PES Environmental, Inc.
Engineering & Environmental Services
AN NV5 COMPANY

October 18, 2022

827.001.49

Washington State Department of Ecology
Northwest Regional Office
15700 Dayton Avenue North
Shoreline, Washington 98133

Attention: Ms. Valerie Cramer

CLEANUP PROGRESS REPORT, THIRD QUARTER 2022
BSB PROPERTY, KENT, WASHINGTON
CONSENT DECREE No. 11-2-27288-5

Dear Ms. Cramer:

On behalf of B.S.B. Diversified Company, Inc. (BSB), PES Environmental, Inc. (PES) is submitting this quarterly progress report for the cleanup action at the BSB property located at 8202 South 200th Street in Kent, Washington. The cleanup action is being implemented pursuant to the requirements of Consent Decree No. 11-2-27288-5 issued by the State of Washington Department of Ecology (Ecology), effective August 8, 2011.

This cleanup progress report, which is being submitted consistent with Section XI of the CD, covers the period of July 1 through September 30, 2022. This progress report includes discussions of: (1) a list of activities that took place during the reporting period, (2) a description of any deviations from the required tasks not already documented in project plans or reports, (3) any deviations from the cleanup action plan during the reporting period or planned deviations during the upcoming reporting period, (4) a plan for recovering any time lost due to schedule deviations, (5) all raw data received during the reporting period with the sample source identified, and (6) a list of deliverables for the upcoming reporting period if different from the schedule.

ACTIVITIES CONDUCTED DURING THE REPORTING PERIOD

During the third quarter of 2022, BSB conducted the following work:

- Pumped water from the vault through the air stripper treatment system to the sewer throughout the quarter. The system was pumped at an average rate of 1.54 gallons per minute (gpm) in July, 1.27 gpm in August, and 1.13 gpm in September, for an average pumping rate of 1.31 gpm for the quarter. A total of 174,034 gallons of water was discharged to the sewer during the quarter;
- Conducted periodic monitoring and maintenance of the pumping and treatment systems;

- Collected discharge monitoring samples consistent with BSB's King County Industrial Waste (KCIW) permit on August 31 and submitted the samples to Fremont Analytical in Seattle for halogenated volatile organic compound (HVOC) analysis;
- Monitored groundwater levels in all piezometers and monitoring wells consistent with the Compliance Monitoring Plan[1] (as modified by the frequency reduction approved by Ecology[2]) on September 13; and
- Collected groundwater samples consistent with the Compliance Monitoring Plan between September 14 and September 26 and submitted the samples to Fremont Analytical in Seattle for HVOC analysis; and
- On September 15, met Ecology at the Property to view groundwater sampling.

DEVIATIONS FROM REQUIRED TASKS NOT ALREADY REPORTED

No unreported deviations from required tasks occurred during the reporting period.

DEVIATIONS FROM CLEANUP ACTION PLAN

No deviations from the cleanup action plan occurred during the reporting period.

DEVIATIONS FROM THE SCHEDULE

No deviations from the schedule provided in the cleanup action plan occurred during the reporting period.

RAW DATA RECEIVED DURING THE REPORTING PERIOD

Attached are two tables summarizing the monthly vault data (Table 1) and the groundwater elevation data in paired shallow and intermediate monitoring points across the soil-bentonite cutoff wall (Table 2). Attachment A provides the September groundwater quality data and data validation review memorandum for Compliance Monitoring Plan monitoring wells. The data generated during discharge monitoring under BSB's KCIW permit are not included since they have already been transmitted to Ecology.

DELIVERABLES PROJECTED DURING THE UPCOMING REPORTING PERIOD

No deliverables are planned for the fourth quarter of 2022.

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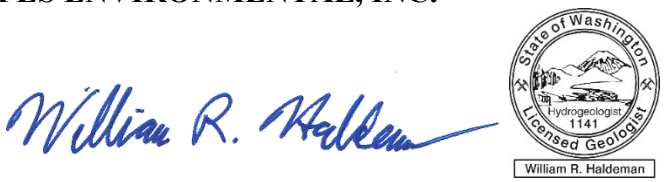
[1] PES Environmental, Inc. 2015. *Compliance Monitoring Plan, Shallow Aquifer Cleanup Action, BSB Property, Kent, Washington.* Submitted on behalf of B.S.B. Diversified Company, Inc., to the Washington State Department of Ecology. December 18.

[2] PES Environmental, Inc. 2017. *Cleanup Progress Report, BSB Property, Kent, Washington, Consent Decree No. 11-2-27288-5.* Submitted on behalf of B.S.B. Diversified Company, Inc., to the Washington State Department of Ecology. January 19.

If you have any questions or comments, please call me at (206) 529-3980.

Sincerely,

PES ENVIRONMENTAL, INC.



William R. Haldeman, LHG, R.G.
Associate Hydrogeologist

Attachments: Table 1 – Monthly Summary of Vault Area Data
Table 2 – Summary of Groundwater Elevations in Paired Monitoring Points
Attachment A – September 2022 Analytical Laboratory Reports and Data Validation Memorandum

cc: Steve Lee, B.S.B. Diversified Company, Inc.
Ronald Burt, Burt Geology & Environmental Applications, PLLC
David DiBoyan, Hexcel Corporation
Chinnathambi Esakkiperumal, Hexcel Corporation

Table 1

Monthly Summary of Vault Area Data
BSB Property, Kent, Washington

	Average Groundwater Elevation (feet)								Groundwater Extraction		SeaTac
	Shallow Wells			Intermediate Wells			Inside Vault		Monthly	Monthly	Airport
Month	Inside P-1	Outside P-3	ΔH	Inside P-2	Outside P-4	ΔH	Cell 6 P-5	Cell 1 P-6	Totals (gallons)	Average Rate (gpm)	Precipitation (inches)
April 2012	24.95	23.04	-1.91	25.36	22.59	-2.77	21.34	–	102,629	2.38	2.68
May 2012	21.14	22.40	1.26	22.65	21.61	-1.04	18.13	–	155,907	3.49	2.05
June 2012	20.30	22.41	2.11	21.80	21.60	-0.20	17.09	–	112,027	2.59	2.96
July 2012	19.74	21.68	1.94	21.12	21.19	0.07	17.25	–	104,169	2.33	1.04
August 2012	19.61	20.84	1.23	20.75	20.57	-0.17	17.42	–	75,009	1.68	0.00
September 2012	19.53	20.24	0.71	20.47	20.21	-0.26	17.65	–	53,519	1.24	0.03
October 2012	20.09	20.88	0.78	20.70	20.49	-0.21	18.59	–	38,014	0.85	6.71
November 2012	22.65	22.64	-0.01	22.84	21.71	-1.13	21.19	–	39,130	0.91	8.28
December 2012	24.81	23.14	-1.68	24.81	22.28	-2.53	21.87	–	52,135	1.17	6.85
2012	**21.43**	**21.92**	**0.49**	**22.28**	**21.36**	**-0.92**	**18.95**	**–**	**732,539**	**1.85**	**30.60**
January 2013	24.18	22.79	-1.39	24.58	22.09	-2.49	19.05	–	91,196	2.04	4.16
February 2013	23.14	22.50	-0.64	23.90	21.84	-2.06	16.79	19.49	99,665	2.47	1.58
March 2013	21.39	22.55	1.16	22.62	21.75	-0.87	16.99	18.56	116,507	2.61	2.74
April 2013	22.01	22.85	0.84	23.04	22.08	-0.96	17.01	19.84	101,804	2.36	5.89
May 2013	21.68	22.17	0.49	22.72	21.60	-1.13	18.95	19.96	76,717	1.72	2.38
June 2013	21.20	21.61	0.42	22.34	21.09	-1.25	16.03	19.27	94,440	2.19	1.30
July 2013	20.51	20.88	0.36	21.56	20.65	-0.90	16.51	18.61	68,125	1.53	0.00
August 2013	20.04	20.41	0.37	21.05	20.28	-0.77	17.16	18.71	65,936	1.48	1.35
September 2013	19.69	21.21	1.52	20.68	20.69	0.01	17.36	18.24	53,781	1.24	6.17
October 2013	20.38	21.83	1.46	21.18	21.20	0.02	18.11	19.07	41,790	0.94	1.54
November 2013	20.76	21.75	1.00	21.48	21.16	-0.32	19.14	19.63	40,384	0.93	3.79
December 2013	20.93	21.59	0.66	21.67	21.04	-0.63	19.51	19.79	44,459	1.00	1.66
2013	**21.33**	**21.84**	**0.52**	**22.24**	**21.29**	**-0.95**	**17.72**	**19.20**	**894,804**	**1.70**	**32.56**
January 2014	21.62	21.90	0.28	22.37	21.27	-1.10	20.04	20.39	51,451	1.15	3.70
February 2014	21.81	22.64	0.83	22.77	21.85	-0.92	20.22	20.18	60,139	1.49	6.11
March 2014	23.58	23.44	-0.15	24.39	22.55	-1.83	21.28	22.01	65,695	1.47	9.44
April 2014	23.94	23.07	-0.87	24.65	22.27	-2.38	22.24	22.52	58,332	1.35	4.18
May 2014	23.87	22.74	-1.13	24.65	22.06	-2.59	22.78	22.43	67,228	1.51	3.15
June 2014	21.83	21.74	-0.09	22.98	21.28	-1.70	21.84	20.08	94,124	2.18	0.73
July 2014	19.98	21.03	1.05	21.37	20.77	-0.61	19.53	18.14	86,821	1.94	0.77
August 2014	19.56	20.84	1.28	20.82	20.59	-0.23	19.00	17.89	72,250	1.62	1.81
September 2014	19.41	20.85	1.44	20.45	20.37	-0.08	18.78	17.84	58,205	1.35	2.23
October 2014	19.59	21.51	1.93	20.50	20.81	0.31	18.75	18.07	55,553	1.24	6.75
November 2014	20.21	22.43	2.22	21.14	21.65	0.52	18.88	18.11	73,872	1.71	4.84
December 2014	20.36	22.88	2.52	21.45	22.16	0.71	18.90	17.93	91,238	2.04	4.79
2014	**21.31**	**22.09**	**0.78**	**22.29**	**21.47**	**-0.82**	**20.19**	**19.63**	**834,908**	**1.59**	**48.50**
January 2015	20.45	22.95	2.51	21.68	22.29	0.60	18.86	18.02	91,055	2.04	3.66
February 2015	20.39	23.19	2.80	21.82	22.45	0.64	18.87	17.86	93,948	2.33	5.27
March 2015	20.33	23.04	2.71	21.70	22.29	0.59	18.64	17.99	104,656	2.34	4.47
April 2015	20.08	22.75	2.67	21.60	22.09	0.49	18.40	17.85	103,400	2.39	2.03
May 2015	19.66	21.82	2.16	21.11	21.48	0.37	18.17	17.85	87,746	1.97	0.58
June 2015	19.43	21.05	1.62	20.69	20.89	0.20	18.03	17.83	71,754	1.66	0.23
July 2015	19.29	20.37	1.08	20.36	20.27	-0.09	17.96	17.78	62,364	1.40	0.09
August 2015	19.14	20.14	1.00	20.08	19.98	-0.10	17.96	17.76	53,726	1.20	3.28
September 2015	19.08	20.61	1.53	19.93	20.18	0.26	18.01	17.78	46,710	1.08	0.83

Table 1

Monthly Summary of Vault Area Data
BSB Property, Kent, Washington

	Average Groundwater Elevation (feet)								Groundwater Extraction		SeaTac
	Shallow Wells			Intermediate Wells			Inside Vault		Monthly	Monthly	Airport
	Inside	Outside		Inside	Outside		Cell 6	Cell 1	Totals	Average	Precipitation
Month	P-1	P-3	ΔH	P-2	P-4	ΔH	P-5	P-6	(gallons)	Rate (gpm)	(inches)
October 2015	19.03	20.98	1.95	19.84	20.39	0.55	18.04	17.76	44,053	0.99	4.81
November 2015	19.47	22.40	2.93	20.33	21.59	1.26	18.25	17.79	59,260	1.37	8.37
December 2015	20.06	23.35	3.30	21.18	22.64	1.46	18.47	17.85	85,791	1.92	11.21
2015	**19.70**	**21.89**	**2.19**	**20.86**	**21.38**	**0.52**	**18.31**	**17.84**	**904,463**	**1.72**	**44.83**
January 2016	20.33	23.33	3.00	21.58	22.69	1.11	18.58	17.93	91,064	2.04	7.45
February 2016	20.52	23.52	3.01	21.95	22.89	0.95	18.56	18.17	92,097	2.21	5.97
March 2016	20.41	23.61	3.21	22.03	23.02	0.99	18.05	17.80	91,359	2.05	5.52
April 2016	20.03	22.65	2.62	21.56	22.33	0.77	18.12	17.92	92,238	2.14	1.19
May 2016	19.63	21.92	2.28	21.01	22.03	1.02	18.08	17.86	77,419	1.73	0.94
June 2016	19.56	21.63	2.07	20.77	21.23	0.46	18.07	17.95	63,280	1.46	1.77
July 2016	19.43	21.36	1.93	20.56	20.89	0.33	18.07	17.85	64,599	1.45	0.72
August 2016	19.32	20.59	1.27	20.34	20.33	-0.01	18.06	17.88	58,816	1.32	0.17
September 2016	19.08	20.61	1.53	19.93	20.18	0.26	18.01	17.78	50,751	1.17	1.05
October 2016	19.37	21.81	2.44	20.27	20.96	0.69	18.10	17.93	57,985	1.30	10.05
November 2016	19.95	22.97	3.02	21.06	22.13	1.07	18.32	18.20	73,164	1.69	6.48
December 2016	20.13	23.12	2.99	21.34	22.29	0.95	18.44	18.12	90,373	2.03	3.87
2016	**19.81**	**22.26**	**2.45**	**21.03**	**21.75**	**0.72**	**18.21**	**17.95**	**903,145**	**1.71**	**45.18**
January 2017	20.23	23.08	2.85	21.54	22.40	0.86	18.48	18.07	92,992	2.08	4.22
February 2017	20.89	23.96	3.07	22.36	23.02	0.66	18.54	18.48	129,374	3.21	8.85
March 2017	20.84	23.81	2.97	22.57	23.10	0.53	17.96	17.90	115,878	2.60	7.31
April 2017	20.89	23.58	2.69	22.73	22.92	0.19	18.07	17.99	141,476	3.27	4.21
May 2017	20.64	23.18	2.53	22.53	22.63	0.10	18.15	17.98	126,185	2.83	2.28
June 2017	20.03	22.38	2.36	21.73	22.00	0.27	18.15	17.99	90,434	2.09	1.52
July 2017	19.74	21.32	1.58	21.18	21.29	0.10	18.14	18.12	70,849	1.59	0.00
August 2017	20.03	20.75	0.72	21.11	20.78	-0.32	18.25	18.87	46,350	1.04	0.02
September 2017	19.87	20.73	0.86	20.85	20.56	-0.29	18.51	18.79	43,435	1.01	0.61
October 2017	19.72	21.34	1.62	20.58	20.79	0.21	18.57	18.52	45,017	1.01	4.80
November 2017	21.02	22.70	1.68	21.63	21.88	0.25	19.87	19.92	29,036	0.67	8.63
December 2017	21.11	22.98	1.87	22.04	22.30	0.27	19.79	19.88	62,616	1.40	5.43
2017	**20.42**	**22.48**	**2.07**	**21.74**	**21.97**	**0.24**	**18.54**	**18.54**	**993,642**	**1.89**	**47.88**
January 2018	22.57	23.61	1.04	23.19	22.86	-0.33	20.85	21.74	32,062	0.72	8.12
February 2018	22.99	23.35	0.36	23.78	22.71	-1.06	21.92	22.00	48,222	1.20	2.16
March 2018	21.68	22.97	1.29	23.00	22.26	-0.73	21.26	19.91	108,566	2.43	2.44
April 2018	20.48	23.26	2.78	22.21	22.51	0.30	18.48	18.25	109,415	2.53	5.69
May 2018	19.87	22.22	2.35	21.56	21.85	0.30	18.14	17.98	88,365	1.98	0.12
June 2018	19.58	21.53	1.96	21.00	21.25	0.26	18.04	18.02	65,272	1.51	0.63
July 2018	19.59	20.91	1.32	20.79	20.76	-0.03	18.10	18.36	50,594	1.13	0.05
August 2018	19.84	20.42	0.58	20.77	20.38	-0.39	18.18	18.98	33,061	0.74	0.20
September 2018	19.66	20.48	0.83	20.61	20.29	-0.32	18.58	18.62	52,057	1.21	1.04
October 2018	19.03	21.14	2.11	20.08	20.59	0.50	18.59	17.82	52,455	1.18	3.78
November 2018	19.12	21.85	2.73	20.19	21.17	0.98	18.66	17.87	47,830	1.11	5.42
December 2018	20.10	22.73	2.62	20.99	21.87	0.89	18.79	19.01	39,334	0.88	6.08
2018	**20.37**	**22.04**	**1.66**	**21.51**	**21.54**	**0.03**	**19.13**	**19.05**	**727,233**	**1.51**	**35.73**
January 2019	21.14	23.04	1.91	22.09	22.37	0.28	19.76	20.05	53,727	1.20	3.83
February 2019	22.13	23.45	1.32	22.87	22.65	-0.21	20.48	20.97	72,183	1.79	4.62

Table 1

Monthly Summary of Vault Area Data
BSB Property, Kent, Washington

	Average Groundwater Elevation (feet)								Groundwater Extraction		SeaTac
	Shallow Wells			Intermediate Wells			Inside Vault		Monthly	Monthly	Airport
Month	Inside P-1	Outside P-3	ΔH	Inside P-2	Outside P-4	ΔH	Cell 6 P-5	Cell 1 P-6	Totals (gallons)	Average Rate (gpm)	Precipitation (inches)
March 2019	20.27	22.69	2.42	21.84	22.11	0.27	19.04	18.21	113,941	2.55	1.37
April 2019	20.19	22.84	2.65	21.66	22.02	0.36	18.16	18.21	87,742	2.03	3.53
May 2019	19.78	21.97	2.19	21.32	21.48	0.16	18.16	17.94	84,096	1.88	0.62
June 2019	20.71	21.35	0.64	21.56	20.98	-0.57	18.33	19.76	30,719	0.71	0.90
July 2019	20.24	21.17	0.93	21.38	20.78	-0.60	18.86	18.89	63,230	1.42	1.15
August 2019	19.58	20.71	1.13	20.75	20.46	-0.29	18.82	18.20	55,797	1.25	1.20
September 2019	19.46	21.66	2.19	20.60	20.90	0.30	18.82	18.07	53,049	1.23	3.32
October 2019	19.54	21.94	2.40	20.63	21.20	0.57	18.85	18.02	58,116	1.30	3.67
November 2019	19.58	21.92	2.34	20.76	21.32	0.55	18.89	18.09	60,461	1.40	1.71
December 2019	19.80	22.59	2.79	20.99	21.82	0.83	18.98	18.31	64,675	1.45	7.96
2019	**20.20**	**22.11**	**1.91**	**21.37**	**21.51**	**0.14**	**18.93**	**18.73**	**797,736**	**1.52**	**33.88**
January 2020	20.46	23.55	3.10	21.67	22.59	0.92	19.10	18.56	80,888	1.81	9.23
February 2020	20.65	23.44	2.79	22.06	22.71	0.65	19.21	18.52	93,430	2.24	4.05
March 2020	20.39	23.01	2.62	21.81	22.20	0.39	19.21	18.44	84,472	1.89	3.17
April 2020	20.10	22.55	2.45	21.50	23.34	1.84	19.18	18.19	71,683	1.66	1.70
May 2020	20.23	22.41	2.17	21.50	21.75	0.25	19.14	18.53	68,401	1.53	3.12
June 2020	20.26	22.50	2.23	21.53	21.66	0.13	19.15	18.43	67,843	1.57	2.28
July 2020	19.74	21.52	1.78	21.09	21.12	0.03	19.08	17.99	68,838	1.54	0.17
August 2020	19.45	20.81	1.36	20.68	20.61	-0.06	18.96	17.93	60,038	1.34	0.31
September 2020	19.90	20.77	0.87	20.74	20.36	-0.38	18.90	18.83	36,383	0.84	2.48
October 2020	19.35	21.41	2.06	20.37	20.67	0.30	18.91	17.92	54,523	1.22	2.56
November 2020	19.89	22.49	2.59	20.79	21.36	0.57	18.96	18.46	49,974	1.16	5.58
December 2020	19.88	22.97	3.09	21.06	21.89	0.82	19.00	18.12	67,891	1.52	6.65
2020	**20.04**	**22.22**	**2.18**	**21.25**	**21.67**	**0.42**	**19.07**	**18.35**	**804,365**	**1.67**	**41.30**
January 2021	20.33	23.58	3.25	21.65	22.66	1.02	19.10	18.36	74,200	1.66	8.75
February 2021	20.75	23.47	2.72	22.06	22.53	0.47	19.18	18.81	87,530	2.17	4.68
March 2021	20.43	23.13	2.70	21.93	22.27	0.34	18.62	18.27	87,880	1.97	2.61
April 2021	20.22	22.55	2.32	21.69	21.86	0.17	18.39	18.25	78,827	1.82	1.03
May 2021	19.97	22.23	2.25	21.33	21.48	0.15	18.24	18.14	71,735	1.61	1.12
June 2021	19.82	22.09	2.27	21.13	21.32	0.18	18.13	18.06	63,518	1.47	1.91
July 2021	19.69	21.05	1.36	20.89	20.81	-0.09	18.07	18.13	55,726	1.25	0.00
August 2021	19.64	20.40	0.76	20.67	20.33	-0.34	18.11	18.32	48,321	1.08	0.11
September 2021	19.55	20.54	0.99	20.43	20.29	-0.14	18.17	18.32	42,223	0.98	3.02
October 2021	20.41	22.11	1.70	21.03	21.28	0.25	18.43	19.35	34,399	0.77	5.76
November 2021	22.23	23.53	1.30	22.58	22.58	0.00	19.77	21.19	36,262	0.84	10.26
December 2021	22.66	23.62	0.96	22.93	22.86	-0.06	20.82	20.62	61,552	1.38	4.08
2021	**20.08**	**22.36**	**2.03**	**21.53**	**21.69**	**0.16**	**18.75**	**18.82**	**742,173**	**1.54**	**43.33**
January 2022	21.68	23.67	1.99	22.89	22.69	-0.20	20.67	19.61	98,479	2.21	7.16
February 2022	20.08	22.65	2.57	21.64	22.01	0.38	19.23	18.63	72,248	1.79	5.32
March 2022	21.57	23.49	1.93	22.72	22.68	-0.04	19.62	20.00	81,169	1.82	3.32
April 2022	20.46	22.88	2.42	21.80	21.94	0.14	19.06	18.15	85,698	1.98	2.71
May 2022	20.37	22.83	2.46	21.66	21.70	0.05	18.64	18.14	92,174	2.06	3.82
June 2022	20.39	22.73	2.33	21.69	21.75	0.06	18.44	18.34	76,831	1.78	2.67
July 2022	19.80	21.56	1.75	21.18	21.20	0.02	18.27	17.99	68,593	1.54	0.18
August 2022	19.64	20.91	1.27	20.82	20.72	-0.09	18.15	18.04	56,838	1.27	0.05

Table 1

Monthly Summary of Vault Area Data
BSB Property, Kent, Washington

Month	Average Groundwater Elevation (feet)								Groundwater Extraction		SeaTac Airport Precipitation (inches)
	Shallow Wells			Intermediate Wells			Inside Vault		Monthly Totals (gallons)	Monthly Average Rate (gpm)	
	Inside P-1	Outside P-3	ΔH	Inside P-2	Outside P-4	ΔH	Cell 6 P-5	Cell 1 P-6			
September 2022	19.26	20.43	1.17	20.50	20.35	-0.14	18.11	18.09	48,603	1.13	0.25
2022	**20.36**	**22.35**	**1.99**	**21.65**	**21.67**	**0.02**	**18.91**	**18.56**	**680,633**	**1.73**	**25.48**

Notes: 1. Elevations in feet relative to the North American Vertical Datum of 1988 (NAVD 88).
2. Inside or outside refers to the location of the piezometer realtive to the soil-bentonite cutoff wall.
4. ΔH = groundwater elevation difference; positive = inward gradient, which is shaded in blue, and negative = outward gradient, which is shaded in red.
3. gpm = gallons per minute.
4. – = not available.
5. Groundwater extracted from Cell 6 through 2/12/13, from Cells 1 and 6 from 2/13/13 through 7/20/13 and from Cell 1 after 7/20/13.
6. P-1 transducer faulty during November and December 2021; groundwater elevations represent averages of two electronic probe measurements each month.

Table 2

Summary of Groundwater Elevations in Paired Monitoring Points
BSB Property, Kent, Washington

Date	Pump Rate (gpm)	Monthly Rainfall (inches)	Groundwater Elevations																
			Northeast Corner			North Boundary			Northwest Corner			Southwest Corner			East Boundary			Center	
			Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	ΔH
Shallow																			
2/6/12	–	3.63	21.29	23.03	1.74	23.36	23.24	-0.12	24.84	24.71	-0.13	23.67	25.15	1.48	23.60	23.45	-0.15	–	–
2/24/12	–	–	20.47	23.20	2.73	22.53	24.52	1.99	24.15	24.82	0.67	22.88	25.19	2.31	19.75	23.60	3.85	–	–
3/13/12	–	7.20	23.69	23.51	-0.18	24.77	23.49	-1.28	25.83	25.35	-0.48	24.79	25.52	0.73	23.51	24.07	0.56	–	–
3/27/12	0.6	–	26.28	23.51	-2.77	26.53	22.91	-3.62	26.82	24.91	-1.91	26.20	25.32	-0.88	26.18	23.60	-2.58	–	–
4/9/12	2.0	2.68	25.76	23.13	-2.63	26.36	22.84	-3.52	26.82	23.90	-2.92	26.06	25.33	-0.73	25.59	23.57	-2.02	–	–
4/26/12	3.0	–	22.84	23.16	0.32	24.65	24.22	-0.43	25.89	24.89	-1.00	24.75	25.23	0.48	22.34	23.58	1.24	–	–
5/4/12	4.0	2.05	22.09	22.95	0.86	23.86	22.87	-0.99	25.27	24.92	-0.35	24.13	25.26	1.13	21.90	23.55	1.65	–	–
5/7/12	4.0	–	21.96	22.76	0.80	23.85	22.59	-1.26	25.17	24.66	-0.51	24.03	25.08	1.05	21.63	23.28	1.65	–	–
5/10/12	4.0	–	21.44	22.36	0.92	23.37	22.22	-1.15	24.75	24.37	-0.38	23.64	24.85	1.21	21.10	22.93	1.83	–	–
6/11/12	2.5	2.96	20.31	22.44	2.13	21.84	22.22	0.38	22.40	24.16	1.76	22.26	24.56	2.30	19.98	22.92	2.94	–	–
6/25/12	2.5	–	20.28	22.45	2.17	21.65	22.24	0.59	22.78	24.08	1.30	22.01	24.40	2.39	19.97	22.89	2.92	–	–
6/26/12	2.5	–	21.02	22.27	1.25	22.00	22.05	0.05	22.92	23.99	1.07	22.26	24.36	2.10	20.74	22.75	2.01	–	–
7/3/12	2.5	1.04	19.80	21.89	2.09	21.21	22.01	0.80	22.44	23.71	1.27	21.71	24.07	2.36	19.55	22.51	2.96	–	–
7/18/12	2.5	–	19.57	21.12	1.55	20.82	21.11	0.29	21.99	23.11	1.12	21.32	23.49	2.17	19.31	21.94	2.63	–	–
8/2/12	2.0	0.00	19.48	20.93	1.45	20.61	20.91	0.30	21.61	22.88	1.27	21.07	23.25	2.18	19.24	21.77	2.53	–	–
8/9/12	2.0	–	19.37	20.69	1.32	20.46	20.79	0.33	21.42	22.65	1.23	20.90	23.00	2.10	19.11	21.57	2.46	–	–
8/20/12	1.5	–	19.53	20.50	0.97	20.48	20.48	0.00	21.33	22.33	1.00	20.92	22.71	1.79	19.36	21.40	2.04	–	–
9/19/12	1.0	0.03	19.34	19.97	0.63	20.16	19.98	-0.18	20.85	21.65	0.80	20.52	22.02	1.50	19.23	20.90	1.67	–	–
10/8/12	1.0	6.71	19.74	19.83	0.09	20.43	19.91	-0.52	20.96	21.34	0.38	20.74	21.70	0.96	19.71	20.76	1.05	–	–
11/9/12	1.0	8.28	22.01	22.50	0.49	22.60	20.47	-2.13	22.93	23.27	0.34	22.56	23.60	1.04	21.84	22.45	0.61	–	–
12/3/12	1.0	6.85	23.95	23.38	-0.57	24.48	22.72	-1.76	24.69	25.10	0.41	24.12	25.39	1.27	24.08	23.82	-0.26	–	–
2012 Shallow Averages			**21.59**	**22.14**	**0.55**	**22.70**	**21.88**	**-0.82**	**23.51**	**23.73**	**0.21**	**22.88**	**24.17**	**1.29**	**21.66**	**22.71**	**1.05**	**–**	**–**
1/4/13	1.5	4.16	24.69	23.02	-1.67	25.34	22.79	-2.55	25.69	24.74	-0.95	25.07	25.11	0.04	24.63	23.29	-1.34	–	–
1/24/13	3.0	–	22.54	22.14	-0.40	23.78	22.18	-1.60	24.56	24.31	-0.25	23.92	24.76	0.84	22.38	22.96	0.58	–	–
2/1/13	2.0	1.58	23.99	22.89	-1.10	25.11	22.35	-2.76	25.73	24.76	-0.97	24.69	25.10	0.41	23.75	23.42	-0.33	–	–
3/1/13	3.0	2.74	21.48	22.44	0.96	23.08	22.40	-0.68	24.16	24.23	0.07	23.15	24.58	1.43	21.15	23.06	1.91	–	–
4/5/13	2.8	5.89	20.17	22.12	1.95	21.83	22.26	0.43	23.10	24.04	0.94	22.29	24.44	2.15	19.92	22.99	3.07	–	–
5/3/13	3.0	2.38	20.89	22.08	1.19	22.59	22.06	-0.53	23.76	24.08	0.32	22.91	24.61	1.70	20.53	22.92	2.39	–	–
5/14/13	0.6	–	21.33	21.88	0.55	22.44	21.88	-0.56	23.32	23.82	0.50	22.72	24.23	1.51	21.27	22.55	1.28	–	–
6/7/13	1.8	1.30	21.40	21.49	0.09	22.70	21.46	-1.24	23.63	23.56	-0.07	22.90	23.93	1.03	21.23	22.30	1.07	–	–
7/12/13	2.0	0.00	19.98	20.86	0.88	21.22	20.82	-0.40	22.24	22.77	0.53	21.62	23.13	1.51	19.83	21.75	1.92	–	–
8/6/13	1.5	1.35	20.10	20.29	0.19	21.09	20.29	-0.80	21.88	22.06	0.18	21.45	22.45	1.00	20.08	21.21	1.13	–	–
9/9/13	1.5	6.17	19.55	21.16	1.61	20.51	20.83	0.32	21.25	22.50	1.25	20.88	22.97	2.09	19.46	21.76	2.30	–	–
10/11/13	1.0	1.54	20.12	22.09	1.97	20.91	21.24	0.33	21.61	23.49	1.88	21.25	23.88	2.63	20.05	22.55	2.50	–	–

Table 2

Summary of Groundwater Elevations in Paired Monitoring Points
BSB Property, Kent, Washington

	Pump	Monthly	Groundwater Elevations																
	Rate	Rainfall	Northeast Corner			North Boundary			Northwest Corner			Southwest Corner			East Boundary			Center	
Date	(gpm)	(inches)	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	ΔH
11/8/13	1.0	3.79	20.45	21.87	1.42	21.16	21.78	0.62	21.69	23.40	1.71	21.46	23.78	2.32	20.48	22.57	2.09	–	–
12/6/13	1.0	1.66	20.85	21.40	0.55	21.55	21.58	0.03	22.04	23.01	0.97	21.70	23.53	1.83	20.82	22.14	1.32	–	–
2013 Shallow Averages			**21.14**	**21.81**	**0.67**	**22.26**	**21.66**	**-0.60**	**23.07**	**23.55**	**0.49**	**22.45**	**23.96**	**1.51**	**20.99**	**22.50**	**1.50**	**–**	**–**
1/13/14	1.0	3.70	21.69	22.28	0.59	22.61	21.69	-0.92	23.06	23.90	0.84	22.51	24.39	1.88	21.58	22.85	1.27	–	–
2/7/14	1.5	6.11	21.00	21.42	0.42	22.05	21.50	-0.55	22.76	22.49	-0.27	22.33	24.03	1.70	20.90	22.47	1.57	–	–
3/14/14	1.5	9.44	23.54	23.36	-0.18	24.64	23.36	-1.28	25.35	25.53	0.18	24.62	25.79	1.17	23.25	24.18	0.93	–	–
4/11/14	1.5	4.18	23.46	22.49	-0.97	24.60	22.48	-2.12	25.32	24.58	-0.74	24.57	25.05	0.48	23.35	23.29	-0.06	–	–
5/8/14	1.5	3.15	24.20	23.05	-1.15	26.07	22.92	-3.15	26.02	25.02	-1.00	25.22	25.41	0.19	23.98	23.86	-0.12	–	–
6/5/14	1.5	0.73	22.71	21.59	-1.12	23.87	21.59	-2.28	24.44	23.56	-0.88	23.88	24.12	0.24	22.63	22.45	-0.18	–	–
7/3/14	2.5	0.77	20.00	20.98	0.98	21.40	20.97	-0.43	22.51	22.85	0.34	21.88	23.27	1.39	19.95	21.80	1.85	–	–
8/6/14	1.75	1.81	19.48	20.50	1.02	20.60	20.47	-0.13	21.55	22.16	0.61	21.07	22.55	1.48	19.45	21.34	1.89	–	–
9/4/14	1.48	2.23	19.29	21.15	1.86	20.24	20.84	0.60	21.04	22.16	1.12	20.69	22.61	1.92	19.23	21.57	2.34	–	–
10/10/14	1.13	6.75	19.29	20.39	1.10	20.09	20.33	0.24	20.74	21.79	1.05	20.48	22.28	1.80	19.24	21.20	1.96	–	–
11/13/14	1.80	4.84	20.14	22.14	2.00	21.20	21.90	0.70	21.90	23.66	1.76	21.48	24.11	2.63	19.81	22.76	2.95	–	–
12/5/14	2.00	4.79	20.07	22.16	2.09	21.18	22.18	1.00	21.97	23.91	1.94	21.50	24.44	2.94	19.77	22.90	3.13	–	–
2014 Shallow Averages			**21.24**	**21.79**	**0.55**	**22.38**	**21.69**	**-0.69**	**23.06**	**23.47**	**0.41**	**22.52**	**24.00**	**1.49**	**21.10**	**22.56**	**1.46**	**–**	**–**
1/14/15	2.00	3.66	20.16	22.52	2.36	21.50	22.45	0.95	22.50	24.27	1.77	21.88	24.81	2.93	19.83	23.15	3.32	–	–
2/13/15	2.50	5.27	20.51	23.20	2.69	22.05	23.58	1.53	23.08	25.10	2.02	22.31	25.52	3.21	20.10	23.87	3.77	–	–
3/13/15	2.29	4.47	19.84	22.27	2.43	21.17	22.22	1.05	22.17	24.11	1.94	21.68	24.64	2.96	19.68	22.81	3.13	–	–
4/10/15	2.60	2.03	20.10	22.37	2.27	21.52	22.32	0.80	22.63	24.27	1.64	22.04	24.79	2.75	19.95	23.13	3.18	–	–
5/1/15	2.00	0.58	19.79	22.02	2.23	21.12	21.95	0.83	22.16	23.83	1.67	21.64	24.33	2.69	19.72	22.76	3.04	–	–
6/5/15	1.85	0.23	19.41	21.18	1.77	20.49	21.12	0.63	21.35	22.79	1.44	20.99	23.25	2.26	19.38	21.96	2.58	–	–
7/2/15	1.60	0.09	19.22	20.45	1.23	20.22	20.46	0.24	21.02	21.98	0.96	20.68	22.39	1.71	19.22	21.34	2.12	–	–
8/7/15	1.30	3.28	19.07	19.85	0.78	19.93	19.85	-0.08	20.61	21.11	0.50	20.34	21.54	1.20	19.05	20.75	1.70	–	–
9/4/15	1.09	0.83	19.04	20.69	1.65	19.78	20.41	0.63	20.37	21.44	1.07	20.14	21.88	1.74	19.02	21.22	2.20	–	–
10/16/15	0.92	4.81	18.88	20.98	2.10	19.59	20.67	1.08	20.13	21.53	1.40	19.99	22.03	2.04	18.88	21.50	2.62	–	–
11/6/15	1.20	8.37	19.02	21.71	2.69	19.68	21.36	1.68	20.20	22.48	2.28	20.04	23.02	2.98	18.91	22.09	3.18	–	–
12/4/15	1.67	11.21	19.61	22.58	2.97	20.50	22.47	1.97	21.07	24.10	3.03	20.91	24.57	3.66	19.39	23.33	3.94	–	–
2015 Shallow Averages			**19.55**	**21.65**	**2.10**	**20.63**	**21.57**	**0.94**	**21.44**	**23.08**	**1.64**	**21.05**	**23.56**	**2.51**	**19.43**	**22.33**	**2.90**	**–**	**–**
1/16/16	2.10	7.45	20.06	23.06	3.00	21.27	NM	–	22.06	24.90	2.84	21.71	25.32	3.61	19.82	NM	–	–	–
2/5/16	0.26	5.97	20.45	23.48	3.03	21.78	23.40	1.62	22.70	25.43	2.73	22.15	25.85	3.70	20.24	24.20	3.96	–	–
3/4/16	2.46	5.52	20.50	23.67	3.17	22.15	23.56	1.41	23.17	25.61	2.44	22.48	26.00	3.52	20.12	24.37	4.25	–	–
4/1/16	1.69	1.19	20.07	22.80	2.73	21.59	22.78	1.19	22.75	24.73	1.98	22.12	25.22	3.10	19.91	23.52	3.61	–	–
5/6/16	1.94	0.94	19.62	21.82	2.20	20.82	21.80	0.98	21.76	23.55	1.79	21.39	24.02	2.63	19.56	22.61	3.05	–	–
6/2/16	1.61	1.77	19.40	21.57	2.17	20.47	21.59	1.12	21.34	22.88	1.54	21.02	23.32	2.30	19.40	22.25	2.85	–	–

Table 2

Summary of Groundwater Elevations in Paired Monitoring Points
BSB Property, Kent, Washington

Date	Pump Rate (gpm)	Monthly Rainfall (inches)	Groundwater Elevations																
			Northeast Corner			North Boundary			Northwest Corner			Southwest Corner			East Boundary			Center	
			Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	ΔH
7/7/16	1.47	0.72	19.21	21.20	1.99	20.25	21.06	0.81	21.04	22.34	1.30	20.78	22.80	2.02	19.18	21.95	2.77	–	–
8/5/16	1.40	0.17	19.18	20.68	1.50	20.14	20.59	0.45	20.86	21.84	0.98	20.74	22.20	1.46	19.22	21.48	2.26	–	–
9/26/16	1.20	1.05	18.98	20.33	1.35	NM	20.18	–	20.44	21.09	0.65	20.29	21.45	1.16	19.03	21.04	2.01	–	–
10/14/16	1.31	10.05	20.35	22.03	1.68	NM	21.71	–	20.61	21.87	1.26	20.49	22.24	1.75	19.24	22.64	3.40	–	–
11/11/16	1.60	6.48	19.97	22.70	2.73	NM	22.48	–	21.53	24.06	2.53	21.26	24.58	3.32	19.82	23.31	3.49	–	–
12/2/16	1.80	3.87	19.80	22.80	3.00	20.86	22.72	1.86	21.63	24.39	2.76	21.31	24.90	3.59	19.75	23.38	3.63	–	–
2016 Shallow Averages			**19.80**	**22.18**	**2.38**	**21.04**	**21.99**	**1.18**	**21.66**	**23.56**	**1.90**	**21.31**	**23.99**	**2.68**	**19.61**	**22.80**	**3.21**	**–**	**–**
1/13/17	2.00	4.22	19.84	22.43	2.59	20.96	22.21	1.25	21.74	24.06	2.32	21.29	24.51	3.22	19.67	22.95	3.28	–	–
2/3/17	2.07	8.85	19.88	22.69	2.81	21.51	22.68	1.17	22.64	24.59	1.95	22.05	25.13	3.08	19.83	23.52	3.69	–	–
3/3/17	3.30	7.31	20.40	23.41	3.01	21.95	23.51	1.56	23.06	25.59	2.53	22.33	25.77	3.44	20.02	24.26	4.24	–	–
4/6/17	1.96	3.27	–	–	–	22.92	23.76	0.84	–	–	–	–	–	–	–	–	–	–	–
5/4/17	3.33	2.28	20.64	23.37	2.73	22.39	23.29	0.90	23.78	24.94	1.16	22.95	25.38	2.43	20.34	23.88	3.54	–	–
6/27/17	2.01	1.52	19.52	21.69	2.17	20.62	21.77	1.15	21.50	23.16	1.66	21.20	23.50	2.30	19.55	22.37	2.82	–	–
7/13/17	1.55	0.00	19.56	21.21	1.65	20.78	21.19	0.41	–	–	–	–	–	–	–	–	–	–	–
9/25/17	1.05	0.59	19.56	20.67	1.11	20.99	20.26	-0.73	20.60	21.46	0.86	20.37	22.54	2.17	19.40	22.38	2.98	–	–
10/11/17	1.05	4.80	19.37	20.49	1.12	20.17	20.31	0.14	–	–	–	–	–	–	–	–	–	–	–
11/6/17	1.04	8.63	20.14	22.23	2.09	NM	21.87	–	–	–	–	–	–	–	–	–	–	–	–
12/14/17	1.70	5.43	20.61	22.15	1.54	21.56	22.11	0.55	22.17	23.90	1.73	21.99	24.43	2.44	20.62	22.94	2.32	–	–
2017 Shallow Averages			**19.95**	**22.03**	**2.08**	**21.39**	**22.09**	**0.72**	**22.21**	**23.96**	**1.74**	**21.74**	**24.47**	**2.73**	**19.92**	**23.19**	**3.27**	**–**	**–**
3/12/18	1.43	2.44	21.89	22.89	1.00	23.21	22.85	-0.36	24.04	24.41	0.37	23.49	24.66	1.17	21.69	23.40	1.71	–	–
6/30/18	1.40	0.63	19.35	21.10	1.75	NM	21.03	–	21.31	22.39	1.08	20.99	22.82	1.83	19.46	21.91	2.45	–	–
9/17/18	1.50	1.04	19.04	20.88	1.84	19.90	20.49	0.59	20.62	20.93	0.31	20.37	21.45	1.08	19.18	21.15	1.97	–	–
12/10/18	1.19	6.08	19.41	22.37	2.96	20.23	22.03	1.80	20.81	23.03	2.22	21.02	23.72	2.70	19.49	22.76	3.27	–	–
2018 Shallow Averages			**19.92**	**21.81**	**1.89**	**21.11**	**21.60**	**0.68**	**21.70**	**22.69**	**1.00**	**21.47**	**23.16**	**1.70**	**19.96**	**22.31**	**2.35**	**–**	**–**
3/18/19	2.50	1.37	20.10	22.60	2.50	NM	22.42	–	22.80	24.06	1.26	22.18	24.58	2.40	19.98	23.16	3.18	–	–
6/21/19	0.75	0.90	21.63	21.69	0.06	NM	21.34	–	22.34	22.38	0.04	22.18	22.85	0.67	21.76	21.96	0.20	–	–
9/3/19	1.27	3.32	19.19	20.35	1.16	20.10	20.16	0.06	20.89	21.07	0.18	20.61	21.51	0.90	19.28	21.05	1.77	–	–
12/9/19	1.30	7.96	19.28	21.82	2.54	20.14	21.54	1.40	20.79	22.57	1.78	20.54	23.08	2.54	19.32	22.13	2.81	–	–
2019 Shallow Averages			**20.05**	**21.62**	**1.57**	**20.12**	**21.37**	**0.73**	**21.71**	**22.52**	**0.82**	**21.38**	**23.01**	**1.63**	**20.09**	**22.08**	**1.99**	**–**	**–**
3/2/20	2.25	3.17	20.39	22.92	2.53	21.47	22.86	1.39	22.27	24.54	2.27	21.91	25.00	3.09	20.36	23.35	2.99	–	–
6/4/20	0.00	2.28	19.93	22.21	2.28	21.10	22.01	0.91	NM	22.13	–	21.50	23.85	2.35	19.94	22.68	2.74	–	–
9/4/20	1.30	2.48	19.14	20.40	1.26	20.10	20.33	0.23	20.89	21.28	0.39	20.64	21.69	1.05	19.18	21.15	1.97	–	–
12/2/20	1.40	6.65	19.83	22.39	2.56	20.74	22.06	1.32	21.36	23.10	1.74	21.14	23.70	2.56	19.76	22.69	2.93	–	–
2020 Shallow Averages			**19.82**	**21.98**	**2.16**	**20.85**	**21.82**	**0.96**	**21.51**	**22.76**	**1.47**	**21.30**	**23.56**	**2.26**	**19.81**	**22.47**	**2.66**	**–**	**–**
3/8/21	2.19	2.61	20.32	23.09	2.77	21.76	23.06	1.30	22.74	24.75	2.01	22.26	25.18	2.92	20.17	23.55	3.38	–	–

Table 2

Summary of Groundwater Elevations in Paired Monitoring Points
BSB Property, Kent, Washington

Date	Pump Rate (gpm)	Monthly Rainfall (inches)	Groundwater Elevations																
			Northeast Corner			North Boundary			Northwest Corner			Southwest Corner			East Boundary			Center	
			Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	ΔH
6/23/21	1.33	1.91	19.62	21.69	2.07	20.73	21.49	0.76	21.57	21.72	0.15	21.23	23.20	1.97	19.58	22.20	2.62	–	–
9/13/21	0.99	3.02	19.43	19.92	0.49	19.99	19.81	-0.18	20.59	20.68	0.09	20.34	21.10	0.76	19.28	20.68	1.40	–	–
12/15/21	1.40	4.08	22.91	23.48	0.57	22.84	23.78	0.94	23.26	25.16	1.90	23.03	25.63	2.60	21.86	24.00	2.14	–	–
2021 Shallow Averages			**20.57**	**22.05**	**1.48**	**21.33**	**22.04**	**0.70**	**22.04**	**23.08**	**1.04**	**21.72**	**23.78**	**2.06**	**20.22**	**22.61**	**2.39**	–	–
3/9/22	1.21	3.32	21.94	23.23	1.29	22.76	23.09	0.33	23.24	24.90	1.66	22.98	25.20	2.22	21.96	23.48	1.52	–	–
6/20/22	1.76	2.67	20.27	22.44	2.17	21.68	22.07	0.39	22.49	23.20	0.71	22.00	23.41	1.41	20.51	22.44	1.93	–	–
9/13/22	1.17	0.25	19.26	20.32	1.06	20.16	20.28	0.12	20.77	21.09	0.32	20.63	21.43	0.80	19.30	21.04	1.74	–	–
2022 Shallow Averages			**20.49**	**22.00**	**1.51**	**21.53**	**21.81**	**0.28**	**22.17**	**23.06**	**0.90**	**21.87**	**23.35**	**1.48**	**20.59**	**22.32**	**1.73**	–	–
Intermediate																			
2/6/12	–	3.63	23.07	22.27	-0.80	23.34	22.55	-0.79	23.57	23.94	0.37	23.62	25.09	1.47	22.91	23.50	0.59	23.42	–
2/24/12	–	–	22.26	22.41	0.15	22.53	22.66	0.13	22.80	24.00	1.20	22.85	25.18	2.33	22.12	23.59	1.47	22.63	–
3/13/12	–	7.20	24.52	22.53	-1.99	24.64	22.45	-2.19	24.74	24.14	-0.60	24.79	25.54	0.75	24.46	23.82	-0.64	24.49	–
3/27/12	0.6	–	26.11	22.46	-3.65	26.14	22.71	-3.43	26.20	24.13	-2.07	26.18	25.28	-0.90	26.13	23.64	-2.49	26.14	–
4/9/12	2.0	2.68	25.85	22.32	-3.53	25.92	22.14	-3.78	26.02	24.10	-1.92	26.02	25.30	-0.72	25.86	23.58	-2.28	25.95	–
4/26/12	3.0	–	24.22	22.20	-2.02	24.43	22.18	-2.25	24.67	23.92	-0.75	24.70	25.24	0.54	24.11	23.47	-0.64	24.44	–
5/4/12	4.0	2.05	23.42	21.83	-1.59	23.85	22.45	-1.40	24.05	23.88	-0.17	24.08	25.25	1.17	23.55	23.35	-0.20	23.92	–
5/7/12	4.0	–	23.27	21.79	-1.48	23.74	22.31	-1.43	23.95	23.82	-0.13	23.99	25.05	1.06	23.40	23.27	-0.13	23.81	–
5/10/12	4.0	–	22.87	21.54	-1.33	23.33	22.05	-1.28	23.56	23.58	0.02	23.59	24.81	1.22	22.99	22.95	-0.04	23.43	–
6/11/12	2.5	2.96	21.57	21.51	-0.06	22.01	21.95	-0.06	22.91	23.37	0.46	22.23	24.54	2.31	21.71	22.93	1.22	22.08	–
6/25/12	2.5	–	21.39	21.42	0.03	21.81	21.90	0.09	21.97	23.21	1.24	21.99	24.43	2.44	21.55	22.84	1.29	21.87	–
6/26/12	2.5	–	21.79	21.31	-0.48	22.13	21.80	-0.33	22.24	23.15	0.91	22.24	24.34	2.10	21.96	22.73	0.77	22.16	–
7/3/12	2.5	1.04	21.07	21.07	0.00	21.50	21.56	0.06	21.67	22.88	1.21	21.68	24.05	2.37	21.21	22.44	1.23	21.55	–
7/18/12	2.5	–	20.72	20.66	-0.06	21.12	21.13	0.01	21.29	22.39	1.10	21.29	23.48	2.19	20.87	21.99	1.12	21.18	–
8/2/12	2.0	0.00	20.53	20.46	-0.07	20.91	20.93	0.02	21.06	22.21	1.15	21.06	23.22	2.16	20.69	21.83	1.14	20.98	–
8/9/12	2.0	–	20.37	20.31	-0.06	20.75	20.75	0.00	20.89	21.97	1.08	20.88	22.99	2.11	20.51	21.65	1.14	20.81	–
8/20/12	1.5	–	20.44	20.11	-0.33	20.78	20.55	-0.23	20.90	21.72	0.82	20.90	22.69	1.79	20.61	21.50	0.89	20.85	–
9/19/12	1.0	0.03	20.11	19.71	-0.40	20.44	20.08	-0.36	20.52	21.06	0.54	20.54	22.02	1.48	20.29	21.03	0.74	20.47	–
10/8/12	1.0	6.71	20.37	19.64	-0.73	20.67	20.00	-0.67	20.75	20.84	0.09	20.70	21.68	0.98	20.58	20.90	0.32	20.69	–
11/9/12	1.0	8.28	22.24	21.12	-1.12	22.50	21.50	-1.00	22.58	22.50	-0.08	22.53	23.61	1.08	22.44	22.47	0.03	22.52	–
12/3/12	1.0	6.85	23.84	21.76	-2.08	24.15	22.28	-1.87	24.17	23.75	-0.42	24.10	25.39	1.29	24.15	23.56	-0.59	24.14	–
2012 Intermediate Averages			**22.42**	**21.29**	**-1.12**	**22.72**	**21.63**	**-1.09**	**22.91**	**22.97**	**0.06**	**22.85**	**24.15**	**1.30**	**22.53**	**22.67**	**0.14**	**22.75**	**–**
1/4/13	1.5	4.16	24.74	21.67	-3.07	24.95	22.21	-2.74	25.05	23.77	-1.28	25.07	25.06	-0.01	24.95	23.23	-1.72	24.99	–
1/24/13	3.0	–	23.39	21.46	-1.93	23.75	21.95	-1.80	23.88	23.48	-0.40	23.89	24.73	0.84	23.56	22.95	-0.61	23.81	–
2/1/13	2.0	1.58	24.28	21.83	-2.45	24.63	22.30	-2.33	24.71	23.82	-0.89	24.70	25.04	0.34	24.55	23.35	-1.20	24.60	–

Table 2

Summary of Groundwater Elevations in Paired Monitoring Points
BSB Property, Kent, Washington

Date	Pump Rate (gpm)	Monthly Rainfall (inches)	Groundwater Elevations																
			Northeast Corner			North Boundary			Northwest Corner			Southwest Corner			East Boundary			Center	
			Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	ΔH
3/1/13	3.0	2.74	22.54	21.43	-1.11	22.95	21.95	-1.00	23.10	23.32	0.22	23.11	24.56	1.45	22.69	22.95	0.26	23.10	–
4/5/13	2.8	5.89	21.66	21.29	-0.37	22.07	21.80	-0.27	22.26	23.13	0.87	22.27	24.43	2.16	21.76	22.81	1.05	22.13	–
5/3/13	3.0	2.38	22.28	21.46	-0.82	22.66	21.97	-0.69	22.85	23.39	0.54	22.87	24.62	1.75	22.38	22.93	0.55	22.75	–
5/14/13	0.6	–	22.26	21.14	-1.12	22.60	21.64	-0.96	22.71	23.05	0.34	22.70	24.20	1.50	22.43	22.55	0.12	22.63	–
6/7/13	1.8	1.30	22.40	20.88	-1.52	22.75	21.36	-1.39	22.87	22.78	-0.09	22.87	23.92	1.05	22.53	22.35	-0.18	22.79	–
7/12/13	2.0	0.00	21.13	20.44	-0.69	21.45	20.85	-0.60	21.70	22.06	0.36	21.62	23.13	1.51	21.37	21.83	0.46	21.51	–
8/6/13	1.5	1.35	21.01	19.95	-1.06	21.34	20.38	-0.96	21.44	21.40	-0.04	21.41	22.44	1.03	21.18	21.34	0.16	21.37	–
9/9/13	1.5	6.17	20.45	20.38	-0.07	20.76	20.80	0.04	20.87	21.79	0.92	20.85	22.93	2.08	20.62	21.81	1.19	20.82	–
10/11/13	1.0	1.54	20.88	21.09	0.21	21.10	21.51	0.41	21.29	22.65	1.36	21.25	23.90	2.65	21.06	22.47	1.41	21.21	–
11/8/13	1.0	3.79	21.12	20.81	-0.31	21.40	21.25	-0.15	21.47	22.46	0.99	21.43	23.76	2.33	21.31	22.40	1.09	21.43	–
12/6/13	1.0	1.66	21.41	20.77	-0.64	21.65	21.19	-0.46	21.71	22.39	0.68	21.72	23.51	1.79	21.60	22.15	0.55	21.70	–
2013 Intermediate Averages			**21.99**	**21.00**	**-0.99**	**22.31**	**21.46**	**-0.84**	**22.44**	**22.75**	**0.30**	**22.43**	**23.94**	**1.51**	**22.17**	**22.47**	**0.30**	**22.37**	**–**
1/13/14	1.0	3.70	22.18	21.14	-1.04	22.45	21.59	-0.86	22.52	22.96	0.44	22.48	24.43	1.95	22.35	22.74	0.39	22.48	–
2/7/14	1.5	6.11	22.03	20.97	-1.06	22.22	21.42	-0.80	22.33	22.77	0.44	22.30	24.01	1.71	22.07	22.52	0.45	22.25	–
3/14/14	1.5	9.44	24.23	22.43	-1.80	24.52	22.91	-1.61	24.61	24.41	-0.20	24.60	25.74	1.14	23.45	24.08	0.63	24.53	–
4/11/14	1.5	4.18	24.17	21.77	-2.40	24.50	22.27	-2.23	24.61	23.76	-0.85	24.59	25.01	0.42	24.36	23.30	-1.06	24.52	–
5/8/14	1.5	3.15	24.79	22.19	-2.60	25.13	22.66	-2.47	25.20	24.10	-1.10	25.21	25.37	0.16	24.98	23.82	-1.16	25.13	–
6/5/14	1.5	0.73	23.47	21.10	-2.37	23.65	21.55	-2.10	23.85	22.96	-0.89	23.85	24.09	0.24	23.61	22.50	-1.11	23.79	–
7/3/14	2.5	0.77	21.35	20.52	-0.83	21.72	20.94	-0.78	21.86	22.19	0.33	21.85	23.25	1.40	21.50	21.84	0.34	21.76	–
8/6/14	1.75	1.81	20.60	20.12	-0.48	20.94	20.51	-0.43	21.04	21.55	0.51	21.04	22.56	1.52	20.78	21.44	0.66	20.99	–
9/4/14	1.48	2.23	20.25	20.16	-0.09	20.56	18.55[a]	-2.01	20.66	21.53	0.87	20.64	22.61	1.97	20.42	21.60	1.18	20.60	–
10/10/14	1.13	6.75	20.12	19.94	-0.18	20.40	20.34	-0.06	20.50	21.26	0.76	20.45	22.27	1.82	20.29	21.29	1.00	20.44	–
11/13/14	1.80	4.84	21.04	21.34	0.30	21.37	21.74	0.37	21.47	22.94	1.47	21.46	24.11	2.65	21.20	22.76	1.56	21.42	–
12/5/14	2.00	4.79	21.09	21.45	0.36	21.42	21.88	0.46	21.51	23.18	1.67	21.55	24.44	2.89	21.23	22.86	1.63	21.46	–
2014 Intermediate Averages			**22.11**	**21.09**	**-1.02**	**22.41**	**21.62**	**-1.04**	**22.51**	**22.80**	**0.29**	**22.50**	**23.99**	**1.49**	**22.19**	**22.56**	**0.38**	**22.45**	**–**
1/14/15	2.00	3.66	21.37	21.77	0.40	21.72	22.22	0.50	21.87	23.51	1.64	21.86	24.67	2.81	21.51	23.11	1.60	21.79	–
2/13/15	2.50	5.27	21.80	22.38	0.58	22.17	22.34	0.17	22.32	24.21	1.89	22.31	25.49	3.18	21.92	23.80	1.88	22.23	–
3/13/15	2.29	4.47	21.17	21.64	0.47	21.53	22.11	0.58	21.66	23.44	1.78	21.65	24.64	2.99	21.11	22.97	1.86	21.57	–
4/10/15	2.60	2.03	21.53	21.80	0.27	21.88	22.26	0.38	22.01	23.58	1.57	22.00	24.76	2.76	21.68	23.10	1.42	21.94	–
5/1/15	2.00	0.58	21.16	21.41	0.25	21.51	21.85	0.34	21.63	23.15	1.52	21.62	24.29	2.67	21.33	22.75	1.42	21.55	–
6/5/15	1.85	0.23	20.55	20.71	0.16	20.85	21.12	0.27	20.98	22.21	1.23	21.00	23.24	2.24	20.75	21.98	1.23	20.92	–
7/2/15	1.60	0.09	20.27	20.21	-0.06	20.59	20.57	-0.02	20.65	21.46	0.81	20.70	22.39	1.69	20.48	21.40	0.92	20.64	–
8/7/15	1.30	3.28	19.95	19.67	-0.28	20.26	20.00	-0.26	20.33	20.71	0.38	20.30	21.54	1.24	20.14	20.87	0.73	20.28	–
9/4/15	1.09	0.83	19.80	19.94	0.14	20.08	20.28	0.20	20.14	20.94	0.80	20.10	21.88	1.78	20.00	21.23	1.23	20.11	–

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BSB Property, Kent, Washington

Date	Pump Rate (gpm)	Monthly Rainfall (inches)	Groundwater Elevations																
			Northeast Corner			North Boundary			Northwest Corner			Southwest Corner			East Boundary			Center	
			Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	ΔH
10/16/15	0.92	4.81	19.65	20.26	0.61	19.93	20.56	0.63	20.00	21.12	1.12	19.97	22.04	2.07	19.86	21.56	1.70	19.96	–
11/6/15	1.20	8.37	19.69	20.70	1.01	19.98	21.02	1.04	20.04	21.86	1.82	20.01	23.02	3.01	19.90	22.07	2.17	20.02	–
12/4/15	1.67	11.21	20.52	21.64	1.12	20.84	22.04	1.20	20.79	23.19	2.40	20.90	24.59	3.69	20.68	23.13	2.45	20.86	–
2015 Intermediate Averages			**20.62**	**21.01**	**0.39**	**20.95**	**21.36**	**0.42**	**21.04**	**22.45**	**1.41**	**21.04**	**23.55**	**2.51**	**20.78**	**22.33**	**1.55**	**20.99**	**–**
1/6/16	2.10	7.45	21.27	22.29	1.02	21.62	22.73	1.11	21.70	24.09	2.39	21.69	25.29	3.60	21.42	23.69	2.27	21.68	–
2/5/16	0.26	5.97	21.66	22.61	0.95	22.04	23.09	1.05	22.13	24.47	2.34	22.11	25.80	3.69	21.84	25.08	3.24	22.84	–
3/4/16	2.46	5.52	21.94	22.82	0.88	22.34	23.30	0.96	22.47	24.65	2.18	22.46	25.99	3.53	22.08	24.23	2.15	22.39	–
4/1/16	1.69	1.19	21.61	22.20	0.59	21.98	22.67	0.69	22.10	23.99	1.89	22.11	25.20	3.09	21.78	23.45	1.67	22.03	–
5/6/16	1.94	0.94	20.93	21.36	0.43	21.28	21.81	0.53	21.37	22.94	1.57	21.37	23.98	2.61	21.12	22.62	1.50	21.31	–
6/2/16	1.61	1.77	20.65	21.01	0.36	20.95	21.41	0.46	21.02	22.34	1.32	21.00	23.29	2.29	20.80	22.25	1.45	20.95	–
7/7/16	1.47	0.72	20.37	20.74	0.37	20.70	21.10	0.40	20.76	21.86	1.10	20.69	22.83	2.14	20.55	21.95	1.40	20.72	–
8/5/16	1.40	0.17	20.23	20.34	0.11	20.54	20.69	0.15	20.62	21.37	0.75	20.60	22.23	1.63	20.43	21.55	1.12	20.57	–
9/26/16	1.20	1.05	19.87	19.93	0.06	20.16	20.25	0.09	20.23	20.71	0.48	20.19	21.46	1.27	20.06	21.14	1.08	20.19	–
10/14/16	1.31	10.05	19.08	20.89	1.81	20.45	21.17	0.72	20.49	21.34	0.85	20.46	22.34	1.88	20.34	22.15	1.81	20.47	–
11/11/16	1.60	6.48	20.89	21.80	0.91	21.19	22.23	1.04	21.28	23.32	2.04	21.24	24.60	3.36	21.08	23.24	2.16	21.22	–
12/2/16	1.80	3.87	20.90	21.86	0.96	21.22	22.34	1.12	21.30	23.58	2.28	22.31	24.88	2.57	21.11	23.24	2.13	21.26	–
2016 Intermediate Averages			**20.78**	**21.49**	**0.70**	**21.21**	**21.90**	**0.69**	**21.29**	**22.89**	**1.60**	**21.35**	**23.99**	**2.64**	**21.05**	**22.88**	**1.83**	**21.30**	**–**
1/13/17	2.00	4.22	20.96	21.64	0.68	21.15	22.05	0.90	21.30	23.31	2.01	21.30	24.53	3.23	21.09	22.84	1.75	21.27	–
2/3/17	2.07	8.85	21.50	22.07	0.57	21.87	22.59	0.72	21.94	23.85	1.91	22.00	25.11	3.11	21.62	23.35	1.73	21.93	–
3/3/17	3.30	7.31	21.81	22.68	0.87	22.26	23.28	1.02	22.35	24.61	2.26	22.32	25.85	3.53	21.90	24.04	2.14	22.35	–
4/6/17	1.96	3.27	–	–	–	19.98	23.38	3.40	–	–	–	–	–	–	–	–	–	–	–
5/4/17	3.33	2.28	22.40	22.53	0.13	22.87	24.02	1.15	22.90	24.19	1.29	22.92	25.38	2.46	22.51	23.78	1.27	22.81	–
6/27/17	2.01	1.52	20.81	21.10	0.29	21.08	21.61	0.53	21.23	22.54	1.31	21.10	23.46	2.36	20.88	22.34	1.46	21.00	–
7/13/17	1.55	0.00	20.91	20.92	0.01	21.22	21.33	0.11	–	–	–	–	–	–	–	–	–	–	–
9/25/17	1.05	0.59	20.45	20.37	-0.08	20.84	20.30	-0.54	20.88	20.95	0.07	20.39	22.61	2.22	19.77	21.35	1.58	20.71	–
10/11/17	1.05	4.80	20.23	20.07	-0.16	20.49	20.39	-0.10	–	–	–	–	–	–	–	–	–	–	–
11/6/17	1.04	8.63	20.55	21.06	0.51	20.81	21.40	0.59	–	–	–	–	–	–	–	–	–	–	–
12/14/17	1.70	5.43	21.58	21.64	0.06	21.85	22.12	0.27	22.12	23.22	1.10	22.00	24.40	2.40	21.77	22.91	1.14	21.89	–
2017 Intermediate Averages			**21.12**	**21.41**	**0.29**	**21.31**	**22.04**	**0.73**	**21.82**	**23.24**	**1.42**	**21.72**	**24.48**	**2.76**	**21.36**	**22.94**	**1.58**	**–**	**–**
3/12/18	1.43	2.44	23.10	22.03	-1.07	NM	22.56	–	23.71	23.59	-0.12	23.50	24.99	1.49	23.26	23.23	-0.03	23.46	–
6/30/18	1.40	0.63	20.56	20.74	0.18	20.90	21.12	0.22	21.15	21.92	0.77	20.96	22.84	1.88	20.74	21.93	1.19	20.96	–
9/17/18	1.50	1.04	20.01	20.06	0.05	NM	20.36	–	NM	20.67	–	20.36	21.45	1.09	20.23	21.24	1.01	20.30	–
12/10/18	1.19	6.08	20.34	21.23	0.89	20.94	NM	–	NM	22.33	–	21.00	23.80	2.80	20.56	22.61	2.05	20.67	–
2018 Intermediate Averages			**21.00**	**21.02**	**0.01**	**20.92**	**21.35**	**0.22**	**22.43**	**22.13**	**0.33**	**21.46**	**23.27**	**1.82**	**21.20**	**22.25**	**1.06**	**21.35**	**–**
3/18/19	2.50	1.37	21.74	21.87	0.13	22.06	22.32	0.26	22.15	23.41	1.26	22.15	24.55	2.40	21.80	23.13	1.33	22.18	–

Table 2

Summary of Groundwater Elevations in Paired Monitoring Points
BSB Property, Kent, Washington

Date	Pump Rate (gpm)	Monthly Rainfall (inches)	Groundwater Elevations																
			Northeast Corner			North Boundary			Northwest Corner			Southwest Corner			East Boundary			Center	
			Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	ΔH
6/21/19	0.75	0.90	21.89	20.81	-1.08	22.16	NM	–	22.15	21.86	-0.29	22.15	22.89	0.74	22.14	21.96	-0.18	22.18	–
9/3/19	1.27	3.32	20.20	20.01	-0.19	20.49	20.30	-0.19	20.58	20.75	0.17	20.58	21.54	0.96	20.44	21.15	0.71	20.56	–
12/9/19	1.30	7.96	20.21	20.84	0.63	20.49	21.23	0.74	20.56	22.03	1.47	20.52	23.09	2.57	20.42	22.07	1.65	20.57	–
2019 Intermediate Averages			**21.01**	**20.88**	**-0.13**	**21.30**	**21.28**	**0.27**	**21.36**	**22.01**	**0.65**	**21.35**	**23.02**	**1.67**	**21.20**	**22.08**	**0.88**	**21.38**	–
3/2/20	2.25	3.17	21.51	22.09	0.58	21.85	22.57	0.72	21.89	23.79	1.90	21.89	24.98	3.09	21.71	23.28	1.57	21.86	–
6/4/20	0.00	2.28	21.08	21.35	0.27	NM	21.87	–	NM	22.76	–	21.49	23.86	2.37	21.32	22.66	1.34	21.43	–
9/4/20	1.30	2.48	20.21	20.19	-0.02	20.53	20.50	-0.03	20.61	20.94	0.33	20.60	21.74	1.14	20.43	21.25	0.82	20.57	–
12/2/20	1.40	6.65	20.71	20.40	-0.31	21.09	21.80	0.71	21.15	22.58	1.43	21.13	23.71	2.58	20.99	22.66	1.67	21.11	–
2020 Intermediate Averages			**20.88**	**21.01**	**0.13**	**21.16**	**21.69**	**0.47**	**21.22**	**22.52**	**1.22**	**21.28**	**23.57**	**2.30**	**21.11**	**22.46**	**1.35**	**21.24**	–
3/8/21	2.19	2.61	21.78	22.25	0.47	22.14	22.78	0.64	22.25	23.97	1.72	22.22	25.17	2.95	21.93	23.50	1.57	22.18	–
6/23/21	1.33	1.91	20.83	21.08	0.25	21.15	21.45	0.30	21.23	22.26	1.03	21.20	23.21	2.01	21.01	22.21	1.20	21.18	–
9/13/21	0.99	3.02	20.20	19.81	-0.39	20.29	20.02	-0.27	20.35	20.40	0.05	20.33	21.12	0.79	20.21	20.75	0.54	20.31	–
12/15/21	1.40	4.08	22.67	22.55	-0.12	22.84	22.65	-0.19	23.04	24.26	1.22	23.02	25.61	2.59	22.88	23.87	0.99	23.00	–
2021 Intermediate Averages			**21.37**	**21.42**	**0.05**	**21.61**	**21.73**	**0.12**	**21.72**	**22.72**	**1.01**	**21.69**	**23.78**	**2.09**	**21.51**	**22.58**	**1.08**	**21.67**	–
3/9/22	1.21	3.32	22.61	22.37	-0.24	22.92	22.83	-0.09	22.95	24.08	1.13	22.95	25.18	2.23	22.82	23.54	0.72	22.96	–
6/20/22	1.76	2.67	21.61	21.38	-0.23	21.91	21.80	-0.11	22.00	22.59	0.59	21.97	23.38	1.41	21.78	22.40	0.62	21.95	–
9/13/22	1.17	0.25	20.24	20.19	-0.05	20.57	20.51	-0.06	20.62	20.83	0.21	20.60	21.44	0.84	20.45	21.17	0.72	20.59	–
2022 Intermediate Averages			**21.49**	**21.31**	**-0.17**	**21.80**	**21.71**	**-0.09**	**21.86**	**22.50**	**0.64**	**21.84**	**23.33**	**1.49**	**21.68**	**22.37**	**0.69**	**21.83**	–
Deep																			
2/6/12	–	3.63	–	23.94	1.67	–	24.06	1.51	–	24.44	0.50	–	25.03	-0.06	24.15	–	1.24	24.12	0.71
2/24/12	–	–	–	23.96	1.55	–	23.19	0.53	–	24.48	0.48	–	25.04	-0.14	24.15	–	2.03	24.14	1.51
3/13/12	–	7.20	–	24.13	1.60	–	24.30	1.85	–	24.64	0.50	–	25.13	-0.41	24.36	–	-0.10	24.34	-0.14
3/27/12	–	–	–	24.42	1.96	–	24.54	1.83	–	24.94	0.81	–	25.43	0.15	24.56	–	-1.57	24.56	-1.58
4/9/12	–	2.68	–	24.18	1.86	–	22.94	0.80	–	24.77	0.67	–	25.25	-0.05	24.40	–	-1.46	24.40	-1.54
5/4/12	–	2.05	–	23.73	1.90	–	23.91	1.46	–	24.24	0.36	–	24.87	-0.38	23.91	–	0.36	23.86	-0.06
5/7/12	–	–	–	23.71	1.92	–	23.86	1.55	–	24.27	0.45	–	24.83	-0.22	23.92	–	0.52	23.90	0.09
5/10/12	–	–	–	22.58	1.04	–	23.70	1.65	–	24.09	0.51	–	24.75	-0.06	23.73	–	0.74	23.72	0.29
6/11/12	–	2.96	–	23.44	1.93	–	23.62	1.67	–	23.98	0.61	–	24.57	0.03	23.66	–	1.95	23.65	1.57
6/25/12	–	–	–	23.36	1.94	–	23.53	1.63	–	23.90	0.69	–	23.49	-0.94	23.56	–	2.01	23.55	1.68
7/3/12	–	1.04	–	23.16	2.09	–	23.34	1.78	–	23.73	0.85	–	24.25	0.20	23.37	–	2.16	23.37	1.82
7/18/12	–	–	–	22.91	2.25	–	23.09	1.96	–	23.47	1.08	–	23.95	0.47	23.13	–	2.26	23.12	1.93
8/9/12	–	0.00	–	22.59	2.28	–	22.75	2.00	–	23.04	1.07	–	23.62	0.63	22.74	–	2.23	22.72	1.91
9/19/12	–	0.03	–	21.93	2.22	–	22.05	1.97	–	22.37	1.31	–	22.78	0.76	22.10	–	1.81	22.09	1.62
10/8/12	–	6.71	–	21.91	2.27	–	22.06	2.06	–	22.33	1.49	–	22.71	1.03	22.05	–	1.47	22.05	1.36

Table 2

Summary of Groundwater Elevations in Paired Monitoring Points
BSB Property, Kent, Washington

	Pump	Monthly	Groundwater Elevations																
	Rate	Rainfall	Northeast Corner			North Boundary			Northwest Corner			Southwest Corner			East Boundary			Center	
Date	(gpm)	(inches)	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	ΔH
11/9/12	–	8.28	–	22.79	1.67	–	22.45	0.95	–	23.19	0.69	–	23.69	0.08	22.95	–	0.51	22.94	0.42
12/3/12	–	6.85	–	23.44	1.68	–	23.48	1.20	–	23.87	0.12	–	24.49	-0.90	23.63	–	-0.52	23.64	-0.50
2012 Deep Averages			–	**23.20**	**1.92**	–	**23.18**	**1.57**	–	**23.69**	**0.74**	–	**24.22**	**0.08**	**23.39**	–	**0.88**	**23.38**	**0.65**
1/4/13	–	4.16	–	23.64	1.97	–	22.18	-0.03	–	24.14	0.37	–	24.72	-0.34	24.00	–	-0.95	23.91	-1.09
1/24/13	–	–	–	23.59	2.13	–	23.67	1.72	–	24.19	0.71	–	24.70	-0.03	23.81	–	0.25	23.83	0.02
2/1/13	–	1.58	–	23.57	1.74	–	23.45	1.15	–	24.09	0.27	–	24.58	-0.46	23.75	–	-0.80	23.80	-0.80
3/1/13	–	2.74	–	23.25	1.82	–	NM	–	–	23.80	0.48	–	24.33	-0.23	23.45	–	0.76	23.49	0.39
4/5/13	–	5.89	–	23.41	2.12	–	23.62	1.82	–	24.00	0.87	–	24.52	0.09	23.62	–	1.86	23.66	1.53
5/3/13	–	2.38	–	23.49	2.03	–	23.67	1.70	–	24.04	0.65	–	24.68	0.06	22.71	–	0.33	23.40	0.65
5/14/13	–	–	–	23.26	2.12	–	23.50	1.86	–	23.86	0.81	–	24.39	0.19	23.45	–	1.02	23.47	0.84
6/7/13	–	1.30	–	23.09	2.21	–	23.29	1.93	–	23.66	0.88	–	24.16	0.24	23.28	–	0.75	23.31	0.52
7/12/13	–	0.00	–	22.66	2.22	–	22.83	1.98	–	23.18	1.12	–	23.66	0.53	22.81	–	1.44	22.85	1.34
8/6/13	–	1.35	–	22.27	2.32	–	22.42	2.04	–	22.74	1.34	–	23.26	0.82	22.40	–	1.22	22.45	1.07
9/9/13	–	6.17	–	22.23	1.85	–	22.30	1.50	–	22.60	0.81	–	23.11	0.18	22.32	–	1.70	22.36	1.54
10/11/13	–	1.54	–	22.69	1.60	–	22.72	1.21	–	23.14	0.49	–	23.12	-0.78	22.82	–	1.76	22.86	1.64
11/8/13	–	3.79	–	22.61	1.80	–	22.75	1.50	–	23.06	0.60	–	23.60	-0.16	22.76	–	1.45	22.80	1.37
12/6/13	–	1.66	–	22.78	2.01	–	NM	–	–	23.40	1.01	–	23.67	0.16	22.95	–	1.35	22.99	1.29
2013 Deep Averages			–	**22.97**	**1.97**	–	**22.92**	**1.48**	–	**23.49**	**0.74**	–	**23.95**	**0.01**	**23.07**	–	**0.91**	**23.15**	**0.79**
1/13/14	–	3.70	–	22.87	1.73	–	NM	–	–	23.31	0.35	–	23.88	-0.55	23.08	–	0.73	23.05	0.57
2/7/14	–	6.11	–	23.24	2.27	–	23.43	2.01	–	23.85	1.08	–	–	–	23.49	–	1.42	23.51	1.26
3/14/14	–	9.44	–	24.18	1.75	–	24.42	1.51	–	23.74	-0.67	–	25.38	-0.36	24.45	–	1.00	24.45	-0.08
4/11/14	–	4.18	–	23.78	2.01	–	23.99	1.72	–	24.39	0.63	–	24.94	-0.07	24.08	–	-0.28	24.09	-0.43
5/8/14	–	3.15	–	24.08	1.89	–	24.29	1.63	–	24.67	0.57	–	25.24	-0.13	24.38	–	-0.60	24.38	-0.75
6/5/14	–	0.73	–	23.26	2.16	–	23.55	2.00	–	23.85	0.89	–	24.38	0.29	23.51	–	-0.10	23.52	-0.28
7/3/14	–	0.77	–	22.69	2.17	–	22.88	1.94	–	23.25	1.06	–	23.70	0.45	22.95	–	1.45	22.95	1.18
8/6/14	–	1.81	–	22.20	2.08	–	22.39	1.88	–	22.71	1.16	–	23.14	0.58	22.45	–	1.67	22.45	1.46
9/4/14	–	2.23	–	22.06	1.90	–	22.20	3.65	–	22.51	0.98	–	23.00	0.39	22.30	–	1.88	22.29	1.69
10/10/14	–	6.75	–	22.00	2.06	–	22.23	1.89	–	22.44	1.18	–	22.93	0.66	22.24	–	1.95	22.22	1.77
11/13/14	–	4.84	–	23.04	1.70	–	23.26	1.52	–	23.55	0.61	–	24.07	-0.04	23.28	–	2.08	23.29	1.87
12/5/14	–	4.79	–	23.25	1.80	–	23.49	1.61	–	23.81	0.63	–	24.38	-0.06	23.51	–	2.28	23.53	2.07
2014 Deep Averages			–	**23.05**	**1.96**	–	**23.28**	**1.94**	–	**23.51**	**0.71**	–	**24.09**	**0.11**	**23.31**	–	**1.12**	**23.31**	**0.86**
1/14/15	–	3.66	–	23.46	1.69	–	23.72	1.50	–	24.05	0.54	–	24.56	-0.11	23.71	–	2.20	23.73	1.94
2/13/15	–	5.27	–	23.93	1.55	–	24.15	1.81	–	24.47	0.26	–	25.12	-0.37	24.16	–	2.24	24.19	1.96
3/13/15	–	4.47	–	23.51	1.87	–	23.79	1.68	–	24.16	0.72	–	24.65	0.01	23.75	–	2.64	23.78	2.21
4/10/15	–	2.03	–	23.68	1.88	–	23.96	1.70	–	24.30	0.72	–	24.80	0.04	23.92	–	2.24	23.96	2.02

Table 2

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BSB Property, Kent, Washington

	Pump	Monthly	Groundwater Elevations																
	Rate	Rainfall	Northeast Corner			North Boundary			Northwest Corner			Southwest Corner			East Boundary			Center	
Date	(gpm)	(inches)	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	ΔH
5/1/15	–	0.58	–	23.31	1.90	–	23.58	1.73	–	23.91	0.76	–	24.40	0.11	23.53	–	2.20	23.55	2.00
6/5/15	–	0.23	–	22.68	1.97	–	22.87	1.75	–	23.19	0.98	–	23.65	0.41	22.88	–	2.13	22.90	1.98
7/2/15	–	0.09	–	22.22	2.01	–	22.45	1.88	–	22.72	1.26	–	23.14	0.75	22.45	–	1.97	22.48	1.84
8/7/15	–	3.28	–	21.68	2.01	–	21.89	1.89	–	22.11	1.40	–	22.50	0.96	21.87	–	1.73	21.89	1.61
9/4/15	–	0.83	–	21.60	1.66	–	21.74	1.46	–	21.98	1.04	–	22.39	0.51	21.77	–	1.77	21.78	1.66
10/16/15	–	4.81	–	21.86	1.60	–	21.96	1.40	–	22.20	1.08	–	22.66	0.62	22.01	–	2.15	22.01	2.05
11/6/15	–	8.37	–	22.05	1.35	–	22.12	1.10	–	22.38	0.52	–	22.91	-0.11	22.19	–	2.29	22.19	2.17
12/4/15	–	11.21	–	23.17	1.53	–	23.18	1.14	–	23.64	0.45	–	24.16	-0.43	23.37	–	2.69	23.38	2.52
2015 Deep Averages			–	**22.76**	**1.75**	–	**22.95**	**1.59**	–	**23.26**	**0.81**	–	**23.75**	**0.20**	**22.97**	–	**2.19**	**22.98**	**2.00**
1/6/16	–	7.45	–	24.14	1.85	–	24.34	1.61	–	24.73	0.64	–	25.25	-0.04	24.33	–	2.91	24.37	2.69
2/5/16	–	5.97	–	24.19	1.58	–	24.41	1.32	–	24.75	0.28	–	25.31	-0.49	22.33	–	0.49	23.73	0.89
3/4/16	–	5.52	–	24.41	1.59	–	24.67	1.37	–	25.04	0.39	–	25.54	-0.45	23.62	–	1.54	24.34	1.95
4/1/16	–	1.19	–	23.96	1.76	–	24.20	1.53	–	24.54	0.55	–	25.04	-0.16	24.15	–	2.37	24.20	2.17
5/6/16	–	0.94	–	23.30	1.94	–	23.54	1.73	–	23.85	0.91	–	24.31	0.33	23.47	–	2.35	23.53	2.23
6/2/16	–	1.77	–	22.92	1.91	–	23.14	1.73	–	23.40	1.06	–	23.83	0.54	23.05	–	2.25	23.09	2.14
7/7/16	–	0.72	–	22.65	1.91	–	22.85	1.75	–	23.12	1.26	–	23.38	0.55	22.80	–	2.25	22.85	2.13
8/5/16	–	0.17	–	22.30	1.96	–	22.55	1.86	–	22.76	1.39	–	23.18	0.95	22.45	–	2.02	22.49	1.92
9/26/16	–	1.05	–	21.77	1.84	–	21.94	1.69	–	22.20	1.49	–	22.57	1.11	21.92	–	1.86	21.95	1.76
10/14/16	–	10.05	–	22.35	1.46	–	22.42	1.25	–	22.75	1.41	–	23.11	0.77	22.48	–	2.14	22.52	2.05
11/11/16	–	6.48	–	23.28	1.48	–	23.44	1.21	–	23.74	0.42	–	24.29	-0.31	23.45	–	2.37	23.49	2.26
12/2/16	–	3.87	–	23.41	1.55	–	23.57	1.23	–	23.89	0.31	–	24.48	-0.40	23.58	–	2.47	23.62	2.36
2016 Deep Averages			–	**23.22**	**1.74**	–	**23.42**	**1.52**	–	**23.73**	**0.84**	–	**24.19**	**0.20**	**23.14**	–	**2.09**	**23.35**	**2.05**
1/13/17	–	4.22	–	23.20	1.56	–	23.44	1.39	–	23.69	0.38	–	24.18	-0.35	23.35	–	2.26	23.38	2.11
2/3/17	–	8.85	–	23.82	1.75	–	24.10	1.51	–	24.52	0.67	–	25.03	-0.08	24.32	–	2.70	24.19	2.26
3/3/17	–	7.31	–	24.28	1.60	–	24.64	1.36	–	24.94	0.33	–	25.52	-0.33	23.50	–	1.60	24.21	1.87
5/4/17	–	3.27	–	24.25	1.72	–	24.43	0.41	–	24.80	0.61	–	25.80	0.42	24.38	–	1.87	24.43	1.62
6/27/17	–	1.52	–	23.10	2.00	–	23.29	1.68	–	23.55	1.01	–	23.97	0.51	23.22	–	2.34	23.25	2.25
9/25/17	–	0.59	–	21.89	1.52	–	22.86	2.56	–	22.39	1.44	–	23.55	0.94	22.20	–	2.43	22.12	1.41
12/14/17	–	5.43	–	23.34	1.70	–	23.44	1.32	–	23.87	0.65	–	NM	–	23.69	–	1.92	23.63	1.74
2017 Deep Averages			–	**23.41**	**1.69**	–	**23.74**	**1.46**	–	**23.97**	**0.73**	–	**24.68**	**0.19**	**23.52**	–	**2.16**	**23.60**	**1.89**
3/12/18	–	2.44	–	23.86	1.83	–	NM	–	–	24.39	0.80	–	NM	–	24.15	–	0.89	24.12	0.66
6/30/18	–	0.63	–	22.69	1.95	–	22.85	1.73	–	NM	–	–	23.62	0.78	22.96	–	2.22	22.91	1.95
9/17/18	–	1.63	–	21.69	1.63	–	21.87	1.51	–	23.08	2.41	–	23.46	2.01	22.04	–	1.81	21.96	1.66
12/10/18	–	6.08	–	22.70	1.47	–	NM	–	–	24.11	1.78	–	23.59	-0.21	23.01	–	2.45	22.91	2.24
2018 Deep Averages			–	**22.74**	**1.72**	–	**22.36**	**1.62**	–	**23.86**	**1.66**	–	**23.56**	**0.69**	**23.04**	–	**1.84**	**22.97**	**1.63**

Table 2

Summary of Groundwater Elevations in Paired Monitoring Points
BSB Property, Kent, Washington

Date	Pump Rate (gpm)	Monthly Rainfall (inches)	Groundwater Elevations																
			Northeast Corner			North Boundary			Northwest Corner			Southwest Corner			East Boundary			Center	
			Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	Outside	ΔH	Inside	ΔH
3/18/19	–	1.37	–	23.61	1.74	–	23.83	1.51	–	24.11	0.70	–	24.62	0.07	23.94	–	2.14	23.89	1.71
6/21/19	–	0.90	–	22.70	1.89	–	22.73	–	–	22.97	1.11	–	23.46	0.57	22.92	–	0.78	22.85	0.66
9/3/19	–	3.32	–	22.01	2.00	–	22.10	1.80	–	22.34	1.59	–	22.78	1.24	22.24	–	1.80	22.17	1.61
12/9/19	–	7.96	–	22.56	1.72	–	22.63	1.40	–	22.95	0.92	–	23.48	0.39	22.88	–	2.46	22.82	2.25
2019 Deep Averages			–	**22.72**	**1.84**	–	**22.82**	**1.57**	–	**23.09**	**1.08**	–	**23.59**	**0.57**	**23.00**	–	**1.80**	**22.93**	**1.56**
3/2/20	–	3.17	–	23.89	1.80	–	24.14	1.57	–	24.46	0.67	–	25.02	0.04	24.25	–	2.54	24.20	2.34
6/4/20	–	2.28	–	23.19	1.84	–	23.37	1.50	–	23.63	0.87	–	24.16	0.30	23.45	–	2.13	23.41	1.98
9/4/20	–	2.48	–	22.14	1.95	–	22.33	1.83	–	22.54	1.60	–	23.00	1.26	23.72	–	3.29	22.82	2.25
12/2/20	–	6.65	–	23.06	2.66	–	23.22	1.42	–	23.49	0.91	–	24.05	0.34	23.35	–	2.36	23.31	2.19
2020 Deep Averages			–	**23.07**	**2.06**	–	**23.27**	**1.58**	–	**23.53**	**1.01**	–	**24.06**	**0.48**	**23.69**	–	**2.58**	**23.44**	**2.19**
3/8/21	–	2.61	–	24.11	1.86	–	24.33	1.55	–	24.69	0.72	–	25.19	0.02	24.45	–	2.52	24.42	2.24
6/23/21	–	1.91	–	23.00	1.92	–	23.22	1.77	–	23.55	1.29	–	23.96	0.75	23.32	–	2.31	23.27	2.10
9/13/21	–	3.02	–	21.58	1.77	–	21.75	1.73	–	21.94	1.54	–	22.36	1.24	21.88	–	1.67	21.82	1.51
12/15/21	–	4.08	–	24.16	1.61	–	24.43	1.78	–	24.76	0.50	–	25.30	-0.31	24.75	–	1.87	24.58	1.58
2021 Deep Averages			–	**23.21**	**1.79**	–	**23.43**	**1.71**	–	**23.74**	**1.01**	–	**24.20**	**0.42**	**23.60**	–	**2.09**	**23.52**	**1.86**
3/9/22	–	3.32	–	23.92	1.55	–	24.17	1.34	–	24.51	0.43	–	24.95	-0.23	24.28	–	1.46	24.24	1.28
6/20/22	–	2.67	–	22.95	1.57	–	NM	–	–	23.35	0.76	–	23.55	0.17	23.09	–	1.31	23.13	1.18
9/13/22	–	0.25	–	22.12	1.93	–	22.32	1.81	–	22.54	1.71	–	22.91	1.47	22.32	–	1.87	22.34	1.75
2022 Deep Averages			–	**23.00**	**1.68**	–	**23.25**	**1.58**	–	**23.47**	**0.97**	–	**23.80**	**0.47**	**23.23**	–	**1.55**	**23.24**	**1.40**

Notes:
1. Shallow and intermediate groundwater comparisons are for monitoring points installed across the soil-bentonite cutoff wall from each other.
2. Deep to intermediate groundwater comparisons are for co-located monitoring monitoring points installed above and below the Layer C aquitard.
3. All elevations in feet relative to the North American Vertical Datum (NAVD 88).
4. ΔH = groundwater elevation difference; positive = inward or upward gradient, which is shaded in blue, and negative = outward or downward gradient, which is shaded in red.
5. – = not available or not applicable; NM = not measured; gpm = gallons per minutes; precipitation measured at SeaTac airport (station 457473).
6. Northeast corner monitoring points = inside: P-1 (shallow), P-2 (intermediate); outside: P-3 (shallow), P-4 (intermediate), HY-108 (deep).
7. North boundary monitoring points = inside: P-5 (shallow), P-6 (intermediate); outside: HYCP-7s (shallow), HYCP-7i (intermediate), HYCP-7d (deep).
8. Northwest corner monitoring points = inside: P-7 (shallow), P-8 (intermediate); outside: HY-1s (shallow), HY-1i (intermediate), HY-1d (deep).
9. Southwest corner monitoring points = inside: P-9 (shallow), P-10 (intermediate); outside: P-11 (shallow), P-12 (intermediate), HY-11d (deep).
10. East boundary monitoring points = inside: P-13 (shallow), P-14 (intermediate), HY-125 (deep); outside: P-15 (shallow), P-16 (intermediate).
11. Center monitoring points = inside: HYCP-3i, HY-12i, and HY-13i (intermediate); outside: HY-117, HY-122, and HY-125 (deep).
12. Center groundwater elevations represent averages of HYCP-3i, HY-12i, and HY-13i (intermediate) and HY-117, HY-122, and HY-125 (deep).

[a] Groundwater elevation suspect based on change in groundwater elevation from previous month compared to other wells.

ATTACHMENT A
September 2022 Laboratory Analytical Reports

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

PES Environmental, Inc.
Bill Haldeman
1215 Fourth Avenue, Suite 1350
Seattle, WA 98161

RE: BSB - Shallow/Intermediate
Work Order Number: 2209247

September 26, 2022

Attention Bill Haldeman:

Fremont Analytical, Inc. received 8 sample(s) on 9/16/2022 for the analyses presented in the following report.

Volatile Organic Compounds by EPA Method 8260D

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

Date: *09/26/2022*

CLIENT: PES Environmental, Inc.
Project: BSB - Shallow/Intermediate
Work Order: 2209247

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2209247-001	HYCP-7s-091422	09/14/2022 4:16 PM	09/16/2022 5:00 PM
2209247-002	HYCP-7i-091522	09/15/2022 9:12 AM	09/16/2022 5:00 PM
2209247-003	HYCP-2-091522	09/15/2022 10:23 AM	09/16/2022 5:00 PM
2209247-004	HYCP-2i-091522	09/15/2022 11:20 AM	09/16/2022 5:00 PM
2209247-005	HYCP-12i-091522	09/15/2022 9:12 AM	09/16/2022 5:00 PM
2209247-006	Gi-091622	09/16/2022 12:18 PM	09/16/2022 5:00 PM
2209247-007	Gs-091622	09/16/2022 1:19 PM	09/16/2022 5:00 PM
2209247-008	TB-091622	09/09/2022 5:20 PM	09/16/2022 5:00 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Case Narrative

WO#: **2209247**
Date: **9/26/2022**

CLIENT: PES Environmental, Inc.
Project: BSB - Shallow/Intermediate

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
DUP - Sample Duplicate
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MCL - Maximum Contaminant Level
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
REP - Sample Replicate
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

Client: PES Environmental, Inc. **Collection Date:** 9/14/2022 4:16:00 PM
Project: BSB - Shallow/Intermediate
Lab ID: 2209247-001 **Matrix:** Groundwater
Client Sample ID: **HYCP-7s-091422**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37885 Analyst: SG

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	9/22/2022 7:45:49 PM
Chloromethane	2.49	0.500		µg/L	1	9/22/2022 7:45:49 PM
Vinyl chloride	ND	0.200		µg/L	1	9/22/2022 7:45:49 PM
Bromomethane	4.98	0.500		µg/L	1	9/22/2022 7:45:49 PM
Trichlorofluoromethane (CFC-11)	ND	0.500		µg/L	1	9/22/2022 7:45:49 PM
Chloroethane	ND	1.00		µg/L	1	9/22/2022 7:45:49 PM
1,1-Dichloroethene	ND	0.500		µg/L	1	9/22/2022 7:45:49 PM
Methylene chloride	ND	0.750		µg/L	1	9/22/2022 7:45:49 PM
trans-1,2-Dichloroethene	ND	0.500		µg/L	1	9/22/2022 7:45:49 PM
1,1-Dichloroethane	ND	0.500		µg/L	1	9/22/2022 7:45:49 PM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	9/22/2022 7:45:49 PM
Chloroform	ND	0.500		µg/L	1	9/22/2022 7:45:49 PM
1,1,1-Trichloroethane (TCA)	ND	0.400		µg/L	1	9/22/2022 7:45:49 PM
1,1-Dichloropropene	ND	0.500		µg/L	1	9/22/2022 7:45:49 PM
Carbon tetrachloride	ND	0.500		µg/L	1	9/22/2022 7:45:49 PM
1,2-Dichloroethane (EDC)	ND	0.400		µg/L	1	9/22/2022 7:45:49 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	9/22/2022 7:45:49 PM
1,2-Dichloropropane	ND	0.500		µg/L	1	9/22/2022 7:45:49 PM
Bromodichloromethane	ND	0.500		µg/L	1	9/22/2022 7:45:49 PM
Dibromomethane	ND	0.500		µg/L	1	9/22/2022 7:45:49 PM
cis-1,3-Dichloropropene	ND	0.500		µg/L	1	9/22/2022 7:45:49 PM
trans-1,3-Dichloropropylene	ND	0.500		µg/L	1	9/22/2022 7:45:49 PM
1,1,2-Trichloroethane	ND	0.350		µg/L	1	9/22/2022 7:45:49 PM
1,3-Dichloropropane	ND	0.500		µg/L	1	9/22/2022 7:45:49 PM
Tetrachloroethene (PCE)	ND	0.400		µg/L	1	9/22/2022 7:45:49 PM
Dibromochloromethane	ND	0.500		µg/L	1	9/22/2022 7:45:49 PM
1,2-Dibromoethane (EDB)	ND	0.200		µg/L	1	9/22/2022 7:45:49 PM
Chlorobenzene	ND	0.500		µg/L	1	9/22/2022 7:45:49 PM
1,1,1,2-Tetrachloroethane	ND	0.300		µg/L	1	9/22/2022 7:45:49 PM
Bromoform	ND	0.500		µg/L	1	9/22/2022 7:45:49 PM
1,1,2,2-Tetrachloroethane	ND	0.400		µg/L	1	9/22/2022 7:45:49 PM
Bromobenzene	ND	0.500		µg/L	1	9/22/2022 7:45:49 PM
2-Chlorotoluene	ND	0.500		µg/L	1	9/22/2022 7:45:49 PM
4-Chlorotoluene	ND	0.500		µg/L	1	9/22/2022 7:45:49 PM
1,2,3-Trichloropropane	ND	0.400		µg/L	1	9/22/2022 7:45:49 PM
1,2,4-Trichlorobenzene	ND	0.750		µg/L	1	9/22/2022 7:45:49 PM
1,3-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 7:45:49 PM
1,4-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 7:45:49 PM
1,2-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 7:45:49 PM

Analytical Report

Work Order: **2209247**
Date Reported: **9/26/2022**

Client: PES Environmental, Inc.
Collection Date: 9/14/2022 4:16:00 PM
Project: BSB - Shallow/Intermediate
Lab ID: 2209247-001
Matrix: Groundwater
Client Sample ID: **HYCP-7s-091422**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 37885		Analyst: SG
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/22/2022 7:45:49 PM
Hexachloro-1,3-butadiene	ND	0.500		µg/L	1	9/22/2022 7:45:49 PM
1,2,3-Trichlorobenzene	ND	0.700		µg/L	1	9/22/2022 7:45:49 PM
Surr: Dibromofluoromethane	59.1	80 - 120	S	%Rec	1	9/22/2022 7:45:49 PM
Surr: Toluene-d8	88.0	80 - 120		%Rec	1	9/22/2022 7:45:49 PM
Surr: 1-Bromo-4-fluorobenzene	88.0	80 - 120		%Rec	1	9/22/2022 7:45:49 PM

NOTES:
S - Outlying surrogate recovery(ies) observed.

Client: PES Environmental, Inc. **Collection Date:** 9/15/2022 9:12:00 AM
Project: BSB - Shallow/Intermediate
Lab ID: 2209247-002 **Matrix:** Groundwater
Client Sample ID: **HYCP-7i-091522**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37885 Analyst: SG

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	9/22/2022 8:46:02 PM
Chloromethane	2.69	0.500		µg/L	1	9/22/2022 8:46:02 PM
Vinyl chloride	0.209	0.200		µg/L	1	9/22/2022 8:46:02 PM
Bromomethane	4.01	0.500		µg/L	1	9/22/2022 8:46:02 PM
Trichlorofluoromethane (CFC-11)	ND	0.500		µg/L	1	9/22/2022 8:46:02 PM
Chloroethane	ND	1.00		µg/L	1	9/22/2022 8:46:02 PM
1,1-Dichloroethene	ND	0.500		µg/L	1	9/22/2022 8:46:02 PM
Methylene chloride	ND	0.750		µg/L	1	9/22/2022 8:46:02 PM
trans-1,2-Dichloroethene	ND	0.500		µg/L	1	9/22/2022 8:46:02 PM
1,1-Dichloroethane	ND	0.500		µg/L	1	9/22/2022 8:46:02 PM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	9/22/2022 8:46:02 PM
Chloroform	ND	0.500		µg/L	1	9/22/2022 8:46:02 PM
1,1,1-Trichloroethane (TCA)	ND	0.400		µg/L	1	9/22/2022 8:46:02 PM
1,1-Dichloropropene	ND	0.500		µg/L	1	9/22/2022 8:46:02 PM
Carbon tetrachloride	ND	0.500		µg/L	1	9/22/2022 8:46:02 PM
1,2-Dichloroethane (EDC)	ND	0.400		µg/L	1	9/22/2022 8:46:02 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	9/22/2022 8:46:02 PM
1,2-Dichloropropane	ND	0.500		µg/L	1	9/22/2022 8:46:02 PM
Bromodichloromethane	ND	0.500		µg/L	1	9/22/2022 8:46:02 PM
Dibromomethane	ND	0.500		µg/L	1	9/22/2022 8:46:02 PM
cis-1,3-Dichloropropene	ND	0.500		µg/L	1	9/22/2022 8:46:02 PM
trans-1,3-Dichloropropylene	ND	0.500		µg/L	1	9/22/2022 8:46:02 PM
1,1,2-Trichloroethane	ND	0.350		µg/L	1	9/22/2022 8:46:02 PM
1,3-Dichloropropane	ND	0.500		µg/L	1	9/22/2022 8:46:02 PM
Tetrachloroethene (PCE)	ND	0.400		µg/L	1	9/22/2022 8:46:02 PM
Dibromochloromethane	ND	0.500		µg/L	1	9/22/2022 8:46:02 PM
1,2-Dibromoethane (EDB)	ND	0.200		µg/L	1	9/22/2022 8:46:02 PM
Chlorobenzene	ND	0.500		µg/L	1	9/22/2022 8:46:02 PM
1,1,1,2-Tetrachloroethane	ND	0.300		µg/L	1	9/22/2022 8:46:02 PM
Bromoform	ND	0.500		µg/L	1	9/22/2022 8:46:02 PM
1,1,2,2-Tetrachloroethane	ND	0.400		µg/L	1	9/22/2022 8:46:02 PM
Bromobenzene	ND	0.500		µg/L	1	9/22/2022 8:46:02 PM
2-Chlorotoluene	ND	0.500		µg/L	1	9/22/2022 8:46:02 PM
4-Chlorotoluene	ND	0.500		µg/L	1	9/22/2022 8:46:02 PM
1,2,3-Trichloropropane	ND	0.400		µg/L	1	9/22/2022 8:46:02 PM
1,2,4-Trichlorobenzene	ND	0.750		µg/L	1	9/22/2022 8:46:02 PM
1,3-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 8:46:02 PM
1,4-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 8:46:02 PM
1,2-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 8:46:02 PM

Analytical Report

Work Order: **2209247**
Date Reported: **9/26/2022**

Client: PES Environmental, Inc.
Collection Date: 9/15/2022 9:12:00 AM
Project: BSB - Shallow/Intermediate
Lab ID: 2209247-002
Matrix: Groundwater
Client Sample ID: **HYCP-7i-091522**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 37885		Analyst: SG
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/22/2022 8:46:02 PM
Hexachloro-1,3-butadiene	ND	0.500		µg/L	1	9/22/2022 8:46:02 PM
1,2,3-Trichlorobenzene	ND	0.700		µg/L	1	9/22/2022 8:46:02 PM
Surr: Dibromofluoromethane	55.4	80 - 120	S	%Rec	1	9/22/2022 8:46:02 PM
Surr: Toluene-d8	88.6	80 - 120		%Rec	1	9/22/2022 8:46:02 PM
Surr: 1-Bromo-4-fluorobenzene	89.1	80 - 120		%Rec	1	9/22/2022 8:46:02 PM

NOTES:
S - Outlying surrogate recovery(ies) observed.

Client: PES Environmental, Inc. **Collection Date:** 9/15/2022 10:23:00 AM
Project: BSB - Shallow/Intermediate
Lab ID: 2209247-003 **Matrix:** Groundwater
Client Sample ID: **HYCP-2-091522**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37885 Analyst: SG

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	9/22/2022 9:16:10 PM
Chloromethane	2.57	0.500		µg/L	1	9/22/2022 9:16:10 PM
Vinyl chloride	0.972	0.200		µg/L	1	9/22/2022 9:16:10 PM
Bromomethane	3.86	0.500		µg/L	1	9/22/2022 9:16:10 PM
Trichlorofluoromethane (CFC-11)	ND	0.500		µg/L	1	9/22/2022 9:16:10 PM
Chloroethane	ND	1.00		µg/L	1	9/22/2022 9:16:10 PM
1,1-Dichloroethene	ND	0.500		µg/L	1	9/22/2022 9:16:10 PM
Methylene chloride	ND	0.750		µg/L	1	9/22/2022 9:16:10 PM
trans-1,2-Dichloroethene	ND	0.500		µg/L	1	9/22/2022 9:16:10 PM
1,1-Dichloroethane	ND	0.500		µg/L	1	9/22/2022 9:16:10 PM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	9/22/2022 9:16:10 PM
Chloroform	ND	0.500		µg/L	1	9/22/2022 9:16:10 PM
1,1,1-Trichloroethane (TCA)	ND	0.400		µg/L	1	9/22/2022 9:16:10 PM
1,1-Dichloropropene	ND	0.500		µg/L	1	9/22/2022 9:16:10 PM
Carbon tetrachloride	ND	0.500		µg/L	1	9/22/2022 9:16:10 PM
1,2-Dichloroethane (EDC)	ND	0.400		µg/L	1	9/22/2022 9:16:10 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	9/22/2022 9:16:10 PM
1,2-Dichloropropane	ND	0.500		µg/L	1	9/22/2022 9:16:10 PM
Bromodichloromethane	ND	0.500		µg/L	1	9/22/2022 9:16:10 PM
Dibromomethane	ND	0.500		µg/L	1	9/22/2022 9:16:10 PM
cis-1,3-Dichloropropene	ND	0.500		µg/L	1	9/22/2022 9:16:10 PM
trans-1,3-Dichloropropylene	ND	0.500		µg/L	1	9/22/2022 9:16:10 PM
1,1,2-Trichloroethane	ND	0.350		µg/L	1	9/22/2022 9:16:10 PM
1,3-Dichloropropane	ND	0.500		µg/L	1	9/22/2022 9:16:10 PM
Tetrachloroethene (PCE)	ND	0.400		µg/L	1	9/22/2022 9:16:10 PM
Dibromochloromethane	ND	0.500		µg/L	1	9/22/2022 9:16:10 PM
1,2-Dibromoethane (EDB)	ND	0.200		µg/L	1	9/22/2022 9:16:10 PM
Chlorobenzene	ND	0.500		µg/L	1	9/22/2022 9:16:10 PM
1,1,1,2-Tetrachloroethane	ND	0.300		µg/L	1	9/22/2022 9:16:10 PM
Bromoform	ND	0.500		µg/L	1	9/22/2022 9:16:10 PM
1,1,2,2-Tetrachloroethane	ND	0.400		µg/L	1	9/22/2022 9:16:10 PM
Bromobenzene	ND	0.500		µg/L	1	9/22/2022 9:16:10 PM
2-Chlorotoluene	ND	0.500		µg/L	1	9/22/2022 9:16:10 PM
4-Chlorotoluene	ND	0.500		µg/L	1	9/22/2022 9:16:10 PM
1,2,3-Trichloropropane	ND	0.400		µg/L	1	9/22/2022 9:16:10 PM
1,2,4-Trichlorobenzene	ND	0.750		µg/L	1	9/22/2022 9:16:10 PM
1,3-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 9:16:10 PM
1,4-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 9:16:10 PM
1,2-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 9:16:10 PM

Analytical Report

Work Order: **2209247**
Date Reported: **9/26/2022**

Client: PES Environmental, Inc.
Collection Date: 9/15/2022 10:23:00 AM
Project: BSB - Shallow/Intermediate
Lab ID: 2209247-003
Matrix: Groundwater
Client Sample ID: **HYCP-2-091522**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 37885		Analyst: SG
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/22/2022 9:16:10 PM
Hexachloro-1,3-butadiene	ND	0.500		µg/L	1	9/22/2022 9:16:10 PM
1,2,3-Trichlorobenzene	ND	0.700		µg/L	1	9/22/2022 9:16:10 PM
Surr: Dibromofluoromethane	55.9	80 - 120	S	%Rec	1	9/22/2022 9:16:10 PM
Surr: Toluene-d8	90.1	80 - 120		%Rec	1	9/22/2022 9:16:10 PM
Surr: 1-Bromo-4-fluorobenzene	88.2	80 - 120		%Rec	1	9/22/2022 9:16:10 PM

NOTES:
S - Outlying surrogate recovery(ies) observed.

Client: PES Environmental, Inc. **Collection Date:** 9/15/2022 11:20:00 AM
Project: BSB - Shallow/Intermediate
Lab ID: 2209247-004 **Matrix:** Groundwater
Client Sample ID: **HYCP-2i-091522**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37885 Analyst: SG

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	9/22/2022 9:46:17 PM
Chloromethane	2.66	0.500		µg/L	1	9/22/2022 9:46:17 PM
Vinyl chloride	ND	0.200		µg/L	1	9/22/2022 9:46:17 PM
Bromomethane	3.74	0.500		µg/L	1	9/22/2022 9:46:17 PM
Trichlorofluoromethane (CFC-11)	ND	0.500		µg/L	1	9/22/2022 9:46:17 PM
Chloroethane	ND	1.00		µg/L	1	9/22/2022 9:46:17 PM
1,1-Dichloroethene	ND	0.500		µg/L	1	9/22/2022 9:46:17 PM
Methylene chloride	ND	0.750		µg/L	1	9/22/2022 9:46:17 PM
trans-1,2-Dichloroethene	ND	0.500		µg/L	1	9/22/2022 9:46:17 PM
1,1-Dichloroethane	ND	0.500		µg/L	1	9/22/2022 9:46:17 PM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	9/22/2022 9:46:17 PM
Chloroform	ND	0.500		µg/L	1	9/22/2022 9:46:17 PM
1,1,1-Trichloroethane (TCA)	ND	0.400		µg/L	1	9/22/2022 9:46:17 PM
1,1-Dichloropropene	ND	0.500		µg/L	1	9/22/2022 9:46:17 PM
Carbon tetrachloride	ND	0.500		µg/L	1	9/22/2022 9:46:17 PM
1,2-Dichloroethane (EDC)	ND	0.400		µg/L	1	9/22/2022 9:46:17 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	9/22/2022 9:46:17 PM
1,2-Dichloropropane	ND	0.500		µg/L	1	9/22/2022 9:46:17 PM
Bromodichloromethane	ND	0.500		µg/L	1	9/22/2022 9:46:17 PM
Dibromomethane	ND	0.500		µg/L	1	9/22/2022 9:46:17 PM
cis-1,3-Dichloropropene	ND	0.500		µg/L	1	9/22/2022 9:46:17 PM
trans-1,3-Dichloropropylene	ND	0.500		µg/L	1	9/22/2022 9:46:17 PM
1,1,2-Trichloroethane	ND	0.350		µg/L	1	9/22/2022 9:46:17 PM
1,3-Dichloropropane	ND	0.500		µg/L	1	9/22/2022 9:46:17 PM
Tetrachloroethene (PCE)	ND	0.400		µg/L	1	9/22/2022 9:46:17 PM
Dibromochloromethane	ND	0.500		µg/L	1	9/22/2022 9:46:17 PM
1,2-Dibromoethane (EDB)	ND	0.200		µg/L	1	9/22/2022 9:46:17 PM
Chlorobenzene	ND	0.500		µg/L	1	9/22/2022 9:46:17 PM
1,1,1,2-Tetrachloroethane	ND	0.300		µg/L	1	9/22/2022 9:46:17 PM
Bromoform	ND	0.500		µg/L	1	9/22/2022 9:46:17 PM
1,1,2,2-Tetrachloroethane	ND	0.400		µg/L	1	9/22/2022 9:46:17 PM
Bromobenzene	ND	0.500		µg/L	1	9/22/2022 9:46:17 PM
2-Chlorotoluene	ND	0.500		µg/L	1	9/22/2022 9:46:17 PM
4-Chlorotoluene	ND	0.500		µg/L	1	9/22/2022 9:46:17 PM
1,2,3-Trichloropropane	ND	0.400		µg/L	1	9/22/2022 9:46:17 PM
1,2,4-Trichlorobenzene	ND	0.750		µg/L	1	9/22/2022 9:46:17 PM
1,3-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 9:46:17 PM
1,4-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 9:46:17 PM
1,2-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 9:46:17 PM

Analytical Report

Work Order: **2209247**
Date Reported: **9/26/2022**

Client: PES Environmental, Inc.
Collection Date: 9/15/2022 11:20:00 AM
Project: BSB - Shallow/Intermediate
Lab ID: 2209247-004
Matrix: Groundwater
Client Sample ID: **HYCP-2i-091522**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 37885		Analyst: SG
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/22/2022 9:46:17 PM
Hexachloro-1,3-butadiene	ND	0.500		µg/L	1	9/22/2022 9:46:17 PM
1,2,3-Trichlorobenzene	ND	0.700		µg/L	1	9/22/2022 9:46:17 PM
Surr: Dibromofluoromethane	55.2	80 - 120	S	%Rec	1	9/22/2022 9:46:17 PM
Surr: Toluene-d8	91.0	80 - 120		%Rec	1	9/22/2022 9:46:17 PM
Surr: 1-Bromo-4-fluorobenzene	89.7	80 - 120		%Rec	1	9/22/2022 9:46:17 PM

NOTES:
S - Outlying surrogate recovery(ies) observed.

Client: PES Environmental, Inc. **Collection Date:** 9/15/2022 9:12:00 AM
Project: BSB - Shallow/Intermediate
Lab ID: 2209247-005 **Matrix:** Groundwater
Client Sample ID: **HYCP-12i-091522**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37885 Analyst: SG

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	9/22/2022 10:16:24 PM
Chloromethane	ND	0.500		µg/L	1	9/22/2022 10:16:24 PM
Vinyl chloride	61,800	1,000	D	µg/L	5000	9/23/2022 4:06:34 PM
Bromomethane	ND	0.500		µg/L	1	9/22/2022 10:16:24 PM
Trichlorofluoromethane (CFC-11)	ND	0.500		µg/L	1	9/22/2022 10:16:24 PM
Chloroethane	ND	1.00		µg/L	1	9/22/2022 10:16:24 PM
1,1-Dichloroethene	479	250	D	µg/L	500	9/23/2022 5:06:50 PM
Methylene chloride	ND	0.750		µg/L	1	9/22/2022 10:16:24 PM
trans-1,2-Dichloroethene	3,200	2,500	D	µg/L	5000	9/23/2022 4:06:34 PM
1,1-Dichloroethane	ND	0.500		µg/L	1	9/22/2022 10:16:24 PM
cis-1,2-Dichloroethene	94,000	2,500	D	µg/L	5000	9/23/2022 4:06:34 PM
Chloroform	ND	0.500		µg/L	1	9/22/2022 10:16:24 PM
1,1,1-Trichloroethane (TCA)	ND	0.400		µg/L	1	9/22/2022 10:16:24 PM
1,1-Dichloropropene	ND	0.500		µg/L	1	9/22/2022 10:16:24 PM
Carbon tetrachloride	ND	0.500		µg/L	1	9/22/2022 10:16:24 PM
1,2-Dichloroethane (EDC)	ND	0.400		µg/L	1	9/22/2022 10:16:24 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	9/22/2022 10:16:24 PM
1,2-Dichloropropane	ND	0.500		µg/L	1	9/22/2022 10:16:24 PM
Bromodichloromethane	ND	0.500		µg/L	1	9/22/2022 10:16:24 PM
Dibromomethane	ND	0.500		µg/L	1	9/22/2022 10:16:24 PM
cis-1,3-Dichloropropene	ND	0.500		µg/L	1	9/22/2022 10:16:24 PM
trans-1,3-Dichloropropylene	ND	0.500		µg/L	1	9/22/2022 10:16:24 PM
1,1,2-Trichloroethane	ND	0.350		µg/L	1	9/22/2022 10:16:24 PM
1,3-Dichloropropane	ND	0.500		µg/L	1	9/22/2022 10:16:24 PM
Tetrachloroethene (PCE)	ND	0.400		µg/L	1	9/22/2022 10:16:24 PM
Dibromochloromethane	ND	0.500		µg/L	1	9/22/2022 10:16:24 PM
1,2-Dibromoethane (EDB)	ND	0.200		µg/L	1	9/22/2022 10:16:24 PM
Chlorobenzene	ND	0.500		µg/L	1	9/22/2022 10:16:24 PM
1,1,1,2-Tetrachloroethane	ND	0.300		µg/L	1	9/22/2022 10:16:24 PM
Bromoform	ND	0.500		µg/L	1	9/22/2022 10:16:24 PM
1,1,2,2-Tetrachloroethane	ND	0.400		µg/L	1	9/22/2022 10:16:24 PM
Bromobenzene	ND	0.500		µg/L	1	9/22/2022 10:16:24 PM
2-Chlorotoluene	ND	0.500		µg/L	1	9/22/2022 10:16:24 PM
4-Chlorotoluene	ND	0.500		µg/L	1	9/22/2022 10:16:24 PM
1,2,3-Trichloropropane	ND	0.400		µg/L	1	9/22/2022 10:16:24 PM
1,2,4-Trichlorobenzene	ND	0.750		µg/L	1	9/22/2022 10:16:24 PM
1,3-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 10:16:24 PM
1,4-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 10:16:24 PM
1,2-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 10:16:24 PM

Analytical Report

Work Order: **2209247**
Date Reported: **9/26/2022**

Client: PES Environmental, Inc.
Collection Date: 9/15/2022 9:12:00 AM
Project: BSB - Shallow/Intermediate
Lab ID: 2209247-005
Matrix: Groundwater
Client Sample ID: **HYCP-12i-091522**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 37885		Analyst: SG
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/22/2022 10:16:24 PM
Hexachloro-1,3-butadiene	ND	0.500		µg/L	1	9/22/2022 10:16:24 PM
1,2,3-Trichlorobenzene	ND	0.700		µg/L	1	9/22/2022 10:16:24 PM
Surr: Dibromofluoromethane	75.2	80 - 120	S	%Rec	1	9/22/2022 10:16:24 PM
Surr: Toluene-d8	84.3	80 - 120		%Rec	1	9/22/2022 10:16:24 PM
Surr: 1-Bromo-4-fluorobenzene	94.0	80 - 120		%Rec	1	9/22/2022 10:16:24 PM

NOTES:
S - Outlying surrogate recovery(ies) observed.

Client: PES Environmental, Inc. **Collection Date:** 9/16/2022 12:18:00 PM
Project: BSB - Shallow/Intermediate
Lab ID: 2209247-006 **Matrix:** Groundwater
Client Sample ID: **Gi-091622**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37885 Analyst: SG

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	9/22/2022 10:46:31 PM
Chloromethane	2.54	0.500		µg/L	1	9/22/2022 10:46:31 PM
Vinyl chloride	4.99	0.200		µg/L	1	9/22/2022 10:46:31 PM
Bromomethane	3.72	0.500		µg/L	1	9/22/2022 10:46:31 PM
Trichlorofluoromethane (CFC-11)	ND	0.500		µg/L	1	9/22/2022 10:46:31 PM
Chloroethane	ND	1.00		µg/L	1	9/22/2022 10:46:31 PM
1,1-Dichloroethene	ND	0.500		µg/L	1	9/22/2022 10:46:31 PM
Methylene chloride	ND	0.750		µg/L	1	9/22/2022 10:46:31 PM
trans-1,2-Dichloroethene	3.40	0.500		µg/L	1	9/22/2022 10:46:31 PM
1,1-Dichloroethane	ND	0.500		µg/L	1	9/22/2022 10:46:31 PM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	9/23/2022 1:35:58 PM
Chloroform	ND	0.500		µg/L	1	9/22/2022 10:46:31 PM
1,1,1-Trichloroethane (TCA)	ND	0.400		µg/L	1	9/22/2022 10:46:31 PM
1,1-Dichloropropene	ND	0.500		µg/L	1	9/22/2022 10:46:31 PM
Carbon tetrachloride	ND	0.500		µg/L	1	9/22/2022 10:46:31 PM
1,2-Dichloroethane (EDC)	ND	0.400		µg/L	1	9/22/2022 10:46:31 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	9/22/2022 10:46:31 PM
1,2-Dichloropropane	ND	0.500		µg/L	1	9/22/2022 10:46:31 PM
Bromodichloromethane	ND	0.500		µg/L	1	9/22/2022 10:46:31 PM
Dibromomethane	ND	0.500		µg/L	1	9/22/2022 10:46:31 PM
cis-1,3-Dichloropropene	ND	0.500		µg/L	1	9/22/2022 10:46:31 PM
trans-1,3-Dichloropropylene	ND	0.500		µg/L	1	9/22/2022 10:46:31 PM
1,1,2-Trichloroethane	ND	0.350		µg/L	1	9/22/2022 10:46:31 PM
1,3-Dichloropropane	ND	0.500		µg/L	1	9/22/2022 10:46:31 PM
Tetrachloroethene (PCE)	ND	0.400		µg/L	1	9/22/2022 10:46:31 PM
Dibromochloromethane	ND	0.500		µg/L	1	9/22/2022 10:46:31 PM
1,2-Dibromoethane (EDB)	ND	0.200		µg/L	1	9/22/2022 10:46:31 PM
Chlorobenzene	ND	0.500		µg/L	1	9/22/2022 10:46:31 PM
1,1,1,2-Tetrachloroethane	ND	0.300		µg/L	1	9/22/2022 10:46:31 PM
Bromoform	ND	0.500		µg/L	1	9/22/2022 10:46:31 PM
1,1,2,2-Tetrachloroethane	ND	0.400		µg/L	1	9/22/2022 10:46:31 PM
Bromobenzene	ND	0.500		µg/L	1	9/22/2022 10:46:31 PM
2-Chlorotoluene	ND	0.500		µg/L	1	9/22/2022 10:46:31 PM
4-Chlorotoluene	ND	0.500		µg/L	1	9/22/2022 10:46:31 PM
1,2,3-Trichloropropane	ND	0.400		µg/L	1	9/22/2022 10:46:31 PM
1,2,4-Trichlorobenzene	ND	0.750		µg/L	1	9/22/2022 10:46:31 PM
1,3-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 10:46:31 PM
1,4-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 10:46:31 PM
1,2-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 10:46:31 PM

Analytical Report

Work Order: **2209247**
Date Reported: **9/26/2022**

Client: PES Environmental, Inc.
Collection Date: 9/16/2022 12:18:00 PM
Project: BSB - Shallow/Intermediate
Lab ID: 2209247-006
Matrix: Groundwater
Client Sample ID: **Gi-091622**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 37885		Analyst: SG
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/22/2022 10:46:31 PM
Hexachloro-1,3-butadiene	ND	0.500		µg/L	1	9/22/2022 10:46:31 PM
1,2,3-Trichlorobenzene	ND	0.700		µg/L	1	9/22/2022 10:46:31 PM
Surr: Dibromofluoromethane	58.0	80 - 120	S	%Rec	1	9/22/2022 10:46:31 PM
Surr: Toluene-d8	89.3	80 - 120		%Rec	1	9/22/2022 10:46:31 PM
Surr: 1-Bromo-4-fluorobenzene	90.1	80 - 120		%Rec	1	9/22/2022 10:46:31 PM

NOTES:
S - Outlying surrogate recovery(ies) observed.

Client: PES Environmental, Inc. **Collection Date:** 9/16/2022 1:19:00 PM
Project: BSB - Shallow/Intermediate
Lab ID: 2209247-007 **Matrix:** Groundwater
Client Sample ID: **Gs-091622**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37885 Analyst: SG

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	9/22/2022 11:16:41 PM
Chloromethane	2.52	0.500		µg/L	1	9/22/2022 11:16:41 PM
Vinyl chloride	1.62	0.200		µg/L	1	9/22/2022 11:16:41 PM
Bromomethane	3.46	0.500		µg/L	1	9/22/2022 11:16:41 PM
Trichlorofluoromethane (CFC-11)	ND	0.500		µg/L	1	9/22/2022 11:16:41 PM
Chloroethane	ND	1.00		µg/L	1	9/22/2022 11:16:41 PM
1,1-Dichloroethene	ND	0.500		µg/L	1	9/22/2022 11:16:41 PM
Methylene chloride	ND	0.750		µg/L	1	9/22/2022 11:16:41 PM
trans-1,2-Dichloroethene	ND	0.500		µg/L	1	9/22/2022 11:16:41 PM
1,1-Dichloroethane	ND	0.500		µg/L	1	9/22/2022 11:16:41 PM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	9/23/2022 2:06:06 PM
Chloroform	ND	0.500		µg/L	1	9/22/2022 11:16:41 PM
1,1,1-Trichloroethane (TCA)	ND	0.400		µg/L	1	9/22/2022 11:16:41 PM
1,1-Dichloropropene	ND	0.500		µg/L	1	9/22/2022 11:16:41 PM
Carbon tetrachloride	ND	0.500		µg/L	1	9/22/2022 11:16:41 PM
1,2-Dichloroethane (EDC)	ND	0.400		µg/L	1	9/22/2022 11:16:41 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	9/22/2022 11:16:41 PM
1,2-Dichloropropane	ND	0.500		µg/L	1	9/22/2022 11:16:41 PM
Bromodichloromethane	ND	0.500		µg/L	1	9/22/2022 11:16:41 PM
Dibromomethane	ND	0.500		µg/L	1	9/22/2022 11:16:41 PM
cis-1,3-Dichloropropene	ND	0.500		µg/L	1	9/22/2022 11:16:41 PM
trans-1,3-Dichloropropylene	ND	0.500		µg/L	1	9/22/2022 11:16:41 PM
1,1,2-Trichloroethane	ND	0.350		µg/L	1	9/22/2022 11:16:41 PM
1,3-Dichloropropane	ND	0.500		µg/L	1	9/22/2022 11:16:41 PM
Tetrachloroethene (PCE)	ND	0.400		µg/L	1	9/22/2022 11:16:41 PM
Dibromochloromethane	ND	0.500		µg/L	1	9/22/2022 11:16:41 PM
1,2-Dibromoethane (EDB)	ND	0.200		µg/L	1	9/22/2022 11:16:41 PM
Chlorobenzene	ND	0.500		µg/L	1	9/22/2022 11:16:41 PM
1,1,1,2-Tetrachloroethane	ND	0.300		µg/L	1	9/22/2022 11:16:41 PM
Bromoform	ND	0.500		µg/L	1	9/22/2022 11:16:41 PM
1,1,2,2-Tetrachloroethane	ND	0.400		µg/L	1	9/22/2022 11:16:41 PM
Bromobenzene	ND	0.500		µg/L	1	9/22/2022 11:16:41 PM
2-Chlorotoluene	ND	0.500		µg/L	1	9/22/2022 11:16:41 PM
4-Chlorotoluene	ND	0.500		µg/L	1	9/22/2022 11:16:41 PM
1,2,3-Trichloropropane	ND	0.400		µg/L	1	9/22/2022 11:16:41 PM
1,2,4-Trichlorobenzene	ND	0.750		µg/L	1	9/22/2022 11:16:41 PM
1,3-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 11:16:41 PM
1,4-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 11:16:41 PM
1,2-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 11:16:41 PM

Analytical Report

Work Order: **2209247**
Date Reported: **9/26/2022**

Client: PES Environmental, Inc.
Collection Date: 9/16/2022 1:19:00 PM
Project: BSB - Shallow/Intermediate
Lab ID: 2209247-007
Matrix: Groundwater
Client Sample ID: **Gs-091622**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 37885		Analyst: SG
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/22/2022 11:16:41 PM
Hexachloro-1,3-butadiene	ND	0.500		µg/L	1	9/22/2022 11:16:41 PM
1,2,3-Trichlorobenzene	ND	0.700		µg/L	1	9/22/2022 11:16:41 PM
Surr: Dibromofluoromethane	55.1	80 - 120	S	%Rec	1	9/22/2022 11:16:41 PM
Surr: Toluene-d8	89.7	80 - 120		%Rec	1	9/22/2022 11:16:41 PM
Surr: 1-Bromo-4-fluorobenzene	89.9	80 - 120		%Rec	1	9/22/2022 11:16:41 PM

NOTES:
S - Outlying surrogate recovery(ies) observed.

Client: PES Environmental, Inc. **Collection Date:** 9/9/2022 5:20:00 PM
Project: BSB - Shallow/Intermediate
Lab ID: 2209247-008 **Matrix:** Water
Client Sample ID: TB-091622

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37885 Analyst: SG

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	9/22/2022 7:15:42 PM
Chloromethane	ND	0.500		µg/L	1	9/22/2022 7:15:42 PM
Vinyl chloride	ND	0.200		µg/L	1	9/22/2022 7:15:42 PM
Bromomethane	ND	0.500		µg/L	1	9/22/2022 7:15:42 PM
Trichlorofluoromethane (CFC-11)	ND	0.500		µg/L	1	9/22/2022 7:15:42 PM
Chloroethane	ND	1.00		µg/L	1	9/22/2022 7:15:42 PM
1,1-Dichloroethene	ND	0.500		µg/L	1	9/22/2022 7:15:42 PM
Methylene chloride	ND	0.750		µg/L	1	9/22/2022 7:15:42 PM
trans-1,2-Dichloroethene	ND	0.500		µg/L	1	9/22/2022 7:15:42 PM
1,1-Dichloroethane	ND	0.500		µg/L	1	9/22/2022 7:15:42 PM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	9/22/2022 7:15:42 PM
Chloroform	ND	0.500		µg/L	1	9/22/2022 7:15:42 PM
1,1,1-Trichloroethane (TCA)	ND	0.400		µg/L	1	9/22/2022 7:15:42 PM
1,1-Dichloropropene	ND	0.500		µg/L	1	9/22/2022 7:15:42 PM
Carbon tetrachloride	ND	0.500		µg/L	1	9/22/2022 7:15:42 PM
1,2-Dichloroethane (EDC)	ND	0.400		µg/L	1	9/22/2022 7:15:42 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	9/22/2022 7:15:42 PM
1,2-Dichloropropane	ND	0.500		µg/L	1	9/22/2022 7:15:42 PM
Bromodichloromethane	ND	0.500		µg/L	1	9/22/2022 7:15:42 PM
Dibromomethane	ND	0.500		µg/L	1	9/22/2022 7:15:42 PM
cis-1,3-Dichloropropene	ND	0.500		µg/L	1	9/22/2022 7:15:42 PM
trans-1,3-Dichloropropylene	ND	0.500		µg/L	1	9/22/2022 7:15:42 PM
1,1,2-Trichloroethane	ND	0.350		µg/L	1	9/22/2022 7:15:42 PM
1,3-Dichloropropane	ND	0.500		µg/L	1	9/22/2022 7:15:42 PM
Tetrachloroethene (PCE)	ND	0.400		µg/L	1	9/22/2022 7:15:42 PM
Dibromochloromethane	ND	0.500		µg/L	1	9/22/2022 7:15:42 PM
1,2-Dibromoethane (EDB)	ND	0.200		µg/L	1	9/22/2022 7:15:42 PM
Chlorobenzene	ND	0.500		µg/L	1	9/22/2022 7:15:42 PM
1,1,1,2-Tetrachloroethane	ND	0.300		µg/L	1	9/22/2022 7:15:42 PM
Bromoform	ND	0.500		µg/L	1	9/22/2022 7:15:42 PM
1,1,2,2-Tetrachloroethane	ND	0.400		µg/L	1	9/22/2022 7:15:42 PM
Bromobenzene	ND	0.500		µg/L	1	9/22/2022 7:15:42 PM
2-Chlorotoluene	ND	0.500		µg/L	1	9/22/2022 7:15:42 PM
4-Chlorotoluene	ND	0.500		µg/L	1	9/22/2022 7:15:42 PM
1,2,3-Trichloropropane	ND	0.400		µg/L	1	9/22/2022 7:15:42 PM
1,2,4-Trichlorobenzene	ND	0.750		µg/L	1	9/22/2022 7:15:42 PM
1,3-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 7:15:42 PM
1,4-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 7:15:42 PM
1,2-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 7:15:42 PM

Analytical Report

Work Order: **2209247**
Date Reported: **9/26/2022**

Client: PES Environmental, Inc.
Collection Date: 9/9/2022 5:20:00 PM
Project: BSB - Shallow/Intermediate
Lab ID: 2209247-008
Matrix: Water
Client Sample ID: TB-091622

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 37885		Analyst: SG
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/22/2022 7:15:42 PM
Hexachloro-1,3-butadiene	ND	0.500		µg/L	1	9/22/2022 7:15:42 PM
1,2,3-Trichlorobenzene	ND	0.700		µg/L	1	9/22/2022 7:15:42 PM
Surr: Dibromofluoromethane	103	80 - 120		%Rec	1	9/22/2022 7:15:42 PM
Surr: Toluene-d8	95.3	80 - 120		%Rec	1	9/22/2022 7:15:42 PM
Surr: 1-Bromo-4-fluorobenzene	92.0	80 - 120		%Rec	1	9/22/2022 7:15:42 PM

Work Order: 2209247
CLIENT: PES Environmental, Inc.
Project: BSB - Shallow/Intermediate

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-37885** SampType: **LCS** Units: **µg/L** Prep Date: **9/21/2022** RunNo: **78487**
Client ID: **LCSW** Batch ID: **37885** Analysis Date: **9/22/2022** SeqNo: **1614263**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	35.4	1.25	20.00	0	177	80	120				S
Chloromethane	22.9	0.750	20.00	0	115	80	120				
Vinyl chloride	23.6	0.200	20.00	0	118	80	120				
Bromomethane	22.5	1.20	20.00	0	112	80	120				
Trichlorofluoromethane (CFC-11)	22.5	0.500	20.00	0	113	80	120				
Chloroethane	20.7	1.00	20.00	0	103	80	120				
1,1-Dichloroethene	25.7	0.500	20.00	0	129	80	120				S
Methylene chloride	23.6	0.750	20.00	0	118	80	120				
trans-1,2-Dichloroethene	27.0	0.500	20.00	0	135	80	120				S
1,1-Dichloroethane	20.8	0.500	20.00	0	104	80	120				
cis-1,2-Dichloroethene	21.6	0.500	20.00	0	108	80	120				
Chloroform	21.4	0.500	20.00	0	107	80	120				
1,1,1-Trichloroethane (TCA)	21.6	0.400	20.00	0	108	80	120				
1,1-Dichloropropene	21.9	0.500	20.00	0	109	80	120				
Carbon tetrachloride	22.1	0.750	20.00	0	110	80	120				
1,2-Dichloroethane (EDC)	21.1	0.400	20.00	0	106	80	120				
Trichloroethene (TCE)	20.2	0.500	20.00	0	101	80	120				
1,2-Dichloropropane	20.9	0.500	20.00	0	105	80	120				
Bromodichloromethane	21.7	0.500	20.00	0	109	80	120				
Dibromomethane	21.3	0.500	20.00	0	106	80	120				
cis-1,3-Dichloropropene	22.2	0.500	20.00	0	111	80	120				
trans-1,3-Dichloropropylene	22.6	0.500	20.00	0	113	80	120				
1,1,2-Trichloroethane	22.1	0.350	20.00	0	111	80	120				
1,3-Dichloropropane	22.0	0.500	20.00	0	110	80	120				
Tetrachloroethene (PCE)	22.3	0.400	20.00	0	112	80	120				
Dibromochloromethane	22.8	1.00	20.00	0	114	80	120				
1,2-Dibromoethane (EDB)	21.9	0.300	20.00	0	109	80	120				
Chlorobenzene	21.3	0.500	20.00	0	107	80	120				
1,1,1,2-Tetrachloroethane	22.1	0.300	20.00	0	111	80	120				
Bromoform	23.8	0.500	20.00	0	119	80	120				
1,1,2,2-Tetrachloroethane	26.8	0.400	20.00	0	134	80	120				S
Bromobenzene	22.1	0.500	20.00	0	110	80	120				

Work Order: 2209247
CLIENT: PES Environmental, Inc.
Project: BSB - Shallow/Intermediate

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-37885** SampType: **LCS** Units: **µg/L** Prep Date: **9/21/2022** RunNo: **78487**
Client ID: **LCSW** Batch ID: **37885** Analysis Date: **9/22/2022** SeqNo: **1614263**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Chlorotoluene	21.8	0.500	20.00	0	109	80	120				
4-Chlorotoluene	22.0	0.500	20.00	0	110	80	120				
1,2,3-Trichloropropane	22.3	0.400	20.00	0	111	80	120				
1,2,4-Trichlorobenzene	22.2	0.750	20.00	0	111	80	120				
1,3-Dichlorobenzene	21.5	0.500	20.00	0	107	80	120				
1,4-Dichlorobenzene	21.6	0.500	20.00	0	108	80	120				
1,2-Dichlorobenzene	21.9	0.500	20.00	0	109	80	120				
1,2-Dibromo-3-chloropropane	23.7	1.00	20.00	0	118	80	120				
Hexachloro-1,3-butadiene	22.4	0.500	20.00	0	112	80	120				
1,2,3-Trichlorobenzene	22.7	0.700	20.00	0	114	80	120				
Surr: Dibromofluoromethane	25.4		25.00		102	80	120				
Surr: Toluene-d8	25.3		25.00		101	80	120				
Surr: 1-Bromo-4-fluorobenzene	26.7		25.00		107	80	120				

NOTES:
S - Outlying spike recovery observed (high bias). Samples are non-detect; result meets QC requirements.

Sample ID: **MB-37885** SampType: **MBLK** Units: **µg/L** Prep Date: **9/21/2022** RunNo: **78487**
Client ID: **MBLKW** Batch ID: **37885** Analysis Date: **9/22/2022** SeqNo: **1614240**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00									
Chloromethane	ND	0.500									
Vinyl chloride	ND	0.200									
Bromomethane	ND	0.500									
Trichlorofluoromethane (CFC-11)	ND	0.500									
Chloroethane	ND	1.00									
1,1-Dichloroethene	ND	0.500									
Methylene chloride	ND	0.750									
trans-1,2-Dichloroethene	ND	0.500									
1,1-Dichloroethane	ND	0.500									
cis-1,2-Dichloroethene	ND	0.500									
Chloroform	ND	0.500									

Work Order: 2209247
CLIENT: PES Environmental, Inc.
Project: BSB - Shallow/Intermediate

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-37885** SampType: **MBLK** Units: **µg/L** Prep Date: **9/21/2022** RunNo: **78487**
Client ID: **MBLKW** Batch ID: **37885** Analysis Date: **9/22/2022** SeqNo: **1614240**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane (TCA)	ND	0.400									
1,1-Dichloropropene	ND	0.500									
Carbon tetrachloride	ND	0.500									
1,2-Dichloroethane (EDC)	ND	0.400									
Trichloroethene (TCE)	ND	0.500									
1,2-Dichloropropane	ND	0.500									
Bromodichloromethane	ND	0.500									
Dibromomethane	ND	0.500									
cis-1,3-Dichloropropene	ND	0.500									
trans-1,3-Dichloropropylene	ND	0.500									
1,1,2-Trichloroethane	ND	0.350									
1,3-Dichloropropane	ND	0.500									
Tetrachloroethene (PCE)	ND	0.400									
Dibromochloromethane	ND	0.500									
1,2-Dibromoethane (EDB)	ND	0.200									
Chlorobenzene	ND	0.500									
1,1,1,2-Tetrachloroethane	ND	0.300									
Bromoform	ND	0.500									
1,1,2,2-Tetrachloroethane	ND	0.400									
Bromobenzene	ND	0.500									
2-Chlorotoluene	ND	0.500									
4-Chlorotoluene	ND	0.500									
1,2,3-Trichloropropane	ND	0.400									
1,2,4-Trichlorobenzene	ND	0.750									
1,3-Dichlorobenzene	ND	0.500									
1,4-Dichlorobenzene	ND	0.500									
1,2-Dichlorobenzene	ND	0.500									
1,2-Dibromo-3-chloropropane	ND	1.00									
Hexachloro-1,3-butadiene	ND	0.500									
1,2,3-Trichlorobenzene	ND	0.700									
Surr: Dibromofluoromethane	26.1		25.00		105	80	120				
Surr: Toluene-d8	23.9		25.00		95.5	80	120				

Work Order: 2209247
CLIENT: PES Environmental, Inc.
Project: BSB - Shallow/Intermediate

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-37885** SampType: **MBLK** Units: **µg/L** Prep Date: **9/21/2022** RunNo: **78487**
Client ID: **MBLKW** Batch ID: **37885** Analysis Date: **9/22/2022** SeqNo: **1614240**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 1-Bromo-4-fluorobenzene	23.3		25.00		93.1	80	120				

Sample ID: **2209247-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **9/21/2022** RunNo: **78487**
Client ID: **HYCP-7s-091422** Batch ID: **37885** Analysis Date: **9/22/2022** SeqNo: **1614243**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00						0		30	
Chloromethane	2.65	0.500						2.488	6.48	30	
Vinyl chloride	ND	0.200						0		30	
Bromomethane	4.46	0.500						4.983	11.1	30	
Trichlorofluoromethane (CFC-11)	ND	0.500						0		30	
Chloroethane	ND	1.00						0		30	
1,1-Dichloroethene	ND	0.500						0		30	
Methylene chloride	ND	0.750						0		30	
trans-1,2-Dichloroethene	ND	0.500						0		30	
1,1-Dichloroethane	ND	0.500						0		30	
cis-1,2-Dichloroethene	ND	0.500						0		30	
Chloroform	ND	0.500						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.400						0		30	
1,1-Dichloropropene	ND	0.500						0		30	
Carbon tetrachloride	ND	0.500						0		30	
1,2-Dichloroethane (EDC)	ND	0.400						0		30	
Trichloroethene (TCE)	ND	0.500						0		30	
1,2-Dichloropropane	ND	0.500						0		30	
Bromodichloromethane	ND	0.500						0		30	
Dibromomethane	ND	0.500						0		30	
cis-1,3-Dichloropropene	ND	0.500						0		30	
trans-1,3-Dichloropropylene	ND	0.500						0		30	
1,1,2-Trichloroethane	ND	0.350						0		30	
1,3-Dichloropropane	ND	0.500						0		30	
Tetrachloroethene (PCE)	ND	0.400						0		30	

Work Order: 2209247
CLIENT: PES Environmental, Inc.
Project: BSB - Shallow/Intermediate

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2209247-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **9/21/2022** RunNo: **78487**
Client ID: **HYCP-7s-091422** Batch ID: **37885** Analysis Date: **9/22/2022** SeqNo: **1614243**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	ND	0.500						0		30	
1,2-Dibromoethane (EDB)	ND	0.200						0		30	
Chlorobenzene	ND	0.500						0		30	
1,1,1,2-Tetrachloroethane	ND	0.300						0		30	
Bromoform	ND	0.500						0		30	
1,1,2,2-Tetrachloroethane	ND	0.400						0		30	
Bromobenzene	ND	0.500						0		30	
2-Chlorotoluene	ND	0.500						0		30	
4-Chlorotoluene	ND	0.500						0		30	
1,2,3-Trichloropropane	ND	0.400						0		30	
1,2,4-Trichlorobenzene	ND	0.750						0		30	
1,3-Dichlorobenzene	ND	0.500						0		30	
1,4-Dichlorobenzene	ND	0.500						0		30	
1,2-Dichlorobenzene	ND	0.500						0		30	
1,2-Dibromo-3-chloropropane	ND	1.00						0		30	
Hexachloro-1,3-butadiene	ND	0.500						0		30	
1,2,3-Trichlorobenzene	ND	0.700						0		30	
Surr: Dibromofluoromethane	14.4		25.00		57.6	80	120		0		S
Surr: Toluene-d8	22.2		25.00		89.0	80	120		0		
Surr: 1-Bromo-4-fluorobenzene	22.5		25.00		90.0	80	120		0		

NOTES:
S - Outlying surrogate recovery(ies) observed.

Sample ID: **2209248-023ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **9/21/2022** RunNo: **78487**
Client ID: **BATCH** Batch ID: **37885** Analysis Date: **9/23/2022** SeqNo: **1614253**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00						0		30	
Chloromethane	ND	0.500						0		30	
Vinyl chloride	1.18	0.200						2.165	58.7	30	R
Bromomethane	ND	0.500						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.500						0		30	

Work Order: 2209247
CLIENT: PES Environmental, Inc.
Project: BSB - Shallow/Intermediate

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2209248-023ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **9/21/2022** RunNo: **78487**
Client ID: **BATCH** Batch ID: **37885** Analysis Date: **9/23/2022** SeqNo: **1614253**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroethane	ND	1.00						0		30	
1,1-Dichloroethene	ND	0.500						0		30	
Methylene chloride	ND	0.750						0		30	
trans-1,2-Dichloroethene	ND	0.500						0		30	
1,1-Dichloroethane	ND	0.500						0		30	
cis-1,2-Dichloroethene	1.44	0.500						1.879	26.6	30	
Chloroform	ND	0.500						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.400						0		30	
1,1-Dichloropropene	ND	0.500						0		30	
Carbon tetrachloride	ND	0.500						0		30	
1,2-Dichloroethane (EDC)	ND	0.400						0		30	
Trichloroethene (TCE)	ND	0.500						0		30	
1,2-Dichloropropane	ND	0.500						0		30	
Bromodichloromethane	ND	0.500						0		30	
Dibromomethane	ND	0.500						0		30	
cis-1,3-Dichloropropene	ND	0.500						0		30	
trans-1,3-Dichloropropylene	ND	0.500						0		30	
1,1,2-Trichloroethane	ND	0.350						0		30	
1,3-Dichloropropane	ND	0.500						0		30	
Tetrachloroethene (PCE)	ND	0.400						0		30	
Dibromochloromethane	ND	0.500						0		30	
1,2-Dibromoethane (EDB)	ND	0.200						0		30	
Chlorobenzene	ND	0.500						0		30	
1,1,1,2-Tetrachloroethane	ND	0.300						0		30	
Bromoform	ND	0.500						0		30	
1,1,2,2-Tetrachloroethane	ND	0.400						0		30	
Bromobenzene	ND	0.500						0		30	
2-Chlorotoluene	ND	0.500						0		30	
4-Chlorotoluene	ND	0.500						0		30	
1,2,3-Trichloropropane	ND	0.400						0		30	
1,2,4-Trichlorobenzene	ND	0.750						0		30	
1,3-Dichlorobenzene	ND	0.500						0		30	

Work Order: 2209247
CLIENT: PES Environmental, Inc.
Project: BSB - Shallow/Intermediate

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2209248-023ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **9/21/2022** RunNo: **78487**
Client ID: **BATCH** Batch ID: **37885** Analysis Date: **9/23/2022** SeqNo: **1614253**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	ND	0.500						0		30	
1,2-Dichlorobenzene	ND	0.500						0		30	
1,2-Dibromo-3-chloropropane	ND	1.00						0		30	
Hexachloro-1,3-butadiene	ND	0.500						0		30	
1,2,3-Trichlorobenzene	ND	0.700						0		30	
Surr: Dibromofluoromethane	25.6		25.00		102	80	120		0		
Surr: Toluene-d8	24.1		25.00		96.2	80	120		0		
Surr: 1-Bromo-4-fluorobenzene	22.7		25.00		90.8	80	120		0		

NOTES:
R - High RPD observed.

Sample ID: **2209247-002AMS** SampType: **MS** Units: **µg/L** Prep Date: **9/21/2022** RunNo: **78487**
Client ID: **HYCP-7i-091522** Batch ID: **37885** Analysis Date: **9/23/2022** SeqNo: **1614261**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	18.1	1.00	20.00	0	90.7	1.35	172				
Chloromethane	17.7	0.500	20.00	2.693	74.9	27.2	164				
Vinyl chloride	7.68	0.200	20.00	0.2093	37.4	52.3	147				S
Bromomethane	19.0	0.500	20.00	4.006	75.0	24.2	186				
Trichlorofluoromethane (CFC-11)	2.50	0.500	20.00	0	12.5	71.2	137				S
Chloroethane	7.75	1.00	20.00	0	38.7	62.9	141				S
1,1-Dichloroethene	13.1	0.500	20.00	0	65.5	76.5	136				S
Methylene chloride	17.7	0.750	20.00	0	88.4	73.7	132				
trans-1,2-Dichloroethene	19.7	0.500	20.00	0	98.4	79.1	131				
1,1-Dichloroethane	7.90	0.500	20.00	0	39.5	74.3	138				S
cis-1,2-Dichloroethene	14.5	0.500	20.00	0	72.5	78.3	131				S
Chloroform	11.2	0.500	20.00	0	55.9	78.9	131				S
1,1,1-Trichloroethane (TCA)	15.2	0.400	20.00	0	76.0	81.1	132				S
1,1-Dichloropropene	19.8	0.500	20.00	0	98.9	81.3	133				
Carbon tetrachloride	14.3	0.500	20.00	0	71.3	79.5	133				S
1,2-Dichloroethane (EDC)	12.6	0.400	20.00	0	63.0	73.4	132				S
Trichloroethene (TCE)	16.5	0.500	20.00	0	82.7	75	133				

Work Order: 2209247
CLIENT: PES Environmental, Inc.
Project: BSB - Shallow/Intermediate

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2209247-002AMS** SampType: **MS** Units: **µg/L** Prep Date: **9/21/2022** RunNo: **78487**
Client ID: **HYCP-7i-091522** Batch ID: **37885** Analysis Date: **9/23/2022** SeqNo: **1614261**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichloropropane	15.7	0.500	20.00	0	78.7	76.2	134				
Bromodichloromethane	11.8	0.500	20.00	0	59.0	76.1	130				S
Dibromomethane	11.0	0.500	20.00	0	55.1	75.5	130				S
cis-1,3-Dichloropropene	13.6	0.500	20.00	0	67.8	68.4	128				S
trans-1,3-Dichloropropylene	14.1	0.500	20.00	0	70.3	63.8	132				
1,1,2-Trichloroethane	14.4	0.350	20.00	0	72.2	75.2	130				S
1,3-Dichloropropane	14.6	0.500	20.00	0	73.2	73.9	131				S
Tetrachloroethene (PCE)	17.1	0.400	20.00	0	85.5	78	131				
Dibromochloromethane	12.0	0.500	20.00	0	59.9	72.6	129				S
1,2-Dibromoethane (EDB)	13.6	0.200	20.00	0	67.8	73.9	128				S
Chlorobenzene	16.5	0.500	20.00	0	82.3	80.9	124				
1,1,1,2-Tetrachloroethane	14.2	0.300	20.00	0	71.1	79.3	123				S
Bromoform	11.1	0.500	20.00	0	55.6	68.3	132				S
1,1,2,2-Tetrachloroethane	15.2	0.400	20.00	0	76.1	72.7	141				
Bromobenzene	15.1	0.500	20.00	0	75.7	79.9	124				S
2-Chlorotoluene	16.9	0.500	20.00	0	84.4	77.9	133				
4-Chlorotoluene	16.9	0.500	20.00	0	84.5	78	130				
1,2,3-Trichloropropane	13.6	0.400	20.00	0	68.0	66.3	132				
1,2,4-Trichlorobenzene	15.8	0.750	20.00	0	79.1	67.6	131				
1,3-Dichlorobenzene	16.3	0.500	20.00	0	81.3	83.5	123				S
1,4-Dichlorobenzene	16.0	0.500	20.00	0	80.0	84.2	121				S
1,2-Dichlorobenzene	15.5	0.500	20.00	0	77.6	83.3	124				S
1,2-Dibromo-3-chloropropane	11.4	1.00	20.00	0	56.9	57.7	146				S
Hexachloro-1,3-butadiene	19.8	0.500	20.00	0	98.9	68.5	136				
1,2,3-Trichlorobenzene	14.8	0.700	20.00	0	73.9	62.9	138				
Surr: Dibromofluoromethane	15.6		25.00		62.3	80	120				S
Surr: Toluene-d8	24.3		25.00		97.1	80	120				
Surr: 1-Bromo-4-fluorobenzene	25.5		25.00		102	80	120				

NOTES:
S - Spike recovery indicates a possible matrix effect.
S - Outlying surrogate recovery(ies) observed.

Sample Log-In Check List

Client Name:	PES	Work Order Number:	2209247
Logged by:	Elisabeth Samoray	Date Received:	9/16/2022 5:00:00 PM

Chain of Custody

1.	Is Chain of Custody complete?	Yes	☑	No	☐	Not Present ☐
2.	How was the sample delivered?	Client				

Log In

3.	Coolers are present?	Yes	☑	No	☐	NA ☐
4.	Shipping container/cooler in good condition?	Yes	☑	No	☐	
5.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes	☑	No	☐	Not Present ☐
6.	Was an attempt made to cool the samples?	Yes	☑	No	☐	NA ☐
7.	Were all items received at a temperature of >2°C to 6°C *	Yes	☑	No	☐	NA ☐
8.	Sample(s) in proper container(s)?	Yes	☑	No	☐	
9.	Sufficient sample volume for indicated test(s)?	Yes	☑	No	☐	
10.	Are samples properly preserved?	Yes	☑	No	☐	
11.	Was preservative added to bottles?	Yes	☐	No	☑	NA ☐
12.	Is there headspace in the VOA vials?	Yes	☐	No	☑	NA ☐
13.	Did all samples containers arrive in good condition(unbroken)?	Yes	☑	No	☐	
14.	Does paperwork match bottle labels?	Yes	☑	No	☐	
15.	Are matrices correctly identified on Chain of Custody?	Yes	☑	No	☐	
16.	Is it clear what analyses were requested?	Yes	☑	No	☐	
17.	Were all holding times able to be met?	Yes	☑	No	☐	

Special Handling (if applicable)

18.	Was client notified of all discrepancies with this order?	Yes	☐	No	☐	NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

19. Additional remarks:

Item Information

Item #	Temp ºC
Sample 1	5.8

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 9/16/22 Page: 1 of: 1

Laboratory Project No (internal): 2209247

Project Name: BSB - Shallow/Intermediate

Special Remarks: Tier 2 (batch QC ok)

Project No: 827.001.49.004

Client: PES Environmental

Collected by: N. Wisdom + A. Semeraro

Address: 2101 4th Ave #1310

Location: Kent, WA

City, State, Zip: Seattle, WA 98121

Report To (PM): Bill Haldeman

Telephone: 206-529-3980

Sample Disposal: ☐ Return to client ☑ Disposal by lab (after 30 days)

Fax:

PM Email: bill.haldeman

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	HVOCs VOCs (EPA 8260 / 624) 8260D	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8) Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	HYCP-7s-091422	9/14/22	1616	GW	3	X											
2	HYCP-7i-091522	9/15/22	0912			X											
3	HYCP-2-091522		1023			X											
4	HYCP-2i-091522		1120			X											
5	HYCP-12i-091522	↓	0912			X											Should be HY-12i-091522. No changes to report made. sem 10/18/2022.
6	Gi-091622	9/16/22	1218			X											
7	Gs-091622	↓	1319	↓	↓	X											
8	TB-091622	↓	—	—	1	X											
9																	
10																	

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☑ Standard ☐ Next Day
☐ 3 Day ☐ Same Day
☐ 2 Day ____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x	Anthony Semeraro	9/16/22 16:50	x Clare O'Connor	Clare O'Connor	9/16/22 17:00
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x		

Analytical Report

Work Order: **2209247**
Date Reported: **9/26/2022**

Client: PES Environmental, Inc.
Collection Date: 9/14/2022 4:16:00 PM
Project: BSB - Shallow/Intermediate
Lab ID: 2209247-001
Matrix: Groundwater
Client Sample ID: **HYCP-7s-091422**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37885 Analyst: SG

Analyses	Result		RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	UJ	1.00		µg/L	1	9/22/2022 7:45:49 PM
Chloromethane	2.49	J	0.500		µg/L	1	9/22/2022 7:45:49 PM
Vinyl chloride	ND	UJ	0.200		µg/L	1	9/22/2022 7:45:49 PM
Bromomethane	4.98	J	0.500		µg/L	1	9/22/2022 7:45:49 PM
Trichlorofluoromethane (CFC-11)	ND	UJ	0.500		µg/L	1	9/22/2022 7:45:49 PM
Chloroethane	ND		1.00		µg/L	1	9/22/2022 7:45:49 PM
1,1-Dichloroethene	ND		0.500		µg/L	1	9/22/2022 7:45:49 PM
Methylene chloride	ND		0.750		µg/L	1	9/22/2022 7:45:49 PM
trans-1,2-Dichloroethene	ND		0.500		µg/L	1	9/22/2022 7:45:49 PM
1,1-Dichloroethane	ND		0.500		µg/L	1	9/22/2022 7:45:49 PM
cis-1,2-Dichloroethene	ND		0.500		µg/L	1	9/22/2022 7:45:49 PM
Chloroform	ND		0.500		µg/L	1	9/22/2022 7:45:49 PM
1,1,1-Trichloroethane (TCA)	ND		0.400		µg/L	1	9/22/2022 7:45:49 PM
1,1-Dichloropropene	ND		0.500		µg/L	1	9/22/2022 7:45:49 PM
Carbon tetrachloride	ND		0.500		µg/L	1	9/22/2022 7:45:49 PM
1,2-Dichloroethane (EDC)	ND		0.400		µg/L	1	9/22/2022 7:45:49 PM
Trichloroethene (TCE)	ND		0.500		µg/L	1	9/22/2022 7:45:49 PM
1,2-Dichloropropane	ND		0.500		µg/L	1	9/22/2022 7:45:49 PM
Bromodichloromethane	ND		0.500		µg/L	1	9/22/2022 7:45:49 PM
Dibromomethane	ND		0.500		µg/L	1	9/22/2022 7:45:49 PM
cis-1,3-Dichloropropene	ND		0.500		µg/L	1	9/22/2022 7:45:49 PM
trans-1,3-Dichloropropylene	ND		0.500		µg/L	1	9/22/2022 7:45:49 PM
1,1,2-Trichloroethane	ND		0.350		µg/L	1	9/22/2022 7:45:49 PM
1,3-Dichloropropane	ND		0.500		µg/L	1	9/22/2022 7:45:49 PM
Tetrachloroethene (PCE)	ND		0.400		µg/L	1	9/22/2022 7:45:49 PM
Dibromochloromethane	ND		0.500		µg/L	1	9/22/2022 7:45:49 PM
1,2-Dibromoethane (EDB)	ND		0.200		µg/L	1	9/22/2022 7:45:49 PM
Chlorobenzene	ND		0.500		µg/L	1	9/22/2022 7:45:49 PM
1,1,1,2-Tetrachloroethane	ND		0.300		µg/L	1	9/22/2022 7:45:49 PM
Bromoform	ND		0.500		µg/L	1	9/22/2022 7:45:49 PM
1,1,2,2-Tetrachloroethane	ND		0.400		µg/L	1	9/22/2022 7:45:49 PM
Bromobenzene	ND		0.500		µg/L	1	9/22/2022 7:45:49 PM
2-Chlorotoluene	ND		0.500		µg/L	1	9/22/2022 7:45:49 PM
4-Chlorotoluene	ND		0.500		µg/L	1	9/22/2022 7:45:49 PM
1,2,3-Trichloropropane	ND		0.400		µg/L	1	9/22/2022 7:45:49 PM
1,2,4-Trichlorobenzene	ND		0.750		µg/L	1	9/22/2022 7:45:49 PM
1,3-Dichlorobenzene	ND		0.500		µg/L	1	9/22/2022 7:45:49 PM
1,4-Dichlorobenzene	ND		0.500		µg/L	1	9/22/2022 7:45:49 PM
1,2-Dichlorobenzene	ND	UJ	0.500		µg/L	1	9/22/2022 7:45:49 PM

Analytical Report

Work Order: **2209247**
Date Reported: **9/26/2022**

Client: PES Environmental, Inc.
Collection Date: 9/14/2022 4:16:00 PM
Project: BSB - Shallow/Intermediate
Lab ID: 2209247-001
Matrix: Groundwater
Client Sample ID: **HYCP-7s-091422**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 37885		Analyst: SG
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/22/2022 7:45:49 PM
Hexachloro-1,3-butadiene	ND	0.500		µg/L	1	9/22/2022 7:45:49 PM
1,2,3-Trichlorobenzene	ND	0.700		µg/L	1	9/22/2022 7:45:49 PM
Surr: Dibromofluoromethane	59.1	80 - 120	S	%Rec	1	9/22/2022 7:45:49 PM
Surr: Toluene-d8	88.0	80 - 120		%Rec	1	9/22/2022 7:45:49 PM
Surr: 1-Bromo-4-fluorobenzene	88.0	80 - 120		%Rec	1	9/22/2022 7:45:49 PM

NOTES:
S - Outlying surrogate recovery(ies) observed.

Analytical Report

Work Order: **2209247**
Date Reported: **9/26/2022**

Client: PES Environmental, Inc.
Collection Date: 9/15/2022 9:12:00 AM
Project: BSB - Shallow/Intermediate
Lab ID: 2209247-002
Matrix: Groundwater
Client Sample ID: **HYCP-7i-091522**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37885 Analyst: SG

Analyses	Result		RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	UJ	1.00		µg/L	1	9/22/2022 8:46:02 PM
Chloromethane	2.69	J	0.500		µg/L	1	9/22/2022 8:46:02 PM
Vinyl chloride	0.209	J	0.200		µg/L	1	9/22/2022 8:46:02 PM
Bromomethane	4.01	J	0.500		µg/L	1	9/22/2022 8:46:02 PM
Trichlorofluoromethane (CFC-11)	ND	UJ	0.500		µg/L	1	9/22/2022 8:46:02 PM
Chloroethane	ND		1.00		µg/L	1	9/22/2022 8:46:02 PM
1,1-Dichloroethene	ND		0.500		µg/L	1	9/22/2022 8:46:02 PM
Methylene chloride	ND		0.750		µg/L	1	9/22/2022 8:46:02 PM
trans-1,2-Dichloroethene	ND		0.500		µg/L	1	9/22/2022 8:46:02 PM
1,1-Dichloroethane	ND		0.500		µg/L	1	9/22/2022 8:46:02 PM
cis-1,2-Dichloroethene	ND		0.500		µg/L	1	9/22/2022 8:46:02 PM
Chloroform	ND		0.500		µg/L	1	9/22/2022 8:46:02 PM
1,1,1-Trichloroethane (TCA)	ND		0.400		µg/L	1	9/22/2022 8:46:02 PM
1,1-Dichloropropene	ND		0.500		µg/L	1	9/22/2022 8:46:02 PM
Carbon tetrachloride	ND		0.500		µg/L	1	9/22/2022 8:46:02 PM
1,2-Dichloroethane (EDC)	ND		0.400		µg/L	1	9/22/2022 8:46:02 PM
Trichloroethene (TCE)	ND		0.500		µg/L	1	9/22/2022 8:46:02 PM
1,2-Dichloropropane	ND		0.500		µg/L	1	9/22/2022 8:46:02 PM
Bromodichloromethane	ND		0.500		µg/L	1	9/22/2022 8:46:02 PM
Dibromomethane	ND		0.500		µg/L	1	9/22/2022 8:46:02 PM
cis-1,3-Dichloropropene	ND		0.500		µg/L	1	9/22/2022 8:46:02 PM
trans-1,3-Dichloropropylene	ND		0.500		µg/L	1	9/22/2022 8:46:02 PM
1,1,2-Trichloroethane	ND		0.350		µg/L	1	9/22/2022 8:46:02 PM
1,3-Dichloropropane	ND		0.500		µg/L	1	9/22/2022 8:46:02 PM
Tetrachloroethene (PCE)	ND		0.400		µg/L	1	9/22/2022 8:46:02 PM
Dibromochloromethane	ND		0.500		µg/L	1	9/22/2022 8:46:02 PM
1,2-Dibromoethane (EDB)	ND		0.200		µg/L	1	9/22/2022 8:46:02 PM
Chlorobenzene	ND		0.500		µg/L	1	9/22/2022 8:46:02 PM
1,1,1,2-Tetrachloroethane	ND		0.300		µg/L	1	9/22/2022 8:46:02 PM
Bromoform	ND		0.500		µg/L	1	9/22/2022 8:46:02 PM
1,1,2,2-Tetrachloroethane	ND		0.400		µg/L	1	9/22/2022 8:46:02 PM
Bromobenzene	ND		0.500		µg/L	1	9/22/2022 8:46:02 PM
2-Chlorotoluene	ND		0.500		µg/L	1	9/22/2022 8:46:02 PM
4-Chlorotoluene	ND		0.500		µg/L	1	9/22/2022 8:46:02 PM
1,2,3-Trichloropropane	ND		0.400		µg/L	1	9/22/2022 8:46:02 PM
1,2,4-Trichlorobenzene	ND		0.750		µg/L	1	9/22/2022 8:46:02 PM
1,3-Dichlorobenzene	ND		0.500		µg/L	1	9/22/2022 8:46:02 PM
1,4-Dichlorobenzene	ND		0.500		µg/L	1	9/22/2022 8:46:02 PM
1,2-Dichlorobenzene	ND	UJ	0.500		µg/L	1	9/22/2022 8:46:02 PM

Analytical Report

Work Order: **2209247**
Date Reported: **9/26/2022**

Client: PES Environmental, Inc.
Collection Date: 9/15/2022 9:12:00 AM
Project: BSB - Shallow/Intermediate
Lab ID: 2209247-002
Matrix: Groundwater
Client Sample ID: **HYCP-7i-091522**

Analyses	Result		RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D					Batch ID: 37885		Analyst: SG
1,2-Dibromo-3-chloropropane	ND	UJ	1.00		µg/L	1	9/22/2022 8:46:02 PM
Hexachloro-1,3-butadiene	ND	UJ	0.500		µg/L	1	9/22/2022 8:46:02 PM
1,2,3-Trichlorobenzene	ND	UJ	0.700		µg/L	1	9/22/2022 8:46:02 PM
Surr: Dibromofluoromethane	55.4		80 - 120	S	%Rec	1	9/22/2022 8:46:02 PM
Surr: Toluene-d8	88.6		80 - 120		%Rec	1	9/22/2022 8:46:02 PM
Surr: 1-Bromo-4-fluorobenzene	89.1		80 - 120		%Rec	1	9/22/2022 8:46:02 PM

NOTES:
S - Outlying surrogate recovery(ies) observed.

Client: PES Environmental, Inc. **Collection Date:** 9/15/2022 10:23:00 AM
Project: BSB - Shallow/Intermediate
Lab ID: 2209247-003 **Matrix:** Groundwater
Client Sample ID: **HYCP-2-091522**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37885 Analyst: SG

Analyses	Result		RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	UJ	1.00		µg/L	1	9/22/2022 9:16:10 PM
Chloromethane	2.57	J	0.500		µg/L	1	9/22/2022 9:16:10 PM
Vinyl chloride	0.972	J	0.200		µg/L	1	9/22/2022 9:16:10 PM
Bromomethane	3.86	J	0.500		µg/L	1	9/22/2022 9:16:10 PM
Trichlorofluoromethane (CFC-11)	ND	UJ	0.500		µg/L	1	9/22/2022 9:16:10 PM
Chloroethane	ND		1.00		µg/L	1	9/22/2022 9:16:10 PM
1,1-Dichloroethene	ND		0.500		µg/L	1	9/22/2022 9:16:10 PM
Methylene chloride	ND		0.750		µg/L	1	9/22/2022 9:16:10 PM
trans-1,2-Dichloroethene	ND		0.500		µg/L	1	9/22/2022 9:16:10 PM
1,1-Dichloroethane	ND		0.500		µg/L	1	9/22/2022 9:16:10 PM
cis-1,2-Dichloroethene	ND		0.500		µg/L	1	9/22/2022 9:16:10 PM
Chloroform	ND		0.500		µg/L	1	9/22/2022 9:16:10 PM
1,1,1-Trichloroethane (TCA)	ND		0.400		µg/L	1	9/22/2022 9:16:10 PM
1,1-Dichloropropene	ND		0.500		µg/L	1	9/22/2022 9:16:10 PM
Carbon tetrachloride	ND		0.500		µg/L	1	9/22/2022 9:16:10 PM
1,2-Dichloroethane (EDC)	ND		0.400		µg/L	1	9/22/2022 9:16:10 PM
Trichloroethene (TCE)	ND		0.500		µg/L	1	9/22/2022 9:16:10 PM
1,2-Dichloropropane	ND		0.500		µg/L	1	9/22/2022 9:16:10 PM
Bromodichloromethane	ND		0.500		µg/L	1	9/22/2022 9:16:10 PM
Dibromomethane	ND		0.500		µg/L	1	9/22/2022 9:16:10 PM
cis-1,3-Dichloropropene	ND		0.500		µg/L	1	9/22/2022 9:16:10 PM
trans-1,3-Dichloropropylene	ND		0.500		µg/L	1	9/22/2022 9:16:10 PM
1,1,2-Trichloroethane	ND		0.350		µg/L	1	9/22/2022 9:16:10 PM
1,3-Dichloropropane	ND		0.500		µg/L	1	9/22/2022 9:16:10 PM
Tetrachloroethene (PCE)	ND		0.400		µg/L	1	9/22/2022 9:16:10 PM
Dibromochloromethane	ND		0.500		µg/L	1	9/22/2022 9:16:10 PM
1,2-Dibromoethane (EDB)	ND		0.200		µg/L	1	9/22/2022 9:16:10 PM
Chlorobenzene	ND		0.500		µg/L	1	9/22/2022 9:16:10 PM
1,1,1,2-Tetrachloroethane	ND		0.300		µg/L	1	9/22/2022 9:16:10 PM
Bromoform	ND		0.500		µg/L	1	9/22/2022 9:16:10 PM
1,1,2,2-Tetrachloroethane	ND		0.400		µg/L	1	9/22/2022 9:16:10 PM
Bromobenzene	ND		0.500		µg/L	1	9/22/2022 9:16:10 PM
2-Chlorotoluene	ND		0.500		µg/L	1	9/22/2022 9:16:10 PM
4-Chlorotoluene	ND		0.500		µg/L	1	9/22/2022 9:16:10 PM
1,2,3-Trichloropropane	ND		0.400		µg/L	1	9/22/2022 9:16:10 PM
1,2,4-Trichlorobenzene	ND		0.750		µg/L	1	9/22/2022 9:16:10 PM
1,3-Dichlorobenzene	ND		0.500		µg/L	1	9/22/2022 9:16:10 PM
1,4-Dichlorobenzene	ND		0.500		µg/L	1	9/22/2022 9:16:10 PM
1,2-Dichlorobenzene	ND	UJ	0.500		µg/L	1	9/22/2022 9:16:10 PM

Analytical Report

Work Order: **2209247**
Date Reported: **9/26/2022**

Client: PES Environmental, Inc.
Collection Date: 9/15/2022 10:23:00 AM
Project: BSB - Shallow/Intermediate
Lab ID: 2209247-003
Matrix: Groundwater
Client Sample ID: **HYCP-2-091522**

Analyses	Result		RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D					Batch ID: 37885		Analyst: SG
1,2-Dibromo-3-chloropropane	ND	UJ	1.00		µg/L	1	9/22/2022 9:16:10 PM
Hexachloro-1,3-butadiene	ND	UJ	0.500		µg/L	1	9/22/2022 9:16:10 PM
1,2,3-Trichlorobenzene	ND	UJ	0.700		µg/L	1	9/22/2022 9:16:10 PM
Surr: Dibromofluoromethane	55.9		80 - 120	S	%Rec	1	9/22/2022 9:16:10 PM
Surr: Toluene-d8	90.1		80 - 120		%Rec	1	9/22/2022 9:16:10 PM
Surr: 1-Bromo-4-fluorobenzene	88.2		80 - 120		%Rec	1	9/22/2022 9:16:10 PM

NOTES:
S - Outlying surrogate recovery(ies) observed.

JC 10/11/22

Client: PES Environmental, Inc. **Collection Date:** 9/15/2022 11:20:00 AM
Project: BSB - Shallow/Intermediate
Lab ID: 2209247-004 **Matrix:** Groundwater
Client Sample ID: **HYCP-2i-091522**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37885 Analyst: SG

Analyses	Result	Qual	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	UJ	1.00		µg/L	1	9/22/2022 9:46:17 PM
Chloromethane	2.66	J	0.500		µg/L	1	9/22/2022 9:46:17 PM
Vinyl chloride	ND	UJ	0.200		µg/L	1	9/22/2022 9:46:17 PM
Bromomethane	3.74	J	0.500		µg/L	1	9/22/2022 9:46:17 PM
Trichlorofluoromethane (CFC-11)	ND	UJ	0.500		µg/L	1	9/22/2022 9:46:17 PM
Chloroethane	ND		1.00		µg/L	1	9/22/2022 9:46:17 PM
1,1-Dichloroethene	ND		0.500		µg/L	1	9/22/2022 9:46:17 PM
Methylene chloride	ND		0.750		µg/L	1	9/22/2022 9:46:17 PM
trans-1,2-Dichloroethene	ND		0.500		µg/L	1	9/22/2022 9:46:17 PM
1,1-Dichloroethane	ND		0.500		µg/L	1	9/22/2022 9:46:17 PM
cis-1,2-Dichloroethene	ND		0.500		µg/L	1	9/22/2022 9:46:17 PM
Chloroform	ND		0.500		µg/L	1	9/22/2022 9:46:17 PM
1,1,1-Trichloroethane (TCA)	ND		0.400		µg/L	1	9/22/2022 9:46:17 PM
1,1-Dichloropropene	ND		0.500		µg/L	1	9/22/2022 9:46:17 PM
Carbon tetrachloride	ND		0.500		µg/L	1	9/22/2022 9:46:17 PM
1,2-Dichloroethane (EDC)	ND		0.400		µg/L	1	9/22/2022 9:46:17 PM
Trichloroethene (TCE)	ND		0.500		µg/L	1	9/22/2022 9:46:17 PM
1,2-Dichloropropane	ND		0.500		µg/L	1	9/22/2022 9:46:17 PM
Bromodichloromethane	ND		0.500		µg/L	1	9/22/2022 9:46:17 PM
Dibromomethane	ND		0.500		µg/L	1	9/22/2022 9:46:17 PM
cis-1,3-Dichloropropene	ND		0.500		µg/L	1	9/22/2022 9:46:17 PM
trans-1,3-Dichloropropylene	ND		0.500		µg/L	1	9/22/2022 9:46:17 PM
1,1,2-Trichloroethane	ND		0.350		µg/L	1	9/22/2022 9:46:17 PM
1,3-Dichloropropane	ND		0.500		µg/L	1	9/22/2022 9:46:17 PM
Tetrachloroethene (PCE)	ND		0.400		µg/L	1	9/22/2022 9:46:17 PM
Dibromochloromethane	ND		0.500		µg/L	1	9/22/2022 9:46:17 PM
1,2-Dibromoethane (EDB)	ND		0.200		µg/L	1	9/22/2022 9:46:17 PM
Chlorobenzene	ND		0.500		µg/L	1	9/22/2022 9:46:17 PM
1,1,1,2-Tetrachloroethane	ND		0.300		µg/L	1	9/22/2022 9:46:17 PM
Bromoform	ND		0.500		µg/L	1	9/22/2022 9:46:17 PM
1,1,2,2-Tetrachloroethane	ND		0.400		µg/L	1	9/22/2022 9:46:17 PM
Bromobenzene	ND		0.500		µg/L	1	9/22/2022 9:46:17 PM
2-Chlorotoluene	ND		0.500		µg/L	1	9/22/2022 9:46:17 PM
4-Chlorotoluene	ND		0.500		µg/L	1	9/22/2022 9:46:17 PM
1,2,3-Trichloropropane	ND		0.400		µg/L	1	9/22/2022 9:46:17 PM
1,2,4-Trichlorobenzene	ND		0.750		µg/L	1	9/22/2022 9:46:17 PM
1,3-Dichlorobenzene	ND		0.500		µg/L	1	9/22/2022 9:46:17 PM
1,4-Dichlorobenzene	ND		0.500		µg/L	1	9/22/2022 9:46:17 PM
1,2-Dichlorobenzene	ND	UJ	0.500		µg/L	1	9/22/2022 9:46:17 PM

Analytical Report

Work Order: **2209247**
Date Reported: **9/26/2022**

Client: PES Environmental, Inc.
Collection Date: 9/15/2022 11:20:00 AM
Project: BSB - Shallow/Intermediate
Lab ID: 2209247-004
Matrix: Groundwater
Client Sample ID: **HYCP-2i-091522**

Analyses	Result		RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D					Batch ID: 37885		Analyst: SG
1,2-Dibromo-3-chloropropane	ND	UJ	1.00		µg/L	1	9/22/2022 9:46:17 PM
Hexachloro-1,3-butadiene	ND		0.500		µg/L	1	9/22/2022 9:46:17 PM
1,2,3-Trichlorobenzene	ND	UJ	0.700		µg/L	1	9/22/2022 9:46:17 PM
Surr: Dibromofluoromethane	55.2		80 - 120	S	%Rec	1	9/22/2022 9:46:17 PM
Surr: Toluene-d8	91.0		80 - 120		%Rec	1	9/22/2022 9:46:17 PM
Surr: 1-Bromo-4-fluorobenzene	89.7		80 - 120		%Rec	1	9/22/2022 9:46:17 PM

NOTES:
S - Outlying surrogate recovery(ies) observed.

Analytical Report

Work Order: **2209247**
Date Reported: **9/26/2022**

Client: PES Environmental, Inc.
Collection Date: 9/15/2022 9:12:00 AM
Project: BSB - Shallow/Intermediate
Lab ID: 2209247-005 JC 10/18/2022
Matrix: Groundwater
Client Sample ID: HY~~CP~~-12i-091522

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37885 Analyst: SG

Analyses	Result		RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	UJ	1.00		µg/L	1	9/22/2022 10:16:24 PM
Chloromethane	ND	UJ	0.500		µg/L	1	9/22/2022 10:16:24 PM
Vinyl chloride	61,800	J	1,000	D	µg/L	5000	9/23/2022 4:06:34 PM
Bromomethane	ND	UJ	0.500		µg/L	1	9/22/2022 10:16:24 PM
Trichlorofluoromethane (CFC-11)	ND	UJ	0.500		µg/L	1	9/22/2022 10:16:24 PM
Chloroethane	ND	UJ	1.00		µg/L	1	9/22/2022 10:16:24 PM
1,1-Dichloroethene	479	J	250	D	µg/L	500	9/23/2022 5:06:50 PM
Methylene chloride	ND	UJ	0.750		µg/L	1	9/22/2022 10:16:24 PM
trans-1,2-Dichloroethene	3,200	J	2,500	D	µg/L	5000	9/23/2022 4:06:34 PM
1,1-Dichloroethane	ND	UJ	0.500		µg/L	1	9/22/2022 10:16:24 PM
cis-1,2-Dichloroethene	94,000	J	2,500	D	µg/L	5000	9/23/2022 4:06:34 PM
Chloroform	ND	UJ	0.500		µg/L	1	9/22/2022 10:16:24 PM
1,1,1-Trichloroethane (TCA)	ND		0.400		µg/L	1	9/22/2022 10:16:24 PM
1,1-Dichloropropene	ND		0.500		µg/L	1	9/22/2022 10:16:24 PM
Carbon tetrachloride	ND		0.500		µg/L	1	9/22/2022 10:16:24 PM
1,2-Dichloroethane (EDC)	ND		0.400		µg/L	1	9/22/2022 10:16:24 PM
Trichloroethene (TCE)	ND		0.500		µg/L	1	9/22/2022 10:16:24 PM
1,2-Dichloropropane	ND		0.500		µg/L	1	9/22/2022 10:16:24 PM
Bromodichloromethane	ND		0.500		µg/L	1	9/22/2022 10:16:24 PM
Dibromomethane	ND		0.500		µg/L	1	9/22/2022 10:16:24 PM
cis-1,3-Dichloropropene	ND		0.500		µg/L	1	9/22/2022 10:16:24 PM
trans-1,3-Dichloropropylene	ND		0.500		µg/L	1	9/22/2022 10:16:24 PM
1,1,2-Trichloroethane	ND		0.350		µg/L	1	9/22/2022 10:16:24 PM
1,3-Dichloropropane	ND		0.500		µg/L	1	9/22/2022 10:16:24 PM
Tetrachloroethene (PCE)	ND		0.400		µg/L	1	9/22/2022 10:16:24 PM
Dibromochloromethane	ND		0.500		µg/L	1	9/22/2022 10:16:24 PM
1,2-Dibromoethane (EDB)	ND		0.200		µg/L	1	9/22/2022 10:16:24 PM
Chlorobenzene	ND		0.500		µg/L	1	9/22/2022 10:16:24 PM
1,1,1,2-Tetrachloroethane	ND		0.300		µg/L	1	9/22/2022 10:16:24 PM
Bromoform	ND		0.500		µg/L	1	9/22/2022 10:16:24 PM
1,1,2,2-Tetrachloroethane	ND		0.400		µg/L	1	9/22/2022 10:16:24 PM
Bromobenzene	ND		0.500		µg/L	1	9/22/2022 10:16:24 PM
2-Chlorotoluene	ND		0.500		µg/L	1	9/22/2022 10:16:24 PM
4-Chlorotoluene	ND		0.500		µg/L	1	9/22/2022 10:16:24 PM
1,2,3-Trichloropropane	ND		0.400		µg/L	1	9/22/2022 10:16:24 PM
1,2,4-Trichlorobenzene	ND		0.750		µg/L	1	9/22/2022 10:16:24 PM
1,3-Dichlorobenzene	ND		0.500		µg/L	1	9/22/2022 10:16:24 PM
1,4-Dichlorobenzene	ND		0.500		µg/L	1	9/22/2022 10:16:24 PM
1,2-Dichlorobenzene	ND	UJ	0.500		µg/L	1	9/22/2022 10:16:24 PM

Analytical Report

Work Order: **2209247**
Date Reported: **9/26/2022**

Client: PES Environmental, Inc.
Collection Date: 9/15/2022 9:12:00 AM
Project: BSB - Shallow/Intermediate
Lab ID: 2209247-005 JC 10/18/2022
Matrix: Groundwater
Client Sample ID: HYCP-12i-091522

Analyses	Result		RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D					Batch ID: 37885		Analyst: SG
1,2-Dibromo-3-chloropropane	ND	UJ	1.00		µg/L	1	9/22/2022 10:16:24 PM
Hexachloro-1,3-butadiene	ND		0.500		µg/L	1	9/22/2022 10:16:24 PM
1,2,3-Trichlorobenzene	ND	UJ	0.700		µg/L	1	9/22/2022 10:16:24 PM
Surr: Dibromofluoromethane	75.2		80 - 120	S	%Rec	1	9/22/2022 10:16:24 PM
Surr: Toluene-d8	84.3		80 - 120		%Rec	1	9/22/2022 10:16:24 PM
Surr: 1-Bromo-4-fluorobenzene	94.0		80 - 120		%Rec	1	9/22/2022 10:16:24 PM

NOTES:
S - Outlying surrogate recovery(ies) observed.

Client: PES Environmental, Inc.
Collection Date: 9/16/2022 12:18:00 PM
Project: BSB - Shallow/Intermediate
Lab ID: 2209247-006
Matrix: Groundwater
Client Sample ID: **Gi-091622**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37885 Analyst: SG

Analyses	Result		RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	UJ	1.00		µg/L	1	9/22/2022 10:46:31 PM
Chloromethane	2.54	J	0.500		µg/L	1	9/22/2022 10:46:31 PM
Vinyl chloride	4.99	J	0.200		µg/L	1	9/22/2022 10:46:31 PM
Bromomethane	3.72	J	0.500		µg/L	1	9/22/2022 10:46:31 PM
Trichlorofluoromethane (CFC-11)	ND	UJ	0.500		µg/L	1	9/22/2022 10:46:31 PM
Chloroethane	ND		1.00		µg/L	1	9/22/2022 10:46:31 PM
1,1-Dichloroethene	ND		0.500		µg/L	1	9/22/2022 10:46:31 PM
Methylene chloride	ND	UJ	0.750		µg/L	1	9/22/2022 10:46:31 PM
trans-1,2-Dichloroethene	3.40	J	0.500		µg/L	1	9/22/2022 10:46:31 PM
1,1-Dichloroethane	ND	UJ	0.500		µg/L	1	9/22/2022 10:46:31 PM
cis-1,2-Dichloroethene	ND		0.500		µg/L	1	9/23/2022 1:35:58 PM
Chloroform	ND		0.500		µg/L	1	9/22/2022 10:46:31 PM
1,1,1-Trichloroethane (TCA)	ND		0.400		µg/L	1	9/22/2022 10:46:31 PM
1,1-Dichloropropene	ND		0.500		µg/L	1	9/22/2022 10:46:31 PM
Carbon tetrachloride	ND		0.500		µg/L	1	9/22/2022 10:46:31 PM
1,2-Dichloroethane (EDC)	ND		0.400		µg/L	1	9/22/2022 10:46:31 PM
Trichloroethene (TCE)	ND		0.500		µg/L	1	9/22/2022 10:46:31 PM
1,2-Dichloropropane	ND		0.500		µg/L	1	9/22/2022 10:46:31 PM
Bromodichloromethane	ND		0.500		µg/L	1	9/22/2022 10:46:31 PM
Dibromomethane	ND		0.500		µg/L	1	9/22/2022 10:46:31 PM
cis-1,3-Dichloropropene	ND		0.500		µg/L	1	9/22/2022 10:46:31 PM
trans-1,3-Dichloropropylene	ND		0.500		µg/L	1	9/22/2022 10:46:31 PM
1,1,2-Trichloroethane	ND		0.350		µg/L	1	9/22/2022 10:46:31 PM
1,3-Dichloropropane	ND		0.500		µg/L	1	9/22/2022 10:46:31 PM
Tetrachloroethene (PCE)	ND		0.400		µg/L	1	9/22/2022 10:46:31 PM
Dibromochloromethane	ND		0.500		µg/L	1	9/22/2022 10:46:31 PM
1,2-Dibromoethane (EDB)	ND		0.200		µg/L	1	9/22/2022 10:46:31 PM
Chlorobenzene	ND		0.500		µg/L	1	9/22/2022 10:46:31 PM
1,1,1,2-Tetrachloroethane	ND		0.300		µg/L	1	9/22/2022 10:46:31 PM
Bromoform	ND		0.500		µg/L	1	9/22/2022 10:46:31 PM
1,1,2,2-Tetrachloroethane	ND		0.400		µg/L	1	9/22/2022 10:46:31 PM
Bromobenzene	ND		0.500		µg/L	1	9/22/2022 10:46:31 PM
2-Chlorotoluene	ND		0.500		µg/L	1	9/22/2022 10:46:31 PM
4-Chlorotoluene	ND		0.500		µg/L	1	9/22/2022 10:46:31 PM
1,2,3-Trichloropropane	ND		0.400		µg/L	1	9/22/2022 10:46:31 PM
1,2,4-Trichlorobenzene	ND		0.750		µg/L	1	9/22/2022 10:46:31 PM
1,3-Dichlorobenzene	ND		0.500		µg/L	1	9/22/2022 10:46:31 PM
1,4-Dichlorobenzene	ND		0.500		µg/L	1	9/22/2022 10:46:31 PM
1,2-Dichlorobenzene	ND	UJ	0.500		µg/L	1	9/22/2022 10:46:31 PM

Analytical Report

Work Order: **2209247**
Date Reported: **9/26/2022**

Client: PES Environmental, Inc.
Collection Date: 9/16/2022 12:18:00 PM
Project: BSB - Shallow/Intermediate
Lab ID: 2209247-006
Matrix: Groundwater
Client Sample ID: **Gi-091622**

Analyses	Result		RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D					Batch ID: 37885		Analyst: SG
1,2-Dibromo-3-chloropropane	ND	UJ	1.00		µg/L	1	9/22/2022 10:46:31 PM
Hexachloro-1,3-butadiene	ND		0.500		µg/L	1	9/22/2022 10:46:31 PM
1,2,3-Trichlorobenzene	ND	UJ	0.700		µg/L	1	9/22/2022 10:46:31 PM
Surr: Dibromofluoromethane	58.0		80 - 120	S	%Rec	1	9/22/2022 10:46:31 PM
Surr: Toluene-d8	89.3		80 - 120		%Rec	1	9/22/2022 10:46:31 PM
Surr: 1-Bromo-4-fluorobenzene	90.1		80 - 120		%Rec	1	9/22/2022 10:46:31 PM

NOTES:
S - Outlying surrogate recovery(ies) observed.

Analytical Report

Work Order: **2209247**
Date Reported: **9/26/2022**

Client: PES Environmental, Inc.
Collection Date: 9/16/2022 1:19:00 PM
Project: BSB - Shallow/Intermediate
Lab ID: 2209247-007
Matrix: Groundwater
Client Sample ID: **Gs-091622**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37885 Analyst: SG

Analyses	Result		RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	UJ	1.00		µg/L	1	9/22/2022 11:16:41 PM
Chloromethane	2.52	J	0.500		µg/L	1	9/22/2022 11:16:41 PM
Vinyl chloride	1.62	J	0.200		µg/L	1	9/22/2022 11:16:41 PM
Bromomethane	3.46	J	0.500		µg/L	1	9/22/2022 11:16:41 PM
Trichlorofluoromethane (CFC-11)	ND	UJ	0.500		µg/L	1	9/22/2022 11:16:41 PM
Chloroethane	ND		1.00		µg/L	1	9/22/2022 11:16:41 PM
1,1-Dichloroethene	ND		0.500		µg/L	1	9/22/2022 11:16:41 PM
Methylene chloride	ND		0.750		µg/L	1	9/22/2022 11:16:41 PM
trans-1,2-Dichloroethene	ND		0.500		µg/L	1	9/22/2022 11:16:41 PM
1,1-Dichloroethane	ND		0.500		µg/L	1	9/22/2022 11:16:41 PM
cis-1,2-Dichloroethene	ND		0.500		µg/L	1	9/23/2022 2:06:06 PM
Chloroform	ND		0.500		µg/L	1	9/22/2022 11:16:41 PM
1,1,1-Trichloroethane (TCA)	ND		0.400		µg/L	1	9/22/2022 11:16:41 PM
1,1-Dichloropropene	ND		0.500		µg/L	1	9/22/2022 11:16:41 PM
Carbon tetrachloride	ND		0.500		µg/L	1	9/22/2022 11:16:41 PM
1,2-Dichloroethane (EDC)	ND		0.400		µg/L	1	9/22/2022 11:16:41 PM
Trichloroethene (TCE)	ND		0.500		µg/L	1	9/22/2022 11:16:41 PM
1,2-Dichloropropane	ND		0.500		µg/L	1	9/22/2022 11:16:41 PM
Bromodichloromethane	ND		0.500		µg/L	1	9/22/2022 11:16:41 PM
Dibromomethane	ND		0.500		µg/L	1	9/22/2022 11:16:41 PM
cis-1,3-Dichloropropene	ND		0.500		µg/L	1	9/22/2022 11:16:41 PM
trans-1,3-Dichloropropylene	ND		0.500		µg/L	1	9/22/2022 11:16:41 PM
1,1,2-Trichloroethane	ND		0.350		µg/L	1	9/22/2022 11:16:41 PM
1,3-Dichloropropane	ND		0.500		µg/L	1	9/22/2022 11:16:41 PM
Tetrachloroethene (PCE)	ND		0.400		µg/L	1	9/22/2022 11:16:41 PM
Dibromochloromethane	ND		0.500		µg/L	1	9/22/2022 11:16:41 PM
1,2-Dibromoethane (EDB)	ND		0.200		µg/L	1	9/22/2022 11:16:41 PM
Chlorobenzene	ND		0.500		µg/L	1	9/22/2022 11:16:41 PM
1,1,1,2-Tetrachloroethane	ND		0.300		µg/L	1	9/22/2022 11:16:41 PM
Bromoform	ND		0.500		µg/L	1	9/22/2022 11:16:41 PM
1,1,2,2-Tetrachloroethane	ND		0.400		µg/L	1	9/22/2022 11:16:41 PM
Bromobenzene	ND		0.500		µg/L	1	9/22/2022 11:16:41 PM
2-Chlorotoluene	ND		0.500		µg/L	1	9/22/2022 11:16:41 PM
4-Chlorotoluene	ND		0.500		µg/L	1	9/22/2022 11:16:41 PM
1,2,3-Trichloropropane	ND		0.400		µg/L	1	9/22/2022 11:16:41 PM
1,2,4-Trichlorobenzene	ND		0.750		µg/L	1	9/22/2022 11:16:41 PM
1,3-Dichlorobenzene	ND		0.500		µg/L	1	9/22/2022 11:16:41 PM
1,4-Dichlorobenzene	ND		0.500		µg/L	1	9/22/2022 11:16:41 PM
1,2-Dichlorobenzene	ND	UJ	0.500		µg/L	1	9/22/2022 11:16:41 PM

Analytical Report

Work Order: **2209247**
Date Reported: **9/26/2022**

Client: PES Environmental, Inc.
Collection Date: 9/16/2022 1:19:00 PM
Project: BSB - Shallow/Intermediate
Lab ID: 2209247-007
Matrix: Groundwater
Client Sample ID: **Gs-091622**

Analyses	Result		RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D					Batch ID: 37885		Analyst: SG
1,2-Dibromo-3-chloropropane	ND	UJ	1.00		µg/L	1	9/22/2022 11:16:41 PM
Hexachloro-1,3-butadiene	ND		0.500		µg/L	1	9/22/2022 11:16:41 PM
1,2,3-Trichlorobenzene	ND	UJ	0.700		µg/L	1	9/22/2022 11:16:41 PM
Surr: Dibromofluoromethane	55.1		80 - 120	S	%Rec	1	9/22/2022 11:16:41 PM
Surr: Toluene-d8	89.7		80 - 120		%Rec	1	9/22/2022 11:16:41 PM
Surr: 1-Bromo-4-fluorobenzene	89.9		80 - 120		%Rec	1	9/22/2022 11:16:41 PM

NOTES:
S - Outlying surrogate recovery(ies) observed.

3600 Fremont Ave. N.
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PES Environmental, Inc.
Bill Haldeman
1215 Fourth Avenue, Suite 1350
Seattle, WA 98161

RE: BSB- Shallow/ Intermediate
Work Order Number: 2209284

September 28, 2022

Attention Bill Haldeman:

Fremont Analytical, Inc. received 2 sample(s) on 9/21/2022 for the analyses presented in the following report.

Volatile Organic Compounds by EPA Method 8260D

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

Date: *09/28/2022*

CLIENT: PES Environmental, Inc.
Project: BSB- Shallow/ Intermediate
Work Order: 2209284

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2209284-001	HY-1i-092022	09/20/2022 1:35 PM	09/21/2022 10:29 AM
2209284-002	MW-101-092022	09/20/2022 8:00 AM	09/21/2022 10:29 AM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Original

Case Narrative

WO#: **2209284**
Date: **9/28/2022**

CLIENT: PES Environmental, Inc.
Project: BSB- Shallow/ Intermediate

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
DUP - Sample Duplicate
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MCL - Maximum Contaminant Level
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
REP - Sample Replicate
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

Client: PES Environmental, Inc. **Collection Date:** 9/20/2022 1:35:00 PM
Project: BSB- Shallow/ Intermediate
Lab ID: 2209284-001 **Matrix:** Groundwater
Client Sample ID: **HY-1i-092022**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37886 Analyst: SG

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00	Q	µg/L	1	9/22/2022 1:59:07 AM
Chloromethane	ND	0.500	Q	µg/L	1	9/22/2022 1:59:07 AM
Vinyl chloride	ND	0.200		µg/L	1	9/22/2022 1:59:07 AM
Bromomethane	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
Trichlorofluoromethane (CFC-11)	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
Chloroethane	ND	1.00		µg/L	1	9/22/2022 1:59:07 AM
1,1-Dichloroethene	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
Methylene chloride	ND	0.750		µg/L	1	9/22/2022 1:59:07 AM
trans-1,2-Dichloroethene	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
1,1-Dichloroethane	0.696	0.500		µg/L	1	9/22/2022 1:59:07 AM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
Chloroform	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
1,1,1-Trichloroethane (TCA)	ND	0.400		µg/L	1	9/22/2022 1:59:07 AM
1,1-Dichloropropene	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
Carbon tetrachloride	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
1,2-Dichloroethane (EDC)	ND	0.400		µg/L	1	9/22/2022 1:59:07 AM
Trichloroethene (TCE)	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
1,2-Dichloropropane	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
Bromodichloromethane	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
Dibromomethane	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
cis-1,3-Dichloropropene	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
trans-1,3-Dichloropropylene	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
1,1,2-Trichloroethane	ND	0.350		µg/L	1	9/22/2022 1:59:07 AM
1,3-Dichloropropane	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
Tetrachloroethene (PCE)	ND	0.400		µg/L	1	9/22/2022 1:59:07 AM
Dibromochloromethane	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
1,2-Dibromoethane (EDB)	ND	0.200		µg/L	1	9/22/2022 1:59:07 AM
Chlorobenzene	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
1,1,1,2-Tetrachloroethane	ND	0.300		µg/L	1	9/22/2022 1:59:07 AM
Bromoform	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
1,1,2,2-Tetrachloroethane	ND	0.400		µg/L	1	9/22/2022 1:59:07 AM
Bromobenzene	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
2-Chlorotoluene	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
4-Chlorotoluene	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
1,2,3-Trichloropropane	ND	0.400		µg/L	1	9/22/2022 1:59:07 AM
1,2,4-Trichlorobenzene	ND	0.750		µg/L	1	9/22/2022 1:59:07 AM
1,3-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
1,4-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
1,2-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM

Analytical Report

Work Order: **2209284**
Date Reported: **9/28/2022**

Client: PES Environmental, Inc.
Collection Date: 9/20/2022 1:35:00 PM
Project: BSB- Shallow/ Intermediate
Lab ID: 2209284-001
Matrix: Groundwater
Client Sample ID: **HY-1i-092022**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 37886		Analyst: SG
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/22/2022 1:59:07 AM
Hexachloro-1,3-butadiene	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
1,2,3-Trichlorobenzene	ND	0.700		µg/L	1	9/22/2022 1:59:07 AM
Surr: Dibromofluoromethane	106	80 - 120		%Rec	1	9/22/2022 1:59:07 AM
Surr: Toluene-d8	96.4	80 - 120		%Rec	1	9/22/2022 1:59:07 AM
Surr: 1-Bromo-4-fluorobenzene	91.7	80 - 120		%Rec	1	9/22/2022 1:59:07 AM

NOTES:
Q - Associated calibration verification is below acceptance criteria. Result may be low-biased.

Client: PES Environmental, Inc. **Collection Date:** 9/20/2022 8:00:00 AM
Project: BSB- Shallow/ Intermediate
Lab ID: 2209284-002 **Matrix:** Groundwater
Client Sample ID: **MW-101-092022**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37886 Analyst: SG

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00	Q	µg/L	1	9/22/2022 2:29:17 AM
Chloromethane	ND	0.500	Q	µg/L	1	9/22/2022 2:29:17 AM
Vinyl chloride	0.393	0.200		µg/L	1	9/22/2022 2:29:17 AM
Bromomethane	ND	0.500		µg/L	1	9/22/2022 2:29:17 AM
Trichlorofluoromethane (CFC-11)	ND	0.500		µg/L	1	9/22/2022 2:29:17 AM
Chloroethane	ND	1.00		µg/L	1	9/22/2022 2:29:17 AM
1,1-Dichloroethene	ND	0.500		µg/L	1	9/22/2022 2:29:17 AM
Methylene chloride	ND	0.750		µg/L	1	9/22/2022 2:29:17 AM
trans-1,2-Dichloroethene	ND	0.500		µg/L	1	9/22/2022 2:29:17 AM
1,1-Dichloroethane	0.737	0.500		µg/L	1	9/22/2022 2:29:17 AM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	9/22/2022 2:29:17 AM
Chloroform	ND	0.500		µg/L	1	9/22/2022 2:29:17 AM
1,1,1-Trichloroethane (TCA)	ND	0.400		µg/L	1	9/22/2022 2:29:17 AM
1,1-Dichloropropene	ND	0.500		µg/L	1	9/22/2022 2:29:17 AM
Carbon tetrachloride	ND	0.500		µg/L	1	9/22/2022 2:29:17 AM
1,2-Dichloroethane (EDC)	ND	0.400		µg/L	1	9/22/2022 2:29:17 AM
Trichloroethene (TCE)	ND	0.500		µg/L	1	9/22/2022 2:29:17 AM
1,2-Dichloropropane	ND	0.500		µg/L	1	9/22/2022 2:29:17 AM
Bromodichloromethane	ND	0.500		µg/L	1	9/22/2022 2:29:17 AM
Dibromomethane	ND	0.500		µg/L	1	9/22/2022 2:29:17 AM
cis-1,3-Dichloropropene	ND	0.500		µg/L	1	9/22/2022 2:29:17 AM
trans-1,3-Dichloropropylene	ND	0.500		µg/L	1	9/22/2022 2:29:17 AM
1,1,2-Trichloroethane	ND	0.350		µg/L	1	9/22/2022 2:29:17 AM
1,3-Dichloropropane	ND	0.500		µg/L	1	9/22/2022 2:29:17 AM
Tetrachloroethene (PCE)	ND	0.400		µg/L	1	9/22/2022 2:29:17 AM
Dibromochloromethane	ND	0.500		µg/L	1	9/22/2022 2:29:17 AM
1,2-Dibromoethane (EDB)	ND	0.200		µg/L	1	9/22/2022 2:29:17 AM
Chlorobenzene	ND	0.500		µg/L	1	9/22/2022 2:29:17 AM
1,1,1,2-Tetrachloroethane	ND	0.300		µg/L	1	9/22/2022 2:29:17 AM
Bromoform	ND	0.500		µg/L	1	9/22/2022 2:29:17 AM
1,1,2,2-Tetrachloroethane	ND	0.400		µg/L	1	9/22/2022 2:29:17 AM
Bromobenzene	ND	0.500		µg/L	1	9/22/2022 2:29:17 AM
2-Chlorotoluene	ND	0.500		µg/L	1	9/22/2022 2:29:17 AM
4-Chlorotoluene	ND	0.500		µg/L	1	9/22/2022 2:29:17 AM
1,2,3-Trichloropropane	ND	0.400		µg/L	1	9/22/2022 2:29:17 AM
1,2,4-Trichlorobenzene	ND	0.750		µg/L	1	9/22/2022 2:29:17 AM
1,3-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 2:29:17 AM
1,4-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 2:29:17 AM
1,2-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 2:29:17 AM

Analytical Report

Work Order: **2209284**
Date Reported: **9/28/2022**

Client: PES Environmental, Inc.
Collection Date: 9/20/2022 8:00:00 AM
Project: BSB- Shallow/ Intermediate
Lab ID: 2209284-002
Matrix: Groundwater
Client Sample ID: **MW-101-092022**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 37886		Analyst: SG
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/22/2022 2:29:17 AM
Hexachloro-1,3-butadiene	ND	0.500		µg/L	1	9/22/2022 2:29:17 AM
1,2,3-Trichlorobenzene	ND	0.700		µg/L	1	9/22/2022 2:29:17 AM
Surr: Dibromofluoromethane	106	80 - 120		%Rec	1	9/22/2022 2:29:17 AM
Surr: Toluene-d8	97.2	80 - 120		%Rec	1	9/22/2022 2:29:17 AM
Surr: 1-Bromo-4-fluorobenzene	91.3	80 - 120		%Rec	1	9/22/2022 2:29:17 AM

NOTES:
Q - Associated calibration verification is below acceptance criteria. Result may be low-biased.

Work Order: 2209284
CLIENT: PES Environmental, Inc.
Project: BSB- Shallow/ Intermediate

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-37886** SampType: **LCS** Units: **µg/L** Prep Date: **9/21/2022** RunNo: **78457**
Client ID: **LCSW** Batch ID: **37886** Analysis Date: **9/21/2022** SeqNo: **1613751**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	15.7	1.00	20.00	0	78.4	80	120				S
Chloromethane	14.7	0.500	20.00	0	73.5	80	120				S
Vinyl chloride	18.0	0.200	20.00	0	89.8	80	120				
Bromomethane	17.6	0.500	20.00	0	87.8	80	120				
Trichlorofluoromethane (CFC-11)	19.6	0.500	20.00	0	98.0	80	120				
Chloroethane	17.1	1.00	20.00	0	85.6	80	120				
1,1-Dichloroethene	22.8	0.500	20.00	0	114	80	120				
Methylene chloride	23.7	0.750	20.00	0	118	80	120				
trans-1,2-Dichloroethene	25.6	0.500	20.00	0	128	80	120				S
1,1-Dichloroethane	19.7	0.500	20.00	0	98.5	80	120				
cis-1,2-Dichloroethene	20.1	0.500	20.00	0	101	80	120				
Chloroform	20.0	0.500	20.00	0	99.9	80	120				
1,1,1-Trichloroethane (TCA)	20.6	0.400	20.00	0	103	80	120				
1,1-Dichloropropene	20.7	0.500	20.00	0	104	80	120				
Carbon tetrachloride	21.2	0.500	20.00	0	106	80	120				
1,2-Dichloroethane (EDC)	19.6	0.400	20.00	0	98.0	80	120				
Trichloroethene (TCE)	19.0	0.500	20.00	0	95.1	80	120				
1,2-Dichloropropane	19.9	0.500	20.00	0	99.4	80	120				
Bromodichloromethane	20.6	0.500	20.00	0	103	80	120				
Dibromomethane	20.0	0.500	20.00	0	100	80	120				
cis-1,3-Dichloropropene	21.0	0.500	20.00	0	105	80	120				
trans-1,3-Dichloropropylene	20.9	0.500	20.00	0	105	80	120				
1,1,2-Trichloroethane	20.9	0.350	20.00	0	105	80	120				
1,3-Dichloropropane	20.5	0.500	20.00	0	102	80	120				
Tetrachloroethene (PCE)	21.2	0.400	20.00	0	106	80	120				
Dibromochloromethane	21.6	0.500	20.00	0	108	80	120				
1,2-Dibromoethane (EDB)	20.7	0.200	20.00	0	103	80	120				
Chlorobenzene	20.3	0.500	20.00	0	102	80	120				
1,1,1,2-Tetrachloroethane	21.4	0.300	20.00	0	107	80	120				
Bromoform	22.6	0.500	20.00	0	113	80	120				
1,1,2,2-Tetrachloroethane	25.5	0.400	20.00	0	127	80	120				S
Bromobenzene	20.8	0.500	20.00	0	104	80	120				

Work Order: 2209284
CLIENT: PES Environmental, Inc.
Project: BSB- Shallow/ Intermediate

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-37886** SampType: **LCS** Units: **µg/L** Prep Date: **9/21/2022** RunNo: **78457**
Client ID: **LCSW** Batch ID: **37886** Analysis Date: **9/21/2022** SeqNo: **1613751**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Chlorotoluene	20.6	0.500	20.00	0	103	80	120				
4-Chlorotoluene	20.9	0.500	20.00	0	105	80	120				
1,2,3-Trichloropropane	20.4	0.400	20.00	0	102	80	120				
1,2,4-Trichlorobenzene	21.1	0.750	20.00	0	105	80	120				
1,3-Dichlorobenzene	20.3	0.500	20.00	0	102	80	120				
1,4-Dichlorobenzene	20.2	0.500	20.00	0	101	80	120				
1,2-Dichlorobenzene	20.6	0.500	20.00	0	103	80	120				
1,2-Dibromo-3-chloropropane	22.0	1.00	20.00	0	110	80	120				
Hexachloro-1,3-butadiene	22.2	0.500	20.00	0	111	80	120				
1,2,3-Trichlorobenzene	21.0	0.700	20.00	0	105	80	120				
Surr: Dibromofluoromethane	25.3		25.00		101	80	120				
Surr: Toluene-d8	24.9		25.00		99.8	80	120				
Surr: 1-Bromo-4-fluorobenzene	26.3		25.00		105	80	120				

NOTES:
S - Outlying spike recovery observed (high bias). Detections will be qualified with a *.
S - Outlying spike recovery observed (low bias). Samples will be qualified with a Q.

Sample ID: **MB-37886** SampType: **MBLK** Units: **µg/L** Prep Date: **9/21/2022** RunNo: **78457**
Client ID: **MBLKW** Batch ID: **37886** Analysis Date: **9/21/2022** SeqNo: **1613718**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00									Q
Chloromethane	ND	0.500									Q
Vinyl chloride	ND	0.200									
Bromomethane	ND	0.500									
Trichlorofluoromethane (CFC-11)	ND	0.500									
Chloroethane	ND	1.00									
1,1-Dichloroethene	ND	0.500									
Methylene chloride	ND	0.750									
trans-1,2-Dichloroethene	ND	0.500									
1,1-Dichloroethane	ND	0.500									
cis-1,2-Dichloroethene	ND	0.500									

Work Order: 2209284
CLIENT: PES Environmental, Inc.
Project: BSB- Shallow/ Intermediate

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-37886** SampType: **MBLK** Units: **µg/L** Prep Date: **9/21/2022** RunNo: **78457**
Client ID: **MBLKW** Batch ID: **37886** Analysis Date: **9/21/2022** SeqNo: **1613718**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	ND	0.500									
1,1,1-Trichloroethane (TCA)	ND	0.400									
1,1-Dichloropropene	ND	0.500									
Carbon tetrachloride	ND	0.500									
1,2-Dichloroethane (EDC)	ND	0.400									
Trichloroethene (TCE)	ND	0.500									
1,2-Dichloropropane	ND	0.500									
Bromodichloromethane	ND	0.500									
Dibromomethane	ND	0.500									
cis-1,3-Dichloropropene	ND	0.500									
trans-1,3-Dichloropropylene	ND	0.500									
1,1,2-Trichloroethane	ND	0.350									
1,3-Dichloropropane	ND	0.500									
Tetrachloroethene (PCE)	ND	0.400									
Dibromochloromethane	ND	0.500									
1,2-Dibromoethane (EDB)	ND	0.200									
Chlorobenzene	ND	0.500									
1,1,1,2-Tetrachloroethane	ND	0.300									
Bromoform	ND	0.500									
1,1,2,2-Tetrachloroethane	ND	0.400									
Bromobenzene	ND	0.500									
2-Chlorotoluene	ND	0.500									
4-Chlorotoluene	ND	0.500									
1,2,3-Trichloropropane	ND	0.400									
1,2,4-Trichlorobenzene	ND	0.750									
1,3-Dichlorobenzene	ND	0.500									
1,4-Dichlorobenzene	ND	0.500									
1,2-Dichlorobenzene	ND	0.500									
1,2-Dibromo-3-chloropropane	ND	1.00									
Hexachloro-1,3-butadiene	ND	0.500									
1,2,3-Trichlorobenzene	ND	0.700									
Surr: Dibromofluoromethane	25.7		25.00		103	80	120				

Work Order: 2209284
CLIENT: PES Environmental, Inc.
Project: BSB- Shallow/ Intermediate

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-37886** SampType: **MBLK** Units: **µg/L** Prep Date: **9/21/2022** RunNo: **78457**
Client ID: **MBLKW** Batch ID: **37886** Analysis Date: **9/21/2022** SeqNo: **1613718**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Toluene-d8	23.8		25.00		95.4	80	120				
Surr: 1-Bromo-4-fluorobenzene	23.4		25.00		93.8	80	120				

NOTES:
Q - Associated calibration verification is below acceptance criteria. Result may be low-biased.

Sample ID: **2209282-009ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **9/21/2022** RunNo: **78457**
Client ID: **BATCH** Batch ID: **37886** Analysis Date: **9/21/2022** SeqNo: **1614201**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00						0		30	Q
Chloromethane	ND	0.500						0		30	Q
Vinyl chloride	ND	0.200						0		30	
Bromomethane	ND	0.500						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.500						0		30	
Chloroethane	ND	1.00						0		30	
1,1-Dichloroethene	ND	0.500						0		30	
Methylene chloride	ND	0.750						0		30	
trans-1,2-Dichloroethene	ND	0.500						0		30	
1,1-Dichloroethane	ND	0.500						0		30	
cis-1,2-Dichloroethene	ND	0.500						0		30	
Chloroform	ND	0.500						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.400						0		30	
1,1-Dichloropropene	ND	0.500						0		30	
Carbon tetrachloride	ND	0.500						0		30	
1,2-Dichloroethane (EDC)	ND	0.400						0		30	
Trichloroethene (TCE)	ND	0.500						0		30	
1,2-Dichloropropane	ND	0.500						0		30	
Bromodichloromethane	ND	0.500						0		30	
Dibromomethane	ND	0.500						0		30	
cis-1,3-Dichloropropene	ND	0.500						0		30	
trans-1,3-Dichloropropylene	ND	0.500						0		30	
1,1,2-Trichloroethane	ND	0.350						0		30	

Work Order: 2209284
CLIENT: PES Environmental, Inc.
Project: BSB- Shallow/ Intermediate

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2209282-009ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **9/21/2022** RunNo: **78457**
Client ID: **BATCH** Batch ID: **37886** Analysis Date: **9/21/2022** SeqNo: **1614201**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3-Dichloropropane	ND	0.500						0		30	
Tetrachloroethene (PCE)	ND	0.400						0		30	
Dibromochloromethane	ND	0.500						0		30	
1,2-Dibromoethane (EDB)	ND	0.200						0		30	
Chlorobenzene	ND	0.500						0		30	
1,1,1,2-Tetrachloroethane	ND	0.300						0		30	
Bromoform	ND	0.500						0		30	
1,1,2,2-Tetrachloroethane	ND	0.400						0		30	
Bromobenzene	ND	0.500						0		30	
2-Chlorotoluene	ND	0.500						0		30	
4-Chlorotoluene	ND	0.500						0		30	
1,2,3-Trichloropropane	ND	0.400						0		30	
1,2,4-Trichlorobenzene	ND	0.750						0		30	
1,3-Dichlorobenzene	ND	0.500						0		30	
1,4-Dichlorobenzene	ND	0.500						0		30	
1,2-Dichlorobenzene	ND	0.500						0		30	
1,2-Dibromo-3-chloropropane	ND	1.00						0		30	
Hexachloro-1,3-butadiene	ND	0.500						0		30	
1,2,3-Trichlorobenzene	ND	0.700						0		30	
Surr: Dibromofluoromethane	26.3		25.00		105	80	120		0		
Surr: Toluene-d8	24.4		25.00		97.6	80	120		0		
Surr: 1-Bromo-4-fluorobenzene	23.6		25.00		94.3	80	120		0		

NOTES:
Q - Associated calibration verification is below acceptance criteria. Result may be low-biased.

Sample ID: **2209285-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **9/21/2022** RunNo: **78457**
Client ID: **BATCH** Batch ID: **37886** Analysis Date: **9/22/2022** SeqNo: **1613733**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00						0		30	Q
Chloromethane	ND	0.500						0		30	Q
Vinyl chloride	4.67	0.200						4.603	1.38	30	

Work Order: 2209284
CLIENT: PES Environmental, Inc.
Project: BSB- Shallow/ Intermediate

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2209285-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **9/21/2022** RunNo: **78457**
Client ID: **BATCH** Batch ID: **37886** Analysis Date: **9/22/2022** SeqNo: **1613733**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromomethane	ND	0.500						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.500						0		30	
Chloroethane	ND	1.00						0		30	
1,1-Dichloroethene	ND	0.500						0		30	
Methylene chloride	ND	0.750						0		30	
trans-1,2-Dichloroethene	ND	0.500						0.5481	17.8	30	
1,1-Dichloroethane	ND	0.500						0		30	
cis-1,2-Dichloroethene	ND	0.500						0		30	
Chloroform	ND	0.500						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.400						0		30	
1,1-Dichloropropene	ND	0.500						0		30	
Carbon tetrachloride	ND	0.500						0		30	
1,2-Dichloroethane (EDC)	ND	0.400						0		30	
Trichloroethene (TCE)	ND	0.500						0		30	
1,2-Dichloropropane	ND	0.500						0		30	
Bromodichloromethane	ND	0.500						0		30	
Dibromomethane	ND	0.500						0		30	
cis-1,3-Dichloropropene	ND	0.500						0		30	
trans-1,3-Dichloropropylene	ND	0.500						0		30	
1,1,2-Trichloroethane	ND	0.350						0		30	
1,3-Dichloropropane	ND	0.500						0		30	
Tetrachloroethene (PCE)	ND	0.400						0		30	
Dibromochloromethane	ND	0.500						0		30	
1,2-Dibromoethane (EDB)	ND	0.200						0		30	
Chlorobenzene	ND	0.500						0		30	
1,1,1,2-Tetrachloroethane	ND	0.300						0		30	
Bromoform	ND	0.500						0		30	
1,1,2,2-Tetrachloroethane	ND	0.400						0		30	
Bromobenzene	ND	0.500						0		30	
2-Chlorotoluene	ND	0.500						0		30	
4-Chlorotoluene	ND	0.500						0		30	
1,2,3-Trichloropropane	ND	0.400						0		30	

Work Order: 2209284
CLIENT: PES Environmental, Inc.
Project: BSB- Shallow/ Intermediate

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2209285-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **9/21/2022** RunNo: **78457**
Client ID: **BATCH** Batch ID: **37886** Analysis Date: **9/22/2022** SeqNo: **1613733**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	ND	0.750						0		30	
1,3-Dichlorobenzene	ND	0.500						0		30	
1,4-Dichlorobenzene	ND	0.500						0		30	
1,2-Dichlorobenzene	ND	0.500						0		30	
1,2-Dibromo-3-chloropropane	ND	1.00						0		30	
Hexachloro-1,3-butadiene	ND	0.500						0		30	
1,2,3-Trichlorobenzene	ND	0.700						0		30	
Surr: Dibromofluoromethane	26.8		25.00		107	80	120		0		
Surr: Toluene-d8	24.5		25.00		97.9	80	120		0		
Surr: 1-Bromo-4-fluorobenzene	23.0		25.00		91.9	80	120		0		

NOTES:
Q - Associated calibration verification is below acceptance criteria. Result may be low-biased.

Sample ID: **2209284-002AMS** SampType: **MS** Units: **µg/L** Prep Date: **9/21/2022** RunNo: **78457**
Client ID: **MW-101-092022** Batch ID: **37886** Analysis Date: **9/22/2022** SeqNo: **1613738**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	18.1	1.00	20.00	0	90.7	1.35	172				
Chloromethane	14.5	0.500	20.00	0	72.6	27.2	164				
Vinyl chloride	22.0	0.200	20.00	0.3925	108	52.3	147				
Bromomethane	20.1	0.500	20.00	0	101	24.2	186				
Trichlorofluoromethane (CFC-11)	21.7	0.500	20.00	0	108	71.2	137				
Chloroethane	19.1	1.00	20.00	0	95.7	62.9	141				
1,1-Dichloroethene	26.6	0.500	20.00	0	133	76.5	136				
Methylene chloride	24.9	0.750	20.00	0	124	73.7	132				
trans-1,2-Dichloroethene	28.0	0.500	20.00	0	140	79.1	131				S
1,1-Dichloroethane	21.0	0.500	20.00	0.7370	102	74.3	138				
cis-1,2-Dichloroethene	22.0	0.500	20.00	0	110	78.3	131				
Chloroform	21.6	0.500	20.00	0	108	78.9	131				
1,1,1-Trichloroethane (TCA)	22.1	0.400	20.00	0	111	81.1	132				
1,1-Dichloropropene	22.8	0.500	20.00	0	114	81.3	133				
Carbon tetrachloride	20.4	0.500	20.00	0	102	79.5	133				

Work Order: 2209284
CLIENT: PES Environmental, Inc.
Project: BSB- Shallow/ Intermediate

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2209284-002AMS** SampType: **MS** Units: **µg/L** Prep Date: **9/21/2022** RunNo: **78457**
Client ID: **MW-101-092022** Batch ID: **37886** Analysis Date: **9/22/2022** SeqNo: **1613738**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichloroethane (EDC)	20.6	0.400	20.00	0	103	73.4	132				
Trichloroethene (TCE)	20.4	0.500	20.00	0	102	75	133				
1,2-Dichloropropane	21.0	0.500	20.00	0	105	76.2	134				
Bromodichloromethane	21.1	0.500	20.00	0	105	76.1	130				
Dibromomethane	20.3	0.500	20.00	0	102	75.5	130				
cis-1,3-Dichloropropene	20.5	0.500	20.00	0	103	68.4	128				
trans-1,3-Dichloropropylene	20.3	0.500	20.00	0	102	63.8	132				
1,1,2-Trichloroethane	21.6	0.350	20.00	0	108	75.2	130				
1,3-Dichloropropane	21.2	0.500	20.00	0	106	73.9	131				
Tetrachloroethene (PCE)	22.7	0.400	20.00	0	113	78	131				
Dibromochloromethane	21.0	0.500	20.00	0	105	72.6	129				
1,2-Dibromoethane (EDB)	21.3	0.200	20.00	0	106	73.9	128				
Chlorobenzene	22.0	0.500	20.00	0	110	80.9	124				
1,1,1,2-Tetrachloroethane	20.5	0.300	20.00	0	103	79.3	123				
Bromoform	20.0	0.500	20.00	0	99.9	68.3	132				
1,1,2,2-Tetrachloroethane	26.2	0.400	20.00	0	131	72.7	141				
Bromobenzene	22.1	0.500	20.00	0	111	79.9	124				
2-Chlorotoluene	22.4	0.500	20.00	0	112	77.9	133				
4-Chlorotoluene	22.2	0.500	20.00	0	111	78	130				
1,2,3-Trichloropropane	19.8	0.400	20.00	0	99.1	66.3	132				
1,2,4-Trichlorobenzene	21.5	0.750	20.00	0	108	67.6	131				
1,3-Dichlorobenzene	21.4	0.500	20.00	0	107	83.5	123				
1,4-Dichlorobenzene	21.6	0.500	20.00	0	108	84.2	121				
1,2-Dichlorobenzene	22.0	0.500	20.00	0	110	83.3	124				
1,2-Dibromo-3-chloropropane	20.3	1.00	20.00	0	101	57.7	146				
Hexachloro-1,3-butadiene	22.4	0.500	20.00	0	112	68.5	136				
1,2,3-Trichlorobenzene	22.3	0.700	20.00	0	111	62.9	138				
Surr: Dibromofluoromethane	25.4		25.00		102	80	120				
Surr: Toluene-d8	24.8		25.00		99.1	80	120				
Surr: 1-Bromo-4-fluorobenzene	26.2		25.00		105	80	120				

NOTES:
S - Outlying spike recoveries were associated with this sample.

Sample Log-In Check List

Client Name:	PES	Work Order Number:	2209284
Logged by:	Gabrielle Coeuille	Date Received:	9/21/2022 10:29:00 AM

Chain of Custody

1.	Is Chain of Custody complete?	Yes	☑	No	☐	Not Present ☐
2.	How was the sample delivered?	Client				

Log In

3.	Coolers are present?	Yes	☑	No	☐	NA ☐
4.	Shipping container/cooler in good condition?	Yes	☑	No	☐	
5.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes	☐	No	☐	Not Present ☑
6.	Was an attempt made to cool the samples?	Yes	☑	No	☐	NA ☐
7.	Were all items received at a temperature of >2°C to 6°C *	Yes	☑	No	☐	NA ☐
8.	Sample(s) in proper container(s)?	Yes	☐	No	☑	
9.	Sufficient sample volume for indicated test(s)?	Yes	☐	No	☑	
10.	Are samples properly preserved?	Yes	☑	No	☐	
11.	Was preservative added to bottles?	Yes	☐	No	☑	NA ☐
12.	Is there headspace in the VOA vials?	Yes	☐	No	☑	NA ☐
13.	Did all samples containers arrive in good condition(unbroken)?	Yes	☑	No	☐	
14.	Does paperwork match bottle labels?	Yes	☑	No	☐	
15.	Are matrices correctly identified on Chain of Custody?	Yes	☑	No	☐	
16.	Is it clear what analyses were requested?	Yes	☑	No	☐	
17.	Were all holding times able to be met?	Yes	☑	No	☐	

Special Handling (if applicable)

18.	Was client notified of all discrepancies with this order?	Yes	☑	No	☐	NA ☐

Person Notified:	Bill Haldeman	Date:	9/21/2022
By Whom:	Gabrielle Coeuille	Via:	☑ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:	All samples except for samples 5 and 8 collected in incorrect container. How should we pr		
Client Instructions:	Test 5 and 8, resampling all other samples.		

19. Additional remarks:

Item Information

Item #	Temp ºC
Sample 1	4.7

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 9/21/22 | Page: 1 | of: 1

Laboratory Project No (internal): 2209284

Project Name: BSB - Shallow/Intermediate

Special Remarks: Tier 2 lab QA/QC (batch QC ok)

Client: PES Environmental

Project No: 827.001.49.004

Address: 2101 4th Ave #1310

Collected by: N. Wisdom & A. Semeraro

City, State, Zip: Seattle, WA 98121

Location: Kent, WA

Telephone: 206-529-3980

Report To (PM): Bill Haldeman

Sample Disposal: ☐ Return to client ☑ Disposal by lab (after 30 days)

Fax:

PM Email: bill.haldeman@nv5.com

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	HVOCs VOCs (EPA 8260 / 624) 8260D	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8) Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1 HY-13i-091922	9/19/22	0857	GW	3	X											
2 Hs-092022	9/20/22	0848			X											
3 HY-1s-092022		1521			X											
4 HY-11i-092022		1154			X											
5 HY-1i-092022		1335			X											
6 HY-11s-092022		1329			X											
7 Hi-092022		0935			X											
8 MW-101-092022		0800			X											
9																
10																

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☑ Standard ☐ Next Day
☐ 3 Day ☐ Same Day
☐ 2 Day ☐ _____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x Natalie Wisdom	Natalie Wisdom	9/21/22 | 0949	x Sarah Palamballa	Sarah Palamballa	9/21/22 10:29
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x		

Client: PES Environmental, Inc. **Collection Date:** 9/20/2022 1:35:00 PM
Project: BSB- Shallow/ Intermediate
Lab ID: 2209284-001 **Matrix:** Groundwater
Client Sample ID: **HY-1i-092022**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37886 Analyst: SG

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND UJ	1.00	Q	µg/L	1	9/22/2022 1:59:07 AM
Chloromethane	ND UJ	0.500	Q	µg/L	1	9/22/2022 1:59:07 AM
Vinyl chloride	ND	0.200		µg/L	1	9/22/2022 1:59:07 AM
Bromomethane	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
Trichlorofluoromethane (CFC-11)	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
Chloroethane	ND	1.00		µg/L	1	9/22/2022 1:59:07 AM
1,1-Dichloroethene	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
Methylene chloride	ND	0.750		µg/L	1	9/22/2022 1:59:07 AM
trans-1,2-Dichloroethene	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
1,1-Dichloroethane	0.696	0.500		µg/L	1	9/22/2022 1:59:07 AM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
Chloroform	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
1,1,1-Trichloroethane (TCA)	ND	0.400		µg/L	1	9/22/2022 1:59:07 AM
1,1-Dichloropropene	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
Carbon tetrachloride	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
1,2-Dichloroethane (EDC)	ND	0.400		µg/L	1	9/22/2022 1:59:07 AM
Trichloroethene (TCE)	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
1,2-Dichloropropane	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
Bromodichloromethane	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
Dibromomethane	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
cis-1,3-Dichloropropene	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
trans-1,3-Dichloropropylene	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
1,1,2-Trichloroethane	ND	0.350		µg/L	1	9/22/2022 1:59:07 AM
1,3-Dichloropropane	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
Tetrachloroethene (PCE)	ND	0.400		µg/L	1	9/22/2022 1:59:07 AM
Dibromochloromethane	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
1,2-Dibromoethane (EDB)	ND	0.200		µg/L	1	9/22/2022 1:59:07 AM
Chlorobenzene	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
1,1,1,2-Tetrachloroethane	ND	0.300		µg/L	1	9/22/2022 1:59:07 AM
Bromoform	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
1,1,2,2-Tetrachloroethane	ND	0.400		µg/L	1	9/22/2022 1:59:07 AM
Bromobenzene	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
2-Chlorotoluene	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
4-Chlorotoluene	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
1,2,3-Trichloropropane	ND	0.400		µg/L	1	9/22/2022 1:59:07 AM
1,2,4-Trichlorobenzene	ND	0.750		µg/L	1	9/22/2022 1:59:07 AM
1,3-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
1,4-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
1,2-Dichlorobenzene	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM

Analytical Report

Work Order: **2209284**
Date Reported: **9/28/2022**

Client: PES Environmental, Inc.
Collection Date: 9/20/2022 1:35:00 PM
Project: BSB- Shallow/ Intermediate
Lab ID: 2209284-001
Matrix: Groundwater
Client Sample ID: **HY-1i-092022**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 37886		Analyst: SG
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/22/2022 1:59:07 AM
Hexachloro-1,3-butadiene	ND	0.500		µg/L	1	9/22/2022 1:59:07 AM
1,2,3-Trichlorobenzene	ND	0.700		µg/L	1	9/22/2022 1:59:07 AM
Surr: Dibromofluoromethane	106	80 - 120		%Rec	1	9/22/2022 1:59:07 AM
Surr: Toluene-d8	96.4	80 - 120		%Rec	1	9/22/2022 1:59:07 AM
Surr: 1-Bromo-4-fluorobenzene	91.7	80 - 120		%Rec	1	9/22/2022 1:59:07 AM

NOTES:
Q - Associated calibration verification is below acceptance criteria. Result may be low-biased.

Client: PES Environmental, Inc. **Collection Date:** 9/20/2022 8:00:00 AM
Project: BSB- Shallow/ Intermediate
Lab ID: 2209284-002 **Matrix:** Groundwater
Client Sample ID: **MW-101-092022**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37886 Analyst: SG

Analyses	Result		RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	UJ	1.00	Q	µg/L	1	9/22/2022 2:29:17 AM
Chloromethane	ND	UJ	0.500	Q	µg/L	1	9/22/2022 2:29:17 AM
Vinyl chloride	0.393		0.200		µg/L	1	9/22/2022 2:29:17 AM
Bromomethane	ND		0.500		µg/L	1	9/22/2022 2:29:17 AM
Trichlorofluoromethane (CFC-11)	ND		0.500		µg/L	1	9/22/2022 2:29:17 AM
Chloroethane	ND		1.00		µg/L	1	9/22/2022 2:29:17 AM
1,1-Dichloroethene	ND		0.500		µg/L	1	9/22/2022 2:29:17 AM
Methylene chloride	ND		0.750		µg/L	1	9/22/2022 2:29:17 AM
trans-1,2-Dichloroethene	ND		0.500		µg/L	1	9/22/2022 2:29:17 AM
1,1-Dichloroethane	0.737		0.500		µg/L	1	9/22/2022 2:29:17 AM
cis-1,2-Dichloroethene	ND		0.500		µg/L	1	9/22/2022 2:29:17 AM
Chloroform	ND		0.500		µg/L	1	9/22/2022 2:29:17 AM
1,1,1-Trichloroethane (TCA)	ND		0.400		µg/L	1	9/22/2022 2:29:17 AM
1,1-Dichloropropene	ND		0.500		µg/L	1	9/22/2022 2:29:17 AM
Carbon tetrachloride	ND		0.500		µg/L	1	9/22/2022 2:29:17 AM
1,2-Dichloroethane (EDC)	ND		0.400		µg/L	1	9/22/2022 2:29:17 AM
Trichloroethene (TCE)	ND		0.500		µg/L	1	9/22/2022 2:29:17 AM
1,2-Dichloropropane	ND		0.500		µg/L	1	9/22/2022 2:29:17 AM
Bromodichloromethane	ND		0.500		µg/L	1	9/22/2022 2:29:17 AM
Dibromomethane	ND		0.500		µg/L	1	9/22/2022 2:29:17 AM
cis-1,3-Dichloropropene	ND		0.500		µg/L	1	9/22/2022 2:29:17 AM
trans-1,3-Dichloropropylene	ND		0.500		µg/L	1	9/22/2022 2:29:17 AM
1,1,2-Trichloroethane	ND		0.350		µg/L	1	9/22/2022 2:29:17 AM
1,3-Dichloropropane	ND		0.500		µg/L	1	9/22/2022 2:29:17 AM
Tetrachloroethene (PCE)	ND		0.400		µg/L	1	9/22/2022 2:29:17 AM
Dibromochloromethane	ND		0.500		µg/L	1	9/22/2022 2:29:17 AM
1,2-Dibromoethane (EDB)	ND		0.200		µg/L	1	9/22/2022 2:29:17 AM
Chlorobenzene	ND		0.500		µg/L	1	9/22/2022 2:29:17 AM
1,1,1,2-Tetrachloroethane	ND		0.300		µg/L	1	9/22/2022 2:29:17 AM
Bromoform	ND		0.500		µg/L	1	9/22/2022 2:29:17 AM
1,1,2,2-Tetrachloroethane	ND		0.400		µg/L	1	9/22/2022 2:29:17 AM
Bromobenzene	ND		0.500		µg/L	1	9/22/2022 2:29:17 AM
2-Chlorotoluene	ND		0.500		µg/L	1	9/22/2022 2:29:17 AM
4-Chlorotoluene	ND		0.500		µg/L	1	9/22/2022 2:29:17 AM
1,2,3-Trichloropropane	ND		0.400		µg/L	1	9/22/2022 2:29:17 AM
1,2,4-Trichlorobenzene	ND		0.750		µg/L	1	9/22/2022 2:29:17 AM
1,3-Dichlorobenzene	ND		0.500		µg/L	1	9/22/2022 2:29:17 AM
1,4-Dichlorobenzene	ND		0.500		µg/L	1	9/22/2022 2:29:17 AM
1,2-Dichlorobenzene	ND		0.500		µg/L	1	9/22/2022 2:29:17 AM

Analytical Report

Work Order: **2209284**
Date Reported: **9/28/2022**

Client: PES Environmental, Inc.
Collection Date: 9/20/2022 8:00:00 AM
Project: BSB- Shallow/ Intermediate
Lab ID: 2209284-002
Matrix: Groundwater
Client Sample ID: **MW-101-092022**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 37886		Analyst: SG
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/22/2022 2:29:17 AM
Hexachloro-1,3-butadiene	ND	0.500		µg/L	1	9/22/2022 2:29:17 AM
1,2,3-Trichlorobenzene	ND	0.700		µg/L	1	9/22/2022 2:29:17 AM
Surr: Dibromofluoromethane	106	80 - 120		%Rec	1	9/22/2022 2:29:17 AM
Surr: Toluene-d8	97.2	80 - 120		%Rec	1	9/22/2022 2:29:17 AM
Surr: 1-Bromo-4-fluorobenzene	91.3	80 - 120		%Rec	1	9/22/2022 2:29:17 AM

NOTES:
Q - Associated calibration verification is below acceptance criteria. Result may be low-biased.

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

PES Environmental, Inc.
Bill Haldeman
1215 Fourth Avenue, Suite 1350
Seattle, WA 98161

RE: BSB-Shallow/Interm.
Work Order Number: 2209354

October 03, 2022

Attention Bill Haldeman:

Fremont Analytical, Inc. received 7 sample(s) on 9/26/2022 for the analyses presented in the following report.

Volatile Organic Compounds by EPA Method 8260D

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

Date: *10/03/2022*

CLIENT: PES Environmental, Inc.
Project: BSB-Shallow/Interm.
Work Order: 2209354

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2209354-001	Hs-092622	09/26/2022 9:38 AM	09/26/2022 5:43 PM
2209354-002	Hi-092622	09/26/2022 10:18 AM	09/26/2022 5:43 PM
2209354-003	HY-11s-092622	09/26/2022 11:40 AM	09/26/2022 5:43 PM
2209354-004	HY-11i-092622	09/26/2022 12:27 PM	09/26/2022 5:43 PM
2209354-005	HY-13i-092622	09/26/2022 3:42 PM	09/26/2022 5:43 PM
2209354-006	HY-1s-092622	09/26/2022 2:27 PM	09/26/2022 5:43 PM
2209354-007	TB-092622	09/21/2022 1:25 PM	09/26/2022 5:43 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Case Narrative

WO#: **2209354**

Date: **10/3/2022**

CLIENT: PES Environmental, Inc.

Project: BSB-Shallow/Interm.

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
DUP - Sample Duplicate
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MCL - Maximum Contaminant Level
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
REP - Sample Replicate
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

Client: PES Environmental, Inc.
Collection Date: 9/26/2022 9:38:00 AM
Project: BSB-Shallow/Interm.
Lab ID: 2209354-001
Matrix: Groundwater
Client Sample ID: **Hs-092622**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37950 Analyst: LAC

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00	Q	µg/L	1	9/28/2022 6:51:43 PM
Chloromethane	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
Vinyl chloride	ND	0.200		µg/L	1	9/28/2022 6:51:43 PM
Bromomethane	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
Trichlorofluoromethane (CFC-11)	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
Chloroethane	ND	1.00		µg/L	1	9/28/2022 6:51:43 PM
1,1-Dichloroethene	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
Methylene chloride	ND	1.00		µg/L	1	9/28/2022 6:51:43 PM
trans-1,2-Dichloroethene	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
1,1-Dichloroethane	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
Chloroform	ND	1.00		µg/L	1	9/28/2022 6:51:43 PM
1,1,1-Trichloroethane (TCA)	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
1,1-Dichloropropene	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
Carbon tetrachloride	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
1,2-Dichloroethane (EDC)	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
1,2-Dichloropropane	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
Bromodichloromethane	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
Dibromomethane	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
cis-1,3-Dichloropropene	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
trans-1,3-Dichloropropylene	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
1,1,2-Trichloroethane	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
1,3-Dichloropropane	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
Tetrachloroethene (PCE)	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
Dibromochloromethane	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
1,2-Dibromoethane (EDB)	ND	0.200		µg/L	1	9/28/2022 6:51:43 PM
Chlorobenzene	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
1,1,1,2-Tetrachloroethane	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
Bromoform	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
1,1,2,2-Tetrachloroethane	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
Bromobenzene	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
2-Chlorotoluene	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
4-Chlorotoluene	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
1,2,3-Trichloropropane	ND	2.00		µg/L	1	9/28/2022 6:51:43 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	9/28/2022 6:51:43 PM
1,3-Dichlorobenzene	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
1,4-Dichlorobenzene	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
1,2-Dichlorobenzene	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM

Analytical Report

Work Order: **2209354**
Date Reported: **10/3/2022**

Client: PES Environmental, Inc.
Collection Date: 9/26/2022 9:38:00 AM
Project: BSB-Shallow/Interm.
Lab ID: 2209354-001
Matrix: Groundwater
Client Sample ID: **Hs-092622**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 37950		Analyst: LAC
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/28/2022 6:51:43 PM
Hexachloro-1,3-butadiene	ND	2.00		µg/L	1	9/28/2022 6:51:43 PM
1,2,3-Trichlorobenzene	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
Surr: Dibromofluoromethane	107	80 - 120		%Rec	1	9/28/2022 6:51:43 PM
Surr: Toluene-d8	98.1	80 - 120		%Rec	1	9/28/2022 6:51:43 PM
Surr: 1-Bromo-4-fluorobenzene	91.2	80 - 120		%Rec	1	9/28/2022 6:51:43 PM

NOTES:
Q - Associated calibration verification is below acceptance criteria. Result may be low-biased.

Analytical Report

Work Order: **2209354**
Date Reported: **10/3/2022**

Client: PES Environmental, Inc.
Collection Date: 9/26/2022 10:18:00 AM
Project: BSB-Shallow/Interm.
Lab ID: 2209354-002
Matrix: Groundwater
Client Sample ID: **Hi-092622**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37950 Analyst: LAC

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	9/29/2022 4:24:07 AM
Chloromethane	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
Vinyl chloride	ND	0.200		µg/L	1	9/29/2022 4:24:07 AM
Bromomethane	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
Trichlorofluoromethane (CFC-11)	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
Chloroethane	ND	1.00		µg/L	1	9/29/2022 4:24:07 AM
1,1-Dichloroethene	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
Methylene chloride	ND	1.00		µg/L	1	9/29/2022 4:24:07 AM
trans-1,2-Dichloroethene	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
1,1-Dichloroethane	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
Chloroform	ND	1.00		µg/L	1	9/29/2022 4:24:07 AM
1,1,1-Trichloroethane (TCA)	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
1,1-Dichloropropene	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
Carbon tetrachloride	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
1,2-Dichloroethane (EDC)	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
Trichloroethene (TCE)	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
1,2-Dichloropropane	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
Bromodichloromethane	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
Dibromomethane	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
cis-1,3-Dichloropropene	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
trans-1,3-Dichloropropylene	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
1,1,2-Trichloroethane	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
1,3-Dichloropropane	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
Tetrachloroethene (PCE)	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
Dibromochloromethane	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
1,2-Dibromoethane (EDB)	ND	0.200		µg/L	1	9/29/2022 4:24:07 AM
Chlorobenzene	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
1,1,1,2-Tetrachloroethane	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
Bromoform	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
1,1,2,2-Tetrachloroethane	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
Bromobenzene	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
2-Chlorotoluene	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
4-Chlorotoluene	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
1,2,3-Trichloropropane	ND	2.00		µg/L	1	9/29/2022 4:24:07 AM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	9/29/2022 4:24:07 AM
1,3-Dichlorobenzene	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
1,4-Dichlorobenzene	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
1,2-Dichlorobenzene	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM

Analytical Report

Work Order: **2209354**
Date Reported: **10/3/2022**

Client: PES Environmental, Inc.
Collection Date: 9/26/2022 10:18:00 AM
Project: BSB-Shallow/Interm.
Lab ID: 2209354-002
Matrix: Groundwater
Client Sample ID: **Hi-092622**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 37950		Analyst: LAC
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/29/2022 4:24:07 AM
Hexachloro-1,3-butadiene	ND	2.00		µg/L	1	9/29/2022 4:24:07 AM
1,2,3-Trichlorobenzene	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
Surr: Dibromofluoromethane	109	80 - 120		%Rec	1	9/29/2022 4:24:07 AM
Surr: Toluene-d8	98.3	80 - 120		%Rec	1	9/29/2022 4:24:07 AM
Surr: 1-Bromo-4-fluorobenzene	90.9	80 - 120		%Rec	1	9/29/2022 4:24:07 AM

Client: PES Environmental, Inc.
Collection Date: 9/26/2022 11:40:00 AM
Project: BSB-Shallow/Interm.
Lab ID: 2209354-003
Matrix: Groundwater
Client Sample ID: **HY-11s-092622**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37950 Analyst: LAC

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00	Q	µg/L	1	9/28/2022 7:21:50 PM
Chloromethane	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM
Vinyl chloride	0.235	0.200		µg/L	1	9/28/2022 7:21:50 PM
Bromomethane	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM
Trichlorofluoromethane (CFC-11)	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM
Chloroethane	ND	1.00		µg/L	1	9/28/2022 7:21:50 PM
1,1-Dichloroethene	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM
Methylene chloride	ND	1.00		µg/L	1	9/28/2022 7:21:50 PM
trans-1,2-Dichloroethene	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM
1,1-Dichloroethane	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM
cis-1,2-Dichloroethene	3.39	0.500		µg/L	1	9/28/2022 7:21:50 PM
Chloroform	ND	1.00		µg/L	1	9/28/2022 7:21:50 PM
1,1,1-Trichloroethane (TCA)	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM
1,1-Dichloropropene	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM
Carbon tetrachloride	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM
1,2-Dichloroethane (EDC)	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM
1,2-Dichloropropane	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM
Bromodichloromethane	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM
Dibromomethane	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM
cis-1,3-Dichloropropene	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM
trans-1,3-Dichloropropylene	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM
1,1,2-Trichloroethane	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM
1,3-Dichloropropane	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM
Tetrachloroethene (PCE)	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM
Dibromochloromethane	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM
1,2-Dibromoethane (EDB)	ND	0.200		µg/L	1	9/28/2022 7:21:50 PM
Chlorobenzene	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM
1,1,1,2-Tetrachloroethane	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM
Bromoform	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM
1,1,2,2-Tetrachloroethane	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM
Bromobenzene	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM
2-Chlorotoluene	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM
4-Chlorotoluene	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM
1,2,3-Trichloropropane	ND	2.00		µg/L	1	9/28/2022 7:21:50 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	9/28/2022 7:21:50 PM
1,3-Dichlorobenzene	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM
1,4-Dichlorobenzene	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM
1,2-Dichlorobenzene	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM

Analytical Report

Work Order: **2209354**
Date Reported: **10/3/2022**

Client: PES Environmental, Inc.
Collection Date: 9/26/2022 11:40:00 AM
Project: BSB-Shallow/Interm.
Lab ID: 2209354-003
Matrix: Groundwater
Client Sample ID: **HY-11s-092622**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 37950		Analyst: LAC
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/28/2022 7:21:50 PM
Hexachloro-1,3-butadiene	ND	2.00		µg/L	1	9/28/2022 7:21:50 PM
1,2,3-Trichlorobenzene	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM
Surr: Dibromofluoromethane	106	80 - 120		%Rec	1	9/28/2022 7:21:50 PM
Surr: Toluene-d8	97.4	80 - 120		%Rec	1	9/28/2022 7:21:50 PM
Surr: 1-Bromo-4-fluorobenzene	91.6	80 - 120		%Rec	1	9/28/2022 7:21:50 PM

NOTES:
Q - Associated calibration verification is below acceptance criteria. Result may be low-biased.

Client: PES Environmental, Inc.
Collection Date: 9/26/2022 12:27:00 PM
Project: BSB-Shallow/Interm.
Lab ID: 2209354-004
Matrix: Groundwater
Client Sample ID: **HY-11i-092622**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37950 Analyst: LAC

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00	Q	µg/L	1	9/28/2022 7:51:57 PM
Chloromethane	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
Vinyl chloride	ND	0.200		µg/L	1	9/28/2022 7:51:57 PM
Bromomethane	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
Trichlorofluoromethane (CFC-11)	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
Chloroethane	ND	1.00		µg/L	1	9/28/2022 7:51:57 PM
1,1-Dichloroethene	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
Methylene chloride	ND	1.00		µg/L	1	9/28/2022 7:51:57 PM
trans-1,2-Dichloroethene	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
1,1-Dichloroethane	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
Chloroform	ND	1.00		µg/L	1	9/28/2022 7:51:57 PM
1,1,1-Trichloroethane (TCA)	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
1,1-Dichloropropene	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
Carbon tetrachloride	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
1,2-Dichloroethane (EDC)	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
1,2-Dichloropropane	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
Bromodichloromethane	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
Dibromomethane	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
cis-1,3-Dichloropropene	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
trans-1,3-Dichloropropylene	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
1,1,2-Trichloroethane	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
1,3-Dichloropropane	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
Tetrachloroethene (PCE)	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
Dibromochloromethane	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
1,2-Dibromoethane (EDB)	ND	0.200		µg/L	1	9/28/2022 7:51:57 PM
Chlorobenzene	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
1,1,1,2-Tetrachloroethane	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
Bromoform	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
1,1,2,2-Tetrachloroethane	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
Bromobenzene	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
2-Chlorotoluene	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
4-Chlorotoluene	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
1,2,3-Trichloropropane	ND	2.00		µg/L	1	9/28/2022 7:51:57 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	9/28/2022 7:51:57 PM
1,3-Dichlorobenzene	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
1,4-Dichlorobenzene	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
1,2-Dichlorobenzene	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM

Analytical Report

Work Order: **2209354**
Date Reported: **10/3/2022**

Client: PES Environmental, Inc.
Collection Date: 9/26/2022 12:27:00 PM
Project: BSB-Shallow/Interm.
Lab ID: 2209354-004
Matrix: Groundwater
Client Sample ID: **HY-11i-092622**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 37950		Analyst: LAC
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/28/2022 7:51:57 PM
Hexachloro-1,3-butadiene	ND	2.00		µg/L	1	9/28/2022 7:51:57 PM
1,2,3-Trichlorobenzene	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
Surr: Dibromofluoromethane	106	80 - 120		%Rec	1	9/28/2022 7:51:57 PM
Surr: Toluene-d8	97.3	80 - 120		%Rec	1	9/28/2022 7:51:57 PM
Surr: 1-Bromo-4-fluorobenzene	89.9	80 - 120		%Rec	1	9/28/2022 7:51:57 PM

NOTES:
Q - Associated calibration verification is below acceptance criteria. Result may be low-biased.

Client: PES Environmental, Inc.
Collection Date: 9/26/2022 3:42:00 PM
Project: BSB-Shallow/Interm.
Lab ID: 2209354-005
Matrix: Groundwater
Client Sample ID: **HY-13i-092622**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37950 Analyst: LAC

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	9/29/2022 4:54:15 AM
Chloromethane	ND	0.500		µg/L	1	9/29/2022 4:54:15 AM
Vinyl chloride	1,570	10.0	DQ	µg/L	50	10/3/2022 2:25:26 PM
Bromomethane	ND	0.500		µg/L	1	9/29/2022 4:54:15 AM
Trichlorofluoromethane (CFC-11)	ND	0.500		µg/L	1	9/29/2022 4:54:15 AM
Chloroethane	ND	1.00		µg/L	1	9/29/2022 4:54:15 AM
1,1-Dichloroethene	52.3	2.50	DQ	µg/L	5	10/3/2022 2:55:35 PM
Methylene chloride	ND	1.00		µg/L	1	9/29/2022 4:54:15 AM
trans-1,2-Dichloroethene	133	25.0	D	µg/L	50	10/3/2022 2:25:26 PM
1,1-Dichloroethane	ND	0.500		µg/L	1	9/29/2022 4:54:15 AM
cis-1,2-Dichloroethene	6,850	25.0	DE	µg/L	50	10/3/2022 2:25:26 PM
Chloroform	ND	1.00		µg/L	1	9/29/2022 4:54:15 AM
1,1,1-Trichloroethane (TCA)	ND	0.500		µg/L	1	9/29/2022 4:54:15 AM
1,1-Dichloropropene	ND	0.500		µg/L	1	9/29/2022 4:54:15 AM
Carbon tetrachloride	ND	0.500		µg/L	1	9/29/2022 4:54:15 AM
1,2-Dichloroethane (EDC)	ND	0.500		µg/L	1	9/29/2022 4:54:15 AM
Trichloroethene (TCE)	164	25.0	D	µg/L	50	10/3/2022 2:25:26 PM
1,2-Dichloropropane	ND	0.500		µg/L	1	9/29/2022 4:54:15 AM
Bromodichloromethane	ND	0.500		µg/L	1	9/29/2022 4:54:15 AM
Dibromomethane	ND	0.500		µg/L	1	9/29/2022 4:54:15 AM
cis-1,3-Dichloropropene	ND	0.500		µg/L	1	9/29/2022 4:54:15 AM
trans-1,3-Dichloropropylene	ND	0.500		µg/L	1	9/29/2022 4:54:15 AM
1,1,2-Trichloroethane	ND	0.500		µg/L	1	9/29/2022 4:54:15 AM
1,3-Dichloropropane	ND	0.500		µg/L	1	9/29/2022 4:54:15 AM
Tetrachloroethene (PCE)	ND	0.500		µg/L	1	9/29/2022 4:54:15 AM
Dibromochloromethane	ND	0.500		µg/L	1	9/29/2022 4:54:15 AM
1,2-Dibromoethane (EDB)	ND	0.200		µg/L	1	9/29/2022 4:54:15 AM
Chlorobenzene	ND	0.500		µg/L	1	9/29/2022 4:54:15 AM
1,1,1,2-Tetrachloroethane	ND	0.500		µg/L	1	9/29/2022 4:54:15 AM
Bromoform	ND	0.500		µg/L	1	9/29/2022 4:54:15 AM
1,1,2,2-Tetrachloroethane	ND	0.500		µg/L	1	9/29/2022 4:54:15 AM
Bromobenzene	ND	0.500		µg/L	1	9/29/2022 4:54:15 AM
2-Chlorotoluene	ND	0.500		µg/L	1	9/29/2022 4:54:15 AM
4-Chlorotoluene	ND	0.500		µg/L	1	9/29/2022 4:54:15 AM
1,2,3-Trichloropropane	ND	2.00		µg/L	1	9/29/2022 4:54:15 AM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	9/29/2022 4:54:15 AM
1,3-Dichlorobenzene	ND	0.500		µg/L	1	9/29/2022 4:54:15 AM
1,4-Dichlorobenzene	ND	0.500		µg/L	1	9/29/2022 4:54:15 AM
1,2-Dichlorobenzene	ND	0.500		µg/L	1	9/29/2022 4:54:15 AM

Analytical Report

Work Order: **2209354**
Date Reported: **10/3/2022**

Client: PES Environmental, Inc.
Collection Date: 9/26/2022 3:42:00 PM
Project: BSB-Shallow/Interm.
Lab ID: 2209354-005
Matrix: Groundwater
Client Sample ID: **HY-13i-092622**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 37950		Analyst: LAC
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/29/2022 4:54:15 AM
Hexachloro-1,3-butadiene	ND	2.00		µg/L	1	9/29/2022 4:54:15 AM
1,2,3-Trichlorobenzene	ND	0.500		µg/L	1	9/29/2022 4:54:15 AM
Surr: Dibromofluoromethane	82.0	80 - 120		%Rec	1	9/29/2022 4:54:15 AM
Surr: Toluene-d8	89.6	80 - 120		%Rec	1	9/29/2022 4:54:15 AM
Surr: 1-Bromo-4-fluorobenzene	91.7	80 - 120		%Rec	1	9/29/2022 4:54:15 AM

NOTES:
Q - Associated calibration verification is above acceptance criteria. Result may be high-biased.

Client: PES Environmental, Inc.
Collection Date: 9/26/2022 2:27:00 PM
Project: BSB-Shallow/Interm.
Lab ID: 2209354-006
Matrix: Groundwater
Client Sample ID: **HY-1s-092622**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37950 Analyst: LAC

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00	Q	µg/L	1	9/28/2022 8:22:03 PM
Chloromethane	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM
Vinyl chloride	21.9	0.200		µg/L	1	9/28/2022 8:22:03 PM
Bromomethane	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM
Trichlorofluoromethane (CFC-11)	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM
Chloroethane	ND	1.00		µg/L	1	9/28/2022 8:22:03 PM
1,1-Dichloroethene	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM
Methylene chloride	ND	1.00		µg/L	1	9/28/2022 8:22:03 PM
trans-1,2-Dichloroethene	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM
1,1-Dichloroethane	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM
cis-1,2-Dichloroethene	2.59	0.500		µg/L	1	9/28/2022 8:22:03 PM
Chloroform	ND	1.00		µg/L	1	9/28/2022 8:22:03 PM
1,1,1-Trichloroethane (TCA)	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM
1,1-Dichloropropene	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM
Carbon tetrachloride	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM
1,2-Dichloroethane (EDC)	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM
1,2-Dichloropropane	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM
Bromodichloromethane	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM
Dibromomethane	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM
cis-1,3-Dichloropropene	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM
trans-1,3-Dichloropropylene	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM
1,1,2-Trichloroethane	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM
1,3-Dichloropropane	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM
Tetrachloroethene (PCE)	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM
Dibromochloromethane	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM
1,2-Dibromoethane (EDB)	ND	0.200		µg/L	1	9/28/2022 8:22:03 PM
Chlorobenzene	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM
1,1,1,2-Tetrachloroethane	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM
Bromoform	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM
1,1,2,2-Tetrachloroethane	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM
Bromobenzene	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM
2-Chlorotoluene	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM
4-Chlorotoluene	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM
1,2,3-Trichloropropane	ND	2.00		µg/L	1	9/28/2022 8:22:03 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	9/28/2022 8:22:03 PM
1,3-Dichlorobenzene	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM
1,4-Dichlorobenzene	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM
1,2-Dichlorobenzene	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM

Analytical Report

Work Order: **2209354**
Date Reported: **10/3/2022**

Client: PES Environmental, Inc.
Collection Date: 9/26/2022 2:27:00 PM
Project: BSB-Shallow/Interm.
Lab ID: 2209354-006
Matrix: Groundwater
Client Sample ID: **HY-1s-092622**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 37950		Analyst: LAC
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/28/2022 8:22:03 PM
Hexachloro-1,3-butadiene	ND	2.00		µg/L	1	9/28/2022 8:22:03 PM
1,2,3-Trichlorobenzene	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM
Surr: Dibromofluoromethane	104	80 - 120		%Rec	1	9/28/2022 8:22:03 PM
Surr: Toluene-d8	97.5	80 - 120		%Rec	1	9/28/2022 8:22:03 PM
Surr: 1-Bromo-4-fluorobenzene	89.9	80 - 120		%Rec	1	9/28/2022 8:22:03 PM

NOTES:
Q - Associated calibration verification is below acceptance criteria. Result may be low-biased.

Client: PES Environmental, Inc. **Collection Date:** 9/21/2022 1:25:00 PM
Project: BSB-Shallow/Interm.
Lab ID: 2209354-007 **Matrix:** Water
Client Sample ID: **TB-092622**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37950 Analyst: LAC

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00	Q	µg/L	1	9/28/2022 3:20:52 PM
Chloromethane	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM
Vinyl chloride	ND	0.200		µg/L	1	9/28/2022 3:20:52 PM
Bromomethane	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM
Trichlorofluoromethane (CFC-11)	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM
Chloroethane	ND	1.00		µg/L	1	9/28/2022 3:20:52 PM
1,1-Dichloroethene	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM
Methylene chloride	ND	1.00		µg/L	1	9/28/2022 3:20:52 PM
trans-1,2-Dichloroethene	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM
1,1-Dichloroethane	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM
Chloroform	ND	1.00		µg/L	1	9/28/2022 3:20:52 PM
1,1,1-Trichloroethane (TCA)	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM
1,1-Dichloropropene	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM
Carbon tetrachloride	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM
1,2-Dichloroethane (EDC)	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM
1,2-Dichloropropane	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM
Bromodichloromethane	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM
Dibromomethane	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM
cis-1,3-Dichloropropene	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM
trans-1,3-Dichloropropylene	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM
1,1,2-Trichloroethane	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM
1,3-Dichloropropane	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM
Tetrachloroethene (PCE)	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM
Dibromochloromethane	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM
1,2-Dibromoethane (EDB)	ND	0.200		µg/L	1	9/28/2022 3:20:52 PM
Chlorobenzene	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM
1,1,1,2-Tetrachloroethane	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM
Bromoform	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM
1,1,2,2-Tetrachloroethane	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM
Bromobenzene	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM
2-Chlorotoluene	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM
4-Chlorotoluene	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM
1,2,3-Trichloropropane	ND	2.00		µg/L	1	9/28/2022 3:20:52 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	9/28/2022 3:20:52 PM
1,3-Dichlorobenzene	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM
1,4-Dichlorobenzene	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM
1,2-Dichlorobenzene	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM

Analytical Report

Work Order: **2209354**
Date Reported: **10/3/2022**

Client: PES Environmental, Inc.
Collection Date: 9/21/2022 1:25:00 PM
Project: BSB-Shallow/Interm.
Lab ID: 2209354-007
Matrix: Water
Client Sample ID: **TB-092622**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 37950		Analyst: LAC
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/28/2022 3:20:52 PM
Hexachloro-1,3-butadiene	ND	2.00		µg/L	1	9/28/2022 3:20:52 PM
1,2,3-Trichlorobenzene	ND	0.500		µg/L	1	9/28/2022 3:20:52 PM
Surr: Dibromofluoromethane	105	80 - 120		%Rec	1	9/28/2022 3:20:52 PM
Surr: Toluene-d8	95.9	80 - 120		%Rec	1	9/28/2022 3:20:52 PM
Surr: 1-Bromo-4-fluorobenzene	90.9	80 - 120		%Rec	1	9/28/2022 3:20:52 PM

NOTES:
Q - Associated calibration verification is below acceptance criteria. Result may be low-biased.

Work Order: 2209354
CLIENT: PES Environmental, Inc.
Project: BSB-Shallow/Interm.

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-37950** SampType: **LCS** Units: **µg/L** Prep Date: **9/28/2022** RunNo: **78690**
Client ID: **LCSW** Batch ID: **37950** Analysis Date: **9/28/2022** SeqNo: **1619091**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	15.8	1.25	20.00	0	79.2	80	120				S
Chloromethane	16.6	0.750	20.00	0	82.8	80	120				
Vinyl chloride	19.3	0.200	20.00	0	96.3	80	120				
Bromomethane	19.5	1.20	20.00	0	97.3	80	120				
Trichlorofluoromethane (CFC-11)	20.4	0.500	20.00	0	102	80	120				
Chloroethane	18.9	1.00	20.00	0	94.7	80	120				
1,1-Dichloroethene	22.6	0.500	20.00	0	113	80	120				
Acetone	48.4	6.00	50.00	0	96.9	80	120				
Methylene chloride	23.9	0.750	20.00	0	120	80	120				
trans-1,2-Dichloroethene	24.4	0.500	20.00	0	122	80	120				S
1,1-Dichloroethane	19.4	0.500	20.00	0	97.2	80	120				
cis-1,2-Dichloroethene	20.0	0.500	20.00	0	99.8	80	120				
(MEK) 2-Butanone	48.4	1.50	50.00	0	96.9	80	120				
Chloroform	20.1	0.500	20.00	0	101	80	120				
1,1,1-Trichloroethane (TCA)	20.5	0.400	20.00	0	102	80	120				
1,1-Dichloropropene	19.6	0.500	20.00	0	98.1	80	120				
Carbon tetrachloride	20.9	0.750	20.00	0	104	80	120				
1,2-Dichloroethane (EDC)	19.2	0.400	20.00	0	96.1	80	120				
Trichloroethene (TCE)	19.3	0.500	20.00	0	96.6	80	120				
1,2-Dichloropropane	19.7	0.500	20.00	0	98.3	80	120				
Bromodichloromethane	19.9	0.500	20.00	0	99.6	80	120				
Dibromomethane	19.3	0.500	20.00	0	96.3	80	120				
cis-1,3-Dichloropropene	19.4	0.500	20.00	0	96.9	80	120				
trans-1,3-Dichloropropylene	19.2	0.500	20.00	0	96.2	80	120				
Methyl Isobutyl Ketone (MIBK)	45.9	1.25	50.00	0	91.8	80	120				
1,1,2-Trichloroethane	19.7	0.350	20.00	0	98.6	80	120				
1,3-Dichloropropane	19.6	0.500	20.00	0	98.0	80	120				
Tetrachloroethene (PCE)	20.5	0.400	20.00	0	102	80	120				
Dibromochloromethane	20.7	1.00	20.00	0	103	80	120				
1,2-Dibromoethane (EDB)	19.5	0.300	20.00	0	97.5	80	120				
2-Hexanone	46.8	1.00	50.00	0	93.5	80	120				
Chlorobenzene	20.1	0.500	20.00	0	100	80	120				

Work Order: 2209354
CLIENT: PES Environmental, Inc.
Project: BSB-Shallow/Interm.

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-37950** SampType: **LCS** Units: **µg/L** Prep Date: **9/28/2022** RunNo: **78690**
Client ID: **LCSW** Batch ID: **37950** Analysis Date: **9/28/2022** SeqNo: **1619091**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	20.2	0.300	20.00	0	101	80	120				
Bromoform	20.4	0.500	20.00	0	102	80	120				
1,1,2,2-Tetrachloroethane	21.2	0.400	20.00	0	106	80	120				
Bromobenzene	20.2	0.500	20.00	0	101	80	120				
2-Chlorotoluene	20.0	0.500	20.00	0	100	80	120				
4-Chlorotoluene	20.0	0.500	20.00	0	100	80	120				
1,2,3-Trichloropropane	19.0	0.400	20.00	0	95.2	80	120				
1,2,4-Trichlorobenzene	19.0	0.750	20.00	0	94.8	80	120				
1,3-Dichlorobenzene	19.6	0.500	20.00	0	98.0	80	120				
1,4-Dichlorobenzene	19.6	0.500	20.00	0	98.2	80	120				
1,2-Dichlorobenzene	19.6	0.500	20.00	0	98.2	80	120				
1,2-Dibromo-3-chloropropane	17.1	1.00	20.00	0	85.6	80	120				
Hexachloro-1,3-butadiene	20.1	0.500	20.00	0	100	80	120				
1,2,3-Trichlorobenzene	18.6	0.700	20.00	0	93.2	80	120				
Surr: Dibromofluoromethane	25.5		25.00		102	80	120				
Surr: Toluene-d8	25.7		25.00		103	80	120				
Surr: 1-Bromo-4-fluorobenzene	26.4		25.00		106	80	120				

NOTES:
S - Outlying spike recovery observed (low bias). Samples will be qualified with a Q.

Sample ID: **MB-37950** SampType: **MBLK** Units: **µg/L** Prep Date: **9/28/2022** RunNo: **78690**
Client ID: **MBLKW** Batch ID: **37950** Analysis Date: **9/28/2022** SeqNo: **1619090**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.25									Q
Chloromethane	ND	0.750									
Vinyl chloride	ND	0.200									
Bromomethane	ND	1.20									
Trichlorofluoromethane (CFC-11)	ND	0.500									
Chloroethane	ND	1.00									
1,1-Dichloroethene	ND	0.500									
Acetone	ND	6.00									

Work Order: 2209354
CLIENT: PES Environmental, Inc.
Project: BSB-Shallow/Interm.

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-37950** SampType: **MBLK** Units: **µg/L** Prep Date: **9/28/2022** RunNo: **78690**
Client ID: **MBLKW** Batch ID: **37950** Analysis Date: **9/28/2022** SeqNo: **1619090**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methylene chloride	ND	0.750									
trans-1,2-Dichloroethene	ND	0.500									
1,1-Dichloroethane	ND	0.500									
cis-1,2-Dichloroethene	ND	0.500									
(MEK) 2-Butanone	ND	1.50									
Chloroform	ND	0.500									
1,1,1-Trichloroethane (TCA)	ND	0.400									
1,1-Dichloropropene	ND	0.500									
Carbon tetrachloride	ND	0.750									
1,2-Dichloroethane (EDC)	ND	0.400									
Trichloroethene (TCE)	ND	0.500									
1,2-Dichloropropane	ND	0.500									
Bromodichloromethane	ND	0.500									
Dibromomethane	ND	0.500									
cis-1,3-Dichloropropene	ND	0.500									
trans-1,3-Dichloropropylene	ND	0.500									
Methyl Isobutyl Ketone (MIBK)	ND	1.25									
1,1,2-Trichloroethane	ND	0.350									
1,3-Dichloropropane	ND	0.500									
Tetrachloroethene (PCE)	ND	0.400									
Dibromochloromethane	ND	1.00									
1,2-Dibromoethane (EDB)	ND	0.300									
2-Hexanone	ND	1.00									
Chlorobenzene	ND	0.500									
1,1,1,2-Tetrachloroethane	ND	0.300									
Bromoform	ND	0.500									
1,1,2,2-Tetrachloroethane	ND	0.400									
Bromobenzene	ND	0.500									
2-Chlorotoluene	ND	0.500									
4-Chlorotoluene	ND	0.500									
1,2,3-Trichloropropane	ND	0.400									
1,2,4-Trichlorobenzene	ND	0.750									

Work Order: 2209354
CLIENT: PES Environmental, Inc.
Project: BSB-Shallow/Interm.

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-37950** SampType: **MBLK** Units: **µg/L** Prep Date: **9/28/2022** RunNo: **78690**
Client ID: **MBLKW** Batch ID: **37950** Analysis Date: **9/28/2022** SeqNo: **1619090**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3-Dichlorobenzene	ND	0.500									
1,4-Dichlorobenzene	ND	0.500									
1,2-Dichlorobenzene	ND	0.500									
1,2-Dibromo-3-chloropropane	ND	1.00									
Hexachloro-1,3-butadiene	ND	0.500									
1,2,3-Trichlorobenzene	ND	0.700									
Surr: Dibromofluoromethane	25.8		25.00		103	80	120				
Surr: Toluene-d8	24.1		25.00		96.4	80	120				
Surr: 1-Bromo-4-fluorobenzene	22.9		25.00		91.6	80	120				

NOTES:
Q - Associated calibration verification is below acceptance criteria. Result may be low-biased.

Sample ID: **2209352-002ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **9/28/2022** RunNo: **78690**
Client ID: **BATCH** Batch ID: **37950** Analysis Date: **9/28/2022** SeqNo: **1619068**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.25						0		30	Q
Chloromethane	ND	0.750						0		30	
Vinyl chloride	ND	0.200						0		30	
Bromomethane	ND	1.20						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.500						0		30	
Chloroethane	ND	1.00						0		30	
1,1-Dichloroethene	ND	0.500						0		30	
Acetone	ND	6.00						0		30	
Methylene chloride	ND	0.750						0		30	
trans-1,2-Dichloroethene	ND	0.500						0		30	
1,1-Dichloroethane	ND	0.500						0		30	
cis-1,2-Dichloroethene	ND	0.500						0		30	
(MEK) 2-Butanone	ND	1.50						0		30	
Chloroform	ND	0.500						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.400						0		30	
1,1-Dichloropropene	ND	0.500						0		30	

Work Order: 2209354
CLIENT: PES Environmental, Inc.
Project: BSB-Shallow/Interm.

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2209352-002ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **9/28/2022** RunNo: **78690**
Client ID: **BATCH** Batch ID: **37950** Analysis Date: **9/28/2022** SeqNo: **1619068**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Carbon tetrachloride	ND	0.750						0		30	
1,2-Dichloroethane (EDC)	ND	0.400						0		30	
Trichloroethene (TCE)	ND	0.500						0		30	
1,2-Dichloropropane	ND	0.500						0		30	
Bromodichloromethane	ND	0.500						0		30	
Dibromomethane	ND	0.500						0		30	
cis-1,3-Dichloropropene	ND	0.500						0		30	
trans-1,3-Dichloropropylene	ND	0.500						0		30	
Methyl Isobutyl Ketone (MIBK)	ND	1.25						0		30	
1,1,2-Trichloroethane	ND	0.350						0		30	
1,3-Dichloropropane	ND	0.500						0		30	
Tetrachloroethene (PCE)	ND	0.400						0		30	
Dibromochloromethane	ND	1.00						0		30	
1,2-Dibromoethane (EDB)	ND	0.300						0		30	
2-Hexanone	ND	1.00						0		30	
Chlorobenzene	ND	0.500						0		30	
1,1,1,2-Tetrachloroethane	ND	0.300						0		30	
Bromoform	ND	0.500						0		30	
1,1,2,2-Tetrachloroethane	ND	0.400						0		30	
Bromobenzene	ND	0.500						0		30	
2-Chlorotoluene	ND	0.500						0		30	
4-Chlorotoluene	ND	0.500						0		30	
1,2,3-Trichloropropane	ND	0.400						0		30	
1,2,4-Trichlorobenzene	ND	0.750						0		30	
1,3-Dichlorobenzene	ND	0.500						0		30	
1,4-Dichlorobenzene	ND	0.500						0		30	
1,2-Dichlorobenzene	ND	0.500						0		30	
1,2-Dibromo-3-chloropropane	ND	1.00						0		30	
Hexachloro-1,3-butadiene	ND	0.500						0		30	
1,2,3-Trichlorobenzene	ND	0.700						0		30	
Surr: Dibromofluoromethane	26.3		25.00		105	80	120		0		
Surr: Toluene-d8	24.0		25.00		96.2	80	120		0		

Work Order: 2209354
CLIENT: PES Environmental, Inc.
Project: BSB-Shallow/Interm.

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2209352-002ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **9/28/2022** RunNo: **78690**
Client ID: **BATCH** Batch ID: **37950** Analysis Date: **9/28/2022** SeqNo: **1619068**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 1-Bromo-4-fluorobenzene	22.8		25.00		91.1	80	120		0		

NOTES:
Q - Associated calibration verification is below acceptance criteria. Result may be low-biased.

Sample ID: **2209352-001AMS** SampType: **MS** Units: **µg/L** Prep Date: **9/28/2022** RunNo: **78690**
Client ID: **BATCH** Batch ID: **37950** Analysis Date: **9/28/2022** SeqNo: **1619066**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	36.8	1.25	20.00	0	184	1.35	172				S
Chloromethane	25.2	0.750	20.00	0	126	27.2	164				
Vinyl chloride	28.9	0.200	20.00	0	144	52.3	147				
Bromomethane	22.8	1.20	20.00	0	114	24.2	186				
Trichlorofluoromethane (CFC-11)	26.4	0.500	20.00	0	132	71.2	137				
Chloroethane	24.8	1.00	20.00	0	124	62.9	141				
1,1-Dichloroethene	28.1	0.500	20.00	0	141	76.5	136				S
Acetone	55.0	6.00	50.00	2.835	104	56.1	148				
Methylene chloride	26.5	0.750	20.00	0	132	73.7	132				S
trans-1,2-Dichloroethene	28.3	0.500	20.00	0	141	79.1	131				S
1,1-Dichloroethane	21.5	0.500	20.00	0	108	74.3	138				
cis-1,2-Dichloroethene	21.9	0.500	20.00	0.2572	108	78.3	131				
(MEK) 2-Butanone	52.6	1.50	50.00	0	105	61.5	139				
Chloroform	21.7	0.500	20.00	0	108	78.9	131				
1,1,1-Trichloroethane (TCA)	22.7	0.400	20.00	0	114	81.1	132				
1,1-Dichloropropene	22.8	0.500	20.00	0	114	81.3	133				
Carbon tetrachloride	23.5	0.750	20.00	0	117	79.5	133				
1,2-Dichloroethane (EDC)	20.7	0.400	20.00	0	104	73.4	132				
Trichloroethene (TCE)	20.4	0.500	20.00	0	102	75	133				
1,2-Dichloropropane	21.1	0.500	20.00	0	106	76.2	134				
Bromodichloromethane	21.6	0.500	20.00	0	108	76.1	130				
Dibromomethane	20.9	0.500	20.00	0	104	75.5	130				
cis-1,3-Dichloropropene	20.8	0.500	20.00	0	104	68.4	128				
trans-1,3-Dichloropropylene	20.7	0.500	20.00	0	103	63.8	132				

Work Order: 2209354
CLIENT: PES Environmental, Inc.
Project: BSB-Shallow/Interm.

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2209352-001AMS** SampType: **MS** Units: **µg/L** Prep Date: **9/28/2022** RunNo: **78690**
Client ID: **BATCH** Batch ID: **37950** Analysis Date: **9/28/2022** SeqNo: **1619066**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl Isobutyl Ketone (MIBK)	52.0	1.25	50.00	0	104	59.1	143				
1,1,2-Trichloroethane	21.3	0.350	20.00	0	106	75.2	130				
1,3-Dichloropropane	20.8	0.500	20.00	0	104	73.9	131				
Tetrachloroethene (PCE)	22.8	0.400	20.00	0	114	78	131				
Dibromochloromethane	21.3	1.00	20.00	0	107	72.6	129				
1,2-Dibromoethane (EDB)	20.9	0.300	20.00	0	104	73.9	128				
2-Hexanone	53.2	1.00	50.00	0	106	55.6	149				
Chlorobenzene	21.3	0.500	20.00	0	107	80.9	124				
1,1,1,2-Tetrachloroethane	21.0	0.300	20.00	0	105	79.3	123				
Bromoform	21.1	0.500	20.00	0	105	68.3	132				
1,1,2,2-Tetrachloroethane	24.5	0.400	20.00	0	122	72.7	141				
Bromobenzene	21.4	0.500	20.00	0	107	79.9	124				
2-Chlorotoluene	21.8	0.500	20.00	0	109	77.9	133				
4-Chlorotoluene	21.8	0.500	20.00	0	109	78	130				
1,2,3-Trichloropropane	20.5	0.400	20.00	0	103	66.3	132				
1,2,4-Trichlorobenzene	21.5	0.750	20.00	0	108	67.6	131				
1,3-Dichlorobenzene	21.2	0.500	20.00	0	106	83.5	123				
1,4-Dichlorobenzene	21.4	0.500	20.00	0	107	84.2	121				
1,2-Dichlorobenzene	21.6	0.500	20.00	0	108	83.3	124				
1,2-Dibromo-3-chloropropane	20.8	1.00	20.00	0	104	57.7	146				
Hexachloro-1,3-butadiene	22.8	0.500	20.00	0	114	68.5	136				
1,2,3-Trichlorobenzene	21.6	0.700	20.00	0	108	62.9	138				
Surr: Dibromofluoromethane	25.4		25.00		102	80	120				
Surr: Toluene-d8	25.6		25.00		102	80	120				
Surr: 1-Bromo-4-fluorobenzene	26.1		25.00		104	80	120				

NOTES:
S - Outlying spike recovery(ies) observed.

Work Order: 2209354
CLIENT: PES Environmental, Inc.
Project: BSB-Shallow/Interm.

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2209361-002ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **9/28/2022** RunNo: **78690**
Client ID: **BATCH** Batch ID: **37950** Analysis Date: **9/29/2022** SeqNo: **1619080**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.25						0		30	
Chloromethane	ND	0.750						0		30	
Vinyl chloride	ND	0.200						0		30	
Bromomethane	ND	1.20						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.500						0		30	
Chloroethane	ND	1.00						0		30	
1,1-Dichloroethene	ND	0.500						0		30	
Acetone	ND	6.00						0		30	
Methylene chloride	ND	0.750						0		30	
trans-1,2-Dichloroethene	ND	0.500						0		30	
1,1-Dichloroethane	ND	0.500						0		30	
cis-1,2-Dichloroethene	ND	0.500						0		30	
(MEK) 2-Butanone	ND	1.50						0		30	
Chloroform	ND	0.500						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.400						0		30	
1,1-Dichloropropene	ND	0.500						0		30	
Carbon tetrachloride	ND	0.750						0		30	
1,2-Dichloroethane (EDC)	ND	0.400						0		30	
Trichloroethene (TCE)	ND	0.500						0		30	
1,2-Dichloropropane	ND	0.500						0		30	
Bromodichloromethane	ND	0.500						0		30	
Dibromomethane	ND	0.500						0		30	
cis-1,3-Dichloropropene	ND	0.500						0		30	
trans-1,3-Dichloropropylene	ND	0.500						0		30	
Methyl Isobutyl Ketone (MIBK)	ND	1.25						0		30	
1,1,2-Trichloroethane	ND	0.350						0		30	
1,3-Dichloropropane	ND	0.500						0		30	
Tetrachloroethene (PCE)	ND	0.400						0		30	
Dibromochloromethane	ND	1.00						0		30	
1,2-Dibromoethane (EDB)	ND	0.300						0		30	
2-Hexanone	ND	1.00						0		30	
Chlorobenzene	ND	0.500						0		30	

Work Order: 2209354
CLIENT: PES Environmental, Inc.
Project: BSB-Shallow/Interm.

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2209361-002ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **9/28/2022** RunNo: **78690**
Client ID: **BATCH** Batch ID: **37950** Analysis Date: **9/29/2022** SeqNo: **1619080**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	0.300						0		30	
Bromoform	ND	0.500						0		30	
1,1,2,2-Tetrachloroethane	ND	0.400						0		30	
Bromobenzene	ND	0.500						0		30	
2-Chlorotoluene	ND	0.500						0		30	
4-Chlorotoluene	ND	0.500						0		30	
1,2,3-Trichloropropane	ND	0.400						0		30	
1,2,4-Trichlorobenzene	ND	0.750						0		30	
1,3-Dichlorobenzene	ND	0.500						0		30	
1,4-Dichlorobenzene	ND	0.500						0		30	
1,2-Dichlorobenzene	ND	0.500						0		30	
1,2-Dibromo-3-chloropropane	ND	1.00						0		30	
Hexachloro-1,3-butadiene	ND	0.500						0		30	
1,2,3-Trichlorobenzene	ND	0.700						0		30	
Surr: Dibromofluoromethane	26.9		25.00		107	80	120		0		
Surr: Toluene-d8	24.9		25.00		99.7	80	120		0		
Surr: 1-Bromo-4-fluorobenzene	22.6		25.00		90.5	80	120		0		

Sample Log-In Check List

Client Name:	PES	Work Order Number:	2209354
Logged by:	Elisabeth Samoray	Date Received:	9/26/2022 5:43:00 PM

Chain of Custody

1.	Is Chain of Custody complete?	Yes	☑	No	☐	Not Present ☐
2.	How was the sample delivered?	Client				

Log In

3.	Coolers are present?	Yes	☑	No	☐	NA ☐
4.	Shipping container/cooler in good condition?	Yes	☑	No	☐	
5.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes	☑	No	☐	Not Present ☐
6.	Was an attempt made to cool the samples?	Yes	☑	No	☐	NA ☐
7.	Were all items received at a temperature of >2°C to 6°C *	Yes	☑	No	☐	NA ☐
8.	Sample(s) in proper container(s)?	Yes	☑	No	☐	
9.	Sufficient sample volume for indicated test(s)?	Yes	☑	No	☐	
10.	Are samples properly preserved?	Yes	☑	No	☐	
11.	Was preservative added to bottles?	Yes	☐	No	☑	NA ☐
12.	Is there headspace in the VOA vials?	Yes	☑	No	☐	NA ☐
13.	Did all samples containers arrive in good condition(unbroken)?	Yes	☑	No	☐	
14.	Does paperwork match bottle labels?	Yes	☑	No	☐	
15.	Are matrices correctly identified on Chain of Custody?	Yes	☑	No	☐	
16.	Is it clear what analyses were requested?	Yes	☑	No	☐	
17.	Were all holding times able to be met?	Yes	☑	No	☐	

Special Handling (if applicable)

18.	Was client notified of all discrepancies with this order?	Yes	☐	No	☐	NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

19. Additional remarks:

Item Information

Item #	Temp ºC
Sample 1	3.6

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 9/26/22 Page: 1 of: 1

Laboratory Project No (internal): 2209354

Project Name: BSB - Shallow/Interm.

Special Remarks: Tier 2 lab QA/QC (batch QC ok)

Client: PES Environmental

Project No: 827.001.49.004

Address: 2101 4th Ave #1310

Collected by: Natalie Wisdom

City, State, Zip: Seattle, WA 98121

Location: Kent, WA

Telephone: 206-529-3980

Report To (PM): Bill Haldeman

Sample Disposal: ☐ Return to client ☑ Disposal by lab (after 30 days)

Fax:

PM Email: bill.haldeman@anv5.com

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	HVOCs VOCs (EPA 8260 / 624) 8260B	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8) Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	Hs-092622	9/26/22	0938	GW	3	X											
2	Hi-092622		1018			X											
3	HY-11s-092622		1140			X											
4	HY-11i-092622		1227			X											
5	HY-13i-092622		1542			X											
6	HY-1s-092622		1427			X											
7	TB-092622		—	W	1	X											
8																	
9																	
10																	

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☑ Standard ☐ Next Day
☐ 3 Day ☐ Same Day
☐ 2 Day ☐ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x Natalie Wisdom	Natalie Wisdom	9/26/22 17:35	x	SARAH PALOMBELLA	9/26/22 17:43
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x		

Analytical Report

Work Order: **2209354**
Date Reported: **10/3/2022**

Client: PES Environmental, Inc.
Collection Date: 9/26/2022 9:38:00 AM
Project: BSB-Shallow/Interm.
Lab ID: 2209354-001
Matrix: Groundwater
Client Sample ID: **Hs-092622**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37950 Analyst: LAC

Analyses	Result		RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	UJ	1.00	Q	µg/L	1	9/28/2022 6:51:43 PM
Chloromethane	ND		0.500		µg/L	1	9/28/2022 6:51:43 PM
Vinyl chloride	ND		0.200		µg/L	1	9/28/2022 6:51:43 PM
Bromomethane	ND		0.500		µg/L	1	9/28/2022 6:51:43 PM
Trichlorofluoromethane (CFC-11)	ND		0.500		µg/L	1	9/28/2022 6:51:43 PM
Chloroethane	ND		1.00		µg/L	1	9/28/2022 6:51:43 PM
1,1-Dichloroethene	ND		0.500		µg/L	1	9/28/2022 6:51:43 PM
Methylene chloride	ND		1.00		µg/L	1	9/28/2022 6:51:43 PM
trans-1,2-Dichloroethene	ND		0.500		µg/L	1	9/28/2022 6:51:43 PM
1,1-Dichloroethane	ND		0.500		µg/L	1	9/28/2022 6:51:43 PM
cis-1,2-Dichloroethene	ND		0.500		µg/L	1	9/28/2022 6:51:43 PM
Chloroform	ND		1.00		µg/L	1	9/28/2022 6:51:43 PM
1,1,1-Trichloroethane (TCA)	ND		0.500		µg/L	1	9/28/2022 6:51:43 PM
1,1-Dichloropropene	ND		0.500		µg/L	1	9/28/2022 6:51:43 PM
Carbon tetrachloride	ND		0.500		µg/L	1	9/28/2022 6:51:43 PM
1,2-Dichloroethane (EDC)	ND		0.500		µg/L	1	9/28/2022 6:51:43 PM
Trichloroethene (TCE)	ND		0.500		µg/L	1	9/28/2022 6:51:43 PM
1,2-Dichloropropane	ND		0.500		µg/L	1	9/28/2022 6:51:43 PM
Bromodichloromethane	ND		0.500		µg/L	1	9/28/2022 6:51:43 PM
Dibromomethane	ND		0.500		µg/L	1	9/28/2022 6:51:43 PM
cis-1,3-Dichloropropene	ND		0.500		µg/L	1	9/28/2022 6:51:43 PM
trans-1,3-Dichloropropylene	ND		0.500		µg/L	1	9/28/2022 6:51:43 PM
1,1,2-Trichloroethane	ND		0.500		µg/L	1	9/28/2022 6:51:43 PM
1,3-Dichloropropane	ND		0.500		µg/L	1	9/28/2022 6:51:43 PM
Tetrachloroethene (PCE)	ND		0.500		µg/L	1	9/28/2022 6:51:43 PM
Dibromochloromethane	ND		0.500		µg/L	1	9/28/2022 6:51:43 PM
1,2-Dibromoethane (EDB)	ND		0.200		µg/L	1	9/28/2022 6:51:43 PM
Chlorobenzene	ND		0.500		µg/L	1	9/28/2022 6:51:43 PM
1,1,1,2-Tetrachloroethane	ND		0.500		µg/L	1	9/28/2022 6:51:43 PM
Bromoform	ND		0.500		µg/L	1	9/28/2022 6:51:43 PM
1,1,2,2-Tetrachloroethane	ND		0.500		µg/L	1	9/28/2022 6:51:43 PM
Bromobenzene	ND		0.500		µg/L	1	9/28/2022 6:51:43 PM
2-Chlorotoluene	ND		0.500		µg/L	1	9/28/2022 6:51:43 PM
4-Chlorotoluene	ND		0.500		µg/L	1	9/28/2022 6:51:43 PM
1,2,3-Trichloropropane	ND		2.00		µg/L	1	9/28/2022 6:51:43 PM
1,2,4-Trichlorobenzene	ND		1.00		µg/L	1	9/28/2022 6:51:43 PM
1,3-Dichlorobenzene	ND		0.500		µg/L	1	9/28/2022 6:51:43 PM
1,4-Dichlorobenzene	ND		0.500		µg/L	1	9/28/2022 6:51:43 PM
1,2-Dichlorobenzene	ND		0.500		µg/L	1	9/28/2022 6:51:43 PM

Analytical Report

Work Order: **2209354**
Date Reported: **10/3/2022**

Client: PES Environmental, Inc.
Collection Date: 9/26/2022 9:38:00 AM
Project: BSB-Shallow/Interm.
Lab ID: 2209354-001
Matrix: Groundwater
Client Sample ID: **Hs-092622**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 37950		Analyst: LAC
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/28/2022 6:51:43 PM
Hexachloro-1,3-butadiene	ND	2.00		µg/L	1	9/28/2022 6:51:43 PM
1,2,3-Trichlorobenzene	ND	0.500		µg/L	1	9/28/2022 6:51:43 PM
Surr: Dibromofluoromethane	107	80 - 120		%Rec	1	9/28/2022 6:51:43 PM
Surr: Toluene-d8	98.1	80 - 120		%Rec	1	9/28/2022 6:51:43 PM
Surr: 1-Bromo-4-fluorobenzene	91.2	80 - 120		%Rec	1	9/28/2022 6:51:43 PM

NOTES:
Q - Associated calibration verification is below acceptance criteria. Result may be low-biased.

Client: PES Environmental, Inc.
Collection Date: 9/26/2022 10:18:00 AM
Project: BSB-Shallow/Interm.
Lab ID: 2209354-002
Matrix: Groundwater
Client Sample ID: **Hi-092622**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37950 Analyst: LAC

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	9/29/2022 4:24:07 AM
Chloromethane	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
Vinyl chloride	ND	0.200		µg/L	1	9/29/2022 4:24:07 AM
Bromomethane	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
Trichlorofluoromethane (CFC-11)	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
Chloroethane	ND	1.00		µg/L	1	9/29/2022 4:24:07 AM
1,1-Dichloroethene	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
Methylene chloride	ND	1.00		µg/L	1	9/29/2022 4:24:07 AM
trans-1,2-Dichloroethene	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
1,1-Dichloroethane	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
Chloroform	ND	1.00		µg/L	1	9/29/2022 4:24:07 AM
1,1,1-Trichloroethane (TCA)	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
1,1-Dichloropropene	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
Carbon tetrachloride	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
1,2-Dichloroethane (EDC)	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
Trichloroethene (TCE)	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
1,2-Dichloropropane	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
Bromodichloromethane	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
Dibromomethane	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
cis-1,3-Dichloropropene	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
trans-1,3-Dichloropropylene	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
1,1,2-Trichloroethane	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
1,3-Dichloropropane	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
Tetrachloroethene (PCE)	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
Dibromochloromethane	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
1,2-Dibromoethane (EDB)	ND	0.200		µg/L	1	9/29/2022 4:24:07 AM
Chlorobenzene	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
1,1,1,2-Tetrachloroethane	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
Bromoform	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
1,1,2,2-Tetrachloroethane	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
Bromobenzene	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
2-Chlorotoluene	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
4-Chlorotoluene	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
1,2,3-Trichloropropane	ND	2.00		µg/L	1	9/29/2022 4:24:07 AM
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	9/29/2022 4:24:07 AM
1,3-Dichlorobenzene	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
1,4-Dichlorobenzene	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
1,2-Dichlorobenzene	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM

Analytical Report

Work Order: **2209354**
Date Reported: **10/3/2022**

Client: PES Environmental, Inc.
Collection Date: 9/26/2022 10:18:00 AM
Project: BSB-Shallow/Interm.
Lab ID: 2209354-002
Matrix: Groundwater
Client Sample ID: **Hi-092622**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 37950		Analyst: LAC
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/29/2022 4:24:07 AM
Hexachloro-1,3-butadiene	ND	2.00		µg/L	1	9/29/2022 4:24:07 AM
1,2,3-Trichlorobenzene	ND	0.500		µg/L	1	9/29/2022 4:24:07 AM
Surr: Dibromofluoromethane	109	80 - 120		%Rec	1	9/29/2022 4:24:07 AM
Surr: Toluene-d8	98.3	80 - 120		%Rec	1	9/29/2022 4:24:07 AM
Surr: 1-Bromo-4-fluorobenzene	90.9	80 - 120		%Rec	1	9/29/2022 4:24:07 AM

Analytical Report

Work Order: **2209354**
Date Reported: **10/3/2022**

Client: PES Environmental, Inc.
Collection Date: 9/26/2022 11:40:00 AM
Project: BSB-Shallow/Interm.
Lab ID: 2209354-003
Matrix: Groundwater
Client Sample ID: **HY-11s-092622**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37950 Analyst: LAC

Analyses	Result		RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	UJ	1.00	Q	µg/L	1	9/28/2022 7:21:50 PM
Chloromethane	ND		0.500		µg/L	1	9/28/2022 7:21:50 PM
Vinyl chloride	0.235		0.200		µg/L	1	9/28/2022 7:21:50 PM
Bromomethane	ND		0.500		µg/L	1	9/28/2022 7:21:50 PM
Trichlorofluoromethane (CFC-11)	ND		0.500		µg/L	1	9/28/2022 7:21:50 PM
Chloroethane	ND		1.00		µg/L	1	9/28/2022 7:21:50 PM
1,1-Dichloroethene	ND		0.500		µg/L	1	9/28/2022 7:21:50 PM
Methylene chloride	ND		1.00		µg/L	1	9/28/2022 7:21:50 PM
trans-1,2-Dichloroethene	ND		0.500		µg/L	1	9/28/2022 7:21:50 PM
1,1-Dichloroethane	ND		0.500		µg/L	1	9/28/2022 7:21:50 PM
cis-1,2-Dichloroethene	3.39		0.500		µg/L	1	9/28/2022 7:21:50 PM
Chloroform	ND		1.00		µg/L	1	9/28/2022 7:21:50 PM
1,1,1-Trichloroethane (TCA)	ND		0.500		µg/L	1	9/28/2022 7:21:50 PM
1,1-Dichloropropene	ND		0.500		µg/L	1	9/28/2022 7:21:50 PM
Carbon tetrachloride	ND		0.500		µg/L	1	9/28/2022 7:21:50 PM
1,2-Dichloroethane (EDC)	ND		0.500		µg/L	1	9/28/2022 7:21:50 PM
Trichloroethene (TCE)	ND		0.500		µg/L	1	9/28/2022 7:21:50 PM
1,2-Dichloropropane	ND		0.500		µg/L	1	9/28/2022 7:21:50 PM
Bromodichloromethane	ND		0.500		µg/L	1	9/28/2022 7:21:50 PM
Dibromomethane	ND		0.500		µg/L	1	9/28/2022 7:21:50 PM
cis-1,3-Dichloropropene	ND		0.500		µg/L	1	9/28/2022 7:21:50 PM
trans-1,3-Dichloropropylene	ND		0.500		µg/L	1	9/28/2022 7:21:50 PM
1,1,2-Trichloroethane	ND		0.500		µg/L	1	9/28/2022 7:21:50 PM
1,3-Dichloropropane	ND		0.500		µg/L	1	9/28/2022 7:21:50 PM
Tetrachloroethene (PCE)	ND		0.500		µg/L	1	9/28/2022 7:21:50 PM
Dibromochloromethane	ND		0.500		µg/L	1	9/28/2022 7:21:50 PM
1,2-Dibromoethane (EDB)	ND		0.200		µg/L	1	9/28/2022 7:21:50 PM
Chlorobenzene	ND		0.500		µg/L	1	9/28/2022 7:21:50 PM
1,1,1,2-Tetrachloroethane	ND		0.500		µg/L	1	9/28/2022 7:21:50 PM
Bromoform	ND		0.500		µg/L	1	9/28/2022 7:21:50 PM
1,1,2,2-Tetrachloroethane	ND		0.500		µg/L	1	9/28/2022 7:21:50 PM
Bromobenzene	ND		0.500		µg/L	1	9/28/2022 7:21:50 PM
2-Chlorotoluene	ND		0.500		µg/L	1	9/28/2022 7:21:50 PM
4-Chlorotoluene	ND		0.500		µg/L	1	9/28/2022 7:21:50 PM
1,2,3-Trichloropropane	ND		2.00		µg/L	1	9/28/2022 7:21:50 PM
1,2,4-Trichlorobenzene	ND		1.00		µg/L	1	9/28/2022 7:21:50 PM
1,3-Dichlorobenzene	ND		0.500		µg/L	1	9/28/2022 7:21:50 PM
1,4-Dichlorobenzene	ND		0.500		µg/L	1	9/28/2022 7:21:50 PM
1,2-Dichlorobenzene	ND		0.500		µg/L	1	9/28/2022 7:21:50 PM

Analytical Report

Work Order: **2209354**
Date Reported: **10/3/2022**

Client: PES Environmental, Inc.
Collection Date: 9/26/2022 11:40:00 AM
Project: BSB-Shallow/Interm.
Lab ID: 2209354-003
Matrix: Groundwater
Client Sample ID: **HY-11s-092622**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 37950		Analyst: LAC
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/28/2022 7:21:50 PM
Hexachloro-1,3-butadiene	ND	2.00		µg/L	1	9/28/2022 7:21:50 PM
1,2,3-Trichlorobenzene	ND	0.500		µg/L	1	9/28/2022 7:21:50 PM
Surr: Dibromofluoromethane	106	80 - 120		%Rec	1	9/28/2022 7:21:50 PM
Surr: Toluene-d8	97.4	80 - 120		%Rec	1	9/28/2022 7:21:50 PM
Surr: 1-Bromo-4-fluorobenzene	91.6	80 - 120		%Rec	1	9/28/2022 7:21:50 PM

NOTES:
Q - Associated calibration verification is below acceptance criteria. Result may be low-biased.

Analytical Report

Work Order: **2209354**
Date Reported: **10/3/2022**

Client: PES Environmental, Inc.
Collection Date: 9/26/2022 12:27:00 PM
Project: BSB-Shallow/Interm.
Lab ID: 2209354-004
Matrix: Groundwater
Client Sample ID: **HY-11i-092622**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37950 Analyst: LAC

Analyses	Result		RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	UJ	1.00	Q	µg/L	1	9/28/2022 7:51:57 PM
Chloromethane	ND		0.500		µg/L	1	9/28/2022 7:51:57 PM
Vinyl chloride	ND		0.200		µg/L	1	9/28/2022 7:51:57 PM
Bromomethane	ND		0.500		µg/L	1	9/28/2022 7:51:57 PM
Trichlorofluoromethane (CFC-11)	ND		0.500		µg/L	1	9/28/2022 7:51:57 PM
Chloroethane	ND		1.00		µg/L	1	9/28/2022 7:51:57 PM
1,1-Dichloroethene	ND		0.500		µg/L	1	9/28/2022 7:51:57 PM
Methylene chloride	ND		1.00		µg/L	1	9/28/2022 7:51:57 PM
trans-1,2-Dichloroethene	ND		0.500		µg/L	1	9/28/2022 7:51:57 PM
1,1-Dichloroethane	ND		0.500		µg/L	1	9/28/2022 7:51:57 PM
cis-1,2-Dichloroethene	ND		0.500		µg/L	1	9/28/2022 7:51:57 PM
Chloroform	ND		1.00		µg/L	1	9/28/2022 7:51:57 PM
1,1,1-Trichloroethane (TCA)	ND		0.500		µg/L	1	9/28/2022 7:51:57 PM
1,1-Dichloropropene	ND		0.500		µg/L	1	9/28/2022 7:51:57 PM
Carbon tetrachloride	ND		0.500		µg/L	1	9/28/2022 7:51:57 PM
1,2-Dichloroethane (EDC)	ND		0.500		µg/L	1	9/28/2022 7:51:57 PM
Trichloroethene (TCE)	ND		0.500		µg/L	1	9/28/2022 7:51:57 PM
1,2-Dichloropropane	ND		0.500		µg/L	1	9/28/2022 7:51:57 PM
Bromodichloromethane	ND		0.500		µg/L	1	9/28/2022 7:51:57 PM
Dibromomethane	ND		0.500		µg/L	1	9/28/2022 7:51:57 PM
cis-1,3-Dichloropropene	ND		0.500		µg/L	1	9/28/2022 7:51:57 PM
trans-1,3-Dichloropropylene	ND		0.500		µg/L	1	9/28/2022 7:51:57 PM
1,1,2-Trichloroethane	ND		0.500		µg/L	1	9/28/2022 7:51:57 PM
1,3-Dichloropropane	ND		0.500		µg/L	1	9/28/2022 7:51:57 PM
Tetrachloroethene (PCE)	ND		0.500		µg/L	1	9/28/2022 7:51:57 PM
Dibromochloromethane	ND		0.500		µg/L	1	9/28/2022 7:51:57 PM
1,2-Dibromoethane (EDB)	ND		0.200		µg/L	1	9/28/2022 7:51:57 PM
Chlorobenzene	ND		0.500		µg/L	1	9/28/2022 7:51:57 PM
1,1,1,2-Tetrachloroethane	ND		0.500		µg/L	1	9/28/2022 7:51:57 PM
Bromoform	ND		0.500		µg/L	1	9/28/2022 7:51:57 PM
1,1,2,2-Tetrachloroethane	ND		0.500		µg/L	1	9/28/2022 7:51:57 PM
Bromobenzene	ND		0.500		µg/L	1	9/28/2022 7:51:57 PM
2-Chlorotoluene	ND		0.500		µg/L	1	9/28/2022 7:51:57 PM
4-Chlorotoluene	ND		0.500		µg/L	1	9/28/2022 7:51:57 PM
1,2,3-Trichloropropane	ND		2.00		µg/L	1	9/28/2022 7:51:57 PM
1,2,4-Trichlorobenzene	ND		1.00		µg/L	1	9/28/2022 7:51:57 PM
1,3-Dichlorobenzene	ND		0.500		µg/L	1	9/28/2022 7:51:57 PM
1,4-Dichlorobenzene	ND		0.500		µg/L	1	9/28/2022 7:51:57 PM
1,2-Dichlorobenzene	ND		0.500		µg/L	1	9/28/2022 7:51:57 PM

Analytical Report

Work Order: **2209354**
Date Reported: **10/3/2022**

Client: PES Environmental, Inc.
Collection Date: 9/26/2022 12:27:00 PM
Project: BSB-Shallow/Interm.
Lab ID: 2209354-004
Matrix: Groundwater
Client Sample ID: **HY-11i-092622**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 37950		Analyst: LAC
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/28/2022 7:51:57 PM
Hexachloro-1,3-butadiene	ND	2.00		µg/L	1	9/28/2022 7:51:57 PM
1,2,3-Trichlorobenzene	ND	0.500		µg/L	1	9/28/2022 7:51:57 PM
Surr: Dibromofluoromethane	106	80 - 120		%Rec	1	9/28/2022 7:51:57 PM
Surr: Toluene-d8	97.3	80 - 120		%Rec	1	9/28/2022 7:51:57 PM
Surr: 1-Bromo-4-fluorobenzene	89.9	80 - 120		%Rec	1	9/28/2022 7:51:57 PM

NOTES:
Q - Associated calibration verification is below acceptance criteria. Result may be low-biased.

Analytical Report

Work Order: **2209354**
Date Reported: **10/3/2022**

Client: PES Environmental, Inc.
Collection Date: 9/26/2022 3:42:00 PM
Project: BSB-Shallow/Interm.
Lab ID: 2209354-005
Matrix: Groundwater
Client Sample ID: **HY-13i-092622**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37950 Analyst: LAC

Analyses	Result		RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND		1.00		µg/L	1	9/29/2022 4:54:15 AM
Chloromethane	ND		0.500		µg/L	1	9/29/2022 4:54:15 AM
Vinyl chloride	1,570	J+	10.0	DQ	µg/L	50	10/3/2022 2:25:26 PM
Bromomethane	ND		0.500		µg/L	1	9/29/2022 4:54:15 AM
Trichlorofluoromethane (CFC-11)	ND		0.500		µg/L	1	9/29/2022 4:54:15 AM
Chloroethane	ND		1.00		µg/L	1	9/29/2022 4:54:15 AM
1,1-Dichloroethene	52.3	J+	2.50	DQ	µg/L	5	10/3/2022 2:55:35 PM
Methylene chloride	ND		1.00		µg/L	1	9/29/2022 4:54:15 AM
trans-1,2-Dichloroethene	133	J	25.0	D	µg/L	50	10/3/2022 2:25:26 PM
1,1-Dichloroethane	ND		0.500		µg/L	1	9/29/2022 4:54:15 AM
cis-1,2-Dichloroethene	6,850	J	25.0	DE	µg/L	50	10/3/2022 2:25:26 PM
Chloroform	ND		1.00		µg/L	1	9/29/2022 4:54:15 AM
1,1,1-Trichloroethane (TCA)	ND		0.500		µg/L	1	9/29/2022 4:54:15 AM
1,1-Dichloropropene	ND		0.500		µg/L	1	9/29/2022 4:54:15 AM
Carbon tetrachloride	ND		0.500		µg/L	1	9/29/2022 4:54:15 AM
1,2-Dichloroethane (EDC)	ND		0.500		µg/L	1	9/29/2022 4:54:15 AM
Trichloroethene (TCE)	164		25.0	D	µg/L	50	10/3/2022 2:25:26 PM
1,2-Dichloropropane	ND		0.500		µg/L	1	9/29/2022 4:54:15 AM
Bromodichloromethane	ND		0.500		µg/L	1	9/29/2022 4:54:15 AM
Dibromomethane	ND		0.500		µg/L	1	9/29/2022 4:54:15 AM
cis-1,3-Dichloropropene	ND		0.500		µg/L	1	9/29/2022 4:54:15 AM
trans-1,3-Dichloropropylene	ND		0.500		µg/L	1	9/29/2022 4:54:15 AM
1,1,2-Trichloroethane	ND		0.500		µg/L	1	9/29/2022 4:54:15 AM
1,3-Dichloropropane	ND		0.500		µg/L	1	9/29/2022 4:54:15 AM
Tetrachloroethene (PCE)	ND		0.500		µg/L	1	9/29/2022 4:54:15 AM
Dibromochloromethane	ND		0.500		µg/L	1	9/29/2022 4:54:15 AM
1,2-Dibromoethane (EDB)	ND		0.200		µg/L	1	9/29/2022 4:54:15 AM
Chlorobenzene	ND		0.500		µg/L	1	9/29/2022 4:54:15 AM
1,1,1,2-Tetrachloroethane	ND		0.500		µg/L	1	9/29/2022 4:54:15 AM
Bromoform	ND		0.500		µg/L	1	9/29/2022 4:54:15 AM
1,1,2,2-Tetrachloroethane	ND		0.500		µg/L	1	9/29/2022 4:54:15 AM
Bromobenzene	ND		0.500		µg/L	1	9/29/2022 4:54:15 AM
2-Chlorotoluene	ND		0.500		µg/L	1	9/29/2022 4:54:15 AM
4-Chlorotoluene	ND		0.500		µg/L	1	9/29/2022 4:54:15 AM
1,2,3-Trichloropropane	ND		2.00		µg/L	1	9/29/2022 4:54:15 AM
1,2,4-Trichlorobenzene	ND		1.00		µg/L	1	9/29/2022 4:54:15 AM
1,3-Dichlorobenzene	ND		0.500		µg/L	1	9/29/2022 4:54:15 AM
1,4-Dichlorobenzene	ND		0.500		µg/L	1	9/29/2022 4:54:15 AM
1,2-Dichlorobenzene	ND		0.500		µg/L	1	9/29/2022 4:54:15 AM

Analytical Report

Work Order: **2209354**
Date Reported: **10/3/2022**

Client: PES Environmental, Inc.
Collection Date: 9/26/2022 3:42:00 PM
Project: BSB-Shallow/Interm.
Lab ID: 2209354-005
Matrix: Groundwater
Client Sample ID: **HY-13i-092622**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 37950		Analyst: LAC
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/29/2022 4:54:15 AM
Hexachloro-1,3-butadiene	ND	2.00		µg/L	1	9/29/2022 4:54:15 AM
1,2,3-Trichlorobenzene	ND	0.500		µg/L	1	9/29/2022 4:54:15 AM
Surr: Dibromofluoromethane	82.0	80 - 120		%Rec	1	9/29/2022 4:54:15 AM
Surr: Toluene-d8	89.6	80 - 120		%Rec	1	9/29/2022 4:54:15 AM
Surr: 1-Bromo-4-fluorobenzene	91.7	80 - 120		%Rec	1	9/29/2022 4:54:15 AM

NOTES:
Q - Associated calibration verification is above acceptance criteria. Result may be high-biased.

Analytical Report

Work Order: **2209354**
Date Reported: **10/3/2022**

Client: PES Environmental, Inc.
Collection Date: 9/26/2022 2:27:00 PM
Project: BSB-Shallow/Interm.
Lab ID: 2209354-006
Matrix: Groundwater
Client Sample ID: **HY-1s-092622**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37950 Analyst: LAC

Analyses	Result		RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	UJ	1.00	Q	µg/L	1	9/28/2022 8:22:03 PM
Chloromethane	ND		0.500		µg/L	1	9/28/2022 8:22:03 PM
Vinyl chloride	21.9		0.200		µg/L	1	9/28/2022 8:22:03 PM
Bromomethane	ND		0.500		µg/L	1	9/28/2022 8:22:03 PM
Trichlorofluoromethane (CFC-11)	ND		0.500		µg/L	1	9/28/2022 8:22:03 PM
Chloroethane	ND		1.00		µg/L	1	9/28/2022 8:22:03 PM
1,1-Dichloroethene	ND		0.500		µg/L	1	9/28/2022 8:22:03 PM
Methylene chloride	ND		1.00		µg/L	1	9/28/2022 8:22:03 PM
trans-1,2-Dichloroethene	ND		0.500		µg/L	1	9/28/2022 8:22:03 PM
1,1-Dichloroethane	ND		0.500		µg/L	1	9/28/2022 8:22:03 PM
cis-1,2-Dichloroethene	2.59		0.500		µg/L	1	9/28/2022 8:22:03 PM
Chloroform	ND		1.00		µg/L	1	9/28/2022 8:22:03 PM
1,1,1-Trichloroethane (TCA)	ND		0.500		µg/L	1	9/28/2022 8:22:03 PM
1,1-Dichloropropene	ND		0.500		µg/L	1	9/28/2022 8:22:03 PM
Carbon tetrachloride	ND		0.500		µg/L	1	9/28/2022 8:22:03 PM
1,2-Dichloroethane (EDC)	ND		0.500		µg/L	1	9/28/2022 8:22:03 PM
Trichloroethene (TCE)	ND		0.500		µg/L	1	9/28/2022 8:22:03 PM
1,2-Dichloropropane	ND		0.500		µg/L	1	9/28/2022 8:22:03 PM
Bromodichloromethane	ND		0.500		µg/L	1	9/28/2022 8:22:03 PM
Dibromomethane	ND		0.500		µg/L	1	9/28/2022 8:22:03 PM
cis-1,3-Dichloropropene	ND		0.500		µg/L	1	9/28/2022 8:22:03 PM
trans-1,3-Dichloropropylene	ND		0.500		µg/L	1	9/28/2022 8:22:03 PM
1,1,2-Trichloroethane	ND		0.500		µg/L	1	9/28/2022 8:22:03 PM
1,3-Dichloropropane	ND		0.500		µg/L	1	9/28/2022 8:22:03 PM
Tetrachloroethene (PCE)	ND		0.500		µg/L	1	9/28/2022 8:22:03 PM
Dibromochloromethane	ND		0.500		µg/L	1	9/28/2022 8:22:03 PM
1,2-Dibromoethane (EDB)	ND		0.200		µg/L	1	9/28/2022 8:22:03 PM
Chlorobenzene	ND		0.500		µg/L	1	9/28/2022 8:22:03 PM
1,1,1,2-Tetrachloroethane	ND		0.500		µg/L	1	9/28/2022 8:22:03 PM
Bromoform	ND		0.500		µg/L	1	9/28/2022 8:22:03 PM
1,1,2,2-Tetrachloroethane	ND		0.500		µg/L	1	9/28/2022 8:22:03 PM
Bromobenzene	ND		0.500		µg/L	1	9/28/2022 8:22:03 PM
2-Chlorotoluene	ND		0.500		µg/L	1	9/28/2022 8:22:03 PM
4-Chlorotoluene	ND		0.500		µg/L	1	9/28/2022 8:22:03 PM
1,2,3-Trichloropropane	ND		2.00		µg/L	1	9/28/2022 8:22:03 PM
1,2,4-Trichlorobenzene	ND		1.00		µg/L	1	9/28/2022 8:22:03 PM
1,3-Dichlorobenzene	ND		0.500		µg/L	1	9/28/2022 8:22:03 PM
1,4-Dichlorobenzene	ND		0.500		µg/L	1	9/28/2022 8:22:03 PM
1,2-Dichlorobenzene	ND		0.500		µg/L	1	9/28/2022 8:22:03 PM

Analytical Report

Work Order: **2209354**
Date Reported: **10/3/2022**

Client: PES Environmental, Inc.
Collection Date: 9/26/2022 2:27:00 PM
Project: BSB-Shallow/Interm.
Lab ID: 2209354-006
Matrix: Groundwater
Client Sample ID: **HY-1s-092622**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 37950		Analyst: LAC
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/28/2022 8:22:03 PM
Hexachloro-1,3-butadiene	ND	2.00		µg/L	1	9/28/2022 8:22:03 PM
1,2,3-Trichlorobenzene	ND	0.500		µg/L	1	9/28/2022 8:22:03 PM
Surr: Dibromofluoromethane	104	80 - 120		%Rec	1	9/28/2022 8:22:03 PM
Surr: Toluene-d8	97.5	80 - 120		%Rec	1	9/28/2022 8:22:03 PM
Surr: 1-Bromo-4-fluorobenzene	89.9	80 - 120		%Rec	1	9/28/2022 8:22:03 PM

NOTES:
Q - Associated calibration verification is below acceptance criteria. Result may be low-biased.

MEMORANDUM

TO: Project File **DATE:** October 10 and 18, 2022

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: BSB Property, Kent WA – Shallow & Intermediate Aquifer Cleanup Action

PROJECT #: 443022-0827001.49.005

TASK: EIM Data Validation Level EPA2A for September 2022 - Groundwater Samples

LAB: Fremont Work Order Numbers 2209247, 2209284, and 2209354

Fifteen (15) groundwater samples (including one field duplicate) and two (2) trip blanks were collected September 14-16, 20, and 26, 2022 as part of a bi-annual groundwater sampling event at the BSB Diversified Facility in Kent, Washington. The samples were analyzed for halogenated volatile organic compounds (VOCs) using USEPA Method 8260D. Laboratory analyses were conducted by Fremont Analytical (Fremont) of Seattle, Washington. The quality assurance review of the sample data is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for review of analytical data along with Fremont control limit criteria were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2020).

DATA VALIDATION

Completeness

All samples were collected and analyzed as requested with the following discussion:

- Work Order 2209284: Review of the chain of custody, email communication, and the Sample Log-In Check Lists indicates that six of eight samples (HY-13i-091922, Hs-092022, HY-1s-092022, HY-11i-092022, HY-11s-092022, and Hi-092022) were not analyzed as requested because the samples were collected in incorrect containers (incorrect containers were provided by the laboratory). PES resampled the six samples (September 26, 2022) and sample results are reported in Work Order 2209354.

- Work Order 2209247: PES indicated that sample HYCP-12i-091522 should read HY-12i-091522 on the chain of custody, in the laboratory report, and in the associated EDD on October 17, 2022. Sample identification was manually corrected on the Form 1s and

EDD. The lab was notified however the laboratory report was not reissued since the change is relatively minor.

Sample Collection and Preservation

Samples were collected in laboratory-supplied sample containers preserved as appropriate for the individual analyses conducted. The samples were packed on ice delivered to the analytical laboratory. The laboratory reported that the coolers were received at cooler temperatures were received within the recommended temperature preservation of 6°C. The laboratory reported that the samples were received in good condition with cooling materials. No data were qualified based upon the sample collection and preservation information.

Holding Times

All samples were analyzed for VOCs within the EPA recommended holding time of fourteen days for preserved waters from the date of collection. All holding time criteria were met.

Initial and Continuing Calibration

Initial and continuing calibration data for this project are retained by the laboratory and available for review if necessary. These data were not provided nor requested for this project however Fremont indicated within the laboratory report that continuing calibration criteria did not meet acceptance criteria for the following:

- Work Orders 2209284 and 2209354 - Analytical Batches 37886 and 37950: CCV criteria are outside of acceptance criteria for several compounds and Fremont qualified associated results (Q). **Associated groundwater sample results for these compounds are estimated and qualified (J/UJ) because CCV acceptance criteria for several target compounds were not met.** Detections above the RL are qualified with bias and detections below the RL are qualified without bias.

Method Blank Results

Laboratory method blank is included with the analytical batch per method requirement. The target analytes are not detected in the method blank at or above the reporting limits (RLs). No qualifications of the data are made due to the results of the method blank analysis.

Trip Blank Results

Two trip blanks (TB-091622 with WO 2209247 and TB-092622 with WO 2209284) were collected and analyzed. The target analytes are not detected in the trip blank at or above the RLs. No qualifications of the data are made due to the results of the trip blank analysis.

Field, Rinsate, or Equipment Blank Results

Field, rinsate, or equipment blanks were not collected.

Field Duplicate Analyses

Field duplicate sample pair is as follows:

- Work Order 2209284: Samples HY-1i-092022 and MW-101-092022

Field duplicates were submitted and analyzed with the sample group. VOC target analyte results are comparable and within 30 relative percent difference (RPD) or (>1XRL for detections <5X RL).

Laboratory Duplicate Analyses

Laboratory duplicate samples were performed on client sample HYCP-7s-091422 and on non-client samples within the analytical batches. The primary/duplicate RPDs were within the laboratory control limit of 30% or (>1XRL for detections <5X RL). Duplicate data are acceptable.

Surrogate Recoveries

The surrogate recovery results for the samples, duplicate, laboratory control samples, matrix spike samples, trip blank, and the method blank are within the laboratory surrogate control limits with the following exceptions:

- Work Order 2209247: Surrogate (dibromofluoromethane) recovery is below acceptance criteria (80-120%) for seven samples (HYCP-7s-091422, HYCP-7i-091522, HYCP-2-091522, HYCP-2i-091522, HY-12i-091522, Gi-091622, and Gs-091622**). All associated VOC results for these samples are estimated and qualified (J/UJ) due to low surrogate recovery.**

Laboratory Control Samples

Laboratory control sample (LCS) was analyzed by USEPA Method 8260D. The LCS %Rs and for the target compounds are within the laboratory control criteria for waters with the following exceptions:

- Work Order 2209247 - Analytical Batch 37885: Several LCS compound (dichlorodifluoromethane (CFC-12), 1,1-dichloroethene, trans-1,2-dichloroethene, and 1,1,2,2-tetrachloroethane) recoveries are above criteria. No action is taken on this basis since all VOC results are already qualified due to low surrogate recovery.

- Work Order 2209284 - Analytical Batch 37886: LCS compounds dichlorodifluoromethane (CFC-12) and chloromethane recoveries are below acceptance criteria. For CFC-12 and chloromethane no action is needed since these compounds are already qualified due to a low CCV. LCS compounds trans-1,2-dichloroethene, and 1,1,2,2-tetrachloroethane recoveries are above acceptance criteria. No action is needed for trans-1,2-dichloroethene, and 1,1,2,2-tetrachloroethane since these compounds are not detected in the associated samples.

- Work Order 2209354 - Analytical Batch 37950: LCS compound CFC-12 recovery is below acceptance criteria. For CFC-12 no action is needed since this compound is already qualified due to a low CCV. LCS compound trans-1,2-dichloroethene is above acceptance criteria. **Trans-1,2-dichloroethene is detected in one sample (HY-13i-092622) and is estimated and qualified (J) due to high LCS recovery.**

Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) analyses were performed on client samples HYCP-7i-091522, MW-101-092022, and on non-client samples within the analytical batches. MS % Rs are acceptable with the following exceptions:

- Work Order 2209247 - Analytical Batch 37885: Matrix spike analysis was performed on sample HYCP-7i-091522 with multiple targets recovered below acceptance criteria and laboratory qualified (S). All VOC results for sample HYCP-7i-091522 are already qualified due to low surrogate recovery and no further action is needed.

- Work Order 2209284 - Analytical Batch 37886: Matrix spike analysis was performed on sample MW-101-092022 with trans-1,2-dichloroethene recovery above acceptance criteria. No action is needed since trans-1,2-dichloroethene is not detected in the associated sample.

- Work Order 2209354 - Analytical Batch 37950: Matrix spike analysis was performed on a non-client sample with several targets recovered above acceptance criteria. In this case no action is needed since the spike was performed on a non-client sample within the analytical batch.

Quantitation Limits

Results of the VOC analyses were reported based on laboratory RLs for all compounds. Selected samples were diluted due to elevated concentrations of various target analytes. In these cases, the RLs are raised. The RLs used for this sample group were acceptable for the project with the following discussion:

- Work Order 2209354: Sample HY-13i-092622 result for cis-1,2-dichloroethene is laboratory qualified (E) to indicate that the value exceeds the quantitation range. **Sample HY-13i-092622 cis-1,2-dichloroethene result is estimated and qualified (J).**

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory report with the following discussion:

- An electronic data deliverable (EDD) for this SDG is provided by the laboratory and data validator qualifiers were entered. In some cases, different chemical synonyms are used between the EDD and the hardcopy laboratory report however associated Chemical

Abstracts Service (CAS) numbers are provided in the EDD to confirm chemical identifications.

Data Assessment

The laboratory data reported for this project were reviewed based on the criteria outlined in:

- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2020)

Data qualifiers were assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.