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Two Union Square
601 Union Street, Suite 600
Seattle, WA 98101
tel: 206.292.2078 fax: 206.682.7867

August 13, 2018

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

SUBJECT: B&L WOODWASTE SITE JULY 2018 COMPLIANCE MONITORING RESULTS

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 July, 2018.

Groundwater sampling and analysis were completed in accordance with the 2013 Compliance Monitoring Plan and 2017 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. Results from R-15 were determined to be unrepresentative and unusable due to well damage. All other results are presented in the attached table, figure, and time concentration plots.

We look forward to discussing the results with you.

Sincerely,
FLOYD | SNIDER

Brett Beaulieu, LHG
Senior Hydrogeologist

Encl.: Table 1 Groundwater Arsenic Results
Figure 1 July2018 Groundwater Arsenic Results
Attachment 1 Time Concentration Plots
Attachment 2 Laboratory Analytical Reports

Copies: Dan Silver, B&L Woodwaste Custodial Trustee

Table 1

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	PD-141	PD-214	PZ-3A	PZ-4A	R-15	PZ-5A	W-1	D-5L	D-6B	D-7B	D-8B	MW-40B
Compliance Monitoring Events																									
July 2018	NS	NS	NS	152	NS	NS	NS	NS	NS	NS	188	9.2	NS	NS	6.4	196	6.9	-- [4]	316	9.96	NS	NS	NS	9.05	10.3
April 2018	26.6	NS	-- [2]	133	NS	NS	122	153	NS	NS	188	10.6 [3]	NS	194	10.8	170	7.0	392 [4]	317	10.5	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	8.7	176	5.4	443 [4]	559	10.4	NS	NS	NS	8.23	9.8
October 2017	32.4	53.1	25	74.9	48.8	336	221	153	112	2.77	323	9.76	39.3	240	12.5	563	6.0	539 [4]	706	10.7	4	5	6	9.46	10.7
August 2017	NS	NS	NS	97.4	NS	NS	NS	NS	NS	NS	372	9.10	NS	NS	10.6	215	6.3	215	NS	13.7	NS	NS	NS	8.34	10.0
April 2017	23.7	NS	30	143	NS	NS	270	104	NS	NS	388	9.10	NS	324	13.3	NS	NS	NS	NS	12	NS	NS	NS	12.2	10.2
October 2016	43.6	NS	30	71.6	48.2	300	632	85.3	176	3.10	458	NS	31.4	451	NS	NS	NS	NS	643	18.6	4	NS	6	12.4	9.71
April 2016	22.8	50.2	34	108	41.0	273	1,200	183	170	2.7	431	NS	32.4	413	NS	NS	NS	NS	347	9	4	4	6	10.9	8.00
October 2015	21.1	60.3	37	87.9	43.0	300	1,220	752	139	2.4	423	NS	29.8	441	NS	NS	NS	NS	610	13.5	3	3	5	10.9	7.1
April 2015	22	47.8	45	342	42.0	354	1,580	1,070	204	4.1	399	NS	25.8	407	NS	NS	NS	NS	NS	10.1	4	4	5	9.3	8.4
October 2014	16.3	50.4	57	107	43.6	318	1,650	1,130	117	3.4	436	NS	23.2	323	NS	NS	NS	NS	NS	11.2	3	4	4	10.7	NS
April 2014	17.6	63.7	49	415	37.2	183	1,430	1,260	136	5.4	376	NS	23.2	326	NS	NS	NS	NS	NS	10.1	3	4	4	10.5	NS
October 2013	12.4	107	54	168	40	181	1,740	1,220	174	5.3	404	NS	21.9	302	NS	NS	NS	NS	NS	12	4	3.6	5	13.9	NS
April 2013	16.5	163	30	363	38.0	199	1,910	1,580	252	6.6	398	NS	23.8	296	NS	NS	NS	NS	NS	10.9	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	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	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	4	4	5	28.2	NS
April 2011	90	1,170	32	126	39	203	2,720	1,610	854	5.7	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	5.9	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	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	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	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	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	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
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
March 2005	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	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	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	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	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	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	5 U	5 U	5	20	NS
June 2002	240	1,800	5		38	260	4,700	2,500	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	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	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	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	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	4	4	6	20	NS

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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	PD-141	PD-214	PZ-3A	PZ-4A	R-15	PZ-5A	W-1	D-5L	D-6B	D-7B	D-8B	MW-40B
Historical Events (cont.)																									
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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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
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
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

Note:

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

2 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 well damage and associated sediment.

3 Results are from analyses of groundwater collected on May 22, 2018.

4 No results are reported for July, 2018. Well development conducted in July, 2018 event indicated well damage and associated sediment biasing results high beginning October, 2017.

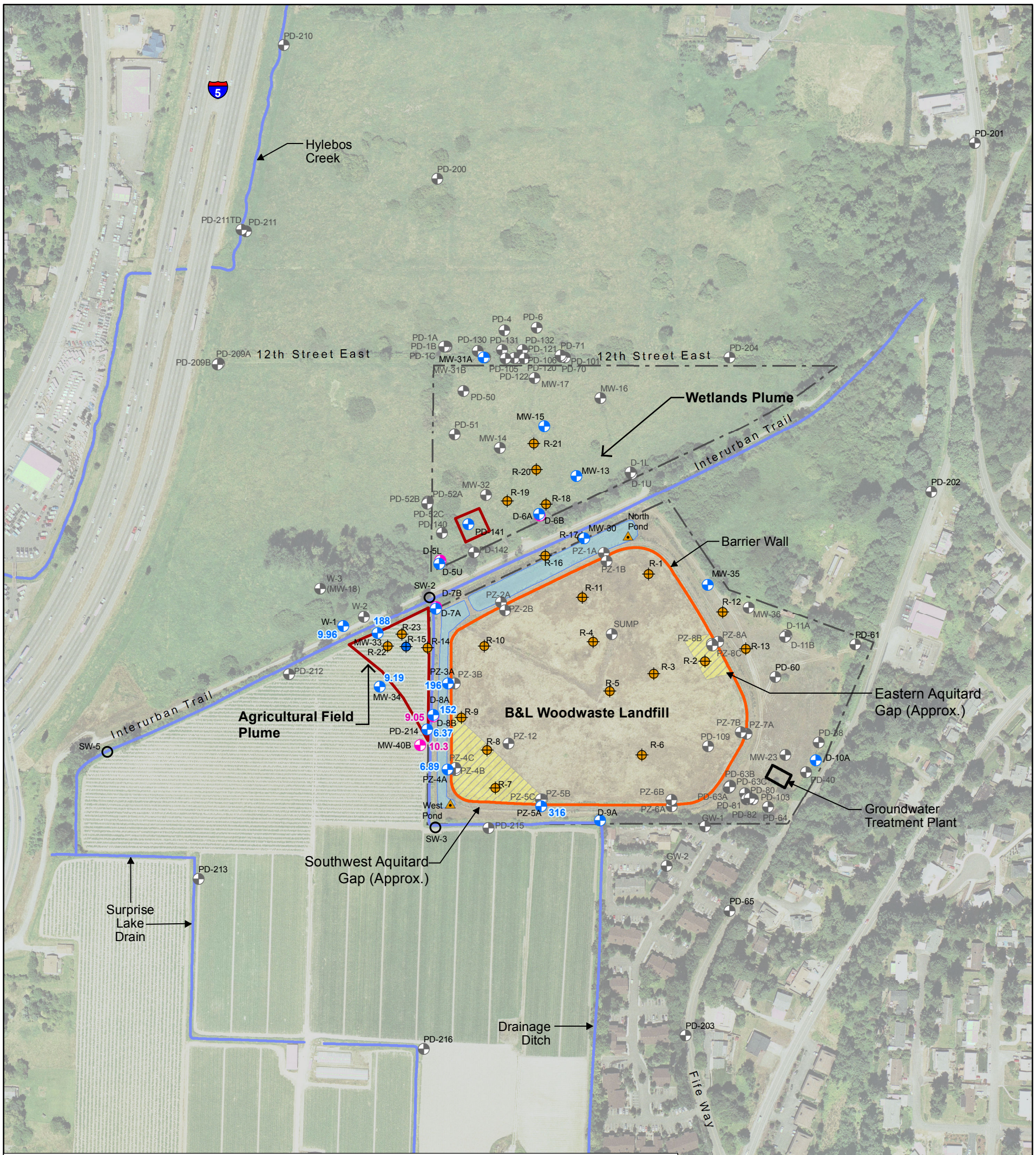
Abbreviations:

µg/L Micrograms per liter

NS Not sampled

Qualifier:

U Analyte is undetected at given reporting limit.



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
- 23.4 — Total Arsenic Concentation, Upper Aquifer
- 16.6 — Total Arsenic Concentration, Lower Aquifer

- 2017 In Situ Treatment Zones
- Conditional Point of Compliance (Barrier Wall)
- Property Boundary from Tax Parcel Data
- Stormwater Pond
- Surface Drainage Feature
- Aquitard Gaps

Notes:
- 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

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

July 2018
Groundwater Arsenic Results

Path: I:\GIS\Projects\B&L-O&M\MXD\Compliance Monitoring Report\July 2018\July 2018 Groundwater Arsenic Results.mxd
Date: 8/10/2018

Attachment 1
Time-Concentration Plots

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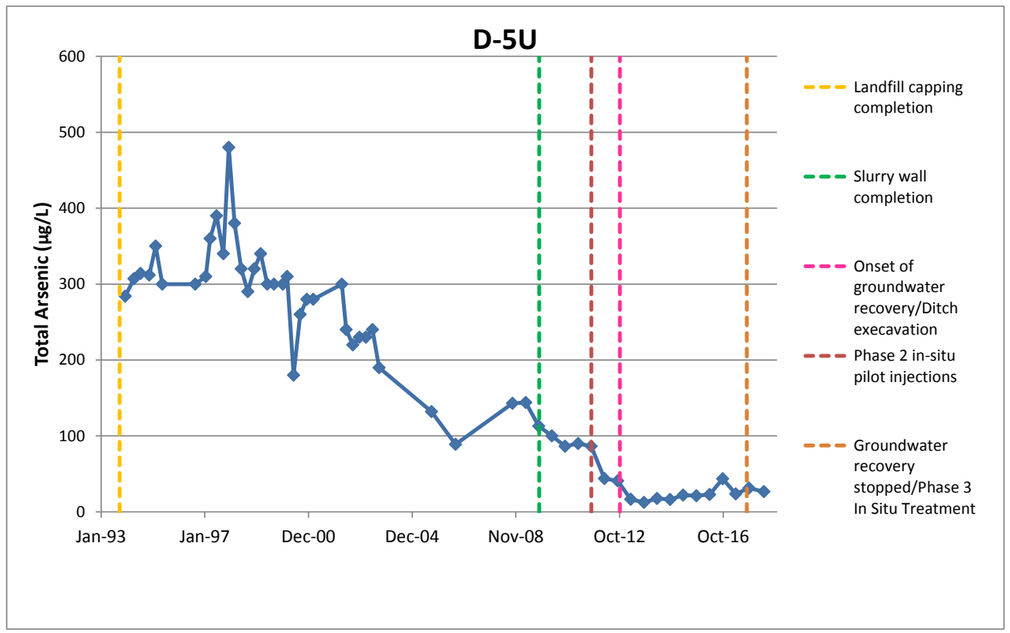
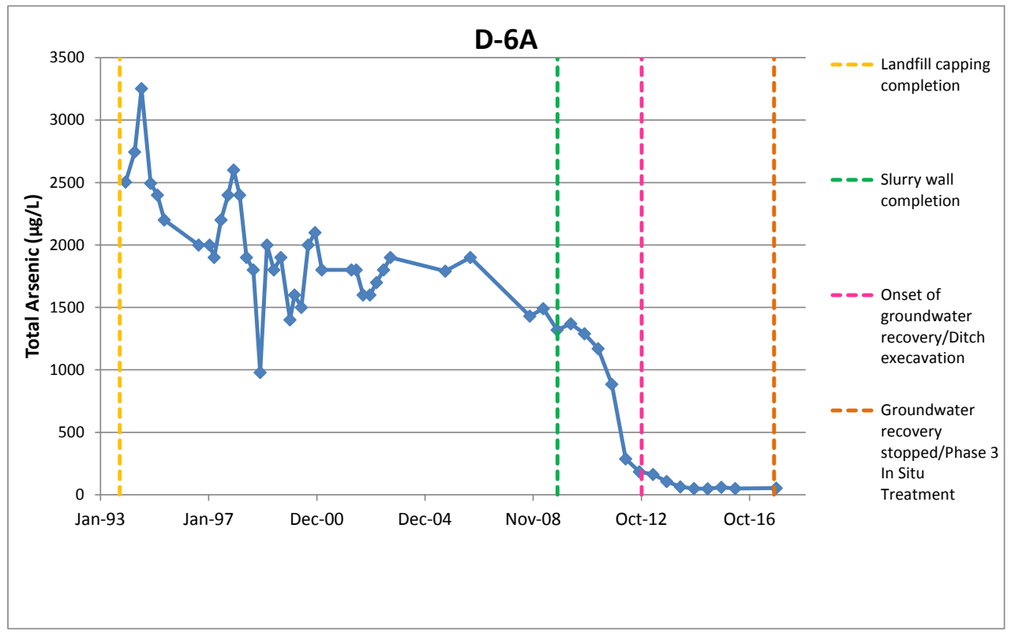
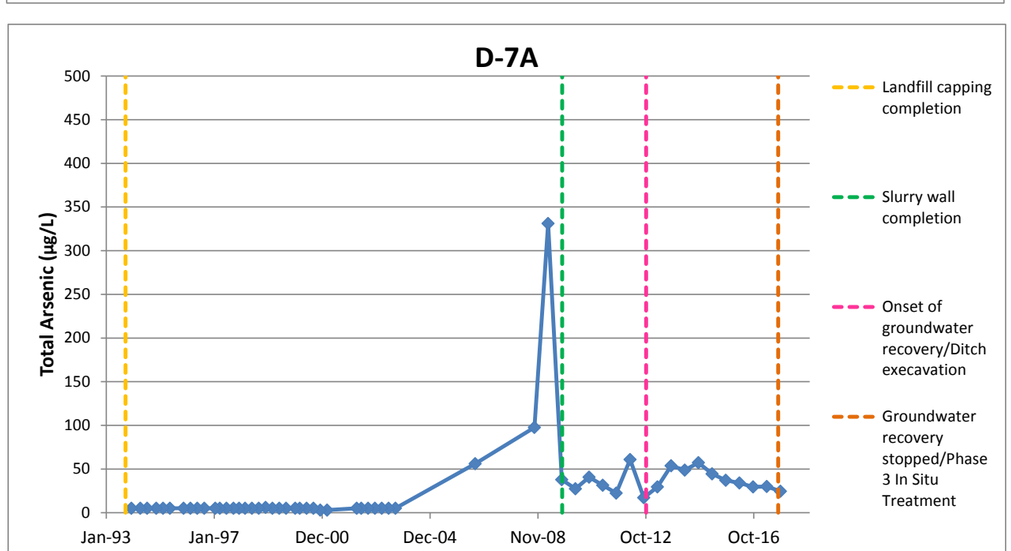
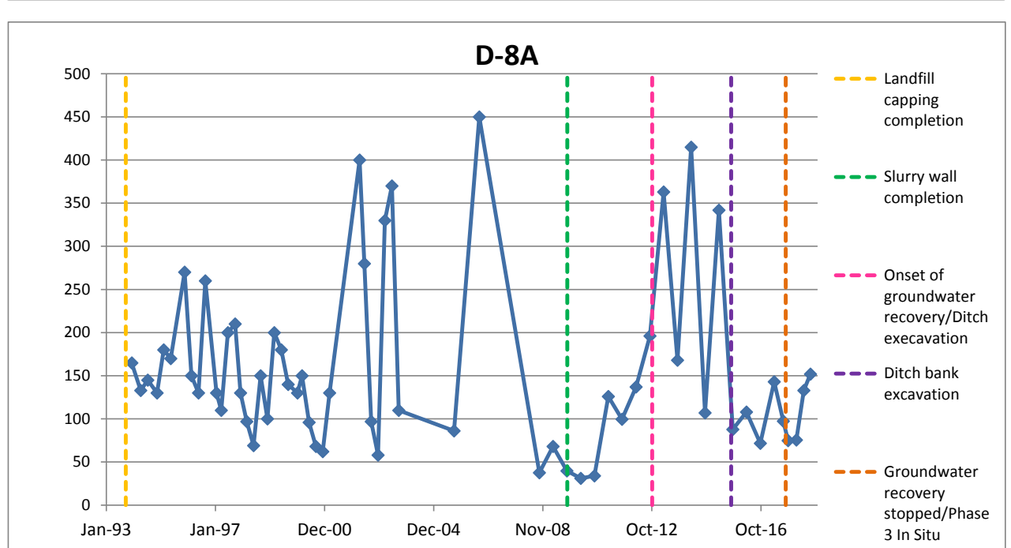
Time-Concentration Plots







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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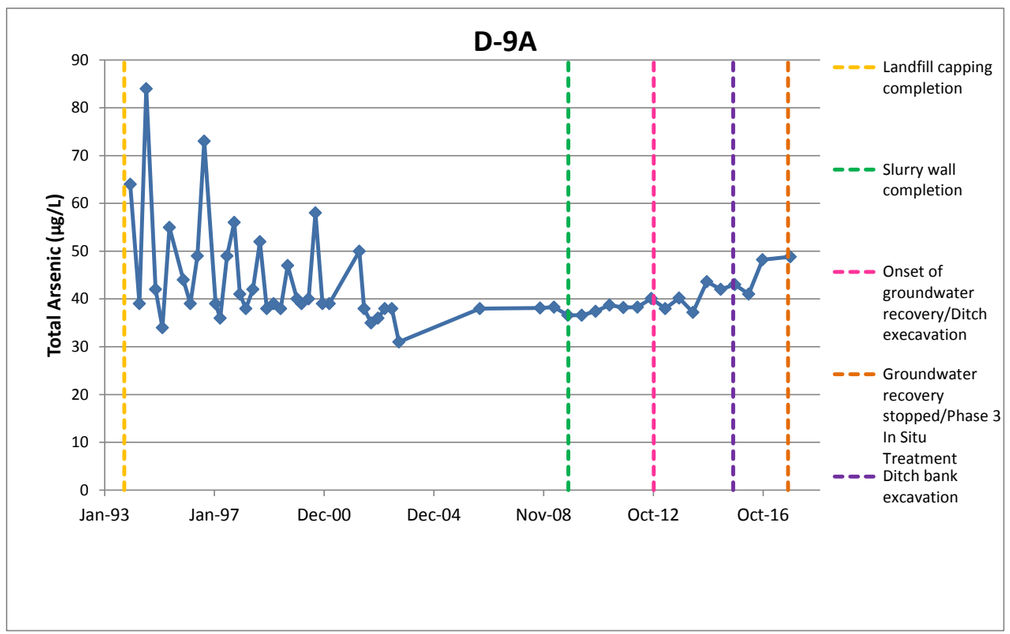

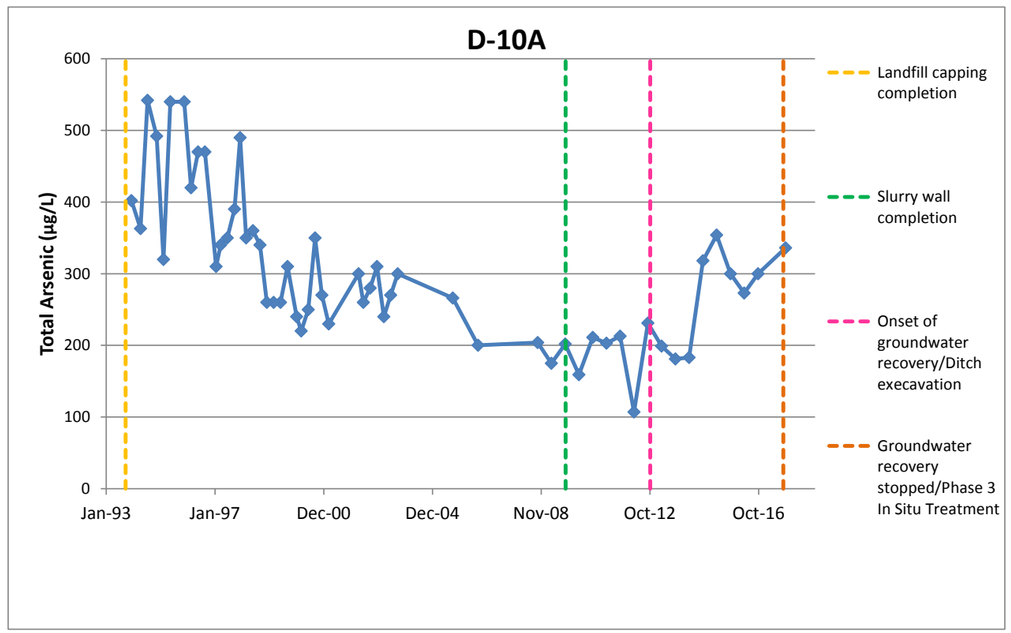

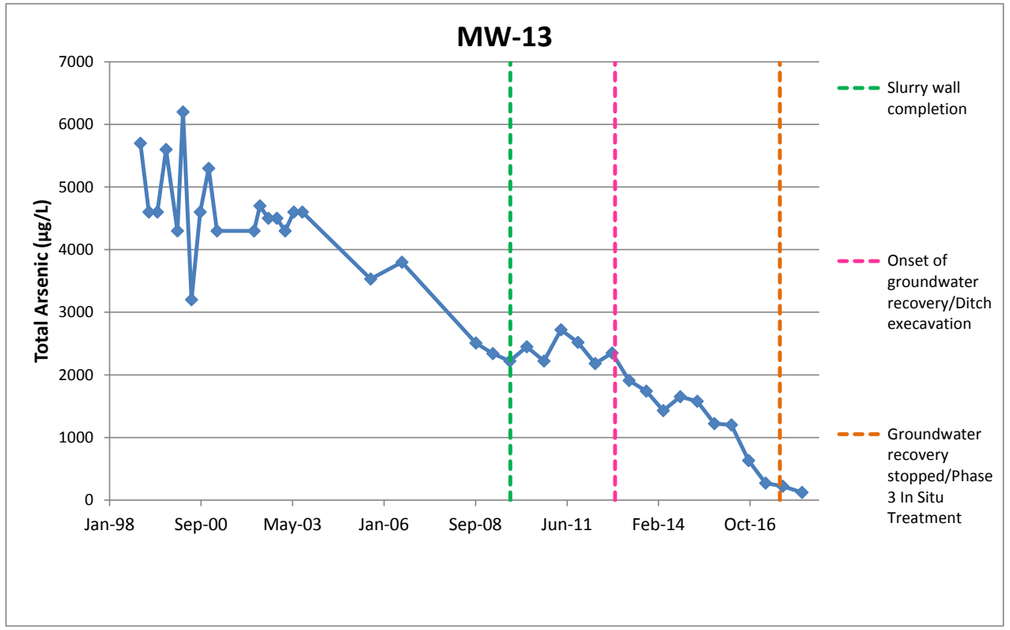

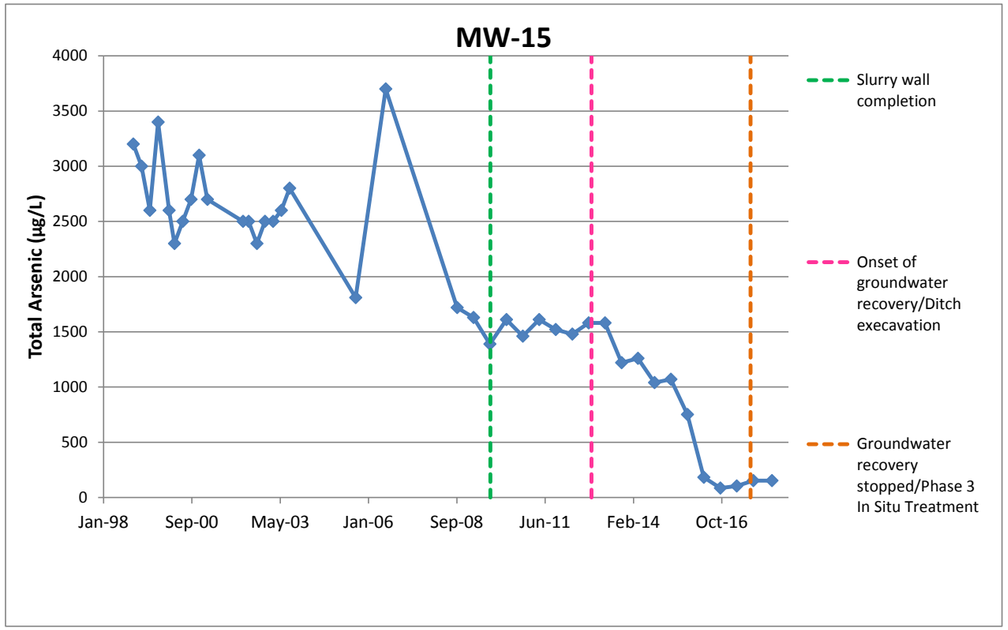

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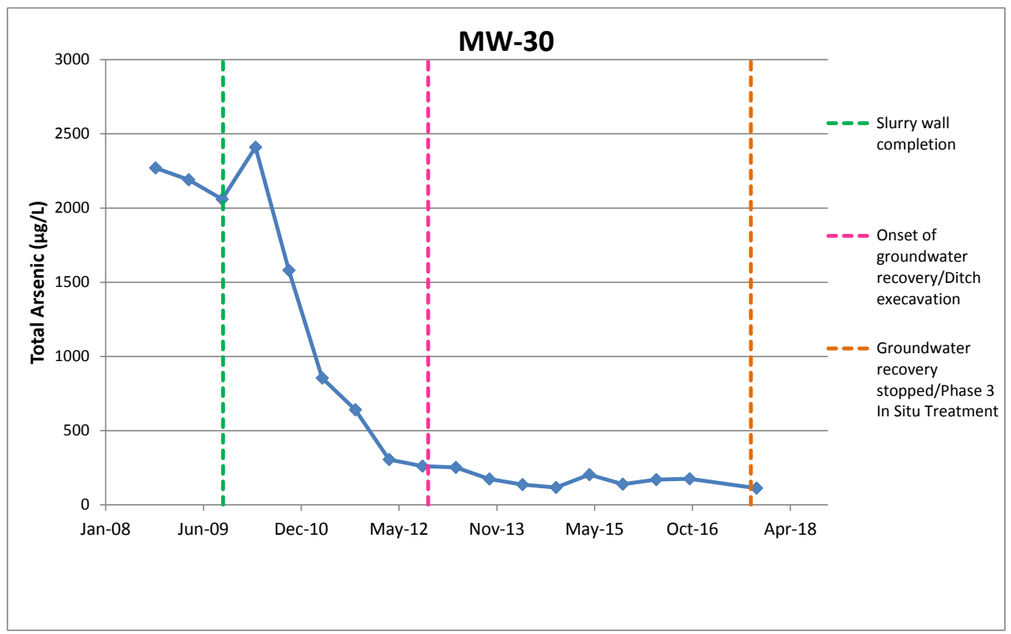

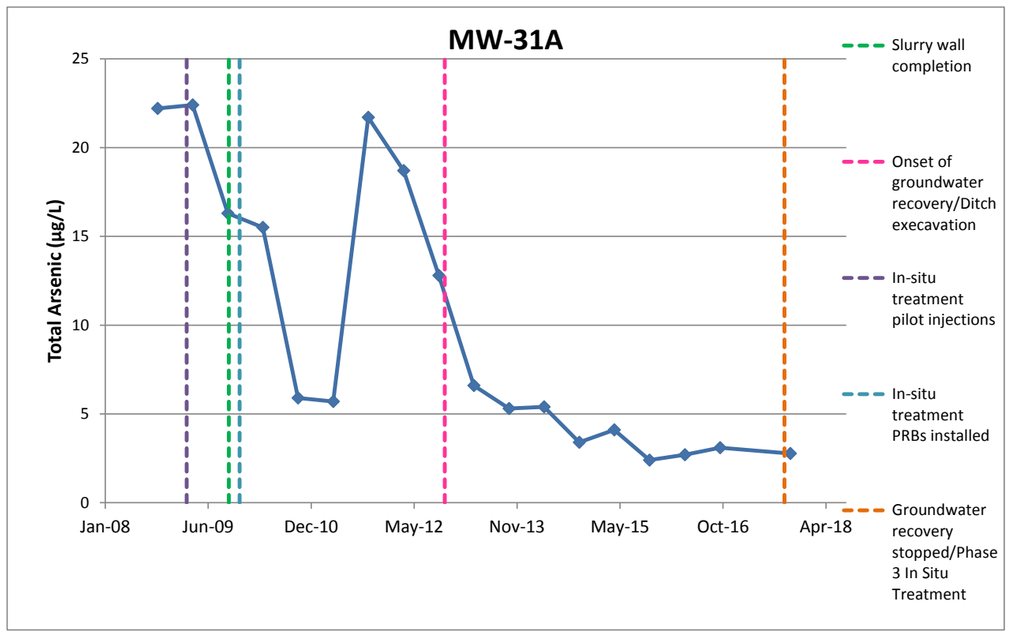

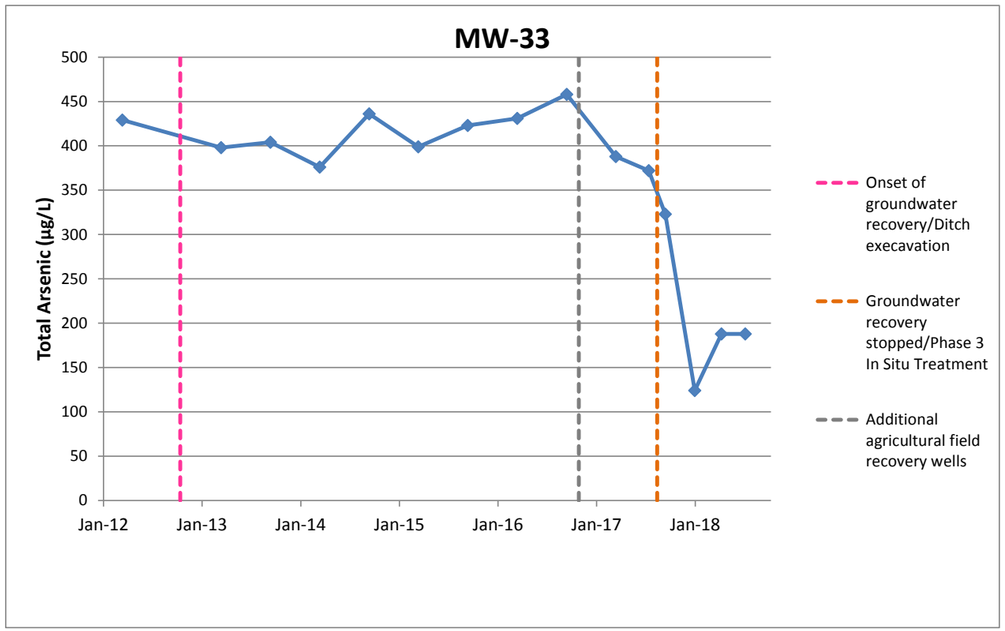

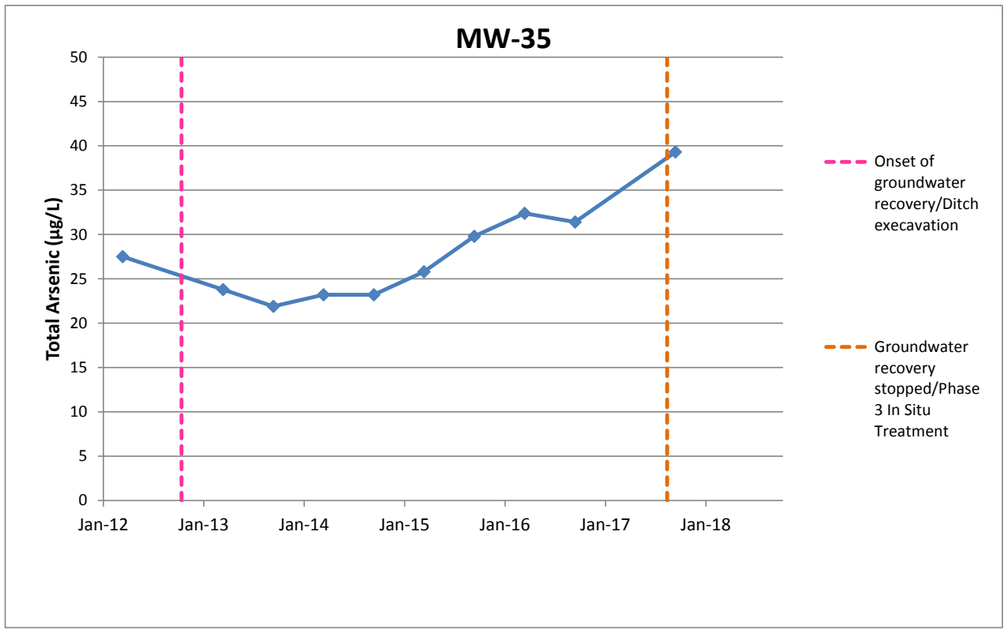

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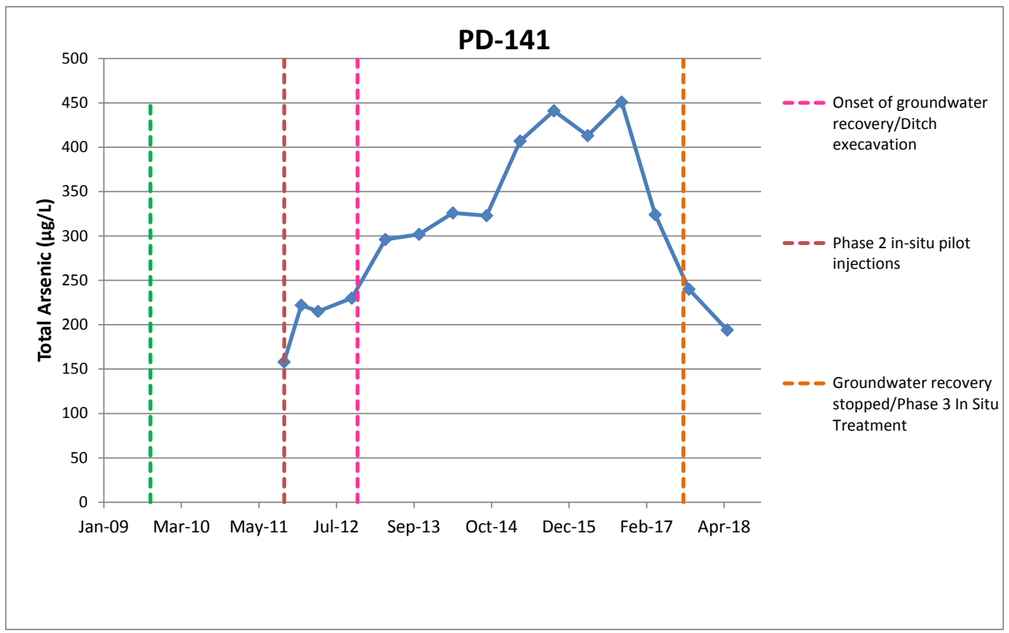

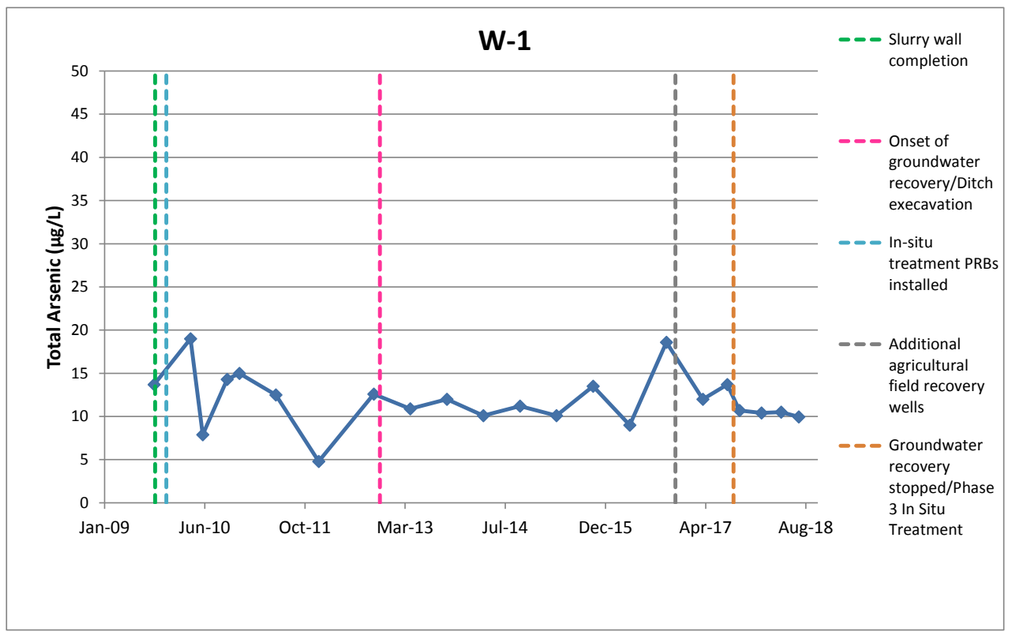

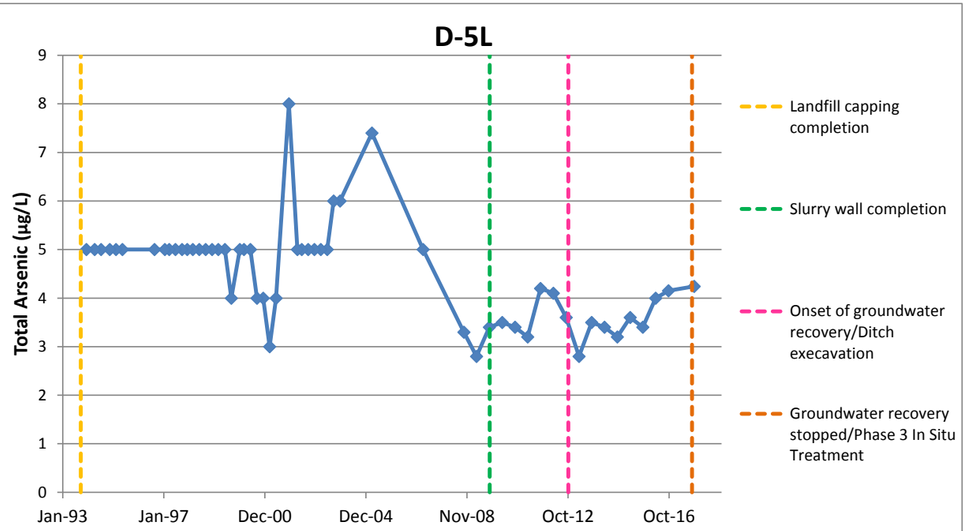

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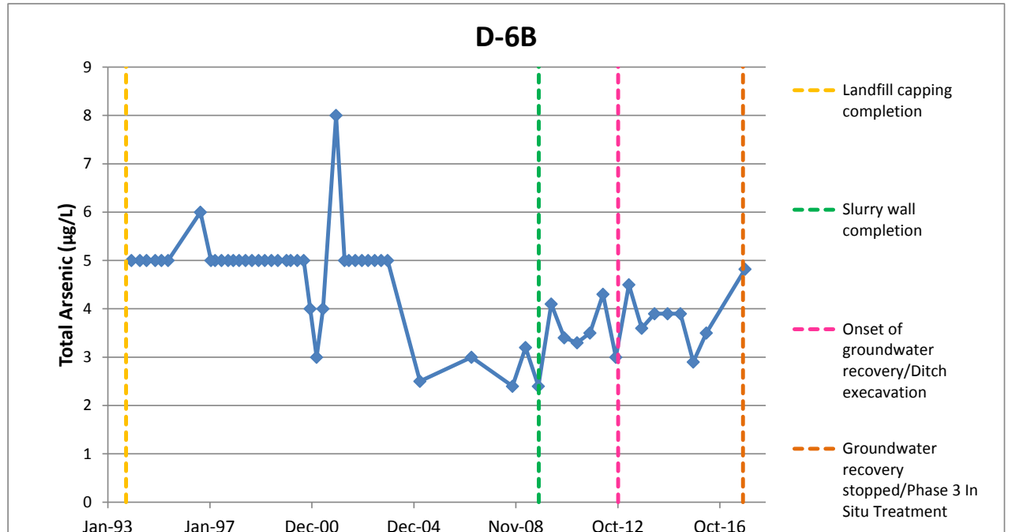

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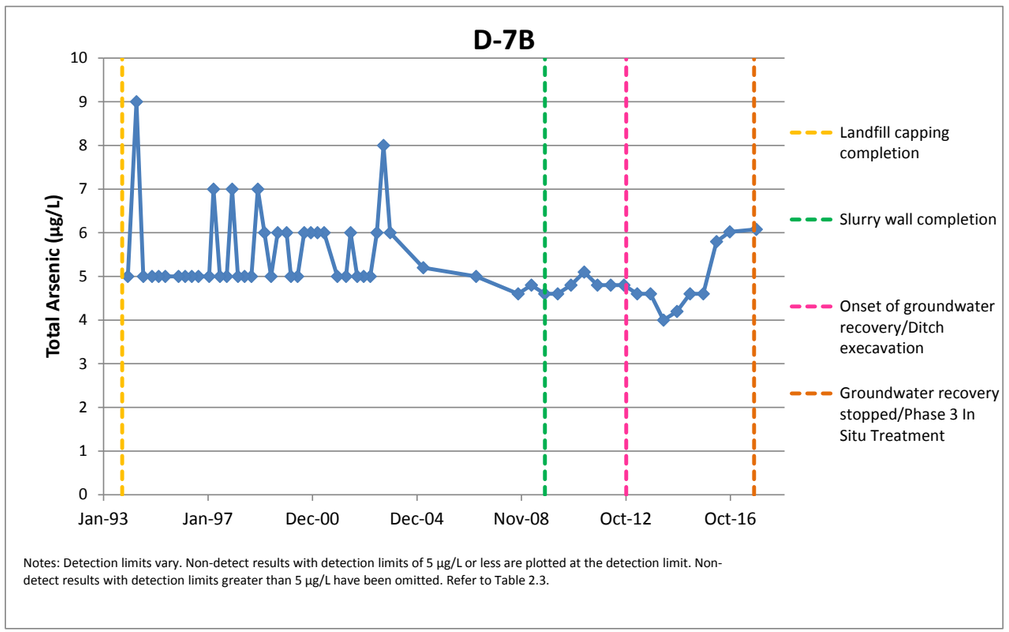
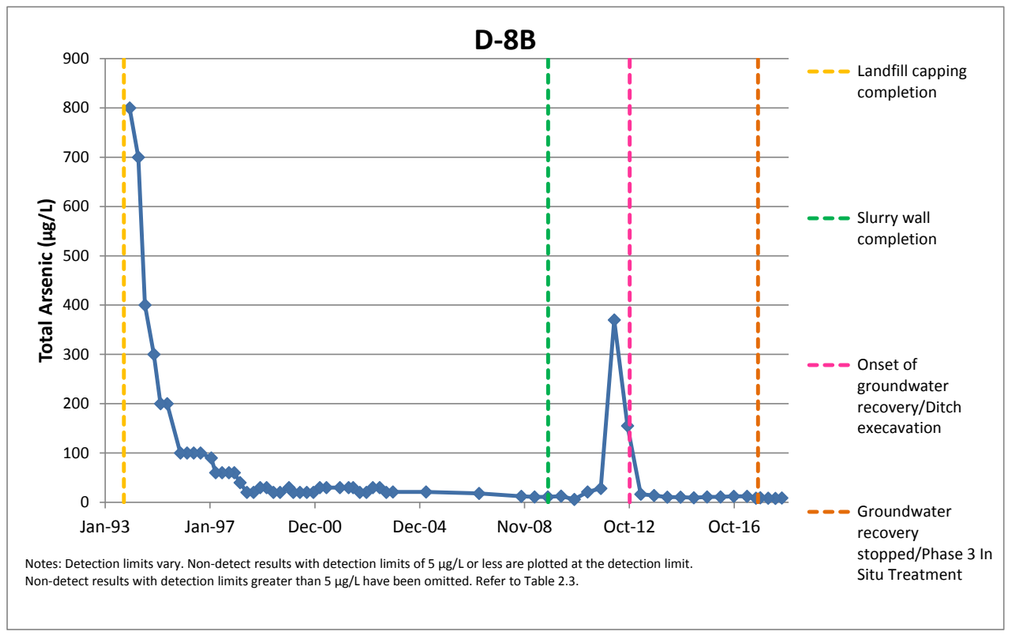
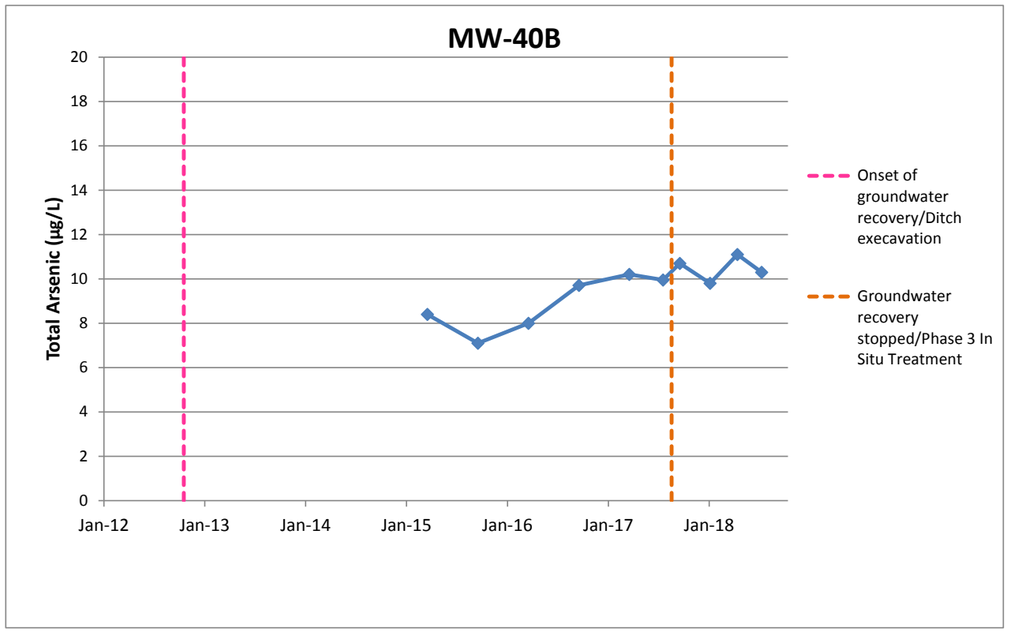
Attachment 1
Time-Concentration Plots

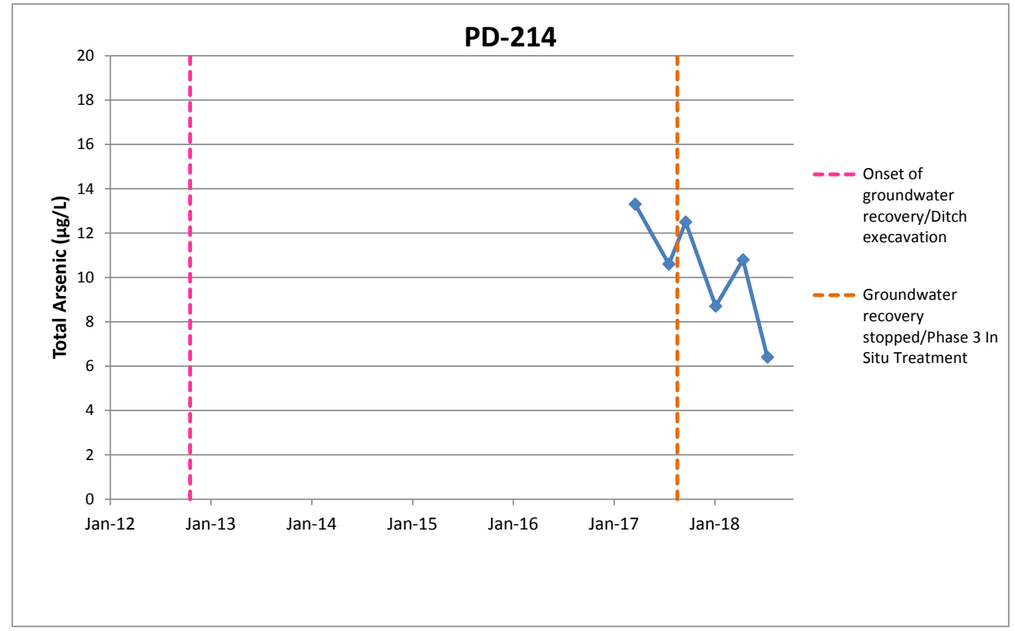


Notes: Detection limits vary. Non-detect results with detection limits of 5 µg/L or less are plotted at the detection limit. Non-detect results with detection limits greater than 5 µg/L have been omitted. Refer to Table 2.3.

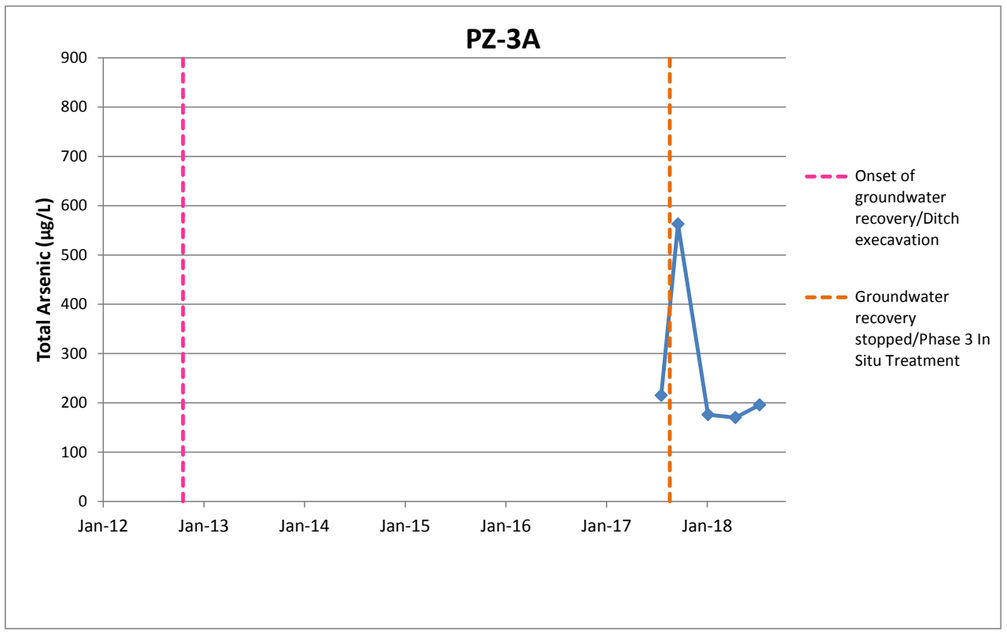


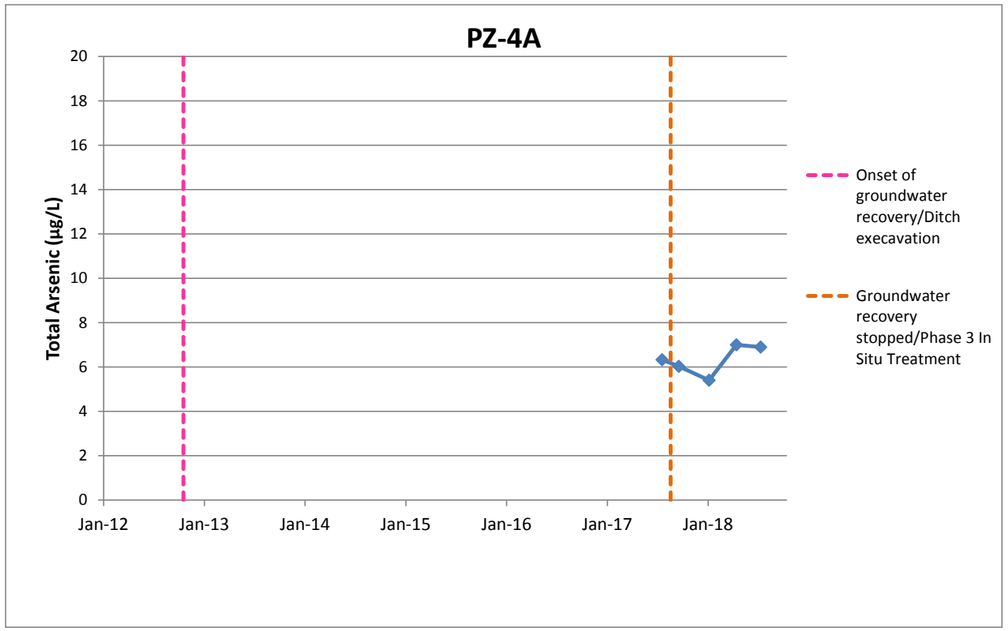
Notes: Detection limits vary. Non-detect results with detection limits of 5 µg/L or less are plotted at the detection limit. Non-detect results with detection limits greater than 5 µg/L have been omitted. Refer to Table 2.3.

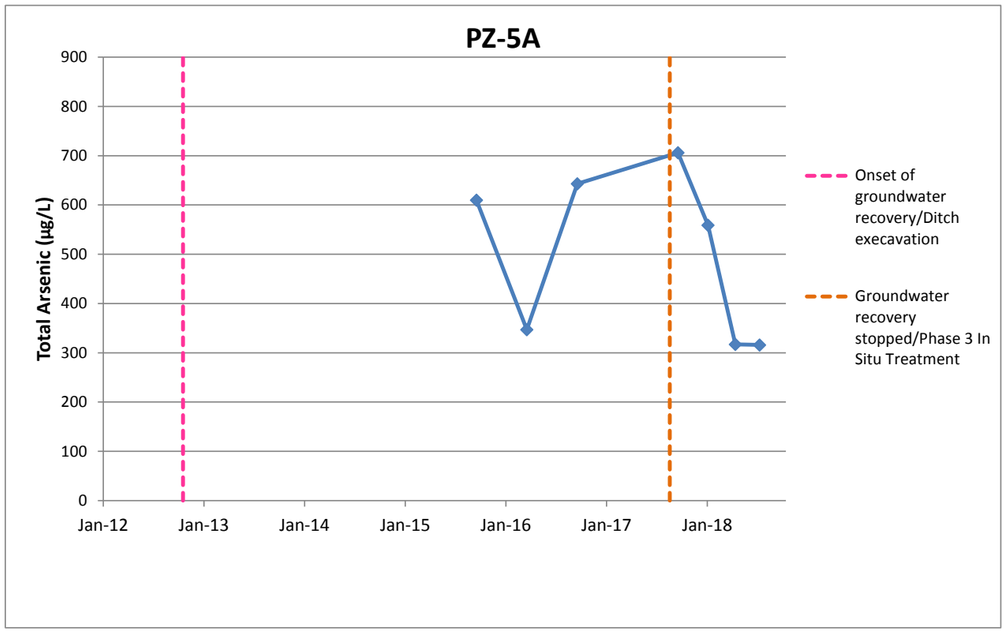


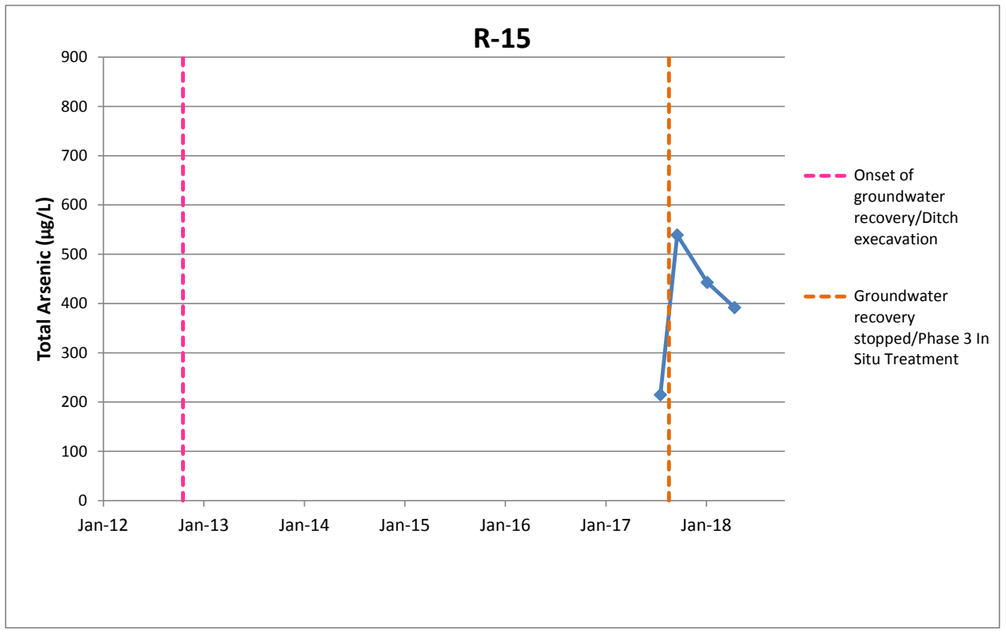


Attachment 1
Time-Concentration Plots

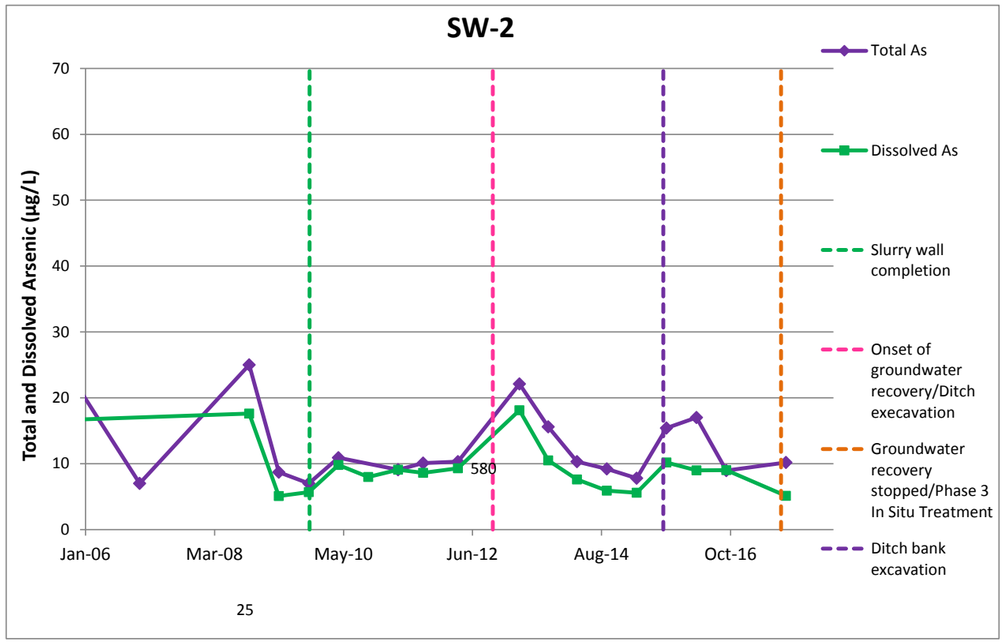


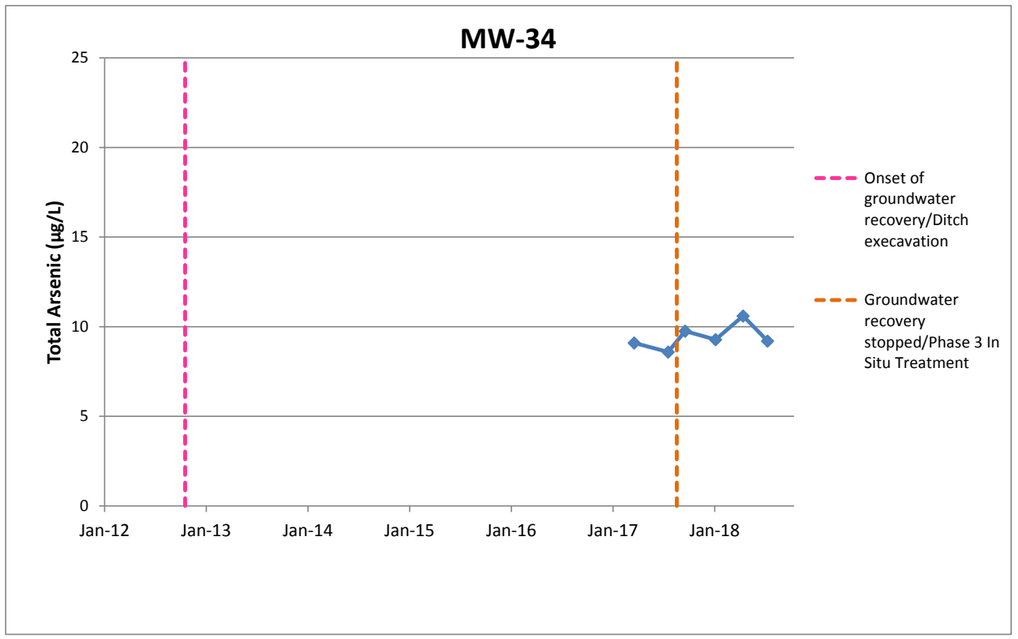


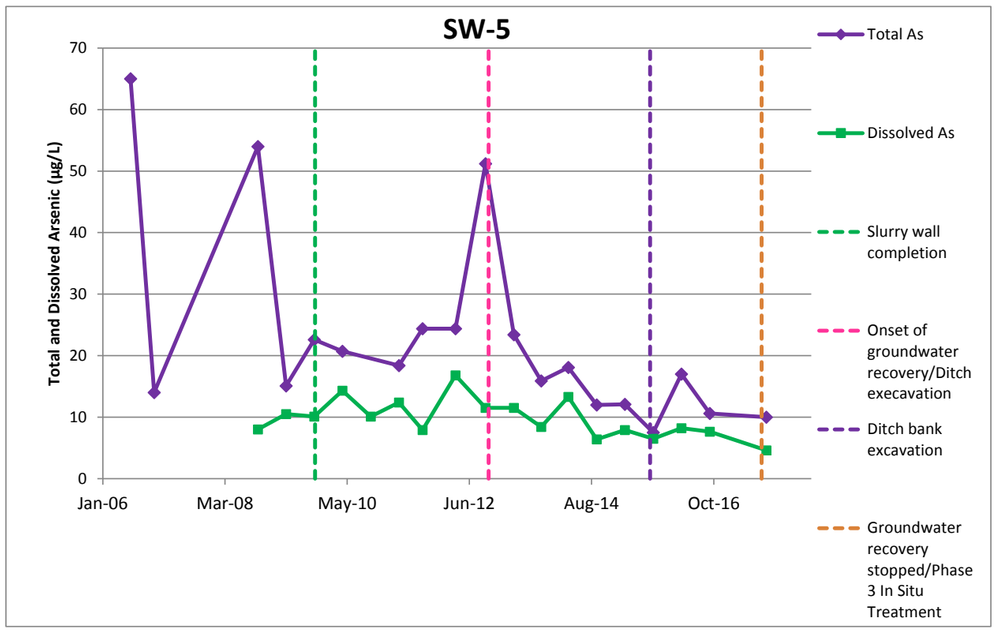


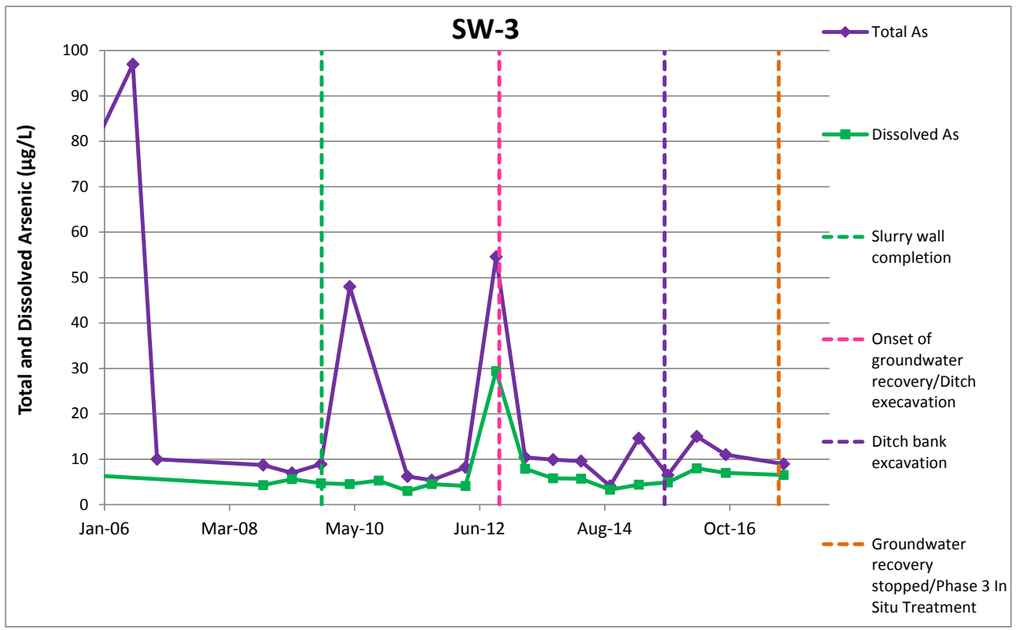


Attachment 1
Time-Concentration Plots









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

August 1, 2018

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 July 25, 2018 from the B and L Woodwaste, F&BI 807490 project. There are 16 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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
FDS0801R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 25, 2018 by Friedman & Bruya, Inc. from the Floyd-Snider B and L Woodwaste, F&BI 807490 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Floyd-Snider
807490 -01	BLW-GW-D8A
807490 -02	BLW-GW-D8B
807490 -03	BLW-GW-PZ3A
807490 -04	BLW-GW-PZ4A
807490 -05	BLW-GW-173
807490 -06	BLW-GW-PZ5A
807490 -07	BLW-GW-MW33
807490 -08	BLW-GW-PD214
807490 -09	BLW-GW-MW34
807490 -10	BLW-GW-MW40B
807490 -11	BLW-GW-R15
807490 -12	BLW-GW-W1

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	BLW-GW-D8A	Client:	Floyd-Snider
Date Received:	07/25/18	Project:	B and L Woodwaste, F&BI 807490
Date Extracted:	07/26/18	Lab ID:	807490-01
Date Analyzed:	07/26/18	Data File:	807490-01.042
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	152

Analysis For Total Metals By EPA Method 200.8

Client ID:	BLW-GW-D8B	Client:	Floyd-Snider
Date Received:	07/25/18	Project:	B and L Woodwaste, F&BI 807490
Date Extracted:	07/26/18	Lab ID:	807490-02
Date Analyzed:	07/26/18	Data File:	807490-02.043
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	9.05

Analysis For Total Metals By EPA Method 200.8

Client ID:	BLW-GW-PZ3A	Client:	Floyd-Snider
Date Received:	07/25/18	Project:	B and L Woodwaste, F&BI 807490
Date Extracted:	07/26/18	Lab ID:	807490-03
Date Analyzed:	07/26/18	Data File:	807490-03.044
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	196

Analysis For Total Metals By EPA Method 200.8

Client ID:	BLW-GW-PZ4A	Client:	Floyd-Snider
Date Received:	07/25/18	Project:	B and L Woodwaste, F&BI 807490
Date Extracted:	07/26/18	Lab ID:	807490-04
Date Analyzed:	07/26/18	Data File:	807490-04.045
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	6.89

Analysis For Total Metals By EPA Method 200.8

Client ID:	BLW-GW-173	Client:	Floyd-Snider
Date Received:	07/25/18	Project:	B and L Woodwaste, F&BI 807490
Date Extracted:	07/26/18	Lab ID:	807490-05
Date Analyzed:	07/26/18	Data File:	807490-05.046
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	189

Analysis For Total Metals By EPA Method 200.8

Client ID:	BLW-GW-PZ5A	Client:	Floyd-Snider
Date Received:	07/25/18	Project:	B and L Woodwaste, F&BI 807490
Date Extracted:	07/26/18	Lab ID:	807490-06
Date Analyzed:	07/26/18	Data File:	807490-06.047
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	316

Analysis For Total Metals By EPA Method 200.8

Client ID:	BLW-GW-MW33	Client:	Floyd-Snider
Date Received:	07/25/18	Project:	B and L Woodwaste, F&BI 807490
Date Extracted:	07/26/18	Lab ID:	807490-07
Date Analyzed:	07/26/18	Data File:	807490-07.048
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	188

Analysis For Total Metals By EPA Method 200.8

Client ID:	BLW-GW-PD214	Client:	Floyd-Snider
Date Received:	07/25/18	Project:	B and L Woodwaste, F&BI 807490
Date Extracted:	07/26/18	Lab ID:	807490-08
Date Analyzed:	07/26/18	Data File:	807490-08.049
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	6.37

Analysis For Total Metals By EPA Method 200.8

Client ID:	BLW-GW-MW34	Client:	Floyd-Snider
Date Received:	07/25/18	Project:	B and L Woodwaste, F&BI 807490
Date Extracted:	07/26/18	Lab ID:	807490-09
Date Analyzed:	07/26/18	Data File:	807490-09.052
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	9.19

Analysis For Total Metals By EPA Method 200.8

Client ID:	BLW-GW-MW40B	Client:	Floyd-Snider
Date Received:	07/25/18	Project:	B and L Woodwaste, F&BI 807490
Date Extracted:	07/26/18	Lab ID:	807490-10
Date Analyzed:	07/26/18	Data File:	807490-10.053
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	10.3

Analysis For Total Metals By EPA Method 200.8

Client ID:	BLW-GW-R15	Client:	Floyd-Snider
Date Received:	07/25/18	Project:	B and L Woodwaste, F&BI 807490
Date Extracted:	07/26/18	Lab ID:	807490-11
Date Analyzed:	07/26/18	Data File:	807490-11.054
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	503

Analysis For Total Metals By EPA Method 200.8

Client ID:	BLW-GW-W1	Client:	Floyd-Snider
Date Received:	07/25/18	Project:	B and L Woodwaste, F&BI 807490
Date Extracted:	07/26/18	Lab ID:	807490-12
Date Analyzed:	07/26/18	Data File:	807490-12.055
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	9.96

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Floyd-Snider
Date Received:	Not Applicable	Project:	B and L Woodwaste, F&BI 807490
Date Extracted:	07/26/18	Lab ID:	I8-481 mb2
Date Analyzed:	07/26/18	Data File:	I8-481 mb2.041
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Date of Report: 08/01/18
Date Received: 07/25/18
Project: B and L Woodwaste, F&BI 807490

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 807464-03 (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	56.8	117	115	70-130	2

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 compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.

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.

8074490

SAMPLE CHAIN OF CUSTODY

ME 07-25-18

ATY

Page # 1 of 2

Report To Brett Beaulieu

Company Floyd Snider

Address 601 Union St, Suite 600

City, State, ZIP Seattle, WA 98101

Phone 206 292-2078 Email Brett.Beaulieu@FloydSnider.com

SAMPLERS (*signature*)

PROJECT NAME: BtL Woodwaste

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				Notes
BLW-GW-D8A	01	7/24/18	0944	GW	1								X				
BLW-GW-D8B	02		1002		1								X				
BLW-GW-PZ3A	03		1045		1								X				
BLW-GW-PZ4A	04		1045		1								X				
BLW-GW-173	05		1200		1								X				
BLW-GW-PZ5A	06		1217		1								X				
BLW-GW-MW33	07		14:45		1								X				
BLW-GW-PD214	08	7/25/18	0922		1								X				
BLW-GW-MW34	09		0937		1								X				Samples received at 4 °C
BLW-GW-MW40B	10		0955		1								X				

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Pamela Osterhout	Floyd Snider	7/25/18	1425
Received by:		Eric Houn	F&B	7/25/18	MRX
Relinquished by:					
Received by:					

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

807490

SAMPLE CHAIN OF CUSTODY

ME 07-25-18

AEY

Page # 2 of 2

Send Report To Brett Beaulieu

Company Floyd Snider

Address

City, State, ZIP see page 1

Phone # Fax #

SAMPLERS (signature)

PROJECT NAME/NO. B+L Woodwaste

PO#

REMARKS

TURNAROUND TIME
- [x] Standard (2 Weeks)
- [ ] RUSH
- Rush charges authorized by

SAMPLE DISPOSAL
- [x] Dispose after 30 days
- [ ] Return samples
- [ ] Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS	Total Arsenic						Notes
BLW-GW-R15	11	7/25/18	10:40	GW	1							X						
BLW-GW-W1	12	↓	12:07	GW	1							X						

P.O.

Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Pamela Osterhout	Floyd Snider	7/25/18	1425
Received by:	Eric Young	F-B	7/26/18	1425
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044