EnviroSound Consulting Inc.

Geotechnical & Environmental Consulting

Groundwater Monitoring Report

Project Information

Project Name: Twelve Trees
Location: Poulsbo, Washington
Client: Apanage Inc.
ESC Project #: ESC19-E019
Date: January 17, 2020

Company Information

P.O. Box 776
Tracyton, Washington 98393
Phone: 360-698-5950
Fax: 360-698-5929

January 17, 2020 Project No. ESC19-E019

Mr. Mark Salo
Apanage Inc.
26276 Twelve Trees Lane NW, Suite B
Poulsbo, Washington 98370

RE: **Fourth Quarterly 2019 - 2020 Groundwater Monitoring Report**
Twelve Trees Business Park
26276 Twelve Trees Lane NW, Suite B
Poulsbo, Washington 98370

Dear Mr. Salo:

This report summarizes the 2019 - 2020 quarterly groundwater monitoring activities for the Twelve Trees Business Park (site) in Poulsbo, Washington (see Figure 1, Vicinity Map). The work was conducted in general accordance with your verbal authorization to conduct the work.

Project Background

The site was previously used as a gravel pit and asphalt manufacturing plant from 1956 through 1981. Groundwater quality monitoring was conducted in 1991 through 1993, and reported by Shannon & Wilson (1994). Levels of trichloroethylene (TCE) were detected in Well 2, ranging from 17 to 32 parts per billion (ppb), which exceeds the Washington Model Toxics Control Act (MTCA) Method A groundwater cleanup standard of 5.0 ppb. Previous sampling results indicate that the TCE occurrence in groundwater was localized in the Well 2 vicinity and that the remainder of the wells contained non-detectable levels, less than 0.1 ppb, of TCE.

A Washington Department of Ecology (Ecology) letter, dated October 21, 1998, to Mr. Mark Salo of Apanage, Inc., site owner, requested that groundwater monitoring be conducted to assure this site does not pose a threat to human health or the environment. Ecology specified that on-site wells Nos. 2 and 4 be monitored on a quarterly basis for one year. Thereafter, according to the letter from Ecology, annual monitoring of well No. 2 was to be continued until the cleanup standards are attained. At that point, if no TCE was detected after one year of quarterly sampling, monitoring of well No. 4 could be discontinued and a final "no further action" determination for groundwater could be issued.

The initial year of quarterly monitoring was completed in February 2000, by Krazan and Associates and summarized in a report dated March 27, 2000. The quarterly monitoring results are listed in Table 1. Per Ecology's letter, an annual monitoring program was then adopted. In addition, monitoring of well No. 4 was discontinued. Krazan and Associates continued annual monitoring through 2004. Alkai Consultants performed annual monitoring from 2004 through 2007. EnviroSound started annual sampling during 2008. The annual monitoring results are listed in Table 2. The groundwater concentration for TCE during the 2017 through 2019 annual sampling events was below the cleanup standard (5 ppb) for three consecutive years. According to the 1998 Ecology letter, once the cleanup level has been attained, four quarters of monitoring with results below the cleanup standard will be required for the No Further Action determination. Consequently, quarterly monitoring was initiated, with the March 2019 sample representing the first quarter (Table 3).

TABLE 1: SUMMARY OF GROUNDWATER ANALYSES INITIAL QUARTERLY MONITORING		
Sample No.	**Date Sampled**	**Trichloroethylene (ppb)**
First Quarter-1999		
99113-MW-2-GW-1	5/25/99	**6.0**
99113-MW-4-GW-2	5/25/99	<1.0
Second Quarter-1999		
99113-MW-2-GW-3	9/1/99	**15.0**
99113-MW-4-GW-4	9/1/99	<1.0
Third Quarter-1999		
99113-MW-2-GW-5	11/21/99	**9.0**
99113-MW-4-GW-6	11/21/99	<1.0
Fourth Quarter-2000		
99113-MW-2-GW-7	2/25/00	**15.0**
99113-MW-4-GW-8	2/25/00	<1.0
MTCA Method A Cleanup Level		**5.0**

TABLE 2: SUMMARY OF GROUNDWATER ANALYSES ANNUAL MONITORING		
Sample No.	**Date Sampled**	**Trichloroethylene (ppb)**
Annual-2001		
01011-MW-2-GW-6*	3/28/01	1.0
Annual-2002		
02005-MW-2-GW-10	4/8/02	**13.0**
Annual-2003		
03012-MW-2-GW-11	3/18/03	**14.0**
Annual-2004		
04002-MW-2 GW-12	3/10/04	**5.0**
Annual-2005		
ACL05-03-E015-MW-2-GW-13	3/31/05	<2.0
Annual-2006		
ACL06-04-E012-MW2-GW-14	4/27/06	**13.0**
Annual 2007		
ACL07-04-E049-MW2-GW-15	4/30/07	**15.0**
Annual 2008		
ESC08-E005-MW2-GW-16	4/21/08	**8.0**
Annual 2009		
ESC09-E005-MW2-GW-17	3/30/09	4.0
Annual 2010		
ESC10-E006-MW2-GW-18	4/15/10	**14.0**

Annual 2011		
ESC011-E003-MW2-GW-19	5/13/11	<2.0
Annual 2012		
ESC012-E002-MW2-GW-20	4/25/12	**14.0**
Annual 2013		
ESC013-E002-MW2-GW-21	5/2/13	**22.0**
Annual 2014		
ESC014-E002-MW2-GW-22	4/16/14	**13.9**
Annual 2015		
ESC015-E002-MW2-GW-23	4/17/15	**12.3**
Annual 2016		
ESC016-E002-MW2-GW-24	4/12/16	**12.2**
Annual 2017		
ESC017-E017-MW2-GW-25	5/1/17	2.2
Annual 2018		
ESC18-E008-MW2-GW-26	5/1/18	1.5
Annual 2019		
ESC19-E006-MW2-GW-27	3/19/19	<1.0
MTCA Method A Cleanup Level		**5.0**

- * *QA Duplicate Sample Analyzed*

2020 Sampling Activities

Well No. 2 was sampled on January 9, 2020. Prior to sampling, the static water level was measured at a depth of 64.14 feet with the bottom of the well measured at 67.50 feet. The groundwater sample was collected utilizing a disposable bailer and dispensed into two 40-milliliter volatile organic analysis (VOA) vials. Both vials were labeled and stored on ice until delivery to the laboratory. The water sample was submitted to Libby Environmental, Inc in Olympia, Washington for analysis of Volatile Organic Compounds by EPA method 8260D.

Environmental Monitoring Results

The TCE concentration in the January 2020 Well No. 2 water sample was 1.0 part per billion (ppb), which is below the MTCA Method A Cleanup Level (5 ppb). The sample also contained 6.3 ppb of cis-1, 2-dichloroethene, a likely breakdown product of the TCE which has been encountered periodically in the past. The detected level of cis-1, 2-dichloroethene is below the Maximum Contaminant Level of 70.0 ppb. The certified Analytical Results and Chain-of-Custody Records are attached to this letter. The quarterly 2019 - 2020 TCE results to date are listed in Table 3.

TABLE 3: SUMMARY OF GROUNDWATER ANALYSES FINAL QUARTERLY MONITORING		
Sample No.	**Date Sampled**	**Trichloroethylene (ppb)**
First Quarter- March 2019		
ESC19-E006-MW2-GW-27	3/19/19	<1.0
Second Quarter- June 2019		
ESC19-E019-MW2-GW-28	6/25/19	1.6
Third Quarter-September 2019		
ESC19-E019-MW2-GW-29	9/26/19	0.56
Fourth Quarter-January 2020		
ESC19-E019-MW2-GW-30	1/9/20	1.0
MTCA Method A Cleanup Level		**5.0**

Limitations

The findings of this report were based upon the results of our field and laboratory investigations, coupled with the interpretation of conditions associated with the groundwater samples. Therefore, the statements are accurate only to the degree implied by review of the data obtained and by professional interpretation.

A laboratory, certified by the State of Washington Department of Ecology, performed the chemical testing. The results of the chemical analysis are accurate only to the degree of care of ensuring the testing accuracy and the representative nature of the soil samples obtained.

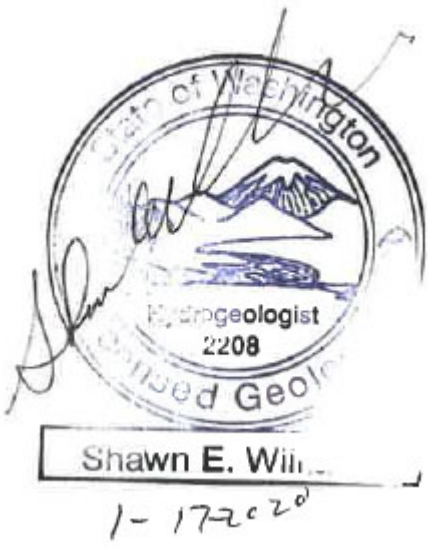
The findings presented herewith are based on professional interpretation using state-of-the-art methods and equipment, and a degree of conservatism deemed proper as of this report date. It is not warranted that such findings cannot be superseded by future environmental, geotechnical, or technical developments.

We appreciate the opportunity to be of service. If you have any questions, please do not hesitate to contact our office at (360) 698-5950.

Respectfully submitted,
EnviroSound Consulting, Inc.

Shawn E. Williams,
Senior Hydrogeologist

Attachments: Vicinity Map, Laboratory Analytical Results



Map adapted from Google Earth Pro, accessed 4-11-19.

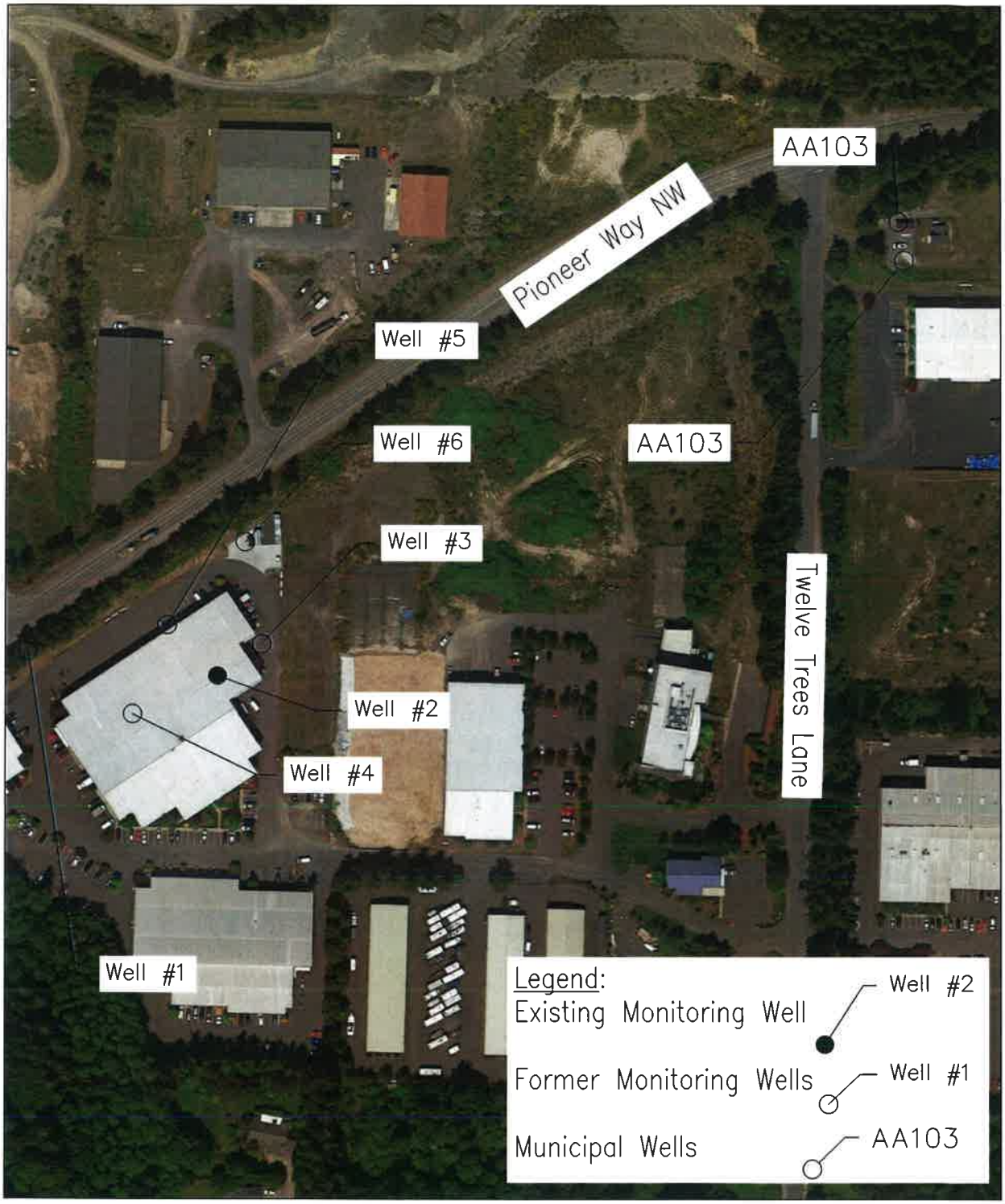
Not to Scale

EnviroSound Consulting

FIGURE 1. Vicinity Map

Project: ESC19-E019
Project Name: 12-Trees Business Park
Location: Poulsbo, WA
Client: Apanage Inc.
Date: July, 2019

N.T.S.



Map adapted from Google Earth Pro. accessed 4-11-19.

Not to Scale

EnviroSound Consulting

FIGURE 2. Monitoring Well Locations

Project: ESC19-E019
Project Name: 12-Trees Business Park
Location: Poulsbo, WA
Client: Apanage Inc.
Date: July, 2019

N.T.S.

Libby Environmental, Inc.

3322 South Bay Road NE • Olympia, WA 98506-2957

January 17, 2020

Shawn Williams
EnviroSound Consulting, Inc.
1719 Stanton Way NW
Bremerton, WA 98311

Dear Mr. Williams:

Please find enclosed the analytical data report for the Twelve Trees Project located in Paulsbo, Washington.

The results of the analyses are summarized in the attached tables. Applicable detection limits and QA/QC data are included. The sample(s) will be disposed of within 30 days unless we are contacted to arrange long term storage.

Libby Environmental, Inc. appreciates the opportunity to have provided analytical services for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Sherry L. Chilcutt
Senior Chemist
Libby Environmental, Inc.

Phone (360) 352-2110 • Fax (360) 352-4154 • libbyenv@gmail.com

ESN

Libby Environmental, Inc.
360-352-2110

CHAIN-OF-CUSTODY RECORD

CLIENT: Environsoft
ADDRESS: P.O Box 776 Tracy Lake WA 98393
PHONE: 360 471 5898 EMAIL Shaun@Environsoft.net
CLIENT PROJECT #: 19. PROJECT MANAGER: SEW

DATE: 1-9-2020 PAGE 1 OF 1
PROJECT NAME: Twelve Trees
LOCATION: Bellingham
COLLECTOR: SEW DATE OF COLLECTION: 1-9-2020

Sample Number	Depth	Time	Sample Type	Container Type	TPH-HCID	TPH-DIESEL AND OIL	TPH-GASOLINE	BTEX 8260	VOC 8260CL	VOC 8260	SEMIVOC 8270	PAH's 8270	PCB's 8082	CL PESTICIDES 8081	RCRA 8 Metals	MTCA 5 Metals	Pb	ASBESTOS PLM	GRO Suite 830-1	DRO Suite 830-1	WO Suite 830-1	8260 C			
1. ~~ESC19-Eel-MW2-GW-20~~	~~20~~	1140	VOAs	water																		X			1-16-2020
2. ESC19-E@19-MW2-GW-3@																									Sample name change per Shaun via email
3.																									
4.																									
5.																									
6.																									
7.																									
8.																									
9.																									
10.																									
11.																									
12.																									
13.																									
14.																									
15.																									
16.																									
17.																									
18.																									

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
Shaun Mills	1-9-2020 1245	Anja Brady	1-9-20 12:45
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
Anja Brady	1-9-20 16:21		1-9-20 15:22

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:
Standard

Turn Around Time: 24 HR 48 HR 5 DAY

Libby Environmental, Inc.

3322 South Bay Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@gmail.com

TWELVE TREES PROJECT
EnviroSound
Paulsbo, Washington
Libby Project # L200109-5

Volatile Organic Compounds by EPA Method 8260D in Water

Sample Description		Method Blank	ESC19-E019-MW2-GW-30
Date Sampled	Reporting	N/A	1/9/2020
Date Analyzed	Limits	1/9/2020	1/9/2020
	(µg/L)	(µg/L)	(µg/L)
Dichlorodifluoromethane	2.0	nd	nd
Chloromethane	2.0	nd	nd
Vinyl chloride	0.2	nd	nd
Bromomethane	2.0	nd	nd
Chloroethane	2.0	nd	nd
Trichlorofluoromethane	2.0	nd	nd
1,1-Dichloroethene	0.5	nd	nd
Methylene chloride	1.0	nd	nd
Methyl *tert*- Butyl Ether (MTBE)	5.0	nd	nd
trans-1,2-Dichloroethene	1.0	nd	nd
1,1-Dichloroethane	1.0	nd	nd
2,2-Dichloropropane	2.0	nd	nd
cis-1,2-Dichloroethene	1.0	nd	6.3
Chloroform	1.0	nd	nd
1,1,1-Trichloroethane (TCA)	1.0	nd	nd
Carbon tetrachloride	1.0	nd	nd
1,1-Dichloropropene	1.0	nd	nd
Benzene	1.0	nd	nd
1,2-Dichloroethane (EDC)	1.0	nd	nd
Trichloroethene (TCE)	0.4	nd	1.0
1,2-Dichloropropane	1.0	nd	nd
Dibromomethane	1.0	nd	nd
Bromodichloromethane	1.0	nd	nd
cis-1,3-Dichloropropene	1.0	nd	nd
Toluene	1.0	nd	nd
Trans-1,3-Dichloropropene	1.0	nd	nd
1,1,2-Trichloroethane	1.0	nd	nd
Tetrachloroethene (PCE)	1.0	nd	nd
1,3-Dichloropropane	1.0	nd	nd
Dibromochloromethane	1.0	nd	nd
1,2-Dibromoethane (EDB) *	0.01	nd	nd
Chlorobenzene	1.0	nd	nd
Ethylbenzene	1.0	nd	nd
1,1,1,2-Tetrachloroethane	1.0	nd	nd
Total Xylenes	2.0	nd	nd
Styrene	1.0	nd	nd

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Volatile Organic Compounds by EPA Method 8260D in Water

Sample Description		Method Blank	ESC19-E019-MW2-GW-30
Date Sampled	Reporting	N/A	1/9/2020
Date Analyzed	Limits	1/9/2020	1/9/2020
	(µg/L)	(µg/L)	(µg/L)
Bromoform	1.0	nd	nd
Isopropylbenzene	4.0	nd	nd
1,1,2,2-Tetrachloroethane	1.0	nd	nd
Bromobenzene	1.0	nd	nd
n-Propylbenzene	1.0	nd	nd
1,2,3-Trichloropropane	1.0	nd	nd
2-Chlorotoluene	1.0	nd	nd
1,3,5-Trimethylbenzene	1.0	nd	nd
4-Chlorotoluene	1.0	nd	nd
tert-Butylbenzene	1.0	nd	nd
1,2,4-Trimethylbenzene	1.0	nd	nd
sec-Butylbenzene	1.0	nd	nd
p-Isopropyltoluene	1.0	nd	nd
1,3-Dichlorobenzene	1.0	nd	nd
1,4-Dichlorobenzene	1.0	nd	nd
n-Butylbenzene	1.0	nd	nd
1,2-Dichlorobenzene	1.0	nd	nd
1,2-Dibromo-3-Chloropropane	1.0	nd	nd
1,2,4-Trichlorolbenzene	2.0	nd	nd
Hexachloro-1,3-butadiene	5.0	nd	nd
Naphthalenes	5.0	nd	nd
1,2,3-Trichlorobenzene	5.0	nd	nd
Surrogate Recovery			
Dibromofluoromethane		103	100
1,2-Dichloroethane-d4		80	68
Toluene-d8		118	117
4-Bromofluorobenzene		102	96

"nd" Indicates not detected at listed detection limit.
"int" Indicates that interference prevents determination.

* ANALYZED BY SIM
ACCEPTABLE RECOVERY LIMITS FOR SURROGATE 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

Libby Environmental, Inc.

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TWELVE TREES PROJECT
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Paulsbo, Washington
Libby Project # L200109-5

QA/QC for Volatile Organic Compounds by EPA Method 8260D in Water

Matrix Spike Sample Identification: L200109-4

	Spiked Conc. (µg/L)	MS Response (µg/L)	MSD Response (µg/L)	MS Recovery (%)	MSD Recovery (%)	RPD (%)	Limits Recovery (%)	Data Flag
Dichlorodifluoromethane	5.0	3.6	3.8	72	76	5.2	65-135	
Chloromethane	5.0	3.8	3.6	76	72	6.1	65-135	
Vinyl chloride	5.0	3.8	4.1	76	83	8.7	65-135	
Bromomethane	5.0	3.8	3.8	76	77	0.8	65-135	
Chloroethane	5.0	6.1	5.6	123	113	8.3	65-135	
Trichlorofluoromethane	5.0	3.9	4.4	79	87	10.3	65-135	
1,1-Dichloroethene	5.0	4.5	5.1	90	102	12.4	65-135	
Methylene chloride	5.0	3.9	4.0	79	81	2.9	65-135	
Methyl *tert*- Butyl Ether (MTBE)	5.0	3.6	3.6	72	72	0.3	65-135	
trans-1,2-Dichloroethene	5.0	4.7	5.1	95	102	7.3	65-135	
1,1-Dichloroethane	5.0	4.4	4.6	89	93	4.3	65-135	
2,2-Dichloropropane	5.0	4.5	4.9	90	98	8.6	65-135	
cis-1,2-Dichloroethene	5.0	4.9	5.0	99	99	0.6	65-135	
Chloroform	5.0	4.4	4.4	87	87	0.1	65-135	
1,1,1-Trichloroethane (TCA)	5.0	5.0	5.0	100	101	1.0	65-135	
Carbon tetrachloride	5.0	4.8	4.8	97	95	1.6	65-135	
1,1-Dichloropropene	5.0	5.7	5.3	115	106	7.3	65-135	
Benzene	5.0	6.1	6.2	122	125	2.1	65-135	
1,2-Dichloroethane (EDC)	5.0	3.4	3.3	67	66	1.6	65-135	
Trichloroethene (TCE)	5.0	6.1	6.4	122	128	4.3	65-135	
1,2-Dichloropropane	5.0	5.6	5.6	113	111	1.5	65-135	
Dibromomethane	5.0	4.5	4.3	90	85	5.1	65-135	
Bromodichloromethane	5.0	4.4	4.5	88	89	0.9	65-135	
cis-1,3-Dichloropropene	5.0	4.8	4.6	97	93	4.4	65-135	
Toluene	5.0	6.1	6.4	121	128	5.4	65-135	
Trans-1,3-Dichloropropene	5.0	3.9	3.5	78	71	10.3	65-135	
1,1,2-Trichloroethane	5.0	4.6	4.8	92	95	3.8	65-135	
Tetrachloroethene (PCE)	5.0	6.5	6.6	129	133	2.5	65-135	
1,3-Dichloropropane	5.0	4.5	4.0	90	81	10.7	65-135	
Dibromochloromethane	5.0	4.1	3.7	82	74	9.8	65-135	
1,2-Dibromoethane (EDB)	5.0	5.0	4.5	99	89	10.7	65-135	
Chlorobenzene	5.0	5.3	5.0	106	101	5.3	65-135	
Ethylbenzene	5.0	6.3	6.1	126	123	2.9	65-135	
1,1,1,2-Tetrachloroethane	5.0	4.6	4.2	92	85	8.6	65-135	
Total Xylenes	15.0	18.7	17.8	125	119	4.9	65-135	
Styrene	5.0	5.4	5.1	107	101	5.7	65-135	

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TWELVE TREES PROJECT
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Paulsbo, Washington
Libby Project # L200109-5

QA/QC for Volatile Organic Compounds by EPA Method 8260D in Water

Matrix Spike Sample Identification: L200109-4

	Spiked Conc. (µg/L)	MS Response (µg/L)	MSD Response (µg/L)	MS Recovery (%)	MSD Recovery (%)	RPD (%)	Limits Recovery (%)	Data Flag
Bromoform	5.0	4.0	3.5	81	70	13.4	65-135	
Isopropylbenzene	5.0	6.1	6.0	122	121	0.8	65-135	
1,1,2,2-Tetrachloroethane	5.0	3.7	4.1	75	82	9.6	65-135	
Bromobenzene	5.0	5.0	4.7	101	94	6.7	65-135	
n-Propylbenzene	5.0	5.9	5.9	119	117	1.4	65-135	
1,2,3-Trichloropropane	5.0	3.4	3.4	68	67	2.0	65-135	
2-Chlorotoluene	5.0	5.3	4.8	106	96	9.7	65-135	
1,3,5-Trimethylbenzene	5.0	5.7	5.2	115	105	8.9	65-135	
4-Chlorotoluene	5.0	5.0	4.5	99	91	8.8	65-135	
tert-Butylbenzene	5.0	6.3	5.8	125	115	8.3	65-135	
1,2,4-Trimethylbenzene	5.0	5.2	4.5	104	91	13.3	65-135	
sec-Butylbenzene	5.0	6.2	5.7	125	115	8.7	65-135	
Isopropyltoluene	5.0	6.1	5.2	122	105	15.5	65-135	
1,3-Dichlorobenzene	5.0	4.9	4.4	99	89	10.9	65-135	
1,4-Dichlorobenzene	5.0	4.6	4.1	92	81	13.1	65-135	
n-Butylbenzene	5.0	5.6	4.4	112	88	23.4	65-135	
1,2-Dichlorobenzene	5.0	4.4	4.0	89	80	10.5	65-135	
1,2-Dibromo-3-Chloropropane	5.0	4.7	2.1	94	41	78.6	65-135	S,R
1,2,4-Trichlorolbenzene	5.0	3.7	4.1	73	83	12.1	65-135	
Hexachloro-1,3-butadiene	5.0	5.5	2.4	110	47	79.5	65-135	S,R
Naphthalene	5.0	3.9	4.4	78	88	12.3	65-135	
1,2,3-Trichlorobenzene	5.0	5.7	3.9	113	77	38.0	65-135	R

Surrogate Recovery (%)	MS	MSD	
Dibromofluoromethane	102	89	65-135
1,2-Dichloroethane-d4	67	66	65-135
Toluene-d8	115	120	65-135
4-Bromofluorobenzene	92	85	65-135

ACCEPTABLE RPD IS 35%
"S" Spike recovery outside accepted recovery limits.
"R" High relative percent difference observed.

ANALYSES PERFORMED BY: Paul Burke

Libby Environmental, Inc.

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TWELVE TREES PROJECT
EnviroSound
Paulsbo, Washington
Libby Project # L200109-5

Laboratory Control Sample

	Spiked Conc. (µg/L)	LCS Response (µg/L)	LCS Recovery (%)	LCS Recovery Limits (%)	Data Flag
Dichlorodifluoromethane	5.0	4.0	81	80-120	
Chloromethane	5.0	4.0	80	80-120	
Vinyl chloride	5.0	4.1	83	80-120	
Bromomethane	5.0	5.1	102	80-120	
Chloroethane	5.0	4.2	83	80-120	
Trichlorofluoromethane	5.0	4.3	85	80-120	
1,1-Dichloroethene	5.0	4.4	89	80-120	
Methylene chloride	5.0	5.0	101	80-120	
Methyl *tert*- Butyl Ether (MTBE)	5.0	4.4	89	80-120	
trans-1,2-Dichloroethene	5.0	4.5	90	80-120	
1,1-Dichloroethane	5.0	4.6	93	80-120	
2,2-Dichloropropane	5.0	4.2	83	80-120	
cis-1,2-Dichloroethene	5.0	5.5	110	80-120	
Chloroform	5.0	4.8	97	80-120	
1,1,1-Trichloroethane (TCA)	5.0	4.2	83	80-120	
Carbon tetrachloride	5.0	4.8	96	80-120	
1,1-Dichloropropene	5.0	4.5	90	80-120	
Benzene	5.0	5.2	104	80-120	
1,2-Dichloroethane (EDC)	5.0	4.7	93	80-120	
Trichloroethene (TCE)	5.0	5.7	114	80-120	
1,2-Dichloropropane	5.0	4.7	95	80-120	
Dibromomethane	5.0	4.9	97	80-120	
Bromodichloromethane	5.0	5.3	107	80-120	
cis-1,3-Dichloropropene	5.0	5.1	102	80-120	
Toluene	5.0	5.9	119	80-120	
Trans-1,3-Dichloropropene	5.0	4.6	92	80-120	
1,1,2-Trichloroethane	5.0	5.6	111	80-120	
Tetrachloroethene (PCE)	5.0	4.9	99	80-120	
1,3-Dichloropropane	5.0	5.4	107	80-120	
Dibromochloromethane	5.0	4.9	97	80-120	
1,2-Dibromoethane (EDB)	5.0	5.1	102	80-120	
Chlorobenzene	5.0	4.9	98	80-120	
Ethylbenzene	5.0	4.9	99	80-120	
1,1,1,2-Tetrachloroethane	5.0	4.6	93	80-120	
Total Xylenes	15.0	15.4	103	80-120	
Styrene	5.0	5.2	104	80-120	

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TWELVE TREES PROJECT
EnviroSound
Paulsbo, Washington
Libby Project # L200109-5

Laboratory Control Sample

	Spiked Conc. (µg/L)	LCS Response (µg/L)	LCS Recovery (%)	LCS Recovery Limits (%)	Data Flag
Bromoform	5.0	5.1	102	80-120	
Isopropylbenzene	5.0	4.6	92	80-120	
1,1,2,2-Tetrachloroethane	5.0	5.3	106	80-120	
Bromobenzene	5.0	5.8	116	80-120	
n-Propylbenzene	5.0	4.9	98	80-120	
1,2,3-Trichloropropane	5.0	5.1	102	80-120	
2-Chlorotoluene	5.0	4.9	98	80-120	
1,3,5-Trimethylbenzene	5.0	4.9	98	80-120	
4-Chlorotoluene	5.0	4.8	96	80-120	
tert-Butylbenzene	5.0	5.0	100	80-120	
1,2,4-Trimethylbenzene	5.0	4.8	96	80-120	
sec-Butylbenzene	5.0	4.8	97	80-120	
Isopropyltoluene	5.0	4.8	97	80-120	
1,3-Dichlorobenzene	5.0	5.2	105	80-120	
1,4-Dichlorobenzene	5.0	5.0	100	80-120	
n-Butylbenzene	5.0	4.2	84	80-120	
1,2-Dichlorobenzene	5.0	5.3	107	80-120	
1,2-Dibromo-3-Chloropropane	5.0	5.4	108	80-120	
1,2,4-Trichlorolbenzene	5.0	5.1	103	80-120	
Hexachloro-1,3-butadiene	5.0	4.3	87	80-120	
Naphthalene	5.0	4.2	83	80-120	
1,2,3-Trichlorobenzene	5.0	4.7	94	80-120	
Surrogate Recovery					
Dibromofluoromethane			106	65-135	
1,2-Dichloroethane-d4			92	65-135	
Toluene-d8			117	65-135	
4-Bromofluorobenzene			89	65-135	

ANALYSES PERFORMED BY: Paul Burke