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November 17, 2020

Mohsen Kourehdar
Washington State Department of Ecology
PO Box 47600
Olympia, Washington 98504-7600

SUBJECT: B&L WOODWASTE SITE OCTOBER 2020 COMPLIANCE MONITORING REPORT

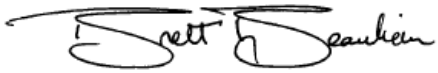
Dear Mr. Kourehdar:

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 2020.

Groundwater and surface water sampling and analysis were completed in accordance with the 2013 Compliance Monitoring Plan and 2017 Compliance Monitoring Plan Addendum. At the request of the Washington State Department of Ecology, a monitoring well (W-3) and a piezometer (PD-60) were added as sampling locations for this event. As noted previously, MW-41 was sampled in place of R-22, and MW-42 was sampled in place of R-15. 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 figures, and attachments.

We look forward to discussing the results with you.

Sincerely,
FLOYD | SNIDER



Brett Beaulieu, LHG
Hydrogeologist

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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	10/13/2020	15:27	15.05	--	--
PD-60	USAq	10/13/2020	15:24	14.97	--	--
MW-35	USAq	10/14/2020	8:54	15.36	--	--
Landfill and Perimeter						
D-7A	USAq	10/14/2020	12:06	14.40	-0.03	--
D-7B	LSAq	10/14/2020	11:23	14.38		
D-8A	USAq	10/13/2020	10:40	15.12	-0.01	--
D-8B	LSAq	10/13/2020	10:43	15.12		
D-9A	USAq	10/13/2020	13:33	16.22	--	--
PZ-1A	USAq	10/13/2020	9:42	14.50	--	-0.60
PZ-1B	USAq	10/13/2020	9:41	15.10		
PZ-2A	USAq	10/13/2020	9:37	14.51	--	-0.65
PZ-2B	USAq	10/13/2020	9:36	15.16		
PZ-3A	USAq	10/13/2020	9:32	14.92	--	-0.24
PZ-3B	USAq	10/13/2020	9:30	15.16		
PZ-4A	USAq	10/13/2020	9:27	15.13	--	-0.06
PZ-4B	USAq	10/13/2020	9:25	15.19	-0.01	
PZ-4C	LSAq	10/13/2020	9:26	15.18		--
PZ-5A	USAq	10/13/2020	10:05	15.60	--	0.20
PZ-5B	USAq	10/13/2020	10:07	15.40	0.06	
PZ-5C	LSAq	10/13/2020	10:08	15.46		--
PZ-6A	USAq	10/13/2020	9:59	15.60	--	0.26
PZ-6B	USAq	10/13/2020	10:01	15.34		
PZ-7A	USAq	10/13/2020	9:51	15.43	--	0.00
PZ-7B	USAq	10/13/2020	9:53	15.43		
PZ-8A	USAq	10/13/2020	9:46	14.83	--	-0.17
PZ-8B	USAq	10/13/2020	9:48	15.00	-0.04	
PZ-8C	LSAq	10/13/2020	9:47	14.96		--
Wetlands North of Landfill						
D-5U	USAq	10/14/2020	13:50	14.43	0.42	--
D-5L	LSAq	10/14/2020	14:43	14.86		
D-6A	USAq	10/14/2020	10:20	-- (1)	Not measured	--
D-6B	LSAq	10/14/2020	9:18	-- (1)		
MW-13	USAq	10/14/2020	13:23	14.26	--	--
MW-15	USAq	10/14/2020	11:52	14.47	--	--
MW-31A	USAq	10/14/2020	10:43	16.18	--	--
PD-141	USAq	10/14/2020	11:28	14.62	--	--

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)
Interurban Trail and Agricultural Fields West of Landfill						
MW-30	USAq	10/14/2020	10:01	14.57	--	--
MW-33	USAq	10/13/2020	11:48	15.59	--	--
MW-34	USAq	10/13/2020	11:46	15.35	--	--
MW-40B	LSAq	10/13/2020	13:55	13.25	--	--
MW-41	USAq	10/13/2020	12:43	15.09	--	--
MW-42	USAq	10/13/2020	14:07	14.37	--	--
PD-214	USAq	10/13/2020	13:08	15.13	--	--
W-1	USAq	10/14/2020	14:41	14.57	--	--
W-3	USAq	10/14/2020	15:47	14.40	--	--

Note:

-- 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
Field Water Quality Parameters [1]

Location	Sample Date	Temperature (°C)	pH	Specific Conductivity (mS/cm)	Oxidation-Reduction Potential (mV)
Upper Sand Aquifer					
D-5U	10/14/2020	13.7	6.35	0.525	24.4
D-6A	10/14/2020	12.6	6.35	0.362	41.9
D-7A	10/14/2020	14.5	6.36	0.400	-110
D-8A	10/13/2020	14.10	6.44	0.222	65.6
D-9A	10/13/2020	13.4	7.39	0.205	50.3
D-10A	10/13/2020	13.3	6.07	0.325	-72.1
MW-13	10/14/2020	11.2	6.80	0.564	-64.4
MW-15	10/14/2020	12.0	6.73	1.40	-75.3
MW-30	10/14/2020	15.5	6.58	0.309	-118
MW-31A	10/14/2020	11.2	6.62	1.00	-73.5
MW-33	10/13/2020	13.7	6.73	0.271	-81.7
MW-34	10/13/2020	13.4	6.97	0.246	-104
MW-35	10/14/2020	13.3	7.76	0.265	-147
MW-41	10/13/2020	14.4	6.49	0.340	-96.1
MW-42	10/13/2020	13.9	6.59	0.530	-57.9
PD-141	10/14/2020	12.4	6.28	1.16	-11.3
PZ-3A	10/13/2020	16.2	6.60	0.152	-120
PZ-4A	10/13/2020	14.2	6.95	0.204	-163
PZ-5A	10/13/2020	15.7	6.36	0.483	51.4
PD-60	10/13/2020	16.8	6.17	1.23	30.4
PD-214	10/13/2020	13.2	7.17	0.215	-94.0
W-1	10/14/2020	14.1	7.16	0.292	-160
W-3	10/14/2020	11.4	6.55	0.391	-134
Lower Sand Aquifer					
D-5L	10/14/2020	12.8	6.63	0.328	33.2
D-6B	10/14/2020	12.3	6.59	0.305	79.6
D-7B	10/14/2020	13.8	6.76	0.332	-146
D-8B	10/13/2020	13.5	6.76	0.243	-159
MW-40B	10/13/2020	12.7	7.55	0.246	-107

Notes:

1 Field parameters collected with YSI ProDSS water quality instruments and flow through cells. Reported measurements were recorded when stabilization criteria were reached.

Abbreviations:

°C Degrees Celsius
mS/cm Millisiemens per centimeter
mV Millivolt

Table 3
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**	**D-5L**	**D-6B**	**D-7B**	**D-8B**	**MW-40B**
Compliance Monitoring Events																															
October 2020	24.2	83.6	98.1	144	44.0	212	209	192	105	1.52 J [2]	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 [2]	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 [3]	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 [3]	NS	NS	9.96	RS	NS	NS	NS	9.05	10.3
April 2018	26.6	NS	-- [4]	133	NS	NS	122	153	NS	NS	188	10.6 [5]	NS	NS	NS	NS	194	10.8	170	6.98	317	NS	392 [3]	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 [3]	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 [3]	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
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

Table 3
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**	**D-5L**	**D-6B**	**D-7B**	**D-8B**	**MW-40B**
Historical Events (cont.)																														
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 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.

3 Well development conducted during the July 2018 event indicated well damage, and associated sediment was biasing results high beginning in October 2017.

4 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.

5 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 4

Surface Water Arsenic Results [1]

Sampling Date	SW-02 Dissolved Arsenic (µg/L)	SW-02 Total Arsenic (µg/L)	SW-03 Dissolved Arsenic (µg/L)	SW-03 Total Arsenic (µg/L)	SW-05 Dissolved Arsenic (µg/L)	SW-05 Total Arsenic (µg/L)
Compliance Monitoring Events						
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
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

Note:

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

Abbreviations:

µg/L Micrograms per liter

NA Not analyzed

NS Not sampled

Qualifier:

U Analyte is undetected at given reporting limit.

Figures

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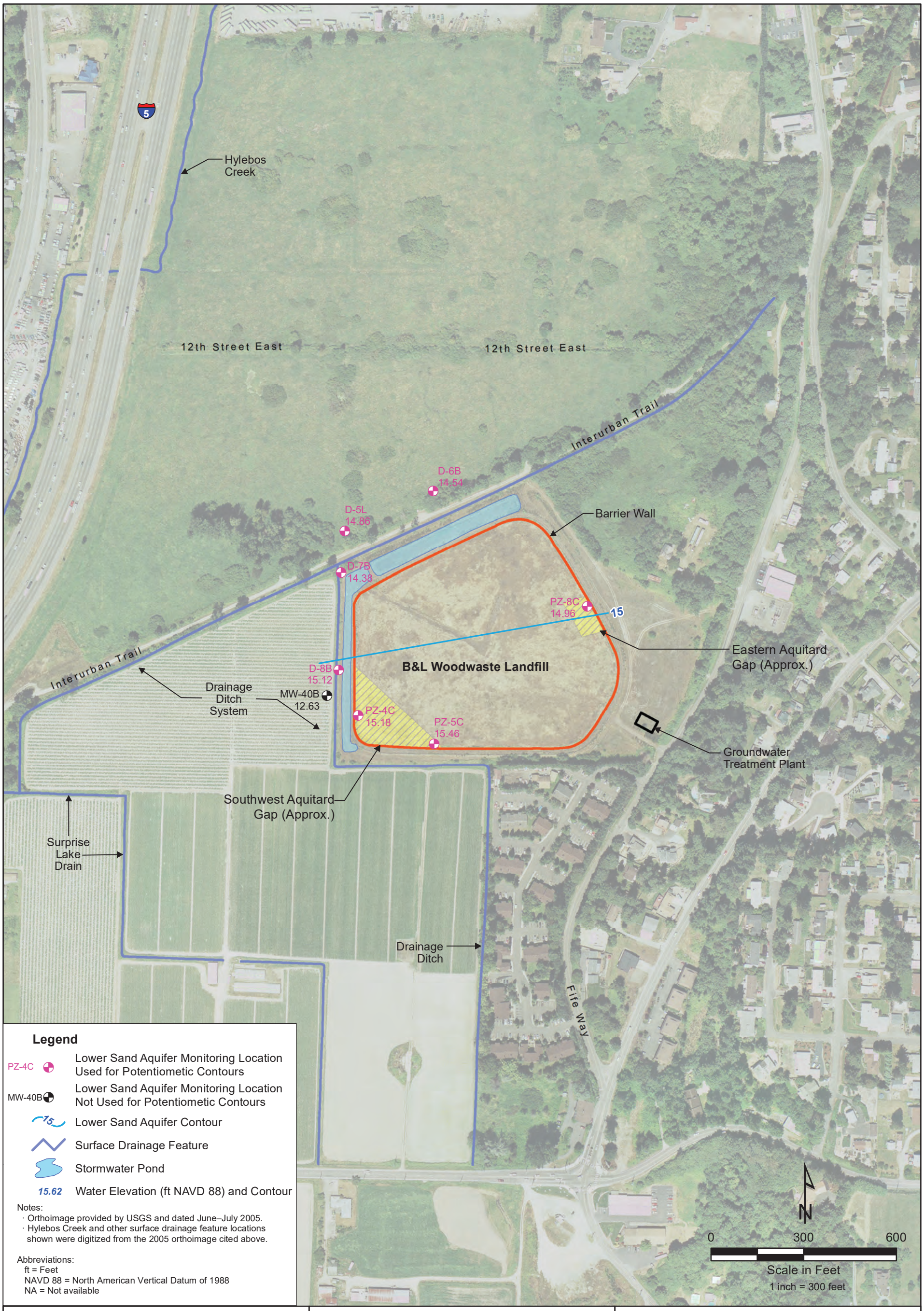
Compliance Monitoring Report
B&L Woodwaste Site
Pierce County, Washington

Figure 1
October 2020 Upper Sand Aquifer Potentiometric Contours

Path: I:\GIS\Projects\B&L-O&M\MXD\Compliance Monitoring Report\2020 Annual\Figure 1 October 2020 Upper Sand Aquifer Potentiometric Contours.mxd
Date: 11/16/2020



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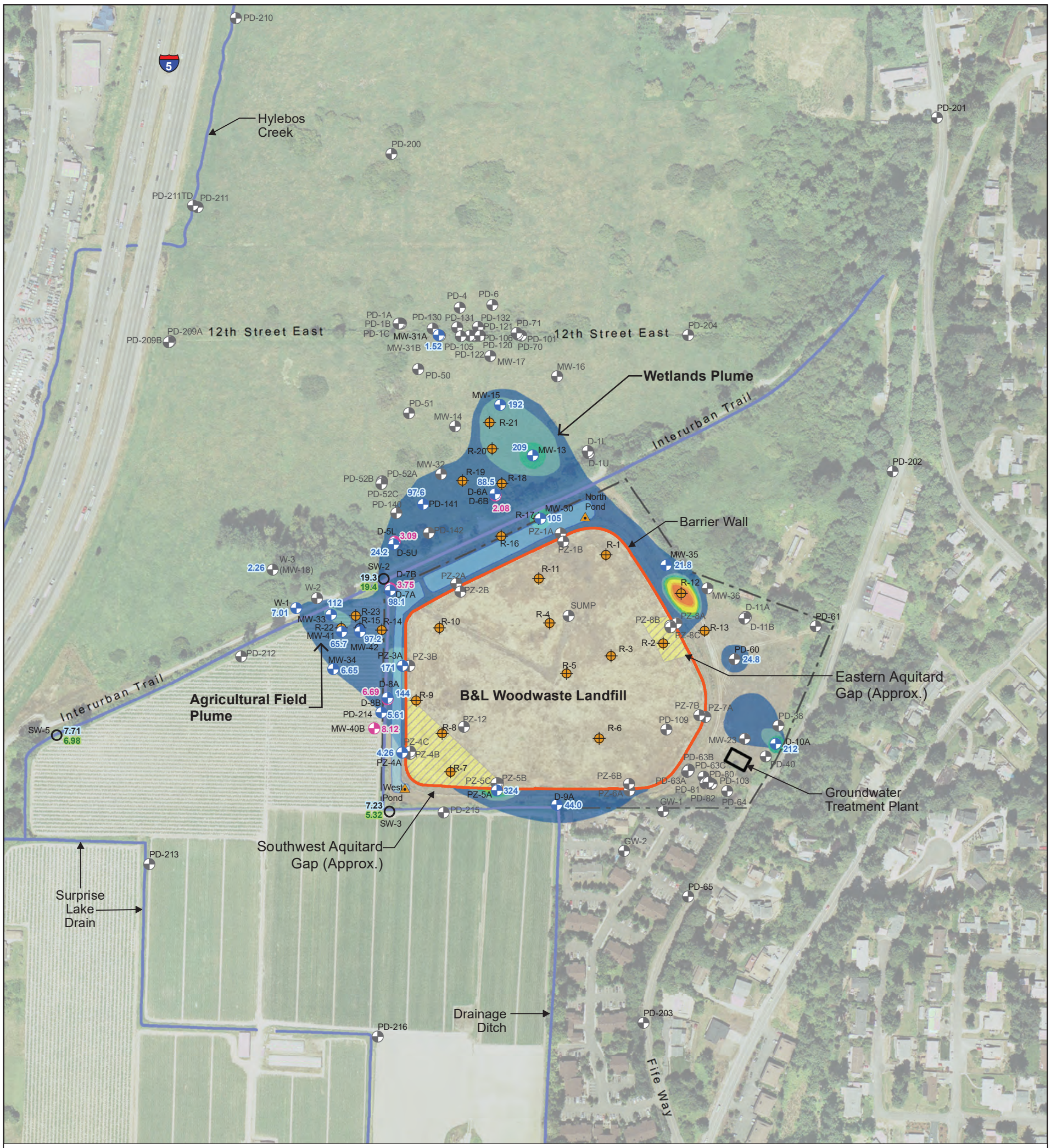
Compliance Monitoring Report
B&L Woodwaste Site
Pierce County, Washington

Figure 2
October 2020 Lower Sand Aquifer Potentiometric Contours

Path: I:\GIS\Projects\B&L-O&M\MXD\Compliance Monitoring Report\2020 Annual\Figure 2 October 2020 Lower Sand Aquifer Potentiometric Contours.mxd
Date: 11/16/2020



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 Gage Location
- Conditional Point of Compliance (Barrier Wall)
- Property Boundary from Tax Parcel Data
- Stormwater Pond
- Surface Drainage Feature
- Aquitard Gaps

Inferred Arsenic Concentration, Upper Sand Aquifer in µg/L **(October 2020)**(1)

- 5–100
- 101–200
- 201–300
- 301–400
- 401–500
- 501–600
- 601–700
- 701–800
- 801–900
- 901–1,000

- 23.4 Total Arsenic Concentation (µg/L), Upper Aquifer
- 16.6 Total Arsenic Concentration (µg/L), Lower Aquifer
- 11.5 Dissolved Arsenic Concentration (µg/L), Surface Water
- 3.5 Total Arsenic Concentration (µg/L), Surface Water

Notes:
1. Inferred concentrations are based on previous results where current data are not available.
- Orthoimage provided by USGS and dated June–July 2005.
- Hylebos Creek and other surface drainage feature locations shown were digitized from the 2005 orthoimage cited above.
- Black and white reproduction of this color figure may affect interpretation of the results.

Abbreviation:
µg/L = Micrograms per liter

N

0 300 600

Scale in Feet
1 inch = 300 feet

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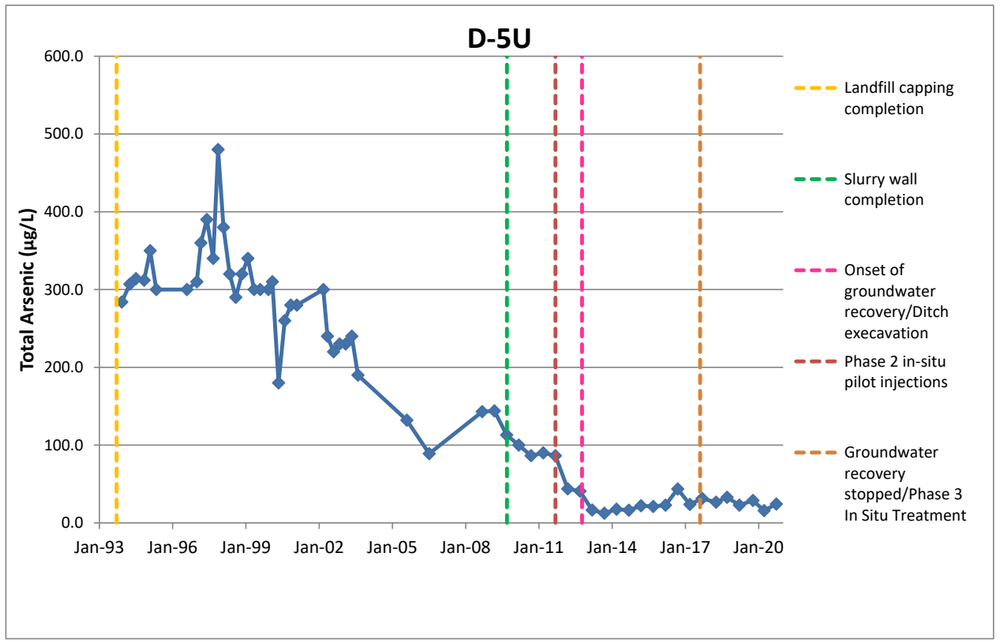
Compliance Monitoring Report
B&L Woodwaste Site
Pierce County, Washington

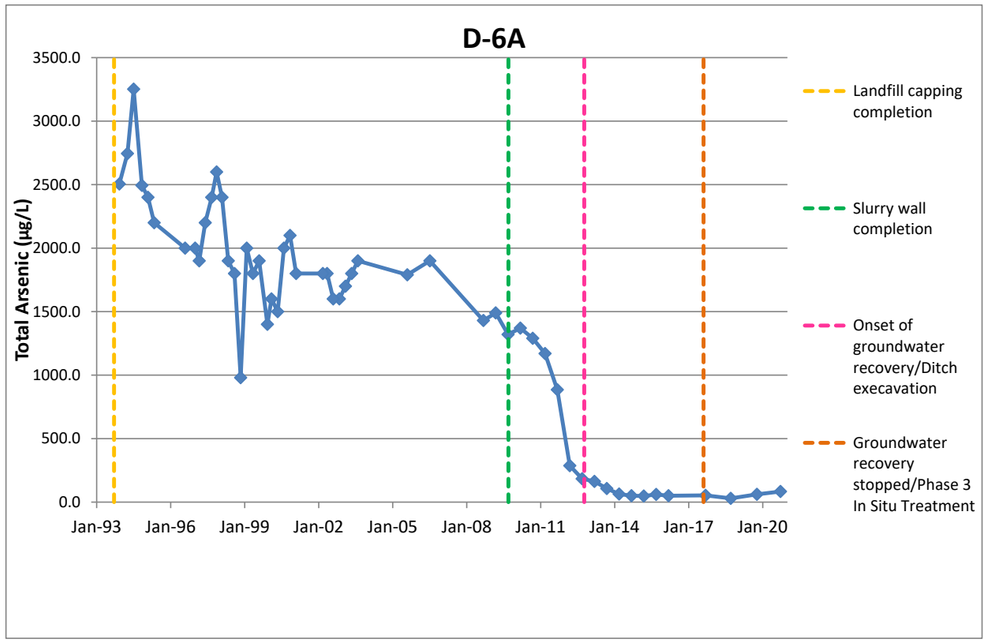
Figure 3
October 2020 Arsenic Results and Concentration Contours

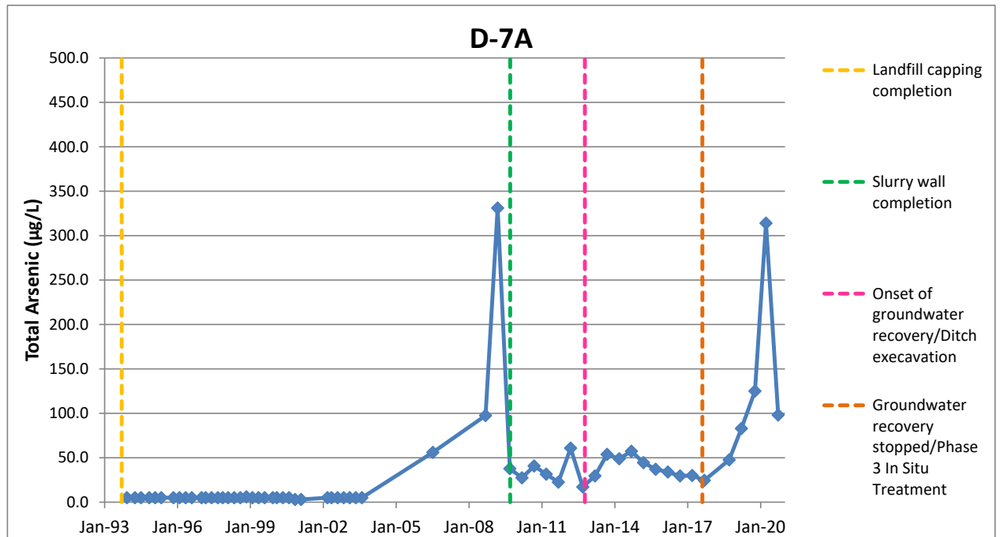
Path: I:\GIS\Projects\B&L-O&M\MXD\Compliance Monitoring Report\2020 Annual\Figure 3 October 2020 Arsenic Results and Concentration Contours.mxd
Date: 11/16/2020

Attachment 1
Time-Concentration Plots

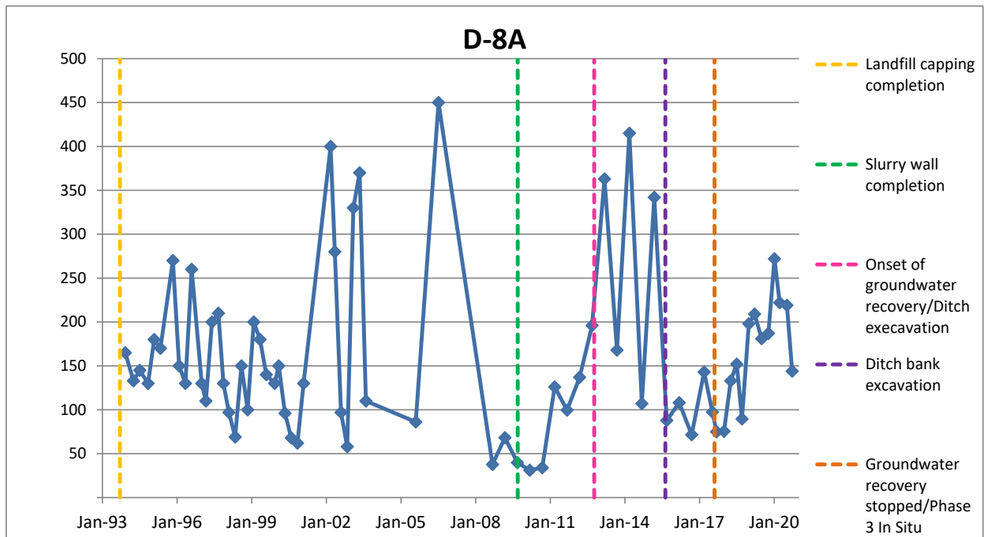
Attachment 1
Time-Concentration Plots







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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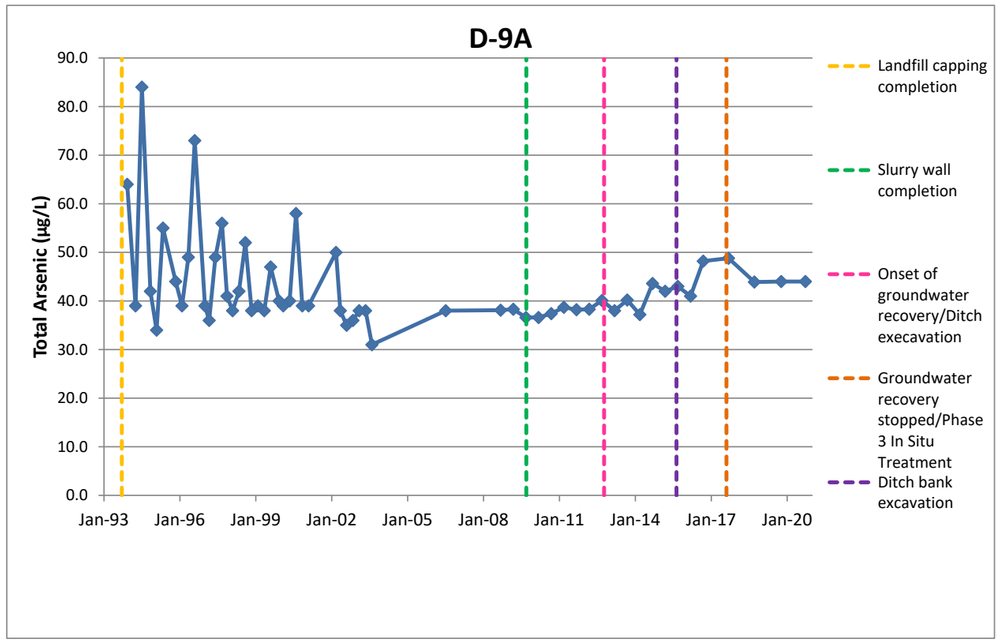

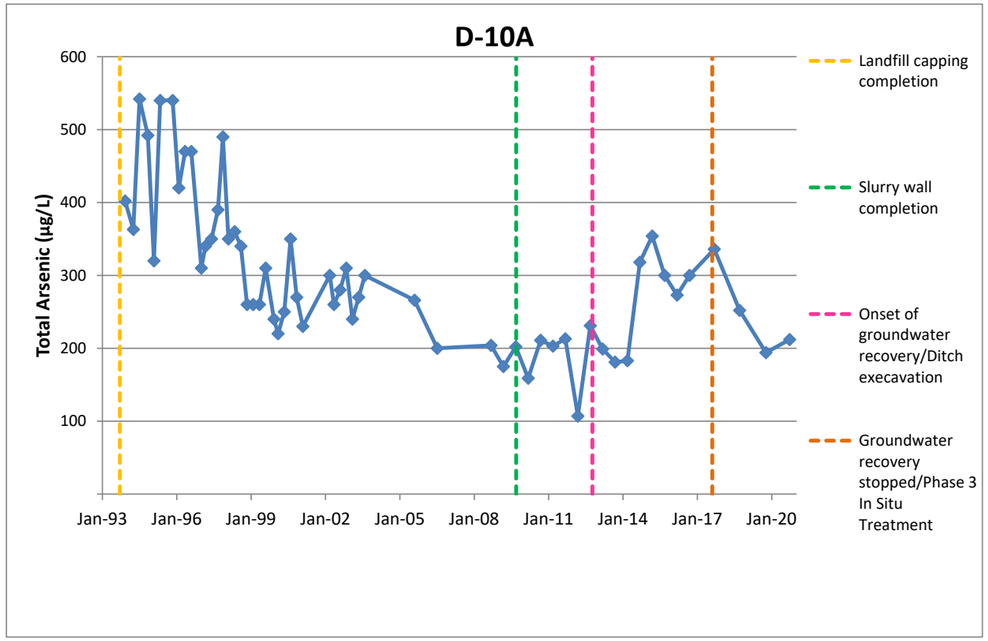

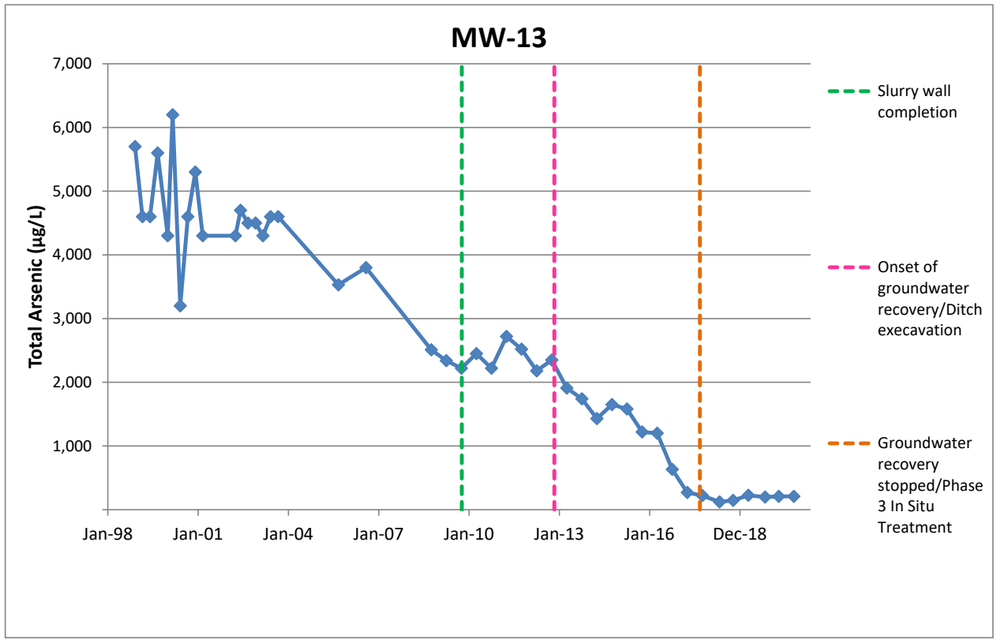

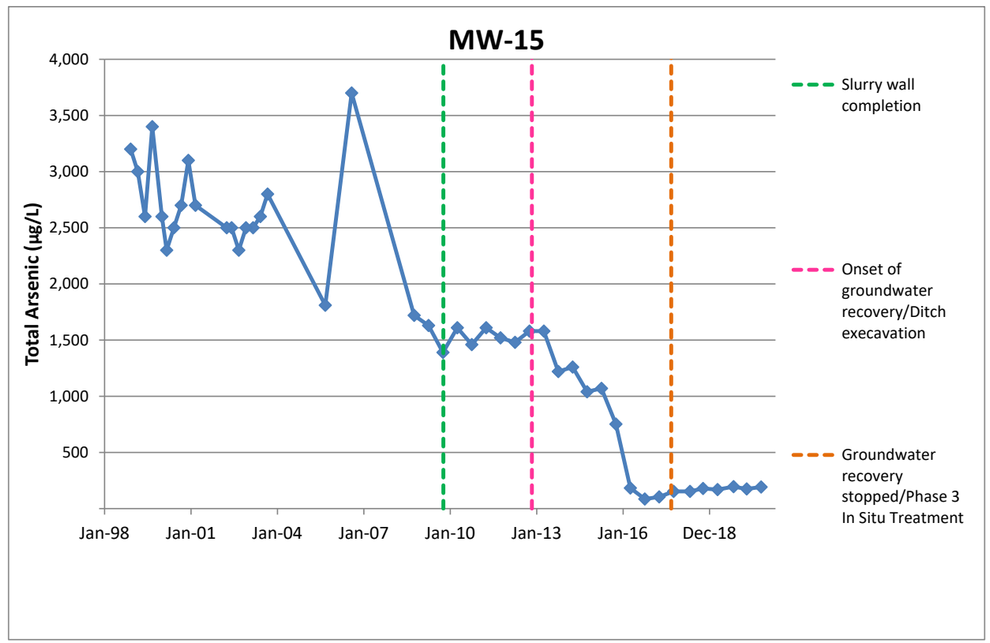

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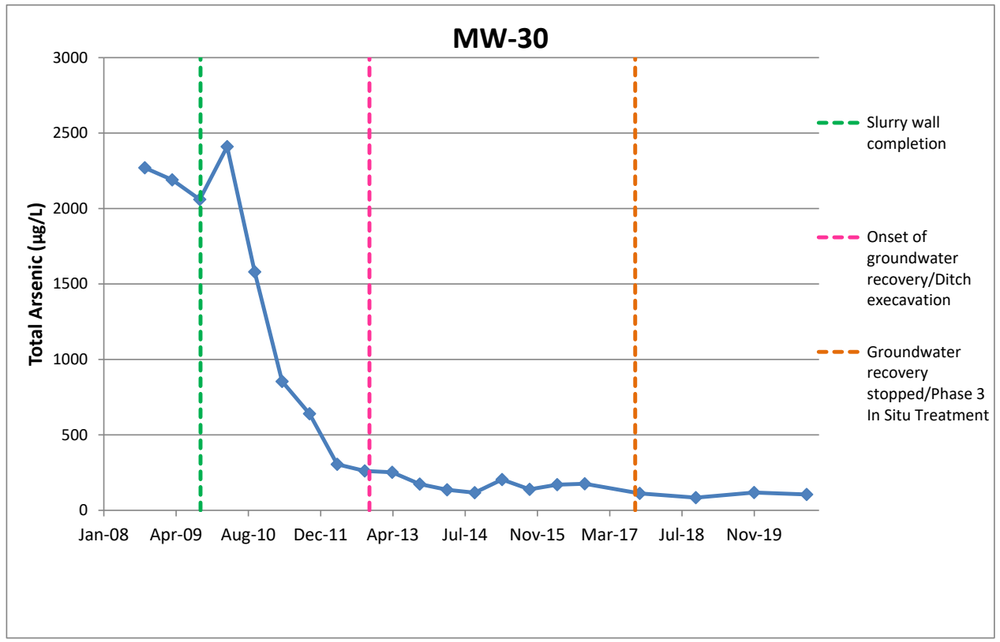

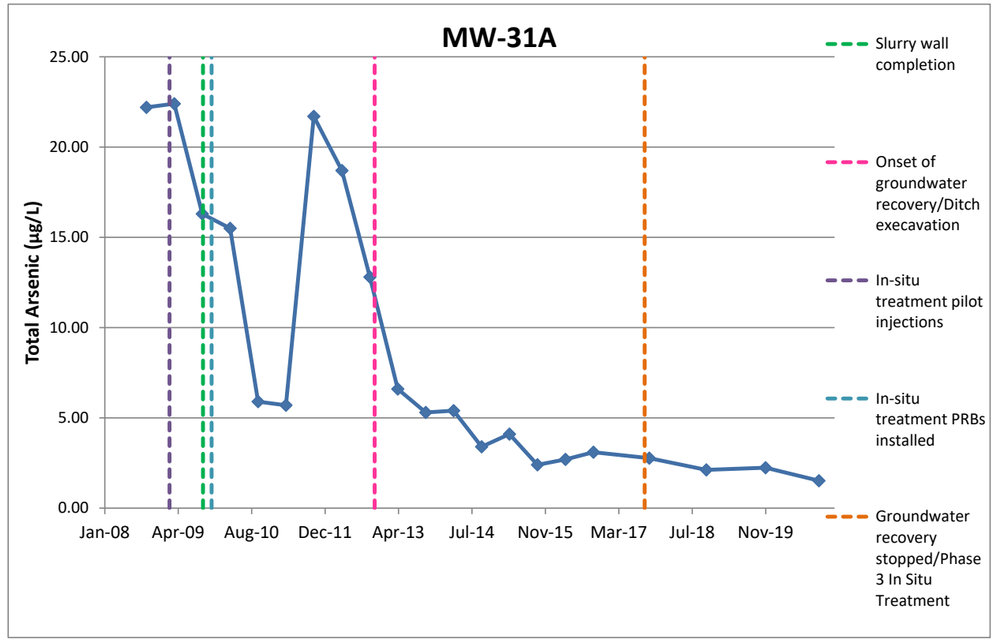

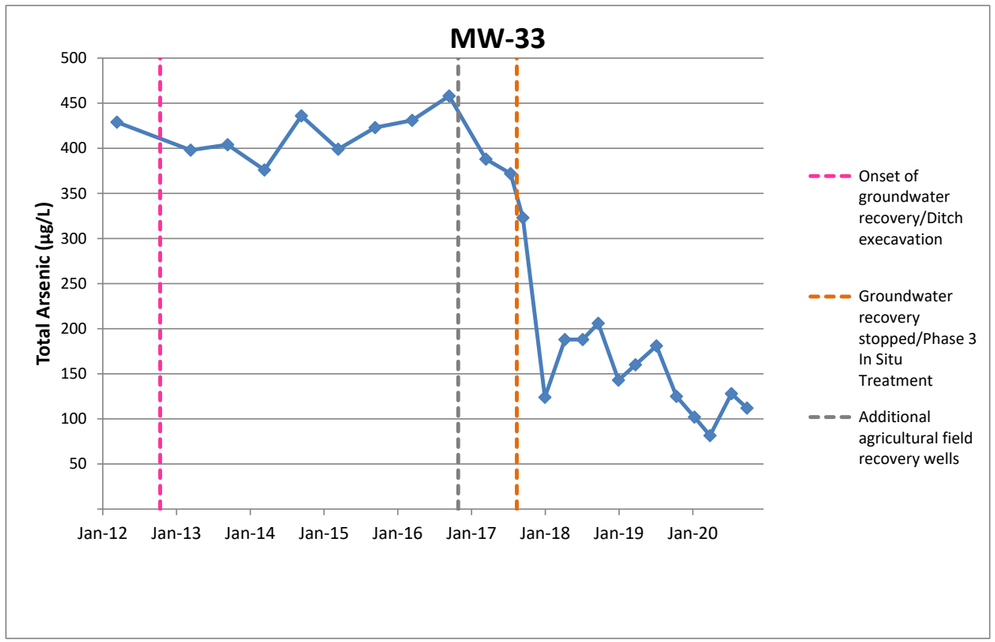

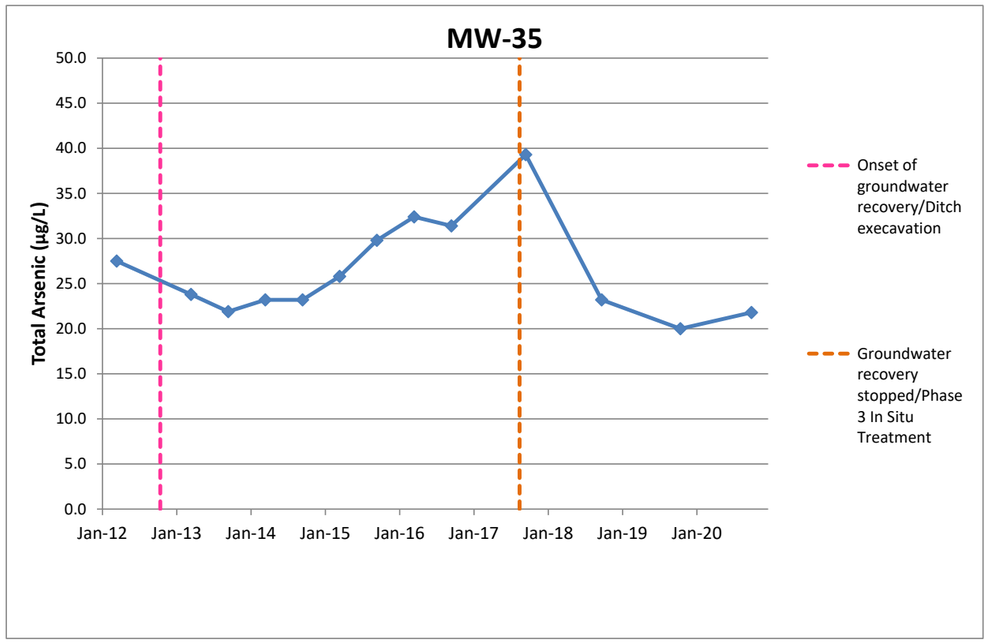

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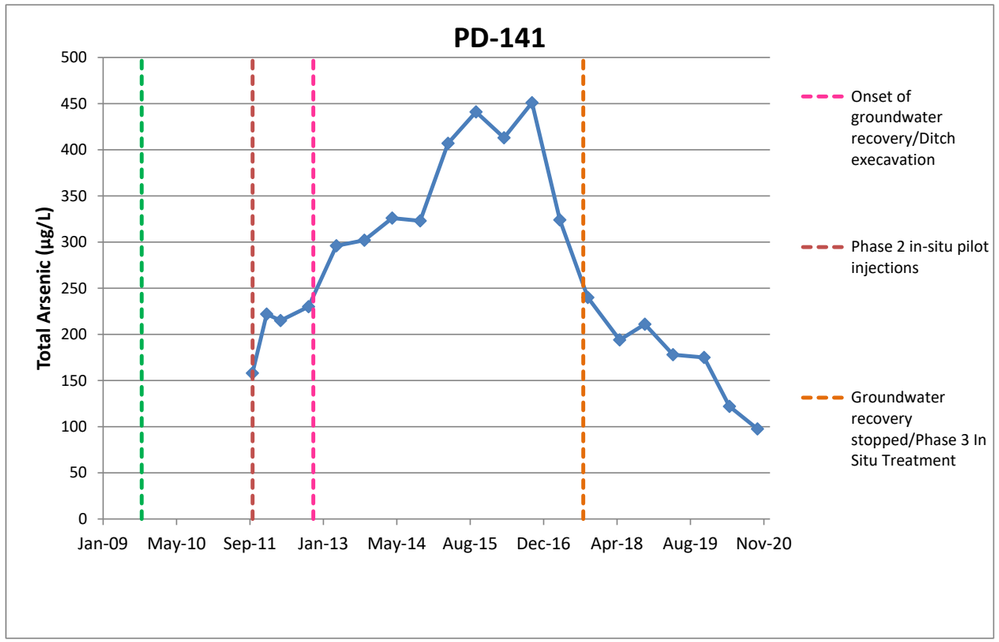

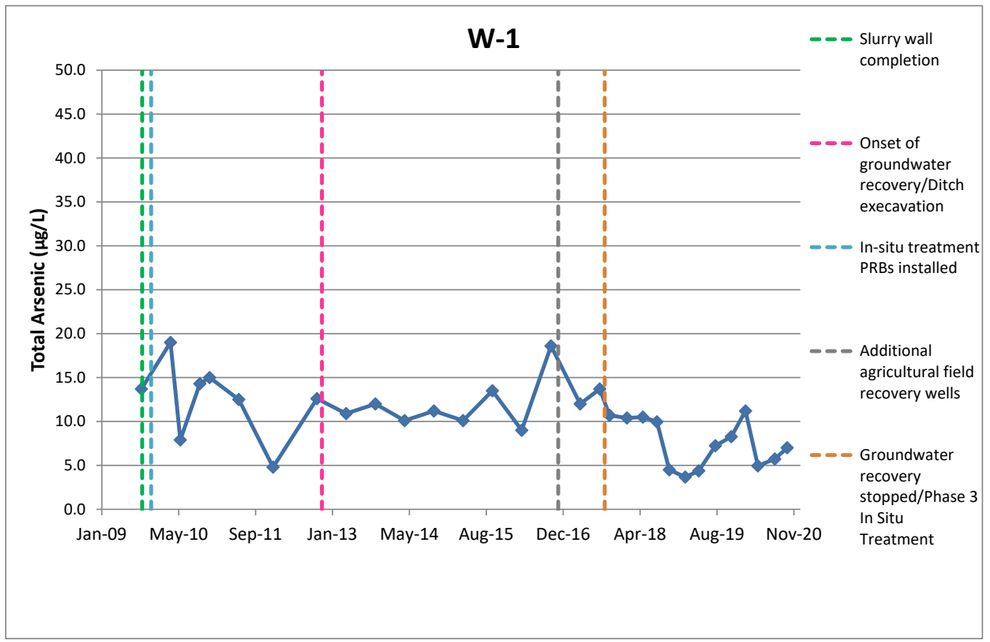

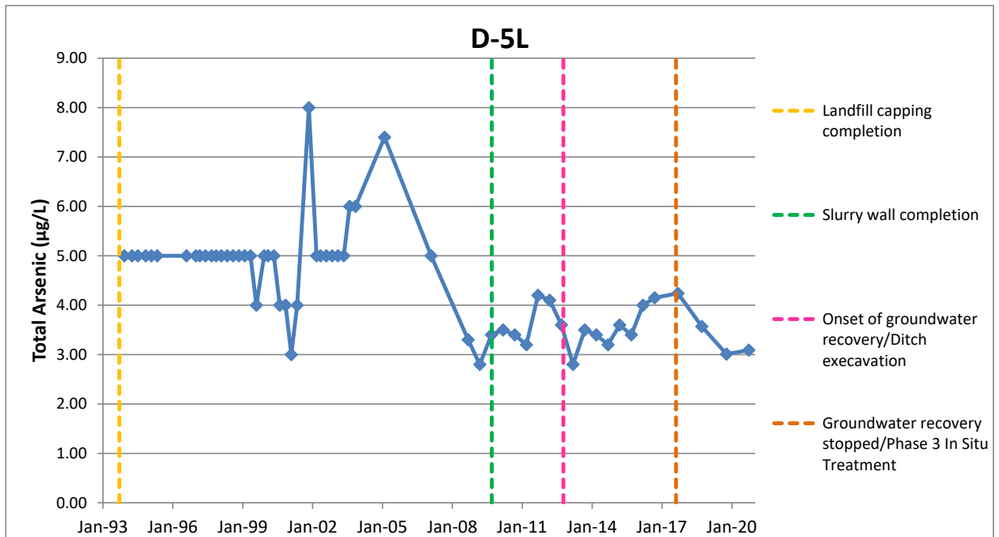

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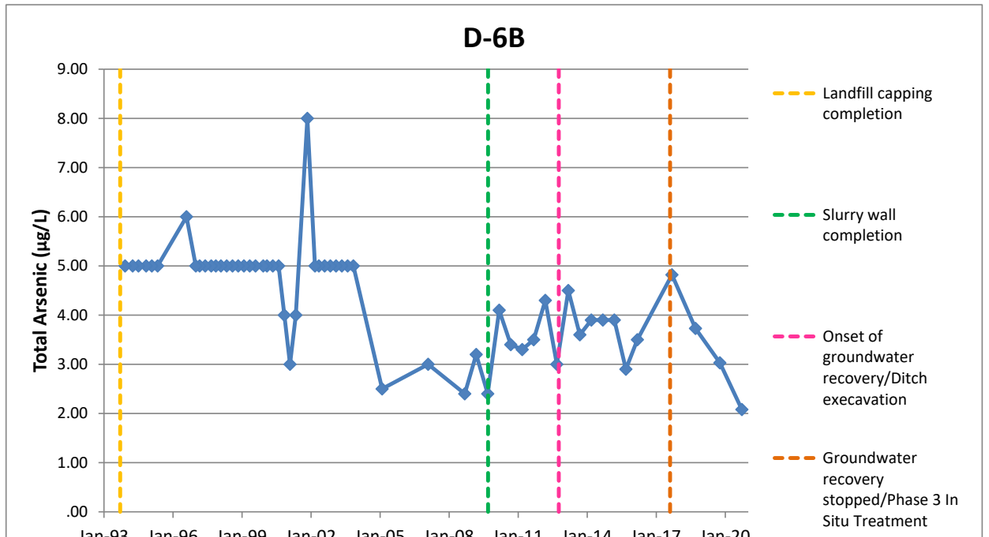

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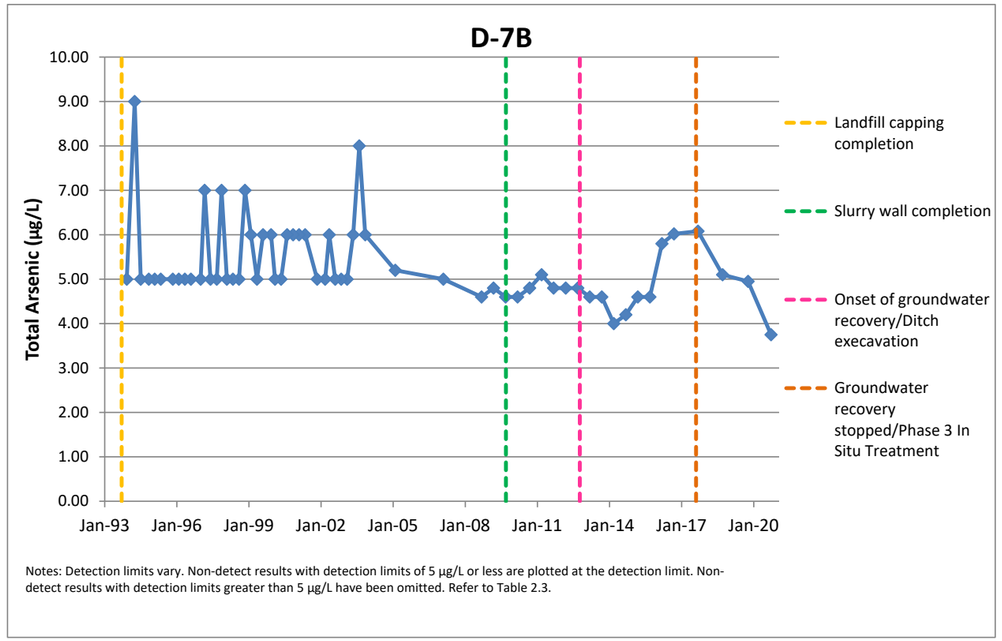

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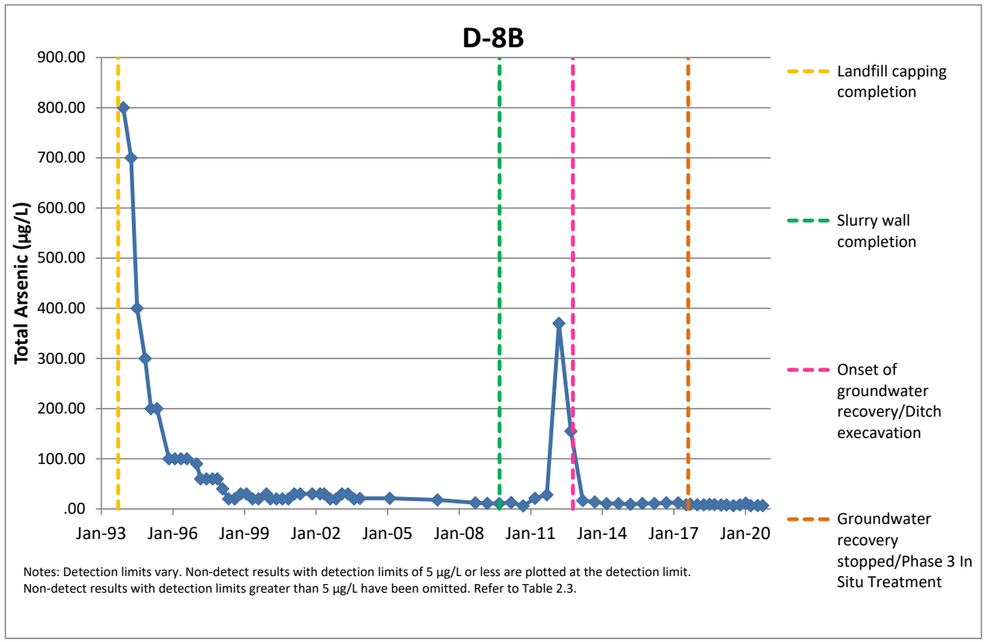

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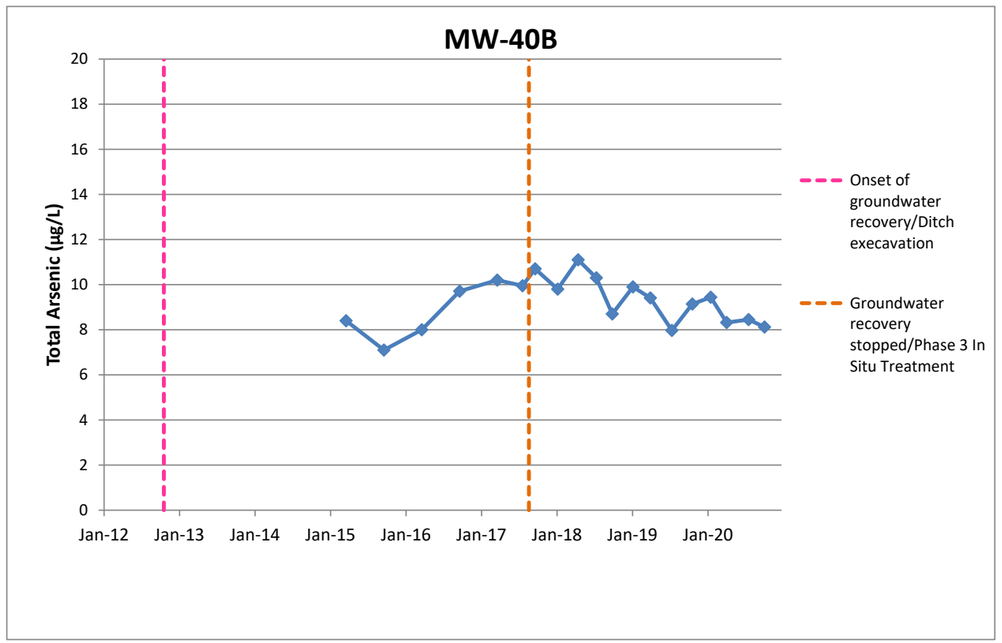

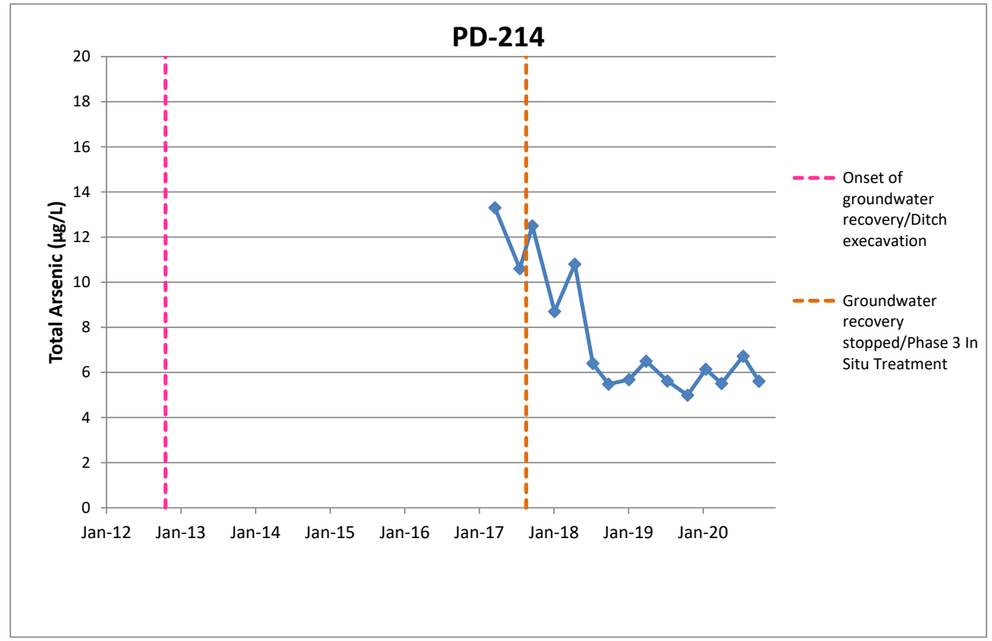

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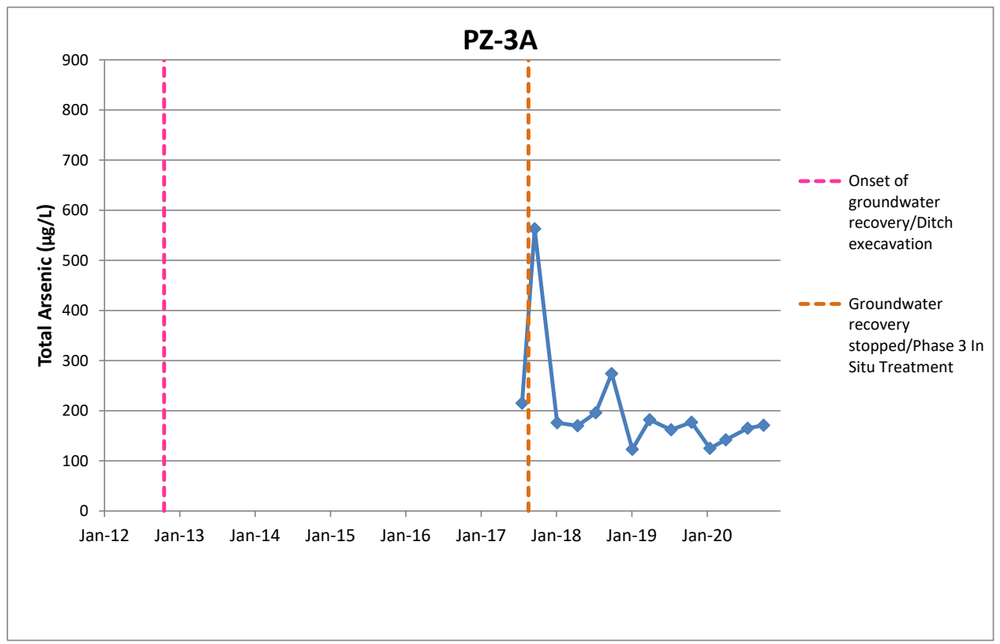

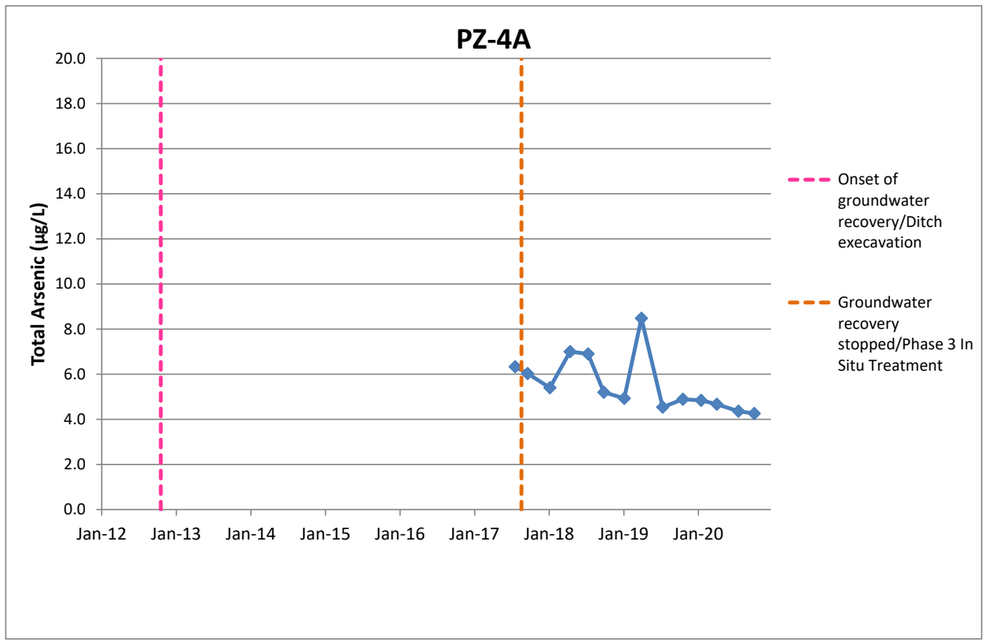

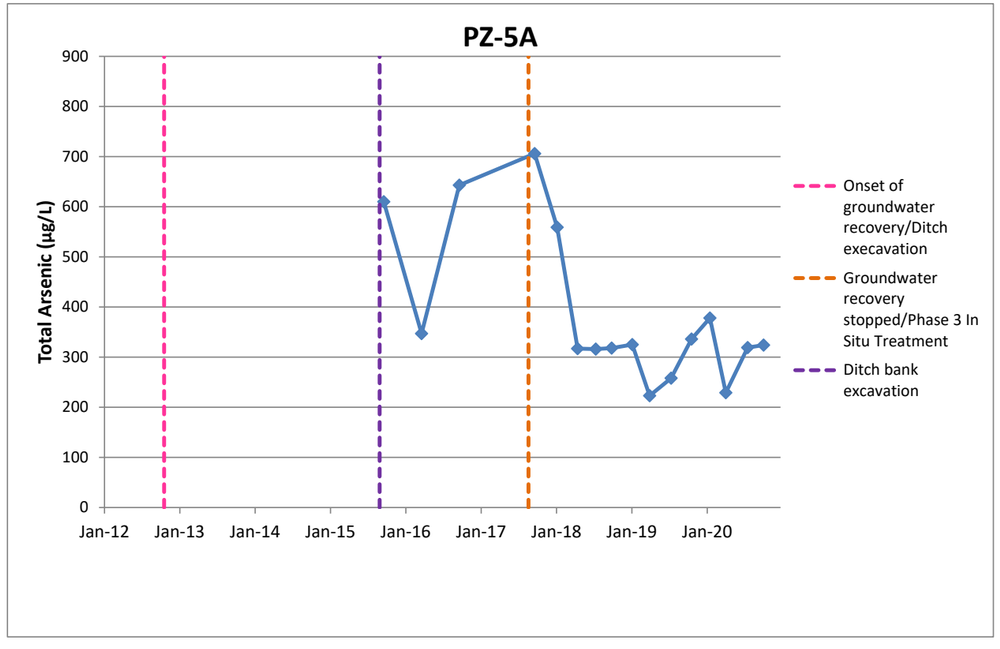

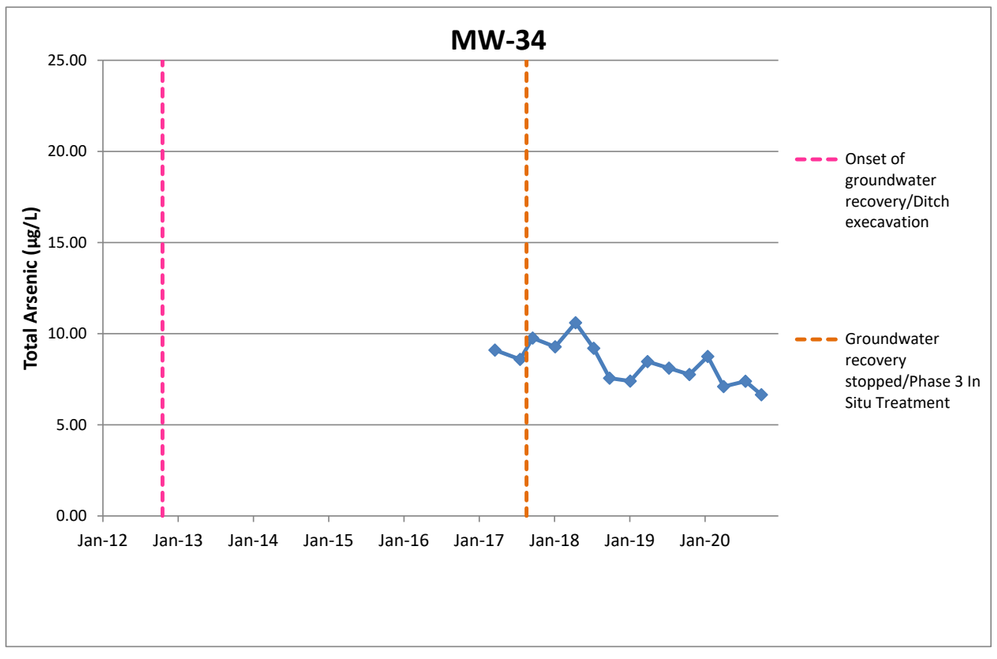

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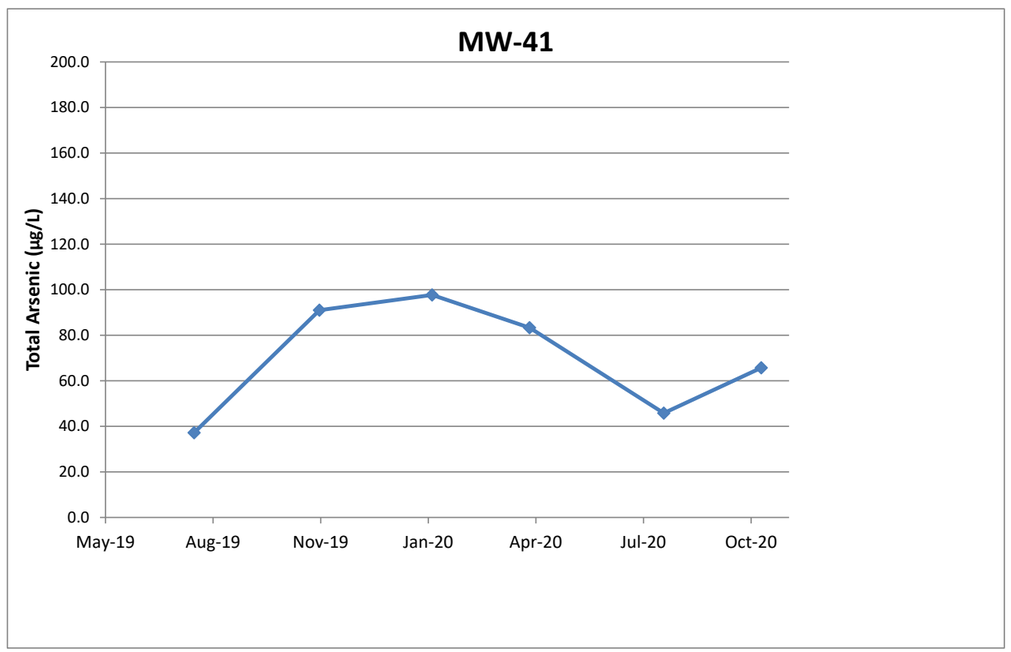

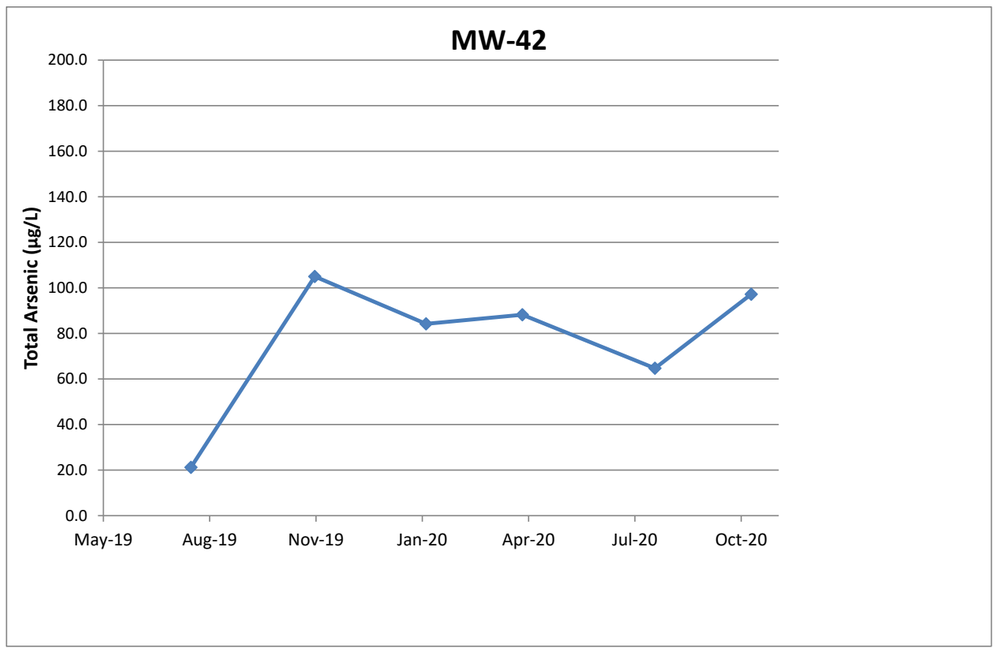

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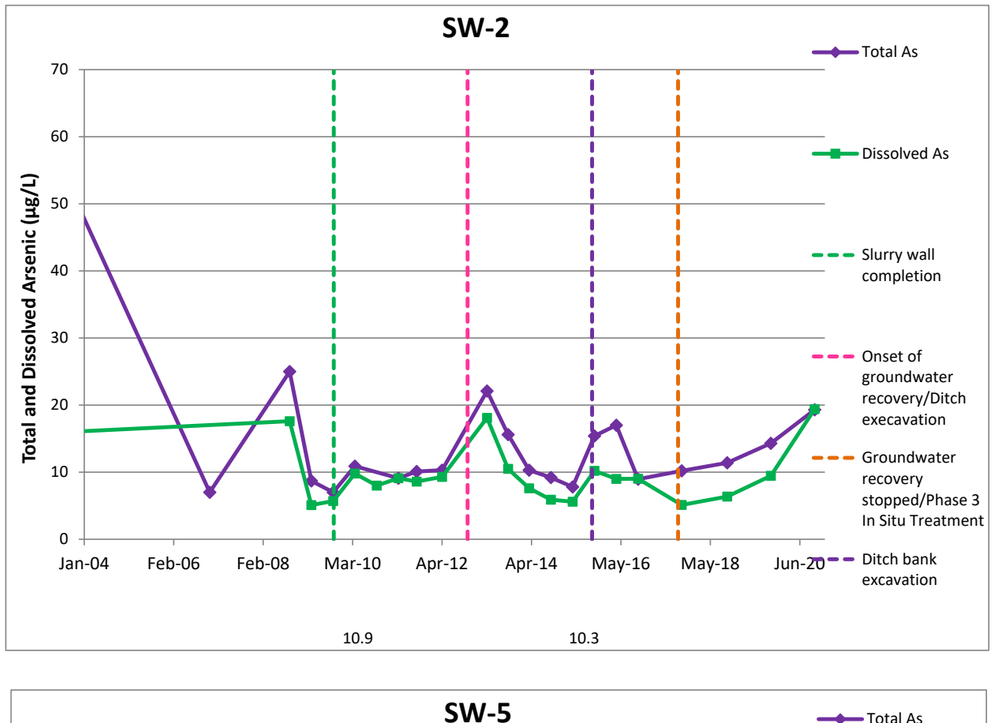
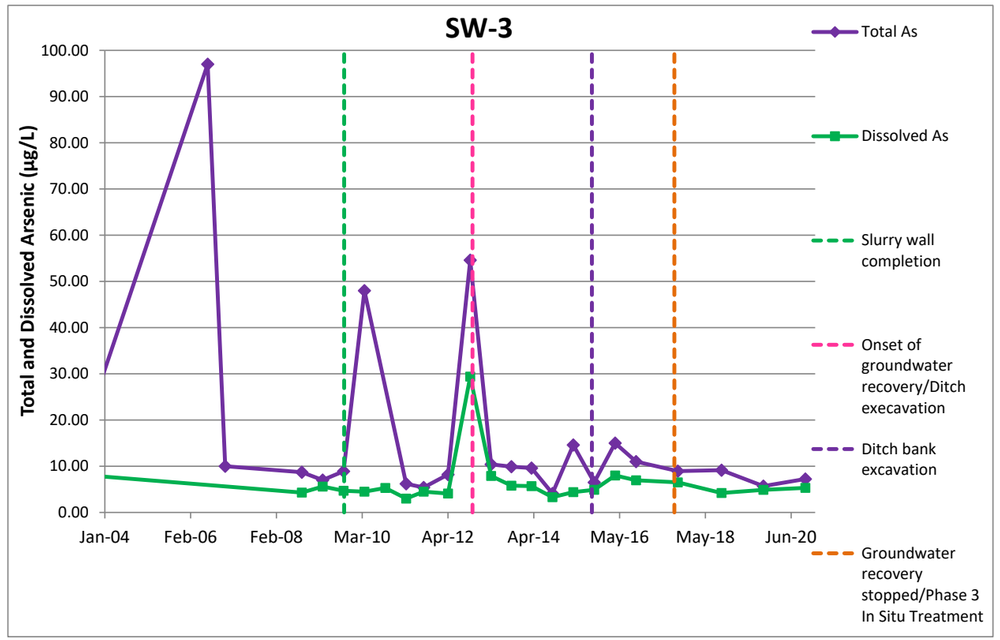
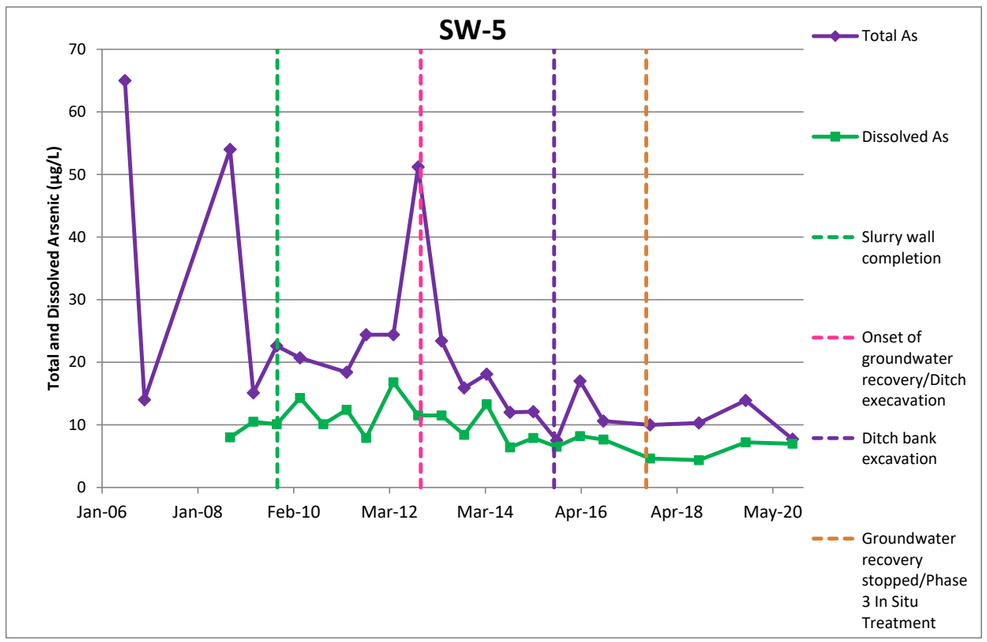
Time-Concentration Plots







Attachment 2
Laboratory Analytical Reports

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

October 29, 2020

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

Dear Mr Beaulieu:

Included are the amended results from the testing of material submitted on October 15, 2020 from the B+L, F&BI 010262 project. The samples BLW-GW-MW-31A-101420 and BLW-GW-W-3-101420 were reported at full strength.

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
FDS1023R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
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Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
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www.friedmanandbruya.com

October 23, 2020

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

Dear Mr Beaulieu:

Included are the results from the testing of material submitted on October 15, 2020 from the B+L, F&BI 010262 project. There are 46 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
FDS1023R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on October 15, 2020 by Friedman & Bruya, Inc. from the Floyd-Snider B+L, F&BI 010262 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Floyd-Snider
010262 -01	D-178-GW-101320
010262 -02	D-8B-GW-101320
010262 -03	D-8A-GW-101320
010262 -04	BLW-SW-3
010262 -05	BLW-SW-3-FF
010262 -06	BLW-GW-PZ-5A
010262 -07	BLW-GW-PZ-4A
010262 -08	BLW-GW-PZ-3A
010262 -09	MW-33-GW-101320
010262 -10	MW-34-GW-101320
010262 -11	MW-41-GW-101320
010262 -12	BLW-GW-D-9A
010262 -13	BLW-GW-PD-60
010262 -14	BLW-GW-D-10A
010262 -15	MW-40B-GW-101320
010262 -16	MW-42-GW-101320
010262 -17	PD-214-GW-101320
010262 -18	BLW-GW-D-6A
010262 -19	BLW-GW-D-6B
010262 -20	BLW-GW-176
010262 -21	BLW-GW-MW-15-101420
010262 -22	BLW-GW-MW-31A-101420
010262 -23	BLW-GW-PD-141
010262 -24	BLW-GW-MW-13-101420
010262 -25	BLW-GW-MW-35
010262 -26	BLW-GW-MW-30
010262 -27	BLW-GW-D-5U
010262 -28	BLW-GW-D-5L
010262 -29	BLW-SW-2
010262 -30	BLW-SW-2-FF
010262 -31	BLW-GW-D-7A
010262 -32	BLW-GW-D-7B
010262 -33	BLW-GW-W-1
010262 -34	BLW-GW-W-3-101420
010262 -35	BLW-SW-5
010262 -36	BLW-SW-5-FF

All quality control requirements were acceptable.

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	BLW-SW-3-FF	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/20/20	Lab ID:	010262-05
Date Analyzed:	10/20/20	Data File:	010262-05.156
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	5.32

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	BLW-SW-2-FF	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/20/20	Lab ID:	010262-30
Date Analyzed:	10/20/20	Data File:	010262-30.157
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	19.4

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	BLW-SW-5-FF	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/20/20	Lab ID:	010262-36
Date Analyzed:	10/20/20	Data File:	010262-36.158
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	6.98

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Floyd-Snider
Date Received:	Not Applicable	Project:	B+L, F&BI 010262
Date Extracted:	10/20/20	Lab ID:	I0-649 mb
Date Analyzed:	10/20/20	Data File:	I0-649 mb.090
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Analysis For Total Metals By EPA Method 6020B

Client ID:	D-178-GW-101320	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-01
Date Analyzed:	10/19/20	Data File:	010262-01.095
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	144

Analysis For Total Metals By EPA Method 6020B

Client ID:	D-8B-GW-101320	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-02
Date Analyzed:	10/19/20	Data File:	010262-02.098
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	6.69

Analysis For Total Metals By EPA Method 6020B

Client ID:	D-8A-GW-101320	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-03
Date Analyzed:	10/19/20	Data File:	010262-03.099
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	141

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-SW-3	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-04
Date Analyzed:	10/19/20	Data File:	010262-04.100
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	7.23

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-PZ-5A	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-06
Date Analyzed:	10/19/20	Data File:	010262-06.101
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	324

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-PZ-4A	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-07
Date Analyzed:	10/19/20	Data File:	010262-07.102
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	4.26

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-PZ-3A	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-08
Date Analyzed:	10/19/20	Data File:	010262-08.108
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	171

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-33-GW-101320	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-09
Date Analyzed:	10/19/20	Data File:	010262-09.109
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	112

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-34-GW-101320	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-10
Date Analyzed:	10/19/20	Data File:	010262-10.110
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	6.65

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-41-GW-101320	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-11
Date Analyzed:	10/19/20	Data File:	010262-11.111
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	65.7

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-D-9A	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-12
Date Analyzed:	10/19/20	Data File:	010262-12.112
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	44.0

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-PD-60	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-13
Date Analyzed:	10/19/20	Data File:	010262-13.113
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	24.8

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-D-10A	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-14 x50
Date Analyzed:	10/20/20	Data File:	010262-14 x50.032
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	212

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-40B-GW-101320	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-15
Date Analyzed:	10/19/20	Data File:	010262-15.115
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	8.12

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-42-GW-101320	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-16 x20
Date Analyzed:	10/20/20	Data File:	010262-16 x20.033
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	97.2

Analysis For Total Metals By EPA Method 6020B

Client ID:	PD-214-GW-101320	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-17
Date Analyzed:	10/19/20	Data File:	010262-17.122
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	5.61

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-D-6A	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-18 x10
Date Analyzed:	10/20/20	Data File:	010262-18 x10.034
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	88.5

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-D-6B	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-19
Date Analyzed:	10/19/20	Data File:	010262-19.124
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	2.08

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-176	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-20 x10
Date Analyzed:	10/20/20	Data File:	010262-20 x10.035
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	83.6

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-MW-15-101420	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-21 x20
Date Analyzed:	10/20/20	Data File:	010262-21 x20.036
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	192

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-MW-31A-101420	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-22
Date Analyzed:	10/19/20 18:29:25	Data File:	010262-22.127
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	1.52 J

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-MW-31A-101420	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-22 x5
Date Analyzed:	10/20/20	Data File:	010262-22 x5.132
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<5

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-PD-141	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-23 x10
Date Analyzed:	10/20/20	Data File:	010262-23 x10.046
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	97.6

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-MW-13-101420	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-24 x50
Date Analyzed:	10/20/20	Data File:	010262-24 x50.055
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	209

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-MW-35	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-25
Date Analyzed:	10/19/20	Data File:	010262-25.137
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	21.8

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-MW-30	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-26
Date Analyzed:	10/19/20	Data File:	010262-26.138
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	105

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-D-5U	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-27 x10
Date Analyzed:	10/20/20	Data File:	010262-27 x10.056
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	24.2

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-D-5L	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-28
Date Analyzed:	10/19/20	Data File:	010262-28.140
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	3.09

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-SW-2	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-29
Date Analyzed:	10/19/20	Data File:	010262-29.141
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	19.3

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-D-7A	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-31 x20
Date Analyzed:	10/20/20	Data File:	010262-31 x20.057
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	98.1

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-D-7B	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-32
Date Analyzed:	10/19/20	Data File:	010262-32.146
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	3.75

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-W-1	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-33
Date Analyzed:	10/19/20	Data File:	010262-33.147
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	7.01

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-W-3-101420	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-34
Date Analyzed:	10/19/20 20:07:54	Data File:	010262-34.148
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	2.26 J

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-GW-W-3-101420	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-34 x5
Date Analyzed:	10/20/20	Data File:	010262-34 x5.125
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<5

Analysis For Total Metals By EPA Method 6020B

Client ID:	BLW-SW-5	Client:	Floyd-Snider
Date Received:	10/15/20	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	010262-35
Date Analyzed:	10/19/20	Data File:	010262-35.149
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	7.71

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Floyd-Snider
Date Received:	Not Applicable	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	I0-643 mb
Date Analyzed:	10/19/20	Data File:	I0-643 mb.088
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Floyd-Snider
Date Received:	Not Applicable	Project:	B+L, F&BI 010262
Date Extracted:	10/19/20	Lab ID:	I0-644 mb
Date Analyzed:	10/19/20	Data File:	I0-644 mb.090
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Date of Report: 10/23/20
Date Received: 10/15/20
Project: B+L, F&BI 010262

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

Laboratory Code: 010304-01 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	938	0 b	0 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	101	80-120

Date of Report: 10/23/20
Date Received: 10/15/20
Project: B+L, F&BI 010262

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

Laboratory Code: 010262-01 (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	144	91	93	75-125	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	96	80-120

Date of Report: 10/23/20
Date Received: 10/15/20
Project: B+L, F&BI 010262

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

Laboratory Code: 010262-23 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	97.6	107	108	70-130	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	96	85-115

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. 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 lowest calibration standard. 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.

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.

010262

SAMPLE CHAIN OF CUSTODY

ME 10/15/20

Page # 1 of 4 AIC 6

Report To Brett Beaulieu

Company Floyd Snider

Address 601 Union St, Suite 600

City, State, ZIP Seattle, WA 98101

Phone 206 212-2078 Email Brett.Beaulieu@floydsnider.com

SAMPLERS (*signature*)

PROJECT NAME: B+L

PO #

REMARKS

INVOICE TO

TURNAROUND TIME
- [X] Standard Turnaround
- [ ] RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- [X] Dispose after 30 days
- [ ] Archive Samples
- [ ] Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Total Arsenic	Dissolved As			Notes
D-178-GW-101320	01	10/13/20	11:00	GW	1								X				
D-8B-GW-101320	02		11:15		1								X				
D-8A-GW-101320	03		11:17		1								X				
BLW-SW-3	04		12:00	SW	1								X				
BLW-SW-3-FF	05		12:05	SW	1									X			Field Filtered
BLW-GW-PZ-5A	06		13:00	GW	1								X				
BLW-GW-PZ-4A	07		1257		1								X				
BLW-GW-PZ-3A	08		1352		1								X				
MW-33-GW-101320	09		1225		1								X				
MW-34-GW-101320	10		1230		1								X				

ANALYSES REQUESTED

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Tyler Scott	F/S	10/15	10:48
Received by:	Khan Phan	FeBI	10/15/20	10:48
Relinquished by:				
Received by:		Samples received at 14 °C		

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SAMPLE CHAIN OF CUSTODY

010262

Report To Brett Beaulieu

Company Floyd Snider

Address

City, State, ZIP see page 1

Phone Email

SAMPLERS (signature) ME 10/15/20

Page # 2 of 4 AEG

PROJECT NAME: BTL

PO #

REMARKS

INVOICE TO

TURNAROUND TIME
- [X] Standard Turnaround
- [ ] RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- [X] Dispose after 30 days
- [ ] Archive Samples
- [ ] Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED: TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Total Arsenic				Notes
MW-41-GW-101320	11	10/13/20	1320	GW	1								X				
BLW-GW-D-9A	12		1402		1								X				
BLW-GW-PD-60	13		1604		1								X				
BLW-GW-D-10A	14		1610		1								X				
MW-40B-GW-101320	15		1430		1								X				
MW-42-GW-101320	16		1450		1								X				
PD-214-GW-101320	17	↓	1345		1								X				
BLW-GW-D-6A	18	10/14/20	1048		1								X				
BLW-GW-D-6B	19	↓	0945		1								X				
BLW-GW-176	20	↓	1045	↓	1								X				

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Tyler Scott	F/S	10/15	10:48
Received by:	Nhan Phan	FEBI	10/15/20	1048
Relinquished by:				
Received by:		Samples received at 14 °C		

Friedman & Bruya, Inc.
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Seattle, WA 98119-2029
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010262

SAMPLE CHAIN OF CUSTODY

ME 10/15/20

Page # 3 of 4 AIG

Report To Brett Beaulieu

Company Floyd Snider

Address

City, State, ZIP see page 1

Phone Email

SAMPLERS (*signature*)

PROJECT NAME: B+L

PO #

REMARKS

INVOICE TO

TURNAROUND TIME
- [X] Standard Turnaround
- [ ] RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- [X] Dispose after 30 days
- [ ] Archive Samples
- [ ] Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Total Arsenic	Dissolved Arsenic			Notes
						ANALYSES REQUESTED											
BLW-GW-MW-15-101420	21	10/14/20	1230	GW	1								X				
BLW-GW-MW-31A-101420	22		1120		1								X				
BLW-GW-PD-141	23		1202		1								X				
BLW-GW-MW-13-101420	24		1405		1								X				
BLW-GW-MW-35	25		0930		1								X				
BLW-GW-MW-30	26		1033		1								X				
BLW-GW-D-SH	27		14:17		1								X				
BLW-GW-D-SL	28		15:10		1								X				
BLW-SW-2	29		13:25	SW	1								X				
BLW-SW-2-FF	30		13:28	SW	1									X			Field Filtered

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Tyler Scott	FS	10/15	10:48
Received by:	Nhan Phan	FEBI	10/15/20	1048
Relinquished by:				
Received by:		Samples received at 14 °C		

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
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SAMPLE CHAIN OF CUSTODY

ME 10/15/20

Page # 4 of 4 AIG

Report To Brett Beaulieu

Company Floyd Snider

Address

City, State, ZIP see page 1

Phone Email

SAMPLERS (*signature*)

PROJECT NAME: BtL

PO #

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

TURNAROUND TIME
- [x] 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 Arsenic	Diss. Arsenic			Notes
						ANALYSES REQUESTED											
BLW-GW-D-7A	31	10/14/20	1300	GW	1								X				
BLW-GW-D-7B	32		1155		1								X				
BLW-GW-W-1	33		1513		1								X				
BLW-GW-W-3-101420	34		1025		1								X				
BLW-SW-5	35		10:05	SW	1								X				
BLW-SW-5-FF	36		10:08	SW	1									X			Field Filtered

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Tyler Scott	F/S	10/15	10:48
Received by:	Nham Phan	FEBT	10/15/20	10:48
Relinquished by:				
Received by:		Samples received at 14 °C		

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