SECOND QUARTER GROUNDWATER MONITORING

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

TRI WESTERN SYNDICATED INVESTMENTS, INC.

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

April 9, 2012 JN-20209-5

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

RE: SECOND QUARTER - GROUNDWATER MONITORING

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

Dear Mr. Radford:

Environmental Associates, Inc. (EAI) has completed the second 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 second quarter of groundwater monitoring was performed over a two-day period during March 22^{nd} and 23^{rd} , 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 March 22nd and 23rd, 2012. Prior to that, the monitoring wells were last sampled in December 2011.

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 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 summarized 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 well's MW-1 and MW-8 currently appear to establish a partial southern limit of the PCE groundwater plume, as depicted on Plate 4, PCE In Groundwater as a red "dashed" line.

The remaining seven (7) samples all contained PCE at concentrations above the laboratory detection level. Groundwater at MW-4 in the northeast corner of the property continues to have trace concentrations of PCE below the WDOE's 5 ppb target compliance level. Groundwater from the remaining six (6) wells continue to contain PCE at concentrations above the WDOE's target compliance level. 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 100 to 150 ppb.

In general, at all locations except MW-9, measured concentrations of PCE were lower than the prior sampling event last December (2011). The 2-ppb difference is for present, viewed as statistically minute. 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.

Robert B. Roe

Next Sampling Event

The next quarterly sampling event is tentatively scheduled to occur in June 2012, with a subsequent event in 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.

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

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(California) License: 876 License: 5195

(Illinois) License: 0327

(Mississippi)

Environmental Associates, Inc.

Sysed Geo

DON W. SPENCER

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

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	Water [*]	Tab	le S	Sur	ve	y
		(fee	et)			
CONTRACTOR DE			~	MATERIAL PROPERTY.		200

		(1	eet)		
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 3/22/2012	408.09	407.69 407.69	5.11 5.38 5.47 5.50	-0.27 -0.09 -0.03	402.58 402.31 402.22 402.19
MW-2 1/20/2010 12/28/2010 12/6/2011 3/23/2012	408.68	408.44 408.44	5.36 5.24 6.26 4.86	0.12 -1.02 1.40	403.08 403.20 402.18 403.58
MW-3 1/20/2010 12/28/2010 12/5/2011 3/23/2012	409.16	408.84 408.86	5.55 5.39 6.65 4.76	0.16 -1.26 1.89	403.29 403.47 402.21 404.10
MW-4 1/20/2010 12/28/2010 12/6/2011 3/23/2012	413.11	412.74 412.77	5.65 5.53 7.24 4.65	0.12 -1.71 2.59	407.09 407.24 405.53 408.12
MW-5 12/28/2010 12/5/2011 3/23/2012		410.09	7.06 8.16 5.40	-1.10 2.76	403.03 401.93 404.69
MW-6 12/28/2010 12/6/2011 3/22/2012		407.83	6.48 7.42 5.94	-0.94 1.48	401.35 400.41 401.89
MW-7 12/28/2010 12/5/2011 3/22/2012		407.41	5.25 5.64 4.75	-0.39 0.89	402.16 401.77 402.66
MW-8 12/28/2010 12/5/2011 3/22/2012		406.22	4.39 4.75 4.14	-0.36 0.61	401.83 401.47 402.08
MW-9 12/28/2010 12/6/2011 3/22/2012		403.23	1.94 2.05 1.90	-0.11 0.15	401.29 401.18 401.33

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.

Mac's One-Hour Cleaners JN-20209-5

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

Monitoring Point	pН	Conductivity mS/m	Temperature (Celsius)	Oxidation-Reduction Potential mV	Dissolved Oxygo 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
Marcii 22, 2012	0.10	0.1	7.07	32.	
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
MW-3					
January 20, 2010	6.63	21.8	14.2	200	5.56
	5.54	21.9	14.9	225	7.49
December 15, 2010)	1	15.4	217	6.13
December 5, 2011	6.19	16.8	4	1	7.91
March 23, 2012	5.71	23.7	11.47	311	7.71
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
Watch 23, 2012	3.70	40.3	11.01		
MW-5				210	6.37
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
MW-6					
December 15, 2010	6.03	19.7	13.9	217	6.68
	1	15.9	14.4	197	6.81
December 5, 2011	6.59	1	10.35	323	7.97
3/22/1012	5.35	16.6	10.55	323	7.57
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
MW-8					
December 15, 2010	5.74	27.9	12.7	191	6.16
	6.08	17.4	12.1	183	7.92
December 5, 2011 March 22, 2012	5.94	22.0	9.95	335	3.02
NAME OF					
MW-9	500	11.8	11.0	184	9.41
December 15, 2010	5.88			160	8.37
December 5, 2011	7.11	8.3	12.8		1
March 22, 2012	6.14	7.1	9.43	322	10.97

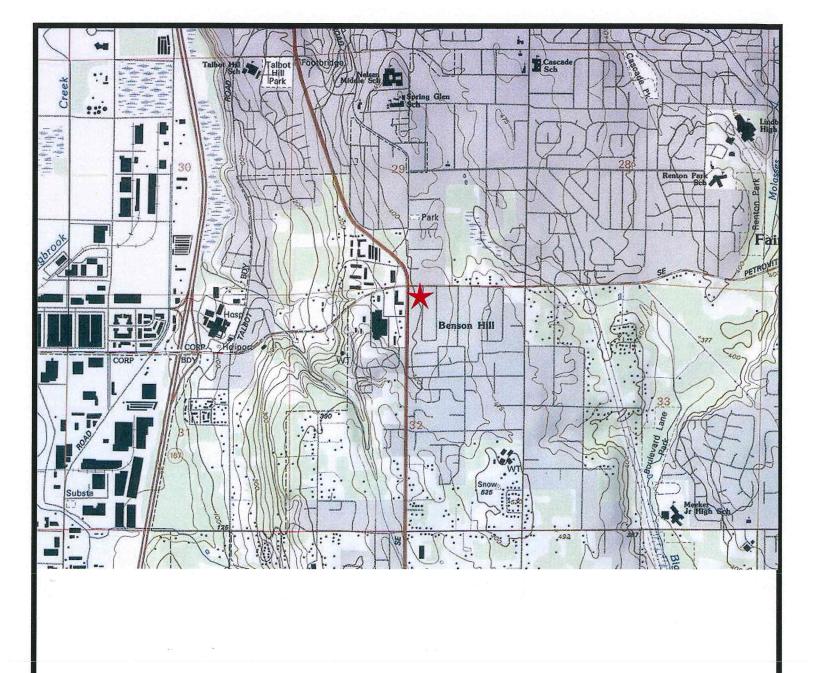
TABLE 3 - Chlorinated VOCs - Groundwater Sampling Results All results and limits in parts per billion (ppb)						
Monitoring Well	Tetrachloroethene (PCE)	Trichloroethene (TCE)	(cis) 1,2 Dichloroethene	(trans) 1,2 Dichloroethen	Vinyl Chloride	Chloroform
MW-1						
1/20/2010	1.5	<1	<1	<1	<0.2	<1
12/15/2010	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
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 NA
3/23/2012	100					
3/23/2012	100	<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 NA
3/23/2012	150	<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
X 633.7 C						
MW-5	220	1 ^				
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
•						

MW-6						
12/16/2010	250	1.1	<1	<1	<0.2	8.1
12/6/2011	210	<i< td=""><td><1</td><td><1</td><td><0.2</td><td>NA</td></i<>	<1	<1	<0.2	NA
3/22/2012	120	<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
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
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
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.



USGS: 7.5 Minute Quadrangle: Renton, Washington

Contour Interval: 25 feet



Subject Property Location





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



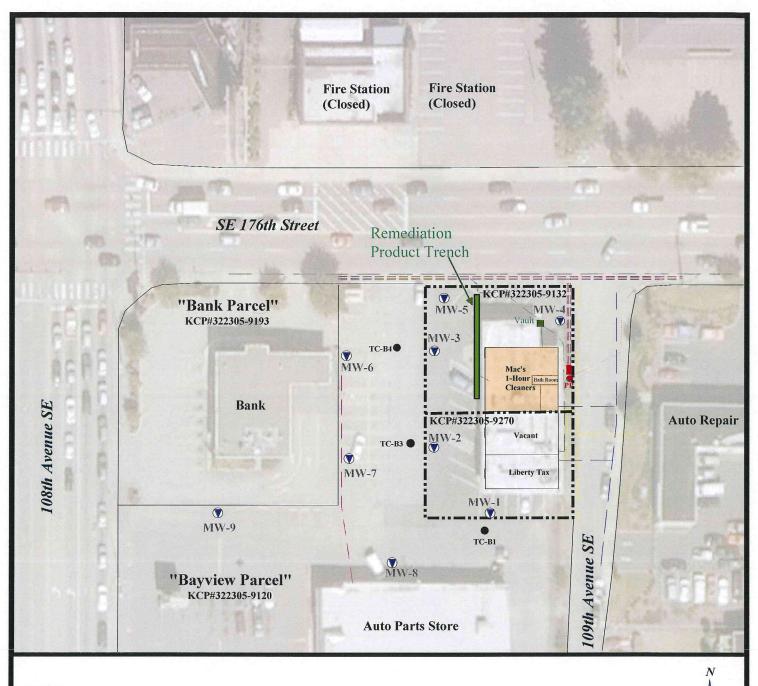
ENVIRONMENTAL ASSOCIATES, INC.

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	March 2012	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).



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

STUDY AREA - OVERVIEW

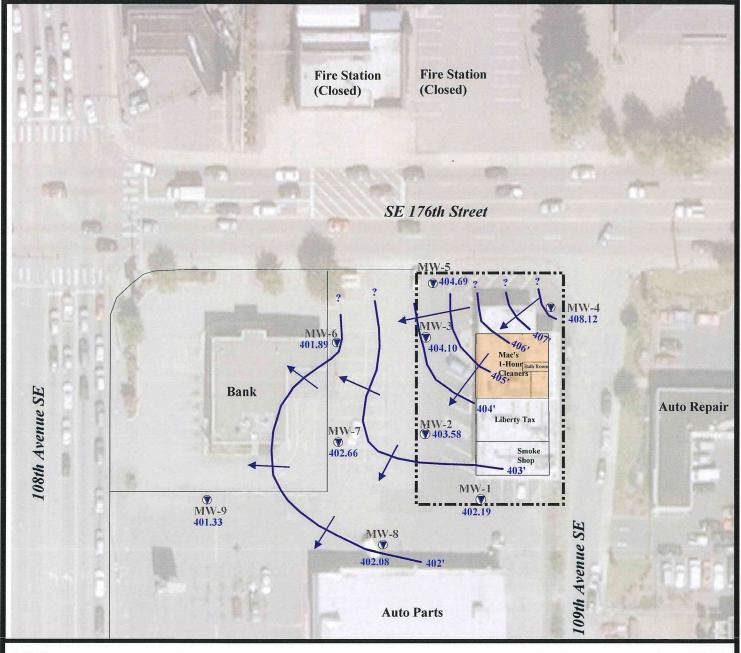
Mac's One Hour Cleaners 10825 SE 176th Street Renton, Washington

Job Number:	Dat
JN-20209-5	

TATORI CII MOTH		March	2012
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Scale:	Plate:
1"=80"	

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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WATER TABLE SURVEY

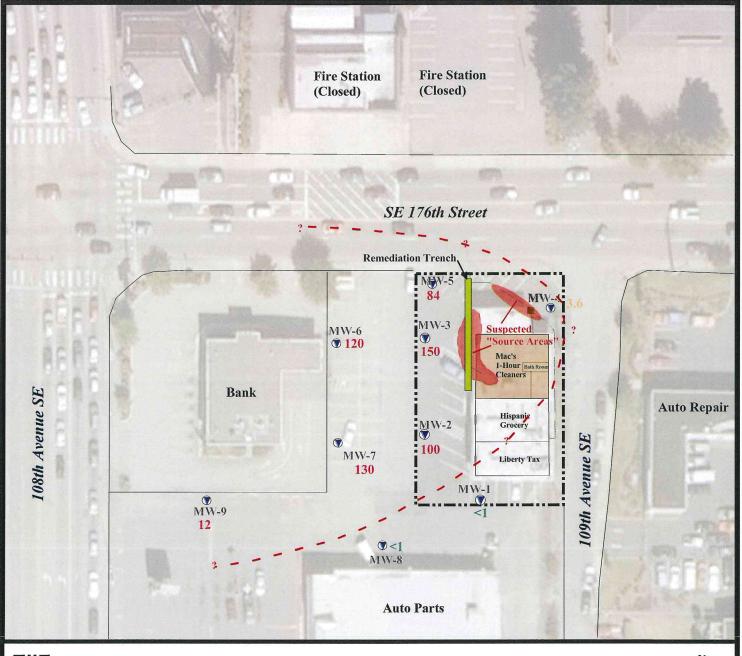
Mac's One Hour Cleaners 10825 SE 176th Street Renton, Washington

Job Number:	
JN-20209-3	

Date:			
March	20	1	2

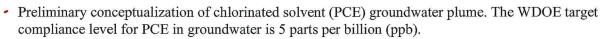
cale:	Plate:
1"=80	3

3





Approximate border of Subject Property





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:	Date:	Scale:	Plate:
JN-20209-5	March 2012	1''=80'	4

APPENDIX-A

Laboratory Reports

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

April 2, 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 March 27, 2012 from the TriWestern-Mac's Cleaners, PO 20209-5, F&BI 203362 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 EAI0402R.DOC

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on March 27, 2012 by Friedman & Bruya, Inc. from the Environmental Associates TriWestern-Mac's Cleaners, PO 20209-5, F&BI 203362 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	Environmental Associates
203362-01	MW-1
203362-02	MW-2
203362-03	MW-3
203362-04	MW-4
203362-05	MW-5
203362-06	MW-6
203362-07	MW-7
203362-08	MW-8
203362-09	MW-9

All quality control requirements were acceptable.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix:	MW-1 03/27/12 03/28/12 03/28/12 Water	Client: Project: Lab ID: Data File: Instrument:	Environmental Associates TriWestern-Mac's Cleaners, PO 20209-5 203362-01 032809.D GCMS4
Units:	ug/L (ppb)	Operator:	JS

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

Concentration ug/L (ppb)
< 0.2
<1
<1
<5
<1
<1
<1
<1
<1
<1
<1

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: MW-2 Date Received: 03/27/ Date Extracted: 03/28/ Date Analyzed: Water Units: ug/L (12 12
--	----------

Client:	Environmental Associates
Project:	TriWestern-Mac's Cleaners, PO 20209-5
Lab ID:	203362-02
Data File:	032823.D
Instrument:	GCMS4
Operator:	JS
•	

Surrogates: 1,2-Dichloroethane-d4 Toluene-d8 4-Bromofluorobenzene	% Recovery: 101 100 101	Lower Limit: 57 63 60	Upper Limit: 121 127 133
Compounds: Vinyl chloride	Concentration ug/L (ppb)	ov.	130

Compounds:	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	100

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: MW-3
Date Received: 03/27/12
Date Extracted: 03/28/12
Date Analyzed: 03/28/12
Matrix: Water
Units: ug/L (ppb)

Client: Environmental Associates

Project: TriWestern-Mac's Cleaners, PO 20209-5 Lab ID: 203362-03

Lab ID: 203362-03
Data File: 032827.D
Instrument: GCMS4
Operator: JS

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	102	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	150 ve

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-3
Date Received:	03/27/12
Date Extracted:	03/28/12
Date Analyzed:	03/28/12
Matrix:	Water
Units:	ug/L (ppb)

Client:	Environmental Associates
Project:	TriWestern-Mac's Cleaners, PO
Lab ID:	203362-03 1/10
Data File:	032822.D

20209-5

032822.I
GCMS4
JS

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	98	57	121
Toluene-d8	103	63	127
4-Bromofluorobenzene	103	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<2 pr
Chloroethane	<10
1,1-Dichloroethene	<10
Methylene chloride	< 50
trans-1,2-Dichloroethene	<10
1,1-Dichloroethane	<10
cis-1,2-Dichloroethene	<10
1,2-Dichloroethane (EDC)	<10
1,1,1-Trichloroethane	<10
Trichloroethene	<10
Tetrachloroethene	150

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client: Environmental Associates
Project: TriWestern-Mac's Cleaners, PO 20209-5

Project: TriWester:
Lab ID: 203362-04
Data File: 032810.D
Instrument: GCMS4
Operator: JS

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	101	57	121
Toluene-d8	99	63	127
4-Bromofluorobenzene	103	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	3.6

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: MW-5 Client: Environmental Associates Date Received: Project: TriWestern-Mac's Cleaners, PO 20209-5 03/27/12 Lab ID: Date Extracted: 03/28/12 203362-05 Date Analyzed: 03/28/12 Data File: 032824.D Water Matrix: Instrument: GCMS4 Units: ug/L (ppb) Operator: JS

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	100	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	103	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	84

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix:	MW-6	Client:	Environmental Associates
	03/27/12	Project:	TriWestern-Mac's Cleaners, PO 20209-5
	03/28/12	Lab ID:	203362-06
	03/28/12	Data File:	032825.D
	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	102	57	121
Toluene-d8	102	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	120

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-7
Date Received:	03/27/12
Date Extracted:	03/28/12
Date Analyzed:	03/28/12
Matrix:	Water
Units:	ug/L (ppb)

Client:	Environmental Associates
Project:	TriWestern-Mac's Cleaners, PO 20209-5
Lab ID:	203362-07
Data File:	032826.D

Lab ID: 203362-0'
Data File: 032826.D
Instrument: GCMS4
Operator: JS

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	98	57	121
Toluene-d8	102	63	127
4-Bromofluorobenzene	97	60	133
1,2-Dichloroethane-d4 Toluene-d8	98 102	57 63	121 127

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	130

ENVIRONMENTAL CHEMISTS

Environmental Associates

203362-08

032811.D

GCMS4

JS

TriWestern-Mac's Cleaners, PO 20209-5

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: MW-8 Client: Date Received: 03/27/12 Project: 03/28/12 Lab ID: Date Extracted: Date Analyzed: 03/28/12 Data File: Matrix: Water Instrument: ug/L (ppb) Units: Operator:

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	100	57	121
Toluene-d8	99	63	127
4-Bromofluorobenzene	103	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

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: MW-9 Client: Environmental Associates Date Received: 03/27/12 Project: TriWestern-Mac's Cleaners, PO 20209-5 Lab ID: Date Extracted: 03/28/12 203362-09 Date Analyzed: 03/28/12 Data File: 032817.D Matrix: Water Instrument: GCMS4 ug/L (ppb) Units: Operator: JS

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	100	57	121
Toluene-d8	98	63	127
4-Bromofluorobenzene	102	60	133

Concentration ug/L (ppb)
< 0.2
<1
<1
<5
<1
<1
<1
<1
<1
<1
12

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	Environmental Associates
•			
Date Received:	Not Applicable	Project:	TriWestern-Mac's Cleaners, PO 20209-5
Date Extracted:	03/28/12	Lab ID:	02-0433 mb
Date Analyzed:	03/28/12	Data File:	032808.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS
		~	••

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	98	57	121
Toluene-d8	99	63	127
4-Bromofluorobenzene	103	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

ENVIRONMENTAL CHEMISTS

Date of Report: 04/02/12 Date Received: 03/27/12

Project: TriWestern-Mac's Cleaners, PO 20209-5, F&BI 203362

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

Laboratory Code: 203362-08 (Matrix Spike)

				Percent	
	Reporting	Spike	Sample	Recovery	Acceptance
Analyte	Units	Level	Result	MS	Criteria
Vinyl chloride	ug/L (ppb)	50	< 0.2	101	36-166
Chloroethane	ug/L (ppb)	50	<1	93	46-160
1,1-Dichloroethene	ug/L (ppb)	50	<1	94	60-136
Methylene chloride	ug/L (ppb)	50	<5	90	67-132
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	102	72-129
1,1-Dichloroethane	ug/L (ppb)	50	<1	104	70-128
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	100	71-127
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	105	69-133
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	100	60-146
Trichloroethene	ug/L (ppb)	50	<1	100	66-135
Tetrachloroethene	ug/L (ppb)	50	<1	97	73-129

Laboratory Code: Laboratory Control Sample

	Reporting	Spike	Percent Recovery	Percent Recovery	Acceptance	RPD
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 20)
Vinyl chloride	ug/L (ppb)	50	116	118	50-154	2
Chloroethane	ug/L (ppb)	50	108	110	58-146	2
1,1-Dichloroethene	ug/L (ppb)	50	101	107	67-136	6
Methylene chloride	ug/L (ppb)	50	91	95	39-148	4
trans-1,2-Dichloroethene	ug/L (ppb)	50	98	103	68-128	5
1,1-Dichloroethane	ug/L (ppb)	50	94	100	79-121	6
cis-1,2-Dichloroethene	ug/L (ppb)	50	97	103	80-123	6
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	90	94	73-132	4
1,1,1-Trichloroethane	ug/L (ppb)	50	98	102	83-130	4
Trichloroethene	ug/L (ppb)	50	92	98	80-120	6
Tetrachloroethene	ug/L (ppb)	50	97	103	76-121	6

ENVIRONMENTAL CHEMISTS

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.
- \boldsymbol{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.
- ${
 m jr}$ 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.

TURNAROUND TIM XStandard (2 Weeks) SAMPLE CHAIN OF CUSTODY SAMPLERS (signature) PROJECT NAME/NO. 362 BIL to 2032 to 2 (N.D) 3/27/12 Send Report To Environmental Asso > Company Tri West Phone # (425) 455 City, State, ZIP Bel Address 10423

Rush charges authorized by	SAMPLE DISPOSAL □ Dispose after 30 days □ Return samples □ Will call with instructions
Rush cha	Dis Dis Dis Dis Dis
20202	
Tri-Western-Macs Clemen 20209-5	REMARKS
Stern Syndlicuted Invert. Main St, Suite Y	55-9025 Fax # (425) 455-2316

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

FORMS\COC\COC.DOC

TIME DATE Samples received at 5 COMPANY EAT PRINT NAME Received by: Relingur