

**FIRST QUARTER
GROUNDWATER MONITORING**

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

**TRI WESTERN SYNDICATED
INVESTMENTS, INC.**

ADRAFT

ENVIRONMENTAL ASSOCIATES, INC.

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December 30, 2011

JN-20209-5

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



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

Dear Mr. Radford:

Environmental Associates, Inc. (EAI) has completed the first 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 first 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 is to be carried out 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 will be 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 first quarter of groundwater monitoring was performed over a two-day period during December 5th and 6th, 2011. 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 of MW-5 and between MW-6 and MW-9. The groundwater flow regime appears generally consistent with prior surveys.

Groundwater Sampling

The nine (9) monitoring wells were sampled between December 5th and 6th, 2011. Prior to that, the monitoring wells were last sampled in December 2010.

Prior to sampling, 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

A rectangular stamp with the word "DRAFT" in a bold, sans-serif font. To the left of the text is a small icon of a document with a pencil, indicating a draft or working version.

The nine (9) groundwater samples were analyzed by the project laboratory for chlorinated volatile organic compounds by EPA test method 8260B. The laboratory results are 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 seven (7) of the nine (9) samples. PCE was not detected in the groundwater samples recovered from MW-1 or MW-8 at concentrations above the laboratory's minimum detection limit. As presented in Table 3, prior groundwater samples from MW-1 and MW-8 have contained detections of PCE, but at concentrations below the Washington State Department of Ecology (WDOE) 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 wells MW-1 and MW-8 currently appear to establish a partial southern limit of the PCE groundwater plume, as presented on Plate 4, PCE In Groundwater as a red “dashed” line.

The remaining seven (7) samples all contained PCE at concentrations above the WDOE's target compliance level. During the current sampling event, the highest concentrations of PCE were observed in groundwater samples recovered from monitoring wells MW-3, MW-6 and MW-7, all three of which contained between 201 to 230 ppb PCE. In general, at all locations, measured concentrations of PCE were lower than the prior sampling event last December (2010). Acknowledging the limited seasonal variation 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 March 2012, with subsequent events in June and September 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.

DRAFT

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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 12/28/2010 12/5/2011	408.09	407.69 407.69	5.11 5.38 5.47	 -0.27 -0.09	402.58 402.31 402.22
MW-2 1/20/2010 12/28/2010 12/6/2011	408.68	408.44 408.44	5.36 5.24 6.26	 0.12 -1.02	403.08 403.20 402.18
MW-3 1/20/2010 12/28/2010 12/5/2011	409.16	408.84 408.86	5.55 5.39 6.65	 0.16 -1.26	403.29 403.47 402.21
MW-4 1/20/2010 12/28/2010 12/6/2011	413.11	412.74 412.77	5.65 5.53 7.24	 0.12 -1.71	407.09 407.24 405.53
MW-5 12/28/2010 12/5/2011		410.09	7.06 8.16	 -1.10	403.03 401.93
MW-6 12/28/2010 12/6/2011		407.83	6.48 7.42	 -0.94	401.35 400.41
MW-7 12/28/2010 12/5/2011		407.41	5.25 5.64	 -0.39	402.16 401.77
MW-8 12/28/2010 12/5/2011		406.22	4.39 4.75	 -0.36	401.83 401.47
MW-9 12/28/2010 12/6/2011		403.23	1.94 2.05	 -0.11	401.29 401.18

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 December 15, 2010 December 5, 2011	7.29 5.9 6.36	15.3 9.1 5.4	13.0 12.6 13.7	-93 110 89	3.69 7.12 2.34
MW-2 January 20, 2010 December 15, 2010 December 5, 2011	6.55 5.43 6.35	12.2 12.7 7.5	14.3 14.9 15.5	37 223 209	2.52 6.64 5.17
MW-3 January 20, 2010 December 15, 2010 December 5, 2011	6.63 5.54 6.19	21.8 21.9 16.8	14.2 14.9 15.4	200 225 217	5.56 7.49 6.13
MW-4 January 20, 2010 December 15, 2010 December 5, 2011	6.86 5.64 6.31	33.4 31.1 20.3	13.5 14.0 14.1	221 216 220	5.88 6.64 5.05
MW-5 December 15, 2010 December 5, 2011	5.72 6.30	14.7 9.3	15.3 15.3	219 198	6.77 4.67
MW-6 December 15, 2010 December 5, 2011	6.03 6.59	19.7 15.9	13.9 14.4	217 197	6.68 6.81
MW-7 December 15, 2010 December 5, 2011	6.15 6.68	23.0 14.0	13.7 13.3	139 164	7.22 5.51
MW-8 December 15, 2010 December 5, 2011	5.74 6.08	27.9 17.4	12.7 12.1	191 183	6.16 7.92
MW-9 December 15, 2010 December 5, 2011	5.88 7.11	11.8 8.3	11.0 12.8	184 160	9.41 8.37

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
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
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
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
MW-5						
12/16/2010	230	1.9	<1	<1	<0.2	<1
12/5/2010	150	<1	<1	<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
MW-7						
12/15/2010	280	1.8	<1	<1	<0.2	3.6
12/5/2011	230	<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
MW-9						
12/15/2010	50	<1	<1	<1	<0.2	<1
12/06/2011	10	<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.

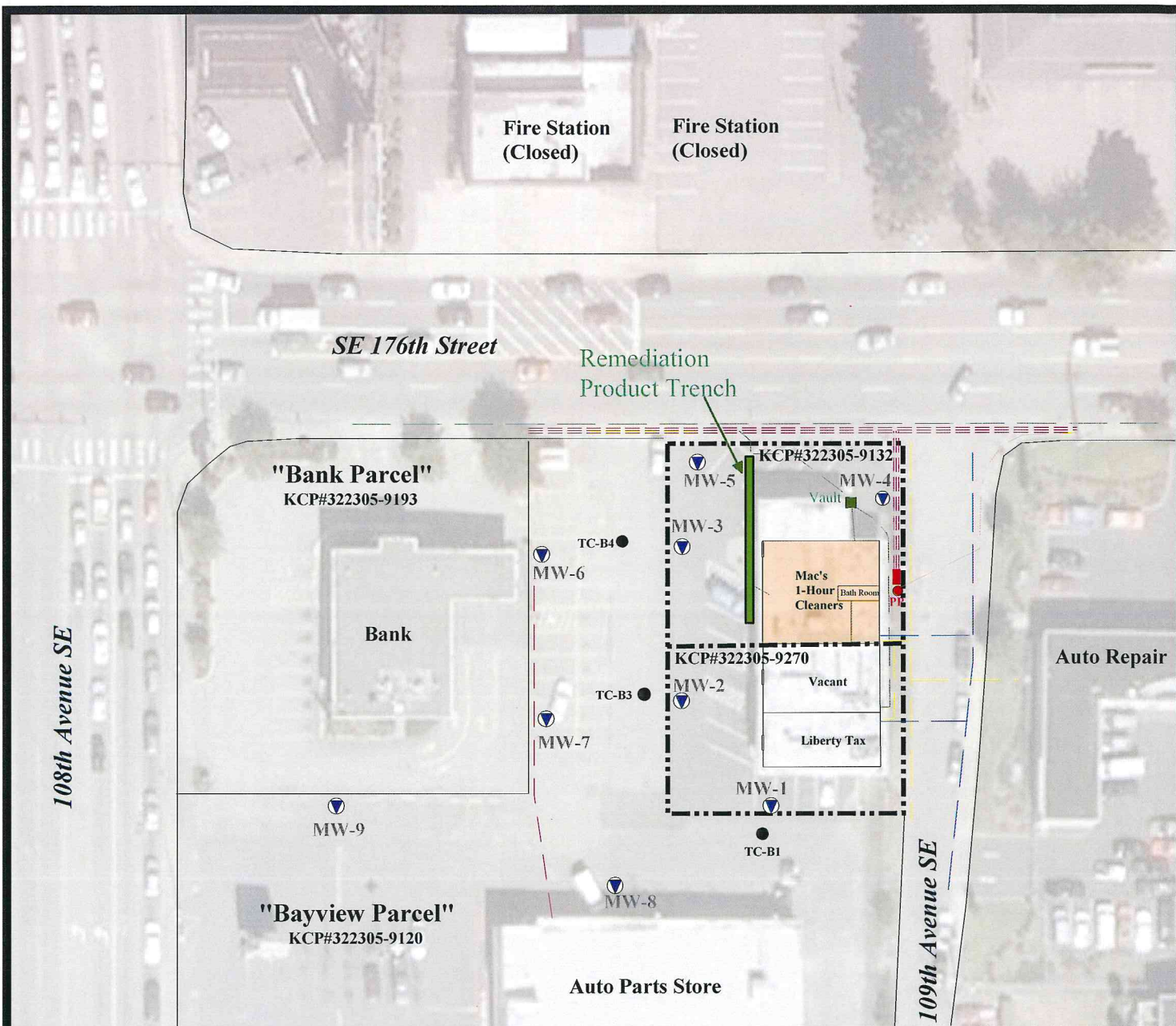
2 - "NA" denotes sample not analyzed for specific analyte.

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.





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:

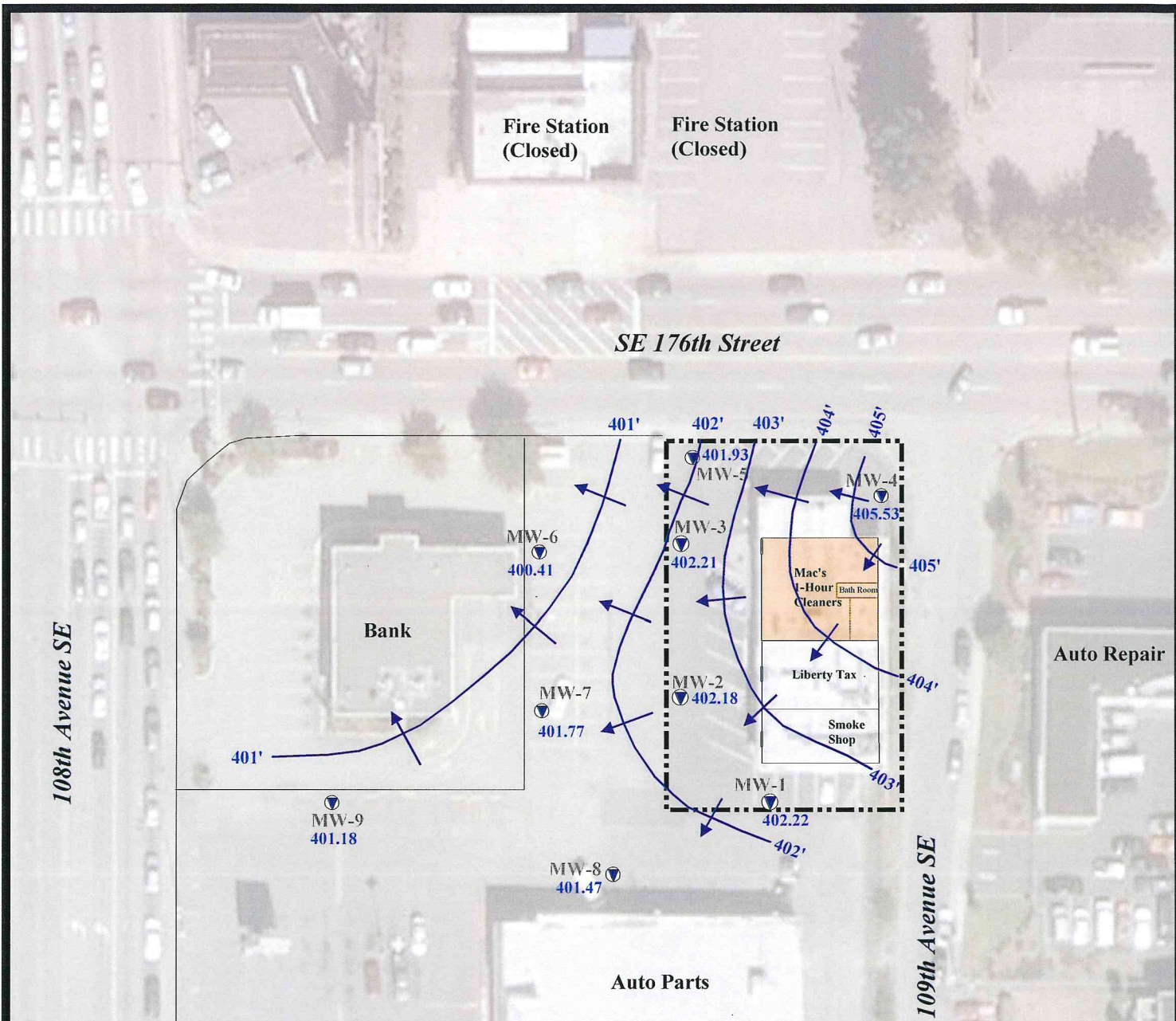
December 2011

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.



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ASSOCIATES, INC.**

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Bellevue, Washington 98004

WATER TABLE SURVEY

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

Job Number:

JN-20209-3

Date:

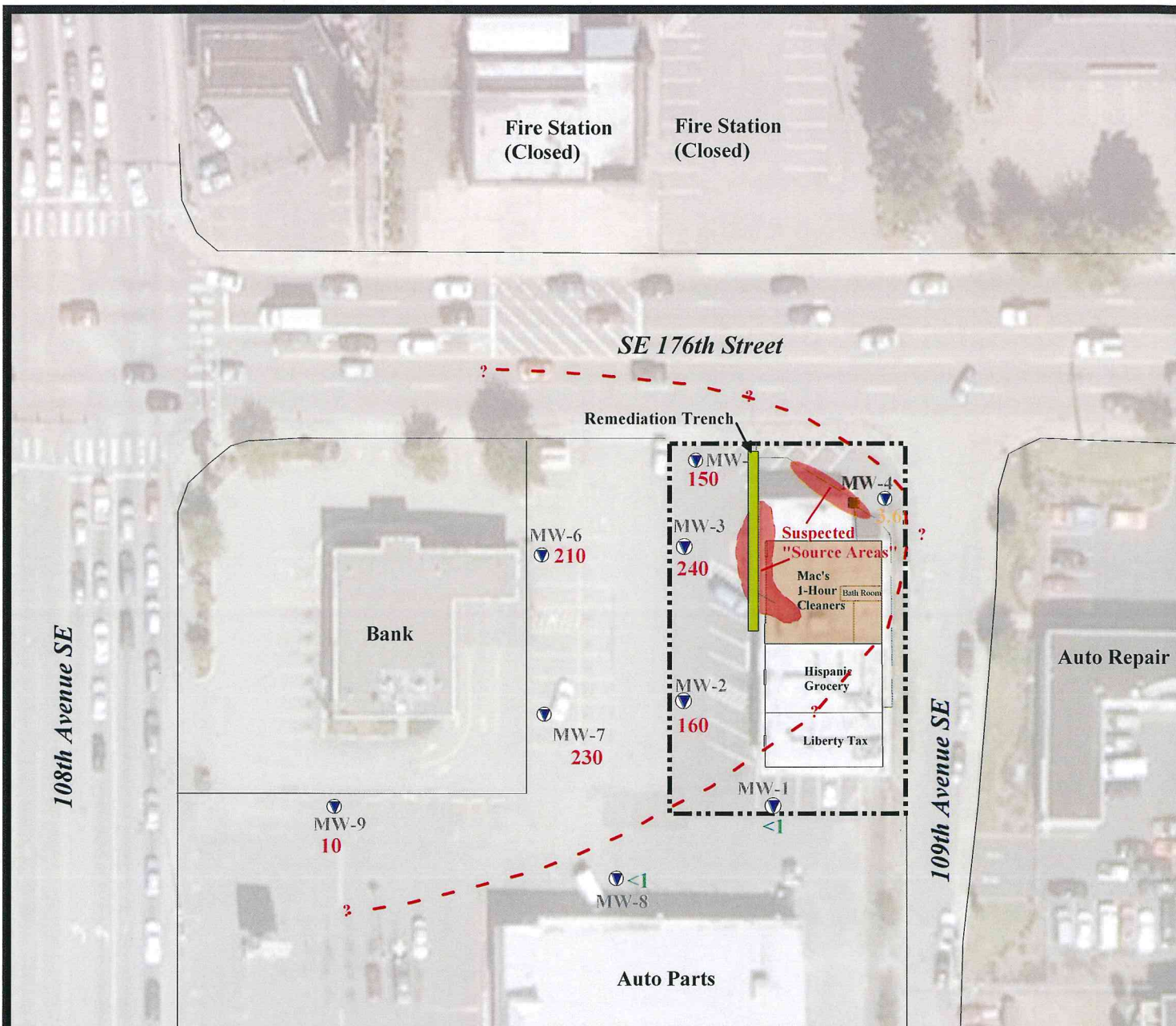
December 2010

Scale:

1"=80'

Plate:

3



Approximate border of Subject Property

Red dashed line: 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.



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PCE IN GROUNDWATER

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

Job Number:

JN-20209-5

Date:

December 2011

Scale:

1"=80'

Plate:

4