ECI Project No. 0422-04



March 27, 2012

Mr. Ron Eaton C/o Linn Larson Larson Commercial – Industrial 1201 Pacific Avenue, Suite 1400 Tacoma, WA 98402

Re: Project Memo - Stockpile Sampling 2119 Mildred Street Fircrest, Washington

Mr. Eaton:

EcoCon, Inc., (ECI), per your request, completed two separate stockpile soil sampling events at 2119 Mildred Street, Fircrest Washington (Subject Site). The sampling was conducted to assess the concentration of perchloroethylene (PCE) suspected of being present in the stockpiled soil.

The soil stockpile was generated during an excavation project in August 2012. Several environmental investigations competed by various companies identified PCE at concentrations exceeding the Model Toxic Control Act (MTCA) Method A Soil Cleanup Levels for Unrestricted Land Uses.

Soil Sampling Methodology

Soil samples were collected as three-way composite from ten separate locations throughout the stockpile. Soil samples were collected by a properly trained environmental professional using industry standard sampling techniques. Soil was gathered from three locations within each sampling sphere at elevations ranging from 6 inches to 24 inches below the stockpile surface. The depth of the stockpile averaged 24 to 30 inches.

Soil Sampling & Analysis

Soil samples were collected on two separate events, August 23, 2012 and August 30, 2013. Sample results for the 2012 sampling event reported four of the ten sampling locations with concentrations of PCE exceeding the 0.05. Sample locations CSP1, CSP2, CSP3 and CSP4 were each reported containing PCE at 0.36 milligram per kilogram (mg/kg), 0.082 mg/kg, 0.10 mg/kg and 0.064 mg/kg respectively. The remaining six sample locations were reported below the CUL. Sample locations CSP5, CSP6 and CSP8 were reported containing PCE at 0.041 mg/kg, 0.042 mg/kg and 0.021 mg/kg respectively. The remaining sample locations, CSP7, CSP9 and CSP10 were each reported below the laboratory method reporting level of 0.02 mg/kg (Figure 2, Attached).

ECI returned to the Subject Site to sample the stockpile for a second time on August 30, 2013. One the four sampling locations, CSP1, CSP2, CSP3 and CSP4, previously identified as impacted exceeding 0.05 mg/kg were sampled. Sample results for the 2013 sampling event reported each of the four samples below the laboratory method reporting level of 0.02 mg/kg (Figure 2, Attached).

Summary

Soil sample results from the 2012 sampling event for sample locations CSP5 through CSP10 and from the 2013 sampling event, CSP1 through CSP4 have been reported below 0.05 mg/kg. Although the final disposition of the soil has not been determined, should offsite disposal be selected, acquiring a contained in determination through the Department of Ecology will be necessary due to the trace amounts of PCE remaining in the soil.

We appreciate the opportunity to provide environmental consulting services to you on this project. If you have any questions or comments regarding this submittal please do not hesitate to contact us at (253) 238-9270.

Respectively Submitted,

Stephen Spencer Principal

Enclosures

Appendix A – Project Figures

- Figure 1: Site Location Map
- Figure 2: Stockpile Sample Location Map

Appendix B – Project Tables

- Table 1: Soil Sample Analytical Results
- MTCA Method A Cleanup Levels

Appendix C – Project Chemical Analysis

- Laboratory Analytical Results
- Sample Chain Of Custody

Attachment A

Project Figures

Figure 1: Site Location Map Figure 2: Stockpile Sample Location Map









Attachment B

Project Table

Table 1: Soil Sample Analytical Results MTCA Method A Cleanup Levels





Table 1: Stock Pile Sample Analytical Results

2119 Mildred Street

Fircrest Washingtion

September 13, 2103

					EPA 8	260C		
Sample Identification Number	Sample Date	Sample Depth	Vinyl Chloride (VC)	1,1-Dichlorothene	trans-1, 2-Dichloroethene	cis -1,2-Dichloroethene	Trichloroethene (TCE)	Tetrachloroethene (PCE)
					Milligrams	per mg/kg		
CSP-1	8/23/2012	6", 12", 24"	<0.02	<0.02	<0.02	<0.02	<0.03	<u>0.360</u>
C3P-1	8/30/2013	10", 16", 24"	<0.02	<0.02	<0.02	<0.02	<0.03	<0.02
65 P 2	8/23/2012	6", 12", 24"	<0.02	<0.02	<0.02	<0.02	<0.03	<u>0.082</u>
CSP-2	8/30/2013	10", 16", 24"	<0.02	<0.02	<0.02	<0.02	<0.03	<0.02
CSP-3	8/23/2012	6", 12", 24"	<0.02	<0.02	<0.02	<0.02	<0.03	<u>0.100</u>
CSP-3	8/30/2013	10", 16", 24"	<0.02	<0.02	<0.02	<0.02	<0.03	<0.02
CSP-4	8/23/2012	6", 12", 24"	<0.02	<0.02	<0.02	<0.02	<0.03	<u>0.064</u>
CSP-4	8/30/2013	10", 16", 24"	<0.02	<0.02	<0.02	<0.02	<0.03	<0.02
CSP-5	8/23/2012	6", 12", 24"	<0.02	<0.02	<0.02	<0.02	<0.03	<u>0.041</u>
CSP-6	8/23/2012	6", 12", 24"	<0.02	<0.02	<0.02	<u>0.035</u>	<0.03	<u>0.042</u>
CSP-7	8/23/2012	6", 12", 24"	<0.02	<0.02	<0.02	<u>0.095</u>	<0.03	<0.02
CSP-8	8/23/2012	6", 12", 24"	<0.02	<0.02	<0.02	0.33	<0.03	<u>0.021</u>
CSP-9	8/23/2012	6", 12", 24"	<0.02	<0.02	<0.02	<0.02	<0.03	<0.02
CSP-10	8/23/2012	6", 12", 24"	<0.02	<0.02	<0.02	0.024	<0.03	<0.02
Laboratory Minimum Meth	Laboratory Minimum Method Reporting / Practical Quantitive Level (MRL)				0.02	0.02	0.03	0.02
Model Toxic Control Act	- Method A Cleanup Leve	els For Groundwater	NA	NA	NA	NA	NA	0.05

Bold / Shaded: Analysis reported exceeding the MTCA Method A cleanup level

Bold: Analysis reported exceeding laboratory method reporting levels

MTCA 2007 Method A Cleanup Levels - Table 740-1

Samples reported in milligram per killigram (mg/kg)

bgs: below ground surface

na: Not Applicable / Not Analysed

Attachment C

Project Chemical Analysis

Laboratory Analytical Results Sample Chain Of Custody



Libby Environ	mental,	Inc.		C	hain	of Cu	Isto	dy R	eco	rd						
4139 Libby Road NE Ph: 360-352-2110 Olympia, WA 98506 Fax: 360-352-4154						Date	8/2	5/12					Page:		1	of
client: ECI						Project Manager: Stephen Spencer										
ddress: PO Box						Proje	ct Nam	e: 0	AUTE	L	<u></u>		_		-	
Phone: 2539217059 Fax: 2533694228						Local	tion: 2	119	MI	Idre	4		City:	Frec	NES	Т
lient Project # 040										GX						3/23/10
Sample Number	Death	Time	Sample	Container	18			Color Color				1 3 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1			1	/
1AB8-2-3	Depth 2-2	Time	Type Sco.1	Type 4 o2	K 37	C	573	YY	Y	24	147.	TZ			Field N	otes
2AB 8- 5-6'	5-6		50.1	402			-		-	++	+	15		-		
3 AB 9 - 2-3 '	2.3		50.1				-	+	-	-	-	X				
4 AB9 - 5-6'	5-6		Soil		++		-	+	-		-	1	-	+		
5 ABIO - 2-3'	2-3		Soil				-	++	-	1	-	X		-		
6 AB10 - 4-5'	4-5		Soil	V			-				-	X		-		
7	1		Pour				-		-		-	-				
8 CSP - 1	SP		56.1	40 mil		1			-					an	RPI	1 - 6-12
9 (SP - 2			2011	- 12 1011		121	-	+	-		-			- 20	Chern	1 6 10
0 CSP - 3			1			121	-				-			-		
1CSP-4		1				121								-		
2CSP-5						X					-					
3CSP-6						12										
4 (SP - 7						X										
5CSP-8						X										
6CSP-9			6	· · · ·		X									1	1/
7 CSP - 10	U		V			X							e ()		1	7
8				U.											10000	
al Sparce		Z3-/	7-1:44	Received by.	-2	R	8-2	Date /			ple Re	ceipt		Rem		K T/A
EliAquishEd by:	Date /	Time		Received by				Date /	Time	Good Cold?	Condition	17	-	7	ULINA	
Relinquished by:	Date /	Time		Received by:				Date /	Time	-	Intact?					
													iners			

EATON PROJECT ECI Fircrest, Washington Libby Project # L120823-5 Client Project # 0404-02

Volatile Organic Compounds by EPA Method 8260C in Soil

Sample Description		Method	CSP-1	CSP-2	CSP-3	CSP-4	CSP-5
		Blank					
Date Sampled	Reporting	N/A	8/23/12	8/23/12	8/23/12	8/23/12	8/23/12
Date Analyzed	Limits	8/29/12	8/29/12	8/29/12	8/29/12	8/29/12	8/29/12
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Dichlorodifluoromethane	0.06	nd	nd	nd	nd	nd	nd
Chloromethane	0.06	nd	nd	nd	nd	nd	nd
Vinyl chloride	0.00	nd	nd	nd	nd	nd	nd
Bromomethane	0.02	nd	nd	nd	nd	nd	nd
Chloroethane	0.05	nd	nd	nd	nd	nd	nd
Trichlorofluoromethane	0.00	nd	nd	nd	nd	nd	nd
1,1-Dichloroethene	0.05	nd	nd	nd	nd	nd	nd
Methylene chloride	0.03	nd	nd	nd	nd	0.029	nd
Methyl <i>tert</i> - Butyl Ether (MTBE)	0.02	nd	nd	nd	nd	0.029 nd	nd
<i>trans</i> -1,2-Dichloroethene	0.02	nd	nd	nd	nd	nd	nd
1.1-Dichloroethane	0.02	nd	nd	nd	nd	nd	nd
,	0.02	nd	nd	nd	nd	nd	nd
2,2-Dichloropropane <i>cis</i> -1,2-Dichloroethene	0.03	nd	nd	nd	nd	nd	0.025
,	0.02	nd	nd	nd	nd		0.025 nd
Chloroform						nd	
1,1,1-Trichloroethane (TCA)	0.02	nd	nd	nd	nd	nd	nd
Carbon tetrachloride	0.02	nd	nd	nd	nd	nd	nd
1,1-Dichloropropene	0.02	nd	nd	nd	nd	nd	nd
Benzene	0.02	nd	nd	nd	nd	nd	nd
1,2-Dichloroethane (EDC)	0.03	nd	nd	nd	nd	nd	nd
Trichloroethene (TCE)	0.03	nd	nd	nd	nd	nd	nd
1,2-Dichloropropane	0.02	nd	nd	nd	nd	nd	nd
Dibromomethane	0.04	nd	nd	nd	nd	nd	nd
Bromodichloromethane	0.02	nd	nd	nd	nd	nd	nd
cis-1,3-Dichloropropene	0.02	nd	nd	nd	nd	nd	nd
Toluene	0.02	nd	nd	nd	nd	nd	nd
Trans-1,3-Dichloropropene	0.03	nd	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	0.03	nd	nd	nd	nd	nd	nd
Tetrachloroethene (PCE)	0.02	nd	0.36	0.082	0.10	0.064	0.041
1,3-Dichloropropane	0.05	nd	nd	nd	nd	nd	nd
Dibromochloromethane	0.03	nd	nd	nd	nd	nd	nd
1,2-Dibromoethane (EDB) *	0.005	nd	nd	nd	nd	nd	nd
Chlorobenzene	0.02	nd	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	0.03	nd	nd	nd	nd	nd	nd
Ethylbenzene	0.03	nd	nd	nd	nd	nd	nd
Total Xylenes	0.03	nd	nd	nd	nd	nd	nd
Styrene	0.02	nd	nd	nd	nd	nd	nd

EATON PROJECT ECI Fircrest, Washington Libby Project # L120823-5 Client Project # 0404-02

Volatile Organic Compounds by EPA Method 8260C in Soil

Sample Description		Method	CSP-1	CSP-2	CSP-3	CSP-4	CSP-5
		Blank					
Date Sampled	Reporting	N/A	8/23/12	8/23/12	8/23/12	8/23/12	8/23/12
Date Analyzed	Limits	8/29/12	8/29/12	8/29/12	8/29/12	8/29/12	8/29/12
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Bromoform	0.02	nd	nd	nd	nd	nd	nd
Isopropylbenzene	0.02	nd	nd	nd	nd	nd	nd
1,2,3-Trichloropropane	0.08	nd	nd	nd	nd	nd	nd
Bromobenzene	0.02	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	0.03	nd	nd	nd	nd	nd	nd
n-Propylbenzene	0.02	nd	nd	nd	nd	nd	nd
2-Chlorotoluene	0.02	nd	nd	nd	nd	nd	nd
4-Chlorotoluene	0.02	nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	0.02	nd	nd	nd	nd	nd	nd
tert-Butylbenzene	0.02	nd	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	0.02	nd	nd	nd	nd	nd	nd
sec-Butylbenzene	0.02	nd	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	0.02	nd	nd	nd	nd	nd	nd
Isopropyltoluene	0.02	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	0.02	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	0.02	nd	nd	nd	nd	nd	nd
n-Butylbenzene	0.02	nd	nd	nd	nd	nd	nd
1,2-Dibromo-3-Chloropropane	0.02	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorolbenzene	0.05	nd	nd	nd	nd	nd	nd
Hexachloro-1,3-butadiene	0.10	nd	nd	nd	nd	nd	nd
Naphthalenes	0.10	nd	nd	nd	nd	1.11	nd
1,2,3-Trichlorobenzene	1.0	nd	nd	nd	nd	nd	nd
Surrogate Recovery							
Dibromofluoromethane		124	99	97	102	111	96
1,2-Dichloroethane-d4		116	116	130	130	123	114
Toluene-d8		89	76	79	91	90	75
4-Bromofluorobenzene "nd" Indicates not detected at		85	85	94	94	84	88

"int" Indicates that interference prevents determination.

* INSTRUMENT DETECTION LIMIT

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE 65% TO 135%

ANALYSES PERFORMED BY: Sherry Chilcutt

EATON PROJECT ECI Fircrest, Washington Libby Project # L120823-5 Client Project # 0404-02

Volatile Organic Compounds by EPA Method 8260C in Soil

Sample Description		CSP-6	CSP-7	CSP-7 Dup	CSP-8	CSP-9	CSP-10
Date Sampled	Reporting	8/23/12	8/23/12	8/23/12	8/23/12	8/23/12	8/23/12
Date Analyzed	Limits	8/29/12	8/29/12	8/29/12	8/29/12	8/29/12	8/29/12
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Dichlorodifluoromethane	0.06	nd	nd	nd	nd	nd	nd
Chloromethane	0.06	nd	nd	nd	nd	nd	nd
Vinyl chloride	0.00	nd	nd	nd	nd	nd	nd
Bromomethane	0.02	nd	nd	nd	nd	nd	nd
Chloroethane	0.05	nd	nd	nd	nd	nd	nd
Trichlorofluoromethane	0.05	nd	nd	nd	nd	nd	nd
1.1-Dichloroethene	0.05	nd	nd	nd	nd	nd	nd
Methylene chloride	0.03	nd	nd	nd	nd	nd	nd
Methyl <i>tert</i> - Butyl Ether (MTBE)	0.02	nd	nd	nd	nd	nd	nd
<i>trans</i> -1,2-Dichloroethene	0.02	nd	nd	nd	nd	nd	nd
1,1-Dichloroethane	0.02	nd	nd	nd	nd	nd	nd
2,2-Dichloropropane	0.02	nd	nd	nd	nd	nd	nd
<i>cis</i> -1,2-Dichloroethene	0.03	0.035	0.095	0.10	0.33	nd	0.024
Chloroform	0.02	0.035 nd	0.095 nd	nd	nd	nd	0.024 nd
	0.02	nd	nd	nd	nd	nd	nd
1,1,1-Trichloroethane (TCA) Carbon tetrachloride	0.02	nd	nd	nd			nd
	0.02	nd	nd	nd	nd nd	nd nd	
1,1-Dichloropropene	0.02	nd	nd	nd	nd	nd	nd
Benzene							nd
1,2-Dichloroethane (EDC)	0.03	nd	nd	nd	nd	nd	nd
Trichloroethene (TCE)	0.03	nd	nd	nd	nd	nd	nd
1,2-Dichloropropane	0.02	nd	nd	nd	nd	nd	nd
Dibromomethane	0.04	nd	nd	nd	nd	nd	nd
Bromodichloromethane	0.02	nd	nd	nd	nd	nd	nd
cis-1,3-Dichloropropene	0.02	nd	nd	nd	nd	nd	nd
Toluene	0.02	nd	nd	nd	nd	nd	nd
Trans-1,3-Dichloropropene	0.03	nd	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	0.03	nd	nd	nd	nd	nd	nd
Tetrachloroethene (PCE)	0.02	0.042	nd	nd	0.021	nd	nd
1,3-Dichloropropane	0.05	nd	nd	nd	nd	nd	nd
Dibromochloromethane	0.03	nd	nd	nd	nd	nd	nd
1,2-Dibromoethane (EDB) *	0.005	nd	nd	nd	nd	nd	nd
Chlorobenzene	0.02	nd	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	0.03	nd	nd	nd	nd	nd	nd
Ethylbenzene	0.03	nd	nd	nd	nd	nd	nd
Total Xylenes	0.03	nd	nd	nd	nd	nd	nd
Styrene	0.02	nd	nd	nd	nd	nd	nd

EATON PROJECT ECI Fircrest, Washington Libby Project # L120823-5 Client Project # 0404-02

Volatile Organic Compounds by EPA Method 8260C in Soil

Sample Description		CSP-6	CSP-7	CSP-7 Dup	CSP-8	CSP-9	CSP-10
Date Sampled	Reporting	8/23/12	8/23/12	8/23/12	8/23/12	8/23/12	8/23/12
Date Analyzed	Limits	8/29/12	8/29/12	8/29/12	8/29/12	8/29/12	8/29/12
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Bromoform	0.02	nd	nd	nd	nd	nd	nd
Isopropylbenzene	0.02	nd	nd	nd	nd	nd	nd
1,2,3-Trichloropropane	0.03	nd	nd	nd	nd	nd	nd
Bromobenzene	0.02	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	0.03	nd	nd	nd	nd	nd	nd
n-Propylbenzene	0.02	nd	nd	nd	nd	nd	nd
2-Chlorotoluene	0.02	nd	nd	nd	nd	nd	nd
4-Chlorotoluene	0.02	nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	0.02	nd	nd	nd	nd	nd	nd
tert-Butylbenzene	0.02	nd	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	0.02	nd	nd	nd	nd	nd	nd
sec-Butylbenzene	0.02	nd	nd	nd	nd	nd	nd
1.3-Dichlorobenzene	0.02	nd	nd	nd	nd	nd	nd
/	0.02	nd	nd	nd	nd	nd	nd
Isopropyltoluene 1.4-Dichlorobenzene	0.02	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	0.02	nd	nd	nd	nd	nd	nd
,	0.02						
n-Butylbenzene	0.02	nd	nd	nd	nd	nd	nd
1,2-Dibromo-3-Chloropropane		nd	nd	nd	nd	nd	nd
1,2,4-Trichlorolbenzene	0.05	nd	nd	nd	nd	nd	nd
Hexachloro-1,3-butadiene	0.10	nd	nd	nd	nd	nd	nd
Naphthalenes	0.03	nd	nd	nd	nd	nd	nd
1,2,3-Trichlorobenzene	1.0	nd	nd	nd	nd	nd	nd
Surrogate Recovery							
Dibromofluoromethane		87	95	93	96	96	101
1,2-Dichloroethane-d4		88	119	107	115	127	128
Toluene-d8		74	75	75	91	78	78
4-Bromofluorobenzene		82	83	80	91	90	94

"int" Indicates that interference prevents determination.

* INSTRUMENT DETECTION LIMIT

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE 65% TO 135%

ANALYSES PERFORMED BY: Sherry Chilcutt

EATON PROJECT ECI Fircrest, Washington Libby Project # L120823-5 Client Project # 0404-02

QA/QC Data - EPA 8260C Analyses

		Sample Ide	entification:		CSP-10		
		Matrix Spike			rix Spike Dup	licate	RPD
	Spiked Conc. (mg/kg)	Measured Conc. (mg/kg)	Spike Recovery (%)	Spiked Conc. (µg/l)	Measured Conc. (µg/l)	Spike Recovery (%)	
1,1-Dichloroethene	0.50	0.46	92	0.50	0.38	76	19.0
Benzene	0.50	0.61	122	0.50	0.58	116	5.0
Toluene	0.50	0.46	92	0.50	0.44	88	4.4
Chlorobenzene	0.50	0.55	110	0.50	0.52	104	5.6
Trichloroethene (TCE)	0.50	0.59	118	0.50	0.54	108	8.8
Surrogate Recovery							
Dibromofluoromethane			87			94	
1,2-Dichloroethane-d4			87			121	
Toluene-d8			75		76		
4-Bromofluorobenzene			81				

	Laboratory Control Sample										
	Spiked Conc. (mg/kg)	Measured Conc. (mg/kg)	Spike Recovery (%)								
1,1-Dichloroethene	0.50	0.57	114								
Benzene	0.50	0.65	130								
Toluene	0.50	0.51	102								
Chlorobenzene	0.50	0.53	106								
Trichloroethene (TCE)	0.50	0.57	114								
Surrogate Recovery											
Dibromofluoromethane			121								
1,2-Dichloroethane-d4			111								
Toluene-d8			87								
4-Bromofluorobenzene			87								

ACCEPTABLE RECOVERY LIMITS FOR MATRIX SPIKES: 65%-135% ACCEPTABLE RPD IS 35%

ANALYSES PERFORMED BY: Sherry Chilcutt

Libby Environm	iental	, Inc.		Cł	nair	of (Cus	toc	ly F	Rec	or	d					w	ww.Libby	Environ	mental.com
4139 Libby Road NE	Ph:	360-352-2	2110					~	-	_	_									
Olympia, WA 98506	Fax:	360-352-4	154			Da	ate: <	6-	<u> 30</u>	-13	S				Pag	e:	-+		of (
Client: ECT						Pr	oject I	Mana	ger:	Ste	=P	ken	<u>Sp</u>	en	221	1				
Address: PO Box	153					Pr	oject f	Name	E	AT	0	Ń	/							
City: Foxisland		State: h)A zip	9833	3	Lo	cation	:2	119	M	id	red			City	, Sta	te: F	VCV	95T	
Phone: 253-421-	7059	Fax: 2	25330	696228	3		llecto	r: /	í	Sp	el	Kel 1	1		Date	e of (Collecti	on: & -	- 30 -	13
Client Project # 6404	-03					Er	nail: 🖉	55	2ev	ice.	Ve	200	00	onc	Shli	ne	• (0	m		
Sample Number	Depth	Time	Sample Type	Container Type	10	882 10 882 10 8	10 A B	Contra to	BIO NOTING	S.C. C.		27 121 20 10 10 10 10 10 10 10 10 10 10 10 10 10	4, 10 m	582 5 H				ield Note		
1CSP-1b	50	9:59		VOA			7	<u>í</u>	\frown	\frown		$ \uparrow \uparrow \uparrow$		Î	Í		<u>í</u>			
2CSP-26	SP	10:12	Six	VOA			/													
3(5P-3b	SP	10:27	Soil	NOA		Ň														
4CSP-4h	SP	10:20	Sort	ICA																
5	ľ	L.	AL-1	V																
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
16																				
17																				
Relinquished by:		/Time 30-/3	•	Received by:				9/39	1	/ Time 3: 0	0	Samp	le Re	ceipt	:		Rema	rks:		
Relinquished by:		/ Time		Received by:						/ Time		Good Co	ondition	?				-	_	
												Cold?						ST	A)	
Relinquished by:	Date	/ Time		Received by:					Date	/ Time	-	Seals In	tact?					_	4	
												Total Nu		f Conta	ainers		TAT:	24HR	48HR	5-DAY

EATON PROJECT ECI Fircrest, Washington Libby Project # L130830-13 Client Project # 0404-02 4139 Libby Road NE Olympia, WA 98506 Phone: (360) 352-2110 FAX: (360) 352-4154 Email: libbyenv@aol.com

Sample Description		Method	CSP-1b	CSP-2b	CSP-3b	CSP-3b	CSP-4b
i i		Blank				Dup	
Date Sampled	Reporting	N/A	8/30/13	8/30/13	8/30/13	8/30/13	8/30/13
Date Analyzed	Limits	9/5/13	9/5/13	9/5/13	9/5/13	9/5/13	9/5/13
2	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Dichlorodifluoromethane	0.06	nd	nd	nd	nd	nd	nd
Chloromethane	0.06	nd	nd	nd	nd	nd	nd
Vinyl chloride	0.02	nd	nd	nd	nd	nd	nd
Bromomethane	0.09	nd	nd	nd	nd	nd	nd
Chloroethane	0.06	nd	nd	nd	nd	nd	nd
Trichlorofluoromethane	0.05	nd	nd	nd	nd	nd	nd
1,1-Dichloroethene	0.05	nd	nd	nd	nd	nd	nd
Methylene chloride	0.02	nd	nd	nd	nd	nd	nd
Methyl tert- Butyl Ether (MTBE)	0.05	nd	nd	nd	nd	nd	nd
trans -1,2-Dichloroethene	0.02	nd	nd	nd	nd	nd	nd
1,1-Dichloroethane	0.03	nd	nd	nd	nd	nd	nd
2,2-Dichloropropane	0.05	nd	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	0.02	nd	nd	nd	nd	nd	nd
Chloroform	0.02	nd	nd	nd	nd	nd	nd
1,1,1-Trichloroethane (TCA)	0.02	nd	nd	nd	nd	nd	nd
Carbon tetrachloride	0.03	nd	nd	nd	nd	nd	nd
1,1-Dichloropropene	0.02	nd	nd	nd	nd	nd	nd
Benzene	0.02	nd	nd	nd	nd	nd	nd
1,2-Dichloroethane (EDC)	0.03	nd	nd	nd	nd	nd	nd
Trichloroethene (TCE)	0.03	nd	nd	nd	nd	nd	nd
1,2-Dichloropropane	0.02	nd	nd	nd	nd	nd	nd
Dibromomethane	0.04	nd	nd	nd	nd	nd	nd
Bromodichloromethane	0.02	nd	nd	nd	nd	nd	nd
cis-1,3-Dichloropropene	0.02	nd	nd	nd	nd	nd	nd
Toluene	0.03	nd	nd	nd	nd	nd	nd
Trans-1,3-Dichloropropene	0.03	nd	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	0.03	nd	nd	nd	nd	nd	nd
Tetrachloroethene (PCE)	0.02	nd	nd	nd	nd	nd	nd
1,3-Dichloropropane	0.05	nd	nd	nd	nd	nd	nd
Dibromochloromethane	0.03	nd	nd	nd	nd	nd	nd
1,2-Dibromoethane (EDB) *	0.005	nd	nd	nd	nd	nd	nd
Chlorobenzene	0.02	nd	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	0.03	nd	nd	nd	nd	nd	nd
Ethylbenzene	0.03	nd	nd	nd	nd	nd	nd
Total Xylenes	0.03	nd	nd	nd	nd	nd	nd
Styrene	0.02	nd	nd	nd	nd	nd	nd

Volatile Organic Compounds by EPA Method 8260C in Soi

EATON PROJECT ECI Fircrest, Washington Libby Project # L130830-13 Client Project # 0404-02

4139 Libby Road NE Olympia, WA 98506 Phone: (360) 352-2110 FAX: (360) 352-4154 Email: libbyenv@aol.com

Sample Description		Method	CSP-1b	CSP-2b	CSP-3b	CSP-3b	CSP-4b
		Blank				Dup	
Date Sampled	Reporting	N/A	8/30/13	8/30/13	8/30/13	8/30/13	8/30/13
Date Analyzed	Limits	9/5/13	9/5/13	9/5/13	9/5/13	9/5/13	9/5/13
-	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Bromoform	0.03	nd	nd	nd	nd	nd	nd
Isopropylbenzene	0.08	nd	nd	nd	nd	nd	nd
1,2,3-Trichloropropane	0.03	nd	nd	nd	nd	nd	nd
Bromobenzene	0.03	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	0.03	nd	nd	nd	nd	nd	nd
n-Propylbenzene	0.02	nd	nd	nd	nd	nd	nd
2-Chlorotoluene	0.02	nd	nd	nd	nd	nd	nd
4-Chlorotoluene	0.02	nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	0.02	nd	nd	nd	nd	nd	nd
tert-Butylbenzene	0.02	nd	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	0.02	nd	nd	nd	nd	nd	nd
sec-Butylbenzene	0.02	nd	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	0.03	nd	nd	nd	nd	nd	nd
Isopropyltoluene	0.02	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	0.03	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	0.03	nd	nd	nd	nd	nd	nd
n-Butylbenzene	0.02	nd	nd	nd	nd	nd	nd
1,2-Dibromo-3-Chloropropane	0.05	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorolbenzene	0.05	nd	nd	nd	nd	nd	nd
Hexachloro-1,3-butadiene	0.10	nd	nd	nd	nd	nd	nd
Naphthalenes	0.05	nd	nd	nd	nd	nd	nd
1,2,3-Trichlorobenzene	0.1	nd	nd	nd	nd	nd	nd
Surrogate Recovery							
Dibromofluoromethane		134	130	133	132	131	12997
1,2-Dichloroethane-d4		106	90	98	97	105	97
Toluene-d8		109	110	119	114	114	114
4-Bromofluorobenzene		103	122	126	125	126	124

Volatile Organic Compounds by EPA Method 8260C in Soi

"int" Indicates that interference prevents determination

*** INSTRUMENT DETECTION LIMI1**

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE 65% TO 135%

ANALYSES PERFORMED BY: Sherry Chilcut

EATON PROJECT ECI Fircrest, Washington Libby Project # L130830-13 Client Project # 0404-02 4139 Libby Road NE Olympia, WA 98506 Phone: (360) 352-2110 FAX: (360) 352-4154 Email: libbyenv@aol.com

QA/QC Data -	- EPA	8260C	Analyses
--------------	-------	-------	----------

	Sample Identification: CSP-4b						
		Matrix Spike		Matrix Spike Duplicate			RPD
	Spiked Conc. (mg/kg)	Measured Conc. (mg/kg)	Spike Recovery (%)	Spiked Conc. (mg/kg)	Measured Conc. (mg/kg)	Spike Recovery (%)	
1,1-Dichloroethene	0.50	0.34	68	0.50	0.3	66	3.0
Benzene	0.50	0.59	118	0.50	0.6	126	6.6
Toluene	0.50	0.55	110	0.50	0.6	110	0.0
Chlorobenzene	0.50	0.66	132	0.50	0.6	124	6.3
Trichloroethene (TCE)	0.50	0.61	122	0.50	0.6	126	3.2
Surrogate Recovery							
Dibromofluoromethane		119 115					
1,2-Dichloroethane-d4		100 82					
Toluene-d8		122 112					
4-Bromofluorobenzene		121 118					

	Laboratory Control Sample					
	Spiked Conc. (mg/kg)	Measured Conc. (mg/kg)	Spike Recovery (%)			
1,1-Dichloroethene	0.50	0.38	76			
Benzene	0.50	0.65	130			
Toluene	0.50	0.58	116			
Chlorobenzene	0.50	0.65	130			
Trichloroethene (TCE)	0.50	0.63	126			
Surrogate Recovery						
Dibromofluoromethane	134					
1,2-Dichloroethane-d4	101					
Toluene-d8		109				
4-Bromofluorobenzene		120				

ACCEPTABLE RECOVERY LIMITS FOR MATRIX SPIKES: 65%-135% ACCEPTABLE RPD IS 35%

ANALYSES PERFORMED BY: Sherry Chilcut