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November 15, 2024

Cam Penner-Ash
Washington State Department of Ecology
PO Box 47600
Olympia, Washington 98504-7600

SUBJECT: B&L WOODWASTE SITE OCTOBER 2024 COMPLIANCE MONITORING REPORT

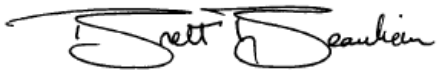
Dear Mr. Penner-Ash:

On behalf of the B&L Woodwaste Custodial Trust, we are submitting the results of compliance monitoring completed at the B&L Woodwaste site in October 2024.

Groundwater and surface water sampling and analysis were completed in accordance with the 2013 Compliance Monitoring Plan and 2024 Compliance Monitoring Plan Addendum. A Compliance Screening Tier 1 data quality review was performed on arsenic data resulting from laboratory analysis. Data were determined to be of acceptable quality for use as reported by the laboratory. The results are presented in the enclosed tables and attachments.

We look forward to discussing the results with you.

Sincerely,
FLOYD | SNIDER



Brett Beaulieu, LHG
Hydrogeologist

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Figure 1 Compliance Monitoring Locations
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Copies: Dan Silver, B&L Woodwaste Custodial Trustee

Tables

Table 1
Groundwater Elevations and Head Differences

Location	Aquifer	Date	Time	Groundwater Elevation (ft NAVD 88)	Vertical Head Difference: LSAq–USAq (ft)	Cross-Barrier Head Difference: Outside–Inside (ft)
Upgradient Areas East of Landfill						
D-10A	USAq	10/15/2024	8:47	14.49	--	--
D-11B	LSAq	10/15/2024	8:59	14.30	--	--
MW-35	USAq	10/15/2024	8:40	14.70	--	--
Landfill and Perimeter						
D-7A	USAq	10/15/2024	9:45	12.60	0.38	--
D-7B	LSAq	10/15/2024	9:46	12.98		
D-8A	USAq	10/15/2024	10:03	13.23	0.02	--
D-8B	LSAq	10/15/2024	10:02	13.26		
D-9A	USAq	10/15/2024	10:19	15.44	--	--
PZ-1A	USAq	10/15/2024	9:30	12.95	--	-1.08
PZ-1B	USAq	10/15/2024	9:31	14.03		
PZ-2A	USAq	10/15/2024	9:36	12.80	--	-1.17
PZ-2B	USAq	10/15/2024	9:37	13.97		
PZ-3A	USAq	10/15/2024	9:50	13.15	--	-0.71
PZ-3B	USAq	10/15/2024	9:51	13.86		
PZ-4A	USAq	10/15/2024	9:57	13.48	--	-0.12
PZ-4B	USAq	10/15/2024	9:59	13.60	-0.05	
PZ-4C	LSAq	10/15/2024	9:59	13.55		--
PZ-5A	USAq	10/15/2024	10:12	14.30	--	0.20
PZ-5B	USAq	10/15/2024	10:10	14.10	-0.16	
PZ-5C	LSAq	10/15/2024	10:10	13.94		--
PZ-6A	USAq	10/15/2024	10:26	14.94	--	0.24
PZ-6B	USAq	10/15/2024	10:28	14.70		
PZ-7A	USAq	10/15/2024	9:19	14.13	--	-0.90
PZ-7B	USAq	10/15/2024	9:21	15.03		
PZ-8A	USAq	10/15/2024	9:24	13.41	--	-1.16
PZ-8B	USAq	10/15/2024	9:26	14.57	-0.02	
PZ-8C	LSAq	10/15/2024	9:29	14.55		--
Wetlands North of Landfill						
D-5U	USAq	10/15/2024	8:08	12.54	--	--
D-6A	USAq	10/15/2024	8:32	12.7	0.50	--
D-6B	LSAq	10/15/2024	8:29	13.2		
MW-13	USAq	10/15/2024	8:21	13.23	--	--
Interurban Trail and Agricultural Fields West of Landfill						
MW-33	USAq	10/15/2024	11:12	13.12	--	--
MW-34	USAq	10/15/2024	13:32	13.14	--	--
MW-40B	LSAq	10/15/2024	11:34	11.33	--	--
MW-41	USAq	10/15/2024	11:04	12.71	--	--
MW-42	USAq	10/15/2024	10:57	12.39	--	--
PD-214	USAq	10/15/2024	12:24	13.26	--	--
W-1	USAq	10/15/2024	7:58	12.36	--	--

Notes:

-- Not collected or not applicable.

1 Water level higher than top of casing at time of measurement.

Abbreviations:

ft Feet

LSAq Lower Sand Aquifer

NAVD 88 North American Vertical Datum of 1988

USAq Upper Sand Aquifer

Table 2

Groundwater Arsenic Results [1]

	Upper Sand Aquifer																									Lower Sand Aquifer				
	Total Arsenic (µg/L)																									Total Arsenic (µg/L)				
Sample Location	D-5U	D-6A	D-7A	D-8A	D-9A	D-10A	MW-13	MW-15	MW-30	MW-31A	MW-33	MW-34	MW-35	MW-41	MW-42	PD-60	PD-141	PD-214	PZ-3A	PZ-4A	PZ-5A	R-14	R-15	R-22	R-23	W-1	W-3 [2]	D-5L	D-6B	D-7B	D-8B	MW-40B
Compliance Monitoring Events																																
October 2024	NS	NS	72	61	NS	NS	NS	NS	NS	NS	150	6.3	NS	82	100	NS	NS	17	160	4.3	490	NS	NS	NS	NS	9.3	NS	NS	NS	NS	41	8.1
April 2024	NS	NS	46.0	150	NS	NS	NS	NS	NS	NS	110	6.60	NS	84.0	120	NS	NS	6.90	120	4.70	230	NS	NS	NS	NS	8.30	NS	NS	NS	NS	52.0	8.30
October 2023	26.7	103	72.3	249	49.8	233	295	226	228	2.31	184	8.20	21.7	92.5	138	36.7	102	18.7	182	4.56	515	NS	NS	NS	NS	14.1	NS	3.01	2.74	5.32	7.34	8.92
July 2023	NS	NS	NS	387	NS	NS	NS	NS	NS	NS	88.0	7.09	NS	62.3	85.8	NS	NS	27.2	120	4.34	400	NS	NS	NS	NS	9.12	NS	NS	NS	NS	6.87	7.46
April 2023	20.8	NS	126	378	NS	NS	229	195	NS	NS	92.1	7.35	NS	68.4	107	NS	100	4.78	126	4.02	186	NS	NS	NS	NS	7.89	NS	NS	NS	NS	5.97	8.23
January 2023	NS	NS	NS	407	NS	NS	NS	NS	NS	NS	87.0	7.83	NS	73.0	107	NS	NS	4.93	112	4.39	299	NS	NS	NS	NS	8.03	NS	NS	NS	NS	7.08	9.86
October 2022	25.7	21.1	73.4	176	48.3	233	280	213	239	3.28	192	9.06	28.2	59.1	119	41.0	134	6.74	217	4.83	512	NS	NS	NS	NS	10.6	NS	4.01	3.58	6.19	14.4	9.63
July 2022	NS	NS	NS	253	NS	NS	NS	NS	NS	NS	98.9	7.96	NS	53.6	111	NS	NS	5.39	149	5.16	222	NS	NS	NS	NS	8.87	NS	NS	NS	NS	8.21	9.18
April 2022	19.7	NS	130	294	NS	NS	330	183	NS	NS	104	7.54	NS	80.5	121 [3]	NS	86	4.43	145	4.43	170	NS	NS	NS	NS	8.79	NS	NS	NS	NS	6.79	8.55
January 2022	NS	NS	NS	358	NS	NS	NS	NS	NS	2.43 [4]	111	8.66	NS	70.0	139	NS	NS	5.98	176	5.01	296	NS	NS	NS	NS	11.4	NS	NS	NS	NS	8.34	9.96
October 2021	27.8	92.4	46.4	186	41.3	216	245	213	204	5.64	185	7.37	21.9	55.0	130	35.1	149	4.75	238	4.60	357	NS	NS	NS	NS	11.7	NS	3.57	2.90	4.96	11.0	8.14
July 2021	NS	NS	NS	209	NS	NS	NS	NS	NS	NS	162	7.68	NS	78.2	127	NS	NS	6.47	163	5.56	261	NS	NS	NS	NS	16.0	NS	NS	NS	NS	13.3	8.72 [2]
April 2021	23.0	NS	94.1	400	NS	NS	191	202	NS	NS	161	9.49	NS	64.7	129	NS	102	7.58	166	5.42	235	NS	NS	NS	NS	10.0	NS	NS	NS	NS	9.69	9.80
January 2021	NS	NS	NS	195	NS	NS	NS	NS	NS	NS	157	8.02	NS	50.7	93.1	NS	NS	5.08	93.5	5.22	372	NS	NS	NS	NS	9.19	NS	NS	NS	NS	8.27	8.44
October 2020	24.2	83.6	98.1	144	44.0	212	209	192	105	1.52 J [5]	112	6.65	21.8	65.7	97.2	24.8	97.6	5.61	171	4.26	324	NS	NS	NS	NS	7.01	2.26 J [5]	3.09	2.08	3.75	6.69	8.12
July 2020	NS	NS	NS	219	NS	NS	NS	NS	NS	NS	128	7.39	NS	45.8	64.7	NS	NS	6.72	165	4.36	319	NS	NS	NS	NS	5.73	NS	NS	NS	NS	6.72	8.45
April 2020	15.8	NS	314	222	NS	NS	209	175	NS	NS	81.5	7.10	NS	83.3	88.2	NS	122	5.51	142	4.67	229	NS	NS	NS	NS	4.95	NS	NS	NS	NS	6.62	8.32
January 2020	NS	NS	NS	272	NS	NS	NS	NS	NS	NS	102	8.75	NS	97.7	84.2	NS	NS	6.14	125	4.84	378	NS	NS	NS	NS	11.2	NS	NS	NS	NS	11.6	9.44
October 2019	28.8	61.2	125	187	44.1	194	198	195	118	2.24	125	7.76	20.0	91.0	105	32.3	175	4.99	177	4.89	336	81.7	NS	NS	21.6	8.27	3.32	3.01	3.03	4.95	8.15	9.14
July 2019	NS	NS	NS	181	NS	NS	NS	NS	NS	NS	181	8.11	NS	37.2	21.2	NS	NS	5.62	162	4.54	258	NS	NS	NS	NS	7.24	NS	NS	NS	NS	6.57	7.97
April 2019	22.8	NS	82.9	209	NS	NS	226	169	NS	NS	160	8.47	NS	NS	NS	NS	178	6.50	182	8.48	223	NS	NS	NS	NS	4.38	NS	NS	NS	NS	8.06	9.41
January 2019	NS	NS	NS	198	NS	NS	NS	NS	NS	NS	146	7.40	NS	NS	NS	NS	NS	5.68	123	4.93	325	NS	NS	NS	NS	3.67	NS	NS	NS	NS	7.90	9.90
October 2018	32.9	29.6	47.6	89.6	43.9	252	146	179	84.1	2.12	206	7.56	23.2	NS	NS	37.0	211	5.48	274	5.20	318	101	384 [6]	455	67.6	4.50	3.73	3.57	3.73	5.10	8.67	8.70
July 2018	NS	NS	NS	152	NS	NS	NS	NS	NS	NS	188	9.19	NS	NS	NS	NS	NS	6.37	196	6.89	316	NS	503 [6]	NS	NS	9.96	RS	NS	NS	NS	9.05	10.3
April 2018	26.6	NS	-- [7]	133	NS	NS	122	153	NS	NS	188	10.6 [8]	NS	NS	NS	NS	194	10.8	170	6.98	317	NS	392 [6]	NS	NS	10.5	NS	NS	NS	NS	8.22	11.1
January 2018	NS	NS	NS	75.5	NS	NS	NS	NS	NS	NS	124	9.28	NS	NS	NS	NS	NS	8.73	176	5.40	559	NS	443 [6]	NS	NS	10.4	NS	NS	NS	NS	8.23	9.75
October 2017	32.4	53.1	24.5	74.9	48.8	336	221	153	112	2.77	323	9.76	39.3	NS	NS	NS	240	12.5	563	6.03	706	NS	539 [6]	NS	NS	10.7	NS	4.24	4.82	6.08	9.46	10.7
August 2017	NS	NS	NS	97.4	NS	NS	NS	NS	NS	NS	372	9.10	NS	NS	NS	NS	NS	10.6	215	6.33	NS	NS	215	NS	NS	13.7	NS	NS	NS	NS	8.34	9.95
April 2017	23.7	NS	30.0	143	NS	NS	270	104	NS	NS	388	9.10	NS	NS	NS	NS	324	13.3	NS	NS	NS	NS	NS	NS	NS	12.0	NS	NS	NS	NS	12.2	10.2
October 2016	43.6	NS	29.5	71.6	48.2	300	632	85.3	176	3.10	458	NS	31.4	NS	NS	NS	451	NS	NS	NS	643	NS	NS	NS	NS	18.6	NS	4.15	NS	6.02	12.4	9.71
April 2016	22.8	50.2	33.9	108	41.0	273	1,200	183	170	2.70	431	NS	32.4	NS	NS	NS	413	NS	NS	NS	347	NS	NS	NS	NS	9.00	NS	4.00	3.50	5.80	10.9	8.00
October 2015	21.1	60.3	37	87.9	43.0	300	1,220	752	139	2.40	423	NS	29.8	NS	NS	NS	441	NS	NS	NS	610	NS	NS	NS	NS	13.5	NS	3	3	5	10.9	7.1
April 2015	22	47.8	45	342	42.0	354	1,580	1,070	204	4.10	399	NS	25.8	NS	NS	NS	407	NS	NS	NS	NS	NS	NS	NS	NS	10.1	NS	4	4	5	9.3	8.4
October 2014	16.3	50.4	57	107	43.6	318	1,650	1,130	117	3.40	436	NS	23.2	NS	NS	NS	323	NS	NS	NS	NS	NS	NS	NS	NS	11.2	NS	3	4	4	10.7	NS
April 2014	17.6	63.7	49	415	37.2	183	1,430	1,260	136	5.40	376	NS	23.2	NS	NS	NS	326	NS	NS	NS	NS	NS	NS	NS	NS	10.1	NS	3	4	4	10.5	NS
October 2013	12.4	107	54	168	40	181	1,740	1,220	174	5.30	404	NS	21.9	NS	NS	NS	302	NS	NS	NS	NS	NS	NS	NS	NS	12	NS	4	3.6	5	13.9	NS
April 2013	16.5	163	30	363	38.0	199	1,910	1,580	252	6.60	398	NS	23.8	NS	NS	NS	296	NS	NS	NS	NS	NS	NS	NS	NS	10.9	NS	3	5	5	16.6	NS
October 2012	40.8	184	17	196	40	231	2,350	1,580	261	12.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4	3.0	5	155	NS
April 2012	43.8	287	61	137	38	107	2,180	1,480	305	18.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4	4	5	370	NS
September 2011	86.3	885	23	99.6	38	213	2,520	1,520	640	21.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4	4	5	28.2	NS
April 2011	90	1,170	32	126	39	203	2,720	1,610	854	5.70	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3	3	5	21.2	NS
October 2010	86.4	1,290	41	34	37	211	2,220	1,460	1,580	5.90	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3	3	5	6.1	NS
April 2010	100	1,370	27	31.1	37	159	2,450	1,610	2,410	15.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4	4	5	12.8	NS
October 2009	113	1,320	38	39.8	37	202	2,220	1,390	2,060	16.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3	2	5	11	NS
April 2009	144	1,490	331	68.2	38	175	2,340	1,630	2,190	22.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3	3	5	11.1	NS
October 2008	143	1,430	98	37.7	38	204	2,510	1,720	2,270	22.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3	2	5	12.2	NS
Historical Events																																
March 2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5	3	5	18	NS
August 2006	89	1,900	56	450	38	200	3,800	3,700	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
September 2005	132	1,790	50 U	86.1	50 U	266	3,530	1,810	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 2

Groundwater Arsenic Results [1]

	Upper Sand Aquifer																										Lower Sand Aquifer				
	Total Arsenic (µg/L)																										Total Arsenic (µg/L)				
Sample Location	D-5U	D-6A	D-7A	D-8A	D-9A	D-10A	MW-13	MW-15	MW-30	MW-31A	MW-33	MW-34	MW-35	MW-41	MW-42	PD-60	PD-141	PD-214	PZ-3A	PZ-4A	PZ-5A	R-14	R-15	R-22	R-23	W-1	W-3 [2]	D-5L	D-6B	D-7B	D-8B	MW-40B
Historical Events (cont.)																															
March 2005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	7	2.5 U	5	21.2	NS
December 2003	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	6	5 U	6	21	NS
September 2003	190	1,900	5	110	31	300	4,600	2,800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	6	5	8	20	NS
June 2003	240	1,800	5 U	370	38	270	4,600	2,600	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5	5 U	6	30	NS
March 2003	230	1,700	5 U	330	38	240	4,300	2,500	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	30	NS
December 2002	230	1,600	5 U	58	36	310	4,500	2,500	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	20	NS
September 2002	220	1,600	5 U	97	35	280	4,500	2,300	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5	20	NS
June 2002	240	1,800	5	280	38	260	4,700	2,500	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	6	30	NS
April 2002	300	1,800	5 U	400	50	300	4,300	2,500	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5	30	NS
December 2001	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	8	8	5 U	30	NS
June 2001	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4	4	6	30	NS
March 2001	280	1,800	3	130	39	230	4,300	2,700	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3	3	6	30	NS
December 2000	280	2,100	3	62	39	270	5,300	3,100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4	4	6	20	NS
September 2000	260	2,000	5	68	58	350	4,600	2,700	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4	5	6	20	NS
June 2000	180	1,500	5 U	96	40	250	3,200	2,500	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	20	NS
March 2000	310	1,600	5 U	150	39	220	6,200	2,300	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	20	NS
January 2000	300	1,400	5 U	130	40	240	4,300	2,600	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	6	30	NS
September 1999	300	1,900	5 U	140	47	310	5,600	3,400	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4	5	6	20	NS
June 1999	300	1,800	5 U	180	38	260	4,600	2,600	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	20	NS
March 1999	340	2,000	5 U	200	39	260	4,600	3,000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	6	30	NS
December 1998	320	980	6	100	38	260	5,700	3,200	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	7	30	NS
September 1998	290	1,800	5 U	150	52	340	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	20	NS
June 1998	320	1,900	5 U	69	42	360	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	20	NS
March 1998	380	2,400	5 U	97	38	350	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	40	NS
December 1997	480	2,600	5 U	130	41	490	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	7	60	NS
September 1997	340	2,400	5 U	210	56	390	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	60	NS
June 1997	390	2,200	5 U	200	49	350	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5	60	NS
March 1997	360	1,900	5	110	36	340	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	7	60	NS
January 1997	310	2,000	5 U	130	39	310	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	90	NS
September 1996	300	2,000	5 U	260	73	470	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5	6	5	100	NS
June 1996	NS	NS	5 U	130	49	470	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5	100	NS
March 1996	NS	NS	5 U	150	39	420	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	100	NS
December 1995	NS	NS	5 U	270	44	540	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5	100	NS
June 1995	300	2,200	5 U	170	55	540	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	200	NS
March 1995	350	2,400	5 U	180	34	320	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	200	NS
December 1994	312	2,494	5 U	130	42	492	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	300	NS
August 1994	314	3,252	5 U	145	84	542	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	400	NS
May 1994	307	2,745	5 U	133	39	363	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	9	700	NS
January 1994	284	2,505	5 U	165	64	402	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5 U	5 U	5 U	800	NS
May 1993	170	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	20 U	NS	NS	NS	NS
August 1990	22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
December 1989	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
September 1989	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:

1 Reported value is the maximum concentration per location, per sampling date.
2 Monitoring well has been decommissioned.
3 Result for the total fraction is displayed. Result for the dissolved fraction was reported at 113 µg/L.
4 Location was sampled in February 2022 in coordination with Washington State Department of Ecology.
5 The laboratory flagged the result "J" to indicate the internal standard associated with the analyte is out of control limits and the reported concentration is an estimate. The sample was re-run at a 5X dilution and the result was non-detect at a concentration of 5 µg/L.
6 Well development conducted during the July 2018 event indicated well damage, and associated sediment was biasing results high beginning in October 2017.
7 No results are reported. Results from sampling during the April 2018 event and follow-up sampling on May 22, 2018, are both biased high from elevated turbidity.
8 Results are from analyses of groundwater collected on May 22, 2018.

Abbreviations:

µg/L Micrograms per liter NS Not sampled

Qualifiers:

J Concentration is an estimate. U Analyte is undetected at given reporting limit.

Table 3

Surface Water Arsenic Results [(1)]

Sampling Date	SW-02		SW-03		SW-05	
	Dissolved Arsenic (µg/L)	Total Arsenic (µg/L)	Dissolved Arsenic (µg/L)	Total Arsenic (µg/L)	Dissolved Arsenic (µg/L)	Total Arsenic (µg/L)
Compliance Monitoring Events						
October 2024	14.0	28.0	3.6	4.2	NS	NS
April 2024	5.0	9.4	3.7	6.2	NS	NS
October 2023	16.2	20.9	18.8	21.8	3.97	8.80
October 2022	7.04	10.7	4.30	5.09	5.33	11.2
July 2022 [(2)]	14.3	21.7	6.67	9.62	NS	NS
October 2021	18.1	19.2	4.23	6.45	7.07	9.26
January 2021	3.93	4.20	NS	NS	2.22	4.63
October 2020	19.4	19.3	5.32	7.23	6.98	7.71
October 2019	9.46	14.3	4.89	5.70	7.21	13.9
October 2018	6.37	11.4	4.21	9.14	4.36	10.3
October 2017	5.12	10.2	6.51	8.94	4.62	9.99
October 2016	9.02	8.96	6.96	11.0	7.65	10.6
April 2016	9.00	17.0	8.00	15.0	8.20	17.0
October 2015	10.2	15.4	4.9	6.5	7.5	14.6
April 2015	5.6	7.8	4.4	14.6	7.9	12.1
October 2014	5.9	9.2	3.3	4.1	6.4	12
April 2014	7.6	10.3	5.7	9.6	13.3	18.1
October 2013	10.5	15.6	5.8	9.9	8.4	15.9
April 2013	18.1	22.1	7.9	10.4	11.5	23.4
October 2012	NS	NS	29.4	54.6	11.5	51.2
April 2012	9.3	10.3	4.1	8.2	16.8	24.4
September 2011	8.6	10.1	4.5	5.4	7.9	24.2
April 2011	9.1	9.1	3	6.2	12.4	18.4
October 2010	8	NA	5.3	NA	10.1	NA
April 2010	9.8	10.9	4.5	48	14.3	20.7
October 2009	5.7	7	4.7	8.9	10.1	22.6
April 2009	5.1	8.7	5.6	7	10.5	15.1
October 2008	17.6	25	4.3	8.7	8	54
Historical Events						
December 2006	NS	7	NS	10	NS	14
July 2006	NS	NS	NS	97	NS	65
September 2003	16	53	8	21	NS	NS
June 2003	11	580	NS	NS	NS	NS
March 2003	9	11	11	24	NS	NS
December 2002	5 U	5 U	5 U	5 U	NS	NS
September 2002	10	370	5 U	5 U	NS	NS
June 2002	24	30	14	15	NS	NS
April 2002	22	26	11	17	NS	NS
March 2001	22	75	40	110	NS	NS
December 2000	31	81	24	24	NS	NS
September 2000	13	2,220	92	1,800	NS	NS

Table 3

Surface Water Arsenic Results [(1)]

Sampling Date	SW-02		SW-03		SW-05	
	Dissolved Arsenic (µg/L)	Total Arsenic (µg/L)	Dissolved Arsenic (µg/L)	Total Arsenic (µg/L)	Dissolved Arsenic (µg/L)	Total Arsenic (µg/L)
Historical Events (cont.)						
June 2000	15	85	37	220	NS	NS
March 2000	23	73	15	20	NS	NS
January 2000	14	18	9	10	NS	NS
June 1999	21	24	8	10	NS	NS
March 1999	10	11	12	19	NS	NS
December 1998	42	40	19	18	NS	NS
March 1997	NS	NS	NS	NS	NS	NS
January 1997	NS	NS	10	9	NS	NS
March 1996	NS	NS	NS	NS	NS	NS
December 1995	NS	NS	NS	NS	NS	NS
June 1995	54	42	21	150	NS	NS
March 1995	31	86	25	41	NS	NS
December 1994	7	14	28	58	NS	NS
August 1994	61	101	60	104	NS	NS
May 1994	41	64	52	95	NS	NS
January 1994	NS	NS	72	222,000	NS	NS
May 1993	90 U	50 U	33	30 U	NS	NS
January 1990	230	370	89	110	NS	NS
November 1989	390	3,400	93	390	NS	NS
October 1989	38	170	49	60	NS	NS

Notes:

1 Reported value is the maximum concentration per location, per sampling date.

2 Supplemental monitoring event to support 2021–2022 dye tracer study.

Abbreviations:

µg/L Micrograms per liter

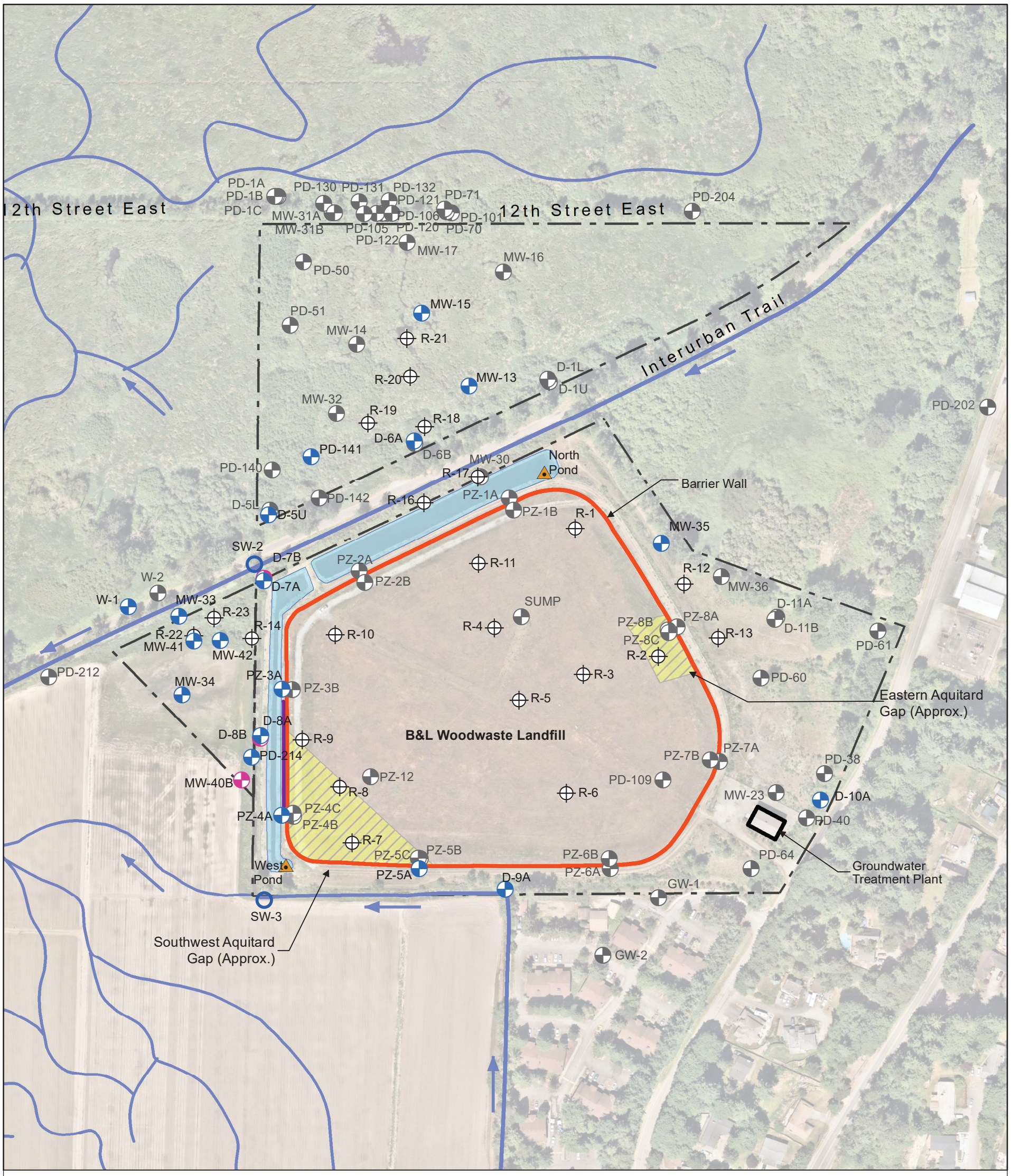
NA Not analyzed

NS Not sampled

Qualifier:

U Analyte is undetected at given reporting limit.

Figures



Legend

- W-1 — Upper Sand Aquifer Monitoring Location
- D-7B — Lower Sand Aquifer Monitoring Location
- SW-5 — Compliance Surface Water Monitoring Location
- PD-216 — Monitoring Well or Piezometer
- R-10 — Recovery Well Location
- West Pond — Pond Staff Gauge Location
- Subsurface Barrier Wall
- Permeable Reactive Barrier
- Property Boundary and Tax Parcel Data
- Stormwater Pond
- Surface Water Flow Direction
- Surface Drainage Feature
- Aquitard Gaps

Notes:
- Orthoimage obtained from Nearmap, June, 2021.
- Hylebos Creek and other surface drainage feature locations shown were digitized from the 2005 USGS orthoimage.
- Black and white reproduction of this color figure may affect interpretation of the results.

Abbreviation:
µg/L = Micrograms per liter
USGS = U.S. Geological Survey

0 200 400
Scale in Feet
1 inch = 200 feet

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Compliance Monitoring Report
B&L Woodwaste Site
Pierce County, Washington

Figure 1
Compliance Monitoring Locations

Path: I:\GIS\Projects\B&L-O&M\MXD\Compliance Monitoring Report\2024 Annual\Figure 1 Compliance Monitoring Locations.mxd
Date: 11/14/2024

12th Street East

12th Street East

Interurban Trail

MW-13
13.23

D-6A
12.70

D-6B
13.20

D-5U
12.54

D-7B
12.98

D-7A
12.60

PZ-1A
12.95

PZ-1B
14.03

PZ-2A
12.80

PZ-2B
13.97

MW-35
14.70

Barrier Wall

W-1
12.36

MW-33
13.12

MW-42
12.39

MW-41
12.71

MW-34
13.14

PZ-3A
13.15

PZ-3B
13.86

PZ-8A
13.41

PZ-8B
14.57

PZ-8C
14.55

Eastern Aquitard
Gap (Approx.)

D-8A
13.23

D-8B
13.26

PD-214
13.26

B&L Woodwaste Landfill

PZ-7B
15.03

PZ-7A
14.13

D-10A
14.49

Drainage
Ditch
System

PZ-4C
13.55

PZ-4A
13.48

PZ-4B
13.6

PZ-5C
13.94

PZ-5B
14.10

PZ-5A
14.30

PZ-6B
14.70

PZ-6A
13.94

D-9A
15.44

Groundwater
Treatment Plant

Southwest Aquitard
Gap (Approx.)

Drainage
Ditch

Fife Way

Legend

- PD-213 — Upper Sand Aquifer Monitoring Location Used for Potentiometric Contours
- PZ-3B — Upper Sand Aquifer Monitoring Location Not Used for Potentiometric Contours
- PZ-4C — Lower Sand Aquifer Monitoring Location Not Used for Potentiometric Contours
- 15 — Upper Sand Aquifer Contour
- Surface Drainage Feature
- Surface Water Flow Direction
- Stormwater Pond
- 15.62 — Water Elevation (ft NAVD 88) and Contour
- Permeable Reactive Barrier
- Approximate Location of Barrier Wall

Notes:
- Orthoimage obtained from Nearmap, June, 2021.
- Hylebos Creek and other surface drainage feature locations shown were digitized from the 2005 USGS orthoimage.

Abbreviations:
ft = Feet
NAVD 88 = North American Vertical Datum of 1988
NA = Not available

N

0 200 400

Scale in Feet
1 inch = 200 feet

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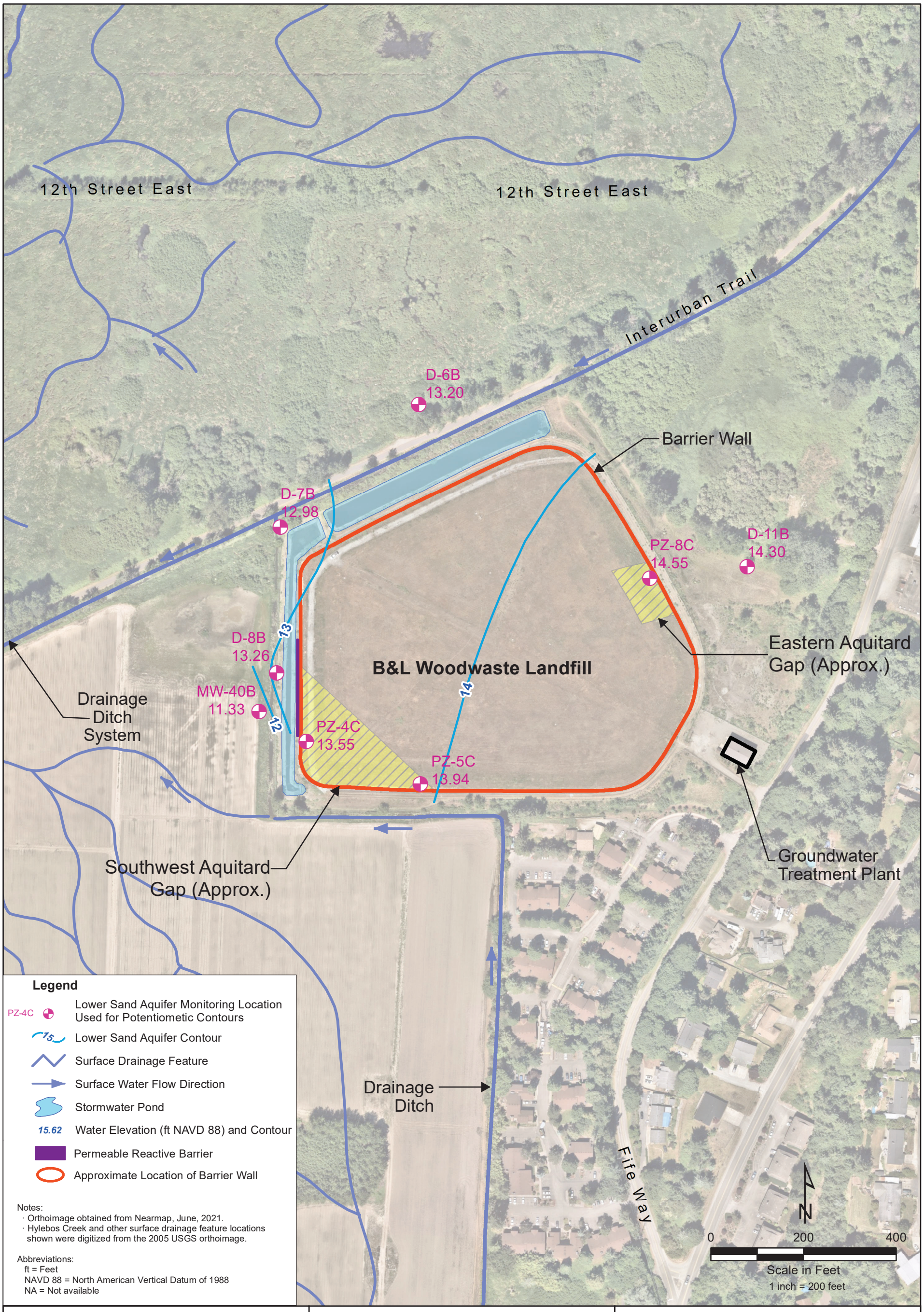
Compliance Monitoring Report
B&L Woodwaste Site
Pierce County, Washington

Figure 2
October 2024 Upper Sand Aquifer
Potentiometric Contours

Path: I:\GIS\Projects\B&L-O&M\MXD\Compliance Monitoring Report\2024 Annual\Figure 2 October 2024 Upper Sand Aquifer Potentiometric Contours.mxd
Date: 11/14/2024



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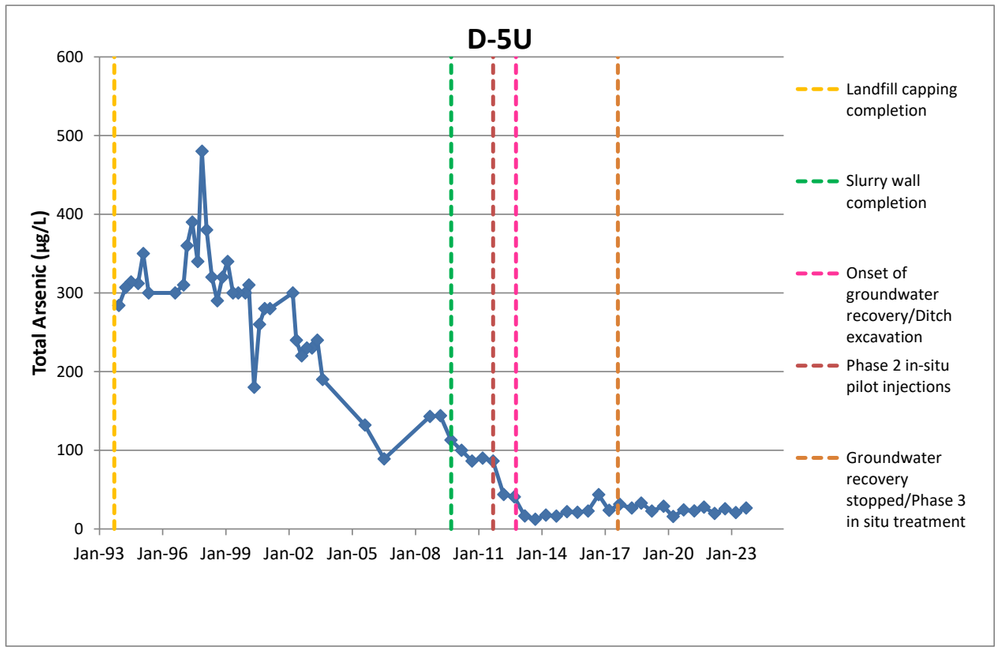
Compliance Monitoring Report
B&L Woodwaste Site
Pierce County, Washington

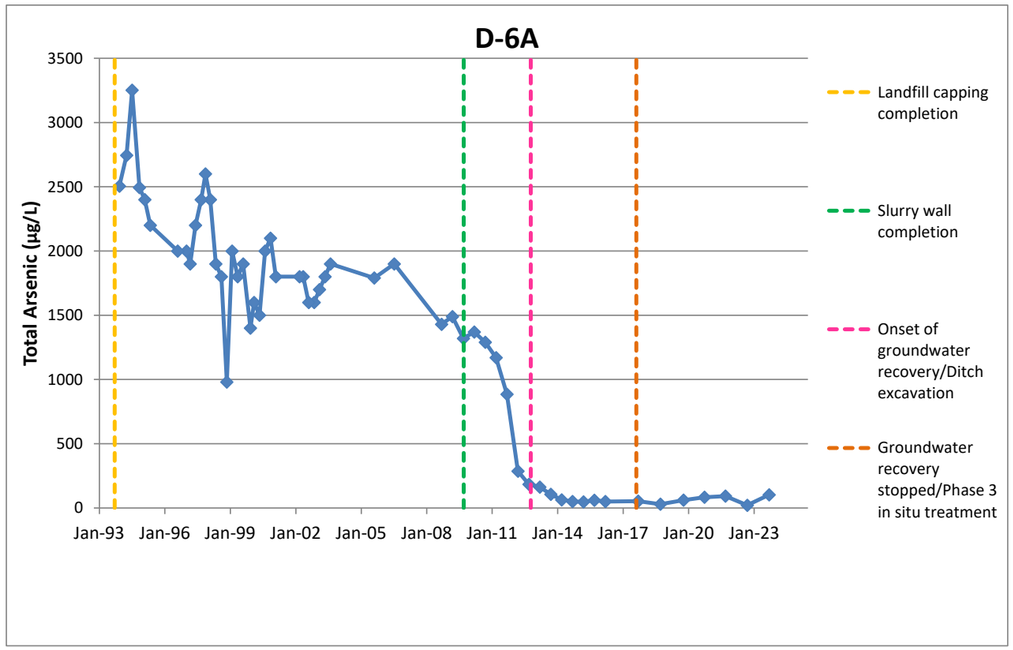
Figure 3
October 2024 Lower Sand Aquifer
Potentiometric Contours

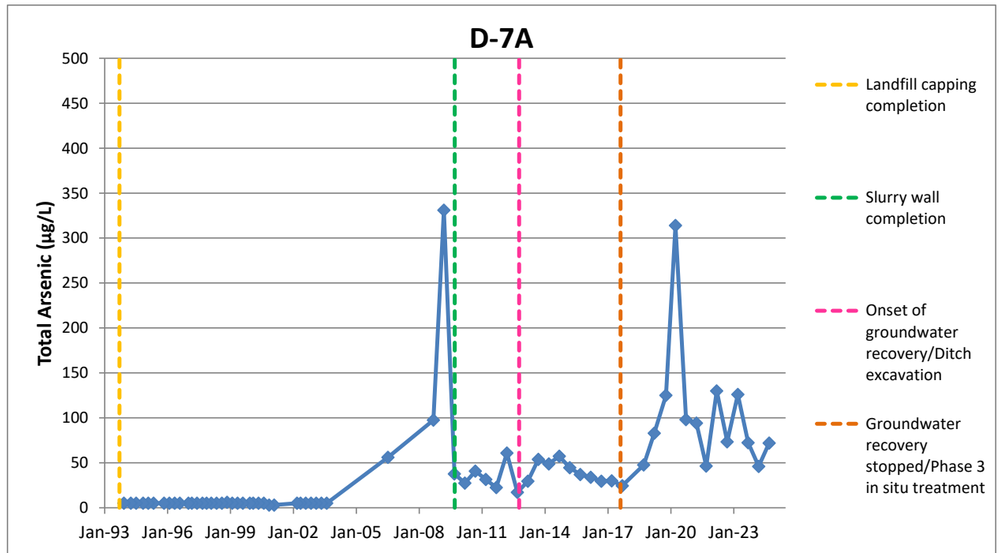
Path: I:\GIS\Projects\B&L-O&M\MXD\Compliance Monitoring Report\2024 Annual\Figure 2 October 2024 Lower Sand Aquifer Potentiometric Contours.mxd
Date: 11/14/2024

Attachment 1
Time-Concentration Plots

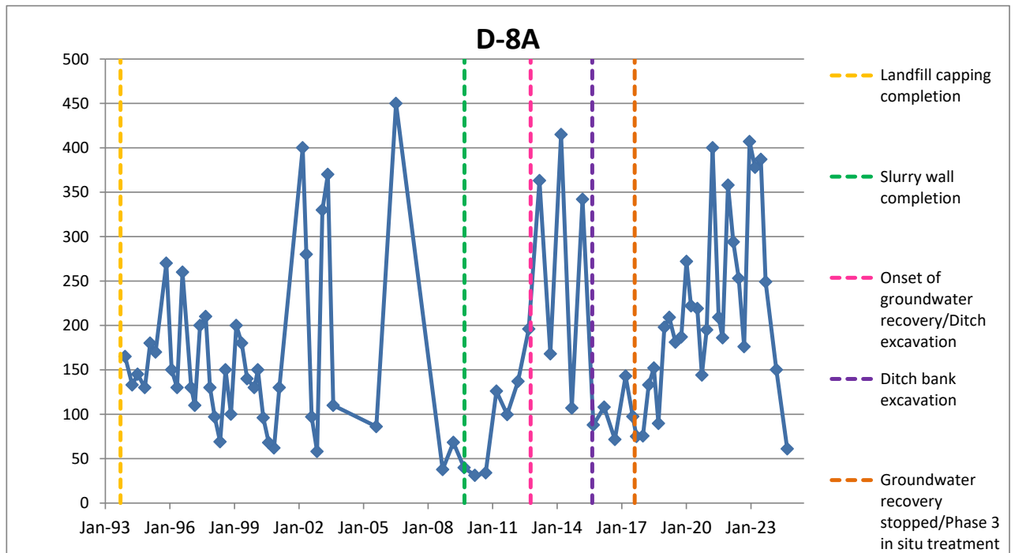
Attachment 1
Time-Concentration Plots







Notes: Detection limits vary. Non-detect results with detection limits of 5 µg/L or less are plotted at the detection limit. Non-detect results with detection limits greater than 5 µg/L have been omitted. Refer to Table 2.3.



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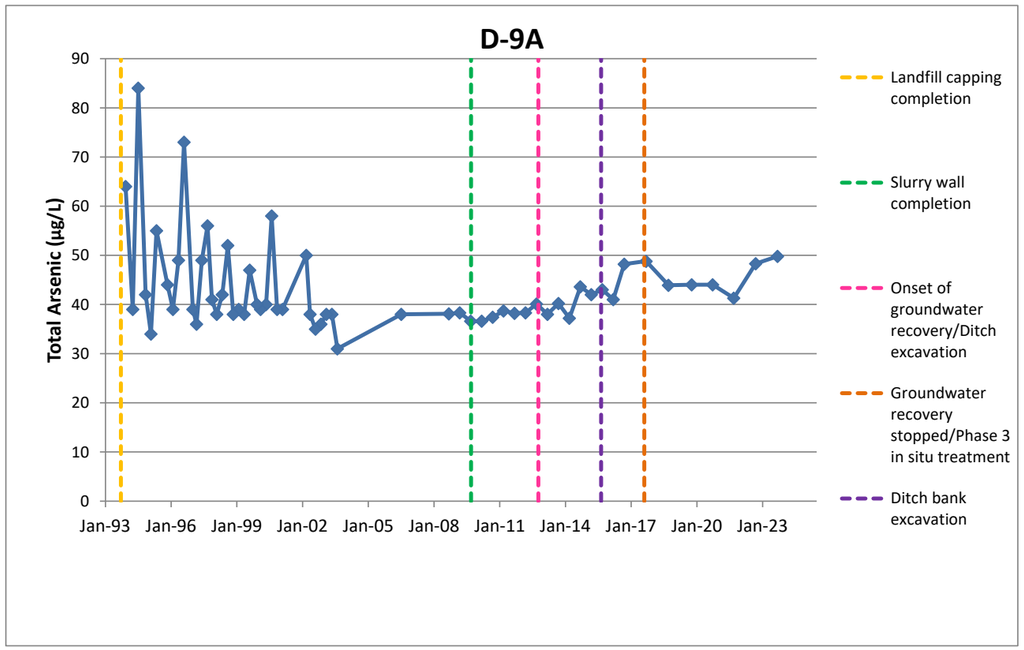
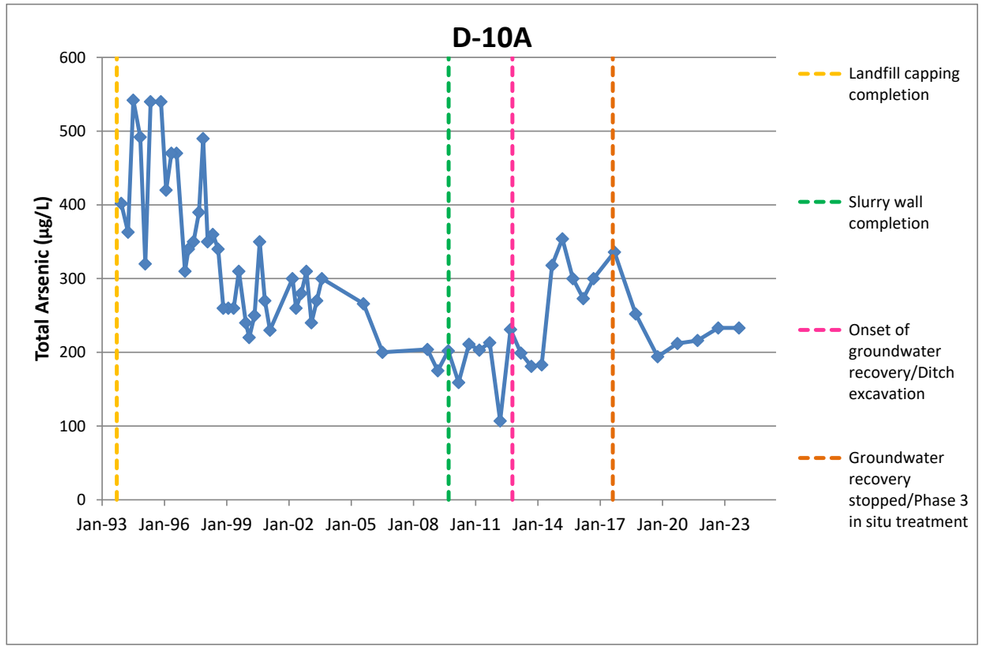
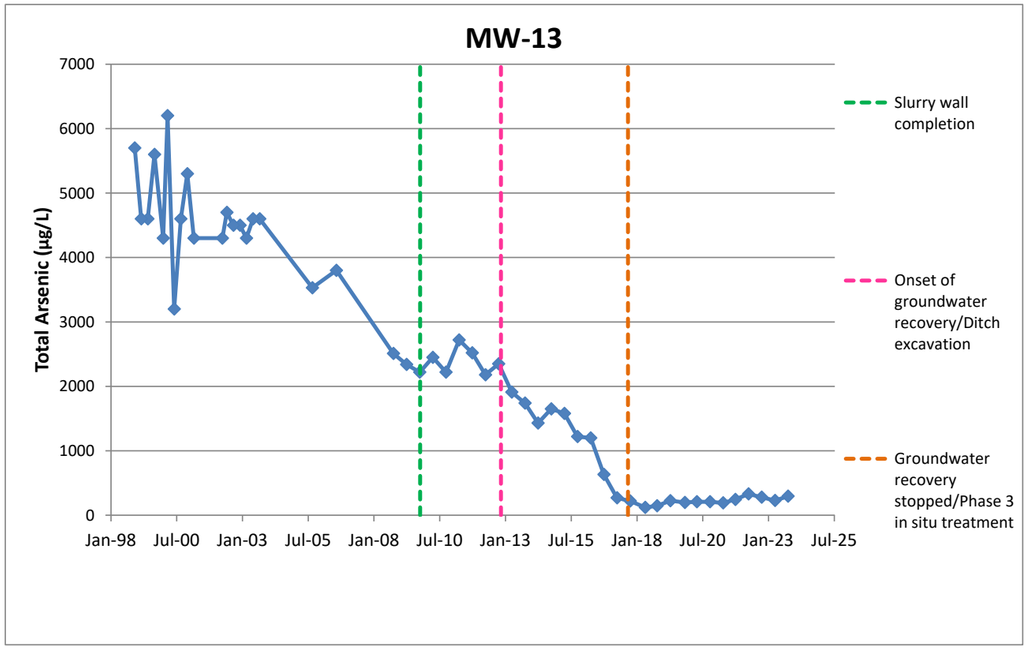
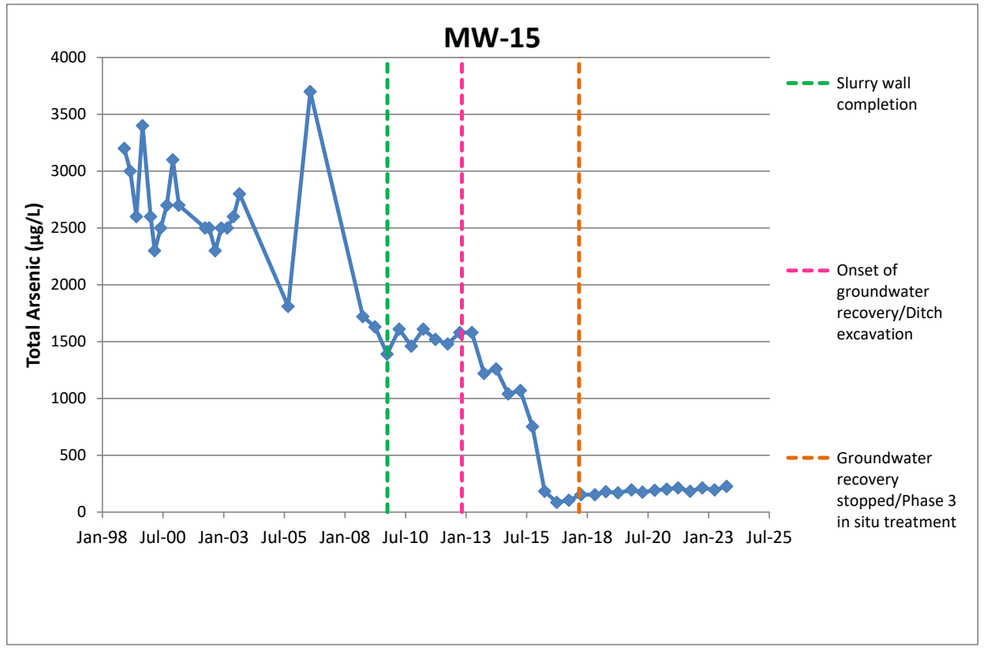
Time-Concentration Plots









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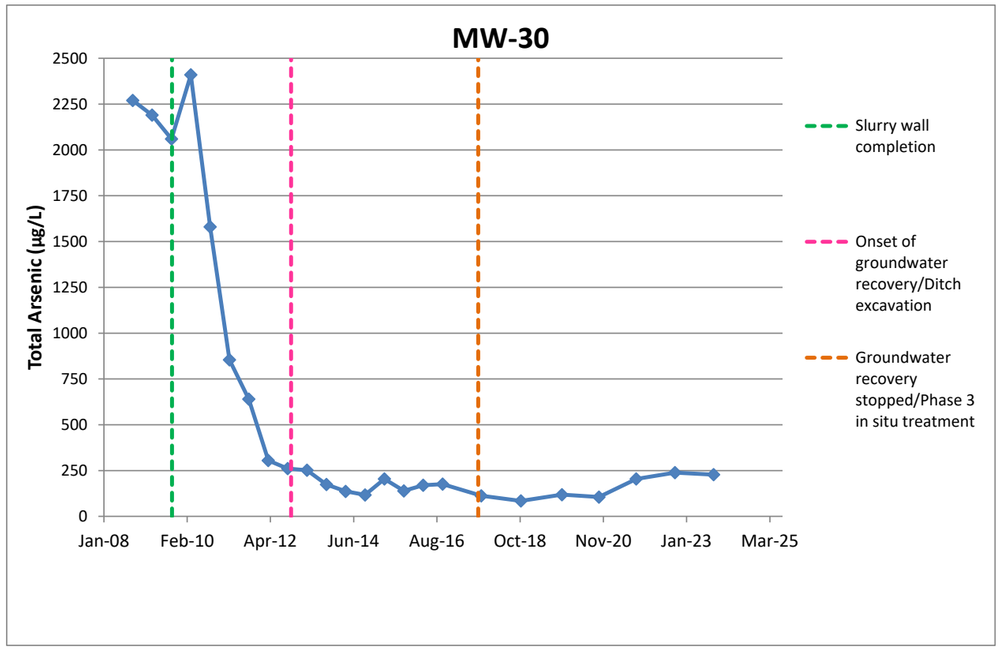
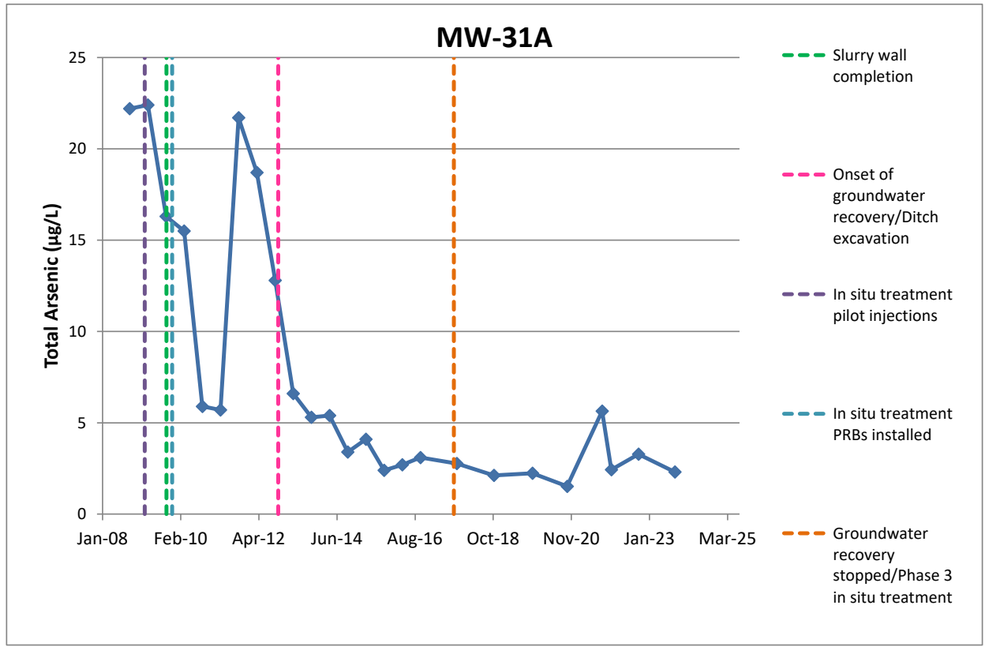
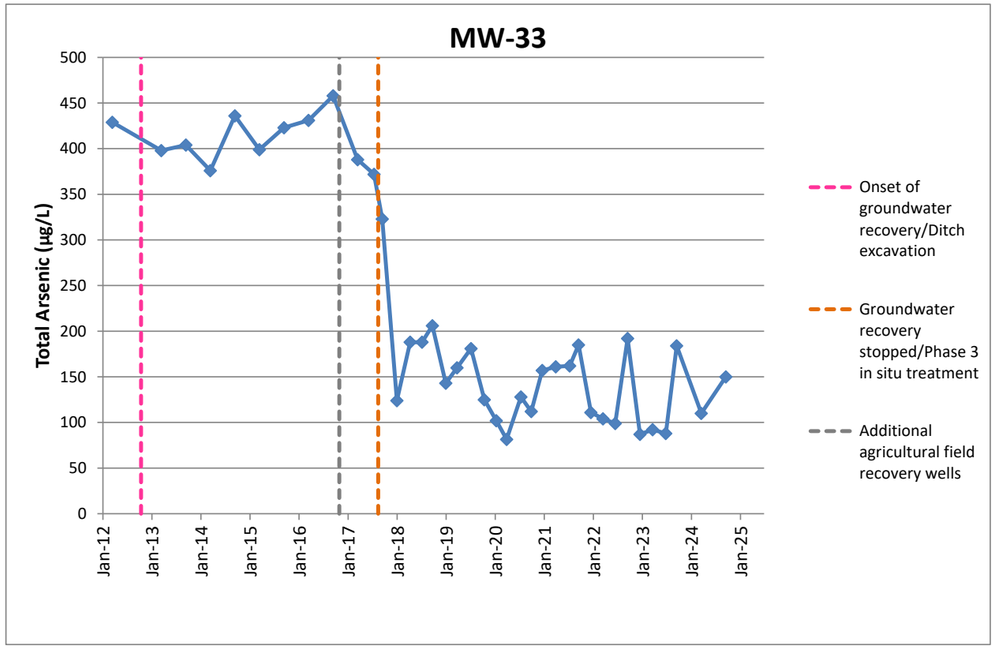
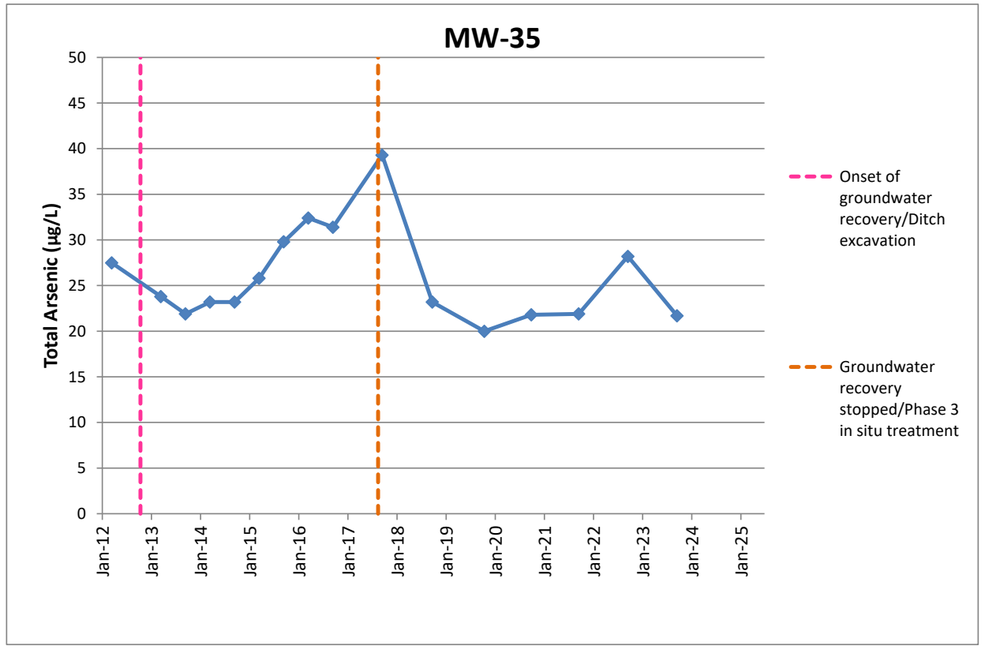
Time-Concentration Plots









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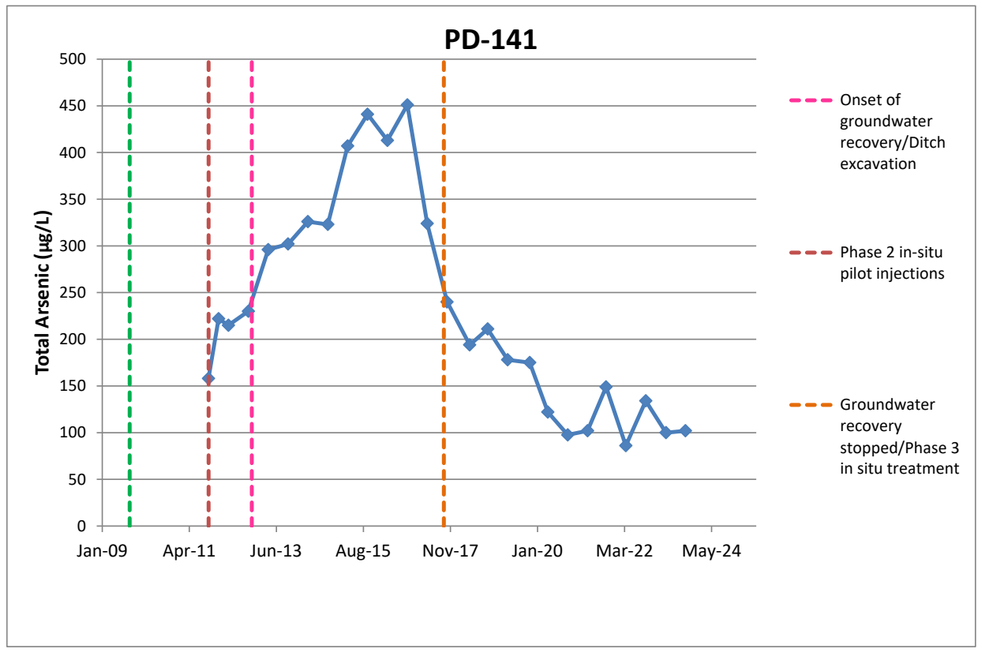
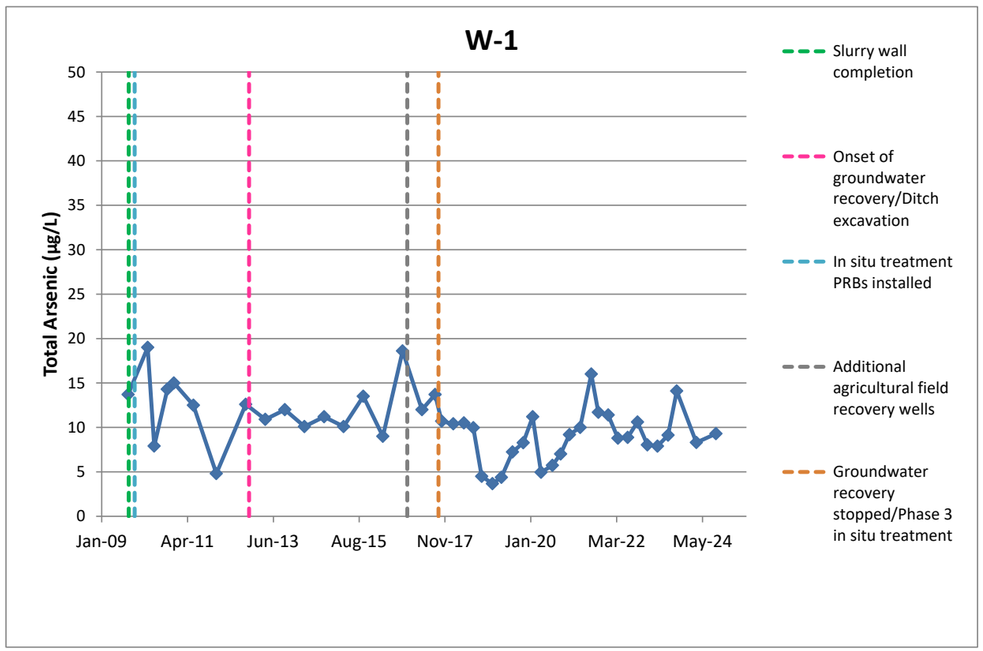
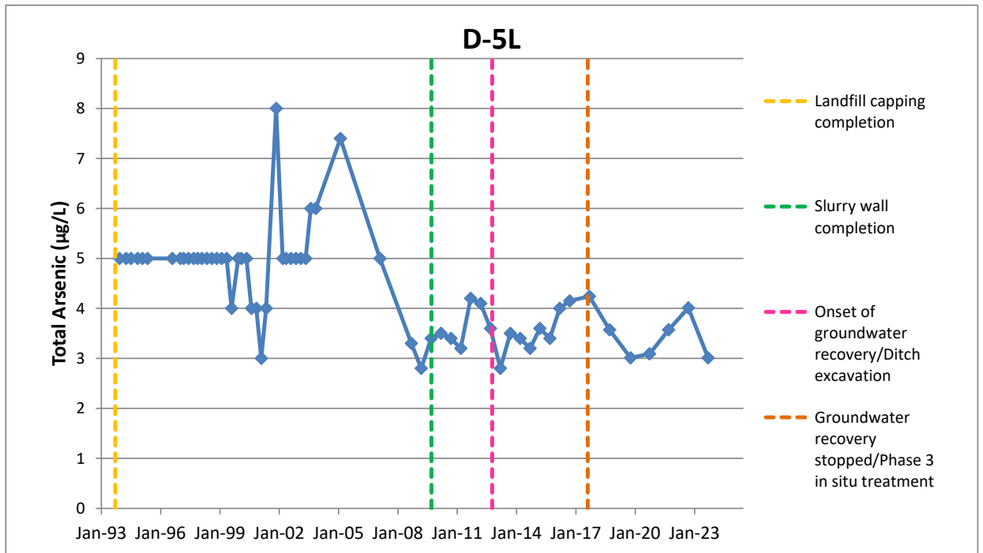
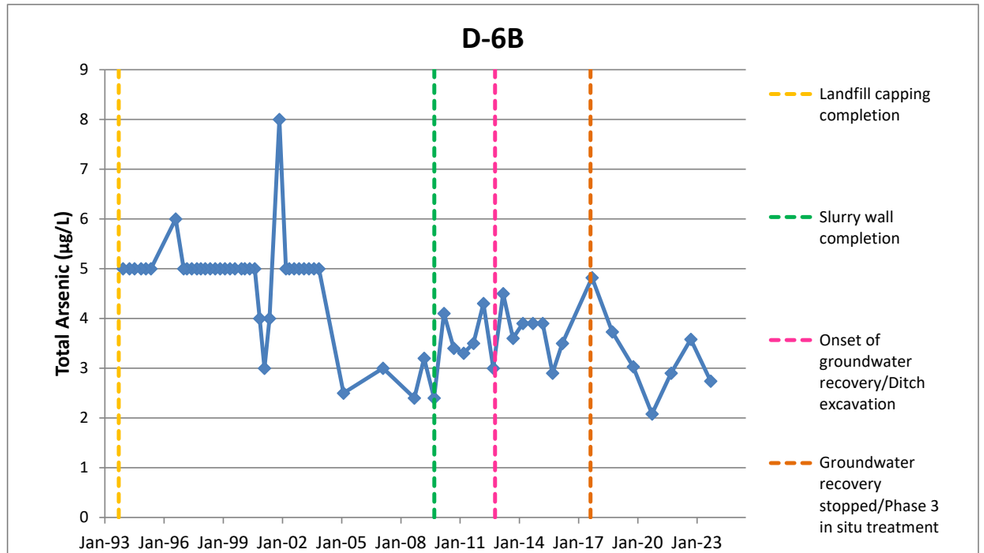






Notes: Detection limits vary. Non-detect results with detection limits of 5 µg/L or less are plotted at the detection limit. Non-detect results with detection limits greater than 5 µg/L have been omitted. Refer to Table 2.3.



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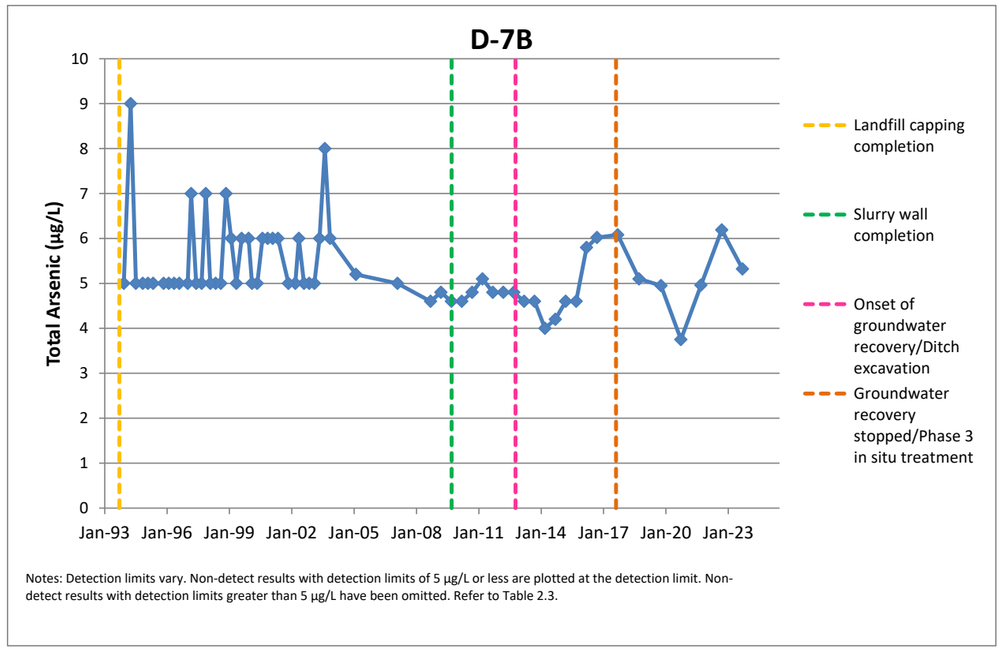

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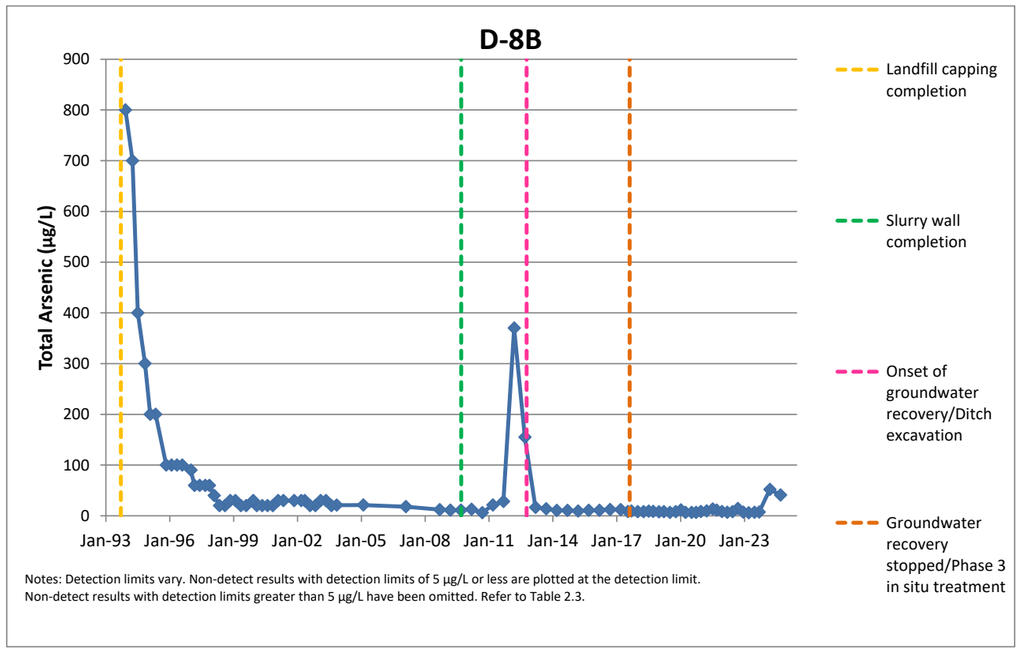
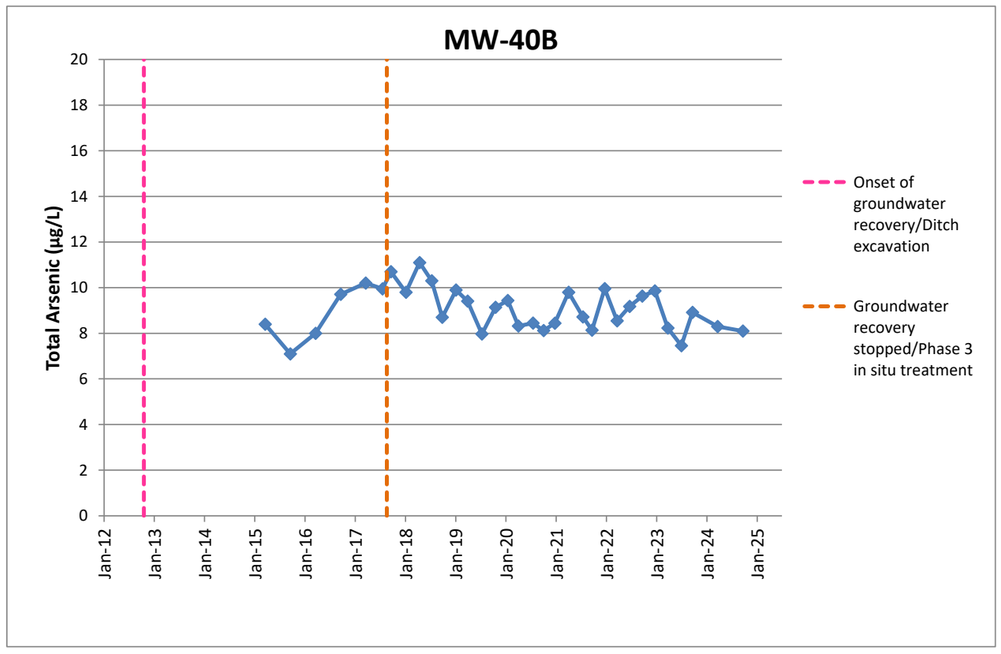
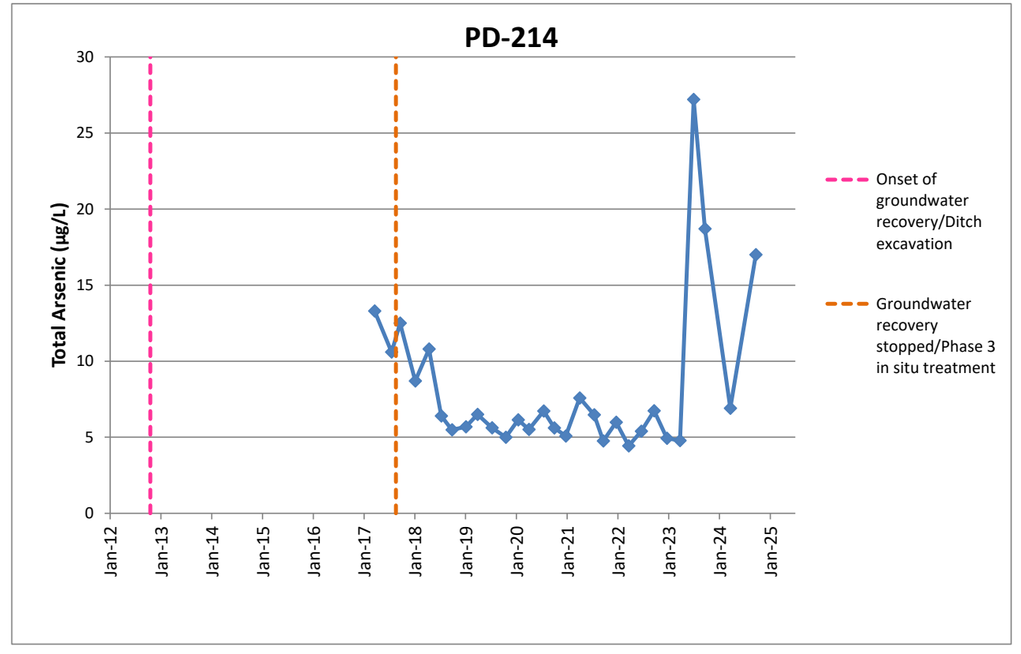


Notes: Detection limits vary. Non-detect results with detection limits of 5 µg/L or less are plotted at the detection limit.
Non-detect results with detection limits greater than 5 µg/L have been omitted. Refer to Table 2.3.





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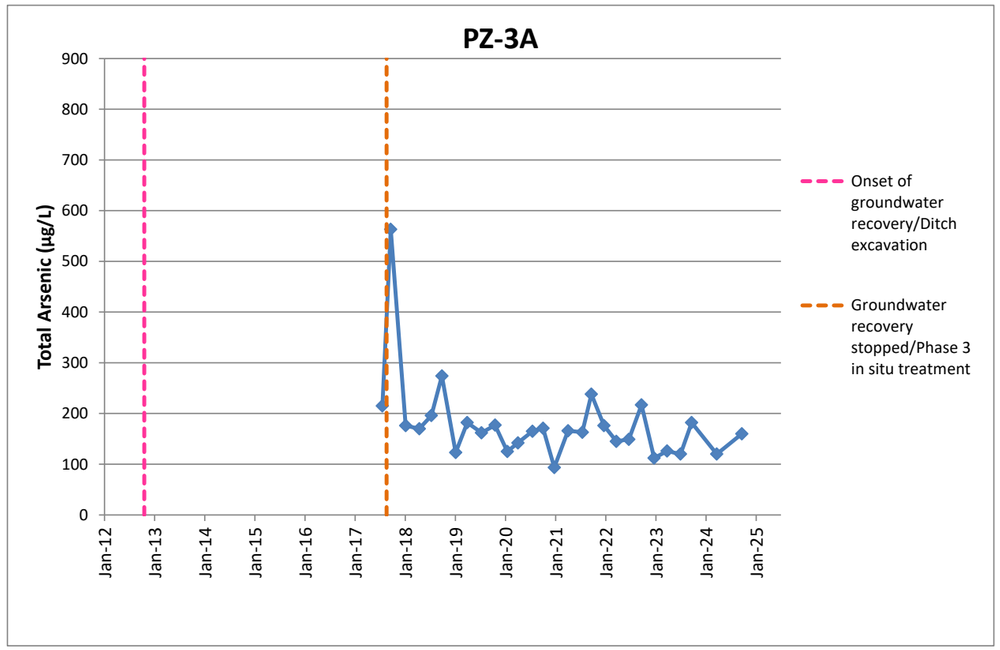
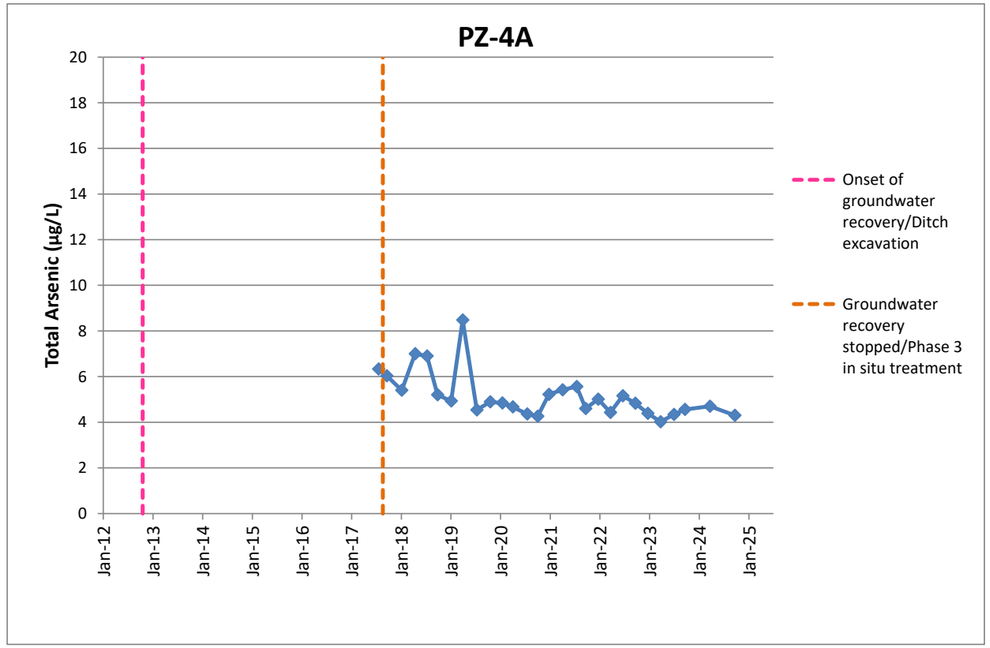
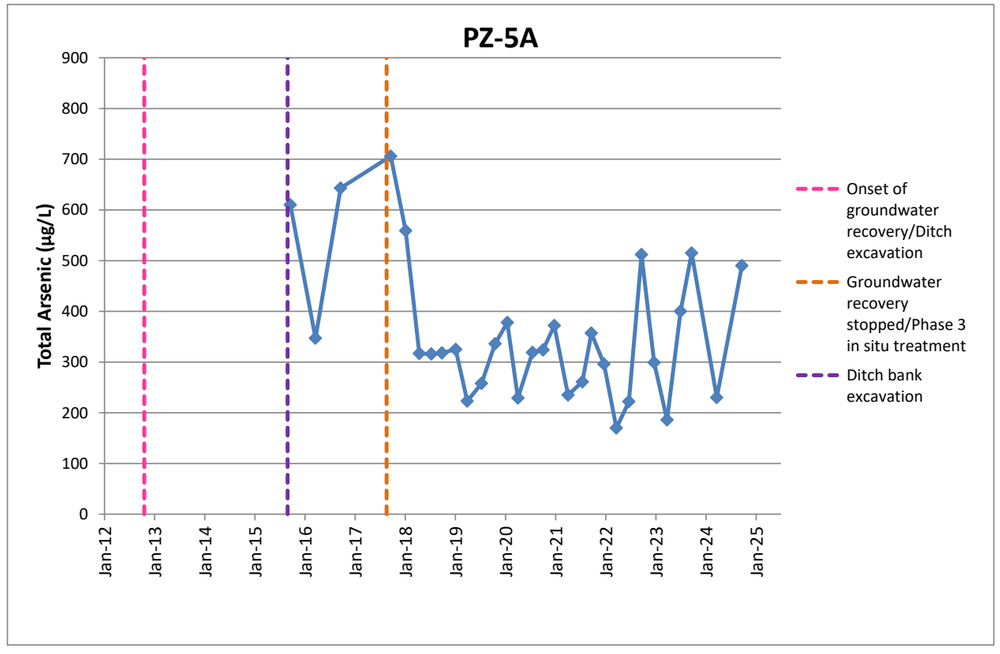
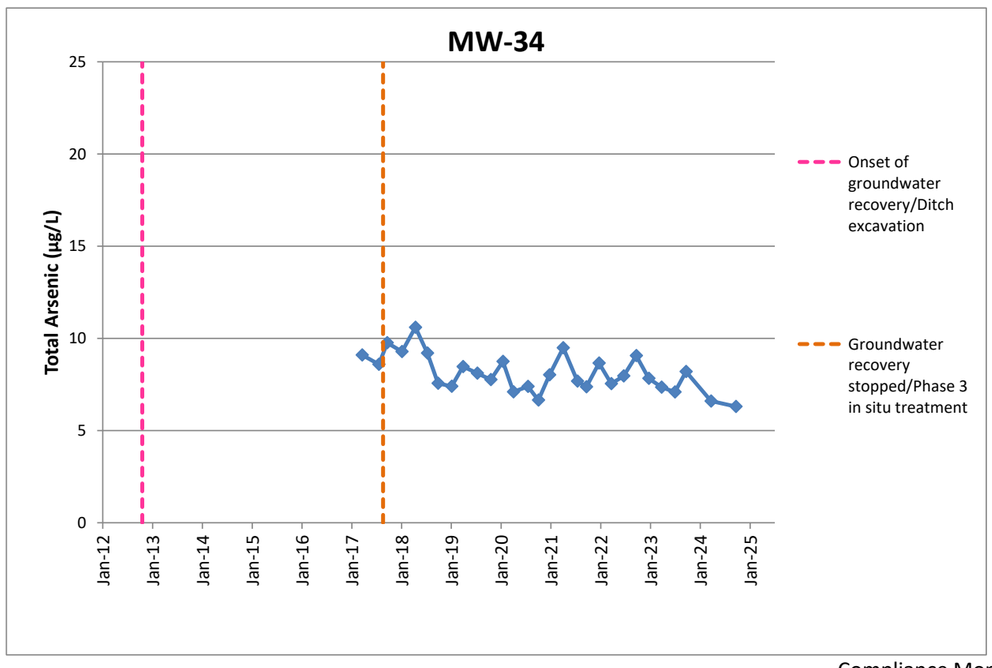
Time-Concentration Plots

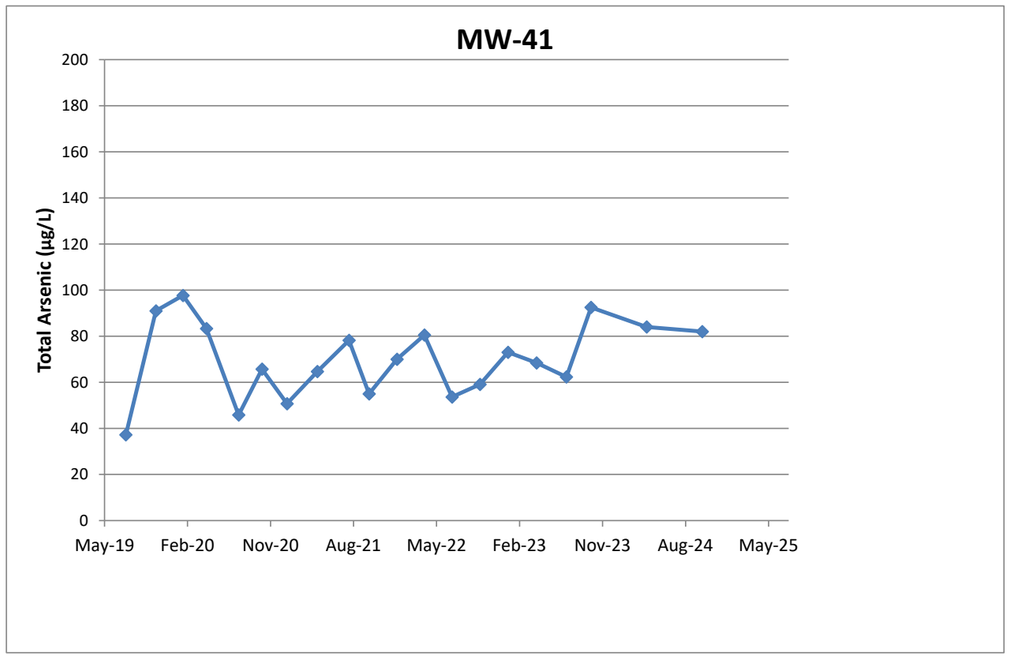


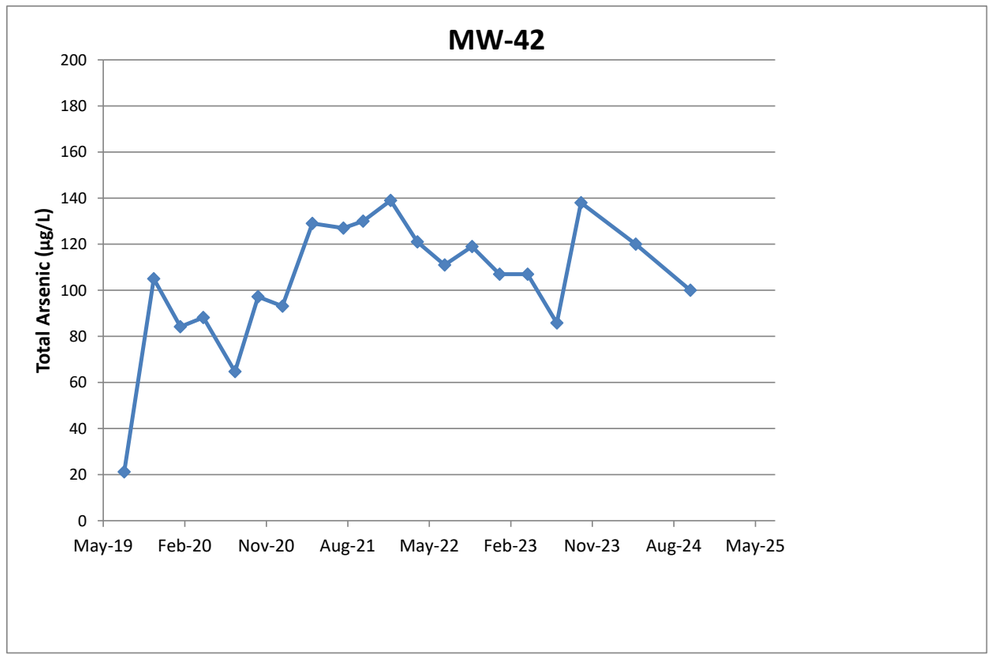




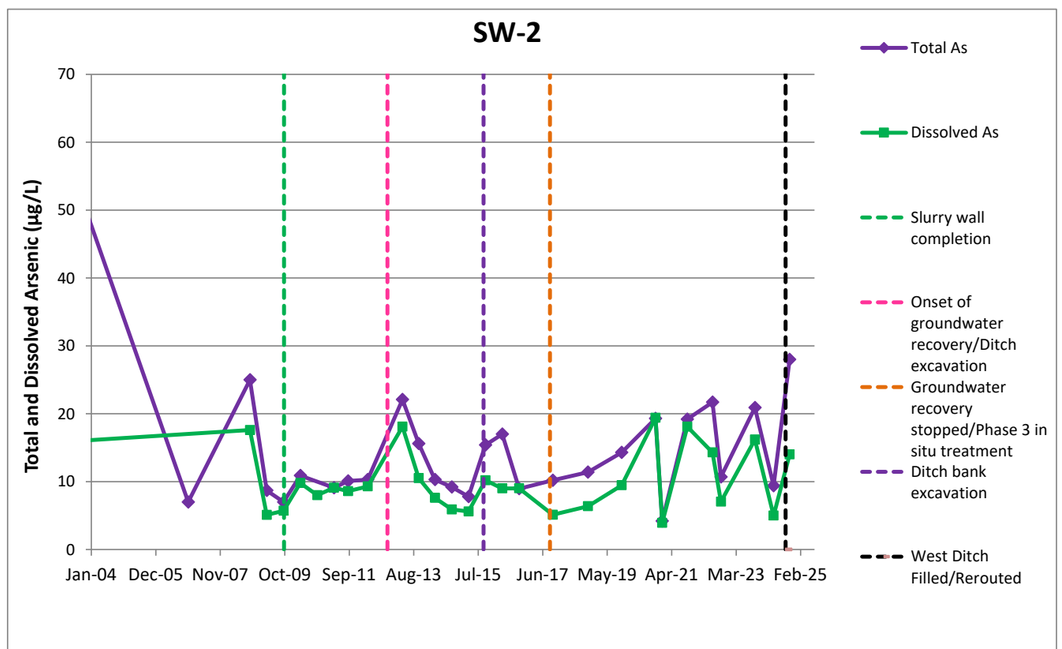


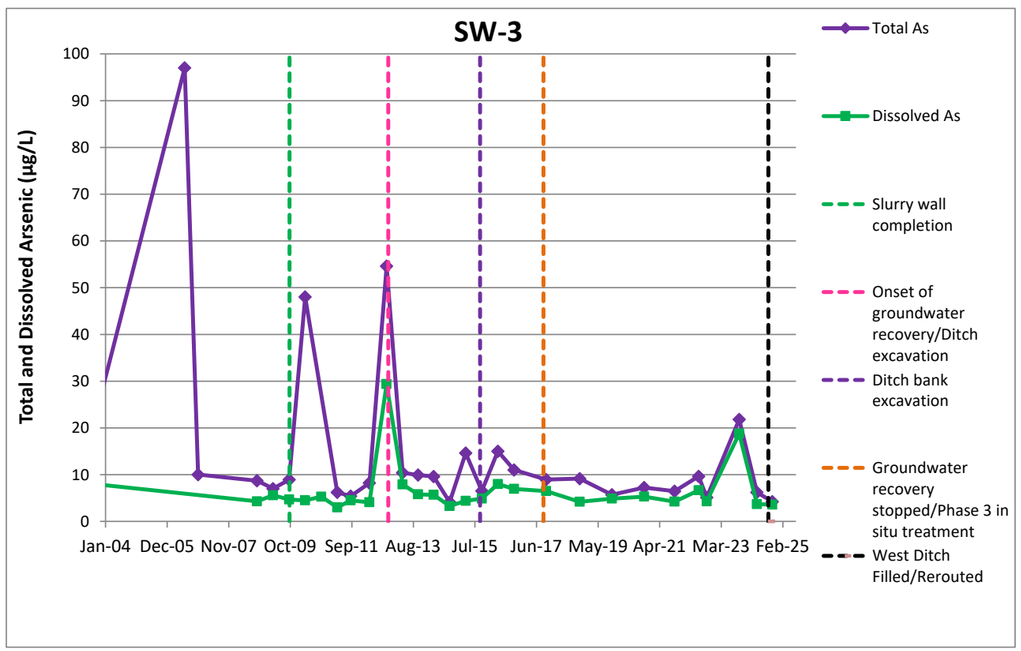
Attachment 1
Time-Concentration Plots

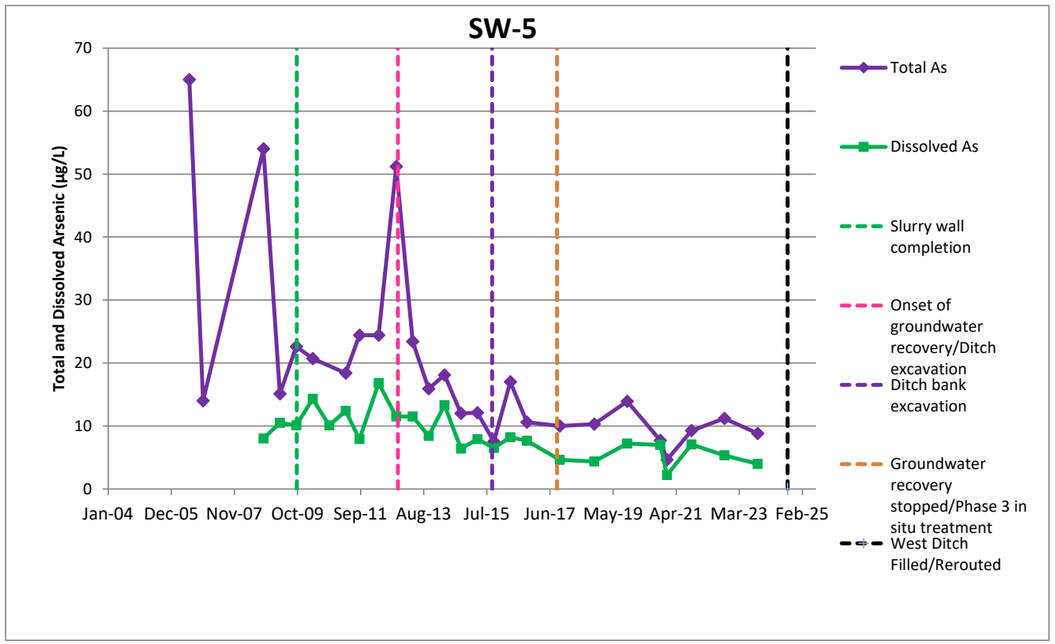




Attachment 1
Time-Concentration Plots







Attachment 2
Laboratory Analytical Report

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Vineta Mills, M.S.
Eric Young, B.S.

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

October 23, 2024

Brett Beaulieu, Project Manager
Floyd-Snider
Two Union Square
601 Union St, Suite 600
Seattle, WA 98101

Dear Mr Beaulieu:

Included are the results from the testing of material submitted on October 16, 2024 from the B + L, F&BI 410324 project. There are 25 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Floyd Snider Lab Data, Pamela Osterhout
FDS1023R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on October 16, 2024 by Friedman & Bruya, Inc. from the Floyd-Snider B + L, F&BI 410324 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Floyd-Snider
410324 -01	BLW-SW-2
410324 -02	BLW-SW-2-FF
410324 -03	BLW-SW-3
410324 -04	BLW-SW-3-FF
410324 -05	BLW-GW-W-1
410324 -06	BLW-GW-MW-33
410324 -07	BLW-GW-MW-34
410324 -08	BLW-GW-MW-40B
410324 -09	BLW-GW-MW-41
410324 -10	BLW-GW-MW-42
410324 -11	BLW-SW-172-FF
410324 -12	BLW-GW-PD-214
410324 -13	BLW-GW-D-7A
410324 -14	BLW-GW-D-177A
410324 -15	BLW-GW-D-8A
410324 -16	BLW-GW-D-8B
410324 -17	BLW-GW-PZ-3A
410324 -18	BLW-GW-PZ-4A
410324 -19	BLW-GW-PZ-5A

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-SW-2	Client:	Floyd-Snider
Date Received:	10/16/24	Project:	B + L, F&BI 410324
Date Extracted:	10/17/24	Lab ID:	410324-01
Date Analyzed:	10/17/24	Data File:	410324-01.237
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	28

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-SW-3	Client:	Floyd-Snider
Date Received:	10/16/24	Project:	B + L, F&BI 410324
Date Extracted:	10/17/24	Lab ID:	410324-03
Date Analyzed:	10/17/24	Data File:	410324-03.238
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	4.2

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-W-1	Client:	Floyd-Snider
Date Received:	10/16/24	Project:	B + L, F&BI 410324
Date Extracted:	10/17/24	Lab ID:	410324-05
Date Analyzed:	10/18/24	Data File:	410324-05.273
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	9.3

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-MW-33	Client:	Floyd-Snider
Date Received:	10/16/24	Project:	B + L, F&BI 410324
Date Extracted:	10/17/24	Lab ID:	410324-06
Date Analyzed:	10/18/24	Data File:	410324-06.274
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	150

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-MW-34	Client:	Floyd-Snider
Date Received:	10/16/24	Project:	B + L, F&BI 410324
Date Extracted:	10/17/24	Lab ID:	410324-07
Date Analyzed:	10/18/24	Data File:	410324-07.275
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	6.3

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-MW-40B	Client:	Floyd-Snider
Date Received:	10/16/24	Project:	B + L, F&BI 410324
Date Extracted:	10/17/24	Lab ID:	410324-08
Date Analyzed:	10/18/24	Data File:	410324-08.276
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	8.1

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-MW-41	Client:	Floyd-Snider
Date Received:	10/16/24	Project:	B + L, F&BI 410324
Date Extracted:	10/17/24	Lab ID:	410324-09
Date Analyzed:	10/18/24	Data File:	410324-09.277
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	82

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-MW-42	Client:	Floyd-Snider
Date Received:	10/16/24	Project:	B + L, F&BI 410324
Date Extracted:	10/17/24	Lab ID:	410324-10
Date Analyzed:	10/18/24	Data File:	410324-10.278
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	100

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-PD-214	Client:	Floyd-Snider
Date Received:	10/16/24	Project:	B + L, F&BI 410324
Date Extracted:	10/17/24	Lab ID:	410324-12
Date Analyzed:	10/18/24	Data File:	410324-12.279
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	17

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-D-7A	Client:	Floyd-Snider
Date Received:	10/16/24	Project:	B + L, F&BI 410324
Date Extracted:	10/17/24	Lab ID:	410324-13
Date Analyzed:	10/18/24	Data File:	410324-13.280
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	66

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-D-177A	Client:	Floyd-Snider
Date Received:	10/16/24	Project:	B + L, F&BI 410324
Date Extracted:	10/17/24	Lab ID:	410324-14
Date Analyzed:	10/18/24	Data File:	410324-14.281
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	72

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-D-8A	Client:	Floyd-Snider
Date Received:	10/16/24	Project:	B + L, F&BI 410324
Date Extracted:	10/17/24	Lab ID:	410324-15
Date Analyzed:	10/18/24	Data File:	410324-15.286
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	61

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-D-8B	Client:	Floyd-Snider
Date Received:	10/16/24	Project:	B + L, F&BI 410324
Date Extracted:	10/17/24	Lab ID:	410324-16
Date Analyzed:	10/18/24	Data File:	410324-16.287
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	41

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-PZ-3A	Client:	Floyd-Snider
Date Received:	10/16/24	Project:	B + L, F&BI 410324
Date Extracted:	10/17/24	Lab ID:	410324-17
Date Analyzed:	10/18/24	Data File:	410324-17.288
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	160

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-PZ-4A	Client:	Floyd-Snider
Date Received:	10/16/24	Project:	B + L, F&BI 410324
Date Extracted:	10/17/24	Lab ID:	410324-18
Date Analyzed:	10/18/24	Data File:	410324-18.289
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	4.3

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-PZ-5A	Client:	Floyd-Snider
Date Received:	10/16/24	Project:	B + L, F&BI 410324
Date Extracted:	10/17/24	Lab ID:	410324-19
Date Analyzed:	10/18/24	Data File:	410324-19.290
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	490

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Floyd-Snider
Date Received:	Not Applicable	Project:	B + L, F&BI 410324
Date Extracted:	10/17/24	Lab ID:	I4-885 mb
Date Analyzed:	10/17/24	Data File:	I4-885 mb.096
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	BLW-SW-2-FF	Client:	Floyd-Snider
Date Received:	10/16/24	Project:	B + L, F&BI 410324
Date Extracted:	10/17/24	Lab ID:	410324-02
Date Analyzed:	10/17/24	Data File:	410324-02.241
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	14

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	BLW-SW-3-FF	Client:	Floyd-Snider
Date Received:	10/16/24	Project:	B + L, F&BI 410324
Date Extracted:	10/17/24	Lab ID:	410324-04
Date Analyzed:	10/17/24	Data File:	410324-04.242
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	3.6

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	BLW-SW-172-FF	Client:	Floyd-Snider
Date Received:	10/16/24	Project:	B + L, F&BI 410324
Date Extracted:	10/17/24	Lab ID:	410324-11
Date Analyzed:	10/17/24	Data File:	410324-11.243
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	14

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Floyd-Snider
Date Received:	Not Applicable	Project:	B + L, F&BI 410324
Date Extracted:	10/17/24	Lab ID:	I4-887 mb
Date Analyzed:	10/17/24	Data File:	I4-887 mb.109
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1

Date of Report: 10/23/24
Date Received: 10/16/24
Project: B + L, F&BI 410324

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS USING EPA METHOD 6020B

Laboratory Code: 410324-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	4.17	99 b	99 b	75-125	0 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	98	80-120

Date of Report: 10/23/24
Date Received: 10/16/24
Project: B + L, F&BI 410324

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR DISSOLVED METALS USING EPA METHOD 6020B

Laboratory Code: 410306-01 x10 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	22.9	96 b	103 b	75-125	7 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	101	80-120

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht – The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the standard reporting limit. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

k – The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

410324

SAMPLE CHAIN OF CUSTODY

10/16/24

Page # 1 of 2 JY

Report To Brett Beaulieu + Pamela Osterhout

Company Floyd Snider

Address 601 Union St, Suite 600

City, State, ZIP Seattle, WA 98101

Phone 206 292-2078 Email Lab.data@floydsnider.com

SAMPLERS (*signature*) [signature]

PROJECT NAME: B+L

PO #

REMARKS

INVOICE TO

Project specific RLs? - (Yes) / No

TURNAROUND TIME
- ☑ Standard turnaround
- ☐ RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Archive samples
- ☐ Other
- (Default): Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Total As 6020	Diss. As 6020			Notes
BLW-SW-2	01	10/15/24	14:20	SW	1								✓				
BLW-SW-2-FF	02		14:22		1									✓			Field Filtered
BLW-SW-3	03		11:15		1								✓				
BLW-SW-3-FF	04		11:17		1									✓			Field Filtered
BLW-GW-W-1	05		08:40	GW	1								✓				
BLW-GW-MW-33	06		11:45		1								✓				
BLW-GW-MW-34	07		14:10		1								✓				
BLW-GW-MW-40B	08		12:12		1								✓				
BLW-GW-MW-41	09		13:15		1								✓				
BLW-GW-MW-42	10		12:35		1								✓				

Friedman & Bruya, Inc.
Ph. (206) 285-8282

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	[signature]	P. Osterhout	Floyd Snider	10/16/24	12:20
Received by:	[signature]	Anh Phan	FBI	10/16/24	12:20
Relinquished by:			Samples received at 16 °C		
Received by:					

410324

SAMPLE CHAIN OF CUSTODY

10/16/24

Page # 2 of 2 J4

Report To Brett + Pam

Company Floyd Snider

Address

City, State, ZIP

Phone Email

SAMPLERS (*signature*)

PROJECT NAME: BTL

PO #

REMARKS

Project specific RLs? - (Yes) / No

INVOICE TO

TURNAROUND TIME
- ☑ Standard turnaround
- ☐ RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Archive samples
- ☐ Other
- (Default): Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Total As	Diss. As			Notes
BLW-SW-172-FF	11	10/15/24	14:25	SW	1									✓			Field Filtered
BLW-GW-PD-214	12	"	12:58	GW	1								✓				
BLW-GW-D-7A	13	"	13:55	"	1								✓				
BLW-GW-D-177A	14	"	14:00	"	1								✓				
BLW-GW-D-8A	15	10/16/24	09:50	"	1								✓				
BLW-GW-D-8B	16	"	09:12	"	1								✓				
BLW-GW-P2-3A	17	"	09:30	"	1								✓				
BLW-GW-P2-4A	18	"	10:30	"	1								✓				
BLW-GW-P2-5A	19	"	10:32	"	1								✓				

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		R Osterhout	F/S	10/16/24	12:20
Received by:		Anh Phan	FBI	10/16/24	12:20
Relinquished by:			Samples received at 16 °C		
Received by:					

Friedman & Bruya, Inc.
Ph. (206) 285-8282

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 410324 CLIENT Floyd Snider INITIALS/ DATE: AP 10/16/24

If custody seals are present on cooler, are they intact? ☑ NA ☐ YES ☐ NO

Cooler/Sample temperature 16 °C
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? ☐ YES ☑ NO

How did samples arrive?
☑ Over the Counter ☐ Picked up by F&BI ☐ FedEx/UPS/GSO

Is there a Chain-of-Custody* (COC)? ☑ YES ☐ NO Initials/ Date: NP 10/16
*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory 0 ≥ 1 days

Are the samples clearly identified? (explain "no" answer below) ☑ YES ☐ NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) ☑ YES ☐ NO

Were appropriate sample containers used? ☑ YES ☐ NO ☐ Unknown

If custody seals are present on samples, are they intact? ☑ NA ☐ YES ☐ NO

Are samples requiring no headspace, headspace free? ☑ NA ☐ YES ☐ NO

Is the following information provided on the COC, and does it match the sample label?
(explain "no" answer below)

Sample ID's	☑ Yes	☐ No	☐ Not on COC/label
Date Sampled	☑ Yes	☐ No	☐ Not on COC/label
Time Sampled	☑ Yes	☐ No	☐ Not on COC/label
# of Containers	☑ Yes	☐ No	
Relinquished	☑ Yes	☐ No	
Requested analysis	☑ Yes	☐ On Hold	

Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? ☑ NA ☐ YES ☐ NO

Number of unused TO15 canisters _____ **Number of unused TO17 tubes** _____