	95-47-6	1	0		165756	10	117.62	percent	N			0.5
8883	204	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	STY	TO15	AIR	BS					3/14/2016	Styrene	12.6		0.15	ppb	100-42-5	1	0		165756	10	126.22	percent	N			0.5
8884	205	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	TBME	TO15	AIR	BS					3/14/2016	Bromoform	12.7		0.15	ppb	75-25-2	1	0		165756	10	126.56	percent	N			0.5
8885	206	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	PCA	TO15	AIR	BS					3/14/2016	1,1,2,2-Tetrachloroethane	10.6		0.15	ppb	79-34-5	1	0		165756	10	106.25	percent	N			0.5
8886	207	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	EBZME4	TO15	AIR	BS					3/14/2016	4-Ethyl toluene	12.2		0.15	ppb	622-96-8	1	0		165756	10	122.47	percent	N			1
8887	208	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	TMB135	TO15	AIR	BS					3/14/2016	1,3,5-Trimethylbenzene	11.8		0.15	ppb	108-67-8	1	0		165756	10	118.39	percent	N			0.5
8888	209	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	TMB124	TO15	AIR	BS					3/14/2016	1,2,4-Trimethylbenzene	12.2		0.15	ppb	95-63-6	1	0		165756	10	122.05	percent	N			0.5
8889	210	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	DCBZ13	TO15	AIR	BS					3/14/2016	1,3-Dichlorobenzene	12.2		0.15	ppb	541-73-1	1	0		165756	10	122.12	percent	N			0.5
8890	211	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	DCBZ14	TO15	AIR	BS					3/14/2016	1,4-Dichlorobenzene	12.4		0.15	ppb	106-46-7	1	0		165756	10	123.53	percent	N			0.5
8891	212	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	DCBZ12	TO15	AIR	BS					3/14/2016	1,2-Dichlorobenzene	12.2		0.3	ppb	95-50-1	1	0		165756	10	121.64	percent	N			1
8892	213	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	FC12	TO15	AIR	BD					3/14/2016	Dichlorodifluoromethane	11.8		0.15	ppb	75-71-8	1	0		165756	10	117.96	percent	N			0.5
8893	215	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	DCTFA12	TO15	AIR	BD					3/14/2016	Freon 114	10.6		0.15	ppb	76-14-2	1	0		165756	10	105.62	percent	N			0.5
8894	217	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	BRME	TO15	AIR	BD					3/14/2016	Bromomethane	10.8		0.15	ppb	74-83-9	1	0		165756	10	107.65	percent	N			0.5
8914	240	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	BDCME	TO15	AIR	BD					3/14/2016	Bromodichloromethane	11.6		0.15	ppb	75-27-4	1	0		165756	10	115.83	percent	N			0.5
8915	241	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	C7N	TO15	AIR	BD					3/14/2016	Heptane	11.9		0.15	ppb	142-82-5	1	0		165756	10	119.37	percent	N			0.5
8916	242	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	DCP13C	TO15	AIR	BD					3/14/2016	cis-1,3-Dichloropropene	12.4		0.15	ppb	10061-01-5	1	0		165756	10	124.16	percent	N			0.5
8917	244	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	DCP13T	TO15	AIR	BD					3/14/2016	trans-1,3-Dichloropropene	13.1		0.15	ppb	10061-02-6	1	0		165756	10	131.18	percent	N			0.5
8918	245	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	TCA112	TO15	AIR	BD					3/14/2016	1,1,2-Trichloroethane	11.3		0.15	ppb	79-00-5	1	0		165756	10	113.28	percent	N			0.5
8919	246	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	BZME	TO15	AIR	BD					3/14/2016	Toluene	11.9		0.15	ppb	108-88-3	1	0		165756	10	119.15	percent	N			0.5
8920	247	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	HXO2	TO15	AIR	BD					3/14/2016	2-Hexanone	11.4		0.3	ppb	591-78-6	1	0		165756	10	113.66	percent	N			1

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
8832	93	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8833	94	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.9	U	X	U			0.9	3	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8834	95	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8835	96	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.9	U	X	U			0.9	3	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8836	97	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.3	U	X	U			0.3	1	A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8837	112	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	102.86		X	=	67.698	129.86			A-0040H-031216-IA-BAS	4.30EPACLP	1/0/1900					165756		TRUE
8838	176	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	12		X	=	60.827	138.03	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8839	178	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	11		X	=	51.691	144.24	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8840	179	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	11		X	=	67.712	123.62	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8895	220	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.3		X	=	68.501	120.04	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8896	221	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.5		X	=	67.174	125.1	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8897	222	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.3		X	=	42.491	145.96	0.3	1	492138	4.30EPACLP						165756		TRUE
8898	223	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.8		X	=	63.855	128.75	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8899	224	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.8		X	=	63.699	127.89	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8900	225	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.1		X	=	68.113	124.64	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8901	226	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.3		X	=	60.827	138.03	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8902	227	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	30.8		X	=	59.331	141.08	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8903	228	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.4		X	=	51.691	144.24	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8904	229	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.3		X	=	67.712	123.62	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8905	231	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.4		X	=	62.414	129.54	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8906	232	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.3		X	=	67.344	121.81	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8907	233	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.6		X	=	50.619	155.33	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8908	234	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.3		X	=	62.441	130.48	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8909	235	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.1		X	=	60.42	127.68	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8910	236	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.1		X	=	58.158	130.61	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8911	237	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.9		X	=	64.138	127.27	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8912	238	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.4		X	=	61.913	123.55	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8913	239	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.3		X	=	60.69	130.65	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8841	185	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	12		X	=	60.42	127.68	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8842	194	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	13		X	=	78.538	148.69	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8843	198	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	12		X	=	62.442	130.92	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8844	201	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	12		X	=	75.851	148.51	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8845	219	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	11		X	=	58.928	132.84	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8846	243	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	12		X	=	73.471	149.97	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8847	252	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	24		X	=	73.675	144.89	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8848	255	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	13		X	=	59.748	136.05	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8849	122	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	0.318	J	X	U			0.3	1	492136	4.30EPACLP						165756		TRUE
8850	147	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	0.3	U	X	U			0.3	1	492136	4.30EPACLP						165756		TRUE
8851	162	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	0.3	U	X	U			0.3	1	492136	4.30EPACLP						165756		TRUE
8852	163	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.5		X	=	59.255	135.13	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8853	165	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.3		X	=	64.568	128.04	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8854	167	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.6		X	=	63.318	129.94	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8855	168	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	9.8		X	=	57.618	137.13	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8856	169	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.8		X	=	58.928	132.84	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8857	170	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.1		X	=	68.501	120.04	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8858	171	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.2		X	=	67.174	125.1	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8859	172	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.9		X	=	42.491	145.96	0.3	1	492137	4.30EPACLP						165756		TRUE
8860	173	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.6		X	=	63.855	128.75	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8861	174	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.5		X	=	63.699	127.89	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8862	175	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.7		X	=	68.113	124.64	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8863	177	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	29.7		X	=	59.331	141.08	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8864	181	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.4		X	=	62.414	129.54	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8865	182	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.2		X	=	67.344	121.81	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8866	183	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.6		X	=	50.619	155.33	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8867	184	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.1		X	=	62.441	130.48	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8868	186	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.8		X	=	58.158	130.61	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8869	187	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.8		X	=	64.138	127.27	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8870	188	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.2		X	=	61.913	123.55	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8871	189	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.3		X	=	60.69	130.65	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8872	190	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.4		X	=	62.886	128.34	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8873	191	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.8		X	=	59.499	133.39	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8874	192	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.3		X	=	64.079	133.63	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8875	193	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.8		X	=	73.471	149.97	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8876	195	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.2		X	=	64.985	126.62	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8877	196	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.8		X	=	75.551	139.43	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8878	197	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	13.8		X	=	80.836	158.78	0.3	1	492137	4.30EPACLP						165756		TRUE
8879	199	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.7		X	=	64.38	129.01	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8880	200	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.6		X	=	62.845	126.85	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8881	202	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	23.7		X	=	73.675	144.89	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8882	203	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.8		X	=	74.707	147.4	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8883	204	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.6		X	=	75.945	158.11	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8884	205	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.7		X	=	59.748	136.05	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8885	206	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.6		X	=	59.318	134.78	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8886	207	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.2		X	=	69.037	163.28	0.15	1	492137	4.30EPACLP						165756		TRUE
8887	208	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.8		X	=	64.237	155.06	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8888	209	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.2		X	=	59.734	169.39	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8889	210	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.2		X	=	58.55	157.62	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8890	211	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.4		X	=	57.682	137.17	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8891	212	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.2		X	=	56.513	140.03	0.3	1	492137	4.30EPACLP						165756		TRUE
8892	213	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.8		X	=	59.255	135.13	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8893	215	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.6		X	=	64.568	128.04	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8894	217	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.8		X	=	63.318	129.94	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8914	240	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.6		X	=	62.886	128.34	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8915	241	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.9		X	=	59.499	133.39	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8916	242	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.4		X	=	64.079	133.63	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8917	244	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	13.1		X	=	78.538	148.69	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8918	245	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.3		X	=	64.985	126.62	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8919	246	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.9		X	=	75.551	139.43	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8920	247	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.4		X	=	80.836	158.78	0.3	1	492138	4.30EPACLP						165756		TRUE

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
8832	93	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8833	94	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			3	3			jbeckett - Tier 2B
8834	95	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8835	96	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			3	3			jbeckett - Tier 2B
8836	97	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
8837	112	1205509873	19	ALSS	1607440	1607440	A-0040H-031216-IA-BAS	A-0040H-031216-IA-BAS	1607440001	4/7/2016	mfesler	20	ppb					jbeckett - Tier 2B
8838	176	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8839	178	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8840	179	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8895	220	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8896	221	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8897	222	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		1	1			jbeckett - Tier 2B
8898	223	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8899	224	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8900	225	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8901	226	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8902	227	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8903	228	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8904	229	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8905	231	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8906	232	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8907	233	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8908	234	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8909	235	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8910	236	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8911	237	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8912	238	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8913	239	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8841	185	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8842	194	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8843	198	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8844	201	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8845	219	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8846	243	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8847	252	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	20		0.5	0.5			jbeckett - Tier 2B
8848	255	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8849	122	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
8850	147	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
8851	162	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
8852	163	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8853	165	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8854	167	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8855	168	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8856	169	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8857	170	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8858	171	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8859	172	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		1	1			jbeckett - Tier 2B
8860	173	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8861	174	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8862	175	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8863	177	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8864	181	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8865	182	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8866	183	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8867	184	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8868	186	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8869	187	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8870	188	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8871	189	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8872	190	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8873	191	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8874	192	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8875	193	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8876	195	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8877	196	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8878	197	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		1	1			jbeckett - Tier 2B
8879	199	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8880	200	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8881	202	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	20		0.5	0.5			jbeckett - Tier 2B
8882	203	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8883	204	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8884	205	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8885	206	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8886	207	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		1	1			jbeckett - Tier 2B
8887	208	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8888	209	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8889	210	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8890	211	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8891	212	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		1	1			jbeckett - Tier 2B
8892	213	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8893	215	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8894	217	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8914	240	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8915	241	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8916	242	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8917	244	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8918	245	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8919	246	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8920	247	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		1	1			jbeckett - Tier 2B

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
8921	248	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	DBCME	TO15	AIR	BD					3/14/2016	Dibromochloromethane	12.3		0.15	ppb	124-48-1	1	0		165756	10	122.52	percent	N			0.5
8922	249	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	EDB	TO15	AIR	BD					3/14/2016	1,2-Dibromoethane	11.9		0.15	ppb	106-93-4	1	0		165756	10	119.08	percent	N			0.5
8923	250	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	CLBZ	TO15	AIR	BD					3/14/2016	Chlorobenzene	11.8		0.15	ppb	108-90-7	1	0		165756	10	117.67	percent	N			0.5
8924	251	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	EBZ	TO15	AIR	BD					3/14/2016	Ethyl benzene	12.2		0.15	ppb	100-41-4	1	0		165756	10	122.09	percent	N			0.5
8925	253	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	XYLO	TO15	AIR	BD					3/14/2016	o-Xylene	11.9		0.15	ppb	95-47-6	1	0		165756	10	119.12	percent	N			0.5
8926	254	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	STY	TO15	AIR	BD					3/14/2016	Styrene	12.8		0.15	ppb	100-42-5	1	0		165756	10	128.1	percent	N			0.5
8927	256	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	PCA	TO15	AIR	BD					3/14/2016	1,1,2,2-Tetrachloroethane	10.9		0.15	ppb	79-34-5	1	0		165756	10	108.73	percent	N			0.5
8928	257	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	EBZME4	TO15	AIR	BD					3/14/2016	4-Ethyl toluene	12.5		0.15	ppb	622-96-8	1	0		165756	10	124.74	percent	N			1
8929	258	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	TMB135	TO15	AIR	BD					3/14/2016	1,3,5-Trimethylbenzene	12.1		0.15	ppb	108-67-8	1	0		165756	10	121.05	percent	N			0.5
8930	259	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	TMB124	TO15	AIR	BD					3/14/2016	1,2,4-Trimethylbenzene	12.3		0.15	ppb	95-63-6	1	0		165756	10	123.4	percent	N			0.5
8931	260	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	DCBZ13	TO15	AIR	BD					3/14/2016	1,3-Dichlorobenzene	12.4		0.15	ppb	541-73-1	1	0		165756	10	123.81	percent	N			0.5
8932	261	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	DCBZ14	TO15	AIR	BD					3/14/2016	1,4-Dichlorobenzene	12.5		0.15	ppb	106-46-7	1	0		165756	10	125.27	percent	N			0.5
8933	262	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	DCBZ12	TO15	AIR	BD					3/14/2016	1,2-Dichlorobenzene	12.4		0.3	ppb	95-50-1	1	0		165756	10	123.83	percent	N			1
8934	113	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	FC12	TO15	AIR	LB					3/14/2016	Dichlorodifluoromethane	0.15	U	0.15	ppb	75-71-8	1	0		165756			percent	N			0.5
8935	114	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	CLME	TO15	AIR	LB					3/14/2016	Methyl chloride	0.15	U	0.15	ppb	74-87-3	1	0		165756			percent	N			0.5
8936	115	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	DCTFA12	TO15	AIR	LB					3/14/2016	Freon 114	0.15	U	0.15	ppb	76-14-2	1	0		165756			percent	N			0.5
8937	116	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	ERYTHRENE	TO15	AIR	LB					3/14/2016	1,3-Butadiene	0.15	U	0.15	ppb	106-99-0	1	0		165756			percent	N			0.5
8938	117	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	BRME	TO15	AIR	LB					3/14/2016	Bromomethane	0.15	U	0.15	ppb	74-83-9	1	0		165756			percent	N			0.5
8939	118	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	CLEA	TO15	AIR	LB					3/14/2016	Ethyl chloride	0.15	U	0.15	ppb	75-00-3	1	0		165756			percent	N			0.5
8940	119	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	FC11	TO15	AIR	LB					3/14/2016	Freon 11	0.15	U	0.15	ppb	75-69-4	1	0		165756			percent	N			0.5
8941	120	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	FC113	TO15	AIR	LB					3/14/2016	Freon 113	0.15	U	0.15	ppb	76-13-1	1	0		165756			percent	N			0.5
8942	121	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	DCE11	TO15	AIR	LB					3/14/2016	1,1-Dichloroethene	0.15	U	0.15	ppb	75-35-4	1	0		165756			percent	N			0.5
8943	123	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	CDS	TO15	AIR	LB					3/14/2016	Carbon disulfide	0.15	U	0.15	ppb	75-15-0	1	0		165756			percent	N			0.5
8944	124	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	MTLNCL	TO15	AIR	LB					3/14/2016	Methylene chloride	0.15	U	0.15	ppb	75-09-2	1	0		165756			percent	N			0.5
8945	125	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	DCE12T	TO15	AIR	LB					3/14/2016	trans-1,2-Dichloroethene	0.15	U	0.15	ppb	156-60-5	1	0		165756			percent	N			0.5
8946	126	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	TBUTMEE	TO15	AIR	LB					3/14/2016	Methyl t-butyl ether	0.15	U	0.15	ppb	1634-04-4	1	0		165756			percent	N			0.5
8947	127	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	VA	TO15	AIR	LB					3/14/2016	Vinyl acetate	0.15	U	0.15	ppb	108-05-4	1	0		165756			percent	N			0.5
8948	128	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	MEK	TO15	AIR	LB					3/14/2016	Methyl ethyl ketone	0.15	U	0.15	ppb	78-93-3	1	0		165756			percent	N			0.5
8949	129	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	DCA11	TO15	AIR	LB					3/14/2016	1,1-Dichloroethane	0.15	U	0.15	ppb	75-34-3	1	0		165756			percent	N			0.5
8950	130	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	ETACET	TO15	AIR	LB					3/14/2016	Ethyl acetate	0.15	U	0.15	ppb	141-78-6	1	0		165756			percent	N			1
8951	131	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	C6N	TO15	AIR	LB					3/14/2016	n-Hexane	0.15	U	0.15	ppb	110-54-3	1	0		165756			percent	N			0.5
8952	132	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	TCLME	TO15	AIR	LB					3/14/2016	Chloroform	0.15	U	0.15	ppb	67-66-3	1	0		165756			percent	N			0.5
8953	133	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	THF	TO15	AIR	LB					3/14/2016	Tetrahydrofuran	0.15	U	0.15	ppb	109-99-9	1	0		165756			percent	N			0.5
8954	134	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	DCA12	TO15	AIR	LB					3/14/2016	1,2-Dichloroethane	0.15	U	0.15	ppb	107-06-2	1	0		165756			percent	N			0.5
8955	135	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	TCA111	TO15	AIR	LB					3/14/2016	1,1,1-Trichloroethane	0.15	U	0.15	ppb	71-55-6	1	0		165756			percent	N			0.5
8956	136	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	CTCL	TO15	AIR	LB					3/14/2016	Carbon tetrachloride	0.15	U	0.15	ppb	56-23-5	1	0		165756			percent	N			0.5
8957	137	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	BZ	TO15	AIR	LB					3/14/2016	Benzene	0.15	U	0.15	ppb	71-43-2	1	0		165756			percent	N			0.5
8958	138	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	CYHEXANE	TO15	AIR	LB					3/14/2016	Cyclohexane	0.15	U	0.15	ppb	110-82-7	1	0		165756			percent	N			0.5
8959	139	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	DCPA12	TO15	AIR	LB					3/14/2016	1,2-Dichloropropane	0.15	U	0.15	ppb	78-87-5	1	0		165756			percent	N			0.5
8960	140	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	BDCME	TO15	AIR	LB					3/14/2016	Bromodichloromethane	0.15	U	0.15	ppb	75-27-4	1	0		165756			percent	N			0.5
8961	141	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	C7N	TO15	AIR	LB					3/14/2016	Heptane	0.15	U	0.15	ppb	142-82-5	1	0		165756			percent	N			0.5
8962	142	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	DCP13C	TO15	AIR	LB					3/14/2016	cis-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-01-5	1	0		165756			percent	N			0.5
8963	143	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	MIBK	TO15	AIR	LB					3/14/2016	Methyl isobutyl ketone	0.15	U	0.15	ppb	108-10-1	1	0		165756			percent	N			0.5
8964	144	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	DCP13T	TO15	AIR	LB					3/14/2016	trans-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-02-6	1	0		165756			percent	N			0.5
8965	145	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	TCA112	TO15	AIR	LB					3/14/2016	1,1,2-Trichloroethane	0.15	U	0.15	ppb	79-00-5	1	0		165756			percent	N			0.5
8966	146	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	BZME	TO15	AIR	LB					3/14/2016	Toluene	0.15	U	0.15	ppb	108-88-3	1	0		165756			percent	N			0.5
8967	148	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	DBCME	TO15	AIR	LB					3/14/2016	Dibromochloromethane	0.15	U	0.15	ppb	124-48-1	1	0		165756			percent	N			0.5
8968	149	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	EDB	TO15	AIR	LB					3/14/2016	1,2-Dibromoethane	0.15	U	0.15	ppb	106-93-4	1	0		165756			percent	N			0.5
8969	150	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	CLBZ	TO15	AIR	LB					3/14/2016	Chlorobenzene	0.15	U	0.15	ppb	108-90-7	1	0		165756			percent	N			0.5
8970	151	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	EBZ	TO15	AIR	LB					3/14/2016	Ethyl benzene	0.15	U	0.15	ppb	100-41-4	1	0		165756			percent	N			0.5
8971	152	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	XYLMP	TO15	AIR	LB					3/14/2016	m,p-Xylene	0.15	U	0.15	ppb	179601-23-1	1	0		165756			percent	N			0.5
8972	153	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	XYLO	TO15	AIR	LB					3/14/2016	o-Xylene	0.15	U	0.15	ppb	95-47-6	1	0		165756			percent	N			0.5
8973	154	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	STY	TO15	AIR	LB					3/14/2016	Styrene	0.15	U	0.15	ppb	100-42-5	1	0		165756			percent	N			0.5
8974	155	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	TBME	TO15	AIR	LB					3/14/2016	Bromoform	0.15	U	0.15	ppb	75-25-2	1	0		165756			percent	N			0.5
8975	156	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	PCA	TO15	AIR	LB					3/14/2016	1,1,2,2-Tetrachloroethane	0.15	U	0.15	ppb	79-34-5	1	0		165756			percent	N			0.5
8976	157	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	EBZME4	TO15	AIR	LB					3/14/2016	4-Ethyl toluene	0.15	U	0.15	ppb	622-96-8	1	0		165756			percent	N			1
8977	158	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	TMB135	TO15	AIR	LB					3/14/2016	1,3,5-Trimethylbenzene	0.15	U	0.15	ppb	108-67-8	1	0		165756			percent	N			0.5
8978	159	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	TMB124	TO15	AIR	LB					3/14/2016	1,2,4-Trimethylbenzene	0.15	U	0.15	ppb	95-63-6	1	0		165756			percent	N			0.5
8979	160	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	DCBZ13	TO15	AIR	LB					3/14/2016	1,3-Dichlorobenzene	0.15	U	0.15	ppb	541-73-1	1	0		165756			percent	N			0.5
8980	161	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	DCBZ14	TO15	AIR	LB					3/14/2016	1,4-Dichlorobenzene	0.15	U	0.15	ppb	106-46-7	1	0		165756			percent	N			0.5
8981	164	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	CLME	TO15	AIR	BS					3/14/2016	Methyl chloride	9.28		0.15	ppb	74-87-3	1	0		165756	10	92.794	percent	N			0.5
8982	166	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	ERYTHRENE	TO15	AIR	BS					3/14/2016	1,3-Butadiene	9.65		0.15	ppb	106-99-0	1	0		165756	10	96.505	percent	N			0.5
8983	180	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	ETACET	TO15	AIR	BS					3/14/2016	Ethyl acetate	8.19		0.15	ppb	141-78-6	1	0		165756	10	81.877	percent	N			1
8984	214	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	CLME	TO15	AIR	BD					3/14/2016	Methyl chloride	9.49		0.15	ppb	74-87-3	1	0		165756	10	94.871	percent	N			0.5
8985	216	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	ERYTHRENE	TO15	AIR	BD					3/14/2016	1,3-Butadiene	9.77		0.15	ppb	106-99-0	1	0		165756	10	97.74	percent	N			0.5
8986	218	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	CLEA	TO15	AIR	BD					3/14/2016	Ethyl chloride	9.94		0.15	ppb	75-00-3	1	0		165756	10	99.443	percent	N			0.5
8987	230	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	ETACET	TO15	AIR	BD					3/14/2016	Ethyl acetate	8.33		0.15	ppb	141-78-6	1	0		165756	10	83.277	percent	N			1
8988	278	0	19	ALSS	1607440	1607440	492136	492136	492136	EPA TO-15	BR4FBZ	TO15	AIR	LB					3/14/2016	4-Bromofluorobenzene	101.03			PERCENT	460-00-4	1	0		165756	20	101.03	percent	Y			
8989	279	0	19	ALSS	1607440	1607440	492137	492137	492137	EPA TO-15	BR4FBZ	TO15	AIR	BS					3/14/2016	4-Bromofluorobenzene	100.19			PERCENT	460-00-4	1	0		165756	20	100.19	percent	Y			
8990	280	0	19	ALSS	1607440	1607440	492138	492138	492138	EPA TO-15	BR4FBZ	TO15	AIR	BD					3/14/2016	4-Bromofluorobenzene	101.45			PERCENT	460-00-4	1	0		165756	20	101.45	percent	Y			
8991	263	0	19	ALSS	1607440	1607440	492458	492458	492458	EPA TO-15 SIM	VC	TO15SIM	AIR	LB					3/15/2016	Vinyl chloride	0.05	U		ppb	75-01-4	1	0		165896			percent	N			0.05
8992	264	0	19	ALSS	1607440	1607440	492458	492458	492458	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	LB					3/15/2016	cis-1,2-Dichloroethene	0.05	U		ppb	156-59-2	1	0		165896			percent	N			0.05
8993	265	0	19	ALSS	1607440	1607440	492458	492458	492458	EPA TO-15 SIM	TCE	TO15SIM	AIR	LB					3/15/2016	Trichloroethene	0.05	U		ppb	79-01-6	1	0		165896			percent	N			0.05
8994	266	0	19	ALSS	1607440	1607440	492458	492458	492458	EPA TO-15 SIM	PCE	TO15SIM	AIR	LB					3/15/2016	Tetrachloroethene	0.05	U		ppb	127-18-4	1	0		165896			percent	N			0.05
8995	267	0	19	ALSS	1607440	1607440	492458	492458	492458	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	LB					3/15/2016	1,4-Dioxane	0.05	U		ppb	123-91-1	1	0		165896			percent	N			0.05
8996	282	0	19	ALSS	1607440	1607440	492459	492459	492459	EPA TO-15 SIM	BR4FBZ	TO15SIM	AIR	BS					3/15/2016	4-Bromofluorobenzene	109.98			PERCENT	460-00-4	1	0		165896	1	109.98	percent	Y			
8997	283	0	19	ALSS	1607440	1607440	492460	492460	492460	EPA TO-15 SIM	BR4FBZ	TO15SIM	AIR	BD					3/15/2016	4-Bromofluorobenzene	106.88			PERCENT	460-00-4	1	0		165896	1	106.88	percent	Y			
8998	268	0	19	ALSS	1607440	1607440	492459	492459	492459	EPA TO-15 SIM	VC	TO15SIM	AIR	BS					3/15/2016	Vinyl chloride	0.502			ppb	75-01-4	1	0		165896	0.5	100.42	percent	N			0.05
8999	269	0	19	ALSS	1607440	1607440	492459	492459	492459	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	BS					3/15/2016	cis-1,2-Dichloroethene	0.534			ppb	156-59-2	1	0		165896	0.5	106.85	percent	N			0.05
9000	270	0	19	ALSS	1607440	1607440	492459	492459	492459	EPA TO-15 SIM	TCE	TO15SIM	AIR	BS					3/15/2016	Trichloroethene	0.542			ppb	79-01-6	1	0		165896	0.5	108.46	percent	N			0.05
9001	271	0	19	ALSS	1607440	1607440	492459	492459	492459	EPA TO-15 SIM	PCE	TO15SIM	AIR	BS					3/15/2016	Tetrachloroethene	0.534			ppb	127-18-4	1	0		165896	0.5	106.82	percent	N			0.05
9002	272	0	19	ALSS	1607440	1607440	492459	492459	492459	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	BS					3/15/2016	1,4-Dioxane	0.528			ppb	123-91-1	1	0		165896	0.5	105.54	percent	N			0.05
9003	273	0	19	ALSS	1607440	1607440	492460	492460	492460	EPA TO-15 SIM	VC	TO15SIM	AIR	BD					3/15/2016	Vinyl chloride	0.511			ppb	75-01-4	1	0		165896	0.5	102.27	percent	N			0.05
9004	274	0	19	ALSS	1607440	1607440	492460	492460	492460	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	BD					3/15/2016	cis-1,2-Dichloroethene	0.532			ppb	156-59-2	1	0		165896	0.5	106.31	percent	N			0.05
9005	275	0	19	ALSS	1607440	1607440	492460	492460	492460	EPA TO-15 SIM	TCE	TO15SIM	AIR	BD					3/15/2016	Trichloroethene	0.517			ppb	79-01-6	1	0		165896	0.5	103.33	percent	N			0.05
9006	276	0	19	ALSS	1607440	1607440	492460	492460	492460	EPA TO-15 SIM	PCE	TO15SIM	AIR	BD					3/15/2016	Tetrachloroethene	0.509			ppb	127-18-4	1	0		165896	0.5	101.87	percent	N			0.05
9007	277	0	19	ALSS	1607440	1607440	492460	492460	492460	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	BD					3/15/2016	1,4-Dioxane	0.484			ppb	123-91-1	1	0		165896	0.5	96.885	percent	N			0.05
9008	281	0	19	ALSS	1607440	1607440	492458	492458	492458	EPA TO-15 SIM	BR4FBZ	TO15SIM	AIR	LB					3/15/2016	4-Bromofluorobenzene	98.222			PERCENT	460-00-4	1	0		165896	1	98.222	percent	Y			
9009	141	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	ACE	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Acetone	17		0.3	ppb	67-64-1	1	0		166496			percent	N			1

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
8921	248	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.3		X	=	62.442	130.92	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8922	249	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.9		X	=	64.38	129.01	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8923	250	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.8		X	=	62.845	126.85	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8924	251	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.2		X	=	75.851	148.51	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8925	253	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.9		X	=	74.707	147.4	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8926	254	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.8		X	=	75.945	158.11	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8927	256	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.9		X	=	59.318	134.78	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8928	257	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.5		X	=	69.037	163.28	0.15	1	492138	4.30EPACLP						165756		TRUE
8929	258	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.1		X	=	64.237	155.06	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8930	259	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.3		X	=	59.734	169.39	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8931	260	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.4		X	=	58.55	157.62	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8932	261	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.5		X	=	57.682	137.17	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8933	262	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.4		X	=	56.513	140.03	0.3	1	492138	4.30EPACLP						165756		TRUE
8934	113	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8935	114	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8936	115	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8937	116	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8938	117	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8939	118	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8940	119	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8941	120	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8942	121	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8943	123	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8944	124	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8945	125	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8946	126	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8947	127	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8948	128	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8949	129	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8950	130	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	1	492136	4.30EPACLP						165756		TRUE
8951	131	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8952	132	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8953	133	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8954	134	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8955	135	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8956	136	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8957	137	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8958	138	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8959	139	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8960	140	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8961	141	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8962	142	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8963	143	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8964	144	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8965	145	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8966	146	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8967	148	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8968	149	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8969	150	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8970	151	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8971	152	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8972	153	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8973	154	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8974	155	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8975	156	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8976	157	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	1	492136	4.30EPACLP						165756		TRUE
8977	158	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8978	159	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8979	160	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8980	161	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	492136	4.30EPACLP						165756		TRUE
8981	164	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	9.28		X	=	55.169	137.44	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8982	166	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	9.65		X	=	57.992	138.25	0.15	0.5	492137	4.30EPACLP						165756		TRUE
8983	180	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	8.19		X	=	53.357	156.94	0.15	1	492137	4.30EPACLP						165756		TRUE
8984	214	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	9.49		X	=	55.169	137.44	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8985	216	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	9.77		X	=	57.992	138.25	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8986	218	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	9.94		X	=	57.618	137.13	0.15	0.5	492138	4.30EPACLP						165756		TRUE
8987	230	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	8.33		X	=	53.357	156.94	0.15	1	492138	4.30EPACLP						165756		TRUE
8988	278	0	19	ALSS	1607440	1607440	492136	492136	492136		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	101.03		X	=	67.698	129.86			492136	4.30EPACLP						165756		TRUE
8989	279	0	19	ALSS	1607440	1607440	492137	492137	492137		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	100.19		X	=	67.698	129.86			492137	4.30EPACLP						165756		TRUE
8990	280	0	19	ALSS	1607440	1607440	492138	492138	492138		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	101.45		X	=	67.698	129.86			492138	4.30EPACLP						165756		TRUE
8991	263	0	19	ALSS	1607440	1607440	492458	492458	492458		1/0/1900	NONE			2		TRUE	3/31/2016	jbeckett	0.05	U	X	U				0.05	492458	4.30EPACLP						165896		TRUE
8992	264	0	19	ALSS	1607440	1607440	492458	492458	492458		1/0/1900	NONE			2		TRUE	3/31/2016	jbeckett	0.05	U	X	U				0.05	492458	4.30EPACLP						165896		TRUE
8993	265	0	19	ALSS	1607440	1607440	492458	492458	492458		1/0/1900	NONE			2		TRUE	3/31/2016	jbeckett	0.05	U	X	U				0.05	492458	4.30EPACLP						165896		TRUE
8994	266	0	19	ALSS	1607440	1607440	492458	492458	492458		1/0/1900	NONE			2		TRUE	3/31/2016	jbeckett	0.05	U	X	U				0.05	492458	4.30EPACLP						165896		TRUE
8995	267	0	19	ALSS	1607440	1607440	492458	492458	492458		1/0/1900	NONE			2		TRUE	3/31/2016	jbeckett	0.05	U	X	U				0.05	492458	4.30EPACLP						165896		TRUE
8996	282	0	19	ALSS	1607440	1607440	492459	492459	492459		1/0/1900	NONE			2		TRUE	3/31/2016	jbeckett	109.98		X	=	48.778	151.81			492459	4.30EPACLP						165896		TRUE
8997	283	0	19	ALSS	1607440	1607440	492460	492460	492460		1/0/1900	NONE			2		TRUE	3/31/2016	jbeckett	106.88		X	=	48.778	151.81			492460	4.30EPACLP						165896		TRUE
8998	268	0	19	ALSS	1607440	1607440	492459	492459	492459		1/0/1900	NONE			3		TRUE	3/31/2016	jbeckett	0.502		X	=	17.533	153.67		0.05	492459	4.30EPACLP						165896		TRUE
8999	269	0	19	ALSS	1607440	1607440	492459	492459	492459		1/0/1900	NONE			3		TRUE	3/31/2016	jbeckett	0.534		X	=	65.189	131.19		0.05	492459	4.30EPACLP						165896		TRUE
9000	270	0	19	ALSS	1607440	1607440	492459	492459	492459		1/0/1900	NONE			3		TRUE	3/31/2016	jbeckett	0.542		X	=	68.353	123.42		0.05	492459	4.30EPACLP						165896		TRUE
9001	271	0	19	ALSS	1607440	1607440	492459	492459	492459		1/0/1900	NONE			3		TRUE	3/31/2016	jbeckett	0.534		X	=	63.624	127.93		0.05	492459	4.30EPACLP						165896		TRUE
9002	272	0	19	ALSS	1607440	1607440	492459	492459	492459		1/0/1900	NONE			3		TRUE	3/31/2016	jbeckett	0.528		X	=	70	130		0.05	492459	4.30EPACLP						165896		TRUE
9003	273	0	19	ALSS	1607440	1607440	492460	492460	492460		1/0/1900	NONE			3		TRUE	3/31/2016	jbeckett	0.511		X	=	17.533	153.67		0.05	492460	4.30EPACLP						165896		TRUE
9004	274	0	19	ALSS	1607440	1607440	492460	492460	492460		1/0/1900	NONE			3		TRUE	3/31/2016	jbeckett	0.532		X	=	65.189	131.19		0.05	492460	4.30EPACLP						165896		TRUE
9005	275	0	19	ALSS	1607440	1607440	492460	492460	492460		1/0/1900	NONE			3		TRUE	3/31/2016	jbeckett	0.517		X	=	68.353	123.42		0.05	492460	4.30EPACLP						165896		TRUE
9006	276	0	19	ALSS	1607440	1607440	492460	492460	492460		1/0/1900	NONE			3		TRUE	3/31/2016	jbeckett	0.509		X	=	63.624	127.93		0.05	492460	4.30EPACLP						165896		TRUE
9007	277	0	19	ALSS	1607440	1607440	492460	492460	492460		1/0/1900	NONE			3		TRUE	3/31/2016	jbeckett	0.484		X	=	70	130		0.05	492460	4.30EPACLP						165896		TRUE
9008	281	0	19	ALSS	1607440	1607440	492458	492458	492458		1/0/1900	NONE			3		TRUE	3/31/2016	jbeckett	98.222		X	=	48.778	151.81			492458	4.30EPACLP						165896		TRUE
9009	141	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	17		X	=			0.3	1	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
8921	248	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8922	249	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8923	250	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8924	251	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8925	253	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8926	254	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8927	256	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8928	257	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		1	1			jbeckett - Tier 2B
8929	258	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8930	259	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8931	260	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8932	261	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8933	262	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		1	1			jbeckett - Tier 2B
8934	113	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8935	114	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8936	115	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8937	116	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8938	117	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8939	118	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8940	119	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8941	120	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8942	121	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8943	123	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8944	124	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8945	125	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8946	126	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8947	127	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8948	128	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8949	129	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8950	130	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
8951	131	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8952	132	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8953	133	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8954	134	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8955	135	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8956	136	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8957	137	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8958	138	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8959	139	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8960	140	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8961	141	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8962	142	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8963	143	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8964	144	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8965	145	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8966	146	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8967	148	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8968	149	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8969	150	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8970	151	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8971	152	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8972	153	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8973	154	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8974	155	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8975	156	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8976	157	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
8977	158	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8978	159	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8979	160	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8980	161	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
8981	164	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8982	166	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8983	180	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	10		1	1			jbeckett - Tier 2B
8984	214	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8985	216	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8986	218	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
8987	230	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	10		1	1			jbeckett - Tier 2B
8988	278	0	19	ALSS	1607440	1607440	492136	492136	492136	4/7/2016	mfesler	20	ppb					jbeckett - Tier 2B
8989	279	0	19	ALSS	1607440	1607440	492137	492137	492137	4/7/2016	mfesler	20	ppb					jbeckett - Tier 2B
8990	280	0	19	ALSS	1607440	1607440	492138	492138	492138	4/7/2016	mfesler	20	ppb					jbeckett - Tier 2B
8991	263	0	19	ALSS	1607440	1607440	492458	492458	492458	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
8992	264	0	19	ALSS	1607440	1607440	492458	492458	492458	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
8993	265	0	19	ALSS	1607440	1607440	492458	492458	492458	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
8994	266	0	19	ALSS	1607440	1607440	492458	492458	492458	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
8995	267	0	19	ALSS	1607440	1607440	492458	492458	492458	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
8996	282	0	19	ALSS	1607440	1607440	492459	492459	492459	4/7/2016	mfesler	1	ppb					jbeckett - Tier 2B
8997	283	0	19	ALSS	1607440	1607440	492460	492460	492460	4/7/2016	mfesler	1	ppb					jbeckett - Tier 2B
8998	268	0	19	ALSS	1607440	1607440	492459	492459	492459	4/7/2016	mfesler	0.5		0.05	0.05			jbeckett - Tier 2B
8999	269	0	19	ALSS	1607440	1607440	492459	492459	492459	4/7/2016	mfesler	0.5		0.05	0.05			jbeckett - Tier 2B
9000	270	0	19	ALSS	1607440	1607440	492459	492459	492459	4/7/2016	mfesler	0.5		0.05	0.05			jbeckett - Tier 2B
9001	271	0	19	ALSS	1607440	1607440	492459	492459	492459	4/7/2016	mfesler	0.5		0.05	0.05			jbeckett - Tier 2B
9002	272	0	19	ALSS	1607440	1607440	492459	492459	492459	4/7/2016	mfesler	0.5		0.05	0.05			jbeckett - Tier 2B
9003	273	0	19	ALSS	1607440	1607440	492460	492460	492460	4/7/2016	mfesler	0.5		0.05	0.05			jbeckett - Tier 2B
9004	274	0	19	ALSS	1607440	1607440	492460	492460	492460	4/7/2016	mfesler	0.5		0.05	0.05			jbeckett - Tier 2B
9005	275	0	19	ALSS	1607440	1607440	492460	492460	492460	4/7/2016	mfesler	0.5		0.05	0.05			jbeckett - Tier 2B
9006	276	0	19	ALSS	1607440	1607440	492460	492460	492460	4/7/2016	mfesler	0.5		0.05	0.05			jbeckett - Tier 2B
9007	277	0	19	ALSS	1607440	1607440	492460	492460	492460	4/7/2016	mfesler	0.5		0.05	0.05			jbeckett - Tier 2B
9008	281	0	19	ALSS	1607440	1607440	492458	492458	492458	4/7/2016	mfesler	1	ppb					jbeckett - Tier 2B
9009	141	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			1	1			jbeckett - Tier 2B

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
9010	142	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	ACE	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Acetone	41		0.71	µg/m3	67-64-1	1	0		166496			percent	N			2.4
9011	162	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	THF	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Tetrahydrofuran	15		0.44	µg/m3	109-99-9	1	0		166496			percent	N			1.5
9012	188	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	BZME	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Toluene	16		0.57	µg/m3	108-88-3	1	0		166496			percent	N			1.9
9013	221	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	MTLNCL	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Methylene chloride	74		1.5	ppb	75-09-2	10	0		166496			percent	N			5
9014	222	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	MTLNCL	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Methylene chloride	260		5.2	µg/m3	75-09-2	10	0		166496			percent	N			17
9015	124	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	FC12	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Dichlorodifluoromethane	2.7		0.74	µg/m3	75-71-8	1	0		166496			percent	N			2.5
9016	125	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	CLME	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Methyl chloride	1.6		0.15	ppb	74-87-3	1	0		166496			percent	N			0.5
9017	126	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	CLME	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Methyl chloride	3.3		0.31	µg/m3	74-87-3	1	0		166496			percent	N			1
9018	128	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	DCTFA12	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Freon 114	1	U	1	µg/m3	76-14-2	1	0		166496			percent	N			3.5
9019	130	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	ERYTHRENE	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	1,3-Butadiene	1.4		0.33	µg/m3	106-99-0	1	0		166496			percent	N			1.1
9020	136	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	FC11	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Freon 11	1.9	J	0.84	µg/m3	75-69-4	1	0		166496			percent	N			2.8
9021	138	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	FC113	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Freon 113	1.1	U	1.1	µg/m3	76-13-1	1	0		166496			percent	N			3.8
9022	151	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	MEK	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Methyl ethyl ketone	3		0.15	ppb	78-93-3	1	0		166496			percent	N			0.5
9023	152	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	MEK	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Methyl ethyl ketone	8.9		0.44	µg/m3	78-93-3	1	0		166496			percent	N			1.5
9024	156	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	ETACET	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Ethyl acetate	1.3	J	0.54	µg/m3	141-78-6	1	0		166496			percent	N			3.6
9025	157	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	C6N	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	n-Hexane	1.2		0.15	ppb	110-54-3	1	0		166496			percent	N			0.5
9026	158	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	C6N	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	n-Hexane	4.2		0.53	µg/m3	110-54-3	1	0		166496			percent	N			1.8
9027	160	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	TCLME	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Chloroform	4.5		0.73	µg/m3	67-66-3	1	0		166496			percent	N			2.4
9028	161	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	THF	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Tetrahydrofuran	4.9		0.15	ppb	109-99-9	1	0		166496			percent	N			0.5
9029	166	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	TCA111	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	1,1,1-Trichloroethane	1.1	J	0.82	µg/m3	71-55-6	1	0		166496			percent	N			2.7
9030	170	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	BZ	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Benzene	2.6		0.48	µg/m3	71-43-2	1	0		166496			percent	N			1.6
9031	176	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	BDCME	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Bromodichloromethane	1	U	1	µg/m3	75-27-4	1	0		166496			percent	N			3.4
9032	178	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	C7N	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Heptane	1.8	J	0.61	µg/m3	142-82-5	1	0		166496			percent	N			2
9033	182	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	MIBK	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Methyl isobutyl ketone	1.5	J	0.61	µg/m3	108-10-1	1	0		166496			percent	N			2
9034	187	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	BZME	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Toluene	4.4		0.15	ppb	108-88-3	1	0		166496			percent	N			0.5
9035	190	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	HXO2	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	2-Hexanone	1.2	U	1.2	µg/m3	591-78-6	1	0		166496			percent	N			4.1
9036	192	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	DBCME	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Dibromochloromethane	1.3	U	1.3	µg/m3	124-48-1	1	0		166496			percent	N			4.3
9037	194	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	EDB	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	1,2-Dibromoethane	1.2	U	1.2	µg/m3	106-93-4	1	0		166496			percent	N			3.8
9038	198	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	EBZ	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Ethyl benzene	1.8	J	0.65	µg/m3	100-41-4	1	0		166496			percent	N			2.2
9039	199	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	XYLMP	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	m,p-Xylene	1.6		0.15	ppb	179601-23-1	1	0		166496			percent	N			0.5
9040	200	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	XYLMP	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	m,p-Xylene	7		0.65	µg/m3	179601-23-1	1	0		166496			percent	N			2.2
9041	202	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	XYLO	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	o-Xylene	2	J	0.65	µg/m3	95-47-6	1	0		166496			percent	N			2.2
9042	206	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	TBME	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Bromoform	1.6	U	1.6	µg/m3	75-25-2	1	0		166496			percent	N			5.2
9043	208	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	PCA	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	1,1,2,2-Tetrachloroethane	1	U	1	µg/m3	79-34-5	1	0		166496			percent	N			3.4
9044	210	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	EBZME4	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	4-Ethyl toluene	1.1	J	0.74	µg/m3	622-96-8	1	0		166496			percent	N			4.9
9045	214	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	TMB124	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	1,2,4-Trimethylbenzene	3.6		0.74	µg/m3	95-63-6	1	0		166496			percent	N			2.5
9046	220	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	DCBZ12	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	1,2-Dichlorobenzene	1.8	U	1.8	µg/m3	95-50-1	1	0		166496			percent	N			6
9047	123	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	FC12	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Dichlorodifluoromethane	0.54		0.15	ppb	75-71-8	1	0		166496			percent	N			0.5
9048	127	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	DCTFA12	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Freon 114	0.15	U	0.15	ppb	76-14-2	1	0		166496			percent	N			0.5
9049	129	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	ERYTHRENE	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	1,3-Butadiene	0.65		0.15	ppb	106-99-0	1	0		166496			percent	N			0.5
9050	131	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	BRME	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Bromomethane	0.15	U	0.15	ppb	74-83-9	1	0		166496			percent	N			0.5
9051	132	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	BRME	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Bromomethane	0.58	U	0.58	µg/m3	74-83-9	1	0		166496			percent	N			1.9
9052	133	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	CLEA	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Ethyl chloride	0.15	U	0.15	ppb	75-00-3	1	0		166496			percent	N			0.5
9053	134	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	CLEA	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Ethyl chloride	0.4	U	0.4	µg/m3	75-00-3	1	0		166496			percent	N			1.3
9054	135	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	FC11	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Freon 11	0.35	J	0.15	ppb	75-69-4	1	0		166496			percent	N			0.5
9055	137	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	FC113	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Freon 113	0.15	U	0.15	ppb	76-13-1	1	0		166496			percent	N			0.5
9056	139	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	DCE11	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	1,1-Dichloroethene	0.15	U	0.15	ppb	75-35-4	1	0		166496			percent	N			0.5
9057	140	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	DCE11	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	1,1-Dichloroethene	0.59	U	0.59	µg/m3	75-35-4	1	0		166496			percent	N			2
9058	143	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	CDS	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Carbon disulfide	0.15	U	0.15	ppb	75-15-0	1	0		166496			percent	N			0.5
9059	144	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	CDS	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Carbon disulfide	0.47	U	0.47	µg/m3	75-15-0	1	0		166496			percent	N			1.6
9060	145	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	DCE12T	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	trans-1,2-Dichloroethene	0.15	U	0.15	ppb	156-60-5	1	0		166496			percent	N			0.5
9061	146	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	DCE12T	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	trans-1,2-Dichloroethene	0.59	U	0.59	µg/m3	156-60-5	1	0		166496			percent	N			2
9062	147	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	TBUTMEE	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Methyl t-butyl ether	0.15	U	0.15	ppb	1634-04-4	1	0		166496			percent	N			0.5
9063	148	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	TBUTMEE	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Methyl t-butyl ether	0.54	U	0.54	µg/m3	1634-04-4	1	0		166496			percent	N			1.8
9064	149	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	VA	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Vinyl acetate	0.15	U	0.15	ppb	108-05-4	1	0		166496			percent	N			0.5

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
9010	142	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	41		X	=			0.71	2.4	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9011	162	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	15	J	X	=			0.44	1.5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9012	188	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	16		X	=			0.57	1.9	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9013	221	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	74		X	=			1.5	5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9014	222	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	260		X	=			5.2	17	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9015	124	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	2.7		X	=			0.74	2.5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9016	125	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.6		X	=			0.15	0.5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9017	126	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	3.3		X	=			0.31	1	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9018	128	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1	U	X	U			1	3.5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9019	130	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.4		X	=			0.33	1.1	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9020	136	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.9	J	X	J			0.84	2.8	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9021	138	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.1	U	X	U			1.1	3.8	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9022	151	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	3		X	=			0.15	0.5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9023	152	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	8.9		X	=			0.44	1.5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9024	156	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.3	J	X	J			0.54	3.6	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9025	157	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.2		X	=			0.15	0.5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9026	158	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	4.2		X	=			0.53	1.8	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9027	160	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	4.5		X	=			0.73	2.4	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9028	161	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	4.9	J	X	=			0.15	0.5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9029	166	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.1	J	X	J			0.82	2.7	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9030	170	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	2.6		X	=			0.48	1.6	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9031	176	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1	U	X	U			1	3.4	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9032	178	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.8	J	X	J			0.61	2	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9033	182	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.5	J	X	J			0.61	2	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9034	187	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	4.4		X	=			0.15	0.5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9035	190	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.2	U	X	U			1.2	4.1	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9036	192	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.3	U	X	U			1.3	4.3	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9037	194	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.2	U	X	U			1.2	3.8	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9038	198	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.8	J	X	J			0.65	2.2	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9039	199	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.6		X	=			0.15	0.5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9040	200	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	7		X	=			0.65	2.2	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9041	202	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	2	J	X	J			0.65	2.2	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9042	206	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.6	U	X	U			1.6	5.2	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9043	208	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1	U	X	U			1	3.4	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9044	210	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.1	J	X	J			0.74	4.9	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9045	214	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	3.6		X	=			0.74	2.5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9046	220	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.8	U	X	U			1.8	6	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9047	123	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.54		X	=			0.15	0.5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9048	127	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9049	129	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.65		X	=			0.15	0.5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9050	131	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9051	132	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.58	U	X	U			0.58	1.9	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9052	133	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9053	134	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.4	U	X	U			0.4	1.3	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9054	135	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.35	J	X	J			0.15	0.5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9055	137	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9056	139	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9057	140	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.59	U	X	U			0.59	2	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9058	143	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9059	144	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.47	U	X	U			0.47	1.6	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9060	145	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9061	146	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.59	U	X	U			0.59	2	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9062	147	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9063	148	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.54	U	X	U			0.54	1.8	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9064	149	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5

APPENDIX A-1

Laboratory Validated Results

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
9010	142	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			2.4	2.4			jbeckett - Tier 2B
9011	162	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			1.5	1.5	J	LCSRPD	jbeckett - Tier 2B
9012	188	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			1.9	1.9			jbeckett - Tier 2B
9013	221	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			5	5			jbeckett - Tier 2B
9014	222	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			17	17			jbeckett - Tier 2B
9015	124	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			2.5	2.5			jbeckett - Tier 2B
9016	125	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9017	126	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9018	128	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			3.5	3.5			jbeckett - Tier 2B
9019	130	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			1.1	1.1			jbeckett - Tier 2B
9020	136	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			2.8	2.8			jbeckett - Tier 2B
9021	138	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			3.8	3.8			jbeckett - Tier 2B
9022	151	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9023	152	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			1.5	1.5			jbeckett - Tier 2B
9024	156	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			3.6	3.6			jbeckett - Tier 2B
9025	157	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9026	158	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			1.8	1.8			jbeckett - Tier 2B
9027	160	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			2.4	2.4			jbeckett - Tier 2B
9028	161	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5	J	LCSRPD	jbeckett - Tier 2B
9029	166	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			2.7	2.7			jbeckett - Tier 2B
9030	170	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			1.6	1.6			jbeckett - Tier 2B
9031	176	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			3.4	3.4			jbeckett - Tier 2B
9032	178	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9033	182	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9034	187	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9035	190	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			4.1	4.1			jbeckett - Tier 2B
9036	192	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			4.3	4.3			jbeckett - Tier 2B
9037	194	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			3.8	3.8			jbeckett - Tier 2B
9038	198	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			2.2	2.2			jbeckett - Tier 2B
9039	199	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9040	200	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			2.2	2.2			jbeckett - Tier 2B
9041	202	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			2.2	2.2			jbeckett - Tier 2B
9042	206	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			5.2	5.2			jbeckett - Tier 2B
9043	208	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			3.4	3.4			jbeckett - Tier 2B
9044	210	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			4.9	4.9			jbeckett - Tier 2B
9045	214	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			2.5	2.5			jbeckett - Tier 2B
9046	220	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			6	6			jbeckett - Tier 2B
9047	123	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9048	127	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9049	129	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9050	131	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9051	132	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			1.9	1.9			jbeckett - Tier 2B
9052	133	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9053	134	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			1.3	1.3			jbeckett - Tier 2B
9054	135	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9055	137	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9056	139	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9057	140	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9058	143	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9059	144	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			1.6	1.6			jbeckett - Tier 2B
9060	145	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9061	146	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9062	147	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9063	148	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			1.8	1.8			jbeckett - Tier 2B
9064	149	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5	NONE	CCV>UCL	jbeckett - Tier 2B
9064	149	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5	none	LCS>UCL	jbeckett - Tier 2B
9064	149	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5	none	LCSD>UCL	jbeckett - Tier 2B
9065	150	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			1.8	1.8	NONE	CCV>UCL	jbeckett - Tier 2B
9065	150	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			1.8	1.8	none	LCS>UCL	jbeckett - Tier 2B
9065	150	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			1.8	1.8	none	LCSD>UCL	jbeckett - Tier 2B
9066	153	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9067	154	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9068	155	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9069	159	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9070	163	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9071	164	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9072	165	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9073	167	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9074	168	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			3.1	3.1			jbeckett - Tier 2B
9075	169	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9076	171	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9077	172	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			1.7	1.7			jbeckett - Tier 2B
9078	173	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9079	174	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			2.4	2.4			jbeckett - Tier 2B
9080	175	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9081	177	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9082	179	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9083	180	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			2.3	2.3			jbeckett - Tier 2B
9084	181	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9085	183	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9086	184	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			2.3	2.3			jbeckett - Tier 2B
9087	185	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9088	186	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			2.7	2.7			jbeckett - Tier 2B
9089	189	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9090	191	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9091	193	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9092	195	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9093	196	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			2.3	2.3			jbeckett - Tier 2B
9094	197	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
9095	201	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	XYLO	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	o-Xylene	0.46	J	0.15	ppb	95-47-6	1	0		166496			percent	N			0.5
9096	203	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	STY	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Styrene	0.15	U	0.15	ppb	100-42-5	1	0		166496			percent	N			0.5
9097	204	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	STY	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Styrene	0.64	U	0.64	µg/m3	100-42-5	1	0		166496			percent	N			2.1
9098	205	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	TBME	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	Bromoform	0.15	U	0.15	ppb	75-25-2	1	0		166496			percent	N			0.5
9099	207	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	PCA	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	1,1,2,2-Tetrachloroethane	0.15	U	0.15	ppb	79-34-5	1	0		166496			percent	N			0.5
9100	209	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	EBZME4	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	4-Ethyl toluene	0.22	J	0.15	ppb	622-96-8	1	0		166496			percent	N			1
9101	211	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	TMB135	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	1,3,5-Trimethylbenzene	0.19	J	0.15	ppb	108-67-8	1	0		166496			percent	N			0.5
9102	212	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	TMB135	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	1,3,5-Trimethylbenzene	0.93	J	0.74	µg/m3	108-67-8	1	0		166496			percent	N			2.5
9103	213	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	TMB124	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	1,2,4-Trimethylbenzene	0.73		0.15	ppb	95-63-6	1	0		166496			percent	N			0.5
9104	215	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	DCBZ13	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	1,3-Dichlorobenzene	0.15	U	0.15	ppb	541-73-1	1	0		166496			percent	N			0.5
9105	216	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	DCBZ13	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	1,3-Dichlorobenzene	0.9	U	0.9	µg/m3	541-73-1	1	0		166496			percent	N			3
9106	217	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	DCBZ14	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	1,4-Dichlorobenzene	0.15	U	0.15	ppb	106-46-7	1	0		166496			percent	N			0.5
9107	218	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	DCBZ14	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	1,4-Dichlorobenzene	0.9	U	0.9	µg/m3	106-46-7	1	0		166496			percent	N			3
9108	219	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	DCBZ12	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	1,2-Dichlorobenzene	0.3	U	0.3	ppb	95-50-1	1	0		166496			percent	N			1
9109	224	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	BR4FBZ	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	4-Bromofluorobenzene	113.27			PERCENT	460-00-4	1	0		166496	20	113.27	percent	Y			
9110	225	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15	BR4FBZ	TO15	AIR	N		3/12/2016	3/14/2016		3/21/2016	4-Bromofluorobenzene	113.68			PERCENT	460-00-4	1	0		166496	20	113.68	percent	Y			
9111	8	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15 SIM	PCE	TO15SIM	AIR	N		3/8/2016	3/14/2016		3/15/2016	Tetrachloroethene	4			µg/m3	127-18-4	1	0		166464			percent	N			0.34
9112	2	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15 SIM	VC	TO15SIM	AIR	N		3/8/2016	3/14/2016		3/15/2016	Vinyl chloride	0.13	U		µg/m3	75-01-4	1	0		166464			percent	N			0.13
9113	4	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	N		3/8/2016	3/14/2016		3/15/2016	cis-1,2-Dichloroethene	0.2	U		µg/m3	156-59-2	1	0		166464			percent	N			0.2
9114	6	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15 SIM	TCE	TO15SIM	AIR	N		3/8/2016	3/14/2016		3/15/2016	Trichloroethene	0.27	U		µg/m3	79-01-6	1	0		166464			percent	N			0.27
9115	7	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15 SIM	PCE	TO15SIM	AIR	N		3/8/2016	3/14/2016		3/15/2016	Tetrachloroethene	0.59			ppb	127-18-4	1	0		166464			percent	N			0.05
9116	10	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	N		3/8/2016	3/14/2016		3/15/2016	1,4-Dioxane	0.18			µg/m3	123-91-1	1	0		166464			percent	N			0.18
9117	112	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15 SIM	BR4FBZ	TO15SIM	AIR	N		3/8/2016	3/14/2016		3/15/2016	4-Bromofluorobenzene	103.09			PERCENT	460-00-4	1	0		166464	1	103.09	percent	Y			
9118	1	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15 SIM	VC	TO15SIM	AIR	N		3/8/2016	3/14/2016		3/15/2016	Vinyl chloride	0.05	U		ppb	75-01-4	1	0		166464			percent	N			0.05
9119	3	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	N		3/8/2016	3/14/2016		3/15/2016	cis-1,2-Dichloroethene	0.05	U		ppb	156-59-2	1	0		166464			percent	N			0.05
9120	5	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15 SIM	TCE	TO15SIM	AIR	N		3/8/2016	3/14/2016		3/15/2016	Trichloroethene	0.05	U		ppb	79-01-6	1	0		166464			percent	N			0.05
9121	9	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	N		3/8/2016	3/14/2016		3/15/2016	1,4-Dioxane	0.051			µg/m3	123-91-1	1	0		166464			percent	N			0.05
9122	232	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15 SIM	PCE	TO15SIM	AIR	FD		3/12/2016	3/14/2016		3/15/2016	Tetrachloroethene	12	E		ppb	127-18-4	1	0		166464			percent	N			0.05
9123	233	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15 SIM	PCE	TO15SIM	AIR	FD		3/12/2016	3/14/2016		3/15/2016	Tetrachloroethene	78	E		µg/m3	127-18-4	1	0		166464			percent	N			0.34
9124	230	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15 SIM	TCE	TO15SIM	AIR	FD		3/12/2016	3/14/2016		3/15/2016	Trichloroethene	1	E		ppb	79-01-6	1	0		166464			percent	N			0.05
9125	231	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15 SIM	TCE	TO15SIM	AIR	FD		3/12/2016	3/14/2016		3/15/2016	Trichloroethene	5.4	E		µg/m3	79-01-6	1	0		166464			percent	N			0.27
9126	227	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15 SIM	VC	TO15SIM	AIR	FD		3/12/2016	3/14/2016		3/15/2016	Vinyl chloride	0.13	U		µg/m3	75-01-4	1	0		166464			percent	N			0.13
9127	228	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	FD		3/12/2016	3/14/2016		3/15/2016	cis-1,2-Dichloroethene	0.15			ppb	156-59-2	1	0		166464			percent	N			0.05
9128	229	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	FD		3/12/2016	3/14/2016		3/15/2016	cis-1,2-Dichloroethene	0.58			µg/m3	156-59-2	1	0		166464			percent	N			0.2
9129	235	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	FD		3/12/2016	3/14/2016		3/15/2016	1,4-Dioxane	0.18	U		µg/m3	123-91-1	1	0		166464			percent	N			0.18
9130	337	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15 SIM	BR4FBZ	TO15SIM	AIR	FD		3/12/2016	3/14/2016		3/15/2016	4-Bromofluorobenzene	110.07			PERCENT	460-00-4	1	0		166464	1	110.07	percent	Y			
9131	226	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15 SIM	VC	TO15SIM	AIR	FD		3/12/2016	3/14/2016		3/15/2016	Vinyl chloride	0.05	U		ppb	75-01-4	1	0		166464			percent	N			0.05
9132	234	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	FD		3/12/2016	3/14/2016		3/15/2016	1,4-Dioxane	0.05	U		µg/m3	123-91-1	1	0		166464			percent	N			0.05
9133	30	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	ACE	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Acetone	17		0.71	µg/m3	67-64-1	1	0		166496			percent	N			2.4
9134	12	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	FC12	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Dichlorodifluoromethane	2.1	J	0.74	µg/m3	75-71-8	1	0		166496			percent	N			2.5
9135	14	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	CLME	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Methyl chloride	1.7		0.31	µg/m3	74-87-3	1	0		166496			percent	N			1
9136	16	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	DCTFA12	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Freon 114	1	U	1	µg/m3	76-14-2	1	0		166496			percent	N			3.5
9137	26	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	FC113	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Freon 113	1.1	U	1.1	µg/m3	76-13-1	1	0		166496			percent	N			3.8
9138	29	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	ACE	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Acetone	7.2		0.3	ppb	67-64-1	1	0		166496			percent	N			1
9139	42	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	MEK	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Methyl ethyl ketone	1.3	J	0.44	µg/m3	78-93-3	1	0		166496			percent	N			1.5
9140	66	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	BDCME	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Bromodichloromethane	1	U	1	µg/m3	75-27-4	1	0		166496			percent	N			3.4
9141	78	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	BZME	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Toluene	3.5		0.57	µg/m3	108-88-3	1	0		166496			percent	N			1.9
9142	80	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	HXO2	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	2-Hexanone	1.2	U	1.2	µg/m3	591-78-6	1	0		166496			percent	N			4.1
9143	82	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	DBCME	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Dibromochloromethane	1.3	U	1.3	µg/m3	124-48-1	1	0		166496			percent	N			4.3
9144	84	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	EDB	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	1,2-Dibromoethane	1.2	U	1.2	µg/m3	106-93-4	1	0		166496			percent	N			3.8
9145	90	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	XYLMP	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	m,p-Xylene	1.2	J	0.65	µg/m3	179601-23-1	1	0		166496			percent	N			2.2
9146	96	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	TBME	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Bromoform	1.6	U	1.6	µg/m3	75-25-2	1	0		166496			percent	N			5.2
9147	98	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	PCA	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	1,1,2,2-Tetrachloroethane	1	U	1	µg/m3	79-34-5	1	0		166496			percent	N			3.4
9148	110	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	DCBZ12	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	1,2-Dichlorobenzene	1.8	U	1.8	µg/m3	95-50-1	1	0		166496			percent	N			6
9149	11	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	FC12	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Dichlorodifluoromethane	0.42	J	0.15	ppb	75-71-8	1	0		166496			percent	N			0.5
9150	13	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	CLME	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Methyl chloride	0.82		0.15	ppb	74-87-3	1	0		166496			percent	N			0.5
9151	15	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	DCTFA12	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Freon 114	0.15	U	0.15	ppb	76-14-2	1	0		166496			percent	N			0.5
9152	17	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	ERYTHRENE	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	1,3-Butadiene	0.15	U	0.15	ppb	106-99-0	1	0		166496			percent	N			0.5
9153	18	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	ERYTHRENE	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	1,3-Butadiene	0.33	U	0.33	µg/m3	106-99-0	1	0		166496			percent	N			1.1
9154	19	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	BRME	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Bromomethane	0.15	U	0.15	ppb	74-83-9	1	0		166496			percent	N			0.5
9155	20	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	BRME	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Bromomethane	0.58	U	0.58	µg/m3	74-83-9	1	0		166496			percent	N			1.9
9156	21	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	CLEA	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Ethyl chloride	0.15	U	0.15	ppb	75-00-3	1	0		166496			percent	N			0.5
9157	22	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	CLEA	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Ethyl chloride	0.4	U	0.4	µg/m3	75-00-3	1	0		166496			percent	N			1.3
9158	23	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	FC11	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Freon 11	0.18	J	0.15	ppb	75-69-4	1	0		166496			percent	N			0.5
9159	24	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	FC11	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Freon 11	0.99	J	0.84	µg/m3	75-69-4	1	0		166496			percent	N			2.8
9160	25	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	FC113	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Freon 113	0.15	U	0.15	ppb	76-13-1	1	0		166496			percent	N			0.5
9161	27	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	DCE11	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	1,1-Dichloroethene	0.15	U	0.15	ppb	75-35-4	1	0		166496			percent	N			0.5
9162	28	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	DCE11	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	1,1-Dichloroethene	0.59	U	0.59	µg/m3	75-35-4	1	0		166496			percent	N			2
9163	31	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	CDS	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Carbon disulfide	0.15	U	0.15	ppb	75-15-0	1	0		166496			percent	N			0.5
9164	32	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	CDS	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Carbon disulfide	0.47	U	0.47	µg/m3	75-15-0	1	0		166496			percent	N			1.6
9165	33	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	MTLNCL	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Methylene chloride	0.17	J	0.15	ppb	75-09-2	1	0		166496			percent	N			0.5
9166	34	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	MTLNCL	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Methylene chloride	0.6	J	0.52	µg/m3	75-09-2	1	0		166496			percent	N			1.7
9167	35	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	DCE12T	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	trans-1,2-Dichloroethene	0.15	U	0.15	ppb	156-60-5	1	0		166496			percent	N			0.5
9168	36	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	DCE12T	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	trans-1,2-Dichloroethene	0.59	U	0.59	µg/m3	156-60-5	1	0		166496			percent	N			2
9169	37	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	TBUTMEE	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Methyl t-butyl ether	0.15	U	0.15	ppb	1634-04-4	1	0		166496			percent	N			0.5
9170	38	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	TBUTMEE	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Methyl t-butyl ether	0.54	U	0.54	µg/m3	1634-04-4	1	0		166496			percent	N			1.8
9171	39	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	VA	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Vinyl acetate	0.15	U	0.15	ppb	108-05-4	1	0		166496			percent	N			0.5
9171	39	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	VA	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Vinyl acetate	0.15	U	0.15	ppb	108-05-4	1	0		166496			percent	N			0.5
9171	39	1459451983	20

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
9095	201	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.46	J	X	J			0.15	0.5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9096	203	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9097	204	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.64	U	X	U			0.64	2.1	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9098	205	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9099	207	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9100	209	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.22	J	X	J			0.15	1	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9101	211	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.19	J	X	J			0.15	0.5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9102	212	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.93	J	X	J			0.74	2.5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9103	213	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.73		X	=			0.15	0.5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9104	215	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9105	216	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.9	U	X	U			0.9	3	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9106	217	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9107	218	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.9	U	X	U			0.9	3	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9108	219	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.3	U	X	U			0.3	1	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9109	224	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	113.27		X	=	67.698	129.86			A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9110	225	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	113.68		X	=	67.698	129.86			A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166496		TRUE
9111	8	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	4		X	=				0.34	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166464		TRUE
9112	2	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.13	U	X	U				0.13	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166464		TRUE
9113	4	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.2	U	X	U				0.2	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166464		TRUE
9114	6	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.27	U	X	U				0.27	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166464		TRUE
9115	7	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.59		X	=				0.05	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166464		TRUE
9116	10	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.18		X	=				0.18	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166464		TRUE
9117	112	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	103.09		X	=	48.778	151.81			A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166464		TRUE
9118	1	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166464		TRUE
9119	3	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166464		TRUE
9120	5	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166464		TRUE
9121	9	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.051		X	=				0.05	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166464		TRUE
9122	232	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	12	J	X	E				0.05	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166464		TRUE
9123	233	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	78	J	X	E				0.34	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166464		TRUE
9124	230	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1	J	X	E				0.05	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166464		TRUE
9125	231	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	5.4	J	X	E				0.27	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166464		TRUE
9126	227	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.13	U	X	U				0.13	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166464		TRUE
9127	228	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15		X	=				0.05	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166464		TRUE
9128	229	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.58		X	=				0.2	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166464		TRUE
9129	235	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.18	U	X	U				0.18	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166464		TRUE
9130	337	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	110.07		X	=	48.778	151.81			A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166464		TRUE
9131	226	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166464		TRUE
9132	234	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166464		TRUE
9133	30	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	17		X	=			0.71	2.4	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9134	12	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	2.1	J	X	J			0.74	2.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9135	14	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.7		X	=			0.31	1	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9136	16	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1	U	X	U			1	3.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9137	26	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.1	U	X	U			1.1	3.8	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9138	29	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	7.2		X	=			0.3	1	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9139	42	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.3	J	X	J			0.44	1.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9140	66	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1	U	X	U			1	3.4	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9141	78	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	3.5		X	=			0.57	1.9	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9142	80	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.2	U	X	U			1.2	4.1	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9143	82	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.3	U	X	U			1.3	4.3	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9144	84	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.2	U	X	U			1.2	3.8	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9145	90	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.2	J	X	J			0.65	2.2	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9146	96	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.6	U	X	U			1.6	5.2	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9147	98	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1	U	X	U			1	3.4	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9148	110	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.8	U	X	U			1.8	6	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9149	11	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.42	J	X	J			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9150	13	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.82		X	=			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9151	15	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9152	17	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9153	18	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.33	U	X	U			0.33	1.1	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9154	19	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9155	20	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.58	U	X	U			0.58	1.9	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9156	21	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9157	22	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.4	U	X	U			0.4	1.3	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9158	23	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.18	J	X	J			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9159	24	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.99	J	X	J			0.84	2.8	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9160	25	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9161	27	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9162	28	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.59	U	X	U			0.59	2	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9163	31	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9164	32	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.47	U	X	U			0.47	1.6	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9165	33	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.17	J	X	J			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9166	34	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.6	J	X	J			0.52	1.7	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9167	35	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9168	36	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.59	U	X	U			0.59	2	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9169	37	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9170	38	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.54	U	X	U			0.54	1.8	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9171	39	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5

APPENDIX A-1

Laboratory Validated Results

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
9095	201	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9096	203	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9097	204	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			2.1	2.1			jbeckett - Tier 2B
9098	205	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9099	207	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9100	209	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9101	211	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9102	212	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			2.5	2.5			jbeckett - Tier 2B
9103	213	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9104	215	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9105	216	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			3	3			jbeckett - Tier 2B
9106	217	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9107	218	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			3	3			jbeckett - Tier 2B
9108	219	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9109	224	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler	20	ppb					jbeckett - Tier 2B
9110	225	-1167178933	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler	20	ppb					jbeckett - Tier 2B
9111	8	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.34	0.34			jbeckett - Tier 2B
9112	2	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.13	0.13			jbeckett - Tier 2B
9113	4	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.2	0.2			jbeckett - Tier 2B
9114	6	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.27	0.27			jbeckett - Tier 2B
9115	7	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9116	10	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.18	0.18			jbeckett - Tier 2B
9117	112	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler	1	ppb					jbeckett - Tier 2B
9118	1	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9119	3	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9120	5	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9121	9	-849010716	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9122	232	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.05	0.05	J	>ICLinearRange	jbeckett - Tier 2B
9123	233	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.34	0.34	J	>ICLinearRange	jbeckett - Tier 2B
9124	230	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.05	0.05	J	>ICLinearRange	jbeckett - Tier 2B
9125	231	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.27	0.27	J	>ICLinearRange	jbeckett - Tier 2B
9126	227	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.13	0.13			jbeckett - Tier 2B
9127	228	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9128	229	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.2	0.2			jbeckett - Tier 2B
9129	235	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.18	0.18			jbeckett - Tier 2B
9130	337	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler	1	ppb					jbeckett - Tier 2B
9131	226	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9132	234	-152954702	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9133	30	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			2.4	2.4			jbeckett - Tier 2B
9134	12	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			2.5	2.5			jbeckett - Tier 2B
9135	14	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9136	16	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			3.5	3.5			jbeckett - Tier 2B
9137	26	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			3.8	3.8			jbeckett - Tier 2B
9138	29	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9139	42	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			1.5	1.5			jbeckett - Tier 2B
9140	66	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			3.4	3.4			jbeckett - Tier 2B
9141	78	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			1.9	1.9			jbeckett - Tier 2B
9142	80	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			4.1	4.1			jbeckett - Tier 2B
9143	82	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			4.3	4.3			jbeckett - Tier 2B
9144	84	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			3.8	3.8			jbeckett - Tier 2B
9145	90	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			2.2	2.2			jbeckett - Tier 2B
9146	96	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			5.2	5.2			jbeckett - Tier 2B
9147	98	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			3.4	3.4			jbeckett - Tier 2B
9148	110	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			6	6			jbeckett - Tier 2B
9149	11	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9150	13	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9151	15	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9152	17	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9153	18	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			1.1	1.1			jbeckett - Tier 2B
9154	19	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9155	20	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			1.9	1.9			jbeckett - Tier 2B
9156	21	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9157	22	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			1.3	1.3			jbeckett - Tier 2B
9158	23	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9159	24	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			2.8	2.8			jbeckett - Tier 2B
9160	25	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9161	27	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9162	28	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9163	31	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9164	32	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			1.6	1.6			jbeckett - Tier 2B
9165	33	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9166	34	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			1.7	1.7			jbeckett - Tier 2B
9167	35	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9168	36	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9169	37	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9170	38	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			1.8	1.8			jbeckett - Tier 2B
9171	39	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5	NONE	CCV>UCL	jbeckett - Tier 2B
9171	39	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5	none	LCS>UCL	jbeckett - Tier 2B
9171	39	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5	none	LCSD>UCL	jbeckett - Tier 2B
9172	40	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			1.8	1.8	NONE	CCV>UCL	jbeckett - Tier 2B
9172	40	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			1.8	1.8	none	LCS>UCL	jbeckett - Tier 2B
9172	40	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			1.8	1.8	none	LCSD>UCL	jbeckett - Tier 2B
9173	41	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9174	43	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9175	44	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9176	45	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9177	46	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			3.6	3.6			jbeckett - Tier 2B
9178	47	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9179	48	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			1.8	1.8			jbeckett - Tier 2B

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
9180	49	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	TCLME	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Chloroform	0.15	U	0.15	ppb	67-66-3	1	0		166496			percent	N			0.5
9181	50	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	TCLME	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Chloroform	0.73	U	0.73	µg/m3	67-66-3	1	0		166496			percent	N			2.4
9182	51	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	THF	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Tetrahydrofuran	0.15	U	0.15	ppb	109-99-9	1	0		166496			percent	N			0.5
9183	52	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	THF	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Tetrahydrofuran	0.44	U	0.44	µg/m3	109-99-9	1	0		166496			percent	N			1.5
9184	53	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	DCA12	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	1,2-Dichloroethane	0.15	U	0.15	ppb	107-06-2	1	0		166496			percent	N			0.5
9185	54	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	DCA12	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	1,2-Dichloroethane	0.61	U	0.61	µg/m3	107-06-2	1	0		166496			percent	N			2
9186	55	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	TCA111	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	1,1,1-Trichloroethane	0.15	U	0.15	ppb	71-55-6	1	0		166496			percent	N			0.5
9187	56	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	TCA111	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	1,1,1-Trichloroethane	0.82	U	0.82	µg/m3	71-55-6	1	0		166496			percent	N			2.7
9188	57	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	CTCL	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Carbon tetrachloride	0.15	U	0.15	ppb	56-23-5	1	0		166496			percent	N			0.5
9189	58	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	CTCL	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Carbon tetrachloride	0.94	U	0.94	µg/m3	56-23-5	1	0		166496			percent	N			3.1
9190	59	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	BZ	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Benzene	0.3	J	0.15	ppb	71-43-2	1	0		166496			percent	N			0.5
9191	60	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	BZ	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Benzene	0.96	J	0.48	µg/m3	71-43-2	1	0		166496			percent	N			1.6
9192	61	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	CYHEXANE	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Cyclohexane	0.17	J	0.15	ppb	110-82-7	1	0		166496			percent	N			0.5
9193	62	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	CYHEXANE	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Cyclohexane	0.6	J	0.52	µg/m3	110-82-7	1	0		166496			percent	N			1.7
9194	63	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	DCPA12	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	1,2-Dichloropropane	0.15	U	0.15	ppb	78-87-5	1	0		166496			percent	N			0.5
9195	64	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	DCPA12	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	1,2-Dichloropropane	0.73	U	0.73	µg/m3	78-87-5	1	0		166496			percent	N			2.4
9196	65	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	BDCME	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Bromodichloromethane	0.15	U	0.15	ppb	75-27-4	1	0		166496			percent	N			0.5
9197	67	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	C7N	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Heptane	0.15	U	0.15	ppb	142-82-5	1	0		166496			percent	N			0.5
9198	68	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	C7N	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Heptane	0.61	U	0.61	µg/m3	142-82-5	1	0		166496			percent	N			2
9199	69	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	DCP13C	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	cis-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-01-5	1	0		166496			percent	N			0.5
9200	70	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	DCP13C	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	cis-1,3-Dichloropropene	0.68	U	0.68	µg/m3	10061-01-5	1	0		166496			percent	N			2.3
9201	71	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	MIBK	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Methyl isobutyl ketone	0.15	U	0.15	ppb	108-10-1	1	0		166496			percent	N			0.5
9202	72	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	MIBK	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Methyl isobutyl ketone	0.61	U	0.61	µg/m3	108-10-1	1	0		166496			percent	N			2
9203	73	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	DCP13T	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	trans-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-02-6	1	0		166496			percent	N			0.5
9204	74	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	DCP13T	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	trans-1,3-Dichloropropene	0.68	U	0.68	µg/m3	10061-02-6	1	0		166496			percent	N			2.3
9205	75	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	TCA112	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	1,1,2-Trichloroethane	0.15	U	0.15	ppb	79-00-5	1	0		166496			percent	N			0.5
9206	76	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	TCA112	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	1,1,2-Trichloroethane	0.82	U	0.82	µg/m3	79-00-5	1	0		166496			percent	N			2.7
9207	77	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	BZME	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Toluene	0.92		0.15	ppb	108-88-3	1	0		166496			percent	N			0.5
9208	79	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	HXO2	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	2-Hexanone	0.3	U	0.3	ppb	591-78-6	1	0		166496			percent	N			1
9209	81	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	DBCME	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Dibromochloromethane	0.15	U	0.15	ppb	124-48-1	1	0		166496			percent	N			0.5
9210	83	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	EDB	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	1,2-Dibromoethane	0.15	U	0.15	ppb	106-93-4	1	0		166496			percent	N			0.5
9211	85	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	CLBZ	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Chlorobenzene	0.15	U	0.15	ppb	108-90-7	1	0		166496			percent	N			0.5
9212	86	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	CLBZ	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Chlorobenzene	0.69	U	0.69	µg/m3	108-90-7	1	0		166496			percent	N			2.3
9213	87	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	EBZ	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Ethyl benzene	0.15	U	0.15	ppb	100-41-4	1	0		166496			percent	N			0.5
9214	88	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	EBZ	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Ethyl benzene	0.65	U	0.65	µg/m3	100-41-4	1	0		166496			percent	N			2.2
9215	89	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	XYLMP	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	m,p-Xylene	0.27	J	0.15	ppb	179601-23-1	1	0		166496			percent	N			0.5
9216	91	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	XYLO	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	o-Xylene	0.15	U	0.15	ppb	95-47-6	1	0		166496			percent	N			0.5
9217	92	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	XYLO	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	o-Xylene	0.65	U	0.65	µg/m3	95-47-6	1	0		166496			percent	N			2.2
9218	93	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	STY	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Styrene	0.15	U	0.15	ppb	100-42-5	1	0		166496			percent	N			0.5
9219	94	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	STY	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Styrene	0.64	U	0.64	µg/m3	100-42-5	1	0		166496			percent	N			2.1
9220	95	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	TBME	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	Bromoform	0.15	U	0.15	ppb	75-25-2	1	0		166496			percent	N			0.5
9221	97	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	PCA	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	1,1,2,2-Tetrachloroethane	0.15	U	0.15	ppb	79-34-5	1	0		166496			percent	N			0.5
9222	99	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	EBZME4	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	4-Ethyl toluene	0.15	U	0.15	ppb	622-96-8	1	0		166496			percent	N			1
9223	100	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	EBZME4	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	4-Ethyl toluene	0.74	U	0.74	µg/m3	622-96-8	1	0		166496			percent	N			4.9
9224	101	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	TMB135	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	1,3,5-Trimethylbenzene	0.15	U	0.15	ppb	108-67-8	1	0		166496			percent	N			0.5
9225	102	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	TMB135	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	1,3,5-Trimethylbenzene	0.74	U	0.74	µg/m3	108-67-8	1	0		166496			percent	N			2.5
9226	103	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	TMB124	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	1,2,4-Trimethylbenzene	0.15	U	0.15	ppb	95-63-6	1	0		166496			percent	N			0.5
9227	104	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	TMB124	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	1,2,4-Trimethylbenzene	0.74	U	0.74	µg/m3	95-63-6	1	0		166496			percent	N			2.5
9228	105	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	DCBZ13	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	1,3-Dichlorobenzene	0.15	U	0.15	ppb	541-73-1	1	0		166496			percent	N			0.5
9229	106	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	DCBZ13	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	1,3-Dichlorobenzene	0.9	U	0.9	µg/m3	541-73-1	1	0		166496			percent	N			3
9230	107	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	DCBZ14	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	1,4-Dichlorobenzene	0.15	U	0.15	ppb	106-46-7	1	0		166496			percent	N			0.5
9231	108	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	DCBZ14	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	1,4-Dichlorobenzene	0.9	U	0.9	µg/m3	106-46-7	1	0		166496			percent	N			3
9232	109	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	DCBZ12	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	1,2-Dichlorobenzene	0.3	U	0.3	ppb	95-50-1	1	0		166496			percent	N			1
9233	111	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	EPA TO-15	BR4FBZ	TO15	AIR	N		3/8/2016	3/14/2016		3/21/2016	4-Bromofluorobenzene	113.91			PERCENT	460-00-4	1	0		166496	20	113.91	percent	Y			
9234	120	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15 SIM	PCE	TO15SIM	AIR	N		3/12/2016	3/14/2016		3/15/2016	Tetrachloroethene	59	E		µg/m3	127-18-4	1	0		166464			percent	N			0.34
9235	118	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15 SIM	TCE	TO15SIM	AIR	N		3/12/2016	3/14/2016		3/15/2016	Trichloroethene	4.3			µg/m3	79-01-6	1	0		166464			percent	N			0.27
9236	119	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15 SIM	PCE	TO15SIM	AIR	N		3/12/2016	3/14/2016		3/15/2016	Tetrachloroethene	8.7	E		ppb	127-18-4	1	0		166464			percent	N			0.05
9237	114	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15 SIM	VC	TO15SIM	AIR	N		3/12/2016	3/14/2016		3/15/2016	Vinyl chloride	0.13	U		µg/m3	75-01-4	1	0		166464			percent	N			0.13
9238	116	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	N		3/12/2016	3/14/2016		3/15/2016	cis-1,2-Dichloroethene	0.39			µg/m3	156-59-2	1	0		166464			percent	N			0.2
9239	117	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15 SIM	TCE	TO15SIM	AIR	N		3/12/2016	3/14/2016		3/15/2016	Trichloroethene	0.79			ppb	79-01-6	1	0		166464			percent	N			0.05
9240	122	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	N		3/12/2016	3/14/2016		3/15/2016	1,4-Dioxane	0.18	U		µg/m3	123-91-1	1	0		166464			percent	N			0.18
9241	223	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15 SIM	BR4FBZ	TO15SIM	AIR	N		3/12/2016	3/14/2016		3/15/2016	4-Bromofluorobenzene	111.72			PERCENT	460-00-4	1	0		166464	1	111.72	percent	Y			
9242	113	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15 SIM	VC	TO15SIM	AIR	N		3/12/2016	3/14/2016		3/15/2016	Vinyl chloride	0.05	U		ppb	75-01-4	1	0		166464			percent	N			0.05
9243	115	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	N		3/12/2016	3/14/2016		3/15/2016	cis-1,2-Dichloroethene	0.098			ppb	156-59-2	1	0		166464			percent	N			0.05
9244	121	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	N		3/12/2016	3/14/2016		3/15/2016	1,4-Dioxane	0.05	U		ppb	123-91-1	1	0		166464			percent	N			0.05
9245	254	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	ACE	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	Acetone	16		0.3	ppb	67-64-1	1	0		166496			percent	N			1
9246	255	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	ACE	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	Acetone	38		0.71	µg/m3	67-64-1	1	0		166496			percent	N			2.4
9247	277	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	THF	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	Tetrahydrofuran	14		0.44	µg/m3	109-99-9	1	0		166496			percent	N			1.5
9248	303	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	BZME	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	Toluene	15		0.57	µg/m3	108-88-3	1	0		166496			percent	N			1.9
9249	238	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	CLME	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	Methyl chloride	1.3		0.15	ppb	74-87-3	1	0		166496			percent	N			0.5
9250	239	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	CLME	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	Methyl chloride	2.7		0.31	µg/m3	74-87-3	1	0		166496			percent	N			1
9251	241	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	DCTFA12	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	Freon 114	1	U	1	µg/m3	76-14-2	1	0		166496			percent	N			3.5
9252	251	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	FC113	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	Freon 113	1.1	U	1.1	µg/m3	76-13-1	1	0		166496			percent	N			3.8
9253	266	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	MEK	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	Methyl ethyl ketone	2.6		0.15	ppb	78-93-3	1	0		166496			percent	N			0.5
9254	267	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	MEK	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	Methyl ethyl ketone	7.5		0.44	µg/m3	78-93-3	1	0		166496			percent	N			1.5
9255	272	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	C6N	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	n-Hexane	1.1		0.15	ppb	110-54-3	1	0		166496			percent	N			0.5
9256	273	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	C6N	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	n-Hexane	3.9		0.53	µg/m3	110-54-3	1	0		166496			percent	N			1.8
9257	275	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	TCLME	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	Chloroform	4.6		0.73	µg/m3	67-66-3	1	0		166496			percent	N			2.4
9258	276	2053993237	20

APPENDIX A-1

Laboratory Validated Results

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
9180	49	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9181	50	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.73	U	X	U			0.73	2.4	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9182	51	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9183	52	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.44	U	X	U			0.44	1.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9184	53	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9185	54	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.61	U	X	U			0.61	2	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9186	55	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9187	56	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.82	U	X	U			0.82	2.7	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9188	57	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9189	58	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.94	U	X	U			0.94	3.1	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9190	59	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.3	J	X	J			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9191	60	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.96	J	X	J			0.48	1.6	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9192	61	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.17	J	X	J			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9193	62	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.6	J	X	J			0.52	1.7	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9194	63	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9195	64	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.73	U	X	U			0.73	2.4	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9196	65	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9197	67	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9198	68	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.61	U	X	U			0.61	2	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9199	69	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9200	70	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.68	U	X	U			0.68	2.3	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9201	71	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9202	72	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.61	U	X	U			0.61	2	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9203	73	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9204	74	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.68	U	X	U			0.68	2.3	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9205	75	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9206	76	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.82	U	X	U			0.82	2.7	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9207	77	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.92		X	=			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9208	79	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.3	U	X	U			0.3	1	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9209	81	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9210	83	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9211	85	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9212	86	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.69	U	X	U			0.69	2.3	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9213	87	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9214	88	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.65	U	X	U			0.65	2.2	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9215	89	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.27	J	X	J			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9216	91	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9217	92	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.65	U	X	U			0.65	2.2	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9218	93	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9219	94	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.64	U	X	U			0.64	2.1	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9220	95	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9221	97	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9222	99	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	1	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9223	100	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.74	U	X	U			0.74	4.9	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9224	101	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9225	102	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.74	U	X	U			0.74	2.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9226	103	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9227	104	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.74	U	X	U			0.74	2.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9228	105	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9229	106	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.9	U	X	U			0.9	3	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9230	107	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9231	108	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.9	U	X	U			0.9	3	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9232	109	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.3	U	X	U			0.3	1	A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9233	111	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	113.91		X	=	67.698	129.86			A-0037H-030816-IA-LAU	4.30EPACLP	1/0/1900					166496		TRUE
9234	120	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	59	J	X	E				0.34	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166464		TRUE
9235	118	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	4.3		X	=				0.27	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166464		TRUE
9236	119	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	8.7	J	X	E				0.05	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166464		TRUE
9237	114	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.13	U	X	U				0.13	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166464		TRUE
9238	116	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.39		X	=				0.2	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166464		TRUE
9239	117	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.79		X	=				0.05	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166464		TRUE
9240	122	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.18	U	X	U				0.18	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166464		TRUE
9241	223	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	111.72		X	=	48.778	151.81			A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166464		TRUE
9242	113	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166464		TRUE
9243	115	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.098		X	=				0.05	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166464		TRUE
9244	121	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	A-0040H-031216-IA-KIT	4.30EPACLP	1/0/1900					166464		TRUE
9245	254	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	16		X	=			0.3	1	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9246	255	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	38		X	=			0.71	2.4	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9247	277	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	14	J	X	=			0.44	1.5	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9248	303	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	15		X	=			0.57	1.9	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9249	238	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.3		X	=			0.15	0.5	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9250	239	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	2.7		X	=			0.31	1	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9251	241	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1	U	X	U			1	3.5	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9252	251	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.1	U	X	U			1.1	3.8	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9253	266	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	2.6		X	=			0.15	0.5	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9254	267	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	7.5		X	=			0.44	1.5	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9255	272	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.1		X	=			0.15	0.5	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9256	273	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	3.9		X	=			0.53	1.8	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9257	275	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	4.6		X	=			0.73	2.4	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9258	276	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	4.9	J	X	=			0.15	0.5	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9259	281	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.3	J	X	J			0.82	2.7	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
9180	49	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9181	50	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			2.4	2.4			jbeckett - Tier 2B
9182	51	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5	none	LCSRPD	jbeckett - Tier 2B
9183	52	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			1.5	1.5	none	LCSRPD	jbeckett - Tier 2B
9184	53	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9185	54	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9186	55	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9187	56	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			2.7	2.7			jbeckett - Tier 2B
9188	57	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9189	58	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			3.1	3.1			jbeckett - Tier 2B
9190	59	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9191	60	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			1.6	1.6			jbeckett - Tier 2B
9192	61	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9193	62	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			1.7	1.7			jbeckett - Tier 2B
9194	63	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9195	64	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			2.4	2.4			jbeckett - Tier 2B
9196	65	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9197	67	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9198	68	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9199	69	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9200	70	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			2.3	2.3			jbeckett - Tier 2B
9201	71	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9202	72	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9203	73	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9204	74	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			2.3	2.3			jbeckett - Tier 2B
9205	75	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9206	76	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			2.7	2.7			jbeckett - Tier 2B
9207	77	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9208	79	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9209	81	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9210	83	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9211	85	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9212	86	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			2.3	2.3			jbeckett - Tier 2B
9213	87	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9214	88	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			2.2	2.2			jbeckett - Tier 2B
9215	89	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9216	91	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9217	92	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			2.2	2.2			jbeckett - Tier 2B
9218	93	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9219	94	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			2.1	2.1			jbeckett - Tier 2B
9220	95	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9221	97	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9222	99	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9223	100	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			4.9	4.9			jbeckett - Tier 2B
9224	101	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9225	102	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			2.5	2.5			jbeckett - Tier 2B
9226	103	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9227	104	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			2.5	2.5			jbeckett - Tier 2B
9228	105	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9229	106	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			3	3			jbeckett - Tier 2B
9230	107	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9231	108	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			3	3			jbeckett - Tier 2B
9232	109	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9233	111	1459451983	20	ALSS	1607459	1607459	A-0037H-030816-IA-LAU	A-0037H-030816-IA-LAU	1607459001	4/7/2016	mfesler	20	ppb					jbeckett - Tier 2B
9234	120	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.34	0.34	J	>ICLinearRange	jbeckett - Tier 2B
9235	118	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.27	0.27			jbeckett - Tier 2B
9236	119	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.05	0.05	J	>ICLinearRange	jbeckett - Tier 2B
9237	114	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.13	0.13			jbeckett - Tier 2B
9238	116	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.2	0.2			jbeckett - Tier 2B
9239	117	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9240	122	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.18	0.18			jbeckett - Tier 2B
9241	223	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler	1	ppb					jbeckett - Tier 2B
9242	113	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9243	115	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9244	121	1905735216	20	ALSS	1607459	1607459	A-0040H-031216-IA-KIT	A-0040H-031216-IA-KIT	1607459002	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9245	254	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9246	255	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			2.4	2.4			jbeckett - Tier 2B
9247	277	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			1.5	1.5	J	LCSRPD	jbeckett - Tier 2B
9248	303	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			1.9	1.9			jbeckett - Tier 2B
9249	238	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9250	239	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9251	241	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			3.5	3.5			jbeckett - Tier 2B
9252	251	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			3.8	3.8			jbeckett - Tier 2B
9253	266	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9254	267	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			1.5	1.5			jbeckett - Tier 2B
9255	272	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9256	273	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			1.8	1.8			jbeckett - Tier 2B
9257	275	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			2.4	2.4			jbeckett - Tier 2B
9258	276	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5	J	LCSRPD	jbeckett - Tier 2B
9259	281	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			2.7	2.7			jbeckett - Tier 2B
9260	285	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			1.6	1.6			jbeckett - Tier 2B
9261	291	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			3.4	3.4			jbeckett - Tier 2B
9262	293	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9263	302	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9264	305	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			4.1	4.1			jbeckett - Tier 2B
9265	307	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			4.3	4.3			jbeckett - Tier 2B
9266	309	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			3.8	3.8			jbeckett - Tier 2B
9267	313	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			2.2	2.2			jbeckett - Tier 2B
9268	314	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
9269	315	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	XYLMP	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	m,p-Xylene	6.2		0.65	µg/m3	179601-23-1	1	0		166496			percent	N			2.2
9270	317	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	XYLO	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	o-Xylene	1.7	J	0.65	µg/m3	95-47-6	1	0		166496			percent	N			2.2
9271	321	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	TBME	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	Bromoform	1.6	U	1.6	µg/m3	75-25-2	1	0		166496			percent	N			5.2
9272	323	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	PCA	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	1,1,2,2-Tetrachloroethane	1	U	1	µg/m3	79-34-5	1	0		166496			percent	N			3.4
9273	335	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	DCBZ12	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	1,2-Dichlorobenzene	1.8	U	1.8	µg/m3	95-50-1	1	0		166496			percent	N			6
9274	236	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	FC12	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	Dichlorodifluoromethane	0.15	U	0.15	ppb	75-71-8	1	0		166496			percent	N			0.5
9275	237	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	FC12	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	Dichlorodifluoromethane	0.74	U	0.74	µg/m3	75-71-8	1	0		166496			percent	N			2.5
9276	240	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	DCTFA12	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	Freon 114	0.15	U	0.15	ppb	76-14-2	1	0		166496			percent	N			0.5
9277	242	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	ERYTHRENE	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	1,3-Butadiene	0.15	U	0.15	ppb	106-99-0	1	0		166496			percent	N			0.5
9278	243	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	ERYTHRENE	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	1,3-Butadiene	0.33	U	0.33	µg/m3	106-99-0	1	0		166496			percent	N			1.1
9279	244	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	BRME	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	Bromomethane	0.15	U	0.15	ppb	74-83-9	1	0		166496			percent	N			0.5
9280	245	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	BRME	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	Bromomethane	0.58	U	0.58	µg/m3	74-83-9	1	0		166496			percent	N			1.9
9281	246	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	CLEA	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	Ethyl chloride	0.15	U	0.15	ppb	75-00-3	1	0		166496			percent	N			0.5
9282	247	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	CLEA	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	Ethyl chloride	0.4	U	0.4	µg/m3	75-00-3	1	0		166496			percent	N			1.3
9283	248	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	FC11	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	Freon 11	0.15	U	0.15	ppb	75-69-4	1	0		166496			percent	N			0.5
9284	249	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	FC11	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	Freon 11	0.84	U	0.84	µg/m3	75-69-4	1	0		166496			percent	N			2.8
9285	250	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	FC113	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	Freon 113	0.15	U	0.15	ppb	76-13-1	1	0		166496			percent	N			0.5
9286	252	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	DCE11	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	1,1-Dichloroethene	0.15	U	0.15	ppb	75-35-4	1	0		166496			percent	N			0.5
9287	253	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	DCE11	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	1,1-Dichloroethene	0.59	U	0.59	µg/m3	75-35-4	1	0		166496			percent	N			2
9288	256	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	CDS	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	Carbon disulfide	0.15	U	0.15	ppb	75-15-0	1	0		166496			percent	N			0.5
9289	257	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	CDS	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	Carbon disulfide	0.47	U	0.47	µg/m3	75-15-0	1	0		166496			percent	N			1.6
9290	258	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	MTLNCL	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	Methylene chloride	0.15	U	0.15	ppb	75-09-2	1	0		166496			percent	N			0.5
9291	259	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	MTLNCL	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	Methylene chloride	0.52	U	0.52	µg/m3	75-09-2	1	0		166496			percent	N			1.7
9292	260	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	DCE12T	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	trans-1,2-Dichloroethene	0.15	U	0.15	ppb	156-60-5	1	0		166496			percent	N			0.5
9293	261	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	DCE12T	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	trans-1,2-Dichloroethene	0.59	U	0.59	µg/m3	156-60-5	1	0		166496			percent	N			2
9294	262	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	TBUTMEE	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	Methyl t-butyl ether	0.15	U	0.15	ppb	1634-04-4	1	0		166496			percent	N			0.5
9295	263	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	TBUTMEE	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	Methyl t-butyl ether	0.54	U	0.54	µg/m3	1634-04-4	1	0		166496			percent	N			1.8
9296	264	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	EPA TO-15	VA	TO15	AIR	FD		3/12/2016	3/14/2016		3/21/2016	Vinyl acetate	0.15	U	0.15	ppb	108-05-4	1	0		166496			percent	N			0.5

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
9269	315	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	6.2		X	=			0.65	2.2	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9270	317	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.7	J	X	J			0.65	2.2	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9271	321	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.6	U	X	U			1.6	5.2	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9272	323	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1	U	X	U			1	3.4	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9273	335	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.8	U	X	U			1.8	6	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9274	236	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	UJ	X	U			0.15	0.5	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9275	237	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.74	UJ	X	U			0.74	2.5	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9276	240	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9277	242	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	UJ	X	U			0.15	0.5	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9278	243	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.33	UJ	X	U			0.33	1.1	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9279	244	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9280	245	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.58	U	X	U			0.58	1.9	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9281	246	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9282	247	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.4	U	X	U			0.4	1.3	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9283	248	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9284	249	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.84	U	X	U			0.84	2.8	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9285	250	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9286	252	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9287	253	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.59	U	X	U			0.59	2	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9288	256	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9289	257	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.47	U	X	U			0.47	1.6	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9290	258	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	UJ	X	U			0.15	0.5	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9291	259	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.52	UJ	X	U			0.52	1.7	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9292	260	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9293	261	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.59	U	X	U			0.59	2	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9294	262	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9295	263	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.54	U	X	U			0.54	1.8	A-0040H-031216-IA-BAS-D	4.30EPACLP	1/0/1900					166496		TRUE
9296	264	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
9269	315	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			2.2	2.2			jbeckett - Tier 2B
9270	317	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			2.2	2.2			jbeckett - Tier 2B
9271	321	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			5.2	5.2			jbeckett - Tier 2B
9272	323	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			3.4	3.4			jbeckett - Tier 2B
9273	335	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			6	6			jbeckett - Tier 2B
9274	236	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5	UJ	FD>RPD	jbeckett - Tier 2B
9275	237	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			2.5	2.5	UJ	FD>RPD	jbeckett - Tier 2B
9276	240	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9277	242	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5	UJ	FD>RPD	jbeckett - Tier 2B
9278	243	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			1.1	1.1	UJ	FD>RPD	jbeckett - Tier 2B
9279	244	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9280	245	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			1.9	1.9			jbeckett - Tier 2B
9281	246	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9282	247	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			1.3	1.3			jbeckett - Tier 2B
9283	248	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9284	249	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			2.8	2.8			jbeckett - Tier 2B
9285	250	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9286	252	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9287	253	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9288	256	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9289	257	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			1.6	1.6			jbeckett - Tier 2B
9290	258	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5	UJ	FD>RPD	jbeckett - Tier 2B
9291	259	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			1.7	1.7	UJ	FD>RPD	jbeckett - Tier 2B
9292	260	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9293	261	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9294	262	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9295	263	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			1.8	1.8			jbeckett - Tier 2B
9296	264	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5	none	LCS>UCL	jbeckett - Tier 2B
9296	264	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5	none	LCSD>UCL	jbeckett - Tier 2B
9296	264	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5	NONE	CCV>UCL	jbeckett - Tier 2B
9297	265	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			1.8	1.8	none	LCSD>UCL	jbeckett - Tier 2B
9297	265	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			1.8	1.8	none	LCS>UCL	jbeckett - Tier 2B
9297	265	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			1.8	1.8	NONE	CCV>UCL	jbeckett - Tier 2B
9298	268	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9299	269	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9300	270	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9301	271	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			3.6	3.6			jbeckett - Tier 2B
9302	274	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9303	278	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9304	279	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9305	280	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9306	282	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9307	283	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			3.1	3.1			jbeckett - Tier 2B
9308	284	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9309	286	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9310	287	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			1.7	1.7			jbeckett - Tier 2B
9311	288	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9312	289	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			2.4	2.4			jbeckett - Tier 2B
9313	290	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9314	292	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9315	294	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9316	295	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			2.3	2.3			jbeckett - Tier 2B
9317	296	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9318	297	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9319	298	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9320	299	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			2.3	2.3			jbeckett - Tier 2B
9321	300	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9322	301	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			2.7	2.7			jbeckett - Tier 2B
9323	304	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9324	306	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9325	308	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9326	310	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9327	311	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			2.3	2.3			jbeckett - Tier 2B
9328	312	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9329	316	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9330	318	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9331	319	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			2.1	2.1			jbeckett - Tier 2B
9332	320	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9333	322	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9334	324	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9335	325	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			4.9	4.9			jbeckett - Tier 2B
9336	326	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9337	327	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			2.5	2.5			jbeckett - Tier 2B
9338	328	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5	UJ	FD>RPD	jbeckett - Tier 2B
9339	329	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			2.5	2.5	UJ	FD>RPD	jbeckett - Tier 2B
9340	330	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9341	331	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			3	3			jbeckett - Tier 2B
9342	332	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9343	333	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			3	3			jbeckett - Tier 2B
9344	334	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9345	336	2053993237	20	ALSS	1607459	1607459	A-0040H-031216-IA-BAS-D	A-0040H-031216-IA-BAS-D	1607459003	4/7/2016	mfesler	20	ppb					jbeckett - Tier 2B
9346	436	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9347	438	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9348	439	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9349	448	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9350	452	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		1	1			jbeckett - Tier 2B
9351	457	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9352	489	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9353	501	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B

APPENDIX A-1

Laboratory Validated Results

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
9354	353	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	ACE	TO15	AIR	LB					3/21/2016	Acetone	0.3	U	0.3	ppb	67-64-1	1	0		166496			percent	N			1
9355	378	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	HXO2	TO15	AIR	LB					3/21/2016	2-Hexanone	0.3	U	0.3	ppb	591-78-6	1	0		166496			percent	N			1
9356	393	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	DCBZ12	TO15	AIR	LB					3/21/2016	1,2-Dichlorobenzene	0.3	U	0.3	ppb	95-50-1	1	0		166496			percent	N			1
9357	394	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	FC12	TO15	AIR	BS					3/21/2016	Dichlorodifluoromethane	11.3		0.15	ppb	75-71-8	1	0		166496	10	113.06	percent	N			0.5
9358	404	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	CLME	TO15	AIR	BS					3/21/2016	Methyl chloride	10.5		0.15	ppb	74-87-3	1	0		166496	10	104.98	percent	N			0.5
9359	405	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	DCTFA12	TO15	AIR	BS					3/21/2016	Freon 114	10.1		0.15	ppb	76-14-2	1	0		166496	10	101.15	percent	N			0.5
9360	406	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	ERYTHRENE	TO15	AIR	BS					3/21/2016	1,3-Butadiene	10.1		0.15	ppb	106-99-0	1	0		166496	10	101.21	percent	N			0.5
9361	407	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	BRME	TO15	AIR	BS					3/21/2016	Bromomethane	11.1		0.15	ppb	74-83-9	1	0		166496	10	110.54	percent	N			0.5
9362	408	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	CLEA	TO15	AIR	BS					3/21/2016	Ethyl chloride	10.4		0.15	ppb	75-00-3	1	0		166496	10	104	percent	N			0.5
9363	409	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	FC11	TO15	AIR	BS					3/21/2016	Freon 11	10.6		0.15	ppb	75-69-4	1	0		166496	10	106.01	percent	N			0.5
9364	410	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	FC113	TO15	AIR	BS					3/21/2016	Freon 113	10.1		0.15	ppb	76-13-1	1	0		166496	10	100.93	percent	N			0.5
9365	411	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	DCE11	TO15	AIR	BS					3/21/2016	1,1-Dichloroethene	10.7		0.15	ppb	75-35-4	1	0		166496	10	107.36	percent	N			0.5
9366	412	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	ACE	TO15	AIR	BS					3/21/2016	Acetone	10.5		0.3	ppb	67-64-1	1	0		166496	10	105.42	percent	N			1
9367	413	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	CDS	TO15	AIR	BS					3/21/2016	Carbon disulfide	10.3		0.15	ppb	75-15-0	1	0		166496	10	102.61	percent	N			0.5
9368	414	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	MTLNCL	TO15	AIR	BS					3/21/2016	Methylene chloride	10.1		0.15	ppb	75-09-2	1	0		166496	10	101.08	percent	N			0.5
9369	416	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	TBUTMEE	TO15	AIR	BS					3/21/2016	Methyl t-butyl ether	10.7		0.15	ppb	1634-04-4	1	0		166496	10	106.59	percent	N			0.5
9370	417	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	VA	TO15	AIR	BS					3/21/2016	Vinyl acetate	26.7		0.15	ppb	108-05-4	1	0		166496	10	267.06	percent	N			0.5
9371	418	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	MEK	TO15	AIR	BS					3/21/2016	Methyl ethyl ketone	10.9		0.15	ppb	78-93-3	1	0		166496	10	109.21	percent	N			0.5
9372	419	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	DCA11	TO15	AIR	BS					3/21/2016	1,1-Dichloroethane	10.4		0.15	ppb	75-34-3	1	0		166496	10	103.54	percent	N			0.5
9373	421	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	C6N	TO15	AIR	BS					3/21/2016	n-Hexane	10.9		0.15	ppb	110-54-3	1	0		166496	10	109.12	percent	N			0.5
9374	422	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	TCLME	TO15	AIR	BS					3/21/2016	Chloroform	10.3		0.15	ppb	67-66-3	1	0		166496	10	103.06	percent	N			0.5
9375	423	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	THF	TO15	AIR	BS					3/21/2016	Tetrahydrofuran	10.8		0.15	ppb	109-99-9	1	0		166496	10	108.35	percent	N			0.5
9376	424	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	DCA12	TO15	AIR	BS					3/21/2016	1,2-Dichloroethane	11.1		0.15	ppb	107-06-2	1	0		166496	10	111.04	percent	N			0.5
9377	425	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	TCA111	TO15	AIR	BS					3/21/2016	1,1,1-Trichloroethane	10.9		0.15	ppb	71-55-6	1	0		166496	10	108.64	percent	N			0.5
9378	426	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	CTCL	TO15	AIR	BS					3/21/2016	Carbon tetrachloride	10.9		0.15	ppb	56-23-5	1	0		166496	10	109.02	percent	N			0.5
9379	428	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	CYHEXANE	TO15	AIR	BS					3/21/2016	Cyclohexane	10.3		0.15	ppb	110-82-7	1	0		166496	10	103.43	percent	N			0.5
9380	429	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	DCPA12	TO15	AIR	BS					3/21/2016	1,2-Dichloropropane	10.5		0.15	ppb	78-87-5	1	0		166496	10	104.54	percent	N			0.5
9381	430	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	BDCME	TO15	AIR	BS					3/21/2016	Bromodichloromethane	10.7		0.15	ppb	75-27-4	1	0		166496	10	107.21	percent	N			0.5
9382	431	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	C7N	TO15	AIR	BS					3/21/2016	Heptane	11.2		0.15	ppb	142-82-5	1	0		166496	10	111.72	percent	N			0.5
9383	432	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	DCP13C	TO15	AIR	BS					3/21/2016	cis-1,3-Dichloropropene	11.3		0.15	ppb	10061-01-5	1	0		166496	10	113.29	percent	N			0.5
9384	433	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	MIBK	TO15	AIR	BS					3/21/2016	Methyl isobutyl ketone	11.8		0.15	ppb	108-10-1	1	0		166496	10	117.81	percent	N			0.5
9385	434	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	DCP13T	TO15	AIR	BS					3/21/2016	trans-1,3-Dichloropropene	11.7		0.15	ppb	10061-02-6	1	0		166496	10	117.23	percent	N			0.5
9386	435	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	TCA112	TO15	AIR	BS					3/21/2016	1,1,2-Trichloroethane	10.4		0.15	ppb	79-00-5	1	0		166496	10	104.26	percent	N			0.5
9387	437	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	HXO2	TO15	AIR	BS					3/21/2016	2-Hexanone	10.9		0.3	ppb	591-78-6	1	0		166496	10	108.76	percent	N			1
9388	441	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	EBZ	TO15	AIR	BS					3/21/2016	Ethyl benzene	10.1		0.15	ppb	100-41-4	1	0		166496	10	100.92	percent	N			0.5
9389	442	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	XYLMP	TO15	AIR	BS					3/21/2016	m,p-Xylene	20.4		0.15	ppb	179601-23-1	1	0		166496	20	101.81	percent	N			0.5
9390	443	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	XYLO	TO15	AIR	BS					3/21/2016	o-Xylene	10.2		0.15	ppb	95-47-6	1	0		166496	10	102.26	percent	N			0.5
9391	444	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	STY	TO15	AIR	BS					3/21/2016	Styrene	10.4		0.15	ppb	100-42-5	1	0		166496	10	104.24	percent	N			0.5
9392	445	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	TBME	TO15	AIR	BS					3/21/2016	Bromoform	9.8		0.15	ppb	75-25-2	1	0		166496	10	97.985	percent	N			0.5
9393	446	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	PCA	TO15	AIR	BS					3/21/2016	1,1,2,2-Tetrachloroethane	9.5		0.15	ppb	79-34-5	1	0		166496	10	94.993	percent	N			0.5
9394	447	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	EBZME4	TO15	AIR	BS					3/21/2016	4-Ethyl toluene	10.3		0.15	ppb	622-96-8	1	0		166496	10	102.6	percent	N			1
9395	449	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	TMB124	TO15	AIR	BS					3/21/2016	1,2,4-Trimethylbenzene	10.2		0.15	ppb	95-63-6	1	0		166496	10	102.24	percent	N			0.5
9396	450	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	DCBZ13	TO15	AIR	BS					3/21/2016	1,3-Dichlorobenzene	10.1		0.15	ppb	541-73-1	1	0		166496	10	100.88	percent	N			0.5
9397	451	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	DCBZ14	TO15	AIR	BS					3/21/2016	1,4-Dichlorobenzene	10.1		0.15	ppb	106-46-7	1	0		166496	10	101.3	percent	N			0.5
9398	453	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	FC12	TO15	AIR	BD					3/21/2016	Dichlorodifluoromethane	11.4		0.15	ppb	75-71-8	1	0		166496	10	113.53	percent	N			0.5
9399	454	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	CLME	TO15	AIR	BD					3/21/2016	Methyl chloride	10.4		0.15	ppb	74-87-3	1	0		166496	10	103.57	percent	N			0.5
9400	455	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	DCTFA12	TO15	AIR	BD					3/21/2016	Freon 114	10.2		0.15	ppb	76-14-2	1	0		166496	10	102.01	percent	N			0.5
9401	456	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	ERYTHRENE	TO15	AIR	BD					3/21/2016	1,3-Butadiene	10.2		0.15	ppb	106-99-0	1	0		166496	10	101.83	percent	N			0.5
9402	458	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	CLEA	TO15	AIR	BD					3/21/2016	Ethyl chloride	10.3		0.15	ppb	75-00-3	1	0		166496	10	103.36	percent	N			0.5
9403	459	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	FC11	TO15	AIR	BD					3/21/2016	Freon 11	10.6		0.15	ppb	75-69-4	1	0		166496	10	105.51	percent	N			0.5
9404	460	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	FC113	TO15	AIR	BD					3/21/2016	Freon 113	10.1		0.15	ppb	76-13-1	1	0		166496	10	100.6	percent	N			0.5
9405	461	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	DCE11	TO15	AIR	BD					3/21/2016	1,1-Dichloroethene	10.7		0.15	ppb	75-35-4	1	0		166496	10	107.01	percent	N			0.5
9406	462	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	ACE	TO15	AIR	BD					3/21/2016	Acetone	10.3		0.3	ppb	67-64-1	1	0		166496	10	103.43	percent	N			1
9407	463	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	CDS	TO15	AIR	BD					3/21/2016	Carbon disulfide	10.2		0.15	ppb	75-15-0	1	0		166496	10	101.59	percent	N			0.5
9408	466	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	TBUTMEE	TO15	AIR	BD					3/21/2016	Methyl t-butyl ether	10.5		0.15	ppb	1634-04-4	1	0		166496	10	105.26	percent	N			0.5
9409	467	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	VA	TO15	AIR	BD					3/21/2016	Vinyl acetate	26.1		0.15	ppb	108-05-4	1	0		166496	10	260.99	percent	N			0.5
9410	468	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	MEK	TO15	AIR	BD					3/21/2016	Methyl ethyl ketone	10.6		0.15	ppb	78-93-3	1	0		166496	10	106.11	percent	N			0.5
9411	469	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	DCA11	TO15	AIR	BD					3/21/2016	1,1-Dichloroethane	10.2		0.15	ppb	75-34-3	1	0		166496	10	101.83	percent	N			0.5
9412	471	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	C6N	TO15	AIR	BD					3/21/2016	n-Hexane	10.9		0.15	ppb	110-54-3	1	0		166496	10	109.26	percent	N			0.5
9413	472	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	TCLME	TO15	AIR	BD					3/21/2016	Chloroform	10.3		0.15	ppb	67-66-3	1	0		166496	10	102.87	percent	N			0.5
9414	474	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	DCA12	TO15	AIR	BD					3/21/2016	1,2-Dichloroethane	11.1		0.15	ppb	107-06-2	1	0		166496	10	110.64	percent	N			0.5
9415	475	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	TCA111	TO15	AIR	BD					3/21/2016	1,1,1-Trichloroethane	10.9		0.15	ppb	71-55-6	1	0		166496	10	108.81	percent	N			0.5
9416	476	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	CTCL	TO15	AIR	BD					3/21/2016	Carbon tetrachloride	10.9		0.15	ppb	56-23-5	1	0		166496	10	109.44	percent	N			0.5
9417	478	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	CYHEXANE	TO15	AIR	BD					3/21/2016	Cyclohexane	10.3		0.15	ppb	110-82-7	1	0		166496	10	103.11	percent	N			0.5
9418	479	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	DCPA12	TO15	AIR	BD					3/21/2016	1,2-Dichloropropane	10.4		0.15	ppb	78-87-5	1	0		166496	10	104.3	percent	N			0.5
9419	480	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	BDCME	TO15	AIR	BD					3/21/2016	Bromodichloromethane	10.7		0.15	ppb	75-27-4	1	0		166496	10	107.19	percent	N			0.5
9420	481	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	C7N	TO15	AIR	BD					3/21/2016	Heptane	11.2		0.15	ppb	142-82-5	1	0		166496	10	112.04	percent	N			0.5
9421	482	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	DCP13C	TO15	AIR	BD					3/21/2016	cis-1,3-Dichloropropene	11.2		0.15	ppb	10061-01-5	1	0		166496	10	112.12	percent	N			0.5
9422	483	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	MIBK	TO15	AIR	BD					3/21/2016	Methyl isobutyl ketone	11.7		0.15	ppb	108-10-1	1	0		166496	10	117.26	percent	N			0.5
9423	484	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	DCP13T	TO15	AIR	BD					3/21/2016	trans-1,3-Dichloropropene	11.8		0.15	ppb	10061-02-6	1	0		166496	10	117.8	percent	N			0.5
9424	485	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	TCA112	TO15	AIR	BD					3/21/2016	1,1,2-Trichloroethane	10.5		0.15	ppb	79-00-5	1	0		166496	10	104.87	percent	N			0.5
9425	486	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	BZME	TO15	AIR	BD					3/21/2016	Toluene	11.2		0.15	ppb	108-88-3	1	0		166496	10	111.54	percent	N			0.5
9426	487	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	HXO2	TO15	AIR	BD					3/21/2016	2-Hexanone	11.2		0.3	ppb	591-78-6	1	0		166496	10	112.47	percent	N			1
9427	488	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	DBCME	TO15	AIR	BD					3/21/2016	Dibromochloromethane	11.1		0.15	ppb	124-48-1	1	0		166496	10	110.84	percent	N			0.5
9428	491	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	EBZ	TO15	AIR	BD					3/21/2016	Ethyl benzene	10.1		0.15	ppb	100-41-4	1	0		166496	10	100.55	percent	N			0.5
9429	492	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	XYLMP	TO15	AIR	BD					3/21/2016	m,p-Xylene	20.2		0.15	ppb	179601-23-1	1	0		166496	20	101.2	percent	N			0.5
9430	493	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	XYLO	TO15	AIR	BD					3/21/2016	o-Xylene	10.2		0.15	ppb	95-47-6	1	0		166496	10	101.57	percent	N			0.5
9431	494	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	STY	TO15	AIR	BD					3/21/2016	Styrene	10.4		0.15	ppb	100-42-5	1	0		166496	10	104.02	percent	N			0.5
9432	497	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	EBZME4	TO15	AIR	BD					3/21/2016	4-Ethyl toluene	10.2		0.15	ppb	622-96-8	1	0		166496	10	102.17	percent	N			1
9433	499	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	TMB124	TO15	AIR	BD					3/21/2016	1,2,4-Trimethylbenzene	10.1		0.15	ppb	95-63-6	1	0		166496	10	101.35	percent	N			0.5
9434	346	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	DCTFA12	TO15	AIR	LB					3/21/2016	Freon 114	0.15	U	0.15	ppb	76-14-2	1	0		166496			percent	N			0.5
9435	347	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	ERYTHRENE	TO15	AIR	LB					3/21/2016	1,3-Butadiene	0.15	U	0.15	ppb	106-99-0	1	0		166496			percent	N			0.5
9436	348	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	BRME	TO15	AIR	LB					3/21/2016	Bromomethane	0.15	U	0.15	ppb	74-83-9	1	0		166496			percent	N			0.5
9437	349	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	CLEA	TO15	AIR	LB					3/21/2016	Ethyl chloride	0.15	U	0.15	ppb	75-00-3	1	0		166496			percent	N			0.5
9438	350	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	FC11	TO15	AIR	LB					3/21/2016	Freon 11	0.15	U	0.15	ppb	75-69-4	1	0		166496			percent	N			0.5
9439	351	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	FC113	TO15	AIR	LB					3/21/2016	Freon 113	0.15	U	0.15	ppb	76-13-1	1	0		166496			percent	N			0.5
9440	352	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	DCE11	TO15	AIR	LB					3/21/2016	1,1-Dichloroethene	0.15	U	0.15	ppb	75-35-4	1	0		166496			percent	N			0.5
9441	354	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	CDS	TO15	AIR	LB					3/21/2016	Carbon disulfide	0.15	U	0.15	ppb	75-15-0	1	0		166496			percent	N			0.5
9442	355	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	MTLNCL	TO15	AIR	LB					3/21/2016	Methylene chloride	0.15	U	0.15	ppb	75-09-2	1	0		166496			percent	N			0.5

APPENDIX A-1

Laboratory Validated Results

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
9354	353	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	0.3	U	X	U			0.3	1	493766	4.30EPACLP						166496		TRUE
9355	378	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	0.3	U	X	U			0.3	1	493766	4.30EPACLP						166496		TRUE
9356	393	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	0.3	U	X	U			0.3	1	493766	4.30EPACLP						166496		TRUE
9357	394	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.3		X	=	59.255	135.13	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9358	404	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.5		X	=	55.169	137.44	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9359	405	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.1		X	=	64.568	128.04	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9360	406	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.1		X	=	57.992	138.25	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9361	407	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.1		X	=	63.318	129.94	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9362	408	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.4		X	=	57.618	137.13	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9363	409	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.6		X	=	58.928	132.84	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9364	410	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.1		X	=	68.501	120.04	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9365	411	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.7		X	=	67.174	125.1	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9366	412	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.5		X	=	42.491	145.96	0.3	1	493767	4.30EPACLP						166496		TRUE
9367	413	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.3		X	=	63.855	128.75	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9368	414	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.1		X	=	63.699	127.89	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9369	416	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.7		X	=	60.827	138.03	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9370	417	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	26.7		X	=	59.331	141.08	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9371	418	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.9		X	=	51.691	144.24	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9372	419	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.4		X	=	67.712	123.62	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9373	421	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.9		X	=	62.414	129.54	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9374	422	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.3		X	=	67.344	121.81	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9375	423	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.8		X	=	50.619	155.33	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9376	424	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.1		X	=	62.441	130.48	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9377	425	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.9		X	=	60.42	127.68	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9378	426	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.9		X	=	58.158	130.61	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9379	428	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.3		X	=	61.913	123.55	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9380	429	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.5		X	=	60.69	130.65	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9381	430	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.7		X	=	62.886	128.34	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9382	431	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.2		X	=	59.499	133.39	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9383	432	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.3		X	=	64.079	133.63	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9384	433	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.8		X	=	73.471	149.97	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9385	434	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.7		X	=	78.538	148.69	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9386	435	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.4		X	=	64.985	126.62	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9387	437	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.9		X	=	80.836	158.78	0.3	1	493767	4.30EPACLP						166496		TRUE
9388	441	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.1		X	=	75.851	148.51	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9389	442	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	20.4		X	=	73.675	144.89	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9390	443	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.2		X	=	74.707	147.4	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9391	444	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.4		X	=	75.945	158.11	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9392	445	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	9.8		X	=	59.748	136.05	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9393	446	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	9.5		X	=	59.318	134.78	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9394	447	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.3		X	=	69.037	163.28	0.15	1	493767	4.30EPACLP						166496		TRUE
9395	449	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.2		X	=	59.734	169.39	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9396	450	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.1		X	=	58.55	157.62	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9397	451	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.1		X	=	57.682	137.17	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9398	453	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.4		X	=	59.255	135.13	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9399	454	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.4		X	=	55.169	137.44	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9400	455	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.2		X	=	64.568	128.04	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9401	456	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.2		X	=	57.992	138.25	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9402	458	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.3		X	=	57.618	137.13	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9403	459	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.6		X	=	58.928	132.84	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9404	460	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.1		X	=	68.501	120.04	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9405	461	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.7		X	=	67.174	125.1	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9406	462	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.3		X	=	42.491	145.96	0.3	1	493768	4.30EPACLP						166496		TRUE
9407	463	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.2		X	=	63.855	128.75	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9408	466	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.5		X	=	60.827	138.03	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9409	467	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	26.1		X	=	59.331	141.08	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9410	468	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.6		X	=	51.691	144.24	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9411	469	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.2		X	=	67.712	123.62	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9412	471	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.9		X	=	62.414	129.54	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9413	472	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.3		X	=	67.344	121.81	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9414	474	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.1		X	=	62.441	130.48	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9415	475	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.9		X	=	60.42	127.68	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9416	476	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.9		X	=	58.158	130.61	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9417	478	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.3		X	=	61.913	123.55	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9418	479	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.4		X	=	60.69	130.65	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9419	480	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.7		X	=	62.886	128.34	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9420	481	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.2		X	=	59.499	133.39	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9421	482	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.2		X	=	64.079	133.63	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9422	483	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.7		X	=	73.471	149.97	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9423	484	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.8		X	=	78.538	148.69	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9424	485	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.5		X	=	64.985	126.62	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9425	486	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.2		X	=	75.551	139.43	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9426	487	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.2		X	=	80.836	158.78	0.3	1	493768	4.30EPACLP						166496		TRUE
9427	488	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.1		X	=	62.442	130.92	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9428	491	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.1		X	=	75.851	148.51	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9429	492	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	20.2		X	=	73.675	144.89	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9430	493	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.2		X	=	74.707	147.4	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9431	494	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.4		X	=	75.945	158.11	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9432	497	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.2		X	=	69.037	163.28	0.15	1	493768	4.30EPACLP						166496		TRUE
9433	499	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.1		X	=	59.734	169.39	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9434	346	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9435	347	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9436	348	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9437	349	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9438	350	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9439	351	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9440	352	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9441	354	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9442	355	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE

APPENDIX A-1

Laboratory Validated Results

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
9354	353	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9355	378	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9356	393	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9357	394	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9358	404	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9359	405	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9360	406	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9361	407	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9362	408	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9363	409	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9364	410	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9365	411	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9366	412	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		1	1			jbeckett - Tier 2B
9367	413	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9368	414	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9369	416	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9370	417	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9371	418	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9372	419	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9373	421	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9374	422	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9375	423	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9376	424	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9377	425	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9378	426	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9379	428	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9380	429	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9381	430	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9382	431	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9383	432	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9384	433	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9385	434	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9386	435	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9387	437	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		1	1			jbeckett - Tier 2B
9388	441	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9389	442	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	20		0.5	0.5			jbeckett - Tier 2B
9390	443	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9391	444	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9392	445	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9393	446	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9394	447	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		1	1			jbeckett - Tier 2B
9395	449	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9396	450	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9397	451	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9398	453	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9399	454	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9400	455	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9401	456	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9402	458	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9403	459	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9404	460	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9405	461	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9406	462	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		1	1			jbeckett - Tier 2B
9407	463	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9408	466	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9409	467	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9410	468	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9411	469	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9412	471	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9413	472	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9414	474	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9415	475	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9416	476	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9417	478	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9418	479	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9419	480	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9420	481	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9421	482	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9422	483	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9423	484	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9424	485	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9425	486	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9426	487	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		1	1			jbeckett - Tier 2B
9427	488	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9428	491	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9429	492	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	20		0.5	0.5			jbeckett - Tier 2B
9430	493	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9431	494	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9432	497	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		1	1			jbeckett - Tier 2B
9433	499	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9434	346	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9435	347	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9436	348	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9437	349	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9438	350	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9439	351	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9440	352	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9441	354	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9442	355	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B

APPENDIX A-1

Laboratory Validated Results

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
9443	356	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	DCE12T	TO15	AIR	LB					3/21/2016	trans-1,2-Dichloroethene	0.15	U	0.15	ppb	156-60-5	1	0		166496			percent	N			0.5
9444	357	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	TBUTMEE	TO15	AIR	LB					3/21/2016	Methyl t-butyl ether	0.15	U	0.15	ppb	1634-04-4	1	0		166496			percent	N			0.5
9445	358	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	VA	TO15	AIR	LB					3/21/2016	Vinyl acetate	0.15	U	0.15	ppb	108-05-4	1	0		166496			percent	N			0.5
9446	359	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	MEK	TO15	AIR	LB					3/21/2016	Methyl ethyl ketone	0.15	U	0.15	ppb	78-93-3	1	0		166496			percent	N			0.5
9447	360	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	DCA11	TO15	AIR	LB					3/21/2016	1,1-Dichloroethane	0.15	U	0.15	ppb	75-34-3	1	0		166496			percent	N			0.5
9448	361	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	ETACET	TO15	AIR	LB					3/21/2016	Ethyl acetate	0.15	U	0.15	ppb	141-78-6	1	0		166496			percent	N			1
9449	362	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	C6N	TO15	AIR	LB					3/21/2016	n-Hexane	0.15	U	0.15	ppb	110-54-3	1	0		166496			percent	N			0.5
9450	363	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	TCLME	TO15	AIR	LB					3/21/2016	Chloroform	0.15	U	0.15	ppb	67-66-3	1	0		166496			percent	N			0.5
9451	364	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	THF	TO15	AIR	LB					3/21/2016	Tetrahydrofuran	0.15	U	0.15	ppb	109-99-9	1	0		166496			percent	N			0.5
9452	365	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	DCA12	TO15	AIR	LB					3/21/2016	1,2-Dichloroethane	0.15	U	0.15	ppb	107-06-2	1	0		166496			percent	N			0.5
9453	366	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	TCA111	TO15	AIR	LB					3/21/2016	1,1,1-Trichloroethane	0.15	U	0.15	ppb	71-55-6	1	0		166496			percent	N			0.5
9454	367	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	CTCL	TO15	AIR	LB					3/21/2016	Carbon tetrachloride	0.15	U	0.15	ppb	56-23-5	1	0		166496			percent	N			0.5
9455	368	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	BZ	TO15	AIR	LB					3/21/2016	Benzene	0.15	U	0.15	ppb	71-43-2	1	0		166496			percent	N			0.5
9456	369	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	CYHEXANE	TO15	AIR	LB					3/21/2016	Cyclohexane	0.15	U	0.15	ppb	110-82-7	1	0		166496			percent	N			0.5
9457	370	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	DCPA12	TO15	AIR	LB					3/21/2016	1,2-Dichloropropane	0.15	U	0.15	ppb	78-87-5	1	0		166496			percent	N			0.5
9458	371	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	BDCME	TO15	AIR	LB					3/21/2016	Bromodichloromethane	0.15	U	0.15	ppb	75-27-4	1	0		166496			percent	N			0.5
9459	372	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	C7N	TO15	AIR	LB					3/21/2016	Heptane	0.15	U	0.15	ppb	142-82-5	1	0		166496			percent	N			0.5
9460	373	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	DCP13C	TO15	AIR	LB					3/21/2016	cis-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-01-5	1	0		166496			percent	N			0.5
9461	374	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	MIBK	TO15	AIR	LB					3/21/2016	Methyl isobutyl ketone	0.15	U	0.15	ppb	108-10-1	1	0		166496			percent	N			0.5
9462	375	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	DCP13T	TO15	AIR	LB					3/21/2016	trans-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-02-6	1	0		166496			percent	N			0.5
9463	376	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	TCA112	TO15	AIR	LB					3/21/2016	1,1,2-Trichloroethane	0.15	U	0.15	ppb	79-00-5	1	0		166496			percent	N			0.5
9464	377	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	BZME	TO15	AIR	LB					3/21/2016	Toluene	0.15	U	0.15	ppb	108-88-3	1	0		166496			percent	N			0.5
9465	379	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	DBCME	TO15	AIR	LB					3/21/2016	Dibromochloromethane	0.15	U	0.15	ppb	124-48-1	1	0		166496			percent	N			0.5
9466	380	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	EDB	TO15	AIR	LB					3/21/2016	1,2-Dibromoethane	0.15	U	0.15	ppb	106-93-4	1	0		166496			percent	N			0.5
9467	381	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	CLBZ	TO15	AIR	LB					3/21/2016	Chlorobenzene	0.15	U	0.15	ppb	108-90-7	1	0		166496			percent	N			0.5
9468	382	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	EBZ	TO15	AIR	LB					3/21/2016	Ethyl benzene	0.15	U	0.15	ppb	100-41-4	1	0		166496			percent	N			0.5
9469	383	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	XYLMP	TO15	AIR	LB					3/21/2016	m,p-Xylene	0.15	U	0.15	ppb	179601-23-1	1	0		166496			percent	N			0.5
9470	384	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	XYLO	TO15	AIR	LB					3/21/2016	o-Xylene	0.15	U	0.15	ppb	95-47-6	1	0		166496			percent	N			0.5
9471	385	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	STY	TO15	AIR	LB					3/21/2016	Styrene	0.15	U	0.15	ppb	100-42-5	1	0		166496			percent	N			0.5
9472	386	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	TBME	TO15	AIR	LB					3/21/2016	Bromoform	0.15	U	0.15	ppb	75-25-2	1	0		166496			percent	N			0.5
9473	387	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	PCA	TO15	AIR	LB					3/21/2016	1,1,2,2-Tetrachloroethane	0.15	U	0.15	ppb	79-34-5	1	0		166496			percent	N			0.5
9474	388	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	EBZME4	TO15	AIR	LB					3/21/2016	4-Ethyl toluene	0.15	U	0.15	ppb	622-96-8	1	0		166496			percent	N			1
9475	389	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	TMB135	TO15	AIR	LB					3/21/2016	1,3,5-Trimethylbenzene	0.15	U	0.15	ppb	108-67-8	1	0		166496			percent	N			0.5
9476	390	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	TMB124	TO15	AIR	LB					3/21/2016	1,2,4-Trimethylbenzene	0.15	U	0.15	ppb	95-63-6	1	0		166496			percent	N			0.5
9477	391	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	DCBZ13	TO15	AIR	LB					3/21/2016	1,3-Dichlorobenzene	0.15	U	0.15	ppb	541-73-1	1	0		166496			percent	N			0.5
9478	392	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	DCBZ14	TO15	AIR	LB					3/21/2016	1,4-Dichlorobenzene	0.15	U	0.15	ppb	106-46-7	1	0		166496			percent	N			0.5
9479	402	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	FC12	TO15	AIR	LB					3/21/2016	Dichlorodifluoromethane	0.15	U	0.15	ppb	75-71-8	1	0		166496			percent	N			0.5
9480	403	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	CLME	TO15	AIR	LB					3/21/2016	Methyl chloride	0.15	U	0.15	ppb	74-87-3	1	0		166496			percent	N			0.5
9481	415	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	DCE12T	TO15	AIR	BS					3/21/2016	trans-1,2-Dichloroethene	9.93		0.15	ppb	156-60-5	1	0		166496	10	99.327	percent	N			0.5
9482	420	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	ETACET	TO15	AIR	BS					3/21/2016	Ethyl acetate	7.51		0.15	ppb	141-78-6	1	0		166496	10	75.114	percent	N			1
9483	427	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	BZ	TO15	AIR	BS					3/21/2016	Benzene	9.91		0.15	ppb	71-43-2	1	0		166496	10	99.074	percent	N			0.5
9484	440	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	CLBZ	TO15	AIR	BS					3/21/2016	Chlorobenzene	9.58		0.15	ppb	108-90-7	1	0		166496	10	95.755	percent	N			0.5
9485	464	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	MTLNCL	TO15	AIR	BD					3/21/2016	Methylene chloride	9.98		0.15	ppb	75-09-2	1	0		166496	10	99.843	percent	N			0.5
9486	465	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	DCE12T	TO15	AIR	BD					3/21/2016	trans-1,2-Dichloroethene	9.85		0.15	ppb	156-60-5	1	0		166496	10	98.515	percent	N			0.5
9487	470	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	ETACET	TO15	AIR	BD					3/21/2016	Ethyl acetate	7.62		0.15	ppb	141-78-6	1	0		166496	10	76.206	percent	N			1
9488	473	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	THF	TO15	AIR	BD					3/21/2016	Tetrahydrofuran	8.25		0.15	ppb	109-99-9	1	0		166496	10	82.463	percent	N			0.5
9489	477	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	BZ	TO15	AIR	BD					3/21/2016	Benzene	9.86		0.15	ppb	71-43-2	1	0		166496	10	98.584	percent	N			0.5
9490	490	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	CLBZ	TO15	AIR	BD					3/21/2016	Chlorobenzene	9.56		0.15	ppb	108-90-7	1	0		166496	10	95.639	percent	N			0.5
9491	495	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	TBME	TO15	AIR	BD					3/21/2016	Bromoform	9.82		0.15	ppb	75-25-2	1	0		166496	10	98.208	percent	N			0.5
9492	496	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	PCA	TO15	AIR	BD					3/21/2016	1,1,2,2-Tetrachloroethane	9.45		0.15	ppb	79-34-5	1	0		166496	10	94.489	percent	N			0.5
9493	498	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	TMB135	TO15	AIR	BD					3/21/2016	1,3,5-Trimethylbenzene	9.95		0.15	ppb	108-67-8	1	0		166496	10	99.517	percent	N			0.5
9494	500	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	DCBZ13	TO15	AIR	BD					3/21/2016	1,3-Dichlorobenzene	9.97		0.15	ppb	541-73-1	1	0		166496	10	99.667	percent	N			0.5
9495	502	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	DCBZ12	TO15	AIR	BD					3/21/2016	1,2-Dichlorobenzene	9.97		0.3	ppb	95-50-1	1	0		166496	10	99.662	percent	N			1
9496	506	0	20	ALSS	1607459	1607459	493766	493766	493766	EPA TO-15	BR4FBZ	TO15	AIR	LB					3/21/2016	4-Bromofluorobenzene	112.11			PERCENT	460-00-4	1	0		166496	20	112.11	percent	Y			
9497	507	0	20	ALSS	1607459	1607459	493767	493767	493767	EPA TO-15	BR4FBZ	TO15	AIR	BS					3/21/2016	4-Bromofluorobenzene	114.34			PERCENT	460-00-4	1	0		166496	20	114.34	percent	Y			
9498	508	0	20	ALSS	1607459	1607459	493768	493768	493768	EPA TO-15	BR4FBZ	TO15	AIR	BD					3/21/2016	4-Bromofluorobenzene	114.35			PERCENT	460-00-4	1	0		166496	20	114.35	percent	Y			
9499	338	0	20	ALSS	1607459	1607459	493686	493686	493686	EPA TO-15 SIM	VC	TO15SIM	AIR	LB					3/15/2016	Vinyl chloride	0.05	U		ppb	75-01-4	1	0		166464			percent	N			0.05
9500	339	0	20	ALSS	1607459	1607459	493686	493686	493686	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	LB					3/15/2016	cis-1,2-Dichloroethene	0.05	U		ppb	156-59-2	1	0		166464			percent	N			0.05
9501	340	0	20	ALSS	1607459	1607459	493686	493686	493686	EPA TO-15 SIM	TCE	TO15SIM	AIR	LB					3/15/2016	Trichloroethene	0.05	U		ppb	79-01-6	1	0		166464			percent	N			0.05
9502	341	0	20	ALSS	1607459	1607459	493686	493686	493686	EPA TO-15 SIM	PCE	TO15SIM	AIR	LB					3/15/2016	Tetrachloroethene	0.05	U		ppb	127-18-4	1	0		166464			percent	N			0.05
9503	342	0	20	ALSS	1607459	1607459	493686	493686	493686	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	LB					3/15/2016	1,4-Dioxane	0.05	U		ppb	123-91-1	1	0		166464			percent	N			0.05
9504	504	0	20	ALSS	1607459	1607459	493687	493687	493687	EPA TO-15 SIM	BR4FBZ	TO15SIM	AIR	BS					3/15/2016	4-Bromofluorobenzene	109.98			PERCENT	460-00-4	1	0		166464	1	109.98	percent	Y			
9505	505	0	20	ALSS	1607459	1607459	493688	493688	493688	EPA TO-15 SIM	BR4FBZ	TO15SIM	AIR	BD					3/15/2016	4-Bromofluorobenzene	106.88			PERCENT	460-00-4	1	0		166464	1	106.88	percent	Y			
9506	343	0	20	ALSS	1607459	1607459	493687	493687	493687	EPA TO-15 SIM	VC	TO15SIM	AIR	BS					3/15/2016	Vinyl chloride	0.502			ppb	75-01-4	1	0		166464	0.5	100.42	percent	N			0.05
9507	344	0	20	ALSS	1607459	1607459	493687	493687	493687	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	BS					3/15/2016	cis-1,2-Dichloroethene	0.534			ppb	156-59-2	1	0		166464	0.5	106.85	percent	N			0.05
9508	345	0	20	ALSS	1607459	1607459	493687	493687	493687	EPA TO-15 SIM	TCE	TO15SIM	AIR	BS					3/15/2016	Trichloroethene	0.542			ppb	79-01-6	1	0		166464	0.5	108.46	percent	N			0.05
9509	395	0	20	ALSS	1607459	1607459	493687	493687	493687	EPA TO-15 SIM	PCE	TO15SIM	AIR	BS					3/15/2016	Tetrachloroethene	0.534			ppb	127-18-4	1	0		166464	0.5	106.82	percent	N			0.05
9510	396	0	20	ALSS	1607459	1607459	493687	493687	493687	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	BS					3/15/2016	1,4-Dioxane	0.528			ppb	123-91-1	1	0		166464	0.5	105.54	percent	N			0.05
9511	397	0	20	ALSS	1607459	1607459	493688	493688	493688	EPA TO-15 SIM	VC	TO15SIM	AIR	BD					3/15/2016	Vinyl chloride	0.511			ppb	75-01-4	1	0		166464	0.5	102.27	percent	N			0.05
9512	398	0	20	ALSS	1607459	1607459	493688	493688	493688	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	BD					3/15/2016	cis-1,2-Dichloroethene	0.532			ppb	156-59-2	1	0		166464	0.5	106.31	percent	N			0.05
9513	399	0	20	ALSS	1607459	1607459	493688	493688	493688	EPA TO-15 SIM	TCE	TO15SIM	AIR	BD					3/15/2016	Trichloroethene	0.517			ppb	79-01-6	1	0		166464	0.5	103.33	percent	N			0.05
9514	400	0	20	ALSS	1607459	1607459	493688	493688	493688	EPA TO-15 SIM	PCE	TO15SIM	AIR	BD					3/15/2016	Tetrachloroethene	0.509			ppb	127-18-4	1	0		166464	0.5	101.87	percent	N			0.05
9515	401	0	20	ALSS	1607459	1607459	493688	493688	493688	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	BD					3/15/2016	1,4-Dioxane	0.484			ppb	123-91-1	1	0		166464	0.5	96.885	percent	N			0.05
9516	503	0	20	ALSS	1607459	1607459	493686	493686	493686	EPA TO-15 SIM	BR4FBZ	TO15SIM	AIR	LB					3/15/2016	4-Bromofluorobenzene	98.222			PERCENT	460-00-4	1	0		166464	1	98.222	percent	Y			
9518	326	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15 SIM	VC	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	Vinyl chloride	0.13	U		µg/m3	75-01-4	1	0		166977			percent	N			0.13
9519	328	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	cis-1,2-Dichloroethene	0.2	U		µg/m3	156-59-2	1	0		166977			percent	N			0.2
9520	330	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15 SIM	TCE	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	Trichloroethene	0.27	U		µg/m3	79-01-6	1	0		166977			percent	N			0.27
9521	331	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15 SIM	PCE	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	Tetrachloroethene	0.27			ppb	127-18-4	1	0		166977			percent	N			0.05
9522	334	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	1,4-Dioxane	0.18	U		µg/m3	123-91-1	1	0		166977			percent	N			0.18
9523	325	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15 SIM	VC	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	Vinyl chloride	0.05	U		ppb	75-01-4	1	0		166977			percent	N			0.05
9524	327	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	cis-1,2-Dichloroethene	0.05	U		ppb	156-59-2	1	0		166977			percent	N			0.05
9525	329	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15 SIM	TCE	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	Trichloroethene	0.05	U		ppb	79-01-6	1	0		166977			percent	N			0.05
9526	333	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	1,4-Dioxane	0.05	U		ppb	123-91-1	1	0		166977			percent	N			0.05
9527	335	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15 SIM	BR4FBZ	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	4-Bromofluorobenzene	75.352			PERCENT	460-00-4	1	0		166977	1.0007	75.352	percent	Y			
9528	444	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15 SIM	PCE	TO15SIM	AIR	FD		3/16/2016	3/21/2016		4/4/2016	Tetrachloroethene	2			µg/m3	127-18-4	1	0		166977			percent	N			0.34
9529	438	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15 SIM	VC	TO15SIM	AIR	FD		3/16/2016	3/21/2016		4/4/2016	Vinyl chloride	0.13	U		µg/m3	75-01-4	1	0		166977			percent	N			0.13
9530	440	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	FD		3/16/2016	3/21/2016		4/4/2016	cis-1,2-Dichloroethene	0.2	U		µg/m3	156-59-2	1	0		166977			percent	N			0.2
9531	442	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15 SIM	TCE	TO15SIM	AIR	FD		3/16/2016	3/21/2016		4/4/2016	Trichloroethene	0.27	U		µg/m3	79-01-6	1	0		166977			percent	N			0.27
9532	443	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15 SIM	PCE	TO15SIM	AIR	FD		3/16/2016	3/21/2016		4/4/2016	Tetrachloroethene	0.3			ppb	127-18-4	1	0		166977			percent	N			0.05

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
9443	356	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9444	357	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9445	358	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9446	359	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9447	360	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9448	361	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	1	493766	4.30EPACLP						166496		TRUE
9449	362	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9450	363	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9451	364	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9452	365	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9453	366	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9454	367	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9455	368	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9456	369	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9457	370	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9458	371	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9459	372	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9460	373	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9461	374	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9462	375	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9463	376	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9464	377	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9465	379	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9466	380	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9467	381	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9468	382	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9469	383	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9470	384	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9471	385	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9472	386	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9473	387	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9474	388	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	1	493766	4.30EPACLP						166496		TRUE
9475	389	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9476	390	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9477	391	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9478	392	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9479	402	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9480	403	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	493766	4.30EPACLP						166496		TRUE
9481	415	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	9.93		X	=	68.113	124.64	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9482	420	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	7.51		X	=	53.357	156.94	0.15	1	493767	4.30EPACLP						166496		TRUE
9483	427	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	9.91		X	=	64.138	127.27	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9484	440	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	9.58		X	=	62.845	126.85	0.15	0.5	493767	4.30EPACLP						166496		TRUE
9485	464	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	9.98		X	=	63.699	127.89	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9486	465	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	9.85		X	=	68.113	124.64	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9487	470	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	7.62		X	=	53.357	156.94	0.15	1	493768	4.30EPACLP						166496		TRUE
9488	473	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	8.25		X	=	50.619	155.33	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9489	477	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	9.86		X	=	64.138	127.27	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9490	490	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	9.56		X	=	62.845	126.85	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9491	495	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	9.82		X	=	59.748	136.05	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9492	496	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	9.45		X	=	59.318	134.78	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9493	498	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	9.95		X	=	64.237	155.06	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9494	500	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	9.97		X	=	58.55	157.62	0.15	0.5	493768	4.30EPACLP						166496		TRUE
9495	502	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	9.97		X	=	56.513	140.03	0.3	1	493768	4.30EPACLP						166496		TRUE
9496	506	0	20	ALSS	1607459	1607459	493766	493766	493766		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	112.11		X	=	67.698	129.86			493766	4.30EPACLP						166496		TRUE
9497	507	0	20	ALSS	1607459	1607459	493767	493767	493767		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	114.34		X	=	67.698	129.86			493767	4.30EPACLP						166496		TRUE
9498	508	0	20	ALSS	1607459	1607459	493768	493768	493768		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	114.35		X	=	67.698	129.86			493768	4.30EPACLP						166496		TRUE
9499	338	0	20	ALSS	1607459	1607459	493686	493686	493686		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	493686	4.30EPACLP						166464		TRUE
9500	339	0	20	ALSS	1607459	1607459	493686	493686	493686		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	493686	4.30EPACLP						166464		TRUE
9501	340	0	20	ALSS	1607459	1607459	493686	493686	493686		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	493686	4.30EPACLP						166464		TRUE
9502	341	0	20	ALSS	1607459	1607459	493686	493686	493686		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	493686	4.30EPACLP						166464		TRUE
9503	342	0	20	ALSS	1607459	1607459	493686	493686	493686		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	493686	4.30EPACLP						166464		TRUE
9504	504	0	20	ALSS	1607459	1607459	493687	493687	493687		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	109.98		X	=	48.778	151.81			493687	4.30EPACLP						166464		TRUE
9505	505	0	20	ALSS	1607459	1607459	493688	493688	493688		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	106.88		X	=	48.778	151.81			493688	4.30EPACLP						166464		TRUE
9506	343	0	20	ALSS	1607459	1607459	493687	493687	493687		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.502		X	=	17.533	153.67		0.05	493687	4.30EPACLP						166464		TRUE
9507	344	0	20	ALSS	1607459	1607459	493687	493687	493687		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.534		X	=	65.189	131.19		0.05	493687	4.30EPACLP						166464		TRUE
9508	345	0	20	ALSS	1607459	1607459	493687	493687	493687		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.542		X	=	68.353	123.42		0.05	493687	4.30EPACLP						166464		TRUE
9509	395	0	20	ALSS	1607459	1607459	493687	493687	493687		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.534		X	=	63.624	127.93		0.05	493687	4.30EPACLP						166464		TRUE
9510	396	0	20	ALSS	1607459	1607459	493687	493687	493687		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.528		X	=	70	130		0.05	493687	4.30EPACLP						166464		TRUE
9511	397	0	20	ALSS	1607459	1607459	493688	493688	493688		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.511		X	=	17.533	153.67		0.05	493688	4.30EPACLP						166464		TRUE
9512	398	0	20	ALSS	1607459	1607459	493688	493688	493688		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.532		X	=	65.189	131.19		0.05	493688	4.30EPACLP						166464		TRUE
9513	399	0	20	ALSS	1607459	1607459	493688	493688	493688		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.517		X	=	68.353	123.42		0.05	493688	4.30EPACLP						166464		TRUE
9514	400	0	20	ALSS	1607459	1607459	493688	493688	493688		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.509		X	=	63.624	127.93		0.05	493688	4.30EPACLP						166464		TRUE
9515	401	0	20	ALSS	1607459	1607459	493688	493688	493688		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.484		X	=	70	130		0.05	493688	4.30EPACLP						166464		TRUE
9516	503	0	20	ALSS	1607459	1607459	493686	493686	493686		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	98.222		X	=	48.778	151.81			493686	4.30EPACLP						166464		TRUE
9518	326	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.13	U	X	U				0.13	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9519	328	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.2	U	X	U				0.2	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9520	330	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.27	U	X	U				0.27	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9521	331	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.27		X	=				0.05	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9522	334	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.18	U	X	U				0.18	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9523	325	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9524	327	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9525	329	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9526	333	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9527	335	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	75.352		X	=	48.778	151.81			A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9528	444	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	2		X	=				0.34	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166977		TRUE
9529	438	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.13	U	X	U				0.13	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166977		TRUE
9530	440	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.2	U	X	U				0.2	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166977		TRUE
9531	442	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.27	U	X	U				0.27	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166977		TRUE
9532	443	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.3		X	=				0.05	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166977		TRUE

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Laboratory Validated Results

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
9443	356	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9444	357	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9445	358	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9446	359	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9447	360	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9448	361	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9449	362	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9450	363	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9451	364	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9452	365	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9453	366	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9454	367	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9455	368	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9456	369	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9457	370	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9458	371	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9459	372	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9460	373	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9461	374	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9462	375	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9463	376	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9464	377	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9465	379	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9466	380	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9467	381	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9468	382	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9469	383	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9470	384	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9471	385	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9472	386	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9473	387	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9474	388	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9475	389	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9476	390	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9477	391	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9478	392	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9479	402	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9480	403	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9481	415	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9482	420	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		1	1			jbeckett - Tier 2B
9483	427	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9484	440	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9485	464	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9486	465	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9487	470	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		1	1			jbeckett - Tier 2B
9488	473	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9489	477	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9490	490	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9491	495	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9492	496	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9493	498	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9494	500	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
9495	502	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	10		1	1			jbeckett - Tier 2B
9496	506	0	20	ALSS	1607459	1607459	493766	493766	493766	4/7/2016	mfesler	20	ppb					jbeckett - Tier 2B
9497	507	0	20	ALSS	1607459	1607459	493767	493767	493767	4/7/2016	mfesler	20	ppb					jbeckett - Tier 2B
9498	508	0	20	ALSS	1607459	1607459	493768	493768	493768	4/7/2016	mfesler	20	ppb					jbeckett - Tier 2B
9499	338	0	20	ALSS	1607459	1607459	493686	493686	493686	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9500	339	0	20	ALSS	1607459	1607459	493686	493686	493686	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9501	340	0	20	ALSS	1607459	1607459	493686	493686	493686	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9502	341	0	20	ALSS	1607459	1607459	493686	493686	493686	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9503	342	0	20	ALSS	1607459	1607459	493686	493686	493686	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9504	504	0	20	ALSS	1607459	1607459	493687	493687	493687	4/7/2016	mfesler	1	ppb					jbeckett - Tier 2B
9505	505	0	20	ALSS	1607459	1607459	493688	493688	493688	4/7/2016	mfesler	1	ppb					jbeckett - Tier 2B
9506	343	0	20	ALSS	1607459	1607459	493687	493687	493687	4/7/2016	mfesler	0.5		0.05	0.05			jbeckett - Tier 2B
9507	344	0	20	ALSS	1607459	1607459	493687	493687	493687	4/7/2016	mfesler	0.5		0.05	0.05			jbeckett - Tier 2B
9508	345	0	20	ALSS	1607459	1607459	493687	493687	493687	4/7/2016	mfesler	0.5		0.05	0.05			jbeckett - Tier 2B
9509	395	0	20	ALSS	1607459	1607459	493687	493687	493687	4/7/2016	mfesler	0.5		0.05	0.05			jbeckett - Tier 2B
9510	396	0	20	ALSS	1607459	1607459	493687	493687	493687	4/7/2016	mfesler	0.5		0.05	0.05			jbeckett - Tier 2B
9511	397	0	20	ALSS	1607459	1607459	493688	493688	493688	4/7/2016	mfesler	0.5		0.05	0.05			jbeckett - Tier 2B
9512	398	0	20	ALSS	1607459	1607459	493688	493688	493688	4/7/2016	mfesler	0.5		0.05	0.05			jbeckett - Tier 2B
9513	399	0	20	ALSS	1607459	1607459	493688	493688	493688	4/7/2016	mfesler	0.5		0.05	0.05			jbeckett - Tier 2B
9514	400	0	20	ALSS	1607459	1607459	493688	493688	493688	4/7/2016	mfesler	0.5		0.05	0.05			jbeckett - Tier 2B
9515	401	0	20	ALSS	1607459	1607459	493688	493688	493688	4/7/2016	mfesler	0.5		0.05	0.05			jbeckett - Tier 2B
9516	503	0	20	ALSS	1607459	1607459	493686	493686	493686	4/7/2016	mfesler	1	ppb					jbeckett - Tier 2B
9518	326	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.13	0.13			jbeckett - Tier 2B
9519	328	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.2	0.2			jbeckett - Tier 2B
9520	330	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.27	0.27			jbeckett - Tier 2B
9521	331	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9522	334	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.18	0.18			jbeckett - Tier 2B
9523	325	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9524	327	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9525	329	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9526	333	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9527	335	-1679903650	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler	1.0007	ppb					jbeckett - Tier 2B
9528	444	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.34	0.34			jbeckett - Tier 2B
9529	438	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.13	0.13			jbeckett - Tier 2B
9530	440	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.2	0.2			jbeckett - Tier 2B
9531	442	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.27	0.27			jbeckett - Tier 2B
9532	443	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B

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Laboratory Validated Results

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
9533	446	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	FD		3/16/2016	3/21/2016		4/4/2016	1,4-Dioxane	0.18	U		µg/m3	123-91-1	1	0		166977			percent	N			0.18
9534	437	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15 SIM	VC	TO15SIM	AIR	FD		3/16/2016	3/21/2016		4/4/2016	Vinyl chloride	0.05	U		ppb	75-01-4	1	0		166977			percent	N			0.05
9535	439	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	FD		3/16/2016	3/21/2016		4/4/2016	cis-1,2-Dichloroethene	0.05	U		ppb	156-59-2	1	0		166977			percent	N			0.05
9536	441	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15 SIM	TCE	TO15SIM	AIR	FD		3/16/2016	3/21/2016		4/4/2016	Trichloroethene	0.05	U		ppb	79-01-6	1	0		166977			percent	N			0.05
9537	445	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	FD		3/16/2016	3/21/2016		4/4/2016	1,4-Dioxane	0.05	U		ppb	123-91-1	1	0		166977			percent	N			0.05
9538	447	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15 SIM	BR4FBZ	TO15SIM	AIR	FD		3/16/2016	3/21/2016		4/4/2016	4-Bromofluorobenzene	67.492			PERCENT	460-00-4	1	0		166977	1.0007	67.492	percent	Y			
9539	244	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15	ACE	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Acetone	13		0.71	µg/m3	67-64-1	1	0		166946			percent	N			2.4
9540	230	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15	DCTFA12	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Freon 114	1	U	1	µg/m3	76-14-2	1	0		166946			percent	N			3.5
9541	238	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15	FC11	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Freon 11	1.3	J	0.84	µg/m3	75-69-4	1	0		166946			percent	N			2.8
9542	240	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15	FC113	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Freon 113	1.1	U	1.1	µg/m3	76-13-1	1	0		166946			percent	N			3.8
9543	243	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15	ACE	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Acetone	5.5		0.3	ppb	67-64-1	1	0		166946			percent	N			1
9544	254	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15	VA	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Vinyl acetate	1.8		0.53	µg/m3	108-05-4	1	0		166946			percent	N			1.8

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
9533	446	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.18	U	X	U				0.18	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166977		TRUE
9534	437	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166977		TRUE
9535	439	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166977		TRUE
9536	441	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166977		TRUE
9537	445	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166977		TRUE
9538	447	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	67.492		X	=	48.778	151.81			A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166977		TRUE
9539	244	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	13	J	X	=			0.71	2.4	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9540	230	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1	U	X	U			1	3.5	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9541	238	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.3	J	X	J			0.84	2.8	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9542	240	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.1	U	X	U			1.1	3.8	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9543	243	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	5.5	J	X	=			0.3	1	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9544	254	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.8	J	X	=			0.53	1.8

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
9533	446	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.18	0.18			jbeckett - Tier 2B
9534	437	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9535	439	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9536	441	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9537	445	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9538	447	-1485149764	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler	1.0007	ppb					jbeckett - Tier 2B
9539	244	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			2.4	2.4	J	FD>RPD	jbeckett - Tier 2B
9540	230	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			3.5	3.5			jbeckett - Tier 2B
9541	238	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			2.8	2.8			jbeckett - Tier 2B
9542	240	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			3.8	3.8			jbeckett - Tier 2B
9543	243	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			1	1	J	FD>RPD	jbeckett - Tier 2B
9544	254	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			1.8	1.8	J	LCSD>UCL	jbeckett - Tier 2B
9544	254	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			1.8	1.8	J	FD>RPD	jbeckett - Tier 2B
9544	254	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			1.8	1.8	J	LCS>UCL	jbeckett - Tier 2B
9544	254	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			1.8	1.8	J	ICVS>UCL	jbeckett - Tier 2B
9545	256	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			1.5	1.5	J	LCSD>UCL	jbeckett - Tier 2B
9546	259	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9547	260	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			3.6	3.6			jbeckett - Tier 2B
9548	264	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			2.4	2.4			jbeckett - Tier 2B
9549	280	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			3.4	3.4			jbeckett - Tier 2B
9550	292	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			1.9	1.9			jbeckett - Tier 2B
9551	294	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			4.1	4.1			jbeckett - Tier 2B
9552	296	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			4.3	4.3			jbeckett - Tier 2B
9553	298	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			3.8	3.8			jbeckett - Tier 2B
9554	310	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			5.2	5.2			jbeckett - Tier 2B
9555	312	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			3.4	3.4			jbeckett - Tier 2B
9556	324	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			6	6			jbeckett - Tier 2B
9557	225	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5	UJ	FD>RPD	jbeckett - Tier 2B
9558	226	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			2.5	2.5	UJ	FD>RPD	jbeckett - Tier 2B
9559	227	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5	UJ	FD>RPD	jbeckett - Tier 2B
9560	228	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			1	1	UJ	FD>RPD	jbeckett - Tier 2B
9561	229	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9562	231	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9563	232	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			1.1	1.1			jbeckett - Tier 2B
9564	233	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9565	234	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			1.9	1.9			jbeckett - Tier 2B
9566	235	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9567	236	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			1.3	1.3			jbeckett - Tier 2B
9568	237	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9569	239	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9570	241	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9571	242	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9572	245	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5	UJ	FD>RPD	jbeckett - Tier 2B
9573	246	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			1.6	1.6	UJ	FD>RPD	jbeckett - Tier 2B
9574	247	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9575	248	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			1.7	1.7			jbeckett - Tier 2B
9576	249	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9577	250	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9578	251	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5	none	LCSD>UCL	jbeckett - Tier 2B
9579	252	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			1.8	1.8	none	LCSD>UCL	jbeckett - Tier 2B
9580	253	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5	J	FD>RPD	jbeckett - Tier 2B
9580	253	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5	J	ICVS>UCL	jbeckett - Tier 2B
9580	253	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5	J	LCSD>UCL	jbeckett - Tier 2B
9580	253	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5	J	LCS>UCL	jbeckett - Tier 2B
9581	255	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5	J	LCSD>UCL	jbeckett - Tier 2B
9582	257	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9583	258	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9584	261	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9585	262	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			1.8	1.8			jbeckett - Tier 2B
9586	263	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9587	265	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5	none	LCSRPD	jbeckett - Tier 2B
9588	266	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			1.5	1.5	none	LCSRPD	jbeckett - Tier 2B
9589	267	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9590	268	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9591	269	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9592	270	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			2.7	2.7			jbeckett - Tier 2B
9593	271	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9594	272	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			3.1	3.1			jbeckett - Tier 2B
9595	273	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9596	274	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			1.6	1.6			jbeckett - Tier 2B
9597	275	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9598	276	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			1.7	1.7			jbeckett - Tier 2B
9599	277	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9600	278	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			2.4	2.4			jbeckett - Tier 2B
9601	279	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9602	281	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9603	282	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9604	283	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9605	284	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			2.3	2.3			jbeckett - Tier 2B
9606	285	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9607	286	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9608	287	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9609	288	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			2.3	2.3			jbeckett - Tier 2B
9610	289	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9611	290	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			2.7	2.7			jbeckett - Tier 2B
9612	291	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9613	293	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9614	295	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9615	297	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
9616	299	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15	CLBZ	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Chlorobenzene	0.15	U	0.15	ppb	108-90-7	1	0		166946			percent	N			0.5
9617	300	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15	CLBZ	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Chlorobenzene	0.69	U	0.69	µg/m3	108-90-7	1	0		166946			percent	N			2.3
9618	301	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15	EBZ	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Ethyl benzene	0.15	U	0.15	ppb	100-41-4	1	0		166946			percent	N			0.5
9619	302	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15	EBZ	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Ethyl benzene	0.65	U	0.65	µg/m3	100-41-4	1	0		166946			percent	N			2.2
9620	303	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15	XYLMP	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	m,p-Xylene	0.15	U	0.15	ppb	179601-23-1	1	0		166946			percent	N			0.5
9621	304	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15	XYLMP	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	m,p-Xylene	0.65	U	0.65	µg/m3	179601-23-1	1	0		166946			percent	N			2.2
9622	305	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15	XYLO	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	o-Xylene	0.15	U	0.15	ppb	95-47-6	1	0		166946			percent	N			0.5
9623	306	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15	XYLO	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	o-Xylene	0.65	U	0.65	µg/m3	95-47-6	1	0		166946			percent	N			2.2
9624	307	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15	STY	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Styrene	0.15	U	0.15	ppb	100-42-5	1	0		166946			percent	N			0.5
9625	308	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15	STY	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Styrene	0.64	U	0.64	µg/m3	100-42-5	1	0		166946			percent	N			2.1
9626	309	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15	TBME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Bromoform	0.15	U	0.15	ppb	75-25-2	1	0		166946			percent	N			0.5
9627	311	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15	PCA	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,1,2,2-Tetrachloroethane	0.15	U	0.15	ppb	79-34-5	1	0		166946			percent	N			0.5
9628	313	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15	EBZME4	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	4-Ethyl toluene	0.15	U	0.15	ppb	622-96-8	1	0		166946			percent	N			1
9629	314	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15	EBZME4	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	4-Ethyl toluene	0.74	U	0.74	µg/m3	622-96-8	1	0		166946			percent	N			4.9
9630	315	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15	TMB135	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,3,5-Trimethylbenzene	0.15	U	0.15	ppb	108-67-8	1	0		166946			percent	N			0.5
9631	316	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15	TMB135	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,3,5-Trimethylbenzene	0.74	U	0.74	µg/m3	108-67-8	1	0		166946			percent	N			2.5
9632	317	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15	TMB124	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,2,4-Trimethylbenzene	0.15	U	0.15	ppb	95-63-6	1	0		166946			percent	N			0.5
9633	318	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15	TMB124	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,2,4-Trimethylbenzene	0.74	U	0.74	µg/m3	95-63-6	1	0		166946			percent	N			2.5
9634	319	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15	DCBZ13	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,3-Dichlorobenzene	0.15	U	0.15	ppb	541-73-1	1	0		166946			percent	N			0.5
9635	320	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15	DCBZ13	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,3-Dichlorobenzene	0.9	U	0.9	µg/m3	541-73-1	1	0		166946			percent	N			3
9636	321	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15	DCBZ14	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,4-Dichlorobenzene	0.15	U	0.15	ppb	106-46-7	1	0		166946			percent	N			0.5
9637	322	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15	DCBZ14	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,4-Dichlorobenzene	0.9	U	0.9	µg/m3	106-46-7	1	0		166946			percent	N			3
9638	323	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15	DCBZ12	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,2-Dichlorobenzene	0.3	U	0.3	ppb	95-50-1	1	0		166946			percent	N			1
9639	336	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	EPA TO-15	BR4FBZ	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	4-Bromofluorobenzene	95.792			PERCENT	460-00-4	1	0		166946	20	95.792	percent	Y			
9640	108	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15 SIM	PCE	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	Tetrachloroethene	10	E		µg/m3	127-18-4	1	0		166977			percent	N			0.34
9641	107	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15 SIM	PCE	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	Tetrachloroethene	1.5	E		ppb	127-18-4	1	0		166977			percent	N			0.05
9642	102	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15 SIM	VC	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	Vinyl chloride	0.13	U		µg/m3	75-01-4	1	0		166977			percent	N			0.13
9643	104	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	cis-1,2-Dichloroethene	0.2	U		µg/m3	156-59-2	1	0		166977			percent	N			0.2
9644	106	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15 SIM	TCE	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	Trichloroethene	0.39			µg/m3	79-01-6	1	0		166977			percent	N			0.27
9645	110	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	1,4-Dioxane	0.18	U		µg/m3	123-91-1	1	0		166977			percent	N			0.18
9646	101	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15 SIM	VC	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	Vinyl chloride	0.05	U		ppb	75-01-4	1	0		166977			percent	N			0.05
9647	103	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	cis-1,2-Dichloroethene	0.05	U		ppb	156-59-2	1	0		166977			percent	N			0.05
9648	105	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15 SIM	TCE	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	Trichloroethene	0.073			ppb	79-01-6	1	0		166977			percent	N			0.05
9649	109	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	1,4-Dioxane	0.05	U		ppb	123-91-1	1	0		166977			percent	N			0.05
9650	111	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15 SIM	BR4FBZ	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	4-Bromofluorobenzene	77.272			PERCENT	460-00-4	1	0		166977	1.0007	77.272	percent	Y			
9651	131	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	ACE	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Acetone	17		0.3	ppb	67-64-1	1	0		166946			percent	N			1
9652	132	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	ACE	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Acetone	40		0.71	µg/m3	67-64-1	1	0		166946			percent	N			2.4
9653	114	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	FC12	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Dichlorodifluoromethane	2.8		0.74	µg/m3	75-71-8	1	0		166946			percent	N			2.5
9654	118	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	DCTFA12	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Freon 114	1	U	1	µg/m3	76-14-2	1	0		166946			percent	N			3.5
9655	126	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	FC11	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Freon 11	1.4	J	0.84	µg/m3	75-69-4	1	0		166946			percent	N			2.8
9656	128	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	FC113	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Freon 113	1.1	U	1.1	µg/m3	76-13-1	1	0		166946			percent	N			3.8
9657	134	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	CDS	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Carbon disulfide	1.3	J	0.47	µg/m3	75-15-0	1	0		166946			percent	N			1.6
9658	136	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	MTLNCL	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Methylene chloride	1.3	J	0.52	µg/m3	75-09-2	1	0		166946			percent	N			1.7
9659	144	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	MEK	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Methyl ethyl ketone	2.1		0.44	µg/m3	78-93-3	1	0		166946			percent	N			1.5
9660	147	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	ETACET	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Ethyl acetate	1.3		0.15	ppb	141-78-6	1	0		166946			percent	N			1
9661	148	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	ETACET	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Ethyl acetate	4.6		0.54	µg/m3	141-78-6	1	0		166946			percent	N			3.6
9662	150	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	C6N	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	n-Hexane	2.2		0.53	µg/m3	110-54-3	1	0		166946			percent	N			1.8
9663	154	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	THF	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Tetrahydrofuran	1.7		0.44	µg/m3	109-99-9	1	0		166946			percent	N			1.5
9664	162	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	BZ	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Benzene	1.5	J	0.48	µg/m3	71-43-2	1	0		166946			percent	N			1.6
9665	164	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	CYHEXANE	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Cyclohexane	1	J	0.52	µg/m3	110-82-7	1	0		166946			percent	N			1.7
9666	168	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	BDCME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Bromodichloromethane	1	U	1	µg/m3	75-27-4	1	0		166946			percent	N			3.4
9667	170	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	C7N	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Heptane	1.1	J	0.61	µg/m3	142-82-5	1	0		166946			percent	N			2
9668	179	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	BZME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Toluene	1.7		0.15	ppb	108-88-3	1	0		166946			percent	N			0.5
9669	180	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	BZME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Toluene	6.4		0.57	µg/m3	108-88-3	1	0		166946			percent	N			1.9
9670	182	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	HXO2	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	2-Hexanone	1.2	U	1.2	µg/m3	591-78-6	1	0		166946			percent	N			4.1
9671	184	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	DBCME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Dibromochloromethane	1.3	U	1.3	µg/m3	124-48-1	1	0		166946			percent	N			4.3
9672	186	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	EDB	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,2-Dibromoethane	1.2	U	1.2	µg/m3	106-93-4	1	0		166946			percent	N			3.8
9673	192	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	XYLMP	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	m,p-Xylene	3.5		0.65	µg/m3	179601-23-1	1	0		166946			percent	N			2.2
9674	198	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	TBME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Bromoform	1.6	U	1.6	µg/m3	75-25-2	1	0		166946			percent	N			5.2
9675	200	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	PCA	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,1,2,2-Tetrachloroethane	1	U	1	µg/m3	79-34-5	1	0		166946			percent	N			3.4
9676	212	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	DCBZ12	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,2-Dichlorobenzene	1.8	U	1.8	µg/m3	95-50-1	1	0		166946			percent	N			6
9677	113	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	FC12	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Dichlorodifluoromethane	0.57		0.15	ppb	75-71-8	1	0		166946			percent	N			0.5
9678	115	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	CLME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Methyl chloride	0.15	U	0.15	ppb	74-87-3	1	0		166946			percent	N			0.5
9679	116	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	CLME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Methyl chloride	0.31	U	0.31	µg/m3	74-87-3	1	0		166946			percent	N			1
9680	117	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	DCTFA12	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Freon 114	0.15	U	0.15	ppb	76-14-2	1	0		166946			percent	N			0.5
9681	119	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	ERYTHRENE	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,3-Butadiene	0.15	U	0.15	ppb	106-99-0	1	0		166946			percent	N			0.5
9682	120	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	ERYTHRENE	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,3-Butadiene	0.33	U	0.33	µg/m3	106-99-0	1	0		166946			percent	N			1.1
9683	121	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	BRME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Bromomethane	0.15	U	0.15	ppb	74-83-9	1	0		166946			percent	N			0.5
9684	122	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	BRME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Bromomethane	0.58	U	0.58	µg/m3	74-83-9	1	0		166946			percent	N			1.9
9685	123	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	CLEA	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Ethyl chloride	0.15	U	0.15	ppb	75-00-3	1	0		166946			percent	N			0.5
9686	124	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	CLEA	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Ethyl chloride	0.4	U	0.4	µg/m3	75-00-3	1	0		166946			percent	N			1.3
9687	125	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	FC11	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Freon 11	0.26	J	0.15	ppb	75-69-4	1	0		166946			percent	N			0.5
9688	127	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	FC113	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Freon 113	0.15	U	0.15	ppb	76-13-1	1	0		166946			percent	N			0.5
9689	129	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	DCE11	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,1-Dichloroethene	0.15	U	0.15	ppb	75-35-4	1	0		166946			percent	N			0.5
9690	130	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	DCE11	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,1-Dichloroethene	0.59	U	0.59	µg/m3	75-35-4	1	0		166946			percent	N			2
9691	133	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	CDS	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Carbon disulfide	0.42	J	0.15	ppb	75-15-0	1	0		166946			percent	N			0.5
9692	135	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	MTLNCL	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Methylene chloride	0.37	J	0.15	ppb	75-09-2	1	0		166946			percent	N			0.5
9693	137	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	DCE12T	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	trans-1,2-Dichloroethene	0.15	U	0.15	ppb	156-60-5	1	0		166946			percent	N			0.5
9694	138	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	DCE12T	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	trans-1,2-Dichloroethene	0.59	U	0.59	µg/m3	156-60-5	1	0		166946			percent	N			2
9695	139	83163541	21	AL

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
9616	299	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9617	300	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.69	U	X	U			0.69	2.3	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9618	301	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9619	302	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.65	U	X	U			0.65	2.2	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9620	303	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9621	304	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.65	U	X	U			0.65	2.2	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9622	305	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9623	306	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.65	U	X	U			0.65	2.2	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9624	307	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9625	308	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.64	U	X	U			0.64	2.1	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9626	309	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9627	311	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9628	313	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	1	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9629	314	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.74	U	X	U			0.74	4.9	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9630	315	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9631	316	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.74	U	X	U			0.74	2.5	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9632	317	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9633	318	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.74	U	X	U			0.74	2.5	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9634	319	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9635	320	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.9	U	X	U			0.9	3	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9636	321	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9637	322	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.9	U	X	U			0.9	3	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9638	323	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.3	U	X	U			0.3	1	A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9639	336	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	95.792		X	=	67.698	129.86			A-0051-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9640	108	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	10	J	X	E				0.34	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9641	107	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.5	J	X	E				0.05	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9642	102	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.13	U	X	U				0.13	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9643	104	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.2	U	X	U				0.2	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9644	106	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.39		X	=				0.27	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9645	110	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.18	U	X	U				0.18	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9646	101	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9647	103	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9648	105	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.073		X	=				0.05	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9649	109	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9650	111	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	77.272		X	=	48.778	151.81			A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9651	131	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	17		X	=			0.3	1	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9652	132	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	40		X	=			0.71	2.4	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9653	114	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	2.8		X	=			0.74	2.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9654	118	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1	U	X	U			1	3.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9655	126	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.4	J	X	J			0.84	2.8	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9656	128	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.1	U	X	U			1.1	3.8	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9657	134	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.3	J	X	J			0.47	1.6	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9658	136	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.3	J	X	J			0.52	1.7	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9659	144	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	2.1	J	X	=			0.44	1.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9660	147	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.3		X	=			0.15	1	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9661	148	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	4.6		X	=			0.54	3.6	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9662	150	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	2.2		X	=			0.53	1.8	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9663	154	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.7	J	X	=			0.44	1.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9664	162	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.5	J	X	J			0.48	1.6	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9665	164	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1	J	X	J			0.52	1.7	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9666	168	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1	U	X	U			1	3.4	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9667	170	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.1	J	X	J			0.61	2	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9668	179	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.7		X	=			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9669	180	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	6.4		X	=			0.57	1.9	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9670	182	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.2	U	X	U			1.2	4.1	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9671	184	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.3	U	X	U			1.3	4.3	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9672	186	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.2	U	X	U			1.2	3.8	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9673	192	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	3.5		X	=			0.65	2.2	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9674	198	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.6	U	X	U			1.6	5.2	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9675	200	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1	U	X	U			1	3.4	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9676	212	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.8	U	X	U			1.8	6	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9677	113	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.57		X	=			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9678	115	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9679	116	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.31	U	X	U			0.31	1	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9680	117	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9681	119	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9682	120	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.33	U	X	U			0.33	1.1	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9683	121	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9684	122	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.58	U	X	U			0.58	1.9	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9685	123	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9686	124	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.4	U	X	U			0.4	1.3	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9687	125	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.26	J	X	J			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9688	127	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9689	129	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9690	130	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.59	U	X	U			0.59	2	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9691	133	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.42	J	X	J			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9692	135	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.37	J	X	J			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9693	137	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9694	138	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.59	U	X	U			0.59	2	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9695	139	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9696	140	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.54	U	X	U			0.54	1.8	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9697	141	83163541	21	ALSS	1608222	1608222	A-0018H-031616-

APPENDIX A-1

Laboratory Validated Results

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
9616	299	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9617	300	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			2.3	2.3			jbeckett - Tier 2B
9618	301	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9619	302	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			2.2	2.2			jbeckett - Tier 2B
9620	303	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9621	304	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			2.2	2.2			jbeckett - Tier 2B
9622	305	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9623	306	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			2.2	2.2			jbeckett - Tier 2B
9624	307	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9625	308	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			2.1	2.1			jbeckett - Tier 2B
9626	309	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9627	311	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9628	313	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9629	314	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			4.9	4.9			jbeckett - Tier 2B
9630	315	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9631	316	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			2.5	2.5			jbeckett - Tier 2B
9632	317	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9633	318	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			2.5	2.5			jbeckett - Tier 2B
9634	319	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9635	320	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			3	3			jbeckett - Tier 2B
9636	321	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9637	322	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			3	3			jbeckett - Tier 2B
9638	323	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9639	336	-838560527	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS	A-0051-031616-IA-BAS	1608222003	4/7/2016	mfesler	20	ppb					jbeckett - Tier 2B
9640	108	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.34	0.34	J	>ICLinearRange	jbeckett - Tier 2B
9641	107	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.05	0.05	J	>ICLinearRange	jbeckett - Tier 2B
9642	102	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.13	0.13			jbeckett - Tier 2B
9643	104	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.2	0.2			jbeckett - Tier 2B
9644	106	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.27	0.27			jbeckett - Tier 2B
9645	110	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.18	0.18			jbeckett - Tier 2B
9646	101	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9647	103	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9648	105	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9649	109	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9650	111	-410955676	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler	1.0007	ppb					jbeckett - Tier 2B
9651	131	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9652	132	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			2.4	2.4			jbeckett - Tier 2B
9653	114	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			2.5	2.5			jbeckett - Tier 2B
9654	118	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			3.5	3.5			jbeckett - Tier 2B
9655	126	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			2.8	2.8			jbeckett - Tier 2B
9656	128	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			3.8	3.8			jbeckett - Tier 2B
9657	134	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			1.6	1.6			jbeckett - Tier 2B
9658	136	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			1.7	1.7			jbeckett - Tier 2B
9659	144	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			1.5	1.5	J	LCSD>UCL	jbeckett - Tier 2B
9660	147	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9661	148	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			3.6	3.6			jbeckett - Tier 2B
9662	150	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			1.8	1.8			jbeckett - Tier 2B
9663	154	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			1.5	1.5	J	LCSRPD	jbeckett - Tier 2B
9664	162	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			1.6	1.6			jbeckett - Tier 2B
9665	164	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			1.7	1.7			jbeckett - Tier 2B
9666	168	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			3.4	3.4			jbeckett - Tier 2B
9667	170	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9668	179	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9669	180	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			1.9	1.9			jbeckett - Tier 2B
9670	182	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			4.1	4.1			jbeckett - Tier 2B
9671	184	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			4.3	4.3			jbeckett - Tier 2B
9672	186	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			3.8	3.8			jbeckett - Tier 2B
9673	192	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			2.2	2.2			jbeckett - Tier 2B
9674	198	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			5.2	5.2			jbeckett - Tier 2B
9675	200	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			3.4	3.4			jbeckett - Tier 2B
9676	212	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			6	6			jbeckett - Tier 2B
9677	113	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9678	115	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9679	116	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9680	117	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9681	119	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9682	120	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			1.1	1.1			jbeckett - Tier 2B
9683	121	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9684	122	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			1.9	1.9			jbeckett - Tier 2B
9685	123	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9686	124	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			1.3	1.3			jbeckett - Tier 2B
9687	125	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9688	127	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9689	129	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9690	130	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9691	133	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9692	135	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9693	137	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9694	138	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9695	139	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5	none	LCSD>UCL	jbeckett - Tier 2B
9696	140	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			1.8	1.8	none	LCSD>UCL	jbeckett - Tier 2B
9697	141	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5	none	LCS>UCL	jbeckett - Tier 2B
9697	141	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5	none	LCSD>UCL	jbeckett - Tier 2B
9697	141	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5	NONE	ICVS>UCL	jbeckett - Tier 2B
9698	142	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			1.8	1.8	NONE	ICVS>UCL	jbeckett - Tier 2B
9698	142	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			1.8	1.8	none	LCSD>UCL	jbeckett - Tier 2B
9698	142	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			1.8	1.8	none	LCS>UCL	jbeckett - Tier 2B
9699	143	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5	J	LCSD>UCL	jbeckett - Tier 2B
9700	145	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
9701	146	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	DCA11	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,1-Dichloroethane	0.61	U	0.61	µg/m3	75-34-3	1	0		166946			percent	N			2
9702	149	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	C6N	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	n-Hexane	0.62		0.15	ppb	110-54-3	1	0		166946			percent	N			0.5
9703	151	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	TCLME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Chloroform	0.15	U	0.15	ppb	67-66-3	1	0		166946			percent	N			0.5
9704	152	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	TCLME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Chloroform	0.73	U	0.73	µg/m3	67-66-3	1	0		166946			percent	N			2.4
9705	153	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	THF	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Tetrahydrofuran	0.57		0.15	ppb	109-99-9	1	0		166946			percent	N			0.5
9706	155	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	DCA12	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,2-Dichloroethane	0.15	U	0.15	ppb	107-06-2	1	0		166946			percent	N			0.5
9707	156	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	DCA12	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,2-Dichloroethane	0.61	U	0.61	µg/m3	107-06-2	1	0		166946			percent	N			2
9708	157	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	TCA111	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,1,1-Trichloroethane	0.15	U	0.15	ppb	71-55-6	1	0		166946			percent	N			0.5
9709	158	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	TCA111	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,1,1-Trichloroethane	0.82	U	0.82	µg/m3	71-55-6	1	0		166946			percent	N			2.7
9710	159	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	CTCL	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Carbon tetrachloride	0.15	U	0.15	ppb	56-23-5	1	0		166946			percent	N			0.5
9711	160	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	CTCL	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Carbon tetrachloride	0.94	U	0.94	µg/m3	56-23-5	1	0		166946			percent	N			3.1
9712	161	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	BZ	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Benzene	0.48	J	0.15	ppb	71-43-2	1	0		166946			percent	N			0.5
9713	163	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	CYHEXANE	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Cyclohexane	0.3	J	0.15	ppb	110-82-7	1	0		166946			percent	N			0.5
9714	165	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	DCPA12	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,2-Dichloropropane	0.15	U	0.15	ppb	78-87-5	1	0		166946			percent	N			0.5
9715	166	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	DCPA12	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,2-Dichloropropane	0.73	U	0.73	µg/m3	78-87-5	1	0		166946			percent	N			2.4
9716	167	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	BDCME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Bromodichloromethane	0.15	U	0.15	ppb	75-27-4	1	0		166946			percent	N			0.5
9717	169	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	C7N	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Heptane	0.27	J	0.15	ppb	142-82-5	1	0		166946			percent	N			0.5
9718	171	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	DCP13C	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	cis-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-01-5	1	0		166946			percent	N			0.5
9719	172	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	DCP13C	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	cis-1,3-Dichloropropene	0.68	U	0.68	µg/m3	10061-01-5	1	0		166946			percent	N			2.3
9720	173	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	MIBK	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Methyl isobutyl ketone	0.15	U	0.15	ppb	108-10-1	1	0		166946			percent	N			0.5
9721	174	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	MIBK	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Methyl isobutyl ketone	0.61	U	0.61	µg/m3	108-10-1	1	0		166946			percent	N			2
9722	175	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	DCP13T	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	trans-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-02-6	1	0		166946			percent	N			0.5
9723	176	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	DCP13T	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	trans-1,3-Dichloropropene	0.68	U	0.68	µg/m3	10061-02-6	1	0		166946			percent	N			2.3
9724	177	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	TCA112	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,1,2-Trichloroethane	0.15	U	0.15	ppb	79-00-5	1	0		166946			percent	N			0.5
9725	178	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	TCA112	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,1,2-Trichloroethane	0.82	U	0.82	µg/m3	79-00-5	1	0		166946			percent	N			2.7
9726	181	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	HXO2	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	2-Hexanone	0.3	U	0.3	ppb	591-78-6	1	0		166946			percent	N			1
9727	183	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	DBCME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Dibromochloromethane	0.15	U	0.15	ppb	124-48-1	1	0		166946			percent	N			0.5
9728	185	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	EDB	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,2-Dibromoethane	0.15	U	0.15	ppb	106-93-4	1	0		166946			percent	N			0.5
9729	187	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	CLBZ	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Chlorobenzene	0.15	U	0.15	ppb	108-90-7	1	0		166946			percent	N			0.5
9730	188	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	CLBZ	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Chlorobenzene	0.69	U	0.69	µg/m3	108-90-7	1	0		166946			percent	N			2.3
9731	189	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	EBZ	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Ethyl benzene	0.21	J	0.15	ppb	100-41-4	1	0		166946			percent	N			0.5
9732	190	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	EBZ	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Ethyl benzene	0.9	J	0.65	µg/m3	100-41-4	1	0		166946			percent	N			2.2
9733	191	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	XYLMP	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	m,p-Xylene	0.82		0.15	ppb	179601-23-1	1	0		166946			percent	N			0.5
9734	193	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	XYLO	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	o-Xylene	0.23	J	0.15	ppb	95-47-6	1	0		166946			percent	N			0.5
9735	194	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	XYLO	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	o-Xylene	0.98	J	0.65	µg/m3	95-47-6	1	0		166946			percent	N			2.2
9736	195	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	STY	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Styrene	0.15	U	0.15	ppb	100-42-5	1	0		166946			percent	N			0.5
9737	196	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	STY	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Styrene	0.64	U	0.64	µg/m3	100-42-5	1	0		166946			percent	N			2.1
9738	197	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	TBME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Bromoform	0.15	U	0.15	ppb	75-25-2	1	0		166946			percent	N			0.5
9739	199	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	PCA	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,1,2,2-Tetrachloroethane	0.15	U	0.15	ppb	79-34-5	1	0		166946			percent	N			0.5
9740	201	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	EBZME4	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	4-Ethyl toluene	0.15	U	0.15	ppb	622-96-8	1	0		166946			percent	N			1
9741	202	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	EBZME4	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	4-Ethyl toluene	0.74	U	0.74	µg/m3	622-96-8	1	0		166946			percent	N			4.9
9742	203	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	TMB135	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,3,5-Trimethylbenzene	0.15	U	0.15	ppb	108-67-8	1	0		166946			percent	N			0.5
9743	204	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	TMB135	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,3,5-Trimethylbenzene	0.74	U	0.74	µg/m3	108-67-8	1	0		166946			percent	N			2.5
9744	205	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	TMB124	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,2,4-Trimethylbenzene	0.16	J	0.15	ppb	95-63-6	1	0		166946			percent	N			0.5
9745	206	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	TMB124	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,2,4-Trimethylbenzene	0.81	J	0.74	µg/m3	95-63-6	1	0		166946			percent	N			2.5
9746	207	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	DCBZ13	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,3-Dichlorobenzene	0.15	U	0.15	ppb	541-73-1	1	0		166946			percent	N			0.5
9747	208	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	DCBZ13	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,3-Dichlorobenzene	0.9	U	0.9	µg/m3	541-73-1	1	0		166946			percent	N			3
9748	209	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	DCBZ14	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,4-Dichlorobenzene	0.15	U	0.15	ppb	106-46-7	1	0		166946			percent	N			0.5
9749	210	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	DCBZ14	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,4-Dichlorobenzene	0.9	U	0.9	µg/m3	106-46-7	1	0		166946			percent	N			3
9750	211	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	DCBZ12	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,2-Dichlorobenzene	0.3	U	0.3	ppb	95-50-1	1	0		166946			percent	N			1
9751	224	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15	BR4FBZ	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	4-Bromofluorobenzene	96.253			PERCENT	460-00-4	1	0		166946	20	96.253	percent	Y			
9752	556	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15 SIM	PCE	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	Tetrachloroethene	1.4			µg/m3	127-18-4	1	0		166977			percent	N			0.34
9753	550	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15 SIM	VC	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	Vinyl chloride	0.13	U		µg/m3	75-01-4	1	0		166977			percent	N			0.13
9754	552	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	cis-1,2-Dichloroethene	0.2	U		µg/m3	156-59-2	1	0		166977			percent	N			0.2
9755	554	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15 SIM	TCE	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	Trichloroethene	0.27	U		µg/m3	79-01-6	1	0		166977			percent	N			0.27
9756	555	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15 SIM	PCE	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	Tetrachloroethene	0.2			ppb	127-18-4	1	0		166977			percent	N			0.05
9757	558	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	1,4-Dioxane	0.18	U		µg/m3	123-91-1	1	0		166977			percent	N			0.18
9758	549	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15 SIM	VC	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	Vinyl chloride	0.05	U		ppb	75-01-4	1	0		166977			percent	N			0.05
9759	551	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	cis-1,2-Dichloroethene	0.05	U		ppb	156-59-2	1	0		166977			percent	N			0.05
9760	553	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15 SIM	TCE	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	Trichloroethene	0.05	U		ppb	79-01-6	1	0		166977			percent	N			0.05
9761	557	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	1,4-Dioxane	0.05	U		ppb	123-91-1	1	0		166977			percent	N			0.05
9762	559	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15 SIM	BR4FBZ	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	4-Bromofluorobenzene	73.761			PERCENT	460-00-4	1	0		166977	1.0007	73.761	percent	Y			
9763	220	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15 SIM	PCE	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	Tetrachloroethene	12	E		µg/m3	127-18-4	1	0		166977			percent	N			0.34
9764	219	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15 SIM	PCE	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	Tetrachloroethene	1.8	E		ppb	127-18-4	1	0		166977			percent	N			0.05
9765	214	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15 SIM	VC	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	Vinyl chloride	0.13	U		µg/m3	75-01-4	1	0		166977			percent	N			0.13
9766	216	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	cis-1,2-Dichloroethene	0.2	U		µg/m3	156-59-2	1	0		166977			percent	N			0.2
9767	217	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15 SIM	TCE	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	Trichloroethene	0.15			ppb	79-01-6	1	0		166977			percent	N			0.05
9768	218	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15 SIM	TCE	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	Trichloroethene	0.83			µg/m3	79-01-6	1	0		166977			percent	N			0.27
9769	222	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	1,4-Dioxane	0.18	U		µg/m3	123-91-1	1	0		166977			percent	N			0.18
9770	213	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15 SIM	VC	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	Vinyl chloride	0.05	U		ppb	75-01-4	1	0		166977			percent	N			0.05
9771	215	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	cis-1,2-Dichloroethene	0.05	U		ppb	156-59-2	1	0		166977			percent	N			0.05
9772	221	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	1,4-Dioxane	0.05	U		ppb	123-91-1	1	0		166977			percent	N			0.05
9773	223	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	EPA TO-15 SIM	BR4FBZ	TO15SIM	AIR	N		3/16/2016	3/21/2016		4/4/2016	4-Bromofluorobenzene	88.161			PERCENT	460-00-4	1	0		166977	1.0007	88.161	percent	Y			
9774	338	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15	FC12	TO15	AIR	FD		3/16/2016	3/21/2016		4/2/2016	Dichlorodifluoromethane	2.6		0.74	µg/m3	75-71-8	1	0		166946			percent	N			2.5
9775	340	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15	CLME	TO15	AIR	FD		3/16/2016	3/21/2016		4/2/2016	Methyl chloride	1.7		0.31	µg/m3	74-87-3	1	0		166946			percent	N			1
9776	342	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15	DCTFA12	TO15	AIR	FD		3/16/2016	3/21/2016		4/2/2016	Freon 114	1	U	1	µg/m3	76-14-2	1	0		166946			percent	N			3.5
9777	350	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15	FC11	TO15	AIR	FD		3/16/2016	3/21/2016		4/2/2016	Freon 11	1.3	J	0.84	µg/m3	75-69-4	1	0		166946			percent	N			2.8
9778	352	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15	FC113	TO15	AIR	FD		3/16/2016	3/21/2016		4/2/2016	Freon 113	1.1	U	1.1	µg/m3	76-13-1	1	0		166946			percent	N			3.8
9779	355	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
9701	146	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.61	U	X	U			0.61	2	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9702	149	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.62		X	=			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9703	151	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9704	152	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.73	U	X	U			0.73	2.4	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9705	153	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.57	J	X	=			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9706	155	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9707	156	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.61	U	X	U			0.61	2	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9708	157	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9709	158	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.82	U	X	U			0.82	2.7	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9710	159	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9711	160	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.94	U	X	U			0.94	3.1	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9712	161	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.48	J	X	J			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9713	163	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.3	J	X	J			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9714	165	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9715	166	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.73	U	X	U			0.73	2.4	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9716	167	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9717	169	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.27	J	X	J			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9718	171	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9719	172	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.68	U	X	U			0.68	2.3	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9720	173	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9721	174	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.61	U	X	U			0.61	2	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9722	175	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9723	176	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.68	U	X	U			0.68	2.3	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9724	177	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9725	178	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.82	U	X	U			0.82	2.7	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9726	181	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.3	U	X	U			0.3	1	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9727	183	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9728	185	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9729	187	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9730	188	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.69	U	X	U			0.69	2.3	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9731	189	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.21	J	X	J			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9732	190	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.9	J	X	J			0.65	2.2	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9733	191	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.82		X	=			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9734	193	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.23	J	X	J			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9735	194	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.98	J	X	J			0.65	2.2	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9736	195	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9737	196	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.64	U	X	U			0.64	2.1	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9738	197	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9739	199	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9740	201	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	1	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9741	202	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.74	U	X	U			0.74	4.9	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9742	203	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9743	204	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.74	U	X	U			0.74	2.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9744	205	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.16	J	X	J			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9745	206	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.81	J	X	J			0.74	2.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9746	207	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9747	208	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.9	U	X	U			0.9	3	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9748	209	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9749	210	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.9	U	X	U			0.9	3	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9750	211	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.3	U	X	U			0.3	1	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9751	224	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	96.253		X	=	67.698	129.86			A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9752	556	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.4		X	=				0.34	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166977		TRUE
9753	550	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.13	U	X	U				0.13	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166977		TRUE
9754	552	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.2	U	X	U				0.2	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166977		TRUE
9755	554	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.27	U	X	U				0.27	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166977		TRUE
9756	555	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.2		X	=				0.05	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166977		TRUE
9757	558	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.18	U	X	U				0.18	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166977		TRUE
9758	549	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166977		TRUE
9759	551	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166977		TRUE
9760	553	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166977		TRUE
9761	557	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166977		TRUE
9762	559	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	73.761		X	=	48.778	151.81			A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166977		TRUE
9763	220	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	12	J	X	E				0.34	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9764	219	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.8	J	X	E				0.05	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9765	214	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.13	U	X	U				0.13	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9766	216	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.2	U	X	U				0.2	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9767	217	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15		X	=				0.05	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9768	218	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.83		X	=				0.27	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9769	222	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.18	U	X	U				0.18	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9770	213	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9771	215	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9772	221	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9773	223	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	88.161		X	=	48.778	151.81			A-0018H-031616-IA-BAS	4.30EPACLP	1/0/1900					166977		TRUE
9774	338	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	2.6	J	X	=			0.74	2.5	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166946		TRUE
9775	340	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.7	J	X	=			0.31	1	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166946		TRUE
9776	342	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1	U	X	U			1	3.5	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166946		TRUE
9777	350	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.3	J	X	J			0.84	2.8	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166946		TRUE
9778	352	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.1	U	X	U			1.1	3.8	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166946		TRUE
9779	355	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	3.3	J	X	=			0.3	1	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166946		TRUE
9780	356	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	7.8	J	X	=			0.71	2.4	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166946		TRUE
9781	358	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.7	J	X	=			0.47	1.6

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
9701	146	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9702	149	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9703	151	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9704	152	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			2.4	2.4			jbeckett - Tier 2B
9705	153	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5	J	LCSRPD	jbeckett - Tier 2B
9706	155	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9707	156	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9708	157	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9709	158	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			2.7	2.7			jbeckett - Tier 2B
9710	159	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9711	160	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			3.1	3.1			jbeckett - Tier 2B
9712	161	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9713	163	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9714	165	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9715	166	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			2.4	2.4			jbeckett - Tier 2B
9716	167	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9717	169	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9718	171	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9719	172	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			2.3	2.3			jbeckett - Tier 2B
9720	173	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9721	174	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9722	175	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9723	176	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			2.3	2.3			jbeckett - Tier 2B
9724	177	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9725	178	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			2.7	2.7			jbeckett - Tier 2B
9726	181	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9727	183	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9728	185	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9729	187	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9730	188	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			2.3	2.3			jbeckett - Tier 2B
9731	189	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9732	190	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			2.2	2.2			jbeckett - Tier 2B
9733	191	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9734	193	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9735	194	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			2.2	2.2			jbeckett - Tier 2B
9736	195	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9737	196	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			2.1	2.1			jbeckett - Tier 2B
9738	197	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9739	199	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9740	201	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9741	202	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			4.9	4.9			jbeckett - Tier 2B
9742	203	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9743	204	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			2.5	2.5			jbeckett - Tier 2B
9744	205	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9745	206	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			2.5	2.5			jbeckett - Tier 2B
9746	207	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9747	208	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			3	3			jbeckett - Tier 2B
9748	209	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9749	210	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			3	3			jbeckett - Tier 2B
9750	211	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9751	224	83163541	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler	20	ppb					jbeckett - Tier 2B
9752	556	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.34	0.34			jbeckett - Tier 2B
9753	550	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.13	0.13			jbeckett - Tier 2B
9754	552	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.2	0.2			jbeckett - Tier 2B
9755	554	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.27	0.27			jbeckett - Tier 2B
9756	555	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9757	558	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.18	0.18			jbeckett - Tier 2B
9758	549	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9759	551	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9760	553	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9761	557	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9762	559	517697200	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler	1.0007	ppb					jbeckett - Tier 2B
9763	220	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.34	0.34	J	>ICLinearRange	jbeckett - Tier 2B
9764	219	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.05	0.05	J	>ICLinearRange	jbeckett - Tier 2B
9765	214	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.13	0.13			jbeckett - Tier 2B
9766	216	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.2	0.2			jbeckett - Tier 2B
9767	217	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9768	218	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.27	0.27			jbeckett - Tier 2B
9769	222	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.18	0.18			jbeckett - Tier 2B
9770	213	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9771	215	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9772	221	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
9773	223	864795954	21	ALSS	1608222	1608222	A-0018H-031616-IA-BAS	A-0018H-031616-IA-BAS	1608222002	4/7/2016	mfesler	1.0007	ppb					jbeckett - Tier 2B
9774	338	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			2.5	2.5	J	FD>RPD	jbeckett - Tier 2B
9775	340	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			1	1	J	FD>RPD	jbeckett - Tier 2B
9776	342	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			3.5	3.5			jbeckett - Tier 2B
9777	350	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			2.8	2.8			jbeckett - Tier 2B
9778	352	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			3.8	3.8			jbeckett - Tier 2B
9779	355	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			1	1	J	FD>RPD	jbeckett - Tier 2B
9780	356	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			2.4	2.4	J	FD>RPD	jbeckett - Tier 2B
9781	358	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			1.6	1.6	J	FD>RPD	jbeckett - Tier 2B
9782	372	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			3.6	3.6			jbeckett - Tier 2B
9783	376	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			2.4	2.4			jbeckett - Tier 2B
9784	392	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			3.4	3.4			jbeckett - Tier 2B
9785	404	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			1.9	1.9			jbeckett - Tier 2B
9786	406	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			4.1	4.1			jbeckett - Tier 2B
9787	408	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			4.3	4.3			jbeckett - Tier 2B
9788	410	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			3.8	3.8			jbeckett - Tier 2B
9789	422	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			5.2	5.2			jbeckett - Tier 2B

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
9790	424	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15	PCA	TO15	AIR	FD		3/16/2016	3/21/2016		4/2/2016	1,1,2,2-Tetrachloroethane	1	U	1	µg/m3	79-34-5	1	0		166946			percent	N			3.4
9791	436	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15	DCBZ12	TO15	AIR	FD		3/16/2016	3/21/2016		4/2/2016	1,2-Dichlorobenzene	1.8	U	1.8	µg/m3	95-50-1	1	0		166946			percent	N			6
9792	337	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15	FC12	TO15	AIR	FD		3/16/2016	3/21/2016		4/2/2016	Dichlorodifluoromethane	0.52		0.15	ppb	75-71-8	1	0		166946			percent	N			0.5
9793	339	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15	CLME	TO15	AIR	FD		3/16/2016	3/21/2016		4/2/2016	Methyl chloride	0.84		0.15	ppb	74-87-3	1	0		166946			percent	N			0.5
9794	341	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15	DCTFA12	TO15	AIR	FD		3/16/2016	3/21/2016		4/2/2016	Freon 114	0.15	U	0.15	ppb	76-14-2	1	0		166946			percent	N			0.5
9795	343	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15	ERYTHRENE	TO15	AIR	FD		3/16/2016	3/21/2016		4/2/2016	1,3-Butadiene	0.15	U	0.15	ppb	106-99-0	1	0		166946			percent	N			0.5
9796	344	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15	ERYTHRENE	TO15	AIR	FD		3/16/2016	3/21/2016		4/2/2016	1,3-Butadiene	0.33	U	0.33	µg/m3	106-99-0	1	0		166946			percent	N			1.1
9797	345	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15	BRME	TO15	AIR	FD		3/16/2016	3/21/2016		4/2/2016	Bromomethane	0.15	U	0.15	ppb	74-83-9	1	0		166946			percent	N			0.5
9798	346	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15	BRME	TO15	AIR	FD		3/16/2016	3/21/2016		4/2/2016	Bromomethane	0.58	U	0.58	µg/m3	74-83-9	1	0		166946			percent	N			1.9
9799	347	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15	CLEA	TO15	AIR	FD		3/16/2016	3/21/2016		4/2/2016	Ethyl chloride	0.15	U	0.15	ppb	75-00-3	1	0		166946			percent	N			0.5
9800	348	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15	CLEA	TO15	AIR	FD		3/16/2016	3/21/2016		4/2/2016	Ethyl chloride	0.4	U	0.4	µg/m3	75-00-3	1	0		166946			percent	N			1.3
9801	349	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15	FC11	TO15	AIR	FD		3/16/2016	3/21/2016		4/2/2016	Freon 11	0.24	J	0.15	ppb	75-69-4	1	0		166946			percent	N			0.5
9802	351	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15	FC113	TO15	AIR	FD		3/16/2016	3/21/2016		4/2/2016	Freon 113	0.15	U	0.15	ppb	76-13-1	1	0		166946			percent	N			0.5
9803	353	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15	DCE11	TO15	AIR	FD		3/16/2016	3/21/2016		4/2/2016	1,1-Dichloroethene	0.15	U	0.15	ppb	75-35-4	1	0		166946			percent	N			0.5
9804	354	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15	DCE11	TO15	AIR	FD		3/16/2016	3/21/2016		4/2/2016	1,1-Dichloroethene	0.59	U	0.59	µg/m3	75-35-4	1	0		166946			percent	N			2
9805	357	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15	CDS	TO15	AIR	FD		3/16/2016	3/21/2016		4/2/2016	Carbon disulfide	0.55		0.15	ppb	75-15-0	1	0		166946			percent	N			0.5
9806	359	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15	MTLNCL	TO15	AIR	FD		3/16/2016	3/21/2016		4/2/2016	Methylene chloride	0.2	J	0.15	ppb	75-09-2	1	0		166946			percent	N			0.5
9807	360	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15	MTLNCL	TO15	AIR	FD		3/16/2016	3/21/2016		4/2/2016	Methylene chloride	0.71	J	0.52	µg/m3	75-09-2	1	0		166946			percent	N			1.7
9808	361	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15	DCE12T	TO15	AIR	FD		3/16/2016	3/21/2016		4/2/2016	trans-1,2-Dichloroethene	0.15	U	0.15	ppb	156-60-5	1	0		166946			percent	N			0.5
9809	362	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15	DCE12T	TO15	AIR	FD		3/16/2016	3/21/2016		4/2/2016	trans-1,2-Dichloroethene	0.59	U	0.59	µg/m3	156-60-5	1	0		166946			percent	N			2
9810	363	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15	TBUTMEE	TO15	AIR	FD		3/16/2016	3/21/2016		4/2/2016	Methyl t-butyl ether	0.15	U	0.15	ppb	1634-04-4	1	0		166946			percent	N			0.5
9811	364	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15	TBUTMEE	TO15	AIR	FD		3/16/2016	3/21/2016		4/2/2016	Methyl t-butyl ether	0.54	U	0.54	µg/m3	1634-04-4	1	0		166946			percent	N			1.8
9812	365	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15	VA	TO15	AIR	FD		3/16/2016	3/21/2016		4/2/2016	Vinyl acetate	0.15	U	0.15	ppb	108-05-4	1	0		166946			percent	N			0.5

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
9790	424	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1	U	X	U			1	3.4	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166946		TRUE
9791	436	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.8	U	X	U			1.8	6	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166946		TRUE
9792	337	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.52	J	X	=			0.15	0.5	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166946		TRUE
9793	339	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.84	J	X	=			0.15	0.5	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166946		TRUE
9794	341	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166946		TRUE
9795	343	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166946		TRUE
9796	344	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.33	U	X	U			0.33	1.1	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166946		TRUE
9797	345	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166946		TRUE
9798	346	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.58	U	X	U			0.58	1.9	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166946		TRUE
9799	347	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166946		TRUE
9800	348	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.4	U	X	U			0.4	1.3	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166946		TRUE
9801	349	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.24	J	X	J			0.15	0.5	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166946		TRUE
9802	351	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166946		TRUE
9803	353	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166946		TRUE
9804	354	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.59	U	X	U			0.59	2	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166946		TRUE
9805	357	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.55	J	X	=			0.15	0.5	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166946		TRUE
9806	359	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.2	J	X	J			0.15	0.5	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166946		TRUE
9807	360	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.71	J	X	J			0.52	1.7	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166946		TRUE
9808	361	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166946		TRUE
9809	362	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.59	U	X	U			0.59	2	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166946		TRUE
9810	363	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166946		TRUE
9811	364	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.54	U	X	U			0.54	1.8	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166946		TRUE
9812	365	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	UJ	X	U			0.15	0.5

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
9790	424	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			3.4	3.4			jbeckett - Tier 2B
9791	436	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			6	6			jbeckett - Tier 2B
9792	337	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5	J	FD>RPD	jbeckett - Tier 2B
9793	339	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5	J	FD>RPD	jbeckett - Tier 2B
9794	341	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9795	343	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9796	344	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			1.1	1.1			jbeckett - Tier 2B
9797	345	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9798	346	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			1.9	1.9			jbeckett - Tier 2B
9799	347	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9800	348	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			1.3	1.3			jbeckett - Tier 2B
9801	349	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9802	351	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9803	353	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9804	354	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9805	357	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5	J	FD>RPD	jbeckett - Tier 2B
9806	359	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9807	360	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			1.7	1.7			jbeckett - Tier 2B
9808	361	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9809	362	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9810	363	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5	none	LCSD>UCL	jbeckett - Tier 2B
9811	364	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			1.8	1.8	none	LCSD>UCL	jbeckett - Tier 2B
9812	365	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5	none	LCS>UCL	jbeckett - Tier 2B
9812	365	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5	UJ	FD>RPD	jbeckett - Tier 2B
9812	365	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5	NONE	ICVS>UCL	jbeckett - Tier 2B
9812	365	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5	none	LCSD>UCL	jbeckett - Tier 2B
9813	366	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			1.8	1.8	UJ	FD>RPD	jbeckett - Tier 2B
9813	366	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			1.8	1.8	none	LCSD>UCL	jbeckett - Tier 2B
9813	366	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			1.8	1.8	none	LCS>UCL	jbeckett - Tier 2B
9813	366	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			1.8	1.8	NONE	ICVS>UCL	jbeckett - Tier 2B
9814	367	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5	J	LCSD>UCL	jbeckett - Tier 2B
9815	368	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			1.5	1.5	J	LCSD>UCL	jbeckett - Tier 2B
9816	369	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9817	370	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9818	371	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9819	373	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9820	374	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			1.8	1.8			jbeckett - Tier 2B
9821	375	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9822	377	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5	none	LCSRPD	jbeckett - Tier 2B
9823	378	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			1.5	1.5	none	LCSRPD	jbeckett - Tier 2B
9824	379	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9825	380	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9826	381	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9827	382	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			2.7	2.7			jbeckett - Tier 2B
9828	383	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9829	384	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			3.1	3.1			jbeckett - Tier 2B
9830	385	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9831	386	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			1.6	1.6			jbeckett - Tier 2B
9832	387	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9833	388	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			1.7	1.7			jbeckett - Tier 2B
9834	389	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9835	390	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			2.4	2.4			jbeckett - Tier 2B
9836	391	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9837	393	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9838	394	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9839	395	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9840	396	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			2.3	2.3			jbeckett - Tier 2B
9841	397	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9842	398	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9843	399	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9844	400	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			2.3	2.3			jbeckett - Tier 2B
9845	401	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9846	402	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			2.7	2.7			jbeckett - Tier 2B
9847	403	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9848	405	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9849	407	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9850	409	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9851	411	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9852	412	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			2.3	2.3			jbeckett - Tier 2B
9853	413	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9854	414	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			2.2	2.2			jbeckett - Tier 2B
9855	415	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9856	416	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			2.2	2.2			jbeckett - Tier 2B
9857	417	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9858	418	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			2.2	2.2			jbeckett - Tier 2B
9859	419	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9860	420	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			2.1	2.1			jbeckett - Tier 2B
9861	421	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9862	423	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9863	425	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9864	426	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			4.9	4.9			jbeckett - Tier 2B
9865	427	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9866	428	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			2.5	2.5			jbeckett - Tier 2B
9867	429	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9868	430	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			2.5	2.5			jbeckett - Tier 2B
9869	431	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9870	432	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			3	3			jbeckett - Tier 2B
9871	433	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9872	434	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			3	3			jbeckett - Tier 2B

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
9873	435	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15	DCBZ12	TO15	AIR	FD		3/16/2016	3/21/2016		4/2/2016	1,2-Dichlorobenzene	0.3	U	0.3	ppb	95-50-1	1	0		166946			percent	N			1
9874	448	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	EPA TO-15	BR4FBZ	TO15	AIR	FD		3/16/2016	3/21/2016		4/2/2016	4-Bromofluorobenzene	96.004			PERCENT	460-00-4	1	0		166946	20	96.004	percent	Y			
9875	19	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	ACE	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Acetone	14		0.3	ppb	67-64-1	1	0		166946			percent	N			1
9876	20	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	ACE	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Acetone	34		0.71	µg/m3	67-64-1	1	0		166946			percent	N			2.4
9877	6	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	DCTFA12	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Freon 114	1	U	1	µg/m3	76-14-2	1	0		166946			percent	N			3.5
9878	14	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	FC11	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Freon 11	1.3	J	0.84	µg/m3	75-69-4	1	0		166946			percent	N			2.8
9879	16	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	FC113	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Freon 113	1.1	U	1.1	µg/m3	76-13-1	1	0		166946			percent	N			3.8
9880	31	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	MEK	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Methyl ethyl ketone	1.1		0.15	ppb	78-93-3	1	0		166946			percent	N			0.5
9881	32	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	MEK	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Methyl ethyl ketone	3.4		0.44	µg/m3	78-93-3	1	0		166946			percent	N			1.5
9882	36	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	ETACET	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Ethyl acetate	3.3	J	0.54	µg/m3	141-78-6	1	0		166946			percent	N			3.6
9883	38	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	C6N	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	n-Hexane	1	J	0.53	µg/m3	110-54-3	1	0		166946			percent	N			1.8
9884	40	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	TCLME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Chloroform	1.6	J	0.73	µg/m3	67-66-3	1	0		166946			percent	N			2.4
9885	42	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	THF	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Tetrahydrofuran	2.9		0.44	µg/m3	109-99-9	1	0		166946			percent	N			1.5
9886	56	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	BDCME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Bromodichloromethane	1	U	1	µg/m3	75-27-4	1	0		166946			percent	N			3.4
9887	67	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	BZME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Toluene	1.3		0.15	ppb	108-88-3	1	0		166946			percent	N			0.5
9888	68	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	BZME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Toluene	5		0.57	µg/m3	108-88-3	1	0		166946			percent	N			1.9
9889	70	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	HXO2	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	2-Hexanone	1.2	U	1.2	µg/m3	591-78-6	1	0		166946			percent	N			4.1
9890	72	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	DBCME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Dibromochloromethane	1.3	U	1.3	µg/m3	124-48-1	1	0		166946			percent	N			4.3
9891	74	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	EDB	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,2-Dibromoethane	1.2	U	1.2	µg/m3	106-93-4	1	0		166946			percent	N			3.8
9892	80	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	XYLMP	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	m,p-Xylene	2	J	0.65	µg/m3	179601-23-1	1	0		166946			percent	N			2.2
9893	86	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	TBME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Bromoform	1.6	U	1.6	µg/m3	75-25-2	1	0		166946			percent	N			5.2
9894	88	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	PCA	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,1,2,2-Tetrachloroethane	1	U	1	µg/m3	79-34-5	1	0		166946			percent	N			3.4
9895	100	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	DCBZ12	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,2-Dichlorobenzene	1.8	U	1.8	µg/m3	95-50-1	1	0		166946			percent	N			6
9896	1	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	FC12	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Dichlorodifluoromethane	0.15	U	0.15	ppb	75-71-8	1	0		166946			percent	N			0.5
9897	2	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	FC12	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Dichlorodifluoromethane	0.74	U	0.74	µg/m3	75-71-8	1	0		166946			percent	N			2.5
9898	3	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	CLME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Methyl chloride	0.15	U	0.15	ppb	74-87-3	1	0		166946			percent	N			0.5
9899	4	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	CLME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Methyl chloride	0.31	U	0.31	µg/m3	74-87-3	1	0		166946			percent	N			1
9900	5	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	DCTFA12	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Freon 114	0.15	U	0.15	ppb	76-14-2	1	0		166946			percent	N			0.5
9901	7	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	ERYTHRENE	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,3-Butadiene	0.15	U	0.15	ppb	106-99-0	1	0		166946			percent	N			0.5
9902	8	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	ERYTHRENE	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,3-Butadiene	0.33	U	0.33	µg/m3	106-99-0	1	0		166946			percent	N			1.1
9903	9	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	BRME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Bromomethane	0.15	U	0.15	ppb	74-83-9	1	0		166946			percent	N			0.5
9904	10	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	BRME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Bromomethane	0.58	U	0.58	µg/m3	74-83-9	1	0		166946			percent	N			1.9
9905	11	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	CLEA	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Ethyl chloride	0.15	U	0.15	ppb	75-00-3	1	0		166946			percent	N			0.5
9906	12	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	CLEA	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Ethyl chloride	0.4	U	0.4	µg/m3	75-00-3	1	0		166946			percent	N			1.3
9907	13	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	FC11	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Freon 11	0.24	J	0.15	ppb	75-69-4	1	0		166946			percent	N			0.5
9908	15	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	FC113	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Freon 113	0.15	U	0.15	ppb	76-13-1	1	0		166946			percent	N			0.5
9909	17	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	DCE11	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,1-Dichloroethene	0.15	U	0.15	ppb	75-35-4	1	0		166946			percent	N			0.5
9910	18	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	DCE11	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,1-Dichloroethene	0.59	U	0.59	µg/m3	75-35-4	1	0		166946			percent	N			2
9911	21	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	CDS	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Carbon disulfide	0.15	U	0.15	ppb	75-15-0	1	0		166946			percent	N			0.5
9912	22	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	CDS	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Carbon disulfide	0.47	U	0.47	µg/m3	75-15-0	1	0		166946			percent	N			1.6
9913	23	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	MTLNCL	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Methylene chloride	0.24	J	0.15	ppb	75-09-2	1	0		166946			percent	N			0.5
9914	24	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	MTLNCL	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Methylene chloride	0.83	J	0.52	µg/m3	75-09-2	1	0		166946			percent	N			1.7
9915	25	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	DCE12T	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	trans-1,2-Dichloroethene	0.15	U	0.15	ppb	156-60-5	1	0		166946			percent	N			0.5
9916	26	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	DCE12T	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	trans-1,2-Dichloroethene	0.59	U	0.59	µg/m3	156-60-5	1	0		166946			percent	N			2
9917	27	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	TBUTMEE	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Methyl t-butyl ether	0.15	U	0.15	ppb	1634-04-4	1	0		166946			percent	N			0.5
9918	28	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	TBUTMEE	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Methyl t-butyl ether	0.54	U	0.54	µg/m3	1634-04-4	1	0		166946			percent	N			1.8
9919	29	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	VA	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Vinyl acetate	0.15	U	0.15	ppb	108-05-4	1	0		166946			percent	N			0.5

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
9873	435	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.3	U	X	U			0.3	1	A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166946		TRUE
9874	448	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	96.004		X	=	67.698	129.86			A-0051-031616-IA-BAS-D	4.30EPACLP	1/0/1900					166946		TRUE
9875	19	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	14		X	=			0.3	1	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9876	20	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	34		X	=			0.71	2.4	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9877	6	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1	U	X	U			1	3.5	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9878	14	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.3	J	X	J			0.84	2.8	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9879	16	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.1	U	X	U			1.1	3.8	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9880	31	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.1	J	X	=			0.15	0.5	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9881	32	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	3.4	J	X	=			0.44	1.5	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9882	36	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	3.3	J	X	J			0.54	3.6	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9883	38	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1	J	X	J			0.53	1.8	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9884	40	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.6	J	X	J			0.73	2.4	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9885	42	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	2.9	J	X	=			0.44	1.5	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9886	56	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1	U	X	U			1	3.4	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9887	67	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.3		X	=			0.15	0.5	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9888	68	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	5		X	=			0.57	1.9	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9889	70	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.2	U	X	U			1.2	4.1	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9890	72	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.3	U	X	U			1.3	4.3	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9891	74	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.2	U	X	U			1.2	3.8	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9892	80	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	2	J	X	J			0.65	2.2	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9893	86	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.6	U	X	U			1.6	5.2	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9894	88	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1	U	X	U			1	3.4	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9895	100	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.8	U	X	U			1.8	6	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9896	1	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9897	2	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.74	U	X	U			0.74	2.5	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9898	3	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9899	4	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.31	U	X	U			0.31	1	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9900	5	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9901	7	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9902	8	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.33	U	X	U			0.33	1.1	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9903	9	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9904	10	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.58	U	X	U			0.58	1.9	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9905	11	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9906	12	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.4	U	X	U			0.4	1.3	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9907	13	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.24	J	X	J			0.15	0.5	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9908	15	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9909	17	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9910	18	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.59	U	X	U			0.59	2	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9911	21	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9912	22	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.47	U	X	U			0.47	1.6	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9913	23	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.24	J	X	J			0.15	0.5	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9914	24	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.83	J	X	J			0.52	1.7	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9915	25	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9916	26	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.59	U	X	U			0.59	2	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9917	27	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9918	28	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.54	U	X	U			0.54	1.8	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9919	29	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5

APPENDIX A-1

Laboratory Validated Results

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
9873	435	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9874	448	1035085959	21	ALSS	1608222	1608222	A-0051-031616-IA-BAS-D	A-0051-031616-IA-BAS-D	1608222004	4/7/2016	mfesler	20	ppb					jbeckett - Tier 2B
9875	19	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9876	20	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			2.4	2.4			jbeckett - Tier 2B
9877	6	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			3.5	3.5			jbeckett - Tier 2B
9878	14	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			2.8	2.8			jbeckett - Tier 2B
9879	16	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			3.8	3.8			jbeckett - Tier 2B
9880	31	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5	J	LCSD>UCL	jbeckett - Tier 2B
9881	32	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			1.5	1.5	J	LCSD>UCL	jbeckett - Tier 2B
9882	36	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			3.6	3.6			jbeckett - Tier 2B
9883	38	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			1.8	1.8			jbeckett - Tier 2B
9884	40	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			2.4	2.4			jbeckett - Tier 2B
9885	42	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			1.5	1.5	J	LCSRPD	jbeckett - Tier 2B
9886	56	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			3.4	3.4			jbeckett - Tier 2B
9887	67	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9888	68	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			1.9	1.9			jbeckett - Tier 2B
9889	70	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			4.1	4.1			jbeckett - Tier 2B
9890	72	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			4.3	4.3			jbeckett - Tier 2B
9891	74	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			3.8	3.8			jbeckett - Tier 2B
9892	80	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			2.2	2.2			jbeckett - Tier 2B
9893	86	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			5.2	5.2			jbeckett - Tier 2B
9894	88	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			3.4	3.4			jbeckett - Tier 2B
9895	100	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			6	6			jbeckett - Tier 2B
9896	1	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9897	2	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			2.5	2.5			jbeckett - Tier 2B
9898	3	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9899	4	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9900	5	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9901	7	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9902	8	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			1.1	1.1			jbeckett - Tier 2B
9903	9	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9904	10	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			1.9	1.9			jbeckett - Tier 2B
9905	11	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9906	12	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			1.3	1.3			jbeckett - Tier 2B
9907	13	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9908	15	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9909	17	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9910	18	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9911	21	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9912	22	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			1.6	1.6			jbeckett - Tier 2B
9913	23	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9914	24	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			1.7	1.7			jbeckett - Tier 2B
9915	25	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9916	26	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9917	27	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5	none	LCSD>UCL	jbeckett - Tier 2B
9918	28	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			1.8	1.8	none	LCSD>UCL	jbeckett - Tier 2B
9919	29	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5	none	LCS>UCL	jbeckett - Tier 2B
9919	29	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5	NONE	ICVS>UCL	jbeckett - Tier 2B
9919	29	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5	none	LCSD>UCL	jbeckett - Tier 2B
9920	30	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			1.8	1.8	NONE	ICVS>UCL	jbeckett - Tier 2B
9920	30	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			1.8	1.8	none	LCSD>UCL	jbeckett - Tier 2B
9920	30	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			1.8	1.8	none	LCS>UCL	jbeckett - Tier 2B
9921	33	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9922	34	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9923	35	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9924	37	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9925	39	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9926	41	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5	J	LCSRPD	jbeckett - Tier 2B
9927	43	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9928	44	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9929	45	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9930	46	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			2.7	2.7			jbeckett - Tier 2B
9931	47	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9932	48	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			3.1	3.1			jbeckett - Tier 2B
9933	49	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9934	50	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			1.6	1.6			jbeckett - Tier 2B
9935	51	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9936	52	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			1.7	1.7			jbeckett - Tier 2B
9937	53	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9938	54	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			2.4	2.4			jbeckett - Tier 2B
9939	55	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9940	57	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9941	58	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9942	59	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9943	60	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			2.3	2.3			jbeckett - Tier 2B
9944	61	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9945	62	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
9946	63	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9947	64	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			2.3	2.3			jbeckett - Tier 2B
9948	65	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9949	66	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			2.7	2.7			jbeckett - Tier 2B
9950	69	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9951	71	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9952	73	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9953	75	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9954	76	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			2.3	2.3			jbeckett - Tier 2B
9955	77	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9956	78	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			2.2	2.2			jbeckett - Tier 2B
9957	79	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
9958	81	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	XYLO	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	o-Xylene	0.15	U	0.15	ppb	95-47-6	1	0		166946			percent	N			0.5
9959	82	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	XYLO	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	o-Xylene	0.65	U	0.65	µg/m3	95-47-6	1	0		166946			percent	N			2.2
9960	83	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	STY	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Styrene	0.15	U	0.15	ppb	100-42-5	1	0		166946			percent	N			0.5
9961	84	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	STY	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Styrene	0.64	U	0.64	µg/m3	100-42-5	1	0		166946			percent	N			2.1
9962	85	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	TBME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Bromoform	0.15	U	0.15	ppb	75-25-2	1	0		166946			percent	N			0.5
9963	87	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	PCA	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,1,2,2-Tetrachloroethane	0.15	U	0.15	ppb	79-34-5	1	0		166946			percent	N			0.5
9964	89	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	EBZME4	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	4-Ethyl toluene	0.15	U	0.15	ppb	622-96-8	1	0		166946			percent	N			1
9965	90	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	EBZME4	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	4-Ethyl toluene	0.74	U	0.74	µg/m3	622-96-8	1	0		166946			percent	N			4.9
9966	91	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	TMB135	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,3,5-Trimethylbenzene	0.15	U	0.15	ppb	108-67-8	1	0		166946			percent	N			0.5
9967	92	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	TMB135	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,3,5-Trimethylbenzene	0.74	U	0.74	µg/m3	108-67-8	1	0		166946			percent	N			2.5
9968	93	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	TMB124	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,2,4-Trimethylbenzene	0.2	J	0.15	ppb	95-63-6	1	0		166946			percent	N			0.5
9969	94	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	TMB124	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,2,4-Trimethylbenzene	0.97	J	0.74	µg/m3	95-63-6	1	0		166946			percent	N			2.5
9970	95	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	DCBZ13	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,3-Dichlorobenzene	0.15	U	0.15	ppb	541-73-1	1	0		166946			percent	N			0.5
9971	96	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	DCBZ13	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,3-Dichlorobenzene	0.9	U	0.9	µg/m3	541-73-1	1	0		166946			percent	N			3
9972	97	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	DCBZ14	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,4-Dichlorobenzene	0.15	U	0.15	ppb	106-46-7	1	0		166946			percent	N			0.5
9973	98	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	DCBZ14	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,4-Dichlorobenzene	0.9	U	0.9	µg/m3	106-46-7	1	0		166946			percent	N			3
9974	99	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	DCBZ12	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,2-Dichlorobenzene	0.3	U	0.3	ppb	95-50-1	1	0		166946			percent	N			1
9975	112	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	EPA TO-15	BR4FBZ	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	4-Bromofluorobenzene	96.653			PERCENT	460-00-4	1	0		166946	20	96.653	percent	Y			
9976	468	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	ACE	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Acetone	14		0.71	µg/m3	67-64-1	1	0		166946			percent	N			2.4
9977	454	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	DCTFA12	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Freon 114	1	U	1	µg/m3	76-14-2	1	0		166946			percent	N			3.5
9978	462	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	FC11	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Freon 11	1.4	J	0.84	µg/m3	75-69-4	1	0		166946			percent	N			2.8
9979	464	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	FC113	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Freon 113	1.1	U	1.1	µg/m3	76-13-1	1	0		166946			percent	N			3.8
9980	467	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	ACE	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Acetone	5.9		0.3	ppb	67-64-1	1	0		166946			percent	N			1
9981	480	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	MEK	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Methyl ethyl ketone	1.1	J	0.44	µg/m3	78-93-3	1	0		166946			percent	N			1.5
9982	498	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	BZ	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Benzene	1.4	J	0.48	µg/m3	71-43-2	1	0		166946			percent	N			1.6
9983	504	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	BDCME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Bromodichloromethane	1	U	1	µg/m3	75-27-4	1	0		166946			percent	N			3.4
9984	515	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	BZME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Toluene	1.4		0.15	ppb	108-88-3	1	0		166946			percent	N			0.5
9985	516	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	BZME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Toluene	5.4		0.57	µg/m3	108-88-3	1	0		166946			percent	N			1.9
9986	518	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	HXO2	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	2-Hexanone	1.2	U	1.2	µg/m3	591-78-6	1	0		166946			percent	N			4.1
9987	520	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	DBCME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Dibromochloromethane	1.3	U	1.3	µg/m3	124-48-1	1	0		166946			percent	N			4.3
9988	522	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	EDB	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,2-Dibromoethane	1.2	U	1.2	µg/m3	106-93-4	1	0		166946			percent	N			3.8
9989	528	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	XYLMP	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	m,p-Xylene	2.3		0.65	µg/m3	179601-23-1	1	0		166946			percent	N			2.2
9990	534	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	TBME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Bromoform	1.6	U	1.6	µg/m3	75-25-2	1	0		166946			percent	N			5.2
9991	536	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	PCA	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,1,2,2-Tetrachloroethane	1	U	1	µg/m3	79-34-5	1	0		166946			percent	N			3.4
9992	548	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	DCBZ12	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,2-Dichlorobenzene	1.8	U	1.8	µg/m3	95-50-1	1	0		166946			percent	N			6
9993	449	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	FC12	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Dichlorodifluoromethane	0.15	U	0.15	ppb	75-71-8	1	0		166946			percent	N			0.5
9994	450	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	FC12	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Dichlorodifluoromethane	0.74	U	0.74	µg/m3	75-71-8	1	0		166946			percent	N			2.5
9995	451	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	CLME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Methyl chloride	0.15	U	0.15	ppb	74-87-3	1	0		166946			percent	N			0.5
9996	452	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	CLME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Methyl chloride	0.31	U	0.31	µg/m3	74-87-3	1	0		166946			percent	N			1
9997	453	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	DCTFA12	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Freon 114	0.15	U	0.15	ppb	76-14-2	1	0		166946			percent	N			0.5
9998	455	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	ERYTHRENE	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,3-Butadiene	0.15	U	0.15	ppb	106-99-0	1	0		166946			percent	N			0.5
9999	456	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	ERYTHRENE	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,3-Butadiene	0.33	U	0.33	µg/m3	106-99-0	1	0		166946			percent	N			1.1
10000	457	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	BRME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Bromomethane	0.15	U	0.15	ppb	74-83-9	1	0		166946			percent	N			0.5
10001	458	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	BRME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Bromomethane	0.58	U	0.58	µg/m3	74-83-9	1	0		166946			percent	N			1.9
10002	459	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	CLEA	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Ethyl chloride	0.15	U	0.15	ppb	75-00-3	1	0		166946			percent	N			0.5
10003	460	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	CLEA	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Ethyl chloride	0.4	U	0.4	µg/m3	75-00-3	1	0		166946			percent	N			1.3
10004	461	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	FC11	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Freon 11	0.24	J	0.15	ppb	75-69-4	1	0		166946			percent	N			0.5
10005	463	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	FC113	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Freon 113	0.15	U	0.15	ppb	76-13-1	1	0		166946			percent	N			0.5
10006	465	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	DCE11	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,1-Dichloroethene	0.15	U	0.15	ppb	75-35-4	1	0		166946			percent	N			0.5
10007	466	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	DCE11	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,1-Dichloroethene	0.59	U	0.59	µg/m3	75-35-4	1	0		166946			percent	N			2
10008	469	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	CDS	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Carbon disulfide	0.15	U	0.15	ppb	75-15-0	1	0		166946			percent	N			0.5
10009	470	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	CDS	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Carbon disulfide	0.47	U	0.47	µg/m3	75-15-0	1	0		166946			percent	N			1.6
10010	471	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	MTLNCL	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Methylene chloride	0.18	J	0.15	ppb	75-09-2	1	0		166946			percent	N			0.5
10011	472	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	MTLNCL	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Methylene chloride	0.64	J	0.52	µg/m3	75-09-2	1	0		166946			percent	N			1.7
10012	473	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	DCE12T	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	trans-1,2-Dichloroethene	0.15	U	0.15	ppb	156-60-5	1	0		166946			percent	N			0.5
10013	474	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	DCE12T	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	trans-1,2-Dichloroethene	0.59	U	0.59	µg/m3	156-60-5	1	0		166946			percent	N			2
10014	475	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	TBUTMEE	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Methyl t-butyl ether	0.15	U	0.15	ppb	1634-04-4	1	0		166946			percent	N			0.5
10015	476	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	TBUTMEE	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Methyl t-butyl ether	0.54	U	0.54	µg/m3	1634-04-4	1	0		166946			percent	N			1.8
10016	477	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	VA	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Vinyl acetate	0.15	U	0.15	ppb	108-05-4	1	0		166946			percent	N			0.5

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
9958	81	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9959	82	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.65	U	X	U			0.65	2.2	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9960	83	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9961	84	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.64	U	X	U			0.64	2.1	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9962	85	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9963	87	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9964	89	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	1	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9965	90	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.74	U	X	U			0.74	4.9	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9966	91	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9967	92	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.74	U	X	U			0.74	2.5	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9968	93	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.2	J	X	J			0.15	0.5	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9969	94	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.97	J	X	J			0.74	2.5	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9970	95	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9971	96	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.9	U	X	U			0.9	3	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9972	97	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9973	98	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.9	U	X	U			0.9	3	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9974	99	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.3	U	X	U			0.3	1	A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9975	112	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	96.653		X	=	67.698	129.86			A-0017H-031616-IA-BAS	4.30EPACLP	1/0/1900					166946		TRUE
9976	468	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	14		X	=			0.71	2.4	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
9977	454	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1	U	X	U			1	3.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
9978	462	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.4	J	X	J			0.84	2.8	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
9979	464	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.1	U	X	U			1.1	3.8	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
9980	467	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	5.9		X	=			0.3	1	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
9981	480	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.1	J	X	J			0.44	1.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
9982	498	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.4	J	X	J			0.48	1.6	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
9983	504	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1	U	X	U			1	3.4	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
9984	515	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.4		X	=			0.15	0.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
9985	516	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	5.4		X	=			0.57	1.9	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
9986	518	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.2	U	X	U			1.2	4.1	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
9987	520	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.3	U	X	U			1.3	4.3	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
9988	522	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.2	U	X	U			1.2	3.8	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
9989	528	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	2.3		X	=			0.65	2.2	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
9990	534	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.6	U	X	U			1.6	5.2	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
9991	536	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1	U	X	U			1	3.4	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
9992	548	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	1.8	U	X	U			1.8	6	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
9993	449	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
9994	450	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.74	U	X	U			0.74	2.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
9995	451	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
9996	452	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.31	U	X	U			0.31	1	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
9997	453	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
9998	455	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
9999	456	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.33	U	X	U			0.33	1.1	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10000	457	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10001	458	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.58	U	X	U			0.58	1.9	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10002	459	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10003	460	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.4	U	X	U			0.4	1.3	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10004	461	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.24	J	X	J			0.15	0.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10005	463	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10006	465	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10007	466	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.59	U	X	U			0.59	2	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10008	469	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10009	470	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.47	U	X	U			0.47	1.6	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10010	471	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.18	J	X	J			0.15	0.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10011	472	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.64	J	X	J			0.52	1.7	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10012	473	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10013	474	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.59	U	X	U			0.59	2	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10014	475	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10015	476	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.54	U	X	U			0.54	1.8	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10016	477	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
9958	81	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9959	82	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			2.2	2.2			jbeckett - Tier 2B
9960	83	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9961	84	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			2.1	2.1			jbeckett - Tier 2B
9962	85	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9963	87	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9964	89	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9965	90	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			4.9	4.9			jbeckett - Tier 2B
9966	91	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9967	92	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			2.5	2.5			jbeckett - Tier 2B
9968	93	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9969	94	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			2.5	2.5			jbeckett - Tier 2B
9970	95	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9971	96	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			3	3			jbeckett - Tier 2B
9972	97	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9973	98	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			3	3			jbeckett - Tier 2B
9974	99	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9975	112	1459960527	21	ALSS	1608222	1608222	A-0017H-031616-IA-BAS	A-0017H-031616-IA-BAS	1608222001	4/7/2016	mfesler	20	ppb					jbeckett - Tier 2B
9976	468	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			2.4	2.4			jbeckett - Tier 2B
9977	454	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			3.5	3.5			jbeckett - Tier 2B
9978	462	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			2.8	2.8			jbeckett - Tier 2B
9979	464	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			3.8	3.8			jbeckett - Tier 2B
9980	467	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9981	480	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			1.5	1.5	J	LCSD>UCL	jbeckett - Tier 2B
9982	498	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			1.6	1.6			jbeckett - Tier 2B
9983	504	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			3.4	3.4			jbeckett - Tier 2B
9984	515	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9985	516	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			1.9	1.9			jbeckett - Tier 2B
9986	518	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			4.1	4.1			jbeckett - Tier 2B
9987	520	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			4.3	4.3			jbeckett - Tier 2B
9988	522	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			3.8	3.8			jbeckett - Tier 2B
9989	528	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			2.2	2.2			jbeckett - Tier 2B
9990	534	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			5.2	5.2			jbeckett - Tier 2B
9991	536	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			3.4	3.4			jbeckett - Tier 2B
9992	548	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			6	6			jbeckett - Tier 2B
9993	449	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9994	450	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			2.5	2.5			jbeckett - Tier 2B
9995	451	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9996	452	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
9997	453	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9998	455	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
9999	456	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			1.1	1.1			jbeckett - Tier 2B
10000	457	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10001	458	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			1.9	1.9			jbeckett - Tier 2B
10002	459	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10003	460	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			1.3	1.3			jbeckett - Tier 2B
10004	461	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10005	463	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10006	465	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10007	466	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
10008	469	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10009	470	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			1.6	1.6			jbeckett - Tier 2B
10010	471	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10011	472	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			1.7	1.7			jbeckett - Tier 2B
10012	473	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10013	474	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
10014	475	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5	none	LCSD>UCL	jbeckett - Tier 2B
10015	476	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			1.8	1.8	none	LCSD>UCL	jbeckett - Tier 2B
10016	477	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5	none	LCS>UCL	jbeckett - Tier 2B
10016	477	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5	none	LCSD>UCL	jbeckett - Tier 2B
10016	477	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5	NONE	ICVS>UCL	jbeckett - Tier 2B
10017	478	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			1.8	1.8	none	LCSD>UCL	jbeckett - Tier 2B
10017	478	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			1.8	1.8	none	LCS>UCL	jbeckett - Tier 2B
10017	478	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			1.8	1.8	NONE	ICVS>UCL	jbeckett - Tier 2B
10018	479	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5	J	LCSD>UCL	jbeckett - Tier 2B
10019	481	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10020	482	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
10021	483	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
10022	484	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			3.6	3.6			jbeckett - Tier 2B
10023	485	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10024	486	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			1.8	1.8			jbeckett - Tier 2B
10025	487	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10026	488	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			2.4	2.4			jbeckett - Tier 2B
10027	489	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5	none	LCSRPD	jbeckett - Tier 2B
10028	490	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			1.5	1.5	none	LCSRPD	jbeckett - Tier 2B
10029	491	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10030	492	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
10031	493	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10032	494	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			2.7	2.7			jbeckett - Tier 2B
10033	495	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10034	496	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			3.1	3.1			jbeckett - Tier 2B
10035	497	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10036	499	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10037	500	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			1.7	1.7			jbeckett - Tier 2B
10038	501	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10039	502	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			2.4	2.4			jbeckett - Tier 2B
10040	503	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10041	505	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10042	506	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			2	2			jbeckett - Tier 2B

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
10043	507	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	DCP13C	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	cis-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-01-5	1	0		166946			percent	N			0.5
10044	508	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	DCP13C	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	cis-1,3-Dichloropropene	0.68	U	0.68	µg/m3	10061-01-5	1	0		166946			percent	N			2.3
10045	509	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	MIBK	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Methyl isobutyl ketone	0.16	J	0.15	ppb	108-10-1	1	0		166946			percent	N			0.5
10046	510	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	MIBK	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Methyl isobutyl ketone	0.64	J	0.61	µg/m3	108-10-1	1	0		166946			percent	N			2
10047	511	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	DCP13T	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	trans-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-02-6	1	0		166946			percent	N			0.5
10048	512	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	DCP13T	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	trans-1,3-Dichloropropene	0.68	U	0.68	µg/m3	10061-02-6	1	0		166946			percent	N			2.3
10049	513	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	TCA112	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,1,2-Trichloroethane	0.15	U	0.15	ppb	79-00-5	1	0		166946			percent	N			0.5
10050	514	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	TCA112	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,1,2-Trichloroethane	0.82	U	0.82	µg/m3	79-00-5	1	0		166946			percent	N			2.7
10051	517	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	HXO2	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	2-Hexanone	0.3	U	0.3	ppb	591-78-6	1	0		166946			percent	N			1
10052	519	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	DBCME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Dibromochloromethane	0.15	U	0.15	ppb	124-48-1	1	0		166946			percent	N			0.5
10053	521	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	EDB	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,2-Dibromoethane	0.15	U	0.15	ppb	106-93-4	1	0		166946			percent	N			0.5
10054	523	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	CLBZ	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Chlorobenzene	0.15	U	0.15	ppb	108-90-7	1	0		166946			percent	N			0.5
10055	524	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	CLBZ	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Chlorobenzene	0.69	U	0.69	µg/m3	108-90-7	1	0		166946			percent	N			2.3
10056	525	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	EBZ	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Ethyl benzene	0.15	U	0.15	ppb	100-41-4	1	0		166946			percent	N			0.5
10057	526	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	EBZ	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Ethyl benzene	0.65	U	0.65	µg/m3	100-41-4	1	0		166946			percent	N			2.2
10058	527	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	XYLMP	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	m,p-Xylene	0.53		0.15	ppb	179601-23-1	1	0		166946			percent	N			0.5
10059	529	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	XYLO	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	o-Xylene	0.16	J	0.15	ppb	95-47-6	1	0		166946			percent	N			0.5
10060	530	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	XYLO	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	o-Xylene	0.68	J	0.65	µg/m3	95-47-6	1	0		166946			percent	N			2.2
10061	531	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	STY	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Styrene	0.15	U	0.15	ppb	100-42-5	1	0		166946			percent	N			0.5
10062	532	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	STY	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Styrene	0.64	U	0.64	µg/m3	100-42-5	1	0		166946			percent	N			2.1
10063	533	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	TBME	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	Bromoform	0.15	U	0.15	ppb	75-25-2	1	0		166946			percent	N			0.5
10064	535	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	PCA	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,1,2,2-Tetrachloroethane	0.15	U	0.15	ppb	79-34-5	1	0		166946			percent	N			0.5
10065	537	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	EBZME4	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	4-Ethyl toluene	0.15	U	0.15	ppb	622-96-8	1	0		166946			percent	N			1
10066	538	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	EBZME4	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	4-Ethyl toluene	0.74	U	0.74	µg/m3	622-96-8	1	0		166946			percent	N			4.9
10067	539	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	TMB135	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,3,5-Trimethylbenzene	0.15	U	0.15	ppb	108-67-8	1	0		166946			percent	N			0.5
10068	540	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	TMB135	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,3,5-Trimethylbenzene	0.74	U	0.74	µg/m3	108-67-8	1	0		166946			percent	N			2.5
10069	541	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	TMB124	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,2,4-Trimethylbenzene	0.15	U	0.15	ppb	95-63-6	1	0		166946			percent	N			0.5
10070	542	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	TMB124	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,2,4-Trimethylbenzene	0.74	U	0.74	µg/m3	95-63-6	1	0		166946			percent	N			2.5
10071	543	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	DCBZ13	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,3-Dichlorobenzene	0.15	U	0.15	ppb	541-73-1	1	0		166946			percent	N			0.5
10072	544	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	DCBZ13	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,3-Dichlorobenzene	0.9	U	0.9	µg/m3	541-73-1	1	0		166946			percent	N			3
10073	545	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	DCBZ14	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,4-Dichlorobenzene	0.15	U	0.15	ppb	106-46-7	1	0		166946			percent	N			0.5
10074	546	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	DCBZ14	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,4-Dichlorobenzene	0.9	U	0.9	µg/m3	106-46-7	1	0		166946			percent	N			3
10075	547	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	DCBZ12	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	1,2-Dichlorobenzene	0.3	U	0.3	ppb	95-50-1	1	0		166946			percent	N			1
10076	560	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	EPA TO-15	BR4FBZ	TO15	AIR	N		3/16/2016	3/21/2016		4/2/2016	4-Bromofluorobenzene	95.619			PERCENT	460-00-4	1	0		166946	20	95.619	percent	Y			
10077	620	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	ACE	TO15	AIR	BS					4/1/2016	Acetone	12		0.3	ppb	67-64-1	1	0		166946	10	119.84	percent	N			1
10129	660	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	DCBZ12	TO15	AIR	BS					4/1/2016	1,2-Dichlorobenzene	11.8		0.3	ppb	95-50-1	1	0		166946	10	117.68	percent	N			1
10130	661	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	FC12	TO15	AIR	BD					4/1/2016	Dichlorodifluoromethane	11.8		0.15	ppb	75-71-8	1	0		166946	10	118.38	percent	N			0.5
10131	662	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	CLME	TO15	AIR	BD					4/1/2016	Methyl chloride	12.6		0.15	ppb	74-87-3	1	0		166946	10	126.04	percent	N			0.5
10132	663	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	DCTFA12	TO15	AIR	BD					4/1/2016	Freon 114	11.6		0.15	ppb	76-14-2	1	0		166946	10	115.84	percent	N			0.5
10133	664	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	ERYTHRENE	TO15	AIR	BD					4/1/2016	1,3-Butadiene	12.3		0.15	ppb	106-99-0	1	0		166946	10	123.45	percent	N			0.5
10134	665	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	BRME	TO15	AIR	BD					4/1/2016	Bromomethane	11.9		0.15	ppb	74-83-9	1	0		166946	10	118.81	percent	N			0.5
10135	666	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	CLEA	TO15	AIR	BD					4/1/2016	Ethyl chloride	11.8		0.15	ppb	75-00-3	1	0		166946	10	117.98	percent	N			0.5
10136	667	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	FC11	TO15	AIR	BD					4/1/2016	Freon 11	11.7		0.15	ppb	75-69-4	1	0		166946	10	117.05	percent	N			0.5
10137	668	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	FC113	TO15	AIR	BD					4/1/2016	Freon 113	11.8		0.15	ppb	76-13-1	1	0		166946	10	118.24	percent	N			0.5
10138	669	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	DCE11	TO15	AIR	BD					4/1/2016	1,1-Dichloroethene	12.5		0.15	ppb	75-35-4	1	0		166946	10	124.61	percent	N			0.5
10139	670	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	ACE	TO15	AIR	BD					4/1/2016	Acetone	12.6		0.3	ppb	67-64-1	1	0		166946	10	126.32	percent	N			1
10140	671	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	CDS	TO15	AIR	BD					4/1/2016	Carbon disulfide	11.8		0.15	ppb	75-15-0	1	0		166946	10	117.96	percent	N			0.5
10141	672	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	MTLNCL	TO15	AIR	BD					4/1/2016	Methylene chloride	11.7		0.15	ppb	75-09-2	1	0		166946	10	116.99	percent	N			0.5
10142	673	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	DCE12T	TO15	AIR	BD					4/1/2016	trans-1,2-Dichloroethene	12.4		0.15	ppb	156-60-5	1	0		166946	10	124.21	percent	N			0.5
10143	674	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	TBUTMEE	TO15	AIR	BD					4/1/2016	Methyl t-butyl ether	13.3		0.15	ppb	1634-04-4	1	0		166946	10	132.97	percent	N			0.5
10144	675	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	VA	TO15	AIR	BD					4/1/2016	Vinyl acetate	13.7		0.15	ppb	108-05-4	1	0		166946	10	137.39	percent	N			0.5
10145	676	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	MEK	TO15	AIR	BD					4/1/2016	Methyl ethyl ketone	13.3		0.15	ppb	78-93-3	1	0		166946	10	132.97	percent	N			0.5
10146	677	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	DCA11	TO15	AIR	BD					4/1/2016	1,1-Dichloroethane	11.9		0.15	ppb	75-34-3	1	0		166946	10	119.49	percent	N			0.5
10147	678	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	ETACET	TO15	AIR	BD					4/1/2016	Ethyl acetate	11.4		0.15	ppb	141-78-6	1	0		166946	10	113.96	percent	N			1
10148	679	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	C6N	TO15	AIR	BD					4/1/2016	n-Hexane	10.9		0.15	ppb	110-54-3	1	0		166946	10	109.09	percent	N			0.5
10149	680	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	TCLME	TO15	AIR	BD					4/1/2016	Chloroform	10.3		0.15	ppb	67-66-3	1	0		166946	10	103.07	percent	N			0.5
10150	682	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	DCA12	TO15	AIR	BD					4/1/2016	1,2-Dichloroethane	10.5		0.15	ppb	107-06-2	1	0		166946	10	104.93	percent	N			0.5
10151	683	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	TCA111	TO15	AIR	BD					4/1/2016	1,1,1-Trichloroethane	10.5		0.15	ppb	71-55-6	1	0		166946	10	104.64	percent	N			0.5
10152	684	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	CTCL	TO15	AIR	BD					4/1/2016	Carbon tetrachloride	10.5		0.15	ppb	56-23-5	1	0		166946	10	104.65	percent	N			0.5
10153	685	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	BZ	TO15	AIR	BD					4/1/2016	Benzene	10.6		0.15	ppb	71-43-2	1	0		166946	10	106.49	percent	N			0.5
10154	686	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	CYHEXANE	TO15	AIR	BD					4/1/2016	Cyclohexane	11.4		0.15	ppb	110-82-7	1	0		166946	10	114.15	percent	N			0.5
10155	687	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	DCPA12	TO15	AIR	BD					4/1/2016	1,2-Dichloropropane	10.5		0.15	ppb	78-87-5	1	0		166946	10	105.14	percent	N			0.5
10078	641	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	MIBK	TO15	AIR	BS					4/1/2016	Methyl isobutyl ketone	12		0.15	ppb	108-10-1	1	0		166946	10	119.63	percent	N			0.5
10079	642	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	DCP13T	TO15	AIR	BS					4/1/2016	trans-1,3-Dichloropropene	12		0.15	ppb	10061-02-6	1	0		166946	10	119.62	percent	N			0.5
10080	650	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	XYLMP	TO15	AIR	BS					4/1/2016	m,p-Xylene	23		0.15	ppb	179601-23-1	1	0		166946	20	114.89	percent	N			0.5
10081	570	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	ACE	TO15	AIR	LB					4/1/2016	Acetone	0.3	U	0.3	ppb	67-64-1	1	0		166946			percent	N			1
10082	595	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	HXO2	TO15	AIR	LB					4/1/2016	2-Hexanone	0.3	U	0.3	ppb	591-78-6	1	0		166946			percent	N			1
10083	610	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	DCBZ12	TO15	AIR	LB					4/1/2016	1,2-Dichlorobenzene	0.3	U	0.3	ppb	95-50-1	1	0		166946			percent	N			1
10084	611	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	FC12	TO15	AIR	BS					4/1/2016	Dichlorodifluoromethane	11.8		0.15	ppb	75-71-8	1	0		166946	10	118.07	percent	N			0.5
10085	612	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	CLME	TO15	AIR	BS					4/1/2016	Methyl chloride	11.9		0.15	ppb	74-87-3	1	0		166946	10	119.41	percent	N			0.5
10086	613	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	DCTFA12	TO15	AIR	BS					4/1/2016	Freon 114	11.4		0.15	ppb	76-14-2	1	0		166946	10	114.39	percent	N			0.5
10087	614	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	ERYTHRENE	TO15	AIR	BS					4/1/2016	1,3-Butadiene	12.3		0.15	ppb	106-99-0	1	0		166946	10	123.01	percent	N			0.5
10088	615	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	BRME	TO15	AIR	BS					4/1/2016	Bromomethane	11.6		0.15	ppb	74-83-9	1	0		166946	10	116.42	percent	N			0.5
10089	616	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	CLEA	TO15	AIR	BS					4/1/2016	Ethyl chloride	11.3		0.15	ppb	75-00-3	1	0		166946	10	113.36	percent	N			0.5
10090	617	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	FC11	TO15	AIR	BS					4/1/2016	Freon 11	11.3		0.15	ppb	75-69-4	1	0		166946	10	113.25	percent	N			0.5
10091	618	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	FC113	TO15	AIR	BS					4/1/2016	Freon 113	11.3		0.15	ppb	76-13-1	1	0		166946	10	112.9	percent	N			0.5
10092	619	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	DCE11	TO15	AIR	BS					4/1/2016	1,1-Dichloroethene	11.9		0.15	ppb	75-35-4	1	0		166946	10	119.15	percent	N			0.5
10093	621	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	CDS	TO15	AIR	BS					4/1/2016	Carbon disulfide	11.4		0.15	ppb	75-15-0	1	0		166946	10	113.56	percent	N			0.5
10094	622	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	MTLNCL	TO15	AIR	BS					4/1/2016	Methylene chloride	11.1		0.15	ppb	75-09-2	1	0		166946	10	111.37	percent	N			0.5
10095	623	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	DCE12T	TO15	AIR	BS					4/1/2016	trans-1,2-Dichloroethene	11.9		0.15	ppb	156-60-5	1	0		166946	10	118.81	percent	N			0.5
10096	624	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	TBUTMEE	TO15	AIR	BS					4/1/2016	Methyl t-butyl ether	12.5		0.15	ppb	1634-04-4	1	0		166946	10	125.34	percent	N			0.5
10097	625	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	VA	TO15	AIR	BS					4/1/2016	Vinyl acetate	13.1		0.15	ppb	108-05-4	1	0		166946	10	130.84	percent	N			0.5
10098	626	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	MEK	TO15	AIR	BS					4/1/2016	Methyl ethyl ketone	12.5		0.15	ppb	78-93-3	1	0		166946	10	124.94	percent	N			0.5
10099	627	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	DCA11	TO15	AIR	BS					4/1/2016	1,1-Dichloroethane	11.3		0.15	ppb	75-34-3	1	0		166946	10	113.26	percent	N			0.5
10100	628	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	ETACET	TO15	AIR	BS					4/1/2016	Ethyl acetate	11.5		0.15	ppb	141-78-6	1	0		166946	10	114.88	percent	N			1
10101	629	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	C6N	TO15	AIR	BS					4/1/2016	n-Hexane	11.1		0.15	ppb	110-54-3	1	0		166946	10	110.68	percent	N			0.5
10102	630	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	TCLME	TO15	AIR	BS					4/1/2016	Chloroform	10.6		0.15	ppb	67-66-3	1	0		166946	10	105.75	percent	N			0.5
10103	631	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	THF	TO15	AIR	BS					4/1/2016	Tetrahydrofuran	12.1		0.15	ppb	109-99-9	1	0		166946	10	121.36	percent	N			0.5
10104	632	0	21	ALSS	1608222	1608222	494866

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
10043	507	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10044	508	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.68	U	X	U			0.68	2.3	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10045	509	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.16	J	X	J			0.15	0.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10046	510	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.64	J	X	J			0.61	2	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10047	511	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10048	512	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.68	U	X	U			0.68	2.3	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10049	513	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10050	514	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.82	U	X	U			0.82	2.7	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10051	517	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.3	U	X	U			0.3	1	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10052	519	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10053	521	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10054	523	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10055	524	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.69	U	X	U			0.69	2.3	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10056	525	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10057	526	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.65	U	X	U			0.65	2.2	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10058	527	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.53		X	=			0.15	0.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10059	529	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.16	J	X	J			0.15	0.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10060	530	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.68	J	X	J			0.65	2.2	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10061	531	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10062	532	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.64	U	X	U			0.64	2.1	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10063	533	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10064	535	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10065	537	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	1	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10066	538	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.74	U	X	U			0.74	4.9	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10067	539	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10068	540	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.74	U	X	U			0.74	2.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10069	541	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10070	542	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.74	U	X	U			0.74	2.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10071	543	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10072	544	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.9	U	X	U			0.9	3	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10073	545	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10074	546	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.9	U	X	U			0.9	3	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10075	547	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.3	U	X	U			0.3	1	A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10076	560	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	95.619		X	=	67.698	129.86			A-0023-031616-IA-BA1	4.30EPACLP	1/0/1900					166946		TRUE
10077	620	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	12		X	=	42.491	145.96	0.3	1	494866	4.30EPACLP						166946		TRUE
10129	660	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.8		X	=	56.513	140.03	0.3	1	494866	4.30EPACLP						166946		TRUE
10130	661	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.8		X	=	59.255	135.13	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10131	662	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.6		X	=	55.169	137.44	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10132	663	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.6		X	=	64.568	128.04	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10133	664	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.3		X	=	57.992	138.25	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10134	665	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.9		X	=	63.318	129.94	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10135	666	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.8		X	=	57.618	137.13	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10136	667	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.7		X	=	58.928	132.84	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10137	668	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.8		X	=	68.501	120.04	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10138	669	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.5		X	=	67.174	125.1	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10139	670	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.6		X	=	42.491	145.96	0.3	1	494867	4.30EPACLP						166946		TRUE
10140	671	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.8		X	=	63.855	128.75	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10141	672	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.7		X	=	63.699	127.89	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10142	673	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.4		X	=	68.113	124.64	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10143	674	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	13.3		X	=	60.827	138.03	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10144	675	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	13.7		X	=	59.331	141.08	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10145	676	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	13.3		X	=	51.691	144.24	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10146	677	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.9		X	=	67.712	123.62	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10147	678	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.4		X	=	53.357	156.94	0.15	1	494867	4.30EPACLP						166946		TRUE
10148	679	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.9		X	=	62.414	129.54	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10149	680	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.3		X	=	67.344	121.81	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10150	682	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.5		X	=	62.441	130.48	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10151	683	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.5		X	=	60.42	127.68	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10152	684	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.5		X	=	58.158	130.61	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10153	685	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.6		X	=	64.138	127.27	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10154	686	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.4		X	=	61.913	123.55	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10155	687	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.5		X	=	60.69	130.65	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10078	641	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	12		X	=	73.471	149.97	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10079	642	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	12		X	=	78.538	148.69	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10080	650	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			0		TRUE	4/6/2016	jbeckett	23		X	=	73.675	144.89	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10081	570	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	0.3	U	X	U			0.3	1	494865	4.30EPACLP						166946		TRUE
10082	595	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	0.3	U	X	U			0.3	1	494865	4.30EPACLP						166946		TRUE
10083	610	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	0.3	U	X	U			0.3	1	494865	4.30EPACLP						166946		TRUE
10084	611	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.8		X	=	59.255	135.13	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10085	612	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.9		X	=	55.169	137.44	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10086	613	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.4		X	=	64.568	128.04	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10087	614	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.3		X	=	57.992	138.25	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10088	615	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.6		X	=	63.318	129.94	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10089	616	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.3		X	=	57.618	137.13	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10090	617	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.3		X	=	58.928	132.84	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10091	618	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.3		X	=	68.501	120.04	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10092	619	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.9		X	=	67.174	125.1	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10093	621	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.4		X	=	63.855	128.75	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10094	622	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.1		X	=	63.699	127.89	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10095	623	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.9		X	=	68.113	124.64	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10096	624	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.5		X	=	60.827	138.03	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10097	625	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	13.1		X	=	59.331	141.08	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10098	626	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.5		X	=	51.691	144.24	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10099	627	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.3		X	=	67.712	123.62	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10100	628	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.5		X	=	53.357	156.94	0.15	1	494866	4.30EPACLP						166946		TRUE
10101	629	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.1		X	=	62.414	129.54	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10102	630	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.6		X	=	67.344	121.81	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10103	631	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.1		X	=	50.619	155.33	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10104	632	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.6		X	=	62.441	130.48	0.15	0.5	494866	4.30EPACLP						166946		TRUE

APPENDIX A-1

Laboratory Validated Results

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
10043	507	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10044	508	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			2.3	2.3			jbeckett - Tier 2B
10045	509	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10046	510	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			2	2			jbeckett - Tier 2B
10047	511	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10048	512	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			2.3	2.3			jbeckett - Tier 2B
10049	513	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10050	514	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			2.7	2.7			jbeckett - Tier 2B
10051	517	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
10052	519	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10053	521	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10054	523	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10055	524	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			2.3	2.3			jbeckett - Tier 2B
10056	525	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10057	526	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			2.2	2.2			jbeckett - Tier 2B
10058	527	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10059	529	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10060	530	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			2.2	2.2			jbeckett - Tier 2B
10061	531	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10062	532	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			2.1	2.1			jbeckett - Tier 2B
10063	533	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10064	535	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10065	537	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
10066	538	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			4.9	4.9			jbeckett - Tier 2B
10067	539	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10068	540	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			2.5	2.5			jbeckett - Tier 2B
10069	541	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10070	542	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			2.5	2.5			jbeckett - Tier 2B
10071	543	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10072	544	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			3	3			jbeckett - Tier 2B
10073	545	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10074	546	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			3	3			jbeckett - Tier 2B
10075	547	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
10076	560	1846226379	21	ALSS	1608222	1608222	A-0023-031616-IA-BA1	A-0023-031616-IA-BA1	1608222005	4/7/2016	mfesler	20	ppb					jbeckett - Tier 2B
10077	620	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		1	1			jbeckett - Tier 2B
10129	660	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		1	1			jbeckett - Tier 2B
10130	661	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10131	662	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10132	663	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10133	664	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10134	665	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10135	666	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10136	667	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10137	668	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10138	669	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10139	670	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		1	1			jbeckett - Tier 2B
10140	671	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10141	672	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10142	673	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10143	674	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10144	675	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10145	676	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10146	677	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10147	678	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		1	1			jbeckett - Tier 2B
10148	679	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10149	680	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10150	682	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10151	683	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10152	684	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10153	685	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10154	686	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10155	687	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10078	641	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10079	642	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10080	650	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	20		0.5	0.5			jbeckett - Tier 2B
10081	570	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
10082	595	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
10083	610	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
10084	611	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10085	612	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10086	613	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10087	614	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10088	615	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10089	616	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10090	617	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10091	618	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10092	619	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10093	621	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10094	622	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10095	623	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10096	624	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10097	625	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10098	626	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10099	627	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10100	628	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		1	1			jbeckett - Tier 2B
10101	629	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10102	630	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10103	631	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10104	632	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B

APPENDIX A-1

Laboratory Validated Results

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
10105	633	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	TCA111	TO15	AIR	BS					4/1/2016	1,1,1-Trichloroethane	10.6		0.15	ppb	71-55-6	1	0		166946	10	106.46	percent	N			0.5
10106	634	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	CTCL	TO15	AIR	BS					4/1/2016	Carbon tetrachloride	10.6		0.15	ppb	56-23-5	1	0		166946	10	106.1	percent	N			0.5
10107	635	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	BZ	TO15	AIR	BS					4/1/2016	Benzene	10.9		0.15	ppb	71-43-2	1	0		166946	10	108.77	percent	N			0.5
10108	636	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	CYHEXANE	TO15	AIR	BS					4/1/2016	Cyclohexane	11.8		0.15	ppb	110-82-7	1	0		166946	10	117.5	percent	N			0.5
10109	637	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	DCPA12	TO15	AIR	BS					4/1/2016	1,2-Dichloropropane	10.8		0.15	ppb	78-87-5	1	0		166946	10	107.63	percent	N			0.5
10110	638	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	BDCME	TO15	AIR	BS					4/1/2016	Bromodichloromethane	10.7		0.15	ppb	75-27-4	1	0		166946	10	106.75	percent	N			0.5
10111	639	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	C7N	TO15	AIR	BS					4/1/2016	Heptane	11.5		0.15	ppb	142-82-5	1	0		166946	10	114.77	percent	N			0.5
10112	640	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	DCP13C	TO15	AIR	BS					4/1/2016	cis-1,3-Dichloropropene	11.9		0.15	ppb	10061-01-5	1	0		166946	10	119.46	percent	N			0.5
10113	643	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	TCA112	TO15	AIR	BS					4/1/2016	1,1,2-Trichloroethane	10.9		0.15	ppb	79-00-5	1	0		166946	10	109.13	percent	N			0.5
10114	644	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	BZME	TO15	AIR	BS					4/1/2016	Toluene	11.9		0.15	ppb	108-88-3	1	0		166946	10	118.62	percent	N			0.5
10115	645	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	HXO2	TO15	AIR	BS					4/1/2016	2-Hexanone	12.5		0.3	ppb	591-78-6	1	0		166946	10	124.95	percent	N			1
10116	646	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	DBCME	TO15	AIR	BS					4/1/2016	Dibromochloromethane	11.1		0.15	ppb	124-48-1	1	0		166946	10	110.51	percent	N			0.5
10117	647	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	EDB	TO15	AIR	BS					4/1/2016	1,2-Dibromoethane	11.3		0.15	ppb	106-93-4	1	0		166946	10	112.98	percent	N			0.5
10118	648	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	CLBZ	TO15	AIR	BS					4/1/2016	Chlorobenzene	10.7		0.15	ppb	108-90-7	1	0		166946	10	107.41	percent	N			0.5
10119	649	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	EBZ	TO15	AIR	BS					4/1/2016	Ethyl benzene	11.8		0.15	ppb	100-41-4	1	0		166946	10	118.42	percent	N			0.5
10120	651	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	XYLO	TO15	AIR	BS					4/1/2016	o-Xylene	11.7		0.15	ppb	95-47-6	1	0		166946	10	117.32	percent	N			0.5
10121	652	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	STY	TO15	AIR	BS					4/1/2016	Styrene	12.5		0.15	ppb	100-42-5	1	0		166946	10	124.68	percent	N			0.5
10122	653	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	TBME	TO15	AIR	BS					4/1/2016	Bromoform	11.1		0.15	ppb	75-25-2	1	0		166946	10	110.7	percent	N			0.5
10123	654	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	PCA	TO15	AIR	BS					4/1/2016	1,1,2,2-Tetrachloroethane	10.9		0.15	ppb	79-34-5	1	0		166946	10	108.81	percent	N			0.5
10124	655	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	EBZME4	TO15	AIR	BS					4/1/2016	4-Ethyl toluene	12.5		0.15	ppb	622-96-8	1	0		166946	10	125.4	percent	N			1
10125	656	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	TMB135	TO15	AIR	BS					4/1/2016	1,3,5-Trimethylbenzene	11.9		0.15	ppb	108-67-8	1	0		166946	10	118.57	percent	N			0.5
10126	657	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	TMB124	TO15	AIR	BS					4/1/2016	1,2,4-Trimethylbenzene	12.5		0.15	ppb	95-63-6	1	0		166946	10	124.7	percent	N			0.5
10127	658	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	DCBZ13	TO15	AIR	BS					4/1/2016	1,3-Dichlorobenzene	11.3		0.15	ppb	541-73-1	1	0		166946	10	113.33	percent	N			0.5
10128	659	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	DCBZ14	TO15	AIR	BS					4/1/2016	1,4-Dichlorobenzene	11.5		0.15	ppb	106-46-7	1	0		166946	10	115.28	percent	N			0.5
10156	688	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	BDCME	TO15	AIR	BD					4/1/2016	Bromodichloromethane	10.5		0.15	ppb	75-27-4	1	0		166946	10	105.1	percent	N			0.5
10157	689	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	C7N	TO15	AIR	BD					4/1/2016	Heptane	11.2		0.15	ppb	142-82-5	1	0		166946	10	112.22	percent	N			0.5
10158	690	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	DCP13C	TO15	AIR	BD					4/1/2016	cis-1,3-Dichloropropene	11.6		0.15	ppb	10061-01-5	1	0		166946	10	115.94	percent	N			0.5
10159	691	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	MIBK	TO15	AIR	BD					4/1/2016	Methyl isobutyl ketone	11.7		0.15	ppb	108-10-1	1	0		166946	10	117.42	percent	N			0.5
10160	692	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	DCP13T	TO15	AIR	BD					4/1/2016	trans-1,3-Dichloropropene	11.7		0.15	ppb	10061-02-6	1	0		166946	10	117.22	percent	N			0.5
10161	693	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	TCA112	TO15	AIR	BD					4/1/2016	1,1,2-Trichloroethane	10.7		0.15	ppb	79-00-5	1	0		166946	10	106.55	percent	N			0.5
10162	694	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	BZME	TO15	AIR	BD					4/1/2016	Toluene	11.6		0.15	ppb	108-88-3	1	0		166946	10	116.43	percent	N			0.5
10163	695	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	HXO2	TO15	AIR	BD					4/1/2016	2-Hexanone	12.3		0.3	ppb	591-78-6	1	0		166946	10	122.64	percent	N			1
10164	696	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	DBCME	TO15	AIR	BD					4/1/2016	Dibromochloromethane	10.8		0.15	ppb	124-48-1	1	0		166946	10	108.03	percent	N			0.5
10165	697	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	EDB	TO15	AIR	BD					4/1/2016	1,2-Dibromoethane	11.1		0.15	ppb	106-93-4	1	0		166946	10	110.87	percent	N			0.5
10166	698	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	CLBZ	TO15	AIR	BD					4/1/2016	Chlorobenzene	10.5		0.15	ppb	108-90-7	1	0		166946	10	104.83	percent	N			0.5
10167	699	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	EBZ	TO15	AIR	BD					4/1/2016	Ethyl benzene	11.5		0.15	ppb	100-41-4	1	0		166946	10	115.12	percent	N			0.5
10168	700	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	XYLMP	TO15	AIR	BD					4/1/2016	m,p-Xylene	22.6		0.15	ppb	179601-23-1	1	0		166946	20	112.76	percent	N			0.5
10169	701	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	XYLO	TO15	AIR	BD					4/1/2016	o-Xylene	11.5		0.15	ppb	95-47-6	1	0		166946	10	114.59	percent	N			0.5
10170	702	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	STY	TO15	AIR	BD					4/1/2016	Styrene	12.2		0.15	ppb	100-42-5	1	0		166946	10	122.42	percent	N			0.5
10171	703	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	TBME	TO15	AIR	BD					4/1/2016	Bromoform	10.9		0.15	ppb	75-25-2	1	0		166946	10	108.63	percent	N			0.5
10172	704	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	PCA	TO15	AIR	BD					4/1/2016	1,1,2,2-Tetrachloroethane	10.6		0.15	ppb	79-34-5	1	0		166946	10	105.93	percent	N			0.5
10173	705	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	EBZME4	TO15	AIR	BD					4/1/2016	4-Ethyl toluene	12.3		0.15	ppb	622-96-8	1	0		166946	10	122.76	percent	N			1
10174	706	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	TMB135	TO15	AIR	BD					4/1/2016	1,3,5-Trimethylbenzene	11.5		0.15	ppb	108-67-8	1	0		166946	10	115.46	percent	N			0.5
10175	707	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	TMB124	TO15	AIR	BD					4/1/2016	1,2,4-Trimethylbenzene	12.2		0.15	ppb	95-63-6	1	0		166946	10	121.59	percent	N			0.5
10176	708	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	DCBZ13	TO15	AIR	BD					4/1/2016	1,3-Dichlorobenzene	11.1		0.15	ppb	541-73-1	1	0		166946	10	111.16	percent	N			0.5
10177	709	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	DCBZ14	TO15	AIR	BD					4/1/2016	1,4-Dichlorobenzene	11.1		0.15	ppb	106-46-7	1	0		166946	10	111.16	percent	N			0.5
10178	710	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	DCBZ12	TO15	AIR	BD					4/1/2016	1,2-Dichlorobenzene	11.4		0.3	ppb	95-50-1	1	0		166946	10	114.19	percent	N			1
10179	561	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	FC12	TO15	AIR	LB					4/1/2016	Dichlorodifluoromethane	0.15	U	0.15	ppb	75-71-8	1	0		166946			percent	N			0.5
10180	562	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	CLME	TO15	AIR	LB					4/1/2016	Methyl chloride	0.15	U	0.15	ppb	74-87-3	1	0		166946			percent	N			0.5
10181	563	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	DCTFA12	TO15	AIR	LB					4/1/2016	Freon 114	0.15	U	0.15	ppb	76-14-2	1	0		166946			percent	N			0.5
10182	564	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	ERYTHRENE	TO15	AIR	LB					4/1/2016	1,3-Butadiene	0.15	U	0.15	ppb	106-99-0	1	0		166946			percent	N			0.5
10183	565	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	BRME	TO15	AIR	LB					4/1/2016	Bromomethane	0.15	U	0.15	ppb	74-83-9	1	0		166946			percent	N			0.5
10184	566	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	CLEA	TO15	AIR	LB					4/1/2016	Ethyl chloride	0.15	U	0.15	ppb	75-00-3	1	0		166946			percent	N			0.5
10185	567	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	FC11	TO15	AIR	LB					4/1/2016	Freon 11	0.15	U	0.15	ppb	75-69-4	1	0		166946			percent	N			0.5
10186	568	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	FC113	TO15	AIR	LB					4/1/2016	Freon 113	0.15	U	0.15	ppb	76-13-1	1	0		166946			percent	N			0.5
10187	569	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	DCE11	TO15	AIR	LB					4/1/2016	1,1-Dichloroethene	0.15	U	0.15	ppb	75-35-4	1	0		166946			percent	N			0.5
10188	571	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	CDS	TO15	AIR	LB					4/1/2016	Carbon disulfide	0.15	U	0.15	ppb	75-15-0	1	0		166946			percent	N			0.5
10189	572	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	MTLNCL	TO15	AIR	LB					4/1/2016	Methylene chloride	0.15	U	0.15	ppb	75-09-2	1	0		166946			percent	N			0.5
10190	573	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	DCE12T	TO15	AIR	LB					4/1/2016	trans-1,2-Dichloroethene	0.15	U	0.15	ppb	156-60-5	1	0		166946			percent	N			0.5
10191	574	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	TBUTMEE	TO15	AIR	LB					4/1/2016	Methyl t-butyl ether	0.15	U	0.15	ppb	1634-04-4	1	0		166946			percent	N			0.5
10192	575	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	VA	TO15	AIR	LB					4/1/2016	Vinyl acetate	0.15	U	0.15	ppb	108-05-4	1	0		166946			percent	N			0.5
10193	576	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	MEK	TO15	AIR	LB					4/1/2016	Methyl ethyl ketone	0.15	U	0.15	ppb	78-93-3	1	0		166946			percent	N			0.5
10194	577	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	DCA11	TO15	AIR	LB					4/1/2016	1,1-Dichloroethane	0.15	U	0.15	ppb	75-34-3	1	0		166946			percent	N			0.5
10195	578	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	ETACET	TO15	AIR	LB					4/1/2016	Ethyl acetate	0.15	U	0.15	ppb	141-78-6	1	0		166946			percent	N			1
10196	579	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	C6N	TO15	AIR	LB					4/1/2016	n-Hexane	0.15	U	0.15	ppb	110-54-3	1	0		166946			percent	N			0.5
10197	580	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	TCLME	TO15	AIR	LB					4/1/2016	Chloroform	0.15	U	0.15	ppb	67-66-3	1	0		166946			percent	N			0.5
10198	581	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	THF	TO15	AIR	LB					4/1/2016	Tetrahydrofuran	0.15	U	0.15	ppb	109-99-9	1	0		166946			percent	N			0.5
10199	582	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	DCA12	TO15	AIR	LB					4/1/2016	1,2-Dichloroethane	0.15	U	0.15	ppb	107-06-2	1	0		166946			percent	N			0.5
10200	583	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	TCA111	TO15	AIR	LB					4/1/2016	1,1,1-Trichloroethane	0.15	U	0.15	ppb	71-55-6	1	0		166946			percent	N			0.5
10201	584	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	CTCL	TO15	AIR	LB					4/1/2016	Carbon tetrachloride	0.15	U	0.15	ppb	56-23-5	1	0		166946			percent	N			0.5
10202	585	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	BZ	TO15	AIR	LB					4/1/2016	Benzene	0.15	U	0.15	ppb	71-43-2	1	0		166946			percent	N			0.5
10203	586	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	CYHEXANE	TO15	AIR	LB					4/1/2016	Cyclohexane	0.15	U	0.15	ppb	110-82-7	1	0		166946			percent	N			0.5
10204	587	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	DCPA12	TO15	AIR	LB					4/1/2016	1,2-Dichloropropane	0.15	U	0.15	ppb	78-87-5	1	0		166946			percent	N			0.5
10205	588	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	BDCME	TO15	AIR	LB					4/1/2016	Bromodichloromethane	0.15	U	0.15	ppb	75-27-4	1	0		166946			percent	N			0.5
10206	589	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	C7N	TO15	AIR	LB					4/1/2016	Heptane	0.15	U	0.15	ppb	142-82-5	1	0		166946			percent	N			0.5
10207	590	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	DCP13C	TO15	AIR	LB					4/1/2016	cis-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-01-5	1	0		166946			percent	N			0.5
10208	591	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	MIBK	TO15	AIR	LB					4/1/2016	Methyl isobutyl ketone	0.15	U	0.15	ppb	108-10-1	1	0		166946			percent	N			0.5
10209	592	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	DCP13T	TO15	AIR	LB					4/1/2016	trans-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-02-6	1	0		166946			percent	N			0.5
10210	593	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	TCA112	TO15	AIR	LB					4/1/2016	1,1,2-Trichloroethane	0.15	U	0.15	ppb	79-00-5	1	0		166946			percent	N			0.5
10211	594	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	BZME	TO15	AIR	LB					4/1/2016	Toluene	0.15	U	0.15	ppb	108-88-3	1	0		166946			percent	N			0.5
10212	596	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	DBCME	TO15	AIR	LB					4/1/2016	Dibromochloromethane	0.15	U	0.15	ppb	124-48-1	1	0		166946			percent	N			0.5
10213	597	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	EDB	TO15	AIR	LB					4/1/2016	1,2-Dibromoethane	0.15	U	0.15	ppb	106-93-4	1	0		166946			percent	N			0.5
10214	598	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	CLBZ	TO15	AIR	LB					4/1/2016	Chlorobenzene	0.15	U	0.15	ppb	108-90-7	1	0		166946			percent	N			0.5
10215	599	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	EBZ	TO15	AIR	LB					4/1/2016	Ethyl benzene	0.15	U	0.15	ppb	100-41-4	1	0		166946			percent	N			0.5
10216	600	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	XYLMP	TO15	AIR	LB					4/1/2016	m,p-Xylene	0.15	U	0.15	ppb	179601-23-1	1	0		166946			percent	N			0.5
10217	601	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	XYLO	TO15	AIR	LB					4/1/2016	o-Xylene	0.15	U	0.15	ppb	95-47-6	1	0		166946			percent	N			0.5
10218	602	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	STY	TO15	AIR	LB					4/1/2016	Styrene	0.15	U	0.15	ppb	100-42-5	1	0		166946			percent	N			0.5
10219	603	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	TBME	TO15	AIR	LB					4/1/2016	Bromoform	0.15	U	0.15	ppb	75-25-2	1	0		166946			percent	N			0.5
10220	604	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	PCA	TO15	AIR	LB					4/1/2016	1,1,2,2-Tetrachloroethane	0.15	U	0.15	ppb	79-34-5	1	0		166946			percent	N			0.5

APPENDIX A-1

Laboratory Validated Results

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
10105	633	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.6		X	=	60.42	127.68	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10106	634	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.6		X	=	58.158	130.61	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10107	635	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.9		X	=	64.138	127.27	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10108	636	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.8		X	=	61.913	123.55	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10109	637	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.8		X	=	60.69	130.65	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10110	638	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.7		X	=	62.886	128.34	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10111	639	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.5		X	=	59.499	133.39	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10112	640	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.9		X	=	64.079	133.63	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10113	643	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.9		X	=	64.985	126.62	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10114	644	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.9		X	=	75.551	139.43	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10115	645	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.5		X	=	80.836	158.78	0.3	1	494866	4.30EPACLP						166946		TRUE
10116	646	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.1		X	=	62.442	130.92	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10117	647	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.3		X	=	64.38	129.01	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10118	648	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.7		X	=	62.845	126.85	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10119	649	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.8		X	=	75.851	148.51	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10120	651	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.7		X	=	74.707	147.4	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10121	652	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.5		X	=	75.945	158.11	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10122	653	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.1		X	=	59.748	136.05	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10123	654	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.9		X	=	59.318	134.78	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10124	655	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.5		X	=	69.037	163.28	0.15	1	494866	4.30EPACLP						166946		TRUE
10125	656	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.9		X	=	64.237	155.06	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10126	657	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.5		X	=	59.734	169.39	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10127	658	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.3		X	=	58.55	157.62	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10128	659	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.5		X	=	57.682	137.17	0.15	0.5	494866	4.30EPACLP						166946		TRUE
10156	688	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.5		X	=	62.886	128.34	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10157	689	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.2		X	=	59.499	133.39	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10158	690	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.6		X	=	64.079	133.63	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10159	691	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.7		X	=	73.471	149.97	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10160	692	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.7		X	=	78.538	148.69	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10161	693	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.7		X	=	64.985	126.62	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10162	694	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.6		X	=	75.551	139.43	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10163	695	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.3		X	=	80.836	158.78	0.3	1	494867	4.30EPACLP						166946		TRUE
10164	696	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.8		X	=	62.442	130.92	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10165	697	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.1		X	=	64.38	129.01	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10166	698	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.5		X	=	62.845	126.85	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10167	699	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.5		X	=	75.851	148.51	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10168	700	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	22.6		X	=	73.675	144.89	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10169	701	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.5		X	=	74.707	147.4	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10170	702	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.2		X	=	75.945	158.11	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10171	703	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.9		X	=	59.748	136.05	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10172	704	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	10.6		X	=	59.318	134.78	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10173	705	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.3		X	=	69.037	163.28	0.15	1	494867	4.30EPACLP						166946		TRUE
10174	706	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.5		X	=	64.237	155.06	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10175	707	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	12.2		X	=	59.734	169.39	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10176	708	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.1		X	=	58.55	157.62	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10177	709	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.1		X	=	57.682	137.17	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10178	710	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			1		TRUE	4/6/2016	jbeckett	11.4		X	=	56.513	140.03	0.3	1	494867	4.30EPACLP						166946		TRUE
10179	561	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10180	562	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10181	563	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10182	564	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10183	565	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10184	566	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10185	567	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10186	568	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10187	569	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10188	571	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10189	572	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10190	573	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10191	574	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10192	575	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10193	576	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10194	577	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10195	578	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	1	494865	4.30EPACLP						166946		TRUE
10196	579	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10197	580	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10198	581	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10199	582	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10200	583	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10201	584	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10202	585	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10203	586	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10204	587	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10205	588	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10206	589	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10207	590	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10208	591	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10209	592	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10210	593	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10211	594	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10212	596	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10213	597	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10214	598	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10215	599	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10216	600	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10217	601	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10218	602	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10219	603	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10220	604	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE

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Laboratory Validated Results

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
10105	633	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10106	634	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10107	635	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10108	636	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10109	637	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10110	638	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10111	639	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10112	640	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10113	643	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10114	644	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10115	645	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		1	1			jbeckett - Tier 2B
10116	646	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10117	647	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10118	648	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10119	649	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10120	651	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10121	652	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10122	653	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10123	654	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10124	655	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		1	1			jbeckett - Tier 2B
10125	656	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10126	657	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10127	658	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10128	659	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10156	688	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10157	689	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10158	690	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10159	691	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10160	692	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10161	693	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10162	694	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10163	695	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		1	1			jbeckett - Tier 2B
10164	696	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10165	697	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10166	698	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10167	699	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10168	700	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	20		0.5	0.5			jbeckett - Tier 2B
10169	701	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10170	702	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10171	703	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10172	704	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10173	705	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		1	1			jbeckett - Tier 2B
10174	706	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10175	707	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10176	708	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10177	709	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10178	710	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		1	1			jbeckett - Tier 2B
10179	561	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10180	562	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10181	563	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10182	564	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10183	565	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10184	566	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10185	567	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10186	568	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10187	569	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10188	571	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10189	572	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10190	573	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10191	574	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10192	575	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10193	576	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10194	577	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10195	578	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
10196	579	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10197	580	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10198	581	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10199	582	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10200	583	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10201	584	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10202	585	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10203	586	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10204	587	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10205	588	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10206	589	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10207	590	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10208	591	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10209	592	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10210	593	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10211	594	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10212	596	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10213	597	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10214	598	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10215	599	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10216	600	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10217	601	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10218	602	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10219	603	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10220	604	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B

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Laboratory Validated Results

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index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
10221	605	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	EBZME4	TO15	AIR	LB					4/1/2016	4-Ethyl toluene	0.15	U	0.15	ppb	622-96-8	1	0		166946			percent	N			1
10222	606	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	TMB135	TO15	AIR	LB					4/1/2016	1,3,5-Trimethylbenzene	0.15	U	0.15	ppb	108-67-8	1	0		166946			percent	N			0.5
10223	607	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	TMB124	TO15	AIR	LB					4/1/2016	1,2,4-Trimethylbenzene	0.15	U	0.15	ppb	95-63-6	1	0		166946			percent	N			0.5
10224	608	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	DCBZ13	TO15	AIR	LB					4/1/2016	1,3-Dichlorobenzene	0.15	U	0.15	ppb	541-73-1	1	0		166946			percent	N			0.5
10225	609	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	DCBZ14	TO15	AIR	LB					4/1/2016	1,4-Dichlorobenzene	0.15	U	0.15	ppb	106-46-7	1	0		166946			percent	N			0.5
10226	681	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	THF	TO15	AIR	BD					4/1/2016	Tetrahydrofuran	9.26		0.15	ppb	109-99-9	1	0		166946	10	92.563	percent	N			0.5
10227	727	0	21	ALSS	1608222	1608222	494866	494866	494866	EPA TO-15	BR4FBZ	TO15	AIR	BS					4/1/2016	4-Bromofluorobenzene	102.54			PERCENT	460-00-4	1	0		166946	20	102.54	percent	Y			
10228	728	0	21	ALSS	1608222	1608222	494867	494867	494867	EPA TO-15	BR4FBZ	TO15	AIR	BD					4/1/2016	4-Bromofluorobenzene	102.29			PERCENT	460-00-4	1	0		166946	20	102.29	percent	Y			
10229	726	0	21	ALSS	1608222	1608222	494865	494865	494865	EPA TO-15	BR4FBZ	TO15	AIR	LB					4/1/2016	4-Bromofluorobenzene	97.643			PERCENT	460-00-4	1	0		166946	20	97.643	percent	Y			
10230	711	0	21	ALSS	1608222	1608222	494926	494926	494926	EPA TO-15 SIM	VC	TO15SIM	AIR	LB					4/4/2016	Vinyl chloride	0.05	U		ppb	75-01-4	1	0		166977			percent	N			0.05
10231	712	0	21	ALSS	1608222	1608222	494926	494926	494926	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	LB					4/4/2016	cis-1,2-Dichloroethene	0.05	U		ppb	156-59-2	1	0		166977			percent	N			0.05
10232	713	0	21	ALSS	1608222	1608222	494926	494926	494926	EPA TO-15 SIM	TCE	TO15SIM	AIR	LB					4/4/2016	Trichloroethene	0.05	U		ppb	79-01-6	1	0		166977			percent	N			0.05
10233	714	0	21	ALSS	1608222	1608222	494926	494926	494926	EPA TO-15 SIM	PCE	TO15SIM	AIR	LB					4/4/2016	Tetrachloroethene	0.05	U		ppb	127-18-4	1	0		166977			percent	N			0.05
10234	715	0	21	ALSS	1608222	1608222	494926	494926	494926	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	LB					4/4/2016	1,4-Dioxane	0.05	U		ppb	123-91-1	1	0		166977			percent	N			0.05
10235	716	0	21	ALSS	1608222	1608222	494927	494927	494927	EPA TO-15 SIM	VC	TO15SIM	AIR	BS					4/4/2016	Vinyl chloride	0.53			ppb	75-01-4	1	0		166977	0.5	106.02	percent	N			0.05
10236	730	0	21	ALSS	1608222	1608222	494927	494927	494927	EPA TO-15 SIM	BR4FBZ	TO15SIM	AIR	BS					4/4/2016	4-Bromofluorobenzene	101.82			PERCENT	460-00-4	1	0		166977	1	101.82	percent	Y			
10237	731	0	21	ALSS	1608222	1608222	494928	494928	494928	EPA TO-15 SIM	BR4FBZ	TO15SIM	AIR	BD					4/4/2016	4-Bromofluorobenzene	101.92			PERCENT	460-00-4	1	0		166977	1	101.92	percent	Y			
10238	717	0	21	ALSS	1608222	1608222	494927	494927	494927	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	BS					4/4/2016	cis-1,2-Dichloroethene	0.537			ppb	156-59-2	1	0		166977	0.5	107.45	percent	N			0.05
10239	718	0	21	ALSS	1608222	1608222	494927	494927	494927	EPA TO-15 SIM	TCE	TO15SIM	AIR	BS					4/4/2016	Trichloroethene	0.508			ppb	79-01-6	1	0		166977	0.5	101.58	percent	N			0.05
10240	719	0	21	ALSS	1608222	1608222	494927	494927	494927	EPA TO-15 SIM	PCE	TO15SIM	AIR	BS					4/4/2016	Tetrachloroethene	0.521			ppb	127-18-4	1	0		166977	0.5	104.16	percent	N			0.05
10241	720	0	21	ALSS	1608222	1608222	494927	494927	494927	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	BS					4/4/2016	1,4-Dioxane	0.498			ppb	123-91-1	1	0		166977	0.5	99.513	percent	N			0.05
10242	721	0	21	ALSS	1608222	1608222	494928	494928	494928	EPA TO-15 SIM	VC	TO15SIM	AIR	BD					4/4/2016	Vinyl chloride	0.521			ppb	75-01-4	1	0		166977	0.5	104.22	percent	N			0.05
10243	722	0	21	ALSS	1608222	1608222	494928	494928	494928	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	BD					4/4/2016	cis-1,2-Dichloroethene	0.524			ppb	156-59-2	1	0		166977	0.5	104.81	percent	N			0.05
10244	723	0	21	ALSS	1608222	1608222	494928	494928	494928	EPA TO-15 SIM	TCE	TO15SIM	AIR	BD					4/4/2016	Trichloroethene	0.506			ppb	79-01-6	1	0		166977	0.5	101.17	percent	N			0.05
10245	724	0	21	ALSS	1608222	1608222	494928	494928	494928	EPA TO-15 SIM	PCE	TO15SIM	AIR	BD					4/4/2016	Tetrachloroethene	0.514			ppb	127-18-4	1	0		166977	0.5	102.79	percent	N			0.05
10246	725	0	21	ALSS	1608222	1608222	494928	494928	494928	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	BD					4/4/2016	1,4-Dioxane	0.452			ppb	123-91-1	1	0		166977	0.5	90.443	percent	N			0.05
10247	729	0	21	ALSS	1608222	1608222	494926	494926	494926	EPA TO-15 SIM	BR4FBZ	TO15SIM	AIR	LB					4/4/2016	4-Bromofluorobenzene	80.371			PERCENT	460-00-4	1	0		166977	1	80.371	percent	Y			
10248	244	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	ACE	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Acetone	19		0.71	µg/m3	67-64-1	1	0		169861			percent	N			2.4
10249	226	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	FC12	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Dichlorodifluoromethane	2.8		0.74	µg/m3	75-71-8	1	0		169861			percent	N			2.5
10250	228	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	CLME	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Methyl chloride	1		0.31	µg/m3	74-87-3	1	0		169861			percent	N			1
10251	230	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	DCTFA12	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Freon 114	1	U	1	µg/m3	76-14-2	1	0		169861			percent	N			3.5
10252	238	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	FC11	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Freon 11	1.8	J	0.84	µg/m3	75-69-4	1	0		169861			percent	N			2.8
10253	240	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	FC113	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Freon 113	1.1	U	1.1	µg/m3	76-13-1	1	0		169861			percent	N			3.8
10254	243	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	ACE	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Acetone	7.9		0.3	ppb	67-64-1	1	0		169861			percent	N			1
10255	256	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	MEK	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Methyl ethyl ketone	1.7		0.44	µg/m3	78-93-3	1	0		169861			percent	N			1.5
10256	260	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	ETACET	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Ethyl acetate	3.1	J	0.54	µg/m3	141-78-6	1	0		169861			percent	N			3.6
10257	280	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	BDCME	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Bromodichloromethane	1	U	1	µg/m3	75-27-4	1	0		169861			percent	N			3.4
10258	292	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	BZME	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Toluene	2.6		0.57	µg/m3	108-88-3	1	0		169861			percent	N			1.9
10259	294	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	HXO2	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	2-Hexanone	1.7	J	1.2	µg/m3	591-78-6	1	0		169861			percent	N			4.1
10260	296	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	DBCME	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Dibromochloromethane	1.3	U	1.3	µg/m3	124-48-1	1	0		169861			percent	N			4.3
10261	298	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	EDB	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	1,2-Dibromoethane	1.2	U	1.2	µg/m3	106-93-4	1	0		169861			percent	N			3.8
10262	302	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	EBZ	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Ethyl benzene	3.3		0.65	µg/m3	100-41-4	1	0		169861			percent	N			2.2
10263	304	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	XYLMP	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	m,p-Xylene	2.3		0.65	µg/m3	179601-23-1	1	0		169861			percent	N			2.2
10264	310	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	TBME	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Bromoform	1.6	U	1.6	µg/m3	75-25-2	1	0		169861			percent	N			5.2
10265	312	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	PCA	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	1,1,2,2-Tetrachloroethane	1	U	1	µg/m3	79-34-5	1	0		169861			percent	N			3.4
10266	324	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	DCBZ12	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	1,2-Dichlorobenzene	1.8	U	1.8	µg/m3	95-50-1	1	0		169861			percent	N			6
10267	225	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	FC12	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Dichlorodifluoromethane	0.57		0.15	ppb	75-71-8	1	0		169861			percent	N			0.5
10268	227	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	CLME	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Methyl chloride	0.5		0.15	ppb	74-87-3	1	0		169861			percent	N			0.5
10269	229	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	DCTFA12	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Freon 114	0.15	U	0.15	ppb	76-14-2	1	0		169861			percent	N			0.5
10270	231	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	ERYTHRENE	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	1,3-Butadiene	0.15	U	0.15	ppb	106-99-0	1	0		169861			percent	N			0.5
10271	232	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	ERYTHRENE	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	1,3-Butadiene	0.33	U	0.33	µg/m3	106-99-0	1	0		169861			percent	N			1.1
10272	233	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	BRME	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Bromomethane	0.15	U	0.15	ppb	74-83-9	1	0		169861			percent	N			0.5
10273	234	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	BRME	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Bromomethane	0.58	U	0.58	µg/m3	74-83-9	1	0		169861			percent	N			1.9
10274	235	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	CLEA	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Ethyl chloride	0.15	U	0.15	ppb	75-00-3	1	0		169861			percent	N			0.5
10275	236	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	CLEA	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Ethyl chloride	0.4	U	0.4	µg/m3	75-00-3	1	0		169861			percent	N			1.3
10276	237	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	FC11	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Freon 11	0.31	J	0.15	ppb	75-69-4	1	0		169861			percent	N			0.5
10277	239	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	FC113	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Freon 113	0.15	U	0.15	ppb	76-13-1	1	0		169861			percent	N			0.5
10278	241	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	DCE11	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	1,1-Dichloroethene	0.15	U	0.15	ppb	75-35-4	1	0		169861			percent	N			0.5
10279	242	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	DCE11	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	1,1-Dichloroethene	0.59	U	0.59	µg/m3	75-35-4	1	0		169861			percent	N			2
10280	245	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	CDS	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Carbon disulfide	0.15	U	0.15	ppb	75-15-0	1	0		169861			percent	N			0.5
10281	246	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	CDS	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Carbon disulfide	0.47	U	0.47	µg/m3	75-15-0	1	0		169861			percent	N			1.6
10282	247	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	MTLNCL	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Methylene chloride	0.24	J	0.15	ppb	75-09-2	1	0		169861			percent	N			0.5
10283	248	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	MTLNCL	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Methylene chloride	0.82	J	0.52	µg/m3	75-09-2	1	0		169861			percent	N			1.7
10284	249	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	DCE12T	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	trans-1,2-Dichloroethene	0.15	U	0.15	ppb	156-60-5	1	0		169861			percent	N			0.5
10285	250	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	DCE12T	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	trans-1,2-Dichloroethene	0.59	U	0.59	µg/m3	156-60-5	1	0		169861			percent	N			2
10286	251	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	TBUTMEE	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Methyl t-butyl ether	0.15	U	0.15	ppb	1634-04-4	1	0		169861			percent	N			0.5
10287	252	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	TBUTMEE	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Methyl t-butyl ether	0.54	U	0.54	µg/m3	1634-04-4	1	0		169861			percent	N			1.8
10288	253	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	VA	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Vinyl acetate	0.15	U	0.15	ppb	108-05-4	1	0		169861			percent	N			0.5
10289	254	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	VA	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Vinyl acetate	0.53	U	0.53	µg/m3	108-05-4	1	0		169861			percent	N			1.8
10290	255	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	MEK	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Methyl ethyl ketone	0.59		0.15	ppb	78-93-3	1	0		169861			percent	N			0.5
10291	257	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	DCA11	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	1,1-Dichloroethane	0.15	U	0.15	ppb	75-34-3	1	0		169861			percent	N			0.5
10292	258	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	DCA11	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	1,1-Dichloroethane	0.61	U	0.61	µg/m3	75-34-3	1	0		169861			percent	N			2
10293	259	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	ETACET	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Ethyl acetate	0.87	J	0.15	ppb	141-78-6	1	0		169861			percent	N			1
10294	261	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	C6N	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	n-Hexane	0.23	J	0.15	ppb	110-54-3	1	0		169861			percent	N			0.5
10295	262	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	C6N	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	n-Hexane	0.8	J	0.53	µg/m3	110-54-3	1	0		169861			percent	N			1.8
10296	263	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	TCLME	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Chloroform	0.18	J	0.15	ppb	67-66-3	1	0		169861			percent	N			0.5
10297	264	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	TCLME	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Chloroform	0.86	J	0.73	µg/m3	67-66-3	1	0		169861			percent	N			2.4
10298	265	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	THF	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Tetrahydrofuran	0.15	U	0.15	ppb	109-99-9	1	0		169861			percent	N			0.5
10299	266	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	THF	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Tetrahydrofuran	0.44	U	0.44	µg/m3	109-99-9	1	0		169861			percent	N			1.5
10300	267	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	DCA12	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	1,2-Dichloroethane	0.15	U	0.15	ppb	107-06-2	1	0		169861			percent	N			0.5
10301	268	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	DCA12	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	1,2-Dichloroethane	0.61	U	0.61	µg/m3	107-06-2	1	0		169861			percent	N			2
10302	269	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	TCA111	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	1,1,1-Trichloroethane	0.15	U	0.15	ppb	71-55-6	1	0		169861			percent	N			0.5
10303	270	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	TCA111	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	1,1,1-Trichloroethane	0.82	U	0.82	µg/m3	71-55-6	1	0		169861			percent	N			2.7
10304	271	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	CTCL	TO15	AIR	N		5/24/2016	5/24/

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
10221	605	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	1	494865	4.30EPACLP						166946		TRUE
10222	606	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10223	607	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10224	608	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10225	609	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.15	U	X	U			0.15	0.5	494865	4.30EPACLP						166946		TRUE
10226	681	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	9.26		X	=	50.619	155.33	0.15	0.5	494867	4.30EPACLP						166946		TRUE
10227	727	0	21	ALSS	1608222	1608222	494866	494866	494866		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	102.54		X	=	67.698	129.86			494866	4.30EPACLP						166946		TRUE
10228	728	0	21	ALSS	1608222	1608222	494867	494867	494867		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	102.29		X	=	67.698	129.86			494867	4.30EPACLP						166946		TRUE
10229	726	0	21	ALSS	1608222	1608222	494865	494865	494865		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	97.643		X	=	67.698	129.86			494865	4.30EPACLP						166946		TRUE
10230	711	0	21	ALSS	1608222	1608222	494926	494926	494926		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	494926	4.30EPACLP						166977		TRUE
10231	712	0	21	ALSS	1608222	1608222	494926	494926	494926		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	494926	4.30EPACLP						166977		TRUE
10232	713	0	21	ALSS	1608222	1608222	494926	494926	494926		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	494926	4.30EPACLP						166977		TRUE
10233	714	0	21	ALSS	1608222	1608222	494926	494926	494926		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	494926	4.30EPACLP						166977		TRUE
10234	715	0	21	ALSS	1608222	1608222	494926	494926	494926		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.05	U	X	U				0.05	494926	4.30EPACLP						166977		TRUE
10235	716	0	21	ALSS	1608222	1608222	494927	494927	494927		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	0.53		X	=	17.533	153.67		0.05	494927	4.30EPACLP						166977		TRUE
10236	730	0	21	ALSS	1608222	1608222	494927	494927	494927		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	101.82		X	=	48.778	151.81			494927	4.30EPACLP						166977		TRUE
10237	731	0	21	ALSS	1608222	1608222	494928	494928	494928		1/0/1900	NONE			2		TRUE	4/6/2016	jbeckett	101.92		X	=	48.778	151.81			494928	4.30EPACLP						166977		TRUE
10238	717	0	21	ALSS	1608222	1608222	494927	494927	494927		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.537		X	=	65.189	131.19		0.05	494927	4.30EPACLP						166977		TRUE
10239	718	0	21	ALSS	1608222	1608222	494927	494927	494927		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.508		X	=	68.353	123.42		0.05	494927	4.30EPACLP						166977		TRUE
10240	719	0	21	ALSS	1608222	1608222	494927	494927	494927		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.521		X	=	63.624	127.93		0.05	494927	4.30EPACLP						166977		TRUE
10241	720	0	21	ALSS	1608222	1608222	494927	494927	494927		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.498		X	=	70	130		0.05	494927	4.30EPACLP						166977		TRUE
10242	721	0	21	ALSS	1608222	1608222	494928	494928	494928		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.521		X	=	17.533	153.67		0.05	494928	4.30EPACLP						166977		TRUE
10243	722	0	21	ALSS	1608222	1608222	494928	494928	494928		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.524		X	=	65.189	131.19		0.05	494928	4.30EPACLP						166977		TRUE
10244	723	0	21	ALSS	1608222	1608222	494928	494928	494928		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.506		X	=	68.353	123.42		0.05	494928	4.30EPACLP						166977		TRUE
10245	724	0	21	ALSS	1608222	1608222	494928	494928	494928		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.514		X	=	63.624	127.93		0.05	494928	4.30EPACLP						166977		TRUE
10246	725	0	21	ALSS	1608222	1608222	494928	494928	494928		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	0.452		X	=	70	130		0.05	494928	4.30EPACLP						166977		TRUE
10247	729	0	21	ALSS	1608222	1608222	494926	494926	494926		1/0/1900	NONE			3		TRUE	4/6/2016	jbeckett	80.371		X	=	48.778	151.81			494926	4.30EPACLP						166977		TRUE
10248	244	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			0		TRUE	6/13/2016	jbeckett	19		X	=			0.71	2.4	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10249	226	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	2.8		X	=			0.74	2.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10250	228	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1		X	=			0.31	1	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10251	230	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1	U	X	U			1	3.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10252	238	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.8	J	X	J			0.84	2.8	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10253	240	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.1	U	X	U			1.1	3.8	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10254	243	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	7.9		X	=			0.3	1	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10255	256	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.7		X	=			0.44	1.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10256	260	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	3.1	J	X	J			0.54	3.6	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10257	280	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1	U	X	U			1	3.4	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10258	292	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	2.6		X	=			0.57	1.9	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10259	294	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.7	U	X	J			1.2	4.1	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10260	296	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.3	U	X	U			1.3	4.3	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10261	298	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.2	U	X	U			1.2	3.8	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10262	302	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	3.3		X	=			0.65	2.2	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10263	304	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	2.3		X	=			0.65	2.2	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10264	310	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.6	U	X	U			1.6	5.2	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10265	312	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1	U	X	U			1	3.4	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10266	324	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.8	U	X	U			1.8	6	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10267	225	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.57		X	=			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10268	227	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.5		X	=			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10269	229	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10270	231	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10271	232	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.33	U	X	U			0.33	1.1	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10272	233	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10273	234	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.58	U	X	U			0.58	1.9	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10274	235	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10275	236	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.4	U	X	U			0.4	1.3	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10276	237	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.31	J	X	J			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10277	239	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10278	241	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10279	242	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.59	U	X	U			0.59	2	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10280	245	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10281	246	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.47	U	X	U			0.47	1.6	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10282	247	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.24	J	X	J			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10283	248	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.82	J	X	J			0.52	1.7	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10284	249	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10285	250	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.59	U	X	U			0.59	2	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10286	251	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10287	252	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.54	U	X	U			0.54	1.8	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10288	253	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10289	254	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.53	U	X	U			0.53	1.8	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10290	255	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.59		X	=			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10291	257	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10292	258	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.61	U	X	U			0.61	2	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10293	259	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.87	J	X	J			0.15	1	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10294	261	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.23	J	X	J			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10295	262	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.8	J	X	J			0.53	1.8	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10296	263	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.18	J	X	J			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10297	264	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.86	J	X	J			0.73	2.4	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10298	265	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10299	266	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.44	U	X	U			0.44	1.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10300	267	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10301	268	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.61	U	X	U			0.61	2	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10302	269	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10303	270	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.82	U	X	U			0.82	2.7	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10304	271	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10305	272	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.94	U	X	U			0.94	3.1	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10306	273	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10307	274	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NON

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
10221	605	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			1	1			jbeckett - Tier 2B
10222	606	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10223	607	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10224	608	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10225	609	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler			0.5	0.5			jbeckett - Tier 2B
10226	681	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	10		0.5	0.5			jbeckett - Tier 2B
10227	727	0	21	ALSS	1608222	1608222	494866	494866	494866	4/7/2016	mfesler	20	ppb					jbeckett - Tier 2B
10228	728	0	21	ALSS	1608222	1608222	494867	494867	494867	4/7/2016	mfesler	20	ppb					jbeckett - Tier 2B
10229	726	0	21	ALSS	1608222	1608222	494865	494865	494865	4/7/2016	mfesler	20	ppb					jbeckett - Tier 2B
10230	711	0	21	ALSS	1608222	1608222	494926	494926	494926	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
10231	712	0	21	ALSS	1608222	1608222	494926	494926	494926	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
10232	713	0	21	ALSS	1608222	1608222	494926	494926	494926	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
10233	714	0	21	ALSS	1608222	1608222	494926	494926	494926	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
10234	715	0	21	ALSS	1608222	1608222	494926	494926	494926	4/7/2016	mfesler			0.05	0.05			jbeckett - Tier 2B
10235	716	0	21	ALSS	1608222	1608222	494927	494927	494927	4/7/2016	mfesler	0.5		0.05	0.05			jbeckett - Tier 2B
10236	730	0	21	ALSS	1608222	1608222	494927	494927	494927	4/7/2016	mfesler	1	ppb					jbeckett - Tier 2B
10237	731	0	21	ALSS	1608222	1608222	494928	494928	494928	4/7/2016	mfesler	1	ppb					jbeckett - Tier 2B
10238	717	0	21	ALSS	1608222	1608222	494927	494927	494927	4/7/2016	mfesler	0.5		0.05	0.05			jbeckett - Tier 2B
10239	718	0	21	ALSS	1608222	1608222	494927	494927	494927	4/7/2016	mfesler	0.5		0.05	0.05			jbeckett - Tier 2B
10240	719	0	21	ALSS	1608222	1608222	494927	494927	494927	4/7/2016	mfesler	0.5		0.05	0.05			jbeckett - Tier 2B
10241	720	0	21	ALSS	1608222	1608222	494927	494927	494927	4/7/2016	mfesler	0.5		0.05	0.05			jbeckett - Tier 2B
10242	721	0	21	ALSS	1608222	1608222	494928	494928	494928	4/7/2016	mfesler	0.5		0.05	0.05			jbeckett - Tier 2B
10243	722	0	21	ALSS	1608222	1608222	494928	494928	494928	4/7/2016	mfesler	0.5		0.05	0.05			jbeckett - Tier 2B
10244	723	0	21	ALSS	1608222	1608222	494928	494928	494928	4/7/2016	mfesler	0.5		0.05	0.05			jbeckett - Tier 2B
10245	724	0	21	ALSS	1608222	1608222	494928	494928	494928	4/7/2016	mfesler	0.5		0.05	0.05			jbeckett - Tier 2B
10246	725	0	21	ALSS	1608222	1608222	494928	494928	494928	4/7/2016	mfesler	0.5		0.05	0.05			jbeckett - Tier 2B
10247	729	0	21	ALSS	1608222	1608222	494926	494926	494926	4/7/2016	mfesler	1	ppb					jbeckett - Tier 2B
10248	244	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			2.4	2.4			jbeckett - Tier 2B
10249	226	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			2.5	2.5			jbeckett - Tier 2B
10250	228	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			1	1			jbeckett - Tier 2B
10251	230	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			3.5	3.5			jbeckett - Tier 2B
10252	238	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			2.8	2.8			jbeckett - Tier 2B
10253	240	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			3.8	3.8			jbeckett - Tier 2B
10254	243	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			1	1			jbeckett - Tier 2B
10255	256	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			1.5	1.5			jbeckett - Tier 2B
10256	260	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			3.6	3.6			jbeckett - Tier 2B
10257	280	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			3.4	3.4			jbeckett - Tier 2B
10258	292	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			1.9	1.9			jbeckett - Tier 2B
10259	294	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			4.1	4.1	U	LB>MDL	jbeckett - Tier 2B
10260	296	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			4.3	4.3			jbeckett - Tier 2B
10261	298	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			3.8	3.8			jbeckett - Tier 2B
10262	302	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			2.2	2.2			jbeckett - Tier 2B
10263	304	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			2.2	2.2			jbeckett - Tier 2B
10264	310	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			5.2	5.2			jbeckett - Tier 2B
10265	312	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			3.4	3.4			jbeckett - Tier 2B
10266	324	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			6	6			jbeckett - Tier 2B
10267	225	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10268	227	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10269	229	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10270	231	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10271	232	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			1.1	1.1			jbeckett - Tier 2B
10272	233	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10273	234	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			1.9	1.9			jbeckett - Tier 2B
10274	235	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10275	236	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			1.3	1.3			jbeckett - Tier 2B
10276	237	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10277	239	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10278	241	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10279	242	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			2	2			jbeckett - Tier 2B
10280	245	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10281	246	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			1.6	1.6			jbeckett - Tier 2B
10282	247	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10283	248	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			1.7	1.7			jbeckett - Tier 2B
10284	249	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10285	250	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			2	2			jbeckett - Tier 2B
10286	251	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10287	252	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			1.8	1.8			jbeckett - Tier 2B
10288	253	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10289	254	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			1.8	1.8			jbeckett - Tier 2B
10290	255	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10291	257	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10292	258	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			2	2			jbeckett - Tier 2B
10293	259	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			1	1			jbeckett - Tier 2B
10294	261	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10295	262	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			1.8	1.8			jbeckett - Tier 2B
10296	263	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10297	264	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			2.4	2.4			jbeckett - Tier 2B
10298	265	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10299	266	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			1.5	1.5			jbeckett - Tier 2B
10300	267	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10301	268	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			2	2			jbeckett - Tier 2B
10302	269	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10303	270	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			2.7	2.7			jbeckett - Tier 2B
10304	271	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10305	272	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			3.1	3.1			jbeckett - Tier 2B
10306	273	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10307	274	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			1.6	1.6			jbeckett - Tier 2B
10308	275	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10309	276	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			1.7	1.7			jbeckett - Tier 2B

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
10310	277	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	DCPA12	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	1,2-Dichloropropane	0.15	U	0.15	ppb	78-87-5	1	0		169861			percent	N			0.5
10311	278	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	DCPA12	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	1,2-Dichloropropane	0.73	U	0.73	µg/m3	78-87-5	1	0		169861			percent	N			2.4
10312	279	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	BDCME	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Bromodichloromethane	0.15	U	0.15	ppb	75-27-4	1	0		169861			percent	N			0.5
10313	281	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	C7N	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Heptane	0.15	U	0.15	ppb	142-82-5	1	0		169861			percent	N			0.5
10314	282	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	C7N	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Heptane	0.61	U	0.61	µg/m3	142-82-5	1	0		169861			percent	N			2
10315	283	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	DCP13C	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	cis-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-01-5	1	0		169861			percent	N			0.5
10316	284	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	DCP13C	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	cis-1,3-Dichloropropene	0.68	U	0.68	µg/m3	10061-01-5	1	0		169861			percent	N			2.3
10317	285	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	MIBK	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Methyl isobutyl ketone	0.15	U	0.15	ppb	108-10-1	1	0		169861			percent	N			0.5
10318	286	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	MIBK	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Methyl isobutyl ketone	0.61	U	0.61	µg/m3	108-10-1	1	0		169861			percent	N			2
10319	287	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	DCP13T	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	trans-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-02-6	1	0		169861			percent	N			0.5
10320	288	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	DCP13T	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	trans-1,3-Dichloropropene	0.68	U	0.68	µg/m3	10061-02-6	1	0		169861			percent	N			2.3
10321	289	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	TCA112	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	1,1,2-Trichloroethane	0.15	U	0.15	ppb	79-00-5	1	0		169861			percent	N			0.5
10322	290	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	TCA112	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	1,1,2-Trichloroethane	0.82	U	0.82	µg/m3	79-00-5	1	0		169861			percent	N			2.7
10323	291	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	BZME	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Toluene	0.68		0.15	ppb	108-88-3	1	0		169861			percent	N			0.5
10324	293	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	HXO2	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	2-Hexanone	0.41	J	0.3	ppb	591-78-6	1	0		169861			percent	N			1
10325	295	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	DBCME	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Dibromochloromethane	0.15	U	0.15	ppb	124-48-1	1	0		169861			percent	N			0.5
10326	297	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	EDB	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	1,2-Dibromoethane	0.15	U	0.15	ppb	106-93-4	1	0		169861			percent	N			0.5
10327	299	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	CLBZ	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Chlorobenzene	0.15	U	0.15	ppb	108-90-7	1	0		169861			percent	N			0.5
10328	300	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	CLBZ	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Chlorobenzene	0.69	U	0.69	µg/m3	108-90-7	1	0		169861			percent	N			2.3
10329	301	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	EBZ	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Ethyl benzene	0.76		0.15	ppb	100-41-4	1	0		169861			percent	N			0.5
10330	303	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	XYLMP	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	m,p-Xylene	0.53		0.15	ppb	179601-23-1	1	0		169861			percent	N			0.5
10331	305	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	XYLO	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	o-Xylene	0.19	J	0.15	ppb	95-47-6	1	0		169861			percent	N			0.5
10332	306	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	XYLO	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	o-Xylene	0.81	J	0.65	µg/m3	95-47-6	1	0		169861			percent	N			2.2
10333	307	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	STY	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Styrene	0.15	U	0.15	ppb	100-42-5	1	0		169861			percent	N			0.5
10334	308	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	STY	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Styrene	0.64	U	0.64	µg/m3	100-42-5	1	0		169861			percent	N			2.1
10335	309	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	TBME	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	Bromoform	0.15	U	0.15	ppb	75-25-2	1	0		169861			percent	N			0.5
10336	311	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	PCA	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	1,1,2,2-Tetrachloroethane	0.15	U	0.15	ppb	79-34-5	1	0		169861			percent	N			0.5
10337	313	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	EBZME4	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	4-Ethyl toluene	0.15	U	0.15	ppb	622-96-8	1	0		169861			percent	N			1
10338	314	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	EBZME4	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	4-Ethyl toluene	0.74	U	0.74	µg/m3	622-96-8	1	0		169861			percent	N			4.9
10339	315	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	TMB135	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	1,3,5-Trimethylbenzene	0.15	U	0.15	ppb	108-67-8	1	0		169861			percent	N			0.5
10340	316	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	TMB135	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	1,3,5-Trimethylbenzene	0.74	U	0.74	µg/m3	108-67-8	1	0		169861			percent	N			2.5
10341	317	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	TMB124	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	1,2,4-Trimethylbenzene	0.15	U	0.15	ppb	95-63-6	1	0		169861			percent	N			0.5
10342	318	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	TMB124	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	1,2,4-Trimethylbenzene	0.74	U	0.74	µg/m3	95-63-6	1	0		169861			percent	N			2.5
10343	319	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	DCBZ13	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	1,3-Dichlorobenzene	0.15	U	0.15	ppb	541-73-1	1	0		169861			percent	N			0.5
10344	320	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	DCBZ13	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	1,3-Dichlorobenzene	0.9	U	0.9	µg/m3	541-73-1	1	0		169861			percent	N			3
10345	321	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	DCBZ14	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	1,4-Dichlorobenzene	0.15	U	0.15	ppb	106-46-7	1	0		169861			percent	N			0.5
10346	322	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	DCBZ14	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	1,4-Dichlorobenzene	0.9	U	0.9	µg/m3	106-46-7	1	0		169861			percent	N			3
10347	323	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	DCBZ12	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	1,2-Dichlorobenzene	0.3	U	0.3	ppb	95-50-1	1	0		169861			percent	N			1
10348	336	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15	BR4FBZ	TO15	AIR	N		5/24/2016	5/24/2016		5/24/2016	4-Bromofluorobenzene	95.314			PERCENT	460-00-4	1	0		169861	20	95.314	percent	Y			
10349	356	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	ACE	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Acetone	18		0.71	µg/m3	67-64-1	1	0		169861			percent	N			2.4
10350	338	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	FC12	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Dichlorodifluoromethane	2.9		0.74	µg/m3	75-71-8	1	0		169861			percent	N			2.5
10351	340	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	CLME	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Methyl chloride	1		0.31	µg/m3	74-87-3	1	0		169861			percent	N			1
10352	342	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	DCTFA12	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Freon 114	1	U	1	µg/m3	76-14-2	1	0		169861			percent	N			3.5
10353	350	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	FC11	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Freon 11	1.8	J	0.84	µg/m3	75-69-4	1	0		169861			percent	N			2.8
10354	352	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	FC113	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Freon 113	1.1	U	1.1	µg/m3	76-13-1	1	0		169861			percent	N			3.8
10355	355	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	ACE	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Acetone	7.8		0.3	ppb	67-64-1	1	0		169861			percent	N			1
10356	368	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	MEK	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Methyl ethyl ketone	1.5		0.44	µg/m3	78-93-3	1	0		169861			percent	N			1.5
10357	372	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	ETACET	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Ethyl acetate	3	J	0.54	µg/m3	141-78-6	1	0		169861			percent	N			3.6
10358	392	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	BDCME	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Bromodichloromethane	1	U	1	µg/m3	75-27-4	1	0		169861			percent	N			3.4
10359	404	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	BZME	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Toluene	2.3		0.57	µg/m3	108-88-3	1	0		169861			percent	N			1.9
10360	406	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	HXO2	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	2-Hexanone	1.7	J	1.2	µg/m3	591-78-6	1	0		169861			percent	N			4.1
10361	408	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	DBCME	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Dibromochloromethane	1.3	U	1.3	µg/m3	124-48-1	1	0		169861			percent	N			4.3
10362	410	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	EDB	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	1,2-Dibromoethane	1.2	U	1.2	µg/m3	106-93-4	1	0		169861			percent	N			3.8
10363	414	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	EBZ	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Ethyl benzene	3.2		0.65	µg/m3	100-41-4	1	0		169861			percent	N			2.2
10364	416	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	XYLMP	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	m,p-Xylene	2.4		0.65	µg/m3	179601-23-1	1	0		169861			percent	N			2.2
10365	422	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	TBME	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Bromoform	1.6	U	1.6	µg/m3	75-25-2	1	0		169861			percent	N			5.2
10366	424	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	PCA	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	1,1,2,2-Tetrachloroethane	1	U	1	µg/m3	79-34-5	1	0		169861			percent	N			3.4
10367	436	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	DCBZ12	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	1,2-Dichlorobenzene	1.8	U	1.8	µg/m3	95-50-1	1	0		169861			percent	N			6
10368	337	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	FC12	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Dichlorodifluoromethane	0.58		0.15	ppb	75-71-8	1	0		169861			percent	N			0.5
10369	339	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	CLME	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Methyl chloride	0.51		0.15	ppb	74-87-3	1	0		169861			percent	N			0.5
10370	341	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	DCTFA12	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Freon 114	0.15	U	0.15	ppb	76-14-2	1	0		169861			percent	N			0.5
10371	343	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	ERYTHRENE	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	1,3-Butadiene	0.15	U	0.15	ppb	106-99-0	1	0		169861			percent	N			0.5
10372	344	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	ERYTHRENE	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	1,3-Butadiene	0.33	U	0.33	µg/m3	106-99-0	1	0		169861			percent	N			1.1
10373	345	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	BRME	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Bromomethane	0.15	U	0.15	ppb	74-83-9	1	0		169861			percent	N			0.5
10374	346	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	BRME	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Bromomethane	0.58	U	0.58	µg/m3	74-83-9	1	0		169861			percent	N			1.9
10375	347	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	CLEA	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Ethyl chloride	0.15	U	0.15	ppb	75-00-3	1	0		169861			percent	N			0.5
10376	348	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	CLEA	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Ethyl chloride	0.4	U	0.4	µg/m3	75-00-3	1	0		169861			percent	N			1.3
10377	349	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	FC11	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Freon 11	0.32	J	0.15	ppb	75-69-4	1	0		169861			percent	N			0.5
10378	351	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	FC113	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Freon 113	0.15	U	0.15	ppb	76-13-1	1	0		169861			percent	N			0.5
10379	353	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	DCE11	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	1,1-Dichloroethene	0.15	U	0.15	ppb	75-35-4	1	0		169861			percent	N			0.5
10380	354	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	DCE11	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	1,1-Dichloroethene	0.59	U	0.59	µg/m3	75-35-4	1	0		169861			percent	N			2
10381	357	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	CDS	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Carbon disulfide	0.15	U	0.15	ppb	75-15-0	1	0		169861			percent	N			0.5
10382	358	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	CDS	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Carbon disulfide	0.47	U	0.47	µg/m3	75-15-0	1	0		169861			percent	N			1.6
10383	359	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	MTLNCL	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Methylene chloride	0.19	J	0.15	ppb	75-09-2	1	0		169861			percent	N			0.5
10384	360	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	MTLNCL	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Methylene chloride	0.66	J	0.52	µg/m3	75-09-2	1	0		169861			percent	N			1.7
10385	361	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	DCE12T	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	trans-1,2-Dichloroethene	0.15	U	0.15	ppb	156-60-5	1	0		169861			percent	N			0.5
10386	362	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	DCE12T	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	trans-1,2-Dichloroethene	0.59	U	0.59	µg/m3	156-60-5	1	0		169861			percent	N			2
10387	363	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
10310	277	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10311	278	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.73	U	X	U			0.73	2.4	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10312	279	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10313	281	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10314	282	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.61	U	X	U			0.61	2	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10315	283	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10316	284	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.68	U	X	U			0.68	2.3	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10317	285	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10318	286	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.61	U	X	U			0.61	2	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10319	287	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10320	288	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.68	U	X	U			0.68	2.3	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10321	289	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10322	290	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.82	U	X	U			0.82	2.7	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10323	291	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.68		X	=			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10324	293	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.41	U	X	J			0.3	1	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10325	295	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10326	297	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10327	299	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10328	300	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.69	U	X	U			0.69	2.3	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10329	301	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.76		X	=			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10330	303	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.53		X	=			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10331	305	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.19	J	X	J			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10332	306	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.81	J	X	J			0.65	2.2	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10333	307	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10334	308	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.64	U	X	U			0.64	2.1	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10335	309	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10336	311	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10337	313	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	1	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10338	314	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.74	U	X	U			0.74	4.9	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10339	315	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10340	316	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.74	U	X	U			0.74	2.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10341	317	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10342	318	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.74	U	X	U			0.74	2.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10343	319	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10344	320	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.9	U	X	U			0.9	3	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10345	321	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10346	322	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.9	U	X	U			0.9	3	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10347	323	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.3	U	X	U			0.3	1	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10348	336	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			3		TRUE	6/13/2016	jbeckett	95.314		X	=	67.698	129.86			A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169861		TRUE
10349	356	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			0		TRUE	6/13/2016	jbeckett	18		X	=			0.71	2.4	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10350	338	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	2.9		X	=			0.74	2.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10351	340	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1		X	=			0.31	1	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10352	342	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1	U	X	U			1	3.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10353	350	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.8	J	X	J			0.84	2.8	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10354	352	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.1	U	X	U			1.1	3.8	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10355	355	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	7.8		X	=			0.3	1	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10356	368	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.5		X	=			0.44	1.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10357	372	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	3	J	X	J			0.54	3.6	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10358	392	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1	U	X	U			1	3.4	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10359	404	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	2.3		X	=			0.57	1.9	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10360	406	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.7	U	X	J			1.2	4.1	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10361	408	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.3	U	X	U			1.3	4.3	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10362	410	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.2	U	X	U			1.2	3.8	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10363	414	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	3.2		X	=			0.65	2.2	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10364	416	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	2.4		X	=			0.65	2.2	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10365	422	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.6	U	X	U			1.6	5.2	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10366	424	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1	U	X	U			1	3.4	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10367	436	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.8	U	X	U			1.8	6	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10368	337	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.58		X	=			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10369	339	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.51		X	=			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10370	341	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10371	343	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10372	344	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.33	U	X	U			0.33	1.1	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10373	345	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10374	346	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.58	U	X	U			0.58	1.9	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10375	347	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10376	348	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.4	U	X	U			0.4	1.3	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10377	349	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.32	J	X	J			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10378	351	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10379	353	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10380	354	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.59	U	X	U			0.59	2	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10381	357	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10382	358	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.47	U	X	U			0.47	1.6	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10383	359	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.19	J	X	J			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10384	360	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.66	J	X	J			0.52	1.7	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10385	361	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10386	362	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.59	U	X	U			0.59	2	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10387	363	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10388	364	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.54	U	X	U			0.54	1.8	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
10310	277	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10311	278	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			2.4	2.4			jbeckett - Tier 2B
10312	279	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10313	281	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10314	282	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			2	2			jbeckett - Tier 2B
10315	283	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10316	284	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			2.3	2.3			jbeckett - Tier 2B
10317	285	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10318	286	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			2	2			jbeckett - Tier 2B
10319	287	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10320	288	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			2.3	2.3			jbeckett - Tier 2B
10321	289	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10322	290	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			2.7	2.7			jbeckett - Tier 2B
10323	291	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10324	293	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			1	1	U	LB<RL	jbeckett - Tier 2B
10325	295	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10326	297	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10327	299	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10328	300	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			2.3	2.3			jbeckett - Tier 2B
10329	301	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10330	303	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10331	305	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10332	306	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			2.2	2.2			jbeckett - Tier 2B
10333	307	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10334	308	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			2.1	2.1			jbeckett - Tier 2B
10335	309	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10336	311	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10337	313	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			1	1			jbeckett - Tier 2B
10338	314	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			4.9	4.9			jbeckett - Tier 2B
10339	315	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10340	316	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			2.5	2.5			jbeckett - Tier 2B
10341	317	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10342	318	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			2.5	2.5			jbeckett - Tier 2B
10343	319	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10344	320	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			3	3			jbeckett - Tier 2B
10345	321	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10346	322	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			3	3			jbeckett - Tier 2B
10347	323	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			1	1			jbeckett - Tier 2B
10348	336	-1710160038	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy	20	ppb					jbeckett - Tier 2B
10349	356	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			2.4	2.4			jbeckett - Tier 2B
10350	338	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			2.5	2.5			jbeckett - Tier 2B
10351	340	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			1	1			jbeckett - Tier 2B
10352	342	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			3.5	3.5			jbeckett - Tier 2B
10353	350	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			2.8	2.8			jbeckett - Tier 2B
10354	352	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			3.8	3.8			jbeckett - Tier 2B
10355	355	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			1	1			jbeckett - Tier 2B
10356	368	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			1.5	1.5			jbeckett - Tier 2B
10357	372	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			3.6	3.6			jbeckett - Tier 2B
10358	392	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			3.4	3.4			jbeckett - Tier 2B
10359	404	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			1.9	1.9			jbeckett - Tier 2B
10360	406	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			4.1	4.1	U	LB>MDL	jbeckett - Tier 2B
10361	408	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			4.3	4.3			jbeckett - Tier 2B
10362	410	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			3.8	3.8			jbeckett - Tier 2B
10363	414	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			2.2	2.2			jbeckett - Tier 2B
10364	416	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			2.2	2.2			jbeckett - Tier 2B
10365	422	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			5.2	5.2			jbeckett - Tier 2B
10366	424	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			3.4	3.4			jbeckett - Tier 2B
10367	436	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			6	6			jbeckett - Tier 2B
10368	337	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10369	339	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10370	341	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10371	343	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10372	344	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			1.1	1.1			jbeckett - Tier 2B
10373	345	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10374	346	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			1.9	1.9			jbeckett - Tier 2B
10375	347	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10376	348	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			1.3	1.3			jbeckett - Tier 2B
10377	349	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10378	351	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10379	353	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10380	354	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			2	2			jbeckett - Tier 2B
10381	357	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10382	358	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			1.6	1.6			jbeckett - Tier 2B
10383	359	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10384	360	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			1.7	1.7			jbeckett - Tier 2B
10385	361	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10386	362	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			2	2			jbeckett - Tier 2B
10387	363	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10388	364	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			1.8	1.8			jbeckett - Tier 2B
10389	365	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10390	366	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			1.8	1.8			jbeckett - Tier 2B
10391	367	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10392	369	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10393	370	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			2	2			jbeckett - Tier 2B
10394	371	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			1	1			jbeckett - Tier 2B
10395	373	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10396	374	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			1.8	1.8			jbeckett - Tier 2B
10397	375	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10398	376	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			2.4	2.4			jbeckett - Tier 2B

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
10399	377	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	THF	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Tetrahydrofuran	0.15	U	0.15	ppb	109-99-9	1	0		169861			percent	N			0.5
10400	378	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	THF	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Tetrahydrofuran	0.44	U	0.44	µg/m3	109-99-9	1	0		169861			percent	N			1.5
10401	379	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	DCA12	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	1,2-Dichloroethane	0.15	U	0.15	ppb	107-06-2	1	0		169861			percent	N			0.5
10402	380	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	DCA12	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	1,2-Dichloroethane	0.61	U	0.61	µg/m3	107-06-2	1	0		169861			percent	N			2
10403	381	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	TCA111	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	1,1,1-Trichloroethane	0.15	U	0.15	ppb	71-55-6	1	0		169861			percent	N			0.5
10404	382	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	TCA111	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	1,1,1-Trichloroethane	0.82	U	0.82	µg/m3	71-55-6	1	0		169861			percent	N			2.7
10405	383	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	CTCL	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Carbon tetrachloride	0.15	U	0.15	ppb	56-23-5	1	0		169861			percent	N			0.5
10406	384	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	CTCL	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Carbon tetrachloride	0.94	U	0.94	µg/m3	56-23-5	1	0		169861			percent	N			3.1
10407	385	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	BZ	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Benzene	0.15	U	0.15	ppb	71-43-2	1	0		169861			percent	N			0.5
10408	386	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	BZ	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Benzene	0.48	U	0.48	µg/m3	71-43-2	1	0		169861			percent	N			1.6
10409	387	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	CYHEXANE	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Cyclohexane	0.15	U	0.15	ppb	110-82-7	1	0		169861			percent	N			0.5
10410	388	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	CYHEXANE	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Cyclohexane	0.52	U	0.52	µg/m3	110-82-7	1	0		169861			percent	N			1.7
10411	389	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	DCPA12	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	1,2-Dichloropropane	0.15	U	0.15	ppb	78-87-5	1	0		169861			percent	N			0.5
10412	390	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	DCPA12	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	1,2-Dichloropropane	0.73	U	0.73	µg/m3	78-87-5	1	0		169861			percent	N			2.4
10413	391	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	BDCME	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Bromodichloromethane	0.15	U	0.15	ppb	75-27-4	1	0		169861			percent	N			0.5
10414	393	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	C7N	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Heptane	0.15	U	0.15	ppb	142-82-5	1	0		169861			percent	N			0.5
10415	394	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	C7N	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Heptane	0.61	U	0.61	µg/m3	142-82-5	1	0		169861			percent	N			2
10416	395	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	DCP13C	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	cis-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-01-5	1	0		169861			percent	N			0.5
10417	396	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	DCP13C	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	cis-1,3-Dichloropropene	0.68	U	0.68	µg/m3	10061-01-5	1	0		169861			percent	N			2.3
10418	397	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	MIBK	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Methyl isobutyl ketone	0.15	U	0.15	ppb	108-10-1	1	0		169861			percent	N			0.5
10419	398	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	MIBK	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Methyl isobutyl ketone	0.61	U	0.61	µg/m3	108-10-1	1	0		169861			percent	N			2
10420	399	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	DCP13T	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	trans-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-02-6	1	0		169861			percent	N			0.5
10421	400	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	DCP13T	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	trans-1,3-Dichloropropene	0.68	U	0.68	µg/m3	10061-02-6	1	0		169861			percent	N			2.3
10422	401	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	TCA112	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	1,1,2-Trichloroethane	0.15	U	0.15	ppb	79-00-5	1	0		169861			percent	N			0.5
10423	402	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	TCA112	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	1,1,2-Trichloroethane	0.82	U	0.82	µg/m3	79-00-5	1	0		169861			percent	N			2.7
10424	403	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	BZME	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Toluene	0.62		0.15	ppb	108-88-3	1	0		169861			percent	N			0.5
10425	405	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	HXO2	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	2-Hexanone	0.41	J	0.3	ppb	591-78-6	1	0		169861			percent	N			1
10426	407	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	DBCME	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Dibromochloromethane	0.15	U	0.15	ppb	124-48-1	1	0		169861			percent	N			0.5
10427	409	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	EDB	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	1,2-Dibromoethane	0.15	U	0.15	ppb	106-93-4	1	0		169861			percent	N			0.5
10428	411	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	CLBZ	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Chlorobenzene	0.15	U	0.15	ppb	108-90-7	1	0		169861			percent	N			0.5
10429	412	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	CLBZ	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Chlorobenzene	0.69	U	0.69	µg/m3	108-90-7	1	0		169861			percent	N			2.3
10430	413	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	EBZ	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Ethyl benzene	0.74		0.15	ppb	100-41-4	1	0		169861			percent	N			0.5
10431	415	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	XYLMP	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	m,p-Xylene	0.55		0.15	ppb	179601-23-1	1	0		169861			percent	N			0.5
10432	417	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	XYLO	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	o-Xylene	0.2	J	0.15	ppb	95-47-6	1	0		169861			percent	N			0.5
10433	418	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	XYLO	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	o-Xylene	0.85	J	0.65	µg/m3	95-47-6	1	0		169861			percent	N			2.2
10434	419	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	STY	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Styrene	0.15	U	0.15	ppb	100-42-5	1	0		169861			percent	N			0.5
10435	420	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	STY	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Styrene	0.64	U	0.64	µg/m3	100-42-5	1	0		169861			percent	N			2.1
10436	421	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	TBME	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	Bromoform	0.15	U	0.15	ppb	75-25-2	1	0		169861			percent	N			0.5
10437	423	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	PCA	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	1,1,2,2-Tetrachloroethane	0.15	U	0.15	ppb	79-34-5	1	0		169861			percent	N			0.5
10438	425	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	EBZME4	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	4-Ethyl toluene	0.15	U	0.15	ppb	622-96-8	1	0		169861			percent	N			1
10439	426	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	EBZME4	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	4-Ethyl toluene	0.74	U	0.74	µg/m3	622-96-8	1	0		169861			percent	N			4.9
10440	427	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	TMB135	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	1,3,5-Trimethylbenzene	0.15	U	0.15	ppb	108-67-8	1	0		169861			percent	N			0.5
10441	428	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	TMB135	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	1,3,5-Trimethylbenzene	0.74	U	0.74	µg/m3	108-67-8	1	0		169861			percent	N			2.5
10442	429	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	TMB124	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	1,2,4-Trimethylbenzene	0.17	J	0.15	ppb	95-63-6	1	0		169861			percent	N			0.5
10443	430	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	TMB124	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	1,2,4-Trimethylbenzene	0.85	J	0.74	µg/m3	95-63-6	1	0		169861			percent	N			2.5
10444	431	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	DCBZ13	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	1,3-Dichlorobenzene	0.15	U	0.15	ppb	541-73-1	1	0		169861			percent	N			0.5
10445	432	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	DCBZ13	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	1,3-Dichlorobenzene	0.9	U	0.9	µg/m3	541-73-1	1	0		169861			percent	N			3
10446	433	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	DCBZ14	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	1,4-Dichlorobenzene	0.15	U	0.15	ppb	106-46-7	1	0		169861			percent	N			0.5
10447	434	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	DCBZ14	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	1,4-Dichlorobenzene	0.9	U	0.9	µg/m3	106-46-7	1	0		169861			percent	N			3
10448	435	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	DCBZ12	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	1,2-Dichlorobenzene	0.3	U	0.3	ppb	95-50-1	1	0		169861			percent	N			1
10449	448	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15	BR4FBZ	TO15	AIR	FD		5/24/2016	5/24/2016		5/24/2016	4-Bromofluorobenzene	95.376			PERCENT	460-00-4	1	0		169861	20	95.376	percent	Y			
10450	332	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15 SIM	PCE	TO15SIM	AIR	N		5/24/2016	5/24/2016		5/25/2016	Tetrachloroethene	13	E		µg/m3	127-18-4	1	0		169913			percent	N			0.34
10451	331	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15 SIM	PCE	TO15SIM	AIR	N		5/24/2016	5/24/2016		5/25/2016	Tetrachloroethene	2	E		ppb	127-18-4	1	0		169913			percent	N			0.05
10452	326	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15 SIM	VC	TO15SIM	AIR	N		5/24/2016	5/24/2016		5/25/2016	Vinyl chloride	0.13	U		µg/m3	75-01-4	1	0		169913			percent	N			0.13
10453	328	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	N		5/24/2016	5/24/2016		5/25/2016	cis-1,2-Dichloroethene	0.2	U		µg/m3	156-59-2	1	0		169913			percent	N			0.2
10454	330	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15 SIM	TCE	TO15SIM	AIR	N		5/24/2016	5/24/2016		5/25/2016	Trichloroethene	0.27	U		µg/m3	79-01-6	1	0		169913			percent	N			0.27
10455	334	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	N		5/24/2016	5/24/2016		5/25/2016	1,4-Dioxane	0.18	U		µg/m3	123-91-1	1	0		169913			percent	N			0.18
10456	325	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15 SIM	VC	TO15SIM	AIR	N		5/24/2016	5/24/2016		5/25/2016	Vinyl chloride	0.05	U		ppb	75-01-4	1	0		169913			percent	N			0.05
10457	327	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	N		5/24/2016	5/24/2016		5/25/2016	cis-1,2-Dichloroethene	0.05	U		ppb	156-59-2	1	0		169913			percent	N			0.05
10458	329	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15 SIM	TCE	TO15SIM	AIR	N		5/24/2016	5/24/2016		5/25/2016	Trichloroethene	0.05	U		ppb	79-01-6	1	0		169913			percent	N			0.05
10459	333	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	N		5/24/2016	5/24/2016		5/25/2016	1,4-Dioxane	0.05	U		ppb	123-91-1	1	0		169913			percent	N			0.05
10460	335	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	EPA TO-15 SIM	BR4FBZ	TO15SIM	AIR	N		5/24/2016	5/24/2016		5/25/2016	4-Bromofluorobenzene	93.784			PERCENT	460-00-4	1	0		169913	1	93.784	percent	Y			
10461	444	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15 SIM	PCE	TO15SIM	AIR	FD		5/24/2016	5/24/2016		5/25/2016	Tetrachloroethene	13	E		µg/m3	127-18-4	1	0		169913			percent	N			0.34
10462	443	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15 SIM	PCE	TO15SIM	AIR	FD		5/24/2016	5/24/2016		5/25/2016	Tetrachloroethene	1.9	E		ppb	127-18-4	1	0		169913			percent	N			0.05
10463	438	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15 SIM	VC	TO15SIM	AIR	FD		5/24/2016	5/24/2016		5/25/2016	Vinyl chloride	0.13	U		µg/m3	75-01-4	1	0		169913			percent	N			0.13
10464	440	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	FD		5/24/2016	5/24/2016		5/25/2016	cis-1,2-Dichloroethene	0.2	U		µg/m3	156-59-2	1	0		169913			percent	N			0.2
10465	442	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15 SIM	TCE	TO15SIM	AIR	FD		5/24/2016	5/24/2016		5/25/2016	Trichloroethene	0.27	U		µg/m3	79-01-6	1	0		169913			percent	N			0.27
10466	446	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	FD		5/24/2016	5/24/2016		5/25/2016	1,4-Dioxane	0.18	U		µg/m3	123-91-1	1	0		169913			percent	N			0.18
10467	437	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15 SIM	VC	TO15SIM	AIR	FD		5/24/2016	5/24/2016		5/25/2016	Vinyl chloride	0.05	U		ppb	75-01-4	1	0		169913			percent	N			0.05
10468	439	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	FD		5/24/2016	5/24/2016		5/25/2016	cis-1,2-Dichloroethene	0.05	U		ppb	156-59-2	1	0		169913			percent	N			0.05
10469	441	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15 SIM	TCE	TO15SIM	AIR	FD		5/24/2016	5/24/2016		5/25/2016	Trichloroethene	0.05	U		ppb	79-01-6	1	0		169913			percent	N			0.05
10470	445	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	FD		5/24/2016	5/24/2016		5/25/2016	1,4-Dioxane	0.05	U		ppb	123-91-1	1	0		169913			percent	N			0.05
10471	447	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	EPA TO-15 SIM	BR4FBZ	TO15SIM	AIR	FD		5/24/2016	5/24/2016		5/25/2016	4-Bromofluorobenzene	94.027			PERCENT	460-00-4	1	0		169913	1	94.027	percent	Y			
10472	22	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	ACE	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Acetone	20		0.71	µg/m3	67-64-1	1	0		169861			percent	N			2.4
10473	44	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	TCLME	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Chloroform	12		0.73	µg/m3	67-66-3	1	0		169861			percent	N			2.4
10474	50	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	TCA111	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,1,1-Trichloroethane	40		0.82	µg/m3	71-55-6	1	0		169861			percent	N			2.7
10475	58	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
10399	377	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10400	378	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.44	U	X	U			0.44	1.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10401	379	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10402	380	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.61	U	X	U			0.61	2	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10403	381	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10404	382	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.82	U	X	U			0.82	2.7	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10405	383	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10406	384	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.94	U	X	U			0.94	3.1	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10407	385	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10408	386	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.48	U	X	U			0.48	1.6	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10409	387	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10410	388	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.52	U	X	U			0.52	1.7	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10411	389	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10412	390	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.73	U	X	U			0.73	2.4	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10413	391	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10414	393	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10415	394	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.61	U	X	U			0.61	2	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10416	395	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10417	396	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.68	U	X	U			0.68	2.3	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10418	397	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10419	398	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.61	U	X	U			0.61	2	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10420	399	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10421	400	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.68	U	X	U			0.68	2.3	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10422	401	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10423	402	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.82	U	X	U			0.82	2.7	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10424	403	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.62		X	=			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10425	405	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.41	U	X	J			0.3	1	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10426	407	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10427	409	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10428	411	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10429	412	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.69	U	X	U			0.69	2.3	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10430	413	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.74		X	=			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10431	415	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.55		X	=			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10432	417	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.2	J	X	J			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10433	418	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.85	J	X	J			0.65	2.2	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10434	419	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10435	420	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.64	U	X	U			0.64	2.1	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10436	421	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10437	423	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10438	425	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	1	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10439	426	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.74	U	X	U			0.74	4.9	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10440	427	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10441	428	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.74	U	X	U			0.74	2.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10442	429	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.17	J	X	J			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10443	430	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.85	J	X	J			0.74	2.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10444	431	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10445	432	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.9	U	X	U			0.9	3	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10446	433	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10447	434	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.9	U	X	U			0.9	3	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10448	435	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.3	U	X	U			0.3	1	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10449	448	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			3		TRUE	6/13/2016	jbeckett	95.376		X	=	67.698	129.86			A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169861		TRUE
10450	332	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			0		TRUE	6/6/2016	jbeckett	13	J	X	E				0.34	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169913		TRUE
10451	331	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			1		TRUE	6/6/2016	jbeckett	2	J	X	E				0.05	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169913		TRUE
10452	326	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/6/2016	jbeckett	0.13	U	X	U				0.13	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169913		TRUE
10453	328	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/6/2016	jbeckett	0.2	U	X	U				0.2	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169913		TRUE
10454	330	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/6/2016	jbeckett	0.27	U	X	U				0.27	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169913		TRUE
10455	334	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			2		TRUE	6/6/2016	jbeckett	0.18	U	X	U				0.18	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169913		TRUE
10456	325	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			3		TRUE	6/6/2016	jbeckett	0.05	U	X	U				0.05	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169913		TRUE
10457	327	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			3		TRUE	6/6/2016	jbeckett	0.05	U	X	U				0.05	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169913		TRUE
10458	329	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			3		TRUE	6/6/2016	jbeckett	0.05	U	X	U				0.05	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169913		TRUE
10459	333	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			3		TRUE	6/6/2016	jbeckett	0.05	U	X	U				0.05	A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169913		TRUE
10460	335	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003		1/0/1900	NONE			3		TRUE	6/6/2016	jbeckett	93.784		X	=	48.778	151.81			A-0053H-052416-IA-BAS	4.30EPACLP	1/0/1900					169913		TRUE
10461	444	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			0		TRUE	6/6/2016	jbeckett	13	J	X	E				0.34	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169913		TRUE
10462	443	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			1		TRUE	6/6/2016	jbeckett	1.9	J	X	E				0.05	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169913		TRUE
10463	438	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/6/2016	jbeckett	0.13	U	X	U				0.13	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169913		TRUE
10464	440	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/6/2016	jbeckett	0.2	U	X	U				0.2	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169913		TRUE
10465	442	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/6/2016	jbeckett	0.27	U	X	U				0.27	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169913		TRUE
10466	446	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			2		TRUE	6/6/2016	jbeckett	0.18	U	X	U				0.18	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169913		TRUE
10467	437	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			3		TRUE	6/6/2016	jbeckett	0.05	U	X	U				0.05	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169913		TRUE
10468	439	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			3		TRUE	6/6/2016	jbeckett	0.05	U	X	U				0.05	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169913		TRUE
10469	441	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			3		TRUE	6/6/2016	jbeckett	0.05	U	X	U				0.05	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169913		TRUE
10470	445	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			3		TRUE	6/6/2016	jbeckett	0.05	U	X	U				0.05	A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169913		TRUE
10471	447	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004		1/0/1900	NONE			3		TRUE	6/6/2016	jbeckett	94.027		X	=	48.778	151.81			A-0053H-052416-IA-BAS-D	4.30EPACLP	1/0/1900					169913		TRUE
10472	22	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			0		TRUE	6/13/2016	jbeckett	20		X	=			0.71	2.4	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10473	44	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			0		TRUE	6/13/2016	jbeckett	12		X	=			0.73	2.4	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10474	50	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			0		TRUE	6/13/2016	jbeckett	40		X	=			0.82	2.7	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10475	58	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			0		TRUE	6/13/2016	jbeckett	18		X	=			0.81	2.7	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10476	64	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			0		TRUE	6/13/2016	jbeckett	19		X	=			0.61	2	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10477	109	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-S

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
10399	377	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10400	378	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			1.5	1.5			jbeckett - Tier 2B
10401	379	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10402	380	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			2	2			jbeckett - Tier 2B
10403	381	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10404	382	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			2.7	2.7			jbeckett - Tier 2B
10405	383	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10406	384	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			3.1	3.1			jbeckett - Tier 2B
10407	385	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10408	386	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			1.6	1.6			jbeckett - Tier 2B
10409	387	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10410	388	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			1.7	1.7			jbeckett - Tier 2B
10411	389	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10412	390	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			2.4	2.4			jbeckett - Tier 2B
10413	391	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10414	393	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10415	394	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			2	2			jbeckett - Tier 2B
10416	395	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10417	396	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			2.3	2.3			jbeckett - Tier 2B
10418	397	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10419	398	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			2	2			jbeckett - Tier 2B
10420	399	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10421	400	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			2.3	2.3			jbeckett - Tier 2B
10422	401	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10423	402	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			2.7	2.7			jbeckett - Tier 2B
10424	403	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10425	405	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			1	1	U	LB<RL	jbeckett - Tier 2B
10426	407	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10427	409	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10428	411	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10429	412	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			2.3	2.3			jbeckett - Tier 2B
10430	413	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10431	415	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10432	417	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10433	418	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			2.2	2.2			jbeckett - Tier 2B
10434	419	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10435	420	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			2.1	2.1			jbeckett - Tier 2B
10436	421	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10437	423	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10438	425	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			1	1			jbeckett - Tier 2B
10439	426	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			4.9	4.9			jbeckett - Tier 2B
10440	427	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10441	428	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			2.5	2.5			jbeckett - Tier 2B
10442	429	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10443	430	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			2.5	2.5			jbeckett - Tier 2B
10444	431	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10445	432	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			3	3			jbeckett - Tier 2B
10446	433	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10447	434	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			3	3			jbeckett - Tier 2B
10448	435	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			1	1			jbeckett - Tier 2B
10449	448	-1324522216	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy	20	ppb					jbeckett - Tier 2B
10450	332	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.34	0.34	J	>ICLinearRange	jbeckett - Tier 2B
10451	331	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.05	0.05	J	>ICLinearRange	jbeckett - Tier 2B
10452	326	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.13	0.13			jbeckett - Tier 2B
10453	328	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.2	0.2			jbeckett - Tier 2B
10454	330	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.27	0.27			jbeckett - Tier 2B
10455	334	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.18	0.18			jbeckett - Tier 2B
10456	325	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.05	0.05			jbeckett - Tier 2B
10457	327	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.05	0.05			jbeckett - Tier 2B
10458	329	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.05	0.05			jbeckett - Tier 2B
10459	333	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy			0.05	0.05			jbeckett - Tier 2B
10460	335	-166123821	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS	A-0053H-052416-IA-BAS	1614564003	6/15/2016	mcichy	1	ppb					jbeckett - Tier 2B
10461	444	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.34	0.34	J	>ICLinearRange	jbeckett - Tier 2B
10462	443	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.05	0.05	J	>ICLinearRange	jbeckett - Tier 2B
10463	438	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.13	0.13			jbeckett - Tier 2B
10464	440	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.2	0.2			jbeckett - Tier 2B
10465	442	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.27	0.27			jbeckett - Tier 2B
10466	446	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.18	0.18			jbeckett - Tier 2B
10467	437	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.05	0.05			jbeckett - Tier 2B
10468	439	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.05	0.05			jbeckett - Tier 2B
10469	441	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.05	0.05			jbeckett - Tier 2B
10470	445	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy			0.05	0.05			jbeckett - Tier 2B
10471	447	-164735687	22	ALSS	1614564	1614564	A-0053H-052416-IA-BAS-D	A-0053H-052416-IA-BAS-D	1614564004	6/15/2016	mcichy	1	ppb					jbeckett - Tier 2B
10472	22	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			2.4	2.4			jbeckett - Tier 2B
10473	44	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			2.4	2.4			jbeckett - Tier 2B
10474	50	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			2.7	2.7			jbeckett - Tier 2B
10475	58	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			2.7	2.7			jbeckett - Tier 2B
10476	64	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			2	2			jbeckett - Tier 2B
10477	109	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			5	5	J	>ICLinearRange	jbeckett - Tier 2B
10478	110	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			34	34	J	>ICLinearRange	jbeckett - Tier 2B
10479	133	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			1	1			jbeckett - Tier 2B
10480	134	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			2.4	2.4			jbeckett - Tier 2B
10481	154	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			1.8	1.8			jbeckett - Tier 2B
10482	162	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			2.7	2.7			jbeckett - Tier 2B
10483	168	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			1.7	1.7			jbeckett - Tier 2B
10484	170	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			2.7	2.7			jbeckett - Tier 2B
10485	176	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			2	2			jbeckett - Tier 2B
10486	221	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			5	5	J	>ICLinearRange	jbeckett - Tier 2B
10487	222	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			34	34	J	>ICLinearRange	jbeckett - Tier 2B

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
10488	2	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	FC12	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Dichlorodifluoromethane	3.3		0.74	µg/m3	75-71-8	1	0		169861			percent	N			2.5
10489	4	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	CLME	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Methyl chloride	1.3		0.31	µg/m3	74-87-3	1	0		169861			percent	N			1
10490	6	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	DCTFA12	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Freon 114	1	U	1	µg/m3	76-14-2	1	0		169861			percent	N			3.5
10491	15	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	FC11	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Freon 11	1.2		0.15	ppb	75-69-4	1	0		169861			percent	N			0.5
10492	16	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	FC11	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Freon 11	6.7		0.84	µg/m3	75-69-4	1	0		169861			percent	N			2.8
10493	18	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	FC113	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Freon 113	1.4	J	1.1	µg/m3	76-13-1	1	0		169861			percent	N			3.8
10494	21	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	ACE	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Acetone	8.2		0.3	ppb	67-64-1	1	0		169861			percent	N			1
10495	23	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	CDS	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Carbon disulfide	1.2		0.15	ppb	75-15-0	1	0		169861			percent	N			0.5
10496	24	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	CDS	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Carbon disulfide	3.8		0.47	µg/m3	75-15-0	1	0		169861			percent	N			1.6
10497	41	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	C6N	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	n-Hexane	2.5		0.15	ppb	110-54-3	1	0		169861			percent	N			0.5
10498	42	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	C6N	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	n-Hexane	8.9		0.53	µg/m3	110-54-3	1	0		169861			percent	N			1.8
10499	43	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	TCLME	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Chloroform	2.4		0.15	ppb	67-66-3	1	0		169861			percent	N			0.5
10500	49	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	TCA111	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,1,1-Trichloroethane	7.3		0.15	ppb	71-55-6	1	0		169861			percent	N			0.5
10501	55	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	CYHEXANE	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Cyclohexane	2.1		0.15	ppb	110-82-7	1	0		169861			percent	N			0.5
10502	56	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	CYHEXANE	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Cyclohexane	7.4		0.52	µg/m3	110-82-7	1	0		169861			percent	N			1.7
10503	57	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	TCE	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Trichloroethene	3.3		0.15	ppb	79-01-6	1	0		169861			percent	N			0.5
10504	62	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	BDCME	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Bromodichloromethane	1	U	1	µg/m3	75-27-4	1	0		169861			percent	N			3.4
10505	63	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	C7N	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Heptane	4.7		0.15	ppb	142-82-5	1	0		169861			percent	N			0.5
10506	73	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	BZME	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Toluene	1.1		0.15	ppb	108-88-3	1	0		169861			percent	N			0.5
10507	74	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	BZME	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Toluene	4.1		0.57	µg/m3	108-88-3	1	0		169861			percent	N			1.9
10508	76	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	HXO2	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	2-Hexanone	1.2	U	1.2	µg/m3	591-78-6	1	0		169861			percent	N			4.1
10509	78	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	DBCME	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Dibromochloromethane	1.3	U	1.3	µg/m3	124-48-1	1	0		169861			percent	N			4.3
10510	80	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	EDB	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,2-Dibromoethane	1.2	U	1.2	µg/m3	106-93-4	1	0		169861			percent	N			3.8
10511	86	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	XYLMP	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	m,p-Xylene	2.8		0.65	µg/m3	179601-23-1	1	0		169861			percent	N			2.2
10512	88	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	XYLO	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	o-Xylene	1.3	J	0.65	µg/m3	95-47-6	1	0		169861			percent	N			2.2
10513	92	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	TBME	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Bromoform	1.6	U	1.6	µg/m3	75-25-2	1	0		169861			percent	N			5.2
10514	94	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	PCA	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,1,2,2-Tetrachloroethane	1	U	1	µg/m3	79-34-5	1	0		169861			percent	N			3.4
10515	100	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	TMB124	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,2,4-Trimethylbenzene	1.4	J	0.74	µg/m3	95-63-6	1	0		169861			percent	N			2.5
10516	106	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	DCBZ12	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,2-Dichlorobenzene	1.8	U	1.8	µg/m3	95-50-1	1	0		169861			percent	N			6
10517	107	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	DIOXANE14	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,4-Dioxane	2	U	2	ppb	123-91-1	1	0		169861			percent	N			2
10518	108	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	DIOXANE14	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,4-Dioxane	7.2	U	7.2	µg/m3	123-91-1	1	0		169861			percent	N			7.2
10519	114	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	FC12	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Dichlorodifluoromethane	3.4		0.74	µg/m3	75-71-8	1	0		169861			percent	N			2.5
10520	116	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	CLME	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Methyl chloride	1.3		0.31	µg/m3	74-87-3	1	0		169861			percent	N			1
10521	118	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	DCTFA12	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Freon 114	1	U	1	µg/m3	76-14-2	1	0		169861			percent	N			3.5
10522	128	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	FC11	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Freon 11	5.5		0.84	µg/m3	75-69-4	1	0		169861			percent	N			2.8
10523	130	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	FC113	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Freon 113	1.2	J	1.1	µg/m3	76-13-1	1	0		169861			percent	N			3.8
10524	135	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	CDS	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Carbon disulfide	1.6		0.15	ppb	75-15-0	1	0		169861			percent	N			0.5
10525	136	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	CDS	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Carbon disulfide	5.1		0.47	µg/m3	75-15-0	1	0		169861			percent	N			1.6
10526	138	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	MTLNCL	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Methylene chloride	1.3	J	0.52	µg/m3	75-09-2	1	0		169861			percent	N			1.7
10527	153	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	C6N	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	n-Hexane	4.6		0.15	ppb	110-54-3	1	0		169861			percent	N			0.5
10528	155	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	TCLME	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Chloroform	1.8		0.15	ppb	67-66-3	1	0		169861			percent	N			0.5
10529	156	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	TCLME	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Chloroform	8.9		0.73	µg/m3	67-66-3	1	0		169861			percent	N			2.4
10530	161	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	TCA111	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,1,1-Trichloroethane	5.7		0.15	ppb	71-55-6	1	0		169861			percent	N			0.5
10531	166	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	BZ	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Benzene	2.1		0.48	µg/m3	71-43-2	1	0		169861			percent	N			1.6
10532	167	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	CYHEXANE	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Cyclohexane	3.9		0.15	ppb	110-82-7	1	0		169861			percent	N			0.5
10533	169	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	TCE	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Trichloroethene	4		0.15	ppb	79-01-6	1	0		169861			percent	N			0.5
10534	174	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	BDCME	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Bromodichloromethane	1	U	1	µg/m3	75-27-4	1	0		169861			percent	N			3.4
10535	175	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	C7N	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Heptane	8.2		0.15	ppb	142-82-5	1	0		169861			percent	N			0.5
10536	185	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	BZME	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Toluene	1.7		0.15	ppb	108-88-3	1	0		169861			percent	N			0.5
10537	186	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	BZME	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Toluene	6.3		0.57	µg/m3	108-88-3	1	0		169861			percent	N			1.9
10538	188	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	HXO2	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	2-Hexanone	1.2	U	1.2	µg/m3	591-78-6	1	0		169861			percent	N			4.1
10539	190	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	DBCME	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Dibromochloromethane	1.3	U	1.3	µg/m3	124-48-1	1	0		169861			percent	N			4.3
10540	192	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	EDB	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,2-Dibromoethane	1.2	U	1.2	µg/m3	106-93-4	1	0		169861			percent	N			3.8
10541	196	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	EBZ	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Ethyl benzene	1.6	J	0.65	µg/m3	100-41-4	1	0		169861			percent	N			2.2
10542	198	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	XYLMP	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	m,p-Xylene	3.8		0.65	µg/m3	179601-23-1	1	0		169861			percent	N			2.2
10543	200	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	XYLO	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	o-Xylene	1.9	J	0.65	µg/m3	95-47-6	1	0		169861			percent	N			2.2
10544	202	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	STY	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Styrene	1.5	J	0.64	µg/m3	100-42-5	1	0		169861			percent	N			2.1
10545	204	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	TBME	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Bromoform	1.6	U	1.6	µg/m3	75-25-2	1	0		169861			percent	N			5.2
10546	206	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	PCA	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,1,2,2-Tetrachloroethane	1	U	1	µg/m3	79-34-5	1	0		169861			percent	N			3.4
10547	212	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	TMB124	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,2,4-Trimethylbenzene	1.8	J	0.74	µg/m3	95-63-6	1	0		169861			percent	N			2.5
10548	218	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	DCBZ12	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,2-Dichlorobenzene	1.8	U	1.8	µg/m3	95-50-1	1	0		169861			percent	N			6
10549	219	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	DIOXANE14	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,4-Dioxane	2	U	2	ppb	123-91-1	1	0		169861			percent	N			2
10550	220	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	DIOXANE14	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,4-Dioxane	7.2	U	7.2	µg/m3	123-91-1	1	0		169861			percent	N			7.2
10551	1	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	FC12	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Dichlorodifluoromethane	0.66		0.15	ppb	75-71-8	1	0		169861			percent	N			0.5
10552	3	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	CLME	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Methyl chloride	0.64		0.15	ppb	74-87-3	1	0		169861			percent	N			0.5
10553	5	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	DCTFA12	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Freon 114	0.15	U	0.15	ppb	76-14-2	1	0		169861			percent	N			0.5
10554	7	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	VC	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Vinyl chloride	0.15	U	0.15	ppb	75-01-4	1	0		169861			percent	N			0.5
10555	8	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	VC	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Vinyl chloride	0.38	U	0.38	µg/m3	75-01-4	1	0		169861			percent	N			1.3
10556	9	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	ERYTHRENE	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,3-Butadiene	0.15	U	0.15	ppb	106-99-0	1	0		169861			percent	N			0.5
10557	10	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	ERYTHRENE	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,3-Butadiene	0.33	U	0.33	µg/m3	106-99-0	1	0		169861			percent	N			1.1
10558	11	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	BRME	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Bromomethane	0.15	U	0.15	ppb	74-83-9	1	0		169861			percent	N			0.5
10559	12	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	BRME	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Bromomethane	0.58	U	0.58	µg/m3	74-83-9	1	0		169861			percent	N			1.9
10560	13	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	CLEA	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Ethyl chloride	0.15	U	0.15	ppb	75-00-3	1	0		169861			percent	N			0.5
10561	14	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	CLEA	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Ethyl chloride	0.4	U	0.4	µg/m3	75-00-3	1	0		169861			percent	N			1.3
10562	17	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	FC113	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Freon 113	0.18	J	0.15	ppb	76-13-1	1	0		169861			percent	N			0.5
10563	19	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
10488	2	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	3.3		X	=			0.74	2.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10489	4	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.3		X	=			0.31	1	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10490	6	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1	U	X	U			1	3.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10491	15	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.2		X	=			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10492	16	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	6.7		X	=			0.84	2.8	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10493	18	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.4	J	X	J			1.1	3.8	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10494	21	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	8.2		X	=			0.3	1	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10495	23	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.2		X	=			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10496	24	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	3.8		X	=			0.47	1.6	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10497	41	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	2.5		X	=			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10498	42	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	8.9		X	=			0.53	1.8	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10499	43	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	2.4		X	=			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10500	49	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	7.3		X	=			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10501	55	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	2.1		X	=			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10502	56	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	7.4		X	=			0.52	1.7	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10503	57	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	3.3		X	=			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10504	62	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1	U	X	U			1	3.4	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10505	63	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	4.7		X	=			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10506	73	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.1		X	=			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10507	74	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	4.1		X	=			0.57	1.9	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10508	76	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.2	U	X	U			1.2	4.1	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10509	78	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.3	U	X	U			1.3	4.3	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10510	80	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.2	U	X	U			1.2	3.8	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10511	86	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	2.8		X	=			0.65	2.2	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10512	88	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.3	J	X	J			0.65	2.2	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10513	92	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.6	U	X	U			1.6	5.2	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10514	94	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1	U	X	U			1	3.4	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10515	100	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.4	J	X	J			0.74	2.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10516	106	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.8	U	X	U			1.8	6	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10517	107	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	2	U	X	U			2	2	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10518	108	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	7.2	U	X	U			7.2	7.2	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10519	114	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	3.4		X	=			0.74	2.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10520	116	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.3		X	=			0.31	1	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10521	118	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1	U	X	U			1	3.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10522	128	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	5.5		X	=			0.84	2.8	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10523	130	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.2	J	X	J			1.1	3.8	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10524	135	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.6		X	=			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10525	136	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	5.1		X	=			0.47	1.6	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10526	138	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.3	J	X	J			0.52	1.7	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10527	153	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	4.6		X	=			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10528	155	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.8		X	=			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10529	156	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	8.9		X	=			0.73	2.4	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10530	161	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	5.7		X	=			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10531	166	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	2.1		X	=			0.48	1.6	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10532	167	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	3.9		X	=			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10533	169	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	4		X	=			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10534	174	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1	U	X	U			1	3.4	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10535	175	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	8.2		X	=			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10536	185	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.7		X	=			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10537	186	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	6.3		X	=			0.57	1.9	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10538	188	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.2	U	X	U			1.2	4.1	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10539	190	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.3	U	X	U			1.3	4.3	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10540	192	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.2	U	X	U			1.2	3.8	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10541	196	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.6	J	X	J			0.65	2.2	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10542	198	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	3.8		X	=			0.65	2.2	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10543	200	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.9	J	X	J			0.65	2.2	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10544	202	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.5	J	X	J			0.64	2.1	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10545	204	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.6	U	X	U			1.6	5.2	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10546	206	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1	U	X	U			1	3.4	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10547	212	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.8	J	X	J			0.74	2.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10548	218	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	1.8	U	X	U			1.8	6	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10549	219	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	2	U	X	U			2	2	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10550	220	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	7.2	U	X	U			7.2	7.2	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10551	1	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.66		X	=			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10552	3	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.64		X	=			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10553	5	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10554	7	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10555	8	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.38	U	X	U			0.38	1.3	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10556	9	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10557	10	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.33	U	X	U			0.33	1.1	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10558	11	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10559	12	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.58	U	X	U			0.58	1.9	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10560	13	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10561	14	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.4	U	X	U			0.4	1.3	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10562	17	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE		

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
10488	2	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			2.5	2.5			jbeckett - Tier 2B
10489	4	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			1	1			jbeckett - Tier 2B
10490	6	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			3.5	3.5			jbeckett - Tier 2B
10491	15	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10492	16	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			2.8	2.8			jbeckett - Tier 2B
10493	18	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			3.8	3.8			jbeckett - Tier 2B
10494	21	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			1	1			jbeckett - Tier 2B
10495	23	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10496	24	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			1.6	1.6			jbeckett - Tier 2B
10497	41	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10498	42	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			1.8	1.8			jbeckett - Tier 2B
10499	43	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10500	49	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10501	55	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10502	56	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			1.7	1.7			jbeckett - Tier 2B
10503	57	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10504	62	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			3.4	3.4			jbeckett - Tier 2B
10505	63	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10506	73	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10507	74	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			1.9	1.9			jbeckett - Tier 2B
10508	76	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			4.1	4.1	none	LB<RL	jbeckett - Tier 2B
10509	78	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			4.3	4.3			jbeckett - Tier 2B
10510	80	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			3.8	3.8			jbeckett - Tier 2B
10511	86	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			2.2	2.2			jbeckett - Tier 2B
10512	88	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			2.2	2.2			jbeckett - Tier 2B
10513	92	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			5.2	5.2			jbeckett - Tier 2B
10514	94	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			3.4	3.4			jbeckett - Tier 2B
10515	100	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			2.5	2.5			jbeckett - Tier 2B
10516	106	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			6	6			jbeckett - Tier 2B
10517	107	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			2	2			jbeckett - Tier 2B
10518	108	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			7.2	7.2			jbeckett - Tier 2B
10519	114	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			2.5	2.5			jbeckett - Tier 2B
10520	116	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			1	1			jbeckett - Tier 2B
10521	118	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			3.5	3.5			jbeckett - Tier 2B
10522	128	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			2.8	2.8			jbeckett - Tier 2B
10523	130	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			3.8	3.8			jbeckett - Tier 2B
10524	135	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10525	136	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			1.6	1.6			jbeckett - Tier 2B
10526	138	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			1.7	1.7			jbeckett - Tier 2B
10527	153	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10528	155	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10529	156	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			2.4	2.4			jbeckett - Tier 2B
10530	161	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10531	166	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			1.6	1.6			jbeckett - Tier 2B
10532	167	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10533	169	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10534	174	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			3.4	3.4			jbeckett - Tier 2B
10535	175	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10536	185	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10537	186	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			1.9	1.9			jbeckett - Tier 2B
10538	188	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			4.1	4.1	none	LB<RL	jbeckett - Tier 2B
10539	190	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			4.3	4.3			jbeckett - Tier 2B
10540	192	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			3.8	3.8			jbeckett - Tier 2B
10541	196	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			2.2	2.2			jbeckett - Tier 2B
10542	198	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			2.2	2.2			jbeckett - Tier 2B
10543	200	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			2.2	2.2			jbeckett - Tier 2B
10544	202	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			2.1	2.1			jbeckett - Tier 2B
10545	204	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			5.2	5.2			jbeckett - Tier 2B
10546	206	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			3.4	3.4			jbeckett - Tier 2B
10547	212	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			2.5	2.5			jbeckett - Tier 2B
10548	218	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			6	6			jbeckett - Tier 2B
10549	219	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			2	2			jbeckett - Tier 2B
10550	220	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			7.2	7.2			jbeckett - Tier 2B
10551	1	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10552	3	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10553	5	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10554	7	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10555	8	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			1.3	1.3			jbeckett - Tier 2B
10556	9	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10557	10	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			1.1	1.1			jbeckett - Tier 2B
10558	11	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10559	12	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			1.9	1.9			jbeckett - Tier 2B
10560	13	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10561	14	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			1.3	1.3			jbeckett - Tier 2B
10562	17	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10563	19	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10564	20	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			2	2			jbeckett - Tier 2B
10565	25	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10566	26	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			1.7	1.7			jbeckett - Tier 2B
10567	27	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10568	28	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			2	2			jbeckett - Tier 2B
10569	29	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10570	30	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			1.8	1.8			jbeckett - Tier 2B
10571	31	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10572	32	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			1.8	1.8			jbeckett - Tier 2B
10573	33	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10574	34	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			1.5	1.5			jbeckett - Tier 2B
10575	35	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10576	36	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			2	2			jbeckett - Tier 2B

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
10577	37	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	DCA11	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,1-Dichloroethane	0.15	U	0.15	ppb	75-34-3	1	0		169861			percent	N			0.5
10578	38	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	DCA11	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,1-Dichloroethane	0.61	U	0.61	µg/m3	75-34-3	1	0		169861			percent	N			2
10579	39	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	ETACET	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Ethyl acetate	0.15	U	0.15	ppb	141-78-6	1	0		169861			percent	N			1
10580	40	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	ETACET	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Ethyl acetate	0.54	U	0.54	µg/m3	141-78-6	1	0		169861			percent	N			3.6
10581	45	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	THF	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Tetrahydrofuran	0.15	U	0.15	ppb	109-99-9	1	0		169861			percent	N			0.5
10582	46	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	THF	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Tetrahydrofuran	0.44	U	0.44	µg/m3	109-99-9	1	0		169861			percent	N			1.5
10583	47	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	DCA12	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,2-Dichloroethane	0.15	U	0.15	ppb	107-06-2	1	0		169861			percent	N			0.5
10584	48	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	DCA12	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,2-Dichloroethane	0.61	U	0.61	µg/m3	107-06-2	1	0		169861			percent	N			2
10585	51	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	CTCL	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Carbon tetrachloride	0.15	U	0.15	ppb	56-23-5	1	0		169861			percent	N			0.5
10586	52	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	CTCL	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Carbon tetrachloride	0.94	U	0.94	µg/m3	56-23-5	1	0		169861			percent	N			3.1
10587	53	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	BZ	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Benzene	0.31	J	0.15	ppb	71-43-2	1	0		169861			percent	N			0.5
10588	54	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	BZ	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Benzene	0.98	J	0.48	µg/m3	71-43-2	1	0		169861			percent	N			1.6
10589	59	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	DCPA12	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,2-Dichloropropane	0.15	U	0.15	ppb	78-87-5	1	0		169861			percent	N			0.5
10590	60	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	DCPA12	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,2-Dichloropropane	0.73	U	0.73	µg/m3	78-87-5	1	0		169861			percent	N			2.4
10591	61	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	BDCME	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Bromodichloromethane	0.15	U	0.15	ppb	75-27-4	1	0		169861			percent	N			0.5
10592	65	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	DCP13C	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	cis-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-01-5	1	0		169861			percent	N			0.5
10593	66	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	DCP13C	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	cis-1,3-Dichloropropene	0.68	U	0.68	µg/m3	10061-01-5	1	0		169861			percent	N			2.3
10594	67	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	MIBK	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Methyl isobutyl ketone	0.15	U	0.15	ppb	108-10-1	1	0		169861			percent	N			0.5
10595	68	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	MIBK	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Methyl isobutyl ketone	0.61	U	0.61	µg/m3	108-10-1	1	0		169861			percent	N			2
10596	69	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	DCP13T	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	trans-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-02-6	1	0		169861			percent	N			0.5
10597	70	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	DCP13T	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	trans-1,3-Dichloropropene	0.68	U	0.68	µg/m3	10061-02-6	1	0		169861			percent	N			2.3
10598	71	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	TCA112	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,1,2-Trichloroethane	0.15	U	0.15	ppb	79-00-5	1	0		169861			percent	N			0.5
10599	72	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	TCA112	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,1,2-Trichloroethane	0.82	U	0.82	µg/m3	79-00-5	1	0		169861			percent	N			2.7
10600	75	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	HXO2	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	2-Hexanone	0.3	U	0.3	ppb	591-78-6	1	0		169861			percent	N			1
10601	77	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	DBCME	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Dibromochloromethane	0.15	U	0.15	ppb	124-48-1	1	0		169861			percent	N			0.5
10602	79	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	EDB	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,2-Dibromoethane	0.15	U	0.15	ppb	106-93-4	1	0		169861			percent	N			0.5
10603	81	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	CLBZ	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Chlorobenzene	0.15	U	0.15	ppb	108-90-7	1	0		169861			percent	N			0.5
10604	82	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	CLBZ	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Chlorobenzene	0.69	U	0.69	µg/m3	108-90-7	1	0		169861			percent	N			2.3
10605	83	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	EBZ	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Ethyl benzene	0.22	J	0.15	ppb	100-41-4	1	0		169861			percent	N			0.5
10606	84	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	EBZ	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Ethyl benzene	0.95	J	0.65	µg/m3	100-41-4	1	0		169861			percent	N			2.2
10607	85	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	XYLMP	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	m,p-Xylene	0.63		0.15	ppb	179601-23-1	1	0		169861			percent	N			0.5
10608	87	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	XYLO	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	o-Xylene	0.3	J	0.15	ppb	95-47-6	1	0		169861			percent	N			0.5
10609	89	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	STY	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Styrene	0.23	J	0.15	ppb	100-42-5	1	0		169861			percent	N			0.5
10610	90	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	STY	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Styrene	0.97	J	0.64	µg/m3	100-42-5	1	0		169861			percent	N			2.1
10611	91	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	TBME	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Bromoform	0.15	U	0.15	ppb	75-25-2	1	0		169861			percent	N			0.5
10612	93	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	PCA	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,1,2,2-Tetrachloroethane	0.15	U	0.15	ppb	79-34-5	1	0		169861			percent	N			0.5
10613	95	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	EBZME4	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	4-Ethyl toluene	0.15	U	0.15	ppb	622-96-8	1	0		169861			percent	N			1
10614	96	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	EBZME4	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	4-Ethyl toluene	0.74	U	0.74	µg/m3	622-96-8	1	0		169861			percent	N			4.9
10615	97	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	TMB135	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,3,5-Trimethylbenzene	0.15	U	0.15	ppb	108-67-8	1	0		169861			percent	N			0.5
10616	98	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	TMB135	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,3,5-Trimethylbenzene	0.74	U	0.74	µg/m3	108-67-8	1	0		169861			percent	N			2.5
10617	99	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	TMB124	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,2,4-Trimethylbenzene	0.28	J	0.15	ppb	95-63-6	1	0		169861			percent	N			0.5
10618	101	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	DCBZ13	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,3-Dichlorobenzene	0.15	U	0.15	ppb	541-73-1	1	0		169861			percent	N			0.5
10619	102	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	DCBZ13	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,3-Dichlorobenzene	0.9	U	0.9	µg/m3	541-73-1	1	0		169861			percent	N			3
10620	103	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	DCBZ14	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,4-Dichlorobenzene	0.15	U	0.15	ppb	106-46-7	1	0		169861			percent	N			0.5
10621	104	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	DCBZ14	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,4-Dichlorobenzene	0.9	U	0.9	µg/m3	106-46-7	1	0		169861			percent	N			3
10622	105	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	DCBZ12	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,2-Dichlorobenzene	0.3	U	0.3	ppb	95-50-1	1	0		169861			percent	N			1
10623	113	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	FC12	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Dichlorodifluoromethane	0.69		0.15	ppb	75-71-8	1	0		169861			percent	N			0.5
10624	115	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	CLME	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Methyl chloride	0.63		0.15	ppb	74-87-3	1	0		169861			percent	N			0.5
10625	117	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	DCTFA12	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Freon 114	0.15	U	0.15	ppb	76-14-2	1	0		169861			percent	N			0.5
10626	119	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	VC	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Vinyl chloride	0.15	U	0.15	ppb	75-01-4	1	0		169861			percent	N			0.5
10627	120	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	VC	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Vinyl chloride	0.38	U	0.38	µg/m3	75-01-4	1	0		169861			percent	N			1.3
10628	121	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	ERYTHRENE	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,3-Butadiene	0.15	U	0.15	ppb	106-99-0	1	0		169861			percent	N			0.5
10629	122	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	ERYTHRENE	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,3-Butadiene	0.33	U	0.33	µg/m3	106-99-0	1	0		169861			percent	N			1.1
10630	123	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	BRME	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Bromomethane	0.15	U	0.15	ppb	74-83-9	1	0		169861			percent	N			0.5
10631	124	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	BRME	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Bromomethane	0.58	U	0.58	µg/m3	74-83-9	1	0		169861			percent	N			1.9
10632	125	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	CLEA	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Ethyl chloride	0.15	U	0.15	ppb	75-00-3	1	0		169861			percent	N			0.5
10633	126	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	CLEA	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Ethyl chloride	0.4	U	0.4	µg/m3	75-00-3	1	0		169861			percent	N			1.3
10634	127	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	FC11	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Freon 11	0.97		0.15	ppb	75-69-4	1	0		169861			percent	N			0.5
10635	129	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	FC113	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Freon 113	0.16	J	0.15	ppb	76-13-1	1	0		169861			percent	N			0.5
10636	131	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	DCE11	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,1-Dichloroethene	0.15	U	0.15	ppb	75-35-4	1	0		169861			percent	N			0.5
10637	132	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	DCE11	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,1-Dichloroethene	0.59	U	0.59	µg/m3	75-35-4	1	0		169861			percent	N			2
10638	137	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	MTLNCL	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Methylene chloride	0.36	J	0.15	ppb	75-09-2	1	0		169861			percent	N			0.5
10639	139	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	DCE12T	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	trans-1,2-Dichloroethene	0.15	U	0.15	ppb	156-60-5	1	0		169861			percent	N			0.5
10640	140	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	DCE12T	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	trans-1,2-Dichloroethene	0.59	U	0.59	µg/m3	156-60-5	1	0		169861			percent	N			2
10641	141	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	TBUTMEE	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Methyl t-butyl ether	0.15	U	0.15	ppb	1634-04-4	1	0		169861			percent	N			0.5
10642	142	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	TBUTMEE	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Methyl t-butyl ether	0.54	U	0.54	µg/m3	1634-04-4	1	0		169861			percent	N			1.8
10643	143	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	VA	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Vinyl acetate	0.15	U	0.15	ppb	108-05-4	1	0		169861			percent	N			0.5
10644	144	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	VA	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Vinyl acetate	0.53	U	0.53	µg/m3	108-05-4	1	0		169861			percent	N			1.8
10645	145	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	MEK	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Methyl ethyl ketone	0.15	U	0.15	ppb	78-93-3	1	0		169861			percent	N			0.5
10646	146	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	MEK	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Methyl ethyl ketone	0.44	U	0.44	µg/m3	78-93-3	1	0		169861			percent	N			1.5
10647	147	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	DCE12C	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	cis-1,2-Dichloroethene	0.15	U	0.15	ppb	156-59-2	1	0		169861			percent	N			0.5
10648	148	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	DCE12C	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	cis-1,2-Dichloroethene	0.59	U	0.59	µg/m3	156-59-2	1	0		169861			percent	N			2
10649	149	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	DCA11	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,1-Dichloroethane	0.15	U	0.15	ppb	75-34-3	1	0		169861			percent	N			0.5
10650	150	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	DCA11	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,1-Dichloroethane	0.61	U	0.61	µg/m3	75-34-3	1	0		169861			percent	N			2
10651	151	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
10577	37	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10578	38	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.61	U	X	U			0.61	2	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10579	39	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	1	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10580	40	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.54	U	X	U			0.54	3.6	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10581	45	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10582	46	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.44	U	X	U			0.44	1.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10583	47	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10584	48	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.61	U	X	U			0.61	2	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10585	51	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10586	52	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.94	U	X	U			0.94	3.1	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10587	53	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.31	J	X	J			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10588	54	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.98	J	X	J			0.48	1.6	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10589	59	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10590	60	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.73	U	X	U			0.73	2.4	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10591	61	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10592	65	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10593	66	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.68	U	X	U			0.68	2.3	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10594	67	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10595	68	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.61	U	X	U			0.61	2	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10596	69	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10597	70	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.68	U	X	U			0.68	2.3	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10598	71	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10599	72	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.82	U	X	U			0.82	2.7	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10600	75	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.3	U	X	U			0.3	1	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10601	77	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10602	79	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10603	81	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10604	82	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.69	U	X	U			0.69	2.3	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10605	83	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.22	J	X	J			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10606	84	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.95	J	X	J			0.65	2.2	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10607	85	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.63		X	=			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10608	87	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.3	J	X	J			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10609	89	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.23	J	X	J			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10610	90	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.97	J	X	J			0.64	2.1	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10611	91	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10612	93	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10613	95	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	1	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10614	96	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.74	U	X	U			0.74	4.9	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10615	97	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10616	98	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.74	U	X	U			0.74	2.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10617	99	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.28	J	X	J			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10618	101	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10619	102	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.9	U	X	U			0.9	3	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10620	103	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10621	104	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.9	U	X	U			0.9	3	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10622	105	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.3	U	X	U			0.3	1	A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10623	113	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.69		X	=			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10624	115	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.63		X	=			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10625	117	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10626	119	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10627	120	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.38	U	X	U			0.38	1.3	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10628	121	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10629	122	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.33	U	X	U			0.33	1.1	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10630	123	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10631	124	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.58	U	X	U			0.58	1.9	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10632	125	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10633	126	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.4	U	X	U			0.4	1.3	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10634	127	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.97		X	=			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10635	129	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.16	J	X	J			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10636	131	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10637	132	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.59	U	X	U			0.59	2	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10638	137	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.36	J	X	J			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10639	139	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10640	140	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.59	U	X	U			0.59	2	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10641	141	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10642	142	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.54	U	X	U			0.54	1.8	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10643	143	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10644	144	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.53	U	X	U			0.53	1.8	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10645	145	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10646	146	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.44	U	X	U			0.44	1.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10647	147	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10648	148	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.59	U	X	U			0.59	2	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10649	149	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10650	150	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.61	U	X	U			0.61	2	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10651	151	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
10577	37	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10578	38	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			2	2			jbeckett - Tier 2B
10579	39	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			1	1			jbeckett - Tier 2B
10580	40	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			3.6	3.6			jbeckett - Tier 2B
10581	45	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10582	46	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			1.5	1.5			jbeckett - Tier 2B
10583	47	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10584	48	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			2	2			jbeckett - Tier 2B
10585	51	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10586	52	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			3.1	3.1			jbeckett - Tier 2B
10587	53	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10588	54	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			1.6	1.6			jbeckett - Tier 2B
10589	59	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10590	60	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			2.4	2.4			jbeckett - Tier 2B
10591	61	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10592	65	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10593	66	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			2.3	2.3			jbeckett - Tier 2B
10594	67	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10595	68	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			2	2			jbeckett - Tier 2B
10596	69	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10597	70	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			2.3	2.3			jbeckett - Tier 2B
10598	71	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10599	72	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			2.7	2.7			jbeckett - Tier 2B
10600	75	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			1	1	none	LB<RL	jbeckett - Tier 2B
10601	77	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10602	79	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10603	81	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10604	82	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			2.3	2.3			jbeckett - Tier 2B
10605	83	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10606	84	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			2.2	2.2			jbeckett - Tier 2B
10607	85	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10608	87	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10609	89	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10610	90	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			2.1	2.1			jbeckett - Tier 2B
10611	91	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10612	93	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10613	95	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			1	1			jbeckett - Tier 2B
10614	96	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			4.9	4.9			jbeckett - Tier 2B
10615	97	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10616	98	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			2.5	2.5			jbeckett - Tier 2B
10617	99	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10618	101	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10619	102	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			3	3			jbeckett - Tier 2B
10620	103	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10621	104	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			3	3			jbeckett - Tier 2B
10622	105	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy			1	1			jbeckett - Tier 2B
10623	113	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10624	115	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10625	117	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10626	119	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10627	120	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			1.3	1.3			jbeckett - Tier 2B
10628	121	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10629	122	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			1.1	1.1			jbeckett - Tier 2B
10630	123	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10631	124	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			1.9	1.9			jbeckett - Tier 2B
10632	125	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10633	126	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			1.3	1.3			jbeckett - Tier 2B
10634	127	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10635	129	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10636	131	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10637	132	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			2	2			jbeckett - Tier 2B
10638	137	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10639	139	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10640	140	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			2	2			jbeckett - Tier 2B
10641	141	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10642	142	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			1.8	1.8			jbeckett - Tier 2B
10643	143	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10644	144	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			1.8	1.8			jbeckett - Tier 2B
10645	145	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10646	146	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			1.5	1.5			jbeckett - Tier 2B
10647	147	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10648	148	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			2	2			jbeckett - Tier 2B
10649	149	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10650	150	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			2	2			jbeckett - Tier 2B
10651	151	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			1	1			jbeckett - Tier 2B
10652	152	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			3.6	3.6			jbeckett - Tier 2B
10653	157	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10654	158	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			1.5	1.5			jbeckett - Tier 2B
10655	159	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10656	160	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			2	2			jbeckett - Tier 2B
10657	163	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10658	164	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			3.1	3.1			jbeckett - Tier 2B
10659	165	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10660	171	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10661	172	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			2.4	2.4			jbeckett - Tier 2B
10662	173	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10663	177	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10664	178	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			2.3	2.3			jbeckett - Tier 2B
10665	179	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
10666	180	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	MIBK	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Methyl isobutyl ketone	0.61	U	0.61	µg/m3	108-10-1	1	0		169861			percent	N			2
10667	181	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	DCP13T	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	trans-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-02-6	1	0		169861			percent	N			0.5
10668	182	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	DCP13T	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	trans-1,3-Dichloropropene	0.68	U	0.68	µg/m3	10061-02-6	1	0		169861			percent	N			2.3
10669	183	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	TCA112	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,1,2-Trichloroethane	0.15	U	0.15	ppb	79-00-5	1	0		169861			percent	N			0.5
10670	184	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	TCA112	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,1,2-Trichloroethane	0.82	U	0.82	µg/m3	79-00-5	1	0		169861			percent	N			2.7
10671	187	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	HXO2	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	2-Hexanone	0.3	U	0.3	ppb	591-78-6	1	0		169861			percent	N			1
10672	189	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	DBCME	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Dibromochloromethane	0.15	U	0.15	ppb	124-48-1	1	0		169861			percent	N			0.5
10673	191	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	EDB	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,2-Dibromoethane	0.15	U	0.15	ppb	106-93-4	1	0		169861			percent	N			0.5
10674	193	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	CLBZ	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Chlorobenzene	0.15	U	0.15	ppb	108-90-7	1	0		169861			percent	N			0.5
10675	194	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	CLBZ	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Chlorobenzene	0.69	U	0.69	µg/m3	108-90-7	1	0		169861			percent	N			2.3
10676	195	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	EBZ	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Ethyl benzene	0.37	J	0.15	ppb	100-41-4	1	0		169861			percent	N			0.5
10677	197	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	XYLMP	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	m,p-Xylene	0.88		0.15	ppb	179601-23-1	1	0		169861			percent	N			0.5
10678	199	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	XYLO	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	o-Xylene	0.45	J	0.15	ppb	95-47-6	1	0		169861			percent	N			0.5
10679	201	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	STY	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Styrene	0.36	J	0.15	ppb	100-42-5	1	0		169861			percent	N			0.5
10680	203	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	TBME	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	Bromoform	0.15	U	0.15	ppb	75-25-2	1	0		169861			percent	N			0.5
10681	205	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	PCA	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,1,2,2-Tetrachloroethane	0.15	U	0.15	ppb	79-34-5	1	0		169861			percent	N			0.5
10682	207	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	EBZME4	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	4-Ethyl toluene	0.15	U	0.15	ppb	622-96-8	1	0		169861			percent	N			1
10683	208	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	EBZME4	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	4-Ethyl toluene	0.74	U	0.74	µg/m3	622-96-8	1	0		169861			percent	N			4.9
10684	209	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	TMB135	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,3,5-Trimethylbenzene	0.15	U	0.15	ppb	108-67-8	1	0		169861			percent	N			0.5
10685	210	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	TMB135	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,3,5-Trimethylbenzene	0.74	U	0.74	µg/m3	108-67-8	1	0		169861			percent	N			2.5
10686	211	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	TMB124	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,2,4-Trimethylbenzene	0.36	J	0.15	ppb	95-63-6	1	0		169861			percent	N			0.5
10687	213	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	DCBZ13	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,3-Dichlorobenzene	0.15	U	0.15	ppb	541-73-1	1	0		169861			percent	N			0.5
10688	214	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	DCBZ13	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,3-Dichlorobenzene	0.9	U	0.9	µg/m3	541-73-1	1	0		169861			percent	N			3
10689	215	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	DCBZ14	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,4-Dichlorobenzene	0.15	U	0.15	ppb	106-46-7	1	0		169861			percent	N			0.5
10690	216	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	DCBZ14	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,4-Dichlorobenzene	0.9	U	0.9	µg/m3	106-46-7	1	0		169861			percent	N			3
10691	217	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	DCBZ12	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	1,2-Dichlorobenzene	0.3	U	0.3	ppb	95-50-1	1	0		169861			percent	N			1
10692	111	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	BR4FBZ	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	4-Bromofluorobenzene	96.051			PERCENT	460-00-4	1	0		169861	20	96.051	percent	Y			
10693	112	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	EPA TO-15	BR4FBZ	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	4-Bromofluorobenzene	96.542			PERCENT	460-00-4	1	0		169861	20	96.542	percent	Y			
10694	223	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	BR4FBZ	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	4-Bromofluorobenzene	97.294			PERCENT	460-00-4	1	0		169861	20	97.294	percent	Y			
10695	224	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	EPA TO-15	BR4FBZ	TO15	AIR	N		5/23/2016	5/24/2016		5/24/2016	4-Bromofluorobenzene	95.934			PERCENT	460-00-4	1	0		169861	20	95.934	percent	Y			
10696	503	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	DIOXANE14	TO15	AIR	LB					5/24/2016	1,4-Dioxane	2	U		ppb	123-91-1	1	0		169861			percent	N			2
10697	504	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	FC12	TO15	AIR	BS					5/24/2016	Dichlorodifluoromethane	12		0.15	ppb	75-71-8	1	0		169861	10	120.28	percent	N			0.5
10698	505	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	CLME	TO15	AIR	BS					5/24/2016	Methyl chloride	11		0.15	ppb	74-87-3	1	0		169861	10	109.59	percent	N			0.5
10699	508	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	ERYTHRENE	TO15	AIR	BS					5/24/2016	1,3-Butadiene	11		0.15	ppb	106-99-0	1	0		169861	10	110.01	percent	N			0.5
10700	516	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	MTLNCL	TO15	AIR	BS					5/24/2016	Methylene chloride	11		0.15	ppb	75-09-2	1	0		169861	10	110.1	percent	N			0.5
10701	527	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	DCA12	TO15	AIR	BS					5/24/2016	1,2-Dichloroethane	12		0.15	ppb	107-06-2	1	0		169861	10	120.39	percent	N			0.5
10702	529	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	CTCL	TO15	AIR	BS					5/24/2016	Carbon tetrachloride	12		0.15	ppb	56-23-5	1	0		169861	10	120.01	percent	N			0.5
10703	532	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	TCE	TO15	AIR	BS					5/24/2016	Trichloroethene	11		0.15	ppb	79-01-6	1	0		169861	10	110.36	percent	N			0.5
10704	535	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	C7N	TO15	AIR	BS					5/24/2016	Heptane	11		0.15	ppb	142-82-5	1	0		169861	10	109.57	percent	N			0.5
10705	542	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	PCE	TO15	AIR	BS					5/24/2016	Tetrachloroethene	11		0.15	ppb	127-18-4	1	0		169861	10	110.42	percent	N			0.5
10706	546	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	EBZ	TO15	AIR	BS					5/24/2016	Ethyl benzene	11		0.15	ppb	100-41-4	1	0		169861	10	109.6	percent	N			0.5
10707	555	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	DCBZ13	TO15	AIR	BS					5/24/2016	1,3-Dichlorobenzene	11		0.15	ppb	541-73-1	1	0		169861	10	110.45	percent	N			0.5
10708	556	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	DCBZ14	TO15	AIR	BS					5/24/2016	1,4-Dichlorobenzene	11		0.15	ppb	106-46-7	1	0		169861	10	110.2	percent	N			0.5
10709	565	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	CLEA	TO15	AIR	BD					5/24/2016	Ethyl chloride	11		0.15	ppb	75-00-3	1	0		169861	10	110.47	percent	N			0.5
10710	566	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	FC11	TO15	AIR	BD					5/24/2016	Freon 11	12		0.15	ppb	75-69-4	1	0		169861	10	119.8	percent	N			0.5
10711	578	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	ETACET	TO15	AIR	BD					5/24/2016	Ethyl acetate	11		0.15	ppb	141-78-6	1	0		169861	10	110.38	percent	N			1
10712	584	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	CTCL	TO15	AIR	BD					5/24/2016	Carbon tetrachloride	12		0.15	ppb	56-23-5	1	0		169861	10	120.01	percent	N			0.5
10713	585	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	BZ	TO15	AIR	BD					5/24/2016	Benzene	11		0.15	ppb	71-43-2	1	0		169861	10	109.9	percent	N			0.5
10714	586	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	CYHEXANE	TO15	AIR	BD					5/24/2016	Cyclohexane	11		0.15	ppb	110-82-7	1	0		169861	10	110.4	percent	N			0.5
10715	598	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	DBCME	TO15	AIR	BD					5/24/2016	Dibromochloromethane	12		0.15	ppb	124-48-1	1	0		169861	10	119.84	percent	N			0.5
10716	602	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	XYLMP	TO15	AIR	BD					5/24/2016	m,p-Xylene	22		0.15	ppb	179601-23-1	1	0		169861	20	110.09	percent	N			0.5
10717	604	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	STY	TO15	AIR	BD					5/24/2016	Styrene	11		0.15	ppb	100-42-5	1	0		169861	10	110.39	percent	N			0.5
10718	606	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	PCA	TO15	AIR	BD					5/24/2016	1,1,2,2-Tetrachloroethane	11		0.15	ppb	79-34-5	1	0		169861	10	110.35	percent	N			0.5
10719	459	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	ACE	TO15	AIR	LB					5/24/2016	Acetone	0.3	U	0.3	ppb	67-64-1	1	0		169861			percent	N			1
10720	486	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	HXO2	TO15	AIR	LB					5/24/2016	2-Hexanone	0.312	J	0.3	ppb	591-78-6	1	0		169861			percent	N			1
10721	502	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	DCBZ12	TO15	AIR	LB					5/24/2016	1,2-Dichlorobenzene	0.3	U	0.3	ppb	95-50-1	1	0		169861			percent	N			1
10722	506	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	DCTFA12	TO15	AIR	BS					5/24/2016	Freon 114	11.1		0.15	ppb	76-14-2	1	0		169861	10	111.37	percent	N			0.5
10723	507	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	VC	TO15	AIR	BS					5/24/2016	Vinyl chloride	11.3		0.15	ppb	75-01-4	1	0		169861	10	112.6	percent	N			0.5
10724	509	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	BRME	TO15	AIR	BS					5/24/2016	Bromomethane	11.3		0.15	ppb	74-83-9	1	0		169861	10	113.42	percent	N			0.5
10725	510	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	CLEA	TO15	AIR	BS					5/24/2016	Ethyl chloride	11.1		0.15	ppb	75-00-3	1	0		169861	10	110.88	percent	N			0.5
10726	511	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	FC11	TO15	AIR	BS					5/24/2016	Freon 11	12.1		0.15	ppb	75-69-4	1	0		169861	10	121.34	percent	N			0.5
10727	512	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	FC113	TO15	AIR	BS					5/24/2016	Freon 113	11.2		0.15	ppb	76-13-1	1	0		169861	10	112.11	percent	N			0.5
10728	513	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	DCE11	TO15	AIR	BS					5/24/2016	1,1-Dichloroethene	11.8		0.15	ppb	75-35-4	1	0		169861	10	117.55	percent	N			0.5
10729	514	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	ACE	TO15	AIR	BS					5/24/2016	Acetone	12.4		0.3	ppb	67-64-1	1	0		169861	10	124.38	percent	N			1
10730	515	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	CDS	TO15	AIR	BS					5/24/2016	Carbon disulfide	11.6		0.15	ppb	75-15-0	1	0		169861	10	116.16	percent	N			0.5
10731	517	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	DCE12T	TO15	AIR	BS					5/24/2016	trans-1,2-Dichloroethene	11.2		0.15	ppb	156-60-5	1	0		169861	10	111.87	percent	N			0.5
10732	518	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	TBUTMEE	TO15	AIR	BS					5/24/2016	Methyl t-butyl ether	11.7		0.15	ppb	1634-04-4	1	0		169861	10	116.68	percent	N			0.5
10733	519	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	VA	TO15	AIR	BS					5/24/2016	Vinyl acetate	11.6		0.15	ppb	108-05-4	1	0		169861	10	116.16	percent	N			0.5
10734	520	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	MEK	TO15	AIR	BS					5/24/2016	Methyl ethyl ketone	12.1		0.15	ppb	78-93-3	1	0		169861	10	121.46	percent	N			0.5
10735	521	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	DCE12C	TO15	AIR	BS					5/24/2016	cis-1,2-Dichloroethene	11.3		0.15	ppb	156-59-2	1	0		169861	10	113.04	percent	N			0.5
10736	522	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	DCA11	TO15	AIR	BS					5/24/2016	1,1-Dichloroethane	11.6		0.15	ppb	75-34-3	1	0		169861	10	115.92	percent	N			0.5
10737	523	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	ETACET	TO15	AIR	BS					5/24/2016	Ethyl acetate	11.1		0.15	ppb	141-78-6	1	0		169861	10	111.47	percent	N			1
10738	524	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	C6N	TO15	AIR	BS					5/24/2016	n-Hexane	10.8		0.15	ppb	110-54-3	1	0		169861	10	107.9	percent	N			0.5
10739	525	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	TCLME	TO15	AIR	BS					5/24/2016	Chloroform	11.7		0.15	ppb	67-66-3	1	0		169861	10	116.85	percent	N			0.5
10740	526	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	THF	TO15	AIR	BS					5/24/2016	Tetrahydrofuran	11.2		0.15	ppb	109-99-9	1	0		169861	10	112.16	percent	N			0.5
10741	528	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	TCA111	TO15	AIR	BS					5/24/2016	1,1,1-Trichloroethane	11.8		0.15	ppb	71-55-6	1	0		169861	10	118.49	percent	N			0.5
10742	530	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	BZ	TO15	AIR	BS					5/24/2016	Benzene	10.9		0.15	ppb	71-43-2	1	0		169861	10	109.19	percent	N			0.5
10743	531	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	CYHEXANE	TO15	AIR	BS					5/24/2016	Cyclohexane	10.9		0.15	ppb	110-82-7	1	0		169861	10	109.32	percent	N			0.5
10744	533	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	DCPA12	TO15	AIR	BS					5/24/2016	1,2-Dichloropropane	10.9		0.15	ppb	78-87-5	1	0		169861	10	109.24	percent	N			0.5
10745	534	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	BDCME	TO15	AIR	BS					5/24/2016	Bromodichloromethane	11.9		0.15	ppb	75-27-4	1	0		169861	10	119.43	percent	N			0.5
10746	536	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	DCP13C	TO15	AIR	BS					5/24/2016	cis-1,3-Dichloropropene	11.5		0.15	ppb	10061-01-5	1	0		169861	10	114.71	percent	N			0.5
10747	537	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	MIBK	TO15	AIR	BS					5/24/2016	Methyl isobutyl ketone	11.5		0.15	ppb	108-10-1	1	0		169861	10	114.51	percent	N			0.5
10748	538	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	DCP13T	TO15	AIR	BS					5/24/2016	trans-1,3-Dichloropropene	11.7		0.15	ppb	10061-02-6	1	0		169861	10	116.99	percent	N			0.5
10749	539	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	TCA112	TO15	AIR	BS					5/24/2016	1,1,2-Trichloroethane	11.3		0.15	ppb	79-00-5	1	0		169861	10	113.03	percent	N			0.5
10750	540	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	BZME	TO15	AIR	BS					5/24/2016	Toluene	11.2		0.15	ppb	108-88-3	1	0		169861	10	112.26	percent	N			0.5
10751	541	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	HXO2	TO15	AIR	BS					5/24/2016	2-Hexanone	12.1		0.3	ppb	591-78-6	1	0		169861	10	121.39	percent	N			1
10752	543	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	DBCME	TO15	AIR	BS					5/24/2016	Dibromochloromethane	11.9		0.15	ppb	124-48-1	1	0		169861	10	119.42	percent	N			0.5
10753	544	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	EDB	TO15	AIR	BS					5/24/2016	1

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
10666	180	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.61	U	X	U			0.61	2	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10667	181	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10668	182	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.68	U	X	U			0.68	2.3	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10669	183	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10670	184	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.82	U	X	U			0.82	2.7	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10671	187	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.3	U	X	U			0.3	1	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10672	189	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10673	191	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10674	193	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10675	194	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.69	U	X	U			0.69	2.3	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10676	195	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.37	J	X	J			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10677	197	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.88		X	=			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10678	199	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.45	J	X	J			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10679	201	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.36	J	X	J			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10680	203	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10681	205	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10682	207	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	1	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10683	208	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.74	U	X	U			0.74	4.9	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10684	209	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10685	210	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.74	U	X	U			0.74	2.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10686	211	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.36	J	X	J			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10687	213	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10688	214	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.9	U	X	U			0.9	3	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10689	215	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10690	216	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.9	U	X	U			0.9	3	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10691	217	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.3	U	X	U			0.3	1	A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10692	111	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			3		TRUE	6/13/2016	jbeckett	96.051		X	=	67.698	129.86			A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10693	112	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001		1/0/1900	NONE			3		TRUE	6/13/2016	jbeckett	96.542		X	=	67.698	129.86			A-0053H-052316-SG-001-6'(0037)	4.30EPACLP	1/0/1900					169861		TRUE
10694	223	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			3		TRUE	6/13/2016	jbeckett	97.294		X	=	67.698	129.86			A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10695	224	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002		1/0/1900	NONE			3		TRUE	6/13/2016	jbeckett	95.934		X	=	67.698	129.86			A-0053H-052316-SG-001-6'(0050)	4.30EPACLP	1/0/1900					169861		TRUE
10696	503	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			0		TRUE	6/13/2016	jbeckett	2	U	X	U				2	501656	4.30EPACLP						169861		TRUE
10697	504	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			0		TRUE	6/13/2016	jbeckett	12		X	=	44.78	152	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10698	505	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			0		TRUE	6/13/2016	jbeckett	11		X	=	37.33	153.2	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10699	508	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			0		TRUE	6/13/2016	jbeckett	11		X	=	49.04	147.5	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10700	516	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			0		TRUE	6/13/2016	jbeckett	11		X	=	59.19	132.9	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10701	527	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			0		TRUE	6/13/2016	jbeckett	12		X	=	52.66	143.7	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10702	529	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			0		TRUE	6/13/2016	jbeckett	12		X	=	57.86	143.2	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10703	532	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			0		TRUE	6/13/2016	jbeckett	11		X	=	70.94	137	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10704	535	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			0		TRUE	6/13/2016	jbeckett	11		X	=	58.98	148.1	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10705	542	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			0		TRUE	6/13/2016	jbeckett	11		X	=	59.98	146	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10706	546	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			0		TRUE	6/13/2016	jbeckett	11		X	=	64.2	147.4	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10707	555	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			0		TRUE	6/13/2016	jbeckett	11		X	=	53.94	158	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10708	556	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			0		TRUE	6/13/2016	jbeckett	11		X	=	51.98	161.4	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10709	565	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			0		TRUE	6/13/2016	jbeckett	11		X	=	51.06	144.9	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10710	566	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			0		TRUE	6/13/2016	jbeckett	12		X	=	47.84	148.9	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10711	578	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			0		TRUE	6/13/2016	jbeckett	11		X	=	54.41	150.1	0.15	1	501658	4.30EPACLP						169861		TRUE
10712	584	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			0		TRUE	6/13/2016	jbeckett	12		X	=	57.86	143.2	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10713	585	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			0		TRUE	6/13/2016	jbeckett	11		X	=	56.51	143.5	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10714	586	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			0		TRUE	6/13/2016	jbeckett	11		X	=	61.79	131.9	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10715	598	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			0		TRUE	6/13/2016	jbeckett	12		X	=	67.95	141.8	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10716	602	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			0		TRUE	6/13/2016	jbeckett	22		X	=	62.33	145.6	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10717	604	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			0		TRUE	6/13/2016	jbeckett	11		X	=	60.91	160.8	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10718	606	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			0		TRUE	6/13/2016	jbeckett	11		X	=	49.54	150.8	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10719	459	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	0.3	U	X	U			0.3	1	501656	4.30EPACLP						169861		TRUE
10720	486	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	0.312	J	X	J			0.3	1	501656	4.30EPACLP						169861		TRUE
10721	502	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	0.3	U	X	U			0.3	1	501656	4.30EPACLP						169861		TRUE
10722	506	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.1		X	=	54.2	145.9	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10723	507	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.3		X	=	51.9	146.1	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10724	509	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.3		X	=	51.74	149.4	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10725	510	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.1		X	=	51.06	144.9	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10726	511	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	12.1		X	=	47.84	148.9	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10727	512	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.2		X	=	69.04	133.4	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10728	513	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.8		X	=	53.62	144.6	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10729	514	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	12.4		X	=	30.65	150.8	0.3	1	501657	4.30EPACLP						169861		TRUE
10730	515	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.6		X	=	60.93	136.3	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10731	517	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.2		X	=	62.54	139.3	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10732	518	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.7		X	=	66.09	138.6	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10733	519	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.6		X	=	53.43	155.7	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10734	520	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	12.1		X	=	57.2	147.8	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10735	521	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.3		X	=	63.72	141.6	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10736	522	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.6		X	=	62.21	134.2	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10737	523	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.1		X	=	54.41	150.1	0.15	1	501657	4.30EPACLP						169861		TRUE
10738	524	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	10.8		X	=	60.24	142.1	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10739	525	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.7		X	=	64.56	131.2	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10740	526	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.2		X	=	64.23	147	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10741	528	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.8		X	=	61.46	137.3	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10742	530	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	10.9		X	=	56.51	143.5	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10743	531	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	10.9		X	=	61.79	131.9	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10744	533	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	10.9		X	=	59.66	139.7	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10745	534	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.9		X	=	63.34	136.4	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10746	536	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.5		X	=	65.87	142.6	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10747	537	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.5		X	=	62.13	149	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10748	538	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.7		X	=	64.68	145.3	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10749	539	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.3		X	=	68.27	134.4	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10750	540	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.2		X	=	66.05	146.5	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10751	541	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	12.1		X	=	58.51	162	0.3	1	501657	4.30EPACLP						169861		TRUE
10752	543	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.9		X	=	67.95	141.8	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10753	544	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.6		X	=	72.6	136.7	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10754	545	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	10.7		X	=	67.42	134.7	0.15	0.5	501657	4.30EPACLP						169861		TRUE

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
10666	180	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			2	2			jbeckett - Tier 2B
10667	181	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10668	182	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			2.3	2.3			jbeckett - Tier 2B
10669	183	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10670	184	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			2.7	2.7			jbeckett - Tier 2B
10671	187	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			1	1	none	LB<RL	jbeckett - Tier 2B
10672	189	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10673	191	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10674	193	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10675	194	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			2.3	2.3			jbeckett - Tier 2B
10676	195	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10677	197	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10678	199	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10679	201	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10680	203	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10681	205	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10682	207	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			1	1			jbeckett - Tier 2B
10683	208	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			4.9	4.9			jbeckett - Tier 2B
10684	209	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10685	210	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			2.5	2.5			jbeckett - Tier 2B
10686	211	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10687	213	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10688	214	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			3	3			jbeckett - Tier 2B
10689	215	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10690	216	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			3	3			jbeckett - Tier 2B
10691	217	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy			1	1			jbeckett - Tier 2B
10692	111	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy	20	ppb					jbeckett - Tier 2B
10693	112	1465232733	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0037)	A-0053H-052316-SG-001-6'(0037)	1614564001	6/15/2016	mcichy	20	ppb					jbeckett - Tier 2B
10694	223	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy	20	ppb					jbeckett - Tier 2B
10695	224	1465484587	22	ALSS	1614564	1614564	A-0053H-052316-SG-001-6'(0050)	A-0053H-052316-SG-001-6'(0050)	1614564002	6/15/2016	mcichy	20	ppb					jbeckett - Tier 2B
10696	503	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			2	2			jbeckett - Tier 2B
10697	504	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10698	505	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10699	508	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10700	516	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10701	527	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10702	529	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10703	532	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10704	535	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10705	542	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10706	546	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10707	555	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10708	556	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10709	565	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10710	566	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10711	578	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		1	1			jbeckett - Tier 2B
10712	584	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10713	585	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10714	586	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10715	598	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10716	602	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	20		0.5	0.5			jbeckett - Tier 2B
10717	604	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10718	606	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10719	459	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			1	1			jbeckett - Tier 2B
10720	486	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			1	1			jbeckett - Tier 2B
10721	502	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			1	1			jbeckett - Tier 2B
10722	506	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10723	507	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10724	509	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10725	510	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10726	511	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10727	512	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10728	513	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10729	514	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		1	1			jbeckett - Tier 2B
10730	515	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10731	517	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10732	518	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10733	519	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10734	520	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10735	521	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10736	522	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10737	523	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		1	1			jbeckett - Tier 2B
10738	524	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10739	525	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10740	526	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10741	528	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10742	530	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10743	531	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10744	533	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10745	534	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10746	536	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10747	537	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10748	538	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10749	539	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10750	540	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10751	541	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		1	1			jbeckett - Tier 2B
10752	543	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10753	544	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10754	545	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
10755	547	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	XYLMP	TO15	AIR	BS					5/24/2016	m,p-Xylene	21.7		0.15	ppb	179601-23-1	1	0		169861	20	108.38	percent	N			0.5
10756	548	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	XYLO	TO15	AIR	BS					5/24/2016	o-Xylene	10.9		0.15	ppb	95-47-6	1	0		169861	10	109.35	percent	N			0.5
10757	549	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	STY	TO15	AIR	BS					5/24/2016	Styrene	10.9		0.15	ppb	100-42-5	1	0		169861	10	108.71	percent	N			0.5
10758	550	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	TBME	TO15	AIR	BS					5/24/2016	Bromoform	11.5		0.15	ppb	75-25-2	1	0		169861	10	114.57	percent	N			0.5
10759	551	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	PCA	TO15	AIR	BS					5/24/2016	1,1,2,2-Tetrachloroethane	10.8		0.15	ppb	79-34-5	1	0		169861	10	108.3	percent	N			0.5
10760	552	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	EBZME4	TO15	AIR	BS					5/24/2016	4-Ethyl toluene	11.3		0.15	ppb	622-96-8	1	0		169861	10	113.23	percent	N			1
10761	553	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	TMB135	TO15	AIR	BS					5/24/2016	1,3,5-Trimethylbenzene	11.1		0.15	ppb	108-67-8	1	0		169861	10	110.57	percent	N			0.5
10762	554	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	TMB124	TO15	AIR	BS					5/24/2016	1,2,4-Trimethylbenzene	11.3		0.15	ppb	95-63-6	1	0		169861	10	112.9	percent	N			0.5
10763	557	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	DCBZ12	TO15	AIR	BS					5/24/2016	1,2-Dichlorobenzene	11.2		0.3	ppb	95-50-1	1	0		169861	10	111.83	percent	N			1
10764	558	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	DIOXANE14	TO15	AIR	BS					5/24/2016	1,4-Dioxane	10.6			ppb	123-91-1	1	0		169861	10	106.48	percent	N			2
10765	559	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	FC12	TO15	AIR	BD					5/24/2016	Dichlorodifluoromethane	11.8		0.15	ppb	75-71-8	1	0		169861	10	118.34	percent	N			0.5
10766	560	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	CLME	TO15	AIR	BD					5/24/2016	Methyl chloride	10.8		0.15	ppb	74-87-3	1	0		169861	10	107.91	percent	N			0.5
10767	561	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	DCTFA12	TO15	AIR	BD					5/24/2016	Freon 114	11.2		0.15	ppb	76-14-2	1	0		169861	10	112.22	percent	N			0.5
10768	562	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	VC	TO15	AIR	BD					5/24/2016	Vinyl chloride	11.3		0.15	ppb	75-01-4	1	0		169861	10	112.87	percent	N			0.5
10769	563	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	ERYTHRENE	TO15	AIR	BD					5/24/2016	1,3-Butadiene	10.9		0.15	ppb	106-99-0	1	0		169861	10	109.46	percent	N			0.5
10770	564	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	BRME	TO15	AIR	BD					5/24/2016	Bromomethane	11.1		0.15	ppb	74-83-9	1	0		169861	10	110.78	percent	N			0.5
10771	567	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	FC113	TO15	AIR	BD					5/24/2016	Freon 113	11.2		0.15	ppb	76-13-1	1	0		169861	10	111.75	percent	N			0.5
10772	568	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	DCE11	TO15	AIR	BD					5/24/2016	1,1-Dichloroethene	11.8		0.15	ppb	75-35-4	1	0		169861	10	117.5	percent	N			0.5
10773	569	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	ACE	TO15	AIR	BD					5/24/2016	Acetone	12.4		0.3	ppb	67-64-1	1	0		169861	10	123.68	percent	N			1
10774	570	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	CDS	TO15	AIR	BD					5/24/2016	Carbon disulfide	11.6		0.15	ppb	75-15-0	1	0		169861	10	115.81	percent	N			0.5
10775	571	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	MTLNCL	TO15	AIR	BD					5/24/2016	Methylene chloride	10.9		0.15	ppb	75-09-2	1	0		169861	10	109.19	percent	N			0.5
10776	572	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	DCE12T	TO15	AIR	BD					5/24/2016	trans-1,2-Dichloroethene	11.2		0.15	ppb	156-60-5	1	0		169861	10	112.31	percent	N			0.5
10777	573	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	TBUTMEE	TO15	AIR	BD					5/24/2016	Methyl t-butyl ether	11.7		0.15	ppb	1634-04-4	1	0		169861	10	116.77	percent	N			0.5
10778	574	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	VA	TO15	AIR	BD					5/24/2016	Vinyl acetate	11.6		0.15	ppb	108-05-4	1	0		169861	10	116.38	percent	N			0.5
10779	575	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	MEK	TO15	AIR	BD					5/24/2016	Methyl ethyl ketone	12.3		0.15	ppb	78-93-3	1	0		169861	10	122.6	percent	N			0.5
10780	576	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	DCE12C	TO15	AIR	BD					5/24/2016	cis-1,2-Dichloroethene	11.3		0.15	ppb	156-59-2	1	0		169861	10	113.11	percent	N			0.5
10781	577	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	DCA11	TO15	AIR	BD					5/24/2016	1,1-Dichloroethane	11.6		0.15	ppb	75-34-3	1	0		169861	10	115.63	percent	N			0.5
10782	579	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	C6N	TO15	AIR	BD					5/24/2016	n-Hexane	10.9		0.15	ppb	110-54-3	1	0		169861	10	109.11	percent	N			0.5
10783	580	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	TCLME	TO15	AIR	BD					5/24/2016	Chloroform	11.7		0.15	ppb	67-66-3	1	0		169861	10	116.77	percent	N			0.5
10784	581	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	THF	TO15	AIR	BD					5/24/2016	Tetrahydrofuran	11.2		0.15	ppb	109-99-9	1	0		169861	10	112.28	percent	N			0.5
10785	582	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	DCA12	TO15	AIR	BD					5/24/2016	1,2-Dichloroethane	12.1		0.15	ppb	107-06-2	1	0		169861	10	120.53	percent	N			0.5
10786	583	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	TCA111	TO15	AIR	BD					5/24/2016	1,1,1-Trichloroethane	11.9		0.15	ppb	71-55-6	1	0		169861	10	118.5	percent	N			0.5
10787	587	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	TCE	TO15	AIR	BD					5/24/2016	Trichloroethene	11.1		0.15	ppb	79-01-6	1	0		169861	10	111	percent	N			0.5
10788	588	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	DCPA12	TO15	AIR	BD					5/24/2016	1,2-Dichloropropane	10.9		0.15	ppb	78-87-5	1	0		169861	10	109.43	percent	N			0.5
10789	589	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	BDCME	TO15	AIR	BD					5/24/2016	Bromodichloromethane	11.9		0.15	ppb	75-27-4	1	0		169861	10	119.46	percent	N			0.5
10790	590	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	C7N	TO15	AIR	BD					5/24/2016	Heptane	10.9		0.15	ppb	142-82-5	1	0		169861	10	109.22	percent	N			0.5
10791	591	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	DCP13C	TO15	AIR	BD					5/24/2016	cis-1,3-Dichloropropene	11.5		0.15	ppb	10061-01-5	1	0		169861	10	115.14	percent	N			0.5
10792	592	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	MIBK	TO15	AIR	BD					5/24/2016	Methyl isobutyl ketone	11.5		0.15	ppb	108-10-1	1	0		169861	10	115.48	percent	N			0.5
10793	593	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	DCP13T	TO15	AIR	BD					5/24/2016	trans-1,3-Dichloropropene	11.9		0.15	ppb	10061-02-6	1	0		169861	10	119.19	percent	N			0.5
10794	594	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	TCA112	TO15	AIR	BD					5/24/2016	1,1,2-Trichloroethane	11.4		0.15	ppb	79-00-5	1	0		169861	10	113.78	percent	N			0.5
10795	595	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	BZME	TO15	AIR	BD					5/24/2016	Toluene	11.3		0.15	ppb	108-88-3	1	0		169861	10	113.45	percent	N			0.5
10796	596	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	HXO2	TO15	AIR	BD					5/24/2016	2-Hexanone	12.2		0.3	ppb	591-78-6	1	0		169861	10	122.31	percent	N			1
10797	597	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	PCE	TO15	AIR	BD					5/24/2016	Tetrachloroethene	11.2		0.15	ppb	127-18-4	1	0		169861	10	111.56	percent	N			0.5
10798	599	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	EDB	TO15	AIR	BD					5/24/2016	1,2-Dibromoethane	11.7		0.15	ppb	106-93-4	1	0		169861	10	117.13	percent	N			0.5
10799	600	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	CLBZ	TO15	AIR	BD					5/24/2016	Chlorobenzene	10.8		0.15	ppb	108-90-7	1	0		169861	10	108.21	percent	N			0.5
10800	601	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	EBZ	TO15	AIR	BD					5/24/2016	Ethyl benzene	11.1		0.15	ppb	100-41-4	1	0		169861	10	111.43	percent	N			0.5
10801	603	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	XYLO	TO15	AIR	BD					5/24/2016	o-Xylene	11.1		0.15	ppb	95-47-6	1	0		169861	10	111.14	percent	N			0.5
10802	605	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	TBME	TO15	AIR	BD					5/24/2016	Bromoform	11.6		0.15	ppb	75-25-2	1	0		169861	10	116.4	percent	N			0.5
10803	607	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	EBZME4	TO15	AIR	BD					5/24/2016	4-Ethyl toluene	11.4		0.15	ppb	622-96-8	1	0		169861	10	114.24	percent	N			1
10804	608	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	TMB135	TO15	AIR	BD					5/24/2016	1,3,5-Trimethylbenzene	11.2		0.15	ppb	108-67-8	1	0		169861	10	111.69	percent	N			0.5
10805	609	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	TMB124	TO15	AIR	BD					5/24/2016	1,2,4-Trimethylbenzene	11.4		0.15	ppb	95-63-6	1	0		169861	10	114.17	percent	N			0.5
10806	610	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	DCBZ13	TO15	AIR	BD					5/24/2016	1,3-Dichlorobenzene	11.2		0.15	ppb	541-73-1	1	0		169861	10	111.52	percent	N			0.5
10807	611	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	DCBZ14	TO15	AIR	BD					5/24/2016	1,4-Dichlorobenzene	11.3		0.15	ppb	106-46-7	1	0		169861	10	112.51	percent	N			0.5
10808	612	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	DCBZ12	TO15	AIR	BD					5/24/2016	1,2-Dichlorobenzene	11.4		0.3	ppb	95-50-1	1	0		169861	10	113.58	percent	N			1
10809	613	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	DIOXANE14	TO15	AIR	BD					5/24/2016	1,4-Dioxane	10.8			ppb	123-91-1	1	0		169861	10	107.64	percent	N			2
10810	449	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	FC12	TO15	AIR	LB					5/24/2016	Dichlorodifluoromethane	0.15	U	0.15	ppb	75-71-8	1	0		169861			percent	N			0.5
10811	450	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	CLME	TO15	AIR	LB					5/24/2016	Methyl chloride	0.15	U	0.15	ppb	74-87-3	1	0		169861			percent	N			0.5
10812	451	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	DCTFA12	TO15	AIR	LB					5/24/2016	Freon 114	0.15	U	0.15	ppb	76-14-2	1	0		169861			percent	N			0.5
10813	452	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	VC	TO15	AIR	LB					5/24/2016	Vinyl chloride	0.15	U	0.15	ppb	75-01-4	1	0		169861			percent	N			0.5
10814	453	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	ERYTHRENE	TO15	AIR	LB					5/24/2016	1,3-Butadiene	0.15	U	0.15	ppb	106-99-0	1	0		169861			percent	N			0.5
10815	454	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	BRME	TO15	AIR	LB					5/24/2016	Bromomethane	0.15	U	0.15	ppb	74-83-9	1	0		169861			percent	N			0.5
10816	455	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	CLEA	TO15	AIR	LB					5/24/2016	Ethyl chloride	0.15	U	0.15	ppb	75-00-3	1	0		169861			percent	N			0.5
10817	456	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	FC11	TO15	AIR	LB					5/24/2016	Freon 11	0.15	U	0.15	ppb	75-69-4	1	0		169861			percent	N			0.5
10818	457	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	FC113	TO15	AIR	LB					5/24/2016	Freon 113	0.15	U	0.15	ppb	76-13-1	1	0		169861			percent	N			0.5
10819	458	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	DCE11	TO15	AIR	LB					5/24/2016	1,1-Dichloroethene	0.15	U	0.15	ppb	75-35-4	1	0		169861			percent	N			0.5
10820	460	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	CDS	TO15	AIR	LB					5/24/2016	Carbon disulfide	0.15	U	0.15	ppb	75-15-0	1	0		169861			percent	N			0.5
10821	461	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	MTLNCL	TO15	AIR	LB					5/24/2016	Methylene chloride	0.15	U	0.15	ppb	75-09-2	1	0		169861			percent	N			0.5
10822	462	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	DCE12T	TO15	AIR	LB					5/24/2016	trans-1,2-Dichloroethene	0.15	U	0.15	ppb	156-60-5	1	0		169861			percent	N			0.5
10823	463	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	TBUTMEE	TO15	AIR	LB					5/24/2016	Methyl t-butyl ether	0.15	U	0.15	ppb	1634-04-4	1	0		169861			percent	N			0.5
10824	464	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	VA	TO15	AIR	LB					5/24/2016	Vinyl acetate	0.15	U	0.15	ppb	108-05-4	1	0		169861			percent	N			0.5
10825	465	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	MEK	TO15	AIR	LB					5/24/2016	Methyl ethyl ketone	0.15	U	0.15	ppb	78-93-3	1	0		169861			percent	N			0.5
10826	466	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	DCE12C	TO15	AIR	LB					5/24/2016	cis-1,2-Dichloroethene	0.15	U	0.15	ppb	156-59-2	1	0		169861			percent	N			0.5
10827	467	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	DCA11	TO15	AIR	LB					5/24/2016	1,1-Dichloroethane	0.15	U	0.15	ppb	75-34-3	1	0		169861			percent	N			0.5
10828	468	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	ETACET	TO15	AIR	LB					5/24/2016	Ethyl acetate	0.15	U	0.15	ppb	141-78-6	1	0		169861			percent	N			1
10829	469	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	C6N	TO15	AIR	LB					5/24/2016	n-Hexane	0.15	U	0.15	ppb	110-54-3	1	0		169861			percent	N			0.5
10830	470	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	TCLME	TO15	AIR	LB					5/24/2016	Chloroform	0.15	U	0.15	ppb	67-66-3	1	0		169861			percent	N			0.5
10831	471	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	THF	TO15	AIR	LB					5/24/2016	Tetrahydrofuran	0.15	U	0.15	ppb	109-99-9	1	0		169861			percent	N			0.5
10832	472	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	DCA12	TO15	AIR	LB					5/24/2016	1,2-Dichloroethane	0.15	U	0.15	ppb	107-06-2	1	0		169861			percent	N			0.5
10833	473	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	TCA111	TO15	AIR	LB					5/24/2016	1,1,1-Trichloroethane	0.15	U	0.15	ppb	71-55-6	1	0		169861			percent	N			0.5
10834	474	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	CTCL	TO15	AIR	LB					5/24/2016	Carbon tetrachloride	0.15	U	0.15	ppb	56-23-5	1	0		169861			percent	N			0.5
10835	475	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	BZ	TO15	AIR	LB					5/24/2016	Benzene	0.15	U	0.15	ppb	71-43-2	1	0		169861			percent	N			0.5
10836	476	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	CYHEXANE	TO15	AIR	LB					5/24/2016	Cyclohexane	0.15	U	0.15	ppb	110-82-7	1	0		169861			percent	N			0.5
10837	477	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	TCE	TO15	AIR	LB					5/24/2016	Trichloroethene	0.15	U	0.15	ppb	79-01-6	1	0		169861			percent	N			0.5
10838	478	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	DCPA12	TO15	AIR	LB					5/24/2016	1,2-Dichloropropane	0.15	U	0.15	ppb	78-87-5	1	0		169861			percent	N			0.5
10839	479	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	BDCME	TO15	AIR	LB					5/24/2016	Bromodichloromethane	0.15	U	0.15	ppb	75-27-4	1	0		169861			percent	N			0.5
10840	480	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	C7N	TO15	AIR	LB					5/24/2016	Heptane	0.15	U	0.15	ppb	142-82-5	1	0		169861			percent	N			0.5
10841	481	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	DCP13C	TO15	AIR	LB					5/24/2016	cis-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-01-5	1	0		169861			percent	N			0.5
10842	482	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	MIBK	TO15	AIR	LB					5/24/2016	Methyl isobutyl ketone	0.15	U	0.15	ppb	108-10-1	1	0		169861			percent	N			0.5
10843	483	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	DCP13T	TO15	AIR	LB					5/24/2016	trans-1,3-Dichloropropene	0.15	U	0.15	ppb	10061-02-6	1	0		169861			percent	N			0.5

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
10755	547	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	21.7		X	=	62.33	145.6	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10756	548	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	10.9		X	=	60.81	147.6	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10757	549	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	10.9		X	=	60.91	160.8	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10758	550	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.5		X	=	50.01	155.2	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10759	551	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	10.8		X	=	49.54	150.8	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10760	552	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.3		X	=	57.08	161.2	0.15	1	501657	4.30EPACLP						169861		TRUE
10761	553	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.1		X	=	54.12	155.1	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10762	554	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.3		X	=	50.36	163.6	0.15	0.5	501657	4.30EPACLP						169861		TRUE
10763	557	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.2		X	=	49.32	164	0.3	1	501657	4.30EPACLP						169861		TRUE
10764	558	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	10.6		X	=	70	130		2	501657	4.30EPACLP						169861		TRUE
10765	559	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.8		X	=	44.78	152	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10766	560	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	10.8		X	=	37.33	153.2	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10767	561	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.2		X	=	54.2	145.9	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10768	562	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.3		X	=	51.9	146.1	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10769	563	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	10.9		X	=	49.04	147.5	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10770	564	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.1		X	=	51.74	149.4	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10771	567	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.2		X	=	69.04	133.4	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10772	568	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.8		X	=	53.62	144.6	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10773	569	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	12.4		X	=	30.65	150.8	0.3	1	501658	4.30EPACLP						169861		TRUE
10774	570	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.6		X	=	60.93	136.3	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10775	571	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	10.9		X	=	59.19	132.9	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10776	572	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.2		X	=	62.54	139.3	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10777	573	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.7		X	=	66.09	138.6	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10778	574	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.6		X	=	53.43	155.7	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10779	575	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	12.3		X	=	57.2	147.8	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10780	576	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.3		X	=	63.72	141.6	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10781	577	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.6		X	=	62.21	134.2	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10782	579	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	10.9		X	=	60.24	142.1	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10783	580	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.7		X	=	64.56	131.2	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10784	581	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.2		X	=	64.23	147	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10785	582	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	12.1		X	=	52.66	143.7	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10786	583	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.9		X	=	61.46	137.3	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10787	587	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.1		X	=	70.94	137	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10788	588	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	10.9		X	=	59.66	139.7	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10789	589	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.9		X	=	63.34	136.4	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10790	590	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	10.9		X	=	58.98	148.1	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10791	591	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.5		X	=	65.87	142.6	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10792	592	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.5		X	=	62.13	149	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10793	593	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.9		X	=	64.68	145.3	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10794	594	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.4		X	=	68.27	134.4	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10795	595	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.3		X	=	66.05	146.5	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10796	596	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	12.2		X	=	58.51	162	0.3	1	501658	4.30EPACLP						169861		TRUE
10797	597	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.2		X	=	59.98	146	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10798	599	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.7		X	=	72.6	136.7	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10799	600	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	10.8		X	=	67.42	134.7	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10800	601	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.1		X	=	64.2	147.4	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10801	603	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.1		X	=	60.81	147.6	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10802	605	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.6		X	=	50.01	155.2	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10803	607	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.4		X	=	57.08	161.2	0.15	1	501658	4.30EPACLP						169861		TRUE
10804	608	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.2		X	=	54.12	155.1	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10805	609	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.4		X	=	50.36	163.6	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10806	610	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.2		X	=	53.94	158	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10807	611	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.3		X	=	51.98	161.4	0.15	0.5	501658	4.30EPACLP						169861		TRUE
10808	612	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	11.4		X	=	49.32	164	0.3	1	501658	4.30EPACLP						169861		TRUE
10809	613	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			1		TRUE	6/13/2016	jbeckett	10.8		X	=	70	130		2	501658	4.30EPACLP						169861		TRUE
10810	449	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10811	450	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10812	451	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10813	452	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10814	453	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10815	454	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10816	455	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10817	456	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10818	457	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10819	458	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10820	460	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10821	461	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10822	462	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10823	463	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10824	464	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10825	465	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10826	466	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10827	467	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10828	468	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	1	501656	4.30EPACLP						169861		TRUE
10829	469	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10830	470	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10831	471	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10832	472	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10833	473	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10834	474	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10835	475	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10836	476	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10837	477	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10838	478	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10839	479	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10840	480	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10841	481	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10842	482	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10843	483	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
10755	547	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	20		0.5	0.5			jbeckett - Tier 2B
10756	548	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10757	549	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10758	550	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10759	551	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10760	552	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		1	1			jbeckett - Tier 2B
10761	553	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10762	554	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10763	557	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		1	1			jbeckett - Tier 2B
10764	558	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	10		2	2			jbeckett - Tier 2B
10765	559	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10766	560	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10767	561	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10768	562	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10769	563	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10770	564	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10771	567	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10772	568	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10773	569	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		1	1			jbeckett - Tier 2B
10774	570	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10775	571	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10776	572	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10777	573	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10778	574	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10779	575	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10780	576	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10781	577	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10782	579	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10783	580	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10784	581	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10785	582	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10786	583	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10787	587	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10788	588	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10789	589	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10790	590	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10791	591	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10792	592	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10793	593	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10794	594	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10795	595	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10796	596	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		1	1			jbeckett - Tier 2B
10797	597	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10798	599	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10799	600	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10800	601	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10801	603	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10802	605	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10803	607	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		1	1			jbeckett - Tier 2B
10804	608	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10805	609	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10806	610	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10807	611	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		0.5	0.5			jbeckett - Tier 2B
10808	612	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		1	1			jbeckett - Tier 2B
10809	613	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	10		2	2			jbeckett - Tier 2B
10810	449	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10811	450	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10812	451	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10813	452	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10814	453	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10815	454	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10816	455	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10817	456	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10818	457	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10819	458	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10820	460	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10821	461	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10822	462	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10823	463	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10824	464	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10825	465	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10826	466	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10827	467	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10828	468	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			1	1			jbeckett - Tier 2B
10829	469	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10830	470	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10831	471	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10832	472	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10833	473	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10834	474	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10835	475	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10836	476	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10837	477	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10838	478	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10839	479	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10840	480	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10841	481	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10842	482	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10843	483	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Method	ParamID	Lab Method	Matrix	QAQC Type	LR Type	Sample Date	Receive Date	Extract Date	Analysis Date	Analyte	Result	Lab Flag	Detect Limit	Units	CAS	Dilution	Percent Solids	Lab TestCode	LabLot Number	Expected Value	Recovery	Recovery Units	Surrogate	Par ValUncert	Comments	RL
10844	484	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	TCA112	TO15	AIR	LB					5/24/2016	1,1,2-Trichloroethane	0.15	U	0.15	ppb	79-00-5	1	0		169861			percent	N			0.5
10845	485	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	BZME	TO15	AIR	LB					5/24/2016	Toluene	0.15	U	0.15	ppb	108-88-3	1	0		169861			percent	N			0.5
10846	487	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	PCE	TO15	AIR	LB					5/24/2016	Tetrachloroethene	0.15	U	0.15	ppb	127-18-4	1	0		169861			percent	N			0.5
10847	488	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	DBCME	TO15	AIR	LB					5/24/2016	Dibromochloromethane	0.15	U	0.15	ppb	124-48-1	1	0		169861			percent	N			0.5
10848	489	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	EDB	TO15	AIR	LB					5/24/2016	1,2-Dibromoethane	0.15	U	0.15	ppb	106-93-4	1	0		169861			percent	N			0.5
10849	490	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	CLBZ	TO15	AIR	LB					5/24/2016	Chlorobenzene	0.15	U	0.15	ppb	108-90-7	1	0		169861			percent	N			0.5
10850	491	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	EBZ	TO15	AIR	LB					5/24/2016	Ethyl benzene	0.15	U	0.15	ppb	100-41-4	1	0		169861			percent	N			0.5
10851	492	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	XYLMP	TO15	AIR	LB					5/24/2016	m,p-Xylene	0.15	U	0.15	ppb	179601-23-1	1	0		169861			percent	N			0.5
10852	493	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	XYLO	TO15	AIR	LB					5/24/2016	o-Xylene	0.15	U	0.15	ppb	95-47-6	1	0		169861			percent	N			0.5
10853	494	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	STY	TO15	AIR	LB					5/24/2016	Styrene	0.15	U	0.15	ppb	100-42-5	1	0		169861			percent	N			0.5
10854	495	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	TBME	TO15	AIR	LB					5/24/2016	Bromoform	0.15	U	0.15	ppb	75-25-2	1	0		169861			percent	N			0.5
10855	496	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	PCA	TO15	AIR	LB					5/24/2016	1,1,2,2-Tetrachloroethane	0.15	U	0.15	ppb	79-34-5	1	0		169861			percent	N			0.5
10856	497	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	EBZME4	TO15	AIR	LB					5/24/2016	4-Ethyl toluene	0.15	U	0.15	ppb	622-96-8	1	0		169861			percent	N			1
10857	498	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	TMB135	TO15	AIR	LB					5/24/2016	1,3,5-Trimethylbenzene	0.15	U	0.15	ppb	108-67-8	1	0		169861			percent	N			0.5
10858	499	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	TMB124	TO15	AIR	LB					5/24/2016	1,2,4-Trimethylbenzene	0.15	U	0.15	ppb	95-63-6	1	0		169861			percent	N			0.5
10859	500	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	DCBZ13	TO15	AIR	LB					5/24/2016	1,3-Dichlorobenzene	0.15	U	0.15	ppb	541-73-1	1	0		169861			percent	N			0.5
10860	501	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	DCBZ14	TO15	AIR	LB					5/24/2016	1,4-Dichlorobenzene	0.15	U	0.15	ppb	106-46-7	1	0		169861			percent	N			0.5
10861	629	0	22	ALSS	1614564	1614564	501656	501656	501656	EPA TO-15	BR4FBZ	TO15	AIR	LB					5/24/2016	4-Bromofluorobenzene	94.335			PERCENT	460-00-4	1	0		169861	20	94.335	percent	Y			
10862	630	0	22	ALSS	1614564	1614564	501657	501657	501657	EPA TO-15	BR4FBZ	TO15	AIR	BS					5/24/2016	4-Bromofluorobenzene	97.441			PERCENT	460-00-4	1	0		169861	20	97.441	percent	Y			
10863	631	0	22	ALSS	1614564	1614564	501658	501658	501658	EPA TO-15	BR4FBZ	TO15	AIR	BD					5/24/2016	4-Bromofluorobenzene	97.513			PERCENT	460-00-4	1	0		169861	20	97.513	percent	Y			
10864	614	0	22	ALSS	1614564	1614564	501738	501738	501738	EPA TO-15 SIM	VC	TO15SIM	AIR	LB					5/25/2016	Vinyl chloride	0.05	U		ppb	75-01-4	1	0		169913			percent	N			0.05
10865	615	0	22	ALSS	1614564	1614564	501738	501738	501738	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	LB					5/25/2016	cis-1,2-Dichloroethene	0.05	U		ppb	156-59-2	1	0		169913			percent	N			0.05
10866	616	0	22	ALSS	1614564	1614564	501738	501738	501738	EPA TO-15 SIM	TCE	TO15SIM	AIR	LB					5/25/2016	Trichloroethene	0.05	U		ppb	79-01-6	1	0		169913			percent	N			0.05
10867	617	0	22	ALSS	1614564	1614564	501738	501738	501738	EPA TO-15 SIM	PCE	TO15SIM	AIR	LB					5/25/2016	Tetrachloroethene	0.05	U		ppb	127-18-4	1	0		169913			percent	N			0.05
10868	618	0	22	ALSS	1614564	1614564	501738	501738	501738	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	LB					5/25/2016	1,4-Dioxane	0.05	U		ppb	123-91-1	1	0		169913			percent	N			0.05
10869	619	0	22	ALSS	1614564	1614564	501739	501739	501739	EPA TO-15 SIM	VC	TO15SIM	AIR	BS					5/25/2016	Vinyl chloride	0.542			ppb	75-01-4	1	0		169913	0.5	108.48	percent	N			0.05
10870	620	0	22	ALSS	1614564	1614564	501739	501739	501739	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	BS					5/25/2016	cis-1,2-Dichloroethene	0.509			ppb	156-59-2	1	0		169913	0.5	101.78	percent	N			0.05
10871	621	0	22	ALSS	1614564	1614564	501739	501739	501739	EPA TO-15 SIM	TCE	TO15SIM	AIR	BS					5/25/2016	Trichloroethene	0.575			ppb	79-01-6	1	0		169913	0.5	115.05	percent	N			0.05
10872	622	0	22	ALSS	1614564	1614564	501739	501739	501739	EPA TO-15 SIM	PCE	TO15SIM	AIR	BS					5/25/2016	Tetrachloroethene	0.614			ppb	127-18-4	1	0		169913	0.5	122.85	percent	N			0.05
10873	623	0	22	ALSS	1614564	1614564	501739	501739	501739	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	BS					5/25/2016	1,4-Dioxane	0.461			ppb	123-91-1	1	0		169913	0.5	92.267	percent	N			0.05
10874	624	0	22	ALSS	1614564	1614564	501740	501740	501740	EPA TO-15 SIM	VC	TO15SIM	AIR	BD					5/25/2016	Vinyl chloride	0.576			ppb	75-01-4	1	0		169913	0.5	115.27	percent	N			0.05
10875	625	0	22	ALSS	1614564	1614564	501740	501740	501740	EPA TO-15 SIM	DCE12C	TO15SIM	AIR	BD					5/25/2016	cis-1,2-Dichloroethene	0.544			ppb	156-59-2	1	0		169913	0.5	108.87	percent	N			0.05
10876	626	0	22	ALSS	1614564	1614564	501740	501740	501740	EPA TO-15 SIM	TCE	TO15SIM	AIR	BD					5/25/2016	Trichloroethene	0.597			ppb	79-01-6	1	0		169913	0.5	119.4	percent	N			0.05
10877	627	0	22	ALSS	1614564	1614564	501740	501740	501740	EPA TO-15 SIM	PCE	TO15SIM	AIR	BD					5/25/2016	Tetrachloroethene	0.627			ppb	127-18-4	1	0		169913	0.5	125.42	percent	N			0.05
10878	628	0	22	ALSS	1614564	1614564	501740	501740	501740	EPA TO-15 SIM	DIOXANE14	TO15SIM	AIR	BD					5/25/2016	1,4-Dioxane	0.471			ppb	123-91-1	1	0		169913	0.5	94.22	percent	N			0.05
10879	632	0	22	ALSS	1614564	1614564	501738	501738	501738	EPA TO-15 SIM	BR4FBZ	TO15SIM	AIR	LB					5/25/2016	4-Bromofluorobenzene	89.638			PERCENT	460-00-4	1	0		169913	1	89.638	percent	Y			
10880	633	0	22	ALSS	1614564	1614564	501739	501739	501739	EPA TO-15 SIM	BR4FBZ	TO15SIM	AIR	BS					5/25/2016	4-Bromofluorobenzene	93.722			PERCENT	460-00-4	1	0		169913	1	93.722	percent	Y			
10881	634	0	22	ALSS	1614564	1614564	501740	501740	501740	EPA TO-15 SIM	BR4FBZ	TO15SIM	AIR	BD					5/25/2016	4-Bromofluorobenzene	93.883			PERCENT	460-00-4	1	0		169913	1	93.883	percent	Y			

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Extract Time	Analysis Time	Method Extraction	LCL	UCL	precision	Validation Comments	Validated	Date	Initials	Final Result	Final Validation Flag	Basis	Conc Qual	Lower Control Limit	Upper Control Limit	MDL Adjusted	RL Adjusted	SampleDescription	VersionCode	Sample Time	Leach Method	Leach Date	Leach Time	Leach Lot	Analysis Lot	CalRefID	FinalReview
10844	484	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10845	485	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10846	487	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10847	488	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10848	489	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10849	490	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10850	491	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10851	492	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10852	493	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10853	494	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10854	495	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10855	496	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10856	497	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	1	501656	4.30EPACLP						169861		TRUE
10857	498	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10858	499	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10859	500	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10860	501	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			2		TRUE	6/13/2016	jbeckett	0.15	U	X	U			0.15	0.5	501656	4.30EPACLP						169861		TRUE
10861	629	0	22	ALSS	1614564	1614564	501656	501656	501656		1/0/1900	NONE			3		TRUE	6/13/2016	jbeckett	94.335		X	=	67.698	129.86			501656	4.30EPACLP						169861		TRUE
10862	630	0	22	ALSS	1614564	1614564	501657	501657	501657		1/0/1900	NONE			3		TRUE	6/13/2016	jbeckett	97.441		X	=	67.698	129.86			501657	4.30EPACLP						169861		TRUE
10863	631	0	22	ALSS	1614564	1614564	501658	501658	501658		1/0/1900	NONE			3		TRUE	6/13/2016	jbeckett	97.513		X	=	67.698	129.86			501658	4.30EPACLP						169861		TRUE
10864	614	0	22	ALSS	1614564	1614564	501738	501738	501738		1/0/1900	NONE			2		TRUE	6/6/2016	jbeckett	0.05	U	X	U				0.05	501738	4.30EPACLP						169913		TRUE
10865	615	0	22	ALSS	1614564	1614564	501738	501738	501738		1/0/1900	NONE			2		TRUE	6/6/2016	jbeckett	0.05	U	X	U				0.05	501738	4.30EPACLP						169913		TRUE
10866	616	0	22	ALSS	1614564	1614564	501738	501738	501738		1/0/1900	NONE			2		TRUE	6/6/2016	jbeckett	0.05	U	X	U				0.05	501738	4.30EPACLP						169913		TRUE
10867	617	0	22	ALSS	1614564	1614564	501738	501738	501738		1/0/1900	NONE			2		TRUE	6/6/2016	jbeckett	0.05	U	X	U				0.05	501738	4.30EPACLP						169913		TRUE
10868	618	0	22	ALSS	1614564	1614564	501738	501738	501738		1/0/1900	NONE			2		TRUE	6/6/2016	jbeckett	0.05	U	X	U				0.05	501738	4.30EPACLP						169913		TRUE
10869	619	0	22	ALSS	1614564	1614564	501739	501739	501739		1/0/1900	NONE			3		TRUE	6/6/2016	jbeckett	0.542		X	=	66.86	144.4		0.05	501739	4.30EPACLP						169913		TRUE
10870	620	0	22	ALSS	1614564	1614564	501739	501739	501739		1/0/1900	NONE			3		TRUE	6/6/2016	jbeckett	0.509		X	=	52.19	167.4		0.05	501739	4.30EPACLP						169913		TRUE
10871	621	0	22	ALSS	1614564	1614564	501739	501739	501739		1/0/1900	NONE			3		TRUE	6/6/2016	jbeckett	0.575		X	=	33.78	166.6		0.05	501739	4.30EPACLP						169913		TRUE
10872	622	0	22	ALSS	1614564	1614564	501739	501739	501739		1/0/1900	NONE			3		TRUE	6/6/2016	jbeckett	0.614		X	=	63.63	150.7		0.05	501739	4.30EPACLP						169913		TRUE
10873	623	0	22	ALSS	1614564	1614564	501739	501739	501739		1/0/1900	NONE			3		TRUE	6/6/2016	jbeckett	0.461		X	=	70	130		0.05	501739	4.30EPACLP						169913		TRUE
10874	624	0	22	ALSS	1614564	1614564	501740	501740	501740		1/0/1900	NONE			3		TRUE	6/6/2016	jbeckett	0.576		X	=	66.86	144.4		0.05	501740	4.30EPACLP						169913		TRUE
10875	625	0	22	ALSS	1614564	1614564	501740	501740	501740		1/0/1900	NONE			3		TRUE	6/6/2016	jbeckett	0.544		X	=	52.19	167.4		0.05	501740	4.30EPACLP						169913		TRUE
10876	626	0	22	ALSS	1614564	1614564	501740	501740	501740		1/0/1900	NONE			3		TRUE	6/6/2016	jbeckett	0.597		X	=	33.78	166.6		0.05	501740	4.30EPACLP						169913		TRUE
10877	627	0	22	ALSS	1614564	1614564	501740	501740	501740		1/0/1900	NONE			3		TRUE	6/6/2016	jbeckett	0.627		X	=	63.63	150.7		0.05	501740	4.30EPACLP						169913		TRUE
10878	628	0	22	ALSS	1614564	1614564	501740	501740	501740		1/0/1900	NONE			3		TRUE	6/6/2016	jbeckett	0.471		X	=	70	130		0.05	501740	4.30EPACLP						169913		TRUE
10879	632	0	22	ALSS	1614564	1614564	501738	501738	501738		1/0/1900	NONE			3		TRUE	6/6/2016	jbeckett	89.638		X	=	48.778	151.81			501738	4.30EPACLP						169913		TRUE
10880	633	0	22	ALSS	1614564	1614564	501739	501739	501739		1/0/1900	NONE			3		TRUE	6/6/2016	jbeckett	93.722		X	=	48.778	151.81			501739	4.30EPACLP						169913		TRUE
10881	634	0	22	ALSS	1614564	1614564	501740	501740	501740		1/0/1900	NONE			3		TRUE	6/6/2016	jbeckett	93.883		X	=	48.778	151.81			501740	4.30EPACLP						169913		TRUE

APPENDIX A-1

Laboratory Validated Results

700 South 1600 East PCE Plume AOU 1: East Side Springs, 2016 Vapor Intrusion Investigation Field Data Report, Salt Lake City VA Medical Center, Utah

index:tbl AnalyticalData	index:tbl LabData	index:tbl FieldSample	index:tbl LabFiles	Lab Name	SDG	COC Number	Field ID	NativeID	LabsampleID	Final Review Date	Final Reviewer	Spike Added	Surr Spike Units	LOD	LOD Adjusted	Validation Flag	Validation Reason	Reviewer
10844	484	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10845	485	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10846	487	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10847	488	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10848	489	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10849	490	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10850	491	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10851	492	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10852	493	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10853	494	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10854	495	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10855	496	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10856	497	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			1	1			jbeckett - Tier 2B
10857	498	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10858	499	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10859	500	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10860	501	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy			0.5	0.5			jbeckett - Tier 2B
10861	629	0	22	ALSS	1614564	1614564	501656	501656	501656	6/15/2016	mcichy	20	ppb					jbeckett - Tier 2B
10862	630	0	22	ALSS	1614564	1614564	501657	501657	501657	6/15/2016	mcichy	20	ppb					jbeckett - Tier 2B
10863	631	0	22	ALSS	1614564	1614564	501658	501658	501658	6/15/2016	mcichy	20	ppb					jbeckett - Tier 2B
10864	614	0	22	ALSS	1614564	1614564	501738	501738	501738	6/15/2016	mcichy			0.05	0.05			jbeckett - Tier 2B
10865	615	0	22	ALSS	1614564	1614564	501738	501738	501738	6/15/2016	mcichy			0.05	0.05			jbeckett - Tier 2B
10866	616	0	22	ALSS	1614564	1614564	501738	501738	501738	6/15/2016	mcichy			0.05	0.05			jbeckett - Tier 2B
10867	617	0	22	ALSS	1614564	1614564	501738	501738	501738	6/15/2016	mcichy			0.05	0.05			jbeckett - Tier 2B
10868	618	0	22	ALSS	1614564	1614564	501738	501738	501738	6/15/2016	mcichy			0.05	0.05			jbeckett - Tier 2B
10869	619	0	22	ALSS	1614564	1614564	501739	501739	501739	6/15/2016	mcichy	0.5		0.05	0.05			jbeckett - Tier 2B
10870	620	0	22	ALSS	1614564	1614564	501739	501739	501739	6/15/2016	mcichy	0.5		0.05	0.05			jbeckett - Tier 2B
10871	621	0	22	ALSS	1614564	1614564	501739	501739	501739	6/15/2016	mcichy	0.5		0.05	0.05			jbeckett - Tier 2B
10872	622	0	22	ALSS	1614564	1614564	501739	501739	501739	6/15/2016	mcichy	0.5		0.05	0.05			jbeckett - Tier 2B
10873	623	0	22	ALSS	1614564	1614564	501739	501739	501739	6/15/2016	mcichy	0.5		0.05	0.05			jbeckett - Tier 2B
10874	624	0	22	ALSS	1614564	1614564	501740	501740	501740	6/15/2016	mcichy	0.5		0.05	0.05			jbeckett - Tier 2B
10875	625	0	22	ALSS	1614564	1614564	501740	501740	501740	6/15/2016	mcichy	0.5		0.05	0.05			jbeckett - Tier 2B
10876	626	0	22	ALSS	1614564	1614564	501740	501740	501740	6/15/2016	mcichy	0.5		0.05	0.05			jbeckett - Tier 2B
10877	627	0	22	ALSS	1614564	1614564	501740	501740	501740	6/15/2016	mcichy	0.5		0.05	0.05			jbeckett - Tier 2B
10878	628	0	22	ALSS	1614564	1614564	501740	501740	501740	6/15/2016	mcichy	0.5		0.05	0.05			jbeckett - Tier 2B
10879	632	0	22	ALSS	1614564	1614564	501738	501738	501738	6/15/2016	mcichy	1	ppb					jbeckett - Tier 2B
10880	633	0	22	ALSS	1614564	1614564	501739	501739	501739	6/15/2016	mcichy	1	ppb					jbeckett - Tier 2B
10881	634	0	22	ALSS	1614564	1614564	501740	501740	501740	6/15/2016	mcichy	1	ppb					jbeckett - Tier 2B

Appendix A-2
Laboratory Data Reports

Appendix A-3
Laboratory Sample Receipt Notifications

Appendix B
HAPSITE Calibration Reports

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24-Feb-16

FULL SCAN Calibration Response Table

HAPSITE method: /Haps/Method/Analyze/Concentrator/Hill Vapor Intrusion Cal 2 min SIM.mth

Method Description:

SIM CVOC Method in order of elution VC; 1,1-DCE; trans-DCE; 1,1-DCA; cis-DCE; CtCl; TCE; PCE

General Quantification Range from 0.1 ppbv to 50 ppbv

Tune File: default.tun

Target Library: QB 24FEB2016

Last Modified: 2/24/2016 6:54:40 PM

W = RT +- (0:08.00 / 2 + RT * 0.050)

Min Fit = 0.200; Min Pur = 0.200; Min Area = 5000

Width = 7 - 70 scans; Res = 5 scans; NLM = 2.000

Average Response Factor

Internal Standards

Analytes

Analyte. #1 -- 1,1-DCE

5 Calibration Points

Average Response Factor

Concentration = (0.0000e+000)(AREA**2)+(1.6257e-006)(AREA)+0.0000e+000

pt.	File	Conc.	Cratio	Area	Aratio	Resp. Factor
1	SIM_100PPB_VA_20160224_20160224_011	10	1.00E+01	6366964	6.37E+06	6.37E+05
2	SIM_100PPB_VA_20160224_20160224_010	5	5.00E+00	3215293	3.22E+06	6.43E+05
3	SIM_100PPB_VA_20160224_20160224_009	2.5	2.50E+00	1540924	1.54E+06	6.16E+05
4	SIM_100PPB_VA_20160224_20160224_008	0.5	5.00E-01	288284	2.88E+05	5.77E+05
5	SIM_100PPB_VA_20160224_20160224_007	0.1	1.00E-01	60290	6.03E+04	6.03E+05
Average RF =	6.15E+05	**RSD of Average RF =**	4.36%			
RSD of Curve Fit =	5.62%					

Analyte. #2 -- trans-1,2 DCE

5 Calibration Points

Average Response Factor

Concentration = (0.0000e+000)(AREA**2)+(7.4498e-007)(AREA)+0.0000e+000

pt.	File	Conc.	Cratio	Area	Aratio	Resp. Factor
1	SIM_100PPB_VA_20160224_20160224_011	10	1.00E+01	14443685	1.44E+07	1.44E+06
2	SIM_100PPB_VA_20160224_20160224_010	5	5.00E+00	6980477	6.98E+06	1.40E+06
3	SIM_100PPB_VA_20160224_20160224_009	2.5	2.50E+00	3507226	3.51E+06	1.40E+06
4	SIM_100PPB_VA_20160224_20160224_008	0.5	5.00E-01	625557	6.26E+05	1.25E+06
5	SIM_100PPB_VA_20160224_20160224_007	0.1	1.00E-01	121715	1.22E+05	1.22E+06
Average RF =	1.34E+06	**RSD of Average RF =**	7.54%			
RSD of Curve Fit =	10.39%					

Analyte. #3 -- 1,1-DCA
5 Calibration Points
Average Response Factor
Concentration = (0.0000e+000)(AREA**2)+(2.5990e-006)(AREA)+0.0000e+000

pt.	File	Conc.	Cratio	Area	Aratio	Resp. Factor
1	SIM_100PPB_VA_20160224_20160224_011	10	1.00E+01	4342412	4.34E+06	4.34E+05
2	SIM_100PPB_VA_20160224_20160224_010	5	5.00E+00	2137831	2.14E+06	4.28E+05
3	SIM_100PPB_VA_20160224_20160224_009	2.5	2.50E+00	995849	9.96E+05	3.98E+05
4	SIM_100PPB_VA_20160224_20160224_008	0.5	5.00E-01	195563	1.96E+05	3.91E+05
5	SIM_100PPB_VA_20160224_20160224_007	0.1	1.00E-01	27258	2.73E+04	2.73E+05
Average RF =	3.85E+05	**RSD of Average RF =**	16.99%			
RSD of Curve Fit =	17.54%					

Analyte. #4 -- cis-1,2 DCE
5 Calibration Points
Average Response Factor
Concentration = (0.0000e+000)(AREA**2)+(7.4498e-007)(AREA)+0.0000e+000

pt.	File	Conc.	Cratio	Area	Aratio	Resp. Factor
1	SIM_100PPB_VA_20160224_20160224_011	10	1.00E+01	14443685	1.44E+07	1.44E+06
2	SIM_100PPB_VA_20160224_20160224_010	5	5.00E+00	6980477	6.98E+06	1.40E+06
3	SIM_100PPB_VA_20160224_20160224_009	2.5	2.50E+00	3507226	3.51E+06	1.40E+06
4	SIM_100PPB_VA_20160224_20160224_008	0.5	5.00E-01	625557	6.26E+05	1.25E+06
5	SIM_100PPB_VA_20160224_20160224_007	0.1	1.00E-01	121715	1.22E+05	1.22E+06
Average RF =	1.34E+06	**RSD of Average RF =**	7.54%			
RSD of Curve Fit =	10.39%					

Analyte. #5 -- 1,2-DCA
5 Calibration Points
Average Response Factor
Concentration = (0.0000e+000)(AREA**2)+(5.8847e-007)(AREA)+0.0000e+000

pt.	File	Conc.	Cratio	Area	Aratio	Resp. Factor
1	SIM_100PPB_VA_20160224_20160224_011	10	1.00E+01	18851750	1.89E+07	1.89E+06
2	SIM_100PPB_VA_20160224_20160224_010	5	5.00E+00	9107245	9.11E+06	1.82E+06
3	SIM_100PPB_VA_20160224_20160224_009	2.5	2.50E+00	4512735	4.51E+06	1.81E+06
4	SIM_100PPB_VA_20160224_20160224_008	0.5	5.00E-01	796600	7.97E+05	1.59E+06
5	SIM_100PPB_VA_20160224_20160224_007	0.1	1.00E-01	139169	1.39E+05	1.39E+06
Average RF =	1.70E+06	**RSD of Average RF =**	12.01%			
RSD of Curve Fit =	14.78%					

Analyte. #6 -- TCE
5 Calibration Points
Average Response Factor
Concentration = (0.0000e+000)(AREA**2)+(3.3083e-007)(AREA)+0.0000e+000

pt.	File	Conc.	Cratio	Area	Aratio	Resp. Factor
1	SIM_100PPB_VA_20160224_20160224_011	10	1.00E+01	34479256	3.45E+07	3.45E+06
2	SIM_100PPB_VA_20160224_20160224_010	5	5.00E+00	16222415	1.62E+07	3.24E+06
3	SIM_100PPB_VA_20160224_20160224_009	2.5	2.50E+00	7683489	7.68E+06	3.07E+06
4	SIM_100PPB_VA_20160224_20160224_008	0.5	5.00E-01	1381079	1.38E+06	2.76E+06
5	SIM_100PPB_VA_20160224_20160224_007	0.1	1.00E-01	258549	2.59E+05	2.59E+06
Average RF =	3.02E+06	**RSD of Average RF =**	11.60%			
RSD of Curve Fit =	18.32%					

Analyte. #7 -- PCE
5 Calibration Points
Average Response Factor
Concentration = (0.0000e+000)(AREA**2)+(2.4570e-007)(AREA)+0.0000e+000

pt.	File	Conc.	Cratio	Area	Aratio	Resp. Factor
1	SIM_100PPB_VA_20160224_20160224_011	10	1.00E+01	45810648	4.58E+07	4.58E+06
2	SIM_100PPB_VA_20160224_20160224_010	5	5.00E+00	21932502	2.19E+07	4.39E+06
3	SIM_100PPB_VA_20160224_20160224_009	2.5	2.50E+00	10729943	1.07E+07	4.29E+06
4	SIM_100PPB_VA_20160224_20160224_008	0.5	5.00E-01	1743069	1.74E+06	3.49E+06
5	SIM_100PPB_VA_20160224_20160224_007	0.1	1.00E-01	360452	3.61E+05	3.60E+06
Average RF =	4.07E+06	**RSD of Average RF =**	12.09%			
RSD of Curve Fit =	16.71%					

4-Mar-16

FULL SCAN Calibration Response Table
HAPSITE method: /Haps/Method/Analyze/Concentrator/Hill Vapor Intrusion Cal 2 min SIM.mth
Method Description:
SIM CVOC Method in order of elution cis-DCE; TCE; PCE

General Quantification Range from 0.1 ppbv to 50 ppbv

Tune File: default.tun
Target Library: QB 04MAR2016
Last Modified: 3/4/2016 7:30:36 AM

W = RT +- (0:08.00 / 2 + RT * 0.050)
Min Fit = 0.200; Min Pur = 0.200; Min Area = 5000
Width = 7 - 70 scans; Res = 5 scans; NLM = 2.000

Average Response Factor

Internal Standards

Analytes
Analyte. #1 -- cis-1,2 DCE
5 Calibration Points
Average Response Factor
Concentration = (0.0000e+000)(AREA**2)+(5.7436e-007)(AREA)+0.0000e+000

pt.	File	Conc.	Cratio	Area	Aratio	Resp. Factor
1	SIM_100PPB_VA_20160224_20160304_007	10	1.00E+01	18148252	1.82E+07	1.81E+06
2	SIM_100PPB_VA_20160224_20160304_006	5	5.00E+00	8972280	8.97E+06	1.79E+06
3	SIM_100PPB_VA_20160224_20160304_005	2.5	2.50E+00	4427155	4.43E+06	1.77E+06
4	SIM_100PPB_VA_20160224_20160304_004	0.1	1.00E-01	146206	1.46E+05	1.46E+06
5	SIM_100PPB_VA_20160224_20160304_002	0.5	5.00E-01	931561	9.32E+05	1.86E+06
Average RF =	1.74E+06	**RSD of Average RF =**	9.17%			
RSD of Curve Fit =	6.06%					

Analyte. #2 -- TCE
5 Calibration Points
Average Response Factor
Concentration = (0.0000e+000)(AREA**2)+(3.3784e-007)(AREA)+0.0000e+000

pt.	File	Conc.	Cratio	Area	Aratio	Resp. Factor
1	SIM_100PPB_VA_20160224_20160304_007	10	1.00E+01	32950018	3.30E+07	3.30E+06
2	SIM_100PPB_VA_20160224_20160304_006	5	5.00E+00	15646416	1.57E+07	3.13E+06
3	SIM_100PPB_VA_20160224_20160304_005	2.5	2.50E+00	7572508	7.57E+06	3.03E+06
4	SIM_100PPB_VA_20160224_20160304_004	0.1	1.00E-01	237153	2.37E+05	2.37E+06
5	SIM_100PPB_VA_20160224_20160304_002	0.5	5.00E-01	1487472	1.49E+06	2.97E+06
Average RF =	2.96E+06	**RSD of Average RF =**	11.85%			
RSD of Curve Fit =	14.94%					

Analyte. #3 -- PCE
5 Calibration Points
Average Response Factor
Concentration = (0.0000e+000)(AREA**2)+(2.5458e-007)(AREA)+0.0000e+000

pt.	File	Conc.	Cratio	Area	Aratio	Resp. Factor
1	SIM_100PPB_VA_20160224_20160304_007	10	1.00E+01	42409000	4.24E+07	4.24E+06
2	SIM_100PPB_VA_20160224_20160304_006	5	5.00E+00	20776340	2.08E+07	4.16E+06
3	SIM_100PPB_VA_20160224_20160304_005	2.5	2.50E+00	10076704	1.01E+07	4.03E+06
4	SIM_100PPB_VA_20160224_20160304_004	0.1	1.00E-01	335218	3.35E+05	3.35E+06
5	SIM_100PPB_VA_20160224_20160304_002	0.5	5.00E-01	1930584	1.93E+06	3.86E+06
Average RF =	3.93E+06	**RSD of Average RF =**	8.97%			
RSD of Curve Fit =	11.05%					

10-Mar-16

FULL SCAN Calibration Response Table
HAPSITE method: /Haps/Method/Analyze/Concentrator/Hill Vapor Intrusion Cal 2 min SIM.mth
Method Description:
SIM CVOC Method in order of elution cis-DCE; TCE; PCE

General Quantification Range from 0.1 ppbv to 50 ppbv

Tune File: default.tun
Target Library: QB 10MAR2016
Last Modified: 3/10/2016 1:07:55 PM

W = RT +- (0:08.00 / 2 + RT * 0.050)
Min Fit = 0.200; Min Pur = 0.200; Min Area = 5000
Width = 7 - 70 scans; Res = 5 scans; NLM = 2.000

Average Response Factor

Internal Standards

Analytes

Analyte. #1 -- cis-1,2 DCE

5 Calibration Points
Average Response Factor
Concentration = (0.0000e+000)(AREA**2)+(4.5153e-007)(AREA)+0.0000e+000

pt.	File	Conc.	Cratio	Area	Aratio	Resp. Factor
1	SIM_100PPB_VA_20160304_20160310_007	10	1.00E+01	23827424	2.38E+07	2.38E+06
2	SIM_100PPB_VA_20160304_20160310_006	2.5	2.50E+00	5891573	5.89E+06	2.36E+06
3	SIM_100PPB_VA_20160304_20160310_005	0.5	5.00E-01	1056666	1.06E+06	2.11E+06
4	SIM_100PPB_VA_20160304_20160310_004	0.1	1.00E-01	195315	1.95E+05	1.95E+06
5	SIM_100PPB_VA_20160304_20160310_001	5	5.00E+00	11337877	1.13E+07	2.27E+06
Average RF =	2.21E+06	**RSD of Average RF =**	8.14%			
RSD of Curve Fit =	10.27%					

Analyte. #2 -- TCE

5 Calibration Points
Average Response Factor
Concentration = (0.0000e+000)(AREA**2)+(3.4332e-007)(AREA)+0.0000e+000

pt.	File	Conc.	Cratio	Area	Aratio	Resp. Factor
1	SIM_100PPB_VA_20160304_20160310_007	10	1.00E+01	33971032	3.40E+07	3.40E+06
2	SIM_100PPB_VA_20160304_20160310_006	2.5	2.50E+00	7934647	7.94E+06	3.17E+06
3	SIM_100PPB_VA_20160304_20160310_005	0.5	5.00E-01	1335259	1.34E+06	2.67E+06
4	SIM_100PPB_VA_20160304_20160310_004	0.1	1.00E-01	229777	2.30E+05	2.30E+06
5	SIM_100PPB_VA_20160304_20160310_001	5	5.00E+00	15122557	1.51E+07	3.02E+06
Average RF =	2.91E+06	RSD of Average RF =	14.89%			
RSD of Curve Fit =	21.00%					

Analyte. #3 -- PCE

5 Calibration Points
Average Response Factor
Concentration = (0.0000e+000)(AREA**2)+(2.6559e-007)(AREA)+0.0000e+000

pt.	File	Conc.	Cratio	Area	Aratio	Resp. Factor
1	SIM_100PPB_VA_20160304_20160310_007	10	1.00E+01	42382572	4.24E+07	4.24E+06
2	SIM_100PPB_VA_20160304_20160310_006	2.5	2.50E+00	10073661	1.01E+07	4.03E+06
3	SIM_100PPB_VA_20160304_20160310_005	0.5	5.00E-01	1689841	1.69E+06	3.38E+06
4	SIM_100PPB_VA_20160304_20160310_004	0.1	1.00E-01	324793	3.25E+05	3.25E+06
5	SIM_100PPB_VA_20160304_20160310_001	5	5.00E+00	19654424	1.97E+07	3.93E+06
Average RF =	3.77E+06	**RSD of Average RF =**	11.40%			
RSD of Curve Fit =	16.36%					

2-May-16

FULL SCAN Calibration Response Table

HAPSITE method: /Haps/Method/Analyze/Concentrator/Hill Vapor Intrusion Cal 2 min SIM.mth

Method Description:

SIM CVOC Method in order of elution cis-DCE; TCE; PCE

General Quantification Range from 0.1 ppbv to 50 ppbv

Tune File: default.tun
Target Library: RAQB 02MAY2016
Last Modified: 5/2/2016 9:26:25 AM

W = RT +- (0:08.00 / 2 + RT * 0.050)
Min Fit = 0.200; Min Pur = 0.200; Min Area = 5000
Width = 7 - 70 scans; Res = 5 scans; NLM = 2.000

Average Response Factor

Internal Standards

Analytes

Analyte. #1 -- cis-1,2 DCE

5 Calibration Points
Average Response Factor
Concentration = (0.0000e+000)(AREA**2)+(6.5786e-007)(AREA)+0.0000e+000

pt.	File	Conc.	Cratio	Area	Aratio	Resp. Factor
1	SIM_100PPB_VA_20160502_20160502_016	0.1	1.00E-01	112562	1.13E+05	1.13E+06
2	SIM_100PPB_VA_20160502_20160502_014	10	1.00E+01	14845862	1.49E+07	1.48E+06
3	SIM_100PPB_VA_20160502_20160502_013	5	5.00E+00	7559746	7.56E+06	1.51E+06
4	SIM_100PPB_VA_20160502_20160502_003	2.5	2.50E+00	4524318	4.52E+06	1.81E+06
5	SIM_100PPB_VA_20160502_20160502_002	0.5	5.00E-01	834251	8.34E+05	1.67E+06
Average RF =	1.52E+06	**RSD of Average RF =**	16.86%			
RSD of Curve Fit =	7.28%					

Analyte. #2 -- TCE

5 Calibration Points
Average Response Factor
Concentration = (0.0000e+000)(AREA**2)+(4.4329e-007)(AREA)+0.0000e+000

pt.	File	Conc.	Cratio	Area	Aratio	Resp. Factor
1	SIM_100PPB_VA_20160502_20160502_016	0.1	1.00E-01	153619	1.54E+05	1.54E+06
2	SIM_100PPB_VA_20160502_20160502_014	10	1.00E+01	24650670	2.47E+07	2.47E+06
3	SIM_100PPB_VA_20160502_20160502_013	5	5.00E+00	11539784	1.15E+07	2.31E+06
4	SIM_100PPB_VA_20160502_20160502_003	2.5	2.50E+00	6474057	6.47E+06	2.59E+06
5	SIM_100PPB_VA_20160502_20160502_002	0.5	5.00E-01	1190270	1.19E+06	2.38E+06
Average RF =	2.26E+06	**RSD of Average RF =**	18.43%			
RSD of Curve Fit =	12.89%					

Analyte. #3 -- PCE
5 Calibration Points
Average Response Factor
Concentration = (0.0000e+000)(AREA**2)+(3.0894e-007)(AREA)+0.0000e+000

pt.	File	Conc.	Cratio	Area	Aratio	Resp. Factor
1	SIM_100PPB_VA_20160502_20160502_016	0.1	1.00E-01	237666	2.38E+05	2.38E+06
2	SIM_100PPB_VA_20160502_20160502_014	10	1.00E+01	34144804	3.41E+07	3.41E+06
3	SIM_100PPB_VA_20160502_20160502_013	5	5.00E+00	16649161	1.67E+07	3.33E+06
4	SIM_100PPB_VA_20160502_20160502_003	2.5	2.50E+00	9323635	9.32E+06	3.73E+06
5	SIM_100PPB_VA_20160502_20160502_002	0.5	5.00E-01	1666928	1.67E+06	3.33E+06
Average RF =	3.24E+06	**RSD of Average RF =**	15.69%			
RSD of Curve Fit =	8.92%					

9-May-16

FULL SCAN Calibration Response Table
HAPSITE method: /Haps/Method/Analyze/Concentrator/Hill Vapor Intrusion Cal 2 min SIM.mth
Method Description:
SIM CVOC Method in order of elution cis-DCE; TCE; PCE

General Quantification Range from 0.1 ppbv to 50 ppbv

Tune File: default.tun
Target Library: RAQB 09MAY2016
Last Modified: 5/9/2016 9:51:28 AM

W = RT +- (0:08.00 / 2 + RT * 0.050)
Min Fit = 0.200; Min Pur = 0.200; Min Area = 5000
Width = 7 - 70 scans; Res = 5 scans; NLM = 2.000

Average Response Factor

Internal Standards

Analytes
Analyte. #1 -- cis-1,2 DCE
5 Calibration Points
Average Response Factor
Concentration = (0.0000e+000)(AREA**2)+(5.4089e-007)(AREA)+0.0000e+000

pt.	File	Conc.	Cratio	Area	Aratio	Resp. Factor
1	SIM_100PPB_VA_20160509_20160509_007	10	1.00E+01	18855910	1.89E+07	1.89E+06
2	SIM_100PPB_VA_20160509_20160509_004	5	5.00E+00	9120568	9.12E+06	1.82E+06
3	SIM_100PPB_VA_20160509_20160509_003	2.5	2.50E+00	4524149	4.52E+06	1.81E+06
4	SIM_100PPB_VA_20160509_20160509_002	0.5	5.00E-01	913182	9.13E+05	1.83E+06
5	SIM_100PPB_VA_20160509_20160509_001	0.1	1.00E-01	189829	1.90E+05	1.90E+06
Average RF =	1.85E+06	**RSD of Average RF =**	2.17%			
RSD of Curve Fit =	2.98%					

Analyte. #2 -- TCE
5 Calibration Points
Average Response Factor
Concentration = (0.0000e+000)(AREA**2)+(3.4961e-007)(AREA)+0.0000e+000

pt.	File	Conc.	Cratio	Area	Aratio	Resp. Factor
1	SIM_100PPB_VA_20160509_20160509_007	10	1.00E+01	31025914	3.10E+07	3.10E+06
2	SIM_100PPB_VA_20160509_20160509_004	5	5.00E+00	14805423	1.48E+07	2.96E+06
3	SIM_100PPB_VA_20160509_20160509_003	2.5	2.50E+00	7341643	7.34E+06	2.94E+06
4	SIM_100PPB_VA_20160509_20160509_002	0.5	5.00E-01	1352337	1.35E+06	2.70E+06
5	SIM_100PPB_VA_20160509_20160509_001	0.1	1.00E-01	259663	2.60E+05	2.60E+06
Average RF =	2.86E+06	**RSD of Average RF =**	7.17%			
RSD of Curve Fit =	11.33%					

Analyte. #3 -- PCE
5 Calibration Points
Average Response Factor
Concentration = (0.0000e+000)(AREA**2)+(2.4124e-007)(AREA)+0.0000e+000

pt.	File	Conc.	Cratio	Area	Aratio	Resp. Factor
1	SIM_100PPB_VA_20160509_20160509_007	10	1.00E+01	44213680	4.42E+07	4.42E+06
2	SIM_100PPB_VA_20160509_20160509_004	5	5.00E+00	21578070	2.16E+07	4.32E+06
3	SIM_100PPB_VA_20160509_20160509_003	2.5	2.50E+00	10649149	1.07E+07	4.26E+06
4	SIM_100PPB_VA_20160509_20160509_002	0.5	5.00E-01	1971240	1.97E+06	3.94E+06
5	SIM_100PPB_VA_20160509_20160509_001	0.1	1.00E-01	378739	3.79E+05	3.79E+06
Average RF =	4.15E+06	**RSD of Average RF =**	6.47%			
RSD of Curve Fit =	9.22%					

13-May-16

FULL SCAN Calibration Response Table
HAPSITE method: /Haps/Method/Analyze/Concentrator/Hill Vapor Intrusion Cal 2 min SIM.mth
Method Description:
SIM CVOC Method in order of elution cis-DCE; TCE; PCE

General Quantification Range from 0.1 ppbv to 50 ppbv

Tune File: default.tun
Target Library: QB 13MAY2016
Last Modified: 5/13/2016 8:58:36 AM

W = RT +- (0:08.00 / 2 + RT * 0.050)
Min Fit = 0.200; Min Pur = 0.200; Min Area = 5000
Width = 7 - 70 scans; Res = 5 scans; NLM = 2.000

Average Response Factor

Internal Standards

Analytes

Analyte. #1 -- cis-1,2 DCE

5 Calibration Points
Average Response Factor
Concentration = (0.0000e+000)(AREA**2)+(3.6753e-007)(AREA)+0.0000e+000

pt.	File	Conc.	Cratio	Area	Aratio	Resp. Factor
1	SIM_100PPB_VA_20160513_20160513_004	0.5	5.00E-01	1497385	1.50E+06	2.99E+06
2	SIM_100PPB_VA_20160513_20160513_003	0.1	1.00E-01	325938	3.26E+05	3.26E+06
3	SIM_100PPB_VA_20160509_20160513_003	5	5.00E+00	12611971	1.26E+07	2.52E+06
4	SIM_100PPB_VA_20160513_20160513_001	10	1.00E+01	25944906	2.59E+07	2.59E+06
5	SIM_100PPB_VA_20160513_20160513_010	2.5	2.50E+00	5583352	5.58E+06	2.23E+06
Average RF =	2.72E+06	**RSD of Average RF =**	14.91%			
RSD of Curve Fit =	11.00%					

Analyte. #2 -- TCE

5 Calibration Points
Average Response Factor
Concentration = (0.0000e+000)(AREA**2)+(2.2303e-007)(AREA)+0.0000e+000

pt.	File	Conc.	Cratio	Area	Aratio	Resp. Factor
1	SIM_100PPB_VA_20160513_20160513_004	0.5	5.00E-01	2373265	2.37E+06	4.75E+06
2	SIM_100PPB_VA_20160513_20160513_003	0.1	1.00E-01	506908	5.07E+05	5.07E+06
3	SIM_100PPB_VA_20160509_20160513_003	5	5.00E+00	21115012	2.11E+07	4.22E+06
4	SIM_100PPB_VA_20160513_20160513_001	10	1.00E+01	44401688	4.44E+07	4.44E+06
5	SIM_100PPB_VA_20160513_20160513_010	2.5	2.50E+00	9849404	9.85E+06	3.94E+06
Average RF =	4.48E+06	**RSD of Average RF =**	9.83%			
RSD of Curve Fit =	6.19%					

Analyte. #3 -- PCE

5 Calibration Points
Average Response Factor
Concentration = (0.0000e+000)(AREA**2)+(1.5527e-007)(AREA)+0.0000e+000

pt.	File	Conc.	Cratio	Area	Aratio	Resp. Factor
1	SIM_100PPB_VA_20160513_20160513_004	0.5	5.00E-01	3602696	3.60E+06	7.21E+06
2	SIM_100PPB_VA_20160513_20160513_003	0.1	1.00E-01	682205	6.82E+05	6.82E+06
3	SIM_100PPB_VA_20160509_20160513_003	5	5.00E+00	30520822	3.05E+07	6.10E+06
4	SIM_100PPB_VA_20160513_20160513_001	10	1.00E+01	61845504	6.19E+07	6.18E+06
5	SIM_100PPB_VA_20160513_20160513_010	2.5	2.50E+00	14715641	1.47E+07	5.89E+06
Average RF =	6.44E+06	**RSD of Average RF =**	8.56%			
RSD of Curve Fit =	7.59%					

3-Jun-16

FULL SCAN Calibration Response Table

HAPSITE method: /Haps/Method/Analyze/Concentrator/Hill Vapor Intrusion Cal 2 min SIM.mth

Method Description:

SIM CVOC Method in order of elution cis-DCE; TCE; PCE

General Quantification Range from 0.1 ppbv to 50 ppbv

Tune File: default.tun
Target Library: QB 02JUN2016
Last Modified: 8/4/2016 2:21:00 PM

W = RT +- (0:08.00 / 2 + RT * 0.050)
Min Fit = 0.200; Min Pur = 0.200; Min Area = 5000
Width = 7 - 70 scans; Res = 5 scans; NLM = 2.000

Average Response Factor

Internal Standards

Analytes

Analyte. #1 -- cis-1,2 DCE

5 Calibration Points
Linear, forced through origin calibration curve
Concentration = (0.0000e+000)(AREA**2)+(5.0746e-007)(AREA)+0.0000e+000

pt.	File	Conc.	Cratio	Area	Aratio	Resp. Factor
1	SIM_100PPB_VA_20160602_20160602_005	10	1.00E+01	19654426	1.97E+07	1.97E+06
2	SIM_100PPB_VA_20160602_20160602_004	5	5.00E+00	9883414	9.88E+06	1.98E+06
3	SIM_100PPB_VA_20160602_20160602_003	1	1.00E+00	2118314	2.12E+06	2.12E+06
4	SIM_100PPB_VA_20160602_20160602_002	0.5	5.00E-01	1219555	1.22E+06	2.44E+06
5	SIM_100PPB_VA_20160602_20160602_001	0.1	1.00E-01	446851	4.47E+05	4.47E+06
Average RF =	2.59E+06	**RSD of Average RF =**	41.08%			
RSD of Curve Fit =	2.83%					

Analyte. #2 -- TCE

5 Calibration Points
Linear, forced through origin calibration curve
Concentration = (0.0000e+000)(AREA**2)+(2.6729e-007)(AREA)+0.0000e+000

pt.	File	Conc.	Cratio	Area	Aratio	Resp. Factor
1	SIM_100PPB_VA_20160602_20160602_005	10	1.00E+01	37659000	3.77E+07	3.77E+06
2	SIM_100PPB_VA_20160602_20160602_004	5	5.00E+00	18063702	1.81E+07	3.61E+06
3	SIM_100PPB_VA_20160602_20160602_003	1	1.00E+00	4169354	4.17E+06	4.17E+06
4	SIM_100PPB_VA_20160602_20160602_002	0.5	5.00E-01	2086877	2.09E+06	4.17E+06
5	SIM_100PPB_VA_20160602_20160602_001	0.1	1.00E-01	547757	5.48E+05	5.48E+06
Average RF =	4.24E+06	**RSD of Average RF =**	17.33%			
RSD of Curve Fit =	3.43%					

Analyte. #3 -- PCE
5 Calibration Points
Linear, forced through origin calibration curve
Concentration = (0.0000e+000)(AREA**2)+(1.7505e-007)(AREA)+0.0000e+000

pt.	File	Conc.	Cratio	Area	Aratio	Resp. Factor
1	SIM_100PPB_VA_20160602_20160602_005	10	1.00E+01	57057468	5.71E+07	5.71E+06
2	SIM_100PPB_VA_20160602_20160602_004	5	5.00E+00	28152546	2.82E+07	5.63E+06
3	SIM_100PPB_VA_20160602_20160602_003	1	1.00E+00	7402200	7.40E+06	7.40E+06
4	SIM_100PPB_VA_20160602_20160602_002	0.5	5.00E-01	3688404	3.69E+06	7.38E+06
5	SIM_100PPB_VA_20160602_20160602_001	0.1	1.00E-01	5027	5.03E+03	5.03E+04
Average RF =	5.23E+06	**RSD of Average RF =**	57.76%			
RSD of Curve Fit =	5.22%					

NOTES:
% = Percent.
AOU 1 = Accelerated Operable Unit 1 East Side Springs.
Aratio = Area ratio.
CVOC = Chlorinated volatile organic compound.
DCA = Dichloroethane.
DCE = Dichloroethene.
Conc. = Concentration.
Cratio = Concentration ratio.
CtCl = Carbon tetrachloride.
PCE = Tetrachloroethene.
ppbv = Part(s) per billion per volume.
Resp. = Response.
RF = Response factor.
RSD = Relative standard deviation.
SIM = Select ion monitoring.
TCE =Trichloroethene.
VA = Department of Veteran Affairs.
VC = Vinyl chloride.

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Appendix C
Field Notes

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MADE IN TACOMA
— SINCE 1916 —
Rite in the Rain®
— DEFYING MOTHER NATURE —

Name Dan Bingham

Address 4246 S. Riverboat Rd. Suite 210
Taylorsville, UT 84123

Phone 385-474-8505 / 435-770-4319

Email

Projects VA AOU-1
665353.77.01.04

MADE USA · RITE GREEN · Archival paper

RiteintheRain.com

0047-H
Pressure Cycling

1/3

QGB
CH

2/24/16

1800 Calibrated VA HAPSITE. Calibrate meet requirements.
Range 0.1 - 10 ppbv
1900 Ran 5 ppbv calibration verification. (Run #12
CIS = 5.3 ppbv TCE = 5.5 ppbv PCE = 5.5 ppbv
CV passed. QC CV => RPD must be ≥ 70%

END

QGB
CH

2/25/16

0650 Arrived @ SLC office. Began loading equipment.
Printed PTSP. Filled out PTSP.
0720 Chris + Quan signed PTSP + AHA.
0810 Arrived @ 0047-H. Discussed sampling ~~pr~~ approach.
0825 Resident allowed entrance explained VI assessment process. Jeremy Laird on-site
0845 Residents left for work.
0850 Began initial HAPSITE survey.
1010 Mechanical room has > PCE detection (1.3 ppbv). Surveyed various products in the mechanical room. No products indicated that they contain PCE. Moving forward w/ Pressure cycling.

Est. House Air Volume = 19,200 ft3

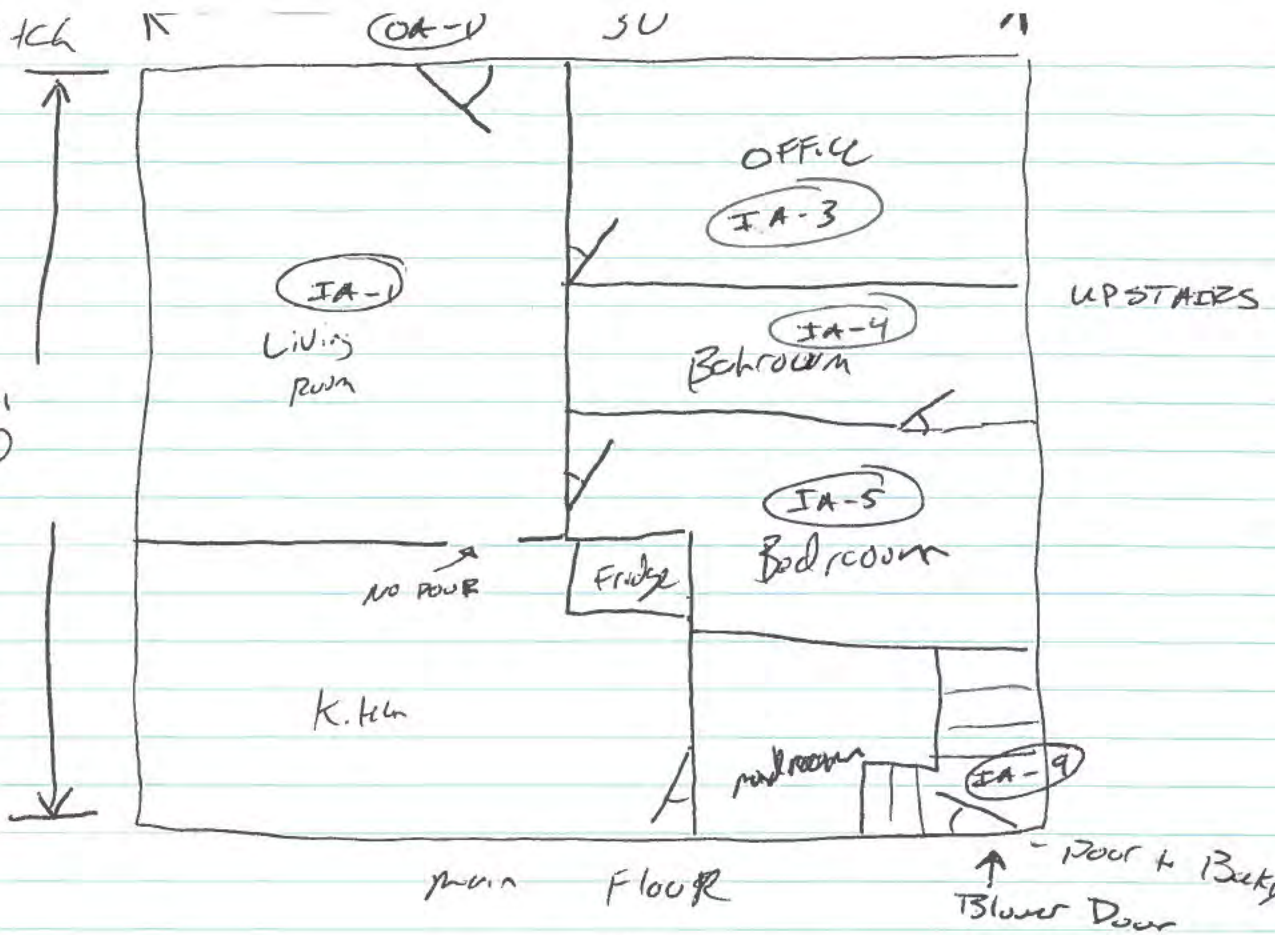
1100 Mark from EPA/Denver on-site. Jeremy showed him around the site.
1121 Began PC set up. Omniguard installed in basement laundry room window; westside. Set to log every 5 min in pascals.
Omniguard Serial # = G405318 (Pine Environmental Rental)
Initial ΔP = -0.5 Pa
Omniguard Job Name = 47H
Chris Holt recording ΔPs and operating blower door.
Blower door install in back door (north side). Door located @ ground level
1145 David Waite onsite.

1155 Began -5 Pa pressure step.

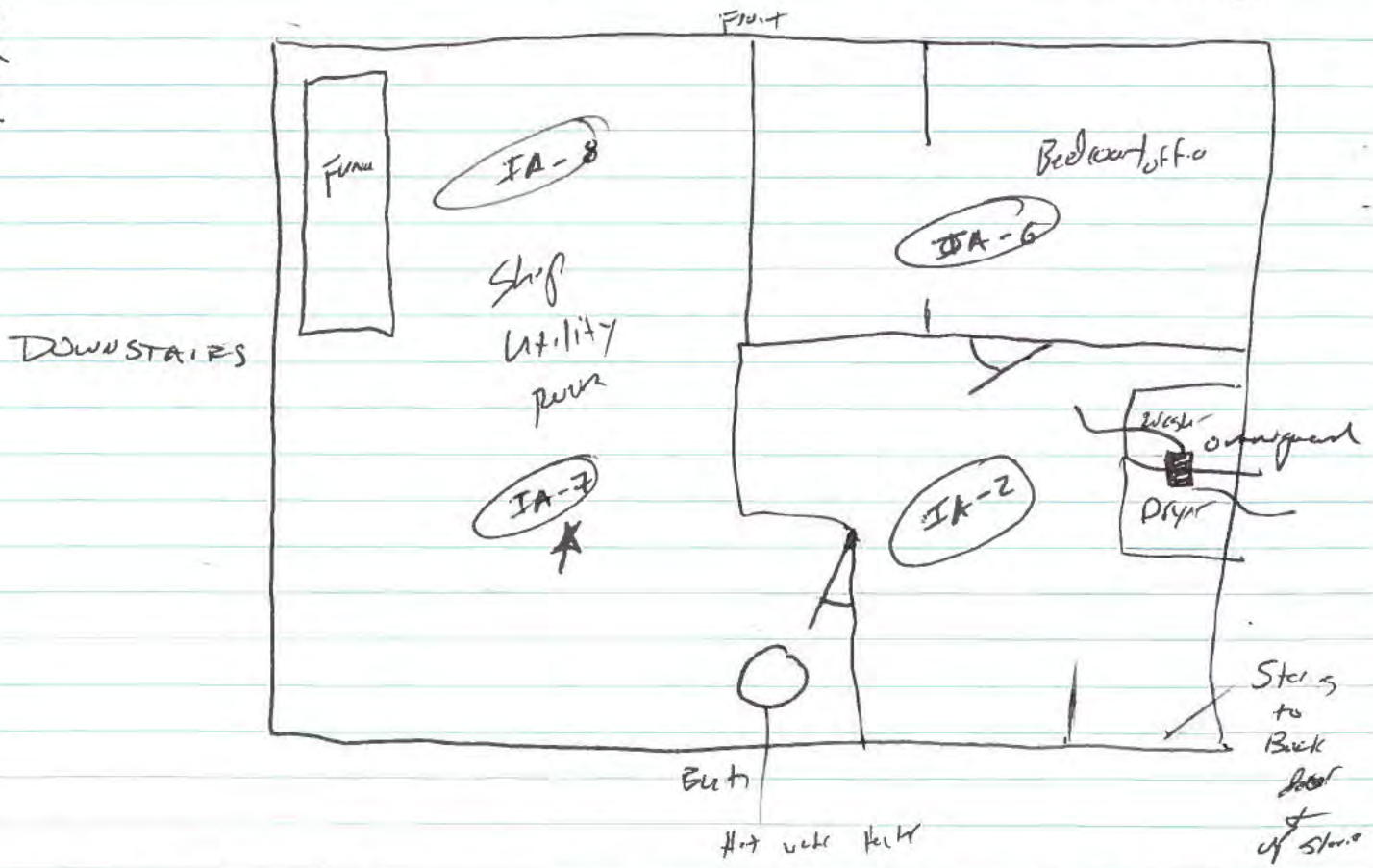
(Continue) H.G. Bingham

Rite in the Rain

2/3 Sketch



OU47-H
2/25/16



* Basement connected to upstairs: no door between upstairs + downstairs
* Furnaces turned off upon arrival. All doors were shut as well. Furnace + water heater remained off during pressure cycling.

HAB

2/25/16

0047-M

Pressure Cycling

QGB
CH

1210 David Waite + Jeremy Laird left site.

- 5 Pa Pressure Cycle

Avg Flow rate = ~586 CFM
2.5 Air exchange = 77 minutes
Total Air Volume = ~~45,000~~ 18,000 ft3
Avg Δ Pressure = -5.1 Pa

1315 Increased negative pressure to -10 Pa for one set of samples (mechanical Room, near blower door, upstairs living room)

-10 Pa Pressure Cycle

Avg flow rate = 925 CFM
2.5 Air Exchanges = 77.1 minutes
Total Air Volume = 18,000 ft3 (house volume)
Avg Δ Pressure = -10.1 Pa

1405 Ended -10 Pa PC

1410 Began +5 Pa PC
1440 Jeremy Laird back on-site.

+5 Pa PC

Avg flow rate = 705 CFM
2.5 Air exchange =
Avg Δ Pressure = 5.1 Pa
Total Air Volum = 18,000 ft3 (house volume)

1505 Ended +5 Pa PC. Ran 5 ppbv CCl4. Began packing equipment. Re-installed furnace covers. ~~Relit~~ Lite water heater pilot light.

5 ppbv CCl4 CIS = 88% RPD
TCE = 96% RPD
PCE = 96% RPD

1610 Left site.

RND
QB

Rite in the Rain

1/3

0051-H
Pressure Cycling

2/26/16 QGTB
CH

0745 Arrived @ SLC office. Set up field sample log spreadsheet. Set up HAPSITE.

0810 Loaded vehicle w/ equipment + MOB to 0051-H.

0845 Arrived @ 0051-H. Filled out PTSP.

0900 Chris Holt on-site. Both signed PTSP.

0910 Began HAPSITE survey. No interior VOC sources identified.

0930 Jeremy Laird on-site.

0940 EA + Cascade drilling onsite out front for direct push groundwater sampling.

0956 Nick Kirkham on-site

1010 Began equipment setup for pressure cycling. PCE concentrations on all 3 levels ~~[illegible]~~ were the same (0.3 ppbv). Basement mechanical room w/ floor drain and bare concrete floors was 0.55 ppbv. No interior products found in home. Large floor crack located in mechanical room.

→ Omniguard installed in east basement window. Job name 51H. Logging every 5 min.

→ Blower door install in back door (south side) at top of stairs to the basement. (ground level). Recorded baseline differential pressure.

→ Baseline $\Delta P = -1.5$ Pa

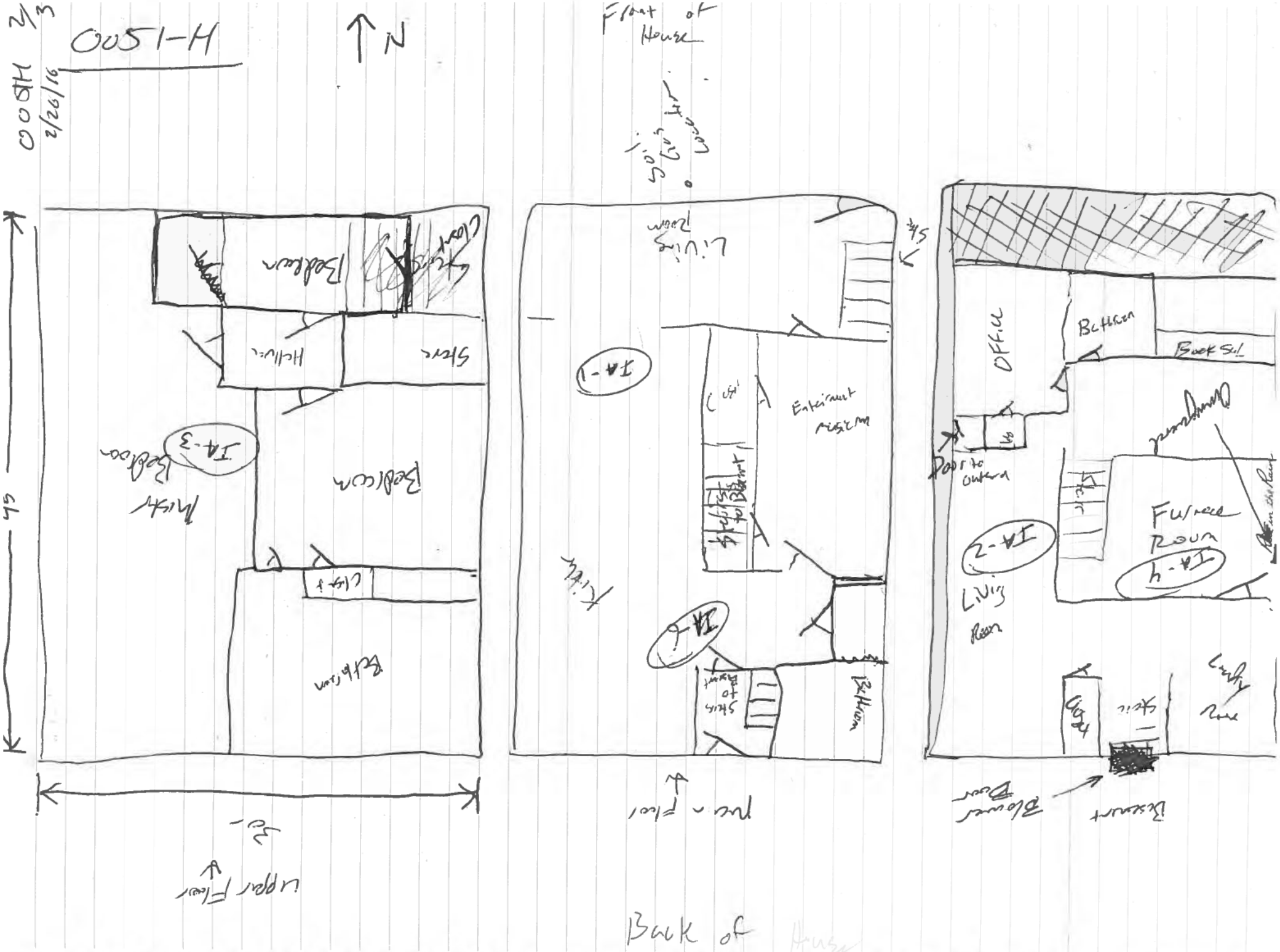
1035 Chris began recording baseline pressure reading. See baseline reading above.

1043 Began -5 PC. Set ΔP @ -6.5 Pa since baseline was -1.5 Pa.

1059 Chris left to collect SG samples @ 0047-H

	time	ΔP Door (Pa)	ΔP Omni (Pa)	Q (cfm)
-5 Pa	11:15	-6.2	-6.5	932
	11:40	-6.4	-6.5	925
	11:55	-6.2	-6.5	930
-10 Pa	1212	-11.7	-11.5	1430
	1220	-11.3	-11.5	1420

[signature]



0051-H
2/3
0051H
2/26/16
N
Front of House
Soil Gas Location
Bedroom
Closet
Hallway
Stairs
Master Bedroom
IA-3
Bedroom
Closet
Bathroom
Living Room
IA-1
Entertainment Museum
Stairs to Basement
Kitchen
IA-2
Stairs to Basement
Bathroom
Office
Bathroom
Book Sal
Door to outside
Furnace Room
IA-4
Living Room
Laundry Room
Stairs
Blower Door
Basement
Upper Floor
Main Floor
Back of House

2/26/16 0051-H Pressure Cycling 2/26/16 QGB CH 3/3

12:12 Began -10 Pa PC. Set ΔP @ -11.5 Pa since baseline was -1.5 Pa.

12:40 Jeremy Laird back on-site for 10 min before leaving.

12:45 Chris Holt back on-site to collect soil gas sample. Soil gas sample collected on north west side of near flower bed. Basement slab depth below ground surface ~7.5 ft.

+ Soil gas sample collected from 7.5 ft bgs and 8.5 ft bgs. tip and screen covered in clay

1333 Began +5 Pa PC, PCE concentration @ all locations went zero immediately.

1420 Ended +5 Pa PC.

1423 Collected air sampled above spring in front of 0051-H. Probe placed 6" above water

1449 Removed all equipment from residence. Jeremy discussed preliminary results w/ resident

1530 Collected additional soil gas sample. Soil is tight and didn't produce alot of gas.

1545 Ran 5 ppbv CCV. CCV Passed

CIS = 88% RPD

TCE = 110% RPD

PCE = 110% RPD

1600 off-site MOB to office.

QB

END

2/29/16 W11-H TO-15 Resample

1000 Sample ID: A-0011H-030116-IA-012A-LLL
Canister ID: 3477 FC: 0467
IP: -23.72 in Hg FP: -0.14 in Hg
ST: 1030 am ET: 0830 am
SD: 2/29/16 ED: 3/1/16

- No new chemicals brought into the home since last sampling event, dso no new construction.
- Canister placed in basement living room
- Jeremy Laird was on-site w/ homeowner during sample deployment.
- Initial canister vacuum ~~lower than~~ higher than expected (-23 in Hg normal)

3/1/16

0830 Picked up canister @ W11-H. Vacuum lower than expected 0.4 in Hg but not @ zero.
0845 Discussed additional sampling scheduled for later this week.
0900 Arrived @ W41-H to conduct pre-HI assessment interview w/ Jeremy Laird.

03/2/16 W17-H TO-15 Resample

1150 Arrived @ W17-H. Jeremy Laird was with me during visit. Placed canister in basement living area

Sample ID: A-0017H-030316-IA-BAS

Normal Sample
Canister ID: 0361 FC ID: 0411
IP: -23.75 in Hg FP: 0.43 in Hg
ST: 12:10 pm ET: 1030 am
Start Date: 3/2/16 ED: 3/3/16

Sample ID: A-0017HH-030316-IA-BAS-D

Field Duplicate
CID: 0217 FC ID: 0090
IP: -23.62 in Hg FP: 0.41 in Hg
ST: 12:10 ET: 10:30
SD: 3/2/16 ED: 3/3/16

1204 ~~out~~ Left W17-H

Rite in the Rain

TO-15 CONFIRMATION
SAMPLING

1/1

3/2/16 0003-H TO-15 Re-sample

12:10 Stopped by 0003-H to see if we can sample early. Allowed to enter. Placed canister in main living area basement Jeremy Laird w/ me during sample. Previous sample was in basement master bedroom but resident request we not enter this room. Q3

Sample ID: A-0003H-030316-IA-~~[illegible]~~ BAS

CID: 0422	FCID: 0231
IP: -23.41 inHg	FP: ~~0231~~ -6.3 inHg
ST: 1215	ET: 0958
SD: 3/2/16	ED: 3/3/16

12:20 Left residence. (0003-H)

16:18 Arrived @ 0018-H. Set up summa canister in basement bedroom. (NE corner).
Jeremy Laird w/ me during sample deployment.
Canister information →

Sample ID: A-0018H-030316-IA-BAS

CID: 0144	FCID: 0591
IP: -23.55 inHg	FP: 0.51 inHg
ST: 1631	ET: 1515
SD: 3/2/16	ED: 3/3/16

3/3/16

1000 Retrieved ~~summa~~ canister from 0003-H w/ Jeremy Laird.

1030 Retrieved summa canister from 0017-H w/ Jeremy Laird.

1515 Retrieved summa canister from 0018H w/ Jeremy Laird.

END
Q3

* Canister 0084 Lealy initial P on 2/29/16 was -20 inHg and -0.1 inHg on 3/3/16 w/out being used.

0045-S EHS
Initial HAPSITE SURVEY

3/4/16

QGB

0600 Arrived @ SCC office. Edited HAPSITE method to only analyze for CIS 12DCE, TCE, PCE. Re-calibrated since higher std concentration of CIS were higher than desired (5 ppbv std = CIS was 6.2 ppbv).
A404C Loaded equipment in field vehicle.
Calibration looked good. all analytes met required RSD, RSD of RF, and R^2.

Ran 5 ppbv calibration verification before MOB to EHS. CV passed (all RPDs ≥ 70%)

0810 Arrived @ EHS Meet w/ Jeremy Laird & Marcus (EHS facility manager).

0820 Began sampling Level A (Ground/basement level) Ground level on westside // Basement level on eastside

1020 Brake Cleaner w/ PCE identified w/in Autoshop. Chemical storage closet in autoshop clearly had PCE/TCE containing materials. PCE = 5.5 ppbv TCE = 16 ppbv w/in closet. Brake cleaner labeling PCE found in closet. Other products were not surveyed due to lack of time.

1040 Probe seems to be contaminated w/ PCE. ~~Perhaps~~ may be due to survey PCE containing PCE. Turned probe temperature up to 80°C or method ran various runs to clean out.

1045 Terence Mares dropped off extra sample probe from KD Analytical HAPSITE to replace contaminate probe.
Installed new probe and ran multiple samples. PCE concentrations steadily declining

1423 Ran 0.5 ppbv CCV to check calibration. TCE + CIS passed.
PCE slightly above 130% RPD @ 134%.
Proceeded w/ sampling.

65
60 m
40 70
Heat low 70
80

Rite in the Rain

1445 Jeremy Laird + Nick Kirkham on-site.

1600 Probe temperature will not decrease after sample run. Edited method to run final few samples.

1790 Returned keys to Marcos

1745 Jeremy Laird off-site

1755 Ran end of day CCV (5 ppbv std). RPD's ⇒ TCE = 110% CIS = 100% PCE = 134%

END QB

TO-15 CONFIRMATION SAMPLING

3/7/16

1008 Arrived @ 0037-H. Deployed canister in basement laundry room. Jeremy Laird w/ me during sample deployment.

Sample ID: A-0037H-030816-IA-LAU

CID: 0370 FC: 0123

IP: -23.33 inHg FP: -0.71 inHg

Start Date: 3/7/16 Final Date: 3/8/16

Start time: 10:10 am End time: 0745 am

3/8/16

0041-H

0700 Arrived @ SCC office loaded equipment.

0715 MOB to 0037-H to pick up Summa canister.

0745 White wait on street. Home owner walked by and invited me in to pick up canister. Retrieved canister. Canister information above

0900 Aaron Cantrell + Quinn Bingham on-site

0915 PTSP talk was completed.

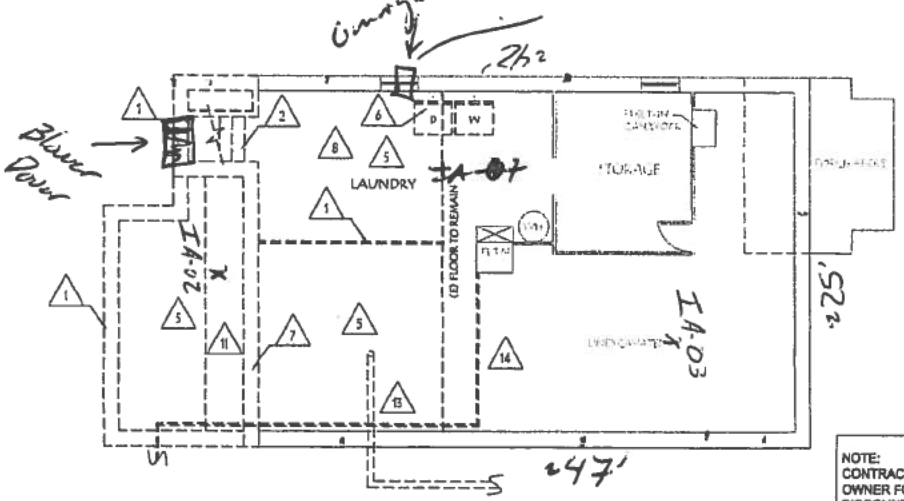
0930 Arrived @ 0041-H. Began baseline sampling. HAPSITE indicated no interior sources of PCE + TCE. CIS was detected at low levels (0.12-0.2 ppbv) throughout the residence. Jeremy Laird cleaned utility locate spray paint from homeowner driveway per resident's request.

1020 Jeremy Laird off-site

1115 Rolf Lange on-site

1119 Began pressure cycling (-5 Pa PC set) Avg Q = 516 CFM Avg DP = -6 Pa

0041-H 3-8-16



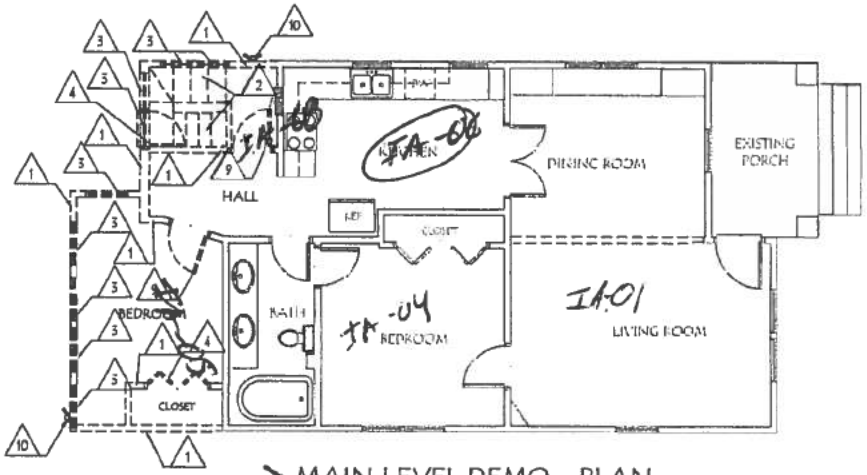
→ LOWER LEVEL DEMO - PLAN

SCALE = 1/8" = 1'-0"

8' 0 8' 16'

NOTE:
CONTRACTOR TO COORDINATE W/ OWNER FOR TEMPORARY DISCONNECT & RECONFIGURATION AS REQUIRED OF EXISTING ADT SECURITY & COMCAST SERVICE/ WIRING.

10A-01



→ MAIN LEVEL DEMO - PLAN

SCALE = 1/8" = 1'-0"

8' 0 8' 16'

LEGEND

EXISTING WALL TO REMAIN

EXISTING WALL TO BE DEMOLISHED

DEMOLITION NOTES

1. REMOVE AND DISPOSE OF EXISTING WOOD STUD WALL.
2. REMOVE AND DISPOSE OF EXISTING STAIR.
3. REMOVE AND DISPOSE OF EXISTING WINDOW.
4. REMOVE AND DISPOSE OF EXISTING DOOR.
5. EXCAVATE AND REMOVE DIRT.
6. REMOVE EXISTING WASHER & DRYER & SALVAGE FOR RE-INSTALLATION.
7. REMOVE AND DISPOSE OF EXISTING CONCRETE WALL.
8. REMOVE & DISPOSE OF WOOD FLOOR.
9. REMOVE EXISTING DOOR & SALVAGE FOR RE-INSTALLATION.
10. REMOVE EXISTING MOTION DETECTOR LIGHT & SALVAGE FOR RE-INSTALLATION.
11. REMOVE & DISPOSE OF EXISITNG CONCRETE WALK.
12. RELOCATE REFRIGERATOR WATER LINE & HOSE BIB SHUT OFF VALVES TO STORAGE ROOM.
13. RECONFIGURE EXISITNG SEWER DRAIN UP INTO JOIST SPACE.
14. RECONFIGURE EXISITNG HVAC VENT PIPES COORDINATE NEW LOCATION WITH OWNER.

CONTACT THE UTAH DIVISION OF AIR QUALITY ON ALL REMODEL PROJECTS PHONE: 801-536-4000

NOTE: FIELD VERIFY ALL DIMENSIONS

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Salt Lake City, UT 84102
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RICHARD & JOYCE GLASER
REMODEL & ADDITION
1116 EAST SUNNYSIDE AVENUE
SALT LAKE CITY, UTAH 84102

ARCHITECT: AVS
DRAWN BY: CSD

LOWER LEVEL DEMOLITION PLAN

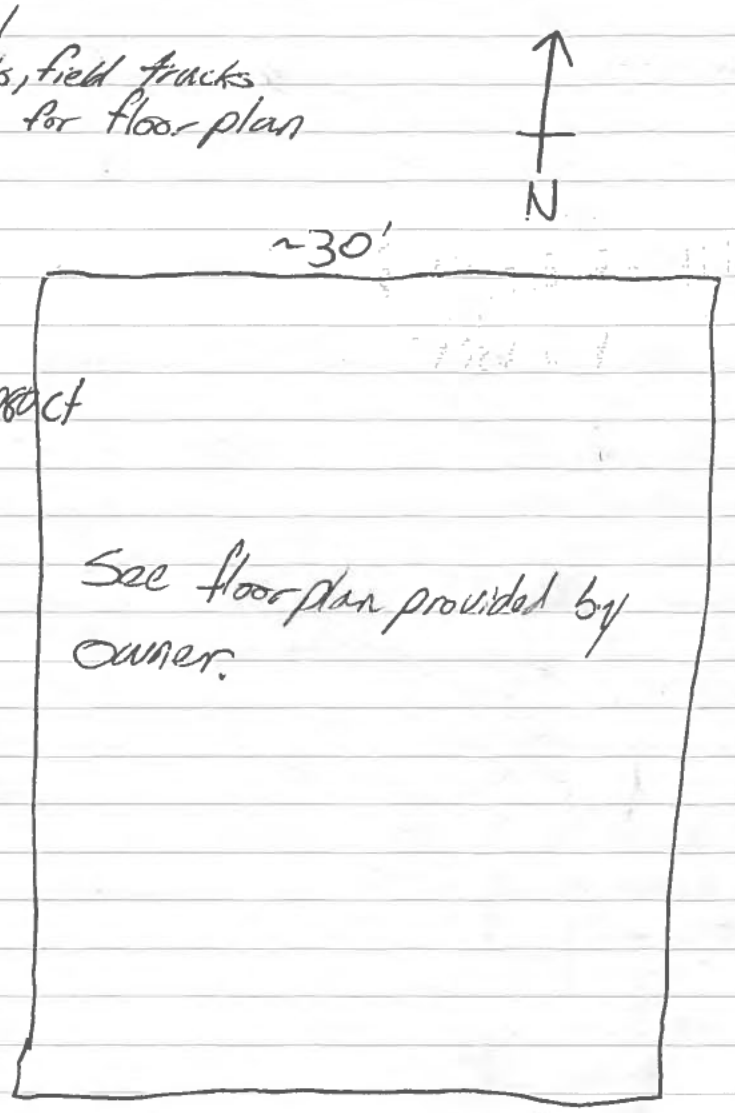
D1.1

11 FEB 2009

3/8/16 0041-H

Weather: Sunny
Crew: CH2M-2, V.A.-1
Eq: Hapsite, hand tools, field trucks
Cont. from previous page for floor plan

10:15:
Upstairs: 1,130 ft²
Downstairs: 1,130
2,260 ft
8' ceiling +↗
1 Air exchange Vol: 18,080 ct



12:59 Rolf Lange off-site. Began -10 Pa PC event.
Avg Q = 715 CFM Avg DP = -11 Pa.
14:09 +5 Pa PC event began. Avg Q = 563 CFM Avg DP = 5.3 Pa
15:25 Ended +5 Pa PC event. Removed equipment from residence.
1545 Out of residence.
1550 Began soil gas sample on SB corner of residence. Probe installed approximately 7' bgs. One later purged prior to sample collection.
1625 Ran 5ppbv cut. All analytes passed: RPD > 70%
1635 Aaron Control & Quin Bingham offsite

TEMP
QB

Rite in the Rain

CO40-H 3/10/16 CO41H Pressure Cycling pg 1

Weather: Sunny

Crew: 2 CHEA 1 HA

Equipment: HAPSITE, Soil Gas probe kit, blower door

0615 Arrived @ office. Ran 5 ppbv calt CIS was @ 130% RPD. TCE + PCE right @ 100% RPD. Decided to recalibrate to avoid issues w/ CIS throughout the day.

0700 Aaron Cantrell arrived @ the office. We loaded equipment. Continued calibration. Calibration good.

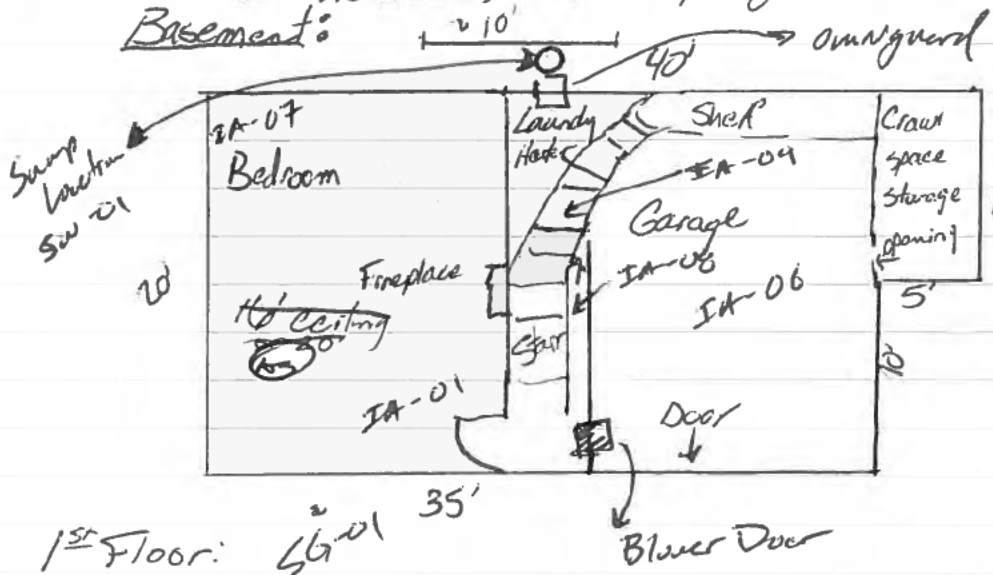
0800 Left office. Both signed PTSP.

0818 Arrived @ CO40-H.

0830: Home dimensions 35' x 20' x 40' w/ 3 levels

Total home ~3,200 ft² w/o garage

Basement:

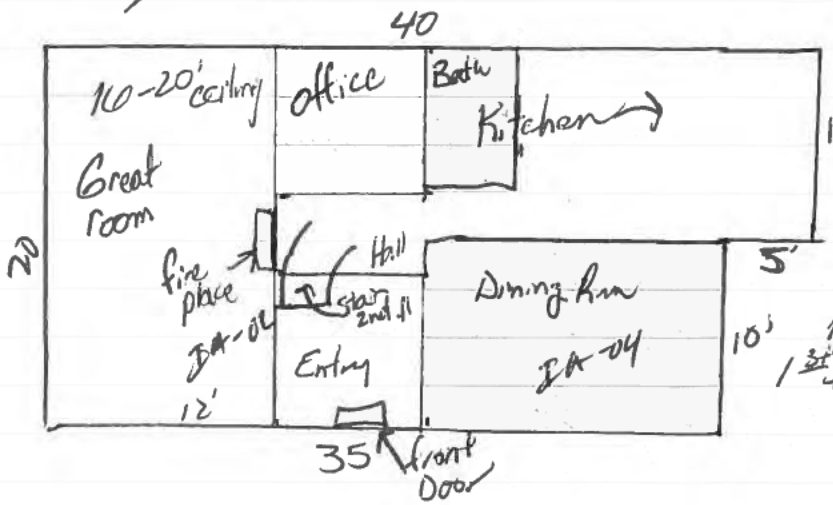


N

~750 ft² ~ 7' ceilings

Basement: ~5,250 cf ⑤ Cubic feet

1st Floor: SG-01



~750 ft²

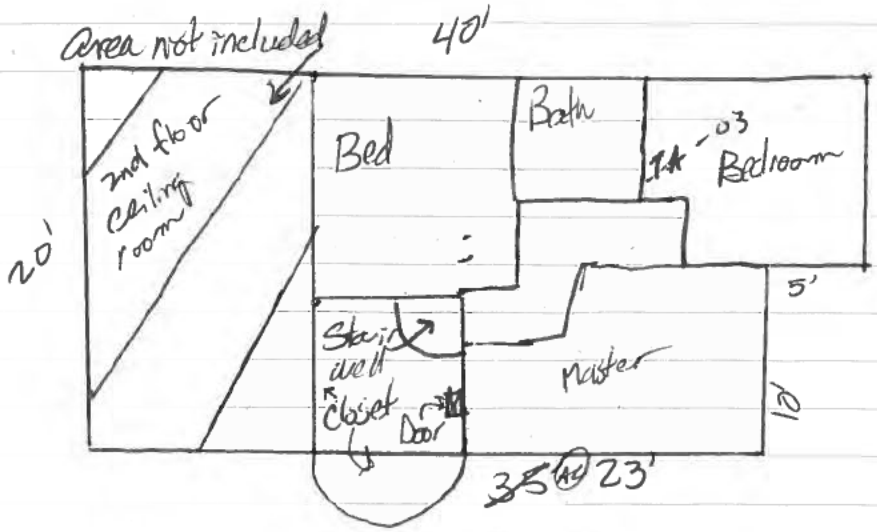
~8' ceilings except in the great room use 20', in Great room GR = ~4800 ft³

Rest of 1st floor = 4,080

1st floor: 8,880 ⑨ Cubic feet

2nd floor sketch on the next page

0040-H Cont. 3/10/16



≈ 510 ft² w/8' Ceiling
2nd floor: ≈ 4080 ft³

0926: estimated square footage is 2,010 ft. Estimated house air volume is $\boxed{18,210\ ft^3}$; one exchange volume

09:55 Informed novak of RAL PCE exceedance
10:50 -5 Pascal pressure cycle began. Avg Q = -1064 CFM, Avg DP = -5.6 Pa
→ Jeremy Laird on-site from 0830 – 0930.
1215 -10 Pa PC ~~pressure~~ began. Avg Q = 1791 CFM AVG DP = -10.8 Pa

1301 Collected sample 6" above sump water through window in basement laundry room. PCE = 22 ppbv TCE = 2.2 ppbv
1305 +5 Pa PC began. Avg Q = 1272 CFM; Avg DP = 5.0 Pa
1320 Nick Kirkham on-site
1441 Finished +5 Pa PC
1440 Lynn from ~~JA~~ on-site.
1480 Lynn off-site.
1458 Collected soil gas on westerd of home from 4' and 6' bgs.
1532 Ran 5 ppbv CCH. Passed. RPDs CIS = 74% TCE = 90% PCE = 80%

1600 Left 0040-H. MOB to SLC office
1630 Arrived @ office. Worked on data management.
1715 Ended day

QB
END

Rite in the Rain

0052-H

0052H Pressure Cycling

Pg. 1

3/11/16

Weather: Sunny / Partly Cloud

Crew: 2 CH2M

Equip: HAPSITE, field tools, blower door, soil gas sample kit

0700 Arrived @ SLC office to run beginning of the day CCV. Ordered another canister of 5.0 ppbv calibration standard.

0740 Aaron Cantrell arrived @ office. CCV passed.

0850 Arrived @ 0052-H. Resident allowed entrance. Began initial HAPSITE survey. No interior sources found.

0900 Jeremy Laird on site.

0925: Floor Plans

1st Floor

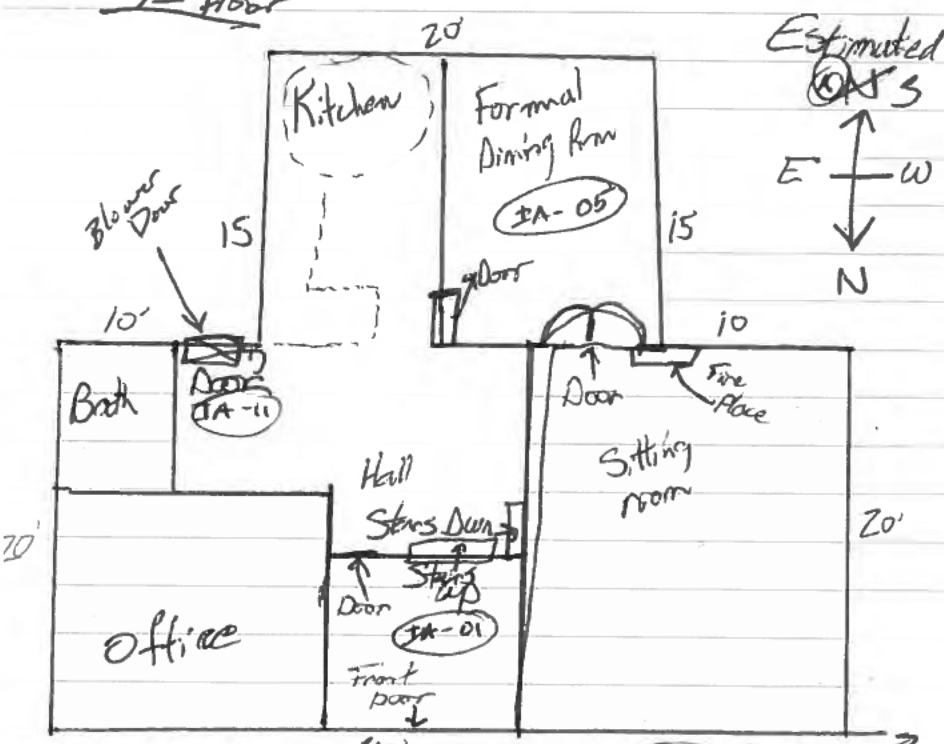
~10'

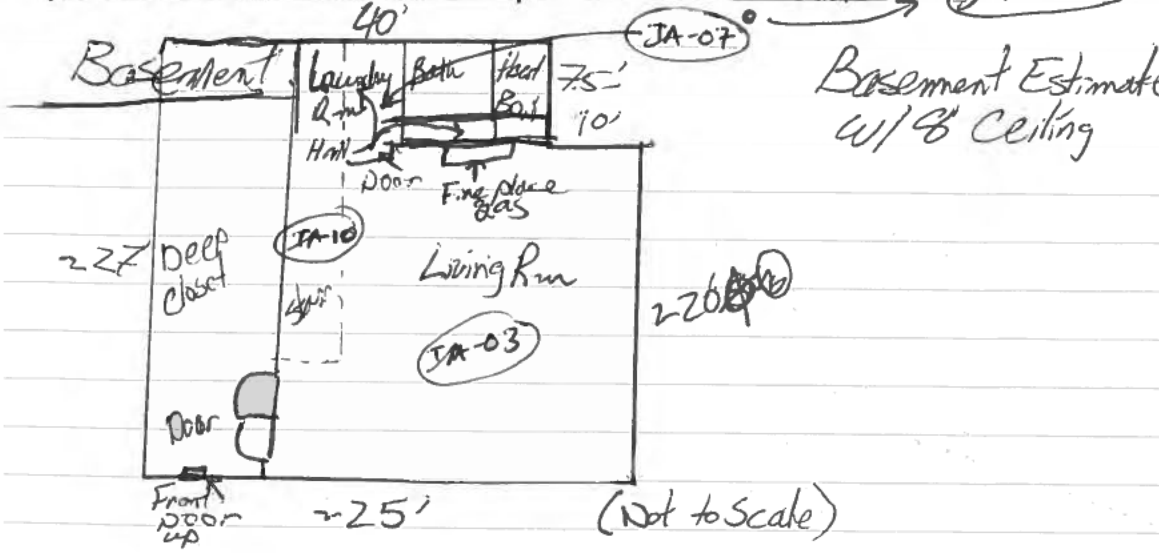
Above ground 1,923 ft²

Total Home: ~3,200 ft² per owner?

Estimated ft² 1st floor: ~1,100 ft²

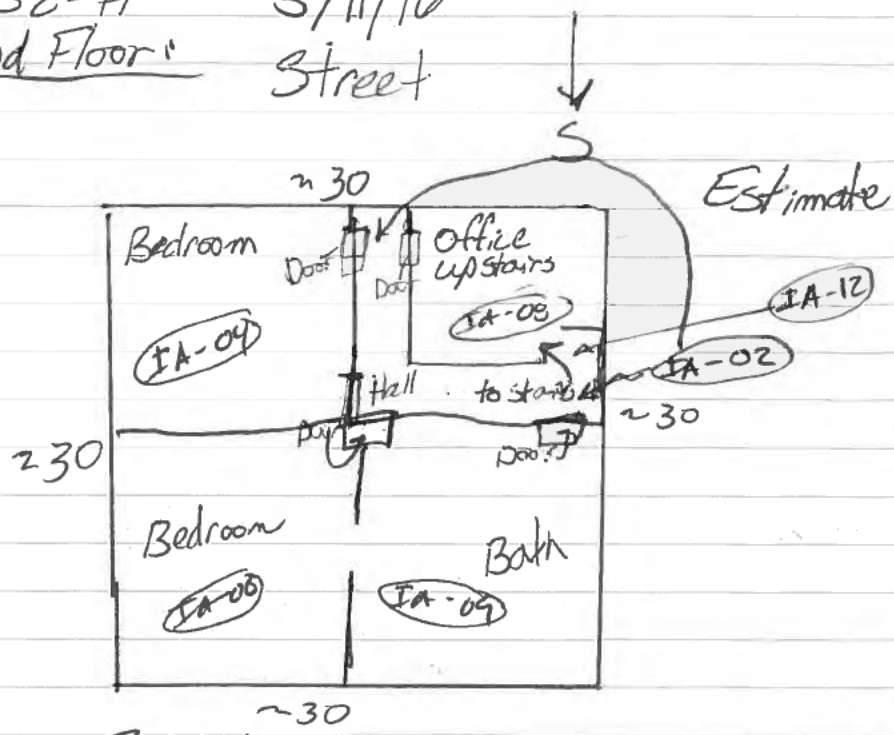
8-16' ceilings (16' only in office)





Basement Estimate ft²: 690 ft² w/ 8' Ceiling

0052-H 3/11/16
2nd Floor: Street



Estimate 2nd fl ft²: 900

10:09: Estimate of 0052-H ft²: ~2700 ft² Variable ceiling heights but average ~8'. Conservative method use 3,000ft² x 8' ceiling height for a home volume of 24,000ft³ So ~60,000cf @ 2.5 exchange.

1110 Set up blower door in exterior door to backyard near kitchen. Arranged in basement (doggy door) southside. Baseline ΔP = -1.0 Pa. → Avg Q = 1107 CFM; Avg DP = -6.6 Pa
1120 Began -5 Pa PC. 1140 Aaron Cantrell went to pick up Summas
1225 Began -10 Pa PC Avg Q = 1481 CFM, Avg DP = -10.6 Pa
1307 Began +5 Pa PC. Avg Q = 1197 CFM, Avg DP = 4.9 Pa
1307 Aaron Cantrell back on-site.
1400 Ended +5 Pa PC. Packed up PC equipment
1430 Set up to collect soil gas sample on north side of house. west of front porch (Aaron Cantrell)
1435 Set up summa canisters for deployment @ 0040-H today @ 1500. Jenny Laird back on-site.
1450 Ran 5 ppb CCH. Passed. RPDs: cis = 72% TCE = 86% PCE = 100%
1500 Deployed 3 TO-15 samples @ 0040-H. See next page for details
1510 Re-lit water heater + boiler @ 0052-H
1540 WNB to office.

0040-H TO-15 Confirmation Samples
3/11/16 GGB

Basement Bedroom (North side of residence)

Sample ID: A-0040H-031216-IA-BAS
Canister: 0086 Flow Controller: 0467
Initial P: -25.3 in Hg Final P: -0.26 in Hg
Start time: 1508 End time: 1238
Start Date: 3/11/16 End Date: 3/12/16

Sample ID: A-0040H-031216-IA-BAS-D
Canister: 0114 Flow Controller: 0287
Initial P: -25.01 in Hg Final P: -0.17 in Hg
Start time: 1508 End time: 1238
Start Date: 3/11/16 End Date: 3/12/16

Main Level Kitchen

Sample ID: A-0040H-030216-IA-KIT
Canister: 0162 Flow Controller: 0195
Initial P: -25.2 in Hg Final P: -1.26 in Hg
Start time: 1504 End time: 1238
Start Date: 3/11/16 End Date: 3/12/16

3/14/16

Dropped off TO-15 canisters from 0037-H & 0040-H @ 1204. Provided lab w/ QAPP table 7 to ensure correct analysis is performed. Lab is adjusting flow controllers to 3 ml/min rather than 4 ml/min since flow vacuums upon sample retrieval has been an issue.

3/15/16 Picked up 3 6L summas from ALS all with initial vacuums above -25 in Hg. Also picked up 5 flow controllers that have been set to 3 ml/min rather than 4 ml/min

GB

3/15/16
OGB

TO-15 CONFIRMATION SAMPLING

0017-H

Sample ID: A-0017H-031616-IA-BAS
Canister ID: 0128 FC: 0592
Initial P: -25.52 inHg Final P: ~~-15~~ -3.52 inHg
Start time 17:50 pm End time: 1554
Start Date: 3/15/16 End Date: 3/16/16
No new products in home since last sampling event.
Installed in basement living room.

0019-H

Sample ID: A-0019H-031616-IA-BAS
Canister ID: 0196 FC ID: 0442
Initial P: [redacted]-25.62 Final P: 0
Start time: 1759 End time: 1559
Start Dat: 3/15/16 End Dat: 3/16/16
No new products in house since last sampling event
Installed in basement bedroom. Same room as air purifier.
Purifier turned off during sampling.

0051-H

Sample ID: A-0051H-031616-IA-BAS
Canister ID: 0304 FC ID: 0519
Initial P: -25.21 inHg Final P: 0
Start time: 1949 End time: 1800
Start Date: 3/15/16 End Date: 3/16/16
No new products brought into home since HABSITE event.
Installed in basement living room.

See field log on next page for 0051-H

0023-H

Sample ID: A-0023H-031616-IA-BA1
Canister ID: 0371 FC ID: 0466
Initial P: -25.67 inHg Final P: -4.3 inHg
Start time: 1956 End time: 1759
Start Date: 3/15/16 End Dat: 3/16/16
No new products brought into home since last sampleevent.
Installed in basement storage room. Sump located in this room. Room not a living space. Seldomly occupied.

Rite in the Rain

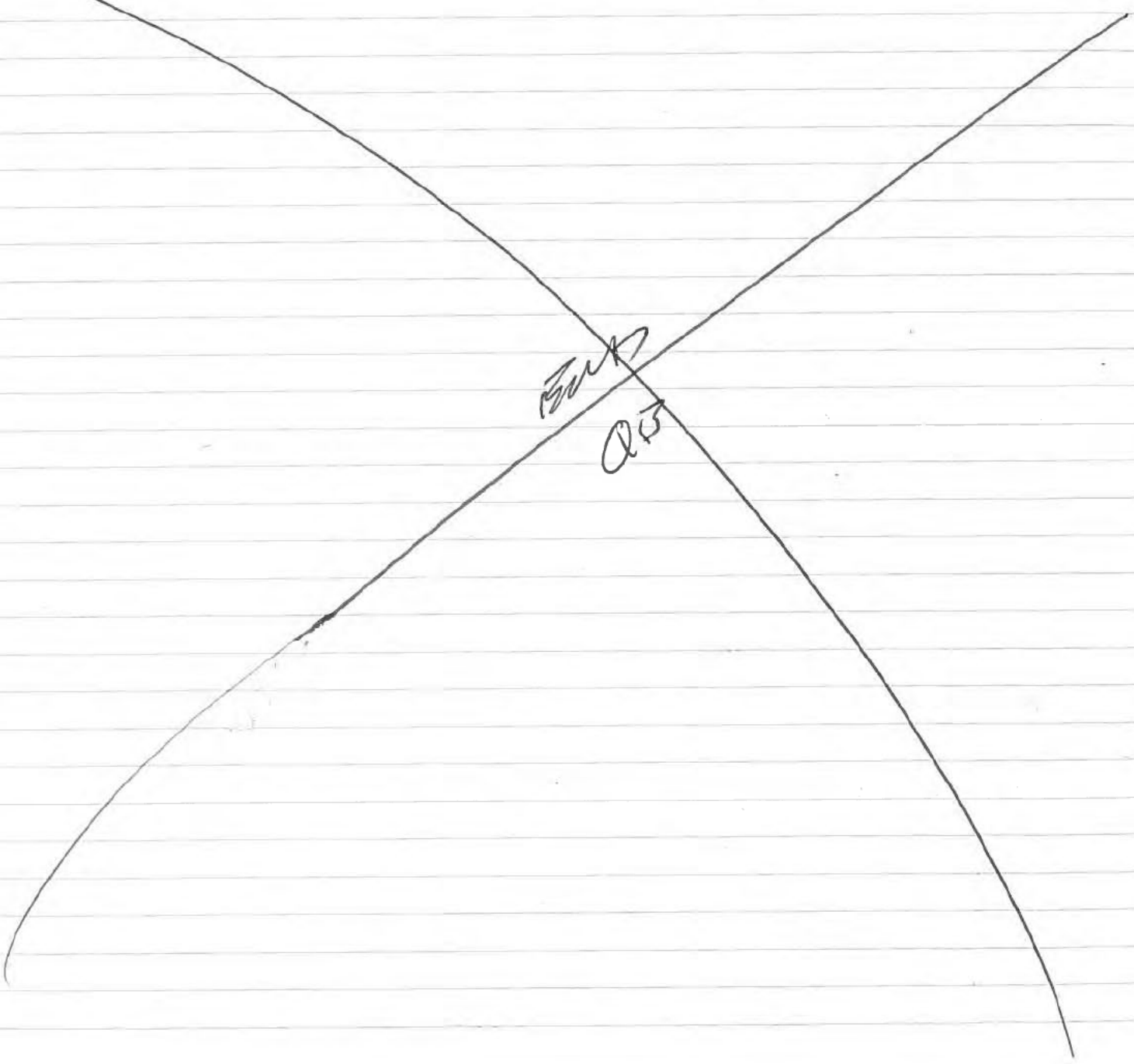
3/15/16

0051-H Field Duplicate

Sample ID: A-0051H-03166-IA-BA3-D
Canister ID: 0163 FCID: 0157
Initial P: -28.49 in Hg Final P: -6.90 in Hg
Start time: 1949 End time: 1809
Start Date: 3/15/16 End date: 3/16/16

Installed in Basement Living room

Canister 0367 Low vacuum. Not used.



0045-5
Pressure Cycling

3/21/16

0630 Ran CCA (5 ppbv). cis, TCE, PCE RPD= 88%, 92%, 106% respectively.
0700 Filled out coc for 03/16/16 TO-15 samples.
0730 Rachel arrived @ office. Began loading equipment

0830 Arrived @ 0045-5. Jeremy Loisel on-site. Jeremy provided us w/ additional Nitrogen cylinder
0906 Filled out Pre-task, baseline sampling
0910 Outdoor air sample

0945 Set up blower door in Room A203/A205
~~Volume Room A203/A205=29,700 ft³~~
0955 Take front Lobby Sample (between pillars) 20160321_005

1006 Take sample @ south end of front hallway

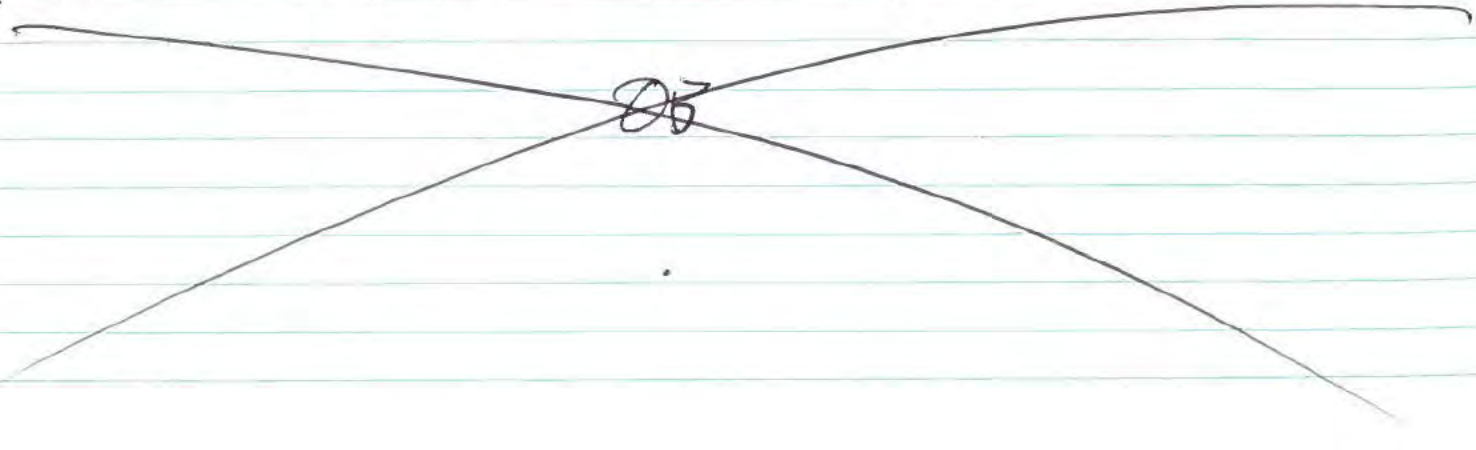
1020 Start negative pressure cycling to -5.0 (config A1)
Avg Q= 1208 CFM Avg DP= -5.2 Pa
1159 Began -10 Pa PC.
Avg Q= 2466 CFM Avg DP= -10.1 Pa
Room A203 + A205 are one room. Biology lab w/ ~15 ft ceilings ~~East~~ East wall is an exterior wall with windows but windows are designed not to open. Room has two entrances on the west wall. One on the north and one on south end of classroom. No VOC containing products identified in this space

1350 Ended +5 Pa PC in Room A203/A205 / Avg Q= 1501 / Avg DP= 4.4 Pa
1355 Move to Room A213
1400 Collected IA sample from Room A219 (woodshop)
1405 Began set up for PCing on Room A213. Volume = 14,880 ft³
No interior sources in Room A213.
1500 Begin negative cycle to -5 PA
Avg Q= 1349 CFM Avg DP= -5.4 Pa
1535 Begin negative cycle to -10 PA
Avg Q= 1743 CFM Avg DP= -10.2 Pa

Rite in the Rain

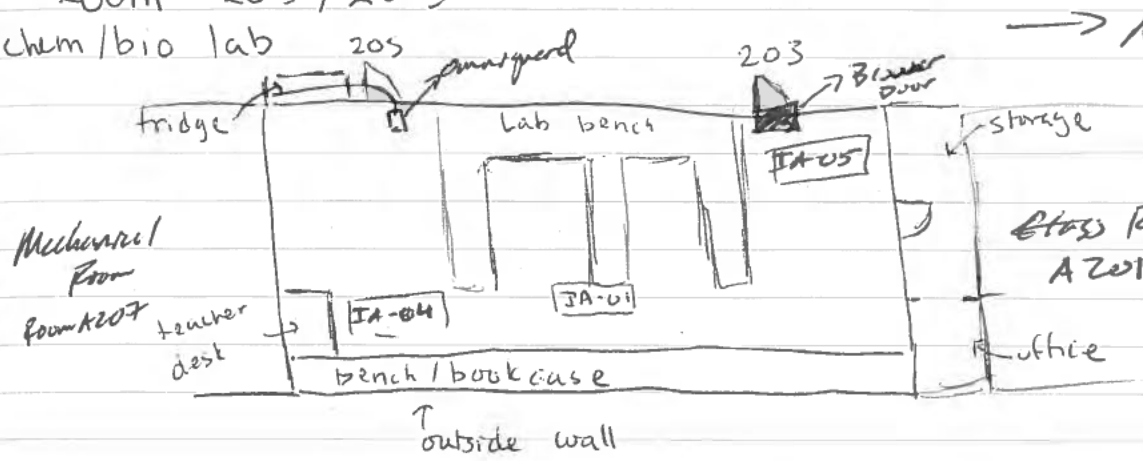
4/3

Time	Omni ΔP	Fan ΔP	CFM	Notes
1015	-0.5	-0.1	LO	Room 205/203
1020	-0.5	-0.9	LO	EMS
1025	-5.0	-5.1	1195	
1035	-5.0	-5.4	1245	
1045	-5.5	-5.6	1244	
1055	-5.5	-5.5	1241	
1105	-5.5	-5.4	1244	
1110	-5.0	-5.2	1170	
1120	-5.0	-5.2	1166	
1135	-5.0	-5.1	1168	
1050	-5.0	-5.2	1201	
1158	-10.0	-10.4	2438	
1208	-10.5	-10.9	2506	
1215	-10.0	-10.4	2438	
1200	-10.5	-10.5	2440	
1230	-10.0	-10.6	2429	
1240	-9.5	-10.0	2447	
1257	+5.0	+4.6	1533	
1305	+5.0	+4.4	1510	
1315	+5.0	+4.7	1490	
1320	+5.0	+4.9	1488	
1335	+5.0	+4.8	1500	
1345	+5.0	+4.7	1494	
1445	4.0	3.8	LO	Room A213
1450	4.0	4.0	LO	
455	4.0	4.0	LO	
500	-5.0	-4.8	1310	
1510	-5.5	-6.0	1395	
1520	-5.5	-5.6	1381	
1530	-5.0	-5.0	1304	
1535	-10.5	-10.5	1747	
1545	-10.0	-10.0	1753	
1555	~~-10.1~~ -10.0	-9.8	1728	

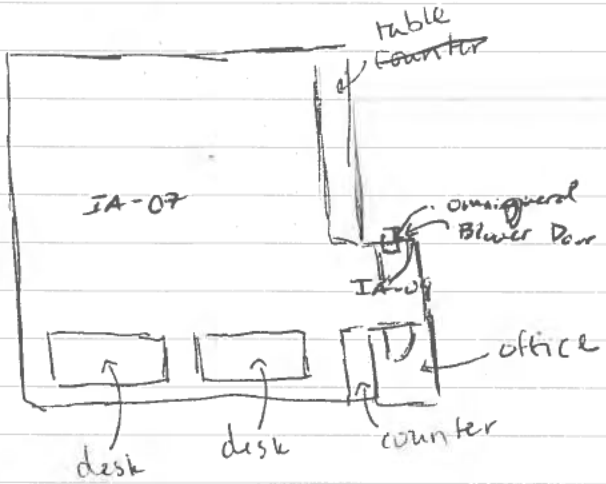


Room 205/203

chem/bio lab

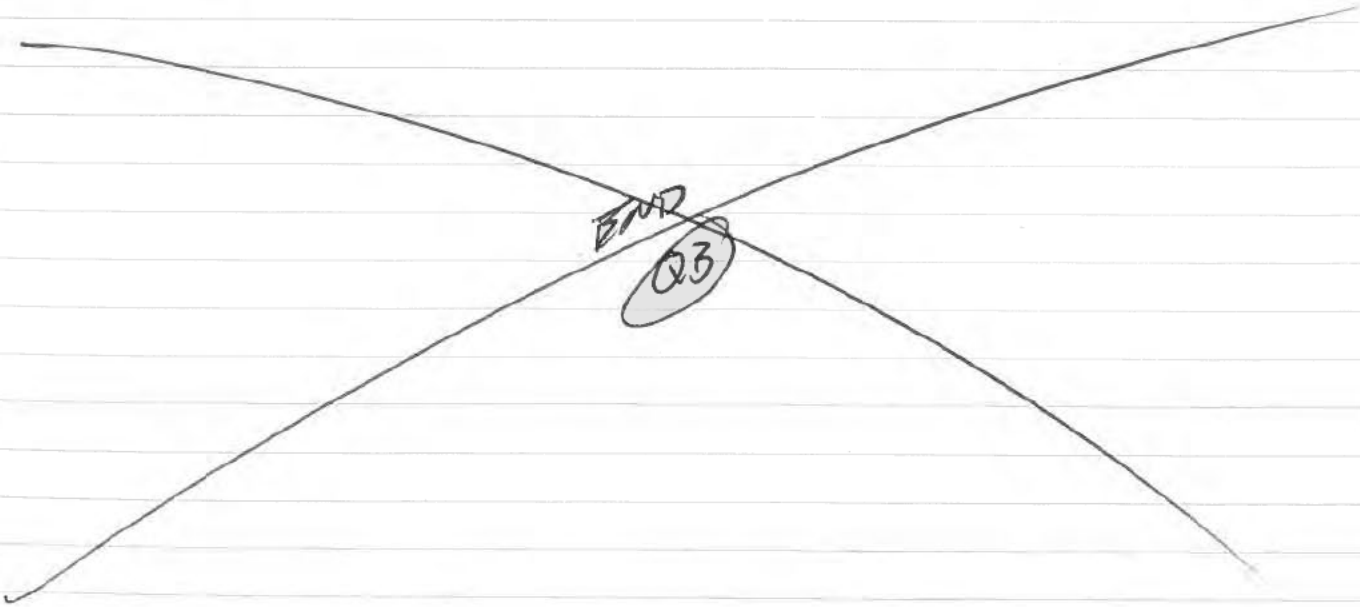


A213



1600 Had to leave EHS since facility management was testing the building and setting alarm. Were not

1650 Ran end of day CCV (5ppbv). All analytes passed. All RPDs > 70%



Weather: Rainy
Crew: QGB, FA

0045-S
Pressure Cycling

Room A215 3/22/16

1/3

0615 Ran beginning of day CCV. All analytes passed.
All RPDs were greater than 70%
0630 Sent update emails to EA
0720 MOB to EHS

0745 On-site
0800 Jeremy Laird & Rachel Adams on-site. Completed PTSP & signed it. Jeremy left after -10 Pa PC.
0810 Began baseline sampling.
0850 Set up for pressure cycling in Room A215 (woodshop)
0910 take baseline pressure readings
baseline ~ -5 Pa ⇒ make first pressure step to -10

0925 Began -10 Pa PC. > Q = 521 CFM ; ~~Total Vol~~
1145 Ended -10 Pa PC. Avg DP = -10 Pa

1210 Began -15 Pa PC. > Q = 1306 CFM
1405 Ended -15 Pa PC. Avg DP = -14.8 Pa

1418 Began +5 Pa PC. > Q = 1796 CFM
1515 Ended +5 Pa PC. Avg DP = 4.8 Pa

1530 Sampled neighboring rooms including room above Room A215.

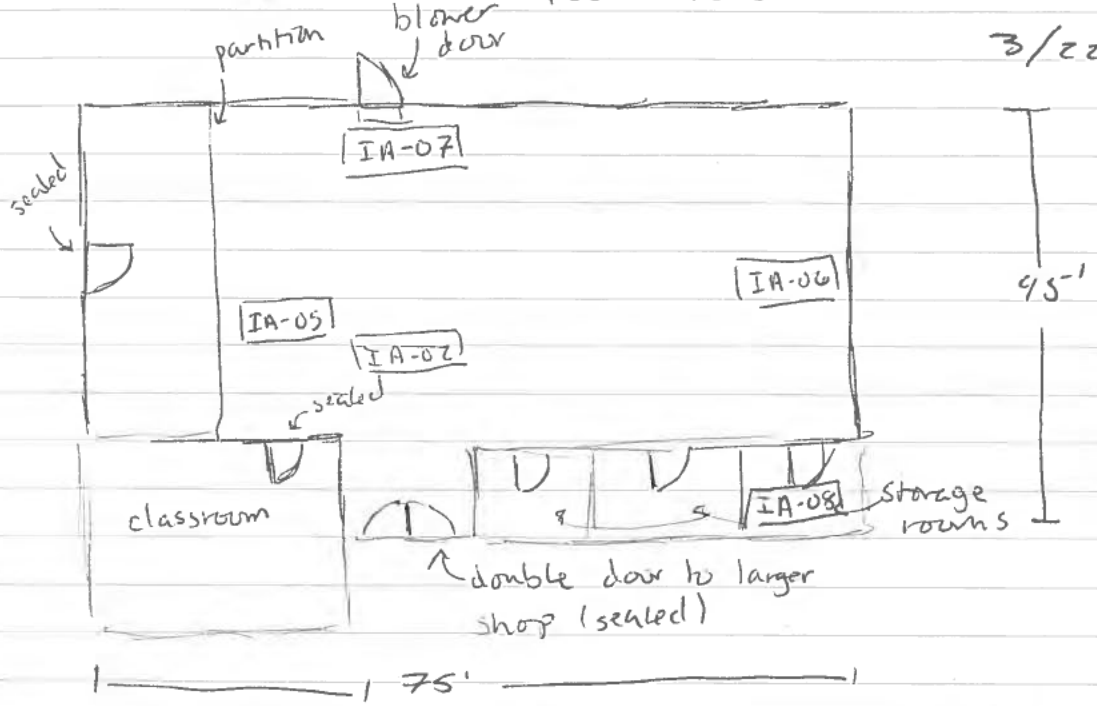
1615 Sampled soil gas on south side of ~~out~~ autoshop.
Probe installed ~ 4 ft bgs.
1635 MOB to SLC office

QB
END

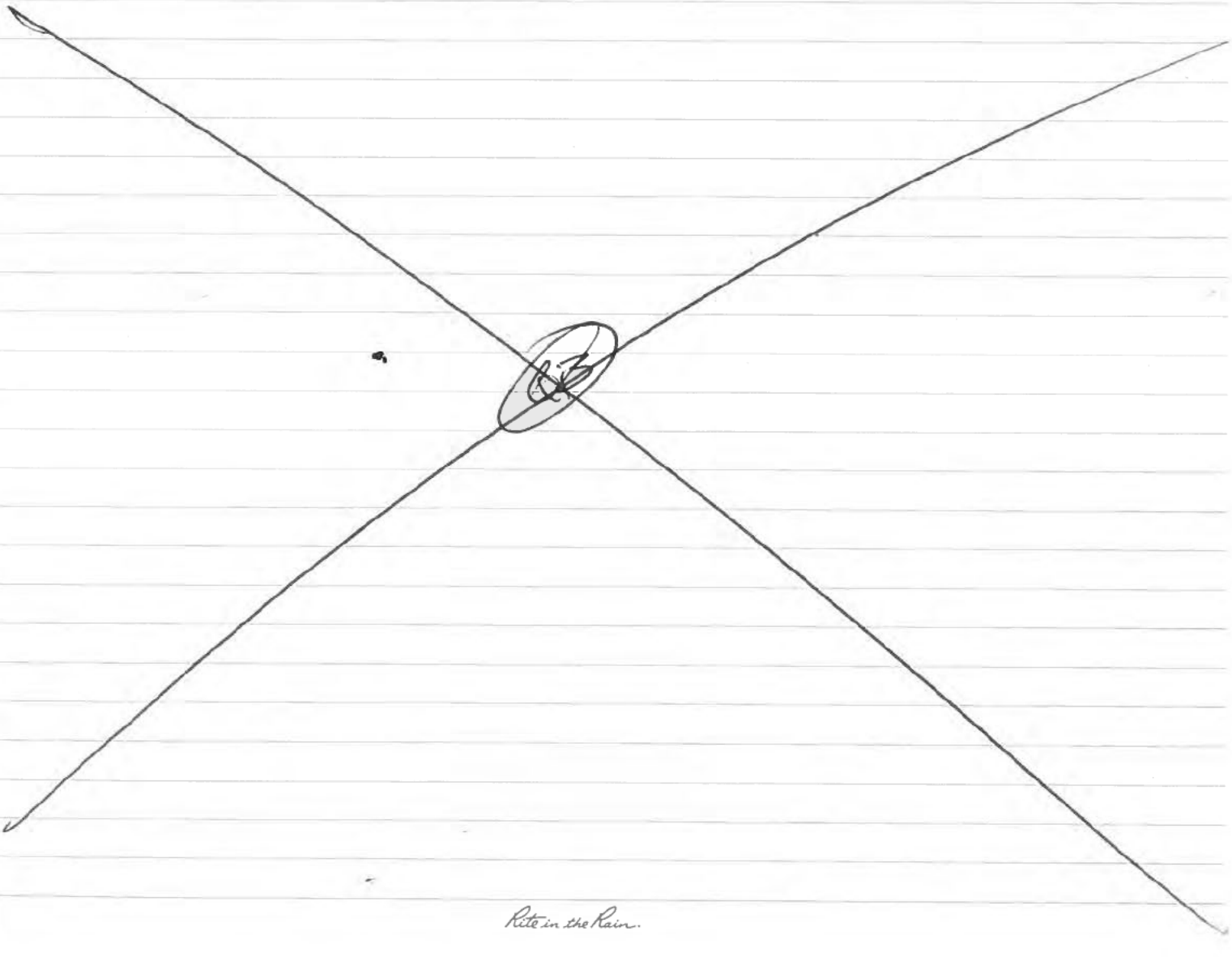
CW45-S
Room A215

A-215
Wood shop

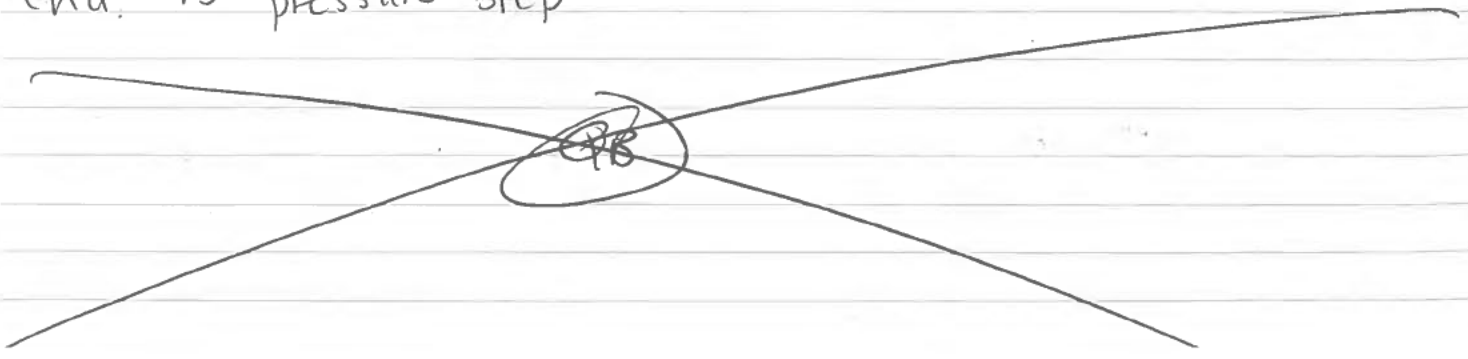
3/22/16



* See scanned floor plan for all sample locations



3/3	Omni ΔP	Fan ΔP	CFM	
925	-10.5	-10.6	550	EHS Room 215A
935	-10.5	-10.9	528	
945	-10.0	-10.0	523	
955	-10.0	-10.0	519	
1005	-10.0	-9.8	517	
1015	-10.5	-9.8	521	
1025	-9.5	-10.0	515	
1035	-9.5	-9.8	524	
045	-10.0	-10.1	517	
1055	-9.5	-9.9	515	
105	-9.5	-10	520	
1115	-10.0	-10.1	515	
125	-10.0	-10.1	512	
1135	-10.0	-10.1	518	
1140	End -10 pressure step			
1210	-15.0	-15.2	1210	
1220	-15.0	-14.9	1244	
1230	-14.0	-14.2	1233	
240	-15.0	-15.0	1273	
250	-14.5	-14.9	1287	
300	-14.5	-15.0	1283	
310	-14.5	-14.9	1316	
320	-15.0	-15.5	1372	
1330	-15.0	-15.6	1349	
340	-15.0	-15.3	1374	
350	-15.0	-15.3	1387	
1400	-15.5	-15.7	1343	
End -15 pressure step				
1418	5.0	4.8	1781	
1425	4.5	4.8	1769	
1435	4.5	4.4	1766	
1445	5.0	4.6	1825	
1455	4.5	4.1	1774	
1505	5.5	5.2	1823	
End +5 pressure step				

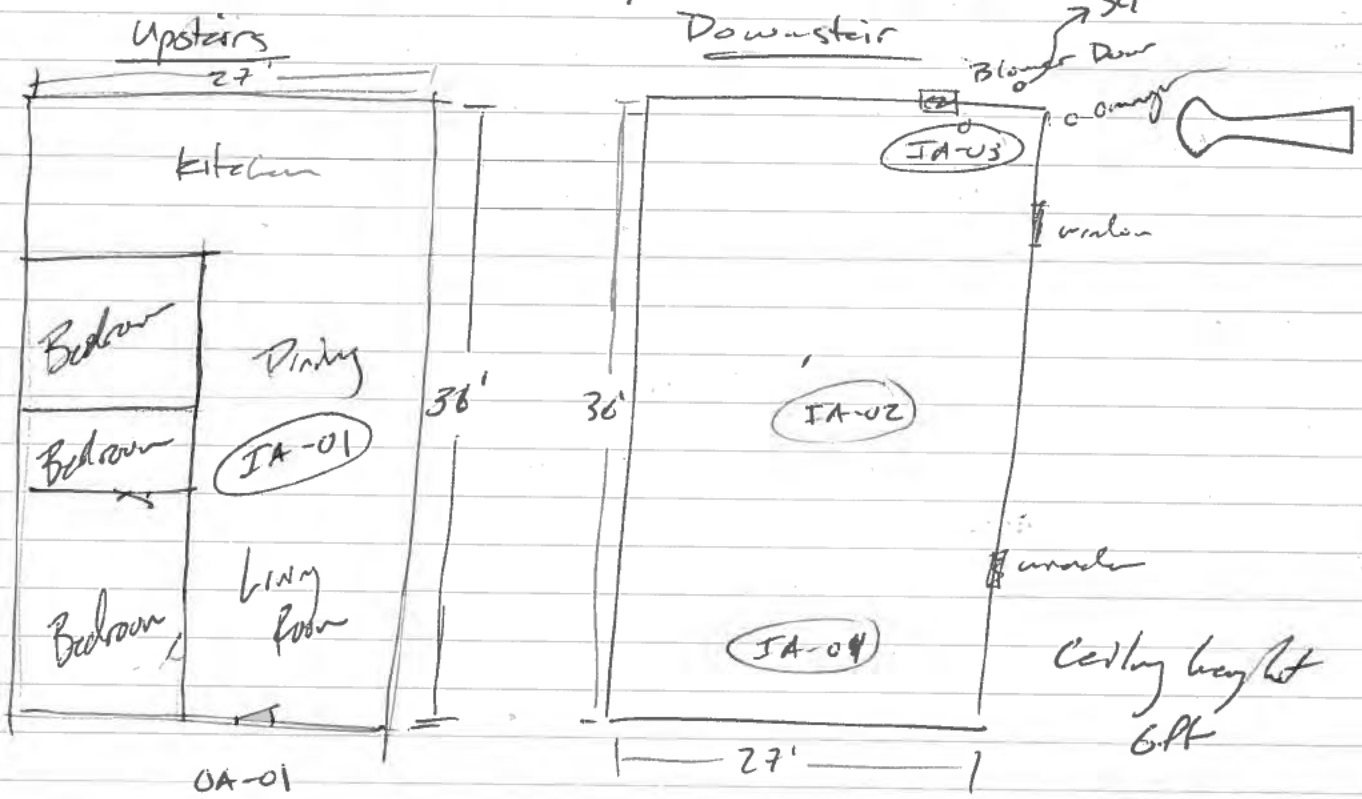


0050-H

3/23/16 PRESSURE CYCLING

Weather: Cold / Cloudy
Crew: QGB

0600 Arrival @ SLC office. Fan calibration check. Barely passed. Re-calibrated to avoid calibration issue @ end of day. Calibration w/in parameters.
0735 MOB for 0050-H
0820 Arrival @ 0050-H. Jeremy Laird on-site



TOTAL V = 5,832 ft³

Area = ~9.72 ft²

0940 Began -5 Pa PC. (baseline ΔP = -1.5 Pa. Avg Q = 641 cfm / DP = -6.21
1015 Ended -5 Pa PC and began -10 Pa PC / Avg Q = 1021 cfm / DP = -11.6 Pa
1047 Ended -10 Pa PC and began +5 Pa PC / Avg Q = 682 cfm / DP = 4.5 Pa
1123 End +5 Pa PC.
1130 Set up to sample soil gas. Collected SG from 5' bgs near outside basement entrance
1300 off-site

QB
1300

Rite in the Rain

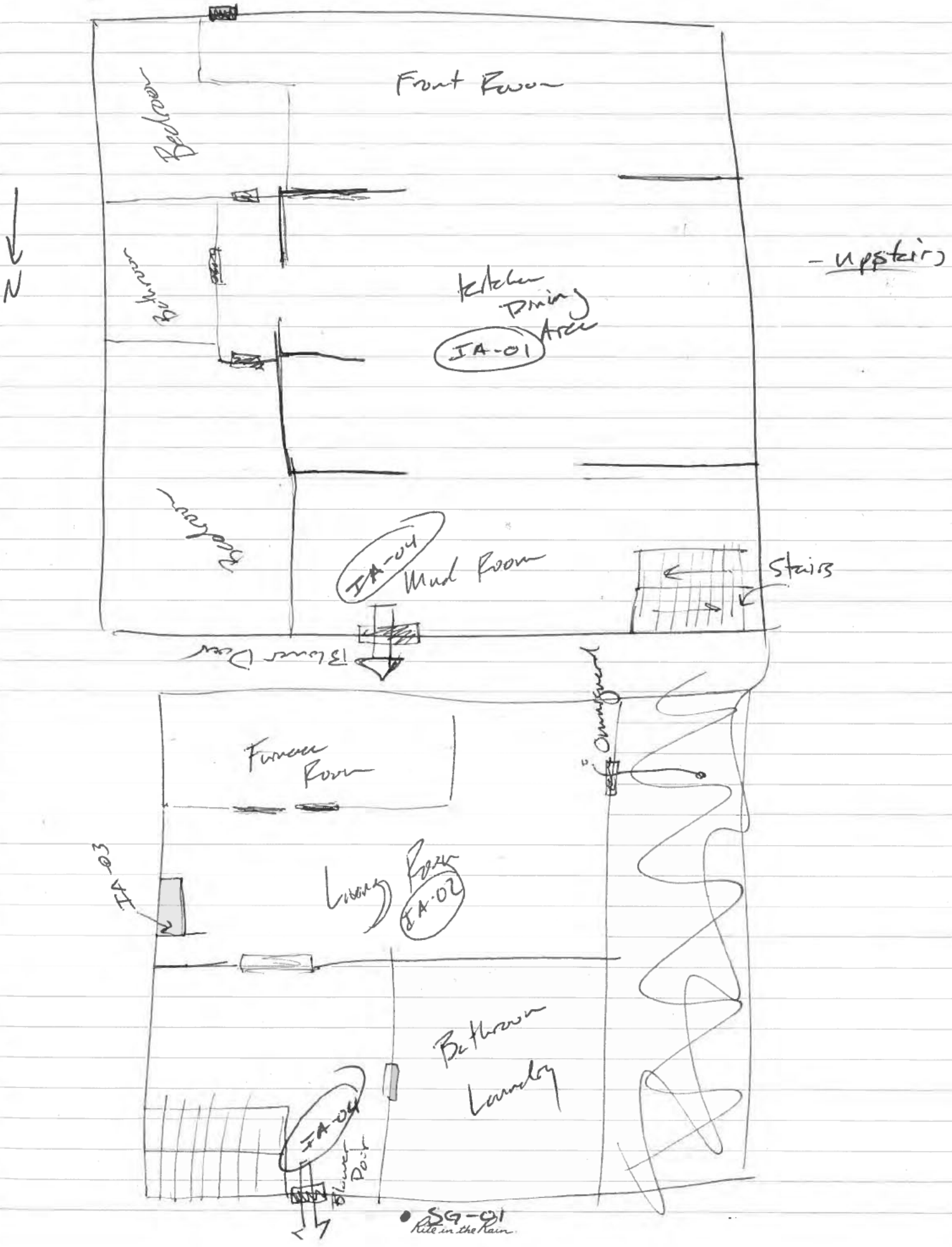
0053-H

5/2/16

Personnel: OG13, RA
Objective: Pressure cycle and
Weather: Sunny 60's
Equipment: HAPSITE, Blower Door, soil gas sample kit, field tools
0630 @ office began HAPSITE calibration. Calibration range 0.1 – 10 ppbv.
Method: SIM-10PBB-HA-20160502
0749 Load equipment into vehicle. Troubleshoot issues w/ HAPSITE calibrate. Calibrate is good ~~to go~~ now.
0930 MOB to 0053-H.
0950 Arrived @ 0053-H. Began initial HAPSITE survey.
0950 With technician on-site.
1010 Packed returned to office to pick up Omni/guard.
1055 No interior sources. PCE = 1.6 ppbv in basement + 1.4 ppbv upstairs
1152 Began -5 Pa PC event. Slight increase in PCE concentration in the basement and decrease upstairs. PCE max conc = 3.5 ppbv
1335 Began -10 Pa PC event.
1445 Began +5 Pa PC event
1530 Met w/ resident @ 910 ≈ 1200 re to discuss further pressure cycling.
1600 Jeremy Laird on site for 10 minutes
1610 Jeremy Laird off site.
1615 Set up to sample soil gas while Rachel finished +5 Pa PC sampling. Soil gas sample collected on northside of home from ~ 6.5 ft bgs. Soil gas exceeded the residential SG SL of 326 ug/m³ for PCE. PCE was 510.5 ug/m³
1713 Ran end of day CCV. All three analytes were within ±30% RPD.
1730 Loaded equipment and MOB to SLC office

OA-01

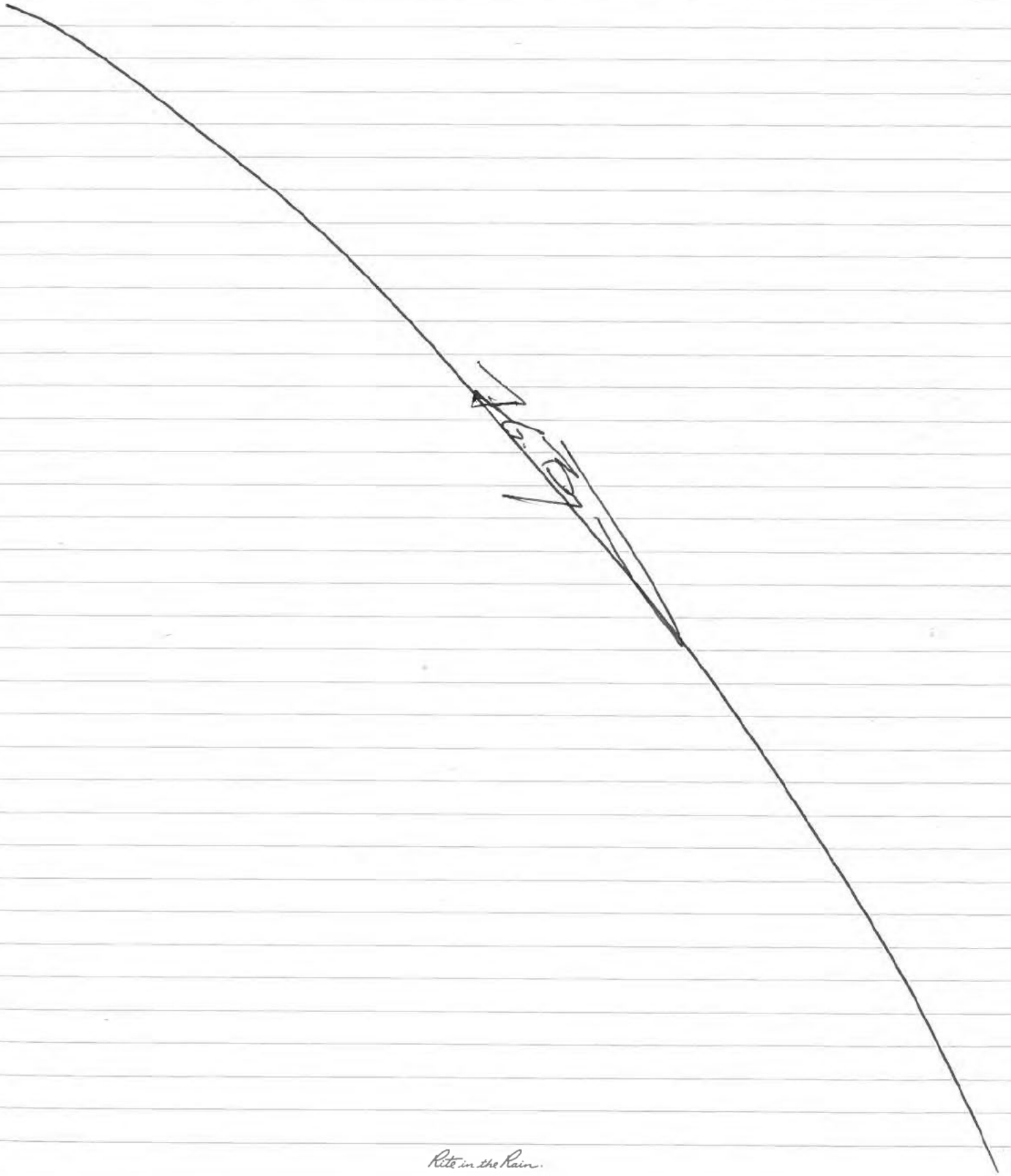
5/2/16


Front Room
Bedroom
Bedroom
Kitchen
Dining Area
IA-01
- upstairs
N
Bedroom
IA-04
Mud Room
Stairs
Blower Door
Furnace Room
Thermostat
IA-03
Living Room
IA-02
Bathroom
Laundry
IA-04
Blower Door
SG-01
Kitte in the Rain

CO53-H 5/2/16

Time	Door ΔP	Omni ΔP	Flow	Target ΔP
1125	0.5	0.0	0	Baseline
1130	-0.4	-0.5	0	
1135	-0.5	-0.6	0	
1140	~~-0.8~~ RA -0.5	~~-0.5~~ RA -0.5	0	
1145	~~-0.8~~ RA -0.2	0.0	0	
1150	-6.1	-6.0	699	-5.0
1155	-3.5	-5.5	640	-5.0
1200	-5.5	-5.0	649	-5.0
1205	-5.0	-5.0	647	-5.0
12:10	-5.4	-4.5	653	-5.0
12:15	-5.7	-6.0	648	-5.0
12:20	~~-4.8~~ RA -5.5	-4.5	652	-5.0
12:25	-4.8	-4.5	650	-5.0
12:30	-5.3	-5.0	635	-5.0
12:35	-4.8	-6.0	642	-5.0
12:40	-5.2	-5.5	645	-5.0
12:45	-5.0	-5.5	643	-5.0
12:50	-5.4	-5.5	640	-5.0
12:55	-5.2	-5.5	658	-5.0
13:00	-5.6	-5.0	644	-5.0
13:05	-5.6	-6.5	653	-5.0
13:10	-5.7	-5.0	655	-5.0
13:15	-5.8	-4.5	663	-5.0
13:20	-4.6	-6.0	661	-5.0
13:25	-5.7	-5.0	662	-5.0
13:30	-6.2	-5.5	659	-5.0
13:35	-10.5	-10.0	995	-10.0
13:45	-11.3	-10.5	991	-10.0
13:55	-11.3	-11.0	991	-10.0
14:05	-12.1	-11.5	958	-10.0
14:15	-13.0	-12.0	967	-10.0
14:25	-11.4	-11.0	934	-10.0
14:35	-11.5	-11.0	954	-10.0
14:45	-10.5	-11.0	960	-10.0
14:48	4.6	+5.0	~~785~~	+5
14:55	4.8	4.5	793	+5
15:05	4.8	4.5	797	+5
15:15	4.8	~~8.5~~	805	+5
15:25	4.8	4.5	805	+5

Time	Dow ΔP	Omni ΔP	Flow	Target ΔP
~~15:35~~ DIA 15:35	3.4	5.5	798	+5
15:45	4.5	5.5	810	+5
15:55	4.8	5.5	812	+5
16:05	4.8	4.5	806	+5
16:15	5.3	5.0	805	+5
16:25	5.5	5.0	811	



Rite in the Rain.

1/4

0056-H

5/3/16

Personal: QGB, RA
Objective: HAPSITE SURVEY, Pressure Cycle residence
Equip: HAPSITE, Omniguard, Blower door, AMS soil gas kit, field [illegible]
Weather: Sunny 70°F

0700 Arrived @ off-site. Ran calibration check. All analytes w/in calibration check QC parameter (≥ 70% RPD)

0815 MOB to 0056-H.

0905 Arrived @ 0056-H. Jeremy laid on-site. Resident allowed access. Begin initial HAPSITE. Setup omniguard in basement west window.

1035 Begin -5 pressure step

1145 Begin -10 pressure step

1240 End -10 pressure step, begin +5 pressure step

14:10 End +5 pressure step, run scan method on aerosol cans/containers in basement. No detects

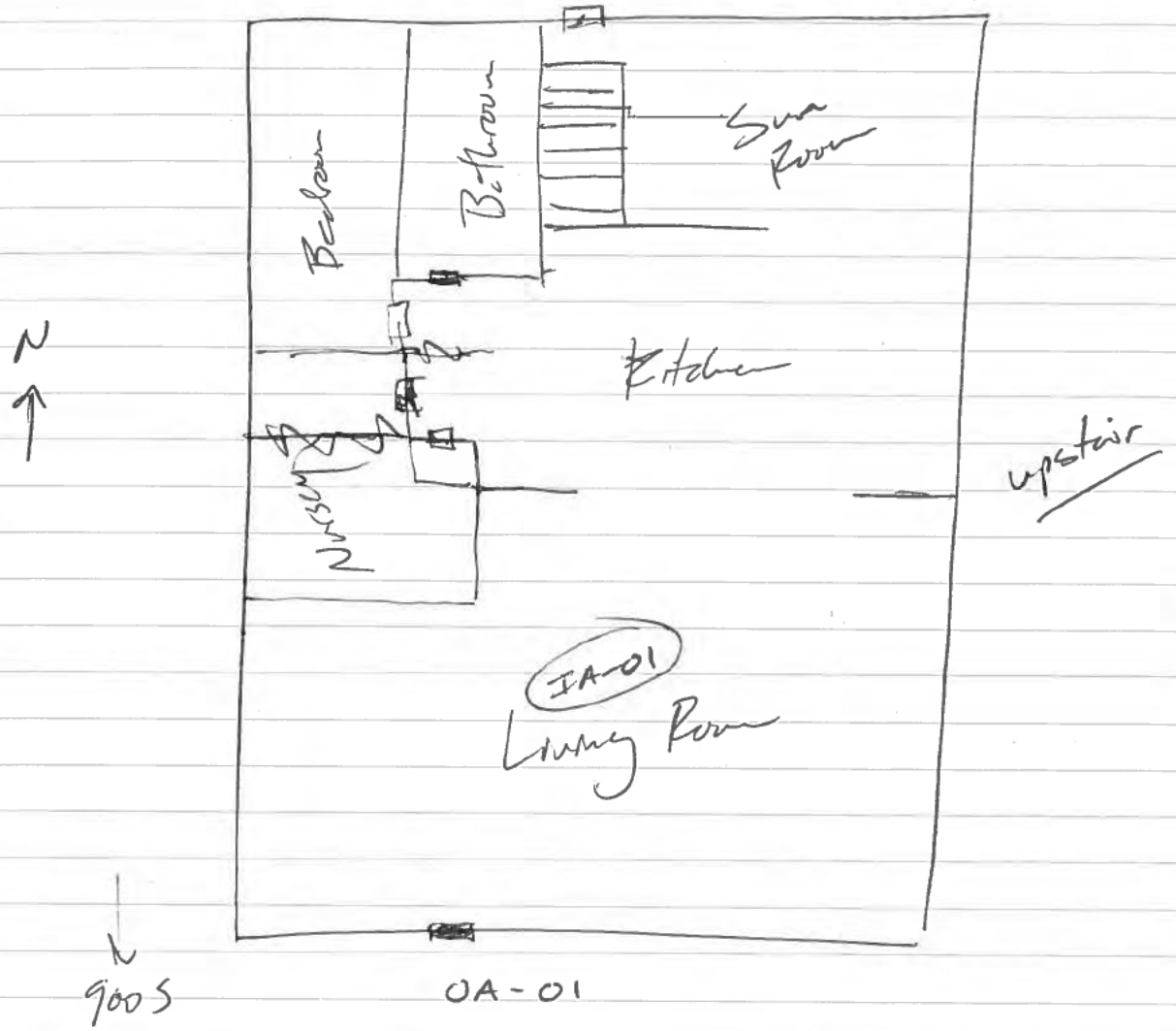
14:30 Collected soil gas samples @ ~~5.5~~ 4.5 ft BGS

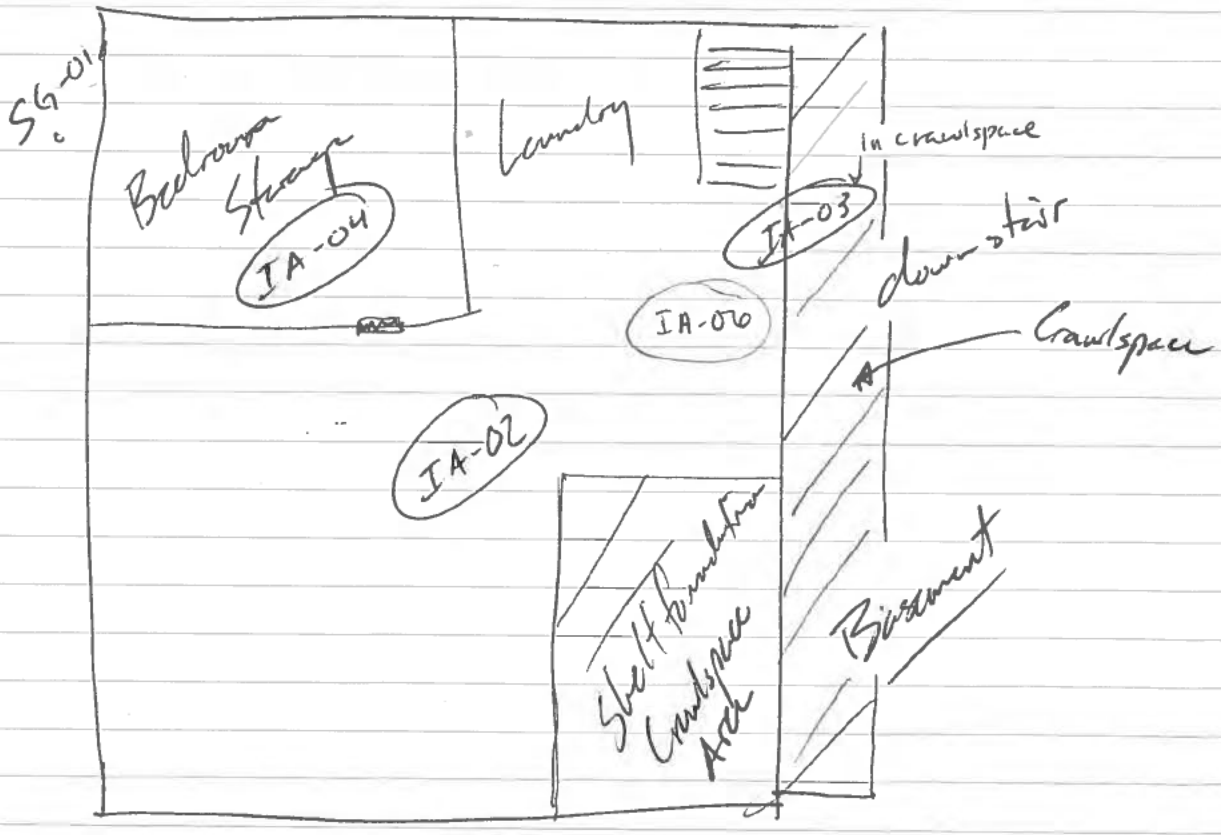
1545 MOB to SLC

CUSO-M

2/4

5/3/16





3/4

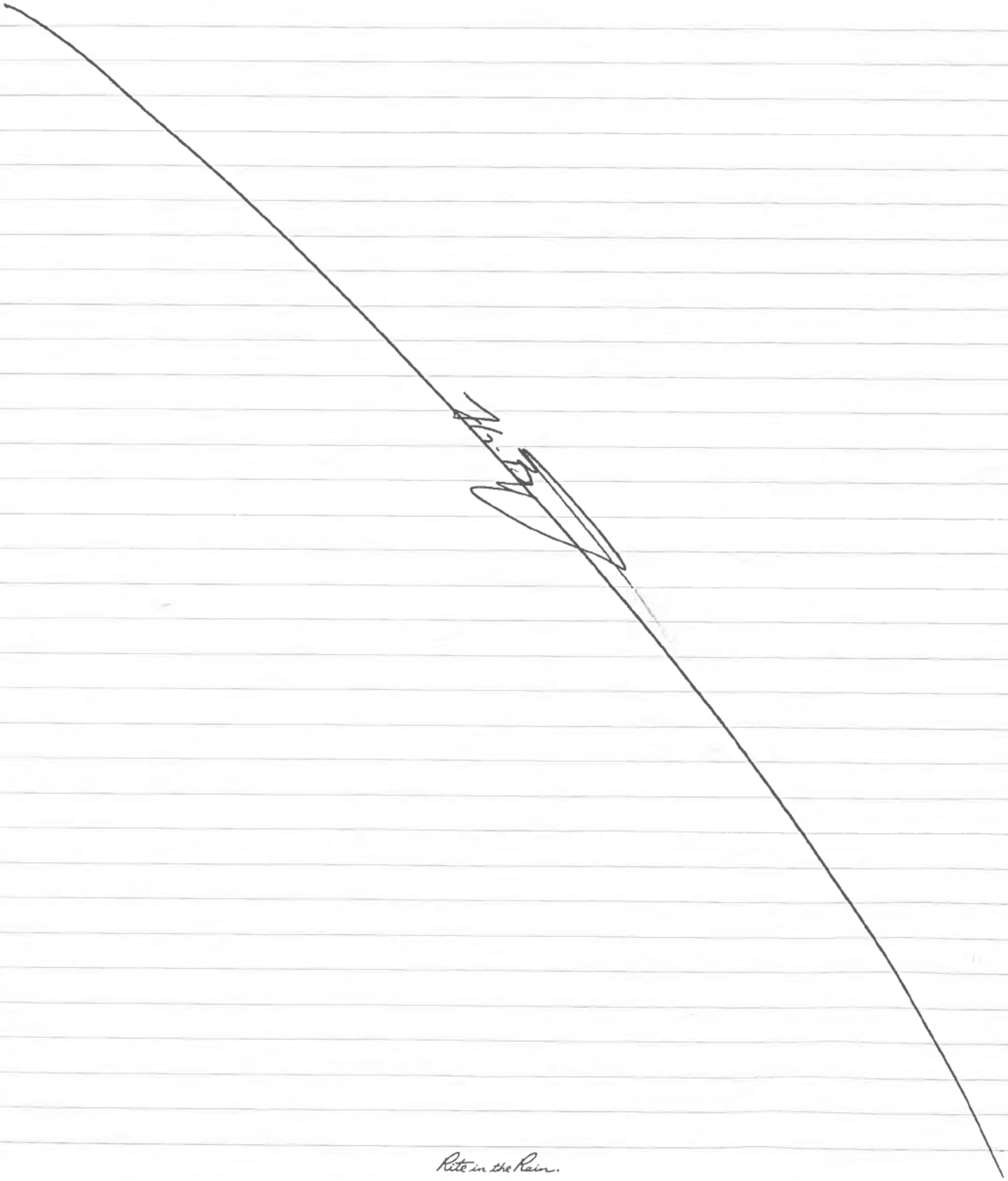
OOSO-11

Time	Door ΔP	Omni ΔP	Flow	Target ΔP
~~9:10~~ RA 10:10	-1.2	-1.0	0	~~0~~ RA
10:15	-1.4	-1.0	0	—
10:20	-0.2	-0.5	0	—
10:25	-0.5	-0.5	0	—
10:30	-0.6	-0.5	0	—
10:35	-4.8	-5.0	466	-5.0
10:40	-5.2	-5.0	451	-5.0
10:45	-4.8	-4.5	456	-5.0
10:50	-5.9	-4.5	455	-5.0
10:55	-4.9	-5.0	456	↓
11:00	-5.0	-4.5	455	↓
11:05	-4.6	-5.0	456	↓
11:10	-5.0	-5.5	457	↓
11:15	-5.1	-4.5	461	↓
11:20	-5.0	-4.5	455	↓
11:25	-5.1	-5.0	458	↓
11:30	-6.4	-6.0	462	↓
11:35	-5.0	-5.0	461	↓
11:40	-5.0	-5.5	470	↓
11:45	-10.2	-9.5	739	-10.0
11:50	-11.4	-12.0	737	↓
11:55	-10.0	-10.5	723	↓
12:00	-9.9	-9.5	723	↓
12:05	-9.7	-9.5	724	↓
12:10	-9.8	-11.5	722	↓
12:15	~~-12.0~~ RA -11.0	-11.0	719	↓
12:20	-10.8	-11.0	700	↓
12:25	-10.5	-10.0	701	↓
12:30	-10.2	-9.5	700	↓
12:35	-9.8	-9.5	695	↓
12:40	4.1	4.5	547	+5
12:45	4.5	5.5	550	↓
12:50	4.5	5.0	542	↓
12:55	5.3 ~~3.6~~ RA	4.5	547	↓
13:00	5.1	5.0	551	↓
13:05	4.2	4.5	552	↓
13:10	5.2	5.0	540	↓
13:15	4.8	5.0	541	↓
13:20	5.1	5.5	542	↓
13:25	5.0	5.0	548	↓

4/4

0056-11

Time	Dow ΔP	Omni ΔP	Flow	Target ΔP
				+ 5
13:30	5.8	5.5	538	
13:35	5.2	5.0	537	
13:40	4.3	5.0	536	
13:45	4.8	4.5	537	
13:50	5.0	4.0	540	
13:55	4.2	5.0	538	
14:00	4.0	5.0	537	



Rite in the Rain.

6054-H

5/9/16

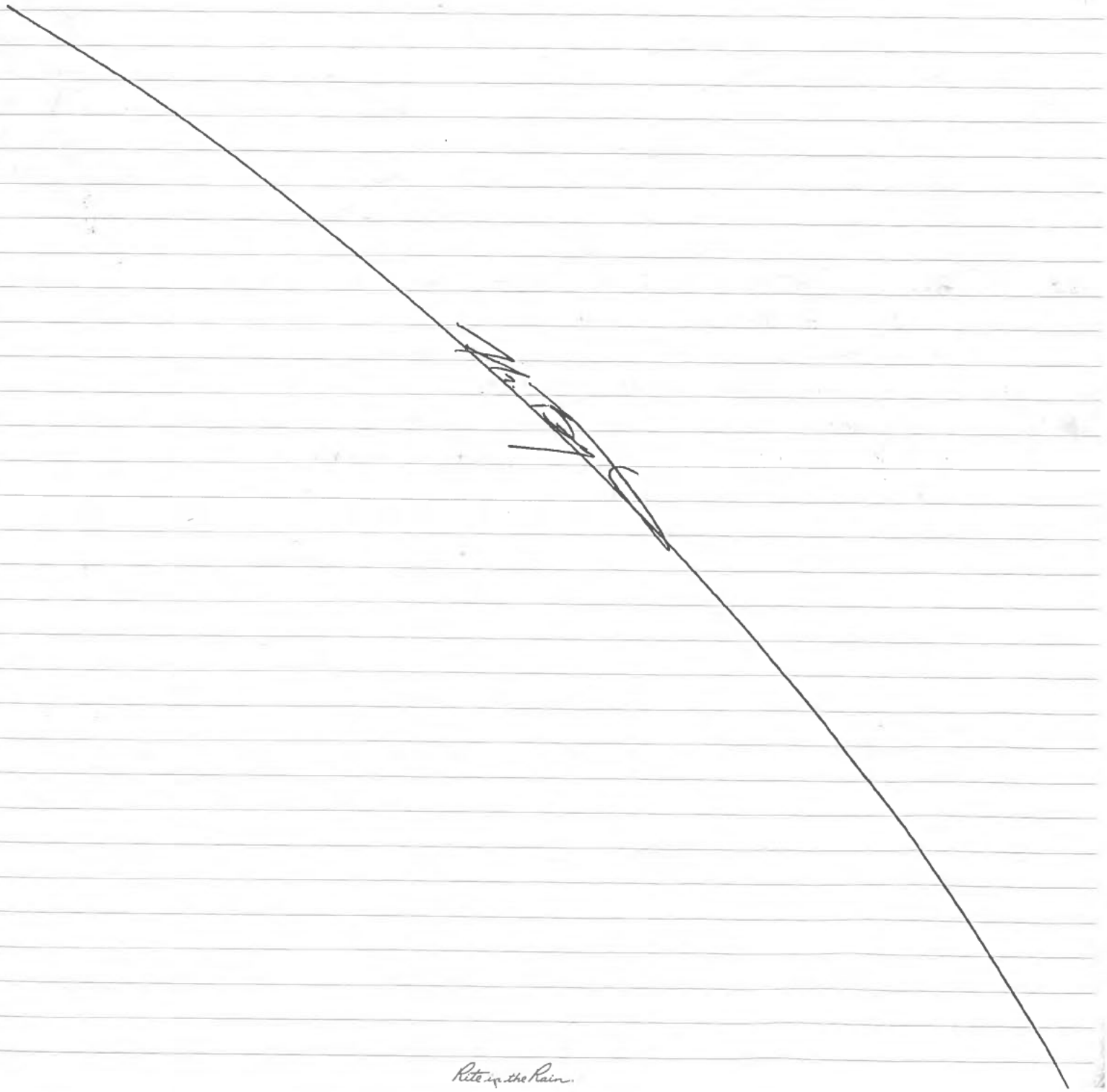
PERSONNEL: OGB, FA
OBJECTIVE: HAPSITE, Blower Door, Omniguard, field tools
EQUIPMENT: HAPSITE survey, pressure test resistance
WEATHER: Partly Cloudy 53°F
Client: FA
PN: 605353.77.01.04

0800 Ran calibration check. Didn't pass. Began new calibration.
Calibration range: 0.1 - 10 ppbv
Method: SIM-10078B_FA_20160509
0930 MOB to residence.
1010 Arrived @ residence. Jenny Lund on-site. Resident allowed access. Resident said he removed all products
1019 Began HAPSITE survey. CT5, PCE, and TCE present on both floors. Two-story home. Furnace was on
1100 Turned off furnace
1110 Standing water in basement sump room. groundwater infiltration during snow thaw and rain events.
1145 Setup omniguard in basement bathroom.
1300 Trouble w/ HAPSITE. won't recognize the external power source. Performed board reset. HAPSITE began functioning properly again.
1359 Began -5 Pa pressure test. Overall, VOC concentrations seemed to be decreasing during pressure test.
1500 HAPSITE stopped working again. No enough time to troubleshoot and finish PCE. Plan to reschedule PC test once HAPSITE is functional again.
1530 MOB to SLC office

0057-H

5/9/16

TIME	DOOR ΔP (Pa)	OMNI ΔP (Pa)	FLOW (CFM)	TARGET P (Pa)
13:55	-4.1	-5.0	698	-5
14:05	-4.5	-5.0	689	-5
14:10	-4.4	-5.0	692	-5
14:15	-4.2	-4.5	693	-5
14:30	-4.6	-4.5	715	-5
14:40	-4.4	-4.5	717	-5
14:50	-4.9	-4.5	731	-5
15:00	-4.9	-5.0	749	



Rite in the Rain.

0055-H

PERSONNEL: QGB, RA PRESSURE CYCLING 5/13/16

Objective: Pressure cycle residence

Equipment: HAPSITE, Blower door, omniguard, field tools, Ams soil gas kit.

Weather: sunny, 70°F

PN: 665353.ZZ01.04

0600 Arrived @ office. Calibrated HAPSITE since calibration check didn't meet QC requirements. Calibration range 0.1-10 ppbv
Method: SIM_100PBB_VA_20160513.

0800 MOB to 0055H.

0845 Arrived @ 0055-H. HAPSITE failed to recognize the external power source. Racked MOB to office to ~~pickup~~ pick up different ext. power source. Rest board. Didn't fix issue.

1010 Racked back on-site. different ext. power source fixed issue. Began baseline sampling.

1039 No interior background sources were identified. Resident had removed the two items found in the laundry room on our first visit to schedule this appointment.

1105 Began -5 Pa pressure test. Home volume = 28,000 ft³
-5 Pa PC Q = 950 CFM

1229 -10 Pa PC test began. ~~Home vo~~ Q = 1551 CFM

1320 Began +5 Pa pressure test.

1420 Soil gas sample collected from westside of home (backyard) @ depth of ~5 ft bgs.

1540 Left site. MOB to SLC office. Run CCV. Passed

5/13/16

Time	Fan CFM	Fan ΔP	Omni ΔP
10 45	0	-0.6	-0.5
10 50	0	-0.6	0.0
10:55	0	-0.2	0.0
11:00	0	-0.3	0.0
11:05	0 ~~0.1~~ RA	-0.1	0 0
11:05	995 ~~336~~ RA	-5.7	-5.5
11:15	987	-5.7	-5.5
11:25	839 ~~903~~ RA	-5.4	-5.0
11:35	826	-6.4	-5.5
11:45	985	-5 2	-5.0
11:55	968	-5.5	-5.0
12:05	988	-5.5	-5.0
12:15	983	-5.2	-5.0
12:25	982	-5.4	-5.0
12:25	1501	-10.1	-9.5
12:35	1548	-10.7	-11.0
12:45	1567	-10.0	-10.0
12:55	1534	-10.3	-16
13:05	1581	-10.6	-10
13:15	1575	-10.2	-9.5
13:20	997	4.4	5.0
15:30	1099	5.1	5.0 ~~6.0~~ RA
13:40	1154	4.0	5.0
13:50	1115	5 4	6.0
14:00	1014	3.8	5.0
14:10	1011	4.0	5.0
~~14:20~~ 14:15	1013	3.8	5.0

Rite in the Rain.

0054-H

5/18/11

Personnel: QGB
Objective: HAPSITE survey at residence to confirm interior source.
Equipment: HAPSITE, field tools, AMS soil gas sampling kit
Weather: Sunny 68°F

0800 Began HAPSITE calibration. ~~Range 0.1-10 ppbv~~ (QB) Ran 5 ppbv calibration check on SPM 100PPB-VA_20160513 and it passed. No calibration required.

0915 Loaded equipment and MOB to 0054-H.

1000 Arrived @ 0054-H. Resident met us outside the home and expressed how sampling today would not be possible since her father just had a stroke, her husband just had emergency back surgery. She also expressed concern about actually having any additional sampling completed. Jeremy and I expressed our understanding and left under the understanding we would follow up soon.

1030 MOB to VA office. Had conference call w/ Novak and VA to discuss pathforward.
Jeremy spoke w/ resident. They agreed to do the sampling today

1130 On-site w/ Jeremy Laird and Lynne Welsh. Jeremy mentioned to me that she intended to remove everything from shop area (expected compartment w/ indoor source) in the next two weeks. I explain to Lynne and Jeremy that it would be ~~good~~ better to sample after cleaning out the shop area. ~~[illegible]~~ Sampling after shop area is cleaned will provide more informative data.
Jeremy called and left a VM w/ the wife and spoke w/ the husband regarding this pathforward. He agreed to it. Jeremy plans to send email explaining the pathforward.

1200 MOB to SLC office

0053-H

5/23/16

Personal QGB, Jeremy Laird
Objective: deploy 2 6-L Summas w/ basement and collect soil gas samples for TO-15 analysis
Weather: 65°F Sunny
Equipment: Summas, AMS soil gas test, field tools
1000 Loaded equipment into field vehicle.
1050 Arrived @ 0053-H
1053 Jeremy Laird on-site.
1100 Allowed entrance into residence.
Set up two 6-L Summa is basement mean room. 24hr samples.

INDOOR AIR SAMPLES

Sample ID: A-0053H-052416-IA-BAS
Canister ID: 0376/4803 FC: 0466/00347
IP: -24.56 inHg FP: -3.64 inHg
Start time: 11:04 am End time: 08:30 am
S. Date: 5/23/16 E. Date: 5/24/16

Sample ID: A-0053H-052416-IA-BAS-D
Canister ID: 0357/3258 FC ID: 0152/
IP: -24.61 inHg FP: ~~[illegible]~~ (QB)
Start time: 11:04 am End time: 08:30 am
S. Date: 5/23/16 E. Date: 5/24/16

Digital Image: CH2M SN Z3331

SOIL GAS SAMPLES

Collect in backyard (Northside of home) between patio + AC unit @ ~6.5ft bgs
Sample ID: A-0053H-052316-SG-(QB) 001-6'
Canister ID: 0037 FC ID: not used
IP: -25.45 inHg FP: -5.44 inHg
Start time: 12:10 End time 12:10
Date: 5/23/16
Sample ID: A-0053H-052316-SG-001-6'
Canister ID: 0050 FC ID: not used
IP: -25.50 inHg FP -5.47 inHg
Start time: 12:15 End time: 12:15
Date: 5/23/16

★ One liter purged prior to sample collection. Lung box used to purge + collect sample. 1-liter tedlar bag filled then placed on summa to transfer. This was required since ~~[illegible]~~ required to collect sample

Rite in the Rain

OU3-11

Soil Gas Samples 5/23/16

⇒ The two summa soil gas samples were not true splits. One liter of soil gas was purged prior to each summa collection. Each sample was collected in a Tedlar bag and then evacuated into a summa.

12:30 Scheduled to return on 5/24/16 @ 0830 to pick up 24-hr Summas deployed in basement

0054-H

6/3/16

Personnel: QGB, RA, Jeremy Laird
Objective: Pressure cycle residence
Equipment: HAPSITE, Omniguard, blower door, field tool
Weather: Sunny 70°F

0800 Arrived @ office. Loaded equipment into field vehicle.
0 HAPSITE calibrated on 6/2/16. Calibration range 0.1–10 ppbv. Method: STM-~~[illegible]~~PPB-VA-080216 CCV (5ppbv) passed.

0830 MO3 to 0054-H.

0915 Arrived @ 0054-H.

0930 Jeremy Laird arrived @ 0054-H. Allowed entrance to residence. Resident requested that he not be bothered during PCing. He is in separate basement room.
Shop in basement has plastic covering slated doors to the shop. Resident claimed everything has been removed from shop. Removed 2 days ago.
Shop area indicated potential indoor source last sampling round. Hence this sampling event.

1000 Installed Omniguard IV in basement bathroom window (Northside)

1125 −5 Pa PC began. Blower installed upstairs in back entrance door

1304 −10 Pa PC began

1455 +5 Pa PC began

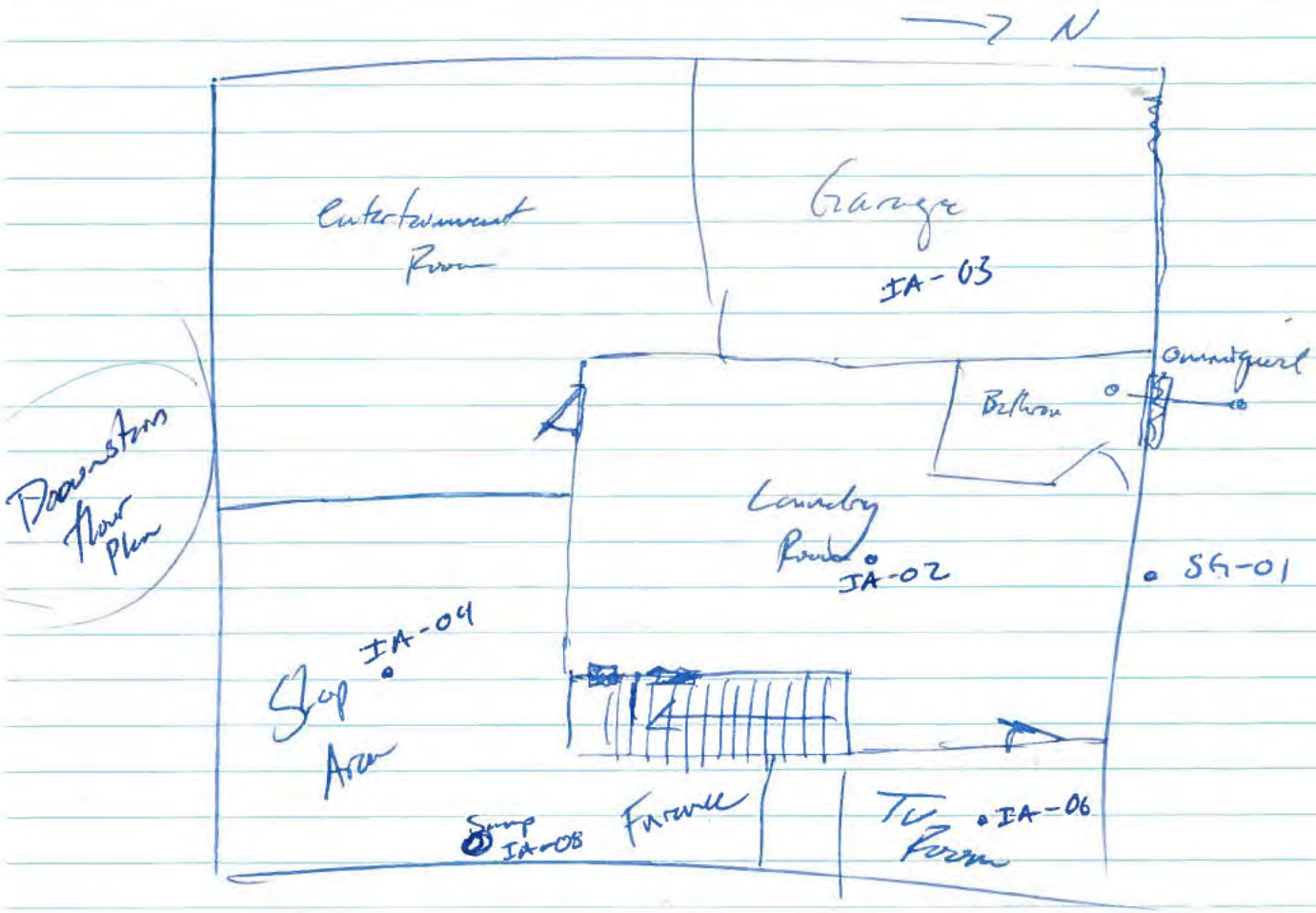
~~[illegible]~~ (3) 1630 Ended +5 Pa PC.

1640 Collected soil gas sample on north side of residence near basement laundry room windows. Collected from approximately 7 ft bgs. Purged 2-L and analyzed 3rd liter.

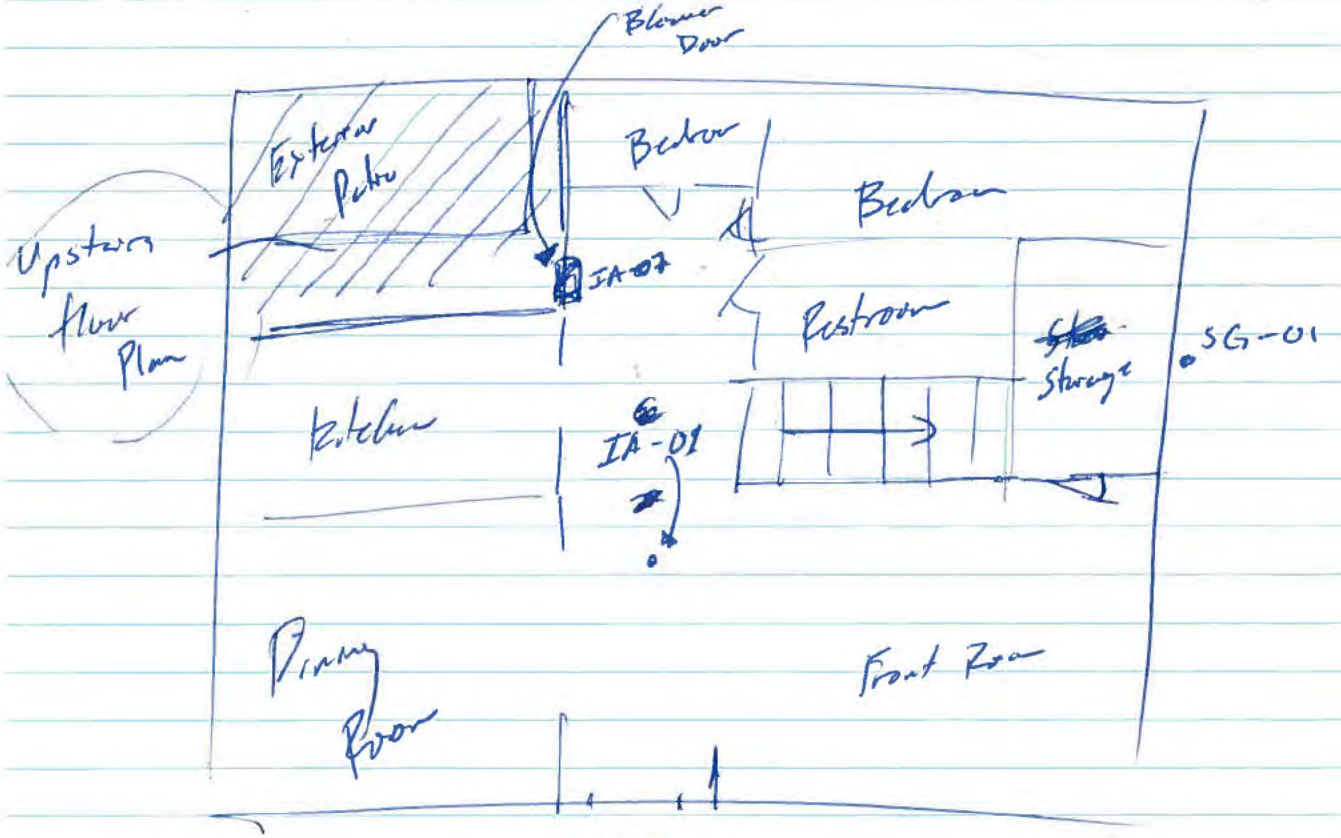
1700 Left residence.

QGB

0054-H



N
Entertainment Room
Garage
IA-03
Omniquest
Bathroom
Downstairs floor Plan
Laundry Room
IA-02
SG-01
IA-04
Shop Area
Sump IA-08
Furnace
TV Room
IA-06



Blower Door
Exterior Patio
Bedroom
Bedroom
Upstairs floor Plan
IA-07
Restroom
Storage
SG-01
Kitchen
IA-01
Dining Room
Front Room
OA-01

6/3/16

Time	ΔP omni	ΔP Fan	CFM
10:50	0.0	0.2	0
10:55	-0.5	0.2	0
11:00	0.5	0.2	0
11:05	0.0	-0.2	0
11:25	-5.0	-5.2	808
11:35	-4.0	-5.2	767
11:45	-4.5	-5.4	795
11:55	-5.5	-5.1	800
12:05	-4.5	-5.8	807
12:25	-5.0	-5.3	814
12:40	-5.0	-5.6	811
12:55	-5.0	-5.4	814
1304	-10.5	-9.8	1200
1315	-10.0	-10.0	1200
1325	-10.0	-9.6	1181
1345	-10.5	-10.5	1186
1400	-10.5	-10.7	1185
1410	-9.5	-10.3	1206
1430	-10.0	-16.1	1207
1440	-9.5	-10.1	1194
1455	+5.0	+2.5	741
1505	4.5	3.3	767
1515	5.0	4.6	790
1525	5.0	4.7	796
1535	5.0	4.8	791
1545	4.5	3.4	780
~~1555~~ 1600	4.5	3.6	778
1610	4.5	4.5	790
1620	4.5	4.2	784

1491 596

Rite in the Rain.

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Appendix D
Chain-of-Custody Forms

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ALS Environmental
Field Chain-of-Custody Record

CoC #: 001

Page 1 of 1

Client Name & Address:	Project Name & No.:
Chevron 4246 S. Riverboat Rd Suite 210 Taylorsville, UT 84121	665353-77.01.04
	ALS Quote No: 10006-7-104589
	Report to: mark.cichy@chevron.com
Phone: 385-474-8505	Report to e-mail:
e-mail: Quin.bingham@chevron.com	Bill to:

Field Sample Number	Date	Time	Depth	ALS Sample Number	No. of Containers	Sample for Matrix QC	Analyses Requested: SIM TO-15 VOC								Preservation Code	Sample Matrix Code	Remarks
A-001H-030316-JA-012A-LLL	3/1/16	0830	—	Canister 3477	1	W	✓									A	Final P= -0.14 in Hg
~~A-001H-030316-JA-BAS~~	~~3/3/16~~	~~1030~~	~~—~~	~~Canister 0361~~	~~1~~		✓	DO NOT ANALYZE ★								A	Final P: 0.43 in Hg
~~A-001H-030316-JA-BAS-D~~	~~3/3/16~~	~~1030~~	~~—~~	~~Canister 0217~~	~~1~~		✓	DO NOT ANALYZE							★	A	Final P: 0.41 in Hg
A-003H-030316-JA-BAS	3/3/16	0958	—	Canister 0422	1		✓									A	Final P: -6.3 in Hg
~~A-001H-030516-JA-BAS~~	~~3/3/16~~	~~1515~~	~~—~~	~~Canister 0144~~	~~1~~		✓	DO NOT ANALYZE							★	A	Final P: 0.41 in Hg

Matrix Codes: W) Water, B) Bulk, L) Liquid, F) Filter, S) Soil, G) Wipe, C) Solid, M) Media

Preservation Codes: 1) Cool to 4°C; 2) HCl to pH<2, 4°C; 3) H_2SO_4 to pH<2, 4°C; 4) HNO_3 to pH<2, 4°C; 5) NaOH to pH>12, 4°C; 6) ZnOAc/NaOH to pH>9, 4°C

Possible Hazard Identification
- ☑ Non-Hazard
- ☐ Flammable
- ☐ Skin Irritant
- ☐ Poison
- ☐ Rad
- ☐ Unknown

Sample Disposal
- ☐ Return to Client
- ☐ Archive ____ Months
- ☑ Disposal by Lab

(fees assessed for samples retained > 3 months)

Data Deliverable:
- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☑ Level 4

EDD Type: LabSpec 7

Requested Turn Around Time
- ☐ 2 Days (Rush)
- ☐ 3 Days (Rush)
- ☐ 7 Days (Rush)
- ☒ 14 Days

(Rush = email data by COB on day due. Surcharges assessed.)

Carrier/Airbill #: NONE

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	3/3/16	1720		03/04/16	17:17
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Shipped to:

ALS Environmental
960 West LeVoy Drive
Salt Lake City, UT 84123
Phone: (800) 356-9135
Phone: (801) 266-7700
FAX: (801) 268-9992
WEB: www.alsglobal.com

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ALS Environmental
Field Chain-of-Custody Record

CoC #: 002

Page 1 of 1

Client Name & Address: Chem Hill, 4246 S Riverboat Rd, Suite 210, Taylorsville, UT 84123	Project Name & No.: 665353.77.01.04
	ALS Quote No: 10006-7-104589
	Report to: Mark Cichy
Phone: 385-474-8525	Report to e-mail: mark.cichy@chem.com
e-mail: Quin.bingham@chem.com	Bill to: 665353.77.01.04

Field Sample Number	Date	Time	Depth	ALS Sample Number	No. of Containers	Sample for Matrix QC	Analyses Requested: TO-15 ★	Analyses Requested: TAT	Preservation Code	Sample Matrix Code	Remarks
A-0037H-030816-IA-LAU	3/9/16	0945	—	Canister 0370	1		1	14		A	Final P=-0.71 inHg
A-0040H-031216-IA-KIT	3/12/16	1238	—	Canister 0162	1		1	14		A	Final P= -1.26 inHg
A-0040H-031216-IA-BAS	3/12/16	1238	—	Canister 0086	1		1	3 ← RUSH		A	Final P=-0.26 inHg
A-0040H-031216-IA-BAS-D	3/12/16	1238	—	Canister 0114	1		1	14		A	Final P= -0.17 inHg

Matrix Codes: W) Water, B) Bulk, L) Liquid, F) Filter, S) Soil, G) Wipe, C) Solid, M) Media, A) air (indoor)

Preservation Codes: 1) Cool to 4°C; 2) HCl to pH<2, 4°C; 3) H_2SO_4 to pH<2, 4°C; 4) HNO_3 to pH<2, 4°C; 5) NaOH to pH>12, 4°C; 6) ZnOAc/NaOH to pH>9, 4°C

Possible Hazard Identification
☒ Non-Hazard ☐ Skin Irritant ☐ Rad
☐ Flammable ☐ Poison ☐ Unknown

Sample Disposal
☐ Return to Client ☐ Archive ____ Months
☒ Disposal by Lab
(fees assessed for samples retained > 3 months)

Data Deliverable:
☐ Level 1 ☐ Level 3
☐ Level 2 ☒ Level 4
EDD Type: Lab spec 7

Requested Turn Around Time
☐ 2 Days (Rush) ☐ 7 Days (Rush)
☐ 3 Days (Rush) ☐ 14 Days
(Rush = email data by COB on day due. Surcharges assessed.)

Carrier/Airbill #:

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	3/14/16	1204		03/14/16	12:07
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Shipped to:
ALS Environmental
960 West LeVoy Drive
Salt Lake City, UT 84123
Phone: (800) 356-9135
Phone: (801) 266-7700
FAX: (801) 268-9992
WEB:www.alsglobal.com

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ALSCoC 121013 ★ = HC, CIS/2 DCE, TCE, PCE by TO-15 SIM ; SCAN for rest of these (see table 7 attch. 1.1) 12/12/2013

ALS Environmental
Field Chain-of-Custody Record

CoC #: C023

Page 1 of 1

Client Name & Address:	Project Name & No.:
CH2M HILL 4246 S. Riverboat Rd Suite 210 Taylorsville, UT 84123	665353.77.01.04
	ALS Quote No: 10006-7-104589
	Report to: Mark Lichy
Phone: 385-474-8525	Report to e-mail: mark.lichy@ch2m.com
e-mail: Quin.bingham@ch2m.com	Bill to: 665353.77.01.04

Field Sample Number	Date	Time	Depth	ALS Sample Number	No. of Containers	Sample for Matrix QC	Analyses Requested: TO-15	Preservation Code	Sample Matrix Code	Remarks
A-0017H-031616-IA-BAS	3/16/16	1554	—	Canister 0228	1		✓		A	Final P= -3.52 inHg
A-0018H-031616-IA-BAS	3/16/16	1559	—	Canister 0196	1		✓		A	Final P= 0 inHg
A-0051-031616-IA-BAS	3/16/16	1900	—	Canister 0304	1		✓		A	Final P= 0 inHg
A-0057-031616-IA-BAS-D	3/16/16	~~1900~~	—	Canister 0163	1		✓		A	Final P= -6.5 inHg
A-0073-031616-IA-BA1	3/16/16	1759	—	Canister 0371	1		✓		A	Final P= -4.3 inHg

Matrix Codes: W) Water, B) Bulk, L) Liquid, F) Filter, S) Soil, G) Wipe, C) Solid, M) Media, A) Indoor Air

Preservation Codes: 1) Cool to 4°C; 2) HCl to pH<2, 4°C; 3) H_2SO_4 to pH<2, 4°C; 4) HNO_3 to pH<2, 4°C; 5) NaOH to pH>12, 4°C; 6) ZnOAc/NaOH to pH>9, 4°C

Possible Hazard Identification
☑ Non-Hazard ☐ Skin Irritant ☐ Rad
☐ Flammable ☐ Poison ☐ Unknown

Sample Disposal
☐ Return to Client ☐ Archive ____ Months
☑ Disposal by Lab
(fees assessed for samples retained > 3 months)

Data Deliverable:
☐ Level 1 ☐ Level 3
☐ Level 2 ☑ Level 4
EDD Type: Lab Spec 7

Requested Turn Around Time
☐ 2 Days (Rush) ☐ 7 Days (Rush)
☐ 3 Days (Rush) ☑ 14 Days
(Rush = email data by COB on day due. Surcharges assessed.)

Carrier/Airbill #:

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	3/21/16	1718		03-21-16	17:16
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Shipped to:
ALS Environmental
960 West LeVoy Drive
Salt Lake City, UT 84123
Phone: (800) 356-9135
Phone: (801) 266-7700
FAX: (801) 268-9992
WEB:www.alsglobal.com

White - Laboratory Copy *Yellow - Client Copy*

ALSCoC 121013 12/12/2013

★ 1,4-Dioxane, VC, ~~1,2~~ cis 1,2 DCE, TCE, PCE by TO-15 SIM; SCAN for all other VOCs. See attached analytes table

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Appendix E
HAPSITE Data Reports

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LOCATION: 0040-H
SAMPLE DATE: 10-Mar-16

Unknown Identification Report
Date: 03/11/16 Time: 16:39:12
Calibration Method:
/Haps/Method/Analyze/Concentrator/Hill Vapor Intrusion Cal 2 min SIM.mth
Tune File:
default.tun
Method Description:
SIM cVOC Method in order of elution
cis-DCE; TCE; PCE
General Quantification Range from 0.1
ppbv to 50 ppbv

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_042.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 5:39:16 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.7	0.933	1	8260202	3.73	
130	02:38.1	TCE	02:33.9	0.905	1	12565433	4.314	
166	03:38.9	PCE	03:31.7	0.994	1	15995804	4.248	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_041.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 5:30:50 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.9	0.701	1	49635	0.022	
130	02:38.1	TCE	02:33.4	0.908	1	27949	0.01	
166	03:38.9	PCE	03:31.8	0.994	1	2496321	0.663	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_040.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.94759 Min Longitude: W 111 Deg 51.45630 Min GMT: 03/10/16 10:02:52 PM

Acquisition Date and Time: 3/10/2016 5:12:16 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.3	0.697	1	110492	0.05	
130	02:38.1	TCE	02:33.8	0.902	1	54645	0.019	
166	03:38.9	PCE	03:32.2	0.995	1	816767	0.217	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_039.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.98604 Min Longitude: W 111 Deg 51.43341 Min GMT: 03/10/16 09:54:27 PM

Acquisition Date and Time: 3/10/2016 5:03:51 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:59.9	0.746	1	59515	0.027	
130	02:38.1	TCE	02:35.4	0.911	1	15465	0.005	
166	03:38.9	PCE	03:34.3	0.995	1	158752	0.042	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_038.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 4:41:52 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:59.1	0.545	1	5833	0.003	
130	02:38.1	TCE	02:34.6	0.839	1	8730	0.003	
166	03:38.9	PCE	03:34.1	0.994	1	183513	0.049	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_037.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.95995 Min Longitude: W 111 Deg 51.44257 Min GMT: 03/10/16 09:11:16 PM

Acquisition Date and Time: 3/10/2016 4:20:40 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.8	0.947	1	13949	0.006	
130	02:38.1	TCE	02:34.0	0.899	1	19751	0.007	
166	03:38.9	PCE	03:31.7	0.994	1	325802	0.087	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_036.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.96201 Min Longitude: W 111 Deg 51.44211 Min GMT: 03/10/16 09:02:43 PM

Acquisition Date and Time: 3/10/2016 4:12:07 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:59.1	0.833	1	7909	0.004
130	02:38.1	TCE		02:33.8	0.897	1	21513	0.007
166	03:38.9	PCE		03:31.5	0.993	1	368663	0.098

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_035.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.98856 Min Longitude: W 111 Deg 51.45630 Min GMT: 03/10/16 08:54:01 PM

Acquisition Date and Time: 3/10/2016 4:03:25 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		02:00.7	0.902	1	5284	0.002
130	02:38.1	TCE		02:37.0	0.899	1	9635	0.003
166	03:38.9	PCE		03:31.9	0.994	1	414807	0.11

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_034.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 3:54:46 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:59.7	0.914	1	10980	0.005
130	02:38.1	TCE		02:33.7	0.909	1	22468	0.008
166	03:38.9	PCE		03:32.3	0.996	1	463693	0.123

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_033.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 3:46:14 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.4	0.896	1	6620	0.003
130	02:38.1	TCE		02:33.8	0.906	1	27757	0.01
166	03:38.9	PCE		03:31.7	0.993	1	598226	0.159

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_032.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 3:37:37 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
	61	02:00.6 cis-1,2 DCE		01:57.7	0.945	1	7382	0.003
	130	02:38.1 TCE		02:42.0	0.523	1	6244	0.002
	166	03:38.9 PCE		03:31.7	0.994	1	589411	0.157

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_031.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 3:29:05 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
	61	02:00.6 cis-1,2 DCE		01:57.6	0.7	1	12657	0.006
	130	02:38.1 TCE		02:33.0	0.903	1	25934	0.009
	166	03:38.9 PCE		03:31.4	0.993	1	595174	0.158

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_030.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 3:20:26 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
	61	02:00.6 cis-1,2 DCE		01:57.6	0.871	1	21995	0.01
	130	02:38.1 TCE		02:33.8	0.909	1	92436	0.032
	166	03:38.9 PCE		03:31.7	0.994	1	1437663	0.382

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_029.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 3:08:17 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
	61	02:00.6 cis-1,2 DCE		01:58.1	0.915	1	283366	0.128
	130	02:38.1 TCE		02:33.6	0.906	1	6629852	2.276
	166	03:38.9 PCE		03:31.5	0.995	1	83387000	22.15

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_028.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 2:59:23 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.8	0.931	1	37815	0.017
130	02:38.1	TCE		02:33.2	0.903	1	228727	0.079
166	03:38.9	PCE		03:31.6	0.994	1	6434059	1.709

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_027.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 2:50:47 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.1	0.945	1	134381	0.061
130	02:38.1	TCE		02:33.5	0.906	1	782517	0.269
166	03:38.9	PCE		03:31.2	0.993	1	14040683	3.729

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_026.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 2:41:46 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.2	0.94	1	23197	0.01
130	02:38.1	TCE		02:33.0	0.908	1	87420	0.03
166	03:38.9	PCE		03:31.5	0.993	1	2342361	0.622

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_025.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 2:33:12 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.3	0.921	1	61108	0.028
130	02:38.1	TCE		02:33.8	0.906	1	457035	0.157
166	03:38.9	PCE		03:31.5	0.994	1	11404103	3.029

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_024.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 2:23:59 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.9	0.946	1	118292	0.053
130	02:38.1	TCE		02:33.5	0.905	1	749614	0.257
166	03:38.9	PCE		03:31.9	0.994	1	13678539	3.633

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_023.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 2:08:19 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.5	0.932	1	41898	0.019
130	02:38.1	TCE		02:34.6	0.906	1	168628	0.058
166	03:38.9	PCE		03:33.4	0.994	1	4131592	1.097

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_022.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 1:59:42 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.2	0.9	1	61436	0.028
130	02:38.1	TCE		02:33.7	0.906	1	369218	0.127
166	03:38.9	PCE		03:31.5	0.994	1	8738196	2.321

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_021.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 1:51:05 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.2	0.948	1	157219	0.071	
130	02:38.1	TCE	02:33.6	0.904	1	916428	0.315	
166	03:38.9	PCE	03:31.3	0.993	1	17786360	4.724	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_020.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 1:42:29 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.0	0.925	1	57612	0.026	
130	02:38.1	TCE	02:33.4	0.904	1	247470	0.085	
166	03:38.9	PCE	03:31.9	0.994	1	5929821	1.575	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_019.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 1:32:47 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.4	0.88	1	62093	0.028	
130	02:38.1	TCE	02:33.8	0.903	1	323937	0.111	
166	03:38.9	PCE	03:31.7	0.994	1	8081341	2.146	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_018.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 1:24:10 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.4	0.949	1	194763	0.088	
130	02:38.1	TCE	02:33.9	0.905	1	1174578	0.403	
166	03:38.9	PCE	03:31.6	0.994	1	22175480	5.89	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_017.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 1:15:10 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.8	0.934	1	128828	0.058
130	02:38.1	TCE		02:33.5	0.901	1	448561	0.154
166	03:38.9	PCE		03:31.9	0.994	1	10121364	2.688

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_016.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 1:06:38 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.4	0.933	1	90343	0.041
130	02:38.1	TCE		02:33.8	0.903	1	482720	0.166
166	03:38.9	PCE		03:32.5	0.994	1	11187775	2.971

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_015.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.95308 Min Longitude: W 111 Deg 51.44348 Min GMT: 03/10/16 05:48:31 PM

Acquisition Date and Time: 3/10/2016 12:57:55 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.4	0.949	1	120347	0.054
130	02:38.1	TCE		02:33.9	0.904	1	784896	0.269
166	03:38.9	PCE		03:31.5	0.993	1	15902505	4.223

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_014.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.95972 Min Longitude: W 111 Deg 51.46408 Min GMT: 03/10/16 05:22:34 PM

Acquisition Date and Time: 3/10/2016 12:31:59 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.8	0.946	1	97234	0.044	
130	02:38.1	TCE	02:33.3	0.903	1	904668	0.311	
166	03:38.9	PCE	03:31.2	0.994	1	14988816	3.981	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_013.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.96819 Min Longitude: W 111 Deg 51.45264 Min GMT: 03/10/16 04:47:01 PM

Acquisition Date and Time: 3/10/2016 11:56:25 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.3	0.93	1	254896	0.115	
130	02:38.1	TCE	02:32.8	0.894	1	1044383	0.359	
166	03:38.9	PCE	03:30.3	0.993	1	18649740	4.953	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_012.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 11:47:24 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.5	0.948	1	302981	0.137	
130	02:38.1	TCE	02:33.0	0.902	1	1577506	0.542	
166	03:38.9	PCE	03:30.7	0.995	1	28154784	7.478	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_009.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.95148 Min Longitude: W 111 Deg 51.45264 Min GMT: 03/10/16 04:13:56 PM

Acquisition Date and Time: 3/10/2016 11:23:14 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.5	0.918	1	200125	0.09	
130	02:38.1	TCE	02:33.0	0.902	1	807553	0.277	
166	03:38.9	PCE	03:30.9	0.995	1	12511684	3.323	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_008.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.95926 Min Longitude: W 111 Deg 51.44760 Min GMT: 03/10/16 04:05:13 PM

Acquisition Date and Time: 3/10/2016 11:14:31 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.4	0.88	1	304478	0.137	
130	02:38.1	TCE	02:32.8	0.865	1	667254	0.229	
166	03:38.9	PCE	03:30.4	0.994	1	10765216	2.859	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_007.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.95079 Min Longitude: W 111 Deg 51.43845 Min GMT: 03/10/16 03:55:14 PM

Acquisition Date and Time: 3/10/2016 11:04:32 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.6	0.921	1	345401	0.156	
130	02:38.1	TCE	02:33.1	0.899	1	1363969	0.468	
166	03:38.9	PCE	03:30.8	0.995	1	21483112	5.706	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_006.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.96223 Min Longitude: W 111 Deg 51.44714 Min GMT: 03/10/16 03:46:24 PM

Acquisition Date and Time: 3/10/2016 10:55:42 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.5	0.895	1	425251	0.192	
130	02:38.1	TCE	02:32.9	0.898	1	1496033	0.514	
166	03:38.9	PCE	03:30.4	0.993	1	23236060	6.171	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_005.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.98444 Min Longitude: W 111 Deg 51.46042 Min GMT: 03/10/16 03:33:17 PM

Acquisition Date and Time: 3/10/2016 10:42:35 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.0	0.929	1	281695	0.127	
130	02:38.1	TCE	02:32.5	0.9	1	1096605	0.376	
166	03:38.9	PCE	03:30.1	0.994	1	17459928	4.637	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_004.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.95949 Min Longitude: W 111 Deg 51.44989 Min GMT: 03/10/16 03:20:40 PM

Acquisition Date and Time: 3/10/2016 10:29:59 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:56.8	0.897	1	19426	0.009
130	02:38.1	TCE		02:33.0	0.906	1	13581	0.005
166	03:38.9	PCE		03:29.7	0.994	1	242291	0.064

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_003.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 10:08:35 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		02:00.7	0.725	1	21917	0.01
130	02:38.1	TCE		02:31.2	0.88	1	22855	0.008
166	03:38.9	PCE		03:28.2	0.999	1	59152	0.016

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_002.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 9:55:58 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:56.8	0.943	1	12052295	5.442
130	02:38.1	TCE		02:32.3	0.905	1	16439326	5.644
166	03:38.9	PCE		03:29.1	0.994	1	20838266	5.534

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_001.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 9:46:50 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:56.9	0.934	1	24141	0.011	
130	02:38.1	TCE	02:32.5	0.905	1	51671	0.018	
166	03:38.9	PCE	03:39.1	0.994	1	6285	0.002	

NOTES:
Act. = Actual.
AOU 1 = Accelerated Operable Unit 1 East Side Springs
cVOC = Chlorinated volatile organic compound.
DCE = Dichloroethene.
PCE = Tetrachloroethene.
ppb = Part(s) per billion.
ppbv = Part(s) per billion per volume.
Pred. = Predicted.
RT = Retention time.
TCE = Trichloroethene.
VA = Department of Veteran Affairs.

LOCATION: 0041-H
SAMPLE DATE: 8-Mar-16

Unknown Identification Report
Date: 03/14/16 Time: 14:37:38
Calibration Method:
/Haps/Method/Analyze/Concentrator/Hill Vapor Intrusion Cal 2 min SIM.mth
Tune File:
default.tun
Method Description:
SIM cVOC Method in order of elution
cis-DCE; TCE; PCE
General Quantification Range from 0.1
ppbv to 50 ppbv

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160307_003.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/7/2016 7:45:51 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:56.2	0.942	1	959664	0.5512	
130	02:38.1	TCE	02:31.7	0.905	1	1562424	0.5279	
166	03:38.9	PCE	03:28.4	0.993	1	1960927	0.4992	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_002.hps
GPS Info:
Latitude: N 40 Deg 45.03342 Min Longitude: W 111 Deg 51.52588 Min GMT: 03/08/16 04:37:38 PM

Acquisition Date and Time: 3/8/2016 11:46:57 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.8	0.542	1	410151	0.2356	
130	02:38.1	TCE	02:32.6	0.896	1	29599	0.01	
166	03:38.9	PCE	03:30.9	0.995	1	196341	0.04998	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_001.hps
GPS Info:
Latitude: N 40 Deg 45.10345 Min Longitude: W 111 Deg 52.01431 Min GMT: 03/08/16 03:39:12 PM

Acquisition Date and Time: 3/8/2016 10:48:31 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:59.9	0.599	1	172204	0.09891	
130	02:38.1	TCE	02:43.5	0.523	1	5284	0.00179	
166	03:38.9	PCE	03:34.0	0.994	1	113474	0.02889	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_003.hps
GPS Info:
Latitude: N 40 Deg 45.04784 Min Longitude: W 111 Deg 51.53320 Min GMT: 03/08/16 04:47:46 PM

Acquisition Date and Time: 3/8/2016 11:57:05 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.7	0.561	1	336521	0.1933	
130	02:38.1	TCE	02:41.2	0.523	1	5430	0.00183	
166	03:38.9	PCE	03:30.9	0.994	1	177032	0.04507	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_007.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/8/2016 12:41:05 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.9	0.524	1	390852	0.2245	
130	02:38.1	TCE	02:32.7	0.818	1	13541	0.00457	
166	03:38.9	PCE	03:45.1	0.624	1	8195	0.00209	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_004.hps
GPS Info:
Latitude: N 40 Deg 45.01625 Min Longitude: W 111 Deg 51.55380 Min GMT: 03/08/16 04:56:21 PM

Acquisition Date and Time: 3/8/2016 12:05:40 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.9	0.601	1	268825	0.1544	
130	02:38.1	TCE	02:39.2	0.91	1	5769	0.00195	
166	03:38.9	PCE	03:30.8	0.995	1	131366	0.03344	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_005.hps
GPS Info:
Latitude: N 40 Deg 45.04395 Min Longitude: W 111 Deg 51.54922 Min GMT: 03/08/16 05:04:56 PM

Acquisition Date and Time: 3/8/2016 12:14:15 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.3	0.524	1	378384	0.2173	
130	02:38.1	TCE	02:33.8	0.906	1	19205	0.00649	
166	03:38.9	PCE	03:30.8	0.993	1	173582	0.04419	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_008.hps
GPS Info:
Latitude: N 40 Deg 45.04372 Min Longitude: W 111 Deg 51.53732 Min GMT: 03/08/16 05:41:59 PM

Acquisition Date and Time: 3/8/2016 12:51:20 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.1	0.524	1	326471	0.1875	
130	02:38.1	TCE	02:33.5	0.881	1	24451	0.00826	
166	03:38.9	PCE	03:30.6	0.994	1	177975	0.04531	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_009.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/8/2016 1:26:47 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.3	0.55	1	225362	0.1294	
130	02:38.1	TCE	N/A	0	0	0		Not found with current search parameters
166	03:38.9	PCE	03:31.3	0.994	1	151772	0.03864	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_010.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/8/2016 1:35:36 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.5	0.645	1	65867	0.03783	
130	02:38.1	TCE	02:33.3	0.911	1	34479	0.01165	
166	03:38.9	PCE	03:31.0	0.993	1	1363734	0.3472	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_011.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/8/2016 1:44:11 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.3	0.553	1	319170	0.1833	
130	02:38.1	TCE	N/A	0	0	0		Not found with current search parameters
166	03:38.9	PCE	03:30.8	0.992	1	148548	0.03782	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_012.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/8/2016 1:52:50 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.4	0.804	1	72042	0.04138	
130	02:38.1	TCE	02:33.2	0.908	1	29418	0.00994	
166	03:38.9	PCE	03:31.6	0.995	1	1047003	0.2665	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_013.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/8/2016 2:01:29 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.1	0.524	1	41636	0.02391	
130	02:38.1	TCE	02:32.2	0.908	1	17778	0.00601	
166	03:38.9	PCE	03:31.5	0.995	1	850250	0.2165	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_015.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/8/2016 2:20:34 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.5	0.789	1	57290	0.03291	
130	02:38.1	TCE	02:33.7	0.901	1	29160	0.00985	
166	03:38.9	PCE	03:30.9	0.993	1	940069	0.2393	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_014.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/8/2016 2:11:55 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.6	0.613	1	229271	0.1317	
130	02:38.1	TCE	02:32.4	0.9	1	1980		Area too low
166	03:38.9	PCE	03:30.8	0.994	1	138889	0.03536	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_016.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/8/2016 2:29:15 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:59.0	0.524	1	44614	0.02562	
130	02:38.1	TCE	02:33.1	0.911	1	21830	0.00737	
166	03:38.9	PCE	03:31.4	0.995	1	1386991	0.3531	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_017.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/8/2016 2:37:51 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.5	0.669	1	235938	0.1355	
130	02:38.1	TCE	02:32.5	0.911	1	21280	0.00719	
166	03:38.9	PCE	03:31.6	0.996	1	223829	0.05698	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_018.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/8/2016 2:48:03 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.4	0.65	1	130486	0.07495	
130	02:38.1	TCE	02:33.2	0.899	1	36254	0.01225	
166	03:38.9	PCE	03:31.7	0.995	1	1508043	0.3839	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_019.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/8/2016 2:56:42 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.1	0.642	1	61824	0.03551	
130	02:38.1	TCE	02:33.6	0.911	1	35772	0.01209	
166	03:38.9	PCE	03:31.2	0.993	1	1502460	0.3825	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_020.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/8/2016 3:06:51 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.3	0.657		1	73208	0.04205
130	02:38.1	TCE	02:38.2	0.523		1	11796	0.00399
166	03:38.9	PCE	03:31.5	0.995		1	1129464	0.2875

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_021.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/8/2016 3:15:27 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.5	0.87		1	69551	0.03995
130	02:38.1	TCE	02:33.4	0.905		1	51434	0.01738
166	03:38.9	PCE	03:31.3	0.994		1	2461894	0.6267

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_022.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/8/2016 3:24:17 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.8	0.579		1	207413	0.1191
130	02:38.1	TCE	02:33.2	0.883		1	12126	0.0041
166	03:38.9	PCE	03:44.7	0.624		1	8776	0.00223

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_023.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/8/2016 3:32:54 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.4	0.599		1	52402	0.0301
130	02:38.1	TCE	02:33.2	0.905		1	33162	0.0112
166	03:38.9	PCE	03:31.6	0.995		1	1006691	0.2563

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_024.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/8/2016 3:41:33 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.4	0.776	1	45012	0.02585	
130	02:38.1	TCE	02:33.2	0.911	1	44756	0.01512	
166	03:38.9	PCE	03:31.7	0.995	1	1538648	0.3917	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_025.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/8/2016 3:51:20 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.5	0.802	1	35031	0.02012	
130	02:38.1	TCE	02:33.3	0.909	1	70441	0.0238	
166	03:38.9	PCE	03:31.3	0.993	1	2109612	0.5371	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_026.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/8/2016 4:00:59 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.3	0.597	1	172373	0.099	
130	02:38.1	TCE	02:33.6	0.882	1	24153	0.00816	
166	03:38.9	PCE	03:31.7	0.995	1	141400	0.036	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_028.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/8/2016 4:29:39 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.3	0.662	1	39091	0.02245	
130	02:38.1	TCE	02:33.8	0.896	1	33862	0.01144	
166	03:38.9	PCE	03:31.5	0.994	1	151364	0.03853	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_029.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/8/2016 4:38:19 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.9	0.784	1	32632	0.01874	
130	02:38.1	TCE	02:34.3	0.882	1	33561	0.01134	
166	03:38.9	PCE	03:44.1	0.624	1	18938	0.00482	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_034.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/8/2016 5:05:34 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.3	0.76	1	17728	0.01018	
130	02:38.1	TCE	02:33.8	0.911	1	20858	0.00705	
166	03:38.9	PCE	03:31.5	0.996	1	72800	0.01853	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_035.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/8/2016 5:14:11 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.9	0.828	1	34470	0.0198	
130	02:38.1	TCE	02:34.1	0.882	1	19262	0.00651	
166	03:38.9	PCE	03:40.9	0.624	1	10641	0.00271	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_036.hps
GPS Info:
Latitude: N 40 Deg 45.03479 Min Longitude: W 111 Deg 51.52039 Min GMT: 03/08/16 10:14:52 PM

Acquisition Date and Time: 3/8/2016 5:24:14 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.1	0.886	1	23360	0.01342	
130	02:38.1	TCE	02:33.5	0.912	1	11349	0.00383	
166	03:38.9	PCE	03:32.0	0.998	1	40934	0.01042	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_037.hps
GPS Info:
Latitude: N 40 Deg 45.03799 Min Longitude: W 111 Deg 51.53778 Min GMT: 03/08/16 10:34:04 PM

Acquisition Date and Time: 3/8/2016 5:43:26 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	N/A		0	0	0	Not found with current search parameters
130	02:38.1	TCE	02:34.3	0.912	1	13584	0.00459	
166	03:38.9	PCE	03:32.1	0.994	1	54662	0.01392	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_038.hps
GPS Info:
Latitude: N 40 Deg 45.03044 Min Longitude: W 111 Deg 51.53229 Min GMT: 03/08/16 11:08:21 PM

Acquisition Date and Time: 3/8/2016 6:17:43 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:59.1	0.579	1	256165	0.1471	
130	02:38.1	TCE	02:34.6	0.876	1	33353	0.01127	
166	03:38.9	PCE	03:33.0	0.993	1	235880	0.06005	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160304_20160308_039.hps
GPS Info:
Latitude: N 40 Deg 45.03204 Min Longitude: W 111 Deg 51.52863 Min GMT: 03/08/16 11:16:38 PM

Acquisition Date and Time: 3/8/2016 6:26:00 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:59.3	0.944	1	9753766	5.602	
130	02:38.1	TCE	02:34.8	0.905	1	14160462	4.784	
166	03:38.9	PCE	03:33.5	0.995	1	18588278	4.732	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160224_20160304_001.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 8:20:07 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.5	0.987	1	6781905	3.895	
130	02:38.1	TCE	02:33.5	0.906	1	14917643	5.04	
166	03:38.9	PCE	03:31.1	0.994	1	20039740	5.102	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160224_20160304_002.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 8:42:08 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.6	0.937	1	931561	0.5351	
130	02:38.1	TCE	02:33.1	0.908	1	1487472	0.5025	
166	03:38.9	PCE	03:30.0	0.993	1	1930584	0.4915	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160224_20160304_003.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 8:51:14 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.4	0.939	1	930605	0.5345	
130	02:38.1	TCE	02:32.8	0.907	1	1437064	0.4855	
166	03:38.9	PCE	03:29.6	0.993	1	1881898	0.4791	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160224_20160304_004.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 8:59:37 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:56.5	0.944	1	146206	0.08398	
130	02:38.1	TCE	02:31.3	0.907	1	237153	0.08012	
166	03:38.9	PCE	03:28.8	0.995	1	335218	0.08534	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160224_20160304_005.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 9:07:54 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:56.9	0.935	1	4427155	2.543	
130	02:38.1	TCE	02:31.8	0.906	1	7572508	2.558	
166	03:38.9	PCE	03:29.3	0.994	1	10076704	2.565	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160224_20160304_006.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 9:16:56 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:56.8	0.937	1	8972280	5.153	
130	02:38.1	TCE	02:32.3	0.907	1	15646416	5.286	
166	03:38.9	PCE	03:29.1	0.994	1	20776340	5.289	

Data File: C:\Users\qbingham\Documents\1_Projects\2_VA AOU1\0041-H\HAPSITE\Data\SIM_100PPB_VA_20160224_20160304_007.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 9:26:24 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.2	0.935	1	18148252	10.42	
130	02:38.1	TCE	02:32.8	0.907	1	32950018	11.13	
166	03:38.9	PCE	03:29.6	0.995	1	42409000	10.8	

NOTES:
Act. = Actual.
AOU 1 = Accelerated Operable Unit 1 East Side Springs.
cVOC = Chlorinated volatile organic compound.
DCE = Dichloroethene.
PCE = Tetrachloroethene.
ppb = Part(s) per billion.
ppbv = Part(s) per billion per volume.
Pred. = Predicted.
RT = Retention time.
TCE = Trichloroethene.
VA = Department of Veteran Affairs.

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LOCATION: 0045-S HAPSITE SURVEY
SAMPLE DATE: 4-Mar-16

Unknown Identification Report
Date: 03/08/16 Time: 12:38:11
Calibration Method:
/Haps/Method/Analyze/Concentrator/Hill Vapor Intrusion Cal 2 min SIM.mth
Tune File:
default.tun
Method Description:
SIM cVOC Method in order of elution
cis-DCE; TCE; PCE
General Quantification Range from 0.1
ppbv to 50 ppbv

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160308_003.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.04784 Min Longitude: W 111 Deg 51.53320 Min GMT: 03/08/16 04:47:46 PM

Acquisition Date and Time: 3/8/2016 11:57:05 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.7	0.561	1	336521	0.193
130	02:38.1	TCE		02:41.2	0.523	1	5430	0.002
166	03:38.9	PCE		03:30.9	0.994	1	177032	0.045

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_050.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 7:49:27 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.5	0.808	1	25791	0.015
130	02:38.1	TCE		02:32.2	0.912	1	20188	0.007
166	03:38.9	PCE		03:29.7	0.994	1	211920	0.054

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_049.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 7:39:50 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.2	0.948	1	20573	0.012
130	02:38.1	TCE		02:37.8	0.523	1	8919	0.003
166	03:38.9	PCE		03:29.5	0.994	1	222616	0.057

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_048.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 7:30:46 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:56.9	0.774	1	26509	0.015
130	02:38.1	TCE		02:31.6	0.859	1	27312	0.009
166	03:38.9	PCE		03:29.2	0.991	1	193371	0.049

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_047.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 7:19:58 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:56.9	0.832	1	24029	0.014
130	02:38.1	TCE		02:31.7	0.852	1	38707	0.013
166	03:38.9	PCE		03:30.0	0.996	1	215279	0.055

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_045.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 6:52:38 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:56.9	0.524	1	22013	0.013
130	02:38.1	TCE		02:42.6	0.523	1	9332	0.003
166	03:38.9	PCE		03:29.1	0.998	1	141596	0.036

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_042.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 5:58:12 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:56.8	0.947	1	48843	0.028
130	02:38.1	TCE		02:32.3	0.91	1	148095	0.05
166	03:38.9	PCE		03:30.1	0.995	1	325834	0.083

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_041.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 5:45:34 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.4	0.934	1	23445	0.013
130	02:38.1	TCE		02:41.7	0.774	1	6693	0.002
166	03:38.9	PCE		03:29.6	0.995	1	229438	0.058

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_040.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 5:35:39 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.4	0.835	1	15850	0.009
130	02:38.1	TCE		02:38.9	0.909	1	6167	0.002
166	03:38.9	PCE		03:29.2	0.995	1	89001	0.023

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_039.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 5:26:29 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.4	0.906	1	11703	0.007
130	02:38.1	TCE		02:32.2	0.898	1	29726	0.01
166	03:38.9	PCE		03:29.1	0.993	1	88956	0.023

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_038.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 5:16:57 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.3	0.946	1	14072	0.008
130	02:38.1	TCE		02:32.3	0.9	1	21323	0.007
166	03:38.9	PCE		03:29.9	0.997	1	78707	0.02

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_037.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 5:07:50 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:56.8	0.844	1	16035	0.009
130	02:38.1	TCE		02:39.7	0.523	1	8634	0.003
166	03:38.9	PCE		03:29.9	0.994	1	82022	0.021

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_036.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 4:56:48 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.4	0.923	1	15694	0.009
130	02:38.1	TCE		02:32.4	0.912	1	33012	0.011
166	03:38.9	PCE		03:30.2	0.994	1	90201	0.023

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_035.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 4:45:58 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.5	0.917	1	11191	0.006
130	02:38.1	TCE		02:32.3	0.89	1	48310	0.016
166	03:38.9	PCE		03:29.9	0.995	1	143250	0.036

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_034.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 4:35:55 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.1	0.936	1	21757	0.012
130	02:38.1	TCE		02:32.1	0.864	1	42323	0.014
166	03:38.9	PCE		03:29.9	0.993	1	271182	0.069

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_033.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 4:26:49 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.2	0.935	1	23643	0.014
130	02:38.1	TCE		02:31.9	0.907	1	40792	0.014
166	03:38.9	PCE		03:30.1	0.992	1	233617	0.059

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_032.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 4:17:44 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.8	0.934	1	861535	0.495
130	02:38.1	TCE		02:33.2	0.91	1	1613972	0.545
166	03:38.9	PCE		03:30.0	0.993	1	2668470	0.679

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_030.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 3:59:16 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.2	0.923	1	30516	0.018
130	02:38.1	TCE		02:32.1	0.9	1	65794	0.022
166	03:38.9	PCE		03:30.3	0.993	1	267392	0.068

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_029.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.07942 Min Longitude: W 111 Deg 51.25397 Min GMT: 03/04/16 08:39:16 PM

Acquisition Date and Time: 3/4/2016 3:48:31 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.5	0.839	1	36388	0.021
130	02:38.1	TCE		02:32.3	0.911	1	45044	0.015
166	03:38.9	PCE		03:30.7	0.995	1	289483	0.074

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_014.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 12:18:58 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.3	0.629	1	196492	0.113
130	02:38.1	TCE		02:32.9	0.908	1	47467528	16.04
166	03:38.9	PCE		03:30.0	0.993	1	22609652	5.756

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_013.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 12:01:56 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.7	0.6	1	87051	0.05
130	02:38.1	TCE		02:32.5	0.907	1	2456973	0.83
166	03:38.9	PCE		03:30.1	0.995	1	479811	0.122

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_012.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 11:51:20 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:56.9	0.857	1	25820	0.015
130	02:38.1	TCE		02:32.4	0.912	1	45846	0.015
166	03:38.9	PCE		03:30.0	0.993	1	248854	0.063

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_011.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 11:42:22 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.4	0.768	1	34821	0.02
130	02:38.1	TCE		02:41.0	0.893	1	10537	0.004
166	03:38.9	PCE		03:30.7	0.996	1	126013	0.032

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_010.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 11:33:05 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.2	0.547	1	29450	0.017
130	02:38.1	TCE		02:33.8	0.895	1	32281	0.011
166	03:38.9	PCE		03:30.7	0.997	1	114844	0.029

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_009.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 11:24:11 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.6	0.524	1	29365	0.017
130	02:38.1	TCE		02:32.3	0.9	1	24222	0.008
166	03:38.9	PCE		03:30.7	0.997	1	137566	0.035

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_008.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 11:14:49 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.3	0.738	1	29240	0.017
130	02:38.1	TCE		02:40.4	0.523	1	6022	0.002
166	03:38.9	PCE		03:30.9	0.997	1	98551	0.025

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_007.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 11:05:59 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.4	0.571	1	27152	0.016
130	02:38.1	TCE		02:32.8	0.906	1	24277	0.008
166	03:38.9	PCE		03:41.7	1	1	6790	0.002

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_006.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 10:57:09 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.4	0.524	1	50490	0.029
130	02:38.1	TCE		02:33.5	0.909	1	22920	0.008
166	03:38.9	PCE		03:30.4	0.994	1	259589	0.066

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_005.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 10:48:22 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.2	0.772	1	44062	0.025
130	02:38.1	TCE		02:33.0	0.903	1	17728	0.006
166	03:38.9	PCE		03:44.4	0.975	1	7490	0.002

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_004.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 10:35:14 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.7	0.704	1	124103	0.071
130	02:38.1	TCE		02:33.2	0.91	1	25465	0.009
166	03:38.9	PCE		03:30.0	0.995	1	103176	0.026

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_003.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 10:26:20 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:56.9	0.873	1	17683	0.01
130	02:38.1	TCE		02:39.8	0.523	1	5909	0.002
166	03:38.9	PCE		03:30.8	0.995	1	79936	0.02

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_002.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 9:48:17 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:56.9	0.828	1	45788	0.026
130	02:38.1	TCE		02:30.9	0.902	1	50123	0.017
166	03:38.9	PCE		03:41.3	0.846	1	9950	0.003

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160304_001.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 9:38:51 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:56.8	0.936	1	9300172	5.342
130	02:38.1	TCE		02:32.3	0.908	1	16060944	5.426
166	03:38.9	PCE		03:29.1	0.994	1	21331470	5.431

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160304_007.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 9:26:24 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.2	0.935	1	18148252	10.42
130	02:38.1	TCE		02:32.8	0.907	1	32950018	11.13
166	03:38.9	PCE		03:29.6	0.995	1	42409000	10.8

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160304_006.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 9:16:56 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:56.8	0.937	1	8972280	5.153
130	02:38.1	TCE		02:32.3	0.907	1	15646416	5.286
166	03:38.9	PCE		03:29.1	0.994	1	20776340	5.289

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160304_005.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 9:07:54 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:56.9	0.935	1	4427155	2.543
130	02:38.1	TCE		02:31.8	0.906	1	7572508	2.558
166	03:38.9	PCE		03:29.3	0.994	1	10076704	2.565

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160304_004.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 8:59:37 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:56.5	0.944	1	146206	0.084
130	02:38.1	TCE		02:31.3	0.907	1	237153	0.08
166	03:38.9	PCE		03:28.8	0.995	1	335218	0.085

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160304_002.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/4/2016 8:42:08 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 04MAR2016
Last Calibrated: 3/4/2016 7:30:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.6	0.937	1	931561	0.535
130	02:38.1	TCE		02:33.1	0.907	1	1487472	0.503
166	03:38.9	PCE		03:30.0	0.993	1	1930584	0.491

LOCATION: 0045-S PRESSURE CYCLING ROOM A203/A205
SAMPLE DATE: 21-Mar-16
Unknown Identification Report
Date: 03/21/16 Time: 15:51:23
Calibration Method:
/Haps/Method/Analyze/Concentrator/Hill Vapor Intrusion Cal 2 min SIM.mth
Tune File:
default.tun
Method Description:
SIM cVOC Method in order of elution
cis-DCE; TCE; PCE
General Quantification Range from 0.1
ppbv to 50 ppbv

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_028.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 3:12:54 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.6	0.875	1	38061	0.017
130	02:38.1	TCE		02:39.0	0.878	1	6548	0.002
166	03:38.9	PCE		03:46.3	0.99	1	6913	0.002

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_027.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 2:53:48 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.3	0.748	1	27512	0.012
130	02:38.1	TCE		02:33.1	0.902	1	57185	0.02
166	03:38.9	PCE		03:30.7	0.996	1	106963	0.028

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_026.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 2:44:47 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.3	0.757	1	27033	0.012
130	02:38.1	TCE		02:32.7	0.91	1	63226	0.022
166	03:38.9	PCE		03:30.2	0.997	1	81243	0.022

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_025.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 2:35:33 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.5	0.726	1	37094	0.017
130	02:38.1	TCE		02:33.1	0.905	1	82132	0.028
166	03:38.9	PCE		03:30.1	0.998	1	92031	0.024

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_024.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 2:26:18 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.2	0.731	1	41316	0.019
130	02:38.1	TCE		02:33.0	0.909	1	58418	0.02
166	03:38.9	PCE		03:30.5	0.997	1	124928	0.033

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_023.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 2:17:16 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.7	0.524	1	28784	0.013
130	02:38.1	TCE		02:42.8	0.523	1	7857	0.003
166	03:38.9	PCE		03:30.1	0.995	1	154472	0.041

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_022.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 2:08:04 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.7	0.819	1	42932	0.019
130	02:38.1	TCE		02:32.4	0.906	1	104386	0.036
166	03:38.9	PCE		03:29.9	0.996	1	132249	0.035

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_021.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 1:56:31 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.4	0.586	1	51710	0.023
130	02:38.1	TCE		02:42.3	0.523	1	19349	0.007
166	03:38.9	PCE		03:42.6	0.999	1	20890	0.006

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_020.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 1:47:14 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.0	0.771	1	48702	0.022
130	02:38.1	TCE		02:32.6	0.906	1	184409	0.063
166	03:38.9	PCE		03:30.1	0.996	1	178132	0.047

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_019.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 1:38:04 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.3	0.645	1	57324	0.026
130	02:38.1	TCE		02:32.8	0.908	1	174050	0.06
166	03:38.9	PCE		03:30.3	0.996	1	170552	0.045

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_018.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 1:29:00 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.5	0.524	1	49538	0.022
130	02:38.1	TCE		02:33.0	0.906	1	179338	0.062
166	03:38.9	PCE		03:30.5	0.994	1	161893	0.043

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_017.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 1:19:55 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.2	0.796	1	52422	0.024
130	02:38.1	TCE		02:33.3	0.908	1	243259	0.084
166	03:38.9	PCE		03:44.9	0.966	1	8976	0.002

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_016.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 1:10:35 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.5	0.771	1	52595	0.024
130	02:38.1	TCE		02:32.9	0.905	1	259320	0.089
166	03:38.9	PCE		03:30.5	0.997	1	165972	0.044

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_015.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 1:01:30 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.6	0.843	1	41082	0.019
130	02:38.1	TCE		02:32.4	0.903	1	274973	0.094
166	03:38.9	PCE		03:30.0	0.997	1	126464	0.034

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_014.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 12:52:24 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.1	0.613	1	65101	0.029
130	02:38.1	TCE		02:32.7	0.904	1	288315	0.099
166	03:38.9	PCE		03:30.2	0.993	1	205830	0.055

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_013.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 12:42:24 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.1	0.68	1	79830	0.036
130	02:38.1	TCE		02:32.8	0.905	1	273974	0.094
166	03:38.9	PCE		03:45.9	0.895	1	10279	0.003

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_012.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 12:31:47 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.5	0.721	1	81893	0.037
130	02:38.1	TCE		02:32.9	0.906	1	270230	0.093
166	03:38.9	PCE		03:45.8	0.97	1	14480	0.004

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_011.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 12:22:23 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.6	0.702	1	87350	0.039
130	02:38.1	TCE		02:32.4	0.904	1	285812	0.098
166	03:38.9	PCE		03:30.0	0.998	1	167313	0.044

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_010.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 12:11:39 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.6	0.591	1	82385	0.037
130	02:38.1	TCE		02:33.1	0.907	1	283520	0.097
166	03:38.9	PCE		03:30.6	0.993	1	92336	0.025

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_009.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 12:02:22 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.7	0.792	1	77106	0.035
130	02:38.1	TCE		02:32.4	0.906	1	295878	0.102
166	03:38.9	PCE		03:30.2	0.995	1	99102	0.026

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_008.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 11:49:23 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.5	0.753	1	60925	0.028
130	02:38.1	TCE		02:43.1	0.523	1	21141	0.007
166	03:38.9	PCE		03:30.4	0.996	1	136383	0.036

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_007.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 11:38:28 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.5	0.596	1	45973	0.021
130	02:38.1	TCE		02:33.0	0.905	1	296515	0.102
166	03:38.9	PCE		03:30.9	0.998	1	157098	0.042

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_006.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 11:14:08 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.2	0.524	1	45967	0.021
130	02:38.1	TCE		02:42.2	0.523	1	24548	0.008
166	03:38.9	PCE		03:30.1	1	1	107034	0.028

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_005.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 11:04:37 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.5	0.6	1	58379	0.026
130	02:38.1	TCE		02:33.0	0.91	1	239363	0.082
166	03:38.9	PCE		03:29.9	0.993	1	99941	0.027

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_004.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.05150 Min Longitude: W 111 Deg 51.33728 Min GMT: 03/21/16 03:09:40 PM

Acquisition Date and Time: 3/21/2016 10:18:47 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.2	0.567	1	51211	0.023
130	02:38.1	TCE		02:32.8	0.908	1	283792	0.097
166	03:38.9	PCE		03:29.6	0.995	1	80138	0.021

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_003.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 9:57:22 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.3	0.573	1	16902	0.008
130	02:38.1	TCE		02:44.0	0.861	1	5629	0.002
166	03:38.9	PCE		03:29.7	0.998	1	53072	0.014

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_002.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 8:05:52 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.4	0.818	1	36027	0.016
130	02:38.1	TCE		02:32.9	0.907	1	27114	0.009
166	03:38.9	PCE		03:30.0	0.997	1	53570	0.014

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_001.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 7:40:14 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.8	0.94	1	9675239	4.369
130	02:38.1	TCE		02:33.3	0.905	1	13420740	4.608
166	03:38.9	PCE		03:31.1	0.994	1	19870180	5.277

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160310_007.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 9:36:43 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.4	0.946	1	23827424	10.76
130	02:38.1	TCE		02:32.1	0.904	1	33971032	11.66
166	03:38.9	PCE		03:29.8	0.995	1	42382572	11.26

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160310_006.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 9:28:12 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:56.4	0.941	1	5891573	2.66
130	02:38.1	TCE		02:31.8	0.905	1	7934647	2.724
166	03:38.9	PCE		03:29.3	0.994	1	10073661	2.675

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160310_005.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 9:18:55 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.4	0.945	1	1056666	0.477
130	02:38.1	TCE		02:32.9	0.905	1	1335259	0.458
166	03:38.9	PCE		03:29.6	0.993	1	1689841	0.449

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160310_004.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 9:07:09 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:56.8	0.947	1	195315	0.088
130	02:38.1	TCE		02:31.5	0.906	1	229777	0.079
166	03:38.9	PCE		03:29.7	0.995	1	324793	0.086

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160310_001.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 8:40:21 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
	61	02:00.6 cis-1,2 DCE		01:58.4	0.944	1	11337877	5.119
	130	02:38.1 TCE		02:33.7	0.904	1	15122557	5.192
	166	03:38.9 PCE		03:31.2	0.994	1	19654424	5.22

LOCATION: 0045-S PRESSURE CYCLING ROOM A213
SAMPLE DATE: 21-Mar-16

Unknown Identification Report
Date: 03/21/16 Time: 16:57:44
Calibration Method:
/Haps/Method/Analyze/Concentrator/Hill Vapor Intrusion Cal 2 min SIM.mth
Tune File:
default.tun
Method Description:
SIM cVOC Method in order of elution
cis-DCE; TCE; PCE
General Quantification Range from 0.1
ppbv to 50 ppbv

Data File: /Data/VA /SIM 100PPB VA 20160304/SIM 100PPB VA 20160304 20160310 007.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 9:36:43 AM
Acquisition Method: /Haps/Method/VA /SIM 100PPB VA 20160304.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
	61	02:00.6 cis-1,2 DCE		01:57.4	0.946	1	23827424	10.76
	130	02:38.1 TCE		02:32.1	0.904	1	33971032	11.66
	166	03:38.9 PCE		03:29.8	0.995	1	42382572	11.26

Data File: /Data/VA /SIM 100PPB VA 20160304/SIM 100PPB VA 20160304 20160310 006.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 9:28:12 AM
Acquisition Method: /Haps/Method/VA /SIM 100PPB VA 20160304.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
	61	02:00.6 cis-1,2 DCE		01:56.4	0.941	1	5891573	2.66
	130	02:38.1 TCE		02:31.8	0.905	1	7934647	2.724
	166	03:38.9 PCE		03:29.3	0.994	1	10073661	2.675

Data File: /Data/VA /SIM 100PPB VA 20160304/SIM 100PPB VA 20160304 20160310 005.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 9:18:55 AM
Acquisition Method: /Haps/Method/VA /SIM 100PPB VA 20160304.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
	61	02:00.6 cis-1,2 DCE		01:57.4	0.945	1	1056666	0.477
	130	02:38.1 TCE		02:32.9	0.905	1	1335259	0.458
	166	03:38.9 PCE		03:29.6	0.993	1	1689841	0.449

Data File: /Data/VA /SIM 100PPB VA 20160304/SIM 100PPB VA 20160304 20160310 004.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 9:07:09 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:56.8	0.947	1	195315	0.088
130	02:38.1	TCE		02:31.5	0.906	1	229777	0.079
166	03:38.9	PCE		03:29.7	0.995	1	324793	0.086

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160310_001.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 8:40:21 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.4	0.944	1	11337877	5.119
130	02:38.1	TCE		02:33.7	0.904	1	15122557	5.192
166	03:38.9	PCE		03:31.2	0.994	1	19654424	5.22

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_039.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 5:56:10 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.4	0.938	1	8150070	3.68
130	02:38.1	TCE		02:33.5	0.907	1	12417122	4.263
166	03:38.9	PCE		03:30.3	0.993	1	18411040	4.89

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_037.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 5:04:30 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.5	0.822	1	45375	0.02
130	02:38.1	TCE		02:32.3	0.911	1	13113	0.005
166	03:38.9	PCE		03:30.1	0.997	1	84070	0.022

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_036.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 4:55:42 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.3	0.598	1	58321	0.026
130	02:38.1	TCE		02:33.7	0.908	1	13867	0.005
166	03:38.9	PCE		03:30.5	0.999	1	81792	0.022

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_035.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 4:46:52 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.3	0.623	1	30628	0.014
130	02:38.1	TCE	N/A		0	0	0	Not found with current search parameters
166	03:38.9	PCE		03:30.7	0.996	1	83826	0.022

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_034.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 4:37:26 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.6	0.84	1	36970	0.017
130	02:38.1	TCE		02:38.2	0.873	1	6713	0.002
166	03:38.9	PCE		03:30.5	0.996	1	84760	0.023

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_033.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 4:28:29 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.5	0.793	1	38833	0.018
130	02:38.1	TCE		02:33.6	0.909	1	15813	0.005
166	03:38.9	PCE		03:30.4	1	1	127725	0.034

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_032.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 4:18:24 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.6	0.756	1	40246	0.018
130	02:38.1	TCE		02:33.0	0.897	1	11665	0.004
166	03:38.9	PCE		03:30.5	0.997	1	101583	0.027

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_031.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 4:08:53 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.4	0.839	1	22622	0.01
130	02:38.1	TCE		02:32.9	0.911	1	23470	0.008
166	03:38.9	PCE		03:30.6	0.998	1	98417	0.026

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_030.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 3:40:20 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.4	0.691	1	112021	0.051
130	02:38.1	TCE		02:40.3	0.523	1	7182	0.002
166	03:38.9	PCE		03:43.1	0.624	1	11101	0.003

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160321_029.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/21/2016 3:26:37 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.7	0.888	1	35053	0.016
130	02:38.1	TCE		02:33.1	0.905	1	60687	0.021
166	03:38.9	PCE		03:30.6	1	1	113099	0.03

LOCATION: 0045-S PRESSURE CYCLING ROOM A215
SAMPLE DATE: 22-Mar-16

Unknown Identification Report
Date: 03/23/16 Time: 06:55:39
Calibration Method:
/Haps/Method/Analyze/Concentrator/Hill Vapor Intrusion Cal 2 min SIM.mth
Tune File:
default.tun
Method Description:
SIM cVOC Method in order of elution
cis-DCE; TCE; PCE
General Quantification Range from 0.1
ppbv to 50 ppbv

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160310_007.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 9:36:43 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.4	0.946	1	23827424	10.76
130	02:38.1	TCE		02:32.1	0.904	1	33971032	11.66
166	03:38.9	PCE		03:29.8	0.995	1	42382572	11.26

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160310_006.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 9:28:12 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:56.4	0.941	1	5891573	2.66
130	02:38.1	TCE		02:31.8	0.905	1	7934647	2.724
166	03:38.9	PCE		03:29.3	0.994	1	10073661	2.675

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160310_005.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 9:18:55 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.4	0.945	1	1056666	0.477
130	02:38.1	TCE		02:32.9	0.905	1	1335259	0.458
166	03:38.9	PCE		03:29.6	0.993	1	1689841	0.449

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160310_004.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 9:07:09 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:56.8	0.947	1	195315	0.088
130	02:38.1	TCE		02:31.5	0.906	1	229777	0.079
166	03:38.9	PCE		03:29.7	0.995	1	324793	0.086

Data File: /Data/VA /SIM_100PPB_VA_20160304/SIM_100PPB_VA_20160304_20160310_001.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 8:40:21 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160304.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.4	0.944	1	11337877	5.119
130	02:38.1	TCE		02:33.7	0.904	1	15122557	5.192
166	03:38.9	PCE		03:31.2	0.994	1	19654424	5.22

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_043.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.99702 Min Longitude: W 111 Deg 51.33133 Min GMT: 03/22/16 10:28:08 PM

Acquisition Date and Time: 3/22/2016 5:37:52 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.8	0.71	1	41367	0.019
130	02:38.1	TCE		02:37.3	0.894	1	13590	0.005
166	03:38.9	PCE		03:33.1	0.994	1	1379823	0.366

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_042.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.99290 Min Longitude: W 111 Deg 51.33041 Min GMT: 03/22/16 10:13:57 PM

Acquisition Date and Time: 3/22/2016 5:23:41 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:59.0	0.746	1	14088	0.006
130	02:38.1	TCE		02:35.2	0.523	1	5910	0.002
166	03:38.9	PCE		03:31.4	0.994	1	177835	0.047

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_041.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 4:43:28 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:56.2	0.57	1	147137	0.066
130	02:38.1	TCE		02:37.7	0.896	1	5374	0.002
166	03:38.9	PCE		03:28.4	0.989	1	39972	0.011

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_040.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 4:30:42 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.2	0.668	1	20285	0.009
130	02:38.1	TCE		02:40.7	0.523	1	5189	0.002
166	03:38.9	PCE	N/A		0	0	0	Not found with current search parameters

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_039.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 4:21:00 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:56.6	0.524	1	50018	0.023
130	02:38.1	TCE		02:31.4	0.907	1	682919	0.234
166	03:38.9	PCE		03:29.1	0.997	1	260861	0.069

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_038.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 4:10:10 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.9	0.824	1	36851	0.017
130	02:38.1	TCE		02:33.4	0.907	1	92323	0.032
166	03:38.9	PCE		03:29.4	0.994	1	145837	0.039

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_035.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 3:45:35 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.8	0.789	1	35817	0.016
130	02:38.1	TCE		02:31.9	0.911	1	124440	0.043
166	03:38.9	PCE		03:29.6	0.995	1	204885	0.054

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_034.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 3:35:20 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.0	0.701	1	43244	0.02
130	02:38.1	TCE		02:42.7	0.523	1	7192	0.002
166	03:38.9	PCE		03:29.2	0.995	1	251040	0.067

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_033.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 3:12:13 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.5	0.785	1	66067	0.03
130	02:38.1	TCE		02:32.4	0.909	1	136933	0.047
166	03:38.9	PCE		03:29.2	0.993	1	375368	0.1

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_032.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 3:03:00 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:56.8	0.724	1	65506	0.03
130	02:38.1	TCE		02:32.3	0.906	1	80200	0.028
166	03:38.9	PCE		03:29.6	0.994	1	432558	0.115

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_031.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 2:53:44 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.4	0.673	1	58683	0.026
130	02:38.1	TCE		02:32.2	0.907	1	90428	0.031
166	03:38.9	PCE		03:29.7	0.995	1	404236	0.107

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_030.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 2:44:36 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:56.9	0.632	1	60109	0.027
130	02:38.1	TCE		02:31.7	0.906	1	110701	0.038
166	03:38.9	PCE		03:29.2	0.995	1	411034	0.109

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_029.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 2:29:05 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.4	0.849	1	47867	0.022
130	02:38.1	TCE		02:32.5	0.902	1	66149	0.023
166	03:38.9	PCE		03:29.8	0.994	1	394934	0.105

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_028.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 2:20:04 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.2	0.757	1	38778	0.018
130	02:38.1	TCE		02:31.8	0.904	1	72603	0.025
166	03:38.9	PCE		03:29.5	0.995	1	316273	0.084

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_027.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 2:10:47 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.6	0.568	1	35619	0.016
130	02:38.1	TCE		02:42.5	0.523	1	6147	0.002
166	03:38.9	PCE		03:29.8	0.995	1	332928	0.088

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_026.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 2:01:36 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.5	0.551	1	42253	0.019
130	02:38.1	TCE		02:32.3	0.907	1	96498	0.033
166	03:38.9	PCE		03:29.9	0.998	1	75977	0.02

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_025.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 1:51:31 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.3	0.713	1	33460	0.015
130	02:38.1	TCE		02:42.5	0.875	1	8074	0.003
166	03:38.9	PCE		03:29.8	0.994	1	394441	0.105

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_024.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 1:40:19 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.5	0.638	1	53362	0.024
130	02:38.1	TCE		02:32.3	0.903	1	52247	0.018
166	03:38.9	PCE		03:45.3	0.624	1	8413	0.002

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_023.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 1:31:16 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.6	0.862	1	53733	0.024
130	02:38.1	TCE		02:32.3	0.905	1	111585	0.038
166	03:38.9	PCE		03:29.8	0.996	1	298714	0.079

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_022.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 1:21:13 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:56.9	0.815	1	49099	0.022
130	02:38.1	TCE		02:32.5	0.908	1	51811	0.018
166	03:38.9	PCE		03:30.0	0.995	1	825439	0.219

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_021.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 12:49:38 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:56.9	0.889	1	41270	0.019
130	02:38.1	TCE		02:37.6	0.903	1	9621	0.003
166	03:38.9	PCE		03:29.2	0.994	1	440422	0.117

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_020.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 12:40:30 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		02:03.4	0.862	1	30464	0.014
130	02:38.1	TCE		02:32.3	0.911	1	63195	0.022
166	03:38.9	PCE		03:29.8	0.995	1	1180782	0.314

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_019.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 12:30:40 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.4	0.766	1	55413	0.025
130	02:38.1	TCE		02:41.7	0.858	1	5482	0.002
166	03:38.9	PCE		03:29.2	0.994	1	465295	0.124

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_018.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 12:21:36 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.5	0.827	1	36986	0.017
130	02:38.1	TCE		02:32.3	0.91	1	76743	0.026
166	03:38.9	PCE		03:29.9	0.995	1	429517	0.114

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_017.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 12:11:25 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.6	0.584	1	71593	0.032
130	02:38.1	TCE		02:33.1	0.91	1	62682	0.022
166	03:38.9	PCE		03:29.5	0.994	1	1232520	0.327

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_016.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 12:02:15 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.2	0.524	1	68917	0.031
130	02:38.1	TCE		02:32.7	0.911	1	92531	0.032
166	03:38.9	PCE		03:29.5	0.995	1	416930	0.111

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_015.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 11:49:12 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.0	0.746	1	52560	0.024
130	02:38.1	TCE		02:41.4	0.845	1	8912	0.003
166	03:38.9	PCE		03:30.1	0.996	1	433888	0.115

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_014.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 11:39:04 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.0	0.577	1	35325	0.016
130	02:38.1	TCE		02:32.5	0.909	1	42892	0.015
166	03:38.9	PCE		03:30.1	0.996	1	972526	0.258

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_011.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 11:10:55 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.6	0.788	1	82327	0.037
130	02:38.1	TCE		02:33.1	0.907	1	83747	0.029
166	03:38.9	PCE		03:29.9	0.995	1	1210749	0.322

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_010.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 11:01:56 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.8	0.637	1	83320	0.038
130	02:38.1	TCE		02:32.5	0.908	1	92030	0.032
166	03:38.9	PCE		03:30.0	0.994	1	231574	0.062

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_009.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 10:52:47 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:56.9	0.62	1	52821	0.024
130	02:38.1	TCE		02:32.3	0.909	1	72875	0.025
166	03:38.9	PCE		03:29.8	0.995	1	267413	0.071

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_008.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 10:43:49 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.6	0.64	1	92224	0.042
130	02:38.1	TCE		02:33.0	0.912	1	60733	0.021
166	03:38.9	PCE		03:30.1	0.994	1	961055	0.255

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_007.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 10:34:57 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.4	0.548	1	61987	0.028
130	02:38.1	TCE		02:39.4	0.861	1	7968	0.003
166	03:38.9	PCE		03:30.4	0.995	1	136204	0.036

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_006.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 9:57:15 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.1	0.753	1	21715	0.01
130	02:38.1	TCE		02:32.1	0.887	1	36140	0.012
166	03:38.9	PCE		03:31.4	0.996	1	50871	0.014

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_005.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 9:48:07 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.6	0.705	1	72462	0.033
130	02:38.1	TCE		02:37.5	0.523	1	12265	0.004
166	03:38.9	PCE		03:30.8	0.997	1	77223	0.021

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_004.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 9:38:26 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.4	0.592	1	67242	0.03
130	02:38.1	TCE		02:38.0	0.523	1	7349	0.003
166	03:38.9	PCE		03:30.4	0.995	1	54940	0.015

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_003.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 9:26:15 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.5	0.711	1	29377	0.013
130	02:38.1	TCE		02:32.4	0.902	1	7808	0.003
166	03:38.9	PCE		03:29.9	0.997	1	41421	0.011

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_002.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.06798 Min Longitude: W 111 Deg 51.44073 Min GMT: 03/22/16 02:05:44 PM

Acquisition Date and Time: 3/22/2016 9:14:49 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.4	0.91	1	13023	0.006
130	02:38.1	TCE		02:33.6	0.912	1	10495	0.004
166	03:38.9	PCE		03:29.6	0.995	1	27376	0.007

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160322_001.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/22/2016 7:22:23 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:	
Search Window:	0:08.00
Window Expand Factor:	0.050
Peak Resolution:	5
Noise Level Multiplier:	2.000
Minimum Area:	5000
Minimum Width:	7
Maximum Width:	70
Minimum Fit:	0.200
Minimum Purity:	0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
	61	02:00.6 cis-1,2 DCE		01:58.3	0.942	1	8409605	3.797
	130	02:38.1 TCE		02:33.7	0.905	1	12030699	4.13
	166	03:38.9 PCE		03:31.3	0.994	1	17959356	4.77

NOTES:
Act. = Actual.
AOU 1 = Accelerated Operable Unit 1 East Side Springs.
cVOC = Chlorinated volatile organic compound.
DCE = Dichloroethene.
PCE = Tetrachloroethene.
ppb = Part(s) per billion.
ppbv = Part(s) per billion per volume.
Pred. = Predicted.
RT = Retention time.
TCE = Trichloroethene.
VA = Department of Veteran Affairs.

LOCATION: 0047-H HAPSITE SURVEY
SAMPLE DATE: 25-Feb-16

Unknown Identification Report
Date: 02/25/16 Time: 16:43:08
Calibration Method:
/Haps/Method/Analyze/Concentrator/Hill Vapor Intrusion Cal 2 min SIM.mth
Tune File:
default.tun
Method Description:
SIM cVOC Method in order of elution VC;
1,1-DCE; trans-DCE; 1,1-DCA; cis-DCE;
CtCl; TCE; PCE
General Quantification Range from 0.1
ppbv to 50 ppbv

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_035.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.01579 Min Longitude: W 111 Deg 51.47827 Min GMT: 02/25/16 10:16:18 PM

Acquisition Date and Time: 2/25/2016 5:25:22 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:39.4	0.967	1	2645425	4.301	
61	01:54.0	trans-1,2 DCE	01:57.9	0.836	1	5744388	4.279	
63	01:56.5	1,1-DCA	01:58.9	0.529	1	1741814	4.527	
61	02:00.6	cis-1,2 DCE	01:57.9	0.988	1	5744388	4.279	
62	02:16.9	1,2-DCA	02:10.5	0.993	1	7549594	4.443	
130	02:38.1	TCE	02:33.9	0.907	1	14497502	4.796	
166	03:38.9	PCE	03:32.1	0.994	1	19382124	4.762	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_034.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.01968 Min Longitude: W 111 Deg 51.43066 Min GMT: 02/25/16 10:07:28 PM

Acquisition Date and Time: 2/25/2016 5:16:32 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:43.7	0.827	1	14064	0.023	
61	01:54.0	trans-1,2 DCE	02:00.2	0.828	1	13530	0.01	
63	01:56.5	1,1-DCA	01:53.4	0.798	1	5869	0.015	
61	02:00.6	cis-1,2 DCE	02:00.2	0.981	1	13530	0.01	
62	02:16.9	1,2-DCA	02:20.5	0.669	1	7449	0.004	
130	02:38.1	TCE	02:33.9	0.911	1	27770	0.009	
166	03:38.9	PCE	03:32.4	0.994	1	319153	0.078	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_033.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.99474 Min Longitude: W 111 Deg 51.45950 Min GMT: 02/25/16 09:59:02 PM

Acquisition Date and Time: 2/25/2016 5:08:05 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00

Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE		01:35.2	0.853	1	9667	0.016
61	01:54.0	trans-1,2 DCE		01:58.5	0.45	1	80453	0.06
63	01:56.5	1,1-DCA	N/A		0	0	0	Not found with current
61	02:00.6	cis-1,2 DCE		01:58.5	0.591	1	80453	0.06
62	02:16.9	1,2-DCA		02:10.3	0.772	1	25660	0.015
130	02:38.1	TCE		02:34.1	0.902	1	40527	0.013
166	03:38.9	PCE		03:32.2	0.995	1	296400	0.073

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_032.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/25/2016 4:59:19 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE		01:36.9	0.631	1	20233	0.033
61	01:54.0	trans-1,2 DCE	N/A		0	0	0	Not found with current
63	01:56.5	1,1-DCA	N/A		0	0	0	Not found with current
61	02:00.6	cis-1,2 DCE	N/A		0	0	0	Not found with current
62	02:16.9	1,2-DCA		02:10.8	0.846	1	22909	0.013
130	02:38.1	TCE		02:33.6	0.908	1	40062	0.013
166	03:38.9	PCE		03:32.4	0.994	1	122130	0.03

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_031.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/25/2016 4:50:29 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	N/A		0	0	0	Not found with current
61	01:54.0	trans-1,2 DCE		01:58.2	0.684	1	14960	0.011
63	01:56.5	1,1-DCA		02:00.3	0.948	1	15420	0.04
61	02:00.6	cis-1,2 DCE		01:58.2	0.761	1	14960	0.011
62	02:16.9	1,2-DCA		02:10.9	0.945	1	87622	0.052
130	02:38.1	TCE		02:33.6	0.911	1	46182	0.015
166	03:38.9	PCE		03:32.4	0.995	1	783409	0.192

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_030.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00526 Min Longitude: W 111 Deg 51.45996 Min GMT: 02/25/16 09:31:52 PM

Acquisition Date and Time: 2/25/2016 4:40:56 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	N/A		0	0	0	Not found with current
61	01:54.0	trans-1,2 DCE	01:59.2	0.668	1	69343	0.052	
63	01:56.5	1,1-DCA	01:53.3	0.818	1	9427	0.025	
61	02:00.6	cis-1,2 DCE	01:59.2	0.756	1	69343	0.052	
62	02:16.9	1,2-DCA	02:09.9	0.845	1	36819	0.022	
130	02:38.1	TCE	02:33.8	0.901	1	33569	0.011	
166	03:38.9	PCE	03:31.8	0.994	1	426239	0.105	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_029.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.01144 Min Longitude: W 111 Deg 51.46362 Min GMT: 02/25/16 09:23:12 PM

Acquisition Date and Time: 2/25/2016 4:32:15 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:37.0	0.505	1	2826		Area too low
61	01:54.0	trans-1,2 DCE	01:58.5	0.44	1	14137	0.011	
63	01:56.5	1,1-DCA	N/A		0	0	0	Not found with current
61	02:00.6	cis-1,2 DCE	01:58.5	0.524	1	14137	0.011	
62	02:16.9	1,2-DCA	02:21.0	0.551	1	10272	0.006	
130	02:38.1	TCE	02:34.8	0.91	1	24890	0.008	
166	03:38.9	PCE	03:32.1	0.995	1	143571	0.035	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_028.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/25/2016 4:23:10 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:37.5	0.533	1	20226	0.033	
61	01:54.0	trans-1,2 DCE	01:58.0	0.652	1	17407	0.013	
63	01:56.5	1,1-DCA	01:52.1	0.71	1	40121	0.104	
61	02:00.6	cis-1,2 DCE	01:58.0	0.86	1	17407	0.013	
62	02:16.9	1,2-DCA	02:10.6	0.823	1	63226	0.037	

130	02:38.1	TCE	02:33.3	0.907	1	40821	0.014
166	03:38.9	PCE	03:32.1	0.994	1	2021292	0.497

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_027.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00343 Min Longitude: W 111 Deg 51.46500 Min GMT: 02/25/16 09:03:15 PM

Acquisition Date and Time: 2/25/2016 4:12:18 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:38.9	0.552	1	56139	0.091	
61	01:54.0	trans-1,2 DCE	01:58.3	0.836	1	25323	0.019	
63	01:56.5	1,1-DCA	01:52.5	0.649	1	29308	0.076	
61	02:00.6	cis-1,2 DCE	01:58.3	0.892	1	25323	0.019	
62	02:16.9	1,2-DCA	02:10.9	0.767	1	75780	0.045	
130	02:38.1	TCE	02:33.8	0.91	1	122911	0.041	
166	03:38.9	PCE	03:31.9	0.994	1	5070052	1.246	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_026.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.01053 Min Longitude: W 111 Deg 51.48239 Min GMT: 02/25/16 08:54:42 PM

Acquisition Date and Time: 2/25/2016 4:03:45 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:39.8	0.546	1	45451	0.074	
61	01:54.0	trans-1,2 DCE	01:59.1	0.661	1	27560	0.021	
63	01:56.5	1,1-DCA	01:53.3	0.692	1	21988	0.057	
61	02:00.6	cis-1,2 DCE	01:59.1	0.647	1	27560	0.021	
62	02:16.9	1,2-DCA	02:10.8	0.618	1	53786	0.032	
130	02:38.1	TCE	02:33.8	0.906	1	90118	0.03	
166	03:38.9	PCE	03:32.3	0.994	1	3409054	0.838	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_025.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/25/2016 3:55:12 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE		01:39.8	0.51	1	33162	0.054
61	01:54.0	trans-1,2 DCE		01:58.3	0.55	1	31150	0.023
63	01:56.5	1,1-DCA		01:53.5	0.69	1	42278	0.11
61	02:00.6	cis-1,2 DCE		01:58.3	0.734	1	31150	0.023
62	02:16.9	1,2-DCA		02:10.0	0.719	1	49990	0.029
130	02:38.1	TCE		02:33.3	0.906	1	126629	0.042
166	03:38.9	PCE		03:31.8	0.993	1	4719575	1.16

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_024.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/25/2016 3:46:29 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE		01:44.4	0.6	1	9575	0.016
61	01:54.0	trans-1,2 DCE		01:58.9	0.58	1	38941	0.029
63	01:56.5	1,1-DCA	N/A		0	0	0	Not found with current
61	02:00.6	cis-1,2 DCE		01:58.9	0.771	1	38941	0.029
62	02:16.9	1,2-DCA		02:10.5	0.763	1	35950	0.021
130	02:38.1	TCE		02:33.6	0.902	1	41038	0.014
166	03:38.9	PCE		03:32.0	0.993	1	689432	0.169

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_023.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.01694 Min Longitude: W 111 Deg 51.45950 Min GMT: 02/25/16 08:28:32 PM

Acquisition Date and Time: 2/25/2016 3:37:35 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	N/A		0	0	0	Not found with current
61	01:54.0	trans-1,2 DCE		01:59.1	0.777	1	28730	0.021
63	01:56.5	1,1-DCA		02:00.1	0.845	1	16761	0.044
61	02:00.6	cis-1,2 DCE		01:59.1	0.906	1	28730	0.021
62	02:16.9	1,2-DCA		02:10.7	0.77	1	42738	0.025
130	02:38.1	TCE		02:33.6	0.906	1	89810	0.03
166	03:38.9	PCE		03:32.2	0.994	1	2705606	0.665

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_022.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.01465 Min Longitude: W 111 Deg 51.47461 Min GMT: 02/25/16 08:19:54 PM

Acquisition Date and Time: 2/25/2016 3:28:57 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5

Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:36.2	0.549	1	10319	0.017	
61	01:54.0	trans-1,2 DCE	01:58.4	0.643	1	26278	0.02	
63	01:56.5	1,1-DCA	01:52.6	0.795	1	15842	0.041	
61	02:00.6	cis-1,2 DCE	01:58.4	0.649	1	26278	0.02	
62	02:16.9	1,2-DCA	02:10.0	0.805	1	52946	0.031	
130	02:38.1	TCE	02:33.8	0.895	1	94204	0.031	
166	03:38.9	PCE	03:31.8	0.993	1	3213722	0.79	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_021.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00572 Min Longitude: W 111 Deg 51.43616 Min GMT: 02/25/16 08:11:02 PM

Acquisition Date and Time: 2/25/2016 3:20:06 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	N/A		0	0	0	Not found with current
61	01:54.0	trans-1,2 DCE	01:59.2	0.624	1	70839	0.053	
63	01:56.5	1,1-DCA	01:59.2	0.993	1	19802	0.051	
61	02:00.6	cis-1,2 DCE	01:59.2	0.732	1	70839	0.053	
62	02:16.9	1,2-DCA	02:10.8	0.719	1	39009	0.023	
130	02:38.1	TCE	02:33.8	0.906	1	53532	0.018	
166	03:38.9	PCE	03:32.5	0.994	1	1016891	0.25	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_020.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/25/2016 3:11:29 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:37.8	0.509	1	34356	0.056	
61	01:54.0	trans-1,2 DCE	01:58.2	0.643	1	32441	0.024	
63	01:56.5	1,1-DCA	01:58.2	0.85	1	19195	0.05	
61	02:00.6	cis-1,2 DCE	01:58.2	0.854	1	32441	0.024	
62	02:16.9	1,2-DCA	02:10.8	0.878	1	60557	0.036	
130	02:38.1	TCE	02:33.6	0.91	1	98717	0.033	
166	03:38.9	PCE	03:32.6	0.995	1	2932883	0.721	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_019.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.98306 Min Longitude: W 111 Deg 51.48834 Min GMT: 02/25/16 07:53:47 PM

Acquisition Date and Time: 2/25/2016 3:02:50 PM

Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE		01:38.9	0.549	1	22701	0.037
61	01:54.0	trans-1,2 DCE		01:59.3	0.708	1	28949	0.022
63	01:56.5	1,1-DCA		01:52.5	0.638	1	25455	0.066
61	02:00.6	cis-1,2 DCE		01:59.3	0.867	1	28949	0.022
62	02:16.9	1,2-DCA		02:10.9	0.761	1	44561	0.026
130	02:38.1	TCE		02:33.8	0.911	1	98812	0.033
166	03:38.9	PCE		03:32.5	0.995	1	2344436	0.576

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_018.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00824 Min Longitude: W 111 Deg 51.46225 Min GMT: 02/25/16 07:44:55 PM

Acquisition Date and Time: 2/25/2016 2:53:58 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE		01:40.7	0.416	1	24985	0.041
61	01:54.0	trans-1,2 DCE		01:59.3	0.688	1	96264	0.072
63	01:56.5	1,1-DCA		02:01.2	0.833	1	10254	0.027
61	02:00.6	cis-1,2 DCE		01:59.3	0.796	1	96264	0.072
62	02:16.9	1,2-DCA		02:11.0	0.755	1	47825	0.028
130	02:38.1	TCE		02:34.2	0.911	1	56169	0.019
166	03:38.9	PCE		03:32.6	0.994	1	1241670	0.305

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_017.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00298 Min Longitude: W 111 Deg 51.48560 Min GMT: 02/25/16 07:35:44 PM

Acquisition Date and Time: 2/25/2016 2:44:47 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE		01:38.8	0.511	1	31180	0.051
61	01:54.0	trans-1,2 DCE		01:58.5	0.776	1	75905	0.057
63	01:56.5	1,1-DCA		02:00.4	0.885	1	26987	0.07
61	02:00.6	cis-1,2 DCE		01:58.5	0.85	1	75905	0.057
62	02:16.9	1,2-DCA		02:10.3	0.919	1	70075	0.041
130	02:38.1	TCE		02:34.0	0.902	1	83295	0.028
166	03:38.9	PCE		03:32.5	0.995	1	2921208	0.718

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_016.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00549 Min Longitude: W 111 Deg 51.46729 Min GMT: 02/25/16 07:26:59 PM

Acquisition Date and Time: 2/25/2016 2:36:03 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:38.6	0.639	1	33338	0.054	
61	01:54.0	trans-1,2 DCE	01:59.0	0.572	1	47710	0.036	
63	01:56.5	1,1-DCA	01:59.9	0.774	1	20373	0.053	
61	02:00.6	cis-1,2 DCE	01:59.0	0.79	1	47710	0.036	
62	02:16.9	1,2-DCA	02:10.6	0.891	1	57411	0.034	
130	02:38.1	TCE	02:34.1	0.902	1	80093	0.026	
166	03:38.9	PCE	03:32.7	0.994	1	2606961	0.641	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_015.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00206 Min Longitude: W 111 Deg 51.37939 Min GMT: 02/25/16 07:16:19 PM

Acquisition Date and Time: 2/25/2016 2:25:23 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:39.9	0.515	1	43210	0.07	
61	01:54.0	trans-1,2 DCE	01:59.4	0.478	1	214608	0.16	
63	01:56.5	1,1-DCA	02:00.3	0.806	1	8744	0.023	
61	02:00.6	cis-1,2 DCE	01:59.4	0.575	1	214608	0.16	
62	02:16.9	1,2-DCA	02:20.7	0.486	1	10017	0.006	
130	02:38.1	TCE	02:33.8	0.91	1	56030	0.019	
166	03:38.9	PCE	03:32.9	0.995	1	1911417	0.47	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_014.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/25/2016 2:16:41 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:38.9	0.5	1	59874	0.097	
61	01:54.0	trans-1,2 DCE	01:58.3	0.566	1	201346	0.15	
63	01:56.5	1,1-DCA	02:00.2	0.506	1	29387	0.076	
61	02:00.6	cis-1,2 DCE	01:58.3	0.716	1	201346	0.15	
62	02:16.9	1,2-DCA	02:22.7	0.344	1	8314	0.005	
130	02:38.1	TCE	02:33.4	0.899	1	69322	0.023	
166	03:38.9	PCE	03:32.6	0.994	1	2752315	0.676	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_013.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.01144 Min Longitude: W 111 Deg 51.47736 Min GMT: 02/25/16 06:57:44 PM

Acquisition Date and Time: 2/25/2016 2:06:47 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:40.7	0.466	1	60798	0.099	
61	01:54.0	trans-1,2 DCE	01:59.3	0.586	1	99336	0.074	
63	01:56.5	1,1-DCA	01:52.5	0.846	1	33860	0.088	
61	02:00.6	cis-1,2 DCE	01:59.3	0.72	1	99336	0.074	
62	02:16.9	1,2-DCA	02:19.8	0.376	1	7683	0.005	
130	02:38.1	TCE	02:33.3	0.906	1	89054	0.029	
166	03:38.9	PCE	03:32.8	0.995	1	2921145	0.718	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_012.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/25/2016 12:44:30 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:38.8	0.534	1	238765	0.388	
61	01:54.0	trans-1,2 DCE	01:59.1	0.812	1	115755	0.086	
63	01:56.5	1,1-DCA	01:52.3	0.748	1	232059	0.603	
61	02:00.6	cis-1,2 DCE	01:59.1	0.918	1	115755	0.086	
62	02:16.9	1,2-DCA	02:10.7	0.61	1	161838	0.095	
130	02:38.1	TCE	02:33.8	0.901	1	101169	0.033	
166	03:38.9	PCE	03:31.7	0.993	1	4875883	1.198	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_011.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00526 Min Longitude: W 111 Deg 51.45905 Min GMT: 02/25/16 05:25:53 PM

Acquisition Date and Time: 2/25/2016 12:34:57 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000

Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:39.1	0.482	1	90648	0.147	
61	01:54.0	trans-1,2 DCE	01:59.4	0.7	1	125528	0.094	
63	01:56.5	1,1-DCA	01:51.7	0.808	1	50405	0.131	
61	02:00.6	cis-1,2 DCE	01:59.4	0.808	1	125528	0.094	
62	02:16.9	1,2-DCA	02:11.0	0.877	1	178189	0.105	
130	02:38.1	TCE	02:33.9	0.904	1	93675	0.031	
166	03:38.9	PCE	03:31.9	0.993	1	4539978	1.115	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_006.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00847 Min Longitude: W 111 Deg 51.46271 Min GMT: 02/25/16 04:33:07 PM

Acquisition Date and Time: 2/25/2016 11:42:08 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:38.8	0.46	1	57515	0.094	
61	01:54.0	trans-1,2 DCE	01:58.4	0.574	1	717855	0.535	
63	01:56.5	1,1-DCA	N/A	0	0	0		Not found with current search parameters
61	02:00.6	cis-1,2 DCE	01:58.4	0.671	1	717855	0.535	
62	02:16.9	1,2-DCA	02:10.1	0.404	1	196325	0.116	
130	02:38.1	TCE	02:33.8	0.904	1	89495	0.03	
166	03:38.9	PCE	03:31.8	0.994	1	3930508	0.966	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_005.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00526 Min Longitude: W 111 Deg 51.46362 Min GMT: 02/25/16 04:24:37 PM

Acquisition Date and Time: 2/25/2016 11:33:38 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:39.2	0.436	1	56848	0.092	
61	01:54.0	trans-1,2 DCE	01:58.5	0.635	1	392188	0.292	
63	01:56.5	1,1-DCA	01:50.8	0.944	1	12591	0.033	
61	02:00.6	cis-1,2 DCE	01:58.5	0.758	1	392188	0.292	
62	02:16.9	1,2-DCA	02:18.0	0.508	1	15148	0.009	
130	02:38.1	TCE	02:33.3	0.896	1	86881	0.029	
166	03:38.9	PCE	03:32.0	0.995	1	4027997	0.99	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_004.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00137 Min Longitude: W 111 Deg 51.46774 Min GMT: 02/25/16 04:15:35 PM

Acquisition Date and Time: 2/25/2016 11:24:36 AM

Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE		01:39.7	0.439	1	5081	0.008
61	01:54.0	trans-1,2 DCE		01:59.2	0.711	1	291181	0.217
63	01:56.5	1,1-DCA	N/A		0	0	0	Not found with current search parameters
61	02:00.6	cis-1,2 DCE		01:59.2	0.799	1	291181	0.217
62	02:16.9	1,2-DCA		02:10.8	0.331	1	199321	0.117
130	02:38.1	TCE		02:33.7	0.888	1	66460	0.022
166	03:38.9	PCE		03:32.4	0.995	1	3128112	0.769

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_003.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00710 Min Longitude: W 111 Deg 51.47461 Min GMT: 02/25/16 04:06:50 PM

Acquisition Date and Time: 2/25/2016 11:15:51 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	N/A		0	0	0	Not found with current search parameters
61	01:54.0	trans-1,2 DCE		01:58.9	0.682	1	127745	0.095
63	01:56.5	1,1-DCA		01:59.9	0.789	1	13486	0.035
61	02:00.6	cis-1,2 DCE		01:58.9	0.737	1	127745	0.095
62	02:16.9	1,2-DCA		02:19.3	0.387	1	12154	0.007
130	02:38.1	TCE		02:34.1	0.905	1	52588	0.017
166	03:38.9	PCE		03:32.4	0.994	1	2266128	0.557

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_002.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00961 Min Longitude: W 111 Deg 51.46500 Min GMT: 02/25/16 03:58:26 PM

Acquisition Date and Time: 2/25/2016 11:07:27 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE		01:39.9	0.445	1	160858	0.262
61	01:54.0	trans-1,2 DCE		01:59.4	0.549	1	501358	0.373
63	01:56.5	1,1-DCA		02:01.3	0.681	1	16901	0.044

61	02:00.6	cis-1,2 DCE	01:59.4	0.639	1	501358	0.373
62	02:16.9	1,2-DCA	02:11.1	0.81	1	105698	0.062
130	02:38.1	TCE	02:34.2	0.901	1	80638	0.027
166	03:38.9	PCE	03:33.0	0.994	1	3711314	0.912

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_001.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00618 Min Longitude: W 111 Deg 51.46179 Min GMT: 02/25/16 03:49:53 PM

Acquisition Date and Time: 2/25/2016 10:58:55 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	N/A		0	0	0	Not found with current search parameters
61	01:54.0	trans-1,2 DCE	01:48.1	0.466	1	24223	0.018	
63	01:56.5	1,1-DCA	N/A		0	0	0	Not found with current search parameters
61	02:00.6	cis-1,2 DCE	02:00.7	0.813	1	16111	0.012	
62	02:16.9	1,2-DCA	02:12.3	0.833	1	30687	0.018	
130	02:38.1	TCE	02:34.9	0.888	1	16128	0.005	
166	03:38.9	PCE	03:33.5	0.995	1	87392	0.021	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160224_014.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/24/2016 9:30:27 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE		01:46.9	0.816	1	43108	0.07
61	01:54.0	trans-1,2 DCE		01:57.6	0.733	1	51370	0.038
63	01:56.5	1,1-DCA		01:53.7	0.659	1	14110	0.037
61	02:00.6	cis-1,2 DCE		01:57.6	0.884	1	51370	0.038
62	02:16.9	1,2-DCA		02:09.3	0.939	1	41428	0.024
130	02:38.1	TCE		02:40.0	0.523	1	6803	0.002
166	03:38.9	PCE		03:30.0	0.99	1	147451	0.036

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160224_013.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/24/2016 9:21:02 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000

Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:38.8	0.966	1	2966111	4.822	
61	01:54.0	trans-1,2 DCE	01:57.4	0.844	1	6628774	4.938	
63	01:56.5	1,1-DCA	01:58.3	0.533	1	2009707	5.223	
61	02:00.6	cis-1,2 DCE	01:57.4	0.992	1	6628774	4.938	
62	02:16.9	1,2-DCA	02:10.1	0.995	1	8532574	5.021	
130	02:38.1	TCE	02:33.4	0.907	1	15384333	5.09	
166	03:38.9	PCE	03:30.5	0.994	1	20801398	5.111	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160224_012.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/24/2016 9:11:25 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:38.8	0.971	1	3150541	5.122	
61	01:54.0	trans-1,2 DCE	01:58.2	0.83	1	7173045	5.344	
63	01:56.5	1,1-DCA	01:58.2	0.53	1	2187397	5.685	
61	02:00.6	cis-1,2 DCE	01:58.2	0.986	1	7173045	5.344	
62	02:16.9	1,2-DCA	02:09.8	0.992	1	9375990	5.517	
130	02:38.1	TCE	02:33.1	0.907	1	16717392	5.531	
166	03:38.9	PCE	03:30.7	0.995	1	22773880	5.595	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160224_011.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/24/2016 8:48:25 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:39.7	0.958	1	6366964	10.35	
61	01:54.0	trans-1,2 DCE	01:57.3	0.842	1	14443685	10.76	
63	01:56.5	1,1-DCA	01:58.2	0.531	1	4342412	11.29	
61	02:00.6	cis-1,2 DCE	01:57.3	0.991	1	14443685	10.76	
62	02:16.9	1,2-DCA	02:09.9	0.997	1	18851750	11.09	
130	02:38.1	TCE	02:33.3	0.907	1	34479256	11.41	
166	03:38.9	PCE	03:30.4	0.994	1	45810648	11.26	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160224_010.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/24/2016 8:37:28 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016

Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:38.7	0.968	1	3215293	5.227	
61	01:54.0	trans-1,2 DCE	01:58.1	0.823	1	6980477	5.2	
63	01:56.5	1,1-DCA	01:58.1	0.529	1	2137831	5.556	
61	02:00.6	cis-1,2 DCE	01:58.1	0.985	1	6980477	5.2	
62	02:16.9	1,2-DCA	02:09.8	0.992	1	9107245	5.359	
130	02:38.1	TCE	02:33.5	0.907	1	16222415	5.367	
166	03:38.9	PCE	03:30.3	0.993	1	21932502	5.389	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160224_009.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/24/2016 8:28:29 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:39.3	0.962	1	1540924	2.505	
61	01:54.0	trans-1,2 DCE	01:57.8	0.809	1	3507226	2.613	
63	01:56.5	1,1-DCA	01:57.8	0.543	1	995849	2.588	
61	02:00.6	cis-1,2 DCE	01:57.8	0.982	1	3507226	2.613	
62	02:16.9	1,2-DCA	02:10.4	0.997	1	4512735	2.656	
130	02:38.1	TCE	02:32.7	0.906	1	7683489	2.542	
166	03:38.9	PCE	03:31.2	0.995	1	10729943	2.636	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160224_008.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/24/2016 8:18:48 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:39.4	0.965	1	288284	0.469	
61	01:54.0	trans-1,2 DCE	01:57.8	0.79	1	625557	0.466	
63	01:56.5	1,1-DCA	01:58.7	0.533	1	195563	0.508	
61	02:00.6	cis-1,2 DCE	01:57.8	0.975	1	625557	0.466	
62	02:16.9	1,2-DCA	02:10.5	0.992	1	796600	0.469	
130	02:38.1	TCE	02:33.3	0.906	1	1381079	0.457	
166	03:38.9	PCE	03:30.7	0.993	1	1743069	0.428	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160224_007.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/24/2016 8:09:14 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:39.2	0.983	1	60290	0.098	
61	01:54.0	trans-1,2 DCE	01:57.6	0.665	1	121715	0.091	
63	01:56.5	1,1-DCA	01:57.6	0.54	1	27258	0.071	
61	02:00.6	cis-1,2 DCE	01:57.6	0.906	1	121715	0.091	
62	02:16.9	1,2-DCA	02:10.3	0.988	1	139169	0.082	
130	02:38.1	TCE	02:33.2	0.909	1	258549	0.086	
166	03:38.9	PCE	03:31.0	0.993	1	360452	0.089	

Data File: C:\Plus IQ\H2427\Data\VA\SIM_100PPB_VA_20160224_20160225_010.hps
GPS Info:
Latitude: N 40 Deg 45.01144 Min Longitude: W 111 Deg 51.46179 Min GMT: 02/25/16 04:59:45 PM

Acquisition Date and Time: 2/25/2016 12:08:49 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:39.0	0.515	1	104503	0.17	
61	01:54.0	trans-1,2 DCE	01:51.7	0.563	1	16110	0.012	
63	01:56.5	1,1-DCA	01:52.7	0.802	1	86433	0.225	
61	02:00.6	cis-1,2 DCE	01:58.4	0.806	1	124107	0.092	
62	02:16.9	1,2-DCA	02:10.3	0.774	1	150130	0.088	
130	02:38.1	TCE	02:33.5	0.91	1	123147	0.041	
166	03:38.9	PCE	03:31.8	0.995	1	5323760	1.308	

Data File: C:\Plus IQ\H2427\Data\VA\SIM_100PPB_VA_20160224_20160225_008.hps
GPS Info:
Latitude: N 40 Deg 45.02586 Min Longitude: W 111 Deg 51.44211 Min GMT: 02/25/16 04:42:55 PM

Acquisition Date and Time: 2/25/2016 11:51:56 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:39.1	0.508	1	10026	0.016	

61	01:54.0	trans-1,2 DCE	01:58.5	0.628	1	107132	0.08
63	01:56.5	1,1-DCA	01:52.7	0.9	1	16653	0.043
61	02:00.6	cis-1,2 DCE	01:58.5	0.779	1	107132	0.08
62	02:16.9	1,2-DCA	02:10.2	0.79	1	137315	0.081
130	02:38.1	TCE	02:33.8	0.909	1	64686	0.021
166	03:38.9	PCE	03:32.1	0.995	1	4458322	1.095

NOTES:
Act. = Actual.
AOU 1 = Accelerated Operable Unit 1 East Side Springs.
CtCl = Carbon tetrachloride.
cVOC = Chlorinated volatile organic compound.
DCA = Dichloroethane.
DCE = Dichloroethene.
PCE = Tetrachloroethene.
ppb = Part(s) per billion.
ppbv = Part(s) per billion per volume.
Pred. = Predicted.
RT = Retention time.
TCE = Trichloroethene.
VA = Department of Veteran Affairs.
VC = Vinyl chloride.

LOCATION: 0050-H HAPSITE SURVEY
SAMPLE DATE: 23-Mar-16

Unknown Identification Report
Date: 03/23/16 Time: 13:18:41
Calibration Method:
/Haps/Method/Analyze/Concentrator/Hill Vapor Intrusion Cal 2 min SIM.mth
Tune File:
default.tun
Method Description:
SIM cVOC Method in order of elution
cis-DCE; TCE; PCE
General Quantification Range from 0.1
ppbv to 50 ppbv

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160323_008.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/23/2016 8:35:36 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 23MAR2016
Last Calibrated: 3/23/2016 7:43:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.5	0.937	1	644315	0.455
130	02:38.1	TCE		02:33.0	0.905	1	955340	0.453
166	03:38.9	PCE		03:46.1	0.626	1	46922	0.016

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160323_007.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/23/2016 8:27:06 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 23MAR2016
Last Calibrated: 3/23/2016 7:43:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:57.0	0.948	1	112091	0.079
130	02:38.1	TCE		02:32.4	0.907	1	167533	0.079
166	03:38.9	PCE		03:30.8	0.996	1	223593	0.074

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160323_004.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/23/2016 8:02:16 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 23MAR2016
Last Calibrated: 3/23/2016 7:43:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.2	0.943	1	15061143	10.63
130	02:38.1	TCE		02:34.4	0.906	1	23561932	11.16
166	03:38.9	PCE		03:32.3	0.995	1	34109564	11.31

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160323_003.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/23/2016 7:54:11 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 23MAR2016
Last Calibrated: 3/23/2016 7:43:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.8	0.941	1	4024159	2.84
130	02:38.1	TCE		02:34.2	0.905	1	5789088	2.742
166	03:38.9	PCE		03:32.8	0.995	1	8364371	2.774

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160323_002.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/23/2016 7:41:49 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 23MAR2016
Last Calibrated: 3/23/2016 7:43:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:59.6	0.939	1	7794978	5.502
130	02:38.1	TCE		02:35.7	0.905	1	11327440	5.366
166	03:38.9	PCE		03:33.5	0.994	1	16179787	5.366

Data File: /Data/VA /SIM_100PPB_VA_20160323/SIM_100PPB_VA_20160323_20160323_017.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/23/2016 2:12:56 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160323.mth
Target Library: QB 23MAR2016
Last Calibrated: 3/23/2016 7:43:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.9	0.941	1	6751806	4.766
130	02:38.1	TCE		02:34.4	0.905	1	10320462	4.889
166	03:38.9	PCE		03:32.2	0.993	1	14764602	4.897

Data File: /Data/VA /SIM_100PPB_VA_20160323/SIM_100PPB_VA_20160323_20160323_016.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.03273 Min Longitude: W 111 Deg 51.50528 Min GMT: 03/23/16 05:55:04 PM

Acquisition Date and Time: 3/23/2016 1:04:49 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160323.mth
Target Library: QB 23MAR2016
Last Calibrated: 3/23/2016 7:43:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:59.1	0.946	1	64588	0.046
130	02:38.1	TCE		02:34.7	0.905	1	1361575	0.645
166	03:38.9	PCE		03:33.6	0.994	1	5655174	1.876

Data File: /Data/VA /SIM_100PPB_VA_20160323/SIM_100PPB_VA_20160323_20160323_015.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.03479 Min Longitude: W 111 Deg 51.51398 Min GMT: 03/23/16 05:17:35 PM

Acquisition Date and Time: 3/23/2016 12:27:20 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160323.mth
Target Library: QB 23MAR2016
Last Calibrated: 3/23/2016 7:43:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.9	0.616	1	5363	0.004
130	02:38.1	TCE		02:46.5	0.89	1	5229	0.002
166	03:38.9	PCE		03:32.9	1	1	13106	0.004

Data File: /Data/VA /SIM_100PPB_VA_20160323/SIM_100PPB_VA_20160323_20160323_014.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/23/2016 12:17:50 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160323.mth
Target Library: QB 23MAR2016
Last Calibrated: 3/23/2016 7:43:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	N/A		0	0	0	Not found with current search parameters
130	02:38.1	TCE		02:34.1	0.847	1	8198	0.004
166	03:38.9	PCE		03:34.3	1	1	23704	0.008

Data File: /Data/VA /SIM_100PPB_VA_20160323/SIM_100PPB_VA_20160323_20160323_013.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/23/2016 12:09:35 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160323.mth
Target Library: QB 23MAR2016
Last Calibrated: 3/23/2016 7:43:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		02:02.4	0.831	1	3710	Area too low
130	02:38.1	TCE		02:36.1	0.891	1	7796	0.004
166	03:38.9	PCE		03:39.4	0.978	1	7275	0.002

Data File: /Data/VA /SIM_100PPB_VA_20160323/SIM_100PPB_VA_20160323_20160323_012.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/23/2016 12:01:19 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160323.mth
Target Library: QB 23MAR2016
Last Calibrated: 3/23/2016 7:43:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.3	0.71	1	6039	0.004
130	02:38.1	TCE	N/A		0	0	0	Not found with current search parameters
166	03:38.9	PCE		03:34.2	0.998	1	29239	0.01

Data File: /Data/VA /SIM_100PPB_VA_20160323/SIM_100PPB_VA_20160323_20160323_011.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/23/2016 11:51:36 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160323.mth
Target Library: QB 23MAR2016
Last Calibrated: 3/23/2016 7:43:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:59.2	0.574	1	27001	0.019
130	02:38.1	TCE		02:34.0	0.911	1	5713	0.003
166	03:38.9	PCE		03:33.4	0.994	1	109282	0.036

Data File: /Data/VA /SIM_100PPB_VA_20160323/SIM_100PPB_VA_20160323_20160323_010.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.99634 Min Longitude: W 111 Deg 51.49200 Min GMT: 03/23/16 04:33:30 PM

Acquisition Date and Time: 3/23/2016 11:43:15 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160323.mth
Target Library: QB 23MAR2016
Last Calibrated: 3/23/2016 7:43:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:59.0	0.524	1	20031	0.014
130	02:38.1	TCE		02:34.5	0.911	1	12782	0.006
166	03:38.9	PCE		03:43.6	0.986	1	8464	0.003

Data File: /Data/VA /SIM_100PPB_VA_20160323/SIM_100PPB_VA_20160323_20160323_009.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00366 Min Longitude: W 111 Deg 51.45813 Min GMT: 03/23/16 04:25:12 PM

Acquisition Date and Time: 3/23/2016 11:34:57 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160323.mth
Target Library: QB 23MAR2016
Last Calibrated: 3/23/2016 7:43:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:59.1	0.524	1	12352	0.009
130	02:38.1	TCE	N/A		0	0	0	Not found with current search parameters
166	03:38.9	PCE		03:33.9	0.994	1	43543	0.014

Data File: /Data/VA /SIM_100PPB_VA_20160323/SIM_100PPB_VA_20160323_20160323_008.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.02243 Min Longitude: W 111 Deg 51.49796 Min GMT: 03/23/16 04:16:53 PM

Acquisition Date and Time: 3/23/2016 11:26:38 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160323.mth
Target Library: QB 23MAR2016
Last Calibrated: 3/23/2016 7:43:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:59.6	0.74	1	27323	0.019
130	02:38.1	TCE		02:34.2	0.91	1	10677	0.005
166	03:38.9	PCE		03:33.6	0.997	1	110475	0.037

Data File: /Data/VA /SIM_100PPB_VA_20160323/SIM_100PPB_VA_20160323_20160323_007.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.03342 Min Longitude: W 111 Deg 51.51031 Min GMT: 03/23/16 04:07:13 PM

Acquisition Date and Time: 3/23/2016 11:16:58 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160323.mth
Target Library: QB 23MAR2016
Last Calibrated: 3/23/2016 7:43:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.3	0.689	1	40569	0.029
130	02:38.1	TCE		02:45.6	0.523	1	6826	0.003
166	03:38.9	PCE		03:33.1	0.997	1	106376	0.035

Data File: /Data/VA /SIM_100PPB_VA_20160323/SIM_100PPB_VA_20160323_20160323_006.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.05402 Min Longitude: W 111 Deg 51.48788 Min GMT: 03/23/16 03:58:35 PM

Acquisition Date and Time: 3/23/2016 11:08:20 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160323.mth
Target Library: QB 23MAR2016
Last Calibrated: 3/23/2016 7:43:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:59.4	0.614	1	24325	0.017
130	02:38.1	TCE		02:35.0	0.714	1	13751	0.007
166	03:38.9	PCE		03:33.8	0.999	1	76038	0.025

Data File: /Data/VA /SIM_100PPB_VA_20160323/SIM_100PPB_VA_20160323_20160323_005.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/23/2016 10:59:47 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160323.mth
Target Library: QB 23MAR2016
Last Calibrated: 3/23/2016 7:43:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.1	0.632	1	16705	0.012
130	02:38.1	TCE		02:33.5	0.827	1	7389	0.004
166	03:38.9	PCE		03:32.8	0.997	1	35793	0.012

Data File: /Data/VA /SIM_100PPB_VA_20160323/SIM_100PPB_VA_20160323_20160323_004.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.02243 Min Longitude: W 111 Deg 51.51260 Min GMT: 03/23/16 03:41:26 PM

Acquisition Date and Time: 3/23/2016 10:51:11 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160323.mth
Target Library: QB 23MAR2016
Last Calibrated: 3/23/2016 7:43:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:59.9	0.605	1	26322	0.019
130	02:38.1	TCE		02:44.2	0.847	1	5414	0.003
166	03:38.9	PCE		03:33.3	0.995	1	63706	0.021

Data File: /Data/VA /SIM_100PPB_VA_20160323/SIM_100PPB_VA_20160323_20160323_003.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.03410 Min Longitude: W 111 Deg 51.50620 Min GMT: 03/23/16 02:48:19 PM

Acquisition Date and Time: 3/23/2016 9:58:04 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160323.mth
Target Library: QB 23MAR2016
Last Calibrated: 3/23/2016 7:43:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.4	0.855	1	11250	0.008
130	02:38.1	TCE	N/A		0	0	0	Not found with current search parameters
166	03:38.9	PCE		03:31.7	0.995	1	24224	0.008

Data File: /Data/VA /SIM_100PPB_VA_20160323/SIM_100PPB_VA_20160323_20160323_002.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.04280 Min Longitude: W 111 Deg 51.51123 Min GMT: 03/23/16 02:38:13 PM

Acquisition Date and Time: 3/23/2016 9:47:59 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160323.mth
Target Library: QB 23MAR2016
Last Calibrated: 3/23/2016 7:43:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.2	0.699	1	126290	0.089
130	02:38.1	TCE		02:33.8	0.859	1	8000	0.004
166	03:38.9	PCE		03:31.5	0.992	1	74906	0.025

Data File: /Data/VA /SIM_100PPB_VA_20160323/SIM_100PPB_VA_20160323_20160323_001.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.04509 Min Longitude: W 111 Deg 51.50528 Min GMT: 03/23/16 02:29:40 PM

Acquisition Date and Time: 3/23/2016 9:39:25 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160323.mth
Target Library: QB 23MAR2016
Last Calibrated: 3/23/2016 7:43:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	N/A		0	0	0	Not found with current search parameters
130	02:38.1	TCE		02:40.8	0.523	1	6975	0.003
166	03:38.9	PCE		03:31.1	0.998	1	49698	0.016

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160323_009.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/23/2016 8:44:43 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mth
Target Library: QB 23MAR2016
Last Calibrated: 3/23/2016 7:43:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.5	0.937	1	643987	0.455	
130	02:38.1	TCE	02:33.1	0.906	1	971199	0.46	
166	03:38.9	PCE	03:30.8	0.996	1	1423818	0.472	

NOTES:
Act. = Actual.
AOU 1 = Accelerated Operable Unit 1 East Side Springs.
cVOC = Chlorinated volatile organic compound.
DCE = Dichloroethene.
PCE = Tetrachloroethene.
ppb = Part(s) per billion.
Pred. = Predicted.
RT = Retention time.
TCE = Trichloroethene.
VA = Department of Veteran Affairs.

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LOCATION: 0051-H HAPSITE SURVEY
SAMPLE DATE: 26-Feb-16

Unknown Identification Report
Date: 02/26/16 Time: 16:29:03
Calibration Method:
/Haps/Method/Analyze/Concentrator/Hill Vapor Intrusion Cal 2 min SIM.mth
Tune File:
default.tun
Method Description:
SIM cVOC Method in order of elution VC;
1,1-DCE; trans-DCE; 1,1-DCA; cis-DCE;
CtCl; TCE; PCE
General Quantification Range from 0.1
ppbv to 50 ppbv

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_033.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.88670 Min Longitude: W 111 Deg 51.43753 Min GMT: 02/26/16 10:42:33 PM

Acquisition Date and Time: 2/26/2016 5:51:34 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:40.9	0.949	1	2782235	4.523	
61	01:54.0	trans-1,2 DCE	01:59.3	0.806	1	5963011	4.442	
63	01:56.5	1,1-DCA	01:59.3	0.519	1	1880558	4.887	
61	02:00.6	cis-1,2 DCE	01:59.3	0.975	1	5963011	4.442	
62	02:16.9	1,2-DCA	02:10.9	0.987	1	7742932	4.556	
130	02:38.1	TCE	02:34.5	0.909	1	16692262	5.522	
166	03:38.9	PCE	03:32.7	0.993	1	22556402	5.542	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_032.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.88899 Min Longitude: W 111 Deg 51.43799 Min GMT: 02/26/16 10:33:36 PM

Acquisition Date and Time: 2/26/2016 5:42:37 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	N/A		0	0	0	Not found with current search parameters
61	01:54.0	trans-1,2 DCE	01:59.1	0.427	1	113875	0.085	
63	01:56.5	1,1-DCA	01:53.3	0.546	1	26835	0.07	
61	02:00.6	cis-1,2 DCE	01:59.1	0.538	1	113875	0.085	
62	02:16.9	1,2-DCA	02:11.7	0.916	1	52815	0.031	
130	02:38.1	TCE	02:34.9	0.578	1	32990	0.011	
166	03:38.9	PCE	03:33.9	0.995	1	1740125	0.428	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_031.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.89311 Min Longitude: W 111 Deg 51.43616 Min GMT: 02/26/16 10:18:22 PM

Acquisition Date and Time: 2/26/2016 5:27:23 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:34.1	0.751	1	6369	0.01	
61	01:54.0	trans-1,2 DCE	01:48.7	0.636	1	40790	0.03	
63	01:56.5	1,1-DCA	01:53.6	0.798	1	6861	0.018	
61	02:00.6	cis-1,2 DCE	01:59.4	0.718	1	144368	0.108	
62	02:16.9	1,2-DCA	N/A	0	0	0		Not found with current search parameters
130	02:38.1	TCE	02:35.5	0.907	1	22100	0.007	
166	03:38.9	PCE	03:33.3	0.995	1	5967776	1.466	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_030.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.88693 Min Longitude: W 111 Deg 51.43387 Min GMT: 02/26/16 10:07:59 PM

Acquisition Date and Time: 2/26/2016 5:17:00 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:47.4	0.76	1	58644	0.095	
61	01:54.0	trans-1,2 DCE	01:59.0	0.489	1	201839	0.15	
63	01:56.5	1,1-DCA	N/A	0	0	0		Not found with current search parameters
61	02:00.6	cis-1,2 DCE	01:59.0	0.589	1	201839	0.15	
62	02:16.9	1,2-DCA	02:10.6	0.823	1	20207	0.012	
130	02:38.1	TCE	02:34.1	0.9	1	43188	0.014	
166	03:38.9	PCE	03:32.4	0.995	1	232645	0.057	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_029.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.88922 Min Longitude: W 111 Deg 51.42929 Min GMT: 02/26/16 09:58:31 PM

Acquisition Date and Time: 2/26/2016 5:07:32 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:47.6	0.967	1	10429	0.017	
61	01:54.0	trans-1,2 DCE	01:58.2	0.553	1	44781	0.033	
63	01:56.5	1,1-DCA	N/A	0	0	0		Not found with current search parameters
61	02:00.6	cis-1,2 DCE	01:58.2	0.612	1	44781	0.033	
62	02:16.9	1,2-DCA	02:09.8	0.933	1	19215	0.011	
130	02:38.1	TCE	02:33.2	0.827	1	20105	0.007	
166	03:38.9	PCE	03:32.5	0.996	1	149072	0.037	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_028.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.89815 Min Longitude: W 111 Deg 51.44257 Min GMT: 02/26/16 09:47:30 PM

Acquisition Date and Time: 2/26/2016 4:56:31 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:39.9	0.572	1	13610	0.022	
61	01:54.0	trans-1,2 DCE	01:59.2	0.64	1	93953	0.07	
63	01:56.5	1,1-DCA	02:02.1	0.839	1	6533	0.017	
61	02:00.6	cis-1,2 DCE	01:59.2	0.765	1	93953	0.07	
62	02:16.9	1,2-DCA	02:09.9	0.953	1	16269	0.01	
130	02:38.1	TCE	02:33.9	0.901	1	39952	0.013	
166	03:38.9	PCE	03:32.4	0.995	1	1588754	0.39	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_027.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/26/2016 4:26:18 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:38.8	0.986	1	51168	0.083	
61	01:54.0	trans-1,2 DCE	01:58.3	0.853	1	181142	0.135	
63	01:56.5	1,1-DCA	01:58.3	0.589	1	62372	0.162	
61	02:00.6	cis-1,2 DCE	01:58.3	0.972	1	181142	0.135	
62	02:16.9	1,2-DCA	02:12.8	0.684	1	27857	0.016	
130	02:38.1	TCE	02:33.2	0.908	1	809847	0.268	
166	03:38.9	PCE	03:31.2	0.994	1	45066884	11.07	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_026.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/26/2016 4:16:33 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:46.8	0.748	1	5388	0.009	
61	01:54.0	trans-1,2 DCE	01:57.5	0.512	1	12284	0.009	
63	01:56.5	1,1-DCA	01:50.7	0.784	1	10116	0.026	
61	02:00.6	cis-1,2 DCE	01:57.5	0.74	1	12284	0.009	
62	02:16.9	1,2-DCA	02:11.0	0.98	1	17412	0.01	
130	02:38.1	TCE	02:34.7	0.911	1	11667	0.004	
166	03:38.9	PCE	03:31.7	0.997	1	69265	0.017	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_025.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/26/2016 4:07:16 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE		01:34.9	0.885	1	8254	0.013
61	01:54.0	trans-1,2 DCE		01:58.0	0.801	1	9860	0.007
63	01:56.5	1,1-DCA	N/A		0	0	0	Not found with current search parameters
61	02:00.6	cis-1,2 DCE		01:58.0	0.945	1	9860	0.007
62	02:16.9	1,2-DCA		02:09.7	0.792	1	17980	0.011
130	02:38.1	TCE		02:33.0	0.903	1	15573	0.005
166	03:38.9	PCE		03:31.4	0.994	1	148063	0.036

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_024.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/26/2016 3:58:13 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE		01:47.7	0.744	1	8649	0.014
61	01:54.0	trans-1,2 DCE		01:58.5	0.618	1	8698	0.006
63	01:56.5	1,1-DCA		01:54.5	0.818	1	4437	Area too low
61	02:00.6	cis-1,2 DCE		01:58.5	0.829	1	8698	0.006
62	02:16.9	1,2-DCA		02:21.9	0.77	1	6431	0.004
130	02:38.1	TCE		02:34.8	0.882	1	8880	0.003
166	03:38.9	PCE		03:31.8	0.993	1	100789	0.025

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_023.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/26/2016 3:49:30 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	N/A		0	0	0	Not found with current search parameters
61	01:54.0	trans-1,2 DCE		01:58.4	0.592	1	9427	0.007
63	01:56.5	1,1-DCA	N/A		0	0	0	Not found with current search parameters
61	02:00.6	cis-1,2 DCE		01:58.4	0.831	1	9427	0.007
62	02:16.9	1,2-DCA		02:11.0	0.851	1	16229	0.01
130	02:38.1	TCE		02:42.0	0.523	1	8218	0.003
166	03:38.9	PCE		03:32.0	0.995	1	185495	0.046

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_022.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/26/2016 3:34:28 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE		01:35.8	0.652	1	7033	0.011
61	01:54.0	trans-1,2 DCE		01:58.0	0.423	1	14963	0.011
63	01:56.5	1,1-DCA	N/A		0	0	0	Not found with current search parameters
61	02:00.6	cis-1,2 DCE		01:58.0	0.541	1	14963	0.011
62	02:16.9	1,2-DCA	N/A		0	0	0	Not found with current search parameters
130	02:38.1	TCE		02:33.5	0.901	1	39766	0.013
166	03:38.9	PCE		03:32.0	0.995	1	4786699	1.176

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_021.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/26/2016 3:24:46 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	N/A		0	0	0	Not found with current search parameters
61	01:54.0	trans-1,2 DCE		01:59.1	0.479	1	22461	0.017
63	01:56.5	1,1-DCA		01:54.3	0.903	1	6189	0.016
61	02:00.6	cis-1,2 DCE		01:59.1	0.56	1	22461	0.017
62	02:16.9	1,2-DCA		02:18.6	0.684	1	6973	0.004
130	02:38.1	TCE		02:32.8	0.904	1	7764	0.003
166	03:38.9	PCE		03:31.9	0.996	1	190873	0.047

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_020.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/26/2016 3:16:00 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:35.9	0.677		1	10590	0.017
61	01:54.0	trans-1,2 DCE	01:57.2	0.861		1	18256	0.014
63	01:56.5	1,1-DCA	01:48.5	0.486		1	3328	Area too low
61	02:00.6	cis-1,2 DCE	01:57.2	0.932		1	18256	0.014
62	02:16.9	1,2-DCA	02:09.9	0.834		1	20767	0.012
130	02:38.1	TCE	02:42.5	0.741		1	6182	0.002
166	03:38.9	PCE	03:32.0	0.995		1	249860	0.061

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_019.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/26/2016 3:06:47 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:37.6	0.712		1	9067	0.015
61	01:54.0	trans-1,2 DCE	01:59.0	0.68		1	11785	0.009
63	01:56.5	1,1-DCA	01:52.1	0.599		1	6465	0.017
61	02:00.6	cis-1,2 DCE	01:59.0	0.661		1	11785	0.009
62	02:16.9	1,2-DCA	02:21.5	0.501		1	5228	0.003
130	02:38.1	TCE	02:33.6	0.911		1	39269	0.013
166	03:38.9	PCE	03:32.0	0.994		1	7841352	1.927

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_018.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/26/2016 2:44:16 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	N/A		0	0	0	Not found with current search parameters
61	01:54.0	trans-1,2 DCE	01:56.1	0.798		1	6994	0.005
63	01:56.5	1,1-DCA	01:59.0	0.546		1	8499	0.022
61	02:00.6	cis-1,2 DCE	01:56.1	0.971		1	6994	0.005
62	02:16.9	1,2-DCA	02:13.6	0.538		1	102312	0.06
130	02:38.1	TCE	02:33.1	0.906		1	1072097	0.355
166	03:38.9	PCE	03:31.5	0.995		1	237153728	58.27

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_017.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/26/2016 2:34:46 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:43.7	0.6	1	8000	0.013	
61	01:54.0	trans-1,2 DCE	01:59.1	0.588	1	15951	0.012	
63	01:56.5	1,1-DCA	01:51.4	0.918	1	8933	0.023	
61	02:00.6	cis-1,2 DCE	01:59.1	0.77	1	15951	0.012	
62	02:16.9	1,2-DCA	02:22.4	0.493	1	8092	0.005	
130	02:38.1	TCE	02:34.5	0.909	1	19180	0.006	
166	03:38.9	PCE	03:32.3	0.995	1	298419	0.073	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_016.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/26/2016 2:25:42 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:47.8	0.94	1	13428	0.022	
61	01:54.0	trans-1,2 DCE	01:59.4	0.668	1	11159	0.008	
63	01:56.5	1,1-DCA	01:58.5	0.59	1	14866	0.039	
61	02:00.6	cis-1,2 DCE	01:59.4	0.63	1	11159	0.008	
62	02:16.9	1,2-DCA	02:11.1	0.883	1	25178	0.015	
130	02:38.1	TCE	02:34.1	0.903	1	75976	0.025	
166	03:38.9	PCE	03:32.1	0.994	1	14069710	3.457	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_015.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/26/2016 2:10:19 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	N/A		0	0	0	Not found with current search parameters
61	01:54.0	trans-1,2 DCE	01:59.2	0.628	1	20640	0.015	
63	01:56.5	1,1-DCA	N/A		0	0	0	Not found with current search parameters
61	02:00.6	cis-1,2 DCE	01:59.2	0.626	1	20640	0.015	
62	02:16.9	1,2-DCA	02:10.9	0.848	1	24992	0.015	
130	02:38.1	TCE	02:34.5	0.892	1	12990	0.004	
166	03:38.9	PCE	03:32.1	0.996	1	392776	0.097	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_014.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/26/2016 1:55:51 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE		01:47.0	0.931	1	10884	0.018	
61	01:54.0	trans-1,2 DCE		01:57.7	0.83	1	19901	0.015	
63	01:56.5	1,1-DCA	N/A		0	0	0		Not found with current search parameters
61	02:00.6	cis-1,2 DCE		01:57.7	0.749	1	19901	0.015	
62	02:16.9	1,2-DCA		02:19.1	0.553	1	7222	0.004	
130	02:38.1	TCE		02:42.2	0.523	1	8680	0.003	
166	03:38.9	PCE		03:31.9	0.994	1	8183436	2.011	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_013.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/26/2016 1:46:48 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE		01:45.8	0.622	1	24818	0.04	
61	01:54.0	trans-1,2 DCE		01:57.4	0.432	1	32014	0.024	
63	01:56.5	1,1-DCA	N/A		0	0	0		Not found with current search parameters
61	02:00.6	cis-1,2 DCE		01:57.4	0.548	1	32014	0.024	
62	02:16.9	1,2-DCA	N/A		0	0	0		Not found with current search parameters
130	02:38.1	TCE		02:39.7	0.523	1	7187	0.002	
166	03:38.9	PCE		03:32.0	0.996	1	502271	0.123	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_012.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/26/2016 1:38:08 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:36.9	0.819	1	19263	0.031	
61	01:54.0	trans-1,2 DCE	01:58.3	0.734	1	18496	0.014	
63	01:56.5	1,1-DCA	02:00.2	0.937	1	6685	0.017	
61	02:00.6	cis-1,2 DCE	01:58.3	0.93	1	18496	0.014	
62	02:16.9	1,2-DCA	02:10.1	0.846	1	18378	0.011	
130	02:38.1	TCE	02:33.9	0.904	1	41723	0.014	
166	03:38.9	PCE	03:32.1	0.995	1	964306	0.237	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_011.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/26/2016 1:22:26 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	N/A		0	0	0	Not found with current search parameters
61	01:54.0	trans-1,2 DCE	01:58.5	0.734	1	21741	0.016	
63	01:56.5	1,1-DCA	N/A		0	0	0	Not found with current search parameters
61	02:00.6	cis-1,2 DCE	01:58.5	0.871	1	21741	0.016	
62	02:16.9	1,2-DCA	02:22.0	0.806	1	6313	0.004	
130	02:38.1	TCE	02:33.2	0.91	1	18393	0.006	
166	03:38.9	PCE	03:32.1	0.993	1	574124	0.141	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_010.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/26/2016 1:13:29 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:35.2	0.735	1	17978	0.029	
61	01:54.0	trans-1,2 DCE	01:58.4	0.856	1	15624	0.012	
63	01:56.5	1,1-DCA	N/A		0	0	0	Not found with current search parameters
61	02:00.6	cis-1,2 DCE	01:58.4	0.953	1	15624	0.012	
62	02:16.9	1,2-DCA	02:19.8	0.528	1	5535	0.003	
130	02:38.1	TCE	02:33.8	0.904	1	27270	0.009	
166	03:38.9	PCE	03:32.4	0.995	1	4162753	1.023	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_009.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/26/2016 1:03:46 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:47.3	0.875	1	10298	0.017	
61	01:54.0	trans-1,2 DCE	01:58.0	0.668	1	39051	0.029	
63	01:56.5	1,1-DCA	02:01.0	0.853	1	9342	0.024	
61	02:00.6	cis-1,2 DCE	01:58.0	0.751	1	39051	0.029	
62	02:16.9	1,2-DCA	02:19.6	0.574	1	7559	0.004	
130	02:38.1	TCE	02:33.2	0.848	1	14201	0.005	
166	03:38.9	PCE	03:31.6	0.993	1	789728	0.194	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_008.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/26/2016 12:55:11 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:39.6	0.498	1	43488	0.071	
61	01:54.0	trans-1,2 DCE	01:59.1	0.657	1	30522	0.023	
63	01:56.5	1,1-DCA	N/A	0	0	0		Not found with current search parameters
61	02:00.6	cis-1,2 DCE	01:59.1	0.706	1	30522	0.023	
62	02:16.9	1,2-DCA	02:10.9	0.876	1	32657	0.019	
130	02:38.1	TCE	02:33.0	0.911	1	23708	0.008	
166	03:38.9	PCE	03:32.6	0.995	1	1052274	0.259	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_007.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/26/2016 12:22:29 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	N/A	0	0	0		Not found with current search parameters
61	01:54.0	trans-1,2 DCE	01:49.7	0.639	1	18324	0.014	
63	01:56.5	1,1-DCA	N/A	0	0	0		Not found with current search parameters
61	02:00.6	cis-1,2 DCE	01:58.5	0.91	1	35570	0.026	
62	02:16.9	1,2-DCA	02:11.2	0.97	1	38123	0.022	
130	02:38.1	TCE	02:37.0	0.523	1	8207	0.003	
166	03:38.9	PCE	03:33.0	0.995	1	1244756	0.306	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_006.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.87732 Min Longitude: W 111 Deg 51.44440 Min GMT: 02/26/16 04:51:14 PM

Acquisition Date and Time: 2/26/2016 12:00:15 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:35.9	0.86	1	38053	0.062	
61	01:54.0	trans-1,2 DCE	01:59.1	0.685	1	27193	0.02	
63	01:56.5	1,1-DCA	N/A	0	0	0		Not found with current search parameters
61	02:00.6	cis-1,2 DCE	01:59.1	0.856	1	27193	0.02	
62	02:16.9	1,2-DCA	02:11.8	0.836	1	32973	0.019	
130	02:38.1	TCE	02:33.8	0.862	1	25756	0.009	
166	03:38.9	PCE	03:33.1	0.995	1	2252918	0.554	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_005.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/26/2016 11:50:31 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	N/A	0	0	0		Not found with current search parameters
61	01:54.0	trans-1,2 DCE	01:48.6	0.588	1	26547	0.02	
63	01:56.5	1,1-DCA	N/A	0	0	0		Not found with current search parameters
61	02:00.6	cis-1,2 DCE	01:59.5	0.804	1	36536	0.027	
62	02:16.9	1,2-DCA	02:20.9	0.466	1	8911	0.005	
130	02:38.1	TCE	02:34.1	0.911	1	23099	0.008	
166	03:38.9	PCE	03:33.3	0.995	1	1424397	0.35	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_004.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.85947 Min Longitude: W 111 Deg 51.48148 Min GMT: 02/26/16 04:32:32 PM

Acquisition Date and Time: 2/26/2016 11:41:34 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:36.3	0.768	1	9477	0.015	
61	01:54.0	trans-1,2 DCE	01:58.6	0.779	1	34418	0.026	
63	01:56.5	1,1-DCA	N/A	0	0	0		Not found with current search parameters
61	02:00.6	cis-1,2 DCE	01:58.6	0.818	1	34418	0.026	
62	02:16.9	1,2-DCA	02:11.1	0.861	1	28346	0.017	
130	02:38.1	TCE	02:34.0	0.886	1	24308	0.008	
166	03:38.9	PCE	03:32.8	0.994	1	1423649	0.35	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_003.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.87572 Min Longitude: W 111 Deg 51.44257 Min GMT: 02/26/16 04:22:18 PM

Acquisition Date and Time: 2/26/2016 11:31:20 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:47.7	0.764	1	18485	0.03	
61	01:54.0	trans-1,2 DCE	01:58.5	0.698	1	49564	0.037	
63	01:56.5	1,1-DCA	01:57.5	0.493	1	11918	0.031	
61	02:00.6	cis-1,2 DCE	01:58.5	0.811	1	49564	0.037	
62	02:16.9	1,2-DCA	02:11.2	0.892	1	29108	0.017	
130	02:38.1	TCE	02:33.3	0.77	1	21898	0.007	
166	03:38.9	PCE	03:32.9	0.996	1	1310958	0.322	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_002.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.89494 Min Longitude: W 111 Deg 51.43616 Min GMT: 02/26/16 04:11:39 PM

Acquisition Date and Time: 2/26/2016 11:20:41 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:47.7	0.644	1	17125	0.028	
61	01:54.0	trans-1,2 DCE	01:58.4	0.656	1	9654	0.007	
63	01:56.5	1,1-DCA	01:55.5	0.795	1	21661	0.056	
61	02:00.6	cis-1,2 DCE	01:58.4	0.862	1	9654	0.007	
62	02:16.9	1,2-DCA	02:11.0	0.954	1	26488	0.016	
130	02:38.1	TCE	02:45.4	0.774	1	4817		Area too low
166	03:38.9	PCE	03:33.4	0.998	1	97341	0.024	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160226_001.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 2/26/2016 10:11:40 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:39.2	0.683	1	24060	0.039	
61	01:54.0	trans-1,2 DCE	01:57.7	0.602	1	39694	0.03	
63	01:56.5	1,1-DCA	01:59.6	0.768	1	4632		Area too low
61	02:00.6	cis-1,2 DCE	01:57.7	0.781	1	39694	0.03	
62	02:16.9	1,2-DCA	02:20.2	0.442	1	10985	0.006	
130	02:38.1	TCE	02:34.0	0.903	1	53598	0.018	
166	03:38.9	PCE	03:30.7	0.992	1	184452	0.045	

Data File: /Data/VA /SIM_100PPB_VA_20160224/SIM_100PPB_VA_20160224_20160225_035.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.01579 Min Longitude: W 111 Deg 51.47827 Min GMT: 02/25/16 10:16:18 PM

Acquisition Date and Time: 2/25/2016 5:25:22 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160224.mth
Target Library: QB 24FEB2016
Last Calibrated: 2/24/2016 6:54:40 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	01:39.0	1,1-DCE	01:39.4	0.967	1	2645425	4.301	
61	01:54.0	trans-1,2 DCE	01:57.9	0.836	1	5744388	4.279	
63	01:56.5	1,1-DCA	01:58.9	0.529	1	1741814	4.527	
61	02:00.6	cis-1,2 DCE	01:57.9	0.988	1	5744388	4.279	
62	02:16.9	1,2-DCA	02:10.5	0.993	1	7549594	4.443	
130	02:38.1	TCE	02:33.9	0.907	1	14497502	4.796	
166	03:38.9	PCE	03:32.1	0.994	1	19382124	4.762	

NOTES:
Act. = Actual.
AOU 1 = Accelerated Operable Unit 1 East Side Springs.
CtCl = Carbon tetrachloride.
cVOC = Chlorinated volatile organic compound.
DCA = Dichloroethane.
DCE = Dichloroethene.
PCE = Tetrachloroethene.
ppb = Part(s) per billion.
ppbv = Part(s) per billion per volume.
Pred. = Predicted.
RT = Retention time.
TCE = Trichloroethene.
VA = Department of Veteran Affairs.
VC = Vinyl chloride.

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LOCATION: 0052-H HAPSITE SURVEY
SAMPLE DATE: 11-Mar-16

Unknown Identification Report
Date: 03/11/16 Time: 16:29:46
Calibration Method:
/Haps/Method/Analyze/Concentrator/Hill Vapor Intrusion Cal 2 min SIM.mth
Tune File:
default.tun
Method Description:
SIM cVOC Method in order of elution
cis-DCE; TCE; PCE
General Quantification Range from 0.1
ppbv to 50 ppbv

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160311_033.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.94667 Min Longitude: W 111 Deg 51.45996 Min GMT: 03/11/16 09:50:52 PM

Acquisition Date and Time: 3/11/2016 5:00:18 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.3	0.94	1	7888245	3.562	
130	02:38.1	TCE	02:33.8	0.906	1	12505324	4.293	
166	03:38.9	PCE	03:32.2	0.996	1	18773522	4.986	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160311_032.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.94209 Min Longitude: W 111 Deg 51.45996 Min GMT: 03/11/16 09:40:45 PM

Acquisition Date and Time: 3/11/2016 4:50:11 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.2	0.695	1	98201	0.044	
130	02:38.1	TCE	02:33.7	0.911	1	16380	0.006	
166	03:38.9	PCE	03:31.5	0.994	1	5509677	1.463	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160311_031.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.90547 Min Longitude: W 111 Deg 51.45172 Min GMT: 03/11/16 08:55:17 PM

Acquisition Date and Time: 3/11/2016 4:04:43 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.7	0.797	1	16057	0.007	
130	02:38.1	TCE	02:49.3	0.889	1	6529	0.002	
166	03:38.9	PCE	03:32.3	0.999	1	20269	0.005	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160311_030.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/11/2016 3:56:08 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	N/A		0	0	0	Not found with current search parameters
130	02:38.1	TCE	02:42.1	0.89	1	6669	0.002	
166	03:38.9	PCE	03:31.8	0.994	1	12672	0.003	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160311_029.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/11/2016 3:47:30 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	N/A		0	0	0	Not found with current search parameters
130	02:38.1	TCE	N/A		0	0	0	Not found with current search parameters
166	03:38.9	PCE	03:32.4	0.998	1	24776	0.007	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160311_028.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/11/2016 3:38:57 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.3	0.524	1	16378	0.007	
130	02:38.1	TCE	02:33.7	0.822	1	5312	0.002	
166	03:38.9	PCE	03:39.8	0.624	1	5912	0.002	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160311_027.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/11/2016 3:30:08 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.2	0.625	1	38436	0.017	
130	02:38.1	TCE	N/A	0	0	0		Not found with current search parameters
166	03:38.9	PCE	03:31.5	0.995	1	25995	0.007	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160311_026.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.96773 Min Longitude: W 111 Deg 51.44714 Min GMT: 03/11/16 08:12:08 PM

Acquisition Date and Time: 3/11/2016 3:21:35 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.5	0.524	1	5332	0.002	
130	02:38.1	TCE	02:35.2	0.912	1	7788	0.003	
166	03:38.9	PCE	03:31.6	0.998	1	23923	0.006	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160311_025.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.93774 Min Longitude: W 111 Deg 51.44623 Min GMT: 03/11/16 07:57:09 PM

Acquisition Date and Time: 3/11/2016 3:06:35 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.1	0.621	1	56710	0.026	
130	02:38.1	TCE	02:39.4	0.523	1	4748		Area too low
166	03:38.9	PCE	03:32.0	0.997	1	163437	0.043	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160311_024.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/11/2016 2:57:50 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.3	0.801	1	31261	0.014	
130	02:38.1	TCE	02:30.2	0.911	1	3847		Area too low
166	03:38.9	PCE	03:31.6	0.997	1	104620	0.028	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160311_023.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/11/2016 2:49:14 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.1	0.568	1	76306	0.034	
130	02:38.1	TCE	02:44.6	0.896	1	5130	0.002	
166	03:38.9	PCE	03:31.3	0.996	1	225174	0.06	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160311_022.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.94255 Min Longitude: W 111 Deg 51.44714 Min GMT: 03/11/16 07:31:12 PM

Acquisition Date and Time: 3/11/2016 2:40:38 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.2	0.792	1	30782	0.014	
130	02:38.1	TCE	02:34.5	0.831	1	7546	0.003	
166	03:38.9	PCE	03:31.4	0.995	1	142770	0.038	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160311_021.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.93156 Min Longitude: W 111 Deg 51.43936 Min GMT: 03/11/16 07:22:36 PM

Acquisition Date and Time: 3/11/2016 2:32:03 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.9	0.871	1	10358	0.005	
130	02:38.1	TCE	02:37.4	0.911	1	2874		Area too low
166	03:38.9	PCE	03:31.6	0.993	1	117964	0.031	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160311_020.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/11/2016 2:23:12 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.4	0.695	1	118919	0.054	
130	02:38.1	TCE	N/A	0	0	0		Not found with current search parameters
166	03:38.9	PCE	03:31.9	0.995	1	335985	0.089	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160311_019.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/11/2016 2:14:25 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.5	0.87	1	18268	0.008	
130	02:38.1	TCE	N/A		0	0	0	Not found with current search parameters
166	03:38.9	PCE	03:31.5	0.993	1	120768	0.032	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160311_016.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.93752 Min Longitude: W 111 Deg 51.44531 Min GMT: 03/11/16 06:38:49 PM

Acquisition Date and Time: 3/11/2016 1:48:15 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.4	0.647	1	227221	0.103	
130	02:38.1	TCE	02:33.8	0.842	1	13196	0.005	
166	03:38.9	PCE	03:31.8	0.994	1	450613	0.12	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160311_015.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.92538 Min Longitude: W 111 Deg 51.47507 Min GMT: 03/11/16 06:29:59 PM

Acquisition Date and Time: 3/11/2016 1:39:25 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.7	0.62	1	117953	0.053	
130	02:38.1	TCE	N/A	0	0	0		Not found with current search parameters
166	03:38.9	PCE	03:32.2	0.994	1	295858	0.079	

Data File: /Data/VA /SIM 100PPB VA 20160310/SIM 100PPB VA 20160310 20160311 014.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.93477 Min Longitude: W 111 Deg 51.45218 Min GMT: 03/11/16 06:18:01 PM

Acquisition Date and Time: 3/11/2016 1:27:27 PM
Acquisition Method: /Haps/Method/VA /SIM 100PPB VA 20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.2	0.68	1	105164	0.047	
130	02:38.1	TCE	02:41.1	0.523	1	5130	0.002	
166	03:38.9	PCE	03:31.5	0.992	1	279597	0.074	

Data File: /Data/VA /SIM 100PPB VA 20160310/SIM 100PPB VA 20160310 20160311 013.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.92790 Min Longitude: W 111 Deg 51.41602 Min GMT: 03/11/16 05:40:47 PM

Acquisition Date and Time: 3/11/2016 12:50:13 PM
Acquisition Method: /Haps/Method/VA /SIM 100PPB VA 20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.3	0.604	1	567333	0.256	
130	02:38.1	TCE	02:33.0	0.853	1	10418	0.004	
166	03:38.9	PCE	03:32.2	0.996	1	878062	0.233	

Data File: /Data/VA /SIM 100PPB VA 20160310/SIM 100PPB VA 20160310 20160311 012.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.93935 Min Longitude: W 111 Deg 51.45081 Min GMT: 03/11/16 05:29:24 PM

Acquisition Date and Time: 3/11/2016 12:38:50 PM
Acquisition Method: /Haps/Method/VA /SIM 100PPB VA 20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.3	0.586	1	470976	0.213	
130	02:38.1	TCE	N/A		0	0	0	Not found with current search parameters
166	03:38.9	PCE	03:32.2	0.996	1	514685	0.137	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160311_011.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/11/2016 12:29:57 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.7	0.524	1	145169	0.066	
130	02:38.1	TCE	02:33.1	0.902	1	11016	0.004	
166	03:38.9	PCE	03:31.6	0.995	1	301875	0.08	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160311_010.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.94324 Min Longitude: W 111 Deg 51.45355 Min GMT: 03/11/16 05:11:13 PM

Acquisition Date and Time: 3/11/2016 12:20:39 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.2	0.602	1	609658	0.275	
130	02:38.1	TCE	02:32.9	0.911	1	11463	0.004	
166	03:38.9	PCE	03:32.1	0.996	1	754238	0.2	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160311_009.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.94507 Min Longitude: W 111 Deg 51.45996 Min GMT: 03/11/16 05:02:17 PM

Acquisition Date and Time: 3/11/2016 12:11:44 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.5	0.743	1	99734	0.045	
130	02:38.1	TCE	N/A		0	0	0	Not found with current search parameters
166	03:38.9	PCE	03:31.8	0.995	1	192513	0.051	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160311_008.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.93820 Min Longitude: W 111 Deg 51.46912 Min GMT: 03/11/16 04:52:01 PM

Acquisition Date and Time: 3/11/2016 12:01:28 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.6	0.524	1	603683	0.273	
130	02:38.1	TCE	02:33.0	0.878	1	14341	0.005	
166	03:38.9	PCE	03:30.9	0.994	1	898110	0.239	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160311_007.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/11/2016 11:51:25 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.5	0.549	1	243953	0.11	
130	02:38.1	TCE	02:31.6	0.897	1	6077	0.002	
166	03:38.9	PCE	03:29.9	0.993	1	349853	0.093	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160311_005.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/11/2016 11:31:37 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.9	0.565	1	950462	0.429	
130	02:38.1	TCE	02:35.1	0.877	1	11936	0.004	
166	03:38.9	PCE	03:32.4	0.993	1	533700	0.142	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160311_004.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.94392 Min Longitude: W 111 Deg 51.45309 Min GMT: 03/11/16 04:12:34 PM

Acquisition Date and Time: 3/11/2016 11:21:57 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:59.1	0.617	1	444554	0.201	
130	02:38.1	TCE	02:38.3	0.523	1	12561	0.004	
166	03:38.9	PCE	03:33.3	0.996	1	294991	0.078	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160311_003.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.96269 Min Longitude: W 111 Deg 51.45538 Min GMT: 03/11/16 03:53:07 PM

Acquisition Date and Time: 3/11/2016 11:02:29 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.2	0.935	1	7009	0.003	
130	02:38.1	TCE	N/A	0	0	0		Not found with current search parameters
166	03:38.9	PCE	03:32.3	0.997	1	84092	0.022	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160311_002.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/11/2016 10:05:31 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.4	0.83	1	56527	0.026	
130	02:38.1	TCE	02:33.7	0.884	1	15529	0.005	
166	03:38.9	PCE	03:30.0	0.979	1	4641		Area too low

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160311_001.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/11/2016 9:53:02 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.5	0.944	1	9503909	4.291	
130	02:38.1	TCE	02:33.0	0.906	1	13039976	4.477	
166	03:38.9	PCE	03:30.7	0.996	1	19223528	5.106	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_007.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.95079 Min Longitude: W 111 Deg 51.43845 Min GMT: 03/10/16 03:55:14 PM

Acquisition Date and Time: 3/10/2016 11:04:32 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.6	0.921	1	345401	0.156	
130	02:38.1	TCE	02:33.1	0.899	1	1363969	0.468	
166	03:38.9	PCE	03:30.8	0.995	1	21483112	5.706	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_006.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.96223 Min Longitude: W 111 Deg 51.44714 Min GMT: 03/10/16 03:46:24 PM

Acquisition Date and Time: 3/10/2016 10:55:42 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.5	0.895	1	425251	0.192	
130	02:38.1	TCE	02:32.9	0.898	1	1496033	0.514	
166	03:38.9	PCE	03:30.4	0.993	1	23236060	6.171	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_005.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.98444 Min Longitude: W 111 Deg 51.46042 Min GMT: 03/10/16 03:33:17 PM

Acquisition Date and Time: 3/10/2016 10:42:35 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.0	0.929	1	281695	0.127	
130	02:38.1	TCE	02:32.5	0.9	1	1096605	0.376	
166	03:38.9	PCE	03:30.1	0.994	1	17459928	4.637	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_004.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.95949 Min Longitude: W 111 Deg 51.44989 Min GMT: 03/10/16 03:20:40 PM

Acquisition Date and Time: 3/10/2016 10:29:59 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:56.8	0.897	1	19426	0.009	
130	02:38.1	TCE	02:33.0	0.906	1	13581	0.005	
166	03:38.9	PCE	03:29.7	0.994	1	242291	0.064	

Data File: /Data/VA /SIM_100PPB_VA_20160310/SIM_100PPB_VA_20160310_20160310_001.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 3/10/2016 9:46:50 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160310.mtl
Target Library: QB 10MAR2016
Last Calibrated: 3/10/2016 1:07:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:56.9	0.934	1	24141	0.011	
130	02:38.1	TCE	02:32.5	0.905	1	51671	0.018	
166	03:38.9	PCE	03:39.1	0.994	1	6285	0.002	

NOTES:
Act. = Actual.
AOU 1 = Accelerated Operable Unit 1 East Side Springs
cVOC = Chlorinated volatile organic compound
cis-1,2 DCE = Dichloroethene.
PCE = Tetrachloroethene.
ppb = Part(s) per billion.
ppbv = Part(s) per billion per volume.
Pred. = Predicted.
RT = Retention time.
TCE = Trichloroethene.
VA = Department of Veteran Affairs.

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LOCATION: 0053-H HAPSITE SURVEY
SAMPLE DATE: 2-May-16

Unknown Identification Report
Date: 05/03/16 Time: 07:26:20
Calibration Method:
/Haps/Method/Analyze/Concentrator/Hill Vapor Intrusion Cal 2 min SIM.mth
Tune File:
default.tun
Method Description:
SIM cVOC Method in order of elution
cis-DCE; TCE; PCE
General Quantification Range from 0.1
ppbv to 50 ppbv

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_059.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.98787 Min Longitude: W 111 Deg 51.43112 Min GMT: 05/02/16 11:14:39 PM

Acquisition Date and Time: 5/2/2016 7:25:26 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.7	0.937	1	7483454	4.923	
130	02:38.1	TCE	02:34.1	0.906	1	13118857	5.815	
166	03:38.9	PCE	03:31.8	0.994	1	18781966	5.803	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_058.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00961 Min Longitude: W 111 Deg 51.44028 Min GMT: 05/02/16 11:02:40 PM

Acquisition Date and Time: 5/2/2016 7:13:28 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:59.7	0.617	1	3137		Area too low
130	02:38.1	TCE	02:34.3	0.906	1	176341	0.078	
166	03:38.9	PCE	03:32.0	0.995	1	23939020	7.396	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_057.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.03136 Min Longitude: W 111 Deg 51.49246 Min GMT: 05/02/16 10:53:59 PM

Acquisition Date and Time: 5/2/2016 7:04:47 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:59.7	0.565	1	53301	0.035	
130	02:38.1	TCE	02:34.3	0.908	1	22101	0.01	
166	03:38.9	PCE	03:32.0	0.995	1	2326494	0.719	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_056.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00664 Min Longitude: W 111 Deg 51.43387 Min GMT: 05/02/16 10:43:11 PM

Acquisition Date and Time: 5/2/2016 6:53:59 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.9	0.947	1	109688	0.072	
130	02:38.1	TCE	02:34.4	0.907	1	1878211	0.833	
166	03:38.9	PCE	03:32.2	0.995	1	293660608	90.72	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_055.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.01076 Min Longitude: W 111 Deg 51.42288 Min GMT: 05/02/16 10:28:30 PM

Acquisition Date and Time: 5/2/2016 6:39:18 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:59.0	0.524	1	11356	0.007	
130	02:38.1	TCE	02:45.4	0.911	1	17610	0.008	
166	03:38.9	PCE	03:32.1	0.994	1	1211974	0.374	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_054.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.99931 Min Longitude: W 111 Deg 51.42975 Min GMT: 05/02/16 10:17:02 PM

Acquisition Date and Time: 5/2/2016 6:27:50 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:59.2	0.797	1	16114	0.011	
130	02:38.1	TCE	02:34.3	0.911	1	14179	0.006	
166	03:38.9	PCE	03:32.4	0.996	1	923175	0.285	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_053.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00549 Min Longitude: W 111 Deg 51.44028 Min GMT: 05/02/16 10:08:27 PM

Acquisition Date and Time: 5/2/2016 6:19:15 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.9	0.806	1	26691	0.018	
130	02:38.1	TCE	02:34.4	0.903	1	15939	0.007	
166	03:38.9	PCE	03:32.1	0.994	1	1197053	0.37	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_049.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00069 Min Longitude: W 111 Deg 51.43112 Min GMT: 05/02/16 09:36:43 PM

Acquisition Date and Time: 5/2/2016 5:47:30 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.8	0.848	1	16668	0.011	
130	02:38.1	TCE	02:33.4	0.903	1	20224	0.009	
166	03:38.9	PCE	03:31.8	0.996	1	68934	0.021	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_048.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00938 Min Longitude: W 111 Deg 51.43707 Min GMT: 05/02/16 09:27:18 PM

Acquisition Date and Time: 5/2/2016 5:38:05 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:53.1	0.79	1	3800		Area too low
130	02:38.1	TCE	02:30.9	0.909	1	9696	0.004	
166	03:38.9	PCE	03:32.2	0.999	1	38250	0.012	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_047.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00458 Min Longitude: W 111 Deg 51.43295 Min GMT: 05/02/16 09:17:16 PM

Acquisition Date and Time: 5/2/2016 5:28:04 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	02:00.5	0.835	1	33941	0.022	
130	02:38.1	TCE	02:35.3	0.91	1	9480	0.004	
166	03:38.9	PCE	03:33.5	0.995	1	2696541	0.833	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_046.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.01076 Min Longitude: W 111 Deg 51.43707 Min GMT: 05/02/16 09:08:19 PM

Acquisition Date and Time: 5/2/2016 5:19:06 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:51.5	0.623	1	3560		Area too low
130	02:38.1	TCE	N/A	0	0	0		Not found with current search
166	03:38.9	PCE	03:32.4	0.996	1	111463	0.034	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_045.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00984 Min Longitude: W 111 Deg 51.44989 Min GMT: 05/02/16 08:58:19 PM

Acquisition Date and Time: 5/2/2016 5:09:07 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	02:09.8	0.71	1	5480	0.004	
130	02:38.1	TCE	N/A	0	0	0		Not found with current search
166	03:38.9	PCE	03:32.3	0.998	1	86126	0.027	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_044.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00824 Min Longitude: W 111 Deg 51.43478 Min GMT: 05/02/16 08:49:47 PM

Acquisition Date and Time: 5/2/2016 5:00:34 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.0	0.856	1	37450	0.025	
130	02:38.1	TCE	02:34.2	0.909	1	31206	0.014	
166	03:38.9	PCE	03:31.3	0.994	1	10045130	3.103	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_043.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.01373 Min Longitude: W 111 Deg 51.43570 Min GMT: 05/02/16 08:41:09 PM

Acquisition Date and Time: 5/2/2016 4:51:56 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.4	0.786	1	41673	0.027	
130	02:38.1	TCE	02:33.9	0.902	1	19134	0.008	
166	03:38.9	PCE	03:31.7	0.994	1	4011149	1.239	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_042.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.01671 Min Longitude: W 111 Deg 51.43295 Min GMT: 05/02/16 08:32:09 PM

Acquisition Date and Time: 5/2/2016 4:42:56 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:59.8	0.707	1	36161	0.024	
130	02:38.1	TCE	02:35.8	0.911	1	66764	0.03	
166	03:38.9	PCE	03:33.1	0.993	1	11453885	3.539	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_041.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00572 Min Longitude: W 111 Deg 51.43158 Min GMT: 05/02/16 08:22:51 PM

Acquisition Date and Time: 5/2/2016 4:33:38 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.4	0.727	1	56393	0.037	
130	02:38.1	TCE	02:33.9	0.908	1	13456	0.006	
166	03:38.9	PCE	03:31.8	0.994	1	1734676	0.536	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_040.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.01350 Min Longitude: W 111 Deg 51.43890 Min GMT: 05/02/16 08:13:55 PM

Acquisition Date and Time: 5/2/2016 4:24:43 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.8	0.599	1	43848	0.029	
130	02:38.1	TCE	02:34.0	0.911	1	43098	0.019	
166	03:38.9	PCE	03:31.4	0.994	1	4321435	1.335	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_039.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00847 Min Longitude: W 111 Deg 51.44852 Min GMT: 05/02/16 08:03:33 PM

Acquisition Date and Time: 5/2/2016 4:14:21 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.4	0.834	1	34406	0.023	
130	02:38.1	TCE	02:33.2	0.893	1	56957	0.025	
166	03:38.9	PCE	03:31.7	0.994	1	10141742	3.133	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_038.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.01053 Min Longitude: W 111 Deg 51.43845 Min GMT: 05/02/16 07:54:50 PM

Acquisition Date and Time: 5/2/2016 4:05:37 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.5	0.713	1	55976	0.037	
130	02:38.1	TCE	02:36.1	0.89	1	11943	0.005	
166	03:38.9	PCE	03:31.6	0.994	1	1679908	0.519	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_037.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.01534 Min Longitude: W 111 Deg 51.43616 Min GMT: 05/02/16 07:45:49 PM

Acquisition Date and Time: 5/2/2016 3:56:36 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.1	0.634	1	51220	0.034	
130	02:38.1	TCE	02:33.7	0.912	1	35465	0.016	
166	03:38.9	PCE	03:31.5	0.994	1	5442707	1.681	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_036.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00618 Min Longitude: W 111 Deg 51.43524 Min GMT: 05/02/16 07:37:12 PM

Acquisition Date and Time: 5/2/2016 3:48:00 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.9	0.817	1	39703	0.026	
130	02:38.1	TCE	02:33.7	0.907	1	63896	0.028	
166	03:38.9	PCE	03:31.5	0.993	1	10371716	3.204	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_035.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.99886 Min Longitude: W 111 Deg 51.45035 Min GMT: 05/02/16 07:26:01 PM

Acquisition Date and Time: 5/2/2016 3:36:49 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:59.1	0.821	1	53810	0.035	
130	02:38.1	TCE	02:34.6	0.902	1	56790	0.025	
166	03:38.9	PCE	03:33.8	0.996	1	9057977	2.798	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_034.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00732 Min Longitude: W 111 Deg 51.43387 Min GMT: 05/02/16 07:16:41 PM

Acquisition Date and Time: 5/2/2016 3:27:28 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.9	0.67	1	80300	0.053	
130	02:38.1	TCE	02:35.8	0.901	1	13952	0.006	
166	03:38.9	PCE	03:31.3	0.994	1	1609085	0.497	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_033.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00961 Min Longitude: W 111 Deg 51.43799 Min GMT: 05/02/16 07:08:10 PM

Acquisition Date and Time: 5/2/2016 3:18:57 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.2	0.524	1	56955	0.037	
130	02:38.1	TCE	02:33.8	0.907	1	8459	0.004	
166	03:38.9	PCE	03:31.7	0.995	1	1337738	0.413	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_030.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00481 Min Longitude: W 111 Deg 51.42929 Min GMT: 05/02/16 06:45:15 PM

Acquisition Date and Time: 5/2/2016 2:56:02 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.2	0.695	1	42175	0.028	
130	02:38.1	TCE	02:33.7	0.911	1	26017	0.012	
166	03:38.9	PCE	03:31.5	0.994	1	6168170	1.906	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_029.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.97963 Min Longitude: W 111 Deg 51.45355 Min GMT: 05/02/16 06:36:41 PM

Acquisition Date and Time: 5/2/2016 2:47:28 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.5	0.524	1	70519	0.046	
130	02:38.1	TCE	02:34.7	0.91	1	3162		Area too low
166	03:38.9	PCE	03:31.8	0.995	1	1428142	0.441	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_028.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.98055 Min Longitude: W 111 Deg 51.45676 Min GMT: 05/02/16 06:28:04 PM

Acquisition Date and Time: 5/2/2016 2:38:52 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.0	0.754	1	65554	0.043	
130	02:38.1	TCE	N/A	0	0	0		Not found with current search
166	03:38.9	PCE	03:32.2	0.994	1	3405327	1.052	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_027.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.03136 Min Longitude: W 111 Deg 51.40778 Min GMT: 05/02/16 06:19:29 PM

Acquisition Date and Time: 5/2/2016 2:30:16 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.3	0.833	1	51937	0.034	
130	02:38.1	TCE	02:33.6	0.902	1	30232	0.013	
166	03:38.9	PCE	03:31.2	0.994	1	6199117	1.915	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_026.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00595 Min Longitude: W 111 Deg 51.43112 Min GMT: 05/02/16 06:10:56 PM

Acquisition Date and Time: 5/2/2016 2:21:43 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.0	0.664	1	125952	0.083	
130	02:38.1	TCE	02:33.5	0.91	1	10691	0.005	
166	03:38.9	PCE	03:31.1	0.994	1	2256178	0.697	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_025.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.02953 Min Longitude: W 111 Deg 51.43066 Min GMT: 05/02/16 06:02:22 PM

Acquisition Date and Time: 5/2/2016 2:13:10 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.6	0.791	1	103473	0.068	
130	02:38.1	TCE	02:39.7	0.523	1	5642	0.003	
166	03:38.9	PCE	03:31.0	0.993	1	3827714	1.183	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_024.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.99702 Min Longitude: W 111 Deg 51.44531 Min GMT: 05/02/16 05:53:41 PM

Acquisition Date and Time: 5/2/2016 2:04:28 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.5	0.681	1	117622	0.077	
130	02:38.1	TCE	02:32.3	0.912	1	22068	0.01	
166	03:38.9	PCE	03:30.7	0.993	1	4596054	1.42	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_023.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00481 Min Longitude: W 111 Deg 51.44943 Min GMT: 05/02/16 04:41:14 PM

Acquisition Date and Time: 5/2/2016 12:52:01 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.7	0.524	1	119641	0.079	
130	02:38.1	TCE	02:33.1	0.901	1	37542	0.017	
166	03:38.9	PCE	03:29.9	0.993	1	6030256	1.863	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_022.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00298 Min Longitude: W 111 Deg 51.44211 Min GMT: 05/02/16 04:31:52 PM

Acquisition Date and Time: 5/2/2016 12:42:39 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.3	0.604	1	205873	0.135	
130	02:38.1	TCE	02:32.8	0.903	1	30211	0.013	
166	03:38.9	PCE	03:29.7	0.994	1	5165261	1.596	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_021.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.01144 Min Longitude: W 111 Deg 51.43433 Min GMT: 05/02/16 04:22:38 PM

Acquisition Date and Time: 5/2/2016 12:33:25 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.5	0.574	1	259196	0.171	
130	02:38.1	TCE	02:32.8	0.893	1	33212	0.015	
166	03:38.9	PCE	03:30.4	0.996	1	4353119	1.345	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_020.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.01167 Min Longitude: W 111 Deg 51.43570 Min GMT: 05/02/16 04:13:52 PM

Acquisition Date and Time: 5/2/2016 12:24:39 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:56.7	0.594	1	192477	0.127	
130	02:38.1	TCE	02:32.3	0.88	1	28765	0.013	
166	03:38.9	PCE	03:29.0	0.993	1	5286384	1.633	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_019.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.01053 Min Longitude: W 111 Deg 51.42334 Min GMT: 05/02/16 04:04:53 PM

Acquisition Date and Time: 5/2/2016 12:15:40 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:56.7	0.524	1	280142	0.184	
130	02:38.1	TCE	02:32.1	0.883	1	26197	0.012	
166	03:38.9	PCE	03:29.6	0.995	1	4620761	1.428	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_018.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00618 Min Longitude: W 111 Deg 51.43066 Min GMT: 05/02/16 03:56:05 PM

Acquisition Date and Time: 5/2/2016 12:06:52 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7

Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:56.6	0.685	1	32218	0.021	
130	02:38.1	TCE	02:32.1	0.523	1	10751	0.005	
166	03:38.9	PCE	03:29.1	0.992	1	26415	0.008	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_017.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/2/2016 11:36:52 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:56.3	0.94	1	7501848	4.935	
130	02:38.1	TCE	02:31.1	0.905	1	11995918	5.318	
166	03:38.9	PCE	03:28.5	0.996	1	17309050	5.347	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_016.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/2/2016 11:27:43 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:55.1	0.949	1	112562	0.074	
130	02:38.1	TCE	02:30.6	0.904	1	153619	0.068	
166	03:38.9	PCE	03:28.0	0.994	1	237666	0.073	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_015.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/2/2016 11:18:08 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:56.1	0.945	1	135495	0.089	
130	02:38.1	TCE	02:41.8	0.884	1	5309	0.002	
166	03:38.9	PCE	03:46.1	0.904	1	9190	0.003	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_014.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/2/2016 11:03:46 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:56.6	0.939	1	14845862	9.767	
130	02:38.1	TCE	02:32.0	0.906	1	24650670	10.93	
166	03:38.9	PCE	03:29.4	0.995	1	34144804	10.55	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_013.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/2/2016 10:54:38 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:56.8	0.943	1	7559746	4.973	
130	02:38.1	TCE	02:31.6	0.905	1	11539784	5.115	
166	03:38.9	PCE	03:29.1	0.996	1	16649161	5.144	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_010.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/2/2016 10:21:39 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:56.9	0.933	1	5732257	3.771	
130	02:38.1	TCE	02:32.5	0.906	1	9498607	4.211	
166	03:38.9	PCE	03:29.2	0.994	1	13555685	4.188	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_009.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/2/2016 10:11:18 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:56.5	0.935	1	4387053	2.886	
130	02:38.1	TCE	02:31.9	0.905	1	7025281	3.114	
166	03:38.9	PCE	03:29.3	0.995	1	10171238	3.142	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_008.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/2/2016 10:01:46 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.9	0.913	1	74816	0.049	
130	02:38.1	TCE	02:32.6	0.91	1	126736	0.056	
166	03:38.9	PCE	03:42.7	0.99	1	14078	0.004	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_003.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/2/2016 8:25:19 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.8	0.932	1	4524318	2.976	
130	02:38.1	TCE	02:32.6	0.905	1	6474057	2.87	
166	03:38.9	PCE	03:30.4	0.995	1	9323635	2.88	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_002.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/2/2016 8:15:46 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.2	0.933	1	834251	0.549	
130	02:38.1	TCE	02:32.9	0.905	1	1190270	0.528	
166	03:38.9	PCE	03:30.4	0.993	1	1666928	0.515	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_001.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/2/2016 8:07:03 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:	
Search Window:	0:08.00
Window Expand Factor:	0.050
Peak Resolution:	5
Noise Level Multiplier:	2.000
Minimum Area:	5000
Minimum Width:	7
Maximum Width:	70
Minimum Fit:	0.200
Minimum Purity:	0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	02:00.6	0.524	1	99151	0.065	
130	02:38.1	TCE	02:34.5	0.876	1	321411	0.142	
166	03:38.9	PCE	03:34.9	0.94	1	1386959	0.428	

NOTES:
Act. = Actual.
AOU 1 = Accelerated Operable Unit 1 East Side Springs.
cVOC = Chlorinated volatile organic compound.
DCE = Dichloroethene.
PCE = Tetrachloroethene.
ppb = Part(s) per billion.
ppbv = Part(s) per billion per volume.
Pred. = Predicted.
RT = Retention time.
TCE = Trichloroethene.
VA = Department of Veteran Affairs.

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LOCATION: 0054-H HAPSITE SURVEY
SAMPLE DATE: 9-May-16

Unknown Identification Report
Date: 05/10/16 Time: 13:33:32
Calibration Method:
/Haps/Method/Analyze/Concentrator/Hill Vapor Intrusion Cal 2 min SIM.mth
Tune File:
default.tun
Method Description:
SIM cVOC Method in order of elution
cis-DCE; TCE; PCE
General Quantification Range from 0.1
ppbv to 50 ppbv

Data File: /Data/VA /SIM_100PPB_VA_20160509/SIM_100PPB_VA_20160509_20160509_027.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/9/2016 5:05:42 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160509.mth
Target Library: RAQB 09MAY2016
Last Calibrated: 5/9/2016 9:51:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.3	0.639	1	458658	0.248	
130	02:38.1	TCE	02:33.9	0.906	1	1027316	0.359	
166	03:38.9	PCE	03:31.6	0.994	1	1164274	0.281	

Data File: /Data/VA /SIM_100PPB_VA_20160509/SIM_100PPB_VA_20160509_20160509_026.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/9/2016 4:55:57 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160509.mth
Target Library: RAQB 09MAY2016
Last Calibrated: 5/9/2016 9:51:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:59.0	0.533	1	849640	0.46	
130	02:38.1	TCE	02:34.5	0.906	1	2261397	0.791	

	166	03:38.9	PCE	03:33.0	0.995	1	2969019	0.716

Data File: /Data/VA /SIM_100PPB_VA_20160509/SIM_100PPB_VA_20160509_20160509_025.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/9/2016 4:46:33 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160509.mth
Target Library: RAQB 09MAY2016
Last Calibrated: 5/9/2016 9:51:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.9	0.649	1	436904	0.236	
130	02:38.1	TCE	02:34.2	0.906	1	3189980	1.115	
166	03:38.9	PCE	03:32.7	0.995	1	3823357	0.922	

Data File: /Data/VA /SIM_100PPB_VA_20160509/SIM_100PPB_VA_20160509_20160509_024.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.97139 Min Longitude: W 111 Deg 51.40732 Min GMT: 05/09/16 08:26:22 PM

Acquisition Date and Time: 5/9/2016 4:37:22 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160509.mth
Target Library: RAQB 09MAY2016
Last Calibrated: 5/9/2016 9:51:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.6	0.556	1	1050799	0.568	
130	02:38.1	TCE	02:34.1	0.905	1	1658400	0.58	
166	03:38.9	PCE	03:32.7	0.995	1	1880112	0.454	

Data File: /Data/VA /SIM_100PPB_VA_20160509/SIM_100PPB_VA_20160509_20160509_023.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/9/2016 4:26:36 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160509.mth

Target Library: RAQB 09MAY2016
Last Calibrated: 5/9/2016 9:51:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:59.8	0.551	1	861324	0.466	
130	02:38.1	TCE	02:34.6	0.905	1	1949915	0.682	
166	03:38.9	PCE	03:33.3	0.994	1	2472402	0.596	

Data File: /Data/VA /SIM_100PPB_VA_20160509/SIM_100PPB_VA_20160509_20160509_022.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/9/2016 4:17:23 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160509.mth
Target Library: RAQB 09MAY2016
Last Calibrated: 5/9/2016 9:51:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:59.7	0.524	1	1028456	0.556	
130	02:38.1	TCE	02:35.1	0.905	1	2895538	1.012	
166	03:38.9	PCE	03:34.5	0.996	1	3212667	0.775	

Data File: /Data/VA /SIM_100PPB_VA_20160509/SIM_100PPB_VA_20160509_20160509_021.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/9/2016 4:08:06 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160509.mth
Target Library: RAQB 09MAY2016
Last Calibrated: 5/9/2016 9:51:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7

Maximum Width:	70
Minimum Fit:	0.200
Minimum Purity:	0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:59.8	0.539	1	990250	0.536	
130	02:38.1	TCE	02:35.3	0.904	1	4561276	1.595	
166	03:38.9	PCE	03:34.9	0.995	1	12953709	3.125	

Data File: /Data/VA /SIM_100PPB_VA_20160509/SIM_100PPB_VA_20160509_20160509_020.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/9/2016 2:26:10 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160509.mth
Target Library: RAQB 09MAY2016
Last Calibrated: 5/9/2016 9:51:28 AM

Peak Search Parameters:

Search Window:	0:08.00
Window Expand Factor:	0.050
Peak Resolution:	5
Noise Level Multiplier:	2.000
Minimum Area:	5000
Minimum Width:	7
Maximum Width:	70
Minimum Fit:	0.200
Minimum Purity:	0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.4	0.524	1	854688	0.462	
130	02:38.1	TCE	02:33.9	0.907	1	2821476	0.986	
166	03:38.9	PCE	03:32.4	0.994	1	4192225	1.011	

Data File: /Data/VA /SIM_100PPB_VA_20160509/SIM_100PPB_VA_20160509_20160509_019.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/9/2016 2:16:34 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160509.mth
Target Library: RAQB 09MAY2016
Last Calibrated: 5/9/2016 9:51:28 AM

Peak Search Parameters:

Search Window:	0:08.00
Window Expand Factor:	0.050
Peak Resolution:	5
Noise Level Multiplier:	2.000
Minimum Area:	5000
Minimum Width:	7
Maximum Width:	70
Minimum Fit:	0.200
Minimum Purity:	0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.9	0.533	1	793244	0.429	
130	02:38.1	TCE	02:33.9	0.907	1	4755194	1.662	

	166	03:38.9	PCE	03:31.6	0.995	1	6301600	1.52

Data File: /Data/VA /SIM_100PPB_VA_20160509/SIM_100PPB_VA_20160509_20160509_018.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/9/2016 2:06:18 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160509.mth
Target Library: RAQB 09MAY2016
Last Calibrated: 5/9/2016 9:51:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.2	0.551	1	1672707	0.905	
130	02:38.1	TCE	02:33.1	0.906	1	2741613	0.958	
166	03:38.9	PCE	03:30.7	0.993	1	3431190	0.828	

Data File: /Data/VA /SIM_100PPB_VA_20160509/SIM_100PPB_VA_20160509_20160509_017.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/9/2016 1:54:34 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160509.mth
Target Library: RAQB 09MAY2016
Last Calibrated: 5/9/2016 9:51:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.6	0.538	1	747398	0.404	
130	02:38.1	TCE	02:33.0	0.906	1	2480576	0.867	
166	03:38.9	PCE	03:30.9	0.995	1	3471643	0.837	

Data File: /Data/VA /SIM_100PPB_VA_20160509/SIM_100PPB_VA_20160509_20160509_016.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/9/2016 1:45:38 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160509.mth

Target Library: RAQB 09MAY2016
Last Calibrated: 5/9/2016 9:51:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.0	0.568	1	860677	0.466	
130	02:38.1	TCE	02:33.3	0.907	1	2695188	0.942	
166	03:38.9	PCE	03:31.1	0.996	1	3158630	0.762	

Data File: /Data/VA /SIM_100PPB_VA_20160509/SIM_100PPB_VA_20160509_20160509_015.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/9/2016 1:36:18 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160509.mth
Target Library: RAQB 09MAY2016
Last Calibrated: 5/9/2016 9:51:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.0	0.562	1	819048	0.443	
130	02:38.1	TCE	02:33.5	0.907	1	2753111	0.963	
166	03:38.9	PCE	03:31.3	0.995	1	4036178	0.974	

Data File: /Data/VA /SIM_100PPB_VA_20160509/SIM_100PPB_VA_20160509_20160509_012.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/9/2016 1:10:06 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160509.mth
Target Library: RAQB 09MAY2016
Last Calibrated: 5/9/2016 9:51:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7

Maximum Width:	70
Minimum Fit:	0.200
Minimum Purity:	0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.7	0.564	1	87950	0.048	
130	02:38.1	TCE	02:32.8	0.906	1	334312	0.117	
166	03:38.9	PCE	03:30.6	0.997	1	298830	0.072	

Data File: /Data/VA /SIM_100PPB_VA_20160509/SIM_100PPB_VA_20160509_20160509_011.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/9/2016 1:00:36 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160509.mth
Target Library: RAQB 09MAY2016
Last Calibrated: 5/9/2016 9:51:28 AM

Peak Search Parameters:

Search Window:	0:08.00
Window Expand Factor:	0.050
Peak Resolution:	5
Noise Level Multiplier:	2.000
Minimum Area:	5000
Minimum Width:	7
Maximum Width:	70
Minimum Fit:	0.200
Minimum Purity:	0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.0	0.547	1	65609	0.035	
130	02:38.1	TCE	02:32.5	0.904	1	222699	0.078	
166	03:38.9	PCE	03:46.3	0.967	1	5492	0.001	

Data File: /Data/VA /SIM_100PPB_VA_20160509/SIM_100PPB_VA_20160509_20160509_010.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/9/2016 12:51:37 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160509.mth
Target Library: RAQB 09MAY2016
Last Calibrated: 5/9/2016 9:51:28 AM

Peak Search Parameters:

Search Window:	0:08.00
Window Expand Factor:	0.050
Peak Resolution:	5
Noise Level Multiplier:	2.000
Minimum Area:	5000
Minimum Width:	7
Maximum Width:	70
Minimum Fit:	0.200
Minimum Purity:	0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.5	0.607	1	778492	0.421	
130	02:38.1	TCE	02:33.0	0.906	1	2346634	0.82	

	166	03:38.9	PCE	03:30.7	0.995	1	2985644	0.72

Data File: /Data/VA /SIM_100PPB_VA_20160509/SIM_100PPB_VA_20160509_20160509_009.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.96841 Min Longitude: W 111 Deg 51.39679 Min GMT: 05/09/16 04:30:45 PM

Acquisition Date and Time: 5/9/2016 12:41:45 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160509.mth
Target Library: RAQB 09MAY2016
Last Calibrated: 5/9/2016 9:51:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.5	0.57	1	1260656	0.682	
130	02:38.1	TCE	02:32.9	0.907	1	2827924	0.989	
166	03:38.9	PCE	03:30.7	0.996	1	3593934	0.867	

Data File: /Data/VA /SIM_100PPB_VA_20160509/SIM_100PPB_VA_20160509_20160509_008.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.97253 Min Longitude: W 111 Deg 51.41418 Min GMT: 05/09/16 04:21:59 PM

Acquisition Date and Time: 5/9/2016 12:32:58 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160509.mth
Target Library: RAQB 09MAY2016
Last Calibrated: 5/9/2016 9:51:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.2	0.938	1	30743	0.017	
130	02:38.1	TCE	02:33.7	0.911	1	36812	0.013	
166	03:38.9	PCE	03:30.4	0.992	1	73847	0.018	

Data File: /Data/VA /SIM_100PPB_VA_20160509/SIM_100PPB_VA_20160509_20160509_005.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/9/2016 11:33:41 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160509.mth

Target Library: RAQB 09MAY2016
Last Calibrated: 5/9/2016 9:51:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.4	0.938	1	18554794	10.04	
130	02:38.1	TCE	02:32.8	0.906	1	30913888	10.81	
166	03:38.9	PCE	03:47.4	0.999	1	1226265	0.296	

Data File: /Data/VA /SIM_100PPB_VA_20160509/SIM_100PPB_VA_20160509_20160509_004.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/9/2016 11:24:49 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160509.mth
Target Library: RAQB 09MAY2016
Last Calibrated: 5/9/2016 9:51:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.1	0.939	1	9120568	4.933	
130	02:38.1	TCE	02:33.5	0.907	1	14805423	5.176	
166	03:38.9	PCE	03:30.3	0.994	1	21578070	5.205	

Data File: /Data/VA /SIM_100PPB_VA_20160509/SIM_100PPB_VA_20160509_20160509_003.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/9/2016 11:16:27 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160509.mth
Target Library: RAQB 09MAY2016
Last Calibrated: 5/9/2016 9:51:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7

Maximum Width:	70
Minimum Fit:	0.200
Minimum Purity:	0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.9	0.928	1	4524149	2.447	
130	02:38.1	TCE	02:32.6	0.906	1	7341643	2.567	
166	03:38.9	PCE	03:30.1	0.995	1	10649149	2.569	

Data File: /Data/VA /SIM_100PPB_VA_20160509/SIM_100PPB_VA_20160509_20160509_002.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/9/2016 11:07:33 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160509.mth
Target Library: RAQB 09MAY2016
Last Calibrated: 5/9/2016 9:51:28 AM

Peak Search Parameters:

Search Window:	0:08.00
Window Expand Factor:	0.050
Peak Resolution:	5
Noise Level Multiplier:	2.000
Minimum Area:	5000
Minimum Width:	7
Maximum Width:	70
Minimum Fit:	0.200
Minimum Purity:	0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.5	0.94	1	913182	0.494	
130	02:38.1	TCE	02:32.9	0.907	1	1352337	0.473	
166	03:38.9	PCE	03:30.7	0.996	1	1971240	0.476	

Data File: /Data/VA /SIM_100PPB_VA_20160509/SIM_100PPB_VA_20160509_20160509_001.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/9/2016 10:59:30 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160509.mth
Target Library: RAQB 09MAY2016
Last Calibrated: 5/9/2016 9:51:28 AM

Peak Search Parameters:

Search Window:	0:08.00
Window Expand Factor:	0.050
Peak Resolution:	5
Noise Level Multiplier:	2.000
Minimum Area:	5000
Minimum Width:	7
Maximum Width:	70
Minimum Fit:	0.200
Minimum Purity:	0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:56.8	0.896	1	189829	0.103	
130	02:38.1	TCE	02:32.3	0.904	1	259663	0.091	

166	03:38.9	PCE	03:30.6	0.996	1	378739	0.091	

Data File: C:\Plus IQ\H2427\Data\SIM_100PPB_VA_20160509_20160509_007.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/9/2016 11:45:53 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160509.mth
Target Library: RAQB 09MAY2016
Last Calibrated: 5/9/2016 9:51:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.5	0.937	1	18855910	10.2	
130	02:38.1	TCE	02:32.9	0.907	1	31025914	10.85	
166	03:38.9	PCE	03:30.5	0.995	1	44213680	10.67	

Data File: C:\Plus IQ\H2427\Data\SIM_100PPB_VA_20160509_20160509_013.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/9/2016 1:20:41 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160509.mth
Target Library: RAQB 09MAY2016
Last Calibrated: 5/9/2016 9:51:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.0	0.579	1	857015	0.464	
130	02:38.1	TCE	02:33.3	0.907	1	4546366	1.589	
166	03:38.9	PCE	03:30.7	0.995	1	8546950	2.062	

Data File: C:\Plus IQ\H2427\Data\SIM_100PPB_VA_20160509_20160509_014.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/9/2016 1:20:41 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160509.mth

Target Library: RAQB 09MAY2016
Last Calibrated: 5/9/2016 9:51:28 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.0	0.579	1	857015	0.464	
130	02:38.1	TCE	02:33.3	0.907	1	4546366	1.589	
166	03:38.9	PCE	03:30.7	0.995	1	8546950	2.062	

LOCATION: 0053-H HAPSITE SURVEY
SAMPLE DATE: 3-Jun-16

Unknown Identification Report
Date: 06/06/16 Time: 07:22:08
Calibration Method:
/Haps/Method/Analyze/Concentrator/Hill Vapor Intrusion Cal 2 min SIM.mth
Tune File:
default.tun
Method Description:
SIM cVOC Method in order of elution
cis-DCE; TCE; PCE
General Quantification Range from 0.1
ppbv to 50 ppbv

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_045.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.96498 Min Longitude: W 111 Deg 51.40457 Min GMT: 06/03/16 11:00:42 PM

Acquisition Date and Time: 6/3/2016 7:12:22 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	02:00.7	0.93	1	8324469	4.224	
130	02:38.1	TCE	02:37.1	0.907	1	15214540	4.067	
166	03:38.9	PCE	03:36.0	0.995	1	18797146	3.29	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_044.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 6:51:32 PM

Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.1	0.571	1	882448	0.448	
130	02:38.1	TCE	02:33.6	0.907	1	2745439	0.734	
166	03:38.9	PCE	03:31.3	0.995	1	2453361	0.429	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_043.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 6:41:55 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.4	0.803	1	86990	0.044	
130	02:38.1	TCE	02:33.8	0.9	1	116764	0.031	
166	03:38.9	PCE	03:31.8	0.995	1	51048736	8.936	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_042.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 6:32:55 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000

Minimum Width:	7
Maximum Width:	70
Minimum Fit:	0.200
Minimum Purity:	0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.6	0.541	1	47315	0.024	
130	02:38.1	TCE	02:33.8	0.9	1	61518	0.016	
166	03:38.9	PCE	03:31.6	0.994	1	4661955	0.816	

Data File: C:\Plus IQ\H2427\Data\SIM_100PPB_VA_20160602_20160602_001.hps
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/2/2016 5:05:53 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:

Search Window:	0:08.00
Window Expand Factor:	0.050
Peak Resolution:	5
Noise Level Multiplier:	2.000
Minimum Area:	5000
Minimum Width:	7
Maximum Width:	70
Minimum Fit:	0.200
Minimum Purity:	0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.4	0.949	1	446851	0.227	
130	02:38.1	TCE	02:32.7	0.903	1	547757	0.146	
166	03:38.9	PCE	03:46.0	0.96	1	5027	0.001	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_040.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 6:15:11 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:

Search Window:	0:08.00
Window Expand Factor:	0.050
Peak Resolution:	5
Noise Level Multiplier:	2.000
Minimum Area:	5000
Minimum Width:	7
Maximum Width:	70
Minimum Fit:	0.200
Minimum Purity:	0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.3	0.681	1	210697	0.107	

	130	02:38.1	TCE	02:33.9	0.909	1	172555	0.046
	166	03:38.9	PCE	03:31.6	0.996	1	172363	0.03

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_039.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 6:05:47 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.4	0.588	1	319531	0.162	
130	02:38.1	TCE	02:33.7	0.908	1	506299	0.135	
166	03:38.9	PCE	03:31.3	0.995	1	585474	0.102	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_038.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 5:56:46 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.0	0.66	1	198443	0.101	
130	02:38.1	TCE	02:33.4	0.908	1	194521	0.052	
166	03:38.9	PCE	03:31.8	0.996	1	202737	0.035	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_037.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 5:47:13 PM

Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.0	0.599	1	457614	0.232	
130	02:38.1	TCE	02:33.4	0.906	1	477335	0.128	
166	03:38.9	PCE	03:30.9	0.993	1	754500	0.132	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_036.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 5:38:07 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.1	0.56	1	225911	0.115	
130	02:38.1	TCE	02:34.1	0.905	1	149947	0.04	
166	03:38.9	PCE	03:31.9	0.994	1	125793	0.022	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_035.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 5:29:11 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000

Minimum Width:	7
Maximum Width:	70
Minimum Fit:	0.200
Minimum Purity:	0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.9	0.524	1	151137	0.077	
130	02:38.1	TCE	02:33.5	0.912	1	109937	0.029	
166	03:38.9	PCE	03:32.0	0.996	1	95456	0.017	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_034.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 5:18:38 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:

Search Window:	0:08.00
Window Expand Factor:	0.050
Peak Resolution:	5
Noise Level Multiplier:	2.000
Minimum Area:	5000
Minimum Width:	7
Maximum Width:	70
Minimum Fit:	0.200
Minimum Purity:	0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.1	0.589	1	530369	0.269	
130	02:38.1	TCE	02:33.7	0.906	1	292099	0.078	
166	03:38.9	PCE	03:31.4	0.994	1	1132343	0.198	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_032.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 4:54:55 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:

Search Window:	0:08.00
Window Expand Factor:	0.050
Peak Resolution:	5
Noise Level Multiplier:	2.000
Minimum Area:	5000
Minimum Width:	7
Maximum Width:	70
Minimum Fit:	0.200
Minimum Purity:	0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.3	0.593	1	548795	0.278	

	130	02:38.1	TCE	02:33.8	0.906	1	375659	0.1
	166	03:38.9	PCE	03:31.5	0.994	1	1794518	0.314

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_031.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 4:45:32 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.4	0.643	1	389428	0.198	
130	02:38.1	TCE	02:33.7	0.906	1	318582	0.085	
166	03:38.9	PCE	03:31.3	0.994	1	2012981	0.352	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_030.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.96704 Min Longitude: W 111 Deg 51.40549 Min GMT: 06/03/16 08:24:56 PM

Acquisition Date and Time: 6/3/2016 4:36:36 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.4	0.562	1	700219	0.355	
130	02:38.1	TCE	02:33.8	0.907	1	161105	0.043	
166	03:38.9	PCE	03:31.8	0.995	1	275499	0.048	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_029.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 4:27:35 PM

Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.4	0.578	1	439943	0.223	
130	02:38.1	TCE	02:34.6	0.907	1	220653	0.059	
166	03:38.9	PCE	03:31.7	0.995	1	367728	0.064	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_028.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 4:17:24 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.3	0.597	1	524446	0.266	
130	02:38.1	TCE	02:33.1	0.908	1	440256	0.118	
166	03:38.9	PCE	03:31.6	0.996	1	1755782	0.307	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_027.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 4:07:53 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000

Minimum Width:	7
Maximum Width:	70
Minimum Fit:	0.200
Minimum Purity:	0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.1	0.524	1	514781	0.261	
130	02:38.1	TCE	02:33.0	0.906	1	353934	0.095	
166	03:38.9	PCE	03:31.5	0.995	1	2067696	0.362	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_026.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 3:58:59 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:

Search Window:	0:08.00
Window Expand Factor:	0.050
Peak Resolution:	5
Noise Level Multiplier:	2.000
Minimum Area:	5000
Minimum Width:	7
Maximum Width:	70
Minimum Fit:	0.200
Minimum Purity:	0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.5	0.556	1	841925	0.427	
130	02:38.1	TCE	02:33.9	0.907	1	217286	0.058	
166	03:38.9	PCE	03:31.7	0.993	1	276171	0.048	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_025.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 3:50:04 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:

Search Window:	0:08.00
Window Expand Factor:	0.050
Peak Resolution:	5
Noise Level Multiplier:	2.000
Minimum Area:	5000
Minimum Width:	7
Maximum Width:	70
Minimum Fit:	0.200
Minimum Purity:	0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.7	0.539	1	875477	0.444	

130	02:38.1	TCE	02:33.5	0.907	1	193251	0.052
166	03:38.9	PCE	03:44.6	0.624	1	9249	0.002

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_024.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 3:36:19 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:59.0	0.54	1	606456	0.308	
130	02:38.1	TCE	02:33.8	0.905	1	257946	0.069	
166	03:38.9	PCE	03:32.3	0.996	1	530411	0.093	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_023.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 3:26:28 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.3	0.626	1	757490	0.384	
130	02:38.1	TCE	02:33.7	0.906	1	631272	0.169	
166	03:38.9	PCE	03:32.1	0.995	1	1540470	0.27	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_022.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 3:17:06 PM

Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.3	0.561	1	626890	0.318	
130	02:38.1	TCE	02:33.9	0.907	1	532280	0.142	
166	03:38.9	PCE	03:31.7	0.994	1	2260575	0.396	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_021.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 3:06:45 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.9	0.524	1	864806	0.439	
130	02:38.1	TCE	02:33.7	0.906	1	674344	0.18	
166	03:38.9	PCE	03:31.4	0.994	1	1445947	0.253	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_020.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 2:57:21 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000

Minimum Width:	7
Maximum Width:	70
Minimum Fit:	0.200
Minimum Purity:	0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.4	0.585	1	706600	0.359	
130	02:38.1	TCE	02:34.0	0.909	1	567475	0.152	
166	03:38.9	PCE	03:31.7	0.994	1	1907039	0.334	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_019.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.98032 Min Longitude: W 111 Deg 51.42288 Min GMT: 06/03/16 06:35:21 PM

Acquisition Date and Time: 6/3/2016 2:47:01 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:

Search Window:	0:08.00
Window Expand Factor:	0.050
Peak Resolution:	5
Noise Level Multiplier:	2.000
Minimum Area:	5000
Minimum Width:	7
Maximum Width:	70
Minimum Fit:	0.200
Minimum Purity:	0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.4	0.541	1	1588862	0.806	
130	02:38.1	TCE	02:33.9	0.905	1	476811	0.127	
166	03:38.9	PCE	03:32.5	0.995	1	404310	0.071	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_018.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 2:38:03 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:

Search Window:	0:08.00
Window Expand Factor:	0.050
Peak Resolution:	5
Noise Level Multiplier:	2.000
Minimum Area:	5000
Minimum Width:	7
Maximum Width:	70
Minimum Fit:	0.200
Minimum Purity:	0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.7	0.539	1	840437	0.426	

	130	02:38.1	TCE	02:34.3	0.908	1	439990	0.118
	166	03:38.9	PCE	03:32.2	0.994	1	436821	0.076

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_017.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 2:23:13 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.9	0.559	1	1272237	0.646	
130	02:38.1	TCE	02:33.8	0.906	1	1011942	0.27	
166	03:38.9	PCE	03:31.5	0.994	1	1313298	0.23	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_016.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 2:13:55 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.1	0.524	1	901250	0.457	
130	02:38.1	TCE	02:33.6	0.906	1	810160	0.217	
166	03:38.9	PCE	03:31.3	0.995	1	1419151	0.248	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_015.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.97643 Min Longitude: W 111 Deg 51.40686 Min GMT: 06/03/16 05:52:50 PM

Acquisition Date and Time: 6/3/2016 2:04:28 PM

Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.4	0.524	1	2631629	1.335	
130	02:38.1	TCE	02:33.2	0.905	1	853202	0.228	
166	03:38.9	PCE	03:31.6	0.995	1	550273	0.096	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_014.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 1:55:33 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.3	0.524	1	1516670	0.77	
130	02:38.1	TCE	02:33.8	0.905	1	794312	0.212	
166	03:38.9	PCE	03:31.8	0.996	1	556781	0.097	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_013.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 1:45:48 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000

Minimum Width:	7
Maximum Width:	70
Minimum Fit:	0.200
Minimum Purity:	0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.3	0.545	1	2223575	1.128	
130	02:38.1	TCE	02:33.8	0.907	1	1225623	0.328	
166	03:38.9	PCE	03:31.6	0.996	1	1039422	0.182	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_012.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 1:36:14 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:

Search Window:	0:08.00
Window Expand Factor:	0.050
Peak Resolution:	5
Noise Level Multiplier:	2.000
Minimum Area:	5000
Minimum Width:	7
Maximum Width:	70
Minimum Fit:	0.200
Minimum Purity:	0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.1	0.545	1	1586642	0.805	
130	02:38.1	TCE	02:33.7	0.906	1	1904050	0.509	
166	03:38.9	PCE	03:30.8	0.993	1	1403787	0.246	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_011.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 1:27:25 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:

Search Window:	0:08.00
Window Expand Factor:	0.050
Peak Resolution:	5
Noise Level Multiplier:	2.000
Minimum Area:	5000
Minimum Width:	7
Maximum Width:	70
Minimum Fit:	0.200
Minimum Purity:	0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.4	0.573	1	3850353	1.954	

130	02:38.1	TCE	02:33.9	0.907	1	1310710	0.35
166	03:38.9	PCE	03:31.5	0.995	1	707969	0.124

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_010.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 1:17:48 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.2	0.579	1	2631459	1.335	
130	02:38.1	TCE	02:33.6	0.906	1	1095836	0.293	
166	03:38.9	PCE	03:31.2	0.995	1	931970	0.163	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_009.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 1:08:16 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.6	0.581	1	162470	0.082	
130	02:38.1	TCE	02:34.9	0.902	1	227291	0.061	
166	03:38.9	PCE	03:32.8	0.994	1	153594	0.027	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_008.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 12:59:09 PM

Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.9	0.601	1	1693595	0.859	
130	02:38.1	TCE	02:34.0	0.906	1	1175339	0.314	
166	03:38.9	PCE	03:32.4	0.995	1	1063464	0.186	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_007.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 12:49:50 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.5	0.542	1	1544138	0.784	
130	02:38.1	TCE	02:33.9	0.906	1	2404486	0.643	
166	03:38.9	PCE	03:30.9	0.993	1	1445538	0.253	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_006.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 12:40:50 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000

Minimum Width:	7
Maximum Width:	70
Minimum Fit:	0.200
Minimum Purity:	0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.2	0.53	1	1511641	0.767	
130	02:38.1	TCE	02:32.9	0.905	1	2031739	0.543	
166	03:38.9	PCE	03:30.5	0.993	1	1442967	0.253	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_005.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 12:32:34 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:

Search Window:	0:08.00
Window Expand Factor:	0.050
Peak Resolution:	5
Noise Level Multiplier:	2.000
Minimum Area:	5000
Minimum Width:	7
Maximum Width:	70
Minimum Fit:	0.200
Minimum Purity:	0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.0	0.565	1	708927	0.36	
130	02:38.1	TCE	02:32.8	0.904	1	965993	0.258	
166	03:38.9	PCE	03:44.2	0.781	1	26456	0.005	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_004.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 12:24:06 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:

Search Window:	0:08.00
Window Expand Factor:	0.050
Peak Resolution:	5
Noise Level Multiplier:	2.000
Minimum Area:	5000
Minimum Width:	7
Maximum Width:	70
Minimum Fit:	0.200
Minimum Purity:	0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.5	0.547	1	640971	0.325	

130	02:38.1	TCE	02:33.0	0.906	1	1106693	0.296
166	03:38.9	PCE	03:30.5	0.993	1	801158	0.14

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_003.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/3/2016 12:15:41 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.2	0.544	1	753540	0.382	
130	02:38.1	TCE	02:32.8	0.901	1	461104	0.123	
166	03:38.9	PCE	03:31.2	0.993	1	436021	0.076	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_002.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.97643 Min Longitude: W 111 Deg 51.42426 Min GMT: 06/03/16 03:54:54 PM

Acquisition Date and Time: 6/3/2016 12:06:32 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.1	0.545	1	2126456	1.079	
130	02:38.1	TCE	02:33.6	0.904	1	679213	0.182	
166	03:38.9	PCE	03:31.4	0.996	1	376629	0.066	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160603_001.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.96956 Min Longitude: W 111 Deg 51.39816 Min GMT: 06/03/16 03:46:34 PM

Acquisition Date and Time: 6/3/2016 11:58:12 AM

Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.2	0.94	1	15326	0.008	
130	02:38.1	TCE	02:33.8	0.878	1	14408	0.004	
166	03:38.9	PCE	03:32.4	0.999	1	39992	0.007	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160602_006.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/2/2016 6:15:44 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:56.7	0.933	1	9918325	5.033	
130	02:38.1	TCE	02:32.2	0.908	1	18637232	4.982	
166	03:38.9	PCE	03:28.9	0.995	1	28846332	5.049	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160602_005.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/2/2016 6:01:53 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000

Minimum Width:	7
Maximum Width:	70
Minimum Fit:	0.200
Minimum Purity:	0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:56.6	0.936	1	19654426	9.974	
130	02:38.1	TCE	02:32.0	0.907	1	37659000	10.07	
166	03:38.9	PCE	03:28.8	0.994	1	57057468	9.988	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160602_004.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/2/2016 5:50:40 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity		area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:56.7	0.934		1	9883414	5.015	
130	02:38.1	TCE	02:32.2	0.907		1	18063702	4.828	
166	03:38.9	PCE	03:29.0	0.994		1	28152546	4.928	

Data File: /Data/VA /SIM_100PPB_VA_20160602/SIM_100PPB_VA_20160602_20160602_003.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 6/2/2016 5:28:54 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160602.mth
Target Library: QB 02JUN2016
Last Calibrated: 6/2/2016 4:03:55 PM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Nan	Act.RT	fit	purity		area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:56.9	0.938		1	2118314	1.075	
130	02:38.1	TCE	02:32.4	0.907		1	4169354	1.114	
166	03:38.9	PCE	03:29.2	0.994		1	7402200	1.296	

NOTES:
Act. = Actual.
AOU 1 = Accelerated Operable Unit 1 East Side Springs.
cVOC = Chlorinated volatile organic compound.
DCE = Dichloroethene.
PCE = Tetrachloroethene.
ppb = Part(s) per billion.
ppbv = Part(s) per billion per volume.
Pred. = Predicted.
RT = Retention time.
TCE = Trichloroethene.
VA = Department of Veteran Affairs.

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LOCATION: 0055-H HAPSITE SURVEY
SAMPLE DATE: 13-May-16

Unknown Identification Report
Date: 05/16/16 Time: 09:21:12
Calibration Method:
/Haps/Method/Analyze/Concentrator/Hill Vapor Intrusion Cal 2 min SIM.mth
Tune File:
default.tun
Method Description:
SIM cVOC Method in order of elution
cis-DCE; TCE; PCE
General Quantification Range from 0.1
ppbv to 50 ppbv

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_040.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/13/2016 5:00:24 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.3	0.937	1	9815581	3.608	
130	02:38.1	TCE	02:33.7	0.907	1	18109368	4.039	
166	03:38.9	PCE	03:32.1	0.994	1	24265594	3.768	

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_039.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/13/2016 4:38:10 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.1	0.591	1	316488	0.116	
130	02:38.1	TCE	02:34.2	0.852	1	26774	0.006	
166	03:38.9	PCE	03:31.2	0.99	1	301205	0.047	

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_038.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/13/2016 4:29:25 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:

Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.2	0.588	1	351615	0.129	
130	02:38.1	TCE	02:33.8	0.902	1	89984	0.02	
166	03:38.9	PCE	03:32.3	0.994	1	302356	0.047	

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_037.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/13/2016 4:20:35 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:59.0	0.72	1	34606	0.013	
130	02:38.1	TCE	02:35.1	0.908	1	99193	0.022	
166	03:38.9	PCE	03:33.7	0.996	1	135096	0.021	

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_036.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/13/2016 4:11:03 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.4	0.82	1	18019	0.007	
130	02:38.1	TCE	02:33.9	0.898	1	43783	0.01	
166	03:38.9	PCE	03:31.8	0.993	1	86922	0.013	

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_035.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/13/2016 4:01:31 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.1	0.782	1	80356	0.03	
130	02:38.1	TCE	02:33.5	0.911	1	63042	0.014	
166	03:38.9	PCE	03:44.1	0.764	1	12395	0.002	

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_034.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/13/2016 3:51:46 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.9	0.592	1	65272	0.024	
130	02:38.1	TCE	02:33.5	0.909	1	65148	0.015	
166	03:38.9	PCE	03:32.2	0.996	1	150356	0.023	

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_033.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/13/2016 3:42:27 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	N/A		0	0	0	Not found with current search parameters
130	02:38.1	TCE	02:38.7	0.86	1	4303		Area too low

166	03:38.9	PCE	03:32.7	0.997	1	127320	0.02

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_032.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/13/2016 3:33:34 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.6	0.622	1	61569	0.023	
130	02:38.1	TCE	02:34.6	0.909	1	33767	0.008	
166	03:38.9	PCE	03:31.7	0.994	1	1444395	0.224	

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_031.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/13/2016 3:24:45 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.3	0.708	1	125730	0.046	
130	02:38.1	TCE	02:46.1	0.899	1	9277	0.002	
166	03:38.9	PCE	03:32.0	0.996	1	267448	0.042	

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_030.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/13/2016 3:15:45 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.8	0.524	1	72915	0.027	
130	02:38.1	TCE	02:33.6	0.909	1	28987	0.006	
166	03:38.9	PCE	03:32.2	0.995	1	802962	0.125	

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_029.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/13/2016 3:06:38 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.4	0.714	1	67743	0.025	
130	02:38.1	TCE	02:33.9	0.834	1	12190	0.003	
166	03:38.9	PCE	03:32.4	0.995	1	702876	0.109	

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_028.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/13/2016 2:57:34 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.4	0.762	1	114415	0.042	
130	02:38.1	TCE	02:34.0	0.912	1	61555	0.014	
166	03:38.9	PCE	03:32.4	0.995	1	355539	0.055	

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_027.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/13/2016 2:47:57 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000

Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.9	0.806	1	94446	0.035
130	02:38.1	TCE		02:34.5	0.881	1	38476	0.009
166	03:38.9	PCE		03:32.3	0.995	1	1146528	0.178

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_026.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/13/2016 2:38:05 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:59.2	0.717	1	107007	0.039
130	02:38.1	TCE		02:34.8	0.894	1	38508	0.009
166	03:38.9	PCE		03:31.9	0.994	1	584161	0.091

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_025.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/13/2016 2:26:00 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE		01:58.0	0.722	1	159757	0.059
130	02:38.1	TCE		02:32.9	0.908	1	34225	0.008
166	03:38.9	PCE		03:32.1	0.995	1	771968	0.12

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_024.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/13/2016 2:16:46 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.2	0.615		1	157147	0.058
130	02:38.1	TCE	02:32.9	0.908		1	41155	0.009
166	03:38.9	PCE	03:32.1	0.995		1	1416546	0.22

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_023.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/13/2016 2:07:40 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.6	0.602		1	74995	0.028
130	02:38.1	TCE	02:49.6	0.523		1	9727	0.002
166	03:38.9	PCE	03:31.8	0.994		1	591281	0.092

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_022.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/13/2016 1:58:36 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.6	0.681		1	160899	0.059
130	02:38.1	TCE	02:40.8	0.885		1	6361	0.001
166	03:38.9	PCE	03:32.0	0.995		1	859665	0.133

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_021.hps on H2427
GPS Info:

Valid GPS Information Not Available

Acquisition Date and Time: 5/13/2016 1:49:30 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.3	0.774	1	207463	0.076	
130	02:38.1	TCE	02:37.5	0.834	1	12485	0.003	
166	03:38.9	PCE	03:31.6	0.994	1	1361993	0.211	

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_019.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/13/2016 1:30:03 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.4	0.565	1	392233	0.144	
130	02:38.1	TCE	02:40.6	0.523	1	7213	0.002	
166	03:38.9	PCE	03:31.6	0.995	1	1376306	0.214	

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_018.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/13/2016 1:21:01 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.5	0.585	1	543887	0.2	
130	02:38.1	TCE	02:34.2	0.881	1	16235	0.004	

166	03:38.9	PCE	03:31.7	0.993	1	1030912	0.16

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_017.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/13/2016 12:42:06 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.2	0.667	1	389347	0.143	
130	02:38.1	TCE	02:34.3	0.64	1	9042	0.002	
166	03:38.9	PCE	03:32.1	0.995	1	653110	0.101	

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_016.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.93912 Min Longitude: W 111 Deg 51.38947 Min GMT: 05/13/16 04:21:40 PM

Acquisition Date and Time: 5/13/2016 12:32:47 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.6	0.595	1	222959	0.082	
130	02:38.1	TCE	02:34.7	0.902	1	18578	0.004	
166	03:38.9	PCE	03:32.4	0.995	1	574767	0.089	

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_015.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.96498 Min Longitude: W 111 Deg 51.42380 Min GMT: 05/13/16 04:11:18 PM

Acquisition Date and Time: 5/13/2016 12:22:25 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.8	0.524	1	341241	0.125	
130	02:38.1	TCE	02:33.6	0.906	1	25764	0.006	
166	03:38.9	PCE	03:33.0	0.996	1	830204	0.129	

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_014.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.96727 Min Longitude: W 111 Deg 51.42380 Min GMT: 05/13/16 04:02:00 PM

Acquisition Date and Time: 5/13/2016 12:13:07 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.7	0.586	1	455759	0.168	
130	02:38.1	TCE	N/A	0	0	0		Not found with current search parameters
166	03:38.9	PCE	03:32.9	0.993	1	798881	0.124	

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_013.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.93271 Min Longitude: W 111 Deg 51.41739 Min GMT: 05/13/16 03:53:30 PM

Acquisition Date and Time: 5/13/2016 12:04:37 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	N/A	0	0	0		Not found with current search parameters
130	02:38.1	TCE	02:35.5	0.903	1	15623	0.003	
166	03:38.9	PCE	03:33.3	0.997	1	126025	0.02	

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_012.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.96132 Min Longitude: W 111 Deg 51.40915 Min GMT: 05/13/16 03:45:16 PM

Acquisition Date and Time: 5/13/2016 11:56:24 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:

Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:59.1	0.524	1	389068	0.143	
130	02:38.1	TCE	02:34.0	0.897	1	12928	0.003	
166	03:38.9	PCE	03:33.4	0.993	1	765532	0.119	

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_010.hps on H2427
GPS Info:
Latitude: N 40 Deg 40.47981 Min Longitude: W 111 Deg 54.85336 Min GMT: 05/13/16 02:19:36 PM

Acquisition Date and Time: 5/13/2016 10:30:43 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:56.8	0.918	1	5583352	2.052	
130	02:38.1	TCE	02:32.4	0.907	1	9849404	2.197	
166	03:38.9	PCE	03:30.7	0.995	1	14715641	2.285	

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_007.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/13/2016 9:59:01 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.4	0.938	1	12576632	4.622	
130	02:38.1	TCE	02:32.1	0.906	1	21936280	4.892	
166	03:38.9	PCE	03:29.5	0.995	1	31587826	4.905	

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_006.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/13/2016 9:48:37 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:56.9	0.935	1	12944471	4.757	
130	02:38.1	TCE	02:32.3	0.907	1	21892434	4.883	
166	03:38.9	PCE	03:29.0	0.993	1	31244868	4.851	

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_005.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/13/2016 9:34:10 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:56.8	0.937	1	12679870	4.66	
130	02:38.1	TCE	02:32.3	0.907	1	21308040	4.752	
166	03:38.9	PCE	03:29.8	0.995	1	30735106	4.772	

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_004.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/13/2016 9:24:48 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:56.5	0.929	1	1497385	0.55	
130	02:38.1	TCE	02:32.7	0.908	1	2373265	0.529	
166	03:38.9	PCE	03:29.4	0.994	1	3602696	0.559	

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_003.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/13/2016 9:15:46 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:56.2	0.904	1	325938	0.12	
130	02:38.1	TCE	02:31.7	0.908	1	506908	0.113	
166	03:38.9	PCE	03:29.3	0.995	1	682205	0.106	

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_002.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/13/2016 9:03:40 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.2	0.851	1	82840	0.03	
130	02:38.1	TCE	02:46.8	0.911	1	6736	0.002	
166	03:38.9	PCE	03:40.0	0.894	1	13245	0.002	

Data File: /Data/VA /SIM_100PPB_VA_20160513/SIM_100PPB_VA_20160513_20160513_001.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/13/2016 8:53:41 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160513.mth
Target Library: QB 13MAY2016
Last Calibrated: 5/13/2016 8:58:36 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.1	0.938	1	25944906	9.535	
130	02:38.1	TCE	02:33.5	0.906	1	44401688	9.903	
166	03:38.9	PCE	03:31.2	0.995	1	61845504	9.603	

NOTES:
Act. = Actual.
AOU 1 = Accelerated Operable Unit 1 East Side Springs.
cVOC = Chlorinated volatile organic compound.
DCE = Dichloroethene.
PCE = Tetrachloroethene.
ppb = Part(s) per billion.
ppbv = Part(s) per billion per volume.
Pred. = Predicted.
RT = Retention time.
TCE = Trichloroethene.
VA = Department of Veteran Affairs.

LOCATION: 0056-H HAPSITE SURVEY
SAMPLE DATE: 3-May-16

Acquisition Date and Time: 5/3/2016 5:09:43 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.9	0.675	1	67828	0.045	
130	02:38.1	TCE	02:33.7	0.871	1	70598	0.031	
166	03:38.9	PCE	03:31.5	0.993	1	1492654	0.461	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160503_029.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00595 Min Longitude: W 111 Deg 51.50208 Min GMT: 05/03/16 08:02:15 PM

Acquisition Date and Time: 5/3/2016 4:13:04 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.8	0.713	1	73383	0.048	
130	02:38.1	TCE	02:32.7	0.906	1	22637	0.01	
166	03:38.9	PCE	03:31.0	0.993	1	509887	0.158	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160503_028.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.01053 Min Longitude: W 111 Deg 51.48743 Min GMT: 05/03/16 07:53:33 PM

Acquisition Date and Time: 5/3/2016 4:04:22 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050

Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.1	0.734	1	78186	0.051	
130	02:38.1	TCE	02:34.3	0.901	1	8642	0.004	
166	03:38.9	PCE	03:31.2	0.993	1	517919	0.16	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160503_027.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.01877 Min Longitude: W 111 Deg 51.46866 Min GMT: 05/03/16 07:44:51 PM

Acquisition Date and Time: 5/3/2016 3:55:40 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.3	0.63	1	80328	0.053	
130	02:38.1	TCE	02:33.0	0.873	1	22175	0.01	
166	03:38.9	PCE	03:31.4	0.993	1	570327	0.176	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160503_026.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00961 Min Longitude: W 111 Deg 51.47827 Min GMT: 05/03/16 07:35:36 PM

Acquisition Date and Time: 5/3/2016 3:46:25 PM
Acquisition Method: /Haps/Method/VA /SIM 100PPB VA 20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.1	0.524	1	91661	0.06	
130	02:38.1	TCE	02:37.9	0.837	1	9150	0.004	
166	03:38.9	PCE	03:31.0	0.996	1	124593	0.038	

Data File: /Data/VA /SIM 100PPB VA 20160502/SIM 100PPB VA 20160502 20160503 025.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00732 Min Longitude: W 111 Deg 51.48010 Min GMT: 05/03/16 07:26:26 PM

Acquisition Date and Time: 5/3/2016 3:37:15 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:59.1	0.62	1	19433	0.013	
130	02:38.1	TCE	02:33.1	0.893	1	18099	0.008	
166	03:38.9	PCE	03:31.6	0.994	1	138708	0.043	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160503_024.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00458 Min Longitude: W 111 Deg 51.48193 Min GMT: 05/03/16 07:17:20 PM

Acquisition Date and Time: 5/3/2016 3:28:09 PM
Acquisition Method: /Haps/Method/VA /SIM 100PPB VA 20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.9	0.524	1	111676	0.073	
130	02:38.1	TCE	02:33.0	0.896	1	23588	0.01	
166	03:38.9	PCE	03:32.1	0.996	1	745062	0.23	

Data File: /Data/VA /SIM 100PPB VA 20160502/SIM 100PPB VA 20160502 20160503 023.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/3/2016 3:18:58 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.4	0.559	1	134776	0.089	
130	02:38.1	TCE	02:33.3	0.894	1	37649	0.017	
166	03:38.9	PCE	03:32.0	0.995	1	1003203	0.31	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160503_020.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.99496 Min Longitude: W 111 Deg 51.48331 Min GMT: 05/03/16 06:31:16 PM

Acquisition Date and Time: 5/3/2016 2:42:02 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.3	0.573	1	286318	0.188	
130	02:38.1	TCE	02:33.1	0.903	1	50242	0.022	
166	03:38.9	PCE	03:31.6	0.995	1	1383141	0.427	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160503_019.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.97643 Min Longitude: W 111 Deg 51.49933 Min GMT: 05/03/16 06:22:40 PM

Acquisition Date and Time: 5/3/2016 2:33:26 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000

Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.3	0.524	1	273759	0.18	
130	02:38.1	TCE	02:33.7	0.909	1	24825	0.011	
166	03:38.9	PCE	03:31.5	0.995	1	1118971	0.346	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160503_018.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.99107 Min Longitude: W 111 Deg 51.48788 Min GMT: 05/03/16 06:13:51 PM

Acquisition Date and Time: 5/3/2016 2:24:38 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.9	0.764	1	76565	0.05	
130	02:38.1	TCE	02:33.0	0.865	1	10782	0.005	
166	03:38.9	PCE	03:31.6	0.995	1	177277	0.055	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160503_017.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.02014 Min Longitude: W 111 Deg 51.47736 Min GMT: 05/03/16 06:04:41 PM

Acquisition Date and Time: 5/3/2016 2:15:27 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.4	0.683	1	100378	0.066	
130	02:38.1	TCE	02:33.9	0.906	1	88782	0.039	

166	03:38.9	PCE	03:31.5	0.994	1	1763363	0.545	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160503_016.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.93912 Min Longitude: W 111 Deg 51.52817 Min GMT: 05/03/16 05:54:37 PM

Acquisition Date and Time: 5/3/2016 2:05:23 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.5	0.673	1	83497	0.055	
130	02:38.1	TCE	02:33.3	0.908	1	161926	0.072	
166	03:38.9	PCE	03:31.1	0.994	1	3287499	1.016	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160503_015.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00870 Min Longitude: W 111 Deg 51.48468 Min GMT: 05/03/16 05:45:54 PM

Acquisition Date and Time: 5/3/2016 1:56:41 PM
Acquisition Method: /Haps/Method/VA /SIM 100PPB VA 20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.5	0.616	1	90941	0.06	
130	02:38.1	TCE	02:33.0	0.892	1	41008	0.018	
166	03:38.9	PCE	03:30.8	0.995	1	1078508	0.333	

Data File: /Data/VA /SIM 100PPB VA 20160502/SIM 100PPB VA 20160502 20160503 014.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/3/2016 1:47:58 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016

Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.4	0.524	1	164739	0.108	
130	02:38.1	TCE	02:33.0	0.905	1	117747	0.052	
166	03:38.9	PCE	03:30.8	0.994	1	2374017	0.733	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160503_013.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.03479 Min Longitude: W 111 Deg 51.48010 Min GMT: 05/03/16 05:27:58 PM

Acquisition Date and Time: 5/3/2016 1:38:44 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.6	0.684	1	148165	0.097	
130	02:38.1	TCE	02:33.1	0.908	1	150544	0.067	
166	03:38.9	PCE	03:30.7	0.994	1	2723436	0.841	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160503_012.hps on H2427
GPS Info:
Latitude: N 40 Deg 44.98901 Min Longitude: W 111 Deg 51.47095 Min GMT: 05/03/16 05:17:02 PM

Acquisition Date and Time: 5/3/2016 1:27:48 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200

Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.7	0.626	1	250480	0.165	
130	02:38.1	TCE	02:33.3	0.901	1	53578	0.024	
166	03:38.9	PCE	03:30.9	0.993	1	276166	0.085	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160503_011.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00870 Min Longitude: W 111 Deg 51.48148 Min GMT: 05/03/16 05:07:05 PM

Acquisition Date and Time: 5/3/2016 1:17:51 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.9	0.524	1	273683	0.18	
130	02:38.1	TCE	02:42.9	0.523	1	9663	0.004	
166	03:38.9	PCE	03:31.0	0.995	1	1363344	0.421	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160503_010.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.01007 Min Longitude: W 111 Deg 51.47827 Min GMT: 05/03/16 04:57:44 PM

Acquisition Date and Time: 5/3/2016 1:08:31 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.0	0.524	1	176647	0.116	
130	02:38.1	TCE	02:33.5	0.885	1	32610	0.014	
166	03:38.9	PCE	03:30.9	0.995	1	1138803	0.352	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160503_009.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00595 Min Longitude: W 111 Deg 51.47552 Min GMT: 05/03/16 04:48:12 PM

Acquisition Date and Time: 5/3/2016 12:58:59 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity		area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.1	0.618		1	506782	0.333	
130	02:38.1	TCE	02:32.9	0.884		1	34565	0.015	
166	03:38.9	PCE	03:31.4	0.995		1	497798	0.154	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160503_008.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00137 Min Longitude: W 111 Deg 51.47964 Min GMT: 05/03/16 04:39:09 PM

Acquisition Date and Time: 5/3/2016 12:49:55 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity		area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.5	0.524		1	544330	0.358	
130	02:38.1	TCE	02:33.0	0.896		1	49702	0.022	
166	03:38.9	PCE	03:30.6	0.994		1	1663316	0.514	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160503_007.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.01259 Min Longitude: W 111 Deg 51.48148 Min GMT: 05/03/16 04:30:19 PM

Acquisition Date and Time: 5/3/2016 12:41:05 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:

Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.6	0.603	1	451706	0.297	
130	02:38.1	TCE	02:33.8	0.867	1	45801	0.02	
166	03:38.9	PCE	03:30.4	0.993	1	1564775	0.483	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160503_006.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.01671 Min Longitude: W 111 Deg 51.46637 Min GMT: 05/03/16 03:54:37 PM

Acquisition Date and Time: 5/3/2016 12:05:23 PM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.4	0.54	1	707654	0.466	
130	02:38.1	TCE	02:33.3	0.879	1	70807	0.031	
166	03:38.9	PCE	03:31.0	0.995	1	1915179	0.592	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160503_005.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.03387 Min Longitude: W 111 Deg 51.45767 Min GMT: 05/03/16 03:44:55 PM

Acquisition Date and Time: 5/3/2016 11:55:41 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.3	0.524	1	672024	0.442	
130	02:38.1	TCE	02:33.1	0.889	1	73472	0.033	
166	03:38.9	PCE	03:30.8	0.995	1	2299153	0.71	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160503_004.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00847 Min Longitude: W 111 Deg 51.48285 Min GMT: 05/03/16 03:33:37 PM

Acquisition Date and Time: 5/3/2016 11:44:24 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.1	0.553	1	630445	0.415	
130	02:38.1	TCE	02:32.9	0.863	1	49106	0.022	
166	03:38.9	PCE	03:30.7	0.994	1	1861884	0.575	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160503_003.hps on H2427
GPS Info:
Latitude: N 40 Deg 45.00618 Min Longitude: W 111 Deg 51.47827 Min GMT: 05/03/16 03:24:42 PM

Acquisition Date and Time: 5/3/2016 11:35:28 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.0	0.576	1	1165031	0.766	
130	02:38.1	TCE	02:33.5	0.859	1	24907	0.011	
166	03:38.9	PCE	03:31.1	0.995	1	979141	0.302	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160503_002.hps on H2427
GPS Info:

Latitude: N 40 Deg 45.00778 Min Longitude: W 111 Deg 51.47507 Min GMT: 05/03/16 03:13:22 PM

Acquisition Date and Time: 5/3/2016 11:24:09 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.7	0.591	1	20811	0.014	
130	02:38.1	TCE	02:34.9	0.912	1	16814	0.007	
166	03:38.9	PCE	03:31.0	0.999	1	77726	0.024	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160503_001.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/3/2016 9:29:55 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
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Peak Resolution: 5
Noise Level Multiplier: 2.000
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Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity	area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:59.3	0.941	1	8141518	5.356	
130	02:38.1	TCE	02:34.9	0.905	1	11789970	5.226	
166	03:38.9	PCE	03:32.8	0.994	1	16571674	5.12	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_016.hps on H2427
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Last Calibrated: 5/2/2016 9:26:25 AM

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Window Expand Factor: 0.050
Peak Resolution: 5

Noise Level Multiplier: 2.000
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Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity		area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:55.1	0.949		1	112562	0.074	
130	02:38.1	TCE	02:30.6	0.904		1	153619	0.068	
166	03:38.9	PCE	03:28.0	0.994		1	237666	0.073	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_014.hps on H2427
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Acquisition Date and Time: 5/2/2016 11:03:46 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
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Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity		area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:56.6	0.939		1	14845862	9.767	
130	02:38.1	TCE	02:32.0	0.906		1	24650670	10.93	
166	03:38.9	PCE	03:29.4	0.995		1	34144804	10.55	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_013.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/2/2016 10:54:38 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity		area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:56.8	0.943		1	7559746	4.973	
130	02:38.1	TCE	02:31.6	0.905		1	11539784	5.115	
166	03:38.9	PCE	03:29.1	0.996		1	16649161	5.144	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_003.hps on H2427
GPS Info:
Valid GPS Information Not Available

Acquisition Date and Time: 5/2/2016 8:25:19 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity		area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:57.8	0.932		1	4524318	2.976	
130	02:38.1	TCE	02:32.6	0.905		1	6474057	2.87	
166	03:38.9	PCE	03:30.4	0.995		1	9323635	2.88	

Data File: /Data/VA /SIM_100PPB_VA_20160502/SIM_100PPB_VA_20160502_20160502_002.hps on H2427
GPS Info:
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Acquisition Date and Time: 5/2/2016 8:15:46 AM
Acquisition Method: /Haps/Method/VA /SIM_100PPB_VA_20160502.mth
Target Library: RAQB 02MAY2016
Last Calibrated: 5/2/2016 9:26:25 AM

Peak Search Parameters:
Search Window: 0:08.00
Window Expand Factor: 0.050
Peak Resolution: 5
Noise Level Multiplier: 2.000
Minimum Area: 5000
Minimum Width: 7
Maximum Width: 70
Minimum Fit: 0.200
Minimum Purity: 0.200

Q-Ion	Pred.RT	Analyte Name	Act.RT	fit	purity		area	ppb	Flag
61	02:00.6	cis-1,2 DCE	01:58.2	0.933		1	834251	0.549	
130	02:38.1	TCE	02:32.9	0.905		1	1190270	0.528	
166	03:38.9	PCE	03:30.4	0.993		1	1666928	0.515	

NOTES:
Act. = Actual.
AOU 1 = Accelerated Operable Unit 1 East Side Springs.
DCE = Dichloroethene.
PCE = Tetrachloroethene.
ppb = Part(s) per billion.
Pred. = Predicted.
RT = Retention time.
TCE = Trichloroethene.
VA = Department of Veteran Affairs.

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TECHNICAL MEMORANDUM

TO: Lynne Welsh, Department of Veterans Affairs

FROM: George Tangalos, EA Team (EA Engineering, Science, and Technology, Inc., PBC/ CH2M HILL)

DATE: 28 February 2017

SUBJECT: Conceptual Site Model Update for the 700 South 1600 East PCE Plume AOU-1: East Side Springs, Salt Lake City, Utah

1. Introduction

1.1 Objective

The purpose of this Conceptual Site Model (CSM) update is to support further development of the Remedial Investigation (RI) strategy for the 700 South 1600 East Tetrachloroethene (PCE) plume (the Site) by integrating information from previous source investigations; existing groundwater data; and available geological, hydrogeological, and modelling data. The CSM will be used to identify data gaps in knowledge about the Site, which will directly inform the scoping process for the RI and feasibility study process. This CSM is an update of the CSM prepared in 2015 (First Environmental [FE], 2015).

1.2 Site Investigation History

The Site is located near the Wasatch Mountain front in the northeastern corner of the Salt Lake Valley (Figure 1). The Site was first identified in 1990 during sampling and analysis of the Mt. Olivet irrigation well. The concentration of PCE in groundwater from the Mt. Olivet well was 32 parts per billion (ppb) at that time. In 1997, PCE was initially detected at Salt Lake City Department of Public Utilities (SLCDPU) Drinking Water Well No. 18 (SLC-18) at a concentration of 0.6 ppb, and the PCE concentration in the Mt. Olivet irrigation well had increased to 184 ppb. In 1998, the United States Environmental Protection Agency (EPA) conducted additional investigations of the area and installed seven monitoring wells (EPA-MW-01S, EPA-MW-01D, EPA-MW-02, EPA-MW-03, EPA-MW-04, EPA-MW-05, and EPA-MW-06) east of the Mt. Olivet well (Utah Department of Environmental Quality [UDEQ], 2000) (Figure 2 and Table 1). During this investigation, source areas for the PCE contamination and the extent of the plume were not clearly identified. However, a sewer line originating from a former dry-cleaning facility at the Veterans Administration (VA) Medical Center was identified as a potential source (Bowen Collins 2004) (Figure 2).

In 2010, in response to an oil pipeline break near Red Butte Creek, water samples were collected by the SLCDPU from Red Butte Creek and springs and seeps emanating along the Wasatch Fault scarp west of 1300 East (i.e., the East Side Springs area). PCE was detected in several of these springs and seeps. Since 2010, additional investigations have been performed to investigate potential source areas and the nature and extent of PCE contamination (UDEQ 2012; MWH 2012). These investigations have resulted in the identification of several possible source areas, as discussed in this technical memorandum.

In September 2012, EPA released the hazard ranking for the Site (EPA 2012). In May 2013, EPA listed the Site on the National Priorities List, making the Site eligible for comprehensive assessment and cleanup through the Comprehensive Environmental Response, Compensation and Liability Act or Superfund process (EPA 2014).

In early 2016, groundwater, surface water (including storm water), soil, soil gas, and indoor air samples were collected and analyzed to support the ongoing RI for Accelerated Operable Unit 1 (AOU-1) in the East Side Springs area (EA 2016a), as well as this CSM update.

1.2.1 Potential Source Areas

Several investigations have been performed in the past, including groundwater, soil, and soil-gas sampling, but a definitive source area has not been identified for the PCE plume. Based on historical records (EPA 2012), as well as data from previous investigations (IHI Environmental 2005, 2007; UDEQ 2000, 2012), three potential source areas have been identified: the VA Medical Center, Building 7; a former Utah Army National Guard vehicle maintenance facility; and a former United States Forest Service (USFS) Helicopter Pad (Figure 2).

VA Medical Center Building 7 (Former Dry Cleaning Facility)

A sewer line (Figure 3) associated with a former dry-cleaning facility at the VA Medical Center Building 7 has been identified as the likely source area, despite limited and inconclusive groundwater, soil, and soil-gas data (UDEQ 2012).

During routine cleaning of the sanitary sewer line near the VA Medical Center Building 7 in the early 1980s, employees of the SLCDPU documented discolored water and odors of drycleaner solvent (EPA 2012).

In November 1996, a soil-gas sample was collected near the southeast corner of Building 6 at the VA Medical Center; this soil-gas sample contained 1.9 ppb of PCE (UDEQ 2000). This location is near the loading dock area of Building 7.

A video survey of the sewer line between Building 7 and Sunnyside Avenue, conducted in December 2003 by SLCDPU, documented numerous defects including cracks, root penetrations, offsets and a pipe sag, as well as evidence of historic breaks, repairs, and replacements of the clay pipe (EPA 2012).

In 2007, the VA contracted a soil gas investigation along the sanitary sewer line lateral beginning at Building 7 and running south to Sunnyside Avenue (Figure 3) (IHI 2007). During the investigation, 48 passive soil gas samplers were installed along the sewer line. PCE was detected in four of the 48 samples; three of which were collected adjacent to the loading dock area of Building 7 and had PCE ranging from 34 to 90 nanograms. However, soil sampling performed in 2004, which happened before the correlative soil gas investigation in 2007, detected no affected soils at the Building 7 loading dock location (IHI 2005).

Former Utah Army National Guard Vehicle Maintenance Facility

The former Utah Army National Guard vehicle maintenance facility was located east of the Mt. Olivet Cemetery. According to UDEQ (2000), 15 soil-gas samples from the area surrounding the facility were collected in 1995. Only two contained chlorinated solvents: one sample collected near the Mt. Olivet

Cemetery contained 16 ppb of PCE, and one sample collected near the former Utah Army National Guard vehicle maintenance building contained 1 ppb of TCE.

Former United States Forest Service Helicopter Pad

To support interagency fire-fighting efforts, the USFS maintained a helicopter pad near the northeast corner of the intersection of Sunnyside Avenue and Guardsman Way. This site is no longer in use by the USFS and has been converted to a University of Utah softball field. This site has not been previously investigated as a potential source area, and any reclamation efforts associated with the termination of use of the helicopter pad are unknown.

2. Ground and Surface Water Monitoring Network

The existing monitoring locations include monitoring wells, drinking water and irrigation wells, artesian wells, seeps and springs, and surface water. Details about each of these monitoring network components are described below.

2.1 Groundwater

2.1.1 Monitoring Wells

A total of eight monitoring wells (MW-01S, MW-01D, MW-02, MW-03, MW-04, MW-05, MW-05R, and MW-06) have been installed during past investigations of the PCE plume. MW-03 was abandoned due to building construction within 1 year of its installation. In 2016, MW-05 was destroyed but replaced in the same location with MW-05R in September of 2016. Information on the existing groundwater monitoring well network is summarized on Table 1. The well data were compiled from the MWH (2012), UDEQ (2012), and UDEQ (2000) reports, and the MW-05R boring log (Attachment A).

2.1.2 Temporary Piezometers

To assess the nature and extent of the 700 South 1600 East PCE Plume and to characterize vapor intrusion potential, temporary small-diameter groundwater monitoring points were installed throughout the East Side Springs area (Figure 4) (EA 2016a). While 34 of the groundwater monitoring points were abandoned immediately after sampling, ten temporary monitoring points were left in place as piezometers to enable future groundwater sampling. Information on the remaining 10 piezometer points is summarized on Table 2.

2.1.3 Drinking Water and Irrigation Wells

Information on the municipal drinking water wells (no longer in service) and irrigation wells in the vicinity of the VA Medical Center well monitoring network is also provided in Table 1. The well data were compiled from the MWH (2012), UDEQ (2012), and UDEQ (2000) reports.

2.1.4 Artesian Wells

Existing artesian (flowing) wells are identified on Table 3; these well are located in the Salt Lake Valley, several miles hydraulically downgradient of the Site (Figure 2). The artesian conditions documented at these wells indicate that confined aquifer conditions are present in the Salt Lake Valley. The location identifications are from the UDEQ (2012) report.

2.2 Surface Water

2.2.1 Red Butte Creek

The headwaters of Red Butte Creek are located in the Wasatch Mountains. As Red Butte Creek exits the Wasatch Mountains through Red Butte Canyon, it enters the Salt Lake Valley and flows through developed business and residential areas (Figure 2). Surface exposure of Red Butte Creek terminates east of Liberty Park, and the creek is diverted underground. Water from Red Butte Creek is assumed to be connected to the Liberty Park Reservoir.

2.2.2 Mt. Olivet Reservoir

The Mt. Olivet Reservoir is located in the Mt. Olivet Cemetery near the northeast corner of the cemetery adjacent to 500 South (Figure 2). The reservoir is supplied by diversions from both Red Butte Creek and Emigration Creek (via a diversion to Red Butte Creek) and the Mt. Olivet Cemetery Irrigation Well (Per. Comm., 2014).

2.2.3 Liberty Park Pond

The Liberty Park Pond is located in Liberty Park, Salt Lake City (Figure 2). The pond is supplied by diversions from Red Butte Creek. In June of 2010, an oil pipeline rupture impacted Red Butte Creek, which in turn impacted the Liberty Park Pond. This resulted in the draining, dredging, and cleaning of the pond.

2.2.4 Seeps and Springs

Seeps and springs in the area are located on residential, public, and private properties containing numerous homes, several public and private schools, a large public park, and several churches. Following the 2010 release of crude oil from a pipeline, Salt Lake City identified 25 springs along the Wasatch Fault line in the area between 800 South and Michigan Avenue (approximately 1300 South) and between 1100 East and 1300 East (UDEQ 2012). During the investigation, although constituents of crude oil were not identified, PCE was detected in several springs and surface water sources (UDEQ 2012). The data from the UDEQ (2012) report was used to develop the investigation area for the East Side Springs, as well as contour preliminary plume shapes where PCE contamination may be present. These preliminary plume shapes are used in the CSM figures to illustrate the East Side Springs area (with the exception of Figure 4; the Figure 4 plume contours are based on 2016 data collected as part of the ongoing RI for AOU-1).

Following the UDEQ (2012) report, the SLCDPU compiled of a more comprehensive list of identified springs and seeps along the East Bench segment of the Wasatch Fault (Attachment B); this list was used as a basis for the 2016 surface water investigation (Figure 5) (EA 2016a).

The ESS-SW identification nomenclature is for springs identified and sampled by UDEQ (2012) (Figure 2); the SP identification nomenclature is for springs identified and sampled by UDEQ (2000) (Figure 2); and the SW-00 identification nomenclature is for springs, seeps and storm water identified by the VA (EA, 2016a) (Figure 5). The data for seeps and springs that have been sampled are summarized in Table 4.

2.2.5 Storm Water Run-off

Several seeps and springs in AOU-1 are mitigated and discharged to storm water lines; therefore, Salt Lake City storm water sewer manholes, located in and downgradient of AOU-1, have been sampled (EA 2016a). Stormwater sample locations consisted of mitigated spring water storm drains, storm water lines, and the Jordan and Salt Lake City Canal. The storm water sampling locations are shown on Figure 5.

3. Geology

3.1 Geologic Setting

The Salt Lake Valley, located in the northern part of Utah, is an alluvial basin bounded by the Wasatch Range to the east, the Oquirrh Mountains to the west, the Traverse Mountains to the south, and the Great Salt Lake to the north-northwest. The Salt Lake Valley is within the Basin and Range Physiographic Province, which is characterized by generally parallel, north-to northeast-trending mountain ranges separated by broad alluvial basins that are a result of Cenozoic-age extensional faulting. The Wasatch Range, formed by uplift along the Wasatch Fault, defines the eastern boundary of the Basin and Range.

The consolidated rocks in the Wasatch Range bounding the northeastern part of Salt Lake Valley, from Emigration Canyon northward to Dry Creek Canyon, are predominantly the Jurassic-age Twin Creek Limestone, the Triassic-age Nugget Sandstone, Ankareh Formation (sandstone, shale and mudstone), the Thaynes Formation (limestone, interbedded with sandstone and shale), the Permian Park City Formation (limestone and shale), and Weber Quartzite (Davis, 1983). These faulted and folded units maintain bedding planes striking approximately perpendicular to the mountain front (Thiros 2010).

The basin-fill deposits in the Salt Lake Valley consist of unconsolidated to semi-consolidated Tertiary-age deposits overlain by unconsolidated Quaternary-age deposits. Based on geophysical studies by Mattick (1970), the contact between the basin-fill deposits and underlying consolidated bedrock near the center of the valley is estimated to be as deep as 4,000 feet (ft) below land surface.

The VA Medical Center is located on unconsolidated sediments of Quaternary age that were deposited mainly as alluvial fans, by streams, and as deltas and other lacustrine features associated with Lake Bonneville and older paleo-lakes that once filled the valley (Thiros 2010). In general, sediments deposited near the mountain front (i.e., the location of the VA Medical Center) tend to be coarser-grained gravels and sands with no substantial, laterally continuous layers of fine-grained materials.

3.2 The Wasatch Fault

The Salt Lake Valley alluvial basin is bounded on the east by the Wasatch Fault, which is comprised of several seismically-independent segments that have been active in Holocene time. This active fault zone has uplifted the Wasatch Mountains as much as 7,000 ft relative to the valley (Thiros 2010).

The East Bench Fault segment of the Wasatch Fault runs predominately north-south, just west and approximately parallel to 1300 East in Salt Lake City. The surface expression of the fault scarp is apparent between approximately 1300 East and 1100 East. Personius and Scott (2009) mapped a spur of the East Bench Fault segment of the Wasatch Fault that strikes northeasterly in the vicinity of SLC-18 (Figure 6).

3.3 Site Lithology

The surficial geology changes from east to west across the 700 South 1600 East PCE plume site. Near the VA Medical Center, the surficial geology is comprised of coarse-grained alluvial fan deposits of gravel in a matrix of sand and silty sand, surrounded by lacustrine deposits to the south, west, and north. Generally, the lacustrine deposits become more fine-grained to the west of the Site, until the East Bench Fault (Personius and Scott, 2009). The East Bench Fault is defined by the presence of mixed colluvium and alluvium deposited as a debris apron at the base of the fault's scarp (Personius and Scott, 2009). The sediments underlying the Site are hundreds of ft thick; bedrock is assumed to be located at a depth exceeding 1,000 ft below ground surface (bgs).

Boring logs for the EPA monitoring wells are presented in the UDEQ (2000) report. These logs include depths of lithologic contacts, soil descriptions, and soil classifications. The logs also contain well construction data and measured depths to groundwater. The logs show that although several small lenses of fine-grained materials occur near the Site, the predominant lithology is coarser grained alluvial material.

Lithologic data for the Mt. Olivet Well and SLC-18 are available in the Utah Division of Water Rights (UDWRi) records (Water Right No. 57-2526 and 57-101/57-4413, respectively) (UDWRi, 2014) and summarized in the UDEQ (2000) and MWH (2012) reports. For these older water-supply wells, the data are limited to lithologic contact depths, soil descriptions, and some well construction details. Although the wells produce water from multiple screened intervals, the logs provide little information of value with respect to aquitard and aquifer intervals.

From 2004 to 2005, and 2015 to 2016, the United States Geological Survey (USGS) conducted groundwater studies using the EPA monitoring wells, Mt. Olivet irrigation well, and SLC-18. These investigations used downhole geophysical tools to evaluate the lithology at the monitoring well locations, with an objective of using the geophysical data to correlate lithology between wells. Through the geophysical analysis, as well as the sediment type and moisture content of specified intervals documented in the boring logs, the USGS identified a series of shallow aquifers and aquitards and hypothesized the presence of a northwest-dipping clay layer at approximately 180.0 ft bgs (USGS 2005). In recent discussions with the USGS (Per. Comm., 2014), the presence and nature of this clay-layer is an interpretation based on limited data; however, the 2015 and 2016 geophysical data may serve to validate or repudiate the previous hypothesis. The data collected in 2015 and 2016 are not yet available to the public.

Several additional boring logs were identified in UDWRi records, including an abandoned 1,004-foot exploratory borehole on VA property (Water Right No. 1057004M00), and an abandoned 1,508-foot-deep exploratory borehole on University of Utah property (Water Right No. 0757007M00 and 0657008M00) (Figure 2). The abandoned exploratory borehole on the University of Utah property encountered bedrock at approximately 280.0 ft bgs, while the abandoned borehole on the VA property did not encounter bedrock (Attachment C).

Lithology from available boring logs and surficial geology descriptions provided by the Personius and Scott (2009) were used to develop a generalized cross-section, shown in Figure 7, and block diagram, shown in Figure 8. The sediment lithology characterized in the boring logs is coarse- to fine-grained upper-basin fill consisting of gravel, sand, silty sand, clay lenses, and interbedded sequences of the aforementioned sediment types. Upper-basin fill sediments are typical of the Wasatch Front and are primarily unconsolidated Quaternary-age deposits, deposited mainly as alluvial fans by streams, and as deltas and other lacustrine features associated with Lake Bonneville and older paleolakes that once filled

the valley (Thiros 2010). Drilling in the East Side Springs area during the ongoing AOU-1 RI was limited to 50 ft bgs, and did not change the current understanding of the regional lithology.

3.4 Surface Topography

The Site is located in a developed urban area. The topography of the area slopes to the southwest at a grade of approximately 4 percent until reaching the East Bench segment of the Wasatch Fault scarp, where it steepens to approximately 10 percent (EPA 2012). The ground surface elevation at the VA Medical Center is approximately 4,735 feet above mean sea level (amsl); the approximate elevation of 1300 East, which runs parallel to the Wasatch Fault scarp, is 4,530 ft amsl; and the elevation of Artesian Well Park is approximately 4,266 ft amsl. The fault scarp is the defining topographic feature shown on Figure 9.

4. Hydrogeology

4.1 Hydrostratigraphy

Groundwater in the Salt Lake Valley occurs in basin-fill sediments that can be divided into four aquifers (Waddell et al. 1987; Thiros 2003):

1. Local, unconfined perched aquifers
2. A deep unconfined aquifer between the artesian aquifer and the mountains
3. A shallow unconfined aquifer overlying the artesian aquifer
4. A deep confined (artesian) aquifer

The localized, unconfined perched aquifers are located near the Wasatch Mountains. Groundwater from the unconfined perched aquifers can move downward into the deep unconfined aquifer because the perched aquifers are discontinuous and lack substantial layers of fine-grained materials. The unconfined perched aquifers transition laterally to form the shallow unconfined aquifer to the west, away from the mountain front. As groundwater in the deep unconfined aquifer flows towards the center of the Salt Lake Valley, it becomes confined beneath laterally continuous fine-grained layers to form the deep confined (artesian) aquifer. The artesian or flowing wells at Liberty Park and Artesian Park tap this deep confined aquifer.

The basin-fill deposits are very complex because they consist of multiple aquifers and confining layers that are both laterally discontinuous and internally heterogeneous; however, all the unconsolidated water-bearing materials in the valley are connected hydraulically to some degree (Waddell 1987). Combined, the deep confined aquifer and the deep unconfined aquifer form the principal aquifer that most groundwater wells in the Salt Lake Valley utilize (Wallace and Lowe, 2009).

4.2 Primary and Secondary Recharge Zones

The primary recharge area for the basin-fill aquifers is near the mountain fronts and associated fault zones where no continuous layers of fine-grained material that will impede the downward movement of water are present (Thiros 2003).

Secondary recharge occurs where continuous layers of fine-grained material are thin or completely absent, and water flows through shallow basin-fill alluvial sediments (i.e., perched aquifers) into deeper basin-fill sediments (i.e., deep unconfined aquifer). The secondary recharge zone borders the primary recharge area on the west and includes the area of the East Side Springs (Figures 7 and 8).

The VA Medical Center and the 700 South 1600 East PCE Plume are within both primary and secondary recharge areas, based on boundaries defined by the USGS (Thiros 2010). SLC-18 and the Mt. Olivet irrigation well are both located in the primary recharge area (Anderson, *et al* 1994; Bowen Collins 2004). The SLC-18 well log indicates "clay and gravel are present to a depth of 266 ft, but does not indicate there are significant clay layers in the area that would impede the downward migration of water or contamination to the aquifer (Bowen Collins 2004)."

4.3 Groundwater Levels and Potentiometric Surfaces

The depth-to-groundwater in the unconfined part of the shallow unconfined basin-fill aquifer (i.e., along the mountain fronts) is typically from 150.0 to 200.0 ft bgs (Thiros 2010). The depth-to-groundwater in the deep confined aquifer ranges from 100.0 to 140.0 ft bgs in the secondary recharge area along the mountain front, to only 1.0 to 5.0 ft bgs in the discharge areas in the center of the valley as a result of the lower surface elevations (Thiros 2010).

The most recent water level data for the EPA monitoring wells, SLC-18, and the Fountain of Ute (Table 1) were presented in the EA (2016b) and FE (2014) reports. The EPA-MW-03 well was abandoned during construction of the Salt Lake City Sports Complex; as such, the water level presented for this well is from the UDEQ (2000) report and was measured just after well construction. The FE (2014) and EA (2016b) reports do not provide water levels for the Mt. Olivet Well (i.e., permission not granted) and University of Utah Well 1 (U of U #1) (i.e., actively pumping); however, the EA (2016b) report does provide water quality data for both wells.

Thorough and consistent historical time-series water level records for these wells are not available; however, Table 5 summarizes the known water level record. The USGS National Water Information System (NWIS) maintains water level records for active (e.g., Bonneville Golf Course Well; Fountain of Ute) and inactive (e.g., SLC-18) wells across the State of Utah; these records are available through the USGS NWIS website (USGS 2014). These records, while of general use on a regional scale, are generally not useful for tracking small scale changes or localized effects on water levels.

Based on the available data, two potentiometric surfaces can be defined by the existing groundwater monitoring well network (Figure 10). An upper potentiometric surface, representative of the shallow part of the unconfined aquifer, can be preliminarily defined by monitoring wells EPA-MW-01S, EPA-MW-02, EPA-MW-03 (abandoned), EPA-MW-04, and EPA-MW-05. The approximate elevation of this upper potentiometric surface near the VA Medical Center is 4,522 ft amsl. A lower potentiometric surface, representative of deeper parts of the unconfined aquifer, can be preliminarily defined by EPA-MW-01D, SLC-18, and the Fountain of Ute. The approximate elevation of this lower potentiometric surface near the VA Medical Center is 4,489 ft amsl. The potentiometric elevations of the nested wells EPA-MW-01S and EPA-MW-01D are approximately 16 ft in difference, indicating a relatively strong vertical hydraulic gradient of approximately 0.09 ft/ft (Table 1), as would be expected in a primary recharge area.

4.4 Horizontal Hydraulic Gradients and Flow Directions

The potentiometric surface for the basin-fill aquifer indicates that groundwater generally moves from recharge areas near the Wasatch Mountain front toward the Jordan River and the Great Salt Lake. In the northeastern part of the Salt Lake Valley, and in the vicinity of the VA Medical Center, groundwater generally flows from the northeast to the southwest (Thiros 2010).

Contrarily, using data obtained from groundwater monitoring wells during a 1999 field investigation (UDEQ 2000), EPA concluded that groundwater flow near the VA Medical Center is toward the northwest. However, MWH (2012) and Bowen Collins (2004) surmised that the northwest groundwater flow direction is representative of "perched and localized mounding in the shallow portion of the shallow unconfined aquifer, and the regional groundwater flow direction is from the northeast to the southwest." However, without better evidence of a perching unit (i.e., a laterally continuous clay or silt layer), it seems unlikely that perched conditions are present based on available boring logs.

As described above, two potentiometric surfaces were contoured: one for shallow groundwater (e.g., the shallowest part of the unconfined aquifer), and a second for deeper groundwater (e.g., the deeper part of the unconfined aquifer) (Figure 10). Shallow groundwater, represented by the "upper potentiometric surface" flows to the northwest, while the somewhat deeper groundwater represented by the "lower potentiometric surface" flows to the west-northwest. A preliminary horizontal hydraulic gradient calculation for the upper potentiometric surface, based on the difference in groundwater elevations and the distance between EPA-MW-05 and the spring ESS-SW-17 (118 ft, and 5,800 ft, respectively) is 0.02 ft/ft. A preliminary horizontal hydraulic gradient calculation for the lower potentiometric surface, based on the difference in groundwater elevations and the distance between SLC-18 and the Fountain of Ute (6 ft, and 1,400 ft, respectively) is 0.004 ft/ft.

Distortion in the upper potentiometric contours may be related to groundwater pumping from the U of U #1 well, or could be due to surveying errors or simply the limited groundwater elevation dataset. The lower potentiometric flow direction is based on simple interpolation from only three water level elevations; as more water elevation data from wells screen in this depth interval become available, the flow direction could change appreciably. As it stands now, the flow direction for groundwater in the lower zone appears to be influenced by groundwater pumping from the U of U #1 well, which operates at night during the summer and early fall months.

4.5 Horizontal Hydraulic Conductivity and Transmissivity

Regional hydraulic conductivity values from 0.03 feet/day (ft/d), to as much as 3,000 ft/d, with a log-normalized mean value of 30 ft/d have been reported for coarse-grained basin-fill deposits in the Basin and Range province (Thiros 2003). Numerical modelling conducted by Lambert (1995) for regional Salt Lake Valley groundwater flow conditions, as cited in Thiros (2010), estimates the hydraulic conductivity for coarser grained deposits in the shallow unconfined aquifer of the Salt Lake Valley to be about 200 ft/d. In contrast, Lambert's estimate of hydraulic conductivity for fine-grain lake-deposited clays, characteristic of the shallow unconfined aquifer in the center of the Salt Lake Valley, was about 1 ft/d.

The transmissivity (i.e., hydraulic conductivity multiplied by the saturated thickness of the aquifer) of the shallow unconfined aquifer ranges from 50 to 4,000 feet squared per day (ft^2/d) and the storage coefficient is estimated to average 0.15 (Wallace and Lowe, 2009). Locally, a 30-day pump test at SLC-18 and a slug test at EPA-MW-01D yielded estimated transmissivities for the shallow unconfined aquifer of 22,700 to 35,800 ft^2/d, respectively, with hydraulic conductivities ranging from 45 ft/d to 140 ft/d (MWH 2012). The local transmissivity values are an order of magnitude greater than the average transmissivity values for the shallow unconfined aquifer; however, Thiros (2010) notes that transmissivity is generally highest near the mountains where streams entering the valley deposit the coarsest-grained materials.

Transmissivity and storage coefficients (a dimensionless number representing the volume of water an aquifer releases from or takes into storage per unit surface area of the aquifer per unit change in head)

range from 1,000 to 50,000 ft^2/d and 0.15 to less than 0.0001, respectively, for the two values, for the unconfined and confined parts of the principal (deep) aquifer, respectively (Wallace and Lowe, 2009).

4.6 Groundwater Velocity

Preliminary estimates of groundwater velocity for the unconfined aquifer range from 0.6 ft/d to 1.9 ft/d. This groundwater velocity estimate is based on an assumed sediment porosity of 0.3; the hydraulic conductivities (45 ft/d to 140 ft/d) of the unconfined aquifer measured during aquifer pump testing at SLC-18 and slug testing at EPA-MW-01D (MWH 2012); and the horizontal hydraulic gradient (0.004 ft/ft) calculated for the lower potentiometric surface.

4.7 Vertical Hydraulic Conductivity

Groundwater moves downward in the primary and secondary recharge areas, from the source to the shallow unconfined aquifer, and ultimately to the deeper principal basin-fill aquifers. In locations where the shallow unconfined aquifer is present, where fine-grained deposits are present, vertical hydraulic conductivity values range from 0.01 to 1 ft/d (Thiros 2003). The vertical hydraulic conductivity of the confining bed between the shallow unconfined and principal aquifer is estimated to average 0.025 ft/d (Wallace and Lowe, 2009).

4.8 Effects of Wasatch Fault on Groundwater Flow

MWH (2012) performed aquifer testing of SLC-18, and concluded that the East Bench Fault Spur, which has been mapped adjacent to SLC-18 (Personius and Scott, 2009), is not a barrier to groundwater flow. This interpretation is the result of a strong response recorded at the EPA-MW-01D well, which indicated a hydraulic connection between the wells (MWH 2012). The presence of PCE in springs and seeps downgradient of the fault further suggests that the East Bench Fault Spur is not a flow barrier.

5. Water Quality and Geochemistry

The shallow unconfined aquifer, and where present, the unconfined part of the deep principal aquifer are susceptible to contamination from activities related to land use because of its proximity to the land surface, and because it is generally comprised of coarse-grained sediments with high hydraulic conductivity values that enable rapid movement of contaminants from the surface to the water table. Water quality in the confined deep aquifer can be degraded by secondary recharge of contaminated water from the unconfined shallow and deep aquifers.

5.1 Water Quality

The chemical composition of groundwater in the Salt Lake Valley varies with location and depth, primarily due to quality of recharge sources and water-rock interactions as it moves from recharge to discharge areas.

5.1.1 Groundwater

Groundwater in the unconfined shallow aquifer in the northeastern part of the Salt Lake Valley generally has more dissolved sulfate relative to bicarbonate compared to upgradient source water (Thiros 2010). Total-dissolved-solids (TDS) concentrations in the shallow unconfined aquifer are generally greater than 500 milligrams per Liter (mg/L), primarily as a result of water-rock interactions with easily eroded

Triassic-age shale and mudstone (e.g., Ankareh Formation) in the mountain block and in the basin-fill deposits of the area (Thiros 2010).

Based on maps presented in Wallace and Lowe (2009), groundwater in the vicinity of the Site would be classified as Class II – Drinking Water Quality Groundwater (TDS between 500 and 3,000 mg/L [UDEQ 2014]). TDS concentrations in the Salt Lake Valley basin-fill aquifer range from 512 to 2,588 mg/L (Wallace and Lowe, 2009). Concentrations of dissolved oxygen in groundwater in the Salt Lake Valley range from 0.3 to 11.6 mg/L, and pH ranges from 6.8 to 8.0 standard units (Thiros 2010). Groundwater in the Salt Lake Valley is generally oxic and neutral pH.

Thiros (2010) provides groundwater quality summary data for different parts of the Salt Lake Valley. For the east side of the Salt Lake Valley, Thiros (2010) states the following:

- Groundwater sampled from wells (5 wells) in the deeper unconfined basin-fill aquifer in the primary recharge area contain modern water; and median pH of 7.1, 7.4 mg/L dissolved oxygen, and 562 mg/L TDS concentrations.

- Groundwater sampled from wells (11 wells) in the shallow unconfined basin-fill aquifer in the secondary recharge area contain modern water; and a median pH of 7.3, 5.3 mg/L dissolved oxygen, and 414 mg/L TDS concentrations.

- Groundwater sampled from wells (15 wells) in the deeper confined basin-fill aquifer in the secondary recharge area contain modern and mixed-age waters; and median pH of 7.5, 5.8 mg/L dissolved oxygen, and 316 mg/L TDS concentrations.

The EA (2016b) report provides Site data (Table 6) congruent with data for the greater Salt Lake Valley. The data indicate that groundwater in the vicinity of the Site is aerobic and neutral in pH. The EA (2016a) report provides shallow groundwater quality measurements for the AOU-1 area (Table 7). The water quality results of shallow groundwater near the Wasatch Fault scarp are more variable than deeper groundwater near the Site. While the pH of the AOU-1 shallow groundwater is neutral, the groundwater quality ranges from anoxic to oxic (0.25 mg/L to 4.77 mg/L), and is generally reducing (-3.3 millivolts [mV] to 121.5 mV).

5.2 Contaminant Distribution

PCE and daughter products in deep groundwater near the VA Medical Center have been identified in monitoring wells (EPA wells), an irrigation well (Mt. Olivet Well), and a municipal drinking water well (SLC-18) downgradient and cross-gradient of the VA Medical Center (Table 5 and Figure 11). The potential width of the deep groundwater plume, as defined by the distance between SLC-18 and EPA-MW-06, is approximately 3,000 ft. The potential length of the plume, as defined by the distance between the upgradient well EPA-MW-05 and the East Side Springs (ESS-GW-07), is approximately 6,000 ft. Along the East Bench segment of the Wasatch Fault, which runs parallel to 1300 East in Salt Lake City, PCE and daughter products have been detected in springs and seeps emerging from the fault scarp (Figure 2), as well as in shallow groundwater (Table 8 and Figure 4). This East Side Springs area currently defines the toe of the PCE plume. Although PCE and daughter products have not been detected in the artesian wells at Artesian and Liberty Parks, it is unknown if any chlorinated ethene-contaminated groundwater has flowed through or under the fault area.

PCE has been detected at depths ranging from 130.0 ft bgs (4,549 ft amsl) at EPA-MW-06, down to 470.0 ft bgs (screened from 4,408 to 4,204 ft amsl) at SLC-18. The Mt. Olivet irrigation well is screened at a lower elevation, but the well contains multiple screened intervals (from 4,167 to 4,230 ft amsl; from 4,253

to 4,350 ft amsl; from 4,395 to 4,415 ft amsl; and from 4,435 to 4,455 ft amsl) in the same well casing; as such, it is unknown at what depth contamination is entering the well.

As previously discussed, the PCE source area is not well defined and PCE contamination may have originated from one or more source areas. The sanitary sewer line extending from VA Medical Center Building 7 to Sunnyside Avenue (Figure 3) has been considered a likely source area (EPA 2012), but the soil and soil gas data previously collected along this sewer line have not revealed a definitive source area or "hot spot."

5.2.1 PCE Concentration Data

Based on water levels, the EPA wells (except EPA-MW-01D) are likely screened in the upper part of the shallow unconfined aquifer. The PCE concentrations in this shallow zone have ranged from 0.8 to 320 micrograms per Liter (µg/L), with a maximum concentration of 320 µg/L observed at EPA-MW-01S in November 1998. PCE has not been detected in the upgradient background well (EPA-MW-05) since installation. The most recent maximum concentration for this upper zone was 72 µg/L in July of 2016 at EPA-MW-02 (Table 5).

Based on water levels, the EPA-MW-01D monitoring well, the Mt. Olivet irrigation well, and the SLC-18 drinking water well are likely screened in a deeper part of the unconfined aquifer. The PCE concentrations in this lower zone have ranged from non-detect to 184 µg/L, with a maximum historical concentration of 184 µg/L observed at the Mt. Olivet irrigation well in 1997. The most recent maximum concentrations for this deeper zone were 40 µg/L at the Mt. Olivet irrigation well in May 2016, and 9.1 µg/L at the EPA-MW-01D in April 2016 (Table 5).

In the East Side Springs area, the maximum concentration of PCE in shallow groundwater (i.e., less than 50 ft bgs was 52 µg/L measured at piezometer GW-52 in July 2016 (Table 8). The concentration of PCE measured in springs, seeps and surface water in the East Side Springs area have not yet been reported from the 2016 AOU-1 RI; historically, the maximum concertation of PCE in springs and seeps was 40.4 µg/L at ESS-SW-15 (as known as SW-11) in August 2010 (Table 4)

Statistical interpretation of PCE concentration trends has not been completed at this time. However, based on visual data observations, PCE concentrations in wells of the shallow zone (EPA-MW-01S, EPA-MW-02, EPA-MW-04, EPA-MW-06) appear to be lower than when the wells were first installed whereas PCE concentrations in the wells of the deeper zone (EPA-MW-01D, SLC-18, Mt. Olivet Well) have remained relatively stable (Table 5).

5.3 Contaminant Fate and Transport

The physical and chemical properties of PCE dictate how it will interact with the environment. Parameters important to fate and transport of PCE include specific gravity, Henry's Law Constant (K_H), vapor pressure, vapor density, water solubility (C_{wsat}), organic carbon partitioning coefficient (K_{oc}), octanol-water partitioning coefficient (K_{ow}), distribution coefficient (K_d), and viscosity. Henry's Law constant (K_H), water solubility, and the distribution coefficient (K_d) are of particular importance for evaluating an organic contaminant's partitioning into various environmental media (soil, water, air).

The K_d of a compound describes the tendency of the compound to either adsorb to natural organic matter present in the soil or to remain in the aqueous or the pure phase. The K_d is a function of the fraction of soil that consists of organic matter (fraction of organic carbon [f_{oc}]) and the extent to which a compound K_{oc}. Often, the K_{oc} is estimated from the K_{ow}, which is the ratio of the concentration of a chemical in n-octanol and water at equilibrium at a specified temperature. A compound with a high K_{oc} value will

tend to attach to the soil organic matter or remain in nonaqueous phases. The attachment kinetics described by the K_d value are at best an estimate of the short-term chemical partitioning between the aqueous phase and soils. Fluctuations in groundwater elevation, changes in the compound or the soil attachment site caused by weathering processes, or water chemistry changes can result in the compound becoming remobilized in the dissolved phase.

In practice, a simplified K_d can be estimated using the organic carbon content of the soil (f_{oc}) and the contaminant partitioning K_{oc}. Large values of f_{oc} and K_d indicate an affinity of the contaminant to partition onto soil; small values indicate an affinity of the contaminant to remain in the aqueous phase upon encountering organic solids.

The net effect of sorption is to retard the transport of contaminants relative to the groundwater. At Hill Air Force Base (AFB), Operable Unit 10, the transport velocities of TCE and PCE were calculated as 0.30 and 0.16 ft/d, respectively, for a relatively low organic carbon content environment (CH2M, 2009). The organic contents of the Hill AFB sediments are likely greater than the organic content of the sediments present at the Site; as such, it is expected that groundwater flow rate and PCE velocities may be greater in the basin-fill deposits of the Site.

Significant levels of daughter products of anaerobic PCE degradation, such as TCE, dichloroethene (DCE), and vinyl chloride have not been detected in deep groundwater collected from monitoring wells or water supply wells near the Site. This is likely because the aquifers are generally aerobic and oxidizing (i.e., unfavorable conditions for the anaerobic biological reductive dechlorination mechanism). However, TCE has been detected in two direct push groundwater samples (ESS-GW-04 and ESS-GW-07) in the East Side Springs area (UDEQ 2012), as well as in samples collected from temporary piezometers (EA 2016a) (Table 8). It is unknown if the TCE is an abiotic or biotic degradation product from natural attenuation of the 700 South 1600 East PCE plume, or if the TCE is from an entirely different source than the VA Medical Center. However, the mildly-reducing and anoxic groundwater conditions measured in the shallow East Side Springs groundwater is more favorable for the anaerobic reductive dechlorination of PCE.

PCE and daughter products have also been identified in soil-gas and indoor air samples collected in the East Side Springs area, indicating volatilization as a pathway for chlorinated ethene degradation from shallow groundwater.

6. Data Gaps

Data gaps for the conceptual site model are summarized in Table 9; this table defines the data gaps, presents what data are already known that may be used to address the data gap, details what data are required to address the data gap, informs how the data will be applied to filling the data gap, and suggests what investigative tools or methods may be useful in the process. The remainder of this section discusses these identified data gaps in more detail.

6.1 Identify the Source Area(s)

The sanitary sewer line associated with VA Medical Center, Building 7 (Figure 3) is the assumed source area for the PCE plume. However, few data are available tracing the PCE plume directly back to this location. If most of the contamination has already been "flushed out" of the vadose zone, linking the sewer line or Building 7 to existing PCE-impacted groundwater may not be possible. Never-the-less, a thorough investigation of this area is required. If the results of this investigation indicate that Building 7 and the sewer line are not the definitive source area, or not the only source area (e.g., PCE identified

upgradient of the VA Medical Center), then this phase of the investigation will continue to assess other potential source areas such as the former Army National Guard vehicle maintenance facility, or other potential areas north/northeast of the VA Medical Center. Methods to investigate the source areas are described below.

6.1.1 Soil-gas Sampling

Real-time soil-gas sampling will be used to identify locations where residual contamination is present in the soil. This assessment would be used as a cursory evaluation tool to better focus additional phases of the investigation, such as borehole drilling to collect soil samples and the installation of monitoring wells.

6.1.2 Field Sensing and Soil Sampling

If preliminary soil gas data indicates the potential presence of a source area, direct push drilling technology equipped with field sensing instruments (e.g., membrane interface probe) will be used to further assess the source area and collect confirmation soil samples. Soil samples will be needed to confirm contamination in the soil and whether soil contamination is present at concentrations that may still contribute to groundwater contamination and warrant remediation.

6.1.3 Monitoring Wells

Once a source area is identified, monitoring wells will be required to determine if contamination in the vadose zone is continuing to migrate to groundwater and evaluate the results of future source area mitigation and cleanup.

6.2 Characterize the Site Geology, Hydrostratigraphy, and Hydrogeology

To better understand likely groundwater flow and contaminant migration paths, it is important to better characterize the geology, hydrostratigraphy, and hydrogeology of the local basin-fill aquifer. Instrumentation, testing, and sampling of existing wells, as well as the installation of additional groundwater monitoring wells, will be fundamental to the characterization.

6.2.1 Geology

Conduct further detailed review of existing well and exploratory borehole logs (Table 10 and Attachment C) to better understand subsurface lithology, depth-to-bedrock, and potential marker beds that could be laterally continuous and compare to data obtained from new borings:

- Abandoned VA Medical Center Exploratory Borehole (Water Right No. 1057004M00); 1,004 ft total depth.
- University of Utah Exploratory Borehole (Water Rights No. 0757007M00 and 0657008M00); 1,508 ft total depth.
- Collect detailed lithology descriptions during installation of additional groundwater monitoring wells:
  - Determine the fraction of soil that consists of organic matter (f_{oc}) to determine a site-specific PCE K_d value.

- Develop more detailed cross-sections of the local subsurface stratigraphy; attempt stratigraphic correlations.

- Determine the thickness of the vadose zone in source areas; characterize the properties of the vadose zone to evaluate the migration of PCE from the source area to groundwater

6.2.2 Hydrostratigraphy and Hydrogeology

Determine hydrostratigraphic intervals:

- Validate the hydrostratigraphic zones assigned to existing well screen intervals (i.e., are the wells representative of upper versus lower potentiometric surfaces; are the wells representative of perched aquifers, or as suggested above, just shallow and deeper parts of the unconfined aquifer). Validation will be conducted through the comparison of data from new wells to be installed during site investigation, the long-term results from water level data collection, and aquifer testing

- Install multi-level monitoring wells constructed in a manner that permits characterization of groundwater flow conditions (e.g., horizontal and vertical hydraulic gradients and groundwater flow directions); aquifer testing (e.g., determine hydraulic gradients, hydraulic connectivity, and hydraulic conductivity and transmissivity); and long-term water level data collection (e.g., installation of pressure transducers).

- Install pressure transducers to monitor groundwater elevation changes during pumping of the U of U #1 pumping well:

  - Use data to understand how hydraulic gradients and groundwater flow directions are affected by pumping.

  - Use data to understand how pumping cycles may affect PCE transport.

- Characterize the geochemical conditions of the aquifer by collecting field parameter (temperature, pH, dissolved oxygen concentration, oxidation-reduction potential, specific conductivity), dissolved major cation and anion concentrations, TDS concentrations, and stable isotope (i.e., oxygen and hydrogen) data:

  - Use geochemical data, if possible, to develop signatures of specific hydrostratigraphic zones.

  - Use the data to determine groundwater flow paths, mixing relationships, and recharge areas.

  - Use the data for insight into what types of chemical contaminant degradation processes may be occurring in the environment.

6.3 Delineate Plume Boundaries and PCE Concentrations

The lateral boundaries of the 700 South 1600 East PCE plume are not well-defined. The vertical extent is also not well-defined. Additional data are required to delineate these boundaries and to contour PCE concentrations across the site. The 2016 shallow groundwater, surface water, soil and soil-gas investigation of the East Side Springs area (EA 2016a) better delineated the toe of the PCE plume, but

additional shallow groundwater data are required west and southwest of the East Side Springs area to delineate these boundaries. Further evaluation of the East Side Springs area is ongoing as part of the AOU-1 RI.

6.3.1 Direct Push

Direct push technology was utilized in 2016 for installation of temporary groundwater sampling points and long-term temporary piezometers in the East Side Springs area in support of the AOU-1 RI. While direct push proved useful in the shallower portions of the plume, there was difficulty advancing beyond approximately 40 ft bgs due to the presence of cobbles. Because of the limitations, the extent of PCE to the west and southwest of the East Side Springs area could not be confirmed. Additional groundwater sampling using a different technique is required along the western edge of the East Side Springs area, downgradient of the Wasatch Fault, as well as near the southwestern edge of the identified PCE groundwater plume. In these specific locations, the point at which PCE is no longer detected in shallow groundwater has not yet been determined.

6.3.2 Monitoring Wells

Multi-level groundwater monitoring wells will be installed to evaluate long-term PCE concentrations and determine hydrostratigraphic properties and hydrogeological parameters (see subsequent section). The well network will include:

- Wells in the core of the plume
- Wells along the plume boundaries
- Downgradient sentinel wells to monitor plume migration and expansion
- Upgradient wells to monitor background conditions
- Larger-diameter wells to facilitate aquifer testing
- Monitoring wells screened in specific hydrostratigraphic intervals

6.3.3 Spring, Seep, and Surface Water Samples

The shallow groundwater piezometers, springs and seeps in the East Side Springs area will continue to be sampled to determine the lateral and downgradient extent of PCE contamination. The location of the springs with relation to contaminant concentrations may be useful in evaluating potential groundwater flow paths. Additional shallow groundwater wells may be added southwest of the East Side Springs area to further assess the downgradient toe of the PCE plume.

6.4 Evaluate Natural Attenuation “Lines of Evidence” for PCE

The overall goal of performing PCE concentration, plume mass, and plume migration trend analyses is to evaluate if natural attenuation processes are acting on the PCE plume and if natural attenuation could be incorporated as a component of the remedy.

The EPA (1999) lays out a general three-tiered framework for the appropriate implementation of monitored natural attenuation. These three tiers of site-specific information, or “lines of evidence,” are:

1. Historical groundwater and/or soil chemistry data that demonstrate a clear and meaningful trend of decreasing contaminant mass and/or concentration over time at appropriate monitoring or sampling points.

2. Hydrogeological and geochemical data that can be used to demonstrate indirectly the type(s) of natural attenuation processes active at the Site, and the rate at which such processes will reduce contaminant concentrations to required levels.

3. Data from field or microcosm studies (conducted in or with actual contaminated site media) that directly demonstrate the occurrence of a particular natural attenuation process at the Site and its ability to degrade the contaminants of concern (typically used to demonstrate biological degradation processes only).

For the Site, collecting data to substantiate the Tier 1 and Tier 2 "lines of evidence" will be the focus early in the RI. To evaluate natural attenuation "lines of evidence," 5 years of consecutive groundwater monitoring data are generally required.

6.4.1 Tier 1

Tier 1 "Lines of Evidence" require statistical analyses of PCE plume stability and PCE concentrations trends at individual wells.

Plume Stability

Plume stability will be evaluated based on long-term monitoring well data and evaluated using a statistical trend analysis program. The primary metric for assessing overall plume stability are temporal trends in plume mass.

PCE Concentrations Trends at Individual Wells

The dissolved PCE concentration will be analyzed on a well-by-well basis over the same time period used for the plume mass analysis. Three different analyses can be used in the trend analysis:

1. Mann-Kendall trend analysis
2. Time series plots
3. Regression analysis following EPA (2011) guidance

The Mann-Kendall trend analysis determines if PCE concentration trends at an individual well are decreasing, increasing, or stable. These individual well analyses can be compared to the overall plume stability analysis. It should be noted that increasing trends at an individual well does not signify a concern from a plume stability and natural attenuation perspective, as some movement of mass within plumes is common even as the plume as a whole is attenuating.

Time series plots provide a visual confirmation of the plume-mass and well-trend analyses. In some cases, a Mann-Kendall analysis, using a historical data set, may indicate a decreasing or increasing trend for an individual well; but upon examination of the time-series plot, more recent data may suggest the opposite trend. In these cases, these wells warrant continued assessment including further statistical trend analysis when sufficient results are available.

Regression analysis at individual wells can provide rate constants for attenuation that provide a "clear and meaningful trend of decreasing contaminant concentration over time (EPA 2011)." Because higher-rate constants mean faster remediation timeframes, simple calculations in a spreadsheet can be used to determine whether the rate constants are different from zero at some predetermined level of statistical

confidence, and to extract the statistical confidence interval on the rate of attenuation (i.e., predict how long it will take for groundwater in the well to reach the maximum contaminant level).

6.4.2 Tier Two

Tier 2 evidence consists of hydrogeological and geochemical data that can be used to demonstrate indirectly the type(s) of natural attenuation processes active at the Site and the rate at which such processes will reduce contaminant concentrations to required levels.

In many cases involving chlorinated solvent plumes, Tier 2 evidence focuses on demonstrating highly anaerobic and strongly reducing conditions; geochemical conditions that are favorable for anaerobic reductive dechlorination by native microbial consortia. In the case of the Site, where literature data suggest that the subsurface environment is aerobic and oxidizing, and anaerobic biodegradation daughter products (i.e., TCE, vinyl chloride) are generally absent in groundwater, or in the case of TCE, occur very sparingly only at the downgradient margin of the plume and may be a primary contaminant from a different source, the Tier Two evidence will need to focus on other natural attenuation mechanisms such as advection and dispersion, adsorption, and abiotic degradation.

Advection and Dispersion

In order to evaluate advection and dispersion, site-specific hydraulic conductivities and gradients will need to be understood. These parameters can be determined through aquifer testing, potentiometric contouring, and soil and sediment characterization.

Adsorption

In order to evaluate adsorption, site-specific f_{oc} and K_d values will need to be determined. These parameters can be determined through soil and sediment collection at various depths within the contaminated aquifers.

Abiotic Degradation

If data from Tier 1 suggest that the PCE plume is naturally attenuating, then abiotic degradation mechanisms can be considered as a potential natural attenuation pathway. Evaluation of abiotic degradation mechanisms can include mineralogical analyses of soil and sediment and groundwater analysis for specific abiotic degradation byproducts.

6.5 Identify Potential Exposure Points

To understand human and ecological risks associated with the 700 South 1600 East PCE plume, it is first important to understand the pathways in which potential receptors may be exposed to contamination. The potential exposure pathways include groundwater (as drinking water and irrigation water), surface water (groundwater from springs and seeps that reaches the surface forming drainages that some residents have incorporated into landscaping features [e.g., ponds, creeks, canals]; or may enter the storm drain network), and soil-gas (off-gassing of shallow groundwater resulting in vapor intrusion into homes and businesses). To address potential exposure pathways, it is necessary to identify physical locations where potential receptors may contact exposure pathways.

6.5.1 Groundwater

Detections of PCE in municipal drinking water well SLC-18 were first identified in 1997, with a maximum concentration of 2.23 µg/L measured in October 2004. In 2016, the concentration of PCE was non-detect (Table 5); however, the well remains not operational. No other drinking water wells are located in the estimated footprint of the PCE plume; however, drinking water wells downgradient and cross-gradient of the Site should be evaluated during the RI.

Several irrigation wells are located within or in the vicinity of the estimated PCE plume footprint, including the U of U #1 pumping well and the Mt. Olivet irrigation well. Detections of PCE in the Mt. Olivet irrigation well have been present since 1990, with a maximum concentration of 184 µg/L measured in 1997. In 2016, the concentration of PCE was 40 µg/L (Table 5). PCE-impacted irrigation wells have the potential to spread PCE-impacted groundwater on the land surface, which may pose a risk to human and ecological receptors. As such, irrigation wells in the vicinity of the Site should be evaluated during the RI.

6.5.2 Springs and Seeps

PCE-impacted groundwater daylights in several springs and seeps in the East Side Springs area, leading to PCE-impacted surface water (e.g., drains, ponds, and sumps). PCE-impacted surface water may pose a risk to human and ecological receptors that come into contact or ingest the surface water. While identification of PCE-impacted springs, seeps and surface water in the East Side Springs area has been completed (EA 2016a), evaluation of the data and assessment of the risk is on-going as part of the AOU-1 Remedial Investigation.

6.5.3 Soil-Gas

Homes that overlie or are in direct contact with shallow groundwater within the footprint of the delineated PCE plume are at risk for vapor intrusion. In the East Side Springs area, soil-gas sampling was performed and indoor air sampling is on-going; evaluation of the data and assessment of the risk will be incorporated into the AOU-1 RI.

7. References

Anderson, P.B., Susong, D.D., Wold, S.R., Heilweil, V.M., Baskin, R.L. 1994. *Hydrogeology of recharge areas and water quality of the principal aquifers along the Wasatch Front and adjacent areas, Utah.* USGS Water Resources Investigations Report 93-4221.

Bowen Collins. 2004. *PCE Well Contamination Evaluation.* Technical Memorandum prepared for Salt Lake City Department of Public Utilities. June.

CH2M HILL. 2009. *Final Operable Unit 10 Remedial Investigation Report.* Hill Air Force Base, Utah. December.

Davis, F.D. 1983. *Geologic Map of the Central Wasatch Front, Utah.* Utah Geological and Mineral Survey. Map 54-A – Wasatch Front Series. May.

EA Engineering, Science, and Technology, Inc., PBC, (EA). 2016a. 700 South 1600 East PCE Plume AOU-1: East Side Springs 2016 Groundwater, Surface Water, and Soil Sampling Technical Memorandum. September.

EA. 2016b. 2016 Monitoring and Supply Well Groundwater Sampling Technical Memorandum, 700 South 1600 East PCE Plume. December. (Publication pending)

First Environment (FE). 2014. Results of Initial Groundwater Sampling Event, June 2014, 700 South 1600 East PCE Plume, Salt Lake City, Utah. Technical Memorandum. September.

FE. 2015. Final Remedial Investigation Work Plan, AOU-1: East Side Springs, 700 South 1600 East PCE Plume, Salt Lake City, Utah. July.

IHI Environmental. 2005. Soil Sampling Oversight Report, Sanitary Sewer Line, VASLCHCS Salt Lake City, Utah. Prepared for VASLCHCS. February.

IHI Environmental. 2007. Soil Gas Investigation Report, Sanitary Sewer Lateral VASLCHCS Building 7 to Sunnyside Avenue, Salt Lake City, Utah. Prepared for VASLCHCS. December.

Lambert, P.M. 1995. *Numerical simulations of ground-water flow in basin-fill material in Salt Lake Valley, Utah.* Utah Department of Natural Resources Technical Publication No. 110-B, 58 p.

Mattick, E.R. 1970. *Thickness of unconsolidated to semiconsolidated sediments in Jordan Valley, Utah*. U.S. Geological Survey Professional Paper 700-C, p. C119-C124.

MWH. 2012. *Final Hydrogeological and Groundwater Model Summary Report for: Culinary Water Supply Protection at Salt Lake City's Drinking Water Well #18 (also referred to as the 500 South Well).* Prepared for Salt Lake City Department of Public Utilities. July.

Personal Communication. 2014. Discussion of the 2004-2005 USGS PowerPoint slide shows regarding site-specific geologic stratigraphy and analytical results from sampling event conducted February 2005. Attendees included Lynne Welsh (VA Medical Center), Rolf Lange (Avalon), George Tangalos (CH2M HILL), Gary Colgan (CH2M HILL), and Susan Thiros (USGS). 7 April, 2014.

Personius, S.F. and Scott, W.E. 2009. *Surficial Geologic Map of the Salt Lake City Segment and Parts of Adjacent Segments of the Wasatch Fault Zone, Davis, Salt Lake, and Utah Counties, Utah* (digitized from USGS Miscellaneous Investigations Series Map I-2106, 1992). Accessed at http://geology.utah.gov./online/m/m-243.pdf

Thiros, S.A. 2003. *Hydrogeology of Shallow Basin-Fill Deposits in Areas of Salt Lake Valley, Salt Lake County, Utah.* USGS Water-Resources Investigations Report 03-4029.

Thiros, S.A. 2010. *Section 2. Conceptual understanding and groundwater quality of the basin-fill aquifer in Salt Lake Valley, Utah*, in Thiros, S.A., Bexfield, L.M., Anning, D.W., and Huntington, J.M., eds., 2010, Conceptual understanding and groundwater quality of selected basin-fill aquifers in the Southwestern United States: U.S. Geological Survey Professional Paper 1781, p. 13-24.

United States Environmental Protection Agency (EPA). 1999. *Use of Monitored Natural Attenuation at Superfund, RCRA Corrective Action, and Underground Storage Tank Sites.* U.S. Environmental Protection Agency Office of Solid Waste and Emergency Response Directive 9200.4-17P. April.

EPA. 2011. *An Approach for Evaluating the Progress of Natural Attenuation in Groundwater*. EPA 600/R-11/204. December.

EPA. 2012. Hazard Ranking System Documentation Record for 700 South 1600 East PCE Plume. EPA ID No. UTD981548985. Accessed at http://www.epa.gov/superfund/sites/docrec/pdoc1874.pdf

EPA. 2014. EPA Home; Region 8; 700 South 1600 East PCE Plume. Accessed 18 March 2014. Available at: http://www2.epa.gov/region8/700-south-1600-east-pce-plume.

United States Geological Survey (USGS). 2005. *Compilation of documents from USGS including email between Susan Thiros (USGS) and Jerald Cross (EPA) dated November 16, 2004; and USGS PowerPoint slide shows regarding site-specific geologic stratigraphy and analytical results from sampling event conducted February 2005.* Various dates. Excerpt. 33 total pages.

USGS. 2014. National Water Information System: Mapper. Select Active and Inactive Groundwater Sites. Accessed at http://maps.waterdata.usgs.gov/mapper/index.html?state=ut

Utah Department of Environmental Quality (UDEQ). 2000. *Mount Olivet Cemetery Plume Analytical Results Report.* Division of Environmental Response and Remediation (DERR). Prepared by Neil B. Taylor.

UDEQ. 2012. *East Side Springs, Salt Lake County, Utah Site Investigation Analytical Results Report, UTN000802825*. Division of Environmental Response and Remediation (DERR). Prepared by Craig Barnitz.

UDEQ. *2014. Utah Groundwater Quality Protection Program.* Accessed 28 April 2014 at http://www.waterquality.utha.gov/GroundWater/gwclasses.htm#ClassIIGW. Last accessed November 2016.

Utah Division of Water Rights (UDWRi). 2014. Searching Water Right Records; Map Search. Accessed at http://www.waterrights.utah.gov/wrinfo/query.asp. Last accessed November 2016.

Waddell, K.M., Seiler, R.L., Santini. M., Solomon, D.K. 1987. *Chemical quality of groundwater in Salt Lake Valley, Utah, 1969-85.* Utah Department of Natural Resources Technical Publication No. 89.

Wallace, J. and Lowe, M. 2009. *Ground-Water Quality Classification for the Principal Basin-Fill Aquifer, Salt Lake Valley, Salt Lake County, Utah*. Utah Geological Survey. Open-File Report 560. Accessed at http://geology.utah.gov/online/ofr/ofr-560/ofr-560.pdf

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Attachments

A Boring Log for EPA-MW-05R
B Known Spring and Seep Locations
C Exploratory Boring Logs

Tables

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TABLE 1
Deep Monitoring Well and Supply Well Information
Conceptual Site Model Update 700 South 1600 East PCE Plume AOU-1: East Side Springs, Salt Lake City, Utah

Location ID	Location Type	Latitude[1]	Longitude[1]	Measuring Point Elevation[2] (ft amsl)	Static Water Depth (ft bTOC)	Groundwater Elevation (ft amsl)	Well Depth (ft bgs)	Well Diameter (in)	Top Screen (ft bgs)	Bottom Screen (ft bgs)	Middle of Screen (ft bgs)	Vertical Hydraulic Gradient Between EPA-MW-01S and EPA-MW-01D (ft/ft)
EPA-MW-01S	Monitoring Well	40.754157	-111.845086	4,664.94	156.97	4,507.97	224	2	184	224	204	0.09
EPA-MW-01D	Monitoring Well	40.754157	-111.845086	4,664.98	173.02	4,491.96	404	4	364	404	384	
EPA-MW-02	Monitoring Well	40.754099	-111.843134	4,680.00	171.25	4,508.75	205.5	2	175.5	202.5	189	
EPA-MW-03[1]	Abandoned	40.755835	-111.843309	4,697.98	189.75	4,508.23	210	4	190	210	200	
EPA-MW-04	Monitoring Well	40.752133	-111.843739	4,657.07	136.62	4,520.45	173	4	143	173	158	
EPA-MW-05	Monitoring Well	40.755552	-111.838924	4,735.04	211.46	4,523.58	225	4	186	221	203.5	
EPA-MW-05R[4]	Monitoring Well	40.755969	-111.839180	4744	215	4529	230	4	198	228	213	
EPA-MW-06	Monitoring Well	40.751363	-111.840428	4,678.63	123.43	4,555.20	134	4	100	130	115	
SLC-18	Production Well (Not in service)	40.758747	-111.846097	4,673.95	183.35	4,489.05	510	20	266	470	368	
Fountain of Ute	Irrigation Well (Not in service)	40.758728	-111.851236	4,610.63	125.98	4,483.51	460	20	200	450	325	
University of Utah Well #1[3]	Irrigation Well	40.758700	-111.851131	4,610.63	--	--	445	16	217	445	331	
Mt. Olivet Well	Irrigation Well	40.754308	111.848544	4,630.00	--	--	463	10	175	195	185	
									215	235	225	
									280	377	328.5	
									400	463	431.5	

NOTES:
EPA monitoring well elevations measured April 2016 (EA 2016b); EPA-MW-03 measured 2011 (UDEQ 2012); SLC-18 and Fountain of Ute measured 2014 (FE 2014)
[1] Coordinate system is North American Datum of 1983 High Accuracy Reference Network.
[2] Coordinate system is National Geodetic Vertical Datum of 1929 (ft).
[3] Location approximate; University of Utah Well #1 is located less than 100 ft east of Fountain of Ute.
[4] Monitoring Well EPA-MW-05 was destroyed and replaced by EPA-MW-05R in 2016; the data provided are from the Weston Solutions boring log (Attachment A).
-- = Data unavailable.
amsl = Above mean seal level.
bgs = Below ground surface.
bTOC = Below top of casing.
ft = Foot (feet).
ID = Identification.
in = Inches.

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TABLE 2
East Side Springs Area Temporary Groundwater Piezometer Summary
Conceptual Site Model Update 700 South 1600 East PCE Plume AOU-1: East Side Springs, Salt Lake City, Utah

Location ID	Installation Date	Abandonment Date	Well Completion Date	Latitude[1]	Longitude[1]	Elevation Top of Casing[2] (ft amsl)	Groundwater Elevation[2] (ft amsl)	Screen Interval (ft)	Total Boring Depth (ft bgs)	Well Diameter[3] (inches)	Slot Size[4]	Backfill Interval (ft bgs)	Seal	Bentonite Seal Interval (ft bgs)	Filter Pack	Filter Pack Interval (ft bgs)
GW-10	2/26/2016	NA	4/5/2016	40.749623	-111.85913	4,382.52	4,370.30	13.0 – 18.0	20	0.75	0.01	0.0 – 11.0 18.0 – 20.0	Bentonite	11.0 – 12.0	10-20 Silica Sand	12.0 – 18.0
GW-11	2/25/2016	NA	4/5/2016	40.7503997	-111.857826	4,437.77	4,435.21	10.0 – 15.0	15	0.75	0.01	0.0 – 8.0	Bentonite	8.0 – 9.0	10-20 Silica Sand	9.0 – 15.0
GW-16	2/27/2016	NA	4/5/2016	40.7509267	-111.858417	4,422.96	4,420.96	3.0 – 8.0	10	0.75	0.01	0.0 – 1.0 8.0 – 10.0	Bentonite	1.0 – 2.0	10-20 Silica Sand	2.0 – 8.0
GW-20	2/29/2016	NA	4/5/2016	40.7525556	-111.859404	4,417.16	4,405.69	11.5 – 16.5	20	0.75	0.01	0.0 – 9.5 16.5 – 20.0	Bentonite	9.5 – 16.5	10-20 Silica Sand	10.5 – 16.5
GW-49	2/25/2016	NA	4/5/2016	40.7489291	-111.854616	4,465.84	4,458.27	7.5 – 12.5	15	0.75	0.01	0.0 – 5.0 12.5 – 15.0	Bentonite	5.0 – 6.0	10-20 Silica Sand	6.0 – 12.5
GW-50	2/26/2016	NA	4/6/2016	40.7483434	-111.856004	4,445.12	4,442.43	4.0 – 9.0	10	0.75	0.01	0.0 – 2.0 9.0 – 10.0	Bentonite	2.0 – 3.0	10-20 Silica Sand	3.0 – 9.0
GW-52	3/2/2016	NA	4/6/2016	40.7496775	-111.855253	4,490.60	4,467.76	25.0 – 30.0	30	0.75	0.01	0.0 – 23.0	Bentonite	23.0 – 24.0	10-20 Silica Sand	24.0 – 30.0
GW-53	3/2/2016	NA	4/5/2016	40.7496231	-111.856746	4,459.05	4,448.29	10.0 – 15.0	15	0.75	0.01	0.0 – 8.0	Bentonite	8.0 – 9.0	10-20 Silica Sand	9.0 – 15.0
GW-59	3/4/2016	NA	4/5/2016	40.7507703	-111.859399	4,385.84	4,377.26	10.0 – 15.0	15	0.75	0.01	0.0 – 8.0	Bentonite	8.0 – 9.0	10-20 Silica Sand	9.0 – 15.0
GW-61	3/5/2016	NA	4/6/2016	40.7475988	-111.858042	4,399.80	4,388.09	15.0 – 20.0	20	0.75	0.01	0.0 – 13.0	Bentonite	13.0 – 14.0	10-20 Silica Sand	14.0 – 20.0

NOTES:
See EA 2016a for entire temporary groundwater piezometer field parameter and geochemical data presentation.
[1] Coordinate system is North American Datum of 1983 High Accuracy Reference Network.
[2] Coordinate system is National Geodetic Vertical Datum of 1929 (ft).
[3] Schedule 40 PVC casing.
[4] Schedule 40 PVC screen.
amsl = Above mean sea level.
bgs = Below ground surface.
ft = Foot (feet).
ID = Identification.
NA = Not applicable.
PVC = Polyvinyl chloride.
RIWP = Remedial Investigation Work Plan.

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TABLE 3
Artesian Wells
Conceptual Site Model Update 700 South 1600 East PCE Plume AOU-1: East Side Springs, Salt Lake City, Utah

Location ID	Description	Latitude	Longitude	Elevation (ft amsl)
ESS-GW-2	Artesian drinking water fountain on southeast corner of Liberty Park (700 East and 1300 South)	40.741881	-111.871839	4,275.00
ESS-GW-3	Artesian Well Park (804 South and 500 East)	40.751727	-111.877108	4,266.00

NOTES:
Ground elevation estimated from Google Earth.
ft amsl = Feet above mean sea level.
ID = Identification.

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TABLE 4
Seeps, Springs, and Surface Water Sampling Locations
Conceptual Site Model Update 700 South 1600 East PCE Plume AOU-1: East Side Springs, Salt Lake City, Utah

Location ID	Alternative Name	PCE (µg/L)	TCE (µg/L)	Sample Date
SP-1	Our Lady of Lourdes Spring	ND	ND	August 1998
SW-16		NR	NR	May 2016
SP-2	Benson Spring	ND	ND	August 1998
SW-15		NR	NR	May 2016
SP-4	Bowen Spring	ND	ND	August 1998
SW-19		NR	NR	May 2016
SL-13	—	ND	ND	July 2010
SL-35	—	ND	NR	July 2010
SL-36	—	ND	NR	July 2010
SL-44	—	ND	NR	July 2010
SL-77	—	ND	NR	July 2010
SL-18	—	**39.3**	NR	July 2010
		8.7	NR	August 2010
SW-12		NR	NR	May 2016
SL-23	—	2.7	NR	July 2010
		2.7	NR	August 2010
SL-25	—	**22.4**	NR	July 2010
		2.5	NR	August 2010
SL-30	—	**17.2**	NR	July 2010
		18.1	NR	August 2010
ESS-SW-16		**20**	ND	November 2011
SW-04		NR	NR	May 2016
SL-82	—	**7.7**	NR	July 2010
		40.4	NR	August 2010
ESS-SW-15		ND	4.6	November 2011
SW-11		NR	NR	May 2016
SP-3	Smith Spring	ND	ND	August 1998
SL-28		**12**	NR	June 2010
		14.4	NR	July 2010
		16.3	NR	August 2010
SW-06		NR	NR	May 2016
SW-09		NR	NR	May 2016
SW-30		NR	NR	May 2016
ESS-SW-17	—	3.7	ND	November 2011
SW-14		NR	NR	May 2016
SW-01	—	NR	NR	May 2016
SW-07	—	NR	NR	May 2016
SW-08	—	NR	NR	May 2016
SW-13	—	NR	NR	May 2016
SW-21	—	NR	NR	May 2016
SW-22	—	NR	NR	May 2016
SW-23	—	NR	NR	May 2016
SW-26	—	NR	NR	May 2016
SW-27	—	NR	NR	May 2016
SW-29	—	NR	NR	May 2016
SW-30	—	NR	NR	May 2016
SW-31	—	NR	NR	May 2016
SW-33	—	NR	NR	May 2016
SW-34	—	NR	NR	May 2016
SW-35	—	NR	NR	May 2016
SW-36	—	NR	NR	May 2016
SW-40	—	NR	NR	May 2016
SW-42	—	NR	NR	May 2016

TABLE 4
Seeps, Springs, and Surface Water Sampling Locations
Conceptual Site Model Update 700 South 1600 East PCE Plume AOU-1: East Side Springs, Salt Lake City, Utah

Location ID	Alternative Name	PCE (µg/L)	TCE (µg/L)	Sample Date
SW-43	—	NR	NR	May 2016
SW-44	—	NR	NR	May 2016
SW-46	—	NR	NR	May 2016
SW-47	—	NR	NR	May 2016
SW-48	—	NR	NR	May 2016
SW-50	—	NR	NR	February 2016

NOTES:
Bold values indicate exceedance of EPA Maximum Contaminant Limit.
'ESS-SW' PCE data from UDEQ (2012); 'SP' PCE data from UDEQ (2000); 'SL' data from figure summarizing results at 11 locations sampled by SLCDPU (2010) and reported in UDEQ (2011a).
µg/L = Micrograms per liter.
ID = Identification.
ND = Non-detect.
NR = Not Reported.
PCE = Tetrachloroethene.
TCE = Trichloroethene.

TABLE 5
Deep Monitoring Well and Supply Well Chlorinated Ethene Data
Conceptual Site Model Update 700 South 1600 East PCE Plume AOU-1: East Side Springs, Salt Lake City, Utah

Sample Date	PCE (µg/L)	TCE (µg/L)	cis-1,2- DCE (µg/L)	Vinyl Chloride (µg/L)	Water Level (ft amsl)	Reference
MCL	**5**	**5**	**70**	**2**		
EPA-MW-01S						
Sep-98	--	--	--	--	4,506.83	UDEQ 2000
Oct-98	--	--	--	--	4,508.28	UDEQ 2000
Nov-98	**320**	4 J	5 J	ND	4,509.22	UDEQ 2000; UDEQ 2012
Nov-98	**310**	4 J	3 J	ND	4,509.22	UDEQ 2012
Feb-11	**278**	2.3	1.4	ND	4,504.49	UDEQ 2012
Nov-11	**150**	1.8	1	ND	4,508.18	UDEQ 2012; MWH 2012
Jun-14	**240**	1.7	0.94 J	ND	4,507.55	FE 2014
Apr-16	**98**	1.3	0.79	ND	4,507.97	EA 2016b
Jul-16	**60**	1.0	0.63	ND	4,507.51	EA 2016b
Sep-16	**--**	--	--	--	4,507.32	EA 2016b
EPA-MW-02						
Sep-98	--	--	--	--	--	UDEQ 2000
Oct-98	--	--	--	--	4,515.51	UDEQ 2000
Nov-98	**290**	ND	ND	ND	4,516.31	UDEQ 2000
Feb-11	**296**	2	1.1	ND	4,505.53	UDEQ 2012
Oct-11	**160**	--	--	--	--	UDEQ 2012
Nov-11	--	--	--	--	4,515.51	UDEQ 2012; MWH 2012
Jun-14	**190**	0.86 J	0.44 J	ND	4,508.43	FE 2014
Apr-16	**98**	0.66	0.36 J	ND	4,508.75	EA 2016b
Jul-16	**72**	0.56	0.40 J	ND	4,508.40	EA 2016b
Sep-16	**--**	--	--	--	4,508.18	EA 2016b
EPA-MW-03						
Sep-98	--	--	--	--	4,510.38	UDEQ 2000
Oct-98	--	--	--	--	4,508.23	UDEQ 2000
Nov-98	**11**	ND	ND	ND	4,509.08	UDEQ 2000
Sep-99	**7**	--	--	--	--	EPA-R8 (2000)
Nov-11	--	--	--	--	Abandoned	UDEQ 2012; MWH 2012
EPA-MW-04						
Sep-98	--	--	--	--	4,521.50	UDEQ 2000
Oct-98	--	--	--	--	4,522.80	UDEQ 2000
Nov-98	**196**	2 J	1 J	ND	4,523.50	UDEQ 2000
Feb-11	**119**	1.1	0.6	ND	4,515.88	UDEQ 2012
Oct-11	**120**	1.1	0.6	ND	--	UDEQ 2012
Nov-11	--	--	--	--	4,519.95	UDEQ 2012; MWH 2012
Jun-14	**72**	0.48 J	0.21 J	ND	4,519.84	FE 2014
Apr-16	**56**	0.44 J	ND	ND	4,520.45	EA 2016b
Jul-16	**41**	0.42 J	ND	ND	4,520.05	EA 2016b
Sep-16	--	--	--	--	4,519.65	EA 2016b
EPA-MW-05						
Sep-98	--	--	--	--	4,524.99	UDEQ 2000
Oct-98	--	--	--	--	4,526.59	UDEQ 2000
Nov-98	ND	ND	ND	ND	4,527.38	UDEQ 2000
Oct-11	ND	--	--	--	--	UDEQ 2012
Feb-11	ND	ND	ND	ND	4,519.91	UDEQ 2012
Oct-11	ND	ND	ND	ND	--	UDEQ 2012
Nov-11	ND	ND	ND	ND	4,523.65	UDEQ 2012; MWH 2012
Jun-14	ND	ND	ND	ND	4,523.47	FE 2014
Apr-16	ND	0.19 J	ND	ND	4,523.58	EA 2016b

TABLE 5
Deep Monitoring Well and Supply Well Chlorinated Ethene Data
Conceptual Site Model Update 700 South 1600 East PCE Plume AOU-1: East Side Springs, Salt Lake City, Utah

Sample Date	PCE (µg/L)	TCE (µg/L)	cis-1,2- DCE (µg/L)	Vinyl Chloride (µg/L)	Water Level (ft amsl)	Reference
MCL	**5**	**5**	**70**	**2**		
EPA-MW-06						
Jan-00	ND	ND	ND	ND	--	UDEQ 2000
Feb-11	0.8	ND	ND	ND	4,553.99	UDEQ 2012
Nov-11	--	--	--	--	4,554.65	UDEQ 2012; MWH 2012
Jun-14	0.46 J	ND	ND	ND	4,560.56	FE 2014
Apr-16	ND	0.15 J	ND	ND	4,555.20	EA 2016b
Jul-16	0.48 J	ND	ND	ND	4,554.63	EA 2016b
Sep-16	--	--	--	--	4,555.27	EA 2016b
EPA-MW-01D						
Sep-98	--	--	--	--	4,471.65	UDEQ 2000
Oct-98	--	--	--	--	4,480.00	UDEQ 2000
Nov-98	1	ND	ND	ND	4,483.55	UDEQ 2000
Oct-11	**8.33**	ND	ND	ND	--	UDEQ 2012
Feb-11	0.2	ND	ND	ND	4,483.88	UDEQ 2012
Oct-11	0.33	--	--	--	--	UDEQ 2012
Dec-11	**12**	ND	ND	ND	4,492.64	UDEQ 2012; MWH 2012
Jun-14	**8.3**	ND	ND	ND	4,491.64	FE 2014
Apr-16	**9.1**	0.16 J	ND	ND	4,491.96	EA 2016b
Jul-16	2.8	ND	ND	ND	4,490.47	EA 2016b
Sep-16	--	--	--	--	4,490.87	EA 2016b
SLC-18 Municipal Drinking Water Well (off-line)						
May-95	ND	--	--	--	--	Bowen Collins 2004
Jul-97	0.6	--	--	--	--	Bowen Collins 2004
Nov-98	ND	--	--	--	--	UDEQ 2012
Aug-00	0.8	ND	ND	ND	--	Bowen Collins 2004
Aug-00	0.8	--	--	--	--	Bowen Collins 2004
Jun-00	1.22	ND	ND	ND	--	Bowen Collins 2004
Jul-00	0.9	--	--	--	--	Bowen Collins 2004
Aug-00	1.3	--	--	--	--	Bowen Collins 2004
Aug-00	1.2	--	--	--	--	Bowen Collins 2004
Aug-00	1.4	--	--	--	--	Bowen Collins 2004
Sep-00	ND	--	--	--	--	Bowen Collins 2004
Aug-00	ND	--	--	--	--	Bowen Collins 2004
Jan-00	ND	--	--	--	--	Bowen Collins 2004
Jun-00	ND	--	--	--	--	Bowen Collins 2004
Sep-11	1.2	ND	ND	ND	--	UDEQ 2012
Sep-11	1.5	--	--	--	--	UDEQ 2012
Sep-11	1.7	--	--	--	--	UDEQ 2012
Sep-11	1.8	--	--	--	--	UDEQ 2012
Oct-11	2.23	ND	ND	ND	--	UDEQ 2012
Nov-11	--	--	--	--	4,490.60	UDEQ 2012; MWH 2012
Jun-14	--	--	--	--	4,489.05	FE 2014
Apr-16	ND	ND	ND	ND	--	EA 2016b
Mt. Olivet Irrigation Well						
Oct-90	**32**	ND	ND	ND	--	Bowen Collins 2004
Oct-90	**25.7**	ND	ND	ND	--	UDEQ 2012
Apr-95	**85**	1.3	2.8	ND	--	Bowen Collins 2004
May-97	**184**	2.36	3.53	ND	--	Bowen Collins 2004
Sep-98	**150**	2 J	2 J	ND	--	UDEQ 2012
Jun-99	**183**	1.1	1.1	ND	--	EPA-R8 (2000)
Oct-11	**128**	1.29	1.04	ND	--	UDEQ 2012
Oct-11	**92**	1.28	1.02	ND	--	UDEQ 2012

TABLE 5

Deep Monitoring Well and Supply Well Chlorinated Ethene Data

Conceptual Site Model Update 700 South 1600 East PCE Plume AOU-1: East Side Springs, Salt Lake City, Utah

Sample Date	PCE (µg/L)	TCE (µg/L)	cis-1,2- DCE (µg/L)	Vinyl Chloride (µg/L)	Water Level (ft amsl)	Reference
MCL	**5**	**5**	**70**	**2**		
Jun-14	--	--	--	--	--	FE 2014
May-16	**40**	0.56	0.26 J	ND	--	EA 2016b
Fountain of Ute (off-line)						
Nov-11	--	--	--	--	4,484.65	UDEQ 2012; MWH 2012
Jun-14	--	--	--	--	4,483.51	FE 2014
University of Utah #1						
Apr-16	ND	ND	ND	ND	--	EA 2016b
Jul-16	ND	ND	ND	ND	--	EA 2016b

NOTES:

Bold values indicate exceedance of MCL.

-- = Data not available or not reported.
µg/L = Micrograms per liter.
DCE = Dichloroethene.
ft amsl = Feet above mean sea level.
J = Estimated value.
MCL = Maximum Contaminant Level (United States Environmental Protection Agency).
ND = Analyte not detected in sample.
PCE = Tetrachloroethene.
TCE = Trichloroethene.

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TABLE 6
Deep Monitoring Well and Supply Well Water Quality Measurements
Conceptual Site Model Update 700 South 1600 East PCE Plume AOU-1: East Side Springs, Salt Lake City, Utah

Location ID	Sample Date	Temperature	Specific Conductance	Dissolved Oxygen	ORP	pH	Turbidity
		(°C)	(µS/cm)	(mg/L)	(mV)		(NTU)
MW-01S	4/28/2016	12.9	1202	7.60	226.8	7.28	102
	7/14/2016	17.0	1429	6.55	228.2	7.08	116
	9/22/2016	13.8	1338	6.33	99.5	7.26	39.5
MW-01D	4/26/2016	12.9	1608	5.16	234.5	7.23	35.4
	7/13/2016	14.6	1169	6.00	224.1	7.10	19.0
	9/21/2016	13.9	1026	5.63	166.9	7.27	30.1
MW-02	4/27/2016	13.5	1678	7.60	209.9	7.21	2.7
	7/14/2016	15.5	1903	6.91	247.1	7.11	12.8
	9/22/2016	15.8	1727	5.66	210.9	7.22	1.0
MW-04	4/27/2016	12.6	1180	7.11	230.5	7.31	1.8
	7/13/2016	16.0	1345	7.21	209.9	7.13	3.4
	9/21/2016	15.6	1265	6.61	225.3	7.27	6.2
MW-05	4/25/2016	13.2	1392	6.21	201.4	7.16	186
MW-06	4/26/2016	12.1	942	6.15	179.1	7.38	18.6
	7/13/2016	15.8	1193	7.94	220.9	7.21	3.1
	9/21/2016	13.4	1111	6.70	118.4	7.36	43
U of U #1	4/28/2016	16.1	939	6.66	201.7	7.43	2.4
	7/12/2016	24.2	1178	0.69	151.9	7.56	279
	9/20/2016	20.6	1080	4.88	93.9	7.41	167
SLC-18	4/28/2016	11.2	1107	7.75	188.6	7.25	1.0
Mt. Olivet	5/2/2016	14.0	1388	8.36	243.9	7.42	17.6

NOTES:
°C = Degrees centigrade.
µS/cm = Microsiemen(s) per centimeter.
ID = Identification.
mg/L = Milligram(s) per liter.
mV = Millivolt(s).
NTU = Nephelometric Turbidity Unit.
ORP = Oxidation-reduction potential.

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TABLE 7
East Side Springs Area Temporary Groundwater Piezometer Water Quality Measurements
Conceptual Site Model Update 700 South 1600 East PCE Plume AOU-1: East Side Springs, Salt Lake City, Utah

Location ID	Sample Date	Temperature	Specific Conductance	Dissolved Oxygen	ORP	pH	Turbidity
		(°C)	(µS/cm)	(mg/L)	(mV)		(NTU)
GW-10	2/27/2016	13.6	2526.00	2.10	121.5	6.85	4.2
GW-11	2/27/2016	12.3	1444.00	3.11	864	6.85	>1000
GW-16	2/28/2016	11.0	1513.00	8.80	100.7	6.86	>1000
GW-20	3/1/2016	12.9	1516.00	1.71	60.2	6.81	276
GW-49	2/25/2016	9.7	1764.00	4.77	81.9	6.85	4.7
GW-50	2/29/2016	8.3	1699.00	0.52	22.3	6.61	165
GW-52	3/3/2016	16.3	1593.00	6.20	83.5	6.62	55.4
GW-53	3/3/2016	11.7	1507.00	2.00	26.8	6.56	428
GW-59	3/5/2016	13.2	1590.00	0.25	-3.3	6.86	25.5
GW-61	3/5/2016	13.1	1664.00	3.85	9.0	6.51	44.1

NOTES:
-- = Not measured.
> = Greater than.
°C = Degrees Centigrade.
µS/cm = Microsiemen(s) per centimeter.
ID = Identification.
mg/L = Milligram(s) per liter.
mV = Millivolt.
NTU = Nephelometric Turbidity Unit.
ORP = Oxidation-reduction potential.

See EA 2016a for entire temporary groundwater piezometer field parameter and geochemical data presentation.

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TABLE 8
East Side Springs Area Temporary Groundwater Piezometer Chlorinated Ethene Data
Conceptual Site Model Update 700 South 1600 East PCE Plume
AOU-1: East Side Springs, Salt Lake City, Utah

		PCE (µg/L)	TCE (µg/L)	cis-1,2- DCE (µg/L)	Vinyl Chloride (µg/L)
	MCL:	**5**	**5**	**70**	**2**
Location Identification	**Sample Date**				
GW-10	2/27/2016	1.4	ND	ND	ND
	7/12/2016	1.1	ND	ND	ND
GW-11	2/27/2016	**45**	0.82	0.39 J	ND
	7/11/2016	**44**	0.56	0.37 J	ND
GW-16	2/28/2016	**20**	0.61	0.26 J	ND
	7/11/2016	**13**	0.53	ND	ND
GW-20	3/1/2016	**2.7**	1.0	ND	ND
	7/11/2016	**8.3**	0.4 J	ND	ND
GW-49	2/25/2016	1.2	ND	ND	ND
	7/12/2016	1.1	ND	ND	ND
GW-50	2/29/2016	2.5	1.7	1.1	ND
	7/12/2016	2.8	**6.1**	1.3	ND
GW-52	3/3/2016	**57**	0.53	0.39 J	ND
	7/12/2016	**52**	0.56	0.32 J	ND
GW-53	3/3/2016	**37**	0.83	0.31 J	ND
	7/11/2016	**40**	0.84	0.21 J	ND
GW-59	3/5/2016	0.17 J	**7.7**	3.9	ND
	7/11/2016	2.0	**6.1**	2.5	ND
GW-61	3/5/2016	2.3	ND	ND	ND
	7/12/2016	2.9	ND	ND	ND

NOTES:
µg/L = micrograms per Liter
1,2-DCE = cis-1,2-Dichloroethylene
J = Estimated Value
MCL = Maximum Contaminant Level (US Environmental Protection Agency)
PCE = Tetrachloroethylene
TCE = Trichloroethylene
ND = Compound was analyzed for, but not detected

Bold number indicates exceedance of MCL

Most temporary monitoring wells abandoned; as such, see the EA 2016a for entire temporary groundwater piezometer field parameter and geochemical data presentation.

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TABLE 9
Conceptual Site Model Data Gap Assessment
Conceptual Site Model Update 700 South 1600 East PCE Plume AOU-1: East Side Springs, Salt Lake City, Utah

Data Gap	Available Data		Data Required	Data Application	Investigation Methods
Identify the Source Areas	VA Medical Center Building 7	• Soil and soil-gas data • Sanitary sewer line video • Monitoring well network	Definitive evidence of a historical or continuing source of tetrachloroethene (PCE) contamination; this could be one or more identified "hot spot(s)"	• Delineate the source area • Determine source area PCE concentrations • Determine if source area is a continuing source for groundwater contamination • Determine whether other sources are contributing to the PCE plume by understanding distribution of PCE with respect to Building 7	• Soil-gas probes to screen locations • Soil samples • Groundwater data from source area monitoring wells
	Former Utah National Guard Vehicle Maintenance Facility	Soil-gas data	Definitive evidence of a historical or continuing source of PCE contamination; this could be one or more identified "hot spot(s)"		
	Former US Forest Service Helicopter Pad	None	Definitive evidence of a historical or continuing source of PCE contamination; this could be one or more identified "hot spot(s)"		
Site Geology	• Literature data from USGS, UGS, and other peer-reviewed publications • EPA well and boring Driller's Logs; VA Medical Center and University of Utah boring logs, available through UDWRi • Lithologic correlations from the USGS • USGS and UGS geologic and fault maps		• Detailed borehole lithology through PCE-impacted stratigraphy • Vadose zone thickness in the source area and footprint of the plume	• Correlate lithology in cross-sections to better understand potential aquifers, preferential flow paths (if any), and perching confining layers • Evaluate migration of PCE from the source area to groundwater	• Detailed borehole logging during drilling of monitoring wells
Site Hydrostratigraphy	• Literature data from USGS, UGS, and other peer-reviewed publications • Groundwater elevation data from existing monitoring wells and production wells		Aquifer testing data from the unconfined aquifers east of the East Bench segment of the Wasatch Fault; and the shallow unconfined and deeper confined aquifers west of the East Bench segment of the Wasatch Fault	Characterize and define the hydrostratigraphic units and aquifers based on potentiometric elevations and hydrogeological parameters	Multi-level monitoring wells, constructed in a manner that permit: • Aquifer testing • Groundwater sampling • Installation of pressure transducers
Site Hydrogeology	• USGS, UGS, and other peer-reviewed literature data about the regional shallow basin-fill aquifer • Previous groundwater models		Site-specific groundwater parameters, including: • Water level measurements • Vertical hydraulic gradients • Horizontal hydraulic gradients • Hydraulic connectivity/transmissivity • Groundwater flow rate • Groundwater geochemical parameters	• Apply the data to hydrostratigraphic interpretations • Use geochemical data as a signature of specific hydrostratigraphic zones • Use the data to determine potential groundwater flow paths, mixing relationships, and recharge • Use the data for insight into what kinds of chemical contaminant degradation processes may be occurring in the environment	• Collect temperature, pH, dissolved oxygen (DO) concentration, oxidation-reduction potential (ORP), specific conductivity, dissolved cation and anion concentrations, total-dissolved-solid concentrations, and stable isotope (i.e., oxygen and hydrogen) data from groundwater monitoring well network • Use groundwater data analysis tools (e.g., Piper plots and Stiff Diagrams) to understand relationships between hydrostratigraphic units and recharge sources
PCE Plume Boundaries and PCE Concentration Contours	• Existing monitoring well network that poorly delineates the shape, depth, and concentration of PCE-impacted deep groundwater • Shallow groundwater, spring, seep, surface water, soil, soil gas and indoor air data from the East Side Springs Area (toe of the plume)		• Multi-level groundwater data from the core, and periphery of PCE plume to define the vertical and lateral extent of PCE-impacted groundwater • Shallow groundwater data from the western and southwestern edge of the East Side Springs area	• Develop a PCE plume map and cross-sections with defined lateral and vertical PCE concentration contours • Use PCE plume map and cross-sections to evaluate potential receptors, assess PCE plume migration, and ultimately, evaluate plume remediation	• Develop a comprehensive monitoring well network to collect long-term groundwater data

TABLE 9
Conceptual Site Model Data Gap Assessment
Conceptual Site Model Update 700 South 1600 East PCE Plume AOU-1: East Side Springs, Salt Lake City, Utah

Data Gap	Available Data		Data Required	Data Application	Investigation Methods
PCE Concentration Trends and Plume Stability	Historical groundwater and spring water PCE data		Long-term (5-years) groundwater PCE concentration data from a comprehensive monitoring well network	• Plume stability is assessed using temporal trends in plume concentration and mass • Mann-Kendall trend analysis determines if PCE concentrations trends at an individual well are decreasing, increasing or stable • Time series plots are used to visualize data trends • Regression analysis at individual wells can provide rate constants for attenuation	• Mann-Kendall trend analysis performed using a statistical trend analysis program • Time series plots generated in graphical database (Excel) • Regression analysis calculations performed in a spreadsheet (Excel) to determine rate constants at a predetermined level of statistical confidence
Natural Attenuation Processes	Literature values for the shallow basin-fill aquifer indicate that the environment is likely oxic and not conducive to anaerobic biodegradation processes		• Site specific hydrogeologic data (see above) • Site-specific f_{oc} and K_d values • PCE daughter product concentrations in groundwater • Field parameters, such as DO, ORP, iron and sulfate concentrations	Generate hydrogeological and geochemical data that can be used to demonstrate indirectly the type(s) of natural attenuation processes active at the site, and the rate at which such processes will reduce contaminant concentrations to required levels (e.g., MCL)	Multi-level monitoring wells, constructed in a manner that permit: • Groundwater sampling for field parameters and VOC concentrations • Collection of soil samples below the water table to determine f_{oc} value and evaluate minerals present that may promote abiotic degradation processes (e.g., magnetite)
Exposure Pathways	Groundwater	PCE-impacted groundwater has been identified at the SLC-18 municipal drinking water well and the Mt. Olivet irrigation well	Map showing drinking water wells and irrigation wells that may be impacted by future migration of the PCE plume	Evaluate potential risk to the drinking water and irrigation wells given knowledge of plume stability, PCE transport rate, and groundwater flow direction	Compare mapped well locations to the PCE plume dynamics (developed to fill previous data gaps)
	Shallow groundwater, springs and seeps	Shallow groundwater, spring and seep, and surface water data from the 2016 investigation (EA 2016a)	Continued data collection	• Mann-Kendall trend analysis determines if PCE concentrations trends at an individual well are decreasing, increasing or stable • Time series plots are used to visualize data trends	• Mann-Kendall trend analysis performed using a statistical trend analysis program • Time series plots generated in graphical database (Excel)
	Soil-gas	Soil-gas and indoor air data from the 2016 investigation (EA 2016a)	Continued data collection	Determine location where mitigation is required	Indoor air verification sampling

TABLE 10
Additional East Bench Wells and Boreholes
Conceptual Site Model Update 700 South 1600 East PCE Plume AOU-1: East Side Springs, Salt Lake City, Utah

Well Name/Location Identification	Water Right Number	Latitude [1]	Longitude [1]	Elevation [1] (ft amsl)	Depth (ft bgs)	Comments
Bonneville Golf Course Well	57-4409	40.744161	-111.828967	4,695.00	240.00	USGS water level data available from 1934 to 2014
SLC-1064	57-4410	40.750550	-111.841161	4,659.00	502.00	Not measured/sampled by USGS since 1947
University of Utah Well - Diversion 1	57-112	40.763222	-111.836200	4,840.00	750.00	SLC-18 filed under same water right number
Abandoned VA Exploratory Borehole	1057004M00	40.756486	-111.837700	4,758.00	1,004.00	Stratigraphic log available
University of Utah Exploratory Borehole	0757007M00	40.768444	-111.840422	4,848.00	1,508.00	Stratigraphic log available
University of Utah Exploratory Borehole Well	0657008M00	40.768444	-111.840422	4,848.00	39.00	

NOTES:
ft amsl = feet above mean seal level
ft bgs = feet below ground surface

[1] Location and elevation estimated from Google Earth

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Figures

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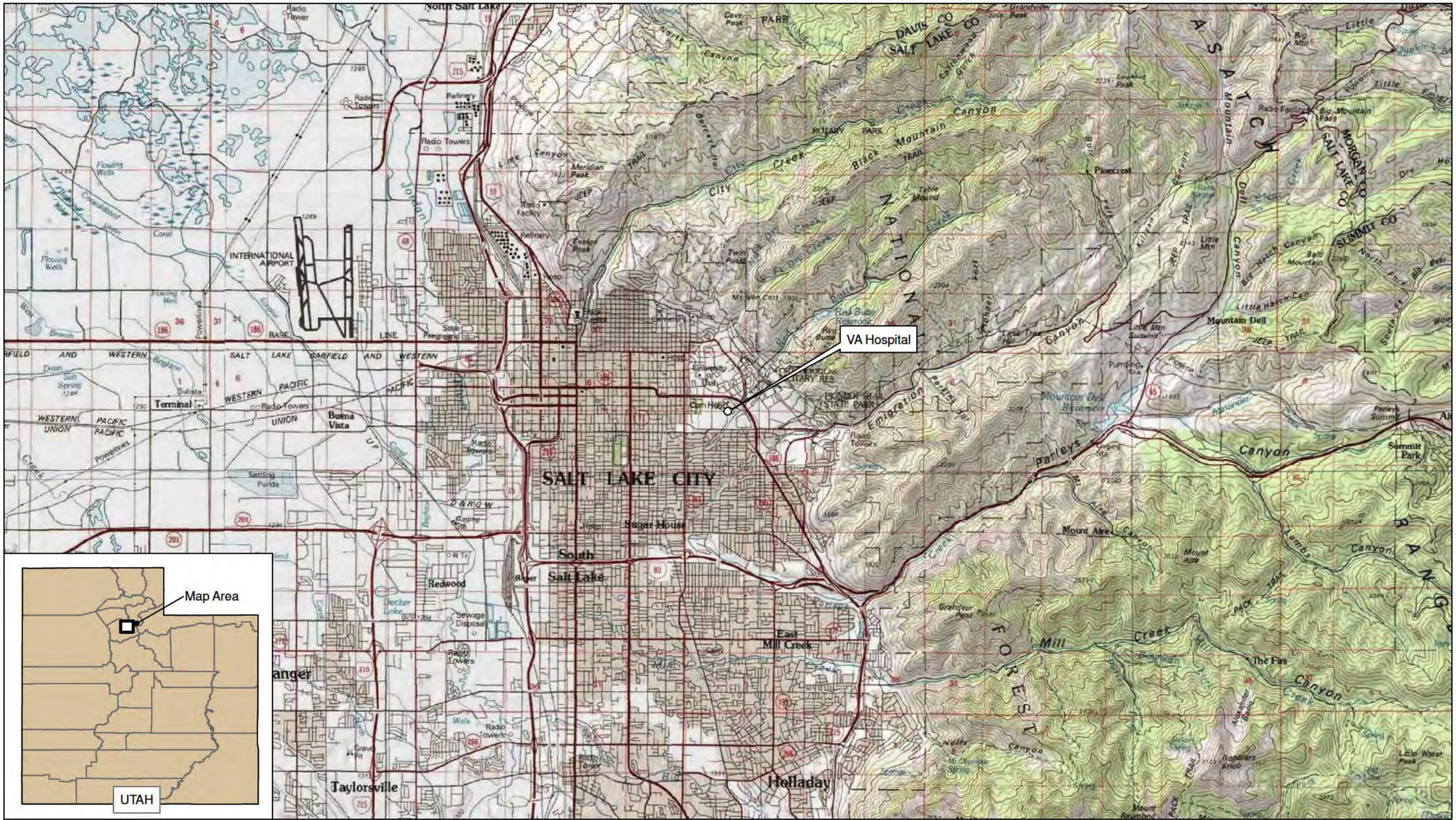

FIGURE 1

SITE LOCATION MAP

Conceptual Site Model Update for the 700 South 1600 East PCE Plume,
Salt Lake City, Utah

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Red Butte Reservior
Red Butte Canyon
Fort Douglas
University of Utah Exploratory Borehole
University of Utah Exploratory Borehole Well
Wasatch Fault Line (East Branch)
University of Utah Campus
University of Utah Well - Diversion 1
Drainage Flow Direction
Wasatch Fault Line (East Branch) Spur
Fountain of Ute
U of U Well 1
SLC-18
Foothill Drive
Mount Olivet Reservoir
Former Utah Army National Guard
Vehicle Maintenance Facility
EPA-MW-03
Abandoned VA Exploratory Borehole
Mount Olivet Well
SP-1
EPA-MW-01D
EPA-MW-02
EPA-MW-01S
VA Building No. 7
SP-2
ESS-SW-17
ESS-GW-3
EPA-MW-04
EPA-MW-06
ESS-SW-15
SLC-1064
Former US Forest Service
Helicopter Pad
SP-3
ESS-SW-16
Emigration Canyon
SP-4
Bonneville Golf Course Well
Liberty Park Pond
ESS-GW-2

Legend

- East Side Springs Area of Known Groundwater PCE (pre-2014)
- East Side Springs Area Where PCE in Groundwater may be within 50' of Surface
- 100'-ft. Buffer Area
- VA Medical Center
- Potential Monitoring Wells
- Monitoring Wells
- Artesian Wells
- Seeps
- Landmarks
- Wasatch Fault Line

0 400 800 1,600 Feet

FIGURE 2

SITE FEATURE MAP

Conceptual Site Model Update for the 700 South 1600 East PCE Plume,
Salt Lake City, Utah

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Legend

- Monitoring Wells
- Sanitary Sewer Line

0 62.5 125 250 Feet

FIGURE 3

SANITARY SEWER LINE MAP

Conceptual Site Model Update for the 700 South 1600 East PCE Plume, Salt Lake City, Utah

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Legend

GW-06
PCE = 3.0 ug/L
TCE = 1.1 ug/L
DCE = 0.48J ug/L
Direct push groundwater sampling location with sample ID, PCE, TCE, and DCE concentrations

GW-16
PCE = 20 ug/L
TCE = 0.61 ug/L
DCE = 0.26J ug/L
Direct push groundwater sampling location converted to long-term temporary piezometer

Wasatch Fault line

Inferred PCE contour

PCE contour

Groundwater flow direction

Note(s) :
PCE, TCE, and DCE are displayed by each sample location under the location identifier.
When a PCE concentration is listed and TCE and/or DCE concentrations are not listed, TCE and/or DCE were not detected in the sample.
Samples were collected between 2/22/16 and 3/8/16
PCE contour labels are in ug/L

Source(s) :
Utah Automated Geographic Reference Center (AGRC)
AOU-1 Source - Figure 2 of 2014 RIWP from First Environment

Acronym(s) and Abbreviation(s) :
ug/L = micrograms per liter
AOU = Accelerated Operable Unit
DCE = *cis*-1,2-dichloroethylene
J = estimated value
NA = not applicable
ND = non-detect
PCE = tetrachloroethylene
RIWP = Remedial Investigation Work Plan
TCE = trichloroethylene

N W E S

0 125 250 500
Feet

FIGURE 4
EAST SIDE SPRINGS GROUNDWATER SAMPLING LOCATIONS AND CHLORINATED ETHENE CONCENTRATIONS
Conceptual Site Model Update for the 700 South 1600 East PCE Plume, Salt Lake City, Utah

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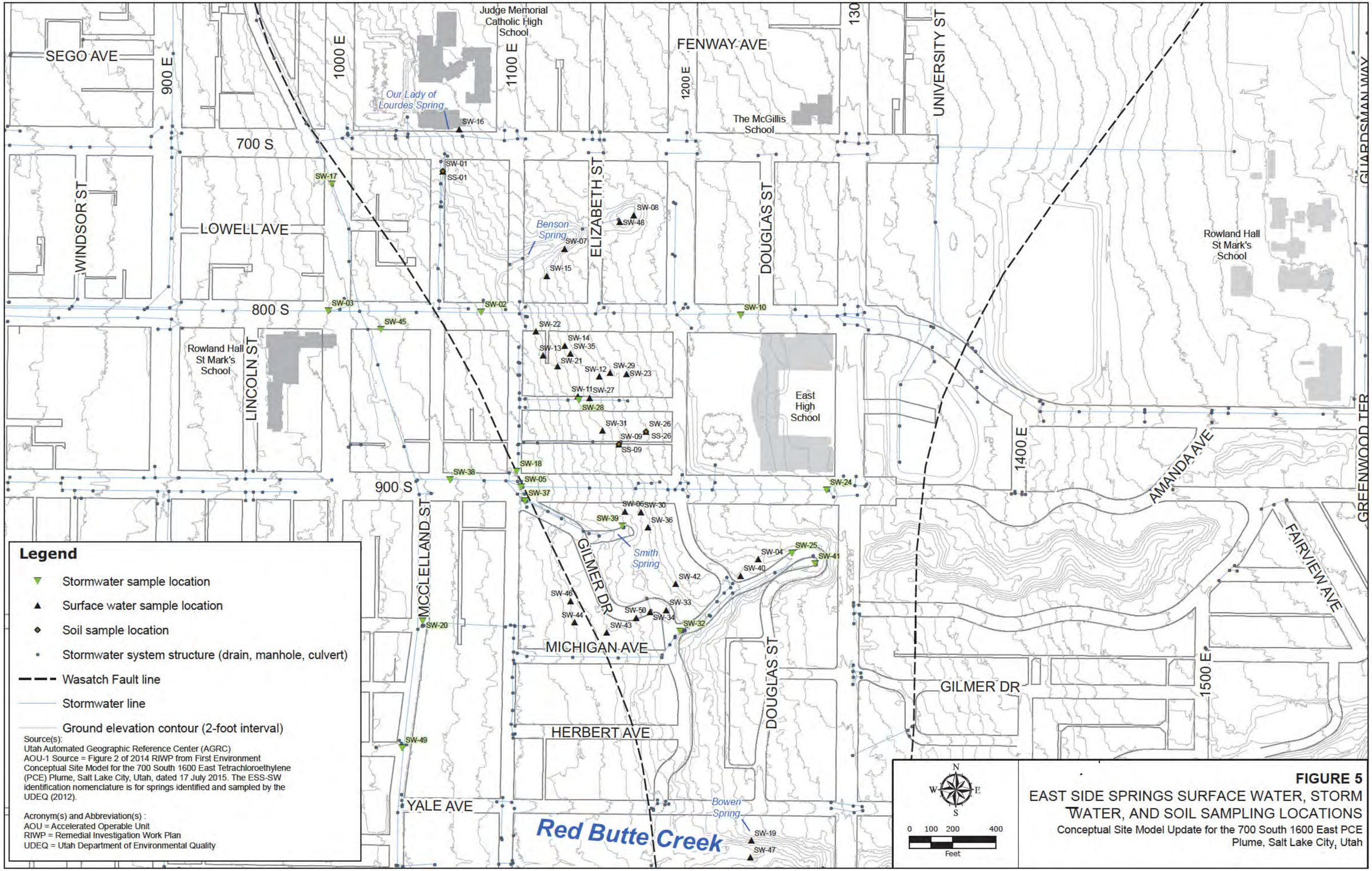

Legend

- Stormwater sample location
- Surface water sample location
- Soil sample location
- Stormwater system structure (drain, manhole, culvert)
- Wasatch Fault line
- Stormwater line
- Ground elevation contour (2-foot interval)

Source(s):
Utah Automated Geographic Reference Center (AGRC)
AOU-1 Source = Figure 2 of 2014 RIWP from First Environment Conceptual Site Model for the 700 South 1600 East Tetrachloroethylene (PCE) Plume, Salt Lake City, Utah, dated 17 July 2015. The ESS-SW identification nomenclature is for springs identified and sampled by the UDEQ (2012).

Acronym(s) and Abbreviation(s) :
AOU = Accelerated Operable Unit
RIWP = Remedial Investigation Work Plan
UDEQ = Utah Department of Environmental Quality

N W E S

0 100 200 400
Feet

FIGURE 5
EAST SIDE SPRINGS SURFACE WATER, STORM WATER, AND SOIL SAMPLING LOCATIONS
Conceptual Site Model Update for the 700 South 1600 East PCE Plume, Salt Lake City, Utah

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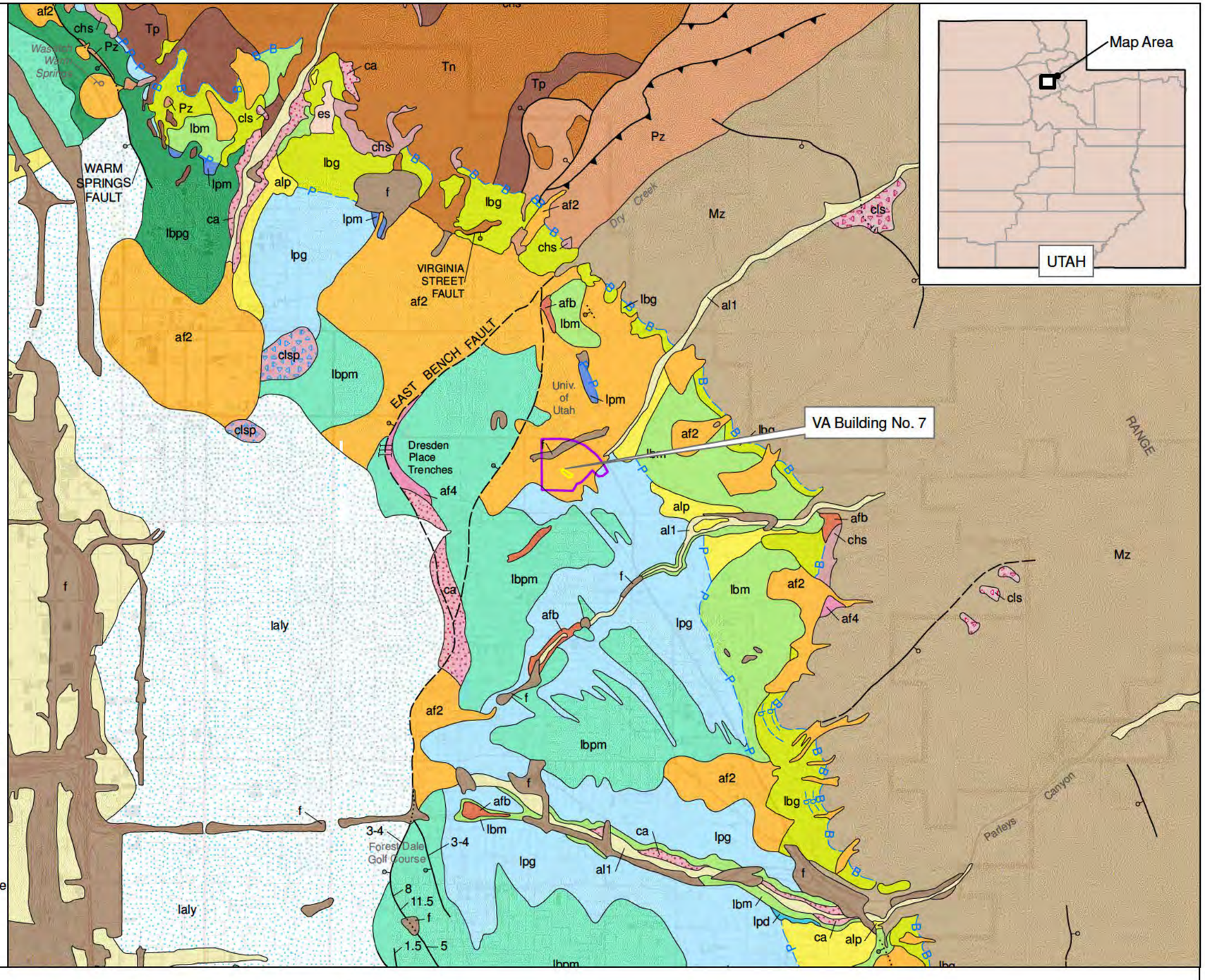
Geologic Units

Unit Symbol, Name, Age

- Mz, Mesozoic sedimentary rocks, Cretaceous to Triassic
- Pz, Palezoic sedimentary rocks, Permian to Cambrian
- Ti, Tertiary intrusive igneous rocks, Oligocene
- Tn, Tertiary sedimentary and volcanic rocks, Neogene
- Tp, Tertiary sedimentary and volcanic rocks, Paleogene
- af1, Fan alluvium 1, upper Holocene
- af2, Fan alluvium 2, middle Holocene to uppermost Pleistocene
- af4, Fan alluvium 4, upper middle Pleistocene
- af5, Fan alluvium 5, middle Pleistocene
- afb, Fan alluvium related to transgressive phase, upper Pleistocene
- afo, Older fan alluvium, undivided, middle Pleistocene
- afy, Younger fan alluvium, undivided, Holocene to uppermost Pleistocene
- al1, Stream alluvium 1, upper Holocene
- al2, Stream alluvium 2, middle Holocene to uppermost Pleistocene
- alp, Stream alluvium related to regressive phase, uppermost Pleistocene
- aly, Younger stream alluvium, undivided, Holocene to uppermost Pleistocene
- ca, Colluvium and alluvium, undivided, Holocene to middle Pleistocene
- cd1, Debris-flow deposits 1, upper Holocene
- cd2, Debris-flow deposits 2, middle Holocene to uppermost Pleistocene
- chs, Hillslope colluvium, Holocene to upper Pleistocene
- cls, Landslide deposits, Holocene to middle Pleistocene
- clsp, Lateral-spread deposits, Holocene to upper Pleistocene
- es, Eolian sand, Holocene and upper Pleistocene
- f, Manmade fill, historic
- gbco, Outwash of Bells Canyon age, upper Pleistocene
- gbct, Till of Bells Canyon age, upper Pleistocene
- gdco, Outwash of Dry Creek age, middle Pleistocene
- gdct, Till of Dry Creek age, middle Pleistocene
- laly, Lacustrine, marsh, and alluvial deposits, Holocene to uppermost Pleistocene
- lbg, Lacustrine sand and gravel related to transgressive phase, upper Pleistocene
- lbm, Lacustrine clay and silt related to transgressive phase, upper Pleistocene
- lbpg, Lacustrine sand and gravel, undivided, upper Pleistocene
- lbpm, Lacustrine clay and silt, undivided, upper Pleistocene
- lbps, Lacustrine sand, undivided, upper Pleistocene
- lpd, Deltaic deposits related to regressive phase, uppermost Pleistocene
- lpg, Lacustrine sand and gravel related to regressive phase, uppermost Pleistocene
- lpm, Lacustrine clay and silt related to regressive phase, uppermost Pleistocene
- ly, Marsh and lacustrine deposits, Holocene to uppermost Pleistocene
- pC, Precambrian metamorphic rocks, Proterozoic and Archean



Legend

- VA Medical Center

0 1,000 2,000 4,000 Feet

Source: Utah Geological Survey Map 243DM, digitized from U.S. Geological Survey Miscellaneous Investigations Series Map I-2106 (1992).

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West

East

SECONDARY RECHARGE AREA

PRIMARY RECHARGE AREA

Quaternary Upper Basin Fill

Coarse Grain (Gravel, Sand, Silt)

Fine Grain (Sand, Silt, Clay)

Clay Layers/Lenses

EPA-MW-02 (elev. 4578 ft.)

Well I. D.

(feet above mean sea level)

Well screen interval

Total Depth (feet below ground surface)

TD 46 ft. bgs

1 inch = 200 feet

10.8X vertical exaggeration

1 inch = 2162 feet

Total Length = 6.55 miles

Potentiometric Surface

Groundwater Flow Direction

Elevation (feet amsl)

Jordan River

900 West

Veterans Memorial Hwy. (I-15)

State Street

Artesian Park Well

ESS-GW-11

700 East

900 East

East Bench Segment of Wasatch Fault

East Side Springs Area

1300 East

1100 East

ESS-SW-17

ESS-SW-15

East Bench Fault Spur

Mt Olivet Well (elev. 4630')

EPA-MW01s/d (elev. 4663')

EPA-MW02 (elev. 4678')

VA Medical Center Building 7

EPA-MW05 (elev. 4732')

Abandoned VA Exploratory Borehole (elev. 4748')

Foothill Blvd.

Red Butte Creek

Red Butte Amphitheater

Red Butte Reservoir

TD 225 ft. bgs

TD 209.5 ft. bgs

TD 404 ft. bgs

TD 463 ft. bgs

TD 1004 ft. bgs

Triassic Ankareh Formation (siltstone-shale)

Triassic Thaynes Formation (limestone)

5400
5300
5200
5100
5000
4900
4800
4700
4600
4500
4400
4300
4200
4100
4000
3900
3800
3700
3600
3500
3400

Cross-Section from Red Butte Reservoir to the Jordan River
Preliminary Conceptual Site Model for the 1600 East and 700 South PCE Plume, Salt Lake City, Utah

FIRST ENVIRONMENT

Figure
Cross-Section from Red Butte Reservoir to the Jordan River
Preliminary Conceptual Site Model for the 1600 East and 700 South PCE Plume, Salt Lake City, Utah

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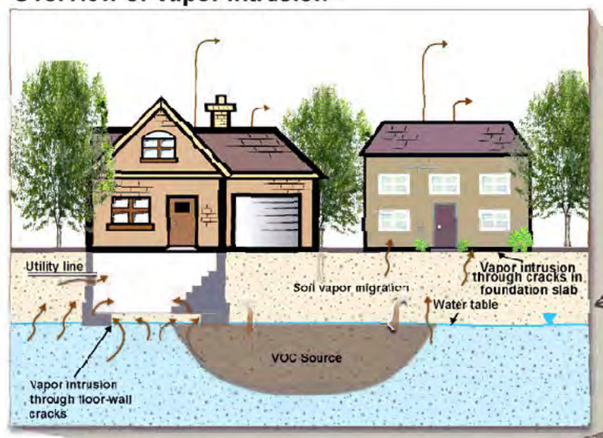
Overview of Vapor Intrusion



LEGEND

- Potentiometric surface
- SS — Seeps and springs
- Extraction well
- Monitoring well
- Approximate groundwater flow direction
- AOU-1 area of known groundwater/ spring PCE *contamination*
- AOU-1 area where PCE in groundwater may be within 50' of surface
- AOU-1 100' buffer area

FIRST ENVIRONMENT

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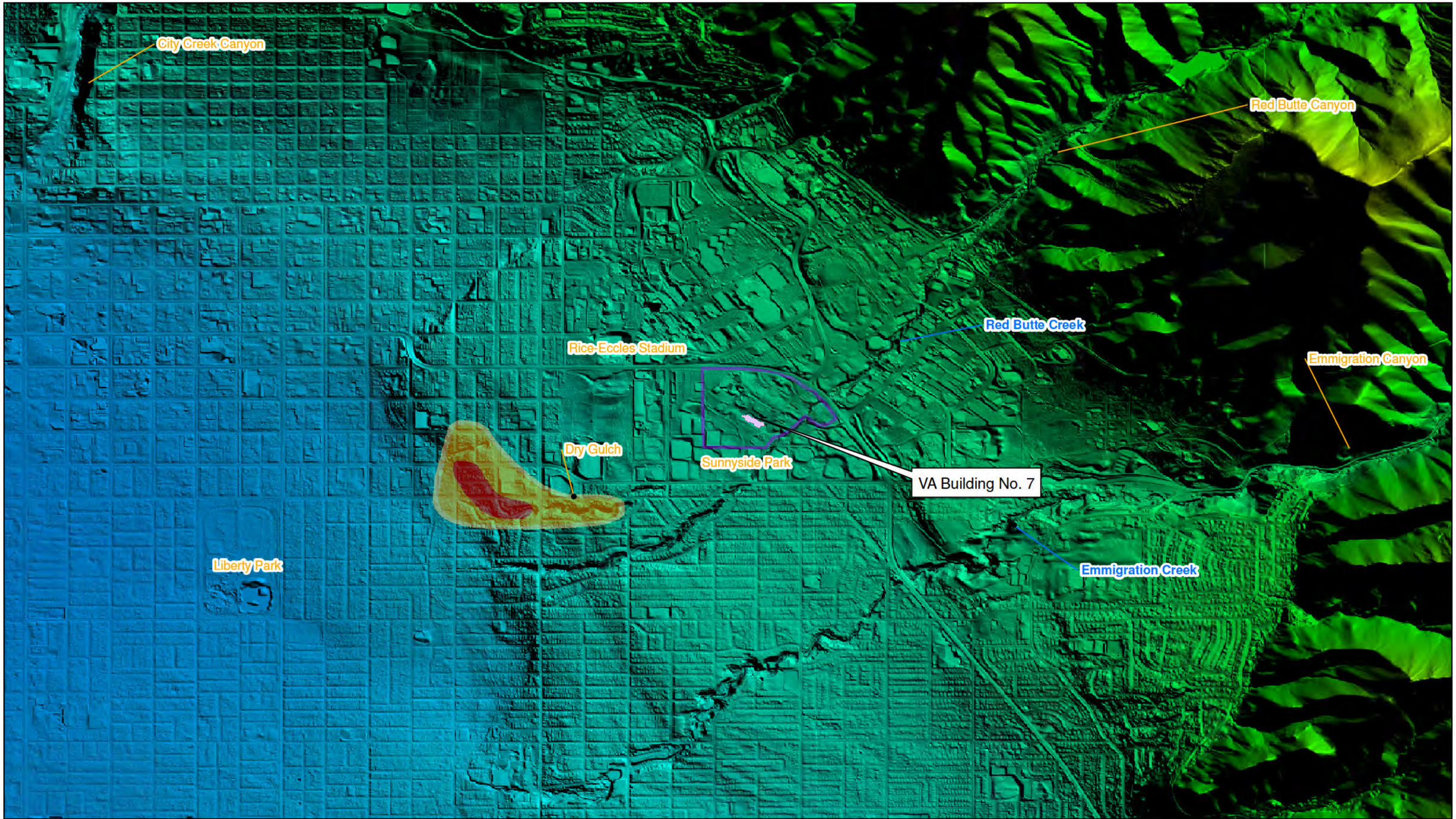

Surface Elevation Range

6,600'

4,200'

Legend

- East Side Springs Area of Known Groundwater PCE (pre-2014)
- East Side Springs Area Where PCE in Groundwater may be within 50' of Surface
- East Side Springs 100' Buffer Area
- VA Medical Center

0 550 1,100 2,200 Feet

FIGURE 9

SURFACE TOPOGRAPHY

Conceptual Site Model Update for the 700 South 1600 East PCE Plume, Salt Lake City, Utah

Source: USGS National Elevation Dataset 2006 , 1/9 Arc (approximately 3 meters).

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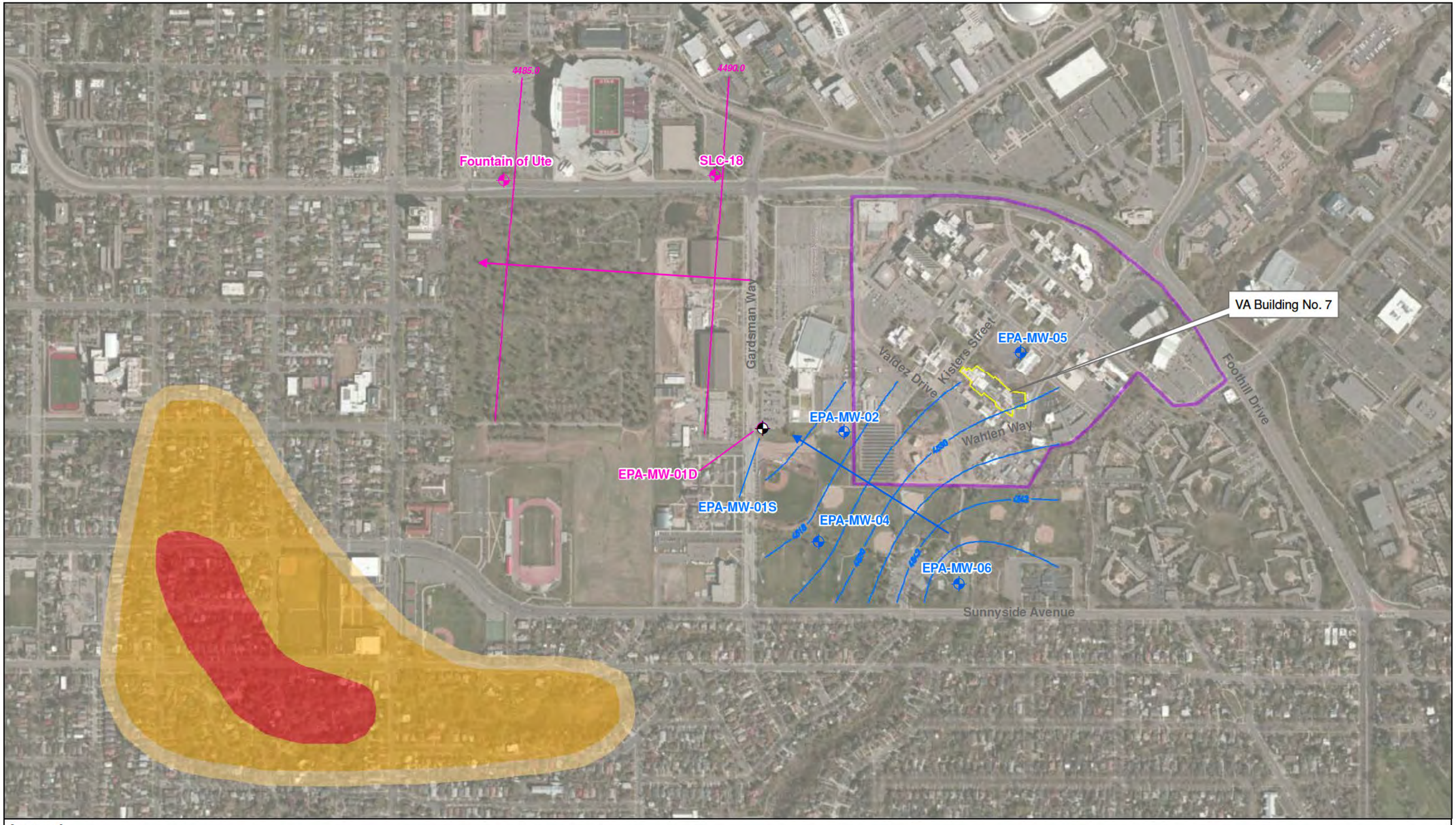

Legend

- Monitoring Well (Shallow)
- Monitoring Well (Deep)
- Groundwater Contour (Shallow)
- Groundwater Contour (Deep)
- East Side Springs Area of Known Groundwater PCE (pre-2014)
- East Side Springs Area Where PCE in Groundwater may be within 50' of Surface
- East Side Springs 100' Buffer Area
- VA Medical Center

0 150 300 600 Feet

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Univ. of Utah #1	PCE	TCE	DCE	VC	Water Level (ft. amsl)
7/12/16 (µg/L)	ND	ND	ND	ND	NM

SLC-18	PCE	TCE	DCE	VC	Water Level (ft. amsl)
4/28/16 (µg/L)	ND	ND	ND	ND	NM

EPA-MW-01D	PCE	TCE	DCE	VC	Water Level (ft. amsl)
7/13/16 (µg/L)	2.8	ND	ND	ND	4490.47

EPA-MW-01S	PCE	TCE	DCE	VC	Water Level (ft. amsl)
7/14/16 (µg/L)	60	1.0	0.63	ND	4507.51

EPA-MW-05	PCE	TCE	DCE	VC	Water Level (ft. amsl)
4/25/16 (µg/L)	0.19J	ND	ND	ND	4523.58

Mt. Olivet	PCE	TCE	DCE	VC	Water Level (ft. amsl)
5/2/16 (µg/L)	40	0.56	0.26J	ND	NM

EPA-MW-02	PCE	TCE	DCE	VC	Water Level (ft. amsl)
7/14/16 (µg/L)	72	0.56	0.40J	ND	4508.40

EPA-MW-06	PCE	TCE	DCE	VC	Water Level (ft. amsl)
7/13/16 (µg/L)	0.48J	ND	ND	ND	4554.63

EPA-MW-04	PCE	TCE	DCE	VC	Water Level (ft. amsl)
7/13/16 (µg/L)	46	0.37J	ND	ND	4520.05

Univ. of Utah #1

SLC-18

EPA-MW-05

EPA-MW-01D

EPA-MW-01S

EPA-MW-02

VA Building No. 7

Mount Olivet Well

EPA-MW-04

EPA-MW-06

Legend

- Monitoring Well
- East Side Springs Area of Known Groundwater PCE (pre-2014)
- East Side Springs Area Where PCE in Groundwater may be within 50' of Surface
- East Side Springs 100' Buffer Area
- VA Medical Center

0 250 500 1,000 Feet

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Attachment A
Boring Log for EPA-MW-05R

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WESTON SOLUTIONS SM
1435 Garrison Street, Suite 100
Lakewood, Colorado 80215

United States Environmental Protection Agency
TDD: 0008/1410-07 EPA- MW-05 Replacement
700 South 1600 East PCE Plume WO#: 20408.012.008.0189.00
500 Foothills Dr. Building 16 Salt Lake City, Utah

Boring ID:	EPA-MW-05R
Start Date:	September 23, 2016
End Date:	September 25, 2016
Latitude:	40.755969°
Longitude:	-111.83918°
Elevation:	4744

Geologist:	Roy Weindorf	Groundwater Depth (feet bgs):	215	Groundwater Elevation:	4529
Drilling Contractor:	Cascade Drilling	Total Depth (feet bgs):	230	Total Depth Elevation:	4514
Drilling Method:	Sonic	Borehole Diameter (inches):	8	Borehole Completion:	Well Installed

Depth (feet)	Organic Vapor Levels (ppm)	Sample ID (Blow Counts)	Sample Type	Graphic Log	USCS	Lithologic Description	Well Design	Elevation (feet)
0						**0.0'-0.3' Asphalt**		4744
5		Hand dug to avoid near surface utilities.				**0.3'-38.0' Clay:** sandy, gravelly, brown, slightly moist (becomes dry with depth), soft to medium stiff, low plasticity, moderately cohesive, >30% coarse content, contains cobbles (round to sub-round, metamorphic and igneous in origin).	Concrete Pad	4739
10	<1	Core: 01	Photo: 1398					4734
	<1	Core: 02						
15	<1	Core: 03					Locking Well Plug	4729
	<1	Core: 04	Photo: 1399					
20	<1	Core: 05				**18.0'** Cored through cobble.		4724
	<1	Core: 06			CL			
25	<1	Core: 07	Photo: 1400				Schedule 80 - 4 Inch PVC Riser	4719
	<1	Core: 08						
30	<1	Core: 09						4714
	<1	Core: 10						
35	<1	Core: 11	Photo: 1401					4709
	<1	Core: 12				**38.0'-41.0' Clay:** brown, slightly moist, medium stiff, low plasticity, moderately cohesive.		
40	<1	Core: 13				**41.0'-53.0' Sand:** cobbly, light brown, dry, loose, coarse grained, sub-round to sub-angular, poorly sorted, >30% fine content.		4704
45	<1	Core: 14	Photo: 1402		SP		Tremie Pipe Placed Bentonite Grout	4699
50	<1					**47.0'-53.0'** Significant cobbles. No core samples.	12 Inch Steel Manhole	4694

Notes: *=pending survey; elevations are feet above mean sea level; bgs = below ground surface; USCS=Unified Soil Classification System; PVC=polyvinyl chloride

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United States Environmental Protection Agency
TDD: 0008/1410-07 EPA- MW-05 Replacement
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Boring ID:	EPA-MW-05R
Start Date:	September 23, 2016
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Elevation:	4744

Geologist:	Roy Weindorf	Groundwater Depth (feet bgs):	215	Groundwater Elevation:	4529
Drilling Contractor:	Cascade Drilling	Total Depth (feet bgs):	230	Total Depth Elevation:	4514
Drilling Method:	Sonic	Borehole Diameter (inches):	8	Borehole Completion:	Well Installed

Depth (feet)	Organic Vapor Levels (ppm)	Sample ID (Blow Counts)	Sample Type	Graphic Log	USCS	Lithologic Description	Well Design	Elevation (feet)
		Photo: 1402			SP	<Sand Continued>		
55	<1	Core: 15				**53.0'-195.0' Clay**: sandy, gravelly, brown, slightly moist (becomes dry with depth), soft to medium stiff, low plasticity, moderately cohesive, >30% coarse content, contains cobbles (round to sub-round, metamorphic and igneous in origin).		4689
	<1	Core: 16						
60		Core: 17						4684
	<1	Core: 18						
65		Photo: 1403						4679
	<1	Core: 19						
70		Photo: 1404			CL			4674
	<1	Core: 20						
		Core: 21						
75								4669
	<1	Core: 22						
		Core: 23						
80		Photo: 1405						4664
	<1	Core: 24						
85								4659
						85.0'-87.0' No cuttings returned.		
	<1	Core: 25				<Clay Continued>		
90		Photo: 1406						4654
	<1	Core: 26				**91.0'** Becomes dry and firm.		
95		Core: 27			CL			4649
	<1	Core: 28						
100		Photo: 1407 Core: 29						4644

Schedule 80 - 4 Inch PVC Riser
Tremie Pipe Placed Bentonite Grout

Notes: *=pending survey; elevations are feet above mean sea level; bgs = below ground surface; USCS=Unified Soil Classification System; PVC=polyvinyl chloride

WESTON SOLUTIONS SM
1435 Garrison Street, Suite 100
Lakewood, Colorado 80215

United States Environmental Protection Agency
TDD: 0008/1410-07 EPA- MW-05 Replacement
700 South 1600 East PCE Plume WO#: 20408.012.008.0189.00
500 Foothills Dr. Building 16 Salt Lake City, Utah

Boring ID:	EPA-MW-05R
Start Date:	September 23, 2016
End Date:	September 25, 2016
Latitude:	40.755969°
Longitude:	-111.83918°
Elevation:	4744

Geologist:	Roy Weindorf	Groundwater Depth (feet bgs):	215	Groundwater Elevation:	4529
Drilling Contractor:	Cascade Drilling	Total Depth (feet bgs):	230	Total Depth Elevation:	4514
Drilling Method:	Sonic	Borehole Diameter (inches):	8	Borehole Completion:	Well Installed

Depth (feet)	Organic Vapor Levels (ppm)	Sample ID (Blow Counts)	Sample Type	Graphic Log	USCS	Lithologic Description	Well Design	Elevation (feet)
105	<1	Core: 28	Photo: 1407			<Clay Continued>		4639
		Core: 30						
	<1	Core: 31	Photo: 1408			**105.0'-117.0'** Minimal Cobbles <5%.		
110		Core: 32						4634
	<1	Core: 33						
115		Core: 34						4629
	<1	Core: 35	Photo: 1409			**117.0'** Increased cobble content >20%. Clasts are sedimentary (photo: 1410), igneous, and metamorphic in origin.		
120	<1	Core: 36						4624
125		Core: 37			CL			4619
	<1	Core: 38	Photo: 1411					
130		Core: 39						4614
	<1	Core: 40						
135		Core: 41						4609
	<1	Core: 42	Photo: 1412					
140		Core: 43						4604
	<1	Core: 46						
145		Core: 47	Photo: 1413					4599
150								4594

Well Design: Schedule 80 - 4 Inch PVC Riser; Tremie Pipe Placed Bentonite Grout

Notes: *=pending survey; elevations are feet above mean sea level; bgs = below ground surface; USCS=Unified Soil Classification System; PVC=polyvinyl chloride

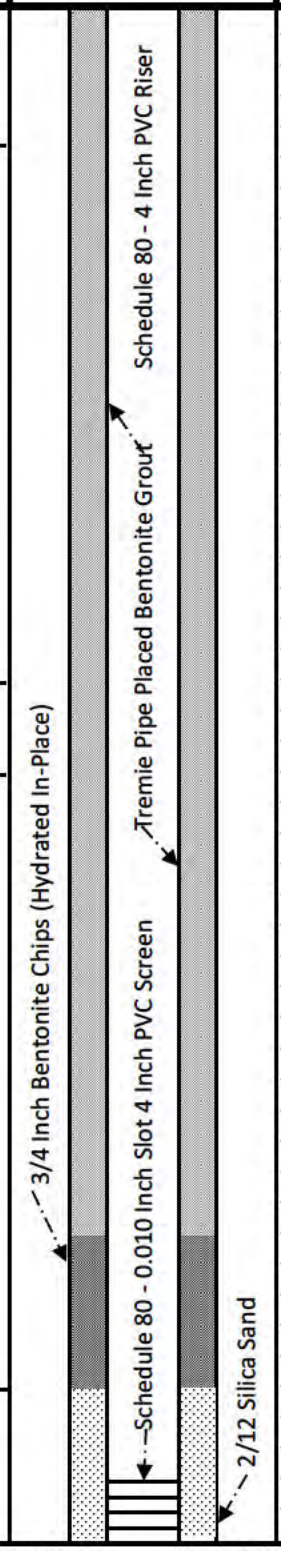
WESTON SOLUTIONS SM
1435 Garrison Street, Suite 100
Lakewood, Colorado 80215

United States Environmental Protection Agency
TDD: 0008/1410-07 EPA- MW-05 Replacement
700 South 1600 East PCE Plume WO#: 20408.012.008.0189.00
500 Foothills Dr. Building 16 Salt Lake City, Utah

Boring ID:	EPA-MW-05R
Start Date:	September 23, 2016
End Date:	September 25, 2016
Latitude:	40.755969°
Longitude:	-111.83918°
Elevation:	4744

Geologist:	Roy Weindorf	Groundwater Depth (feet bgs):	215	Groundwater Elevation:	4529
Drilling Contractor:	Cascade Drilling	Total Depth (feet bgs):	230	Total Depth Elevation:	4514
Drilling Method:	Sonic	Borehole Diameter (inches):	8	Borehole Completion:	Well Installed

Depth (feet)	Organic Vapor Levels (ppm)	Sample ID (Blow Counts)	Sample Type	Graphic Log	USCS	Lithologic Description	Well Design	Elevation (feet)
155	<1	Core: 47 Core: 48	Photo: 1413			<Clay Continued>		4589
	<1	Core: 49 Core: 50	Photo: 1414			**154.5'-195.0'** Minimal Cobbles <5%.		
160	<1	Core: 51 Core: 52	Photo: 1415		CL			4584
165	<1	Core: 53 Core: 54						4579
170	<1					**172.0'-175.0'** Rock stuck in bit. No cuttings returned.		4574
175	<1	Core: 55 Core: 56	Photo: 1416			<Clay Continued. Minimal Cobbles.>		4569
180	<1	Core: 57 Core: 58						4564
185	<1	Core: 59 Core: 60	Photo: 1417		CL			4559
190	<1	Core: 61 Core: 62						4554
195	<1	Core: 63	Photo: 1418			**195.0'-216.8'** **Clay**: brown, dry, medium stiff, low plasticity, moderately cohesive, <10% coarse content (sand, gravel, and cobble).		4549
200								4544



Notes: *=pending survey; elevations are feet above mean sea level; bgs = below ground surface; USCS=Unified Soil Classification System; PVC=polyvinyl chloride

WESTON SOLUTIONS SM
1435 Garrison Street, Suite 100
Lakewood, Colorado 80215

United States Environmental Protection Agency
TDD: 0008/1410-07 EPA- MW-05 Replacement
700 South 1600 East PCE Plume WO#: 20408.012.008.0189.00
500 Foothills Dr. Building 16 Salt Lake City, Utah

Boring ID:	EPA-MW-05R
Start Date:	September 23, 2016
End Date:	September 25, 2016
Latitude:	40.755969°
Longitude:	-111.83918°
Elevation:	4744

Geologist:	Roy Weindorf	Groundwater Depth (feet bgs):	215	Groundwater Elevation:	4529
Drilling Contractor:	Cascade Drilling	Total Depth (feet bgs):	230	Total Depth Elevation:	4514
Drilling Method:	Sonic	Borehole Diameter (inches):	8	Borehole Completion:	Well Installed

Depth (feet)	Organic Vapor Levels (ppm)	Sample ID (Blow Counts)	Sample Type	Graphic Log	USCS	Lithologic Description	Well Design	Elevation (feet)
205	<1	Core: 64	Photo: 1419			<Clay Continued>		4539
		Core: 65						
	<1	Core: 66	Photo: 1420					
210		Core: 67						4534
	<1	Core: 68						
215					CL	**215.0'** Becomes wet.		4529
	<1	Core: 69				**216.8'-217.6'** **Sand**: brown, wet, loose, coarse grained, moderately well sorted, sub angular (photo: 1421).		
220						**217.6'-230.0'** **Clay**: brown, wet, medium stiff, low plasticity, moderately cohesive, <10% coarse content (sand, gravel, and cobble).		4524
	<1		Photo: 1422					
225								4519
	<1							
230							Slough	4514
						END OF BORING		
235								4509
240								4504
245								4499
250								4494

Well Design: Schedule 80 - 0.010 Inch Slot 4 Inch PVC Screen; 2/12 Silica Sand

Materials Used:
Slotted PVC (10 foot): 3; PVC Riser (10 foot): 20; Sand (50 pound bag): 19; Bentonite Chips (50 pound bag): 3; Grout (50 pound

Notes: *=pending survey; elevations are feet above mean sea level; bgs = below ground surface; USCS=Unified Soil Classification System; PVC=polyvinyl chloride

Attachment B
Known Spring and Seep Locations

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ATTACHMENT B
Known Spring and Seep Locations
700 South 1600 East Tetrachloroethylene Plume
Salt Lake City, Utah

Site ID	Location Address	Latitude	Longitude	Comments
SL11	[redacted]	40.754771	-111.862235	Located on east side of road
SL12		40.754276	-111.861416	Located on north side of road
SL13		40.753995	-111.860600	Located on parcel to the west of addres; SP-1 - Our Lady of Lourds Spring
SL14		40.753346	-111.860697	
SL15		40.752985	-111.860324	
SL16		40.753215	-111.857715	
SL17		40.751082	-111.857737	
SL18		40.750995	-111.857978	
SL19		40.750989	-111.858150	
SL20		40.750991	-111.858354	
SL21		40.750994	-111.859327	
SL22		40.751208	-111.859347	
SL23		40.750333	-111.857707	Located on back of parcel, by alley
SL24		40.750433	-111.857711	Located on back of parcel, by alley
SL25		40.749929	-111.857119	
SL26		40.749647	-111.856531	
SL27		40.751746	-111.859158	SP-2 - Benson Spring
SL28		40.749384	-111.857578	SP-3 - Smith Spring
SL29		40.748457	-111.857226	
SL30		40.748835	-111.855246	ESS-SW-16
SL31		40.748837	-111.854451	
SL32		40.748666	-111.854297	
SL33		40.748165	-111.856134	
SL34		40.748134	-111.856515	
SL35		40.745876	-111.856832	SP-4 - Bowen Spring
SL36		40.741176	-111.858763	
SL37		40.738115	-111.854813	
SL38		40.737111	-111.855170	
SL39		40.735086	-111.855994	
SL40		40.734851	-111.856586	
SL41		40.734397	-111.856553	
SL42		40.733418	-111.857183	
SL43		40.733404	-111.855912	Located south side of road at 1215 East 1700 South
SL44		40.740868	-111.853121	
SL45		40.727683	-111.879614	
SL46		40.726798	-111.882712	Located in backyard
SL47		40.727001	-111.883059	
SL48		40.727542	-111.882682	
SL49		40.732752	-111.881295	
SL50		40.732740	-111.881405	
SL52		40.755639	-111.869454	
SL53		40.755714	-111.868468	
SL76		40.712667	-111.863258	Under cob in road
SL57		40.741459	-111.870580	Located in northwest corner of baseball park
SL58		40.741469	-111.870754	Located in northwest corner of baseball park
SL59		40.756495	-111.873776	Located on 600 East, in road

ATTACHMENT B
Known Spring and Seep Locations
700 South 1600 East Tetrachloroethylene Plume
Salt Lake City, Utah

Site ID	Location Address	Latitude	Longitude	Comments
SL60	[redacted]	40.756810	-111.873777	Located on road
SL61		40.756424	-111.873668	On 600 South, on road
SL62		40.751727	-111.877108	Artesian Well Park
SL63		40.741881	-111.871838	Liberty Park Well, southeast corner of Liberty Park
SL64		40.713952	-111.863018	
SL65		40.714351	-111.863130	Located on golf course property; on south property line
SL75		40.736356	-111.856478	Located on road
SL69		40.735958	-111.856517	Located in alley
SL77		40.745356	-111.852571	
SL80		40.740566	-111.880095	
SL81		40.740516	-111.880095	
SL82		40.750988	-111.858443	ESS-SW-15
SL83		40.750994	-111.858604	
SL84		40.751089	-111.857627	
SL85		40.749499	-111.858915	
SL86		40.750342	-111.859097	Located in backyard, south of box in alley
SL87		40.750400	-111.858169	Located in back yard, north of box in alley
SL88		40.751386	-111.859351	
SL89		40.741534	-111.858420	
SL93		40.712410	-111.872308	2" pipe sticking out of creek, by bridge in golf course
SL95		40.726724	-111.880375	Located in backyard
SL94		40.726734	-111.880250	Located in backyard
SL100		40.751759	-111.858751	ESS-SW-17
		40.751593	-111.859331	
SL102		40.749090	-111.854797	Located in meter box
SL103		40.716186	-111.871363	Located in the middle of the south bound lanes
SL104		40.745088	-111.853380	Located behind house
SL106		40.736176	-111.856189	
SL107		40.722003	-111.859451	

Attachment C
Exploratory Boring Logs

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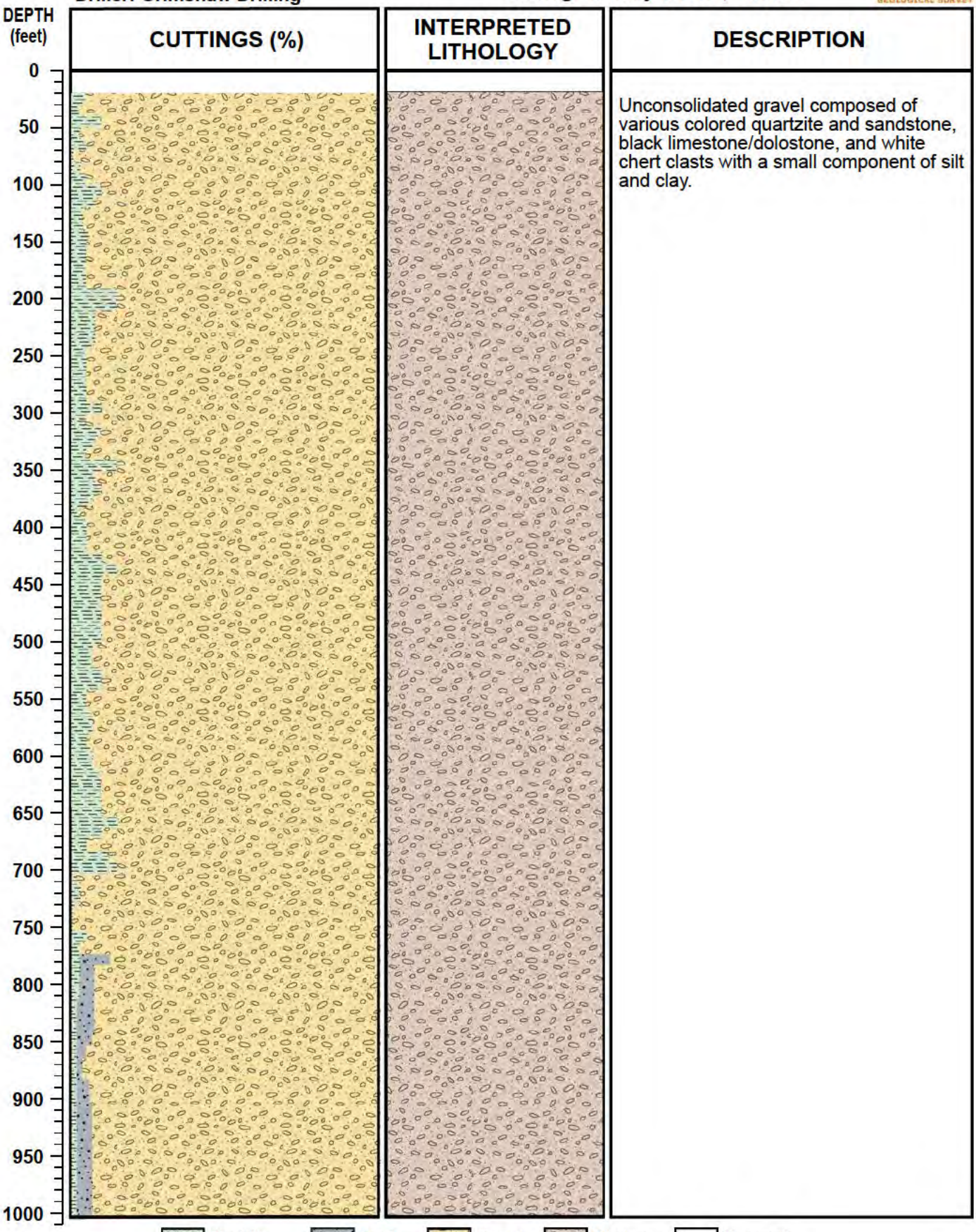
GEOLOGIC LOG OF WATER-WELL CUTTINGS

UTAH GEOLOGICAL SURVEY

DWRi Appropriation #: 10-57-004-M00
Location: (D-1-1)4ddc, Salt Lake County, Utah
Driller: Grimshaw Drilling

Well Owner: U.S. Dept. of Veteran Affairs
Win #: 433935
Geologist: Gary J. Hunt, 11/30/10



Attachment C-1.1

PERCENTAGE LOG OF WATER-WELL CUTTINGS
UTAH GEOLOGICAL SURVEY

DWRi Appropriation #: 10-57-004-M00 **Well Owner: U.S. Dept. of Veteran Affairs**
Location: (D-1-1)4ddc, Salt Lake County, UT **Win #: 433935**
Driller: Grimshaw Drilling **Geologist: Gary J. Hunt, 12/08/2010**

DEPTH RANGE (FEET)		PERCENTAGES			COMMENTS
		unconsolidated			
		css*	sand	gravel+	
0	20	0	0	0	NO SAMPLE
20	30	5	0	95	all 1000' consists of sub-angular clasts of green, gray, red sandstone and quartzite; black limestone (dolostone); white chert; pink clay; maximum clast size (MCS) = 1.0 cm, average clast size (ACS) = 0.3 cm
30	40	3	0	97	" MCS = 0.9 cm; ACS = 0.3 cm
40	50	10	0	90	" more silt and slightly smaller grain size; MCS = 0.8 cm , ACS = 0.3 cm
50	60	3	0	97	" unconsolidated gravel; MCS = 1.2 cm, ACS = 0.4 cm
60	70	5	0	95	" MCS =1.1 cm , ACS = 0.4 cm
70	80	1	0	99	" coarser; same provenance; MCS = 3.0 cm , ACS = 1.0 cm
80	90	3	0	97	" MCS = 2.5 cm, ACS = 1.0 cm
90	100	5	0	95	" slightly smaller grain size; MCS = 1.5 cm, ACS = 0.8 cm
100	110	10	0	90	" finer grained; more silt; MCS = 0.8 cm, ACS = 0.4 cm
110	120	8	0	92	" MCS = 0.8 cm, ACS = 0.3 cm
120	130	4	0	96	" MCS = 1.0 cm, ACS = 0.3 cm
130	140	4	0	96	" MCS = 1.0 cm, ACS = 0.5 cm
140	150	6	0	94	" MCS = 0.7 cm, ACS = 0.3 cm
150	160	5	0	95	" MCS = 1.0 cm, ACS = 0.5 cm
160	170	5	0	95	" MCS = 1.0 cm, ACS = 0.5 cm
170	180	5	0	95	" multi-colored quartzite and sandstone, black dolostone, white chert; MCS = 0.7 cm, ACS = 0.3 cm
180	190	15	0	85	" more clay and sand; MCS = 0.6 cm, ACS = 0.2 cm

***css = clay, silt, and sand; + estimated clast size may not reflect actual size due to action of the drill bit**

PERCENTAGE LOG OF WATER-WELL CUTTINGS
UTAH GEOLOGICAL SURVEY

DEPTH RANGE (FEET)		PERCENTAGES			COMMENTS
		unconsolidated			
		css*	sand	gravel	
190	200	8	0	92	" A little coarser, but finer than most; MCS = 0.7 cm, ACS = 0.3 cm
200	210	15	0	85	" siltier; same provenance; MCS = 0.6 cm, ACS = 0.3 cm
210	220	8	0	92	" MCS = 0.8 cm, ACS = 0.4 cm
220	230	8	0	92	" MCS = 0.8 cm, ACS = 0.4 cm
230	240	8	0	92	" MCS = 0.8 cm, ACS = 0.4 cm
240	250	5	0	95	" MCS = 1.0 cm, ACS = 0.5 cm
250	260	5	0	95	" MCS = 1.0 cm, ACS = 0.4 cm
260	270	5	0	95	" MCS = 1.0 cm, ACS = 0.4 cm
270	280	5	0	95	" MCS = 0.9 cm, ACS = 0.3 cm
280	290	5	0	95	" MCS = 0.8 cm, ACS = 0.3 cm
290	300	10	0	90	" MCS = 0.7 cm, ACS = 0.3 cm
300	310	5	0	95	" MCS = 1.0 cm, ACS = 0.4 cm
310	320	10	0	90	" MCS = 0.8 cm, ACS = 0.3 cm
320	330	8	0	92	" MCS = 0.9 cm, ACS = 0.4 cm
330	340	5	0	95	" MCS = 0.8 cm, ACS = 0.3 cm
340	350	15	0	85	" MCS = 0.6 cm, ACS = 0.3 cm
350	360	8	0	92	" slightly smaller grain size; same provenance; MCS = 0.6 cm, ACS = 0.3 cm
360	370	10	0	90	" MCS = 0.5 cm, ACS = 0.3 cm
370	380	7	0	93	" siltier, smaller clasts; same provenance; MCS = 0.7 cm, ACS = 0.3 cm
380	390	3	0	97	" coarser; less silt; MCS = 0.8 cm, ACS = 0.4 cm

***css = clay, silt, and sand; + estimated clast size may not reflect actual size due to action of the drill bit**

PERCENTAGE LOG OF WATER-WELL CUTTINGS
UTAH GEOLOGICAL SURVEY

DEPTH RANGE (FEET)		PERCENTAGES			COMMENTS
		unconsolidated			
		css*	sand	gravel	
390	400	5	0	95	" MCS = 0.9 cm, ACS = 0.4 cm
400	410	5	0	95	" MCS = 0.9 cm, ACS = 0.4 cm
410	420	5	0	95	" MCS = 0.9 cm, ACS = 0.4 cm
420	430	10	0	90	" MCS = 0.7 cm, ACS = 0.3 cm
430	440	15	0	85	" siltier MCS = 0.7 cm, ACS = 0.3 cm
440	450	10	0	90	" MCS = 0.7 cm, ACS = 0.3 cm
450	460	10	0	90	" MCS = 0.7 cm, ACS = 0.3 cm
460	470	10	0	90	" poorly sorted with more silt than average; same clast provenance; MCS = 0.7 cm, ACS = 0.3 cm
470	480	10	0	90	" MCS = 0.7 cm, ACS = 0.3 cm
480	490	10	0	90	" MCS = 0.7 cm, ACS = 0.3 cm
490	500	10	0	90	" MCS = 0.7 cm, ACS = 0.3 cm
500	510	7	0	93	" slightly smaller grain size MCS = 0.6 cm, ACS = 0.3 cm
510	520	7	0	93	" MCS = 0.6 cm, ACS = 0.3 cm
520	530	10	0	90	" MCS = 0.5 cm, ACS = 0.3 cm
530	540	10	0	90	" MCS = 0.5 cm, ACS = 0.3 cm
540	550	5	0	95	" coarser with less fine grain clay and silt; same provenance; MCS = 0.9 cm, ACS = 0.3 cm
550	560	5	0	95	" MCS = 0.9 cm, ACS = 0.3 cm
560	570	7	0	93	" MCS = 0.9 cm, ACS = 0.3 cm
570	580	7	0	93	" MCS = 1.0 cm, ACS = 0.4 cm

***css = clay, silt, and sand; $^{+}$ estimated clast size may not reflect actual size due to action of the drill bit**

PERCENTAGE LOG OF WATER-WELL CUTTINGS
UTAH GEOLOGICAL SURVEY

DEPTH RANGE (FEET)		PERCENTAGES			COMMENTS
		unconsolidated			
		css*	sand	gravel	
580	590	5	0	95	" MCS = 1.0 cm, ACS = 0.4 cm
590	600	7	0	93	" MCS = 0.8 cm, ACS = 0.3 cm
600	610	7	0	90	" MCS = 0.9 cm, ACS = 0.3 cm
610	620	10	0	90	" more clay and the addition of gypsum; MCS = 0.8 cm, ACS = 0.3 cm
620	630	10	0	90	" gypsum, smaller grains MCS = 0.7 cm, ACS = 0.3 cm
630	640	10	0	90	" muddier matrix; gypsum; MCS = 0.7 cm, ACS = 0.3 cm
640	650	10	0	90	" same provenance plus gypsum; MCS = 0.6 cm , ACS = 0.3 cm
650	660	15	0	85	" MCS = 0.4 cm, ACS = 0.3 cm
660	670	10	0	90	" MCS = 0.5 cm, ACS = 0.3 cm
670	680	5	0	95	" coarser with less silt and NO gypsum; MCS = 0.7 cm, ACS = 0.3 cm
680	690	12	0	88	" more mud; trace gypsum; MCS = 0.6 cm, ACS = 0.3 cm
690	700	15	0	85	" MCS = 0.6 cm, ACS = 0.3 cm
700	710	2	0	98	" strikingly coarser with much less silt and more black limestone clasts; no gypsum; MCS = 0.8 cm, ACS = 0.3 cm
710	720	3	0	97	" MCS = 0.7 cm, ACS = 0.3 cm
720	730	3	0	97	" MCS = 0.7 cm, ACS = 0.3 cm
730	740	1	0	99	" clean gravel with same provenance; MCS = 0.7 cm, ACS = 0.3 cm
740	750	1	0	99	" MCS = 0.7 cm, ACS = 0.3 cm
750	760	5	0	95	" slightly muddier; MCS = 0.7 cm, ACS = 0.3 cm
760	770	3	0	97	" coarser; MCS = 0.8 cm, ACS = 0.3 cm
770	780	3	10	87	" coarse and medium sand with few large angular clasts; MCS = 0.6 cm, ACS = 0.2 cm

***css = clay, silt, and sand; + estimated clast size may not reflect actual size due to action of the drill bit**

PERCENTAGE LOG OF WATER-WELL CUTTINGS
UTAH GEOLOGICAL SURVEY

DEPTH RANGE (FEET)		PERCENTAGES			COMMENTS
		unconsolidated			
		css*	sand	gravel	
780	790	3	5	92	" very few large clasts with more sand; MCS = 0.7 cm, ACS = 0.3 cm
790	800	3	5	92	" MCS = 0.7 cm, ACS = 0.3 cm
800	810	3	5	92	" MCS = 0.8 cm, ACS = 0.3 cm
810	820	2	6	92	" MCS = 0.8 cm, ACS = 0.3 cm
820	830	2	6	92	" MCS = 0.8 cm, ACS = 0.3 cm
830	840	2	6	92	" MCS = 0.8 cm, ACS = 0.3 cm
840	850	2	5	93	" MCS = 0.8 cm, ACS = 0.3 cm
850	860	2	3	95	" MCS = 0.8 cm, ACS = 0.3 cm
860	870	2	2	96	" coarser with less sand and more gravel; MCS = 1.0 cm, ACS = 0.4 cm
870	880	2	2	96	" MCS = 0.9 cm, ACS = 0.3 cm
880	890	2	4	94	" sandy gravel; MCS = 0.8 cm, ACS = 0.3 cm
890	900	2	4	94	" MCS = 0.7 cm, ACS = 0.3 cm
900	910	2	5	93	" MCS = 0.7 cm, ACS = 0.3 cm
910	920	2	5	93	" MCS = 0.7 cm, ACS = 0.3 cm
920	930	2	5	93	" MCS = 0.8 cm, ACS = 0.3 cm
930	940	2	5	93	" MCS = 0.8 cm, ACS = 0.3 cm
940	950	2	5	93	" MCS = 0.7 cm, ACS = 0.3 cm
950	960	2	5	93	" MCS = 0.8 cm, ACS = 0.3 cm
960	970	2	5	93	" MCS = 0.8 cm, ACS = 0.3 cm

***css = clay, silt, and sand; + estimated clast size may not reflect actual size due to action of the drill bit**

PERCENTAGE LOG OF WATER-WELL CUTTINGS
UTAH GEOLOGICAL SURVEY

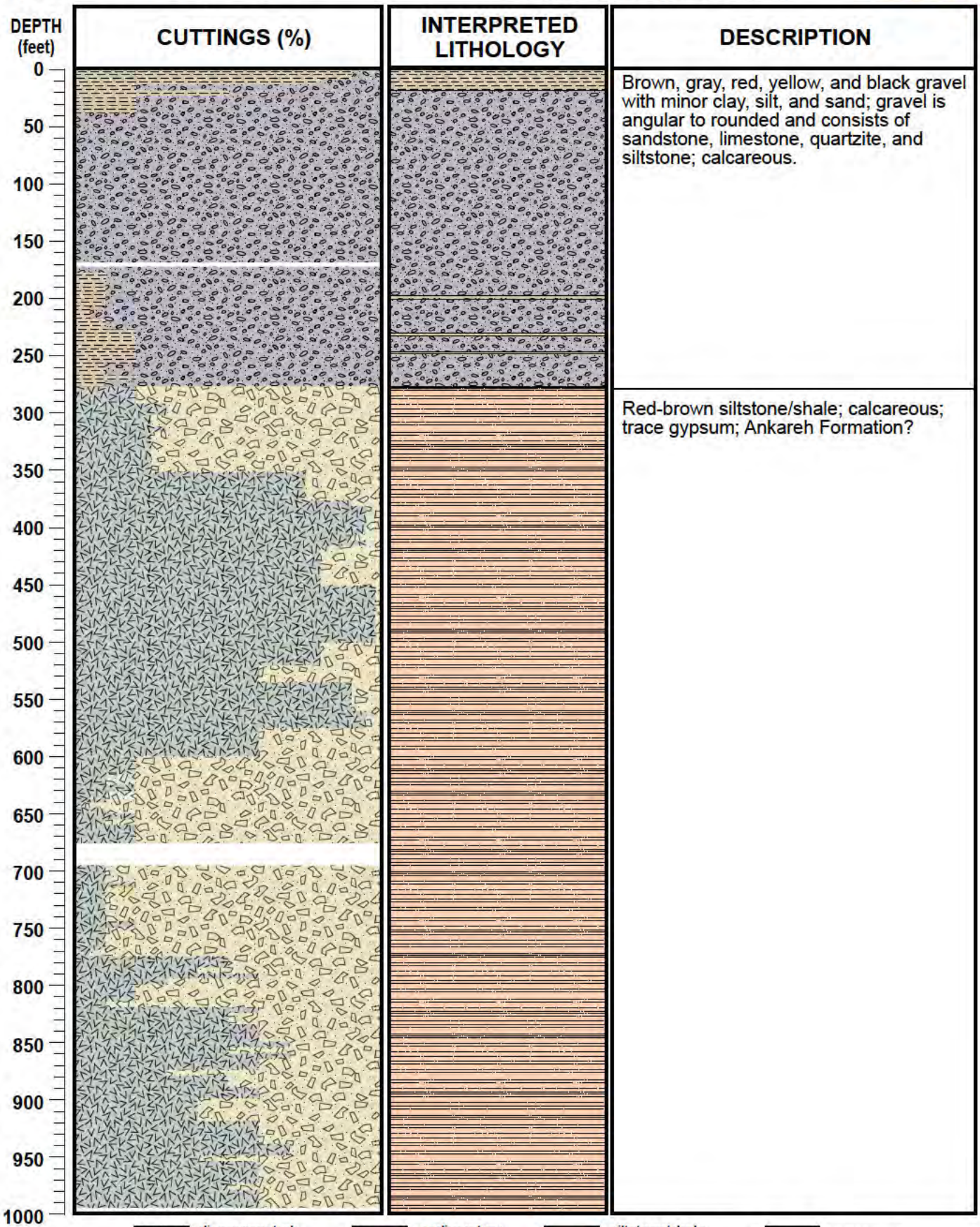
970	980	2	5	93	" MCS = 0.8 cm, ACS = 0.8 cm
980	990	2	5	93	" MCS = 0.8 cm, ACS = 0.3 cm
990	1000	2	5	93	" same provenance MCS = 0.8 cm, ACS = 0.3 cm

***css = clay, silt, and sand; $^{+}$ estimated clast size may not reflect actual size due to action of the drill bit**

GEOLOGIC LOG OF WATER-WELL CUTTINGS

UTAH GEOLOGICAL SURVEY

DWRi Appropriation #: 06-57-008-M00
Location: (D-1-1)4aba, Salt Lake County, Utah
Driller: Zimmerman Well Service
Well Owner: University of Utah
Win #: 427083
Geologist: Janae Wallace, 5/30/07



DESCRIPTION
Brown, gray, red, yellow, and black gravel with minor clay, silt, and sand; gravel is angular to rounded and consists of sandstone, limestone, quartzite, and siltstone; calcareous.
Red-brown siltstone/shale; calcareous; trace gypsum; Ankareh Formation?

disaggregated clay/silt and sand
sedimentary rock fragments
siltstone/shale
no sample
clay, silt, and sand
gravel

Attachment C-2.1

PERCENTAGE LOG OF WATER-WELL CUTTINGS
UTAH GEOLOGICAL SURVEY

DWRi Appropriation #: 06-57-008-M00 Well Owner: University of Utah
Location: (D-1-1)4aba, Salt Lake County, Utah Win #: 427083
Driller: Zimmerman Well Service Geologist: Janae Wallace, 5/30/07

DEPTH RANGE (FEET)		PERCENTAGES				COMMENTS
		unconsolidated		disaggregated		
		css*	gravel+	css*	SRF*	
0	5	90	10	0	0	brown clay, silt, sand, and gravel; gravel is angular to rounded and consists of quartzite, limestone, sandstone, and chert; maximum clast size (MCS) is 1 cm, average clast size (ACS) is 0.5 cm; calcareous
5	10	90	10	0	0	" MCS is 1 cm, ACS is 0.3 cm
10	15	80	20	0	0	" MCS is 0.3 cm, ACS is 0.3 cm
15	20	20	80	0	0	" MCS is 2 cm, ACS is 0.5 cm
20	25	50	50	0	0	" MCS is 2 cm, ACS is 0.3 cm
25	30	20	80	0	0	tan and gray gravel with minor clay, silt, and sand; gravel is angular to rounded and consists of limestone, quartzite, shale, sandstone, and conglomerate; MCS is 2.5 cm, ACS is 1 cm; calcareous
30	35	20	80	0	0	" MCS is 2.5 cm, ACS is 1 cm
35	40	20	80	0	0	" MCS is 3 cm, ACS is 0.5 cm
40	45	0	100	0	0	brown, gray, red, tan, yellow, and black gravel; gravel is angular to rounded and consists of limestone, quartzite, shale, sandstone, and conglomerate; MCS is 0.3 cm, ACS is 0.3 cm; calcareous

*css=clay, silt, and sand; SRF=sedimentary rock fragment; +angular nature of gravel and estimated clast size may result from drill-bit action

DEPTH RANGE (FEET)		PERCENTAGES				COMMENTS
		unconsolidated		disaggregated		
		css*	gravel+	css*	SRF*	
45	50	0	100	0	0	" MCS is 0.5 cm, ACS is 0.3 cm
50	55	0	100	0	0	" MCS is 2 cm, ACS is 0.5 cm
55	60	0	100	0	0	" MCS is 1.5 cm, ACS 0.5 cm
60	65	0	100	0	0	" MCS is 2 cm, ACS is 1 cm
65	70	0	100	0	0	" MCS is 1 cm, ACS is 0.5 cm
70	75	0	100	0	0	" MCS is 2 cm, ACS is 0.5 cm
75	80	0	100	0	0	" MCS is 3 cm, ACS is 1 cm
80	85	0	100	0	0	" MCS is 0.5 cm, ACS is 0.3 cm
85	90	0	100	0	0	" MCS is 1 cm, ACS is 0.5 cm
90	95	0	100	0	0	" MCS is 0.5 cm, ACS is 0.3 cm
95	100	0	100	0	0	" MCS is 0.5 cm, ACS is 0.3 cm
100	105	0	100	0	0	" MCS is 1 cm, ACS is 0.5 cm
105	110	0	100	0	0	" MCS is 1 cm, ACS is 0.5 cm
110	115	0	100	0	0	" MCS is 1 cm, ACS is 0.3 cm
115	120	0	100	0	0	" MCS is 1 cm, ACS is 0.3 cm
120	125	0	100	0	0	" MCS is 1 cm, ACS is 0.3 cm
125	130	0	100	0	0	" MCS is 0.5 cm, ACS is 0.3 cm
130	135	0	100	0	0	" MCS is 1.5 cm, ACS is 0.3 cm
135	140	0	100	0	0	" MCS is 1 cm, ACS is 0.3 cm
140	145	0	100	0	0	" MCS is 1 cm, ACS is 0.3 cm
145	150	0	100	0	0	" MCS is 1 cm, ACS is 0.3 cm

*css=clay, silt, and sand; SRF=sedimentary rock fragment; +angular nature of gravel and estimated clast size may result from drill-bit action

DEPTH RANGE (FEET)		PERCENTAGES				COMMENTS
		unconsolidated		disaggregated		
		css*	gravel+	css*	SRF*	
150	155	0	100	0	0	" MCS is 2 cm, ACS is 0.5 cm
155	160	0	100	0	0	" MCS is 0.5 cm, ACS is 0.3 cm
160	165	0	100	0	0	" MCS is 3 cm, ACS is 1.5 cm
165	170	0	100	0	0	" MCS is 2 cm, ACS is 1 cm
170	175	0	0	0	0	no sample
175	180	0	100	0	0	brown, gray, red, tan, yellow, and black gravel; gravel is angular to rounded and consists of limestone, quartzite, shale, sandstone, and conglomerate; MCS is 2 cm, ACS is 1 cm; calcareous
180	185	10	90	0	0	tan, brown, gray, red, yellow, and black gravel with minor brown clay, silt, and sand; gravel is angular to rounded and consists of limestone, quartzite, shale, sandstone, and conglomerate; MCS is 1 cm, ACS is 0.5 cm; calcareous
185	190	10	90	0	0	" MCS is 0.5 cm, ACS is 0.3 cm
190	195	10	90	0	0	" MCS is 1 cm, ACS is 0.3 cm
195	200	10	90	0	0	" MCS is 1 cm, ACS is 0.5 cm
200	205	10	90	0	0	" MCS is 1 cm, ACS is 0.5 cm
205	210	10	90	0	0	" MCS is 1 cm, ACS is 0.5 cm
210	215	5	95	0	0	" MCS is 1 cm, ACS is 0.3 cm
215	220	5	95	0	0	" MCS is 1.5 cm, ACS is 0.5 cm
220	225	10	90	0	0	" MCS is 4 cm, ACS is 0.5 cm
225	230	10	90	0	0	" MCS is 1 cm, ACS is 0.3 cm

*css=clay, silt, and sand; SRF=sedimentary rock fragment; +angular nature of gravel and estimated clast size may result from drill-bit action

DEPTH RANGE (FEET)		PERCENTAGES				COMMENTS
		unconsolidated		disaggregated		
		css*	gravel+	css*	SRF*	
230	235	20	80	0	0	" MCS is 1 cm, ACS is 0.5 cm
235	240	20	80	0	0	" MCS is 2 cm, ACS is 0.5 cm
240	245	20	80	0	0	" MCS is 1 cm, ACS is 0.5 cm
245	250	20	80	0	0	" MCS is 0.5 cm, ACS is 0.3 cm
250	255	20	80	0	0	" MCS is 1 cm, ACS is 0.3 cm
255	260	20	80	0	0	" MCS is 3 cm, ACS is 1 cm
260	265	10	90	0	0	" MCS is 2 cm, ACS is 1 cm
265	270	10	90	0	0	" MCS is 1 cm, ACS is 0.3 cm
270	275	20	80	0	0	" MCS is 2 cm, ACS is 0.3 cm
275	280	10	90	0	0	" MCS is 1.5 cm, ACS is 0.5 cm
280	285	0	0	20	80	pink-brown clay and silt with red, gray, and tan sand-sized sedimentary rock fragments (siltstone, sandstone, and limestone); calcareous; Ankareh Formation?
285	290	0	0	20	80	"
290	295	0	0	20	80	"
295	300	0	0	30	70	"
300	305	0	0	30	70	"
305	310	0	0	25	75	"
310	315	0	0	25	75	"
315	320	0	0	30	70	"
320	325	0	0	25	75	"

*css=clay, silt, and sand; SRF=sedimentary rock fragment; +angular nature of gravel and estimated clast size may result from drill-bit action

DEPTH RANGE (FEET)		PERCENTAGES				COMMENTS
		unconsolidated		disaggregated		
		css*	gravel+	css*	SRF*	
325	330	0	0	25	75	“
330	335	0	0	25	75	pink-brown clay and silt with red, gray, and tan sand-sized sedimentary rock fragments (siltstone, sandstone, and limestone); calcareous
335	340	0	0	25	75	“
340	345	0	0	25	75	“
345	350	0	0	25	75	“
350	355	0	0	25	75	“
355	360	0	0	75	25	“
360	365	0	0	75	25	“
365	370	0	0	75	25	“
370	375	0	0	75	25	“
375	380	0	0	75	25	“
380	385	0	0	90	10	“
385	390	0	0	95	5	“
390	395	0	0	95	5	“
395	400	0	0	95	5	“
400	405	0	0	95	5	“
405	410	0	0	95	5	“
410	415	0	0	90	10	“
415	420	0	0	95	5	“

*css=clay, silt, and sand; SRF=sedimentary rock fragment; +angular nature of gravel and estimated clast size may result from drill-bit action

DEPTH RANGE (FEET)		PERCENTAGES				COMMENTS
		unconsolidated		disaggregated		
		css*	gravel+	css*	SRF*	
420	425	0	0	80	20	“
425	430	0	0	80	20	red-brown clay and silt with red, gray, and tan sand-sized sedimentary rock fragments (siltstone, sandstone, and limestone); calcareous
430	435	0	0	80	20	“
435	440	0	0	80	20	“
440	445	0	0	80	20	“
445	450	0	0	80	20	“
450	455	0	0	80	20	“
455	460	0	0	98	2	“ trace gypsum
460	465	0	0	98	2	“
465	470	0	0	98	2	“
470	475	0	0	98	2	“
475	480	0	0	98	2	“
480	485	0	0	98	2	“
485	490	0	0	98	2	“
490	495	0	0	98	2	“
495	500	0	0	98	2	“
500	505	0	0	98	2	“
505	510	0	0	80	20	“
510	515	0	0	80	20	“

*css=clay, silt, and sand; SRF=sedimentary rock fragment; +angular nature of gravel and estimated clast size may result from drill-bit action

DEPTH RANGE (FEET)		PERCENTAGES				COMMENTS
		unconsolidated		disaggregated		
		css*	gravel+	css*	SRF*	
515	520	0	0	80	20	“
520	525	0	0	80	20	red-brown clay and silt with red, gray, and tan sand-sized sedimentary rock fragments (siltstone, sandstone, and limestone); trace gypsum; calcareous
525	530	0	0	60	40	“
530	535	0	0	60	40	“
535	540	0	0	60	40	“
540	545	0	0	90	10	“ pink brown
545	550	0	0	90	10	“
550	555	0	0	90	10	“
555	560	0	0	90	10	“
560	565	0	0	90	10	“
565	570	0	0	95	5	“
570	575	0	0	95	5	“
575	580	0	0	95	5	“
580	585	0	0	60	40	“
585	590	0	0	60	40	“
590	595	0	0	60	40	“
595	600	0	0	60	40	“
600	605	0	0	60	40	“
605	610	0	0	20	80	red-brown clay with sand-sized quartz, feldspar, and sedimentary rock fragments

*css=clay, silt, and sand; SRF=sedimentary rock fragment; +angular nature of gravel and estimated clast size may result from drill-bit action

DEPTH RANGE (FEET)		PERCENTAGES				COMMENTS
		unconsolidated		disaggregated		
		css*	gravel+	css*	SRF*	
						(siltstone, sandstone, and limestone); calcareous
610	615	0	0	20	80	“
615	620	0	0	20	80	“
620	625	0	0	10	90	“
625	630	0	0	10	90	“
630	635	0	0	20	80	“
635	640	0	0	10	90	“
640	645	0	0	10	90	“
645	650	0	0	2	98	“
650	655	0	0	10	90	“
655	660	0	0	20	80	“
660	665	0	0	10	90	“
665	670	0	0	20	80	“
670	675	0	0	20	80	“
675	680	0	0	20	80	“
680	700	0	0	0	0	no sample
700	705	0	0	10	90	pink-brown clay with sand-sized quartz, feldspar, and sedimentary rock fragments (siltstone, sandstone, and limestone); calcareous
705	710	0	0	10	90	“
710	715	0	0	10	90	“

*css=clay, silt, and sand; SRF=sedimentary rock fragment; +angular nature of gravel and estimated clast size may result from drill-bit action

DEPTH RANGE (FEET)		PERCENTAGES				COMMENTS
		unconsolidated		disaggregated		
		css*	gravel+	css*	SRF*	
715	720	0	0	20	80	“
720	725	0	0	10	90	“
725	730	0	0	10	90	“ red brown; trace gypsum
730	735	0	0	10	90	“
735	740	0	0	10	90	“
740	745	0	0	10	90	“
745	750	0	0	10	90	“
750	755	0	0	20	80	“
755	760	0	0	10	90	“
760	765	0	0	10	90	“
765	770	0	0	10	90	“
770	775	0	0	10	90	“
775	780	0	0	5	95	“
780	785	0	0	50	50	“
785	790	0	0	50	50	“
790	795	0	0	40	60	“
795	800	0	0	60	40	“
800	805	0	0	30	70	“
805	810	0	0	20	80	“
810	815	0	0	20	80	“
815	820	0	0	20	80	“

*css=clay, silt, and sand; SRF=sedimentary rock fragment; +angular nature of gravel and estimated clast size may result from drill-bit action

DEPTH RANGE (FEET)		PERCENTAGES				COMMENTS
		unconsolidated		disaggregated		
		css*	gravel+	css*	SRF*	
820	825	0	0	10	90	“
825	830	0	0	60	40	“
830	835	0	0	50	50	“
835	840	0	0	50	50	“
840	845	0	0	60	40	“
845	850	0	0	60	40	“
850	855	0	0	60	40	“
855	860	0	0	70	30	“
860	865	0	0	50	50	“
865	870	0	0	70	30	“
870	875	0	0	60	40	“
875	880	0	0	60	40	“
880	885	0	0	30	70	“
885	890	0	0	50	50	“
890	895	0	0	50	50	“
895	900	0	0	60	40	“
900	905	0	0	60	40	“
905	910	0	0	40	60	“
910	915	0	0	40	60	“
915	920	0	0	40	60	“
920	925	0	0	40	60	“

*css=clay, silt, and sand; SRF=sedimentary rock fragment; +angular nature of gravel and estimated clast size may result from drill-bit action

DEPTH RANGE (FEET)		PERCENTAGES				COMMENTS
		unconsolidated		disaggregated		
		css*	gravel+	css*	SRF*	
925	930	0	0	60	40	“
930	935	0	0	60	40	“
935	940	0	0	60	40	“
940	945	0	0	60	40	“
945	950	0	0	70	30	“
950	955	0	0	70	30	“
955	960	0	0	40	60	“
960	965	0	0	60	40	“
965	970	0	0	60	40	“
970	975	0	0	60	40	“
975	980	0	0	60	40	“
980	985	0	0	50	50	“
985	990	0	0	60	40	“
990	995	0	0	60	40	“
995	1005	0	0	60	40	“

*css=clay, silt, and sand; SRF=sedimentary rock fragment; +angular nature of gravel and estimated clast size may result from drill-bit action

FINAL

2017 Vapor Intrusion Investigation Field Data Report

Accelerated Operable Unit 1
700 South 1600 East PCE Plume,
Salt Lake City, Utah

Contract No. W912DQ-15-D-3014 Task Order 0005

Prepared for

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September 2017

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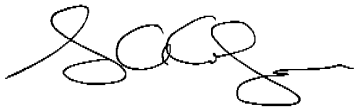
STATEMENT OF TECHNICAL REVIEW

AOU-1 Remedial Investigation for 700 South 1600 East PCE Plume, Salt Lake City, UT
Final 2017 Vapor Intrusion Investigation Field Data Report

The CH2M HILL, Inc. team has completed the technical review of the submittal of the Final 2017 Vapor Intrusion Investigation Field Data Report. Notice is hereby given that an independent technical review has been conducted that is appropriate to the level of risk and complexity inherent in the project, as defined in the Contractor Quality Control Plan. During the independent technical review, compliance with established policy principles and procedures was verified using justified and valid assumptions. This included review of assumptions; methods, procedures, and material used in analyses; the appropriateness of data used and level of data obtained; and reasonableness of the results, including whether the product meets the customer's needs consistent with the law and existing U.S. Army Corps of Engineers policy.

Technical Reviewer	Signature	Date of Review
Gary Colgan		9/12/17
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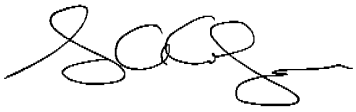
	9/12/17		9/12/17
Signature	Date	Signature	Date

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Acronyms and Abbreviations

--	No screening or removal levels have been established for cis-1,2-Dichloroethene
#	number
%	percent
'	feet
"	inches
<	less than
µg/m^3	microgram(s) per cubic meter
AOU-1	Accelerated Operable Unit 1 East Side Springs
bgs	below ground surface
BL	baseline
CASRN	Chemical Abstract Services Registry Number
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DCE	Dichloroethene
EA	EA Engineering, Science, and Technology, Inc., PBC
EPA	U.S. Environmental Protection Agency
FD	field duplicate
FE	First Environment
ft	foot (feet)
HAPSITE	INFICON HAPSITE®
IA	indoor air
IASL	residential indoor air screening level
ID	identification
J	Estimated value. The result is estimated due to associated quality control problems.
MFM	*Minor Field Modification*
N	normal sample
NA	not applicable
OA	outdoor air
Pa	pascal
PCE	tetrachloroethene
QA	quality assurance
QAPP	quality assurance project plan
RAL	removal action level
RBSL	risk-based screening level
Res.	residential
RI	remedial investigation
SG	soil gas
SAP	Sampling and analysis plan
SIM	selected ion monitoring
SL	screening level

TCE	trichloroethene
U	Not detected. The analyte was analyzed for but not detected above the method detection limit.
VHA	Veterans Health Administration
VI	vapor intrusion
VOC	volatile organic compound

SECTION 1

Introduction and Background

This report presents analytical results from the 2017 vapor intrusion (VI) investigation for Accelerated Operable Unit 1 East Side Springs (AOU-1), which is part of the 700 South 1600 East Tetrachloroethene (PCE) Plume Superfund site in Salt Lake City, Utah. This report is being submitted on behalf of the U.S. Department of Veterans Affairs Salt Lake City Health Care System, which is working cooperatively with the U.S. Environmental Protection Agency (EPA) and the Utah Department of Environmental Quality to implement the remedial investigation (RI). The VI investigation results included in this report supplement the indoor air and soil gas sampling performed in 2015 and 2016. The 2015 and 2016 sampling was guided by the RI Work Plan (First Environment [FE], 2015) that included the sampling and analysis plan and quality assurance (QA) project plan attachments. The data collection activities briefly described in this report are based on those detailed in the *Minor Field Modification* (MFM) *#18* (Appendix A) (EA Engineering, Science, and Technology, Inc., PBC [EA], 2017) to the RI Work Plan (FE, 2015). Results of these data collection activities will help the Veterans Health Administration (VHA) refine the conceptual site model describing the nature, extent, fate, and transport of PCE associated with the PCE plume, specifically with respect to the potential for impacts to indoor air through the subsurface-to-indoor-air VI pathway.

AOU-1 is located in Salt Lake City, Salt Lake County, Utah, along the Wasatch Fault scarp within the general residential area bounded by 500 South and Michigan Avenue between 1100 East and 1300 East (Figure 1). In 2010, chlorinated volatile organic compounds (VOCs), including PCE and trichloroethene (TCE), were detected in the surface water associated with seeps and springs along the fault scarp. The location of the seeps and springs near residences and other occupied structures and the shallow depth to groundwater suggested the potential for VI into occupied structures. AOU-1 is defined as the area where springs are known to have PCE contamination and groundwater is within 50 feet of the ground surface. AOU-1 is surrounded by a 100-foot buffer zone.

SECTION 2

Summary of Previous Characterization Activities

VHA began collecting site-specific VI data within AOU-1 in January 2015 (FE, 2015). More than 1,000 soil gas and indoor air data points were collected from 35 structures consisting of private residences, schools, a church, and an elder-care facility. The structures represent a cross section of structure types, construction dates, depths to groundwater, and locations within AOU-1. Analytical results from those samples were used to update the conceptual site model for AOU-1, which in turn was used to identify data gaps and to prepare a sampling plan (EA, 2015) to fill those gaps.

The VI data collected in 2015 pointed to a portion of AOU-1 where a higher potential for VI to result in indoor air concentrations above risk-based screening levels (RBSLs) was noted. These data, combined with AOU-1 hydrogeological data, facilitated the delineation of a focus area for the 2016 VI sampling. In 2016, 10 residential and 1 public structure (East High School) within the 2016 focus area underwent individual VI investigation as outlined in the 2016 sampling plan (EA, 2015). The 2016 VI sampling activities and results are presented in the *2016 Vapor Intrusion Investigation Field Data Report* (EA, 2016).

The combined 2015 and 2016 VI sampling data were used to again update the AOU-1 conceptual site model, which facilitated the identification of a few remaining data gaps. The seven new residential structures sampled in 2017 were selected based on the 2015/2016 data to address the identified data gaps, as detailed in Section 3 of this report.

SECTION 3

Summary of 2017 Characterization Activities

This section presents a summary of, and rationale for, additional VI sampling activities conducted within AOU-1 from March 2017 to April 2017. Further detail regarding 2017 VI sampling methodology can be found in the MFM #18 (EA, 2017) to the RI Work Plan (FE, 2015). The 2017 VI program consisted of sampling 7 new structures (that is, not previously sampled as part of the 2015 and 2016 effort) and 11 previously sampled structures (previously sampled in 2015) in an area with higher potential for VI. The seven new structures (residential) were located in areas that had not previously been sampled and were selected to improve the spatial data distribution of AOU-1. The 11 previously sampled structures were re-sampled in 2017 to confirm the 2015 indoor air results, which are currently under third-party quality review due to uncertainty regarding correct sampling and field documentation procedures. Table 1 lists the number and type of samples collected at the 11 previously sampled structures and 7 new structures. Details for each of these objectives are provided in the following subsections.

3.1 2017 Sampling Focus Area

The VI data collected in 2015 and 2016 pointed to a portion of AOU-1 where a higher potential for VI to result in indoor air concentrations above RBSLs was noted. These data, combined with AOU-1 hydrogeological data, facilitated the identification of seven new structures to undergo full VI protocol sampling to improve the AOU-1 conceptual site model (Figure 2). In 2017, 7 new structures and 11 previously sampled structures underwent full and limited VI protocol sampling, respectively. See below for a definition of what constitutes a full and a limited protocol. The locations of these structures are shown on Figure 2. Collection of additional VI data from these residential structures within this focus area was conducted to support preparation of the RI report, including refining the conceptual model of VI within AOU-1 and evaluating potential risk.

3.2 Locations and Methods

The following three sampling goals outlined in the RI Work Plan were to be satisfied with the additional 2017 sampling:

- Sampling indoor air with EPA Method TO-15 analysis at 11 previously sampled structures to assess temporal variability in potential VI-related indoor air PCE concentrations and help address uncertainty related to 2015 TO-15 analytical results (Section 3.2.1).
- Sampling seven new (not previously sampled) structures within the focus area to assess spatial variability. This included screening indoor air and near-slab soil gas using a portable gas chromatograph/mass spectrometer called an INFICON HAPSITE® (HAPSITE). EPA Method TO-15 analysis of both indoor air and soil gas was also specified in the event an RBSL exceedance occurred during HAPSITE indoor air and soil gas screening.
- Analyze indoor air concentrations of PCE, TCE, cis-1,2-dichloroethene (DCE), vinyl chloride, and 1,4-dioxane by EPA Method TO-15 Selected Ion Monitoring (SIM) and other VOCs by EPA Method TO-15. Additionally, analyze indoor air PCE, TCE, and cis-1,2-DCE concentrations with a HAPSITE. The following subsections describe the locations and methods for each sampling goal.

3.2.1 Previously Sampled Structures

In 2015, VI data were collected from 36 structures within AOU-1 using the Protocol for Performing Indoor Air and Near-slab Soil Gas Assessments (i.e., *Full VI Protocol,* Appendix H of the RI Work Plan [FE, 2015]). Eleven of these previously sampled structures were re-sampled in 2017 following the limited VI protocol sampling to confirm the 2015 indoor air results, which are currently under third-party quality review due to uncertainty regarding correct sampling and field documentation procedures.

Confirmation samples were collected per Attachment 1 of MFM #18 (EA, 2017), utilizing a limited VI protocol that includes HAPSITE screening of indoor air to identify potential interior background source(s) (no pressure cycling) and collection of up to 2, 24-hour SUMMA™ canister samples per structure of indoor air for EPA Method TO-15 and TO-15 SIM analysis. Soil gas and ambient air samples were not collected. Other components of the VI protocol (FE, 2015), such as detailed building surveys, were not repeated. Instead, an abbreviated interview and building survey were performed to identify any major changes that could have affected the 2017 sampling and data evaluation (recent remodels or household chemical storage, for example). Attachment 1 of MFM #18 (EA, 2017) presents a copy of the full VI protocol that conveys, in detail (via text highlights), those steps of the protocol that were retained in the limited VI protocol used for confirmation sampling. Table 1 lists the type of samples collected at these 11 structures and Figure 2 shows the locations of the SUMMA confirmation samples.

As noted, up to 2, 24-hour SUMMA canister samples were collected from each structure. The determination of where samples were collected and conditions under which an additional sample may be warranted is described in the *Limited VI Protocol* (Attachment 1 of MFM #18 [EA, 2017]).

3.2.2 New Structures

The goal of sampling structures not previously sampled during 2015 and 2016 was to gain a better understanding of the spatial extent of potential VI-related impacts associated with AOU-1 groundwater. Additional structures within the focus area are identified on Figure 2 and in Table 1. The 7 new structures underwent full VI protocol sampling (HAPSITE screening of indoor air to identify potential interior background sources, pressure cycling, and collection of up to 2, 24-hour SUMMA canister samples per structure, if an indoor air RBSL(s) exceedance was measured with the HAPSITE), as outlined in MFM #18 (EA, 2017). The VI protocol (FE, 2015) guided data collection at these structures. This included HAPSITE screening of indoor air and near-slab soil gas and EPA Method TO-15 analysis of both if screening levels were exceeded during HAPSITE screening of each.

SECTION 4

Results

Findings from the 2017 sampling event are summarized in the following subsections. This section is divided into subsections based on data collection activities outlined in Section 3 (previously sampled structures and new structures). Analytical results are compared to RBSLs and removal action levels (RALs) presented in Table 2.

4.1 Previously Sampled Structures (Limited VI Protocol)

Table 3 contains analytical results for the confirmation EPA Method TO-15 SIM samples collected at locations 0001-H, 0002-H, 0004-H, 0012-H, 0013-H, 0025-H, 0026-H, 0027-H, 0029-H, 0038-H, and 0064-H (Figure 2). These samples were 24-hour indoor air samples collected in 6-liter SUMMA canisters that had been individually laboratory-certified clean. Each sample was analyzed using EPA Method TO-15 and TO-15 SIM. Validated analytical results are provided in the *Quality Control Summary Report* (provided as Appendix B) and laboratory sample receipt notifications are provided as Appendix C. Indoor air in these previously sampled structures was screened with a HAPSITE to identify potential interior background source(s) (no pressure cycling) prior to 24-hour SUMMA canister sample collection. HAPSITE calibration reports associated with sampled locations are included in Appendix D and are organized by calibration date. The following subsections present the results of each limited VI protocol sampling event by structure.

4.1.1 0001-H

The limited VI protocol investigation at location 0001-H was conducted on March 15, 2017 and March 22, 2017. Two sample dates were required because the initial HAPSITE survey identified an interior background source containing PCE beneath the upstairs kitchen sink. The product was removed from the residence and a second appointment scheduled to collect a 24-hour SUMMA canister sample. A normal and field duplicate 24-hour SUMMA canister sample were collected at this residence. Table 3 and Table 4 present the EPA Method TO-15 and HAPSITE analytical results, respectively.

Vinyl chloride was the only target analyte that exceeded an indoor air RBSL but not the RAL at 0.17 and 0.19 micrograms per cubic meter ($\mu g/m^3$) in the normal and field duplicate samples, respectively (Table 3).

4.1.2 0002-H

The VI investigation at location 0002-H was conducted on March 22, 2017. No interior background sources were identified within the residence during the HAPSITE survey. Table 5 presents the HAPSITE survey analytical results for this structure.

The 24-hour SUMMA canister indoor air sample was collected in the basement living room. No target analytes exceeded indoor air RBSLs or RALs within the breathing zone during the HAPSITE survey or the 24-hour SUMMA canister sampling at this structure (Tables 3 and 5, respectively).

4.1.3 0004-H

The VI investigation at location 0004-H was conducted on March 13, 2017. No interior background sources were identified within the residence during the HAPSITE survey. Table 6 presents the HAPSITE survey analytical results for this structure.

The 24-hour SUMMA canister indoor air sample was collected in the basement (single large room). No target analytes exceeded indoor air RBSLs or RALs within the breathing zone during the HAPSITE survey or the 24-hour SUMMA canister sampling at this structure (Tables 3 and 6, respectively).

4.1.4 0012-H

The VI investigation at location 0012-H was conducted on March 13, 2017. No interior background sources were identified within the residence during the HAPSITE survey. Table 7 presents the HAPSITE survey analytical results for this structure.

The 24-hour SUMMA canister indoor air sample was collected in the basement living room. No target analytes exceeded indoor air RBSLs or RALs within the breathing zone during the HAPSITE survey or the 24-hour SUMMA canister sampling at this structure (Tables 3 and 7, respectively).

4.1.5 0013-H

The VI investigation at location 0013-H was conducted on March 9, 2017. No interior background sources were identified within the residence during the HAPSITE survey. Table 8 presents the HAPSITE survey analytical results for this structure.

The 24-hour SUMMA canister indoor air sample was collected in the basement living room. No target analytes exceeded indoor air RBSLs or RALs within the breathing zone during the HAPSITE survey or the 24-hour SUMMA canister sampling at this structure (Tables 3 and 8, respectively).

4.1.6 0025-H

The VI investigation at location 0025-H was conducted on March 13, 2017. No interior background sources were identified within the residence during the HAPSITE survey. Table 9 presents the HAPSITE survey analytical results for this structure.

The 24-hour SUMMA canister indoor air sample was collected in the basement living room. 1,4-Dioxane was detected at 2.3 $\mu g/m^3$, which exceeded the 1,4-Dioxane RBSL (0.56 $\mu g/m^3$) but not the RAL (Table 3). No other target analytes exceeded indoor air RBSLs or RALs within the breathing zone during the HAPSITE survey or the 24-hour SUMMA canister sampling at this structure (Tables 3 and 9, respectively).

4.1.7 0026-H

The VI investigation at location 0026-H was conducted on March 9, 2017. No interior background sources were identified within the residence during the HAPSITE survey. Table 10 presents the HAPSITE survey analytical results for this structure.

The 24-hour SUMMA canister indoor air sample was collected in the basement living room. The initial 24-hour SUMMA canister indoor air sample was deployed on March 9, 2017. Upon retrieval of the initial canister on March 10, 2017 the final vacuum was positive; therefore, a new canister was deployed on March 15, 2017 and retrieved on March 16, 2017. The second canister was analyzed and the initial canister was not. No target analytes exceeded indoor air RBSLs or RALs within the breathing zone during the HAPSITE survey or the 24-hour SUMMA canister sampling at this structure (Tables 3 and 10, respectively).

4.1.8 0027-H

The VI investigation at location 0027-H was conducted on March 9, 2017. No interior background sources were identified within the residence during the HAPSITE survey. Table 11 presents the HAPSITE survey analytical results for this structure.

The 24-hour SUMMA canister indoor air sample was collected in the basement laundry room. A normal and a field duplicate 24-hour SUMMA canister sample were collected. No target analytes exceeded indoor air RBSLs or RALs within the breathing zone during the HAPSITE survey or the 24-hour SUMMA canister sampling at this structure (Tables 3 and 11, respectively).

4.1.9 0029-H

The VI investigation at location 0029-H was conducted on March 30, 2017. No interior background sources were identified within the residence during the HAPSITE survey. Table 12 presents the HAPSITE survey analytical results for this structure.

The 24-hour SUMMA canister indoor air sample was collected in the basement living room. No target analytes exceeded indoor air RBSLs or RALs within the breathing zone during the HAPSITE survey or the 24-hour SUMMA canister sampling at this structure (Tables 3 and 12, respectively).

4.1.10 0038-H

The VI investigation at location 0038-H was conducted on April 10, 2017. No interior background sources were identified within the residence during the HAPSITE survey. Table 13 presents the HAPSITE survey analytical results for this structure.

The 24-hour SUMMA canister indoor air sample was collected in the basement living room. A normal and field duplicate 24-hour SUMMA canister sample were collected. No target analytes exceeded indoor air RBSLs or RALs within the breathing zone during the HAPSITE survey or the 24-hour SUMMA canister sampling at this structure (Tables 3 and 13, respectively).

4.1.11 0064-H

The VI investigation at location 0064-H was conducted on April 13, 2017. This location was not previously sampled in 2015, but was sampled in 2017 following the resident's request. The residence underwent a limited VI protocol sampling event, per the request of VHA. No interior background sources were identified within the residence during the HAPSITE survey. Table 14 presents the HAPSITE survey analytical results for this structure.

The 24-hour SUMMA canister indoor air sample was collected in the ground-level living room (single-story residence). No target analytes exceeded indoor air RBSLs or RALs within the breathing zone during the HAPSITE survey or the 24-hour SUMMA canister sampling at this structure (Tables 3 and 14, respectively).

4.2 New Structures (Full VI Protocol)

The following subsections present the analytical results of the HAPSITE survey/pressure-cycling along with sample locations and sample condition descriptions for the seven new structures sampled in 2017 (0057-H, 0058-H, 0059-H, 0060-H, 0061-H, 0062-H, and 0063-H). HAPSITE calibration reports are included in Appendix D and are organized by calibration date. HAPSITE calibration parameters were within the specifications defined in the RI Work Plan (FE, 2015).

4.2.1 0057-H

The VI investigation at location 0057-H was conducted on April 5, 2017. No interior background sources were identified within the residence during the HAPSITE survey. Three targeted differential pressures (-5, -10, and 5 pascals [Pa]) were achieved during pressure cycling. Approximately 2.5 air volumes were exchanged during each pressure step. Table 15 presents the HAPSITE analytical results from the HAPSITE survey and the pressure cycling event at this structure.

No target analytes exceeded indoor air RBSLs or RALs within the breathing zone during the HAPSITE survey and pressure cycling event at this structure (Table 15). No indoor air samples were collected for EPA Method TO-15 analysis.

No target analytes were detected above the soil gas RBSL in the near-slab soil gas (Table 15).

4.2.2 0058-H

The VI investigation at location 0058-H was conducted on March 6, 2017. No interior background sources were identified within the residence during the HAPSITE survey. Three targeted differential pressures (-5, -10, and 5 Pa) were achieved during pressure cycling. Approximately 2.5 air volumes were exchanged during each pressure step. Table 16 presents the HAPSITE analytical results from the HAPSITE survey and the pressure cycling event at this structure.

No target analytes exceeded indoor air RBSLs or RALs within the breathing zone during the HAPSITE survey and pressure cycling event at this structure (Table 16). No indoor air samples were collected for EPA Method TO-15 analysis.

No target analytes were detected above the soil gas RBSL in the near-slab soil gas (Table 16).

4.2.3 0059-H

The VI investigation at location 0059-H was conducted on March 17, 2017. No interior background sources were identified within the residence during the HAPSITE survey. Three targeted differential pressures (-5, -10, and 5 Pa) were achieved during pressure cycling. Approximately 2.5 air volumes were exchanged during each pressure step. Table 17 presents the HAPSITE analytical results from the HAPSITE survey and the pressure cycling event at this structure.

Vapors entering the residence basement laundry room floor drain during induced negative pressure exceeded both the PCE indoor air RBSL and RAL and the TCE indoor air RBSL. Vapor screening samples were collected with the HAPSITE probe 1 inch above the floor drain and not in the breathing zone. All screening samples collected within the breathing zone during the HAPSITE survey and pressure cycling were below the indoor air RBSLs (Table 17). For this reason, no indoor air samples were collected for EPA Method TO-15 analysis, in accordance with the approved VI sampling protocol.

No target analytes were detected above the soil gas RBSL in the near-slab soil gas (Table 17).

4.2.4 0060-H

The VI investigation at location 0060-H was conducted on March 7, 2017. No interior background sources were identified within the residence during the HAPSITE survey. Three targeted differential pressures (-5, -10, and 5 Pa) were achieved during pressure cycling. Approximately 2.5 air volumes were exchanged during each pressure step. Table 18 presents the HAPSITE analytical results from the HAPSITE survey and the pressure cycling event at this structure.

No target analytes exceeded indoor air RBSLs or RALs within the breathing zone during the HAPSITE survey and pressure cycling event at this structure (Table 18). No indoor air samples were collected for EPA Method TO-15 analysis.

No target analytes were detected above the soil gas RBSL in the near-slab soil gas (Table 18).

4.2.5 0061-H

The VI investigation at location 0061-H was conducted on March 8, 2017. No interior background sources were identified within the residence during the HAPSITE survey. Three targeted differential pressures (-5, -10, and 5 Pa) were achieved during pressure cycling. Approximately 2.5 air volumes were

exchanged during each pressure step. Table 19 presents the HAPSITE analytical results from the HAPSITE survey and the pressure cycling event at this structure.

No target analytes exceeded indoor air RBSLs or RALs within the breathing zone during the HAPSITE survey and pressure cycling event at this structure (Table 19). No indoor air samples were collected for EPA Method TO-15 analysis.

No target analytes were detected above the soil gas RBSL in the near-slab soil gas (Table 19).

4.2.6 0062-H

The VI investigation at location 0062-H was conducted on March 29, 2017. No interior background sources were identified within the residence during the HAPSITE survey. Three targeted differential pressures (-5, -10, and 5 Pa) were achieved during pressure cycling. Approximately 2.5 air volumes were exchanged during each pressure step. Table 20 presents the HAPSITE analytical results from the HAPSITE survey and the pressure cycling event at this structure.

No target analytes exceeded indoor air RBSLs or RALs within the breathing zone during the HAPSITE survey and pressure cycling event at this structure (Table 20). No indoor air samples were collected for EPA Method TO-15 analysis.

No target analytes were detected above the soil gas RBSL in the near-slab soil gas (Table 20).

4.2.7 0063-H

The VI investigation at location 0063-H was conducted on March 21, 2017. Three interior background sources containing PCE were identified within the residence during the HAPSITE survey. These three products were removed from residence prior to pressure cycling. One additional PCE-containing product was identified at the beginning of the 5 Pa pressure cycle and was removed from the residence. Three targeted differential pressures (-5, -10, and 5 Pa) were achieved during pressure cycling. Approximately 2.5 air volumes were exchanged during each pressure step. Table 21 presents the HAPSITE analytical results from the HAPSITE survey and the pressure cycling event at this structure.

No target analytes exceeded indoor air RBSLs or RALs within the breathing zone during the HAPSITE survey and pressure cycling event at this structure (Table 21). No indoor air samples were collected for EPA Method TO-15 analysis.

No target analytes were detected above the soil gas RBSL in the near-slab soil gas (Table 21).

4.2.8 Additional Information

All field notes were scribed in spiral-bound notebooks during the 2017 sampling events. These notebooks included a field logbook, HAPSITE field forms, SUMMA field forms, pressure cycling field forms, VI investigation QA assurance checklist forms, and daily report forms. A scanned copy of all field notes is included in Appendix E. Chain-of-custody forms and Analytical Request forms for the EPA Method TO-15 and TO-15 SIM samples collected during the 2017 sampling events also are included in Appendix E. All field documentation was scanned and sent to the VHA and U.S. Army Corps of Engineers (USACE) for quality control review on a weekly basis for the first three weeks of sampling. Appendix F contains the native HAPSITE data reports for each sampled location.

In an effort to ensure that field documentation was performed in accordance with the QAPP and Sampling and Analysis Plan (SAP), a pre-field kickoff meeting took place with the field staff to discuss field documentation and the requirements of the QAPP and SAP prior to any sampling. A daily QA checklist to monitor compliance with the QAPP was completed.

Furthermore, quality assurance protocols were implemented to ensure supplemental sampling data would achieve project data quality objectives. During the first week of VI sampling, the USACE provided oversight in the field and an in-person meeting with the contractor, regulators, and VHA was conducted to review field documentation for accuracy and completeness. Additionally, the VHA and USACE routinely spot-checked field documentation throughout the sampling event. This was accomplished by submitting electronic scanned copies of all completed field documentation to the VHA and USACE weekly for review. Any noncompliance issues were identified and adjustments by the field team were made to resolve them. All field documentation is presented in Appendix E.

4.3 Deviations from Remedial Investigation Work Plan

During the 2017 VI investigative work, there was no deviations from the RI Work Plan (SAP, Appendix B of the RI Work Plan [FE, 2015]) and MFM #18 (Appendix A) (EA, 2017).

SECTION 5

References

EA Engineering, Science, and Technology, Inc., PBC (EA). 2015. *2016 VI Sampling Plan for Accelerated Operable Unit 1: 700 South 1600 East PCE Plume Technical Memorandum*, Salt Lake City, Utah. December.

EA Engineering, Science, and Technology, Inc., PBC (EA). 2016. *700 South 1600 East PCE Plume AOU 1: East Side Springs 2016 Vapor Intrusion Investigation Field Data Report*, Salt Lake City, Utah. September.

EA Engineering, Science, and Technology, Inc., PBC (EA). 2017. *Minor Field Modification #18 Remedial Investigation Work Plan AOU 1: 700 South 1600 East PCE Plume*, Salt Lake City, Utah. March.

First Environment (FE). 2015. *Final Remedial Investigation Work Plan, AOU 1: East Side Springs, 700 South 1600 East PCE Plume*, Salt Lake City, Utah. July.

Tables

Table 1. Sample Purpose, Location, and Type

AOU-1 – 2017 Vapor Intrusion Investigation Field Data Report, Salt Lake City, Utah

Sample Purpose	Structure Location ID	HAPSITE®/ Pressure Control Protocol	HAPSITE®/ No Pressure Control Protocol	TO-15/TO-15 SIM Indoor Air[a]	TO-15 Near-Slab Soil Gas[a]	HAPSITE® Ambient Air Monitoring	Full Interview and Building Survey	Abbreviated Interview and Building Survey Update
SUMMA confirmation sampling (resampling previously sampled structures using limited VI protocol)	0001-H		X	X				X
	0002-H		X	X				X
	0004-H		X	X				X
	0012-H		X	X				X
	0013-H		X	X				X
	0025-H		X	X				X
	0026-H		X	X				X
	0027-H		X	X				X
	0029-H		X	X				X
	0038-H		X	X				X
	0064-H		X	X				X
New structures (supplemental data using full VI protocol)	0057-H	X				X	X	
	0058-H	X				X	X	
	0059-H	X				X	X	
	0060-H	X				X	X	
	0061-H	X				X	X	
	0062-H	X				X	X	
	0063-H	X				X	X	

[a] TO-15 and TO-15 SIM confirmation samples were only to be collected at full VI protocol structures (new structures) if a residential indoor air screening level and/or soil gas screening level was exceeded during full VI protocol sampling. No residential indoor air and soil gas screening levels were exceeded during full VI protocol investigations. TO-15 and TO-15 SIM indoor air confirmation samples were collected at all limited VI protocol structures (previously sampled structures).

Notes:
AOU-1 = Accelerated Operable Unit 1 East Side Springs
ID = identification
VI = vapor intrusion

Table 2. Summary of Screening Levels and Removal Action Levels

AOU-1 – 2017 Vapor Intrusion Investigation Field Data Report, Salt Lake City, Utah

CASRN	Chemical	Residential Indoor Air SL (µg/m^3)	Residential Indoor Air Tier 1 RAL (µg/m^3)	Residential Indoor Air Tier 2 RAL (µg/m^3)	Residential Soil Gas SL (µg/m^3)
123911	1,4-Dioxane	0.56	5.6	56	19
156592	cis-1,2-Dichloroethene	--	--	--	--
127184	Tetrachloroethene	11	41	120	370
79016	Trichloroethene	0.48	2.1	6.3	16
75014	Vinyl chloride	0.17	1.7	17	5.7

Source: Remedial Investigation Work Plan Appendix F (FE 2015)

Notes:
-- = No screening or removal levels have been established for cis-1,2-Dichloroethene.
µg/m^3 = micrograms per cubic meter
AOU-1 = Accelerated Operable Unit 1 East Side Springs
CASRN = Chemical Abstract Services Registry Number
RAL = removal action level
SL = screening level

Table 3. 2017 Confirmation EPA Method TO-15 SIM Indoor Air Results for 2015 Previously Sampled Locations
AOU-1 – 2017 Vapor Intrusion Investigation Field Data Report, Salt Lake City, Utah

							Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	1,4-Dioxane
							Res. IASL: 11 µg/m³	0.48 µg/m³	NA	0.17 µg/m³	0.56 µg/m³
Location ID	Sample ID	Sample Location Description	Sample Date	Sample Type	Method	Units	Tier 1 RAL: 41 µg/m³	2.1 µg/m³	NA	1.7 µg/m³	5.6 µg/m³
0001-H	A-0001H-032317-TO-001-BAS	Basement Living Room	3/23/2017	N	EPA TO-15 SIM	µg/m³	**1.1**	0.27 U	0.2 U	**0.17**	0.18 U
0001-H	A-0001H-032317-TO-002-BAS	Basement Living Room	3/23/2017	FD	EPA TO-15 SIM	µg/m³	**1.1**	0.27 U	0.2 U	**0.19**	0.18 U
0002-H	A-0002H-032317-TO-001-BAS	Basement Living Room	3/23/2017	N	EPA TO-15 SIM	µg/m³	**1.4**	**0.29**	0.2 U	0.13 U	0.18 U
0004-H	A-0004H-031417-TO-001-BAS	Basement (one large room)	3/14/2017	N	EPA TO-15 SIM	µg/m³	0.34 U	0.27 U	0.2 U	0.13 U	0.18 U
0012-H	A-0012H-031417-TO-001-BAS	Basement Living Room	3/14/2017	N	EPA TO-15 SIM	µg/m³	**2.3**	0.27 U	0.2 U	0.13 U	0.18 U
0013-H	A-0013H-031017-TO-001-BAS	Basement Living Room	3/10/2017	N	EPA TO-15 SIM	µg/m³	0.34 U	0.27 U	0.2 U	0.13 U	0.18 U
0025-H	A-0025H-031417-TO-001-BAS	Basement Hallway	3/14/2017	N	EPA TO-15 SIM	µg/m³	**0.37**	0.27 U	0.2 U	0.13 U	**2.3**
0026-H	A-0026H-031617-TO-001-LIV	Basement Living Room	3/16/2017	N	EPA TO-15 SIM	µg/m³	**2**	0.27 U	0.2 U	0.13 U	0.18 U
0027-H	A-0027H-031017-TO-001-BAS	Basement Laundry Room	3/10/2017	N	EPA TO-15 SIM	µg/m³	0.34 U	0.27 U	0.2 U	0.13 U	0.18 U
0027-H	A-0027H-031017-TO-002-BAS	Basement Laundry Room	3/10/2017	FD	EPA TO-15 SIM	µg/m³	0.34 U	0.27 U	0.2 U	0.13 U	0.18 U
0029-H	A-0029H-033117-TO-001-BAS	Basement Living Room	3/31/2017	N	EPA TO-15 SIM	µg/m³	**2**	0.27 U	0.2 U	0.13 U	0.18 U
0038-H	A-0038H-041117-TO-001-BAS	Basement Living Room	4/11/2017	N	EPA TO-15 SIM	µg/m³	0.34 U	0.27 U	0.2 U	0.13 U	0.18 U
0038-H	A-0038H-041117-TO-002-BAS	Basement Living Room	4/11/2017	FD	EPA TO-15 SIM	µg/m³	0.34 U	0.27 U	0.2 U	0.13 U	0.18 U
0064-H	A-0064H-041417-TO-001-LIV	Main Level Living Room	4/14/2017	N	EPA TO-15 SIM	µg/m³	1.9 J	0.27 UJ	0.2 UJ	0.13 UJ	0.18 UJ

Notes:
Table 3 contains the TO-15 SIM analytical results. See Appendix B for TO-15 analytical results.
Bolded values are detections.
Shaded values are screening level exceedances.

µg/m³ = micrograms per cubic meter
AOU-1 = Accelerated Operable Unit 1 East Side Springs
EPA = U.S. Environmental Protection Agency
FD = field duplicate
IASL = residential indoor air screening level
ID = identification
J = Estimated value. The result is estimated due to associated quality control problems.
N = normal sample
RAL = residential removal action level
Res. = residential
SIM = selected ion monitoring
U = Not detected. The analyte was analyzed for but not detected above the method detection limit.

Table 4. 0001-H Limited VI Protocol HAPSITE Analytical Results

AOU-1 – 2017 Vapor Intrusion Investigation Field Data Report, Salt Lake City, Utah

					cis-1,2-Dichloroethene µg/m³		Trichloroethene µg/m³	Tetrachloroethene µg/m³	
					SG RSL	NA	16 µg/m³	370 µg/m³	
Date	Time	Run #	Sample ID	Sample Location Description	IA RSL	NA	0.48 µg/m³	11 µg/m³	Notes
3/15/2017	8:19	1	CV1-031517	Calibration check	96%		94%	92%	Relative percent difference (acceptable range > 70% or < 130%)
3/15/2017	10:21	2	NA	Blank sample	NA		NA	NA	Blank sample
3/15/2017	11:05	3	A-0001H-031517-OA-003-OUT1	Outdoor air (west side)	< 0.4		< 0.5	< 0.7	
3/15/2017	11:12	4	A-0001H-031517-IA-004-LIV1	Main level living room	< 0.4		< 0.5	**4.95**	
3/15/2017	11:27	5	A-0001H-031517-IA-005-BAS1	Basement living area	< 0.4		< 0.5	**2.24**	
3/15/2017	11:38	6	A-0001H-031517-IA-006-SUM1	Basement sump room	< 0.4		< 0.5	**2.31**	
3/15/2017	11:52	7	A-0001H-031517-IA-007-BED1	Basement bedroom	< 0.4		< 0.5	**1.69**	
3/15/2017	12:07	8	A-0001H-031517-IA-008-WBED1	Upstairs bedroom (west)	< 0.4		< 0.5	**2.44**	
3/15/2017	12:18	9	A-0001H-031517-IA-009-MBED1	Master bedroom (east)	< 0.4		< 0.5	**5.15**	
3/15/2017	12:27	1	A-0001H-031517-IA-001-KIT1	Kitchen (upstairs)	NA		NA	NA	Run scan method to help determine background for Ion 61.
3/15/2017	12:36	10	A-0001H-031517-IA-010-BAT1	Upstairs bathroom	< 0.4		< 0.5	**4.81**	
3/15/2017	12:45	1	NA	PCE survey of products	NA		NA	NA	PCE survey of products under kitchen sink; Goo Gone identified. Requested product removal from residence.
3/15/2017	12:51	2	NA	PCE survey of products	NA		NA	NA	PCE survey of products under kitchen sink; Goo Gone identified. Requested product removal from residence.
3/15/2017	13:00	17	CV2-031517	Calibration check	152%		96%	84%	Relative percent difference (acceptable range > 70% or < 130%)
3/22/2017	10:40	8	CV1-032217	Calibration check	104%		110%	112%	Relative percent difference (acceptable range > 70% or < 130%)
3/22/2017	10:50	9	NA	Blank sample	NA		NA	NA	Blank sample
3/22/2017	11:15	10	A-0001H-032217-IA-010-LIV1	Main level living room	< 0.4		< 0.5	**1.94**	
3/22/2017	11:25	11	A-0001H-032217-OA-011-OUT1	Outdoor air (west side)	< 0.4		< 0.5	< 0.7	
3/22/2017	11:32	12	A-0001H-032217-IA-012-BAS1	Basement living area	< 0.4		< 0.5	**1.36**	
3/23/2017	7:23	1	CV2-032317	Calibration check	96%		96%	92%	Relative percent difference (acceptable range > 70% or < 130%)

Notes:
Bolded values are detections.

% = percent
> = greater than
< = less than
µg/m³ = micrograms per cubic meter
AOU-1 = Accelerated Operable Unit 1 East Side Springs
IA = indoor air
ID = identification
NA = not applicable
OA = outdoor air
PCE = tetrachloroethene
RSL = residential screening level
SG = soil gas
VI = vapor intrusion

Table 5. 0002-H Limited VI Protocol HAPSITE Analytical Results

AOU-1 – 2017 Vapor Intrusion Investigation Field Data Report, Salt Lake City, Utah

					cis-1,2-Dichloroethene µg/m³		Trichloroethene µg/m³	Tetrachloroethene µg/m³	
					SG RSL	NA	16 µg/m³	370 µg/m³	
Date	**Time**	**Run #**	**Sample ID**	**Sample Location Description**	**IA RSL**	**NA**	**0.48 µg/m³**	**11 µg/m³**	**Notes**
3/22/2017	10:41	8	CV1-032217	Calibration check	104%		110%	112%	Relative percent difference (acceptable range > 70% or < 130%)
3/22/2017	14:16	13	A-0002H-032217-IA-013-LIV1	Living room (main level)	< 0.4		< 0.5	< 0.7	
3/22/2017	14:25	14	A-0002H-032217-OA-014-OUT1	Outdoor air (north side)	< 0.4		< 0.5	< 0.7	
3/22/2017	14:38	15	A-0002H-032217-IA-015-BAS1	Basement living room	< 0.4		< 0.5	< 0.7	
3/22/2017	14:44	16	A-0002H-032217-IA-016-STO1	Basement storage under stairs	< 0.4		< 0.5	< 0.7	
3/22/2017	14:54	17	NA	HAPSITE froze; run failed	NA		NA	NA	
3/22/2017	15:09	18	A-0002H-032217-IA-018-KIT1	Basement kitchen near floor drain	< 0.4		< 0.5	**0.88**	
3/22/2017	15:19	19	A-0002H-032217-IA-019-FLD1	Floor drain in basement kitchen	< 0.4		< 0.5	**1.02**	
3/23/2017	7:23	1	CV2-032317	Calibration check	96%		96%	92%	Relative percent difference (acceptable range > 70% or < 130%)

Notes:
Bolded values are detections.

= number
% = percent
> = greater than
< = less than
µg/m³ = micrograms per cubic meter
AOU-1 = Accelerated Operable Unit 1 East Side Springs
IA = indoor air
ID = identification
NA = not applicable
OA = outdoor air
RSL = residential screening level
SG = soil gas

Table 6. 0004-H Limited VI Protocol HAPSITE Analytical Results

AOU-1 – 2017 Vapor Intrusion Investigation Field Data Report, Salt Lake City, Utah

					cis-1,2-Dichloroethene µg/m³		Trichloroethene µg/m³	Tetrachloroethene µg/m³	
					SG RSL	NA	16 µg/m³	370 µg/m³	
Date	Time	Run #	Sample ID	Sample Location Description	IA RSL	NA	0.48 µg/m³	11 µg/m³	Notes
3/13/2017	7:00	2	CV1-031317	Calibration check	90%		96%	94%	Relative percent difference (acceptable range > 70% or < 130%)
3/13/2017	11:15	6	A-0004H-031317-OA-006-OUT1	Outdoor air - north side	< 0.4		< 0.5	< 0.7	
3/13/2017	11:25	7	A-0004H-031317-IA-007-LIV1	Main level living room	< 0.4		< 0.5	< 0.7	
3/13/2017	11:39	8	A-0004H-031317-IA-008-BAS1	Basement (one large open room)	< 0.4		< 0.5	< 0.7	
3/13/2017	12:21	9	NA	Blank sample	NA		NA	NA	Blank sample
3/13/2017	NA	10	NA	Run failed	NA		NA	NA	HAPSITE froze; sample run canceled
3/13/2017	NA	11	NA	Run failed	NA		NA	NA	HAPSITE froze; sample run canceled
3/13/2017	13:00	12	CV2-031317	Calibration check	82%		92%	90%	Relative percent difference (acceptable range > 70% or < 130%)

Notes:

= number
% = percent
> = greater than
< = less than
µg/m³ = micrograms per cubic meter
AOU-1 = Accelerated Operable Unit 1 East Side Springs
IA = indoor air
ID = identification
NA = not applicable
OA = outdoor air
RSL = residential screening level
SG = soil gas

Table 7. 0012-H Limited VI Protocol HAPSITE Analytical Results

AOU-1 – 2017 Vapor Intrusion Investigation Field Data Report, Salt Lake City, Utah

					cis-1,2-Dichloroethene µg/m³		Trichloroethene µg/m³	Tetrachloroethene µg/m³	
					SG RSL	NA	16 µg/m³	370 µg/m³	
Date	Time	Run #	Sample ID	Sample Location Description	IA RSL	NA	0.48 µg/m³	11 µg/m³	Notes
3/13/2017	13:00	12	CV2-031317	Calibration check	82%		92%	90%	Relative percent difference (acceptable range > 70% or < 130%)
3/13/2017	13:16	13	NA	Blank sample	NA		NA	NA	
3/13/2017	14:16	14	A-0012H-031317-IA-014-LIV1	Main level living room	< 0.4		< 0.5	**1.22**	
3/13/2017	14:30	15	A-0012H-031317-OA-015-OUT1	Outdoor air - west side	< 0.4		< 0.5	< 0.7	
3/13/2017	14:38	16	A-0012H-031317-IA-016-BAS1	Basement living room	< 0.4		< 0.5	**1.90**	
3/13/2017	14:47	17	A-0012H-031317-IA-017-OFF1	Basement office	< 0.4		< 0.5	**2.58**	
3/13/2017	14:56	18	A-0012H-031317-IA-018-BAT1	Basement bathroom	< 0.4		< 0.5	**2.03**	Floor drain on bathroom floor
3/13/2017	15:05	19	A-0012H-031317-IA-019-LAU1	Basement laundry room	< 0.4		< 0.5	**2.03**	Floor drain in laundry room
3/13/2017	15:35	20	A-0012H-031317-IA-020-FDR1	Basement bathroom floor drain	< 0.4		< 0.5	**2.24**	HAPSITE probe placed on floor drain
3/13/2017	16:35	21	CV3-031317	Calibration check	74%		86%	84%	Relative percent difference (acceptable range > 70% or < 130%)

Notes:
Bolded values are detections.

= number
% = percent
> = greater than
< = less than
µg/m³ = micrograms per cubic meter
AOU-1 = Accelerated Operable Unit 1 East Side Springs
IA = indoor air
ID = identification
NA = not applicable
OA = outdoor air
RSL = residential screening level
SG = soil gas

Table 8. 0013-H Limited VI Protocol HAPSITE Analytical Results

AOU-1 – 2017 Vapor Intrusion Investigation Field Data Report, Salt Lake City, Utah

						cis-1,2-Dichloroethene µg/m³		Trichloroethene µg/m³	Tetrachloroethene µg/m³	
						SG RSL	NA	16 µg/m³	370 µg/m³	
Date	**Time**	**Run #**	**Sample ID**	**Sample Location Description**		**IA RSL**	**NA**	**0.48 µg/m³**	**11 µg/m³**	**Notes**
3/9/2017	8:08	4	CV1-030917	Calibration check		80%		90%	84%	Relative percent difference (acceptable range > 70% or < 130%)
3/9/2017	14:10	17	A-0013H-030917-OA-017-OUT1	Outdoor air - south side		< 0.4		< 0.5	< 0.7	
3/9/2017	14:20	18	A-0013H-030917-IA-018-HAL1	Main level hallway near kitchen		< 0.4		< 0.5	< 0.7	
3/9/2017	14:30	19	A-0013H-030917-IA-019-LAN1	Upstairs landing/office area		< 0.4		< 0.5	< 0.7	
3/9/2017	14:40	20	A-0013H-030917-IA-020-BAS1	Basement living room		< 0.4		< 0.5	< 0.7	
3/9/2017	17:03	25	CV2-030917	Calibration check		82%		94%	92%	Relative percent difference (acceptable range > 70% or < 130%)

Notes:

= number
% = percent
> = greater than
< = less than
µg/m³ = micrograms per cubic meter
AOU-1 = Accelerated Operable Unit 1 East Side Springs
IA = indoor air
ID = identification
NA = not applicable
OA = outdoor air
RSL = residential screening level
SG = soil gas

Table 9. 0025-H Limited VI Protocol HAPSITE Analytical Results

AOU-1 – 2017 Vapor Intrusion Investigation Field Data Report, Salt Lake City, Utah

					cis-1,2-Dichloroethene µg/m³		Trichloroethene µg/m³	Tetrachloroethene µg/m³	
					SG RSL	NA	16 µg/m³	370 µg/m³	
Date	**Time**	**Run #**	**Sample ID**	**Sample Location Description**	**IA RSL**	**NA**	**0.48 µg/m³**	**11 µg/m³**	**Notes**
3/13/2017	7:00	2	CV1-031317	Calibration check	90%		96%	94%	Relative percent difference (acceptable range > 70% or < 130%)
3/13/2017	9:05	3	A-0025H-031317-OA-003-OUT1	Outdoor air - east side	< 0.4		< 0.5	< 0.7	
3/13/2017	9:14	4	A-0025H-031317-IA-004-LIV1	Main level living room	< 0.4		< 0.5	< 0.7	
3/13/2017	9:23	5	A-0025H-031317-IA-005-BAS1	Basement hallway (central location)	< 0.4		< 0.5	< 0.7	
3/13/2017	13:00	12	CV2-031317	Calibration check	82%		92%	90%	Relative percent difference (acceptable range > 70% or < 130%)

Notes:

= number
% = percent
< = greater than
< = less than
µg/m³ = micrograms per cubic meter
AOU-1 = Accelerated Operable Unit 1 East Side Springs
IA = indoor air
ID = identification
NA = not applicable
OA = outdoor air
RSL = residential screening level
SG = soil gas

Table 10. 0026-H Limited VI Protocol HAPSITE Analytical Results

AOU-1 – 2017 Vapor Intrusion Investigation Field Data Report, Salt Lake City, Utah

					cis-1,2-Dichloroethene µg/m³		Trichloroethene µg/m³	Tetrachloroethene µg/m³	
					SG RSL	NA	16 µg/m³	370 µg/m³	
Date	**Time**	**Run #**	**Sample ID**	**Sample Location Description**	**IA RSL**	**NA**	**0.48 µg/m³**	**11 µg/m³**	**Notes**
3/9/2017	8:08	4	CV1-030917	Calibration check	80%		90%	84%	Relative percent difference (acceptable range > 70% or < 130%)
3/9/2017	9:05	6	A-0026H-030917-OA-006-OUT1	Outdoor air - north side	< 0.4		< 0.5	< 0.7	
3/9/2017	9:15	7	A-0026H-030917-IA-007-BAS1	Basement living room	< 0.4		< 0.5	**1.29**	
3/9/2017	9:25	8	A-0026H-030917-IA-008-LAU1	Basement laundry room	< 0.4		< 0.5	**1.08**	
3/9/2017	9:33	9	A-0026H-030917-IA-009-LIV1	Main level living room	**0.48**		< 0.5	**0.88**	
3/9/2017	9:42	10	A-0026H-030917-IA-010-HAL1	Main level hallway near kitchen	< 0.4		< 0.5	**0.88**	
3/9/2017	9:51	11	A-0026H-030917-IA-011-LAN1	Second level landing	< 0.4		< 0.5	**0.95**	
3/9/2017	10:00	12	A-0026H-030917-IA-012-UTI1	Basement utility room	< 0.4		< 0.5	**1.08**	
3/9/2017	10:10	1	NA	PCE survey of products	NA		NA	NA	Conducted on products in utility room; no products with PCE identified
3/9/2017	17:03	25	CV2-030917	Calibration check	82%		94%	92%	Relative percent difference (acceptable range > 70% or < 130%)

Notes:
Bolded values are detections.

= number
% = percent
> = greater than
< = less than
µg/m³ = micrograms per cubic meter
AOU-1 = Accelerated Operable Unit 1 East Side Springs
IA = Indoor air
ID = identification
NA = not applicable
OA = outdoor air
PCE = tetrachloroethene
RSL = residential screening level
SG = soil gas

Table 11. 0027-H Limited VI Protocol HAPSITE Analytical Results

AOU-1 – 2017 Vapor Intrusion Investigation Field Data Report, Salt Lake City, Utah

					cis-1,2-Dichloroethene µg/m³		Trichloroethene µg/m³	Tetrachloroethene µg/m³	
					SG RSL	NA	16 µg/m³	370 µg/m³	
Date	**Time**	**Run #**	**Sample ID**	**Sample Location Description**	**IA RSL**	**NA**	**0.48 µg/m³**	**11 µg/m³**	**Notes**
3/9/2017	8:08	4	CV1-030917	Calibration check	80%		90%	84%	Relative percent difference (acceptable range > 70% or < 130%)
3/9/2017	11:05	13	A-0027H-030917-OA-013-OUT1	Outdoor air - north side	< 0.4		< 0.5	< 0.7	
3/9/2017	11:14	14	A-0027H-030917-IA-014-LIV1	Main level living room	< 0.4		< 0.5	< 0.7	
3/9/2017	11:27	15	A-0027H-030917-IA-015-BAS1	Basement hallway area	< 0.4		< 0.5	< 0.7	
3/9/2017	11:34	16	A-0027H-030917-IA-016-MEC1	Basement mechanical room	< 0.4		< 0.5	< 0.7	
3/9/2017	17:03	25	CV2-030917	Calibration check	82%		94%	92%	Relative percent difference (acceptable range > 70% or < 130%)

Notes:

= number
% = percent
> = greater than
< = less than
µg/m³ = micrograms per cubic meter
AOU-1 = Accelerated Operable Unit 1 East Side Springs
IA = indoor air
ID = identification
NA = not applicable
OA = outdoor air
RSL = residential screening level
SG = soil gas

Table 12. 0029-H Limited VI Protocol HAPSITE Analytical Results

AOU-1 – 2017 Vapor Intrusion Investigation Field Data Report, Salt Lake City, Utah

					cis-1,2-Dichloroethene µg/m³		Trichloroethene µg/m³	Tetrachloroethene µg/m³	
					SG RSL	NA	16 µg/m³	370 µg/m³	
Date	Time	Run #	Sample ID	Sample Location Description	IA RSL	NA	0.48 µg/m³	11 µg/m³	Notes
3/30/2017	8:25	1	CV1-033017	Calibration check	94%		94%	92%	Relative percent difference (acceptable range > 70% or < 130%)
3/30/2017	16:17	2	A-0029H-033017-IA-002-LIV1	Living room (main level)	< 0.4		< 0.5	**5.29**	
3/30/2017	16:28	3	A-0029H-033017-OA-003-OUT1	Outdoor air (south side)	< 0.4		< 0.5	< 0.7	
3/30/2017	16:34	4	A-0029H-033017-IA-004-BAS1	Basement living room	< 0.4		< 0.5	**1.22**	
3/30/2017	16:42	5	A-0029H-033017-IA-005-LAN1	Second floor landing	< 0.4		< 0.5	**6.58**	Resident requested sampling be completed by 17:00.
4/3/2017	10:33	2	CV2-040317	Calibration check	140%[a]		134%[a]	132%[a]	Relative percent difference (acceptable range > 70% or < 130%)

[a] No action was taken due to these RPD exceedances since prior sample results were either nondetect or below RSLs. A high RPD indicates that sample results are biased higher than the actual concentration. That is, actual indoor air detections are biased higher than the actual indoor air concentrations. For example, the TCE RPD for CV2-040317 was 134% and the TCE CV result for was 6.7 ppbv for a known calibration gas of 5 ppbv.

Notes:
Bolded values are detections.

= number
% = percent
> = greater than
< = less than
µg/m³ = micrograms per cubic meter
AOU-1 = Accelerated Operable Unit 1 East Side Springs
IA = indoor air
ID = identification
NA = not applicable
OA = outdoor air
RSL = residential screening level
SG = soil gas

Table 13. 0038-H Limited VI Protocol HAPSITE Analytical Results

AOU-1 – 2017 Vapor Intrusion Investigation Field Data Report, Salt Lake City, Utah

					cis-1,2-Dichloroethene µg/m³		Trichloroethene µg/m³	Tetrachloroethene µg/m³	
					SG RSL	NA	16 µg/m³	370 µg/m³	
Date	**Time**	**Run #**	**Sample ID**	**Sample Location Description**	**IA RSL**	**NA**	**0.48 µg/m³**	**11 µg/m³**	**Notes**
4/10/2017	8:53	1	CV1-041017	Calibration check	96%		92%	92%	Relative percent difference (acceptable range > 70% or < 130%)
4/10/2017	12:15	2	A-0038H-041017-IA-002-LIV1	Main level living room	< 0.4		< 0.5	< 0.7	
4/10/2017	12:25	3	A-0038H-041017-IA-003-BAS1	Basement living room	< 0.4		< 0.5	< 0.7	
4/10/2017	13:40	4	CV2-041017	Calibration check	82%		86%	84%	Relative percent difference (acceptable range > 70% or < 130%)

Notes:

= number
% = percent
> = greater than
< = less than
µg/m³ = micrograms per cubic meter
AOU-1 = Accelerated Operable Unit 1 East Side Springs
IA = indoor air
ID = identification
NA = not applicable
OA = outdoor air
RSL = residential screening level
SG = soil gas

Table 14. 0064-H Limited VI Protocol HAPSITE Analytical Results

AOU-1 – 2017 Vapor Intrusion Investigation Field Data Report, Salt Lake City, Utah

Date	Time	Run #	Sample ID	Sample Location Description	Differential Pressure Condition	cis-1,2-Dichloroethene µg/m³		Trichloroethene µg/m³	Tetrachloroethene µg/m³	Notes
						SG RSL	NA	16 µg/m³	370 µg/m³	
						IA RSL	NA	0.48 µg/m³	11 µg/m³	
4/12/2017	15:25	1	CV1-041217	Calibration check	NA	120%		105%	100%	Relative percent difference (acceptable range > 70% or < 130%)
4/13/2017	8:23	2	A-0064H-041317-IA-002-LIV1	Living room	BL	< 0.4		< 0.5	**2.51**	
4/13/2017	14:37	3	CV2-041317	Calibration check	NA	120%		115%	105%	Relative percent difference (acceptable range > 70% or < 130%)

Notes:
Bolded values are detections.

= number
% = percent
> = greater than
< = less than
µg/m³ = micrograms per cubic meter
AOU-1 = Accelerated Operable Unit 1 East Side Springs
BL = baseline
IA = indoor air
ID = identification
NA = not applicable
OA = outdoor air
RSL = residential screening level
SG = soil gas

Table 15. 0057-H Full VI Protocol HAPSITE Analytical Results

AOU-1 – 2017 Vapor Intrusion Investigation Field Data Report, Salt Lake City, Utah

Date	Time	Run #	Sample ID	Sample Location Description	Differential Pressure Condition (Pa)	cis-1,2-Dichloroethene µg/m³		Trichloroethene µg/m³	Tetrachloroethene µg/m³	Notes
						SG RSL	NA	16 µg/m³	370 µg/m³	
						IA RSL	NA	0.48 µg/m³	11 µg/m³	
4/5/2017	7:18	1	CV1-040517	Calibration check	NA	114%		106%	106%	Relative percent difference (acceptable range > 70% or < 130%)
4/5/2017	8:34	2	A-0057H-04052017-IA-002-LIV1	Main level living room	BL	< 0.4		< 0.5	< 0.7	Sample collected in upper unit
4/5/2017	8:42	3	A-0057H-04052017-IA-003-HAL1	Main level hallway	BL	< 0.4		< 0.5	< 0.7	Sample collected in upper unit
4/5/2017	8:59	4	A-0057H-04052017-IA-004-LLIV1	Lower level living room	BL	< 0.4		< 0.5	< 0.7	Lower level samples are collected in lower unit
4/5/2017	9:06	5	A-0057H-04052017-IA-005-LHAL1	Lower level hallway	BL	< 0.4		< 0.5	< 0.7	
4/5/2017	9:21	6	A-0057H-04052017-IA-006-STO1	Storage area below lower unit	BL	< 0.4		< 0.5	< 0.7	
4/5/2017	10:17	7	A-0057H-04052017-IA-007-LHAL1	Lower level hallway	-5	< 0.4		< 0.5	< 0.7	-5 Pa pressure cycle started at 10:16
4/5/2017	10:26	8	A-0057H-04052017-IA-008-LLIV1	Lower level living room	-5	< 0.4		< 0.5	< 0.7	
4/5/2017	10:35	9	A-0057H-04052017-IA-009-LBLO1	Lower level blower door - East wall	-5	< 0.4		< 0.5	< 0.7	
4/5/2017	10:43	10	A-0057H-04052017-IA-010-LHAL1	Lower level hallway	-5	< 0.4		< 0.5	< 0.7	
4/5/2017	10:52	11	A-0057H-04052017-IA-011-LBLO1	Lower level blower door - East wall	-5	< 0.4		< 0.5	< 0.7	
4/5/2017	11:03	12	A-0057H-04052017-IA-012-LHAL1	Lower level hallway	-10	< 0.4		< 0.5	< 0.7	-10 Pa pressure cycle started at 11:02
4/5/2017	11:12	13	A-0057H-04052017-IA-013-LLIV1	Lower level living room	-10	< 0.4		< 0.5	< 0.7	
4/5/2017	11:20	14	A-0057H-04052017-IA-014-LBLO1	Lower level blower door - East wall	-10	< 0.4		< 0.5	< 0.7	
4/5/2017	11:30	15	A-0057H-04052017-IA-015-LHAL1	Lower level hallway	-10	< 0.4		< 0.5	< 0.7	
4/5/2017	11:38	16	A-0057H-04052017-IA-016-LLIV1	Lower level living room	-10	< 0.4		< 0.5	< 0.7	
4/5/2017	11:47	17	A-0057H-04052017-IA-017-LBLO1	Lower level blower door - East wall	-10	< 0.4		< 0.5	< 0.7	
4/5/2017	11:56	18	A-0057H-04052017-IA-018-LHAL1	Lower level hallway	+5	< 0.4		< 0.5	< 0.7	+5 Pa pressure cycle started at 11:52
4/5/2017	12:05	19	A-0057H-04052017-IA-019-LLIV1	Lower level living room	+5	< 0.4		< 0.5	< 0.7	
4/5/2017	12:14	20	A-0057H-04052017-IA-020-LBLO1	Lower level blower door - East wall	+5	< 0.4		< 0.5	< 0.7	
4/5/2017	12:24	21	A-0057H-04052017-IA-021-LLIV1	Lower level living room	+5	< 0.4		< 0.5	< 0.7	
4/5/2017	12:50	1	NA	PCE survey of soil gas sample	NA	NA		NA	NA	No response
4/5/2017	12:52	22	A-0057H-04052017-SG-022-2'	Sample collected at 24" bgs	NA	< 0.4		< 0.5	**2.1**	Undiluted sample
4/5/2017	13:00	23	NA	Blank sample	NA	NA		NA	NA	Blank sample
4/5/2017	14:30	25	CV2-040517	Calibration check	NA	70%		80%	80%	Relative percent difference (acceptable range > 70% or < 130%)

Notes:
Bolded values are detections.

= number
% = percent
' = feet
" = inches
> = greater than
< = less than
µg/m³ = micrograms per cubic meter
AOU-1 = Accelerated Operable Unit 1 East Side Springs
bgs = below ground surface
BL = baseline
IA = indoor air
ID = identification
NA = not applicable
OA = outdoor air
RSL = residential screening level
SG = soil gas

Table 16. 0058-H Full VI Protocol HAPSITE Analytical Results

AOU-1 – 2017 Vapor Intrusion Investigation Field Data Report, Salt Lake City, Utah

Date	Time	Run #	Sample ID	Sample Location Description	Differential Pressure Condition (Pa)	cis-1,2-Dichloroethene µg/m³		Trichloroethene µg/m³	Tetrachloroethene µg/m³	Notes
						SG RSL	NA	16 µg/m³	370 µg/m³	
						IA RSL	NA	0.48 µg/m³	11 µg/m³	
3/6/2017	6:25	2	CV1-030617	Calibration check	NA	104%		104%	104%	Relative percent difference (acceptable range > 70% or < 130%)
3/6/2017	9:26	4	A-0058H-030617-OA-004-OUT1	Outdoor air (east side)	BL	< 0.4		< 0.5	< 0.7	Outdoor air (east side)
3/6/2017	9:39	5	A-0058H-030617-IA-005-LIV1	Upstairs living room	BL	< 0.4		< 0.5	< 0.7	
3/6/2017	9:44	6	A-0058H-030617-IA-006-BAS1	Basement living room	BL	< 0.4		< 0.5	< 0.7	
3/6/2017	11:18	7	A-0058H-030617-IA-007-BAS2	Basement living room near kitchen	-5	< 0.4		< 0.5	< 0.7	-5 Pa pressure cycle started at 11:15
3/6/2017	11:28	8	A-0058H-030617-IA-008-STA1	Blower door/back stairs	-5	< 0.4		< 0.5	< 0.7	
3/6/2017	11:36	9	A-0058H-030617-IA-009-DIN1	Upstairs dining room	-5	< 0.4		< 0.5	< 0.7	
3/6/2017	11:45	10	A-0058H-030617-IA-010-BAS2	Basement living room near kitchen	-5	< 0.4		< 0.5	< 0.7	
3/6/2017	11:52	11	A-0058H-030617-IA-011-STA1	Blower door/back stairs	-5	< 0.4		< 0.5	< 0.7	
3/6/2017	12:00	12	A-0058H-030617-IA-012-DIN1	Upstairs dining room	-5	< 0.4		< 0.5	< 0.7	
3/6/2017	12:08	13	A-0058H-030617-IA-013-BAS2	Basement living room near kitchen	-5	< 0.4		< 0.5	< 0.7	
3/6/2017	12:18	14	A-0058H-030617-IA-014-STA1	Blower door/back stairs	-5	< 0.4		< 0.5	< 0.7	
3/6/2017	12:25	15	A-0058H-030617-IA-015-BAS2	Basement living room near kitchen	-10	< 0.4		< 0.5	< 0.7	-10 Pa pressure cycle started at 12:25
3/6/2017	12:32	16	A-0058H-030617-IA-016-STA1	Blower door/back stairs	-10	< 0.4		< 0.5	< 0.7	
3/6/2017	12:40	17	A-0058H-030617-IA-017-DIN1	Upstairs dining room	-10	< 0.4		< 0.5	< 0.7	
3/6/2017	12:49	18	A-0058H-030617-IA-018-BAS2	Basement living room near kitchen	-10	< 0.4		< 0.5	< 0.7	
3/6/2017	12:58	19	A-0058H-030617-IA-019-STA1	Blower door/back stairs	-10	< 0.4		< 0.5	< 0.7	
3/6/2017	13:11	20	A-0058H-030617-IA-020-BAS1	Basement living room	5	< 0.4		< 0.5	< 0.7	+5 Pa pressure cycle started at 13:10
3/6/2017	13:19	21	A-0058H-030617-IA-021-STA1	Blower door/back stairs	5	< 0.4		< 0.5	< 0.7	
3/6/2017	13:28	22	A-0058H-030617-IA-022-DIN1	Upstairs dining room	5	< 0.4		< 0.5	< 0.7	
3/6/2017	13:37	23	A-0058H-030617-IA-023-BAS1	Basement living room	5	< 0.4		< 0.5	< 0.7	
3/6/2017	13:48	24	A-0058H-030617-IA-024-STA1	Blower door/back stairs	5	< 0.4		< 0.5	< 0.7	+5 Pa pressure cycle ended at 13:50
3/6/2017	14:30	25	A-0058H-030617-SG-025-4'	South side of house, 4 ft bgs (48" bgs)	NA	< 0.4		< 0.5	< 0.7	Sample diluted 1:10
3/6/2017	14:42	26	A-0058H-030617-SG-026-4'	South side of house, 4 ft bgs (48" bgs)	NA	< 0.4		< 0.5	< 0.7	Undiluted sample
3/6/2017	14:52	27	A-0058H-030617-SG-027-6'	South side of house, 6 ft bgs (71.5" bgs)	NA	< 0.4		< 0.5	< 0.7	Undiluted sample
3/6/2017	15:02	28	NA	Blank Sample	NA	NA		NA	NA	Blank
3/6/2017	16:28	30	CV2-030617	Calibration check	NA	50%		82%	82%	Relative percent difference (acceptable range > 70% or < 130%)

Notes:

= number
% = percent
' = feet
" = inches
> = greater than
< = less than
µg/m³ = micrograms per cubic meter
AOU-1 = Accelerated Operable Unit 1 East Side Springs
bgs = below ground surface
BL = baseline.
ft = foot (feet)
IA = indoor air
ID = identification
NA = not applicable
OA = outdoor air
Pa = pascal(s)
RSL = residential screening level
SG = soil gas

Table 17. 0059-H Pressure Cycling HAPSITE Analytical Results

AOU-1 – 2017 Vapor Intrusion Investigation Field Data Report, Salt Lake City, Utah

Date	Time	Run #	Sample ID	Sample Location Description	Differential Pressure Condition (Pa)	cis-1,2-Dichloroethene µg/m³	Trichloroethene µg/m³	Tetrachloroethene µg/m³	Notes
						SG RSL NA	16 µg/m³	370 µg/m³	
						IA RSL NA	0.48 µg/m³	11 µg/m³	
3/17/2017	8:30	14	CV1-031717	Calibration check	NA	92%	98%	96%	Relative percent difference (acceptable range > 70% or < 130%)
3/17/2017	9:10	15	A-0059H-031717-OA-015-OUT1	Outdoor air (east side)	BL	< 0.4	< 0.5	< 0.7	
3/17/2017	9:22	16	A-0059H-031717-IA-016-HAL1	Hallway (main level)	BL	< 0.4	< 0.5	< 0.7	
3/17/2017	9:28	17	A-0059H-031717-IA-017-LAN1	Upstairs landing area	BL	< 0.4	< 0.5	< 0.7	
3/17/2017	9:37	18	A-0059H-031717-IA-018-BAS1	Basement landing	BL	< 0.4	< 0.5	< 0.7	
3/17/2017	10:44	19	A-0059H-031717-IA-019-STO1	Basement storage room with hole in floor	BL	< 0.4	< 0.5	< 0.7	Hole is 3 ft by 3 ft; sub material open
3/17/2017	11:00	20	A-0059H-031717-IA-020-LAU1	Basement laundry room	-5	< 0.4	< 0.5	**2.37**	-5 Pa pressure cycling started at 11:00
3/17/2017	11:08	21	A-0059H-031717-IA-021-STO1	Basement storage room with hole in floor	-5	< 0.4	< 0.5	< 0.7	
3/17/2017	11:18	22	A-0059H-031717-IA-022-BLO1	Blower door/basement living room	-5	< 0.4	< 0.5	**1.83**	
3/17/2017	11:25 - 11:32	1	NA	PCE survey of products	-5	NA	NA	NA	Screened products in laundry room; Goo Gone identified, placed outside of house.
3/17/2017	11:36 - 11:38	2	NA	PCE survey of products	-5	NA	NA	NA	Screened additional products; no detections.
3/17/2017	11:41	23	A-0059H-031717-IA-023-HAL1	Hallway (main level)	-5	< 0.4	< 0.5	< 0.7	
3/17/2017	11:50	24	A-0059H-031717-IA-024-LAN1	Upstairs landing area	-5	< 0.4	< 0.5	< 0.7	
3/17/2017	11:58	25	A-0059H-031717-IA-025-LAU1	Basement laundry room	-5	< 0.4	< 0.5	**1.22**	
3/17/2017	12:06	26	A-0059H-031717-IA-026-BLO1	Blower door/basement living room	-5	< 0.4	< 0.5	**1.15**	
3/17/2017	12:14	27	A-0059H-031717-IA-027-STO1	Basement storage room with hole in floor	-5	< 0.4	< 0.5	< 0.7	
3/17/2017	12:24	28	A-0059H-031717-IA-028-HAL1	Hallway (main level)	-5	< 0.4	< 0.5	< 0.7	
3/17/2017	12:30	29	A-0059H-031717-IA-029-LAU2	Basement laundry room floor drain	-10	**2.18**	**12.35**	**1071.2 E**	-10 Pa pressure cycle started at 12:35; floor drain has notable sewer odor, not a breathing space sample
3/17/2017	12:40	30	A-0059H-031717-IA-030-LAU1	Basement laundry room	-10	< 0.4	< 0.5	**3.19**	
3/17/2017	12:45	3	NA	PCE survey of products	-10	NA	NA	NA	Survey of aerosol fabric adhesive; PCE not detected
3/17/2017	12:53	31	A-0059H-031717-IA-031-BLO1	Blower door/basement living room	-10	< 0.4	< 0.5	< 0.7	
3/17/2017	13:03	32	A-0059H-031717-IA-032-LAU1	Basement laundry room	-10	< 0.4	< 0.5	**0.95**	
3/17/2017	13:15	4	NA	PCE survey of products	-10	NA	NA	NA	PCE survey of floor drain; PCE detected
3/17/2017	13:17	33	A-0059H-031717-IA-033-LAU2	Basement laundry room floor drain	-10	< 0.4	**2.09**	**220.3**	Floor drain sample after flushing with water, not a breathing space sample
3/17/2017	13:40	34	A-0059H-031717-IA-034-LAU1	Basement laundry room	+5	< 0.4	< 0.5	< 0.7	+5 Pa pressure cycling started at 13:35
3/17/2017	13:47	35	A-0059H-031717-IA-035-BLO1	Blower door/basement living room	+5	< 0.4	< 0.5	< 0.7	
3/17/2017	13:58	36	A-0059H-031717-IA-036-HAL1	Hallway (main level)	+5	< 0.4	< 0.5	< 0.7	

Table 17. 0059-H Pressure Cycling HAPSITE Analytical Results

AOU-1 – 2017 Vapor Intrusion Investigation Field Data Report, Salt Lake City, Utah

Date	Time	Run #	Sample ID	Sample Location Description	Differential Pressure Condition (Pa)	cis-1,2-Dichloroethene µg/m³		Trichloroethene µg/m³	Tetrachloroethene µg/m³	Notes
						SG RSL	NA	16 µg/m³	370 µg/m³	
						IA RSL	NA	0.48 µg/m³	11 µg/m³	
3/17/2017	14:15	37	A-0059H-031717-IA-037-LAN1	Upstairs landing area	+5	< 0.4		< 0.5	< 0.7	
3/17/2017	14:25	38	A-0059H-031717-IA-038-LAU1	Basement laundry room	+5	< 0.4		< 0.5	< 0.7	
3/17/2017	15:08	33	NA	PCE survey of soil gas sample	NA	NA		NA	NA	No response
3/17/2017	15:10	39	A-0059H-031717-SG-039-1.8'	Southwest side of house, 20" bgs	NA	< 0.4		< 0.5	< 0.7	Undiluted sample
3/17/2017	15:20	4	NA	PCE survey of soil gas sample	NA	NA		NA	NA	No response
3/17/2017	15:22	40	A-0059H-031717-SG-040-5'	Southwest side of house, 59" bgs	NA	< 0.4		< 0.5	< 0.7	Undiluted sample
3/17/2017	15:32	41	CV2-031717	Calibration check	NA	52%		94%	92%	Relative percent difference (acceptable range > 70% or < 130%)
3/17/2017	15:42	42	NA	Blank sample	NA	NA		NA	NA	Blank sample

Notes:

Bolded values are detections.

Shaded values are screening level and/or removal action level exceedances.

= number
% = percent
' = feet
" = inches
> = greater than
< = less than
µg/m³ = micrograms per cubic meter
AOU-1 = Accelerated Operable Unit 1 East Side Springs
bgs = below ground surface
ft = foot (feet)
IA = indoor air
ID = identification
NA = not applicable
OA = outdoor air
Pa = pascal
PCE = tetrachloroethene
RSL = residential screening level
SG = soil gas

Table 18. 0060-H Pressure Cycling HAPSITE Analytical Results

AOU-1 – 2017 Vapor Intrusion Investigation Field Data Report, Salt Lake City, Utah

Date	Time	Run #	Sample ID	Sample Location Description	Differential Pressure Condition (Pa)	cis-1,2-Dichloroethene µg/m³	Trichloroethene µg/m³	Tetrachloroethene µg/m³	Notes
						SG RSL NA	16 µg/m³	370 µg/m³	
						IA RSL NA	0.48 µg/m³	11 µg/m³	
3/7/2017	7:36	4	CV1-030717	Calibration check	NA	96%	108%	104%	Relative percent difference (acceptable range > 70% or < 130%)
3/7/2017	9:06	5	A-0060H-030717-OA-005-OUT1	Outdoor air (south side)	BL	< 0.4	< 0.5	< 0.7	Wind from southwest
3/7/2017	9:20	6	A-0060H-030717-IA-006-ENT1	Main level entry area	BL	< 0.4	< 0.5	< 0.7	
3/7/2017	9:30	7	A-0060H-030717-IA-007-STA1	Upstairs landing area	BL	< 0.4	< 0.5	< 0.7	
3/7/2017	9:38	8	A-0060H-030717-IA-008-BAS1	Basement living room	BL	< 0.4	< 0.5	< 0.7	
3/7/2017	9:40	9	A-0060H-030717-IA-009-STO1	Basement storage/mechanical room	BL	< 0.4	< 0.5	< 0.7	
3/7/2017	9:50	10	A-0060H-030717-IA-010-STO2	Basement storage room	BL	< 0.4	< 0.5	< 0.7	
3/7/2017	11:20	11	A-0060H-030717-IA-011-STO1	Basement storage/mechanical room	-5	< 0.4	< 0.5	< 0.7	-5 Pa pressure cycle started at 11:20
3/7/2017	11:30	12	A-0060H-030717-IA-012-BAS1	Basement living room	-5	< 0.4	< 0.5	< 0.7	
3/7/2017	11:39	13	A-0060H-030717-IA-013-BAC1	Blower door/back entrance	-5	< 0.4	< 0.5	< 0.7	
3/7/2017	11:48	14	A-0060H-030717-IA-014-STO1	Basement storage/mechanical room	-5	< 0.4	< 0.5	< 0.7	
3/7/2017	11:57	15	A-0060H-030717-IA-015-BAS1	Basement living room	-5	< 0.4	< 0.5	< 0.7	
3/7/2017	12:06	16	A-0060H-030717-IA-016-BAC1	Blower door/back entrance	-5	< 0.4	< 0.5	< 0.7	
3/7/2017	12:15	17	A-0060H-030717-IA-017-STO1	Basement storage/mechanical room	-5	< 0.4	< 0.5	< 0.7	
3/7/2017	12:28	18	A-0060H-030717-IA-018-BAS1	Basement living room	-5	< 0.4	< 0.5	< 0.7	
3/7/2017	12:37	19	A-0060H-030717-IA-019-BAC1	Blower door/back entrance	-5	< 0.4	< 0.5	< 0.7	
3/7/2017	12:47	20	A-0060H-030717-IA-020-STO1	Basement storage/mechanical room	-5	< 0.4	< 0.5	< 0.7	
3/7/2017	12:56	21	A-0060H-030717-IA-021-STO1	Basement storage/mechanical room	-10	< 0.4	< 0.5	< 0.7	-10 Pa pressure cycle started at 12:50
3/7/2017	13:05	22	A-0060H-030717-IA-022-BAS1	Basement living room	-10	< 0.4	< 0.5	< 0.7	
3/7/2017	13:16	23	A-0060H-030717-IA-023-BAC1	Blower door/back entrance	-10	< 0.4	< 0.5	< 0.7	
3/7/2017	13:25	24	A-0060H-030717-IA-024-STO1	Basement storage/mechanical room	-10	< 0.4	< 0.5	< 0.7	
3/7/2017	13:34	25	A-0060H-030717-IA-025-BAS1	Basement living room	-10	< 0.4	< 0.5	< 0.7	
3/7/2017	13:43	26	A-0060H-030717-IA-026-BAC1	Blower door/back entrance	-10	< 0.4	< 0.5	< 0.7	
3/7/2017	13:52	27	A-0060H-030717-IA-027-STA1	Upstairs landing area	-10	< 0.4	< 0.5	< 0.7	
3/7/2017	14:00	28	A-0060H-030717-IA-028-ENT1	Main level entry area	-10	< 0.4	< 0.5	< 0.7	
3/7/2017	14:17	29	A-0060H-030717-IA-029-STO2	Basement storage room	-10	< 0.4	< 0.5	< 0.7	
3/7/2017	14:29	30	A-0060H-030717-IA-030-STO1	Basement storage/mechanical room	+5	< 0.4	< 0.5	< 0.7	+5 Pa pressure cycle started at 14:20
3/7/2017	14:38	31	A-0060H-030717-IA-031-BAS1	Basement living room	+5	< 0.4	< 0.5	< 0.7	
3/7/2017	14:47	32	A-0060H-030717-IA-032-BAC1	Blower door/back entrance	+5	< 0.4	< 0.5	< 0.7	

Table 18. 0060-H Pressure Cycling HAPSITE Analytical Results

AOU-1 – 2017 Vapor Intrusion Investigation Field Data Report, Salt Lake City, Utah

Date	Time	Run #	Sample ID	Sample Location Description	Differential Pressure Condition (Pa)	cis-1,2-Dichloroethene µg/m³	Trichloroethene µg/m³	Tetrachloroethene µg/m³	Notes
						SG RSL NA	16 µg/m³	370 µg/m³	
						IA RSL NA	0.48 µg/m³	11 µg/m³	
3/7/2017	14:57	33	A-0060H-030717-IA-033-STO2	Basement storage room	+5	< 0.4	< 0.5	< 0.7	
3/7/2017	15:06	34	A-0060H-030717-IA-034-ENT1	Main level entry area	+5	< 0.4	< 0.5	< 0.7	
3/7/2017	15:15	35	A-0060H-030717-IA-035-STA1	Upstairs landing area	+5	< 0.4	< 0.5	< 0.7	
3/7/2017	15:24	36	A-0060H-030717-IA-036-STO1	Basement storage/mechanical room	+5	< 0.4	< 0.5	< 0.7	
3/7/2017	16:30	37	A-0060H-030717-SG-037-4.8'	North side of house, 57" bgs	NA	0.40	< 0.5	< 0.7	1:10 dilution
3/7/2017	16:37	38	A-0060H-030717-SG-038-4.8'	North side of house, 57" bgs	NA	< 0.4	< 0.5	**4.81**	Undiluted sample
3/7/2017	16:45	39	NA	Blank sample	NA	NA	NA	NA	Blank sample
3/7/2017	17:48	40	CV2-030717	Calibration check	NA	80%	90%	88%	Relative percent difference (acceptable range > 70% or < 130%)

Notes:
Bolded values are detections.

= number
% = percent
' = feet
" = inches
> = greater than
< = less than
µg/m³ = micrograms per cubic meter
AOU-1 = Accelerated Operable Unit 1 East Side Springs
bgs = below ground surface
BL = baseline
IA = indoor air
ID = identification
NA = not applicable
OA = outdoor air
Pa = pascal
RSL = residential screening level
SG = soil gas

Table 19. 0061-H Pressure Cycling HAPSITE Analytical Results

AOU-1 – 2017 Vapor Intrusion Investigation Field Data Report, Salt Lake City, Utah

Date	Time	Run #	Sample ID	Sample Location Description	Differential Pressure Condition (Pa)	cis-1,2-Dichloroethene µg/m³	Trichloroethene µg/m³	Tetrachloroethene µg/m³	Notes
						SG RSL NA	16 µg/m³	370 µg/m³	
						IA RSL NA	0.48 µg/m³	11 µg/m³	
3/8/2017	7:06	1	CV1-030817	Calibration check	NA	82%	90%	82%	Relative percent difference (acceptable range > 70% or < 130%)
3/8/2017	9:15	2	A-0061H-030817-OA-002-OUT1	Outdoor air (north side)	BL	< 0.4	< 0.5	< 0.7	
3/8/2017	9:25	3	A-0061H-030817-IA-003-LIV1	Main level living room	BL	< 0.4	< 0.5	< 0.7	
3/8/2017	9:34	4	A-0061H-030817-IA-004-BAS1	Basement area	BL	< 0.4	< 0.5	< 0.7	Basement is not liveable space
3/8/2017	9:55	6	A-0061H-030817-IA-006-BED1	Upstairs southwest bedroom	BL	< 0.4	< 0.5	< 0.7	Run #5 failed during analysis; run not recorded
3/8/2017	10:05	7	A-0061H-030817-IA-007-KIT1	Main level kitchen	BL	< 0.4	< 0.5	< 0.7	
3/8/2017	10:56	8	CV2-030817	Calibration check	NA	78%	88%	88%	Relative percent difference (acceptable range > 70% or < 130%)
3/8/2017	11:28	9	A-0061H-030817-IA-009-BAS1	Basement area	-5	< 0.4	< 0.5	< 0.7	-5 Pa pressure cycling started at 11:35
3/8/2017	11:37	10	A-0061H-030817-IA-010-KIT1	Kitchen	-5	< 0.4	< 0.5	< 0.7	
3/8/2017	11:49	11	A-0061H-030817-IA-011-LIV1	Living Room (main floor)	-5	< 0.4	< 0.5	< 0.7	
3/8/2017	12:07	12	A-0061H-030817-IA-012-BED1	Upstairs bedroom	-5	< 0.4	< 0.5	< 0.7	
3/8/2017	12:16	13	A-0061H-030817-IA-013-LAU1	Laundry room/blower door	-5	< 0.4	< 0.5	< 0.7	
3/8/2017	12:25	14	A-0061H-030817-IA-014-BAS1	Basement area	-5	< 0.4	< 0.5	< 0.7	
3/8/2017	12:34	15	A-0061H-030817-IA-015-KIT1	Kitchen	-5	< 0.4	< 0.5	< 0.7	
3/8/2017	12:45	16	A-0061H-030817-IA-016-LAU1	Laundry room/blower door	-5	< 0.4	< 0.5	< 0.7	
3/8/2017	13:00	17	A-0061H-030817-IA-017-BAS1	Basement area	-10	< 0.4	< 0.5	< 0.7	-10 Pa pressure cycling started at 12:55
3/8/2017	13:07	18	A-0061H-030817-IA-018-KIT1	Kitchen	-10	< 0.4	< 0.5	< 0.7	
3/8/2017	13:16	19	A-0061H-030817-IA-019-LAU1	Laundry room/blower door	-10	NA	NA	NA	HAPSITE battery died
3/8/2017	13:24	20	A-0061H-030817-IA-020-LIV1	Living Room (main floor)	-10	NA	NA	NA	HAPSITE froze; rebooted HAPSITE
3/8/2017	13:47	21	A-0061H-030817-IA-021-LIV1	Living Room (main floor)	-10	< 0.4	< 0.5	< 0.7	
3/8/2017	13:56	22	A-0061H-030817-IA-022-LAU1	Laundry room/blower door	-10	< 0.4	< 0.5	< 0.7	
3/8/2017	14:05	23	A-0061H-030817-IA-023-BED1	Upstairs bedroom	-10	< 0.4	< 0.5	< 0.7	
3/8/2017	14:18	24	A-0061H-030817-IA-024-BAS1	Basement area	+5	< 0.4	< 0.5	< 0.7	+5 Pa pressure cycling started at 14:15
3/8/2017	14:27	25	A-0061H-030817-IA-025-KIT1	Kitchen	+5	< 0.4	< 0.5	< 0.7	
3/8/2017	14:35	26	A-0061H-030817-IA-026-LAU1	Laundry room/blower door	+5	< 0.4	< 0.5	< 0.7	
3/8/2017	14:44	27	A-0061H-030817-IA-027-BED1	Upstairs bedroom	+5	< 0.4	< 0.5	< 0.7	
3/8/2017	14:54	28	A-0061H-030817-IA-028-LIV1	Living Room (main floor)	+5	< 0.4	< 0.5	< 0.7	
3/8/2017	15:30	29	A-0061H-030817-SG-029-4.7'	West side of house, 56" bgs (4.7’ bgs)	NA	< 0.4	< 0.5	< 0.7	1:10 dilution

Table 19. 0061-H Pressure Cycling HAPSITE Analytical Results

AOU-1 – 2017 Vapor Intrusion Investigation Field Data Report, Salt Lake City, Utah

Date	Time	Run #	Sample ID	Sample Location Description	Differential Pressure Condition (Pa)	cis-1,2-Dichloroethene µg/m³		Trichloroethene µg/m³	Tetrachloroethene µg/m³	Notes
						SG RSL	NA	16 µg/m³	370 µg/m³	
						IA RSL	NA	0.48 µg/m³	11 µg/m³	
3/8/2017	15:38	30	A-0061H-030817-SG-030-4.7'	West side of house, 56" bgs (4.7’ bgs)	NA	< 0.4		< 0.5	< 0.7	Undiluted sample
3/8/2017	15:48	31	A-0061H-030817-SG-031-6.1'	West side of house, 73" bgs (6.1’ bgs)	NA	< 0.4		< 0.5	< 0.7	Undiluted sample
3/8/2017	15:56	32	NA	Blank sample	NA	NA		NA	NA	Blank sample
3/8/2017	17:25	33	CV3-030817	Calibration check	NA	70%		84%	82%	Relative percent difference (acceptable range > 70% or < 130%)

Notes:

= number
% = percent
' = feet
" = inches
> = greater than
< = less than
µg/m³ = micrograms per cubic meter
AOU-1 = Accelerated Operable Unit 1 East Side Springs
bgs = below ground surface
BL = baseline
IA = Indoor air
ID = identification
NA = not applicable
OA = outdoor air
Pa = pascal
RSL = residential screening level
SG = soil gas

Table 20. 0062-H Pressure Cycling HAPSITE Analytical Results

AOU-1 – 2017 Vapor Intrusion Investigation Field Data Report, Salt Lake City, Utah

Date	Time	Run #	Sample ID	Sample Location Description	Differential Pressure Condition (Pa)	cis-1,2-Dichloroethene µg/m³		Trichloroethene µg/m³	Tetrachloroethene µg/m³	Notes
						SG RSL	NA	16 µg/m³	370 µg/m³	
						IA RSL	NA	0.48 µg/m³	11 µg/m³	
3/29/2017	6:26	2	CV1-032917	Calibration check	NA	124%		112%	112%	Relative percent difference (acceptable range > 70% or < 130%)
3/29/2017	7:01	3	NA	Blank sample	NA	NA		NA	NA	Blank sample
3/29/2017	9:08	4	A-0062H-032917-OA-004-OUT1	Outdoor air (north side)	BL	< 0.4		< 0.5	< 0.7	
3/29/2017	9:17	5	A-0062H-032917-IA-005-KIT1	Kitchen	BL	< 0.4		< 0.5	< 0.7	
3/29/2017	9:24	6	A-0062H-032917-IA-006-BAS1	Basement	BL	< 0.4		< 0.5	< 0.7	
3/29/2017	9:49	9	A-0062H-032917-IA-009-LAN1	Second floor landing area	BL	< 0.4		< 0.5	< 0.7	HAPSITE skipped run 007; run 008 failed
3/29/2017	10:01	10	A-0062H-032917-IA-010-GAR1	Garage	BL	< 0.4		< 0.5	< 0.7	
3/29/2017	11:03	11	A-0062H-032917-IA-011-KIT1	Kitchen/blower door	-5	< 0.4		< 0.5	< 0.7	-5 Pa pressure cycling started at 11:05
3/29/2017	11:13	12	A-0062H-032917-IA-012-BAS1	Basement	-5	< 0.4		< 0.5	< 0.7	
3/29/2017	11:21	13	A-0062H-032917-IA-013-LAN1	Second floor landing area	-5	< 0.4		< 0.5	< 0.7	
3/29/2017	11:30	14	A-0062H-032917-IA-014-KIT1	Kitchen/blower door	-5	< 0.4		< 0.5	< 0.7	
3/29/2017	11:38	15	A-0062H-032917-IA-015-BAS1	Basement	-10	< 0.4		< 0.5	< 0.7	-10 Pa pressure cycling started at 11:37
3/29/2017	11:46	16	A-0062H-032917-IA-016-KIT1	Kitchen/blower door	-10	< 0.4		< 0.5	< 0.7	
3/29/2017	11:55	17	A-0062H-032917-IA-017-LAN1	Second floor landing area	-10	< 0.4		< 0.5	< 0.7	
3/29/2017	12:04	18	A-0062H-032917-IA-018-BAS1	Basement	-10	< 0.4		< 0.5	< 0.7	
3/29/2017	12:13	19	A-0062H-032917-IA-019-KIT1	Kitchen/blower door	-10	< 0.4		< 0.5	< 0.7	
3/29/2017	12:23	20	A-0062H-032917-IA-020-KIT1	Kitchen/blower door	+5	NA		NA	NA	+5 Pa pressure cycling started at 12:20; Run failed
3/29/2017	12:31	21	A-0062H-032917-IA-021-KIT1	Kitchen/blower door	+5	< 0.4		< 0.5	< 0.7	
3/29/2017	12:41	22	A-0062H-032917-IA-022-BAS1	Basement	+5	< 0.4		< 0.5	< 0.7	
3/29/2017	12:50	23	A-0062H-032917-IA-023-LAN1	Second floor landing area	+5	< 0.4		< 0.5	< 0.7	
3/29/2017	13:00	24	A-0062H-032917-IA-024-BAS1	Basement	+5	< 0.4		< 0.5	< 0.7	
3/29/2017	13:45	25	A-0062H-032917-SG-025-6.5'	Southeast side of house; 76.5" bgs	NA	< 0.4		< 0.5	< 0.7	Undiluted soil gas
3/30/2017	8:25	1	CV2-033017	Calibration check	NA	94%		94%	92%	Relative percent difference (acceptable range > 70% or < 130%)

Notes:

= number
% = percent
' = feet
" = inches
> = greater than
< = less than
µg/m³ = micrograms per cubic meter
AOU-1 = Accelerated Operable Unit 1 East Side Springs
bgs = below ground surface
BL = baseline
IA = indoor air
ID = identification
NA = not applicable
OA = outdoor air
Pa = pascal
RSL = residential screening level
SG = soil gas

Table 21. 0063-H Pressure Cycling HAPSITE Analytical Results

AOU-1 – 2017 Vapor Intrusion Investigation Field Data Report, Salt Lake City, Utah

Date	Time	Run #	Sample ID	Sample Location Description	Differential Pressure Condition (Pa)	cis-1,2-Dichloroethene µg/m³		Trichloroethene µg/m³	Tetrachloroethene µg/m³	Notes
						SG RSL	NA	16 µg/m³	370 µg/m³	
						IA RSL	NA	0.48 µg/m³	11 µg/m³	
3/21/2017	8:40	8	CV1-032117	Calibration check	NA	112%		112%	114%	Relative percent difference (acceptable range > 70% or < 130%)
3/21/2017	8:53	9	NA	Blank sample	NA	NA		NA	NA	Blank sample
3/21/2017	10:02	10	A-0063H-032117-OA-010-OUT1	Outdoor air (south side)	BL	< 0.4		< 0.5	< 0.7	
3/21/2017	10:08	11	A-0063H-032117-IA-011-DIN1	Dining room (main level)	BL	< 0.4		< 0.5	**2.31**	
3/21/2017	10:22	12	A-0063H-032117-IA-012-LAN1	Upstairs landing (2nd floor)	BL	< 0.4		< 0.5	**2.64**	
3/21/2017	10:30	13	A-0063H-032117-IA-013-BAS1	Basement landing area	BL	< 0.4		< 0.5	**2.85**	
3/21/2017	10:38	14	A-0063H-032117-IA-014-BAT1	Basement bathroom	BL	< 0.4		< 0.5	**3.25**	
3/21/2017	10:47	15	A-0063H-032117-IA-015-STO1	Basement storage room	BL	< 0.4		< 0.5	**4.00**	Room contains various chemicals including Goo Gone
3/21/2017	10:57	1	NA	PCE survey of products	BL	NA		NA	NA	Survey of products in basement storage room; three products identified containing PCE and removed from structure.
3/21/2017	11:08	16	A-0063H-032117-IA-016-GAR1	Garage	BL	< 0.4		< 0.5	**2.03**	
3/21/2017	13:14	17	A-0063H-032117-IA-017-BAS1	Basement landing area	-5	< 0.4		< 0.5	**2.24**	-5 Pa pressure cycling started at 13:10
3/21/2017	13:21	18	A-0063H-032117-IA-018-BLO1	Blower door/east basement door	-5	< 0.4		< 0.5	**1.90**	
3/21/2017	13:30	19	A-0063H-032117-IA-019-DIN1	Dining room (main level)	-5	< 0.4		< 0.5	**1.63**	
3/21/2017	13:38	20	A-0063H-032117-IA-020-LAN1	Upstairs landing (2nd floor)	-5	< 0.4		< 0.5	**1.29**	
3/21/2017	13:47	21	A-0063H-032117-IA-021-BAS1	Basement landing area	-5	< 0.4		< 0.5	**1.83**	
3/21/2017	13:58	22	A-0063H-032117-IA-022-BLO1	Blower door/east basement door	-5	< 0.4		< 0.5	**2.17**	
3/21/2017	14:07	23	A-0063H-032117-IA-023-DIN1	Dining room (main level)	-5	< 0.4		< 0.5	**1.42**	
3/21/2017	14:15	24	A-0063H-032117-IA-024-LAN1	Upstairs landing (2nd floor)	-5	< 0.4		< 0.5	**1.03**	
3/21/2017	14:23	25	A-0063H-032117-IA-025-BAS1	Basement landing area	-5	< 0.4		< 0.5	**2.03**	
3/21/2017	14:32	26	A-0063H-032117-IA-026-BLO1	Blower door/east basement door	-5	< 0.4		< 0.5	**1.83**	
3/21/2017	14:40	27	A-0063H-032117-IA-027-DIN1	Dining room (main level)	-5	< 0.4		< 0.5	**1.08**	
3/21/2017	14:48	28	A-0063H-032117-IA-028-LAN1	Upstairs landing (2nd floor)	-5	< 0.4		< 0.5	**0.75**	
3/21/2017	15:00	29	A-0063H-032117-IA-029-BAS1	Basement landing area	-5	< 0.4		< 0.5	**2.78**	
3/21/2017	15:10	30	A-0063H-032117-IA-030-BAS1	Basement landing area	-10	< 0.4		< 0.5	**0.95**	-10 Pa pressure cycling started at 15:10
3/21/2017	15:19	31	A-0063H-032117-IA-031-BLO1	Blower door/east basement door	-10	< 0.4		< 0.5	**1.42**	
3/21/2017	15:28	32	A-0063H-032117-IA-032-DIN1	Dining room (main level)	-10	< 0.4		< 0.5	**0.81**	
3/21/2017	15:37	33	A-0063H-032117-IA-033-LAN1	Upstairs landing (2nd floor)	-10	< 0.4		< 0.5	< 0.7	

Table 21. 0063-H Pressure Cycling HAPSITE Analytical Results

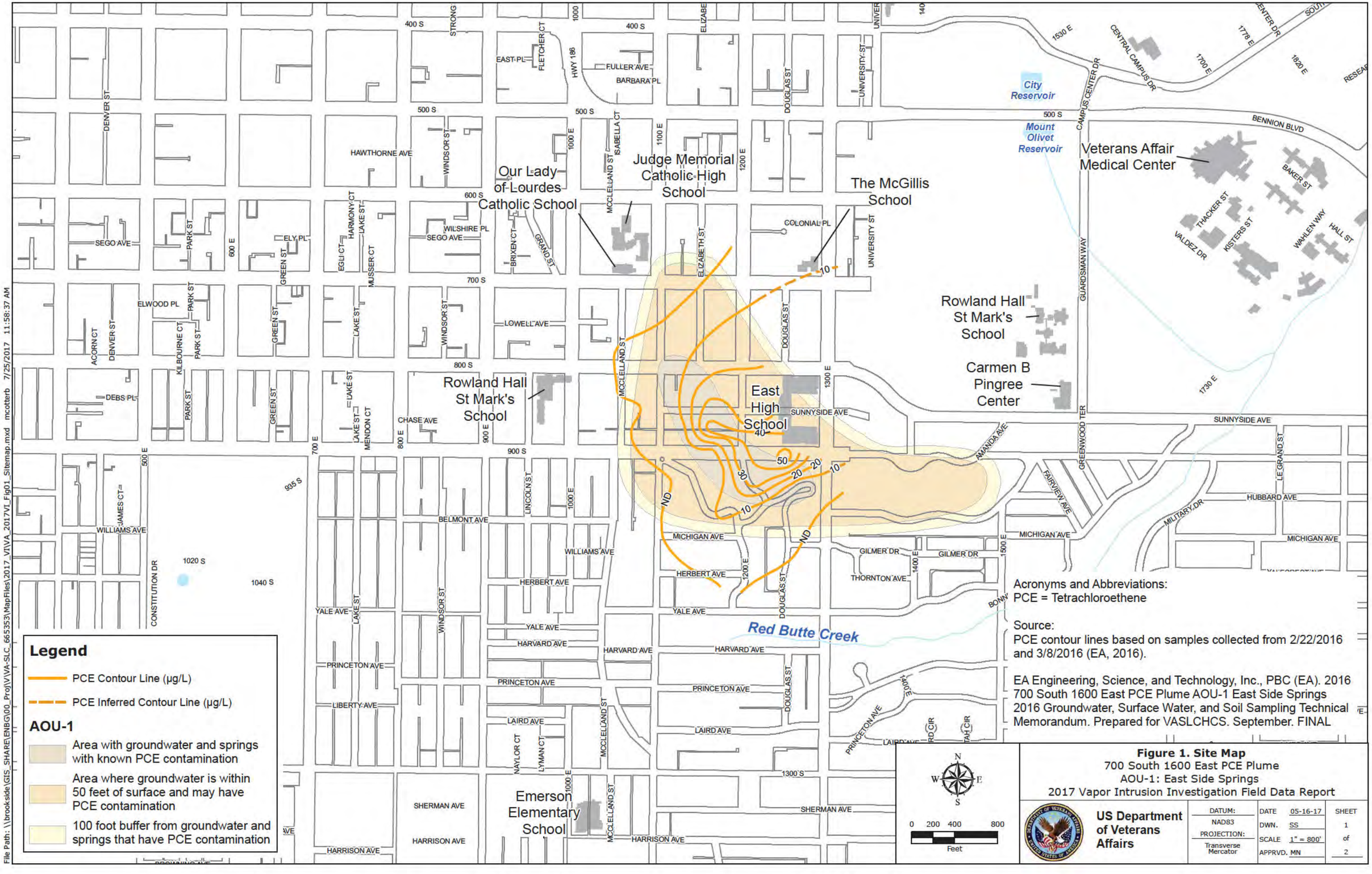
AOU-1 – 2017 Vapor Intrusion Investigation Field Data Report, Salt Lake City, Utah

Date	Time	Run #	Sample ID	Sample Location Description	Differential Pressure Condition (Pa)	cis-1,2-Dichloroethene µg/m³	Trichloroethene µg/m³	Tetrachloroethene µg/m³	Notes
						SG RSL NA	16 µg/m³	370 µg/m³	
						IA RSL NA	0.48 µg/m³	11 µg/m³	
3/21/2017	15:46	34	A-0063H-032117-IA-034-BAS1	Basement landing area	-10	< 0.4	< 0.5	< 0.7	
3/21/2017	15:55	35	A-0063H-032117-IA-035-BLO1	Blower door/east basement door	-10	< 0.4	< 0.5	**1.69**	
3/21/2017	16:04	36	A-0063H-032117-IA-036-BLO1	Blower door/east basement door	-10	< 0.4	< 0.5	0.17	
3/21/2017	16:12	2	NA	PCE survey of products	+5	NA	NA	NA	+5 Pa pressure cycle started at 16:10; screened products in basement laundry cabinet; additional products identified containing PCE; these PCE containing product were not removed during the +5 Pa pressure cycle to maintain consistency during pressure cycling
3/21/2017	16:15	3	NA	PCE survey of products	+5	NA	NA	NA	Screened additional products in basement laundry area; no detections
3/21/2017	16:20	37	A-0063H-032117-IA-037-BAS1	Basement landing area	+5	< 0.4	< 0.5	< 0.7	
3/21/2017	16:30	38	A-0063H-032117-IA-038-BLO1	Blower door/east basement door	+5	< 0.4	< 0.5	< 0.7	
3/21/2017	16:38	39	A-0063H-032117-IA-039-DIN1	Dining room (main level)	+5	< 0.4	< 0.5	< 0.7	
3/21/2017	16:47	40	A-0063H-032117-IA-040-LAN1	Upstairs landing (2nd floor)	+5	< 0.4	< 0.5	< 0.7	
3/21/2017	17:17	4	NA	PCE survey of soil gas sample	NA	NA	NA	NA	No response
3/21/2017	17:20	41	A-0063H-032117-SG-041-6’	Sample collected at 72.5” bgs	NA	< 0.4	< 0.5	**108.5 E**	Undiluted sample
3/21/2017	17:29	42	NA	Blank sample	NA	NA	NA	NA	
3/22/2017	8:04	2	CV2-032217	Calibration check	NA	66%	80%	76%	Relative percent difference (acceptable range > 70% or < 130%)

Notes:
Bolded values are detections.

= number
% = percent
' = feet
" = inches
> = greater than
< = less than
µg/m³ = micrograms per cubic meter
AOU-1 = Accelerated Operable Unit 1 East Side Springs
bgs = below ground surface
BL = baseline
IA = indoor air
ID = identification
NA = not applicable
OA = outdoor air
Pa = pascal
PCE = tetrachloroethene
RSL = residential screening level
SG = soil gas

Figures



Legend

- PCE Contour Line (µg/L)
- PCE Inferred Contour Line (µg/L)

AOU-1

- Area with groundwater and springs with known PCE contamination
- Area where groundwater is within 50 feet of surface and may have PCE contamination
- 100 foot buffer from groundwater and springs that have PCE contamination

Acronyms and Abbreviations:
PCE = Tetrachloroethene

Source:
PCE contour lines based on samples collected from 2/22/2016 and 3/8/2016 (EA, 2016).

EA Engineering, Science, and Technology, Inc., PBC (EA). 2016 700 South 1600 East PCE Plume AOU-1 East Side Springs 2016 Groundwater, Surface Water, and Soil Sampling Technical Memorandum. Prepared for VASLCHCS. September. FINAL

N W E S

0 200 400 800
Feet

Figure 1. Site Map
700 South 1600 East PCE Plume
AOU-1: East Side Springs
2017 Vapor Intrusion Investigation Field Data Report

US Department of Veterans Affairs

DATUM: NAD83	DATE 05-16-17	SHEET 1 of 2
PROJECTION: Transverse Mercator	DWN. SS	
	SCALE 1" = 800'	
	APPRVD. MN	

File Path: \\brookside\GIS_SHARE\ENBG\00_Proj\VIVA-SLC_665353\MapFiles\2017_VI\VA_2017VI_Fig01_Sitemap.mxd mcotterb 7/25/2017 11:58:37 AM

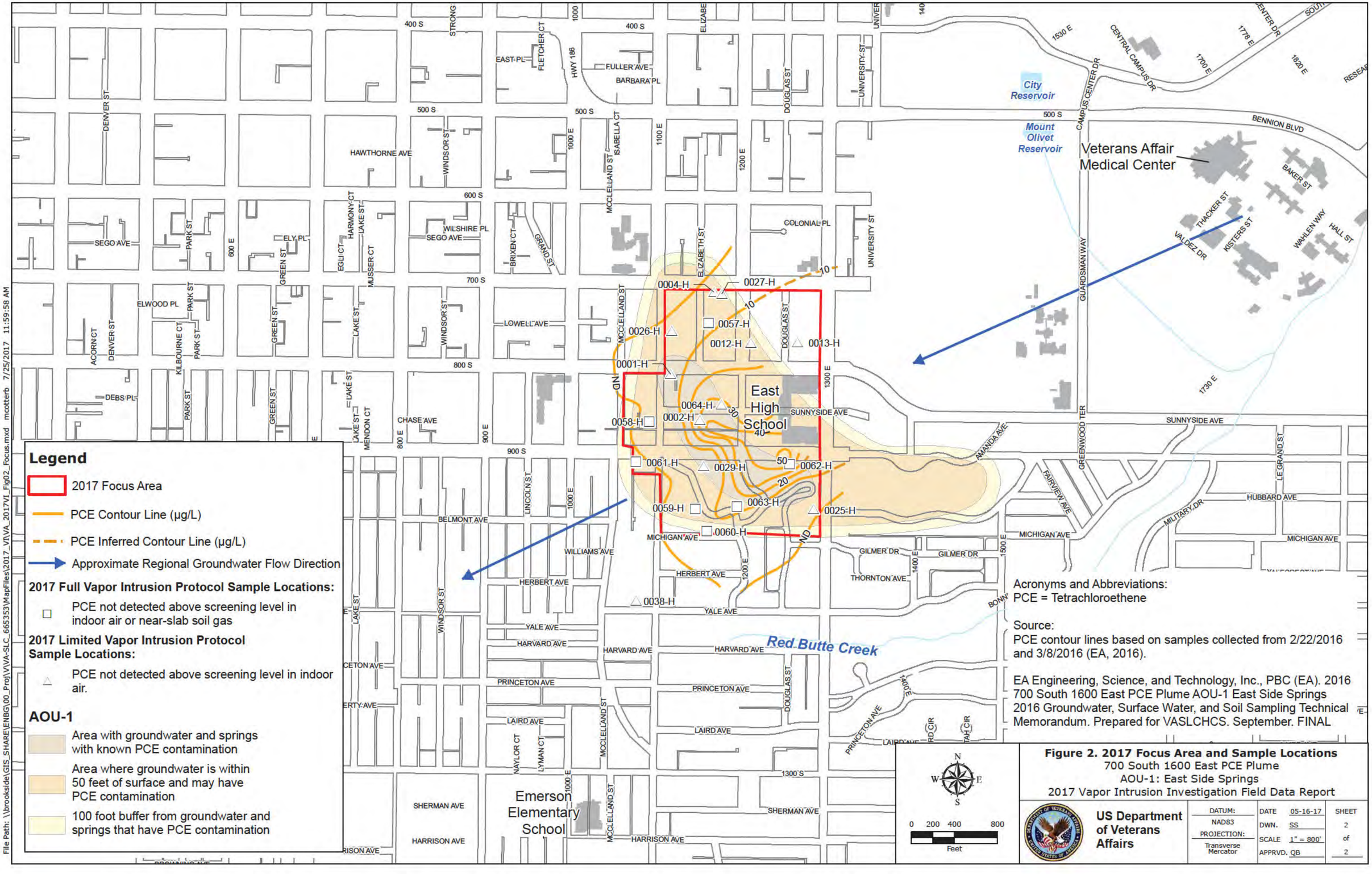

Legend
2017 Focus Area
PCE Contour Line (µg/L)
PCE Inferred Contour Line (µg/L)
Approximate Regional Groundwater Flow Direction
2017 Full Vapor Intrusion Protocol Sample Locations:
PCE not detected above screening level in indoor air or near-slab soil gas
2017 Limited Vapor Intrusion Protocol Sample Locations:
PCE not detected above screening level in indoor air.
AOU-1
Area with groundwater and springs with known PCE contamination
Area where groundwater is within 50 feet of surface and may have PCE contamination
100 foot buffer from groundwater and springs that have PCE contamination
0004-H
0027-H
0026-H
0057-H
0012-H
0013-H
0001-H
0064-H
0002-H
0058-H
0061-H
0029-H
0062-H
0059-H
0063-H
0025-H
0060-H
0038-H
East High School
Emerson Elementary School
City Reservoir
Mount Olivet Reservoir
Veterans Affair Medical Center
Red Butte Creek
10
20
30
40
50
ND
Acronyms and Abbreviations:
PCE = Tetrachloroethene
Source:
PCE contour lines based on samples collected from 2/22/2016 and 3/8/2016 (EA, 2016).
EA Engineering, Science, and Technology, Inc., PBC (EA). 2016 700 South 1600 East PCE Plume AOU-1 East Side Springs 2016 Groundwater, Surface Water, and Soil Sampling Technical Memorandum. Prepared for VASLCHCS. September. FINAL
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Figure 2. 2017 Focus Area and Sample Locations
700 South 1600 East PCE Plume
AOU-1: East Side Springs
2017 Vapor Intrusion Investigation Field Data Report
US Department of Veterans Affairs
DATUM: NAD83
PROJECTION: Transverse Mercator
DATE 05-16-17
DWN. SS
SCALE 1" = 800'
APPRVD. QB
SHEET 2 of 2
File Path: \\brookside\GIS_SHARE\ENBG\00_Proj\VV\VA-SLC_665353\MapFiles\2017_VI\VA_2017V1_Fig02_Focus.mxd mcotterb 7/25/2017 11:59:58 AM

Appendix A
Minor Field Modification #18

EA Engineering, Science, and Technology, Inc., PBC

2363 N. Hill Field Road, Suite 104
Layton, Utah 84041
Telephone: 385-393-4982
Fax: 801-779-0294
www.eaest.com

MINOR FIELD MODIFICATION #18
Remedial Investigation Work Plan
AOU-1: East Side Springs
700 South 1600 East PCE Plume
Salt Lake City, Utah
Approved

TO: D. Lynne Welsh, Department of Veterans Affairs

FROM: Pamela Moss, EA Team (EA Engineering, Science, and Technology, Inc., PBC/CH2M)

DATE: 8 March 2017

SUBJECT: Minor Field Modification to the Remedial Investigation Work Plan AOU-1: East Side Springs 700 South 1600 East PCE Plume Salt Lake City, Utah (July 2015)

1. Introduction

This document provides a description of the minor field modification to the Remedial Investigation Work Plan (RIWP) AOU-1: East Side Springs 700 South 1600 East Tetrachloroethene (PCE) Plume Salt Lake City, Utah (First Environment, Inc. [FE] 2015a) to conduct additional vapor intrusion (VI) sampling at up to 13 previously sampled structures and at up to seven new (not previously sampled) structures as described below. Minor Field Modifications #1 - #17 were provided in separate documents and detail changes to the RIWP and the Sampling and Analysis Plan (SAP) (Appendix A of the RIWP). The following modification is detailed below:

- Minor Field Modification (MFM) #18 – Supplemental VI sampling will be conducted in accordance with the protocols described in the sections below. This field modification includes additional VI sampling at up to 13 structures previously sampled in 2015 and up to seven new (not previously sampled) structures in an attempt to fill potential data gaps from the 2015 and 2016 AOU-1 remedial investigation (RI) VI evaluation. The supplemental sampling is being performed in the event that some or all of the 2015 HAPSITE and TO-15 VI investigation data is determined to be unusable. Usability is being assessed through verification of field and laboratory data, which has identified field notation discrepancies in addition to non-compliance with the project plans. The determination of 2015 VI data usability and whether the data meets project objectives is still in process.

  The 13 structures to be resampled were selected from the 2015 indoor air sampling locations by evaluating the 2016 groundwater and surface water data and selecting the 2015 indoor air sampling locations where 1) groundwater is known to be impacted by PCE, 2) where estimated depth to groundwater was less than fifty feet below ground surface, and 3) where 2016 surface water data (EA 2017) indicates elevated PCE concentrations in the vicinity of PCE impacted groundwater area 4) and the western most edge of the investigation area in the direction of groundwater flow where there is currently no data. The southwest extent of the groundwater PCE plume was not defined during the RI due to limitations of the Geoprobe (which could not drill to

depths exceeding 40 ft bgs). Therefore, locations 0010-H and 0028-H, near the presumed southwest extent of the shallow PCE plume were also retained for confirmation sampling.

The seven new structures were selected by contacting property owners in, or near, the data gap areas from the 2015 and 2016 AOU-1 RI VI evaluation and/or by soliciting volunteers downgradient of the data gap areas. Initial RI data evaluation suggests PCE impact in shallow (i.e., less than 50 ft bgs) groundwater near and east of the intersection of 900 South and 1100 East, and west of 1300 East. There were multiple residences that fell within this area of the shallow PCE GW plume who did not volunteer to have sampling conducted. Some of these residences have since granted access and the structures have been included for VI evaluation The supplemental sampling will be performed in accordance with the work plan requirements and this MFM to ensure data of sufficient quantity and quality are obtained to achieve project data quality objectives.

- In the event that the 2015 data usability assessment determines that some or all of the 2015 data is not usable or does not meet project objectives, the confirmation sampling with the additional new sample locations is expected to be adequate to meet the data quality objectives as outlined in Table 3 of the QAPP (Summary of Data Quality Objective Process). Specifically, principal study questions 1 and 2 of the DQO process address the problem statement regarding indoor air as indicated below:
    - Question 1 - Does vapor intrusion present a complete pathway to structures overlying AOU-1 and is it significant?
    - Question 2 – What is the lateral extent of AOU-1 groundwater contamination that may result in a complete pathway and significant vapor intrusion exposures in overlying structures?

  Data inputs with regard to addressing the indoor air path for both of these questions include (amongst others): indoor air VOC concentrations (collected over temporal and spatial ranges); shallow soil gas VOC concentrations; and groundwater and surface water VOC concentrations from the areas where surface water and groundwater have PCE contamination and is within 50 ft of the ground surface (plus a buffer of 100 ft) (EA 2017). Groundwater and surface water data collected to date in support of the RI have suggested that the area of PCE contamination in springs and groundwater within 50 ft of ground surface is generally located east of McClelland Street, west of 1300 East, south of 700 South and north of Yale (see preliminary PCE in groundwater contours on Figure 1). While not all of the 36 structures from the 2015 sampling event are included for confirmation sampling (many of which are outside this area), each of the confirmation samples (as well as the new VI sampling locations) are within this area. SUMMA TO-15 SIM data is propose be collected from each of the confirmation sampling locations and from those new locations where HAPSITE® results indicate exceedance of screening criteria. The QAPP also indicates that making the indoor air sampling available to owners of any structure within and adjacent to AOU-1 who volunteer for sampling will meet the acceptance criteria for the acceptable number of data points. These proposed confirmation and new sampling locations target areas within the bounds of AOU-1, will result in collection of data necessary to meet the project objectives, fulfills the spirit of sampling the structure of any volunteer within the AOU-1 boundary, and therefore, are expected to meet the data and project objectives as outlined in the QAPP.

2. Minor Field Modification #18 – Proposed Sampling Plan

This section presents the rationale and details for additional AOU-1 VI sampling. Sampling at up to seven new structures (not previously sampled as part of the 2015 and 2016 RI sampling effort) and resampling at 13 previously sampled structures is proposed for the supplemental sampling program. The 2017 supplemental VI sampling will be conducted during the heating season and is currently scheduled to begin in early March 2017. Except where specifically noted within this MFM, the sampling will be performed in accordance with field, HAPSITE®, and laboratory methods and standard operating procedures (SOPs); indoor air and soil gas sampling protocols; quality control (QC) and quality assurance (QA) provisions; and data validation requirements presented in the following planning and procedural documents:

- RIWP (FE 2015a)
- Quality Assurance Project Plan (QAPP) Update Revision 1 (EA Engineering, Science, and Technology, Inc., PBC [EA] 2016a) and Revision 2 (Department of Veterans Affairs [VA] 2017)
- SAP (Attachment A of the RIWP, FE 2015a); and
- Minor Field Modifications
    - Minor Field Modification #1 to the RIWP - Protocol for Performing Indoor Air and Near-slab Soil Gas Assessments (FE 2015b);
    - Minor Field Modifications #3, #4, and #5 to the RIWP - Change of Analytical Method for Analysis of 1,4-Dioxane; Updates to the Analytical Methods, Parameters, and Sample Media; and Update of Health and Safety Plan (EA 2016b);
    - Minor Field Modifications #7 and #8 to the SAP - Change of Analytical Method for Analysis of 1,4-Dioxane and Updates to the Analytical Methods, Parameters, and Sample Media (EA 2016c)

Table 1 presents the type of information included in each of these documents that is relevant to the supplemental investigation.

2.1 SUMMA Confirmation Sampling

In 2015, VI data was collected from 36 structures within AOU-1 using the Protocol for Performing Indoor Air and Near-slab Soil Gas Assessments (i.e., "full VI protocol", Appendix H of the RIWP [FE 2015a]). During a third-party QA review of the 2015 VI field, electronic, and laboratory documentation, several discrepancies and instances of noncompliance with the QAPP were identified. These discrepancies and instances of noncompliance include: inconsistent or missing information regarding where HAPSITE® data were collected; chains of custody forms that were illegible due to improper error correction practices; omission of sample times and dates from chain of custody forms; inconsistent information recorded on electronic field forms and field logbooks; and sample receipts and analytical run logs that were absent from the laboratory data reports. Due to these discrepancies, noncompliance with the QAPP, and the ongoing evaluation of the validity of the 2015 VI data, thirteen of the previously evaluated structures will undergo confirmation sampling.

The confirmation samples will be collected per the planning documents listed above, but utilizing a "limited VI protocol" that includes HAPSITE® screening of indoor air to identify potential interior background sources (no pressure cycling) and collection of up to two 24-hour SUMMA canister samples per structure. Soil gas and ambient air samples will not be collected. Other components of the VI protocol (FE 2015a), such as detailed building surveys, will not repeated. Instead, an abbreviated interview and building survey will be performed to identify any major changes that could affect the

sampling and data evaluation (recent remodels or household chemical storage, for example). Attachment 1 presents a copy of the "full VI protocol" that conveys, in detail (via text highlights), those steps of the protocol that will be retained in "limited VI protocol" that will be utilized for confirmation sampling. Table 2 lists the number and type of samples to be collected at these thirteen structures and Figure 1 shows the locations of the SUMMA confirmation samples.

As noted, up to two 24-hour SUMMA canister samples will be collected from each structure. The determination of where samples will be collected and conditions under which an additional sample may be warranted is described in the "limited VI protocol" (Attachment 1).

2.2 New Locations for Full VI Protocol

Up to seven new (not previously sampled) structures will be sampled in order to supplement 2015 and 2016 VI data (Figure 1). The additional structures to be sampled within AOU-1 are identified as potential new sample locations on Figure 1 and in Table 2. The samples will be collected per the planning documents listed above utilizing a "full VI protocol" (i.e., Appendix H of the RIWP) that includes pressure cycling monitored with the HAPSITE®. Additionally, if an indoor air screening level is exceeded during the full VI protocol sampling, up to two 24-hour SUMMA confirmation samples will be collected at said structure. Ambient air monitoring and near-slab soil gas analysis will be performed if required per the VI protocol (FE 2015a). A full interview and building survey will be conducted at each location in advance of VI sampling.

3. Analytical

Samples will be collected in individually certified clean SUMMA canisters per QAPP Update Revisions 1 and 2. SUMMA canisters will be sent to ALS Environmental in Salt Lake City, Utah for analysis of target volatile organic compounds (VOCs) via TO-15 selective ion monitoring (SIM) (for preliminary contaminants of potential concern [PCOPC]) or TO-15 (for other target analytes) per Table 7 of the QAPP Update Revisions 1 and 2 (EA 2016a, VA 2017). PCE will be analyzed via TO-15 SIM for indoor air samples. QC samples will be collected as specified in QAPP Update Revisions 1 and 2 (EA 2016a, VA 2017). Analytical results will be reported to the lowest achievable method detection limits and reliable quantification levels. Once results are received from the laboratory, data will be validated in accordance with the QAPP Update Revisions 1 and 2 (EA 2016a, VA 2017).

4. Quality Assurance

Additional QA protocol will be implemented in order to ensure supplemental sampling data will achieve project data quality objectives. During the first week of VI sampling, the US Army Corps of Engineers will provide oversight in the field and an in-person meeting with the contractor, regulators, and VA will be conducted to review field documentation for accuracy and completeness. Additionally, the VA will routinely spot-check field documentation throughout the sampling event. If any noncompliance issues are identified, then field audits and meetings will continue weekly until which time the issues are resolved.

In an effort to ensure that field documentation is performed in accordance with the QAPP and SAP, a pre-field kick off meeting will take place with the field staff to discuss all field documentation and to discuss the requirements of the QAPP and SAP. A daily QA checklist (Attachment 2) to monitor compliance with the QAPP will be completed. Once field work has commenced, the Project Manager will be responsible for ensuring field documentation is performed in accordance with the QAPP and SAP.

The field documentation for confirmation samples collected via Limited VI Protocol will consist of:

1. **Field Logbook**: The field logbook will contain all of the field notes specific to each residential limited VI protocol sampling event (i.e., HAPSITE® calibration information, time of arrival/departure, brief floor plan sketch with sampled locations, whether or not an interior source(s) was identified with the HAPSITE®, product manufacture name and its location, SUMMA deployment time, location, initial/final vacuum, canister/flow controller ID, Sample ID, etc.). This will be a Rite in the Rain® notebook with numbered pages.

2. **HAPSITE® Field Form**: HAPSITE® field forms will be used to log each HAPSITE® sample (run number, time, date, location, location description, sample ID, and detected VOC concentrations). One form will be dedicated to each sampled residence. HAPSITE® field forms will be spiral bound in booklet form.

3. **SUMMA Field Form**: SUMMA field forms will be used to log each SUMMA canister deployment. These forms will include the following information: sample location, sample ID, canister/flow controller ID, start/end time, start/end date, initial/final vacuums, flow controller flow rate, etc.). One form will be used per sample location. SUMMA field forms will be spiral bound in booklet form.

The field documentation for new samples collected via the Full VI Protocol Sampling will consist of the same documentation for the Limited VI Protocol with the addition of a pressure cycling field form where blower flowrates and differential pressures will be logged. The SUMMA field form will only be necessary if a screening level is exceeded during the Full Protocol VI sampling, and soil gas samples will be logged on the HAPSITE® field form.

5. Documentation and Reporting

The findings from the 2017 sampling will be summarized in a VI Field Report. Information that may result in the need for actions prior to the VI Field Report will be conveyed to the agencies during the regularly scheduled project-team conference calls.

6. References

Department of Veterans Affairs (VA). 2017. Quality Assurance Project Plan Update Revision 2, 700 South 1600 East PCE Plume AOU-1: East Side Springs, Salt Lake City, Utah.

EA Engineering, Science, and Technology, Inc., PBC (EA). 2016a. Quality Assurance Project Plan Update Revision 1, 700 South 1600 East PCE Plume AOU-1: East Side Springs, Salt Lake City, Utah. February.

EA. 2016b. Minor Field Modifications #3 - #6. Remedial Investigation Work Plan, AOU-1: East Side Springs, 700 South 1600 East Street PCE Plume, Salt Lake City, Utah. March.

EA. 2016c. Minor Field Modifications #7 - #13. Sampling and Analysis Plan, AOU-1: East Side Springs, 700 South 1600 East PCE Plume, Salt Lake City, Utah. March.

EA. 2017. 2016 Surface Water and Stormwater Data Validation Report, 700 South 1600 East PCE Plume AOU-1: East Side Springs, Salt Lake City, Utah.

First Environment (FE). 2015a. Final Remedial Investigation Work Plan, AOU-1: East Side Springs, 700 South 1600 East PCE Plume, Salt Lake City, Utah. July.

FE. 2015b. Minor Field Modification-01. Remedial Investigation Work Plan, Protocol for Performing Indoor Air and Near-slab Soil Gas Assessments, 700 South 1600 East PCE Plume Superfund Site Salt Lake City, Utah. July.

Tables

1 Key Information and Associated Document
2 VI Sample Purposes, Locations, and Types

Figure

1 2017 Supplemental VI Sampling Locations

Attachments

1 Limited Protocol for Performing Indoor Air Assessments (“Limited VI Protocol”)
2 Quality Assurance Checklist

Tables

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TABLE 1
Key Information and Associated Document
Minor Field Modification #18 to the Remedial Investigation Work Plan
AOU-1: East Side Springs, 700 South 1600 East PCE Plume, Salt Lake City, Utah

Document	Key Information
RIWP	• Project objectives, technical approach, and sample rationale • Appendix E - Risk Assessment Work Plan for identification of PCOPCs • Appendix H - Protocol for Performing Indoor Air and Near-Slab Soil Gas Assessments • Appendix I - Project Communications Plan for Contractor Field Staff
QAPP Update Revision 1 and 2	• Data quality, precision, and accuracy objectives • Required training and documentation • Target analyte list, laboratory analytical methods, quantitation limits, and SOPs • Instrument maintenance and calibration • Required quality control samples • Corrective action requirements • Data validation requirements
SAP (Appendix A of the RIWP)	• Sampling methodology and procedures, sample handling, sample designations, and sample documentation • Sample custody requirements • Field SOPs • VI field screening instrument instructions and HAPSITE® Operators Manual
Minor Field Modification #1	• Changes in the order of various components of the indoor air screening process (“full VI protocol”)
Minor Field Modifications #3 and #7	• Indicates analysis of PCOPCs, including 1,4-dioxane, to be completed by TO-15 SIM. TO-13 analysis is no longer required. • This field modification is a change to sections 6.2.1.3 and 6.2.2.2 of the RIWP and 4.1 and 4.2 of the SAP.
Minor Field Modifications #4 and #8	• Replaces Section 6.2.1 Indoor Air Quality Assessment of the RIWP and Section 4.1 Indoor Air Quality Screening, Characterization, and Verification of the SAP with QAPP Update Revision 1 and 2 Section 2.3.1. • Replaces Section 6.2.2 of the RIWP and Section 4.2 of the SAP (i.e., Near-Slab Soil Gas Investigation) with QAPP Update Revision 1 and 2 Section 2.3.2. • Replaces Section 6.2.3 of the RIWP and Section 4.3 of the SAP (i.e., Open-Field Soil Gas Investigation) with QAPP Update Revision 1 and 2 Section 2.3.3.
Minor Field Modification #5	• Replacement of the Health and Safety Plan (Appendix C of the RIWP) to reflect the health and safety protocols specific to EA Engineering, Science, and Technology, Inc. • Assesses the risks associated with potential and actual health and safety hazards and identifies those controls to be implemented during investigation activities.

NOTES:
PCOPC = Preliminary contaminants of potential concern.
QAPP = Quality Assurance Project Plan.
RIWP = Remedial Investigation Work Plan.
SAP = Sampling and Analysis Plan.
SOP = Standard operating procedure.
VI = Vapor intrusion.

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TABLE 2
VI Sample Purpose, Location, and Type
Minor Field Modification #18 to the Remedial Investigation Work Plan
AOU-1: East Side Springs, 700 South 1600 East PCE Plume, Salt Lake City, Utah

Sample Purpose	Structure Location ID	HAPSITE®/ Pressure Control Protocol	HAPSITE®/ No Pressure Control Protocol	TO-15 Indoor Air(1)	TO-15 Near-Slab Soil Gas(1)	HAPSITE® Ambient Air Monitoring	Full Interview and Building Survey	Abbreviated Interview and Building Survey Update
SUMMA confirmation sampling (resampling previously sampled structures using "limited VI protocol")	0001-H		X	X				X
	0002-H		X	X				X
	0004-H		X	X				X
	0010-H		X	X				X
	0012-H		X	X				X
	0013-H		X	X				X
	0025-H		X	X				X
	0026-H		X	X				X
	0027-H		X	X				X
	0029-H		X	X				X
	0033-H		X	X				X
	0036-H		X	X				X
	0038-H		X	X				X
New structures (supplemental data using "full VI protocol")	0057-H	X		X	X	X	X	
	0058-H	X		X	X	X	X	
	0059-H	X		X	X	X	X	
	0060-H	X		X	X	X	X	
	0061-H	X		X	X	X	X	
	0062-H *	X		X	X	X	X	
	0063-H *	X		X	X	X	X	

NOTES:
(1) = TO-15 confirmation samples will only be collected at full VI protocol structures (new structures) if an residential indoor air screening level and/or soil gas screening level is exceeded during full VI protocol sampling. TO-15 indoor air confirmation samples will be collected at all limited VI protocol structures (previously sampled structures).
* Tentative locations pending signed access agreements
ID = Identification.
VI = Vapor intrusion.

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Figure

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Legend
Geoprobe Groundwater Samples
PCE Concentrations
0-10 µg/L
>10 µg/L
Not Installed
Did not hit GW
NA
ND
RI Surface Water Sampling Locations
RI Storm Water Sampling Locations
PCE Countour
2017 Proposed SUMMA Confirmation Sample Locations
Potential New VI Sample Locations
Potential VI Data Gap
Label Explanation:
Red labels: Indicate approximate location of indoor air survey conducted in 2015
Grey labels: Indicate approximate location of 2016 confirmatory air sample
Blue labels: Indicate approximate location of indoor air surveys conducted in 2016
*Circles demonstrate approximate location of sample. The location of the label within each circle should not be interpreted as the specific location of where the sample was gathered rather, the sample is somewhere within that circle.
Labels attached to black arrows indicate general direction of site not located on map
Sources:
Utah Automated Geographic Reference Center (AGRC)
GIS Project Files from EA EST
Judge Memorial High
Our Lady of Lourdes School
The McGillis School
Roland Hall St. Mark's School
East High
0001-H
0002-H
0004-H
0005-H
0006-H
0007-H
0008-H
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0010-H
0011-H
0012-H
0013-H
0014-H
0015-H
0016-H
0017-H
0018-H
0019-B
0020-C
0021-S
0022-S
0023-H
0024-H
0025-H
0026-H
0027-H
0028-S
0029-H
0030-H
0031-S
0033-H
0036-H
0037-H
0038-H
0040-H
0041-H
0045-S
0047-H
0050-H
0051-H
0052-H
0053-H
0054-H
0055-H
0056-H
0057-H
0058-H
0059-H
0060-H
0061-H
0062-H
0063-H
0003-H
Red Butte Creek
Figure 1 - 2017 Supplemental VI Sampling
700 South 1600 East PCE Plume
AOU-1 RIWP Minor Field Modification No. 18
US Department of Veterans Affairs
DATUM: NAD83
PROJECTION: Transverse Mercator
DATE: 02-01-17
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Attachment 1
Limited Protocol for Performing Indoor Air Assessments (“Limited VI Protocol”)

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PREFACE

Limited Protocol for Performing Indoor Air Assessments ("Limited VI Protocol")

The attached document, *Protocol for Performing Indoor Air and Near-slab Soil Gas Assessments* (i.e., referred to as the "full vapor intrusion (VI) protocol" herein, and dated 17 July 2015), was included as Appendix H of the Accelerated Operable Unit 1 (AOU-1) Remedial Investigation Work Plan (RIWP). This document has been included in its entirety (below) to illustrate those steps from the "full VI protocol" that will be performed as part of the "limited VI protocol" noted in Minor Field Modification (MFM) #18. Steps that are highlighted in yellow in the "full VI protocol" constitute those items that are retained as part of the "limited VI protocol".

In addition, MFM #1, #2, #3, #4 and #8 represent approved changes to the "full VI protocol" and shall be reviewed prior to implementing the protocol. For example, since approval in July 2015, the following changes have been made to the "full VI protocol":

- The order of HAPSITE® operations to screen structures for indoor background sources was updated to begin with the use of analyze mode to identify indoor spaces with elevated concentrations of volatile organic compounds (VOCs). Followed by the use of survey mode to positively identify suspect indoor background sources of VOCs. (MFM #1, #4, and #8 [Attachments 1A – 1C, respectively]).

- Vinyl chloride is no longer a reported HAPSITE® analyte based on 2015 TO-15 sample results (MFM #4 and #8 [Attachments 1B and 1C, respectively]).

- Soil gas samples for TO-15 analysis will only be collected if measured PCE soil gas concentrations exceed the 370 micrograms per cubic meter ($\mu g/m^3$) (55.4 parts per billion by volume [ppbv]) screening level (SL) (QAPP Revision 2 [Department of Veterans Affairs (VA) 2017]).

- No soil gas samples will be analyzed using method TO-13 per the approved MFM #3 (Attachment 1B).

Where clarifications to the protocol based on previously approved minor field modifications are included in the text of the protocol, the clarifications are identified by bracketed red, italicized text so that the reader understands these are approved changes from the original approved protocol (standard black font).

FINAL

Protocol for Performing Indoor Air and Near-slab Soil Gas Assessments
700 South 1600 East PCE Plume Superfund Site
Salt Lake City, Utah

PREPARED FOR: D. Lynne Welsh/VA Salt Lake City Health Care System

PREPARED BY: Scott Beckman and Ed Reid, First Environment, Inc.

COPIES: David Waite, CH2M-Hill; Rolf Lange, Avalon; Devin DeMarco, First Environment, Inc.

DATE: July 17, 2015

1.0 Introduction

This document provides a protocol for the use of real-time on-site gas chromatography/mass spectrometry (GC/MS) analysis to screen for indoor sources, identify potential points for vapor intrusion, screen for the presence of volatile organic compounds in soil gas and indoor air, and direct 24-hour SUMMA canister sampling at selected locations (with TO-15 analyses) to evaluate the potential for vapor intrusion in structures associated with the Accelerated Operable Unit-1 (AOU-1) portion of the 700 South 1600 East PCE Plume (Plume).

The AOU-1 Remedial Investigation will involve an assessment structure including residential, commercial, and public buildings within the Study Area. The objectives of the investigation are several-fold:

- Determine, using real-time indoor air sampling via portable laboratory equipment and confirmatory EPA TO-15 analyses for volatile organic compounds (VOCs), if there is an immediate threat to human health in structures associated with the Plume.
- Expedite the indoor air assessment using real-time data from a field-portable GC/MS to identify indoor sources and identify potential vapor intrusion points during negative depressurization followed by positive pressurization of the entire structure or key discrete portions, as determined practical in the field.
- Collect indoor and near-slab soil vapor data as part of a collaborative data-set that will support the overall remedial investigation of both the groundwater plume and vapor intrusion potential, development of a periodic indoor air monitoring program for AOU-1, future risk assessment, and refinement of the conceptual site model.
- Determine the relationship between a subset of co-located TO-15 grab samples and field-portable GC/MS air sample results for determining the comparability of the field instrument to provide acceptable and usable real-time data.

This vapor intrusion investigational approach was adopted from an Environmental Security Technology Certification Program (ESTCP) Project No. ER- 201119-Final Report (GSI, 2013) and ER-201119-GD- Standard Protocol (GSI, 2014) and provides an alternative to the conventional investigation method of indoor air and sub-slab testing. The project-specific Quality Assurance Project Plan (QAPP) and Sampling and Analysis Plan (SAP) (including

Standard Operating Procedures (SOPs) for HAPSITE preparation and general operation) were also used as references for this Protocol, as well as the Infinicon HAPSITE Smart Plus™ and HAPSITE-ER™ Operating Manuals.

The Protocol relies on the use of on-site data acquisition of indoor air volatile organic contaminants and near-slab soil gas using field portable gas chromatography/mass spectrometry (GC/MS) for real-time assessment of structures. The protocol also provides a methodology for locating and quantifying sources of indoor air contamination should indoor air contaminants be identified during the assessment process. For this study, the field portable instrument will be the HAPSITE Smart Plus™ or HAPSITE ER Chemical Identification System™ (HAPSITE). Indoor air constituents detected above initial action screening levels proposed by the Department of Veterans Affairs (VA) will be confirmed by conventional 24-hour SUMMA canister sampling. The SUMMA canister samples will be analyzed using Environmental Protection Agency (EPA) Method TO-15 Select Ion Monitoring (SIM) and TO-15 laboratory analyses by a National Environmental Laboratory Accreditation Program (NELAP)-certified off-site laboratory.

The following activities will be performed as part of the protocol. Real-time assessment using the HAPSITE™ will determine the nature and applicability of specific activities. For AOU-1, the decision criteria are contained in the technical memorandum: Vapor Intrusion Screening Levels and Removal Action Levels 700 South 1600 East PCE Plume, Salt Lake City, Utah dated 10/17/2014.

- Selection of Structures for Vapor Intrusion Assessment (Section 3.0) – selection of structures to be included in the Remedial Investigation.
- Pre-Assessment Activities (Section 4.0) – confirmation of access agreements/ permissions, schedules, and address for testing; property owner/occupant review of questionnaire for locating potential indoor air background sources; and building condition assessment for sampling locations.
- HAPSITE™ Use, Calibration and QC Checks (Section 5.0) – use and operation, initial calibration; continuing calibration and tuning checks, overnight storage, and regular maintenance.
- Outdoor (upwind) Real-time Qualitative Sampling (Section 6.0) - conduct ambient outdoor (background) testing at an upwind location adjacent to the structure using the HAPSITE ™ in analyze mode to identify presence of target VOCs.
- Initial (upon entry) Survey of indoor VOC Concentrations/Identification of Interior Background Sources (Section 7.0) – room-by-room (or groups of room openly connected) walk through of the structure using the HAPSITE™ in survey mode to identify the presence of any elevated VOC concentrations, followed by localized (sub-areas of rooms) assessments as indicated by initial results to identify and record locations of interior background sources.
- Survey of Potential Vapor Intrusion Entry Points (Section 8.0) – areas identified during initial building condition assessment inspection to assess for vapor entry points using HAPSITE™ in survey mode.
- Initial Real-Time Quantitative Sampling (Section 9.0) – under ambient conditions, interior floor-by-floor and (if necessary) room-by-room quantitative assessment of target chlorinated VOCs: Tetrachloroethylene (PCE); Trichloroethylene (TCE); cis-1,2-Dichloroethylene **(**cis-1-2-DCE); and, Vinyl Chloride (VC). *[Note that VC has been*

removed from the HAPSITE® analyte list per approved MFM #4 and #8 (Attachments 1B and 1C, respectively).]

- Negative Pressure Real-Time Quantitative Sampling (Section 10.0) – place the building interior, or if the structure is divided into discrete areas, the portion of the building interior identified as having the greatest potential for vapor intrusion, under negative pressure, and conduct continuous (repeated samples at a central location) quantitative sampling for target chlorinated VOCs during initial depressurization and air exchange, followed by quantitative sampling using the HAPSITE™ on all other floors while building is under negative pressure.
- Positive Pressure Real Time Quantitative Sampling (Section 11.0) – place the building interior, or if the structure is divided into discrete areas, the same portion of the interior where depressurization was previously performed, under positive pressure and conduct continuous (repeated samples at a central location) quantitative sampling in the same locations and sampling procedures as used during the negative depressurization.
- SUMMA Canister Sampling (Section 12.0) – SUMMA™ canisters (24-hour samples) deployed after interior background source are identified and after quantitative HAPSITE™ sampling under ambient and negative pressure, if data indicates exceedances of the established risk action screening levels for any analyte.
- Near-Slab Real-Time Soil Gas Sampling (Section 13.0) – perform real-time, near-slab soil gas quantitative evaluation of contaminants of interest using the HAPSITE™ in analytical mode. Collect SUMMA canister samples at selected sampling probe locations adjacent to structures where indoor SUMMA™ canisters were collected, plus at least two soil gas locations without detectable COCs in soil gas.
- Data Management and Distribution (Section 14.0) – data management and distribution to project participants.

2.0 Problem Definition

A PCE plume (Plume) has been detected in the vicinity of the George E. Wahlen VA Medical Center (VAMC or Facility). The Plume underlies the neighborhoods surrounding the intersection of 700 South and 1600 East in Salt Lake City, Utah, a blended commercial and residential area of approximately 300 acres. PCE was detected at parts per billion (ppb) levels in one of Salt Lake City's secondary drinking water wells (removed from service in 2004) and the Mt. Olivet Cemetery irrigation well. PCE has also been detected at ppb levels in shallow and deep groundwater, surface water springs, and in storm sewers in this area.

VA subsequently designated the primarily residential area on and just below the Wasatch Fault Scarp as AOU-1, also known as the East Side Springs area. This area is characterized by numerous small seeps and springs, some of which discharge PCE-containing groundwater to the land surface near the suspected downgradient margin of the PCE plume. The residential areas just to the north of AOU-1 and a dry gulch just to the east of AOU-1 are included in AOU-1. The northernmost and easternmost portions of AOU-1 are not currently known to contain springs or seeps, and the depth-to-groundwater beneath the surface is not known. However, the proximity of these areas to the groundwater table and springs containing PCE warrant further study to determine whether any subsurface contaminants related to the Site extend to those areas and pose risks to human health and/or the environment.

The primary public health concern within AOU-1 is the potential for vapor intrusion of chlorinated volatile organic compounds, associated with the Plume, into surrounding homes, schools, and other structures in the East Side Springs area. The potential public health threat is the accumulation of volatilized PCE and its degradation by-products from contaminated groundwater into proximal occupied structures above regional screening levels; thus creating an inhalation exposure hazard. The potential pathways for PCE (and associated degradation products) into indoor air may include the surrounding or underlying soil gas, surface water springs, and shallow groundwater in the vicinity of the structure or dwelling.

This protocol outlines performing real-time and conventional indoor-air assessment of structures associated with the East Side Springs in order to rapidly assess excess risk associated with contaminated indoor air resultant of VI and to obtain legally defensible data for future mitigation decisions.

3.0 Selection of Structures for Remedial Investigation Initial VI Assessment

Prior to field-activities, the VA and technical team will coordinate the solicitation of property owners for voluntary testing of their property for VI assessment. VA plans to approach the 50 or so property owners that have already indicated a willingness to allow testing and pending access permission, structures on these properties will constitute the initial group of buildings to be tested for potential vapor intrusion. VA's goal is to identify a sufficient number of structures within the known location of the Plume and outside the Plume that may exhibit a full-spectrum of indoor air vapor concentrations for the contaminants of interest. Of the 50 or so properties to date where owners have volunteered for testing, some are located within the approximate known areas of the Plume where PCE detections in the surface springs were encountered, some are above the Plume in areas where groundwater is at least 30 to 50 feet below the surface, some are located over shallow groundwater that is outside the Plume, and some are located a considerable distance from the known Plume extent and well above the groundwater table.

The rationale for testing a range of locations within the Remedial Investigation Area is to: (1) maximize the probability of encountering structures with a spectrum of measurable concentrations of the contaminants of interest in the known impact areas; and (2) maximize the probability of encountering some structures with no or minimal levels of the contaminants. The combined data-set will be used as an early guide to recruit additional sampling locations and prioritize the recruitment based on potential for vapor intrusion.

4.0 Pre-Assessment Activities

Pre-assessment activities include the following: (1) confirming that an access agreement/permission of the property owner is in place, confirming the schedule for the investigation, and the structure's address; (2) reviewing questionnaire responses in order to evaluate potential indoor air background sources; (3) identifying indoor air sampling locations and evaluating the structural conditions that may affect vapor intrusion; and (4) noting the locations of background sources (to the extent possible) of materials containing chlorinated volatile organics. The activities noted for 1, 2, and 3, above, may be done in advance of the arrival of the sampling team whenever possible. Removal of significant background sources, including non-target sources such as gasoline or paint thinners that are likely to potentially overwhelm the field instruments, will be discussed with owner upon arrival and removed from

the structure with their permission to the extent possible. For this effort, the assessment team will consist of two individuals, at least one of which is trained and certified by the equipment vendor on the use of the HAPSITE.

4.1 Confirmation of Access Agreements, Schedules, and Addresses

Prior to arriving at the testing site, the assessment team will confirm with the VA that permission for access is in place, the scheduled date and address are correct, and a responsible party will be at the building to grant access and provide pertinent information. For the day of the assessment, upon arrival of the sampling team, the property owner will be asked to close all windows, exterior and interior doors, and shut off any forced air climate control equipment for the duration of each sampling task that requires no air circulation (i.e., indoor source survey and entry point survey, negative depressurization). Between sampling tasks and during personnel breaks or lunchtimes, forced air climate controls can be restarted to maintain indoor temperatures. Homes with baseboard electric heat or hot-water radiator heat do not require systems to be turned off.

4.2 Review of Building Questionnaire Responses

A questionnaire will be filled out by the property owner or building occupant prior to on-site assessment and reviewed by the assessment team. The questionnaire will include information regarding the layout of the structure (e.g., number of floors, approximate square-footage, rooms on each floor, attached structures); and the type and location of potential background sources (dry cleaning, glues, solvents, fuels, cleaning products). This information will be used to (1) identify initial sampling locations; and (2) locate and document any potential background sources prior to conducting any screening or sample collection.

4.3 Building Survey

Upon arrival at the building, if the structure was not able to be inspected and the layout obtained prior to the sampling date, the assessment team will perform a walk-through to confirm the layout of the structure. The assessment team will sketch a floor plan layout showing each room on each level with approximate dimensions of each room. Any obvious interior background sources identified from the questionnaire or during the walk-through will be documented as to the type of product and its location within the structure. Unless the source is creating high concentrations of indoor VOCs that will overwhelm the HAPSITE™, all identified background sources will be left in place. The potential source and location will be recorded on the sampling record, as well as the presence of any fixed sources that cannot be removed such as new carpet, freshly painted surfaces, etc. From the building survey, initial quantitative sampling locations will be marked on the layout sketch. These initial locations shall be, at a minimum, on every level and generally centered within the level.

5.0 HAPSITE™ Use, Calibration, and QC Checks

5.1 HAPSITE™ Use

The HAPSITE™ will be operated by a KD Analytical Trained and Certified assessment team member. The trained assessment team member will be familiar with the general use of the instrument, as well as with the project specific measurements and QC requirements.

The HAPSITE™ will be used in two modes - Quantitative Analyze and Qualitative Survey. In Quantitative Analyze mode the instrument will detect and quantify the target chlorinated VOCs: PCE, TCE, cis-1,2-DCE, and VC. The sensitivity of the HAPSITE™ for chlorinated VOCs in

Analyze Mode is 0.1 to 0.5 µg/m3, which is below the characterization criteria (EPA RSLs; in parentheses) for PCE, but close to the criteria for the other selected target analytes: PCE (11.0 µg/m3, TCE (0.48 µg/m3), VC (0.17 µg/m3), and cis-1,2-DCE (no value established by EPA). In Qualitative Survey Mode the instrument will be used as a screening tool for the continuous-reading of the target analytes. The sensitivity of the HAPSITE ™ for the target analytes in Survey Mode is in the low mg/m3 range. Survey mode will be used to assess the location of background sources from indoor products and materials, as well as determine potential entry points for subsurface vapor contaminants.

For the Analyze Mode, a project-specific sample intake and analysis method has been developed for the HAPSITE™ by the operator focusing on the target analytes: PCE, TCE, cis 1,2-DCE, and VC. The selective ion monitoring (SIM) mode will be used to increase the detector sensitivity for the target analytes. The customized method for the HAPSITE™ will include selecting the characteristic ions for each compound targeted, the temperature settings, GC temperature profiles, including ramp times and rates, and the timing and mass measurements associated with each scan set in the method. The equipment vendor is providing the method programming pre-installed as a selection option on the HAPSITE™. These parameters can also be modified or reset according to manufacturer instructions provided in the HAPSITE™ Operations Manual (included as an attachment to the SAP). The method will be designed for low concentration samples (i.e., 0.1 – 10 ppbV range). However, if high concentrations are encountered (e.g., 100 – 1,000 ppbv), the method can be modified simply by reducing the sampling duration – effectively diluting the sample and raising the lower quantification limit for any lower concentration VOCs.

In the Survey Mode, the HAPSITE™ by-passes the GC column and sends a continuous sample directly to the mass spectrometer detector. Survey mode for this project will be used to continuously search for indoor background generating materials and for screening potential entry points for subsurface vapors. For the Survey Mode, the HAPSITE™ is carried from room to room and the concentrator probe placed near a suspected source or near potential vapor intrusion points (e.g., foundation cracks) to identify concentrations of VOCs, as further discussed below. *[Note that the order of HAPSITE® operations were updated in MFM #4 and #8 (Attachment 1B and 1C, respectively). The indoor air will be analyzed for VOCs using the field portable GC/MS in quantitation mode. Screening will be conducted on each level (basements and living/working floors). If VOCs are detected, the portable GC/MS will be run in survey mode to aid identification of background sources of VOCs such as chemical products and dry-cleaned clothing. If such sources are found, the resident will be asked to relocate the materials from the occupied structure to prepare for real-time air assessment (MFM #4 and #8 (Attachments 1B and 1C, respectively)).]*

5.2 Calibration and QC Checks

For the Analyze Mode, tuning, initial calibration, continuing calibrations, and QC checks will be performed to assure that the instrument meets the data quality objectives specified in the Quality Assurance Project Plan.

Prior to the analyses of any samples, blanks, or calibration standards in Analyze Mode, the instrument performance check (tuning check) will be performed to establish that the HAPSITE™ meets the mass spectral ion abundance criteria. The instrument tuning check (also known as the continuing calibration verification; CCV) gas will be analyzed initially following the calibration of the HAPSITE™ and once per 24-hour time period of operation. In the event the instrument performance check standard does not meet criteria, the HAPSITE™ will not be used in Analyze mode until corrections (including recalibration) are made in

accordance with the Operators Manual, however, the Survey Mode may be used to look for the selected ions of the chemicals of interest.

The HAPSITE™ will be calibrated using a minimum of five chemical concentrations that span the monitoring range of interest (0.1 ppbv to 100 ppmv) in an initial calibration sequence to determine instrument sensitivity and the linearity of GC/MS response for the target compounds (PCE, TCE, cis-1,2-DCE, and VC). QA criteria for calibration curve acceptability are: Relative Standard Deviation (RSD) <20%; RSD of RF < 30%; and curve fit R-Squared (R^2) ≥ 0.98, where the RSD % is the measure of the linearity of the concentration levels (ion counts) in the calibration curve for each compound; and the Relative Standard Deviation of the Response Factor (RSD of RF %) is the measure of the linearity of the response factors for each compound in the calibration curve, where the response factor is a measure of the relative response (ion count) of an analyte compared to that of an internal standard. Calibration will be conducted in accordance with the procedures described in detail within the HAPSITE™ Operation Manual attached to the SAP. R^2 is the coefficient of determination or correlation coefficient squared and measures variation in the y variable attributable to the x variable. In the case of instrument calibration, this is the instrument reading relative to the known concentration of a calibration standard.

Prior to the daily analysis of samples and blanks, but after tuning criteria and initial calibration have been met, the initial calibration of the GC/MS system must be routinely checked by analyzing a continuing calibration verification (CCV) standard to ensure that the instrument continues to remain within control limits. The CCV standard will be performed once every 24 hours.

The initial equipment checks and QA analyses will be performed using a project-specific method and calibration library provided onboard the instrument. If the QA results fall outside of the desired performance goals, the instrument will be recalibrated.

In the event a sample concentration overwhelms the HAPSITE™ (i.e., concentrations completely saturate the detector as indicated by analytical results), the instrument will require purging of the analytical system with nitrogen in accordance with the Operators Manual to clean the detector before the next sample can be analyzed. Purging shall continue until the instrument results (blanks) indicate the no carry-over concentrations remain.

5.3 Storage and Routine Maintenance

The HAPSITE should be stored in a climate-controlled, dry location where it can be plugged into a stable power outlet and left in “Stand-by” mode – even over weekends. The use of Stand-by mode maintains the system temperature and carrier gas pumps and preserves the system calibration so that daily startup times are considerably shorter. A properly stored HAPSITE in standby mode can maintain its reliability and calibration for up to a month.

The routine maintenance schedule of the HAPSITE is described in the QAPP and in the Operators Manual. Key maintenance includes switching tuning standard cylinders and performing self-test programs before beginning sampling. The internal power source (battery) for the HAPSITE™ provides only two to three hours of operation time and, except when using the instrument in Survey Mode, the HAPSITE should be placed on the floor or on a cart and connected to external electrical 110 Volt AC power.

6.0 Outdoor Real-time Qualitative Sampling

After confirming that the HAPSITE™ meets tuning and continuing calibration requirements, and upon arrival at a testing site, the HAPSITE™ shall be operated in Analyze Mode to collect an ambient outdoor background sample. The sample is acquired in order to define the ambient (outdoor) concentration of the target VOCs.

The outdoor quantitative sampling should be conducted upwind, but within 10 to 30 feet of the structure to be assessed. The sample is collected upwind of the building at a height of approximately three to five feet above the ground surface (approximating the breathing zone). Outside weather conditions shall be recorded including temperature, barometric pressure, wind direction, and an estimate of wind velocity (categorical).

7.0 Identification of Interior Background Sources

Consumer products and household items are commonly found to be significant sources of chlorinated VOCs in indoor air (see Table below).

CHEMICAL[1]	GENERAL CATEGORIES
1,2-DCA	Molded plastic products, air fresheners
Carbon Tetrachloride	Aerosol cans, refrigerants, dry cleaned clothes, varnish
Chloroform	Dry cleaned clothes, fire extinguishers, adhesive remover, chlorinated drinking water
PCE	Dry cleaned clothes, automotive brake cleaners, metal degreasers, hobby craft glue
TCE	Self-defense pepper spray, degreaser, rug-cleaners
Trans-1,2-DCE	Taxidermy foam, refrigerants, cleaning solutions
1,1,1-TCA	Cleaners, adhesives, aerosol cans

1) Data sources: U.S. Department of Health and Human Services. Household Products Database. 2012.

After collecting a quantitative outdoor ambient background sample, the HAPSITE™shall be switched to operate in Survey Mode inside the building to identify the presence of any elevated VOC concentrations. The initial indoor survey should be conducted by walking through the structure room-by-room (or groups of openly connected rooms) while holding the HAPSITE™ probe at waist level and observing instrument responses (ion count). The initial room to room survey will be followed by localized (sub-areas of rooms) assessments as indicated by initial results to identify and record locations of interior background sources.

The indoor source identification procedure involves using a combination of continuous-read qualitative analysis in survey mode, visual inspection, and isolation. In continuous-reading survey mode, the instrument is used to scan potential sources for the specific target analytes. In survey mode, scan near storage units (e.g., cabinets, closets, storage containers, etc.) and product containers found in the room(s) with the highest concentration of the target VOCs detected during the initial survey and quantitative testing. As the potential source area is approached, the ion counts on the instrument will increase. If an instrument response is observed for a storage unit such as a cabinet or drawer, with permission of the property representative, examine the unit for products or materials. Examine the product labels to see if

the target VOC is identified on the label and note the type of product on the sampling record. Do not remove the products, return the unit to its as found condition, and proceed with the assessment. If permission is not granted to inspect a storage unit, the area will be noted as a possible source of background contamination. *[Note that the procedures outlined in the previous two paragraphs have been updated in MFM #4 and #8 (Attachment 1B and 1C, respectively). The indoor air will be analyzed for VOCs using the field portable GC/MS in quantitation mode. Screening will be conducted on each level (basements and living/working floors. If VOCs are detected, the portable GC/MS will be run in survey mode to aid identification of background sources of VOCs such as chemical products and dry-cleaned clothing. If such sources are found, the resident will be asked to relocate the materials from the occupied structure to prepare for real-time air assessment (MFM #4 and #8 (Attachments 1B and 1C, respectively)).]*

Locations of identified indoor sources will be recorded on the electronic sampling forms and rooms with elevated VOCs not tied to an indoor source shall be noted for further investigation for vapor intrusion points.

8.0 Survey of Potential Vapor Intrusion Entry Points

Areas identified in the initial VI assessment inspection and during the initial walk-through of the structure for potential vapor intrusion entry points will be assessed using the HAPSITE™ in survey mode. The vapor intrusion entry survey will be concurrent with the indoor source survey to the extent practical.

The instrument will be used to scan potential vapor entry points such as sumps, floor drains, expansion joints, plumbing penetrations, or foundation cracks. The sampling port is placed near the potential vapor entry point. If the ion counts increase in the vicinity of the entry point, then there is evidence that there is a vapor intrusion problem. In addition, any VOCs identified by type by the instrument will be recorded. The particular room (or rooms) shall be further evaluated in quantitative mode under depressurization conditions.

9.0 Initial Real-time Quantitative Sampling

After the initial Survey for indoor background and vapor intrusion points for target VOCs has been completed, the HAPSITE™ shall be switched to Analyze Mode to conduct real-time quantitative indoor air sampling and analysis (under ambient pressure conditions). Based on the structural assessment, floor plan of the structure, and Survey Mode results, an initial indoor sample for quantitative analysis will be collected from the three to five foot high breathing zone interval in each major floor level within the building; for example, the basement, main floor, and second floor of the structure. Additional samples may be collected from potential indoor source areas such as an attached garage and from specific rooms where the initial survey indicated evidence of elevated VOCs.

If the concentration of the target VOCs in all areas is below detection limits or below the screening action level concentrations, then it can be concluded that there are no significant background sources of indoor air contamination. The assessment then proceeds to performing an indoor air assessment under negative pressure conditions (Section 10.0). If target VOCs in one or more major areas are detected above screening levels, then a more detailed quantitative assessment is performed to determine the specific rooms associated with the areas exhibiting the highest concentrations. For example, if the VOC concentrations from the first round of sampling were highest in the basement, each room in the basement would be

sampled in quantitative mode.

10.0 Negative Pressure Real-Time Quantitative Sampling

Building depressurization (negative pressure) can exacerbate a vapor intrusion problem and may be a conservative means of detecting vapor intrusion within a structure. The structure will be placed under a stable differential pressure of -5 pascals using a variable speed louvered air door installed in a doorway located at the lowest possible level at the structure. A recording digital manometer will be used to measure the indoor versus outdoor pressure differential and the structure will be maintained under negative differential pressurization for 30 minutes (or until at least 2.5 air exchanges have occurred) before initiating sampling. The louvered air door to be employed in the depressurization will be capable of exhausting up to 6,000 cubic feet per minute of air; however, depending on construction tightness of the structure, particularly in homes built prior to the 1970s, air leakage into the home may not allow attaining of the -5.0 pascal target depressurization level. In this case, testing will proceed as long as any differential depressurization can be achieved. In the event the structure does not achieve a one pascal depressurization relative to the outdoors, this will be taken as an indicator that the structure construction is so leaky with respect to outdoor air that depressurization does not naturally occur and will be noted on the sampling forms, and the sampling will continue to verify that no increases in concentrations occurred..

The HAPSITE™ will be deployed in Analyze Mode in a high-risk location (defined as the lowest living or occupied level of a structure and where vapor intrusion is most likely to occur) immediately prior to the start and operated continuously (one sample every eight minutes or as often as instrument cycling allows) during negative pressurization until the 2.5 air exchanges have been attained. Upon achieving conditions stated above, additional quantitative sampling will be performed on every level of the structure, in the same locations used during the ambient characterization. If the previous entry point screening using the HAPSITE™ in Survey mode identified an area of probable vapor intrusion, then a quantitative measurement will be performed in that room while it is under negative depressurization.

It is important to note that the residences and structures to be tested range in size from single floor dwellings to large public buildings and range in age from 30 to over 100 years. In the event that an entire structure cannot effectively be placed under negative pressure due to size, floor plan layout, or extreme air leakage, the blower door will be located to depressurize the lowest level of the structure where vapor intrusion is most likely to occur, as indicated by the previous testing results. The final decision will be made by the field team leader, and the decision rationale noted in the electronic field record.

11.0 Positive Pressure Real Time Quantitative Sampling

Building pressurization (positive pressure) can assist in the differentiation of indoor background sources and actual vapor intrusion. The structure will be placed under a stable differential pressure of +5 pascals using a variable speed louvered air door installed at the same location as used for the negative depressurization discussed in Section 10.0. In addition, if the initial indoor source survey and ambient quantitative analysis results suggest an indoor source on an upper level, the pressurization test will be conducted with the blower door installed on that level. A recording digital manometer will be used to measure the indoor versus outdoor pressure differential and the structure will be maintained under positive differential pressurization for 30 minutes (or until at least 2.5 air exchanges have occurred) before initiating sampling. Testing will proceed as long as any differential pressurization can be achieved. In the event the

structure does not achieve pressurization relative to the outdoors, the building will be assumed to be too leaky to pressurize and any reduction in vapor concentrations is the result of fresh air dilution.

The HAPSITE™ will be deployed in Analyze Mode in a high-risk location (defined as the lowest living or occupied level of a structure and where vapor intrusion is most likely to occur) immediately prior to the start and operated continuously (one sample every eight minutes or as often as instrument cycling allows) once positive pressurization is achieved until the 2.5 air exchanges have been attained. Upon achieving conditions stated above, additional quantitative sampling, at a minimum, will be performed on every level of the structure, in the same locations used during the ambient characterization. If the previous entry point screening using the HAPSITE™ in Survey mode identified an area of probable vapor intrusion, then a quantitative measurement will be performed in that room while it is under positive pressurization.

It is important to note that the residences and structures to be tested range in size from single floor dwellings to large public buildings and range in age from 30 to over 100 years. In the event that an entire structure cannot effectively be placed under positive pressure due to building size, floor plan layout, or extreme air leakage, the blower door will be located to pressurize the lowest level of the structure where vapor intrusion is most likely to occur, as indicated by the previous testing results, and secondly, in the area noted as most likely containing indoor source materials. The final decision will be made by the field team leader, and the decision rationale noted in the electronic field record.

12.0 SUMMA™ Canister Sampling

Laboratory confirmation samples will be collected from structures where any quantitative HAPSITE ambient indoor or quantitative HAPSITE™ depressurization analyses exceed the screening action levels for any target VOC. Sample collection will use a 24-hour composite sample from a SUMMA™ canister and will be analyzed by Method TO-15.

For residences or other occupied buildings meeting this criteria, at least one indoor air sample for lab analysis will be collected per building. This sample will typically be collected in the lowest regularly occupied level of the home (either a finished basement or first floor) in contact with the ground. If the specific construction or configuration of a residence suggests one indoor sample will not be representative, or field-based detections of any contaminant of interest are detected in widely separated multiple locations, then a second indoor air sample may be collected from another living space, working space, or an unfinished basement room, as indicated by HAPSITE™ characterization results. A house or dwelling's heating and cooling systems can be used during the SUMMA™ Canister sampling.

Non-residential structures such as school buildings and businesses will be screened for indoor air sources, vapor entry points, and negative/positive pressurization as described above, and SUMMA™ canister sample locations will be selected based on the uses of the lower levels of the structure or where VI is most likely to occur. In particular, basement level classrooms in school buildings may be tested with SUMMA canisters for lab analysis regardless of the HAPSITE™ results.

In addition, at least three structures that exhibit concentrations below screening levels (including at least one location with no HAPSITE™ detection of target VOCs) will be sampled using 24-hour SUMMA canisters.

The indoor air samples for full laboratory analysis will be collected into laboratory-supplied six-liter SUMMA™ canisters over a 24-hour period, as detailed below:

- A clean and inerted six-liter Summa canister under a 25 in. Hg vacuum equipped with a flow regulator will be placed at a height of three to five feet above the floor in the center of the space to be sampled.
- The flow regulator will be set to collect a 24-hour time weighted sample (approximately 4 ml/min).
- Sampling will be stopped (i.e., the valves closed and the canister disconnected) after about 24 hours once the vacuum reaches about 5 in. Hg).
- The sampling crew will record the sample name, initial and final vacuums, initial and final sampling times, canister and flow controller serial numbers, and other pertinent information on the field sampling summary and laboratory Chain of Custody (CoC) forms.
- Canisters will be packed in a rigid wall shipping container, such as a cooler or heavy-duty cardboard box (ice is not required), if shipping is required.
- A custody seal will be placed over the openings to the shipping container.
- The shipping container will be shipped or delivered immediately to the laboratory for analysis.
- All samples will be accompanied by the CoC as described in the QAPP.

SUMMA™ Canister sampling will be conducted in accordance with the SOPs provided in the SAP.

As an additional confirmation on the accuracy and precision of the HAPSITE™, up to six instantaneous SUMMA™ grab samples will be collected and analyzed for TO-15 parameters in residences where VOCs are detected during the HAPSITE quantitative sampling. The grab samples will be co-located with the HAPSITE™ sample probe and collected by opening the SUMMA™ canister valve to allow the canister to fill concurrently with the HAPSITE sample intake process. The results will represent the VOC concentrations present at a given location at the time of collection and can be correlated compared directly to HAPSITE quantitative results similar to a duplicate sample analysis.

13.0 Near-Slab Real-Time Soil Gas Sampling and Analysis

The near-slab soil gas characterization approach will be implemented concurrent with the indoor air characterization to identify and characterize target VOCs present in soils adjacent to tested structures. The purpose of the soil gas sampling is two-fold (1) provide soil gas concentrations near structure foundations for support of the AOU-1 Vapor Intrusion Risk Assessment pathway evaluation process; and (2) provide information to help define the potential extents of the underlying groundwater VOC plume.

Near-slab soil gas characterization will be performed adjacent (within five feet) to all structures screened and assessed for indoor vapor intrusion. Soil vapor probes will be driven adjacent to the structure's foundation to a depth approximately six inches below the base of the foundation or to the top of the water table, whichever occurs first. Samples will be collected with a peristaltic pump and Tedlar® bags, field screened with a PID and multi-gas meter, then a second sample collected in the same manner and field-screened in real-time with the portable GC/MS in analyze

mode to identify and quantify any target VOCs present in soil pore space adjacent to structures. At locations where groundwater is not encountered at the base of the foundation, after sampling, the probe rod will be driven another five feet, if soil conditions allow, and the sampling process repeated to obtain vertical delineation data for soil gas. If groundwater is encountered, the approximate depth-to-water will be measured and recorded, the probe re-installed to just above the water table, and a soil gas sample collected just above the water level.

Soil gas samples will also be collected in SUMMA™ canisters and analyzed for full volatile organics (TO-15) analysis for any near-slab characterization sample where indoor SUMMA™ canisters are collected. *[Note that MFM #4 and #8 (Attachments 1B and 1C, respectively) state: collect soil gas samples in a Summa canister and submit selected soil gas samples for full volatile organics (TO-15) analysis at a UDOH certified laboratory at any location where a near-slab characterization sample exceeds the 11.0 µg/m^3 (1.62 ppbv) SL for PCE or where soil gas vapors are found to be elevated 10 times the RSL for the detected VOC. Note however, this screening value was corrected to 370 µg/m^3 (54.55 ppbv) in QAPP Revision 2 (VA 2017).]* In addition, three selected locations throughout AOU-1 where the field portable GC/MS did not detect target VOCs in soil gas above screening levels will be sampled. Sampling for laboratory analyses will be accomplished using SUMMA™ canisters equipped with flow regulators to collect 24-hour time-averaged samples from the soil vapor probes.

In addition to confirmatory VOC analyses, five percent of the soil gas sampling locations within the PCE plume area will be selected for additional Semi-Volatile Organic Compound (SVOC) analyses using method TO-13A. Method TO-13A employs laboratory-supplied sorbent tubes attached inline between the vapor probe and a vacuum pump set at a flow rate of 5 L/min for 480 minutes (8 hours). SVOC samples are for informational purposes to support full characterization of the plume nature and extent, and possible future risk assessment of the Site. *[Note that MFM #3 (Attachment 1B) indicates that no samples will be analyzed using method TO-13. Additionally, per MFM #4 and #8 (Attachments 1B and 1C, respectively) soil gas samples for TO-15 analysis will only be collected if soil gas PCE concentrations exceed the 11.0 µg/m^3 (1.62 ppbv) SL or where soil gas vapors are found to be elevated 10 times the RSL for the detected VOC. Note however, this screening value was corrected to 370 µg/m^3 (54.55 ppbv) in QAPP Revision 2 (VA 2017).]*

The procedures for emplacing the soil gas probes, testing the integrity of the seal, and for collecting and analyzing samples both for the HAPSITE™ and the TO-15 Method and TO-13A Method are described in the QAPP (Section 2.3.2) and the SAP (Section 5.4).

14.0 Data Management and Distribution

14.1 Data Management

Information that will be included in the project data record relative to the indoor air study include field log books, sample collection and handling records, operational records, GPS data, chain-of-custody forms sample receipt records, and shipping documentation. Field log books may be kept electronically via hand-held tablets.

The project field team leader will be required to maintain a field logbook of daily activities. A separate logbook of suitable material that will be bound with consecutively numbered pages will be used for this project. All entries will be legibly written in black ink. Any entry errors are corrected by drawing one solid line through the incorrect entry followed by the user's initials and date. The bottom of each page is signed and dated by the individual making the entries. Factual and objective language will be used. All entries will be complete and accurate enough to allow

reconstruction of each field activity. Activities should be recorded contemporaneously.

The field logbook cover will include the following information:

- job name, contract, and delivery order numbers,
- site activity name,
- start date,
- end date of last logbook entry.

Daily entries of the following minimum information will be recorded in the logbook as follows:

- date and time, expressed in 24-hour (military) format;
- sampling start/stop times;
- weather conditions;
- personnel present;
- field observations;
- site identification and building layout (visual sketches where appropriate);
- location of sampling points (GPS coordinates and/or visual sketches where appropriate);
- description of sample;
- sample identification number;
- number of samples taken;
- time of sample collection;
- number of Quality Assurance/Quality Control (QA/QC) samples taken;
- type and mode of field instrumentation;
- names of people collecting samples;
  all calibrations done;
- any other field instruments;
- any general observations or notes;
- any deviations from the sampling plan.

Sample custody will be documented on standardized CoC records, an example of which is included in Attachment 3 of the QAPP. The CoC record establishes the documentation necessary to trace sample possession from time of collection through sample analysis and final disposition. A sample is in the custody of a person if any of the following criteria are met:

- the sample is in a person's physical possession;
- the sample is in a person's view after being in his or her physical possession;
- the sample was in a person's physical possession and was then locked up or sealed to prevent tampering; and/or
- the sample is kept in a secured area.

Field forms including soil gas sampling data sheet, indoor air sampling data sheets, HAPSITE calibration, and QC information will be used during field work. Examples of these forms can be found in Attachment D of the QAPP.

Photographs will be taken in the field to document sampling locations and conditions. Digital camera photographs will be taken with the date/time record turned on. Photographs of all sampling locations will be taken with the sample number. A photographic log will be kept in

which the date, location, photographer's name, and direction the photographer is facing (if appropriate) will be recorded. Photographs will be labeled, placed in a binder or stored electronically, and submitted at the end of the field work. Selected photographs will be used in reports as deemed necessary or appropriate.

14.2 Data Distribution

Data distribution, in the form of reports and memos, are described in the QAPP (Section 4.2) and are summarized below:

- *Weekly Field Status Reports* – Communicates to VA Remedial Project Manager (RPM) weekly progress and any significant preliminary findings, QA/QC issues, and changes to the field schedule.
- *Progress Reports* – Communicates the progress made by VA and its consultants on a monthly basis regarding site investigation, community involvement, achievement of project milestones, and the myriad of actions that encompass the investigation of AOU-1.
- *Environmental Media Reports* – Communicates in brief the conclusions of individual investigation events (Indoor Air, Soil Gas, Surface Water, and Groundwater) for AOU-1 and any laboratory analysis associated with the event. These reports will be written by the Program Manager and submitted to the VA RPM, EPA, and Utah Department of Environmental Quality (UDEQ).
- *Nonconformance Reports* – Identifies any deviations of planned or expected scope-of-work activities relating to the investigation of AOU-1. Reports may pertain to field data collection, health and safety events, etc. These reports will be written by the FET Program Manager or QA Manager. The reports will be submitted to the VA RPM and Quality Assurance Manager, and if needed, the EPA and UDEQ.
- *Laboratory Audits/Corrective Action Reports* – Communicates the result of any third-party audit or review of the analytical laboratory that is supporting the FET investigation activities. This report will be written by the CLP (soil and water media results) and ALS Global Labs (soil gas and air) laboratory designated personnel. The reports will be submitted to the FET Program Manager, VA RPM and Quality Assurance Manager, UDEQ RPM and the EPA RPMs.
- *Remedial Project Managers (RPM) Debriefings* – Weekly conference calls between VA, EPA, UDEQ and other key stakeholders to discuss previous week's field efforts and investigation.
- *Data Validation Reports* – Communicates the results of laboratory data validation for each media (indoor air, soil gas, surface water, and groundwater) to VA, EPA, and UDEQ. Each report will provide a summary of the data validation process, a list of analytes having changed data qualifiers, a list of analytes rejected during validation, and a determination of the usability of the data. The data validation reports will be prepared by the FET lead data validator and the QA/QC Manager.
- *Remedial Investigation Report (RI Report)* – Communicates the conclusions of all investigation events for AOU-1 and any laboratory analysis associated with the event. The RI Report will also contain summaries of data validation reports and deviations from the SAP and QAPP.

15.0 References

Department of Veterans Affairs (VA). 2017. Quality Assurance Project Plan Update Revision 2, 700 South 1600 East PCE Plume AOU-1: East Side Springs, Salt Lake City, Utah.

ESTCP (2013). *Use of GC/MS Analysis to Distinguish Between Vapor Intrusion and Indoor Sources of VOCs –Final Report* - ESTCP Project ER-201119, November 2013.

ESTCP (2014). *Use of GC/MS Analysis to Distinguish Between Vapor Intrusion and Indoor Sources of VOCs – Standardized Protocol for On-Site Evaluation of Vapor Intrusion* - ESTCP Project ER-201119, July 2014.

Quality Assurance Project Plan (QAPP), 700 South and 1600 East Street PCE Plume, AOU-1: East Side Springs, Salt Lake City, Utah – October 1, 2014.

Sampling and Analysis Plan (SAP), 700 South and 1600 East Street PCE Plume, AOU-1: East Side Springs, Salt Lake City, Utah – October 1, 2014.

INFICON (2006). *Operation Manual for the HAPSITE Smart Plus – 074-472-P1C*.

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Attachment 1A
Minor Field Modification #1

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FINAL

RIWP Minor Field Modification-01
Protocol for Performing Indoor Air and Near-slab Soil Gas Assessments
700 South 1600 East PCE Plume Superfund Site
Salt Lake City, Utah

PREPARED FOR: D. Lynne Welsh, VA Salt Lake City Health Care System

PREPARED BY: Ed Reid, First Environment, Inc.

COPIES: David Waite, CH2M-Hill; Rolf Lange, Avalon; Devin DeMarco, Ellen Reid, First Environment, Inc.

DATE: July 17, 2015

Introduction

This document provides a description of a minor modification to the Protocol for Performing Indoor Air and Near-slab Soil Gas Assessments, Version 4.0 (dated December 23, 2014) for the use of real-time on-site gas chromatography/mass spectrometry (GC/MS) analysis to evaluate the potential for vapor intrusion in structures associated with the Accelerated Operable Unit-1 (AOU-1) portion of the 700 South 1600 East PCE Plume (Plume). The protocol is included as Appendix H of the RIWP. The minor modification is a result of lessons learned during implementing the protocol in early January 2015, additional field training with the field-portable GC/MS (HAPSite™), and the initial screening using the protocol at a variety of sites during the first four weeks of the field effort.

The changes to the protocol are primarily changes in the order of various components of the indoor air screening process. In addition, further clarification to the quantitative indoor ambient air testing process to better define the location and number of rooms to be tested per floor level are provided.

Indoor Air Screening Process Modification

The current Protocol provides general procedures in Sections 7.0, 8.0, and 9.0 for conduct of initial qualitative (HAPSite™ in survey mode) screening for indoor background sources, conduct of initial qualitative (HAPSite™ in survey mode) vapor entry point screening, and conduct of quantitative (HAPSite™ in analyze mode) indoor ambient air sampling, respectively. This portion of the testing is done under ambient conditions. Currently, immediately upon entering a site, the HAPSite™ is used to conduct surveys throughout the building to identify potential locations of indoor background source materials and potential locations of vapor entry. Then, based on the surveys, the HAPSite™ is used in analyze mode to quantify concentrations on each floor of the structure and in habitable rooms.

After testing a number of buildings, it is apparent that walking through a site room-by-room with the HAPSite™ in survey mode is inefficient due to the lack of elevated indoor sources above the survey mode detection limits of about 100 ppb in nearly all structures. Below the survey mode

detection limits, the team can only record total ion counts (TICs) relative to baseline TIC to obtain a gross representation of target compounds. In addition, the vapor entry survey has rarely assisted in identifying entry points when random surveys of cracks, wall penetrations, and crawl spaces have been performed in survey mode. Quantitative testing of ambient air has proven to be better at providing initial data that allows the HAPSite™ operator to isolate specific rooms or areas of a site for further evaluation of indoor sources and entry points.

The original Protocol should be changed so that the order of indoor air testing begins with ambient indoor air analysis (Section 9.0) and then proceeds with either indoor background source surveys (Section 7.0) based on ambient results and visual observation of source materials, or vapor entry point surveys based on ambient results and observations of potential entry points.

The regulatory agencies (EPA and UDEQ) verbally agreed to the change on February 5, 2015 and effective upon VA acceptance of the Minor Field Modification, the Protocol is modified so that ambient indoor air analysis will be conducted upon entry into a site. Ambient air samples will be collected and analyzed by the HAPSite from each occupied level of the site and from selected representative rooms or areas on each level. In addition, the operator will collect ambient samples from selected spaces (i.e., closets, utility rooms, and crawl spaces accessed via entry doors from the basement areas) where indoor source materials may be present. Rooms or spaces with notable potential entry points (i.e., large floor cracks, open sump pits, floor drains, exposed sub-slab soil) will also be tested to determine ambient air concentrations within the space.

Upon completion of ambient air sampling and analysis with the HAPSite™, the operator will evaluate the initial ambient results and, in conjunction with visual observations of potential source materials, will switch the HAPSite™ to survey mode and run short (2-3 minute) surveys at locations where indoor sources are more likely to be present, as discussed in the Protocol. TICs will be noted during each survey and the specific item provoking the response also noted, if any. If ambient quantitative data indicates target compounds were below the HAPSite™ detection limits (approximately 0.1 ppbv) and no source materials were observed, then an indoor source survey is not necessary and shall be noted on the VI field forms. If ambient quantitative data shows target compound concentrations just above detection limits from a structure level where only one or two representative samples were initially collected, additional ambient samples will be collected from other locations (at least one other location) throughout that level to verify concentrations do not increase in other portions of the level – as a result of an indoor source.

After indoor source surveys are complete or deemed un-necessary, the operator will use the ambient-results evaluation and previous visual observations of potential vapor entry points to select locations to survey for vapor entry. The HAPSite will be used in survey mode as described in the original protocol and 2-3 minute surveys at suspected entry points (typically sumps, floor drains, foundation wall penetrations, and bare soil crawl spaces). TIC response will be noted and the type of entry and location also noted. If ambient quantitative data indicates target compounds were below or just above the HAPSite™ detection limits (approximately 0.1 ppbv) and no potential entry points were observed, then a vapor entry survey is not necessary and shall be noted on the VI field forms.

Attachment 1B
Minor Field Modifications #3 - #6

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MINOR FIELD MODIFICATIONS #3 - #6

Remedial Investigation Work Plan
AOU-1: East Side Springs
700 South 1600 East Street PCE Plume
Salt Lake City, Utah
Approved July 2015

TO: D. Lynne Welsh, Department of Veteran's Affairs

FROM: Pamela Moss, EA Team (EA Engineering, Science, and Technology, Inc., PBC/ CH2M HILL)

DATE: 2 March 2016

SUBJECT: Minor Field Modifications to the Remedial Investigation Work Plan AOU-1: East Side Springs 700 South 1600 East PCE Plume Salt Lake City, Utah (July 2015)

1. Introduction

This document provides a description of minor modifications to the Remedial Investigation Work Plan (RIWP) AOU-1: East Side Springs 700 South 1600 East PCE Plume Salt Lake City, Utah (July 2015) to provide consistency for sampling methods, analytes, and other details documented in the RIWP and the Quality Assurance Project Plan (QAPP) Update Revision 1. Minor Field Modification #1 Protocol for Performing Indoor Air and Near-slab Soil Gas Assessments and Minor Field Modification #2 Clarification of QAPP Amendment Number 1 are included in the Final RIWP as Appendices K and L. The following modifications are detailed below:

- Minor Field Modification #3 – Change of analytical method for analysis of 1,4-dioxane (EPA Crosswalk[1] items A6(a)(iii), A6(a)(vii), B1(b), B1(c), B2(a)(i), B2(b), B2(f)(ii), B2(h), B2(i), B3(a)(i), B3(b)(i), B3(d)(i), B4(b)(i), B4(c)(i), B5(a)(i), B6(b), B7(a)(i), B7(b)(i), B8(a)(ii))
- Minor Field Modification #4 – Updates to the analytical methods, parameters, and the sample media on which the analyses will be performed; updates to number of samples, sample locations and depth, analyses, collection methodology, etc. for each of the targeted media; change in use of HAPSITE gas chromatograph/mass spectrometer for field screening of groundwater and surface water samples (EPA Crosswalk[1] items A6(a)(ii), A6(a)(ix), A6(a)(x), A6(a)(xi), A6(a)(xii), B1(f)(i), B1(f)(vi))
- Minor Field Modification #5 – Update of Health and Safety Plan (HASP) (Appendix C of RIWP)
- Minor Field Modification #6 – Inclusion of isotope analysis of surface water (EPA Crosswalk[1] items A3, A4(a)(iii), A4(e), A6(a)(x), A9(a), B4(a)(ii), B4(f))

2. Minor Field Modifcation #3

The TO-15 SIM analyte list will include 1, 4-dioxane. Therefore, TO-13 sampling and analysis will not be used for any samples collected during the 2016 sampling event. This field modification is a change to sections 6.2.1.3 and 6.2.2.2 of the RIWP.

3. Minor Field Modifcation #4

The following sections and table from the RIWP have been updated for consistency with the QAPP Update Revision 1 with respect to 1) analytical methods, parameters, and the sample media on which the analyses will be performed; 2) number of samples, sample locations and depth, analyses, collection methodology, etc. for each of the targeted media; and 3) change in use of HAPSITE gas chromatograph/mass spectrometer for field screening of groundwater and surface water samples.

Section 6.2.1 Indoor Air Quality Assessment is hereby replaced with QAPP Update Revision 1 Section 2.3.1 as follows:

The indoor air characterization approach is as follows:

- *Indoor Air Screening step: Access each occupied structure within AOU-1 where the occupant/owner has granted access and complete visual inspection for potential indoor VOC sources and conduct resident interview. The indoor air will be analyzed for chlorinated volatile organic compounds (cVOCs) using the field portable GC/MS in quantitation mode. Screening will be conducted on each level (basements and living/working floors. If cVOCs are detected, the portable GC/MS will be run in survey mode to aid identification of background sources of cVOCs such as chemical products and dry-cleaned clothing. If such sources are found, the resident will be asked to relocate the materials from the occupied structure to prepare for real-time air assessment. It is estimated that as many as 300 occupied structures, including residences, schools, daycare facilities, and other businesses, are within the AOU-1 boundaries; however, participation of owners will likely be much less and reduce the actual testing locations, with 30 to 50 structures estimated to be included in the testing.*
- *Indoor Air Characterization step: Conduct real-time assessment of indoor air quality at accessible occupied structures within the AOU-1 area where permission has been obtained. The characterization of indoor air will occur in the breathing zone under both ambient conditions approximately 30 minutes after the indoor source screening step is completed and then after the structure is placed under negative differential pressurization (target differential pressure of 10 pascals, equivalent of 0.04 inches of water, a level that replicates the effects of typical cold season stack effects, between inside and outside) as measured with a portable field manometer. Each structure for which access has been granted within AOU-1will be evaluated for cVOCs, using the portable GC/MS in analyze mode, with testing occurring within the breathing zone on basements and living/working levels of the structure to identify the compounds present in the indoor air. A properly calibrated portable GC/MS in analyze mode is capable of achieving low ppbv to parts per trillion by volume detection limits for PCE and TCE in air. The portable GC/MS will also be used in analyze mode to measure ambient outdoor background concentrations concurrent with the indoor activities. To the extent practical given site access considerations and variable wind directions over the period of sampling, one outdoor air sample will be collected associated with each structure.*
- *Indoor Air Verification step: Conduct indoor air sampling using Summa canisters equipped with flow regulators to collect 24-hour time-averaged samples in structures where concentrations of the 5 PCOPCs exceed the screening levels shown in RIWP Appendix H. Concurrent measurements for differential air pressure (inside and outside) will be taken during this step to*

assure samples are representative of conditions that create vapor intrusion. Samples will be sent to a Utah Department of Health (UDOH)-certified laboratory for volatile organic compound (VOC) analysis or VOC-Selective Ion Monitoring (SIM) analysis to achieve lower reporting limits for PCOCs using the EPA Toxic Organics (TO)-15 analytical method. Laboratory testing of indoor air is estimated to occur at approximately 25 structures out of the 30 to 500 expected to be initially assessed in the AOU-1 area, and analysis of up to 40 indoor samples is expected (some structures will require multiple sample locations). Based on Minor Field Modification #1, an additional 4 structures will be sampled to aid the assessment of whether vinyl chloride is present at concentrations below the detection limit using the portable GC/MS. This is needed because the vinyl chloride reporting limit using the portable GC/MS is above the screening level, whereas, the reporting limit for laboratory samples is below the detection limit. The selected structures will be located where groundwater is within 10 to 20 feet of the ground surface and will include:

- *One sample outside the Plume where PCE, TCE, and cis-DCE in the indoor air are below the screening levels (SLs) or the detection limit of the HAPSITE® instrument.*
- *Three samples will be collected inside the area of the Plume where PCE and TCE are equal to or less than their respective SLs but above the instrument detection limits.*

At least three outdoor (upwind, downwind, and in the center of AOU-1) ambient background samples will be collected during the confirmation sampling activities for laboratory analysis for VOCs using method TO-15.

- *Additional Monitoring Activities: In addition to the initial screening, which will be conducted under cold season and low water table conditions, a second round of assessment and confirmation sampling of indoor air at up to 15 selected outdoor background and indoor air locations, based on the potential for indoor air exposure, will be conducted during Spring 2016. This phase will be conducted in the vicinity of known PCE contamination based on results from the initial sampling. The area of AOU-1 where PCE was previously detected above the screening level in indoor air samples and shallow groundwater is anticipated is known as the focus area. The re-testing will be conducted using both real-time field analyses (portable GC/MS) and confirmatory laboratory analysis using Summa canisters for sample collection and offsite laboratory analysis.*

Section 6.2.2 Near-slab Soil Gas Investigation is hereby replaced with QAPP Update Revision 1 Section 2.3.2 as follows:

The near-slab soil gas characterization approach will be implemented concurrent with the indoor air characterization to identify and characterize cVOCs present in soils adjacent to tested structures, as follows:

Near-slab Soil Gas Characterization step: Conduct soil gas characterization adjacent to structures screened and assessed for vapor intrusion where the property owner agreed to soil gas sampling and sampling is practical given site conditions. Soil vapor probes will be driven adjacent to the structure foundation to a depth approximately 6 inches below the base of the foundation or to the top of the water table, whichever occurs first. Samples will be collected with a vacuum pump and Tedlar® bags, field screened with a photoionization detector (PID) and

multigas meter, then a second sample collected in the same manner and field-screened with the portable GC/MS in analyze mode to identify and quantify any cVOCs present in soil pore space adjacent to structures. At locations where groundwater is not encountered at the base of the foundation, the probe rod will be driven another 5 feet after the initial sample is collected, if soil conditions allow, to obtain another sample for vertical delineation data for soil gas. If groundwater is encountered, the approximate depth to water will be measured and recorded. It is anticipated that up to 50 locations will be field screened for near-slab soil gas concentrations during the study.

- *Near-slab Soil Gas Characterization Verification step: Collect soil gas samples in a Summa canister and submit selected soil gas samples for full volatile organics (TO-15) analysis at a UDOH certified laboratory at any location where a near-slab characterization sample exceeds the 11.0 µg/m^3 (1.62 ppbv) SL for PCE or where soil gas vapors are found to be elevated 10 times the RSL for the detected VOC. In addition, selected locations where the field portable GC/MS did not detect VOCs in soil gas will be sampled to confirm results. Sampling for laboratory analyses will be accomplished using Summa canisters equipped with flow regulators to collect 24-hour time-averaged samples from the soil vapor probes. Based on the expected number of buildings located within the area where soil gas impact caused by the PCE plume is most likely to occur, laboratory testing of soil gas is estimated to occur at up to 15 locations.*

- *Conduct additional near-slab, soil floor and crawl space for TO-15 analysis, using a UDOH certified and EPA-approved laboratory, at structure locations identified during the indoor air field characterization and during the field investigation as having high potential for vapor intrusion into indoor air. These locations are proposed to provide additional high-quality lab data for human health risk assessment resulting from the vapor intrusion pathway.*

Near-slab testing was chosen in lieu of sub-slab testing due to the presence of extremely shallow groundwater that occurs at or very near the slabs of many residences as indicated by numerous sump pumps and discharging footer drains. The likelihood of causing groundwater to leak into the basement of a structure by penetrating the slab to install testing apparatus was deemed too risky by the project team.

The indoor air assessment/characterization and near-slab soil gas sampling will commence at the same residences or occupied structures where owners have already indicated they will allow indoor air testing, and then pending permission to access additional properties, proceed to structure locations adjacent to the previously identified springs and seeps. It is anticipated that additional property owners may need to be actively recruited by VA in some portions of AOU-1 to fill data gaps, but at least 36 owners have already indicated a willingness to allow testing. The initial locations for indoor air and soil gas sampling are shown on Figure 9.

Section 6.2.3 Open-field Soil Gas Investigation is hereby replaced with QAPP Update Revision 1 Section 2.3.3 as follows:

Open-field soil gas data will be collected to provide a means of estimating the plume impacted area and to aid in evaluation of vapor intrusion potential. Concurrent with or immediately following the initial indoor air quality characterization steps and near-slab soil gas characterization, the investigative sampling approach for open field soil gas will proceed as follows:

- *Conduct field screening of soil gas levels and vertically profile the soil gas concentrations of PCE and daughter products in the vadose zone by manually or mechanically installing unsaturated (vadose) zone soil vapor sampling points near historically cVOC-impacted seeps and*

springs and in selected locations adjacent to streets/sidewalks (open field samples) in AOU-1. The field screening will be conducted by collecting soil gas samples in Tedlar bags for subsequent analysis using the field portable GC/MS equipment or the GC/MS probe will be connected directly to the sampling point. It is anticipated that soil gas samples will be collected from locations adjacent to the six spring identified during the previous investigations that contained PCE; then at the six spring locations that did not contain PCE; and then expand the sampling program to additional spring locations within AOU-1 as they are identified during field activities, up to an expected total of 50 samples.

- *Conduct additional open field soil gas sampling for TO-15 analysis, using a UDOH certified and EPA-approved laboratory.*

The open field soil gas sampling (near seeps or springs and along public right of ways) will commence at residences or occupied structures where owners have already indicated they will allow access for indoor air testing, and then pending permission to access, proceed to structure locations adjacent to the previously identified springs or seeps, and at selected locations on public rights of way.

Section 6.2.4 Surface Water and Shallow Groundwater Investigation is hereby replaced with QAPP Update Revision 1 Section 2.3.4 as follows:

Concurrent with or immediately following the initial indoor air quality characterization steps, the general investigative sampling approach for surface water and very shallow groundwater will also take place in phases and will proceed as follows:

- *Conduct initial field sampling and preliminary field screening analysis of surface water throughout AOU-1. This will be accomplished by collecting surface water samples at all locatable seeps, springs, and small surface water bodies suspected of being in contact with groundwater; and collecting sump pump discharge and foundation drain discharge samples at residences. In addition, water samples will be collected from selected Salt Lake City stormwater sewer manholes, located in and downgradient of AOU-1, to determine if groundwater seepage and discharge from foundation drains in AOU-1 is impacting the sewer. Surface samples collected during the investigation will be sent to the EPA CLP lab for analysis of VOCs. It is expected that up to 50 surface water samples will be analyzed for VOCs at the EPA CLP laboratory in accordance with CLP method protocol. Samples from a random subset (20%) of these locations will be analyzed for SVOCs, TAL metals, anions, TDS and pH at the CLP laboratory as appropriate or by the subcontractor laboratory ALS in Salt Lake City. 10% confirmation splits of the surface water samples will be collected and shipped to a different CLP laboratory for the same analysis (VOCs, SVOCs, and TAL metals) for quality assurance. The CLP laboratories will be selected by the EPA Region 8 Sample Coordinator prior to initiation of field activities.*
- *Up to 10 surface water samples will be collected and submitted to the University of Utah Stable Isotope Ratio Facility for Environmental Research for deuterium and oxygen-18 analysis.*
    - *Conduct initial field sampling and preliminary field screening analysis of very shallow groundwater (less than 12 feet below surface). This will be accomplished by manually installing up to 25 shallow temporary groundwater sample points into the water table near ponds, seeps, or springs adjacent to residences or occupied structures. An*

additional 35 temporary shallow groundwater sampling points will be installed to depths up to 30 feet using a truck or tractor-mounted GeoProbe™ Tool (or equivalent). If the GeoProbe™ unit hits refusal before the target depth is reached then permanent monitoring points will be installed as part of the RI for OU-2 at those locations. The mechanically installed sample points will be located along public rights of way throughout and surrounding the portion of the PCE plume in AOU-1 to further determine the extent of groundwater conditions in the areas likely to have the potential for vapor intrusion into occupied buildings. Very shallow groundwater sampling will focus on areas where elevated soil gas and indoor air PCE concentrations are detected at occupied structures, whereas the shallow GeoProbe™ points will focus on identification of the extent of the PCE relative to AOU-1. Up to 10 of the shallow sample points and GeoProbe™ points will be constructed as piezometers and covered with protective surface completions for additional water level measurements and possible additional sampling and analytical testing in the future. The remaining temporary sample points will be abandoned, as soon as sampling and water level measurements are completed. Groundwater samples collected during the investigation will be sent to the EPA CLP laboratory for VOC analysis.

- *Expedited turn-around time will be requested for analysis of preliminary COPCs in groundwater from the CLP laboratory during GeoProbe™ investigation in order to select additional groundwater sampling locations to support either 1) stepping out further from the East Side Springs area if preliminary COPCs are detected or 2) stepping in if no preliminary COPCs are detected. If expedited turn-around is not possible from the CLP laboratory, then samples will be sent to ALS in Salt Lake City for CLP VOC analysis. ALS will provide fast turn data and EPA level 2 type data deliverables to include analytical results and QC sample results. Expedited analysis data used to make real time field decisions will not be validated since the data is being used to screen for preliminary COPC detections and to further delineate sampling locations.*
- *Soil lithology will be performed on all locations in the focus area and 50 percent of locations outside the focus area. Locations to be selected to provide lithologic data throughout the investigation area.*
- *Approximately 50 groundwater samples will be collected and shipped to the CLP lab for VOC analysis in accordance with CLP protocols. Samples from a random subset (10%) of the groundwater sample locations will also be analyzed for SVOCs, total and dissolved metals, and alkalinity, anions, pH, TDS at the CLP laboratory as appropriate or by the subcontractor laboratory ALS in Salt Lake City. The CLP lab will be selected by the EPA Region 8 Sample Coordinator prior to initiation of field activities. It is expected that up to five groundwater samples will be submitted for laboratory analyses of SVOCs and total and dissolved metals.*
- *Temporary monitoring points converted to short term piezometers will be used to measure water levels at least two additional times throughout the year to determine seasonal changes in shallow groundwater elevations. In addition, up to five of the piezometers may be sampled for VOCs, SVOCs, and total and dissolved metals for analysis at a CLP laboratory.*

The field investigation for surface water and very shallow groundwater will commence in the vicinity of the 11 spring and seep locations (pending owner approval for access) previously sampled in 2010 and 2011 (UDEQ/DERR, 2011a, b, c), then proceed to spring and seep locations identified, but not tested during previous investigations (pending access approval), and for groundwater continue at properties whose owners have already requested indoor air pathway evaluation. Although not an explicit objective of the AOU-1 investigation, it is anticipated that surface and groundwater sampling will generally define the southwestern downgradient and western and southern cross-gradient extents of the PCE plume in surface water and in the very shallow groundwater within AOU-1. The resultant groundwater and surface water data will be used to guide additional groundwater characterization and placement of permanent monitoring wells during the subsequent site wide PCE plume RI. Figure 10 provides the approximate initial locations for surface water and shallow groundwater samples.

Table 11 Estimated Numbers of Samples by Media is hereby replaced by the following table:

TABLE 11: Estimated Numbers of Samples by Media
700 South 1600 East PCE Plume, Salt Lake City, Utah

Media	Data Level	Analyses	Estimated Number of Samples	Minimum Number of QC Samples	Rationale	Sample Designation[b]
Surface Water	CLP Protocol	Target List VOCs Field Water Quality Parameters[a]	50	3 field duplicates; 1 trip blank per cooler; 1 rinse blank/field blank per day if necessary	Field screening of identified seeps, springs, other surface water to support vapor intrusion pathway analysis	A-0001-mmddyy-SW-001
Surface Water	CLP Protocol, EPA Lab or Subcontractor Lab	Target List VOCs, SVOCs (including 1,4-dioxane), Metals, Anions, pH Field Water Quality Parameters[a]	10	1 field duplicate; 1 rinse blank/field blank per day if necessary; 1 trip blank per cooler	Predictive pathway analysis and support future groundwater investigation	A-0001-mmddyy-SW-001
Surface Water	CLP Protocol	Target List VOCs, SVOCs (including 1,4-dioxane), and Metals	5	1 trip blank per cooler	Quality assurance split samples	A-0001-mmddyy-SW-001A
Surface Water and Groundwater	SIRFER Standard Operating Procedure	Hydrogen and Oxygen Stable Isotopes	10	NA	Support future groundwater investigation	A-0001-mmddyy-SW-001
Groundwater (first saturated interval)	EPA Method Protocol	PCOPCs Target List (PCE, TCE, DCE, VC) Field Water Quality Parameters[a]	50	1 trip blank per week	Initial groundwater plume delineation samples at proposed locations to support real-time field decisions	A-0001-mmddyy-GW-001
Groundwater (Temporary Sampling Points)	CLP Protocol, EPA Lab or Subcontractor Lab	Target List VOCs, SVOCs (including 1,4-Dioxane), Metals, Anions, Alkalinity, TDS, pH Field Water Quality Parameters[a]	10	1 field duplicate; 1 trip blank per cooler; 1 rinse blank/field blank per day if necessary	Predictive pathway analysis and support future groundwater investigation	A-0001-mmddyy-GW-001

TABLE 11: Estimated Numbers of Samples by Media
700 South 1600 East PCE Plume, Salt Lake City, Utah

Media	Data Level	Analyses	Estimated Number of Samples	Minimum Number of QC Samples	Rationale	Sample Designation[b]
Soil Gas (open areas)	Field Analysis	Direct Read or Tedlar® Bag VOCs - GC/MS	50	5 field duplicates 3 field blanks	Real time soil gas results for field decisions	A-0001-mmddyy-SG-001-ft
Soil Gas (open areas)	Level 4 (CLP Equivalent)	Target List TO-15/TO-15 SIM	15	2 field duplicates	Confirm field results; predictive vapor intrusion pathway analysis	A-0001-mmddyy-SG-001-ft
Soil Gas (near slab)	Field Analysis	Direct Read or Tedlar® Bag VOCs - GC/MS	50	5 field duplicates 3 field blanks	Real time field results to support indoor air pathway evaluation	A-0001-mmddyy-SG-001-ft-
Soil Gas (near slab)	CLP Equivalent (Level 4)/ Definitive	Target List TO-15/TO-15 SIM	15[d]	2 field duplicates	Confirm field results, predictive vapor intrusion pathway analysis	A-0001-mmddyy-SG-001-ft
Indoor Air	Field Analysis	Direct Read Probe VOCs - GC/MS	1100 - 1400	NA	Real Time analyses for indoor air sources, real time determination of indoor air health effects.	A-0001-mmddyy-IA-001-ABC
Indoor Air	Level 4 (CLP Equivalent)	Target List VOCs TO-15/ TO-15 SIM	55[d]	6 field duplicates[c]	Confirm field results, determine indoor health effects, evaluate vapor intrusion pathway	A-0001-mmddyy-TO-001-ABC

TABLE 11: Estimated Numbers of Samples by Media
700 South 1600 East PCE Plume, Salt Lake City, Utah

Media	Data Level	Analyses	Estimated Number of Samples	Minimum Number of QC Samples	Rationale	Sample Designation[(b)]
Soil	CLP Protocol	Target List VOCs, SVOCs, Metals	3	1 field duplicate 1 equip blank Shipped with other samples[(c)]	Data needed to support risk assessment	A-0001-mmddyy-SS-001-ft
Ambient Background Air	Field Analysis	Direct Read Probe VOCs - GC/MS	60	NA	Two samples – one upwind and one downwind of structure tested for indoor air	A-0001-mmddyy-OA-001-OUT
Ambient Background Air	Level 4 (CLP-equivalent)	Target List VOCs - TO-15/TO-15 SIM	6	1 field duplicate Shipped with other samples[(c)]	Confirm field results, determine indoor health effects, evaluate vapor intrusion pathway	A-0001-mmddyy-TO-001-OUT

Notes:

(a) DO, ORP, pH, conductivity, temperature, turbidity.
(b) See QAPP Update Revision 1 (Section 3.3.1) for sample naming convention.
(c) Confirmation sample totals include four locations selected in accordance with QAPP Amendment No. 1 and Minor Modification No. 2.

CLP – Contract Laboratory Program
DCE – cis-1,2-Dichloroethene
GC/MS – Gas chromatograph/mass spectrometer
NA – Not applicable
PCE – Tetrachloroethene
PCOPC – Preliminary contaminant of potential concern
SIM – Selective ion monitoring
SIRFER – Stable Isotopes Ratio Facility for Environmental Research, University of Utah
SVOC – Semivolatile organic compound
TCE – Trichloroethene
TDS – Total dissolved solids
VC – Vinyl chloride
VOC – Volatile organic compound

4. Minor Field Modifcation #5

The Health and Safety Plan (HASP) (Appendix C of the RIWP) has been replaced to reflect the protocols of the new contractor, EA Engineering, Science, and Technology, Inc., PBC (EA). The updated HASP is included with this minor field modification as Attachment 1.

5. Minor Field Modifcation #6

The following information is hereby included in section 6.2.4 of the RIWP for consistency with the QAPP Update Revision 1 with respect to the analysis of surface water samples for deuterium and oxygen-18 analysis (see Minor Field Modification #4):

- Up to 10 surface water samples will be collected for analysis of deuterium and oxygen-18.
- Analysis will be performed at the University of Utah Stable Isotope Ratio Facility for Environmental Research, Salt Lake City, Utah and will follow the SPATIAL/SIRFER CRDS Liquid Water Protocol (Attachment 2).
- The Project Manager for isotope analysis is Suvankhar Chakraborty of the University of Utah Stable Isotope Ratio Facility for Environmental Research.
- The data package deliverable for the stable oxygen and hydrogen isotope analysis will be an EPA Level 2 type package and will include the following information:
  - Cover letter or report title page with laboratory identification, client name and signature of person authorizing report release.
  - Summary of samples received that correlates field sample identification (ID) with the laboratory ID.
  - Chain of custody record.
  - Field ID number.
  - Date received.
  - Date prepared.
  - Date analyzed
  - Preparation and analytical methods.
  - Reference sample results
  - Case narrative that addresses the following information at a minimum:
  - Sample receipt discrepancies
  - Descriptions of all non-conformances in the sample receipt, handling, preparation, analytical and reporting processes, and the corrective action taken in each occurrence.
- The turnaround time for the isotope analysis is anticipated to be 45 days. An expedited turnaround time will likely not be required for the isotope analysis.
- Groundwater is analyzed using an autosampler and Picarro Cavity Ring-Down Spectroscopy (CRDS) system to determine $\delta^{18}O$ and $\delta^{2}H$ ratios.

Quality Control Samples (Lab) for Stable Oxygen and Hydrogen Isotope Parameters in Water
AOU-1 - 700 South 1600 East PCE Plume, Salt Lake City, Utah

QC Sample	Frequency	Method/SOP QC Acceptance Limits - δ^2H	Corrective Action	Person Responsible for Corrective Action	Data Quality Indicator (DQI)	Measurement Performance Criteria
Field Duplicate	1 per sampling event	Standard deviation of calibrated isotopic values for 3 or more replicate injections of the unknown sample must be less than 0.2‰ ($\delta^{18}O$) and 0.75‰ (δ^2H)	Evaluate batch precision for other QC samples and flag data accordingly	Data Reviewer	Precision	RPD less than 50% for detect data
PT[1] Reference Water	Run at beginning of run and after every 8 samples	Not vary by more than 0.9‰ for δ2H and 0.12‰ for δ18O (1 standard deviation)	If monthly values exceed the thresholds, the data from individual runs should be reviewed to identify and remedy potential errors in data processing or any systematic changes in instrument performance and their cause.	Laboratory Supervisor	Precision	Not vary by more than 0.9‰ for δ2H and 0.12‰ for δ18O (1 standard deviation)
PZ[1] Reference Water	1 per sample tray run	Standard deviation should be no more than 20% of the average parameter value across the month	Review data from individual runs to identify and remedy potential error or systematic changes. Reanalyze sample and reassess if necessary	Laboratory Supervisor	Precision	Less than or equal to 20% average over the month
UT[1] Reference Water	1 per sample tray run	Standard deviation should be no more than 20% of the average parameter value across the month	Review data from individual runs to identify and remedy potential error or systematic changes. Reanalyze sample and reassess if necessary	Laboratory Supervisor	Precision	Less than or equal to 20% average over the month

6. References

EA Engineering, Science, and Technology, Inc., PBC (EA), 2016. Quality Assurance Project Plan Update Revision 1 for the Accelerated Operable Unit 1: East Side Springs, 700 South 1600 East Street PCE Plume, Salt Lake City, Utah. February.

First Environment (FE). 2015. Final Remedial Investigation Work Plan, AOU-1: East Side Springs, 700 South 1600 East PCE Plume, Salt Lake City, Utah. July.

[1]EPA Crosswalk refers to Attachment 1 of the Quality Assurance Project Plan Update Revision 1 (EA 2016).

Attachment

1 Health and Safety Plan

2 SPATIAL/SIRFER CRDS Liquid Water Protocol

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Attachment 1C
Minor Field Modifications #7 - #13

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www.eaest.com

MINOR FIELD MODIFICATIONS #7 - #13

Sampling and Analysis Plan
AOU-1: East Side Springs
700 South 1600 East PCE Plume
Salt Lake City, Utah
Approved July 2015

TO: D. Lynne Welsh, Department of Veteran's Affairs

FROM: Pamela Moss, EA Team (EA Engineering, Science, and Technology, Inc., PBC/ CH2M HILL)

DATE: 2 March 2016

SUBJECT: Minor Field Modifications to the Sampling and Analysis Plan AOU-1: East Side Springs 700 South 1600 East PCE Plume Salt Lake City, Utah (July 2015)

1. Introduction

This document provides a description of minor modifications to the Sampling and Analysis Plan (SAP) AOU-1: East Side Springs 700 South 1600 East PCE Plume Salt Lake City, Utah (October 2014) to provide consistency for sampling methods, analytes, and other details documented in the SAP and the Quality Assurance Project Plan (QAPP). The SAP is included as Appendix A of the Remedial Investigation Work Plan (RIWP) AOU-1: East Side Springs 700 South 1600 East PCE Plume Salt Lake City, Utah (July 2015). Minor Field Modification #1 Protocol for Performing Indoor Air and Near-slab Soil Gas Assessments and Minor Field Modification #2 Clarification of QAPP Amendment Number 1 are included in the Final RIWP as Appendices K and L. Minor Field Modifications #3 - #6 are included in a separate document and detail changes to the RIWP. The following modifications are detailed below:

- Minor Field Modification #7 – Change of analytical method for analysis of 1,4-dioxane (EPA Crosswalk[1] items A6(a)(iv), A6(a)(vii), B1(b), B1(c), B2(a)(i), B2(b), B2(f)(ii), B2(h), B2(i), B3(a)(i), B3(b)(i), B3(d)(i), B4(b)(i), B4(c)(i), B5(a)(i), B6(b), B7(a)(i), B7(b)(i), B8(a)(ii))
- Minor Field Modification #8 – Updates to the analytical methods, parameters, and the sample media on which the analyses will be performed; updates to number of samples, sample locations and depth, analyses, collection methodology, etc. for each of the targeted media; change in use of HAPSITE gas chromatograph/mass spectrometer for field screening of groundwater and surface water samples (EPA Crosswalk[1] items A6(a)(ii), A6(a)(ix), A6(a)(x), A6(a)(xi), A6(a)(xii), B1(f)(i), B1(f)(vi))
- Minor Field Modification #9 – Inclusion of isotope analysis of surface water (EPA Crosswalk[1] items A3, A4(a)(iii), A4(e), A6(a)(x), B4(a)(ii), B4(f))
- Minor Field Modification #10 – Excludes installation of pressure transducers in temporary monitoring points for the 2016 field event (EPA Crosswalk[1] items A6(a)(xiv), B2(a)(ii))
- Minor Field Modification #11 – Clarifies use of the term definitive data (EPA Crosswalk[1] item B1(f)(i), B1(f)(iii), B1(f)(iv), B1(f)(v), B1(f)(vi), B1(f)(viii), B1(f)(ix))
- Minor Field Modification #12 – Updates to sample containers, preservatives, hold times and sample methods (EPA Crosswalk[1] items B2(f)(i), B2(g), B3(a)(ii))

- Minor Field Modification #13 – Removes field screening for SVOCs.

2. Minor Field Modifcation #7

The TO-15 SIM analyte list will include 1, 4-dioxane. Therefore, TO-13 sampling and analysis will not be used for any samples collected during the 2016 sampling event. This field modification is a change to sections 4.1 and 4.2 of the SAP.

3. Minor Field Modifcation #8

The following sections and table from the SAP have been updated for consistency with the QAPP Update Revision 1 with respect to 1) analytical methods, parameters, and the sample media on which the analyses will be performed; 2) number of samples, sample locations and depth, analyses, collection methodology, etc. for each of the targeted media; and 3) change in use of HAPSITE gas chromatograph/mass spectrometer for field screening of groundwater and surface water samples.

Section 4.1 Indoor Air Quality Screening, Characterization, and Verification is hereby replaced with QAPP Update Revision 1 Section 2.3.1 as follows:

The indoor air characterization approach is as follows:

- *Indoor Air Screening step: Access each occupied structure within AOU-1where the occupant/owner has granted access and complete visual inspection for potential indoor VOC sources and conduct resident interview. The indoor air will be analyzed for chlorinated volatile organic compounds (cVOCs) using the field portable GC/MS in quantitation mode. Screening will be conducted on each level (basements and living/working floors. If cVOCs are detected, the portable GC/MS will be run in survey mode to aid identification of background sources of cVOCs such as chemical products and dry-cleaned clothing. If such sources are found, the resident will be asked to relocate the materials from the occupied structure to prepare for real-time air assessment. It is estimated that as many as 300 occupied structures, including residences, schools, daycare facilities, and other businesses, are within the AOU-1 boundaries; however, participation of owners will likely be much less and reduce the actual testing locations, with 30 to 50 structures estimated to be included in the testing.*
- *Indoor Air Characterization step: Conduct real-time assessment of indoor air quality at accessible occupied structures within the AOU-1 area where permission has been obtained. The characterization of indoor air will occur in the breathing zone under both ambient conditions approximately 30 minutes after the indoor source screening step is completed and then after the structure is placed under negative differential pressurization (target differential pressure of 10 pascals, equivalent of 0.04 inches of water, a level that replicates the effects of typical cold season stack effects, between inside and outside) as measured with a portable field manometer. Each structure for which access has been granted within AOU-1will be evaluated for cVOCs, using the portable GC/MS in analyze mode, with testing occurring within the breathing zone on basements and living/working levels of the structure to identify the compounds present in the indoor air. A properly calibrated portable GC/MS in analyze mode is capable of achieving low ppbv to parts per trillion by volume detection limits for PCE and TCE in air. The portable GC/MS will also be used in analyze mode to measure ambient outdoor background concentrations concurrent with the indoor activities. To the extent practical given site access*

considerations and variable wind directions over the period of sampling, one outdoor air sample will be collected associated with each structure.

- *Indoor Air Verification step: Conduct indoor air sampling using Summa canisters equipped with flow regulators to collect 24-hour time-averaged samples in structures where concentrations of the 5 PCOPCs exceed the screening levels shown in RIWP Appendix H. Concurrent measurements for differential air pressure (inside and outside) will be taken during this step to assure samples are representative of conditions that create vapor intrusion. Samples will be sent to a Utah Department of Health (UDOH)-certified laboratory for volatile organic compound (VOC) analysis or VOC-Selective Ion Monitoring (SIM) analysis to achieve lower reporting limits for PCOCs using the EPA Toxic Organics (TO)-15 analytical method. Laboratory testing of indoor air is estimated to occur at approximately 25 structures out of the 30 to 500 expected to be initially assessed in the AOU-1 area, and analysis of up to 40 indoor samples is expected (some structures will require multiple sample locations). Based on Minor Field Modification #1, an additional 4 structures will be sampled to aid the assessment of whether vinyl chloride is present at concentrations below the detection limit using the portable GC/MS. This is needed because the vinyl chloride reporting limit using the portable GC/MS is above the screening level, whereas, the reporting limit for laboratory samples is below the detection limit. The selected structures will be located where groundwater is within 10 to 20 feet of the ground surface and will include:*

  - *One sample outside the Plume where PCE, TCE, and cis-DCE in the indoor air are below the screening levels (SLs) or the detection limit of the HAPSITE® instrument.*
  - *Three samples will be collected inside the area of the Plume where PCE and TCE are equal to or less than their respective SLs but above the instrument detection limits.*

  At least three outdoor (upwind, downwind, and in the center of AOU-1) ambient background samples will be collected during the confirmation sampling activities for laboratory analysis for VOCs using method TO-15.

- *Additional Monitoring Activities: In addition to the initial screening, which will be conducted under cold season and low water table conditions, a second round of assessment and confirmation sampling of indoor air at up to 15 selected outdoor background and indoor air locations, based on the potential for indoor air exposure, will be conducted during Spring 2016. This phase will be conducted in the vicinity of known PCE contamination based on results from the initial sampling. The area of AOU-1 where PCE was previously detected above the screening level in indoor air samples and shallow groundwater is anticipated is known as the focus area. The re-testing will be conducted using both real-time field analyses (portable GC/MS) and confirmatory laboratory analysis using Summa canisters for sample collection and offsite laboratory analysis.*

Section 4.2 Near-slab Soil Gas Investigation is hereby replaced with QAPP Update Revision 1 Section

2.3.2 as follows:

The near-slab soil gas characterization approach will be implemented concurrent with the indoor air characterization to identify and characterize cVOCs present in soils adjacent to tested structures, as follows:

> *Near-slab Soil Gas Characterization step: Conduct soil gas characterization adjacent to structures screened and assessed for vapor intrusion where the property owner agreed to soil gas sampling and sampling is practical given site conditions. Soil vapor probes will be driven adjacent to the structure foundation to a depth approximately 6 inches below the base of the foundation or to the top of the water table, whichever occurs first. Samples will be collected with a vacuum pump and Tedlar® bags, field screened with a photoionization detector (PID) and multigas meter, then a second sample collected in the same manner and field-screened with the portable GC/MS in analyze mode to identify and quantify any cVOCs present in soil pore space adjacent to structures. At locations where groundwater is not encountered at the base of the foundation, the probe rod will be driven another 5 feet after the initial sample is collected, if soil conditions allow, to obtain another sample for vertical delineation data for soil gas. If groundwater is encountered, the approximate depth to water will be measured and recorded. It is anticipated that up to 50 locations will be field screened for near-slab soil gas concentrations during the study.*

- *Near-slab Soil Gas Characterization Verification step: Collect soil gas samples in a Summa canister and submit selected soil gas samples for full volatile organics (TO-15) analysis at a UDOH certified laboratory at any location where a near-slab characterization sample exceeds the 11.0 µg/m^3 (1.62 ppbv) SL for PCE or where soil gas vapors are found to be elevated 10 times the RSL for the detected VOC. In addition, selected locations where the field portable GC/MS did not detect VOCs in soil gas will be sampled to confirm results. Sampling for laboratory analyses will be accomplished using Summa canisters equipped with flow regulators to collect 24-hour time-averaged samples from the soil vapor probes. Based on the expected number of buildings located within the area where soil gas impact caused by the PCE plume is most likely to occur, laboratory testing of soil gas is estimated to occur at up to 15 locations.*

- *Conduct additional near-slab, soil floor and crawl space for TO-15 analysis, using a UDOH certified and EPA-approved laboratory, at structure locations identified during the indoor air field characterization and during the field investigation as having high potential for vapor intrusion into indoor air. These locations are proposed to provide additional high-quality lab data for human health risk assessment resulting from the vapor intrusion pathway.*

Near-slab testing was chosen in lieu of sub-slab testing due to the presence of extremely shallow groundwater that occurs at or very near the slabs of many residences as indicated by numerous sump pumps and discharging footer drains. The likelihood of causing groundwater to leak into the basement of a structure by penetrating the slab to install testing apparatus was deemed too risky by the project team.

The indoor air assessment/characterization and near-slab soil gas sampling will commence at the same residences or occupied structures where owners have already indicated they will allow indoor air testing, and then pending permission to access additional properties, proceed to structure locations adjacent to the previously identified springs and seeps. It is anticipated that additional property owners may need to be actively recruited by VA in some portions of AOU-1 to fill data gaps, but at least 36 owners have already indicated a willingness to allow testing. The initial locations for indoor air and soil gas sampling are shown on Figure 4.

Section 4.3 Open-field Soil Gas Investigation is hereby replaced with QAPP Update Revision 1 Section

2.3.3 as follows:

Open-field soil gas data will be collected to provide a means of estimating the plume impacted area and to aid in evaluation of vapor intrusion potential. Concurrent with or immediately following the initial indoor air quality characterization steps and near-slab soil gas characterization, the investigative sampling approach for open field soil gas will proceed as follows:

- *Conduct field screening of soil gas levels and vertically profile the soil gas concentrations of PCE and daughter products in the vadose zone by manually or mechanically installing unsaturated (vadose) zone soil vapor sampling points near historically cVOC-impacted seeps and springs and in selected locations adjacent to streets/sidewalks (open field samples) in AOU-1. The field screening will be conducted by collecting soil gas samples in Tedlar bags for subsequent analysis using the field portable GC/MS equipment or the GC/MS probe will be connected directly to the sampling point. It is anticipated that soil gas samples will be collected from locations adjacent to the six spring identified during the previous investigations that contained PCE; then at the six spring locations that did not contain PCE; and then expand the sampling program to additional spring locations within AOU-1 as they are identified during field activities, up to an expected total of 50 samples.*
- *Conduct additional open field soil gas sampling for TO-15 analysis, using a UDOH certified and EPA-approved laboratory.*

The open field soil gas sampling (near seeps or springs and along public right of ways) will commence at residences or occupied structures where owners have already indicated they will allow access for indoor air testing, and then pending permission to access, proceed to structure locations adjacent to the previously identified springs or seeps, and at selected locations on public rights of way.

Section 4.4 Surface Water and Shallow Groundwater Investigation is hereby replaced with QAPP Update Revision 1 Section 2.3.4 as follows:

Concurrent with or immediately following the initial indoor air quality characterization steps, the general investigative sampling approach for surface water and very shallow groundwater will also take place in phases and will proceed as follows:

- *Conduct initial field sampling and preliminary field screening analysis of surface water throughout AOU-1. This will be accomplished by collecting surface water samples at all locatable seeps, springs, and small surface water bodies suspected of being in contact with groundwater; and collecting sump pump discharge and foundation drain discharge samples at residences. In addition, water samples will be collected from selected Salt Lake City stormwater sewer manholes, located in and downgradient of AOU-1, to determine if groundwater seepage and discharge from foundation drains in AOU-1 is impacting the sewer. Surface samples collected during the investigation will be sent to the EPA CLP lab for analysis of VOCs. It is expected that up to 50 surface water samples will be analyzed for VOCs at the EPA CLP laboratory in accordance with CLP method protocol. Samples from a random subset (20%) of these locations will be analyzed for SVOCs, TAL metals, anions, TDS and pH at the CLP laboratory as appropriate or by the subcontractor laboratory ALS in Salt Lake City. 10% confirmation splits of the surface water samples will be collected and shipped to a different CLP laboratory for the same analysis (VOCs, SVOCs, and TAL metals) for quality assurance. The*

CLP laboratories will be selected by the EPA Region 8 Sample Coordinator prior to initiation of field activities.

- *Up to 10 surface water samples will be collected and submitted to the University of Utah Stable Isotope Ratio Facility for Environmental Research for deuterium and oxygen-18 analysis.*

    - *Conduct initial field sampling and preliminary field screening analysis of very shallow groundwater (less than 12 feet below surface). This will be accomplished by manually installing up to 25 shallow temporary groundwater sample points into the water table near ponds, seeps, or springs adjacent to residences or occupied structures. An additional 35 temporary shallow groundwater sampling points will be installed to depths up to 30 feet using a truck or tractor-mounted GeoProbe™ Tool (or equivalent). If the GeoProbe™ unit hits refusal before the target depth is reached then permanent monitoring points will be installed as part of the RI for OU-2 at those locations. The mechanically installed sample points will be located along public rights of way throughout and surrounding the portion of the PCE plume in AOU-1 to further determine the extent of groundwater conditions in the areas likely to have the potential for vapor intrusion into occupied buildings. Very shallow groundwater sampling will focus on areas where elevated soil gas and indoor air PCE concentrations are detected at occupied structures, whereas the shallow GeoProbe™ points will focus on identification of the extent of the PCE relative to AOU-1. Up to 10 of the shallow sample points and GeoProbe™ points will be constructed as piezometers and covered with protective surface completions for additional water level measurements and possible additional sampling and analytical testing in the future. The remaining temporary sample points will be abandoned, as soon as sampling and water level measurements are completed. Groundwater samples collected during the investigation will be sent to the EPA CLP laboratory for VOC analysis.*

- *Expedited turn-around time will be requested for analysis of preliminary COPCs in groundwater from the CLP laboratory during GeoProbe™ investigation in order to select additional groundwater sampling locations to support either 1) stepping out further from the East Side Springs area if preliminary COPCs are detected or 2) stepping in if no preliminary COPCs are detected. If expedited turn-around is not possible from the CLP laboratory, then samples will be sent to ALS in Salt Lake City for CLP VOC analysis. ALS will provide fast turn data and EPA level 2 type data deliverables to include analytical results and QC sample results. Expedited analysis data used to make real time field decisions will not be validated since the data is being used to screen for preliminary COPC detections and to further delineate sampling locations.*

- *Soil lithology will be performed on all locations in the focus area and 50 percent of locations outside the focus area. Locations to be selected to provide lithologic data throughout the investigation area.*

- *Approximately 50 groundwater samples will be collected and shipped to the CLP lab for VOC analysis in accordance with CLP protocols. Samples from a random subset (10%) of the groundwater sample locations will also be analyzed for SVOCs, total and dissolved metals, and alkalinity, anions, pH, TDS at the CLP laboratory as appropriate or by the subcontractor laboratory ALS in Salt Lake City. The CLP lab will be selected by the EPA Region 8 Sample*

Coordinator prior to initiation of field activities. It is expected that up to five groundwater samples will be submitted for laboratory analyses of SVOCs and total and dissolved metals.

- *Temporary monitoring points converted to short term piezometers will be used to measure water levels at least two additional times throughout the year to determine seasonal changes in shallow groundwater elevations. In addition, up to five of the piezometers may be sampled for VOCs, SVOCs, and total and dissolved metals for analysis at a CLP laboratory.*

The field investigation for surface water and very shallow groundwater will commence in the vicinity of the 11 spring and seep locations (pending owner approval for access) previously sampled in 2010 and 2011 (UDEQ/DERR, 2011a, b, c), then proceed to spring and seep locations identified, but not tested during previous investigations (pending access approval), and for groundwater continue at properties whose owners have already requested indoor air pathway evaluation. Although not an explicit objective of the AOU-1 investigation, it is anticipated that surface and groundwater sampling will generally define the southwestern downgradient and western and southern cross-gradient extents of the PCE plume in surface water and in the very shallow groundwater within AOU-1. The resultant groundwater and surface water data will be used to guide additional groundwater characterization and placement of permanent monitoring wells during the subsequent site wide PCE plume RI. Figure 10 provides the approximate initial locations for surface water and shallow groundwater samples.

Table 1 Estimated Numbers of Samples by Media is hereby replaced by the following table:

TABLE 1: Estimated Numbers of Samples by Media
700 South 1600 East PCE Plume, Salt Lake City, Utah

Media	Data Level	Analyses	Estimated Number of Samples	Minimum Number of QC Samples	Rationale	Sample Designation[b]
Surface Water	CLP Protocol	Target List VOCs Field Water Quality Parameters[a]	50	3 field duplicates; 1 trip blank per cooler; 1 rinse blank/field blank per day if necessary	Field screening of identified seeps, springs, other surface water to support vapor intrusion pathway analysis	A-0001-mmddyy-SW-001
Surface Water	CLP Protocol, EPA Lab or Subcontractor Lab	Target List VOCs, SVOCs (including 1,4-dioxane), Metals, Anions, pH Field Water Quality Parameters[a]	10	1 field duplicate; 1 rinse blank/field blank per day if necessary; 1 trip blank per cooler	Predictive pathway analysis and support future groundwater investigation	A-0001-mmddyy-SW-001
Surface Water	CLP Protocol	Target List VOCs, SVOCs (including 1,4-dioxane), and Metals	5	1 trip blank per cooler	Quality assurance split samples	A-0001-mmddyy-SW-001A
Surface Water and Groundwater	SIRFER Standard Operating Procedure	Hydrogen and Oxygen Stable Isotopes	10	NA	Support future groundwater investigation	A-0001-mmddyy-SW-001
Groundwater (first saturated interval)	EPA Method Protocol	PCOPCs Target List (PCE, TCE, DCE, VC) Field Water Quality Parameters[a]	50	1 trip blank per week	Initial groundwater plume delineation samples at proposed locations to support real-time field decisions	A-0001-mmddyy-GW-001
Groundwater (Temporary Sampling Points)	CLP Protocol, EPA Lab or Subcontractor Lab	Target List VOCs, SVOCs (including 1,4-Dioxane), Metals, Anions, Alkalinity, TDS, pH Field Water Quality Parameters[a]	10	1 field duplicate; 1 trip blank per cooler; 1 rinse blank/field blank per day if necessary	Predictive pathway analysis and support future groundwater investigation	A-0001-mmddyy-GW-001

TABLE 1: Estimated Numbers of Samples by Media
700 South 1600 East PCE Plume, Salt Lake City, Utah

Media	Data Level	Analyses	Estimated Number of Samples	Minimum Number of QC Samples	Rationale	Sample Designation[b]
Soil Gas (open areas)	Field Analysis	Direct Read or Tedlar® Bag VOCs - GC/MS	50	5 field duplicates 3 field blanks	Real time soil gas results for field decisions	A-0001-mmddyy-SG-001-ft
Soil Gas (open areas)	Level 4 (CLP Equivalent)	Target List TO-15/TO-15 SIM	15	2 field duplicates	Confirm field results; predictive vapor intrusion pathway analysis	A-0001-mmddyy-SG-001-ft
Soil Gas (near slab)	Field Analysis	Direct Read or Tedlar® Bag VOCs - GC/MS	50	5 field duplicates 3 field blanks	Real time field results to support indoor air pathway evaluation	A-0001-mmddyy-SG-001-ft-
Soil Gas (near slab)	CLP Equivalent (Level 4)/ Definitive	Target List TO-15/TO-15 SIM	15[d]	2 field duplicates	Confirm field results, predictive vapor intrusion pathway analysis	A-0001-mmddyy-SG-001-ft
Indoor Air	Field Analysis	Direct Read Probe VOCs - GC/MS	1100 - 1400	NA	Real Time analyses for indoor air sources, real time determination of indoor air health effects.	A-0001-mmddyy-IA-001-ABC
Indoor Air	Level 4 (CLP Equivalent)	Target List VOCs TO-15/ TO-15 SIM	55[d]	6 field duplicates[c]	Confirm field results, determine indoor health effects, evaluate vapor intrusion pathway	A-0001-mmddyy-TO-001-ABC

TABLE 1: Estimated Numbers of Samples by Media
700 South 1600 East PCE Plume, Salt Lake City, Utah

Media	Data Level	Analyses	Estimated Number of Samples	Minimum Number of QC Samples	Rationale	Sample Designation[b]
Soil	CLP Protocol	Target List VOCs, SVOCs, Metals	3	1 field duplicate 1 equip blank Shipped with other samples[c]	Data needed to support risk assessment	A-0001-mmddyy-SS-001-ft
Ambient Background Air	Field Analysis	Direct Read Probe VOCs - GC/MS	60	NA	Two samples – one upwind and one downwind of structure tested for indoor air	A-0001-mmddyy-OA-001-OUT
Ambient Background Air	Level 4 (CLP-equivalent)	Target List VOCs - TO-15/TO-15 SIM	6	1 field duplicate Shipped with other samples[c]	Confirm field results, determine indoor health effects, evaluate vapor intrusion pathway	A-0001-mmddyy-TO-001-OUT

Notes:

(a) DO, ORP, pH, conductivity, temperature, turbidity.
(b) See QAPP Update Revision 1 (Section 3.3.1) for sample naming convention.
(c) Confirmation sample totals include four locations selected in accordance with QAPP Amendment No. 1 and Minor Modification No. 2.

CLP – Contract Laboratory Program
DCE – cis-1,2-Dichloroethene
GC/MS – Gas chromatograph/mass spectrometer
NA – Not applicable
PCE – Tetrachloroethene
PCOPC – Preliminary contaminant of potential concern
SIM – Selective ion monitoring
SIRFER – Stable Isotopes Ratio Facility for Environmental Research, University of Utah
SVOC – Semivolatile organic compound
TCE – Trichloroethene
TDS – Total dissolved solids
VC – Vinyl chloride
VOC – Volatile organic compound

4. Minor Field Modifcation #9

The following information is hereby included in the SAP for consistency with the QAPP Update Revision 1 with respect to the analysis of surface water samples for deuterium and oxygen-18 analysis (see Minor Field Modification #8):

- Up to 10 surface water samples will be collected for analysis of deuterium and oxygen-18.
- Analysis will be performed at the University of Utah Stable Isotope Ratio Facility for Environmental Research, Salt Lake City, Utah and will follow the SPATIAL/SIRFER CRDS Liquid Water Protocol (Attachment 1).
- The Project Manager for isotope analysis is Suvankhar Chakraborty of the University of Utah Stable Isotope Ratio Facility for Environmental Research. Mr. Chakraborty is hereby included in the SAP distribution list.
- The data package deliverable for the stable oxygen and hydrogen isotope analysis will be an EPA Level 2 type package and will include the following information:
  - Cover letter or report title page with laboratory identification, client name and signature of person authorizing report release.
  - Summary of samples received that correlates field sample identification (ID) with the laboratory ID.
  - Chain of custody record.
  - Field ID number.
  - Date received.
  - Date prepared.
  - Date analyzed
  - Preparation and analytical methods.
  - Reference sample results
  - Case narrative that addresses the following information at a minimum:
  - Sample receipt discrepancies
  - Descriptions of all non-conformances in the sample receipt, handling, preparation, analytical and reporting processes, and the corrective action taken in each occurrence.
- The turnaround time for the isotope analysis is anticipated to be 45 days. An expedited turnaround time will likely not be required for the isotope analysis.
- Groundwater is analyzed using an autosampler and Picarro Cavity Ring-Down Spectroscopy (CRDS) system to determine $\delta^{18}O$ and $\delta^{2}H$ ratios.

5. Minor Field Modifcation #10

Pressure transducers will not be installed in temporary monitoring wells per the QAPP Update Revision 1. This will affect Section 5.1.5 and 5.9 of the SAP.

6. Minor Field Modifcation #11

Updates to the SAP for the clarification of the term definitive data are documented in the errata sheet (General Erratum #3) which states that the terms “screening” and “definitive” are hereby removed throughout the document to be consistent with the use of these terms in the QAPP Update Revision 1.

7. Minor Field Modification #12

Table 4 Sample Collection Summary: Aqueous/Liquid (CLP Methods) and Table 5 Sample Collection Summary: Vapor/Gases are hereby replaced by QAPP Update Revision 1 Table 16 (Attachment 2).

8. Minor Field Modifcation #13

Analysis of field samples will be performed for VOCs but not for SVOCs for the 2016 field event. The PCOPC 1,4-dioxane will be analyzed using the VOC TO-15 SIM method. This change has been addressed by Minor Field Modification #7.

9. References

EA Engineering, Science, and Technology, Inc., PBC (EA), 2016. Quality Assurance Project Plan Update Revision 1 for the Accelerated Operable Unit 1: East Side Springs, 700 South 1600 East PCE Plume, Salt Lake City, Utah. February.

First Environment (FE). 2015. Final Remedial Investigation Work Plan, AOU-1: East Side Springs, 700 South 1600 East PCE Plume, Salt Lake City, Utah. July.

[1]EPA Crosswalk refers to Attachment 1 of the Quality Assurance Project Plan Update Revision 1 (EA 2016).

Attachment

1 SPATIAL/SIRFER CRDS Liquid Water Protocol

2 QAPP Update Revision 1 Table 16: Recommended Sample Container, Preservation and Holding Time

Attachment 1

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CRDS Water Isotope Analyzer Operation

Created 2014 by Crystal Tulley-Cordova

Revised 3/10/2015 by Kali Blevins

Part 1 – Sample Preparation

1. Fill standard and sample vials
    a. Pipette samples
        i. Pipette 0.5 mL from sample container into 2mL crimp-top vial. Use a separate, clean pipette tip for each sample. Discard used tips into a beaker for washing and re-use.
        ii. Use crimper to seal lid. Check to make sure the lid is tight (i.e. does not rotate on the top of the vial) and cleanly crimped. If the crimper is not creating a tight seal, you can adjust it with an Allen wrench.
        iii. Pipette samples 8 at a time, writing each sample name or a unique abbreviation of each sample name on each 2 mL vial with a sharpie.
        iv. Place samples in the sample tray leaving the first four plate locations empty and leaving one plate location blank between each group of eight samples. Empty locations will be used for reference waters. A maximum of 56 samples should be run at a time.
    b. Pipette reference water
        i. In order to limit evaporation, minimize the amount of time the reference waters are out of the refrigerator and the amount of time the cap is off of the reference water bottles. After pipetting reference waters, immediately replace the cap securely on the bottle and parafilm tightly around the cap.
        ii. Pipette 0.5 mL from container into 2mL crimp-top vial. Use a separate, clean pipette tip for each reference water. Discard used tips into a beaker for washing and re-use.
        iii. Use crimper to seal lid. Check to make sure the lid is tight (i.e. does not rotate on the top of the vial) and cleanly crimped.
        iv. Fill 1 vial with reference water PZ and 1 with reference water UT. These primary references are used to calibrate each run.
        v. Fill 1 vial with PT to put at the beginning of the run, 1 additional vial to run before every 8 samples, and 1 to be run in the last plate location. This secondary reference water is used to quality check the accuracy of the calibration regression and to generate a drift correction in each run. An example plate map is shown below.

Table 1. Example plate map with maximum plate locations filled

64	Sample54	65	Sample55	66	Sample56	67	PT	68		69		70	
57	Sample48	58	PT	59	Sample49	60	Sample50	61	Sample51	62	Sample52	63	Sample53
50	Sample41	51	Sample42	52	Sample43	53	Sample44	54	Sample45	55	Sample46	56	Sample47
43	Sample35	44	Sample36	45	Sample37	46	Sample38	47	Sample39	48	Sample40	49	PT
36	Sample29	37	Sample30	38	Sample31	39	Sample32	40	PT	41	Sample33	42	Sample34
29	Sample23	30	Sample24	31	PT	32	Sample25	33	Sample26	34	Sample27	35	Sample28
22	PT	23	Sample17	24	Sample18	25	Sample19	26	Sample20	27	Sample21	28	Sample22
15	Sample10	16	Sample11	17	Sample12	18	Sample13	19	Sample14	20	Sample15	21	Sample16
8	Sample4	9	Sample5	10	Sample6	11	Sample7	12	Sample8	13	PT	14	Sample9
1	PT	2	PZ	3	UT	4	PT	5	Sample1	6	Sample2	7	Sample3

Part 2 – Instrument Preparation

2. Clean syringe
    a. Unplug Autosampler and carefully remove syringe
    b. Don gloves (latex or nitrile), a lab coat, and safety goggles
    c. Open chemical fume hood sash, turn on light, and ensure that it is functioning properly with adequate air flow
    d. Lay down 2 Kimwipes; one to lay syringe on and another for ejecting solvent onto
    e. Use solvent (1-methyl-2-pyrrolidinone) from cabinet below hood to clean the syringe
        i. Insert syringe through the septum on solvent bottle, preferably targeting a previously punctured location. Be careful not to bend the syringe tip.
        ii. Extract solvent with syringe to capacity by moving plunger slowly until it comes out of the syringe. Rotate the plunger as you remove it to thoroughly clean the syringe. Rotating may also help to free the plunger if it becomes stuck.
        iii. Remove syringe from solvent bottle and eject solvent from syringe onto Kimwipe by replacing the plunger in the syringe and fully depressing it.
        iv. Repeat process at least three times or as many times as necessary until the plunger moves smoothly and easily in the syringe. If you cannot get the plunger to move freely it might need to be replaced. Note that broken syringes must be discarded in the sharps container.
        v. Once complete, re-cap the solvent bottle and return to storage under hood. Leave the Kimwipe with the ejected solvent in the fume hood until the solvent has completely evaporated before discarding.
    f. Use deionized water to rinse the syringe three times, fully filling and emptying the syringe each time
    g. Dry syringe
        i. Remove the plunger from the syringe, wiping it with a Kimwipe
        ii. Insert tip of syringe into the piece of blue tubing near the compressed air station, preferably locating a pre-existing hole and being careful not to bend the syringe
        iii. Place the opening of the tubing loosely against the air nozzle (do not try to force tubing over the nozzle)
        iv. Turn the air on and let it run until any water has been blown out of the syringe

v. Check the syringe to ensure that no water droplets remain and then replace the plunger. This eliminates the possibility of air bubbles that might affect the fill volume of the syringe.

h. Replace Syringe
   i. Plug the power supply to the autosampler back in
   ii. On the CRDS computer desktop, open the Autosampler Controller and press Chg Syringe button and wait for the syringe holder to move into position
   iii. Place syringe in syringe holder, making sure body and plunger are in holding locations
   iv. Press Swap Done button on Autosampler Controller

3. Fill out instrument log
   a. Open the sample log file on the desktop of the CRDS instrument computer
   b. Input the following information: date, time, initials, project name, number of samples, number of injections, N_2 pressure from the primary regulator on the N_2 tank
      i. N_2 pressure on the primary regulator should be > 150 psi. If the value is lower do not start the run. Wait for all instruments to finish their runs and then replace the tank will a full one. If no full spare tanks remain on the rack alert the SPATIAL facility manager who will order replacements.
      ii. N_2 pressure on the red, secondary regulator (on the bench top near the tanks) should be 2 (+/- 0.3) psi. If outside this range alert the SPATIAL facility manger. This value does not need to be recorded in the log.
   c. Look at the previous row to determine whether the septum should be changed – the septum should be changed every 300 injections. See section 5 for instructions on changing the septum. Indicate with an "X" if you have changed the septum or syringe.
4. Fill out sample ID file
   a. Open "Sample_list_template.csv" from desktop
   b. In the runfiles folder, save as "YYMMDD_project_HIDS20XX"
   c. Fill out template with sample IDs and project identifiers
5. Change septum
   a. The septum needs to be changed every 300 injections. Check run log to see if it needs to be replaced.
   b. Unscrew the injection port of the vaporizer, using fingers or tool that sits on top of the injection port to grasp and turn the ceramic top of the port. Caution: ceramic surface is warm, but metal parts at base of injection port will be hot.
   c. Remove old septum, replace with new septum. Check to see that new septum is centered.
   d. Replace injection port and hand-tighten
6. Check glass wool
   a. Make sure the glass wool container remains dry and no condensation is apparent in the vial. Check to make sure that the aquarium pump is working correctly and air is being forced through the opening at the top of the vial.

7. Check that background H_2O concentration reported in the data viewer window is below 100 ppm. If not, check that the N_2 tank regulator valve is open and the primary and secondary regulator pressures are correct (see #3).
8. Open Coordinator Launcher
    a. Don't press launch yet
    b. Make sure High Precision program ("AI High Precision" on some instruments) is selected
9. Open Autosampler Control
    a. Check that the following settings are correct:
        i. Row 1 is set for samples 1-4 and ten injections
        ii. Row 2 is set for samples 5-67 and four injections
        iii. If running less than 67 vials, update number in row 2 to match the position of the final sample in the autosampler tray
        iv. Method should be set as 'GJB rinse' (see Appendix)
    b. Click the Run button
10. After clicking Run in Autosampler Control, click the Launch button in Coordinator Launcher
11. Watch first few samples before leaving lab to ensure no problems at start of analysis
12. **Do not open OpenOffice files while run in progress, otherwise raw data will be lost and not saved to .csv file**

Part 3 – Data Processing

13. Run ChemCorrect
    a. After analysis has completed, close the Coordinator Launcher and Autosampler Control and open ChemCorrect from the desktop of the Picarro computer
    b. Click the Source button and navigate to the file with the correct date
    c. Click the 'OK' button to run ChemCorrect
    d. Examine the results to ensure that no samples show evidence for contamination, as indicated by red highlighting in the results window. Any samples flagged for contamination should be treated with activated charcoal and re-run.
        i. Uncap sample vial, add 0.5 mg activated charcoal, recap, and invert 3 times.
        ii. Allow treated sample to rest for 12 or more hours before re-analyzing.
        iii. If the same sample is flagged for contamination by ChemCorrect a second time, the sample should be transferred to the SIRFER lab for analysis by IRMS.
14. Process data
    a. Ensure that the data has been synced to the Dropbox folder and can be accessed from a computer with R installed on it.
    b. Open R and open the R script 'CRDS_liquid_3.R'
    c. Following the instructions in the R script, process the data and write an excel workbook with the data and quality assurance information. Also see the information in CRDS Data Processing R Scripts protocol.
    d. Examine the quality control and final sample data by running the appropriate functions in R and/or examining the information written to the excel workbook.

i. Quality control metrics for the run are compared against the criteria stored in the file "CRDS_liquid_parameters.csv". If any of the quality metrics have been violated, as indicated by the 'Ignore_Run' flag, troubleshooting will be necessary to determine why and all of the samples should be rerun. Examine the memory correction terms, the raw and memory-corrected values for the primary reference waters, the raw, memory-corrected, and drift-corrected values for the secondary reference water to determine what may have caused the quality parameter to be violated and correct for this before running samples again.

ii. Raw data for any individual samples that have violated the quality parameters, as indicated by an 'Ignore' flag, but was not flagged by ChemCorrect, should be reviewed manually.

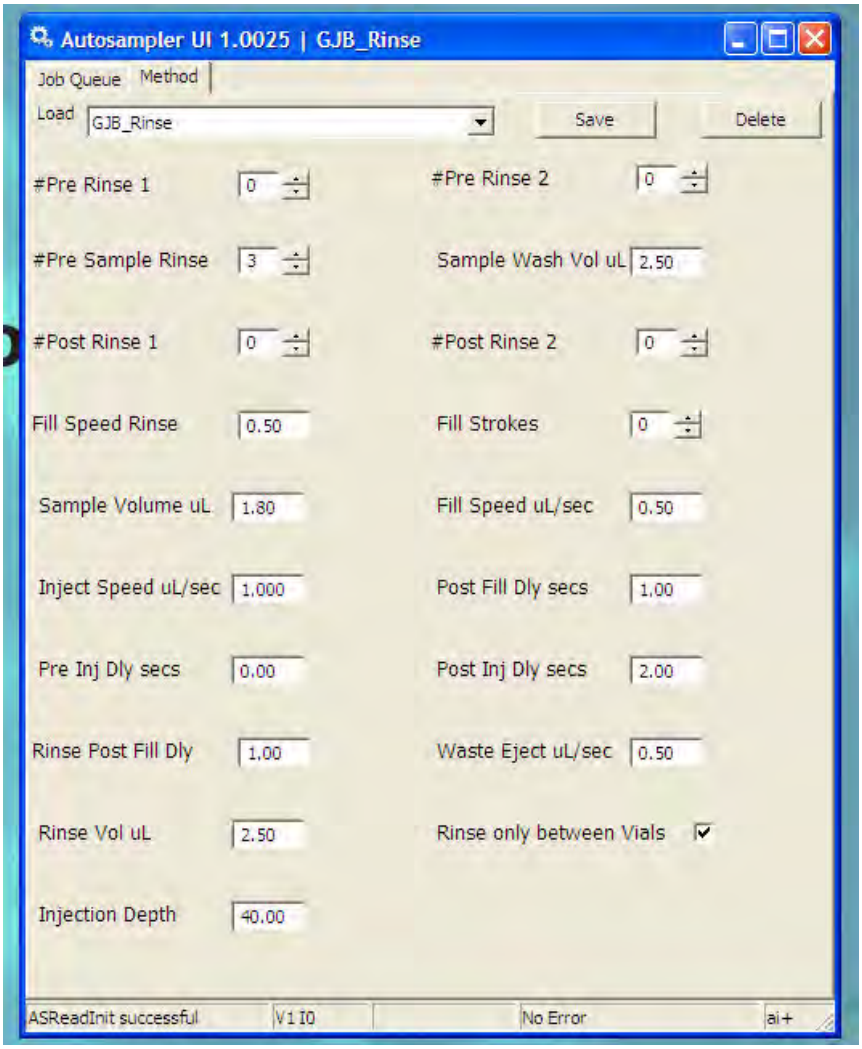
1. Open the .csv instrument output file for the run and identify the analysis results for the four injections of the problem sample.
2. If one of the four injections is a clear outlier (> 3 standard deviations different from the other 3 in terms of H_2O concentration or either isotope ratio) the results for this injection can be deleted from the file. Highlight column "F" and all columns to the right for the row representing the outlier injection and delete the contents. Save the results file as a copy, appending "toAnalyze" at the end of the file name. No more than injection can be deleted for any given sample. Re-process the data file using the R scripts before exporting the results to the database and excel file.
3. If there is no clear outlier or if more than one injection appears to be an outlier the sample should be re-analyzed. If the sample has already been re-run twice, it should be transferred to SIRFER to be analyzed by IRMS.

e. After examining the data, run the appropriate functions in R to upload the data to the database and export an Excel results file.

Part 4 – Sample Disposal

15. Keep 2 mL sample vials in fridge for two weeks after returning data in case some need to be re-run. After this window, discard used sample vials in Broken Glass box.

Appendix – GJB_rinse autosampler method



Attachment 2

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containers in which they were received from the laboratory. The chain-or-custody record will be placed in one of the boxes.

Commercial carriers are not required to sign the chain-of-custody record if it is sealed inside the shipping cooler and the custody seals remain intact. The laboratories are responsible for storing the samples in a secure location and following chain-of-custody procedures.

Soil and water samples will be collected in certified clean containers provided by the project laboratory. Air samples for TO-15 and TO-15 SIM analysis will be collected in individually clean certified Summa canisters with certified clean flow controllers. The requirements for sample volumes, sampling containers, preservation, and holding times are summarized in Table 16 below.

Samplers are responsible for shipping samples to the appropriate non-CLP and CLP-assigned laboratory for analysis. Samplers may contact their RSCC to obtain their laboratory assignment notification.

TABLE 16: Recommended Sample Container, Preservation, and Holding Time

AOU-1 - 700 South 1600 East PCE Plume, Salt Lake City, Utah

Parameter	Method	Matrix	Holding Time (From Date Sampled)	Container	Preservative
Organics					
VOCs	SOM02.2	Soil	48 hours to preservation, Encore samplers 14 days from sample collection	4 x 5g Encore[2]	4ºC (± 2ºC)
				1 x 4 oz glass jar for moisture content	
VOCs	SOM02.2	Water	14 days	3 x 40 ml glass VOA Vial[1,2]	4ºC (± 2ºC), HCl to pH < 2
SVOCs	SOM02.2	Soil	14 days to extraction, 40 days to analysis	150 grams minimum in one 8-ounce wide mouth glass jar[2]	4ºC (± 2ºC)
SVOCs	SOM02.2	Water	7 days to extraction, 40 days to analysis	1 x one liter wide mouth glass bottle	4ºC (± 2ºC)
VOCs	TO-15/ TO-15 SIM	Air	30 days	1L or 6L Summa Canister	NA
SVOCs	TO-13	Air	30 days	Polyurethane Foam (PUF cartridge or XAD-2 resin cartridge	N/A
Inorganic					
Metals (except Mercury)	ISM02.2	Water	180 days	1L polyethylene bottle [2]	4ºC (± 2ºC)), HNO_3 to pH < 2
Metals (except Mercury)	ISM02.2	Soil	180 days	Fill one 8-ounce wide mouth glass jar	4ºC (± 2ºC)
Mercury	ISM02.2	Water	28 days	1L polyethylene bottle [2]	4ºC (± 2ºC)), HNO_3 to pH < 2
Mercury	ISM02.2	Soil	28 days	Fill one 8-ounce wide mouth glass jar	4ºC (± 2ºC)

TABLE 16: Recommended Sample Container, Preservation, and Holding Time

AOU-1 - 700 South 1600 East PCE Plume, Salt Lake City, Utah

Parameter	Method	Matrix	Holding Time (From Date Sampled)	Container	Preservative
General Chemistry					
Chloride, Nitrate Sulfate	E300.0	Water	28 days, Nitrate 48 hours	1L polyethylene bottle	4ºC (± 2ºC)
pH	E 150.1	Water	Upon receipt at lab or within 24 hours	250 ml polyethylene bottle	4ºC (± 2ºC)
TDS	SM2540C	Water	7 days	1L polyethylene bottle	4ºC (± 2ºC)
Alkalinity	SM2320B	Water	14 days	1L polyethylene bottle	4ºC (± 2ºC)
Stable Oxygen and Hydrogen Isotopes	CRDS	Water	180 days	2 x 20 ml glass vial	4ºC (± 2ºC)

Notes:
1 = additional sample volume required for selective ion matrix analysis.
2 = additional sample volume required for MS/MSD analysis
°C = degrees Celsius.
CRDS = Cavity Ring-Down Spectroscopy (Stable Isotopes Research Lab proprietary method)
E – EPA Methods for Chemical Analysis of Water and Wastes, 1983 and Updates.
g = grams
HNO_3 = nitric acid
HCl = hydrochloric acid
L = liter
ml = milliliter
ISM – EPA CLP Statement of Work for Inorganic Superfund Methods, 2014.
SM – Standard Methods for the Examination of Water and Wastewater, 22nd Edition.
SOM – EPA CLP Statement of Work for Organic Superfund Methods, 2014.
TO-15 – EPA Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition.

3.3.3 *Chain-of-Custody*

A chain-of-custody record (Attachment 5) establishes the documentation necessary to trace sample possession from time of collection through sample analysis and final disposition and serves to document the specific analyses requested from the laboratory. A sample is in the custody of a person if any of the following criteria are met:

- the sample is in a person's physical possession;
- the sample is in a person's view after being in his or her physical possession;
- the sample was in a person's physical possession and was then locked up or sealed to prevent tampering; and/or
- the sample is kept in a secured area.

The chain-of-custody in Attachment 5 is included as an example form. For samples being submitted to the CLP laboratory, a custody tracking software called Scribe will be used. An electronic chain-of-custody record created using the Scribe software contains basic header