

SoundEarth Strategies, Inc. 2811 Fairview Avenue East, Suite 2000 Seattle, Washington 98102

Draft - Issued for Regulatory Review

May 10, 2018

Mr. Dean Yasuda Washington State Department of Ecology Northwest Regional Office 3190 160th Avenue Southeast Bellevue, Washington 98008-5452

SUBJECT: REQUEST FOR CONTAINED-IN DETERMINATION Plastic Sales and Service Site 6870 Woodlawn Avenue Northeast Seattle, Washington 98115 Project Number: 0651-002-02

Dear Mr. Yasuda:

On behalf of The Lutheran Retirement Home of Greater Seattle d.b.a. The Hearthstone (Hearthstone), SoundEarth Strategies, Inc. (SouthEarth) has prepared this request for a Contained-In Determination (CID) from the Washington State Department of Ecology (Ecology) for the property at 6870 Woodlawn Avenue Northeast, Seattle, Washington (the Property; Figure 1). Hearthstone advanced 27 direct-push borings into the subsurface soil and collected soil samples from the Property to confirm the concentrations of tetrachloroethene (PCE) in soil previously treated using electrical resistance heating (ERH). Treatment of soil at the Property ended in January 5, 2017. The boring locations are shown on Figure 2. Boring logs are presented in Attachment A. A detailed description of the ERH system is presented in the Engineering Design Report prepared by SoundEarth and dated May 9, 2016.

Soil sampling was performed between April 17 and 19, 2019. The soil temperature at the time of sampling approximately ranged from 14 to 17 degrees Celsius. Soil samples were collected at sample depth interval ranging from 2.5 to 16 feet below ground surface (bgs) and analyzed for the chemicals of concern using U.S. Environmental Protection Agency (EPA) Method 8260C. Sampling and tests were performed in accordance with the Sampling and Analysis Plan prepared by SoundEarth and dated May 9, 2016. One soil sample (B2-5) was also analyzed for leachable chemicals of concern using Toxic Characteristic Leach Test Procedure (TCLP) EPA Method 1311/8260C.

Analytical results for soil samples show that all but one soil sample (B2-5) contained concentrations of PCE less than 14 milligrams per kilogram (mg/kg) and/or were reported below laboratory reporting limits. Excluding the PCE result for sample B2-5, concentrations of PCE in the soil samples ranged from 0.025 mg/kg to 7.4 mg/kg. The concentration PCE in sample B2-5 collected from boring B2 at 5 feet bgs was 27,000 mg/kg. Concentrations of PCE in soil samples collected from boring B2 at 10 feet and 14 feet bgs were 0.77 mg/kg and 0.97 mg/kg. The TCLP concentration of PCE in sample B2-5 was 45 milligrams per liter. Analytical results are presented in Table 1. Field screening results, measured with a handheld gas analyzer equipped with photoionization detector and taken throughout the soil column for each soil

boring, are presented in the boring logs (Attachment A). Laboratory analytical reports are presented in Attachment B.

Soil cuttings from the borings were placed in one 25-gallon drum and one 55-gallon drum. The drums are stored at the Property. Cuttings from soil borings B1 to B6 were placed in the 25-gallon drum and remainder of the soil cuttings from borings B6 to B27 were placed in the 55-gallon drum.

Based on these results, Hearthstone is requesting to excavate and dispose 10,000 tons of soil as F002 listed waste at the Subtitle D Landfills under a CID from Ecology. The area of the Property slated for mass removal of soil containing PCE is shown on Figure 2. The depth of the mass removal excavation will range from 14 to 16 feet bgs. This request excludes soil in an area of approximately 340 square feet proximal to boring B2 and to depth of 8 feet bgs (Figure 2). This excavated soil proximal to boring B2 (estimated at 150 tons) and the soil cuttings in the 25-gallon drum will be profiled for disposal at the Waste Management Subtitle C Landfill in Arlington, Oregon, or the Clean Harbors Subtitle C Landfill in Grantsville, Utah. The F002 listed waste under the CID will be disposed of at the Waste Management Facility in Wenatchee, Washington, or the Republic Roosevelt Landfill in Klickitat County, Washington.

If you have questions or need additional information, please contact the undersigned.

Respectfully,

SoundEarth Strategies, Inc.

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Tom Cammarata, LG, LHG

Attachments: Figure 1, Property Location Map Figure 2, Post-ERH Boring Locations and Area Planned for Mass Removal Table 1, Summary of Soil Analytical Results for Soil Borings A, Soil Boring Logs B, Laboratory Analytical Reports OnSite Environmental, Inc. #1804-197 OnSite Environmental, Inc. #1804-215 OnSite Environmental, Inc. #1804-226

TJC:rt

FIGURES





TABLE



Table 1Summary of Soil Analytical Results for Soil BoringsPlastic Sales and Service Site6870 Woodlawn Avenue NortheastSeattle, Washington

					Analy	tical Results ⁽¹⁾ (mg/	/kg)		Analy	ytical Results ⁽²⁾ (mg	/L)
Well/Boring ID	Feet bgs	Sample ID	Date Sampled	Tetrachloroethene	Trichloroethene	Cis-1,2- Dichloroethene	Trans-1,2- Dichloroethene	Vinyl Chloride	Tetrachloroethene	Trichloroethene	Vinyl Chloride
B1 -	6	B1-6	04/17/18	0.17	<0.025	0.033	<0.025	<0.025	NA	NA	NA
51	14	B1-14	04/17/18	0.40	<0.025	0.15	<0.025	<0.025	NA	NA	NA
	5	B2-5	04/17/18	27,000	28	1.8	<0.92	<0.92	45	<1	<1
B2	10	B2-10	04/17/18	0.77	<0.037	0.16	<0.037	<0.037	NA	NA	NA
	14	B2-14	04/17/18	0.97	<0.034	0.19	<0.034	<0.034	NA	NA	NA
В3	7	B3-7	04/17/18	0.78	<0.038	<0.038	<0.038	<0.038	NA	NA	NA
53	15	B3-15	04/17/18	0.19	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
	6	B4-6	04/17/18	<0.025	<0.025	0.033	<0.025	<0.025	NA	NA	NA
B4	9.5	B4-9.5	04/17/18	<0.025	<0.025	0.049	<0.025	<0.025	NA	NA	NA
	16	B4-16	04/17/18	<0.025	<0.025	0.059	<0.025	<0.025	NA	NA	NA
	6	B5-6	04/17/18	0.11	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
B5	10	B5-10	04/17/18	7.4	0.19	<0.050	<0.050	<0.050	NA	NA	NA
Γ	14	B5-14	04/17/18	0.52	0.066	<0.025	<0.025	<0.025	NA	NA	NA
	2.5	B6-2.5	04/17/18	0.77	<0.046	<0.046	<0.046	<0.046	NA	NA	NA
B6	7.5	B6-7.5	04/17/18	0.90	0.096	<0.054	<0.054	<0.054	NA	NA	NA
	12	B6-12	04/17/18	0.17	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
	6	B7-6	04/17/18	1.9	<0.050	<0.050	<0.050	<0.050	NA	NA	NA
B7	10	B7-10	04/17/18	3.5	<0.048	<0.048	<0.048	<0.048	NA	NA	NA
	14	B7-14	04/17/18	0.32	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
	6	B8-6	04/17/18	0.55	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
B8	10	B8-10	04/17/18	0.23	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
Γ	14	B8-14	04/17/18	0.11	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
	6	B9-6	04/17/18	4.0	<0.053	<0.053	<0.053	<0.053	NA	NA	NA
B9	10	B9-10	04/17/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
	14	B9-14	04/17/18	0.063	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
	6	B10-6	04/17/18	0.88	<0.060	<0.060	<0.060	<0.060	NA	NA	NA
B10	10	B10-10	04/17/18	2.2	<0.053	<0.053	<0.053	<0.053	NA	NA	NA
	14	B10-14	04/17/18	0.22	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
	2.5	B11-2.5	04/18/18	0.59	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
B11	6	B11-6	04/18/18	0.59	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
DII	10	B11-10	04/18/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
l l	14	B11-14	04/18/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
Toxicity Characteris	tic (20x rule for soi	il)		14	10	NE	NE	4			
Toxicity Characteristic TCLP Regulatory Threshold (mg/L)									0.7	0.5	0.2

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Table 1Summary of Soil Analytical Results for Soil BoringsPlastic Sales and Service Site6870 Woodlawn Avenue NortheastSeattle, Washington

					Analy	/tical Results ⁽¹⁾ (mg/	′kg)		Analy	/tical Results ⁽²⁾ (mg	/L)
			Date			Cis-1,2-	Trans-1,2-				
Well/Boring ID	Feet bgs	Sample ID	Sampled	Tetrachloroethene	Trichloroethene	Dichloroethene	Dichloroethene	Vinyl Chloride	Tetrachloroethene	Trichloroethene	Vinyl Chloride
	6	B12-6	04/18/18	1.1	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
B12	10	B12-10	04/18/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
	14	B12-14	04/18/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
	6	B13-6	04/18/18	2.1	<0.054	<0.054	<0.054	<0.054	NA	NA	NA
B13	10	B13-10	04/18/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
	14	B13-14	04/18/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
	2.5	B14-2.5	04/18/18	2.1	<0.079	<0.079	<0.079	<0.079	NA	NA	NA
Γ	6	B14-6	04/18/18	0.67	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
B14	10	B14-10	04/18/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
Γ	14	B14-14	04/18/18	0.83	<0.043	0.097	<0.043	<0.043	NA	NA	NA
Γ	16	B14-16	04/18/18	1.1	<0.044	<0.048	<0.044	<0.044	NA	NA	NA
	6	B15-6	04/18/18	0.84	0.075	<0.052	<0.052	<0.052	NA	NA	NA
B15	10	B15-10	04/18/18	< 0.054	<0.054	1.1	<0.054	<0.054	NA	NA	NA
Ē	14	B15-14	04/18/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
	6	B16-6	04/18/18	0.90	0.46	0.18	<0.047	<0.047	NA	NA	NA
B16	10	B16-10	04/18/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
T T	14	B16-14	04/18/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
	6	B17-6	04/18/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
B17	10	B17-10	04/18/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
Ē	14	B17-14	04/18/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
	6	B18-6	04/18/18	0.74	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
B18	10	B18-10	04/18/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
Ē	14	B18-14	04/18/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
	6	B19-6	04/19/18	0.24	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
B19	10	B19-10	04/19/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
T T	14	B19-14	04/19/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
	6	B20-6	04/19/18	0.40	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
B20	10	B20-10	04/19/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
ľ	14	B20-14	04/19/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
	6	B21-6	04/19/18	0.15	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
B21	10	B21-10	04/19/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
ľ	14	B21-14	04/19/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
	2.5	B22-2.5	04/19/18	0.041	< 0.025	<0.025	<0.025	<0.025	NA	NA	NA
	6	B22-6	04/19/18	0.025	< 0.025	<0.025	<0.025	< 0.025	NA	NA	NA
B22	10	B22-10	04/19/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
F	10	B22-14	04/19/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
Toxicity Characteris				14	10	NE	NE	4			
Toxicity Characteristic TCLP Regulatory Threshold (mg/L)								0.7	0.5	0.2	

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Table 1 Summary of Soil Analytical Results for Soil Borings Plastic Sales and Service Site 6870 Woodlawn Avenue Northeast Seattle, Washington

					Analy	tical Results ⁽¹⁾ (mg/	/kg)		Analy	ytical Results ⁽²⁾ (mg,	/L)
Well/Boring ID	Feet bgs	Sample ID	Date Sampled	Tetrachloroethene	Trichloroethene	Cis-1,2- Dichloroethene	Trans-1,2- Dichloroethene	Vinyl Chloride	Tetrachloroethene	Trichloroethene	Vinyl Chloride
	6	B23-6	04/19/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
B23	10	B23-10	04/19/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
	14	B23-14	04/19/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
	6	B24-6	04/19/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
B24	10	B24-10	04/19/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
	14	B24-14	04/19/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
	2.5	B25-2.5	04/19/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
B25	6	B25-6	04/19/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
D25	10	B25-10	04/19/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
	14	B25-14	04/19/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
	2.5	B26-2.5	04/19/18	0.085	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
	6	B26-6	04/19/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
B26	10	B26-10	04/19/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
	14	B26-14	04/19/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
	16	B26-16	04/19/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
	2.5	B27-2.5	04/19/18	0.10	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
	6	B27-6	04/19/18	<0.041	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
B27	10	B27-10	04/19/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
[14	B27-14	04/19/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
	16	B27-16	04/19/18	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA	NA
xicity Characteris	stic (20x rule for so	il)		14	10	NE	NE	4			
oxicity Characteris	tic TCLP Regulator	y Threshold (mg/L)							0.7	0.5	0.2

NOTES:

Samples analyzed by OnSite Environmental, Inc. in Redmond, Washington.

Bold denotes detected concentration equal or above laboratory limit.

Red denotes concentration above value exceed 14 mg/kg tetrachloroethene and/or TCLP exceeds 0.7 mg/L.

⁽¹⁾Samples analyzed by EPA Method 8260C.

⁽²⁾Samples analyzed for TCLP by EPA Method 1131/8260C and is below Toxicity Characteristic.

< = not detected at a concentration exceeding the laboratory reporting limit

EPA = U.S. Environmental Protection Agency

mg/kg = milligrams per kilogram

mg/L = milligrams per liter

NA = not applicable

NE = not established

TCLP = Toxicity Characteristic Leaching Procedure

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ATTACHMENT A SOIL BORING LOGS

		nd Str		gies WW WW Re	oject: oject Number: gged by: ite Started: inface Condition ell Location N/ ell Location E/ eviewed by: ite Completed	06 Si 4/ Ons: Co S: 5 W: 23		NW property corner NW property corner Water Dep	LOG Site Address: 6870 w	B1 oodlawn Ave NE , Washington 10 feet bgs feet bgs
Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample	USCS Class	0		Description	Well Construction Detail
0 - - 5			80	0.0	B1-6			No lithology description	recorded	
- - - 10 —			100	0.0						
-			100	0.0 0.0	B1-14					
15 —	$\left \right\rangle$		100	0.0				Boring terminated at 16 bentonite and sealed wit	ft bgs. Backfilled with	th
Drillin Samp Hamn Total Total	ng Equ ler Ty ner Ty Borin Well I	/Driller uipmen pe: vpe/We g Dept Depth: D No.:	ıt: ight: h:	16	oT We and liner Sc lbs Filt feet bgs Su feet bgs An	II/Auger D II Screene reen Slot S rer Pack Us rface Seal: nular Seal: nument Ty	d Interval: Size: sed: :	Not Applicable inches Not Applicable feet bg: Not Applicable inches Not Applicable Concrete Bentonite Not Applicable	S Notes/Commer	nts: Page: 1 of 1

		nd Sti	Ear rateg	gies Pro Da Da Su We Re	oject: oject Number: gged by: te Started: rface Conditio ell Location N/s ell Location E/N viewed by:	06 St 4/ ns: Co S: 5 W: 10 TS) ft east of SB/TJC			
Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	te Completed: Sample ID	USCS Class	Graphic Graphic	Lithologic E		Well Construction Detail
0			95	6.9	B2-6 B2-10			No lithology description i	recorded	
Drillin Samp Hamn Total Total	ng Equ oler Ty ner Ty Borin Well	./Drille uipmer /pe: ype/We ig Dept Depth: ID No.:	ight: h:	15	T We and liner Scr lbs Filtu feet bgs Sur feet bgs Ann	II/Auger Di II Screene een Slot S er Pack Us face Seal: nular Seal: nument Ty	d Interval: Size: sed:	Boring terminated at 15 ft bentonite and sealed with Not Applicable Not Applicable	n concrete. Notes/Comments:	Page: 1 of 1

		nd _{Str}	Eart rateg	ies Pr La Da Su W W W Ra	roject: roject Numl ogged by: ate Started: urface Cond fell Location fell Location eviewed by	: ditions: n N/S: n E/W: ':	0651 SNW 4/17 Cond 22.5 17 ft TSB	7/18 hcrete 5 ft south t east of N 3/TJC		th At Time of Drilling	ttle, Washin	igton feet bgs
Depth (feet bgs)		Blow Count	% Recovery	PID (ppm)	ate Comple Samp ID	ble US	4/17 SCS ass	Graphic 81/2		th After Completion: Description		feet bgs Well Construction Detail
•) 0 - - - - - - - - - - - - -			75	1.4 76.8 1.1	B3-7				No lithology description	recorded		
- 10 — - - 15 — -			100	0.0	B3-15				Boring terminated at 16 f	t bgs. Backfilled	with	
Drillin Samp Hamn Fotal Fotal	ng Equ oler Ty ner Ty Borin Well I	o./Drillen uipmen ype: ype/We ng Dept Depth: ID No.:	nt: G 2. eight: N th: 16 No	Holocene/ Mitch Geoprobe 7822E 2.25in/5ft macro Jot Applicable 6 Iot Applicable Jot Applicable	т Тс	Well/Aug Well Scre Screen S Filter Pac Surface S Annular S Monume	eened I Slot Size ck Usee Seal: Seal:	Interval: ze: ed:	Not Applicable inches	h concrete. Notes/Comm		Page: 1 of 1

		nd Sti	Eari rateg	gies WW WW Re	oject: oject Numbe gged by: inte Started: inface Condit ell Location I eviewed by: inte Complete	er: 06 Si 4/ tions: C N/S: 13 E/W: 2 [°] T			BORING LOG Site Address: 6870 Seattl	B4 woodlawn e, Washin 10 	gton
Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample		0		Description		Well Construction Detail
0 -			80	0.3				No lithology description	recorded		
5			90	0.2	B4-6 B4-9.5						
- - - 15			100	1.8	B4-16						
Drillin Samp	g Equ ler Ty		nt:	Holocene/ Mitch Geoprobe 7822E 2.25in/5ft macro	T N and liner S	Vell/Auger D Vell Screene Screen Slot S	d Interval: Size:	Not Applicable inches	h concrete. Notes/Comme		
Total Total	Borin Well [/pe/We g Dept Depth: D No.:	th:		feet bgs S feet bgs A	ilter Pack U Surface Seal Innular Seal Ionument Ty	:	Not Applicable Concrete Bentonite Not Applicable			Page: 1 of 1

		nd Sti	Ear rate T	gies Pr Lo Da Su Wu Re	oject: oject Number gged by: inte Started: inface Condition ell Location N. ell Location E eviewed by: inte Completed	: 06 SI 4/ Dns: C 'S: 4 W: 4 T			BORING B LOG B Site Address: 6870 wood Seattle, W	lawn Ave NE
Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample	USCS Class	0		Description	Well Construction Detail
0			70	0.0	B5-6 B5-10			No lithology description	recorded	
_ _ 15 —			100	0.0	B5-14			Boring terminated at 15 bentonite and sealed wit	ft bgs. Backfilled with th concrete.	
Drillin Drillin Samp Hamn Total Total State	ng Equ ler Ty ner Ty Borin Well [pe: pe/We g Dept Depth:	nt: eight: th:		oT We and liner Sc lbs Fil feet bgs Su feet bgs An	ell/Auger D ell Screene reen Slot S ter Pack Us rface Seals nular Seal onument Ty	d Interval: Size: sed: :	Not ApplicableinchesNot Applicablefeet bgNot ApplicableinchesNot ApplicableconcreteBentoniteNot Applicable	IS	Page: 1 of 1

		nd _{St}	Earl rateg	Jies Pro Da Da Su We Re	oject: oject Number: gged by: te Started: rface Conditio ell Location N/S ell Location E/N viewed by: te Completed:	06 St 4/ ns: Co S: 20 S: 20 N: 47			BORING B6 LOG B6 Site Address: 6870 woodla Seattle, Was th At Time of Drilling: th After Completion:	wn Ave NE
Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	0	Lithologic [-	Well Construction Detail
0 - - 5-			60	0.8	B6-2.5			No lithology description	recorded	
- - - 10 —			100	2.0	B6-7.5					
-			100	1.8	B6-12					
15 — -	1 \							Boring terminated at 15 f bentonite and sealed with	t bgs. Backfilled with h concrete.	
Drillin Samp Hamn Total Total	ng Equ ler Ty ner Ty Borin Well	./Drille uipmer ype: ype/We ig Dept Depth: ID No.:	nt: (2 ight: 1 :h: 1	15	T Wel and liner Scr lbs Filte feet bgs Sur feet bgs Ann	I/Auger Di I Screene een Slot S er Pack Us face Seal: nular Seal: nument Ty	d Interval: Size: sed:	Not ApplicableinchesNot Applicablefeet bgsNot ApplicableinchesNot ApplicableconcreteBentoniteNot Applicable	Notes/Comments:	Page: 1 of 1

	un s RA	trate	gies Wa	oject: oject Number: gged by: Ite Started: Inface Conditio ell Location N/ ell Location E/ eviewed by:	06 SI 4/ ns: G S: 30 N: 2 ⁻		f NW property corner NW property corner	BORING B7 LOG Site Address: 6870 wood Seattle, Wa	awn Ave NE
	Interval Blow Count		Da PID (ppm)	te Completed: Sample ID	USCS Class	Graphic Graphic	Water Dept Lithologic D	h After Completion:	feet bgs Well Construction
		B B				Ğ			Detail
		80	0.4	B7-6 B7-10			No lithology description r	recorded	
15 Drilling Drilling Sample Hamme Total B Total W State W	Equipn Type: Type/ oring D I Dep	nent: Weight: epth: th:	15	T We and liner Scr Ibs Filt feet bgs Sur feet bgs Ann	II/Auger D II Screene een Slot S er Pack Us face Seal: nular Seal: nument Ty	d Interval: Size: sed: :	Boring terminated at 15 ft bentonite and sealed with Not Applicable inches Not Applicable feet bgs Not Applicable inches Not Applicable inches Not Applicable sealed with Not Applicable inches Not Applicable sealed with Not Applicable inches Not Applicable sealed with Not Applicable inches Not Applicable i	Notes/Comments:	Page: 1 of 1

		nd Str AF	ar ateg	pri Lo Da Su We Re	oject: oject Number: gged by: ite Started: irface Conditio ell Location N/: ell Location E/ eviewed by: ite Completed:	06 SI 4/ 0ns: Co S: 30 W: 49 T			BORING B8 LOG B8 Site Address: 6870 wood& Seattle, Wa th At Time of Drilling: th After Completion:	awn Ave NE
Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	0	Lithologic [Well Construction Detail
			50	0.3	B8-6 B8-10			No lithology description	recorded	
15 Drilling Drilling Sample Hamme Total E Total V State V	g Equ er Ty er Ty Boring Well D	iipmen pe: pe/We g Dept)epth:	it: ight: h:	15	T We and liner Scr Ibs Filt feet bgs Sur	II/Auger D II Screene reen Slot S er Pack Us face Seal: nular Seal:	d Interval: Size: sed:	Boring terminated at 15 f bentonite and sealed with Not Applicable inches Not Applicable feet bgs Not Applicable inches Not Applicable inches <	n concrete. Notes/Comments:	Page: 1 of 1

	ndEal Strat	egies WW WW Re	oject: oject Number: ogged by: ate Started: urface Conditio ell Location N/S ell Location E/N eviewed by:	06 St 4/ ns: G S: 13 N: 75 T		NW property corner NW property corner Water Depth	BORING BS LOG BS ite Address: 6870 wood Seattle, W	llawn Ave NE ashington 8 feet bgs
Depth (feet bgs) Interval	Blow Count % Becoverv		ate Completed: Sample ID	4/ USCS Class	Graphic Graphic	Water Depth Lithologic De	After Completion:	feet bgs Well Construction Detail
	10	0.2	B9-6 B9-10			No lithology description re	corded	
15 Drilling Co. Drilling Equ Sampler Ty Hammer Ty Total Boring Total Well I State Well I	lipment: pe: pe/Weight: g Depth: Depth:	0 0.2 0.2 Holocene/ Mitch Geoprobe 7822E 2.25in/5ft macro Not Applicable 15 Not Applicable Not Applicable	OTWelland linerScrlbsFiltefeet bgsSurfeet bgsAnn	II/Auger Di II Screene een Slot S er Pack Us face Seal: nular Seal: nument Ty	d Interval: Size: sed:	Boring terminated at 15 ft bentonite and sealed with of benton and sealed with of	ogs. Backfilled with concrete.	Page: 1 of 1

		nd Sti AF	Ear rate	gies Re B B B B B B B B B B B B B B B B B B	oject: oject Number: gged by: te Started: rface Conditio ell Location N/s ell Location E/N viewed by: te Completed:	06 SI 4/ ns: C S: 13 S: 13 N: 90		f NW property corner NW property corner Water Dept	LOG Site Address: 6870 wood	bdlawn Ave NE Vashington 8 feet bgs feet bgs
Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	0	Lithologic E		Well Construction Detail
			80	0.0				No lithology description r	recorded	
5	5 100			0.2	B10-6					
10			100	1.1	B10-10					
15 —				0.3	B10-14			Boring terminated at 15 fi bentonite and sealed with	t bgs. Backfilled with n concrete.	
Drillin Samp Hamn Total Total	Drilling Equipment:GSampler Type:2.Hammer Type/Weight:NTotal Boring Depth:15Total Well Depth:N			15	T We and liner Scr lbs Filtu feet bgs Sur feet bgs Ann	II/Auger D II Screene een Slot S er Pack Us face Seal: nular Seal: nument Ty	d Interval: Size: sed: :	Not Applicable inches Not Applicable feet bgs Not Applicable inches Not Applicable Concrete Bentonite Not Applicable	Notes/Comments	s: Page: 1 of 1

		nd Sti AF		gies WW Rate	roject: roject Number ogged by: ate Started: urface Condition fell Location N ell Location E eviewed by: ate Completed	: 06 Si 4/ Dns: C 'S: 32 W: 92 T		f NW property corner NW property corner Water Deg Water Deg	B11 oodlawn Ave NE , Washington 4 feet bgs feet bgs	
Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample	USCS Class	0		Description	Well Construction Detail
0			100	12	B11-2.5			No lithology description	recorded	
5				1.1	B11-6					
10			100	0.2	B11-10					
-			100	0.0	B11-14					
15	X		100	0.1	B11-16			Boring terminated at 16 bentonite and sealed wit		th
Drilling Drilling Sample Hamme	g Equ er Ty er Ty	ıipmer pe: vpe/We	nt: eight:	Holocene/ Mitch Geoprobe 7822I 2.25in/5ft macro Not Applicable 16	DT We and liner Sc Ibs Filt	ell/Auger D Ell Screene reen Slot S ter Pack U	d Interval: Size: sed:	Not Applicable inches Not Applicable	s	nts:
Total B Total W State W	Vell [Depth:		Not Applicable Not Applicable	feet bgs An	rface Seal nular Seal nument Ty	:	Concrete Bentonite Not Applicable		Page: 1 of 1

		nd Str AF7		gies W R	roject: roject Number: ogged by: ate Started: urface Conditio ell Location N/ ell Location E/ eviewed by:	06 SI 4/ ons: C S: 32 W: 74 T	4 ft east of SB/TJC	e BORING B12 LOG B12 Site Address: 6870 woodlawn Ave NE Seattle, Washington of NW property corner of NW property corner Water Depth At Time of Drilling: 10 feet b Water Depth After Completion: feet b		
Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	ate Completed Sample ID	USCS Class	Graphic Graphic			Well Construction Detail
0 			50	0.1	B12-2.5			No lithology description	recorded	
5			100	0.0	B12-6					
			100	0.2	B12-10					
- 15 —			100	0.1	B12-14 B12-16			Boring terminated at 16 f bentonite and sealed wit	ft bgs. Backfilled with h concrete.	
Drillin Samp Hamn Total Total	ig Equ ler Ty ner Ty Borin Well [′pe/We g Dept	ıt: ight: h:	Holocene/ Mitch Geoprobe 7822E 2.25in/5ft macro Not Applicable 16 Not Applicable Not Applicable	OT We and liner Sc Ibs Filt feet bgs Su feet bgs An	II/Auger D II Screene reen Slot S rer Pack U rface Seal: nular Seal nument Ty	d Interval: Size: sed: :	Not ApplicableinchesNot Applicablefeet bgsNot ApplicableinchesNot ApplicableconcreteBentoniteNot Applicable	S Notes/Comments:	Page: 1 of 1

Sou DR	nd _{Str}	ate	gies WW WW Re	oject: oject Number: ogged by: ate Started: urface Conditio ell Location N/: ell Location E/ eviewed by:	06 SI 4/ S: 33 W: 50 T	0 ft east of SB/TJC		LOG Site Address: 6870 wo Seattle, oth At Time of Drilling:	Washington 10 feet bgs
Depth (feet bgs) Interval	Blow Count	% Recovery	PID (ppm)	ate Completed: Sample ID	USCS Class	Graphic Graphic		oth After Completion:	feet bgs Well Construction Detail
		75	0.3	B13-2.5			No lithology description	recorded	
5		100	0.6	B13-6					
10			0.1	B13-10					
		100	0.2	B13-14					
15		100	0.1	B13-16			Boring terminated at 16 f bentonite and gravel.	ft bgs. Backfilled wit	h
Drilling Co Drilling Eq Sampler Ty Hammer Ty Total Borir	uipmen ype: ype/Wei	t: ight:	Holocene/ Mitch Geoprobe 7822D 2.25in/5ft macro Not Applicable 16	T We and liner Scr Ibs Filt	II/Auger D II Screene een Slot S er Pack Us face Seal:	d Interval: Size: sed:	Not Applicable inches Not Applicable feet bg Not Applicable inches Not Applicable Concrete	Notes/Commen	ts:
Total Borin Total Well State Well	Depth:		Not Applicable Not Applicable	feet bgs Ani	nular Seal: nular Seal: nument Ty	:	Concrete Bentonite Not Applicable		Page: 1 of 1

Sou	Stı	rate	gies WW WW	oject: oject Number: gged by: nte Started: Inface Conditio ell Location N/3 ell Location E/1	06 SI 4/ 0 ns: G S: 33 W: 3 ⁻	1 ft east of	f NW property corner NW property corner	LOG Site Address: 6870 w Seattle	, Washington
DR	AF	T		eviewed by: ite Completed:		SB/TJC /18/18		oth At Time of Drilling: oth After Completion:	7 feet bgs feet bgs
Depth (feet bgs) Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic I	Description	Well Construction Detail
		60	0.3	B14-2.5			No lithology description	recorded	
5			0.1	B14-6					
10		100	0.1	B14-10					
		100	0.8	B14-14					
15		100	0.4	B14-16			Boring terminated at 16 f	it has Paskfilled wi	*6
Drilling Co Drilling Eq Sampler T Hammer T Total Borir Total Well	uipmen ype: ype/We ng Dept	nt: ight: :h:	Holocene/ Mitch Geoprobe 7822D 2.25in/5ft macro Not Applicable 16 Not Applicable	OT We and liner Scr Ibs Filt feet bgs Sur	II/Auger D II Screene reen Slot S er Pack Us rface Seal: nular Seal:	d Interval: Size: sed: :	Not Applicable inches	Notes/Commer	
State Well	-		Not Applicable	-	nument Ty		Not Applicable		1 of 1

Sou	St	rate	gies WW	oject: oject Number: ogged by: ate Started: urface Conditio ell Location N/3 ell Location E/1	06 SI 4/ ns: G S: 33 N: 10) ft east of	NW property corner	B15 podlawn Ave NE Washington	
D	RAF			eviewed by: ate Completed:		SB/TJC ′18/18		th At Time of Drilling: th After Completion:	7 feet bgs feet bgs
Depth (feet bgs) Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic [Description	Well Construction Detail
0		20					No lithology description	recorded	
		60	0.1	B15-6 B15-10					
		75	0.0	B15-14					
		50	0.0	B15-16			Boring terminated at 16 f bentonite and gravel.	t bgs. Backfilled wit	h
Drilling C Drilling Ed Sampler 1 Hammer 1	quipmer Type: Type/We	nt: eight:	Holocene/ Mitch Geoprobe 7822E 2.25in/5ft macro Not Applicable	T We and liner Scr Ibs Filt	een Slot S er Pack Us	d Interval: Size: sed:	Not Applicable inches Not Applicable feet bgs Not Applicable inches Not Applicable	Notes/Commen	ts:
Total Bori Total Well State Wel	Depth:		16 Not Applicable Not Applicable	feet bgs Anr	face Seal: nular Seal: nument Ty	:	Concrete Bentonite Not Applicable		Page: 1 of 1

So		Stı	rate	gies s w	roject: roject Number ogged by: ate Started: urface Conditi 'ell Location N 'ell Location E	r: 06 Si 4/ ions: G I/S: 6		of NW property corner NW property corner	BORING LOG Site Address: 6870 Seat	B16 Woodlawn tle, Washin	
DI	R/	4 <i>F</i> 7	Γ		eviewed by: ate Completed	Т	SB/TJC /18/18	Water Dep	oth At Time of Drilling: oth After Completion:	: 7 	feet bgs feet bgs
Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic	Description		Well Construction Detail
0			70	0.0	B16-2.5			No lithology description	recorded		
5				0.0	B16-6						
10			100	0.0	B16-10						
-			100	0.0	B16-14						
15	X		60	0.1	B16-16			Poving terminoted at 16	it has Deskfilled	with	
Drilling Drilling Sampler Hamme	Equ r Typ r Typ	ipmen be: pe/We	nt: ight:	Holocene/ Mitch Geoprobe 78221 2.25in/5ft macro Not Applicable	DT W and liner So Ibs Fi	ell/Auger D ell Screene creen Slot S Iter Pack U	d Interval: Size: sed:	Not Applicable inches Not Applicable	Notes/Comm		
Total Bo Total Wo State Wo	ell D	epth:		16 Not Applicable Not Applicable	feet bgs A	urface Seal nnular Seal onument Ty	:	Concrete Bentonite Not Applicable			Page: 1 of 1

Sou		nd _{Sti}	rate	gies www.w	roject: roject Number ogged by: ate Started: urface Condition ell Location No ell Location E/ eviewed by:	: 06 SI 4/ ons: G /S: 67 /W: 28		Site Address: 6870 woodlawn Ave NE Seattle, Washington of NW property corner NW property corner Water Depth At Time of Drilling: 7 feet bgs			
					ate Completed		/18/18		th After Completion:		feet bgs
Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic I	Description		Well Construction Detail
0			65	0.3	B17-2.5			No lithology description	recorded		
5				0.1	B17-6						
10			100	0.0	B17-10						
			100	0.0	B17-14						
15	X		70	0.0	B17-16						
								Boring terminated at 16 f bentonite and gravel.	t bgs. Backfilled v	vith	
Drilling Drilling Sampler Hammer	Equ r Ty	ipmer pe:	nt:	Holocene/ Mitch Geoprobe 7822I 2.25in/5ft macro Not Applicable	T We and liner Sc	ell/Auger D ell Screene reen Slot S ter Pack U	d Interval: Size:	Not Applicable inches Not Applicable feet bgs Not Applicable inches Not Applicable	Notes/Comm	ents:	
Total Bo Total We State We	orino Vell D	g Dept)epth:	h:	16 Not Applicable Not Applicable	feet bgs An	rface Seal: nular Seal onument Ty	:	Concrete Bentonite Not Applicable			Page: 1 of 1

Sou DR	St	rate	gies WW	oject: oject Number: ogged by: ate Started: urface Conditio ell Location N/ ell Location E/ eviewed by:	06 SI 4/ 0ns: G S: 66 W: 46			oth At Time of Drilling:	e, Washington 7 feet bgs
Depth (feet bgs) Interval	Blow Count	% Recovery	Da PID (ppm)	ate Completed: Sample ID	USCS USCS Class	Graphic Graphic		oth After Completion: Description	feet bgs Well Construction Detail
0	B					0	No lithology description	recorded	
		75	0.1	B18-2.5					
5			0.2	B18-6					
		100	0.1	B18-10					
		100	0.1	B18-14					
15		100	0.0	B18-16			Boring terminated at 16 bentonite and gravel.	ft bgs. Backfilled w	ith
Drilling Co Drilling Eq Sampler Ty	uipmeı ype:	nt:	Holocene/ Mitch Geoprobe 7822E 2.25in/5ft macro	OT We and liner Scr	een Slot S	d Interval: Size:	Not ApplicableinchesNot Applicablefeet bg:Not Applicableinches	Notes/Comme	nts:
Hammer T Total Borir Total Well State Well	ng Depi Depth:	th:	Not Applicable 16 Not Applicable Not Applicable	feet bgs Sur feet bgs Ann	er Pack Us face Seal: nular Seal: nument Ty	:	Not Applicable Concrete Bentonite Not Applicable		Page: 1 of 1

So		nd Str AF	rate	gies W W W	oject: oject Number: ogged by: ate Started: urface Conditio ell Location R/ ell Location E/ eviewed by:	06 SI 4/ 0ns: G S: 65 W: 67		f NW property corner of NW property corner Water Dep	LOG Site Address: 6870 woo	19 dlawn Ave NE Jashington 10 feet bgs
				Da	ate Completed:	4/	/19/18	Water Dep	th After Completion:	feet bgs
(f)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic I	Description	Well Construction Detail
			70	0.4	B19-2.5			No lithology description	recorded	
5				0.5	B19-6					
10			100	0.3	B19-10					
			100	0.5	B19-14					
15	\times		80	0.1	B19-16					
								Boring terminated at 16 f bentonite and gravel.	t bgs. Backfilled with	
Drilling Drilling Sample Hamme	g Equ er Ty er Ty	iipmen pe: pe/We	ıt: ight:	Holocene/ Mitch Geoprobe 7822E 2.25in/5ft macro Not Applicable	OT We and liner Scr Ibs Filt	een Slot S er Pack Us	d Interval: Size: sed:	Not Applicable inches Not Applicable	Notes/Comments	;:
Total W	Total Boring Depth:16Total Well Depth:Not			Not Applicable Not Applicable	feet bgs Ani	face Seal: nular Seal: nument Ty	:	Concrete Bentonite Not Applicable		Page: 1 of 1

Sou	Str	rate	gies WW WW	oject: oject Number: ogged by: ate Started: urface Conditio ell Location N/3 ell Location E/1	06 SI 4/ 0 ns: G S: 65 W: 94	4 ft east of	f NW property corner NW property corner	BORING LOG B2	awn Ave NE shington
DR	AF	T		eviewed by: ate Completed:		SB/TJC /19/18		oth At Time of Drilling: oth After Completion:	5 feet bgs feet bgs
Depth (feet bgs) Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic	Description	Well Construction Detail
		60	0.2	B20-2.5			No lithology description	recorded	
5			0.2	B20-6					
10		100	0.2	B20-10					
		100	0.2	B20-14					
15		80	0.2	B20-16			Boring terminated at 16 bentonite and gravel.	ft bgs. Backfilled with	
Drilling Co Drilling Eq Sampler Ty Hammer Ty Total Borir	uipmen ype: ype/We ng Dept	nt: ight:	Holocene/ Mitch Geoprobe 7822D 2.25in/5ft macro Not Applicable 16	OTWeand linerScrlbsFiltfeet bgsSur	een Slot S er Pack Us face Seal:	d Interval: Size: sed:	Not Applicable inches Not Applicable Concrete	Notes/Comments:	Page
Total Well Depth:			Not Applicable Not Applicable	U U	nular Seal nument Ty		Bentonite Not Applicable		Page: 1 of 1

		nd Str 4F7	ate	gies Pro Lo Da Su We Re	oject: oject Number: gged by: Inte Started: Inface Conditio ell Location N/S ell Location E/Neviewed by: Inte Completed:	06 St 4/ ns: G S: 69 N: 38 T			BORING LOG Site Address: 6870 Seatt	le, Washing	-
Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	0	Lithologic E			Well Construction Detail
0			50	0.2	B22-2.5			No lithology description r	recorded		
5			100	0.4	B22-6						
			100	0.2	B22-10						
-			90	0.4	B22-14 B22-16			Boring terminated at 16 ft bentonite and gravel.	t bgs. Backfilled v	vith	
Drillin Samp Hamm	g Equ ler Ty ner Ty	/We	it: ight:		T We want liner Scr Ibs Filt	een Slot S er Pack Us	d Interval: Size: sed:	Not Applicable inches Not Applicable feet bgs Not Applicable inches Not Applicable	Notes/Comm	ents:	
Total Total State	Well [feet bgs Anr	face Seal: nular Seal: nument Ty	:	Concrete Bentonite Not Applicable			Page: 1 of 1

		St	Ear rate	gies www.w	oject: oject Number ogged by: ate Started: urface Condition ell Location R/ ell Location E/ eviewed by:	: 06 SI 4/ Dons: G (S: 69 W: 38		Site Address: 6870 woodlawn Ave Ne Seattle, Washington			
	DRAFT				ate Completed		/19/18		oth After Completion:		feet bgs feet bgs
Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic	Description		Well Construction Detail
0			50	0.2	B22-2.5			No lithology description	recorded		
5				0.4	B22-6						
10			100	0.2	B22-10						
-			100	0.4	B22-14						
15			90	0.3	B22-16						
								Boring terminated at 16 bentonite and gravel.	n ogs. Backfilled v	vitn	
Drilling Sample Hamme	Drilling Equipment:GeopreSampler Type:2.25in/3			Holocene/ Mitch Geoprobe 7822[2.25in/5ft macro Not Applicable	OT We and liner Sc Ibs Filt	ell/Auger Diamter: ell Screened Interval: reen Slot Size: ter Pack Used:		Not Applicable inches Not Applicable	Notes/Comm	ents:	
Total V	Total Boring Depth:1Total Well Depth:N			16 Not Applicable Not Applicable	feet bgs An	rface Seal nular Seal onument Ty	:	Concrete Bentonite Not Applicable			Page: 1 of 1

Soι	St	rate	gies W	oject: oject Number: ogged by: ate Started: urface Conditio ell Location R/ ell Location E/	06 SI 4/ ons: G S: 74		BORING B23 LOG Site Address: 6870 woodlawn Ave NE Seattle, Washington				
D	DRAFT			eviewed by: ate Completed:		SB/TJC /19/18		th At Time of Drilling: th After Completion:	6 	feet bgs feet bgs	
Depth (feet bgs) Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic [Description		Well Construction Detail	
0		65	0.2	B23-2.5			No lithology description	recorded			
5			0.2	B23-6							
10		100	0.1	B23-10							
		100	0.0	B23-14							
15		85	0.1	B23-16			Poving terminated at 16 f	it has Deskfilled u			
Drilling E Sampler Hammer	Drilling Co./Driller: Holocene/ / Drilling Equipment: Geoprobe 7 Sampler Type: 2.25in/5ft m Hammer Type/Weight: Not Applica			T We and liner Scr Ibs Filt	een Slot S er Pack Us	d Interval: Size: sed:	Not Applicable inches Not Applicable	Notes/Comme			
Total Bo Total We State We	II Depth:	1	16 Not Applicable Not Applicable	feet bgs Ani	face Seal: nular Seal: nument Ty	:	Concrete Bentonite Not Applicable			Page: 1 of 1	

Sou DR	nd _{St}	rate	gies WW Re	oject: oject Number: ogged by: ate Started: urface Conditio ell Location N/ ell Location E/ eviewed by: ate Completed	06 SI 4/ 0ns: G S: 90 W: 30 T		f NW property corner NW property corner Water Dep	B24 woodlawn Ave NE e, Washington 6 feet bgs feet bgs	
Depth (feet bgs) Interval	Blow Count	% Recovery	PID (ppm)	Sample	USCS Class	0		oth After Completion:	Well Constructi Detail
0		75	0.0	B24-2.5			No lithology description	recorded	
5			0.0	B24-6					
10		100	0.0	B24-10					
-		100	0.0	B24-14					
15		80	0.1	B24-16			Boring terminated at 16 f bentonite and gravel.	it bgs. Backfilled w	ith
Drilling Eq Sampler Ty Hammer Ty	Sampler Type:2Hammer Type/Weight:N			OT We and liner Sci lbs Filt	reen Slot S er Pack Us	d Interval: Size: sed:	Not Applicable inches Not Applicable	Notes/Comme	nts:
Total Borir Total Well State Well	Depth:		16 Not Applicable Not Applicable	feet bgs An	rface Seal: nular Seal: nument Ty	:	Concrete Bentonite Not Applicable		Page: 1 of 1

Sou DR	nd _{St}	rate	gies WW Re	oject: oject Number: ogged by: ate Started: urface Conditic ell Location N/ ell Location E/ eviewed by:	06 SI 4/ 0 ns: G S: 90 W: 50 T	0 ft east of SB/TJC	f NW property corner NW property corner Water Der	B25 oodlawn Ave NE , Washington 6 feet bgs	
Depth (feet bgs) Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic Braphic		oth After Completion: Description	feet bgs Well Construction Detail
0		75	0.2	B25-2.5			No lithology description	recorded	
5			0.4	B25-6					
		100	0.2	B25-10					
		100	0.1	B25-14					
15		100	0.5	B25-16			Boring terminated at 16 bentonite and gravel.	ft bgs. Backfilled wi	th
Drilling Eq Sampler Ty Hammer Ty	Hammer Type/Weight: No			OT We and liner Sci Ibs Filt	een Slot S er Pack Us	d Interval: Size: sed:	Not Applicable inches Not Applicable	Notes/Commer s	nts:
Total Borir Total Well State Well	Depth:		16 Not Applicable Not Applicable	feet bgs An	face Seal: nular Seal: nument Ty	:	Concrete Bentonite Not Applicable		Page: 1 of 1

		St		gies www.w	oject: oject Number: ogged by: ate Started: urface Condition ell Location N/ ell Location E/ eviewed by:	: 06 SI 4/ Dons: G (S: 90 W: 74		f NW property corner NW property corner Water Dep	tle, Washir	awn Ave NE shington		
	DRAFT				ate Completed				th After Completion:			
Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic I	Description		Well Construction Detail	
0			70	0.8	B26-2.5			No lithology description	recorded			
5				0.5	B26-6							
			100	0.3	B26-10							
-			100	0.1	B26-14							
15 —	X		100	0.9	B26-16			Poving terminoted at 16 f	it has Deskfilled			
								Boring terminated at 16 f bentonite and gravel.	u bgs. Backfilled v	with		
Drillin	Drilling Equipment: Geoprobe			Holocene/ Mitch Geoprobe 78221 2.25in/5ft macro	DT We	/ell/Auger Diamter: /ell Screened Interval: creen Slot Size:		Not Applicable inches Not Applicable feet bgs Not Applicable inches	Notes/Comm	ents:		
Hamm Total I	Hammer Type/Weight: N Total Boring Depth: 16			Not Applicable 16 Not Applicable	lbs Filt feet bgs Su	reen Slot S ter Pack U rface Seal: nular Seal	sed: :	Not Applicable Not Applicable Concrete Bentonite			Page:	
State				Not Applicable	-	nument Ty		Not Applicable			1 of 1	
		nd Sti		gies www	oject: ogged by: ate Started: urface Conditio ell Location N/ ell Location E/ eviewed by:	06 SI 4/ ons: G S: 90 W: 90		f NW property corner NW property corner Water Dep	BORING LOG Site Address: 6870 Seatt	le, Washingt		
--	-------------------------	-------------------------	---------------	---	---	--	------------------------------	---	--	--------------	--------------------------------	
				Da	ate Completed	: 4,	/19/18	Water Dep	oth After Completion:		feet bgs	
Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	USCS Class	Graphic	Lithologic	Description		Well Construction Detail	
0			60	0.4	B27-2.5			No lithology description	recorded			
5				0.3	B27-6							
10			100	0.5	B27-10							
-			100	0.3	B27-14							
15	X		100	0.4	B27-16			Boring terminated at 16 f bentonite and gravel.	ft bgs. Backfilled v	vith		
Drilling Drilling Sample Hamm	g Equ er Ty er Ty	ıipmer pe: vpe/We	nt: ight:	Holocene/ Mitch Geoprobe 7822E 2.25in/5ft macro Not Applicable	OT We and liner Sci Ibs Filt	reen Slot S er Pack Us	d Interval: Size: sed:	Not Applicable inches Not Applicable	Notes/Commo	ents:		
Total E Total V State V	Vell [Depth:		16 Not Applicable Not Applicable	feet bgs An	rface Seal nular Seal nument Ty	:	Concrete Bentonite Not Applicable			Page: 1 of 1	

ATTACHMENT B LABORATORY ANALYTICAL REPORTS

OnSite Environmental, Inc. #1804-197



14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

May 1, 2018

Tom Cammarata Sound Earth Strategies 2811 Fairview Avenue East, Suite 2000 Seattle, WA 98102

Re: Analytical Data for Project 0651-002 Laboratory Reference No. 1804-197

Dear Tom:

Enclosed are the analytical results and associated quality control data for samples submitted on April 18, 2018.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister Project Manager

Enclosures



Date of Report: May 1, 2018 Samples Submitted: April 18, 2018 Laboratory Reference: 1804-197 Project: 0651-002

Case Narrative

Samples were collected on April 17, 2018 and received by the laboratory on April 18, 2018. They were maintained at the laboratory at a temperature of 2° C to 6° C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Volatiles EPA 8260C Analysis

The client requested PQL of 0.025ppm is not achievable for some compounds for samples B2-5, B2-10, B2-14, B3-7, B5-10, B6-2.5, B6-7.5, B7-6, B7-10, B9-6, B10-6 and B10-10 due to the necessary dilution of these samples.

All four internal standards did not meet acceptance criteria for low-level analysis for sample B5-14. Leaks in the sealed VOA environment caused by grit between the VOA lip and VOA cap septum have been shown to cause low internal standard recovery. The second VOA vial provided for low-level analysis was damaged. Therefore, the sample was extracted from a 4-ounce jar for low-level analysis. Some loss of volatiles may have occurred. The reported results for Trichloroethene and Tetrachloroethene are not affected.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.



2

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Analyta	Decult	DOI	Method	Date	Date Analyzad	Flore
Analyte Client ID:	Result B1-6	PQL	Method	Prepared	Analyzed	Flags
Laboratory ID:	04-197-01					
Vinyl Chloride	ND	0.025	EPA 8260C	4-19-18	4-19-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
(cis) 1,2-Dichloroethene	0.033	0.025	EPA 8260C	4-19-18	4-19-18	
Trichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
Tetrachloroethene	0.17	0.047	EPA 8260C	4-18-18	4-18-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	99	75-131				
Toluene-d8	99	83-130				
4-Bromofluorobenzene	91	78-130				



America	Descrit	DOI		Date	Date	-
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B1-14					
Laboratory ID:	04-197-02					
Vinyl Chloride	ND	0.025	EPA 8260C	4-19-18	4-19-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
(cis) 1,2-Dichloroethene	0.15	0.025	EPA 8260C	4-19-18	4-19-18	
Trichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
Tetrachloroethene	0.40	0.039	EPA 8260C	4-18-18	4-18-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	106	75-131				
Toluene-d8	99	83-130				
4-Bromofluorobenzene	84	78-130				



A	D	501		Date	Date	_
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B2-5					
Laboratory ID:	04-197-03					
Vinyl Chloride	ND	0.92	EPA 8260C	4-18-18	4-19-18	
(trans) 1,2-Dichloroethene	ND	0.92	EPA 8260C	4-18-18	4-19-18	
(cis) 1,2-Dichloroethene	1.8	0.92	EPA 8260C	4-18-18	4-19-18	
Trichloroethene	28	0.92	EPA 8260C	4-18-18	4-19-18	
Tetrachloroethene	27000	180	EPA 8260C	4-23-18	4-23-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	108	75-131				
Toluene-d8	112	83-130				
4-Bromofluorobenzene	115	78-130				



Matrix: Soil Units: mg/kg

• • • •		50	•• ••	Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B2-10					
Laboratory ID:	04-197-04					
Vinyl Chloride	ND	0.037	EPA 8260C	4-18-18	4-18-18	
(trans) 1,2-Dichloroethene	ND	0.037	EPA 8260C	4-18-18	4-18-18	
(cis) 1,2-Dichloroethene	0.16	0.037	EPA 8260C	4-18-18	4-18-18	
Trichloroethene	ND	0.037	EPA 8260C	4-18-18	4-18-18	
Tetrachloroethene	0.77	0.037	EPA 8260C	4-18-18	4-18-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	98	75-131				
Toluene-d8	104	83-130				
4-Bromofluorobenzene	112	78-130				



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B2-14					
Laboratory ID:	04-197-05					
Vinyl Chloride	ND	0.034	EPA 8260C	4-18-18	4-18-18	
(trans) 1,2-Dichloroethene	ND	0.034	EPA 8260C	4-18-18	4-18-18	
(cis) 1,2-Dichloroethene	0.19	0.034	EPA 8260C	4-18-18	4-18-18	
Trichloroethene	ND	0.034	EPA 8260C	4-18-18	4-18-18	
Tetrachloroethene	0.97	0.034	EPA 8260C	4-18-18	4-18-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	98	75-131				
Toluene-d8	105	83-130				
4-Bromofluorobenzene	113	78-130				



• • • •		50		Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B3-7					
Laboratory ID:	04-197-06					
Vinyl Chloride	ND	0.038	EPA 8260C	4-18-18	4-18-18	
(trans) 1,2-Dichloroethene	ND	0.038	EPA 8260C	4-18-18	4-18-18	
(cis) 1,2-Dichloroethene	ND	0.038	EPA 8260C	4-18-18	4-18-18	
Trichloroethene	ND	0.038	EPA 8260C	4-18-18	4-18-18	
Tetrachloroethene	0.78	0.038	EPA 8260C	4-18-18	4-18-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	96	75-131				
Toluene-d8	96	83-130				
4-Bromofluorobenzene	103	78-130				



Analysis	Decult	DOI	Mathad	Date	Date	Flows
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B3-15					
Laboratory ID:	04-197-07					
Vinyl Chloride	ND	0.025	EPA 8260C	4-19-18	4-19-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
Trichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
Tetrachloroethene	0.19	0.035	EPA 8260C	4-18-18	4-18-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	94	75-131				
Toluene-d8	95	83-130				
4-Bromofluorobenzene	89	78-130				



Anchite	Decult	DOI	Method	Date	Date Analyzad	Flore
Analyte Client ID:	Result B4-6	PQL	Method	Prepared	Analyzed	Flags
Laboratory ID:	04-197-08					
Vinyl Chloride	ND	0.025	EPA 8260C	4-19-18	4-19-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
(cis) 1,2-Dichloroethene	0.033	0.025	EPA 8260C	4-19-18	4-19-18	
Trichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	94	75-131				
Toluene-d8	97	83-130				
4-Bromofluorobenzene	96	78-130				



Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B4-9.5	FQL	Metrioa	Flepaleu	Analyzeu	Flays
Laboratory ID:	04-197-09					
Vinyl Chloride	ND	0.025	EPA 8260C	4-19-18	4-19-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
(cis) 1,2-Dichloroethene	0.049	0.025	EPA 8260C	4-19-18	4-19-18	
Trichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	95	75-131				
Toluene-d8	93	83-130				
4-Bromofluorobenzene	87	78-130				



Annahata	Descrit	DOI		Date	Date	-
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B4-16					
Laboratory ID:	04-197-10					
Vinyl Chloride	ND	0.025	EPA 8260C	4-19-18	4-19-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
(cis) 1,2-Dichloroethene	0.059	0.025	EPA 8260C	4-19-18	4-19-18	
Trichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	98	75-131				
Toluene-d8	98	83-130				
4-Bromofluorobenzene	92	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B5-6					
Laboratory ID:	04-197-11					
Vinyl Chloride	ND	0.025	EPA 8260C	4-19-18	4-19-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
Trichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
Tetrachloroethene	0.11	0.054	EPA 8260C	4-18-18	4-18-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	100	75-131				
Toluene-d8	100	83-130				
4-Bromofluorobenzene	96	78-130				



A 1	D <i>K</i>	501		Date	Date	_
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B5-10					
Laboratory ID:	04-197-12					
Vinyl Chloride	ND	0.050	EPA 8260C	4-18-18	4-18-18	
(trans) 1,2-Dichloroethene	ND	0.050	EPA 8260C	4-18-18	4-18-18	
(cis) 1,2-Dichloroethene	ND	0.050	EPA 8260C	4-18-18	4-18-18	
Trichloroethene	0.19	0.050	EPA 8260C	4-18-18	4-18-18	
Tetrachloroethene	7.4	0.050	EPA 8260C	4-18-18	4-18-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	100	75-131				
Toluene-d8	104	83-130				
4-Bromofluorobenzene	111	78-130				



A I		501		Date	Date	-
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B5-14					
Laboratory ID:	04-197-13					
Vinyl Chloride	ND	0.025	EPA 8260C	4-23-18	4-23-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
Trichloroethene	0.066	0.053	EPA 8260C	4-18-18	4-18-18	
Tetrachloroethene	0.52	0.053	EPA 8260C	4-18-18	4-18-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	99	75-131				
Toluene-d8	97	83-130				
4-Bromofluorobenzene	87	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B6-2.5					
Laboratory ID:	04-197-14					
Vinyl Chloride	ND	0.046	EPA 8260C	4-18-18	4-18-18	
(trans) 1,2-Dichloroethene	ND	0.046	EPA 8260C	4-18-18	4-18-18	
(cis) 1,2-Dichloroethene	ND	0.046	EPA 8260C	4-18-18	4-18-18	
Trichloroethene	ND	0.046	EPA 8260C	4-18-18	4-18-18	
Tetrachloroethene	0.77	0.046	EPA 8260C	4-18-18	4-18-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	97	75-131				
Toluene-d8	102	83-130				
4-Bromofluorobenzene	110	78-130				



A I	D	501		Date	Date	-
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B6-7.5					
Laboratory ID:	04-197-15					
Vinyl Chloride	ND	0.054	EPA 8260C	4-18-18	4-18-18	
(trans) 1,2-Dichloroethene	ND	0.054	EPA 8260C	4-18-18	4-18-18	
(cis) 1,2-Dichloroethene	ND	0.054	EPA 8260C	4-18-18	4-18-18	
Trichloroethene	0.096	0.054	EPA 8260C	4-18-18	4-18-18	
Tetrachloroethene	0.90	0.054	EPA 8260C	4-18-18	4-18-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	101	75-131				
Toluene-d8	103	83-130				
4-Bromofluorobenzene	108	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B6-12					
Laboratory ID:	04-197-16					
Vinyl Chloride	ND	0.025	EPA 8260C	4-19-18	4-19-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
Trichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
Tetrachloroethene	0.17	0.053	EPA 8260C	4-18-18	4-18-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	101	75-131				
Toluene-d8	101	83-130				
4-Bromofluorobenzene	96	78-130				



A	D <i>K</i>	501		Date	Date	_
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B7-6					
Laboratory ID:	04-197-17					
Vinyl Chloride	ND	0.050	EPA 8260C	4-18-18	4-18-18	
(trans) 1,2-Dichloroethene	ND	0.050	EPA 8260C	4-18-18	4-18-18	
(cis) 1,2-Dichloroethene	ND	0.050	EPA 8260C	4-18-18	4-18-18	
Trichloroethene	ND	0.050	EPA 8260C	4-18-18	4-18-18	
Tetrachloroethene	1.9	0.050	EPA 8260C	4-18-18	4-18-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	105	75-131				
Toluene-d8	102	83-130				
4-Bromofluorobenzene	100	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B7-10					
Laboratory ID:	04-197-18					
Vinyl Chloride	ND	0.048	EPA 8260C	4-18-18	4-18-18	
(trans) 1,2-Dichloroethene	ND	0.048	EPA 8260C	4-18-18	4-18-18	
(cis) 1,2-Dichloroethene	ND	0.048	EPA 8260C	4-18-18	4-18-18	
Trichloroethene	ND	0.048	EPA 8260C	4-18-18	4-18-18	
Tetrachloroethene	3.5	0.048	EPA 8260C	4-18-18	4-18-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	102	75-131				
Toluene-d8	100	83-130				
4-Bromofluorobenzene	99	78-130				



Analyta	Decult	DOI	Method	Date	Date	Flore
Analyte Client ID:	Result B7-14	PQL	Method	Prepared	Analyzed	Flags
Laboratory ID:	04-197-19					
Vinyl Chloride	ND	0.025	EPA 8260C	4-23-18	4-23-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
Trichloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
Tetrachloroethene	0.32	0.050	EPA 8260C	4-18-18	4-18-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	96	75-131				
Toluene-d8	96	83-130				
4-Bromofluorobenzene	90	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B8-6					
Laboratory ID:	04-197-20					
Vinyl Chloride	ND	0.025	EPA 8260C	4-19-18	4-19-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
Trichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
Tetrachloroethene	0.55	0.054	EPA 8260C	4-18-18	4-18-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	100	75-131				
Toluene-d8	99	83-130				
4-Bromofluorobenzene	90	78-130				



A	D <i>K</i>	501		Date	Date	_
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B8-10					
Laboratory ID:	04-197-21					
Vinyl Chloride	ND	0.025	EPA 8260C	4-23-18	4-23-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
Trichloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
Tetrachloroethene	0.23	0.056	EPA 8260C	4-18-18	4-18-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	100	75-131				
Toluene-d8	97	83-130				
4-Bromofluorobenzene	90	78-130				



Analysis	Desself	DOI		Date	Date	-
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B8-14					
Laboratory ID:	04-197-22					
Vinyl Chloride	ND	0.025	EPA 8260C	4-19-18	4-19-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
Trichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
Tetrachloroethene	0.11	0.050	EPA 8260C	4-18-18	4-18-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	97	75-131				
Toluene-d8	99	83-130				
4-Bromofluorobenzene	90	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B9-6					
Laboratory ID:	04-197-23					
Vinyl Chloride	ND	0.053	EPA 8260C	4-18-18	4-18-18	
(trans) 1,2-Dichloroethene	ND	0.053	EPA 8260C	4-18-18	4-18-18	
(cis) 1,2-Dichloroethene	ND	0.053	EPA 8260C	4-18-18	4-18-18	
Trichloroethene	ND	0.053	EPA 8260C	4-18-18	4-18-18	
Tetrachloroethene	4.0	0.053	EPA 8260C	4-18-18	4-18-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	96	75-131				
Toluene-d8	97	83-130				
4-Bromofluorobenzene	99	78-130				



A	D	501		Date	Date	-
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B9-10					
Laboratory ID:	04-197-24					
Vinyl Chloride	ND	0.025	EPA 8260C	4-19-18	4-19-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
Trichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	94	75-131				
Toluene-d8	94	83-130				
4-Bromofluorobenzene	88	78-130				



• • • •		50		Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B9-14					
Laboratory ID:	04-197-25					
Vinyl Chloride	ND	0.025	EPA 8260C	4-19-18	4-19-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
Trichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
Tetrachloroethene	0.063	0.060	EPA 8260C	4-18-18	4-18-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	93	75-131				
Toluene-d8	94	83-130				
4-Bromofluorobenzene	84	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B10-6					
Laboratory ID:	04-197-26					
Vinyl Chloride	ND	0.060	EPA 8260C	4-18-18	4-18-18	
(trans) 1,2-Dichloroethene	ND	0.060	EPA 8260C	4-18-18	4-18-18	
(cis) 1,2-Dichloroethene	ND	0.060	EPA 8260C	4-18-18	4-18-18	
Trichloroethene	ND	0.060	EPA 8260C	4-18-18	4-18-18	
Tetrachloroethene	0.88	0.060	EPA 8260C	4-18-18	4-18-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	102	75-131				
Toluene-d8	104	83-130				
4-Bromofluorobenzene	101	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B10-10					
Laboratory ID:	04-197-27					
Vinyl Chloride	ND	0.053	EPA 8260C	4-18-18	4-18-18	
(trans) 1,2-Dichloroethene	ND	0.053	EPA 8260C	4-18-18	4-18-18	
(cis) 1,2-Dichloroethene	ND	0.053	EPA 8260C	4-18-18	4-18-18	
Trichloroethene	ND	0.053	EPA 8260C	4-18-18	4-18-18	
Tetrachloroethene	2.2	0.053	EPA 8260C	4-18-18	4-18-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	103	75-131				
Toluene-d8	104	83-130				
4-Bromofluorobenzene	100	78-130				



• • • •		50		Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B10-14					
Laboratory ID:	04-197-28					
Vinyl Chloride	ND	0.025	EPA 8260C	4-19-18	4-19-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
Trichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
Tetrachloroethene	0.22	0.025	EPA 8260C	4-19-18	4-19-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	96	75-131				
Toluene-d8	98	83-130				
4-Bromofluorobenzene	91	78-130				



VOLATILES EPA 8260C METHOD BLANK QUALITY CONTROL

Analyte Result PQL Method Prepared Analyzed Flags Laboratory ID: MB0418S1 Vinyl Chloride ND 0.050 EPA 8260C 4-18-18 4-18-18 (18-18) 4-18-18 (18-18) 4-18-18 (18-18) 4-18-18 (18-18) 4-18-18 (18-18) 4-18-18 (18-18) 4-18-18 (18-18) (18-18) 4-18-18 (18-18)					Date	Date	
Vinyl Chloride ND 0.050 EPA 8260C 4-18-18 4-18-18 (trans) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 (cis) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 (cis) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Trichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Trichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Surrogate: Percent Recovery Control Limits Dibromofluoromethane 100 75-131 Toluene-d8 100 83-130 4-Bromofluorobenzene 97 78-130 Laboratory ID: MB0418S2 MB0418S2 4-18-18 4-18-18 Vinyl Chloride ND 0.050 EPA 8260C 4-18-18 4-18-18 (cis) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 (cis) 1,2-Dichloroethene ND 0.050 EPA	Analyte	Result		Method	Prepared	Analyzed	Flags
Vinyl Chloride ND 0.050 EPA 8260C 4-18-18 4-18-18 (trans) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 (cis) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 (cis) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Trichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Trichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Surrogate: Percent Recovery Control Limits Dibromofluoromethane 100 75-131 Toluene-d8 100 83-130 4-Bromofluorobenzene 97 78-130 Laboratory ID: MB0418S2 MB0418S2 4-18-18 4-18-18 Vinyl Chloride ND 0.050 EPA 8260C 4-18-18 4-18-18 (cis) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 (cis) 1,2-Dichloroethene ND 0.050 EPA							
(trans) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 (cis) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Trichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Tetrachloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Surrogate: Percent Recovery Control Limits 4-18-18 4-18-18 Dibromofluoromethane 100 75-131 70/000 83-130 4-Bromofluorobenzene 97 78-130 78-130 78-130 Laboratory ID: MB0418S2 MB0418S2 4-18-18 4-18-18 Vinyl Chloride ND 0.050 EPA 8260C 4-18-18 4-18-18 (trans) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 (cis) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Trichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18	Laboratory ID:	MB0418S1					
(cis) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Trichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Tetrachloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Surrogate: Percent Recovery Control Limits 4-18-18 4-18-18 Dibromofluoromethane 100 75-131 75-131 76-131 Toluene-d8 100 83-130 4-18-18 4-18-18 Laboratory ID: MB0418S2 Vinyl Chloride ND 0.050 EPA 8260C 4-18-18 4-18-18 (trans) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 (cis) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 (cis) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 (cis) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Trichloroethene ND 0.050	Vinyl Chloride	ND	0.050	EPA 8260C	4-18-18	4-18-18	
Trichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Tetrachloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Surrogate: Percent Recovery Control Limits 4-18-18 4-18-18 Dibromofluoromethane 100 75-131 7 7 7 Toluene-d8 100 83-130 4-8 4-18-18 4-18-18 Laboratory ID: MB0418S2 Vinyl Chloride ND 0.050 EPA 8260C 4-18-18 4-18-18 (trans) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 (cis) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 (cis) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Trichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Trichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Tetrachloroethene ND 0.050	(trans) 1,2-Dichloroethene	ND	0.050	EPA 8260C	4-18-18	4-18-18	
Tetrachloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Surrogate: Percent Recovery Control Limits 4-18-18 4-18-18	(cis) 1,2-Dichloroethene	ND	0.050	EPA 8260C	4-18-18	4-18-18	
Surrogate: Percent Recovery Control Limits Dibromofluoromethane 100 75-131 Toluene-d8 100 83-130 4-Bromofluorobenzene 97 78-130 Laboratory ID: MB0418S2 Vinyl Chloride ND 0.050 EPA 8260C 4-18-18 4-18-18 (trans) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 (cis) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Trichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Tetrachloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Surrogate: Percent Recovery Control Limits 0.050 EPA 8260C 4-18-18 4-18-18 Dibromofluoromethane 99 75-131 4-18-18 4-18-18	Trichloroethene	ND	0.050	EPA 8260C	4-18-18	4-18-18	
Dibromofluoromethane 100 75-131 Toluene-d8 100 83-130 4-Bromofluorobenzene 97 78-130 Laboratory ID: MB0418S2 Vinyl Chloride ND 0.050 EPA 8260C 4-18-18 4-18-18 (trans) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 (cis) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Trichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Surrogate: Percent Recovery Control Limits Dibromofluoromethane 99 75-131	Tetrachloroethene	ND	0.050	EPA 8260C	4-18-18	4-18-18	
Toluene-d8 100 83-130 4-Bromofluorobenzene 97 78-130 Laboratory ID: MB0418S2 Vinyl Chloride ND 0.050 EPA 8260C 4-18-18 4-18-18 (trans) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 (cis) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Trichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Trichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Surrogate: Percent Recovery Control Limits Dibromofluoromethane 99 75-131	Surrogate:	Percent Recovery	Control Limits				
4-Bromofluorobenzene 97 78-130 Laboratory ID: MB0418S2 Vinyl Chloride ND 0.050 EPA 8260C 4-18-18 4-18-18 (trans) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 (cis) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Trichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Tetrachloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Surrogate: Percent Recovery Control Limits Dibromofluoromethane 99 75-131	Dibromofluoromethane	100	75-131				
Laboratory ID: MB0418S2 Vinyl Chloride ND 0.050 EPA 8260C 4-18-18 4-18-18 (trans) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 (cis) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Trichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Tetrachloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Surrogate: Percent Recovery Control Limits Dibromofluoromethane 99 75-131	Toluene-d8	100	83-130				
Vinyl Chloride ND 0.050 EPA 8260C 4-18-18 4-18-18 (trans) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 (cis) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Trichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Trichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Tetrachloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Surrogate: Percent Recovery Control Limits 4-18-18 4-18-18 Dibromofluoromethane 99 75-131 4-18-13 4-18-13	4-Bromofluorobenzene	97	78-130				
Vinyl Chloride ND 0.050 EPA 8260C 4-18-18 4-18-18 (trans) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 (cis) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Trichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Trichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Tetrachloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Surrogate: Percent Recovery Control Limits 4-18-18 4-18-18 Dibromofluoromethane 99 75-131 4-18-13 4-18-13							
(trans) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 (cis) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Trichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Trichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Tetrachloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Surrogate: Percent Recovery Control Limits 5 5 5 5 Dibromofluoromethane 99 75-131 5 5 5 5	Laboratory ID:	MB0418S2					
(cis) 1,2-Dichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Trichloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Tetrachloroethene ND 0.050 EPA 8260C 4-18-18 4-18-18 Surrogate: Percent Recovery Control Limits 4-18-18 4-18-18 Dibromofluoromethane 99 75-131 5-131 5-131 5-131	Vinyl Chloride	ND	0.050	EPA 8260C	4-18-18	4-18-18	
TrichloroetheneND0.050EPA 8260C4-18-184-18-18TetrachloroetheneND0.050EPA 8260C4-18-184-18-18Surrogate:Percent RecoveryControl LimitsDibromofluoromethane9975-131	(trans) 1,2-Dichloroethene	ND	0.050	EPA 8260C	4-18-18	4-18-18	
TetrachloroetheneND0.050EPA 8260C4-18-18Surrogate:Percent RecoveryControl LimitsDibromofluoromethane9975-131	(cis) 1,2-Dichloroethene	ND	0.050	EPA 8260C	4-18-18	4-18-18	
Surrogate:Percent RecoveryControl LimitsDibromofluoromethane9975-131	Trichloroethene	ND	0.050	EPA 8260C	4-18-18	4-18-18	
Dibromofluoromethane 99 75-131	Tetrachloroethene	ND	0.050	EPA 8260C	4-18-18	4-18-18	
	Surrogate:	Percent Recovery	Control Limits				
Toluene-d8 98 83-130	Dibromofluoromethane	99	75-131				
	Toluene-d8	98	83-130				
4-Bromofluorobenzene 102 78-130	4-Bromofluorobenzene	102	78-130				



VOLATILES EPA 8260C METHOD BLANK QUALITY CONTROL

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Laboratory ID:	MB0419S2					
Vinyl Chloride	ND	0.025	EPA 8260C	4-19-18	4-19-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
Trichloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-19-18	4-19-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	93	75-131				
Toluene-d8	96	83-130				
4-Bromofluorobenzene	95	78-130				
Laboratory ID:	MB0423S2					
Vinyl Chloride	ND	0.025	EPA 8260C	4-23-18	4-23-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
Trichloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	98	75-131				
Toluene-d8	98	83-130				
4-Bromofluorobenzene	92	78-130				



VOLATILES EPA 8260C SB/SBD QUALITY CONTROL

	Percent		cent	Recovery	RPD					
Analyte	Res	sult	Spike	Level	Reco	overy	Limits	RPD	Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB04	18S1								
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0446	0.0378	0.0500	0.0500	89	76	58-126	17	20	
Benzene	0.0460	0.0401	0.0500	0.0500	92	80	72-122	14	19	
Trichloroethene	0.0453	0.0405	0.0500	0.0500	91	81	75-120	11	20	
Toluene	0.0453	0.0401	0.0500	0.0500	91	80	78-123	12	19	
Chlorobenzene	0.0431	0.0376	0.0500	0.0500	86	75	75-120	14	18	
Surrogate:										
Dibromofluoromethane					101	103	75-131			
Toluene-d8					102	104	83-130			
4-Bromofluorobenzene					99	100	78-130			
Laboratory ID:	SB04	18S2								
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0357	0.0433	0.0500	0.0500	71	87	58-126	19	20	
Benzene	0.0419	0.0484	0.0500	0.0500	84	97	72-122	14	19	
Trichloroethene	0.0412	0.0489	0.0500	0.0500	82	98	75-120	17	20	
Toluene	0.0418	0.0489	0.0500	0.0500	84	98	78-123	16	19	
Chlorobenzene	0.0410	0.0475	0.0500	0.0500	82	95	75-120	15	18	
Surrogate:										
Dibromofluoromethane					104	99	75-131			
Toluene-d8					108	97	83-130			
4-Bromofluorobenzene					108	100	78-130			


VOLATILES EPA 8260C SB/SBD QUALITY CONTROL

Matrix: Soil Units: mg/kg

					Per	cent	Recovery		RPD	
Analyte	Res	sult	Spike	Level	Rec	overy	Limits	RPD	Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB04	19S2								
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0407	0.0465	0.0500	0.0500	81	93	58-126	13	20	
Benzene	0.0432	0.0478	0.0500	0.0500	86	96	72-122	10	19	
Trichloroethene	0.0433	0.0490	0.0500	0.0500	87	98	75-120	12	20	
Toluene	0.0438	0.0476	0.0500	0.0500	88	95	78-123	8	19	
Chlorobenzene	0.0390	0.0435	0.0500	0.0500	78	87	75-120	11	18	
Surrogate:										
Dibromofluoromethane					104	99	75-131			
Toluene-d8					104	102	83-130			
4-Bromofluorobenzene					98	99	78-130			
Laboratory ID:	SB04	23S2								
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0452	0.0433	0.0500	0.0500	90	87	58-126	4	20	
Benzene	0.0487	0.0472	0.0500	0.0500	97	94	72-122	3	19	
Trichloroethene	0.0510	0.0495	0.0500	0.0500	102	99	75-120	3	20	
Toluene	0.0485	0.0484	0.0500	0.0500	97	97	78-123	0	19	
Chlorobenzene	0.0472	0.0449	0.0500	0.0500	94	90	75-120	5	18	
Surrogate:										
Dibromofluoromethane					103	102	75-131			
Toluene-d8					105	104	83-130			
4-Bromofluorobenzene					100	102	78-130			



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TCLP VOLATILES EPA 1311/8260C

Matrix: TCLP Extract Units: ug/L

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B2-5					
Laboratory ID:	04-197-03					
Vinyl Chloride	ND	1000	EPA 8260C	4-30-18	5-1-18	
Trichloroethene	ND	1000	EPA 8260C	4-30-18	5-1-18	
Tetrachloroethene	45000	1000	EPA 8260C	4-30-18	5-1-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	98	75-127				
Toluene-d8	97	80-127				
4-Bromofluorobenzene	93	78-125				



TCLP VOLATILES EPA 1311/8260C METHOD BLANK QUALITY CONTROL

Matrix: TCLP Extract Units: ug/L

0				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Laboratory ID:	MB0430T1					
Vinyl Chloride	ND	2.0	EPA 8260C	4-30-18	5-1-18	
Trichloroethene	ND	2.0	EPA 8260C	4-30-18	5-1-18	
Tetrachloroethene	ND	2.0	EPA 8260C	4-30-18	5-1-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	95	75-127				
Toluene-d8	99	80-127				
4-Bromofluorobenzene	95	78-125				



TCLP VOLATILES EPA 1311/8260C SB/SBD QUALITY CONTROL

Matrix: TCLP Extract Units: ug/L

5					Per	cent	Recovery		RPD	
Analyte	Res	sult	Spike	Level	Reco	overy	Limits	RPD	Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB05	01T1								
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	8.56	8.51	10.0	10.0	86	85	63-126	1	21	
Benzene	9.40	9.33	10.0	10.0	94	93	78-122	1	19	
Trichloroethene	8.82	8.95	10.0	10.0	88	90	63-120	1	20	
Toluene	9.34	9.49	10.0	10.0	93	95	79-124	2	19	
Chlorobenzene	8.29	8.45	10.0	10.0	83	85	78-120	2	19	
Surrogate:										
Dibromofluoromethane					103	100	75-127			
Toluene-d8					100	100	80-127			
4-Bromofluorobenzene					99	99	78-125			



37

Date of Report: May 1, 2018 Samples Submitted: April 18, 2018 Laboratory Reference: 1804-197 Project: 0651-002

% MOISTURE

Date Analyzed: 4-19&23-18

Client ID	Lab ID	% Moisture
B1-6	04-197-01	17
B1-14	04-197-02	9
B2-5	04-197-03	19
B2-10	04-197-04	12
B2-14	04-197-05	8
B3-7	04-197-06	15
B3-15	04-197-07	9
B4-6	04-197-08	20
B4-9.5	04-197-09	12
B4-16	04-197-10	10
B5-6	04-197-11	18
B5-10	04-197-12	16
B5-14	04-197-13	16
B6-2.5	04-197-14	13
B6-7.5	04-197-15	16
B6-12	04-197-16	15
B7-6	04-197-17	15
B7-10	04-197-18	15
B7-14	04-197-19	7
B8-6	04-197-20	18
B8-10	04-197-21	13
B8-14	04-197-22	16
B9-6	04-197-23	16
B9-10	04-197-24	15
B9-14	04-197-25	19
B10-6	04-197-26	15
B10-10	04-197-27	12



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38

Date of Report: May 1, 2018 Samples Submitted: April 18, 2018 Laboratory Reference: 1804-197 Project: 0651-002

% MOISTURE

Date Analyzed: 4-19&23-18

Client ID	Lab ID	% Moisture

B10-14

04-197-28

14





Data Qualifiers and Abbreviations

- A Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B The analyte indicated was also found in the blank sample.
- C The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E The value reported exceeds the quantitation range and is an estimate.
- F Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I Compound recovery is outside of the control limits.
- J The value reported was below the practical quantitation limit. The value is an estimate.
- K Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L The RPD is outside of the control limits.
- M Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 Hydrocarbons in diesel range are impacting lube oil range results.
- O Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P The RPD of the detected concentrations between the two columns is greater than 40.
- Q Surrogate recovery is outside of the control limits.
- S Surrogate recovery data is not available due to the necessary dilution of the sample.
- T The sample chromatogram is not similar to a typical _____
- U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 The practical quantitation limit is elevated due to interferences present in the sample.
- V Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X Sample extract treated with a mercury cleanup procedure.
- X1- Sample extract treated with a sulfuric acid/silica gel cleanup procedure.
- Y The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Ζ-

ND - Not Detected at PQL PQL - Practical Quantitation Limit RPD - Relative Percent Difference



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

OnSite	e onmental inc.		Cha	ain o) f (Cu	IS	to	dy										Pa	ige _		of	3	
Analytical Lab	oratory Testing Services 5th Street • Redmond, WA 98052		urnaround Req (in working da			L	abo	orat	ory	Num	ber:		04	4 -	1	9	7							
Phone: (425 Company: Science Earth Project Number OC51- Project Name: Hearth Stom Project Manager:) 883-3881 · www.onsite-env.com <u>NStrategies</u> OO2 NMargta	Sa 2 C Sta	(Check One) me Day [1 Day 3 Days	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	I-Gx	NWTPH-Dx (Acid / SG Clean-up)	Volatiles 8260CT PCE & TCE OIN DAVE DCE - VC.	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)				MIS/D	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	fetals	I and grease) 1664A	P Drf TCF 11	1-1-1-1	ture
	mple Identification	Date Sample	Time d Sampled	Matrix	Numbe	NWTPI	NWTPI	NWTPH-Gx	NWTPI	Volatile Haloge	EDB E	Semivo (with lo	PAHs 8	PCBs 8082A	Organo	Organo	Chlorir	Total R	Total N	TCLP Metals	HEM (oil and	11		% Moisture
1 B1-6		4/17/	8 0845	S	4					Y														0
231-4			0853	5	4					Y														1
3 B2-5			0930	5	4					X												X		
4 13210			0935	5	4		-			Х														X
5 132-14			0945	5	4					X														X
6 133-7			1010	S	4					X														6
7 B3-15			1020	S	4					X														
8 134-6			1050	S	4					X														
9 34.95			1055	5	4					X														
10 134-16			1105	5	4					X		-		1-10-										X
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OnSite Environmental Inc.		Cha	ain o	f (Cu	Ist	00	y									P	age _	2	_ of _	3		
Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052	Ti	urnaround Requ (in working day	uest /s)		La	abo	rato	ory I	Num	ber:	0) 4	-1	97	7								
Company: Sound Earth Strategies Project Number: OUSI-002	Sar] 1 Day] 3 Days					an-up)	+				081B	s 8270D/SIM	8151A								
Project Name: Hearth Stone Project Manager: Tom Cammarata Sampled by: SNW& GRM		ndard (7 Days) H analysis 5 Da (other)	ys)	Number of Containers	HCID	NWTPH-Gx/BTEX	Gx	NWTPH-Dx (Acid / SG Clean-up)	Iatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	70D/SIM (low-level)	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides	Total RCRA Metals	Total MTCA Metals	etals	HEM (oil and grease) 1664A	-			le
Lab ID Sample Identification	Date Sampled	Time Sampled	Matrix	Number	NWTPH-HCID	-HATWN	NWTPH-GX	-HdTWN	Volatiles 8260C Halogenated Vo	EDB EPA	Semivola (with low	PAHs 8270D	Organoc	Organop	Chlorinat	Total RC	Total MT	TCLP Metals	HEM (oil				% Moisture
11 35-6	4/18/1	8 1215	5	4					×														X
12 B5-10	11	1220	5	4					X														X
13 B5-14		1225	S	4					×														X
14 36-25		1235	S	4					\times	_													Ø
15 B6-7,5		1240	S	4					X													_	
16 56-12		1245	5	4					X	-			_	-		-					_		
17 157-6		1320	S	4					×	_				-	-					_	_		X
18 157-10		1322	S	4					×			_	_	_		-	_	-					X
19 157-14		1330	5	4	-				×	-		_	_	-		-				_			X
30 158-6 Signature		Company	5	14		Date			Time		Con	ments	/Specia	I Inst	ructio	Ins							X
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OnSite Environmental Inc.	Chain o) f	Cu	st	00	ly									Pa	age _	3	_ of _	3	_	
Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052	Turnaround Request (in working days)		La	aboi	rato	ory N	lum	ber:	0	4 -	- 1	9	7								
Phone: (425) 883-3881 • www.onsite-env.com Company: Same Farth Strategy Project Number: Oust-CO2 Project Name: Hearth Stone Project Manager: TOM Cammarata Sampled by: SNW & GRM	(Check One)	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (Acid / SG Clean-up) Volatilies 8260C	エー atiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs) PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	MIS/D	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A				% Moisture
Lab ID Sample Identification	Date Time Sampled Sampled Matrix		NWT	NWT	TWN	NWT	Halo	EDB	Semi (with PAHs	PCB	Orga	Orga	Chloi	Total	Total	TCLF	HEM			_	% Wc
21 138-10	4/17/18/14/0 5	4)	K _														X
22 138-14	1412	1					X														×
23 B9-C	1430					>	Z														X
24 B9-10	433					7	×												_		×
25 159-14	1437				_	7	x														X
26 BU-6	1445						X														X
an 1310-10	1455						X														X
28 BIU-14	500					:	X														X
		B)																		
		P	1									/									
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Sample/Cooler Receipt and Accontance Checklist

Sample/Cooler Receipt and	ACCE	eptance	CHECKI	51	
Client: <u>5ES</u> Client Project Name/Number: 0(65)-002			VI		
Client Project Name/Number: 2631-00 d		Initiated by:	111-11	101	-
OnSite Project Number: 04 - 197		Date Initiated:	4/17/	18	_
1.0 Cooler Verification					
1.1 Were there custody seals on the outside of the cooler?	Yes	Ng	N/A	1 2 3 4	
1.2 Were the custody seals intact?	Yes	No	N/A	1 2 3 4	
1.3 Were the custody seals signed and dated by last custodian?	Yes	No	NA	1 2 3 4	
1.4 Were the samples delivered on ice or blue ice?	res	No		1234	
1.5 Were samples received between 0-6 degrees Celsius?	Yes	NO	Temperature: _	9	
1.6 Have shipping bills (if any) been attached to the back of this form?	Yes	NA			
1.7 How were the samples delivered?	Client	Couriel	UPS/FedEx	OSE Pickup	Other
2.0 Chain of Custody Verification		\smile	~		
2.1 Was a Chain of Custody submitted with the samples?	Yes	No		1 2 3 4	
2.2 Was the COC legible and written in permanent ink?	Yes Yes Yes	No		1 2 3 4	
2.3 Have samples been relinquished and accepted by each custodian?	Yes	No		1 2 3 4	
2.4 Did the sample labels (ID, date, time, preservative) agree with COC?	Yes	No		1 2 3 4	
2.5 Were all of the samples listed on the COC submitted?	Yes	No		1 2 3 4	
2.6 Were any of the samples submitted omitted from the COC?	Yes	No		1234	
3.0 Sample Verification					
3.1 Were any sample containers broken or compromised?	Yes	No		1 2 3 4	
3.2 Were any sample labels missing or illegible?	Yes	No		1 2 3 4	
3.3 Have the correct containers been used for each analysis requested?	Yes	No	~	1 2 3 4	
3.4 Have the samples been correctly preserved?	Yes	No	N/A)	1 2 3 4	
3.5 Are volatiles samples free from headspace and bubbles greater than 6mm?	Yes	No	N/A)	1 2 3 4	
3.6 Is there sufficient sample submitted to perform requested analyses?	Yes	No		1 2 3 4	
3.7 Have any holding times already expired or will expire in 24 hours?	Yes	No		1 2 3 4	

Explain any discrepancies:

3.9 If 5035A was used, which sampling option was used (#1, 2, or 3).

3.8 Was method 5035A used?

Yes

#

1 - Discuss issue in Case Narrative

2 - Process Sample As-is

3 - Client contacted to discuss problem

No

N/A

N/A

1 2 3 4

1 2 3 4

4 - Sample cannot be analyzed or client does not wish to proceed

//SERVER\OSE\Administration\forms\cooler_checklist.xls

OnSite Environmental, Inc. #1804-215



April 27, 2018

Tom Cammarata Sound Earth Strategies 2811 Fairview Avenue East, Suite 2000 Seattle, WA 98102

Re: Analytical Data for Project 0651-002 Laboratory Reference No. 1804-215

Dear Tom:

Enclosed are the analytical results and associated quality control data for samples submitted on April 18, 2018.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely.

David Baumeister Project Manager

Enclosures



Date of Report: April 27, 2018 Samples Submitted: April 18, 2018 Laboratory Reference: 1804-215 Project: 0651-002

Case Narrative

Samples were collected on April 18, 2018 and received by the laboratory on April 18, 2018. They were maintained at the laboratory at a temperature of 2° C to 6° C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Volatiles EPA 8260C Analysis

The client-requested PQL of 0.025 ppm is not achievable for some compounds for samples B13-6, B14-2.5, B14-14, B14-16, B15-6, B15-10 and B16-6 due to the necessary dilution of these samples.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B11-2.5					
Laboratory ID:	04-215-01					
Vinyl Chloride	ND	0.025	EPA 8260C	4-24-18	4-24-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Trichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Tetrachloroethene	0.59	0.090	EPA 8260C	4-20-18	4-20-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	105	75-131				
Toluene-d8	101	83-130				
4-Bromofluorobenzene	104	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B11-6					
Laboratory ID:	04-215-02					
Vinyl Chloride	ND	0.025	EPA 8260C	4-24-18	4-24-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Trichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Tetrachloroethene	0.59	0.052	EPA 8260C	4-20-18	4-20-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	105	75-131				
Toluene-d8	100	83-130				
4-Bromofluorobenzene	99	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B11-10					
Laboratory ID:	04-215-03					
Vinyl Chloride	ND	0.025	EPA 8260C	4-23-18	4-23-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
Trichloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	110	75-131				
Toluene-d8	112	83-130				
4-Bromofluorobenzene	109	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B11-14					
Laboratory ID:	04-215-04					
Vinyl Chloride	ND	0.025	EPA 8260C	4-23-18	4-23-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
Trichloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	109	75-131				
Toluene-d8	110	83-130				
4-Bromofluorobenzene	109	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B12-6					
Laboratory ID:	04-215-07					
Vinyl Chloride	ND	0.025	EPA 8260C	4-24-18	4-24-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Trichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Tetrachloroethene	1.1	0.051	EPA 8260C	4-20-18	4-26-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	99	75-131				
Toluene-d8	94	83-130				
4-Bromofluorobenzene	96	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B12-10					
Laboratory ID:	04-215-08					
Vinyl Chloride	ND	0.025	EPA 8260C	4-23-18	4-23-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
Trichloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	100	75-131				
Toluene-d8	99	83-130				
4-Bromofluorobenzene	93	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B12-14					
Laboratory ID:	04-215-09					
Vinyl Chloride	ND	0.025	EPA 8260C	4-23-18	4-23-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
Trichloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	106	75-131				
Toluene-d8	107	83-130				
4-Bromofluorobenzene	105	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B13-6					
Laboratory ID:	04-215-12					
Vinyl Chloride	ND	0.054	EPA 8260C	4-20-18	4-23-18	
(trans) 1,2-Dichloroethene	ND	0.054	EPA 8260C	4-20-18	4-23-18	
(cis) 1,2-Dichloroethene	ND	0.054	EPA 8260C	4-20-18	4-23-18	
Trichloroethene	ND	0.054	EPA 8260C	4-20-18	4-23-18	
Tetrachloroethene	2.1	0.054	EPA 8260C	4-20-18	4-23-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	104	75-131				
Toluene-d8	99	83-130				
4-Bromofluorobenzene	97	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B13-10					
Laboratory ID:	04-215-13					
Vinyl Chloride	ND	0.025	EPA 8260C	4-23-18	4-23-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
Trichloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	98	75-131				
Toluene-d8	99	83-130				
4-Bromofluorobenzene	100	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B13-14					
Laboratory ID:	04-215-14					
Vinyl Chloride	ND	0.025	EPA 8260C	4-24-18	4-24-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Trichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	100	75-131				
Toluene-d8	99	83-130				
4-Bromofluorobenzene	101	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B14-2.5					
Laboratory ID:	04-215-16					
Vinyl Chloride	ND	0.079	EPA 8260C	4-20-18	4-23-18	
(trans) 1,2-Dichloroethene	ND	0.079	EPA 8260C	4-20-18	4-23-18	
(cis) 1,2-Dichloroethene	ND	0.079	EPA 8260C	4-20-18	4-23-18	
Trichloroethene	ND	0.079	EPA 8260C	4-20-18	4-23-18	
Tetrachloroethene	2.1	0.079	EPA 8260C	4-20-18	4-23-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	100	75-131				
Toluene-d8	96	83-130				
4-Bromofluorobenzene	93	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B14-6					
Laboratory ID:	04-215-17					
Vinyl Chloride	ND	0.025	EPA 8260C	4-24-18	4-24-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Trichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Tetrachloroethene	0.67	0.062	EPA 8260C	4-20-18	4-23-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	94	75-131				
Toluene-d8	94	83-130				
4-Bromofluorobenzene	94	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B14-10					
Laboratory ID:	04-215-18					
Vinyl Chloride	ND	0.025	EPA 8260C	4-24-18	4-24-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Trichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	97	75-131				
Toluene-d8	96	83-130				
4-Bromofluorobenzene	96	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B14-14					
Laboratory ID:	04-215-19					
Vinyl Chloride	ND	0.043	EPA 8260C	4-20-18	4-23-18	
(trans) 1,2-Dichloroethene	ND	0.043	EPA 8260C	4-20-18	4-23-18	
(cis) 1,2-Dichloroethene	0.097	0.043	EPA 8260C	4-20-18	4-23-18	
Trichloroethene	ND	0.043	EPA 8260C	4-20-18	4-23-18	
Tetrachloroethene	0.83	0.043	EPA 8260C	4-20-18	4-23-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	103	75-131				
Toluene-d8	100	83-130				
4-Bromofluorobenzene	99	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B14-16					
Laboratory ID:	04-215-20					
Vinyl Chloride	ND	0.044	EPA 8260C	4-20-18	4-23-18	
(trans) 1,2-Dichloroethene	ND	0.044	EPA 8260C	4-20-18	4-23-18	
(cis) 1,2-Dichloroethene	0.048	0.044	EPA 8260C	4-20-18	4-23-18	
Trichloroethene	ND	0.044	EPA 8260C	4-20-18	4-23-18	
Tetrachloroethene	1.1	0.044	EPA 8260C	4-20-18	4-23-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	100	75-131				
Toluene-d8	99	83-130				
4-Bromofluorobenzene	97	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B15-6					
Laboratory ID:	04-215-21					
Vinyl Chloride	ND	0.052	EPA 8260C	4-20-18	4-23-18	
(trans) 1,2-Dichloroethene	ND	0.052	EPA 8260C	4-20-18	4-23-18	
(cis) 1,2-Dichloroethene	ND	0.052	EPA 8260C	4-20-18	4-23-18	
Trichloroethene	0.075	0.052	EPA 8260C	4-20-18	4-23-18	
Tetrachloroethene	0.84	0.052	EPA 8260C	4-20-18	4-23-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	104	75-131				
Toluene-d8	101	83-130				
4-Bromofluorobenzene	100	78-130				



Matrix: Soil Units: mg/kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B15-10					
Laboratory ID:	04-215-22					
Vinyl Chloride	ND	0.054	EPA 8260C	4-20-18	4-23-18	
(trans) 1,2-Dichloroethene	ND	0.054	EPA 8260C	4-20-18	4-23-18	
(cis) 1,2-Dichloroethene	1.1	0.054	EPA 8260C	4-20-18	4-23-18	
Trichloroethene	ND	0.054	EPA 8260C	4-20-18	4-23-18	
Tetrachloroethene	ND	0.054	EPA 8260C	4-20-18	4-23-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	103	75-131				
Toluene-d8	101	83-130				
4-Bromofluorobenzene	98	78-130				



Matrix: Soil Units: mg/kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B15-14					
Laboratory ID:	04-215-23					
Vinyl Chloride	ND	0.025	EPA 8260C	4-24-18	4-24-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Trichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	93	75-131				
Toluene-d8	93	83-130				
4-Bromofluorobenzene	95	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B16-6					
Laboratory ID:	04-215-26					
Vinyl Chloride	ND	0.047	EPA 8260C	4-20-18	4-23-18	
(trans) 1,2-Dichloroethene	ND	0.047	EPA 8260C	4-20-18	4-23-18	
(cis) 1,2-Dichloroethene	0.18	0.047	EPA 8260C	4-20-18	4-23-18	
Trichloroethene	0.46	0.047	EPA 8260C	4-20-18	4-23-18	
Tetrachloroethene	0.90	0.047	EPA 8260C	4-20-18	4-23-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	102	75-131				
Toluene-d8	100	83-130				
4-Bromofluorobenzene	100	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B16-10					
Laboratory ID:	04-215-27					
Vinyl Chloride	ND	0.025	EPA 8260C	4-24-18	4-24-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Trichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	98	75-131				
Toluene-d8	95	83-130				
4-Bromofluorobenzene	97	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B16-14					
Laboratory ID:	04-215-28					
Vinyl Chloride	ND	0.025	EPA 8260C	4-24-18	4-24-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Trichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	105	75-131				
Toluene-d8	101	83-130				
4-Bromofluorobenzene	106	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B17-6					
Laboratory ID:	04-215-31					
Vinyl Chloride	ND	0.025	EPA 8260C	4-24-18	4-24-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Trichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	97	75-131				
Toluene-d8	97	83-130				
4-Bromofluorobenzene	97	78-130				


				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B17-10					
Laboratory ID:	04-215-32					
Vinyl Chloride	ND	0.025	EPA 8260C	4-24-18	4-24-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Trichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	96	75-131				
Toluene-d8	96	83-130				
4-Bromofluorobenzene	95	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B17-14					
Laboratory ID:	04-215-33					
Vinyl Chloride	ND	0.025	EPA 8260C	4-24-18	4-24-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Trichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	99	75-131				
Toluene-d8	99	83-130				
4-Bromofluorobenzene	95	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B18-6					
Laboratory ID:	04-215-36					
Vinyl Chloride	ND	0.025	EPA 8260C	4-25-18	4-25-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
Trichloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
Tetrachloroethene	0.74	0.057	EPA 8260C	4-20-18	4-24-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	100	75-131				
Toluene-d8	97	83-130				
4-Bromofluorobenzene	101	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B18-10					
Laboratory ID:	04-215-37					
Vinyl Chloride	ND	0.025	EPA 8260C	4-24-18	4-24-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Trichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	111	75-131				
Toluene-d8	110	83-130				
4-Bromofluorobenzene	109	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B18-14					
Laboratory ID:	04-215-38					
Vinyl Chloride	ND	0.025	EPA 8260C	4-24-18	4-24-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Trichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	97	75-131				
Toluene-d8	97	83-130				
4-Bromofluorobenzene	95	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Laboratory ID:	MB0420S3					
Vinyl Chloride	ND	0.050	EPA 8260C	4-20-18	4-20-18	
(trans) 1,2-Dichloroethene	ND	0.050	EPA 8260C	4-20-18	4-20-18	
(cis) 1,2-Dichloroethene	ND	0.050	EPA 8260C	4-20-18	4-20-18	
Trichloroethene	ND	0.050	EPA 8260C	4-20-18	4-20-18	
Tetrachloroethene	ND	0.050	EPA 8260C	4-20-18	4-20-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	95	75-131				
Toluene-d8	94	83-130				
4-Bromofluorobenzene	99	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Laboratory ID:	MB0423S1					
Vinyl Chloride	ND	0.025	EPA 8260C	4-23-18	4-23-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
Trichloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-23-18	4-23-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	108	75-131				
Toluene-d8	113	83-130				
4-Bromofluorobenzene	115	78-130				

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Laboratory ID:	MB0424S3					
Vinyl Chloride	ND	0.025	EPA 8260C	4-24-18	4-24-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Trichloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-24-18	4-24-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	90	75-131				
Toluene-d8	90	83-130				
4-Bromofluorobenzene	96	78-130				

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Laboratory ID:	MB0425S1					
Vinyl Chloride	ND	0.025	EPA 8260C	4-25-18	4-25-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
Trichloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	114	75-131				
Toluene-d8	117	83-130				
4-Bromofluorobenzene	122	78-130				

Matrix: Soil Units: mg/kg

					Per	cent	Recovery		RPD	
Analyte	Res	sult	Spike	Level	Rec	Recovery		RPD	Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB04	20S2								
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0384	0.0373	0.0500	0.0500	77	75	58-126	3	20	
Benzene	0.0461	0.0461	0.0500	0.0500	92	92	72-122	0	19	
Trichloroethene	0.0468	0.0484	0.0500	0.0500	94	97	75-120	3	20	
Toluene	0.0455	0.0469	0.0500	0.0500	91	94	78-123	3	19	
Chlorobenzene	0.0442	0.0443	0.0500	0.0500	88	89	75-120	0	18	
Surrogate:										
Dibromofluoromethane					105	95	75-131			
Toluene-d8					104	96	83-130			
4-Bromofluorobenzene					108	99	78-130			



This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

					Per	cent	Recovery		RPD	
Analyte	Res	sult	Spike	Level	Rece	overy	Limits	RPD	Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB04	23S1								
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0365	0.0355	0.0500	0.0500	73	71	58-126	3	20	
Benzene	0.0480	0.0447	0.0500	0.0500	96	89	72-122	7	19	
Trichloroethene	0.0488	0.0464	0.0500	0.0500	98	93	75-120	5	20	
Toluene	0.0480	0.0452	0.0500	0.0500	96	90	78-123	6	19	
Chlorobenzene	0.0450	0.0420	0.0500	0.0500	90	84	75-120	7	18	
Surrogate:										
Dibromofluoromethane					109	93	75-131			
Toluene-d8					112	93	83-130			
4-Bromofluorobenzene					115	97	78-130			



					Per	cent	Recovery		RPD	
Analyte	Res	sult	Spike	Level	Reco	Recovery		RPD	Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB04	24S1								
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0337	0.0331	0.0500	0.0500	67	66	58-126	2	20	
Benzene	0.0452	0.0448	0.0500	0.0500	90	90	72-122	1	19	
Trichloroethene	0.0463	0.0464	0.0500	0.0500	93	93	75-120	0	20	
Toluene	0.0444	0.0445	0.0500	0.0500	89	89	78-123	0	19	
Chlorobenzene	0.0420	0.0428	0.0500	0.0500	84	86	75-120	2	18	
Surrogate:										
Dibromofluoromethane					97	93	75-131			
Toluene-d8					98	94	83-130			
4-Bromofluorobenzene					102	97	78-130			



					Per	cent	Recovery		RPD	
Analyte	Res	sult	Spike	Level	Rec	overy	Limits	RPD	Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB04	25S1								
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0428	0.0416	0.0500	0.0500	86	83	58-126	3	20	
Benzene	0.0528	0.0518	0.0500	0.0500	106	104	72-122	2	19	
Trichloroethene	0.0512	0.0527	0.0500	0.0500	102	105	75-120	3	20	
Toluene	0.0521	0.0486	0.0500	0.0500	104	97	78-123	7	19	
Chlorobenzene	0.0490	0.0475	0.0500	0.0500	98	95	75-120	3	18	
Surrogate:										
Dibromofluoromethane					99	93	75-131			
Toluene-d8					97	91	83-130			
4-Bromofluorobenzene					102	96	78-130			



Date of Report: April 27, 2018 Samples Submitted: April 18, 2018 Laboratory Reference: 1804-215 Project: 0651-002

% MOISTURE

Date Analyzed: 4-24-18

Client ID	Lab ID	% Moisture
B11-2.5	04-215-01	37
B11-6	04-215-02	18
B11-10	04-215-03	15
B11-14	04-215-04	18
B12-6	04-215-07	12
B12-10	04-215-08	12
B12-14	04-215-09	16
B13-6	04-215-12	19
B13-10	04-215-13	16
B13-14	04-215-14	15
B14-6	04-215-17	18
B14-10	04-215-18	14
B14-14	04-215-19	9
B14-16	04-215-20	9
B15-6	04-215-21	15
B15-10	04-215-22	18
B15-14	04-215-23	10
B16-6	04-215-26	14
B16-10	04-215-27	14
B16-14	04-215-28	10
B17-6	04-215-31	16
B17-10	04-215-32	13
B17-14	04-215-33	11
B18-6	04-215-36	19
B18-10	04-215-37	13
B18-14	04-215-38	14



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

38

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.



Data Qualifiers and Abbreviations

- A Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B The analyte indicated was also found in the blank sample.
- C The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E The value reported exceeds the quantitation range and is an estimate.
- F Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I Compound recovery is outside of the control limits.
- J The value reported was below the practical quantitation limit. The value is an estimate.
- K Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L The RPD is outside of the control limits.
- M Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 Hydrocarbons in diesel range are impacting lube oil range results.
- O Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P The RPD of the detected concentrations between the two columns is greater than 40.
- Q Surrogate recovery is outside of the control limits.
- S Surrogate recovery data is not available due to the necessary dilution of the sample.
- T The sample chromatogram is not similar to a typical
- U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 The practical quantitation limit is elevated due to interferences present in the sample.
- V Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X Sample extract treated with a mercury cleanup procedure.
- X1- Sample extract treated with a sulfuric acid/silica gel cleanup procedure.
- Y The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Ζ-

ND - Not Detected at PQL PQL - Practical Quantitation Limit RPD - Relative Percent Difference



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This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

OnSite Environmental Inc.	Chain c)f	Cı	ist	00	dy										Page		of	4	
Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052	Turnaround Request (in working days)		L	abo	rate	ory N	luml	ber:	C)4	-2	21	5							
Phone: (425) 883-3881 • www.onsite-env.com Company: Same Earth Strategies Project Number: Project Name: Project Manager: Sampled by: SIM - GRM	(Check One) Same Day ☐ 1 Day 2 Days ☐ 3 Days Standard (7 Days) (TPH analysis 5 Days) (other)	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX		NWTPH-Dx (Acid / SG Clean-up) Volatiles 8260C	ILLE latiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	8270D/SIM (low-level)	PCBs 8082A		Organophosphorus Pesticides 8270D/SIM Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	0/ q		isture
Lab ID Sample Identification	Date Time Sampled Sampled Matrix	Num	TWN	TWN	LMN	NWT Volat	Halog	EDB	Semi (with	PAHs	L L L	Orga	Chlor	Total	Total	TCLP	HEM	14		% Moisture
1 BII-25	4/18/18 0840 5	4					X_	_						_	_	_	-			
0 B11-6	0845						K_	-							_	_				
3 BII-10	0852					5	$\langle $					_	-			_	-			
4 1511-14	0455						<								_					
5 1511-16	0963																			
6 B12-2,5	0936																			
7 B12-G	0935					1	X													X
8 B12-10	0937					5														X
9 B12-14	0940					>	\langle													X
10 B12-16	0950																			
Signature	Company	Ţ.		Date	A DESCRIPTION OF	1	ime			nment						1	-			
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Reviewed/Date	Reviewed/Date							_		a Pack										(EDDs)
									Girc	mato	grams	o with	mai	epon	. <u> </u>	lectro	nic Da	a Delly	erables	

OnSite Environmental Inc.	Chain o	f (Cu	st	ody	y							Page	2	_ of	4	
Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052	Turnaround Request (in working days)		La	abor	ator	y Numb	er:	04	-2	15	5						
Phone: (425) 883-3881 · www.onsite-env.com Company: Signature Faith Strategras Project Number: Project Name: HearthStand Project Manager: TOM Cammarata Sampled by:	(Check One) Same Day 1 Day 2 Days 3 Days Standard (7 Days) (TPH analysis 5 Days)	Number of Containers	Q	/BTEX	NWTPH-Gx NWTPH-Dx (Volatiles 8260C PCF * T Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	: 8270D/SIM el PAHs) SIM (low-level)	ne Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	erbicides 8151A	Metals	0	HEM (oil and grease) 1664A			
SNWEGRM	(other)	nber of	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-GX NWTPH-DX	Volatiles 8260C Halogenated Vo	3 EPA 8	Semivolatiles (with low-lever PAHs 8270D/	anochlo	anopho	orinated	Total RCRA Metals Total MTCA Metals	TCLP Metals	d (oil an	0		% Moisture
Lab ID Sample Identification	Sampled Sampled Matrix		MN	MN	MN NN	Voli	Ē	PAF PAF	D D	Org	Chl	Totá	TCL	HE	-	+	N %
11 33-2,5	4/18/18 1035 5	4								-			_		-	+	
12 15/3-6	1040					X											X
13 13-10	1042					X											X
14 313-14	1055					X											X
15 BB-16	1105																
16 B14-25	1125					X											
M B14- G	1130					X											X
16 314-10	1135					X											V
29 BIH-121	1140		-		-	X			+	-							$\overline{\mathbf{O}}$
DD RIN-11	1150				-					-							$\widehat{\mathbf{Y}}$
ad 1519 - C Signature	Company	111		Date		Time		Comments	/Specia	I Instr	uction	S	Contraction of the second				N
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Received								Data Pack						Level	IV 🗆		
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OnSite Environmental Inc.	1.000	Cha		f (Cu	st	00	dy										Pa	ge	3	_ of _	4	-
Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052 Phone: (425) 883-3881 • www.onsite-env.com		around Requ working days			La	abo	rate	ory	Nun	nber		0	4 -	2	1!	5							
Company: Sand Farth Strategies Project Number: OCSI-002 Project Name: Hearth Stanc Project Manager: OM Cammarata Sampled by: Stwe GRM	Same	<i>Duy</i>] 1 Day] 3 Days s)	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (🗌 Acid / SG Clean-up)	Volatiles 8260C RE + +	ter ter	Semivolatiles 8270D/SIM (with Invu-lavel DAHe)	8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	12		isture
Lab ID Sample Identification	Date Sampled	Time Sampled	Matrix	Num	NWTF	NWTF	INWT	NWT	Volati	EDB	Semir	PAHS	PCBs	Orgai	Orgar	Chlor	Total	Total	TCLP	HEM	110		% Moisture
al B15-4	4/18/18	1230	9	4					X		_												X
221315-10		1232		Ц					X		_												K
23 B15-14		1235							X														X
24 B15-16		1245									_												
25 Blu-2,5		1335																					
26 B/4-6		1340							X														X
27 1316-10		1345							\times														X
28 316-14		1352							\times														
89 13/6-16		400																					
30 1317-25		1415	1																				
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OnSite Environmental Inc.	Chain	of	Cu	iste	ody	y						Pa	age _	4	of_2	1	
Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052	Turnaround Request (in working days)		L	abor	ator	y Numb	oer:	04-	-21	15							
Phone: (425) 883-3881 • www.onsite-env.com Company: Project Number: OLSI-OOD Project Name: Hew Historic Project Manager: Project Manager: Sampled by: SIW & GRM	(Check One) Same Day 1 D 2 Days 3 D Standard (7 Days) (TPH analysis 5 Days) (other)		HCID	NWTPH-Gx/BTEX	NW IPH-GX NWTPH-DX (Acid / SG Clean-up)	Volatiles 8260C	EDB EPA 8011 (Waters Only)	8270D/SIM al PAHs) SIM (low-level)	18	Organophosphorus Pesticides 8270D/SIM Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	etals	HEM (oil and grease) 1664A	0		err
Lab ID Sample Identification	Date Time Sampled Sampled Ma	Inumber	NWTPH-HCID	HATWN	NWTPH-GX	Volatiles	EDB EP	Semivolatiles (with low-leve PAHs 8270D/ PCBs 8082A	Organoc	Organop	Total RC	Total MT	TCLP Metals		2		% Moisture
3 37-6		54				X								1			X
32 BI7-10	1420					X											X
33 3197-14	1425					X											X
34 317-16	1430					XIII											
35 B18-2,5	1437																
36 138-6	1442					X											X
37 38.10	1445					X											X
38 318-14	1450					X									1		X
39 1518-16	1 1455 1																
	Eni				-					-	-						_
Signature	Company	TC		Date	i.d.	Time	V	Comments/S	Sector and the sector sector	nstructi	- CHARGE STORE	10	L	~	0.20	_	4
Relinquished Sarah Well-		DED		41	14/19	8 154	1								026	man	, Kg
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Sample/Cooler Receipt and Acceptance Checklist

Client: <u>SES</u> Client Project Name/Number: <u>0651-662</u> OnSite Project Number: <u>04-215</u> 1.0 Cooler Verification		Initiated by: Date Initiated	KZ : 4/18	118	_
1.1 Were there custody seals on the outside of the cooler?	Yes	(No)	N/A	1 2 3 4	
1.2 Were the custody seals intact?	Yes	No	NDA	1 2 3 4	
1.3 Were the custody seals signed and dated by last custodian?	Yes	No	NA	1 2 3 4	
1.4 Were the samples delivered on ice or blue ice?	Yès	No		1 2 3 4	
1.5 Were samples received between 0-6 degrees Celsius?	res	No	Temperature:	1,5	
1.6 Have shipping bills (if any) been attached to the back of this form?	Yes	(N/A)		.,.	
1.7 How were the samples delivered?	Client	Courier	UPS/FedEx	OSE Pickup	Other
2.0 Chain of Custody Verification					
2.1 Was a Chain of Custody submitted with the samples?	Yes	No		1 2 3 4	
2.2 Was the COC legible and written in permanent ink?	٩	No		1 2 3 4	
2.3 Have samples been relinquished and accepted by each custodian?	Yes	No		1 2 3 4	
2.4 Did the sample labels (ID, date, time, preservative) agree with COC?	(es	No		1 2 3 4	
2.5 Were all of the samples listed on the COC submitted?	res	No		1 2 3 4	
2.6 Were any of the samples submitted omitted from the COC?	Yes	No,		1 2 3 4	
3.0 Sample Verification					
3.1 Were any sample containers broken or compromised?	Yes	ND		1 2 3 4	
3.2 Were any sample labels missing or illegible?	Yes	No		1 2 3 4	
3.3 Have the correct containers been used for each analysis requested?	(es	No	0	1 2 3 4	
3.4 Have the samples been correctly preserved?	Yes	No	N7A	1 2 3 4	
3.5 Are volatiles samples free from headspace and bubbles greater than 6mm?	Yes	No	NA	1 2 3 4	
3.6 Is there sufficient sample submitted to perform requested analyses?	res	No		1234	
3.7 Have any holding times already expired or will expire in 24 hours?	Yes	NB		1 2 3 4	
3.8 Was method 5035A used?	es	No	N/A	1 2 3 4	
3.9 If 5035A was used, which sampling option was used (#1, 2, or 3).	# \		N/A	1 2 3 4	
Explain any discrepancies:					

1 - Discuss issue in Case Narrative

2 - Process Sample As-is

3 - Client contacted to discuss problem

4 - Sample cannot be analyzed or client does not wish to proceed

//SERVER\OSE\Administration\forms\cooler_checklist.xls

OnSite Environmental, Inc. #1804-226



14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

May 1, 2018

Tom Cammarata Sound Earth Strategies 2811 Fairview Avenue East, Suite 2000 Seattle, WA 98102

Re: Analytical Data for Project 0651-002 Laboratory Reference No. 1804-226

Dear Tom:

Enclosed are the analytical results and associated quality control data for samples submitted on April 19, 2018.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister Project Manager

Enclosures



Date of Report: May 1, 2018 Samples Submitted: April 19, 2018 Laboratory Reference: 1804-226 Project: 0651-002

Case Narrative

Samples were collected on April 19, 2018 and received by the laboratory on April 19, 2018. They were maintained at the laboratory at a temperature of 2° C to 6° C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B19-6					
Laboratory ID:	04-226-02					
Vinyl Chloride	ND	0.025	EPA 8260C	4-25-18	4-25-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
Trichloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
Tetrachloroethene	0.24	0.051	EPA 8260C	4-25-18	4-25-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	99	75-131				
Toluene-d8	99	83-130				
4-Bromofluorobenzene	102	78-130				



Analyta	Result	DOI	Method	Date	Date Analyzad	Flago
Analyte Client ID:	B19-10	PQL	wethod	Prepared	Analyzed	Flags
Laboratory ID:	04-226-03					
Vinyl Chloride	ND	0.025	EPA 8260C	4-25-18	4-25-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
Trichloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	96	75-131				
Toluene-d8	97	83-130				
4-Bromofluorobenzene	95	78-130				



Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B19-14	FQL	Metriod	riepaieu	Analyzeu	Tiays
Laboratory ID:	04-226-04					
Vinyl Chloride	ND	0.025	EPA 8260C	4-25-18	4-25-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
Trichloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	96	75-131				
Toluene-d8	94	83-130				
4-Bromofluorobenzene	95	78-130				



• • • •		50		Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B20-6					
Laboratory ID:	04-226-07					
Vinyl Chloride	ND	0.025	EPA 8260C	4-25-18	4-25-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
Trichloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
Tetrachloroethene	0.40	0.058	EPA 8260C	4-25-18	4-25-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	96	75-131				
Toluene-d8	93	83-130				
4-Bromofluorobenzene	95	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B20-10					
Laboratory ID:	04-226-08					
Vinyl Chloride	ND	0.025	EPA 8260C	4-25-18	4-25-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
Trichloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	113	75-131				
Toluene-d8	113	83-130				
4-Bromofluorobenzene	110	78-130				



Angluta	Decult	DOL	Mathad	Date	Date	Flore
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B20-14					
Laboratory ID:	04-226-09					
Vinyl Chloride	ND	0.025	EPA 8260C	4-25-18	4-25-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
Trichloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	101	75-131				
Toluene-d8	101	83-130				
4-Bromofluorobenzene	99	78-130				



• • •		50		Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B21-6					
Laboratory ID:	04-226-12					
Vinyl Chloride	ND	0.025	EPA 8260C	4-30-18	4-30-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-30-18	4-30-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-30-18	4-30-18	
Trichloroethene	ND	0.025	EPA 8260C	4-30-18	4-30-18	
Tetrachloroethene	0.15	0.046	EPA 8260C	4-25-18	4-25-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	94	75-131				
Toluene-d8	96	83-130				
4-Bromofluorobenzene	102	78-130				



Analyta	Result	PQL	Method	Date	Date Analyzed	Flogo
Analyte Client ID:	B21-10	FQL	wethod	Prepared	Analyzeu	Flags
Laboratory ID:	04-226-13					
Vinyl Chloride	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Trichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	112	75-131				
Toluene-d8	112	83-130				
4-Bromofluorobenzene	110	78-130				



Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B21-14	FQL	Method	Flepaleu	Analyzeu	Flags
Laboratory ID:	04-226-14					
Vinyl Chloride	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Trichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	105	75-131				
Toluene-d8	108	83-130				
4-Bromofluorobenzene	108	78-130				



Analyta	Result	PQL	Method	Date	Date	Flore
Analyte Client ID:	B22-2.5	PQL	Method	Prepared	Analyzed	Flags
Laboratory ID:	04-226-16					
Vinyl Chloride	ND	0.025	EPA 8260C	4-30-18	4-30-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-30-18	4-30-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-30-18	4-30-18	
Trichloroethene	ND	0.025	EPA 8260C	4-30-18	4-30-18	
Tetrachloroethene	0.041	0.025	EPA 8260C	4-30-18	4-30-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	93	75-131				
Toluene-d8	95	83-130				
4-Bromofluorobenzene	103	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B22-6					
Laboratory ID:	04-226-17					
Vinyl Chloride	ND	0.025	EPA 8260C	4-30-18	4-30-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-30-18	4-30-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-30-18	4-30-18	
Trichloroethene	ND	0.025	EPA 8260C	4-30-18	4-30-18	
Tetrachloroethene	0.025	0.025	EPA 8260C	4-30-18	4-30-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	102	75-131				
Toluene-d8	107	83-130				
4-Bromofluorobenzene	114	78-130				



Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B22-10	FQL	Methoa	Flepaleu	Analyzeu	Flags
Laboratory ID:	04-226-18					
Vinyl Chloride	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Trichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	99	75-131				
Toluene-d8	98	83-130				
4-Bromofluorobenzene	95	78-130				



Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B22-14	FQL	Metriod	Flepaleu	Analyzeu	Flags
Laboratory ID:	04-226-19					
Vinyl Chloride	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Trichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	97	75-131				
Toluene-d8	96	83-130				
4-Bromofluorobenzene	98	78-130				


• • • •		50		Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B23-6					
Laboratory ID:	04-226-22					
Vinyl Chloride	ND	0.025	EPA 8260C	4-27-18	4-27-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-27-18	4-27-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-27-18	4-27-18	
Trichloroethene	ND	0.025	EPA 8260C	4-27-18	4-27-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-27-18	4-27-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	92	75-131				
Toluene-d8	96	83-130				
4-Bromofluorobenzene	97	78-130				



A 1 4	D <i>K</i>	501		Date	Date	-
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B23-10					
Laboratory ID:	04-226-23					
Vinyl Chloride	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Trichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	100	75-131				
Toluene-d8	97	83-130				
4-Bromofluorobenzene	99	78-130				



Analyta	Decult	PQL	Method	Date	Date Analyzad	Flogo
Analyte Client ID:	Result B23-14	PQL	wethod	Prepared	Analyzed	Flags
Laboratory ID:	04-226-24					
Vinyl Chloride	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Trichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	102	75-131				
Toluene-d8	99	83-130				
4-Bromofluorobenzene	104	78-130				



A 1	D	501		Date	Date	_
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B24-6					
Laboratory ID:	04-226-27					
Vinyl Chloride	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Trichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	100	75-131				
Toluene-d8	96	83-130				
4-Bromofluorobenzene	96	78-130				



Analyta	Decult	PQL	Method	Date	Date	Flago
Analyte Client ID:	Result B24-10	PQL	Method	Prepared	Analyzed	Flags
Laboratory ID:	04-226-28					
Vinyl Chloride	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Trichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	110	75-131				
Toluene-d8	109	83-130				
4-Bromofluorobenzene	108	78-130				



A 1 4		501		Date	Date	-
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B24-14					
Laboratory ID:	04-226-29					
Vinyl Chloride	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Trichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	100	75-131				
Toluene-d8	96	83-130				
4-Bromofluorobenzene	101	78-130				



A 1	D	501		Date	Date	_
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B25-2.5					
Laboratory ID:	04-226-31					
Vinyl Chloride	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Trichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	96	75-131				
Toluene-d8	93	83-130				
4-Bromofluorobenzene	89	78-130				



A 1	D <i>K</i>	501		Date	Date	-
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B25-6					
Laboratory ID:	04-226-32					
Vinyl Chloride	ND	0.025	EPA 8260C	4-27-18	4-27-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-27-18	4-27-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-27-18	4-27-18	
Trichloroethene	ND	0.025	EPA 8260C	4-27-18	4-27-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-27-18	4-27-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	103	75-131				
Toluene-d8	108	83-130				
4-Bromofluorobenzene	108	78-130				



Analyta	Decult	DOI	Mathad	Date	Date	Flore
Analyte Client ID:	Result B25-10	PQL	Method	Prepared	Analyzed	Flags
Laboratory ID:	04-226-33					
Vinyl Chloride	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Trichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	98	75-131				
Toluene-d8	95	83-130				
4-Bromofluorobenzene	95	78-130				



Analyta	Decult	DOI	Method	Date	Date Analyzad	Flore
Analyte Client ID:	Result B25-14	PQL	wethod	Prepared	Analyzed	Flags
Laboratory ID:	04-226-34					
Vinyl Chloride	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Trichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	97	75-131				
Toluene-d8	96	83-130				
4-Bromofluorobenzene	100	78-130				



Analysis	Decult	DOL	Mathad	Date	Date	Flore
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B26-2.5					
Laboratory ID:	04-226-36					
Vinyl Chloride	ND	0.025	EPA 8260C	4-27-18	4-27-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-27-18	4-27-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-27-18	4-27-18	
Trichloroethene	ND	0.025	EPA 8260C	4-27-18	4-27-18	
Tetrachloroethene	0.085	0.025	EPA 8260C	4-27-18	4-27-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	91	75-131				
Toluene-d8	93	83-130				
4-Bromofluorobenzene	91	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B26-6					
Laboratory ID:	04-226-37					
Vinyl Chloride	ND	0.025	EPA 8260C	4-30-18	4-30-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-30-18	4-30-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-30-18	4-30-18	
Trichloroethene	ND	0.025	EPA 8260C	4-30-18	4-30-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-30-18	4-30-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	92	75-131				
Toluene-d8	91	83-130				
4-Bromofluorobenzene	97	78-130				



Analyta	Decult	DOI	Mathad	Date	Date	Flore
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B26-10					
Laboratory ID:	04-226-38					
Vinyl Chloride	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Trichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	97	75-131				
Toluene-d8	95	83-130				
4-Bromofluorobenzene	95	78-130				



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Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B26-14					
Laboratory ID:	04-226-39					
Vinyl Chloride	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Trichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	121	75-131				
Toluene-d8	122	83-130				
4-Bromofluorobenzene	121	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B26-16					
Laboratory ID:	04-226-40					
Vinyl Chloride	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Trichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	96	75-131				
Toluene-d8	96	83-130				
4-Bromofluorobenzene	100	78-130				



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Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B27-2.5					
Laboratory ID:	04-226-41					
Vinyl Chloride	ND	0.025	EPA 8260C	4-30-18	4-30-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-30-18	4-30-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-30-18	4-30-18	
Trichloroethene	ND	0.025	EPA 8260C	4-30-18	4-30-18	
Tetrachloroethene	0.10	0.025	EPA 8260C	4-30-18	4-30-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	93	75-131				
Toluene-d8	94	83-130				
4-Bromofluorobenzene	86	78-130				



Analyta	Decult	DOI	Mathad	Date	Date	Flore
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	B27-6					
Laboratory ID:	04-226-42					
Vinyl Chloride	ND	0.025	EPA 8260C	4-30-18	4-30-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-30-18	4-30-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-30-18	4-30-18	
Trichloroethene	ND	0.025	EPA 8260C	4-30-18	4-30-18	
Tetrachloroethene	0.041	0.025	EPA 8260C	4-30-18	4-30-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	90	75-131				
Toluene-d8	93	83-130				
4-Bromofluorobenzene	97	78-130				



Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B27-10		Method	Trepared	Analyzed	Tiags
Laboratory ID:	04-226-43					
Vinyl Chloride	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Trichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	99	75-131				
Toluene-d8	95	83-130				
4-Bromofluorobenzene	94	78-130				



Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B27-14	FQL	Metrioa	Flepaleu	Analyzeu	Flags
Laboratory ID:	04-226-44					
Vinyl Chloride	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Trichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	106	75-131				
Toluene-d8	107	83-130				
4-Bromofluorobenzene	105	78-130				



Analyta	Decult	PQL	Method	Date	Date Analyzad	Flago
Analyte Client ID:	Result B27-16	PQL	wiethod	Prepared	Analyzed	Flags
Laboratory ID:	04-226-45					
Vinyl Chloride	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Trichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	110	75-131				
Toluene-d8	110	83-130				
4-Bromofluorobenzene	108	78-130				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Laboratory ID:	MB0425S1					
Vinyl Chloride	ND	0.025	EPA 8260C	4-25-18	4-25-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
Trichloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-25-18	4-25-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	114	75-131				
Toluene-d8	117	83-130				
4-Bromofluorobenzene	122	78-130				

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Laboratory ID:	MB0426S1					
Vinyl Chloride	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Trichloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-26-18	4-26-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	103	75-131				
Toluene-d8	101	83-130				
4-Bromofluorobenzene	108	78-130				

Matrix: Soil Units: mg/kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Laboratory ID:	MB0427S1					
Vinyl Chloride	ND	0.025	EPA 8260C	4-27-18	4-27-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-27-18	4-27-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-27-18	4-27-18	
Trichloroethene	ND	0.025	EPA 8260C	4-27-18	4-27-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-27-18	4-27-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	108	75-131				
Toluene-d8	107	83-130				
4-Bromofluorobenzene	113	78-130				

38

Matrix: Soil Units: mg/kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Laboratory ID:	MB0430S1					
Vinyl Chloride	ND	0.025	EPA 8260C	4-30-18	4-30-18	
(trans) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-30-18	4-30-18	
(cis) 1,2-Dichloroethene	ND	0.025	EPA 8260C	4-30-18	4-30-18	
Trichloroethene	ND	0.025	EPA 8260C	4-30-18	4-30-18	
Tetrachloroethene	ND	0.025	EPA 8260C	4-30-18	4-30-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	121	75-131				
Toluene-d8	123	83-130				
4-Bromofluorobenzene	129	78-130				

39

					Percent		Recovery		RPD	
Analyte	Res	sult	Spike	Level	Reco	overy	Limits	RPD	Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB04	25S1								
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0428	0.0416	0.0500	0.0500	86	83	58-126	3	20	
Benzene	0.0528	0.0518	0.0500	0.0500	106	104	72-122	2	19	
Trichloroethene	0.0512	0.0527	0.0500	0.0500	102	105	75-120	3	20	
Toluene	0.0521	0.0486	0.0500	0.0500	104	97	78-123	7	19	
Chlorobenzene	0.0490	0.0475	0.0500	0.0500	98	95	75-120	3	18	
Surrogate:										
Dibromofluoromethane					99	93	75-131			
Toluene-d8					97	91	83-130			
4-Bromofluorobenzene					102	96	78-130			



					Percent		Recovery		RPD	
Analyte	Res	sult	Spike	Level	Reco	overy	Limits	RPD	Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB04	26S1								
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0398	0.0397	0.0500	0.0500	80	79	58-126	0	20	
Benzene	0.0524	0.0532	0.0500	0.0500	105	106	72-122	2	19	
Trichloroethene	0.0548	0.0561	0.0500	0.0500	110	112	75-120	2	20	
Toluene	0.0502	0.0506	0.0500	0.0500	100	101	78-123	1	19	
Chlorobenzene	0.0486	0.0481	0.0500	0.0500	97	96	75-120	1	18	
Surrogate:										
Dibromofluoromethane					101	101	75-131			
Toluene-d8					102	102	83-130			
4-Bromofluorobenzene					108	105	78-130			



					Percent		Recovery		RPD	
Analyte	Res	sult	Spike	Level	Rece	overy	Limits	RPD	Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB04	27S1								
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0404	0.0398	0.0500	0.0500	81	80	58-126	1	20	
Benzene	0.0520	0.0529	0.0500	0.0500	104	106	72-122	2	19	
Trichloroethene	0.0545	0.0558	0.0500	0.0500	109	112	75-120	2	20	
Toluene	0.0500	0.0515	0.0500	0.0500	100	103	78-123	3	19	
Chlorobenzene	0.0474	0.0483	0.0500	0.0500	95	97	75-120	2	18	
Surrogate:										
Dibromofluoromethane					93	96	75-131			
Toluene-d8					92	97	83-130			
4-Bromofluorobenzene					95	100	78-130			



					Percent		Recovery		RPD	
Analyte	Res	sult	Spike	Level	Rece	overy	Limits	RPD	Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB04	30S1								
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0350	0.0345	0.0500	0.0500	70	69	58-126	1	20	
Benzene	0.0529	0.0520	0.0500	0.0500	106	104	72-122	2	19	
Trichloroethene	0.0547	0.0533	0.0500	0.0500	109	107	75-120	3	20	
Toluene	0.0511	0.0493	0.0500	0.0500	102	99	78-123	4	19	
Chlorobenzene	0.0481	0.0468	0.0500	0.0500	96	94	75-120	3	18	
Surrogate:										
Dibromofluoromethane					93	93	75-131			
Toluene-d8					95	94	83-130			
4-Bromofluorobenzene					102	102	78-130			



Date of Report: May 1, 2018 Samples Submitted: April 19, 2018 Laboratory Reference: 1804-226 Project: 0651-002

% MOISTURE

Date Analyzed: 4-26&27-18

Client ID	Lab ID	% Moisture
B19-6	04-226-02	14
B19-10	04-226-03	12
B19-14	04-226-04	17
B20-6	04-226-07	19
B20-10	04-226-08	13
B20-14	04-226-09	17
B21-6	04-226-12	13
B21-10	04-226-13	13
B21-14	04-226-14	11
B22-2.5	04-226-16	13
B22-6	04-226-17	17
B22-10	04-226-18	15
B22-14	04-226-19	10
B23-6	04-226-22	15
B23-10	04-226-23	13
B23-14	04-226-24	10
B24-6	04-226-27	15
B24-10	04-226-28	17
B24-14	04-226-29	10
B25-2.5	04-226-31	19
B25-6	04-226-32	26
B25-10	04-226-33	12
B25-14	04-226-34	6
B26-2.5	04-226-36	26
B26-6	04-226-37	16
B26-10	04-226-38	15
B26-14	04-226-39	12

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Date of Report: May 1, 2018 Samples Submitted: April 19, 2018 Laboratory Reference: 1804-226 Project: 0651-002

% MOISTURE

Date Analyzed: 4-26&27-18

Client ID	Lab ID	% Moisture
B26-16	04-226-40	8
B27-2.5	04-226-41	36
B27-6	04-226-42	19
B27-10	04-226-43	14
B27-14	04-226-44	13
B27-16	04-226-45	15



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Data Qualifiers and Abbreviations

- A Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B The analyte indicated was also found in the blank sample.
- C The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E The value reported exceeds the quantitation range and is an estimate.
- F Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I Compound recovery is outside of the control limits.
- J The value reported was below the practical quantitation limit. The value is an estimate.
- K Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L The RPD is outside of the control limits.
- M Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 Hydrocarbons in diesel range are impacting lube oil range results.
- O Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P The RPD of the detected concentrations between the two columns is greater than 40.
- Q Surrogate recovery is outside of the control limits.
- S Surrogate recovery data is not available due to the necessary dilution of the sample.
- T The sample chromatogram is not similar to a typical _____
- U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 The practical quantitation limit is elevated due to interferences present in the sample.
- V Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X Sample extract treated with a mercury cleanup procedure.
- X1- Sample extract treated with a sulfuric acid/silica gel cleanup procedure.
- Y The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Ζ-

ND - Not Detected at PQL PQL - Practical Quantitation Limit RPD - Relative Percent Difference



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OnSite Environmental Inc.		Cha	ain o	f	Cu	ıst	00	dy							*		P	age_	1	of	5	-	
Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052		urnaround Req (in working da			L	abo	rate	ory l	Numl	ber:		04	4 -	2	26								
Phone: (425) 883-3881 · www.onsite-env.com Company: Sound Earth Strategrey Project Number: Project Name: Hearth Stone Project Manager: IOM Cammarata Sampled by:	2 D		1 Day 3 Days	Number of Containers		BTEX		(Asid / SG Clean up) - PCE + BPEAC	PCE r	EDB EPA 8011 (Waters Only)		el)		Organochlorine Pesticides 8081B			Metals		HEM (oil and grease) 1664A				
SAMPE GRM	Date	(other) Time		mber of	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	HWTPH-Dx(Volatiles 8260C Halogenated Vc	B EPA 8(nivolatile th low-le	4s 8270[PCBs 8082A	Janochio	orinated	Total RCRA Metals	Total MTCA Metals	TCLP Metals	M (oil an	4010			% Moisture
Lab IDSample Identification 1 $B/9 - 2.5$ 2 $B/9 - 6$	Sampled		Matrix S	<u>v</u> 4	z	Ż	Ż	* :	> II		Ŭ, Ŭ	4	Ĕ. (2	PL	Ŧ	ł	-		×
3 319-10		0812						X												-	-		X
4 319-18		0815						X												-			X
5 319-18		0820																					
6 1500-2.5		0840													4-							_	
1 130-6		0845						X						_		_	-					_	X
9 30 - 10 9 30 - 14		0847						X		-				_	_	_	-			1			X
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10 1300 -16 Signature		Company				Date			Time		Con	nment	s/Spe	cial In	struct	ions		<u> </u>		Ш			
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Environmental Inc. Project Manager Odd Company Company <th></th>	
Company Sound Earth Strategies Same Day 1 Day Project Number: 2 Days 3 Days Project Name: Sampled by: Sampled by: Sampled by: Sampled by: Sample Sample Sampled by: Sampled by: Sample Sample Sample Sample: Sampled Sample Sampled by: Sample Sample	
11 $Bal-a.5$ $4/e/8$ $O915$ 5 4 1 1 12 $Bal-6$ $O9a0$ X 1 1 1 13 $Bal-10$ $O9a0$ X 1 1 13 $Bal-10$ $O9a0$ X 1 1 14 $Bal-14$ $O9a7$ X 1 1 15 $Bal-16$ $O9a7$ X 1 1 15 $Bal-16$ $O9a7$ X 1 1 16 $Baa-35$ 1000 X 1 1 17 $Baa-6$ 1000 X 1 1	
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11 $Bal-a.5$ $4/e/8$ $O915$ 5 4 1 1 12 $Bal-6$ $O9a0$ X 1 1 1 13 $Bal-10$ $O9a0$ X 1 1 13 $Bal-10$ $O9a0$ X 1 1 14 $Bal-14$ $O9a7$ X 1 1 15 $Bal-16$ $O9a7$ X 1 1 15 $Bal-16$ $O9a7$ X 1 1 16 $Baa-35$ 1000 X 1 1 17 $Baa-6$ 1000 X 1 1	
11 $Bal-a.5$ $4/e/8$ $O915$ 5 4 1 1 12 $Bal-6$ $O9a0$ X 1 1 1 13 $Bal-10$ $O9a0$ X 1 1 13 $Bal-10$ $O9a0$ X 1 1 14 $Bal-14$ $O9a7$ X 1 1 15 $Bal-16$ $O9a7$ X 1 1 15 $Bal-16$ $O9a7$ X 1 1 16 $Baa-35$ 1000 X 1 1 17 $Baa-6$ 1000 X 1 1	
11 $Bal-a.5$ $4/e/8$ $O915$ 5 4 1 1 12 $Bal-6$ $O9a0$ X 1 1 1 13 $Bal-10$ $O9a0$ X 1 1 13 $Bal-10$ $O9a0$ X 1 1 14 $Bal-14$ $O9a7$ X 1 1 15 $Bal-16$ $O9a7$ X 1 1 15 $Bal-16$ $O9a7$ X 1 1 16 $Baa-35$ 1000 X 1 1 17 $Baa-6$ 1000 X 1 1	
11 $Bal-a.5$ $4/g/g$ Oq_{15} 5 4 1 1 12 $Bal-G$ Oq_{20} 1 X 1 1 13 $Bal-IO$ Oq_{20} 1 X 1 1 13 $Bal-IO$ Oq_{20} X 1 1 1 13 $Bal-IO$ Oq_{20} X 1 1 1 14 $Bal-IQ$ Oq_{20} X 1 1 1 14 $Bal-IQ$ Oq_{20} X 1 1 1 15 $Bal-IQ$ Oq_{20} X 1 1 1 15 $Bal-IQ$ $0q_{20}$ X 1 1 1 1 16 $Bal-2-2.5$ 1000 X X 1 1 1 17 $Bal-Q$ 1 1 1 1 1 1 1 1 1	% Moisture
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15 Bal-16 0930 A 16 Ba2-a.5 1000 X A 17 Ba2-6 1005 X A	X
16 Baz-2.5 17 Baz-G 1005 X	X
M Baz-G 1005 X H	
	X
14 322-10	X
	X
19 B22-14 1012 X	X
20 1322-16	
Signature Company Date Time Comments/Special Instructions Relinquished Small William SES Grand Gra	
Relinquished Sanch Welter SES 4/19/18 4:10 * PCE Repatry Lm. +=0.035 Mg/ke Received Van Spar 4/19/18 4:10 T Prelimming Results >14 mg/ng nu th	Xal
Belinguished 1/	LP
Received Wither Lisener OSE 41918 1650	
Relinquished	
Received Data Package: Standard Level III Level IV	
Reviewed/Date Reviewed/Date Chromatograms with final report Electronic Data Deliverables (EDD	Ds)

OnSite Environmental Inc.

Chain of Custody

OnSite Environmental Inc.	Chain o	f C	usi	ody	/							Pa	age _	3	of	5	
Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052	Turnaround Request (in working days)		Labo	rator	Num	ber:	04-	22	6								
Company:	(Check One)																
Project Number:	Same Day 1 Day			(dr					Organophosphorus Pesticides 8270D/SIM	A							
Project Name:	2 Days 3 Days			Clean-t	+ 10	(Ált	(j)	\$ 8081B	ides 82	es 8151A				A			
Project Manager:	TPH analysis 5 Days)	ners		id / SG	RCE B260C	aters Or	ID/SIM Is) Iow-lev	sticides	s Pestic	lerbicid				se) 1664			
Sampled by:		Number of Containers	/BTEX	NWTPH-Gx NWTPH-Dx (□ Acid / SG Clean-up)	(1)	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs) PAHs 8270D/SIM (low-level)	PCBs 8082A Organochlorine Pesticides 8081B	sphorus	Chlorinated Acid Herbicides	Total RCRA Metals	Total MTCA Metals	<u>s</u>	HEM (oil and grease) 1664A	~		
Sampled by: SMW & GRM	(other)	Number of Co	NWTPH-Gx/BTEX	NWTPH-Gx NWTPH-Dx	Volatiles 8260C Halogenated Vo	3 EPA 8	h low-le s 8270	PCBs 8082A Organochlori	anopho	orinated	I RCRA	A MTCP	TCLP Metals	A (oil an	101		% Moisture
Lab ID Sample Identification	Sampled Sampled Matrix		MN	MN N	Vola Hald	Ē	Sen (wit PAF	PCE Org	Org	Chlo	Tota	Tota	TCL	HEN .	1		N %
21 Baz-25	4/14/18/1030 5	4								_							. 1
27 Baz-6	1033				X	_			_	-					T		X
20 025-10	1035		_		X	-				-					1		X
04 150>-14	1040				7					-					T		X
0 100-6	1045		_			-				-		-					
20 824-2.8	1900				X	+			_	-	-						
DUBAH La	1203				X					-	-					+	X
08 1001-10	1205		_		X		5						_				X
201324-14	1 1315					+				-				-	+	++	
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OnSit	e onmental Inc.		Cha	in o	f	Cu	ist	00	dy										Pa	age _	4	_ of _	5	0
Analytical La 14648 NE 9	boratory Testing Services 15th Street • Redmond, WA 98052	Ti	urnaround Requ (in working day	iest s)		L	abo	rate	ory	Num	ber:	C)4	- '	22	26								
Project Name: Project Manager:	1) 883-3881 · www.onsite-env.com Wh - OO2 1 Stene Cammavater	Sar] 1 Day] 3 Days ys)	ntainers		EX		Acid / SG Clean-up)	PCE* 1 olatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	IM (low-level)		Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	etals	etals		HEM (oil and grease) 1664A			
Sampled by: SNW 4	^		(other)		Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (Volatiles 8260C R	EPA 8011	olatiles 8 ow-level	8270D/S	PCBs 8082A	ochlorine	ophosph	nated Ac	Total RCRA Metals	Total MTCA Metals	TCLP Metals	oil and g	10		sture
Lab ID Sa	imple Identification	Date Sampled	Time Sampled	Matrix	Numt	NWTF	NWTF	NWTF	NWTF	Volati Halog	EDB	Semiv (with I	PAHs	PCBs	Organ	Organ	Chlori	Total F	Total I	TCLP	HEM	4		% Moisture
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33 B25-10			1233							X											-	+		X
34 Bas-14			1235							X												+		X
35 Bas-16			1240																					
36 326-2.5			1307							\prec				ч.,					_					X
37 Bali-6			1315							X												+		X
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B.T. data	Signature	1	Company				Date	1		Time	in allow	a second second second		Participant and	a second second second second	COMPANY OF THE OWNER	CROSSING AND	Description of the School of		1-	0	na		
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Reviewed/Date		Reviewed/Date Chromatograms with									ıs wit	h fina	l rep	ort 🗌] Ele	ctroni	c Data	Delive	rables (E	DDs) 🗌				

OnSite Environmental Inc.	Environmental Inc.													F	age _	5	of _	5	-3	
Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052	Turnaround Rec (in working da	juest iys)		Lab	orat	ory	Num	ber:	0	4 -	22	26								
Phone: (425) 883-3881 • www.onsite-env.com Company: Sound Earth Strategies Project Number: Project Nama: Project Manager: Project Manager: TOM Cammarate Sampled by SNN & GRM]	1 Day		NWTPH-HCID NWTPH-Gx/BTEX	-Gx	NWTPH-Dx (🗌 Acid / SG Clean-up)	Volatiles 8260C PCE * T Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs) DALE 82707/SIM //		T	MIS/D	Chlorinated Acid Herbicides 8151A Total RCBA Metals	Total MTCA Metals	etals	HEM (oil and grease) 1664A	19			ure
Lab ID Sample Identification	Date Time Sampled Sampled	Matrix 2		NWTPH-GX/B	NWTPH-Gx	NWTPH	Volatiles Haloger	EDB EP	Semivo (with lov	PCBs 8082A	Organo	Organo	Chlorin8 Total BC	Total M	TCLP Metals	HEM (oi	4			% Moisture
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	4/14/18 1337 1342 1345 1355 1355	3 C					XXXX									-				
				_	-		_											+	+	$\left - \right $
Signature Relinquished Sand With Received Van Received Van Received Helinquished Relinquished Helinquished	05	S Pay E		4	1/19/1	8	Time 4:10 4:11 1651	D)	Comn # Pr T Pr	rents/S VE relim	pecial R-gro	Res	Lin	nt= ,>1"	- O, trug	075 Ikg	Tay	hig te	, LP	
Received										Packag										
Reviewed/Date	Reviewed/Date								Chrom	atogra	ms wit	h fina	repor	t 🗌 El	ectroni	c Data	a Delive	rables	(EDDs)	

Sample/Cooler Receipt and Acceptance Checklist

Client: SES			Ma/		
Client Project Name/Number: 0651-002		Initiated by:			
OnSite Project Number: 04 - 226		Date Initiated	4/19/1	8	_
1.0 Cooler Verification					
1.1 Were there custody seals on the outside of the cooler?	Yes	No	(IA)	1 2 3 4	
1.2 Were the custody seals intact?	Yes	No	N/A	1 2 3 4	
1.3 Were the custody seals signed and dated by last custodian?	Yes	No	N/A	1 2 3 4	
1.4 Were the samples delivered on ice or blue ice?	Yes	No		1 2 3 4	
1.5 Were samples received between 0-6 degrees Celsius?	Yes	No	Temperature:	5,5	
1.6 Have shipping bills (if any) been attached to the back of this form?	Yes	N/A			
1.7 How were the samples delivered?	Client	Courier	UPS/FedEx	OSE Pickup	Other
2.0 Chain of Custody Verification					
2.1 Was a Chain of Custody submitted with the samples?	Yes	No		1 2 3 4	
2.2 Was the COC legible and written in permanent ink?	Yes Yes Yes	No		1 2 3 4	
2.3 Have samples been relinquished and accepted by each custodian?	Yes	No		1 2 3 4	
2.4 Did the sample labels (ID, date, time, preservative) agree with COC?	Yes	No		1 2 3 4	
2.5 Were all of the samples listed on the COC submitted?	Yes	No		1 2 3 4	
2.6 Were any of the samples submitted omitted from the COC?	Yes	No		1234	
3.0 Sample Verification					
3.1 Were any sample containers broken or compromised?	Yes	No		1 2 3 4	
3.2 Were any sample labels missing or illegible?	Yes	No		1 2 3 4	
3.3 Have the correct containers been used for each analysis requested?	Yes	No	-	1 2 3 4	
3.4 Have the samples been correctly preserved?	Yes	No	NA	1 2 3 4	
3.5 Are volatiles samples free from headspace and bubbles greater than 6mm?	Yes	No	NA	1 2 3 4	
3.6 Is there sufficient sample submitted to perform requested analyses?	(es)	No		1 2 3 4	
3.7 Have any holding times already expired or will expire in 24 hours?	Yes	No		1 2 3 4	
3.8 Was method 5035A used?	Yes	No	N/A	1 2 3 4	
3.9 If 5035A was used, which sampling option was used (#1, 2, or 3).	#	1	N/A	1 2 3 4	
Explain any discrepancies:					

1 - Discuss issue in Case Narrative

2 - Process Sample As-is

3 - Client contacted to discuss problem

4 - Sample cannot be analyzed or client does not wish to proceed

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