OCTOBER 2016
GROUNDWATER MONITORING

Mac's One Hour Cleaners
10825 SE 176th Street
Renton, Washington

TRI WESTERN INVESTMENTS, LLC.

ENVIRONMENTAL
ASSOCIATES, INC.

1380 - 112th Avenue Northeast, Suite 300
Bellevue, Washington 98004
(425) 455-9025 Office
(888) 453-5394 Toll Free
(425) 455-2316 Fax

November 22, 2016

JN-20209-5

Mr. Colin Radford
Tri Western Investments, LLC.
10423 Main Street, Suite #4
Bellevue, Washington 98004

RE: OCTOBER 2016 - GROUNDWATER MONITORING
Mac's One Hour Cleaners
10825 SE 176th Street
Renton, Washington

Dear Mr. Radford:

Environmental Associates, Inc. (EAI) has completed a regularly scheduled Fall groundwater monitoring event in accordance with Tri Western Investments, LLC's authorization to sample on-site monitoring wells semi-annually until further notice.

Brief Project Background

A dry-cleaner has operated as a tenant on the subject property since the 1960s. In 2009, the Client / property owner (Tri-Western Syndicated Investments) received notice from the west/southwest adjacent property owner (Bayview) that dry-cleaning solvents (tetrachloroethene or "perc" / PCE) had been discovered beneath their parcel and that they (Bayview) suspected that the source was the dry-cleaner on the subject property. Since that discovery, numerous phases of explorations on and off the subject parcel have occurred along with focused remedial actions.

A network of nine (9) groundwater monitoring wells located on the subject parcel as well as on the adjacent Bayview parcel have been periodically sampled since December 2011. In May 2014, a total of 800 pounds of 3-D ME hydrogen releasing compound (HRC) along with 210 pounds of HRC-Primer, both manufactured by Regenesis, was reapplied to an existing interceptor trench adjacent to the west side of the building.

In April 2016, three (3) additional monitoring wells (MW-10 through MW-12), were installed on the "Bank Parcel" bringing the total number of monitoring wells in the study area to twelve (12). The groundwater monitoring wells (MW-1 through MW-12) were last sampled in April 2016.

Scope of Work

The following scope of work has been adopted for performance of this groundwater monitoring event:

- Measure current depths to groundwater in all twelve (12) study area monitoring wells (MW-1 through MW-12). Utilize the data to prepare an updated water table survey and groundwater flow interpretive map.

- Collect representative groundwater samples from each monitoring well using a low-flow micro-purging technique with a peristaltic pump.

- Submit all recovered groundwater samples to the project laboratory with analysis for chlorinated volatile organic compounds (CVOCs) by EPA test method 8260.

- Prepare a written summary report documenting field methods, observations, findings, and conclusions.

April 2016 - Water Table Survey

The current groundwater monitoring event was performed on October 5th and 6th, 2016. Prior to micro-purging, the depth to groundwater below the top of each well casing was measured. These depths to groundwater along with the corresponding deduced elevations of the water table at each well location are recorded on the data tables for each monitoring well included in Appendix-A.

Consistent with normal seasonal fluctuations in precipitation and resulting changes in groundwater levels, during this current event, water table elevations were, on average, approximately 1.7-feet lower than water levels measured during the prior April 2016 sampling event. Plate 3, Water Table Survey presents a graphical representation of the shallow water table and deduced groundwater flow directions based upon the current geometry of monitoring wells. Examining Plate 3, groundwater flow appears to follow a curving flow path, which begins as southwesterly flow near the northeastern corner of the property and then appears to transition to a more northwesterly direction through the west adjacent Bank Parcel. Groundwater flow regimes appear generally consistent with prior surveys.

October 2016 - Groundwater Sampling

The twelve (12) monitoring wells were sampled between October 5th and 6, 2016. Each existing monitoring well was first "micro-purged" utilizing a peristaltic pump. Following purging, groundwater samples were transferred directly to laboratory-prepared glassware.

Laboratory Results & Discussion

The twelve (12) groundwater samples were analyzed by the project laboratory for chlorinated volatile organic compounds by EPA test method 8260B. The current concentrations of PCE in groundwater are presented in the table below and graphically presented on Plate 4. Additionally, the current results for all contaminants tested for along with all prior laboratory results are presented in the Data Tables in Appendix-A. A copy of the laboratory report is included as Appendix-B.

PCE Concentrations In Parts Per Billion (ppb) Prior & Current Sampling Events

Monitoring Well	Prior Event (April 2016)	Current Event (Oct. 2016)
MW-1	<1	<1
MW-2	**32**	**49**
MW-3	**70**	**45**
MW-4	4.4	1.3
MW-5	**18**	**39**
MW-6	**67**	**64**
MW-7	**49**	**75**
MW-8	1.2	1.5
MW-9	**5.1**	<1
MW-10	**37**	**65**
MW-11	**130**	**120**
MW-12	<1	<1

In the table above, bold denotes concentrations of PCE above the WDOE's target compliance level of 5 ppb.

During this current sampling event, PCE was detected in nine (9) of the twelve (12) water well samples. Of those monitoring wells, seven (7) contained PCE at concentrations above the WDOE's target compliance level of 5 parts per billion (ppb). Lab results for four (4) of the wells displayed increases in concentrations and three (3) exhibited declines in concentration of PCE since the prior Spring 2016 sampling event. Historically the Fall sampling event has exhibited increases in concentrations compared to the Spring sampling events, suggesting a cyclical correlation with water table levels between the wetter Spring and dryer Fall sampling events. This cyclical effect can be seen graphically on Charts 2 and 3 attached. Viewed in perspective, though overall both of these charts still appear to exhibit a very slight declining concentration trend over time.

Next Sampling Event

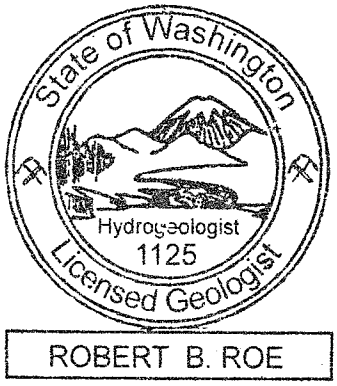
The next sampling event is tentatively scheduled to occur in April 2017.

Limitations

This letter report has been prepared specific application to this project in a manner consistent with that level of care and skill normally exercised by members of the environmental science profession currently practicing under similar conditions in the area. This document is for the exclusive of Tri Western Investments, LLC., along with its members and appointed representatives. Discussion with respect to subsurface environmental conditions relies solely upon the results of sampling and testing conducted at separated sampling localities and environmental conditions may vary between those localities or at other locations, depths, and/or media. No other warranty, expressed or implied, is made here. If new information is acquired or developed in future site work Environmental Associates, Inc., must be retained to reevaluate the conclusions of this letter report and to provide amendments as required.

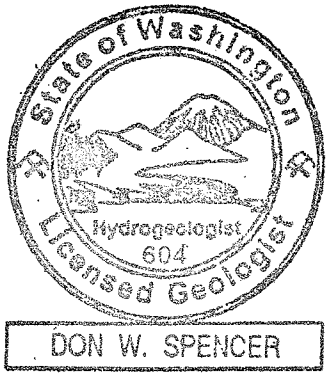
We appreciate the opportunity to be of service on this project and trust that the information provided here is fully responsive to your needs. If you have any questions or we may be of additional service, please do not hesitate to contact us.

Respectfully submitted,
ENVIRONMENTAL ASSOCIATES, INC.



Robert B. Roe, M.Sc., P.G.
Project Manager/Hydrogeologist

License: 1125 (Washington)



Don W. Spencer, M.Sc., P.G., R.E.A.
Principal

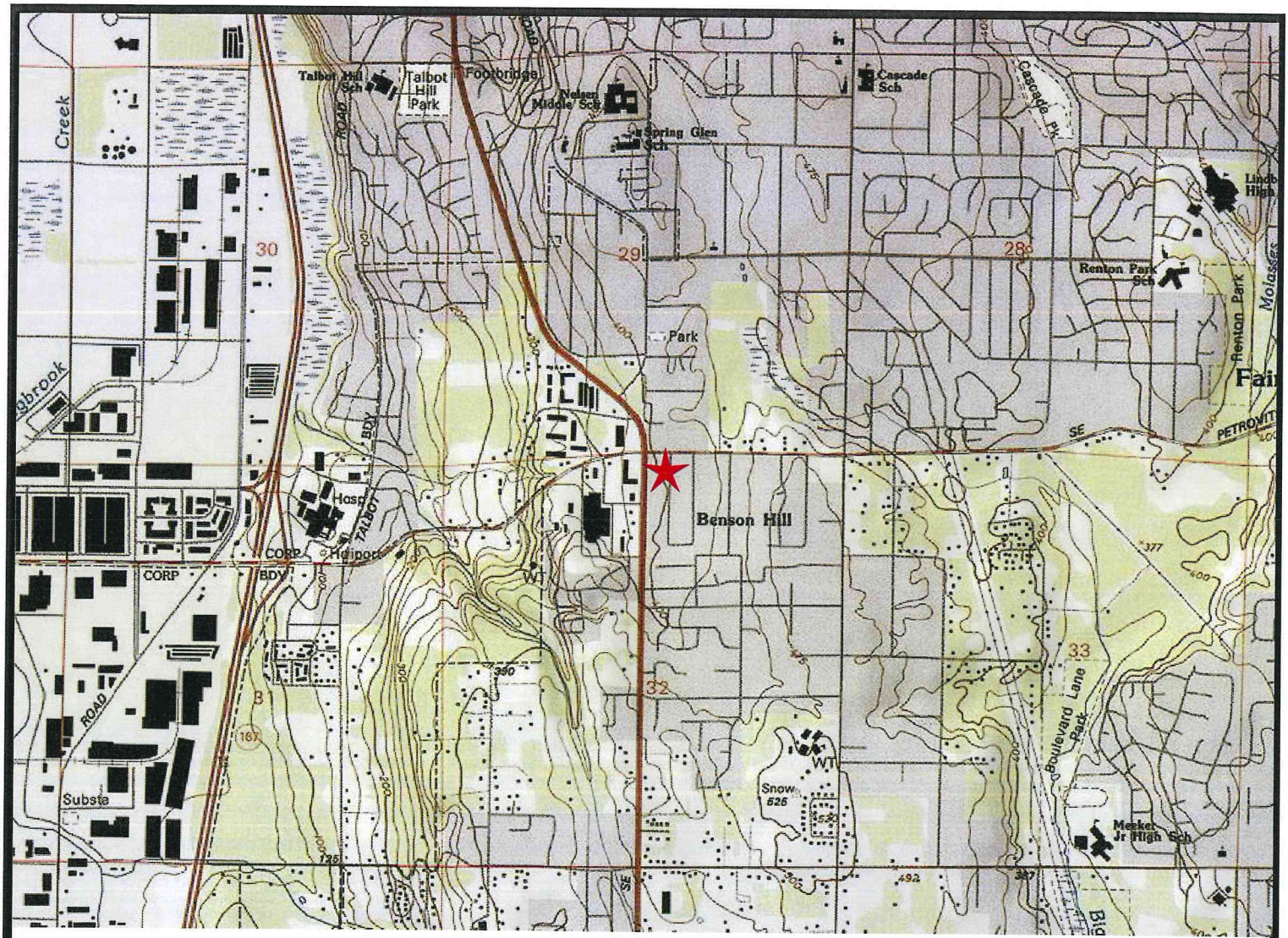
License: 604 (Washington)
License: 11464 (Oregon)
License: 876 (California)
License: 5195 (Illinois)
License: 0327 (Mississippi)

Attachments:

Plate 1 - Vicinity / Topographic Map
Plate 2 - Study Area - Overview
Plate 3 - Water Table Survey
Plate 4 - PCE In Groundwater

Chart 1: Hydrograph
Chart 2: PCE Concentration Trends
Chart 3: Average PCE Concentration in Study Area Groundwater

Appendix-A: Data Tables MW-1 Through MW-12
Appendix-B: Laboratory Reports



USGS: 7.5 Minute Quadrangle: Renton, Washington
Contour Interval: 25 feet

Scale

0 — 1/2 Mile — 1

Subject Property Location

Inferred groundwater flow direction based upon the local topographical gradient in the vicinity of the subject property.

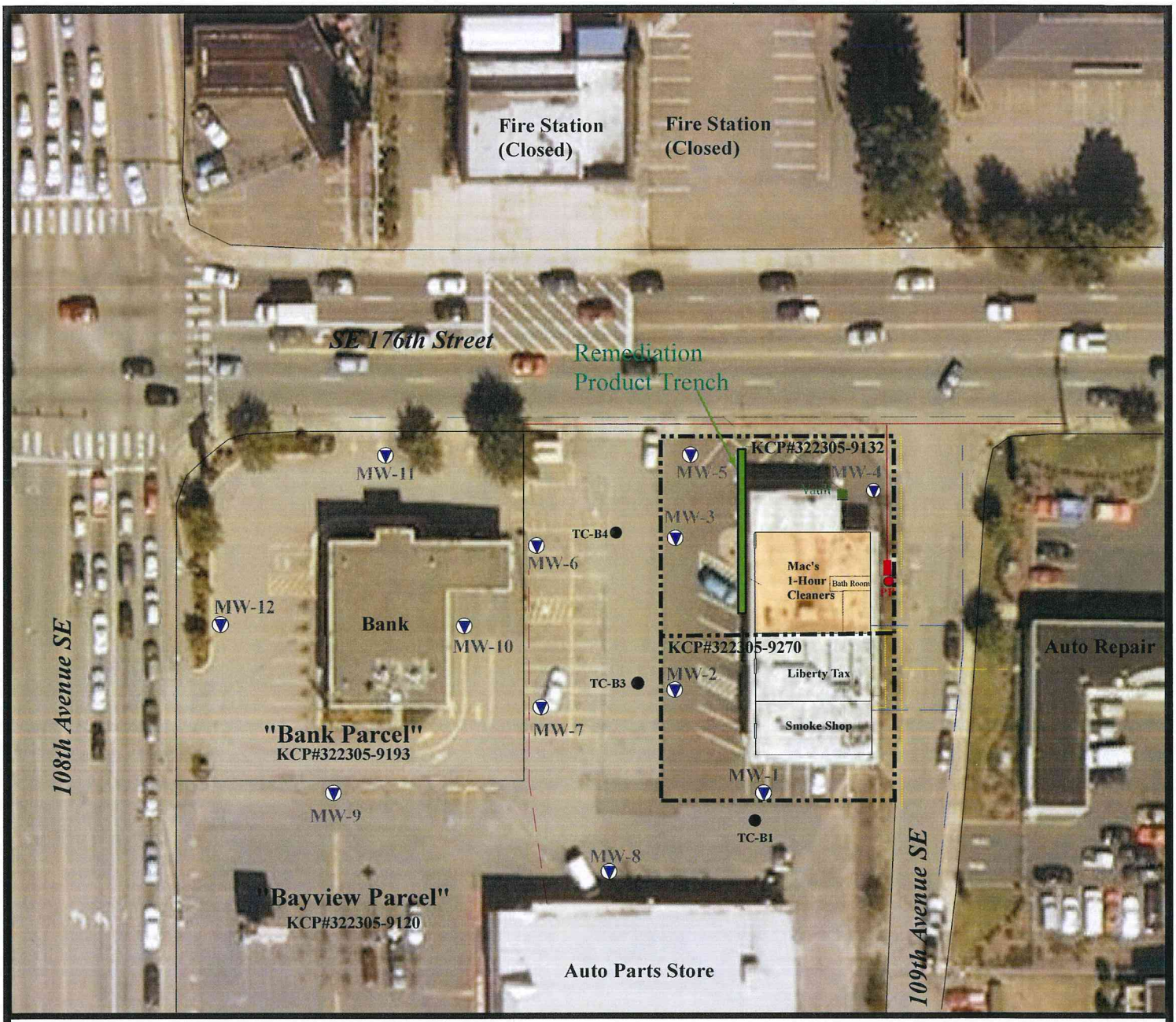
ENVIRONMENTAL ASSOCIATES, INC.

1380 - 112th Avenue NE, Suite 300
Bellevue, Washington 98004

VICINITY / TOPOGRAPHIC MAP

Mac's One Hour Cleaners
10825 SE 176th Street
Renton, Washington

Job Number:	*Date:*		*Plate:*
JN-20209-5	October 2016		1



Approximate border of Subject Parcel.

KCP#: King County tax parcel numbers.

Existing Monitoring wells installed by EAI.

Approximate locations of borings made by Terracon (TC) on the adjacent property.

Approximate locations of underground utilities: Power (red), water (blue), natural gas (yellow), phone (orange), and sanitary sewer / storm drain (green).

N

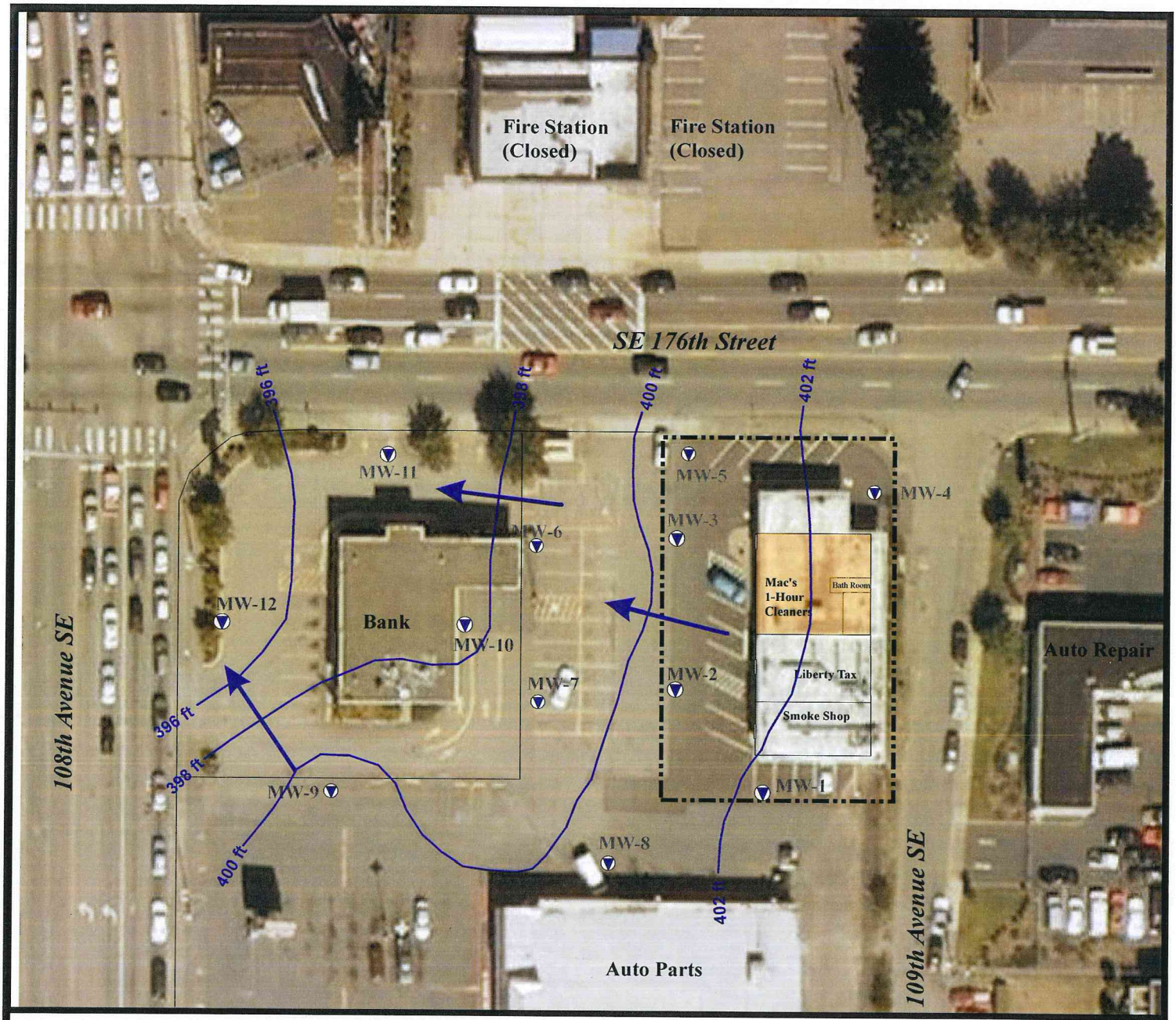
ENVIRONMENTAL ASSOCIATES, INC.

1380 - 112th Avenue NE, Suite 300
Bellevue, Washington 98004

STUDY AREA - OVERVIEW

Mac's One Hour Cleaners
10825 SE 176th Street
Renton, Washington

Job Number:	*Date:*	*Scale:*	*Plate:*
JN-20209-5	October 2016	1"=80'	2



Approximate border of Subject Property

Water Table equal elevation contour lines and inferred groundwater flow direction.

Existing monitoring well locations.

N

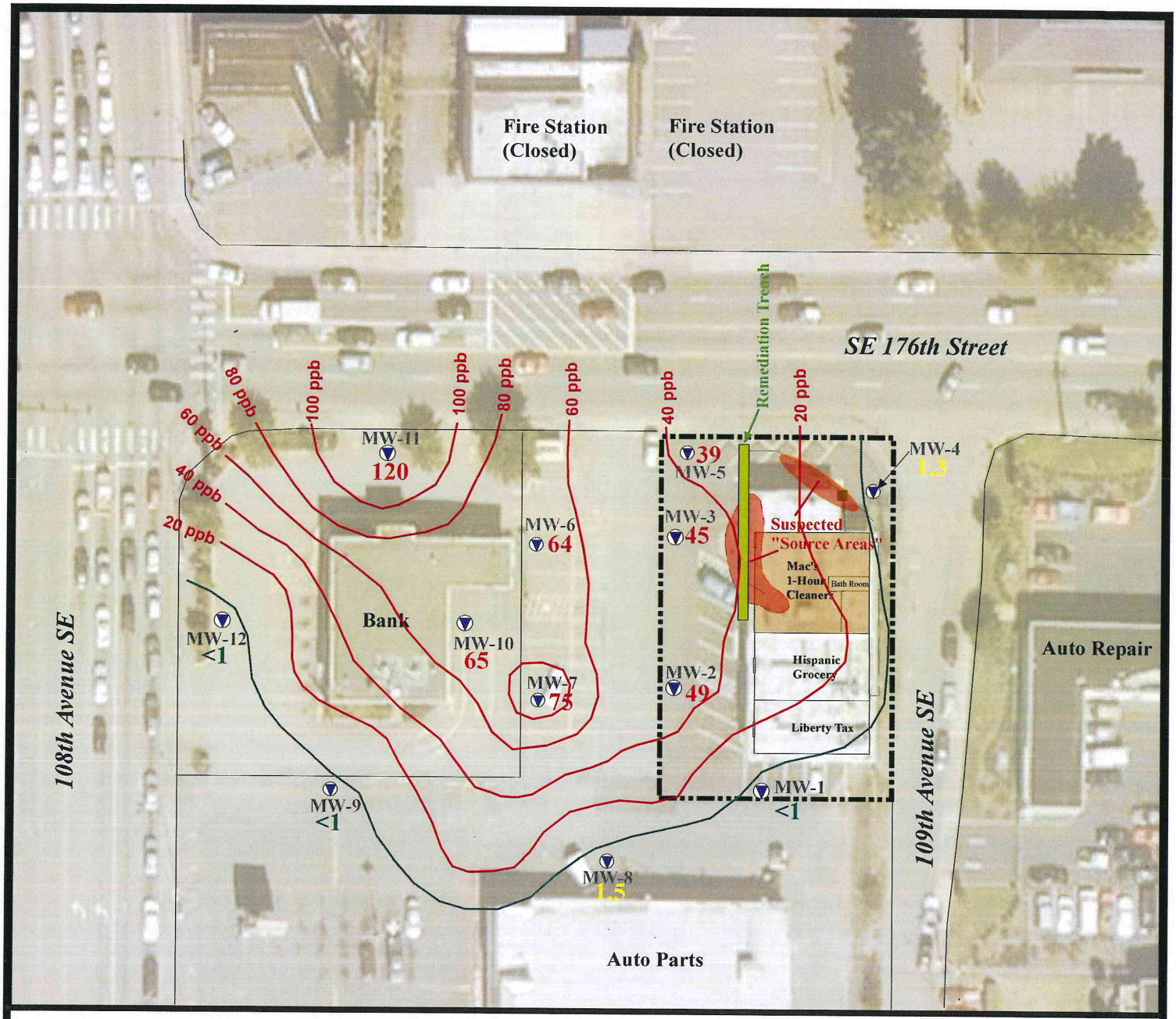
ENVIRONMENTAL ASSOCIATES, INC.

1380 112th Avenue N.E., Ste. 300
Bellevue, Washington 98004

WATER TABLE SURVEY

Mac's One Hour Cleaners
10825 SE 176th Street
Renton, Washington

Job Number:	Date:	Scale:	Plate:
JN-20209-5	Oct 2016	1"=80'	3



Approximate border of Subject Property

PCE groundwater plume concentration contour lines. Concentrations are in parts per billion (ppb).
The WDOE target compliance level for PCE in groundwater is 5 parts per billion (ppb).
Red denotes contour lines representing concentrations above the WDOE's target compliance level.
Green contour lines infer approximate points of compliance.

Existing monitoring well locations.

N

ENVIRONMENTAL ASSOCIATES, INC.
1380 - 112th Avenue NE, Suite 300
Bellevue, Washington 98004

PCE IN GROUNDWATER

Mac's One Hour Cleaners
10825 SE 176th Street
Renton, Washington

Job Number:	Date:	Scale:	Plate:
JN-20209-5	October 2016	1"=80'	4

CHART 1: Hydrograph

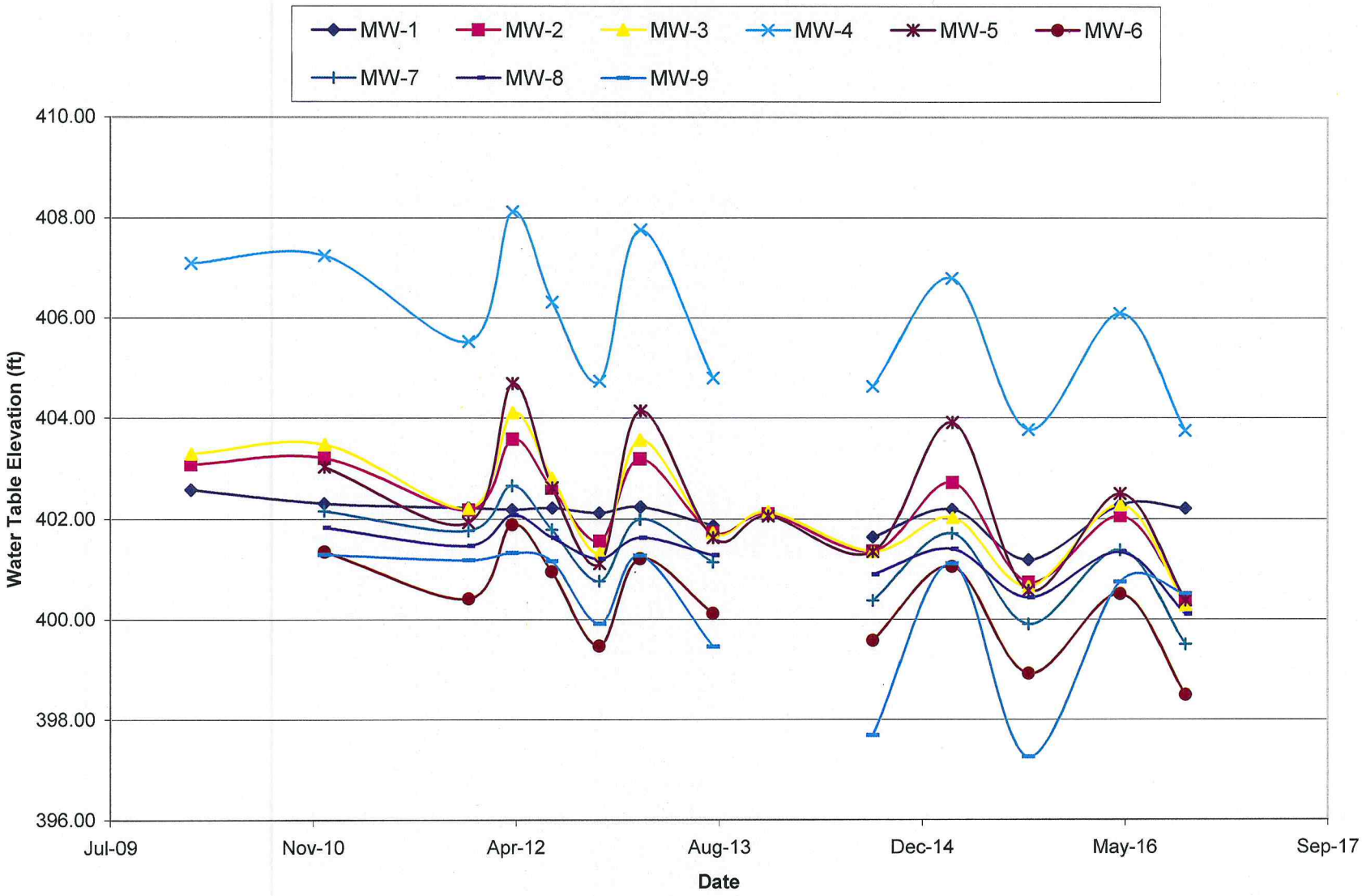


CHART 2: PCE Concentration Trends

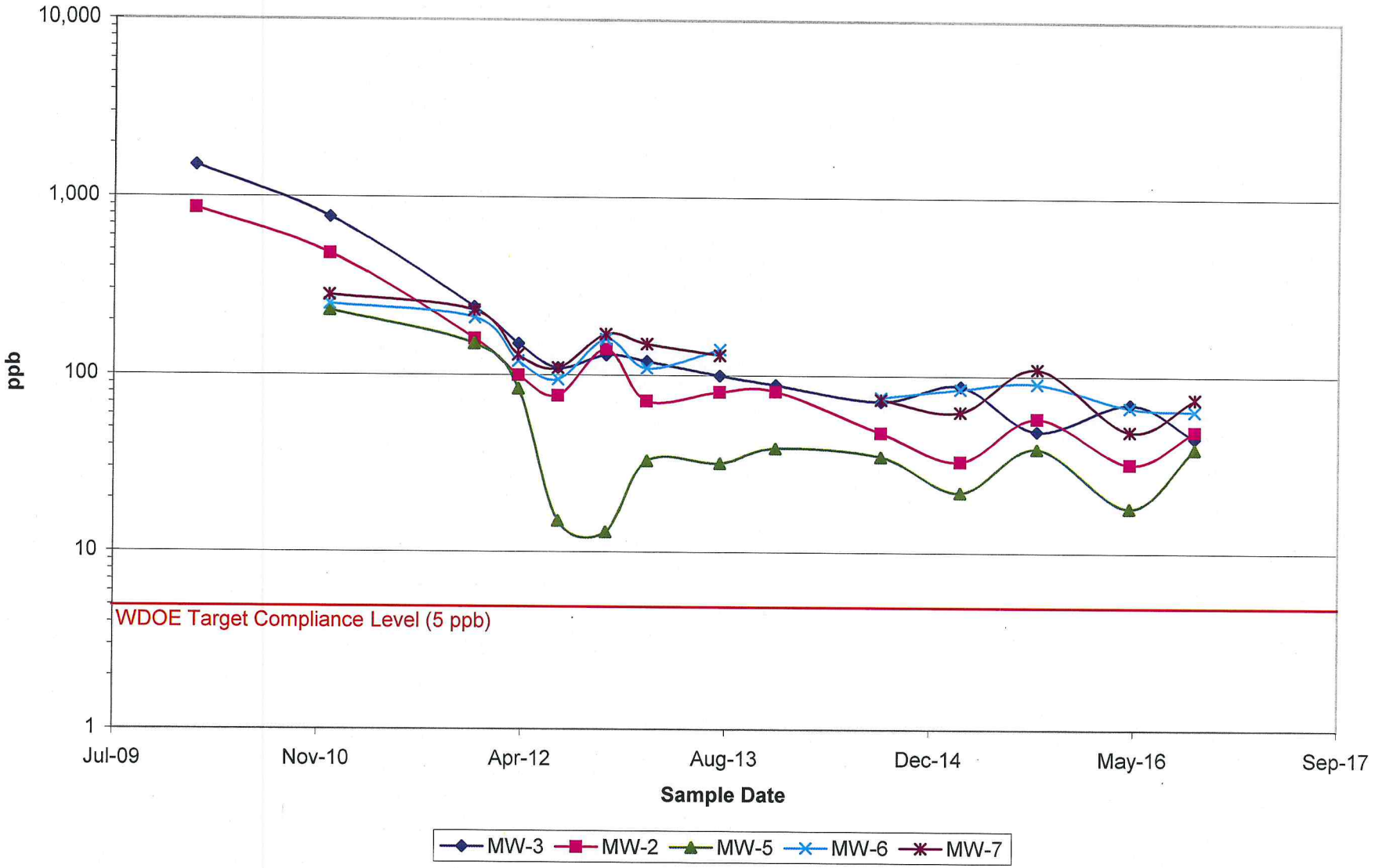
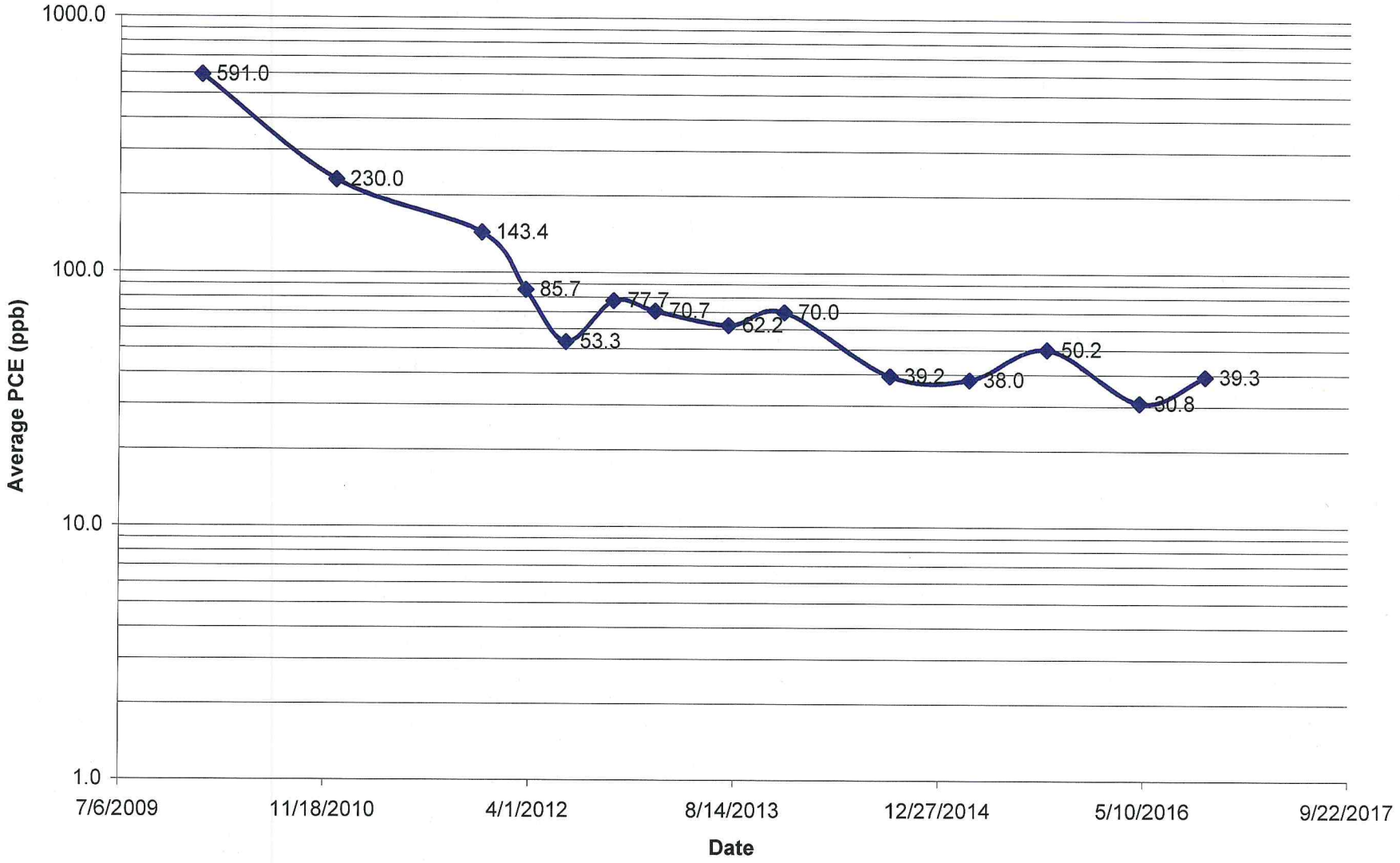


Chart 3: Average PCE Concentration in Study Area Groundwater



APPENDIX-A

Data Tables
MW-1 Through MW-12

DATA TABLE: MW-1
Groundwater Sampling Results in parts per billion (ppb)

Monitoring Well	Tetrachloroethene (PCE)	Trichloroethene (TCE)	(cis) 1,2 Dichloroethene	(trans) 1,2 Dichloroethene	Vinyl Chloride	Depth to Water	Net Change	Water Table Elevation	pH	Conductivity (mS/m)	Temperature (Celsius)	REDOX Potential (mV)	Dissolved Oxygen (mg/L)
MW-1													
1/20/2010	1.5	<1	<1	<1	<0.2	5.11		402.58	7.29	15.3	13.0	-93	3.69
12/15/2010	1.5	<1	<1	<1	<0.2	5.38	-0.27	402.31	5.9	9.1	12.6	110	7.12
12/5/2011	<1	<1	<1	<1	<0.2	5.47	-0.09	402.22	6.36	5.4	13.7	89	2.34
3/22/2012	<1	<1	<1	<1	<0.2	5.50	-0.03	402.19	6.16	8.1	9.87	321	8.76
6/29/2012	1.1	<1	<1	<1	<0.2	5.47	0.03	402.22	6.45	11.3	16.73	127	8.56
10/23/2012	<1	<1	<1	<1	<0.2	5.57	-0.10	402.12	6.29	3.7	15.7	446	2.97
2/1/2013	<1	<1	<1	<1	<0.2	5.45	0.12	402.24	6.09	10	10.7	182	6.65
7/30/2013	<1	<1	<1	<1	<0.2	5.82	-0.37	401.87	6.14	1.32	19.9	190	4.8
12/13/2013													
8/28/2014	<1	<1	<1	<1	<0.2	6.05	-0.23	401.64					
3/10/2015	<1	<1	<1	<1	<0.2	5.5	0.55	402.19					
9/15/2015	<1	<1	<1	<1	<0.2	6.51	-1.01	401.18					
4/29/2016	<1	<1	<1	<1	<0.2	5.41	1.10	402.28					
10/5/2016	<1	<1	<1	<1	<0.2	5.48	-0.07	402.21					
Reporting Limit [3]	1	1	1	1	0.2								
Existing Cleanup Level[4]	5 (A)	5 (A)	16 (B)	160 (B)	0.2 (A)								

Notes:
1 - "ND" denotes analyte not detected at or above listed Reporting Limit.
2- "NA" denotes sample not analyzed for specific analyte.
3- "Reporting Limit" represents the laboratory lower quantitation limit.
4- Method A or B groundwater cleanup levels as published in the Model Toxics Control Act (MTCA) 173-340-WAC, amended 2/12/01.

Bold and Italics denotes concentrations above existing MTCA Method A groundwater cleanup levels.

DATA TABLE: MW-2
Groundwater Sampling Results in parts per billion (ppb)

Monitoring Well	Tetrachloroethene (PCE)	Trichloroethene (TCE)	(cis) 1,2 Dichloroethene	(trans) 1,2 Dichloroethene	Vinyl Chloride	Depth to Water	Net Change	Water Table Elevation	pH	Conductivity (mS/m)	Temperature (Celsius)	REDOX Potential (mV)	Dissolved Oxygen (mg/L)
MW-2													
1/20/2010	***860***	1.7	<1	<1	<0.2	5.36		403.08	6.55	12.2	14.3	37	2.52
12/16/2010	***480***	1.7	<1	<1	<0.2	5.24	0.12	403.20	5.43	12.7	14.9	223	6.64
12/6/2011	***160***	<1	<1	<1	<0.2	6.26	-1.02	402.18	6.35	7.5	15.5	209	5.17
3/23/2012	***100***	<1	<1	<1	<0.2	4.86	1.40	403.58	5.19	13.1	10.89	306	8.03
6/28/2012	***77***	<1	<1	<1	<0.2	5.83	-0.97	402.61	6.12	13.1	17.00	251	6.91
10/24/2012	***140***	<1	<1	<1	<0.2	6.88	-1.05	401.56	6.28	11.0	19.1	473	5.24
1/31/2013	***72***	<1	<1	<1	<0.2	5.25	1.63	403.19	5.94	11.7	12.7	215	6.28
7/29/2013	***81***	<1	<1	<1	<0.2	6.70	-1.45	401.74	5.82	11.5	19.2	293	8
12/13/2013	***82***	<1	<1	<1	<0.2	6.34	0.36	402.1					
8/28/2014	***48***	<1	<1	<1	<0.2	7.08	-0.74	401.36					
3/11/2015	***33***	<1	<1	<1	<0.02	5.72	1.36	402.72					
9/15/2015	***58***	<1	<1	<1	<0.02	7.71	-1.99	400.73					
4/29/2016	***32***	<1	<1	<1	<0.02	6.38	1.33	402.06					
10/5/2016	***49***	<1	<1	<1	<0.02	8.05	-1.67	400.39					
Reporting Limit [3]	1	1	1	1	0.2								
Existing Cleanup Level[4]	5 (A)	5 (A)	16 (B)	160 (B)	0.2 (A)								

Notes:
1 - "ND" denotes analyte not detected at or above listed Reporting Limit.
2- "NA" denotes sample not analyzed for specific analyte.
3- "Reporting Limit" represents the laboratory lower quantitation limit.
4- Method A or B groundwater cleanup levels as published in the Model Toxics Control Act (MTCA) 173-340-WAC, amended 2/12/01.

Bold and Italics denotes concentrations above existing MTCA Method A groundwater cleanup levels.

DATA TABLE: MW-3
Groundwater Sampling Results in parts per billion (ppb)

Monitoring Well	Tetrachloroethene (PCE)	Trichloroethene (TCE)	(cis) 1,2 Dichloroethene	(trans) 1,2 Dichloroethene	Vinyl Chloride	Depth to Water	Net Change	Water Table Elevation	pH	Conductivity (mS/m)	Temperature (Celsius)	REDOX Potential (mV)	Dissolved Oxygen (mg/L)
MW-3													
1/20/2010	***1,500***	1.4	<1	<1	<0.2	5.55		403.29	6.63	21.8	14.2	200	5.56
12/16/2010	***770***	1.7	<1	<1	<0.2	5.39	0.16	403.47	5.54	21.9	14.9	225	7.49
12/5/2011	***240***	<1	<1	<1	<0.2	6.65	-1.26	402.21	6.19	16.8	15.4	217	6.13
3/23/2012	***150***	<1	<1	<1	<0.2	4.76	1.89	404.10	5.71	23.7	11.47	311	7.91
6/28/2012	***110***	<1	<1	<1	<0.2	6.05	-1.29	402.81	5.95	28.8	16.82	269	8.22
10/24/2012	***130***	<1	<1	<1	<0.2	7.54	-1.49	401.32	6.24	25.0	18.3	473	5.06
1/31/2013	***120***	<1	<1	<1	<0.2	5.30	2.24	403.56	5.66	32.8	12.5	238	3.43
7/29/2013	***100***	<1	1.4	<1	<0.2	7.13	-1.83	401.73	5.75	23.7	19.1	312	6.9
12/13/2013	***89***	<1	3.6	<1	<0.2	6.72	0.41	402.14					
8/28/2014	***72***	1.1	<1	<1	<0.2	7.51	-0.79	401.35					
3/11/2015	***88***	1.3	1.3	<1	<0.2	6.84	0.67	402.02					
9/15/2015	***49***	1.8	<1	<1	<0.2	8.22	-1.38	400.64					
4/29/2016	***70***	<1	<1	<1	<0.2	6.58	1.64	402.28					
10/5/2016	***45***	1.0	<1	<1	<0.2	8.59	-2.01	400.27					
Reporting Limit [3]	1	1	1	1	0.2								
Existing Cleanup Level[4]	5 (A)	5 (A)	16 (B)	160 (B)	0.2 (A)								

Notes:
1 - "ND" denotes analyte not detected at or above listed Reporting Limit.
2- "NA" denotes sample not analyzed for specific analyte.
3- "Reporting Limit" represents the laboratory lower quantitation limit.
4- Method A or B groundwater cleanup levels as published in the Model Toxics Control Act (MTCA) 173-340-WAC, amended 2/12/01.

Bold and Italics denotes concentrations above existing MTCA Method A groundwater cleanup levels.

DATA TABLE: MW-4
Groundwater Sampling Results in parts per billion (ppb)

Monitoring Well	Tetrachloroethene (PCE)	Trichloroethene (TCE)	(cis) 1,2 Dichloroethene	(trans) 1,2 Dichloroethene	Vinyl Chloride	Depth to Water	Net Change	Water Table Elevation	pH	Conductivity (mS/m)	Temperature (Celsius)	REDOX Potential (mV)	Dissolved Oxygen (mg/L)
MW-4													
1/20/2010	2.6	<1	<1	<1	<0.2	5.65		407.09	6.86	33.4	13.5	221	5.88
12/16/2010	***6.8***	<1	<1	<1	<0.2	5.53	0.12	407.24	5.64	31.1	14.0	216	6.64
12/6/2011	3.6	<1	<1	<1	<0.2	7.24	-1.71	405.53	6.31	20.3	14.1	220	5.05
3/23/2012	3.6	<1	<1	<1	<0.2	4.65	2.59	408.12	5.76	40.5	11.01	356	7.86
6/29/2012	2.9	<1	<1	<1	<0.2	6.45	-1.80	406.32	6.08	29.7	15.87	199	8.71
10/24/2012	2.6	<1	<1	<1	<0.2	8.03	-1.58	404.74	6.47	26.5	17.8	373	5.15
2/1/2013	3.2	<1	<1	<1	<0.2	5.01	3.02	407.76	5.86	29.7	12.6	222	5.01
7/30/2013	3.4	<1	<1	<1	<0.2	7.97	-2.96	404.8	5.81	28	18.5	272	6.3
12/13/2013													
8/28/2014	4.8	<1	<1	<1	<0.2	8.14	-0.17	404.63					
3/10/2015	3.7	<1	<1	<1	<0.2	5.98	2.16	406.79					
9/15/2015	2.7	<1	<1	<1	<0.2	9	-3.02	403.77					
4/28/2016	4.4	<1	<1	<1	<0.2	6.68	2.32	406.09					
10/5/2016	1.3	<1	<1	<1	<0.2	9.02	-2.34	403.75					
Reporting Limit [3]	1	1	1	1	0.2								
Existing Cleanup Level[4]	5 (A)	5 (A)	16 (B)	160 (B)	0.2 (A)								

Notes:
1 - "ND" denotes analyte not detected at or above listed Reporting Limit.
2- "NA" denotes sample not analyzed for specific analyte.
3- "Reporting Limit" represents the laboratory lower quantitation limit.
4- Method A or B groundwater cleanup levels as published in the Model Toxics Control Act (MTCA) 173-340-WAC, amended 2/12/01.

Bold and Italics denotes concentrations above existing MTCA Method A groundwater cleanup levels.

DATA TABLE: MW-5
Groundwater Sampling Results in parts per billion (ppb)

Monitoring Well	Tetrachloroethene (PCE)	Trichloroethene (TCE)	(cis) 1,2 Dichloroethene	(trans) 1,2 Dichloroethene	Vinyl Chloride	Depth to Water	Net Change	Water Table Elevation	pH	Conductivity (mS/m)	Temperature (Celsius)	REDOX Potential (mV)	Dissolved Oxygen (mg/L)
MW-5													
12/16/2010	***230***	1.9	<1	<1	<0.2	7.06		403.03	5.72	14.7	15.3	219	6.77
12/5/2011	***150***	<1	<1	<1	<0.2	8.16	-1.10	401.93	6.30	9.3	15.3	198	4.67
3/23/2012	***84***	<1	<1	<1	<0.2	5.40	2.76	404.69	5.81	31.7	11.08	261	4.13
6/29/2012	***15***	3	***120***	<1	<0.2	7.47	-2.07	402.62	6.49	180	15.35	-92	10.44
10/24/2012	***13***	<1	***90***	<1	<0.2	8.98	-1.51	401.11	6.74	9.8	17.7	-89	0.33
2/1/2013	***33***	1.4	***29***	<1	***0.22***	5.95	3.03	404.14	6.18	41.7	12.9	80	0.00
7/30/2013	***32***	3.8	***64***	<1	***0.46***	8.46	-2.51	401.63	6.21	9.3	17	11	3
12/13/2013	***39***	4.7	***34***	<1	<0.2	8.03	0.43	402.06					
8/28/2014	***35***	7.9	***47***	<1	<0.2	8.74	-0.71	401.35					
3/11/2015	***22***	1.3	5.7	<1	<0.2	6.18	2.56	403.91					
9/15/2015	***39***	***11***	***26***	<1	<0.2	9.52	-3.34	400.57					
4/28/2016	***18***	***5.6***	15	<1	<0.2	7.59	1.93	402.5					
10/5/2016	***39***	***8.2***	***20***	<1	***0.49***	9.72	-2.13	400.37					
Reporting Limit [3]	1	1	1	1	0.2								
Existing Cleanup Level[4]	5 (A)	5 (A)	16 (B)	160 (B)	0.2 (A)								

Notes:
1 - "ND" denotes analyte not detected at or above listed Reporting Limit.
2- "NA" denotes sample not analyzed for specific analyte.
3- "Reporting Limit" represents the laboratory lower quantitation limit.
4- Method A or B groundwater cleanup levels as published in the Model Toxics Control Act (MTCA) 173-340-WAC, amended 2/12/01.

Bold and Italics denotes concentrations above existing MTCA Method A groundwater cleanup levels.

DATA TABLE: MW-6
Groundwater Sampling Results in parts per billion (ppb)

Monitoring Well	Tetrachloroethene (PCE)	Trichloroethene (TCE)	(cis) 1,2 Dichloroethene	(trans) 1,2 Dichloroethene	Vinyl Chloride	Depth to Water	Net Change	Water Table Elevation	pH	Conductivity (mS/m)	Temperature (Celsius)	REDOX Potential (mV)	Dissolved Oxygen (mg/L)
MW-6													
12/16/2010	***250***	1.1	<1	<1	<0.2	6.48		401.35	6.03	19.7	13.9	217	6.68
12/6/2011	***210***	<1	<1	<1	<0.2	7.42	-0.94	400.41	6.59	15.9	14.4	197	6.81
3/22/2012	***120***	<1	<1	<1	<0.2	5.94	1.48	401.89	5.35	16.6	10.35	323	7.97
6/28/2012	***95***	<1	<1	<1	<0.2	6.88	-0.94	400.95	6.24	18.8	15.41	251	8.78
10/23/2012	***160***	<1	<1	<1	<0.2	8.36	-1.48	399.47	6.53	19.8	15.8	422	8.93
1/31/2013	***110***	<1	<1	<1	<0.2	6.62	1.74	401.21	5.87	21.0	11.90	215	5.45
7/29/2013	***140***	<1	<1	<1	<0.2	7.71	-1.09	400.12	5.89	0.203	828	316	7.6
12/13/2013													
8/28/2014	***76***	<1	<1	<1	<0.2	8.25	-0.54	399.58					
3/10/2015	***85***	<1	<1	<1	<0.2	6.78	1.47	401.05					
9/15/2015	***91***	<1	<1	<1	<0.2	8.91	-2.13	398.92					
4/28/2016	***67***	<1	<1	<1	<0.2	7.33	1.58	400.5					
10/5/2016	***64***	<1	<1	<1	<0.2	9.34	-2.01	398.49					
Reporting Limit [3]	1	1	1	1	0.2								
Existing Cleanup Level[4]	5 (A)	5 (A)	16 (B)	160 (B)	0.2 (A)								

Notes:
1 - "ND" denotes analyte not detected at or above listed Reporting Limit.
2- "NA" denotes sample not analyzed for specific analyte.
3- "Reporting Limit" represents the laboratory lower quantitation limit.
4- Method A or B groundwater cleanup levels as published in the Model Toxics Control Act (MTCA) 173-340-WAC, amended 2/12/01.

Bold and Italics denotes concentrations above existing MTCA Method A groundwater cleanup levels.

DATA TABLE: MW-7
Groundwater Sampling Results in parts per billion (ppb)

Monitoring Well	Tetrachloroethene (PCE)	Trichloroethene (TCE)	(cis) 1,2 Dichloroethene	(trans) 1,2 Dichloroethene	Vinyl Chloride	Depth to Water	Net Change	Water Table Elevation	pH	Conductivity (mS/m)	Temperature (Celsius)	REDOX Potential (mV)	Dissolved Oxygen (mg/L)
MW-7													
12/15/2010	***280***	1.8	<1	<1	<0.2	5.25		402.16	6.15	23.0	13.7	139	7.22
12/5/2011	***230***	<1	<1	<1	<0.2	5.64	-0.39	401.77	6.68	14.0	13.3	164	5.51
3/22/2012	***130***	<1	<1	<1	<0.2	4.75	0.89	402.66	6.20	19.6	10.41	308	9.32
6/28/2012	***110***	<1	<1	<1	<0.2	5.62	-0.87	401.79	6.62	22.1	15.67	236	9.34
10/23/2012	***170***	1	<1	<1	<0.2	6.65	-1.03	400.76	6.59	20.0	16.4	437	8.63
1/31/2013	***150***	<1	<1	<1	<0.2	5.41	1.24	402.00	6.48	19.9	11.8	181	6.91
7/29/2013	***130***	<1	<1	<1	<0.2	6.27	-0.86	401.14	6.08	19.6	9.45	328	8.4
12/13/2013													
8/28/2014	***74***	<1	<1	<1	<0.2	7.04	-0.77	400.37					
3/10/2015	***63***	<1	<1	<1	<0.2	5.7	1.34	401.71					
9/15/2015	***110***	<1	<1	<1	<0.2	7.51	-1.81	399.9					
4/28/2016	***49***	<1	<1	<1	<0.2	6.03	1.48	401.38					
10/5/2016	***75***	<1	<1	<1	<0.2	7.91	-1.88	399.5					
Reporting Limit [3]	1	1	1	1	0.2								
Existing Cleanup Level[4]	5 (A)	5 (A)	16 (B)	160 (B)	0.2 (A)								

Notes:
1 - "ND" denotes analyte not detected at or above listed Reporting Limit.
2- "NA" denotes sample not analyzed for specific analyte.
3- "Reporting Limit" represents the laboratory lower quantitation limit.
4- Method A or B groundwater cleanup levels as published in the Model Toxics Control Act (MTCA) 173-340-WAC, amended 2/12/01.

Bold and Italics denotes concentrations above existing MTCA Method A groundwater cleanup levels.

DATA TABLE: MW-8
Groundwater Sampling Results in parts per billion (ppb)

Monitoring Well	Tetrachloroethene (PCE)	Trichloroethene (TCE)	(cis) 1,2 Dichloroethene	(trans) 1,2 Dichloroethene	Vinyl Chloride	Depth to Water	Net Change	Water Table Elevation	pH	Conductivity (mS/m)	Temperature (Celsius)	REDOX Potential (mV)	Dissolved Oxygen (mg/L)
MW-8													
12/15/2010	1.8	<1	<1	<1	<0.2	4.39		401.83	5.74	27.9	12.7	191	6.16
12/5/2011	<1	<1	<1	<1	<0.2	4.75	-0.36	401.47	6.08	17.4	12.1	183	7.92
3/22/2012	<1	<1	<1	<1	<0.2	4.14	0.61	402.08	5.94	22.0	9.95	335	3.02
6/29/2012	<1	<1	<1	<1	<0.2	4.59	-0.45	401.63	6.33	24.7	16.35	285	7.67
10/23/2012	1.5	<1	<1	<1	<0.2	5.01	-0.42	401.21	6.41	23.6	16.8	446	3.24
2/1/2013	<1	<1	<1	<1	<0.2	4.59	0.42	401.63	6.22	28.6	11.2	225	1.57
7/29/2013	1.2	<1	<1	<1	<0.2	4.94	-0.35	401.28	5.88	25.8	19.0	252	5.0
12/13/2013													
8/28/2014	1.5	<1	<1	<1	<0.2	5.33	-0.39	400.89					
3/10/2015	1.1	<1	<1	<1	<0.2	4.82	0.51	401.4					
9/15/2015	1.5	<1	<1	<1	<0.2	5.79	-0.97	400.43					
4/28/2016	1.2	<1	<1	<1	<0.2	4.88	0.91	401.34					
10/5/2016	1.5	<1	<1	<1	<0.2	6.12	-1.24	400.1					
Reporting Limit [3]	1	1	1	1	0.2								
Existing Cleanup Level[4]	5 (A)	5 (A)	16 (B)	160 (B)	0.2 (A)								

Notes:
1 - "ND" denotes analyte not detected at or above listed Reporting Limit.
2- "NA" denotes sample not analyzed for specific analyte.
3- "Reporting Limit" represents the laboratory lower quantitation limit.
4- Method A or B groundwater cleanup levels as published in the Model Toxics Control Act (MTCA) 173-340-WAC, amended 2/12/01.

Bold and Italics denotes concentrations above existing MTCA Method A groundwater cleanup levels.

DATA TABLE: MW-9
Groundwater Sampling Results in parts per billion (ppb)

Monitoring Well	Tetrachloroethene (PCE)	Trichloroethene (TCE)	(cis) 1,2 Dichloroethene	(trans) 1,2 Dichloroethene	Vinyl Chloride	Depth to Water	Net Change	Water Table Elevation	pH	Conductivity (mS/m)	Temperature (Celsius)	REDOX Potential (mV)	Dissolved Oxygen (mg/L)
MW-9													
12/15/2010	***50***	<1	<1	<1	<0.2	1.94		401.29	5.88	11.8	11.0	184	9.41
12/6/2011	***10***	<1	<1	<1	<0.2	2.05	-0.11	401.18	7.11	8.3	12.8	160	8.37
3/22/2012	***12***	<1	<1	<1	<0.2	1.90	0.15	401.33	6.14	7.1	9.43	322	10.97
6/28/2012	***15***	<1	<1	<1	<0.2	2.07	-0.17	401.16	6.55	12.6	17.04	242	6.35
10/24/2012	4.3	<1	<1	<1	<0.2	3.32	-1.25	399.91	6.59	4.70	17.50	439	8.39
1/31/2013	***6.7***	<1	<1	<1	<0.2	1.96	1.36	401.27	6.22	7.0	10.1	207	8.37
7/30/2013	***9.9***	<1	2.6	<1	<0.2	3.77	-1.81	399.46	6.36	19.1	18	255	6.1
12/13/2013													
8/28/2014	2.5	<1	<1	<1	<0.2	5.55	-1.78	397.68					
3/10/2015	***8.4***	<1	<1	<1	<0.2	2.12	3.43	401.11					
9/15/2015	<1	<1	<1	<1	<0.2	5.98	-3.86	397.25					
4/28/2016	***5.1***	<1	<1	<1	<0.2	2.49	3.49	400.74					
10/5/2016	<1	<1	<1	<1	<0.2	2.72	-0.23	400.51					
Reporting Limit [3]	1	1	1	1	0.2								
Existing Cleanup Level[4]	5 (A)	5 (A)	16 (B)	160 (B)	0.2 (A)								

Notes:
1 - "ND" denotes analyte not detected at or above listed Reporting Limit.
2- "NA" denotes sample not analyzed for specific analyte.
3- "Reporting Limit" represents the laboratory lower quantitation limit.
4- Method A or B groundwater cleanup levels as published in the Model Toxics Control Act (MTCA) 173-340-WAC, amended 2/12/01.

Bold and Italics denotes concentrations above existing MTCA Method A groundwater cleanup levels.

DATA TABLE: MW-10
Groundwater Sampling Results in parts per billion (ppb)

Monitoring Well	Tetrachloroethene (PCE)	Trichloroethene (TCE)	(cis) 1,2 Dichloroethene	(trans) 1,2 Dichloroethene	Vinyl Chloride	Depth to Water	Net Change	Water Table Elevation	pH	Conductivity (mS/m)	Temperature (Celsius)	REDOX Potential (mV)	Dissolved Oxygen (mg/L)
MW-10													
4/28/2016	***37***	<1	<1	<1	<0.2	6.18		400.00					
10/6/2016	***65***	<1	<1	<1	<0.2	8.33	-2.15	397.85					
Reporting Limit [3]	1	1	1	1	0.2								
Existing Cleanup Level[4]	5 (A)	5 (A)	16 (B)	160 (B)	0.2 (A)								

Notes:
1 - "ND" denotes analyte not detected at or above listed Reporting Limit.
2- "NA" denotes sample not analyzed for specific analyte.
3- "Reporting Limit" represents the laboratory lower quantitation limit.
4- Method A or B groundwater cleanup levels as published in the Model Toxics Control Act (MTCA) 173-340-WAC, amended 2/12/01.

Bold and Italics denotes concentrations above existing MTCA Method A groundwater cleanup levels.

DATA TABLE: MW-11
Groundwater Sampling Results in parts per billion (ppb)

Monitoring Well	Tetrachloroethene (PCE)	Trichloroethene (TCE)	(cis) 1,2 Dichloroethene	(trans) 1,2 Dichloroethene	Vinyl Chloride	Depth to Water	Net Change	Water Table Elevation	pH	Conductivity (mS/m)	Temperature (Celsius)	REDOX Potential (mV)	Dissolved Oxygen (mg/L)
MW-11													
4/28/2016	***130***	<1	<1	<1	<0.2	7.89		397.72					
10/6/2016	***120***	<1	<1	<1	<0.2	9.39	-1.50	396.22					
Reporting Limit [3]	1	1	1	1	0.2								
Existing Cleanup Level[4]	5 (A)	5 (A)	16 (B)	160 (B)	0.2 (A)								

Notes:
1 - "ND" denotes analyte not detected at or above listed Reporting Limit.
2- "NA" denotes sample not analyzed for specific analyte.
3- "Reporting Limit" represents the laboratory lower quantitation limit.
4- Method A or B groundwater cleanup levels as published in the Model Toxics Control Act (MTCA) 173-340-WAC, amended 2/12/01.

Bold and Italics denotes concentrations above existing MTCA Method A groundwater cleanup levels.

DATA TABLE: MW-12
Groundwater Sampling Results in parts per billion (ppb)

Monitoring Well	Tetrachloroethene (PCE)	Trichloroethene (TCE)	(cis) 1,2 Dichloroethene	(trans) 1,2 Dichloroethene	Vinyl Chloride	Depth to Water	Net Change	Water Table Elevation	pH	Conductivity (mS/m)	Temperature (Celsius)	REDOX Potential (mV)	Dissolved Oxygen (mg/L)
MW-12													
4/28/2016	<1	<1	<1	<1	<0.2	5.05		397.47					
10/6/2016	<1	<1	<1	<1	<0.2	7.83	-2.78	394.69					
Reporting Limit [3]	1	1	1	1	0.2								
Existing Cleanup Level[4]	5 (A)	5 (A)	16 (B)	160 (B)	0.2 (A)								

Notes:
1 - "ND" denotes analyte not detected at or above listed Reporting Limit.
2- "NA" denotes sample not analyzed for specific analyte.
3- "Reporting Limit" represents the laboratory lower quantitation limit.
4- Method A or B groundwater cleanup levels as published in the Model Toxics Control Act (MTCA) 173-340-WAC, amended 2/12/01.

Bold and Italics denotes concentrations above existing MTCA Method A groundwater cleanup levels.

APPENDIX-B

Laboratory 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 10, 2016

Ryan Opitz, Project Manager
Environmental Associates, Inc.
1380 112th Ave. NE, 300
Bellevue, WA 98004

Dear Mr Opitz:

Included are the results from the testing of material submitted on October 6, 2016 from the EAI 20209-5, F&BI 610079 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
EAI1010R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on October 6, 2016 by Friedman & Bruya, Inc. from the Environmental Associates EAI 20209-5, F&BI 610079 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Environmental Associates
610079 -01	MW-1
610079 -02	MW-2
610079 -03	MW-3
610079 -04	MW-4
610079 -05	MW-5
610079 -06	MW-6
610079 -07	MW-7
610079 -08	MW-8
610079 -09	MW-9
610079 -10	MW-10
610079 -11	MW-11
610079 -12	MW-12

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-1	Client:	Environmental Associates
Date Received:	10/06/16	Project:	EAI 20209-5, F&BI 610079
Date Extracted:	10/06/16	Lab ID:	610079-01
Date Analyzed:	10/06/16	Data File:	100622.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	101	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-2	Client:	Environmental Associates
Date Received:	10/06/16	Project:	EAI 20209-5, F&BI 610079
Date Extracted:	10/06/16	Lab ID:	610079-02
Date Analyzed:	10/06/16	Data File:	100628.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	101	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	49

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-3	Client:	Environmental Associates
Date Received:	10/06/16	Project:	EAI 20209-5, F&BI 610079
Date Extracted:	10/06/16	Lab ID:	610079-03
Date Analyzed:	10/06/16	Data File:	100632.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	99	63	127
4-Bromofluorobenzene	102	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	1.0
Tetrachloroethene	45

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-4	Client:	Environmental Associates
Date Received:	10/06/16	Project:	EAI 20209-5, F&BI 610079
Date Extracted:	10/06/16	Lab ID:	610079-04
Date Analyzed:	10/06/16	Data File:	100625.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	102	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	1.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-5	Client:	Environmental Associates
Date Received:	10/06/16	Project:	EAI 20209-5, F&BI 610079
Date Extracted:	10/06/16	Lab ID:	610079-05
Date Analyzed:	10/06/16	Data File:	100627.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	99	63	127
4-Bromofluorobenzene	102	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	0.49
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	20
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	8.2
Tetrachloroethene	39

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-6	Client:	Environmental Associates
Date Received:	10/06/16	Project:	EAI 20209-5, F&BI 610079
Date Extracted:	10/06/16	Lab ID:	610079-06
Date Analyzed:	10/06/16	Data File:	100631.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	57	121
Toluene-d8	99	63	127
4-Bromofluorobenzene	100	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	64

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-7	Client:	Environmental Associates
Date Received:	10/06/16	Project:	EAI 20209-5, F&BI 610079
Date Extracted:	10/06/16	Lab ID:	610079-07
Date Analyzed:	10/06/16	Data File:	100630.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	99	63	127
4-Bromofluorobenzene	102	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	75

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-8	Client:	Environmental Associates
Date Received:	10/06/16	Project:	EAI 20209-5, F&BI 610079
Date Extracted:	10/06/16	Lab ID:	610079-08
Date Analyzed:	10/06/16	Data File:	100624.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	100	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	1.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-9	Client:	Environmental Associates
Date Received:	10/06/16	Project:	EAI 20209-5, F&BI 610079
Date Extracted:	10/06/16	Lab ID:	610079-09
Date Analyzed:	10/06/16	Data File:	100626.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	101	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-10	Client:	Environmental Associates
Date Received:	10/06/16	Project:	EAI 20209-5, F&BI 610079
Date Extracted:	10/06/16	Lab ID:	610079-10
Date Analyzed:	10/06/16	Data File:	100629.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	99	63	127
4-Bromofluorobenzene	101	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	65

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-11	Client:	Environmental Associates
Date Received:	10/06/16	Project:	EAI 20209-5, F&BI 610079
Date Extracted:	10/06/16	Lab ID:	610079-11
Date Analyzed:	10/06/16	Data File:	100633.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	99	63	127
4-Bromofluorobenzene	102	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-12	Client:	Environmental Associates
Date Received:	10/06/16	Project:	EAI 20209-5, F&BI 610079
Date Extracted:	10/06/16	Lab ID:	610079-12
Date Analyzed:	10/06/16	Data File:	100623.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	57	121
Toluene-d8	99	63	127
4-Bromofluorobenzene	98	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	Environmental Associates
Date Received:	Not Applicable	Project:	EAI 20209-5, F&BI 610079
Date Extracted:	10/06/16	Lab ID:	06-2095 mb
Date Analyzed:	10/06/16	Data File:	100609.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	99	63	127
4-Bromofluorobenzene	102	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Date of Report: 10/10/16
Date Received: 10/06/16
Project: EAI 20209-5, F&BI 610079

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 610079-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	<0.2	97	36-166
Chloroethane	ug/L (ppb)	50	<1	108	46-160
1,1-Dichloroethene	ug/L (ppb)	50	<1	104	60-136
Methylene chloride	ug/L (ppb)	50	<5	100	67-132
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	99	72-129
1,1-Dichloroethane	ug/L (ppb)	50	<1	95	70-128
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	98	71-127
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	86	69-133
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	98	60-146
Trichloroethene	ug/L (ppb)	50	<1	93	66-135
Tetrachloroethene	ug/L (ppb)	50	<1	97	10-226

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	ug/L (ppb)	50	95	97	50-154	2
Chloroethane	ug/L (ppb)	50	108	111	58-146	3
1,1-Dichloroethene	ug/L (ppb)	50	103	100	67-136	3
Methylene chloride	ug/L (ppb)	50	97	97	39-148	0
trans-1,2-Dichloroethene	ug/L (ppb)	50	98	97	68-128	1
1,1-Dichloroethane	ug/L (ppb)	50	94	93	79-121	1
cis-1,2-Dichloroethene	ug/L (ppb)	50	98	96	80-123	2
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	86	86	73-132	0
1,1,1-Trichloroethane	ug/L (ppb)	50	99	96	83-130	3
Trichloroethene	ug/L (ppb)	50	95	93	80-120	2
Tetrachloroethene	ug/L (ppb)	50	98	97	76-121	1

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.

610079

SAMPLE CHAIN OF CUSTODY

ME 10/6/16 V3

Page # 1 of 2

Send Report To _____

Company Tri Western Investment LLC

Address 10423 Main St. Suite 4

City, State, ZIP Bellevue WA 98004

Phone # 425-455-9025 Fax # _____

SAMPLERS (signature) [signature]

PROJECT NAME/NO. EAI 20209-5

PO#

REMARKS send copy to Ryan Coyle at EAI

TURNAROUND TIME
- ☐ Standard (2 Weeks)
- ☐ RUSH _____

Rush charges authorized by _____

SAMPLE DISPOSAL
- ☐ 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							Notes
						ANALYSES REQUESTED												
MW-1	01A/B	10/5	9:00	water	2 VOA				X									
MW-2	02		9:30						X									
MW-3	03		10:00						X									
MW-4	04		10:30						X									
MW-5	05		10:55						X									
MW-6	06	↓	11:35						X									
MW-7	07	10/5	12:00						X									
MW-8	08	10/6	12:30						X									
MW-9	09	10/5	12:30						X									
MW-10	10	10/5	8:30	↓	↓				X									

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: [signature]	Ryan Coyle	EAI	10/6/16	14:05
Received by: [signature]	VINH	FBI	10/6/16	1405
Relinquished by:				
Received by:		Samples received at 6 °C		

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

610079

SAMPLE CHAIN OF CUSTODY

ME 10/6/16

V3

Page # 2 of 2

Send Report To _____

Company Tri Western Investment LLC

Address 16423 Main St. Suite 4

City, State, ZIP Bellevue Wa 98004

Phone # 425-455-9025 Fax # _____

SAMPLERS (signature)

PROJECT NAME/NO. EAF 20209-5

PO#

REMARKS Send copies to Ryan Opitz at EAI

TURNAROUND TIME
- ☐ Standard (2 Weeks)
- ☐ RUSH _____

Rush charges authorized by _____

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED: TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS							Notes
MW-11	11A-B	10/6	9:00	water	2 VOA				X									
MW-12	12A-B	10/6	10:00	water	2 VOA				X									

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Ryan Opitz	EAI	10/6/16	14:05
Received by:	VINH	FBI	10/6/16	1405
Relinquished by:				
Received by:		Samples received at 6 °C		

FORMS\COC\COC.DOC