

**THIRD QUARTER
GROUNDWATER MONITORING**

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

**TRI WESTERN SYNDICATED
INVESTMENTS, INC.**

ENVIRONMENTAL ASSOCIATES, INC.

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September 11, 2012

JN-20209-5

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

**RE: THIRD QUARTER - GROUNDWATER MONITORING
 Mac's One Hour Cleaners
 10825 SE 176th Street
 Renton, Washington**

Dear Mr. Radford:

Environmental Associates, Inc. (EAI) has completed the third of four (4) planned quarterly groundwater monitoring events as provided for in accordance with our proposal, dated August 17, 2011. All nine (9) monitoring wells (five on-site and four off-site) were sampled during this event.

Project Background

A dry-cleaners 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 on their parcel and that they (Bayview) suspected that the source was the dry-cleaner on the subject property. In January / February 2010, four (4) initial groundwater monitoring wells (MW-1 through MW-4) were installed on the subject parcel to make a preliminary assessment of subsurface environmental conditions. That exploration confirmed the presence of PCE in both soil and groundwater at the subject property at concentrations above Washington State Department of Ecology (WDOE) target compliance levels for unrestricted land use. That preliminary assessment also identified the on-site dry-cleaner as a potential source for the encountered contaminants.



Through the Spring / Summer of 2010, several additional phases of environmental study were performed on the Tri-Western parcel. These activities included geophysical surveys, sewer-line closed-circuit TV surveys, and additional phases of soil and groundwater assessment both within the dry-cleaners and in exterior areas of the property. These efforts identified two (2) suspected “source” areas of impacts by dry-cleaning solvent, including an area along a side sewer line along the western side of the building, and a less well defined area along a section of sewer pipe north-northeast of the subject building.

Prior to selection of a potential remediation approach, the next step in the remediation feasibility study process was to further assess the extent of the environmental impact. To facilitate this next phase of work, an access agreement was worked out between the two parcel owners over the Summer / Fall of 2010. One (1) additional monitoring well (MW-5) was installed on-site and four (4) monitoring wells (MW-6 through MW-9) were installed off-site on the adjoining “Bayview” parcel during November and December of 2010.

Following installation and sampling of the additional monitoring wells, the feasibility of several remediation and risk management approaches was evaluated. By mid Summer 2011, the approach favored by the Tri Western team was to initially perform active remediation by excavating a trench along the length of the western sanitary sewer line that served a floor drain inside of Mac’s Cleaners. Leakage along the sewer line was suspected to be a primary source for the groundwater plume. The trench was anticipated to both physically remove some of the PCE-impacted soil at the source area and provide a means of applying remediation stimulating chemicals to hopefully reduce the mass of contamination both at the source and in down-gradient areas on and off the subject property.

In October 2011, the above-referenced trench was constructed and an initial application of remediation products intended to stimulate and enhance anaerobic bio-degradation was applied to the open trench. A network of perforated piping was set within the trench during the backfilling process to allow for future re-application of remediation products. Details regarding the trench construction and remediation product application were previously presented to the client under separate cover.

Scope of Work

To evaluate the performance of the initial application of remediation products, the following scope of work has been adopted for execution on a quarterly basis (every three months) for four (4) consecutive quarters):

- Measure current depths to groundwater in all nine (9) study area monitoring wells (MW-1 through MW-9). 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. During well purging, a multi-parameter meter and flow through cell is used to collect basic geo-chemical data on groundwater conditions such as pH, temperature, conductance, dissolved oxygen, and oxidation/reduction potential.
- Submit all recovered groundwater samples to the project laboratory with analysis for chlorinated volatile organic compounds (CVOCs) by EPA test method 8260. Groundwater samples from MW-3 and MW-5 (nearest to the remediation trench) may also be analyzed for other parameters of interest such as chemical and biological oxygen demand, dissolved gases, and inorganic chemistry such as dissolved iron, nitrogen, and sulfate concentrations, which can be used to evaluate the effectiveness and down-gradient influence of the remediation products applied at the trench.
- Prepare a written summary report documenting field methods, observations, findings, and conclusions. Reports for the first, second, and third quarters will be brief with very little discussion and interpretation of the interim findings. At the conclusion of the fourth quarter, a more detailed report is intended to provide an expanded in-depth data analysis and project review.

Water Table Survey

The third quarter of groundwater monitoring was performed over a two-day period during June 28th and 29th, 2012. 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 presented in Table 1. 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 be westward with a southwesterly radial influence further south in the study area. A minor degree of northwesterly flow may also be occurring in the general vicinity between MW-6 and MW-7. The groundwater flow regime appears generally consistent with prior surveys.

Groundwater Sampling

The nine (9) monitoring wells were sampled between June 28th and 29th, 2012. Prior to that, the monitoring wells were last sampled in March 2012.

Each monitoring well was first “micro-purged” utilizing a peristaltic pump equipped with a flow-through cell instrumented to monitor a variety of parameters including pH, water temperature, conductivity, dissolved oxygen, and redox-potential. Micro-purging continued until consecutive readings of the above parameters stabilized (i.e. varied less than 10 percent). The final readings for the above parameters for each monitoring well are presented in Table 2.

Once that the above measured parameters suggested that the extracted groundwater was representative of ambient conditions, groundwater samples were then transferred directly to laboratory-prepared glassware.

Laboratory Results & Discussion

The nine (9) groundwater samples were analyzed by the project laboratory for chlorinated volatile organic compounds by EPA test method 8260B. The laboratory results on presented in Table 3. Additionally, concentrations of PCE in groundwater are graphically presented on Plate 4.

During this current sampling event, PCE was detected in eight (8) of the nine (9) samples. Only six (6) contained PCE at concentrations above the Washington State Department of Ecology’s 5 parts per billion (ppb) target compliance level. PCE was not detected in the groundwater sample recovered from MW-8 at concentrations above the laboratory’s minimum detection limit. Both MW-1 and MW-4 contained detectable concentrations of PCE that were below the WDOE’s target level. As summarized in Table 3, while groundwater samples from MW-1, MW-4, and MW-8 have contained detections of PCE (past or present), none have been in excess of the Washington State Department of Ecology’s (WDOE’s) target compliance level of 5 parts per billion (ppb).

Monitoring wells MW-1 and MW-8 are both located along the southern margin of the study area. As such, monitoring well’s MW-1 and MW-8 appear to continue to establish a partial southern limit of the PCE groundwater plume, as depicted on Plate 4, PCE In Groundwater as a red “dashed” line.

During the current sampling event, the highest concentrations of PCE were observed in the “core-of-the-plume” monitoring wells MW-2, MW-3, MW-6, and MW-7, in which concentrations of PCE in the groundwater ranged between 77 to 110 ppb.

In general, at all locations except MW-9, measured concentrations of PCE were lower than the prior sampling event last December (2011). Concentrations of PCE at MW-9 continue to fluctuate by a couple ppb.

The most significant change this quarter occurred in the groundwater sample analyzed from MW-5, which exhibited a significant decline in PCE concentration from 84 ppb to 15 ppb, while observing a rise in cis-DCE from “non-detect” to a concentration of 120 ppb. This appears to represent the “classic” anaerobic microbial degradation reaction sequence that the HRC product applied to the trench system is intended to stimulate. That reaction essentially strips chlorine atoms from the PCE molecule producing TCE (3-chlorine atoms) and then variations of DCE (2-chlorine atoms) followed by vinyl chloride (1-chlorine) and finally ethylene / ethane (0-chlorine).

The detection of degradation “daughter” compounds in the groundwater at MW-5 implies that the HRC mixture applied to the trench is reacting with the residual contaminant mass of PCE, and the reaction front is beginning to reach the first line of observation wells (MW-5, MW-2, and MW-3).

Acknowledging the limited seasonal variation in sampling data developed to date, no expanded discussions of possible data trends are offered or warranted at this early juncture. As stated in a prior section, a more detailed analysis of the data is anticipated to be presented in the report for the fourth (4) quarter sampling event.

Next Sampling Event

The next quarterly sampling event is tentatively scheduled to occur in late September or early October 2012.

Limitations

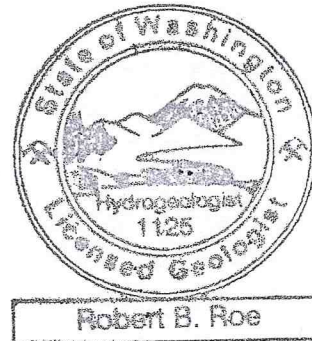
This letter report has been prepared specific application to this project in a manner consistent with that level of care and skill normally exercised by members of the environmental science profession currently practicing under similar conditions in the area. This document is for the exclusive of Tri Western Syndicated Investments, Inc., along with its members and appointed representatives. Information 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.

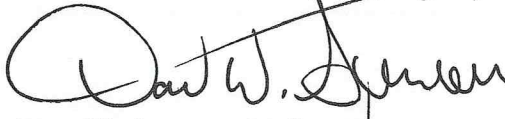
Respectfully submitted,
ENVIRONMENTAL ASSOCIATES, INC.



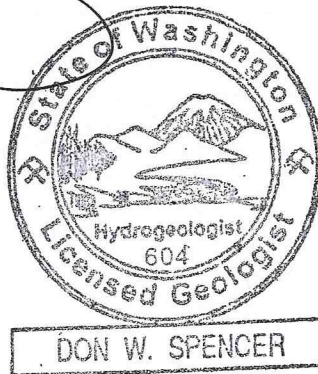
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Attachments:

Table 1 - Water Table Survey
Table 2 - General Water Quality Parameters
Table 3 - Chlorinated VOCs - Groundwater Sampling Results

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

Appendix-A: Laboratory Reports

TABLE 1 Water Table Survey (feet)					
Monitoring Well Number	Ground Surface Elevation	TOC Elevation	Depth to Water Below TOC	Net Change	Elevation of Water Table
MW-1					
1/20/2010	408.09	407.69	5.11		402.58
12/28/2010		407.69	5.38	-0.27	402.31
12/5/2011			5.47	-0.09	402.22
3/22/2012			5.50	-0.03	402.19
6/29/2012			5.47	0.03	402.22
MW-2					
1/20/2010	408.68	408.44	5.36		403.08
12/28/2010		408.44	5.24	0.12	403.20
12/6/2011			6.26	-1.02	402.18
3/23/2012			4.86	1.40	403.58
6/28/2012			5.83	-0.97	402.61
MW-3					
1/20/2010	409.16	408.84	5.55		403.29
12/28/2010		408.86	5.39	0.16	403.47
12/5/2011			6.65	-1.26	402.21
3/23/2012			4.76	1.89	404.10
6/28/2012			6.05	-1.29	402.81
MW-4					
1/20/2010	413.11	412.74	5.65		407.09
12/28/2010		412.77	5.53	0.12	407.24
12/6/2011			7.24	-1.71	405.53
3/23/2012			4.65	2.59	408.12
6/29/2012			6.45	-1.80	406.32
MW-5					
12/28/2010		410.09	7.06		403.03
12/5/2011			8.16	-1.10	401.93
3/23/2012			5.40	2.76	404.69
6/29/2012			7.47	-2.07	402.62
MW-6					
12/28/2010		407.83	6.48		401.35
12/6/2011			7.42	-0.94	400.41
3/22/2012			5.94	1.48	401.89
6/28/2012			6.88	-0.94	400.95
MW-7					
12/28/2010		407.41	5.25		402.16
12/5/2011			5.64	-0.39	401.77
3/22/2012			4.75	0.89	402.66

6/28/2012			5.62	-0.87	401.79
MW-8					
12/28/2010		406.22	4.39		401.83
12/5/2011			4.75	-0.36	401.47
3/22/2012			4.14	0.61	402.08
6/29/2012			4.59	-0.45	401.63
MW-9					
12/28/2010		403.23	1.94		401.29
12/6/2011			2.05	-0.11	401.18
3/22/2012			1.90	0.15	401.33
6/28/2012			2.07	-0.17	401.16

Notes:

- (1) TOC. Top of well casing elevation.
- (2) Elevations based upon assigning the concrete walkway surface at the northeast corner of the subject property building an approximate elevation of 412.00 feet above sea-level.

**TABLE 2 - General Water Quality Parameters
Readings Taken at Time of Sampling**

Monitoring Point	pH	Conductivity mS/m	Temperature (Celsius)	Oxidation-Reduction Potential mV	Dissolved Oxygen mg/L
MW-1					
January 20, 2010	7.29	15.3	13.0	-93	3.69
December 15, 2010	5.9	9.1	12.6	110	7.12
December 5, 2011	6.36	5.4	13.7	89	2.34
March 22, 2012	6.16	8.1	9.87	321	8.76
June 29, 2012	6.45	11.3	16.73	127	8.56
MW-2					
January 20, 2010	6.55	12.2	14.3	37	2.52
December 15, 2010	5.43	12.7	14.9	223	6.64
December 5, 2011	6.35	7.5	15.5	209	5.17
March 23, 2012	5.19	13.1	10.89	306	8.03
June 28, 2012	6.12	13.1	17.00	251	6.91
MW-3					
January 20, 2010	6.63	21.8	14.2	200	5.56
December 15, 2010	5.54	21.9	14.9	225	7.49
December 5, 2011	6.19	16.8	15.4	217	6.13
March 23, 2012	5.71	23.7	11.47	311	7.91
June 28, 2012	5.95	28.8	16.82	269	8.22
MW-4					
January 20, 2010	6.86	33.4	13.5	221	5.88
December 15, 2010	5.64	31.1	14.0	216	6.64
December 5, 2011	6.31	20.3	14.1	220	5.05
March 23, 2012	5.76	40.5	11.01	356	7.86
June 29, 2012	6.08	29.7	15.87	199	8.71
MW-5					
December 15, 2010	5.72	14.7	15.3	219	6.77
December 5, 2011	6.30	9.3	15.3	198	4.67
March 23, 2012	5.81	31.7	11.08	261	4.13
June 29, 2012	6.49	180	15.35	-92	10.44
MW-6					
December 15, 2010	6.03	19.7	13.9	217	6.68
December 5, 2011	6.59	15.9	14.4	197	6.81
March 22, 2012	5.35	16.6	10.35	323	7.97
June 28, 2012	6.24	18.8	15.41	251	8.78
MW-7					
December 15, 2010	6.15	23.0	13.7	139	7.22
December 5, 2011	6.68	14.0	13.3	164	5.51
March 22, 2012	6.20	19.6	10.41	308	9.32
June 28, 2012	6.62	22.1	15.67	236	9.34
MW-8					
December 15, 2010	5.74	27.9	12.7	191	6.16
December 5, 2011	6.08	17.4	12.1	183	7.92
March 22, 2012	5.94	22.0	9.95	335	3.02
June 29, 2012	6.33	24.7	16.35	285	7.67
MW-9					
December 15, 2010	5.88	11.8	11.0	184	9.41
December 5, 2011	7.11	8.3	12.8	160	8.37
March 22, 2012	6.14	7.1	9.43	322	10.97
June 28, 2012	6.55	12.6	17.04	242	6.35

**TABLE 2 - General Water Quality Parameters
Readings Taken at Time of Sampling**

Monitoring Point	pH	Conductivity mS/m	Temperature (Celsius)	Oxidation-Reduction Potential mV	Dissolved Oxygen mg/L
MW-1					
January 20, 2010	7.29	15.3	13.0	-93	3.69
December 15, 2010	5.9	9.1	12.6	110	7.12
December 5, 2011	6.36	5.4	13.7	89	2.34
March 22, 2012	6.16	8.1	9.87	321	8.76
June 29, 2012	6.45	11.3	16.73	127	8.56
MW-2					
January 20, 2010	6.55	12.2	14.3	37	2.52
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December 5, 2011	6.35	7.5	15.5	209	5.17
March 23, 2012	5.19	13.1	10.89	306	8.03
June 28, 2012	6.12	13.1	17.00	251	6.91
MW-3					
January 20, 2010	6.63	21.8	14.2	200	5.56
December 15, 2010	5.54	21.9	14.9	225	7.49
December 5, 2011	6.19	16.8	15.4	217	6.13
March 23, 2012	5.71	23.7	11.47	311	7.91
June 28, 2012	5.95	28.8	16.82	269	8.22
MW-4					
January 20, 2010	6.86	33.4	13.5	221	5.88
December 15, 2010	5.64	31.1	14.0	216	6.64
December 5, 2011	6.31	20.3	14.1	220	5.05
March 23, 2012	5.76	40.5	11.01	356	7.86
June 29, 2012	6.08	29.7	15.87	199	8.71
MW-5					
December 15, 2010	5.72	14.7	15.3	219	6.77
December 5, 2011	6.30	9.3	15.3	198	4.67
March 23, 2012	5.81	31.7	11.08	261	4.13
June 29, 2012	6.49	180	15.35	-92	10.44
MW-6					
December 15, 2010	6.03	19.7	13.9	217	6.68
December 5, 2011	6.59	15.9	14.4	197	6.81
March 22, 2012	5.35	16.6	10.35	323	7.97
June 28, 2012	6.24	18.8	15.41	251	8.78
MW-7					
December 15, 2010	6.15	23.0	13.7	139	7.22
December 5, 2011	6.68	14.0	13.3	164	5.51
March 22, 2012	6.20	19.6	10.41	308	9.32
June 28, 2012	6.62	22.1	15.67	236	9.34
MW-8					
December 15, 2010	5.74	27.9	12.7	191	6.16
December 5, 2011	6.08	17.4	12.1	183	7.92
March 22, 2012	5.94	22.0	9.95	335	3.02
June 29, 2012	6.33	24.7	16.35	285	7.67
MW-9					
December 15, 2010	5.88	11.8	11.0	184	9.41
December 5, 2011	7.11	8.3	12.8	160	8.37
March 22, 2012	6.14	7.1	9.43	322	10.97
June 28, 2012	6.55	12.6	17.04	242	6.35

TABLE 3 - Chlorinated VOCs - Groundwater Sampling Results
All results and limits in parts per billion (ppb)

Monitoring Well	Tetrachloroethene (PCE)	Trichloroethene (TCE)	(cis) 1,2 Dichloroethene	(trans) 1,2 Dichloroethene	Vinyl Chloride	Chloroform
MW-1						
1/20/2010	1.5	<1	<1	<1	<0.2	<1
12/15/2010	1.5	<1	<1	<1	<0.2	<1
12/5/2011	<1	<1	<1	<1	<0.2	NA
3/22/2012	<1	<1	<1	<1	<0.2	NA
6/29/2012	1.1	<1	<1	<1	<0.2	NA
MW-2						
1/20/2010	860	1.7	<1	<1	<0.2	8.5
12/16/2010	480	1.7	<1	<1	<0.2	9.7
12/6/2011	160	<1	<1	<1	<0.2	NA
3/23/2012	100	<1	<1	<1	<0.2	NA
6/28/2012	77	<1	<1	<1	<0.2	NA
MW-3						
1/20/2010	1,500	1.4	<1	<1	<0.2	1.4
12/16/2010	770	1.7	<1	<1	<0.2	1.3
12/5/2011	240	<1	<1	<1	<0.2	NA
3/23/2012	150	<1	<1	<1	<0.2	NA
6/28/2012	110	<1	<1	<1	<0.2	NA
MW-4						
1/20/2010	2.6	<1	<1	<1	<1	5.0
12/16/2010	6.8	<1	<1	<1	<1	6.4
12/6/2011	3.6	<1	<1	<1	<1	NA
3/23/2012	3.6	<1	<1	<1	<1	NA
6/29/2012	2.9	<1	<1	<1	<1	NA

Monitoring Well	Tetrachloroethene (PCE)	Trichloroethene (TCE)	(cis) 1,2 Dichloroethene	(trans) 1,2 Dichloroethene	Vinyl Chloride	Chloroform
MW-5						
12/16/2010	230	1.9	<1	<1	<0.2	<1
12/5/2011	150	<1	<1	<1	<0.2	NA
3/23/2012	84	<1	<1	<1	<0.2	NA
6/29/2012	15	3	120	<1	<0.2	NA
MW-6						
12/16/2010	250	1.1	<1	<1	<0.2	8.1
12/6/2011	210	<1	<1	<1	<0.2	NA
3/22/2012	120	<1	<1	<1	<0.2	NA
6/28/2012	95	<1	<1	<1	<0.2	NA
MW-7						
12/15/2010	280	1.8	<1	<1	<0.2	3.6
12/5/2011	230	<1	<1	<1	<1	NA
3/22/2012	130	<1	<1	<1	<1	NA
6/28/2012	110	<1	<1	<1	<1	NA
MW-8						
12/15/2010	1.8	<1	<1	<1	<0.2	<1
12/5/2011	<1	<1	<1	<1	<1	NA
3/22/2012	<1	<1	<1	<1	<1	NA
6/29/2012	<1	<1	<1	<1	<1	NA
MW-9						
12/15/2010	50	<1	<1	<1	<0.2	<1
12/06//2011	10	<1	<1	<1	<0.2	NA
3/22/2012	12	<1	<1	<1	<0.2	NA
6/28/2012	15	<1	<1	<1	<0.2	NA
Reporting Limit ³	1	1	1	1	0.2	1
Existing Cleanup Level ⁴	5 (A)	5 (A)	80 (B)	160 (B)	0.2 (A)	7.2 (B)

Notes:

1 - "ND" denotes analyte not detected at or above listed Reporting Limit.

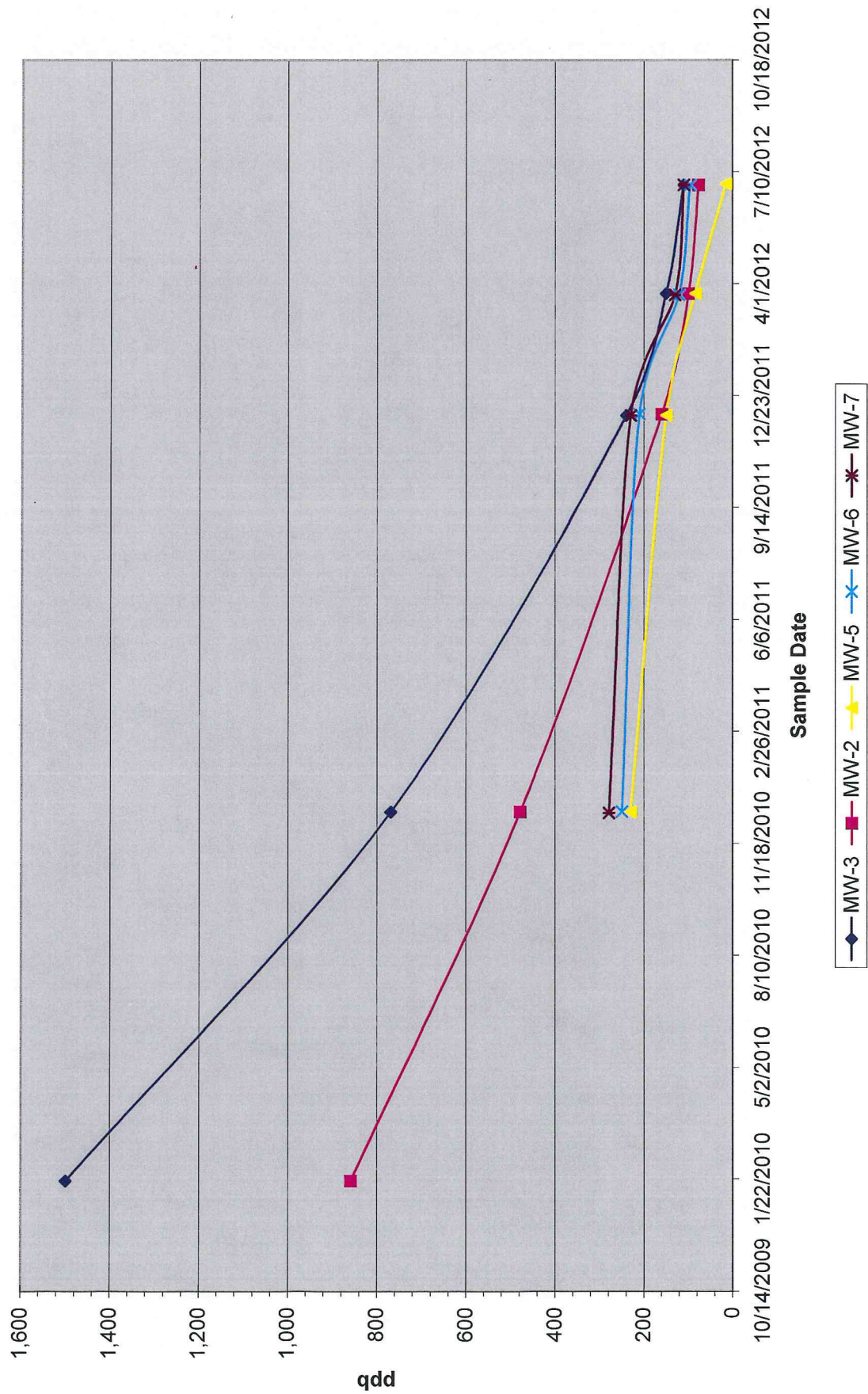
2- "NA" denotes sample not analyzed for specific analyte.

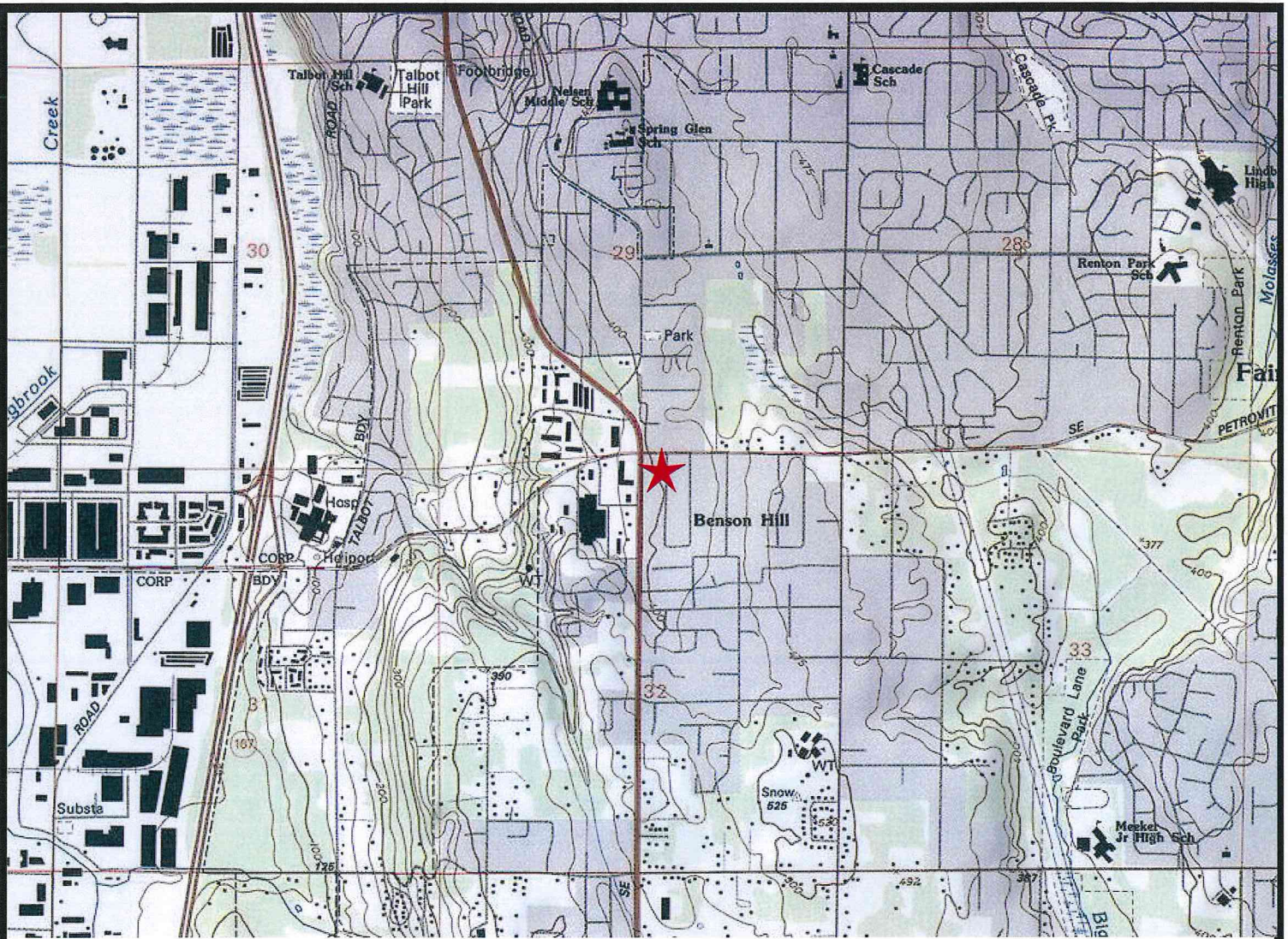
3- "Reporting Limit" represents the laboratory lower quantitation limit.

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.

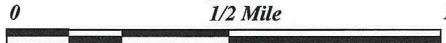
PCE Concentration Trends





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

Scale
1/2 Mile



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:
JN-20209-5

Date:
June 2012

Plate:
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).



ENVIRONMENTAL ASSOCIATES, INC.

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

STUDY AREA - OVERVIEW

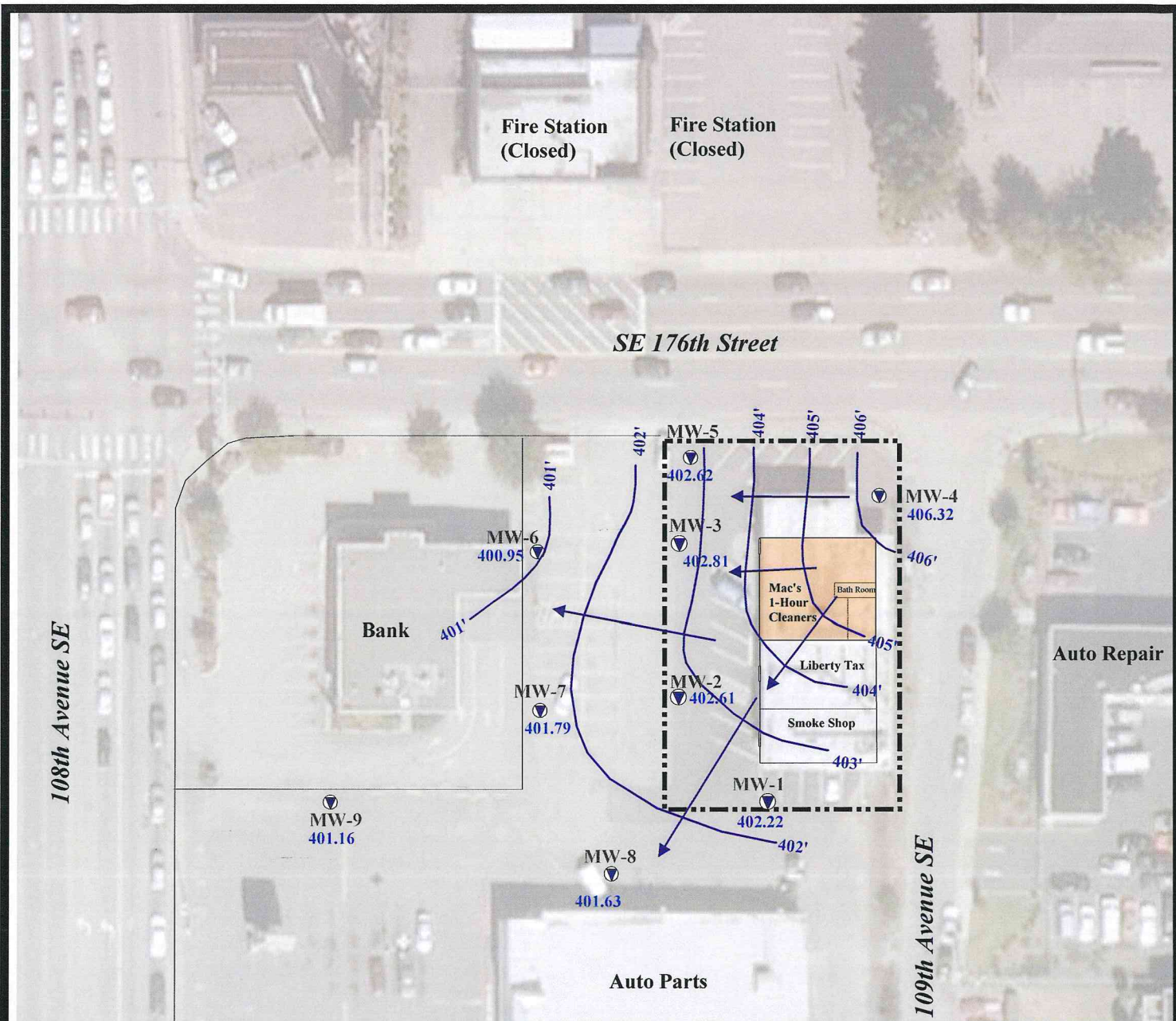
Mac's One Hour Cleaners
10825 SE 176th Street
Renton, Washington

Job Number:
JN-20209-5

Date:
June 2012

Scale:
1"=80'

Plate:
2



Approximate border of Subject Property



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



Existing monitoring well locations.



**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:

JN-20209-3

Date:

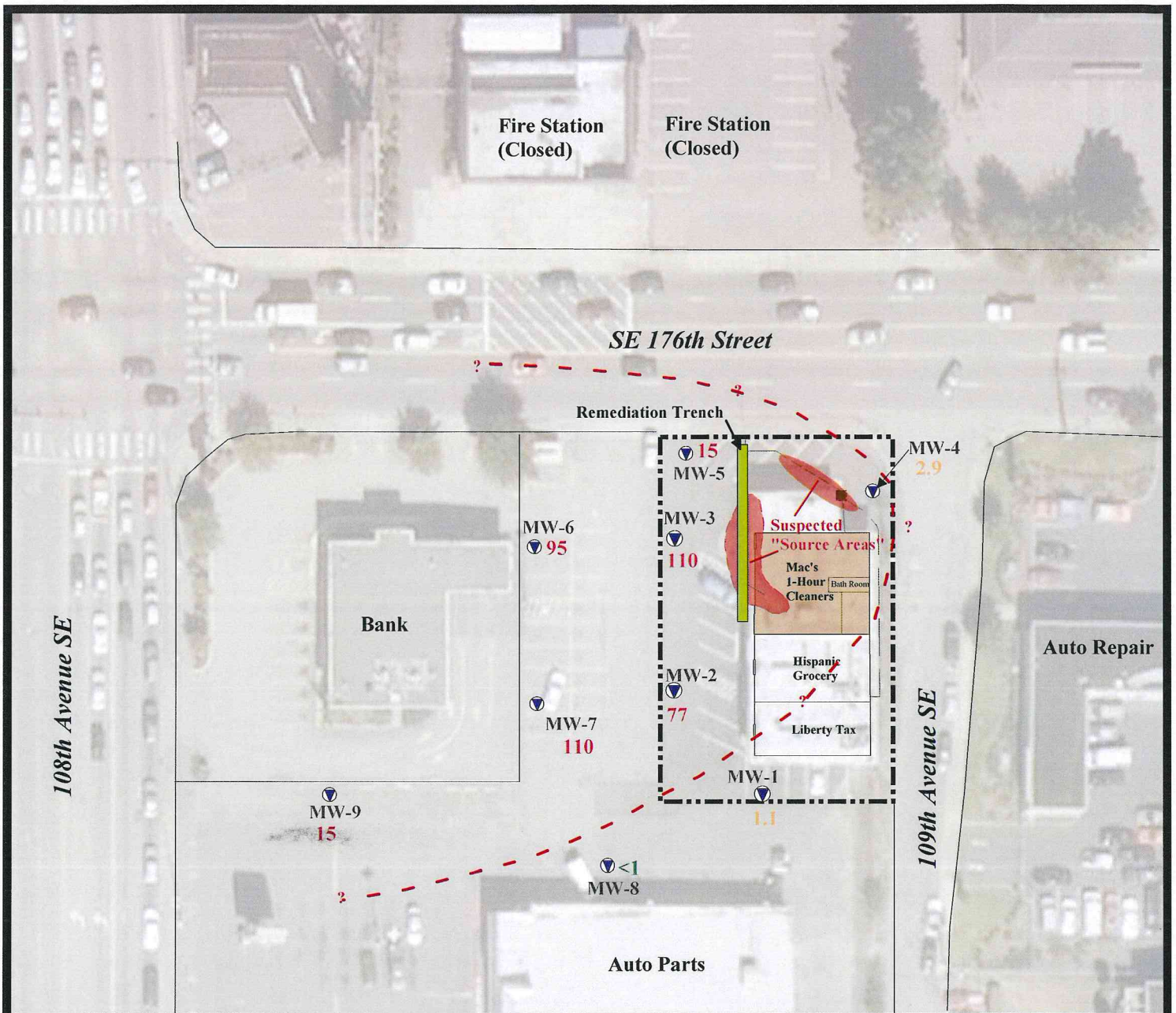
June 2012

Scale:

1"=80'

Plate:

3



Approximate border of Subject Property

- - - Preliminary conceptualization of chlorinated solvent (PCE) groundwater plume. The WDOE target compliance level for PCE in groundwater is 5 parts per billion (ppb).



Existing monitoring well locations.



ENVIRONMENTAL ASSOCIATES, INC.

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

PCE IN GROUNDWATER

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

Job Number:
JN-20209-5

Date:
June 2012

Scale:
1"=80'

Plate:
4

APPENDIX-A

Laboratory Reports

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
e-mail: fbi@isomedia.com

July 10, 2012

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

Dear Mr. Roe:

Included are the results from the testing of material submitted on July 2, 2012 from the Tri-Western-Mac's Cleaners PO JN-20209-5, F&BI 207016 project. There are 14 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
EAI0710R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 2, 2012 by Friedman & Bruya, Inc. from the Environmental Associates Tri-Western-Mac's Cleaners PO JN-20209-5, F&BI 207016 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Associates</u>
207016-01	MW-1
207016-02	MW-2
207016-03	MW-3
207016-04	MW-4
207016-05	MW-5
207016-06	MW-6
207016-07	MW-7
207016-08	MW-8
207016-09	MW-9
207016-10	Drum1, Drum 2, Drum 3

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: 07/02/12	Project: Tri-Western-Mac's Cleaners
Date Extracted: 07/03/12	Lab ID: 207016-01
Date Analyzed: 07/03/12	Data File: 070308.D
Matrix: Water	Instrument: GCMS9
Units: ug/L (ppb)	Operator: JS

	% Recovery:	Lower Limit:	Upper Limit:
Surrogates:			
1,2-Dichloroethane-d4	97	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	105	50	150

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	1.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-2	Client:	Environmental Associates
Date Received:	07/02/12	Project:	Tri-Western-Mac's Cleaners
Date Extracted:	07/03/12	Lab ID:	207016-02
Date Analyzed:	07/03/12	Data File:	070322.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	93	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	101	50	150

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	77

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-3	Client:	Environmental Associates
Date Received:	07/02/12	Project:	Tri-Western-Mac's Cleaners
Date Extracted:	07/03/12	Lab ID:	207016-03
Date Analyzed:	07/03/12	Data File:	070325.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	95	50	150
Toluene-d8	97	50	150
4-Bromofluorobenzene	102	50	150

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	110

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-4	Client:	Environmental Associates
Date Received:	07/02/12	Project:	Tri-Western-Mac's Cleaners
Date Extracted:	07/03/12	Lab ID:	207016-04
Date Analyzed:	07/03/12	Data File:	070318.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	101	50	150

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	2.9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-5	Client:	Environmental Associates
Date Received:	07/02/12	Project:	Tri-Western-Mac's Cleaners
Date Extracted:	07/03/12	Lab ID:	207016-05
Date Analyzed:	07/03/12	Data File:	070321.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	50	150
Toluene-d8	97	50	150
4-Bromofluorobenzene	104	50	150

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	120
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	3.0
Tetrachloroethene	15

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: MW-6	Client: Environmental Associates
Date Received: 07/02/12	Project: Tri-Western-Mac's Cleaners
Date Extracted: 07/03/12	Lab ID: 207016-06
Date Analyzed: 07/03/12	Data File: 070323.D
Matrix: Water	Instrument: GCMS9
Units: ug/L (ppb)	Operator: JS

	% Recovery:	Lower Limit:	Upper Limit:
Surrogates:			
1,2-Dichloroethane-d4	98	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	102	50	150

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	95

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: MW-7	Client: Environmental Associates
Date Received: 07/02/12	Project: Tri-Western-Mac's Cleaners
Date Extracted: 07/03/12	Lab ID: 207016-07
Date Analyzed: 07/03/12	Data File: 070324.D
Matrix: Water	Instrument: GCMS9
Units: ug/L (ppb)	Operator: JS

	% Recovery:	Lower Limit:	Upper Limit:
Surrogates:			
1,2-Dichloroethane-d4	97	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	101	50	150

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	110

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: MW-8	Client: Environmental Associates
Date Received: 07/02/12	Project: Tri-Western-Mac's Cleaners
Date Extracted: 07/03/12	Lab ID: 207016-08
Date Analyzed: 07/03/12	Data File: 070309.D
Matrix: Water	Instrument: GCMS9
Units: ug/L (ppb)	Operator: JS

	% Recovery:	Lower Limit:	Upper Limit:
Surrogates:			
1,2-Dichloroethane-d4	97	50	150
Toluene-d8	97	50	150
4-Bromofluorobenzene	103	50	150

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-9	Client: Environmental Associates
Date Received: 07/02/12	Project: Tri-Western-Mac's Cleaners
Date Extracted: 07/03/12	Lab ID: 207016-09
Date Analyzed: 07/03/12	Data File: 070319.D
Matrix: Water	Instrument: GCMS9
Units: ug/L (ppb)	Operator: JS

	% Recovery:	Lower Limit:	Upper Limit:
Surrogates:			
1,2-Dichloroethane-d4	97	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	101	50	150

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	15

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: Drum1, Drum 2, Drum 3	Client: Environmental Associates
Date Received: 07/02/12	Project: Tri-Western-Mac's Cleaners
Date Extracted: 07/03/12	Lab ID: 207016-10
Date Analyzed: 07/03/12	Data File: 070327.D
Matrix: Water	Instrument: GCMS9
Units: ug/L (ppb)	Operator: JS

	% Recovery:	Lower Limit:	Upper Limit:
Surrogates:			
1,2-Dichloroethane-d4	98	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	104	50	150

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	6.4

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:	Tri-Western-Mac's Cleaners
Date Extracted:	07/03/12	Lab ID:	02-1145 mb
Date Analyzed:	07/03/12	Data File:	070307.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	94	50	150
Toluene-d8	96	50	150
4-Bromofluorobenzene	100	50	150

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

Date of Report: 07/10/12

Date Received: 07/02/12

Project: Tri-Western-Mac's Cleaners PO JN-20209-5, F&BI 207016

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

Laboratory Code: 207016-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent	Acceptance Criteria
				Recovery MS	
Vinyl chloride	ug/L (ppb)	50	<0.2	106	50-150
Chloroethane	ug/L (ppb)	50	<1	108	50-150
1,1-Dichloroethene	ug/L (ppb)	50	<1	101	50-150
Methylene chloride	ug/L (ppb)	50	<5	91	50-150
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	103	50-150
1,1-Dichloroethane	ug/L (ppb)	50	<1	90	50-150
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	90	50-150
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	96	50-150
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	87	50-150
Trichloroethene	ug/L (ppb)	50	<1	85	50-150
Tetrachloroethene	ug/L (ppb)	50	1.1	91	50-150

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	Percent	Acceptance Criteria	RPD (Limit 20)
			Recovery LCS	Recovery LCSD		
Vinyl chloride	ug/L (ppb)	50	113	111	70-130	2
Chloroethane	ug/L (ppb)	50	114	111	70-130	3
1,1-Dichloroethene	ug/L (ppb)	50	106	106	70-130	0
Methylene chloride	ug/L (ppb)	50	96	93	70-130	3
trans-1,2-Dichloroethene	ug/L (ppb)	50	111	105	70-130	6
1,1-Dichloroethane	ug/L (ppb)	50	97	93	70-130	4
cis-1,2-Dichloroethene	ug/L (ppb)	50	94	92	70-130	2
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	102	101	70-130	1
1,1,1-Trichloroethane	ug/L (ppb)	50	94	91	70-130	3
Trichloroethene	ug/L (ppb)	50	92	88	70-130	4
Tetrachloroethene	ug/L (ppb)	50	92	93	70-130	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.

A1 – More than one compound of similar molecule structure was identified with equal probability.

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 this range fell outside of acceptance criteria. The value reported is an estimate.

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

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

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. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. 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 analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is 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 compound indicated 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 in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.


ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

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.

SAMPLE CHAIN OF CUSTODY

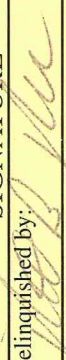

Page # 1 of 1

SAMPLERS (signature) 		PO# JN-20209-5
PROJECT NAME/NO. TriWestern - Mac's Cleaners		
REMARKS		

TURNAROUND TIME <input checked="" type="checkbox"/> Standard (2 Weeks) <input type="checkbox"/> RUSH Rush charges authorized by _____	SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Return samples <input type="checkbox"/> Will call with instructions
---	---

Send Report To Environmental Associates, Inc.
 Company TriWestern Syndicated Invest.
 Address 10423 Main St, Suite 4
 City, State, ZIP Belleuve - WA 98004
 Phone # (425) 455-9025 Fax # (425) 455-2316

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED						Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	
NW-1		6/29/2012		H ₂ O	3				X			
NW-2		6/28/2012			3				X			
NW-3		6/28/2012			3				X			
NW-4		6/29/2012			3				X			
NW-5		6/29/2012			3				X			
NW-6		6/28/2012			3				X			
NW-7		6/28/2012			3				X			
NW-8		6/29/2012			3				X			
NW-9		6/28/2012			3				X			
Down 1, Down 2, Down 3		6/29/2012			3				X			All ore from same drum

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Robert B. Roe	EAT	7/2/2012	
Received by: 	Elizabeth Webber - Bruya	FBI	7/2/12	11:50
Relinquished by:				
Received by:				

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