

12 June 2012

Mr. Steve Teel
Washington State Department of Ecology
Toxics Cleanup Program, Southwest Regional Office
PO Box 47775
Olympia, Washington 98504

**Subject: Milton's Dry Cleaners – REVISED 2012 Groundwater Monitoring Plan
Milton's Dry Cleaners Site, Agreed Order DE423907/4-TC-S
Vancouver, WA**

Dear Mr. Teel:

Geosyntec Consultants (Geosyntec) has revised the following groundwater monitoring and sampling program to incorporate Washington State Department of Ecology's (Ecology's) 15 May 2012 comments to our 9 March 2012 Groundwater Monitoring Work Plan. These activities are being conducted as part of the groundwater remedial investigation (RI) activities at the Milton's Dry Cleaners site (Site). Both the former Milton's Dry Cleaners property (Property) and a larger area (the "Study Area") are being evaluated as part of the Site. The RI is being conducted in accordance with the Agreed Order (DE423907/4-TC-S) and is intended to characterize tetrachloroethene (perchloroethene [PCE]) in soil and groundwater. This monitoring plan is submitted for final review and approval by Ecology. Geosyntec intends to implement this groundwater monitoring program starting in early summer 2012.

Groundwater is being monitored at the Site to determine: (1) trends in PCE concentrations in source area shallow, intermediate, and deep wells; (2) PCE concentration trends in Study Area wells located in the distal shallow, intermediate, and deep aquifers; and (3) groundwater flow directions and gradients. The Site location and existing monitoring well locations are shown on Figure 1. Proposed modifications to the existing groundwater monitoring program and the reasons for these modifications are discussed below.

BACKGROUND

The groundwater monitoring well network is composed of 36 monitoring wells and six domestic water supply wells. One complete year of quarterly groundwater monitoring was completed for the 36 monitoring wells between November 2010 and August 2011, although three of these wells (MW-21s, MW-22i, and MW-23i) were installed in May of 2011 and therefore were only sampled twice in this time period. The six domestic water supply wells have been sampled on a semiannual basis with more frequent bimonthly monitoring at the Friends Church well. Groundwater monitoring was completed historically at shallow wells on the Property (MW-1s-MW-4s) from 2002 through 2005 and at select wells in 2008 and 2009. The results from previous groundwater sampling events are shown on Figures 2 and 3 and summarized in Table 1. These results were discussed in the Soil and Groundwater Data Summary Report (Geosyntec 2011a) and the Monitoring Well Installation, April and August 2011 Groundwater Sampling Events Technical Memorandum (Geosyntec 2011b).

MODIFICATIONS TO GROUNDWATER MONITORING FREQUENCY

This revised groundwater monitoring plan is based on Ecology's comments, a thorough review of previous laboratory analytical data and PCE concentration trends, groundwater elevations, and groundwater chemistry data from the existing network of 36 monitoring wells and six domestic water supply wells over the last four years (2008–2011). Although groundwater elevations fluctuate with precipitation events by several feet, groundwater flow directions have been consistent. At most wells, PCE concentrations have been relatively stable and consistent, with three notable exceptions: MW-4s, MW-7i, and MW-20s (Table 1). Redox parameters obtained during low flow purging, and sampling have also been stable and consistent over the last year of monitoring. In summary, significant seasonal trends in groundwater flow directions, PCE concentrations, and redox conditions are not observed.

Geosyntec proposes the following modifications to the groundwater monitoring plan:

- Cessation of sampling of domestic/irrigation water supply wells at the Ezetta property, where PCE has been detected at consistently low concentrations, and at the Ono and Davis properties, where PCE has not been detected.
- Cessation of regular sampling of wells MW-17s, MW-17i, and MW-12i.

- Use of passive diffusion bags (PDBs) instead of low flow groundwater sampling to provide vertical profiling in source area wells, more efficient field data collection, and reduction of IDW.

Groundwater sampling frequency will be conducted on a quarterly basis from 33 of the 36 existing groundwater monitoring wells and the Friends Church water supply well. Depth-to-water measurements will be collected on a quarterly basis from the 36 groundwater monitoring wells in the Study Area. The PCE concentration history for existing groundwater monitoring wells and the proposed monitoring well sampling frequency are summarized in Table 2.

SAMPLING METHOD

Historically, groundwater sampling from monitoring wells at the Site has typically been conducted using low-flow sampling methods with a non-dedicated bladder pump and disposable tubing. Use of PDBs is proposed instead of low flow sampling. Use of PDBs in combination with traditional groundwater elevation measurements will accomplish groundwater monitoring data objectives and goals for this project, as presented above. More information regarding PDB sampling methodologies, rationale for use, how PDBs work, and field deployment instructions are presented in Attachment A.

PDBs will be suspended within each monitoring well on a dedicated metal line with a tether at the top and bottom of each PDB and a weight attached to the base of the metal line. PDBs are typically set at depth(s) in the middle of the well screen interval or the middle of the wetted screen. The dedicated metal lines, tethers, and weights are custom assembled by the laboratory to place the PDBs at the specified depths in each well. The amount of weight placed at the bottom of the line is based on the total depth of the well, the depth of the water column, and the number of PDBs in a well.

Following suspension in a well, the PDB will be left to equilibrate with the surrounding water over a minimum 14-day time period, although longer time periods reportedly do not affect analytical results. The PDB is retrieved from a well by pulling up the metal line attached to the PDB. The PDB is detached from the line, one end is cut off, and the water inside the PDB is immediately transferred to the laboratory-supplied, preserved, 40-milliliter vials. Following sample collection, the vials are labeled, logged on a chain-of-custody, placed into a cooler with ice, and transported to the analytical laboratory for chemical analysis of VOCs by EPA Method 8260B per typical groundwater sampling procedures.

Following sampling, the used PDB is replaced with a new, laboratory-filled PDB, clipped to the tether, and suspended inside the well screen until the next sampling event. The PDBs are

provided by the laboratory and come prefilled with certified deionized water. The used PDB is discarded as solid waste.

Sampling Method Comparison

A site-specific comparison of sampling methods will be completed to document the transition from low-flow groundwater purging and sampling to the use of PDBs. During the early summer 2012 monitoring event, both low-flow sampling and PDBs will be used to obtain groundwater samples from five monitoring wells for a side-by-side comparison. Experience at other sites shows a close data correlation between low-flow sampling and PDBs, and a change in sampling method is not anticipated to change the integrity of the groundwater sampling data. Analytical results from the side-by-side comparison will be presented to Ecology and evaluated for data quality, usability, and comparability with previous sampling results. If the side-by-side comparison indicates PDBs and low-flow sample results are not similar and/or do not meet data quality objectives, re-evaluation of the use of PDBs and/or resampling of the wells will be conducted, in consultation with Ecology.

The side-by-side comparison will be completed at five wells including on-Site shallow and intermediate wells MW-4s and MW-7i where relatively high VOCs concentrations have been detected, off-site, downgradient intermediate wells MW-13i and MW-14i where relatively low VOC concentrations have been detected, and off-site, downgradient well MW-20s. Results from these five wells will be used to evaluate consistency of PDB and low-flow sample results. PDBs will be installed and allowed to equilibrate for a minimum of two weeks. Immediately after the PDBs are removed from the two wells, low flow sampling method will be used to collect a groundwater sample from each of the five wells. Both samples will be submitted to the laboratory for chemical analysis.

In addition, a vertical profile will be completed in five wells including shallow monitoring wells MW-4s and MW-20s and intermediate monitoring wells MW-7i, MW-10i, and MW-13i. The vertical profiling will be completed to observe potential VOC concentration variability across the well screen. The vertical profile will consist of three PDBs suspended at approximately 3 foot intervals across the 10-foot well screens. If there is sufficient water in the well, four PDBs will be suspended across the wetted portion of the 15-foot well screen in MW-4s. These five wells have historically exhibited relatively high concentrations of VOCs, although results have been highly variable at MW-7i and MW-10i. Based on a review of the boring logs, the geologic materials appear consistent across the well screen intervals. Therefore, a significant difference in VOC concentrations over well screens is not expected for most, if not all, monitoring wells.

Results of the vertical profile and side-by side comparison will be sent to Ecology upon receipt of the results. The data will be analyzed and presented in the technical memorandum to be prepared for this sampling event. The depth of the highest VOC concentration will be selected for future sampling events for these five wells. If there is statistically little difference in the VOC concentrations across the screened interval, the depth closest to the middle of the wetted screen will be used for future sampling. The results of this analysis will also determine if the location of the PDBs in the other wells will need to be evaluated and possibly altered. New wells installed in the Study Area will also be evaluated using a PDB vertical profile to optimize placement depths of PDBs in the well screens.

PDB Method QA/QC

Trip blank PDBs will travel with each batch of PDBs as they are shipped from the laboratory and installed in the wells. The trip blank PDBs will remain in the cooler until the PDBs are installed in the wells. Once installation is complete, the trip blank PDB bag will be emptied into VOA containers preserved with hydrochloric acid and submitted for VOC analysis by EPA Method 8260. A second trip blank will also be used during the sampling event and will consist of a standard trip blank vial (or VOA) that travels with the cooler as PDBs are retrieved and decanted into VOA containers. This trip blank will also be submitted for analysis for VOCs by EPA Method 8260.

GROUNDWATER REPORTING AND SAMPLING SCHEDULE

Existing monitoring wells MW-21s, MW-22i, and MW-23i were sampled during the Winter 2012 quarterly event completed 24 February 2012. In addition, Ecology requested that three groundwater monitoring wells, MW-13i, MW-14i, and MW-16i, be sampled at the same time as proposed soil vapor sampling to be completed by PNG Environmental. These wells were also sampled on 24 February 2012. Low flow purging and sampling methods were used for this sampling event. Results from this sampling event will be reported to Ecology in a brief technical memorandum and incorporated into forthcoming groundwater summary reports.

The next groundwater sampling event and PDB deployment is scheduled for June 2012. The PDBs will be installed as soon as possible and retrieved no sooner than 14 days following installation.

Results from the early summer groundwater sampling event will be communicated informally with Ecology as laboratory reports are received in order to evaluate efficacy of the PDBs. Upon receipt of final laboratory analytical data, a brief technical memorandum will be prepared to document the results of the groundwater monitoring event. This will include the comparison of the low flow sampling to PDBs and the vertical profiles being done in select wells. In addition,

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final analytical results will be uploaded into Ecology's Electronic Information Management (EIM) database.

The autumn groundwater sampling event will be conducted in September 2012, and analytical results, groundwater elevations, and a summary of the results will be presented in a brief technical memorandum. Any problems encountered during the groundwater sampling will be reported to Ecology immediately. Final analytical results will be uploaded into the EIM database.

CLOSURE

We look forward to your approval of this revised groundwater monitoring plan. Please contact us at (503) 222-9518 with any questions regarding this submittal or if you need additional information.

Sincerely,

Geosyntec Consultants



Cindy Bartlett, LG
Geologist



Sean Ragain, LG
Principal

Attachments:

Figure 1 - Monitoring Well Locations

Figure 2 - Analytical results – Shallow Wells

Figure 3 - Analytical results – Intermediate and Deep Wells

Table 1 – Groundwater VOC Analytical Results Summary

Table 2– Groundwater Monitoring Well Sampling Frequency

Attachment A – Passive Diffusion Bag Sampling Information and Cascade Analytical Services – Passive Diffusion (PDB) Sampler Instructions

Copies to: Brian Chenoweth, Chenoweth Law Group
Marty Burck, MSBA
Paul McBeth, PNG Environmental
Rick Lee, Bodyfelt Mount LLP

9 March 2012

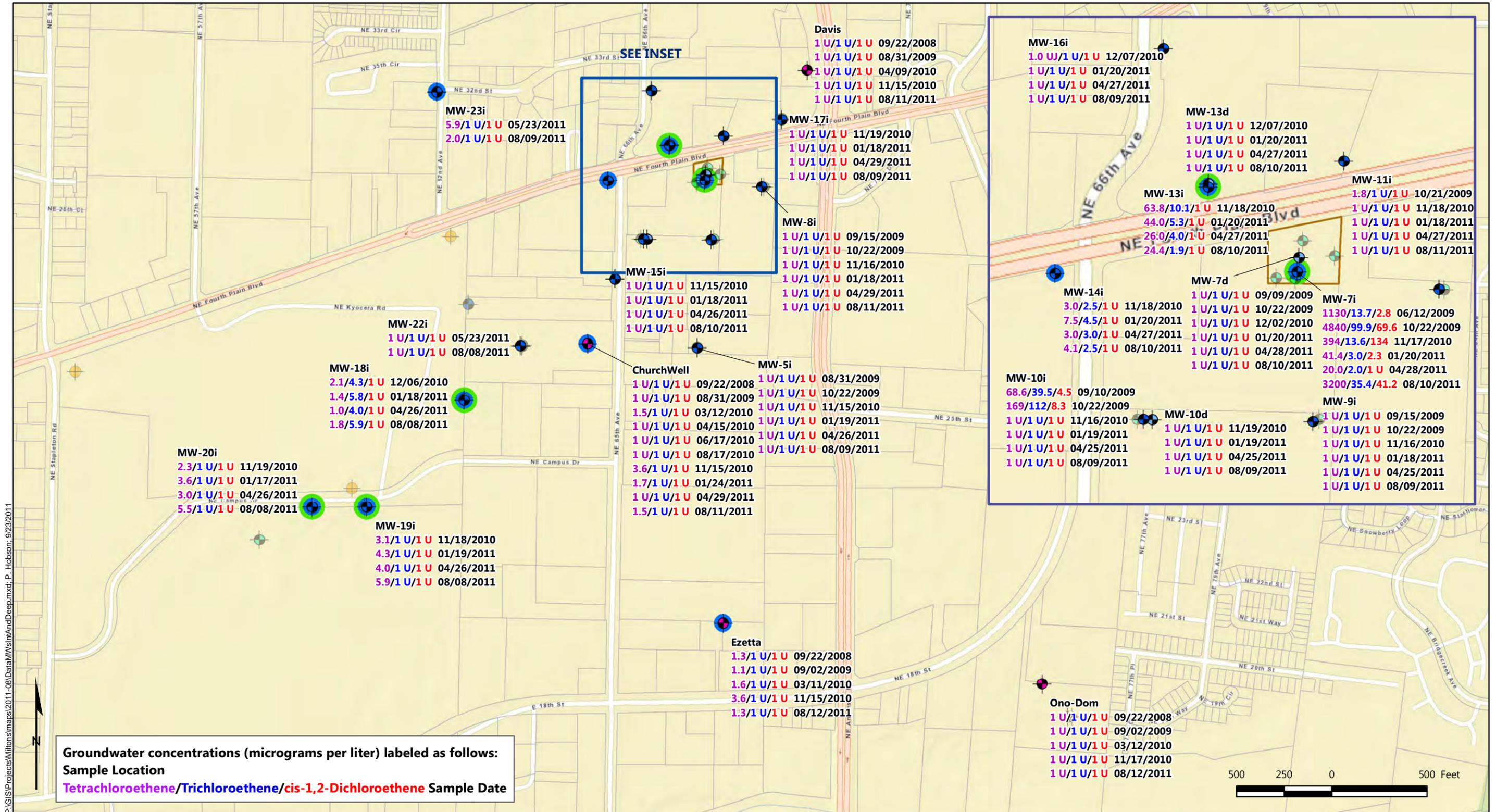
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REFERENCES

Geosyntec Consultants, 2011a. Milton's Dry Cleaners Site – Soil and Groundwater Data Summary Report, February 28, 2011.

Geosyntec Consultants, 2011b. Milton's Dry Cleaners Site – Monitoring Well Installation, April and August 2011 Groundwater Sampling Events Technical Memorandum, October 11, 2011.

Washington State Department of Ecology, 2012. Ecology comments on the Milton's Dry Cleaners – 2012 Groundwater Monitoring Plan, Prepared by Geosyntec, March 9, 2012, Milton's Dry Cleaners Site, Vancouver, Washington, Agreed Order DE4239 07/4-TC-S. 15 May 2012.



P:\GIS\Projects\Wiltons\maps\2011-08\Data\MV\shAndDeep.mxd; P. Hobson; 9/23/2011

Notes:

- Roads and base map compiled from several sources by ESRI.
- The locations of all features shown are approximate.
- This drawing is for informational purposes. It is intended to assist in showing features discussed in an attached document. Geosyntec cannot guarantee the accuracy and content of electronic files. The master file is stored by Geosyntec and will serve as the official record of this communication.

Legend

- Shallow MW (Milton)
- Intermediate MW (Milton)
- Deep MW (Milton)
- Shallow Well (domestic)
- Intermediate Well (domestic)
- Shallow MW (Kyocera)
- PCE Detected
- PCE or TCE Detected > MTCA Method A
- Former Milton's Property
- Tax Lot

Analytical Results - Intermediate and Deep Wells
Milton's Dry Cleaners Study Area - Vancouver, WA

Geosyntec consultants

Portland, OR | September 2011

Figure 3

TABLE 1
GROUNDWATER VOC ANALYTICAL RESULTS SUMMARY
FORMER MILTON'S DRY CLEANERS REMEDIAL INVESTIGATION
VANCOUVER, WA

Sample Location	Sample Date	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)	Cis-1,2-Dichloroethene (ug/L)	1,1-Dichloroethene (ug/L)	Trans-1,2-Dichloroethene (ug/L)	Vinyl Chloride (ug/L)	1,1,1,2-Tetrachloroethane (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloropropene (ug/L)	1,2,3-Trichlorobenzene (ug/L)	1,2,3-Trichloropropane (ug/L)	1,2,4-Trichlorobenzene (ug/L)	1,2,4-Trimethylbenzene (ug/L)	1,2-Dibromo-3-Chloropropane (ug/L)	1,2-dibromoethane(EDB) (ug/L)	1,2-Dichlorobenzene (ug/L)	1,2-Dichloroethane (EDC) (ug/L)	1,2-Dichloroethene (ug/L)	1,2-Dichloropropane (ug/L)	1,3,5-Trimethylbenzene (ug/L)	1,3-Dichlorobenzene (ug/L)	1,3-Dichloropropane (ug/L)	1,4-Dichlorobenzene (ug/L)	2,2-Dichloropropane (ug/L)	2-Butanone (MEK) (ug/L)	2-Chlorotoluene (ug/L)	2-Hexanone (ug/L)	4-Chlorotoluene (ug/L)	4-Methyl-2-Pentanone (Methyl isobutyl ketone) (ug/L)
MW-1s	6/12/2009	1.4	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-1s	11/18/2010	3.8	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-1s	1/21/2011	1.7	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-1s	4/28/2011	1	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-1s	8/10/2011	3.4	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-2s	6/12/2009	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U		1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-2s	11/18/2010	1.5	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-2s	1/21/2011	1.2	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-2s	4/28/2011	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-2s	8/10/2011	1.3	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-3s	6/12/2009	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U		1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-3s	12/2/2010	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-3s	1/21/2011	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-3s	4/28/2011	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-3s	8/10/2011	1.8	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-4s	6/12/2009	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U		1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-4s	11/18/2010	7.3	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-4s	1/21/2011	42.2	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-4s	4/28/2011	112	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-4s	8/10/2011	246	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-5i	8/31/2009	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U		1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-5i	10/22/2009	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U		1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-5i	11/15/2010	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-5i	1/19/2011	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-5i	4/26/2011	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-5i	8/9/2011	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-5s	6/12/2009	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U		1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-5s	6/29/2009	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U		1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-5s	10/22/2009	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U		1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-5s	11/15/2010	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-5s	1/19/2011	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-5s	4/26/2011	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-5s	8/9/2011	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-6i	9/3/2009	1U	1U	1.4	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U		1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-6i	10/22/2009	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U		1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-6i	11/15/2010	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-6i	1/19/2011	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-6i	4/25/2011	1U	1U	1	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-6i	8/8/2011	1U	1U	1.1	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U
MW-6s	6/12/2009	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U		1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U

TABLE 1
GROUNDWATER VOC ANALYTICAL RESULTS SUMMARY
FORMER MILTON'S DRY CLEANERS REMEDIAL INVESTIGATION
VANCOUVER, WA

Sample Location	Sample Date	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)	Cis-1,2-Dichloroethene (ug/L)	1,1-Dichloroethene (ug/L)	Trans-1,2-Dichloroethene (ug/L)	Vinyl Chloride (ug/L)	1,1,1,2-Tetrachloroethane (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloropropene (ug/L)	1,2,3-Trichlorobenzene (ug/L)	1,2,3-Trichloropropane (ug/L)	1,2,4-Trichlorobenzene (ug/L)	1,2,4-Trimethylbenzene (ug/L)	1,2-Dibromo-3-Chloropropane (ug/L)	1,2-dibromoethane(EDB) (ug/L)	1,2-Dichlorobenzene (ug/L)	1,2-Dichloroethane (EDC) (ug/L)	1,2-Dichloroethene (ug/L)	1,2-Dichloropropane (ug/L)	1,3,5-Trimethylbenzene (ug/L)	1,3-Dichlorobenzene (ug/L)	1,3-Dichloropropane (ug/L)	1,4-Dichlorobenzene (ug/L)	2,2-Dichloropropane (ug/L)	2-Butanone (MEK) (ug/L)	2-Chlorotoluene (ug/L)	2-Hexanone (ug/L)	4-Chlorotoluene (ug/L)	4-Methyl-2-Pentanone (Methyl isobutyl ketone) (ug/L)
MW-6s	6/29/2009	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-6s	10/21/2009	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-6s	11/15/2010	4.6	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-6s	1/19/2011	1.8	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-6s	4/25/2011	1	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-6s	8/8/2011	1.8	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-7d	9/9/2009	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-7d	10/22/2009	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-7d	12/2/2010	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-7d	1/20/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-7d	4/28/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-7d	8/10/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-7i	6/12/2009	1130	13.7	2.8	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-7i	10/22/2009	4840	99.9	69.6	1.1	1 U	0.2 U	1.7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.6	1 U		1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-7i	11/17/2010	395	13.2	121	1 U	1.7	0.24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	122	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-7i	1/20/2011	41.4	3	2.3	1 U	1 U	0.23	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-7i	4/28/2011	20	2	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-7i	8/10/2011	3370	37.5	42	1 U	1.4	0.2 U	2.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.3	1 U	43.4	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-7i**	8/12/2011	2450	30.5	154	0.53 J	1.1	1 U	1.2	1 U	1 U	0.22 J	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	0.94 J	1 U	155	0.13 J	1 U	1 U	1 U	0.086 J	1 U	5 U	1 U	5 U	1 U	5 U
MW-7i*	8/12/2011	3020	26.5 J	26.6 J	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	16.1 J	200 U	50 U	50 U	50 U	26.6 J	50 U	50 U	50 U	50 U	50 U	50 U	250 U	50 U	250 U	50 U	250 U
MW-8i	9/15/2009	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-8i	10/22/2009	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-8i	11/16/2010	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-8i	1/18/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-8i	4/29/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
Mw-8i	8/11/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-8s	8/25/2009	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-8s	10/21/2009	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-8s	11/16/2010	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-8s	1/18/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-8s	4/29/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-8s	8/11/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-9i	9/15/2009	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-9i	10/22/2009	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-9i	11/16/2010	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-9i	1/18/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-9i	4/25/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-9i	8/9/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-9s	8/31/2009	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U

TABLE 1
GROUNDWATER VOC ANALYTICAL RESULTS SUMMARY
FORMER MILTON'S DRY CLEANERS REMEDIAL INVESTIGATION
VANCOUVER, WA

Sample Location	Sample Date	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)	Cis-1,2-Dichloroethene (ug/L)	1,1-Dichloroethene (ug/L)	Trans-1,2-Dichloroethene (ug/L)	Vinyl Chloride (ug/L)	1,1,1,2-Tetrachloroethane (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloropropene (ug/L)	1,2,3-Trichlorobenzene (ug/L)	1,2,3-Trichloropropane (ug/L)	1,2,4-Trichlorobenzene (ug/L)	1,2,4-Trimethylbenzene (ug/L)	1,2-Dibromo-3-Chloropropane (ug/L)	1,2-dibromoethane(EDB) (ug/L)	1,2-Dichlorobenzene (ug/L)	1,2-Dichloroethane (EDC) (ug/L)	1,2-Dichloroethene (ug/L)	1,2-Dichloropropane (ug/L)	1,3,5-Trimethylbenzene (ug/L)	1,3-Dichlorobenzene (ug/L)	1,3-Dichloropropane (ug/L)	1,4-Dichlorobenzene (ug/L)	2,2-Dichloropropane (ug/L)	2-Butanone (MEK) (ug/L)	2-Chlorotoluene (ug/L)	2-Hexanone (ug/L)	4-Chlorotoluene (ug/L)	4-Methyl-2-Pentanone (Methyl isobutyl ketone) (ug/L)
MW-9s	10/21/2009	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U	
MW-9s	11/16/2010	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-9s	1/18/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-9s	4/25/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-9s	8/9/2011	1.8	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-10d	11/19/2010	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-10d	1/19/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-10d	4/25/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-10d	8/9/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-10i	9/10/2009	68.6	39.5	4.5	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U	
MW-10i	10/22/2009	169	112	8.3	1 U	1.3	0.33	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U	
MW-10i	11/16/2010	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-10i	1/19/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-10i	4/25/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-10i	8/9/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-10i**	8/12/2011	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.083 J	4 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	0.024 J	1 U	5 U	1 U	5 U	1 U	5 U
MW-10i*	8/12/2011	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.092 J	4 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	0.052 J	1 U	5 U	1 U	5 U	1 U	5 U
MW-10s	9/22/2009	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U	
MW-10s	10/21/2009	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U	
MW-10s	11/16/2010	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-10s	1/19/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-10s	4/25/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-10s	8/9/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-11i	10/21/2009	1.8	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U	
MW-11i	11/18/2010	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-11i	1/18/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-11i	4/27/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-11i	8/11/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-12i	10/13/2009	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U	
MW-12i	10/21/2009	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U	
MW-12i	11/17/2010	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-12i	1/17/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-12i	4/26/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-12i	8/9/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-13d	12/7/2010	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-13d	1/20/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-13d	4/27/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-13d	8/10/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U
MW-13i	11/18/2010	63.8	10.1	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U

TABLE 1
GROUNDWATER VOC ANALYTICAL RESULTS SUMMARY
FORMER MILTON'S DRY CLEANERS REMEDIAL INVESTIGATION
VANCOUVER, WA

Sample Location	Sample Date	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)	Cis-1,2-Dichloroethene (ug/L)	1,1-Dichloroethene (ug/L)	Trans-1,2-Dichloroethene (ug/L)	Vinyl Chloride (ug/L)	1,1,1,2-Tetrachloroethane (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloropropene (ug/L)	1,2,3-Trichlorobenzene (ug/L)	1,2,3-Trichloropropane (ug/L)	1,2,4-Trichlorobenzene (ug/L)	1,2,4-Trimethylbenzene (ug/L)	1,2-Dibromo-3-Chloropropane (ug/L)	1,2-dibromoethane(EDB) (ug/L)	1,2-Dichlorobenzene (ug/L)	1,2-Dichloroethane (EDC) (ug/L)	1,2-Dichloroethene (ug/L)	1,2-Dichloropropane (ug/L)	1,3,5-Trimethylbenzene (ug/L)	1,3-Dichlorobenzene (ug/L)	1,3-Dichloropropane (ug/L)	1,4-Dichlorobenzene (ug/L)	2,2-Dichloropropane (ug/L)	2-Butanone (MEK) (ug/L)	2-Chlorotoluene (ug/L)	2-Hexanone (ug/L)	4-Chlorotoluene (ug/L)	4-Methyl-2-Pentanone (Methyl isobutyl ketone) (ug/L)
MW-13i	1/20/2011	44	5.3	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-13i	4/27/2011	26	4	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-13i	8/10/2011	24.4	1.9	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-14i	11/18/2010	3	2.5	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-14i	1/20/2011	7.5	4.5	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-14i	4/27/2011	3	3	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-14i	8/10/2011	4.1	2.5	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-15i	11/15/2010	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-15i	1/18/2011	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-15i	4/26/2011	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-15i	8/10/2011	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-15s	11/15/2010	7.7	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-15s	1/18/2011	8.9	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-15s	4/26/2011	5	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-15s	8/10/2011	7.6	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-16i	12/7/2010	1UJ	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-16i	1/20/2011	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-16i	4/27/2011	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-16i	8/9/2011	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-17i	11/19/2010	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-17i	1/18/2011	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-17i	4/29/2011	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-17i	8/9/2011	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-17s	11/19/2010	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-17s	1/18/2011	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-17s	4/29/2011	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-17s	8/9/2011	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-18i	12/6/2010	2.1	4.3	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-18i	1/18/2011	1.4	5.8	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-18i	4/26/2011	1	4	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-18i	8/8/2011	1.8	5.9	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-18s	12/6/2010	1U	15.4	4.6	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	5.2	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-18s	1/17/2011	1U	11	3.5	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	3.9	1U	1U	1U	1U	1U	1U	9.1	1U	5U	1U	5U	
MW-18s	4/26/2011	1U	14	5	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	6	1U	1U	1U	1U	1U	1U	5	1U	5U	1U	5U	
MW-18s	8/8/2011	1U	12	6	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	6.6	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-19i	11/18/2010	3.1	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-19i	1/19/2011	4.3	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-19i	4/26/2011	4	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-19i	8/8/2011	5.9	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	

TABLE 1
GROUNDWATER VOC ANALYTICAL RESULTS SUMMARY
FORMER MILTON'S DRY CLEANERS REMEDIAL INVESTIGATION
VANCOUVER, WA

Sample Location	Sample Date	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)	Cis-1,2-Dichloroethene (ug/L)	1,1-Dichloroethene (ug/L)	Trans-1,2-Dichloroethene (ug/L)	Vinyl Chloride (ug/L)	1,1,1,2-Tetrachloroethane (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloropropene (ug/L)	1,2,3-Trichlorobenzene (ug/L)	1,2,3-Trichloropropane (ug/L)	1,2,4-Trichlorobenzene (ug/L)	1,2,4-Trimethylbenzene (ug/L)	1,2-Dibromo-3-Chloropropane (ug/L)	1,2-dibromoethane(EDB) (ug/L)	1,2-Dichlorobenzene (ug/L)	1,2-Dichloroethane (EDC) (ug/L)	1,2-Dichloroethene (ug/L)	1,2-Dichloropropane (ug/L)	1,3,5-Trimethylbenzene (ug/L)	1,3-Dichlorobenzene (ug/L)	1,3-Dichloropropane (ug/L)	1,4-Dichlorobenzene (ug/L)	2,2-Dichloropropane (ug/L)	2-Butanone (MEK) (ug/L)	2-Chlorotoluene (ug/L)	2-Hexanone (ug/L)	4-Chlorotoluene (ug/L)	4-Methyl-2-Pentanone (Methyl isobutyl ketone) (ug/L)
MW-19s	11/19/2010	2	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-19s	1/19/2011	2.5	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-19s	4/26/2011	2	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-19s	8/8/2011	3.6	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-20i	11/19/2010	2.3	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-20i	1/17/2011	3.6	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-20i	4/26/2011	3	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-20i ^a	8/8/2011	4.6 (5.5)	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-20s	11/19/2010	14.7	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-20s	1/17/2011	20.9	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-20s	4/26/2011	24	1	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-20s ^a	8/8/2011	47.0 (51.8)	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-21s	5/23/2011	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-21s	8/8/2011	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-22i	5/23/2011	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-22i	8/8/2011	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-23i	5/23/2011	5.9	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
MW-23i	8/9/2011	2	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
ChurchTap	6/17/2010	1	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
ChurchTap	10/27/2011	1.3	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
ChurchWell	9/22/2008	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U		1U	1U	1U	1U	1U	1U	10U	1U	10U	1U	10U	
ChurchWell	8/31/2009	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U		1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
ChurchWell	3/12/2010	1.5	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U		1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
ChurchWell	4/15/2010	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
ChurchWell	6/17/2010	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
ChurchWell	8/17/2010	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
ChurchWell	11/15/2010	3.6	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
ChurchWell	1/24/2011	1.7	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
ChurchWell	4/29/2011	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
ChurchWell	8/11/2011	1.5	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
ChurchWell	10/27/2011	1	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
Davis	9/22/2008	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U		1U	1U	1U	1U	1U	1U	10U	1U	10U	1U	10U	
Davis	8/31/2009	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U		1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
Davis	4/9/2010	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
Davis	11/15/2010	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
Davis	8/11/2011	1U	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	2U	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
Ezetta	9/22/2008	1.3	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U		1U	1U	1U	1U	1U	1U	10U	1U	10U	1U	10U	
Ezetta	9/2/2009	1.1	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U		1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	
Ezetta	3/11/2010	1.6	1U	1U	1U	1U	0.2U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U		1U	1U	1U	1U	1U	1U	5U	1U	5U	1U	5U	

TABLE 1
GROUNDWATER VOC ANALYTICAL RESULTS SUMMARY
FORMER MILTON'S DRY CLEANERS REMEDIAL INVESTIGATION
VANCOUVER, WA

Sample Location	Sample Date	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)	Cis-1,2-Dichloroethene (ug/L)	1,1-Dichloroethene (ug/L)	Trans-1,2-Dichloroethene (ug/L)	Vinyl Chloride (ug/L)	1,1,1,2-Tetrachloroethane (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloropropane (ug/L)	1,2,3-Trichlorobenzene (ug/L)	1,2,3-Trichloropropane (ug/L)	1,2,4-Trichlorobenzene (ug/L)	1,2,4-Trimethylbenzene (ug/L)	1,2-Dibromo-3-Chloropropane (ug/L)	1,2-dibromoethane(EDB) (ug/L)	1,2-Dichlorobenzene (ug/L)	1,2-Dichloroethane (EDC) (ug/L)	1,2-Dichloroethene (ug/L)	1,2-Dichloropropane (ug/L)	1,3,5-Trimethylbenzene (ug/L)	1,3-Dichlorobenzene (ug/L)	1,3-Dichloropropane (ug/L)	1,4-Dichlorobenzene (ug/L)	2,2-Dichloropropane (ug/L)	2-Butanone (MEK) (ug/L)	2-Chlorotoluene (ug/L)	2-Hexanone (ug/L)	4-Chlorotoluene (ug/L)	4-Methyl-2-Pentanone (Methyl isobutyl ketone) (ug/L)
Ezetta	11/15/2010	3.6	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U	
Ezetta	8/12/2011	1.4	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U	
Ono-Dom	9/22/2008	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	10 U	
Ono-Dom	9/2/2009	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U	
Ono-Dom	3/12/2010	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U	
Ono-Dom	11/17/2010	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U	
Ono-Dom	8/12/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U	
Ono-Irr1	9/22/2008	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	10 U	
Ono-Irr1	9/2/2009	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U	
Ono-Irr1	3/12/2010	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U	
Ono-Irr1	11/17/2010	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U	
Ono-Irr1	8/12/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U	
Ono-Irr2	9/22/2008	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	10 U	1 U	10 U	
Ono-Irr2	9/2/2009	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U	
Ono-Irr2	3/12/2010	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U	
Ono-Irr2	11/17/2010	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U	
Ono-Irr2	8/12/2011	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	5 U	

Notes:

VOCs analyzed by EPA Method 8260.

Monitoring well names are appended by an "s", "i", and "d" to indicate shallow, intermediate, and deep well designations.

ug/L = micrograms per Liter

U = Analyte not detected above method reporting limit

J = Result is estimated

BOLD = analyte detected above method detection limit

blank cells = not reported

MW-7i and MW-10i were also sampled by PNG on August 12, 2011, using low flow (*) and 3 well volume purge (**) methods.

(a) During review of preliminary laboratory data, it was determined that samples from MW-20s and MW-20i were switched by the laboratory. Samples from MW-20s and MW-20i were re-analyzed twice to confirm. Reported results are followed by original results in ().

TABLE 1
GROUNDWATER VOC ANALYTICAL RESULTS SUMMARY
FORMER MILTON'S DRY CLEANERS REMEDIAL INVESTIGATION
VANCOUVER, WA

Sample Location	Sample Date	Acetone (ug/L)	Benzene (ug/L)	Bromobenzene (ug/L)	Bromochloromethane (ug/L)	Bromoform (ug/L)	Bromomethane (ug/L)	Carbon Disulfide (ug/L)	Carbon Tetrachloride (ug/L)	Chlorobenzene (ug/L)	Chloroethane (ug/L)	Chloroform (ug/L)	Chloromethane (ug/L)	Cis-1,3-Dichloropropene (ug/L)	Dibromochloromethane (ug/L)	Dibromomethane (ug/L)	Dichlorobromomethane (ug/L)	Dichlorodifluoromethane (CFC-12) (ug/L)	Ethylbenzene (ug/L)	Hexachlorobutadiene (ug/L)	Isopropylbenzene (Cumene) (ug/L)	Methyl t-butyl ether (ug/L)	Methylene Chloride (ug/L)	Naphthalene (ug/L)	n-Butylbenzene (ug/L)	n-Propylbenzene (ug/L)	p-Isopropyltoluene (ug/L)	Sec-Butylbenzene (ug/L)	Styrene (ug/L)	Tert-Butylbenzene (ug/L)	Toluene (ug/L)	Total Xylenes (ug/L)	Trans-1,3-Dichloropropene (ug/L)	Trichlorofluoromethane (CFC-11) (ug/L)	Xylene, m-,p- (ug/L)	Xylene, o- (ug/L)
MW-6s	6/29/2009	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-6s	10/21/2009	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-6s	11/15/2010	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-6s	1/19/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-6s	4/25/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-6s	8/8/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-7d	9/9/2009	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-7d	10/22/2009	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-7d	12/2/2010	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-7d	1/20/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-7d	4/28/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-7d	8/10/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-7i	6/12/2009	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-7i	10/22/2009	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-7i	11/17/2010	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-7i	1/20/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-7i	4/28/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-7i	8/10/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-7i**	8/12/2011	5 U	0.035 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.24 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	0.065 J	1 U	0.034 J	1 U	1 U	1 U	1 U	0.086 J	3 U	1 U	1 U	2 U	1 U
MW-7i*	8/12/2011	165 J	50 U	50 U	50 U	50 U	50 U	10.3 J	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	103 J	8.7 J	50 U	50 U	7.1 J	50 U	50 U	50 U	50 U	150 U	50 U	50 U	100 U	50 U
MW-8i	9/15/2009	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-8i	10/22/2009	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-8i	11/16/2010	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-8i	1/18/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-8i	4/29/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
Mw-8i	8/11/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-8s	8/25/2009	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-8s	10/21/2009	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-8s	11/16/2010	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-8s	1/18/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-8s	4/29/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-8s	8/11/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-9i	9/15/2009	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-9i	10/22/2009	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-9i	11/16/2010	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-9i	1/18/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-9i	4/25/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-9i	8/9/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-9s	8/31/2009	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U		

TABLE 1
GROUNDWATER VOC ANALYTICAL RESULTS SUMMARY
FORMER MILTON'S DRY CLEANERS REMEDIAL INVESTIGATION
VANCOUVER, WA

Sample Location	Sample Date	Acetone (ug/L)	Benzene (ug/L)	Bromobenzene (ug/L)	Bromochloromethane (ug/L)	Bromoform (ug/L)	Bromomethane (ug/L)	Carbon Disulfide (ug/L)	Carbon Tetrachloride (ug/L)	Chlorobenzene (ug/L)	Chloroethane (ug/L)	Chloroform (ug/L)	Chloromethane (ug/L)	Cis-1,3-Dichloropropene (ug/L)	Dibromochloromethane (ug/L)	Dibromomethane (ug/L)	Dichlorobromomethane (ug/L)	Dichlorodifluoromethane (CFC-12) (ug/L)	Ethylbenzene (ug/L)	Hexachlorobutadiene (ug/L)	Isopropylbenzene (Cumene) (ug/L)	Methyl t-butyl ether (ug/L)	Methylene Chloride (ug/L)	Naphthalene (ug/L)	n-Butylbenzene (ug/L)	n-Propylbenzene (ug/L)	p-Isopropyltoluene (ug/L)	Sec-Butylbenzene (ug/L)	Styrene (ug/L)	Tert-Butylbenzene (ug/L)	Toluene (ug/L)	Total Xylenes (ug/L)	Trans-1,3-Dichloropropene (ug/L)	Trichlorofluoromethane (CFC-11) (ug/L)	Xylene, m-,p- (ug/L)	Xylene, o- (ug/L)
MW-9s	10/21/2009	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-9s	11/16/2010	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-9s	1/18/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-9s	4/25/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-9s	8/9/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-10d	11/19/2010	6.5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-10d	1/19/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-10d	4/25/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-10d	8/9/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-10i	9/10/2009	7.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-10i	10/22/2009	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-10i	11/16/2010	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-10i	1/19/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-10i	4/25/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-10i	8/9/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-10i**	8/12/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.016 J	3 U	1 U	1 U	0.023 J	1 U
MW-10i*	8/12/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	0.14 J	1 U	0.042 J	1 U	1 U	1 U	1 U	0.05 J	3 U	1 U	1 U	0.028 J	1 U
MW-10s	9/22/2009	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-10s	10/21/2009	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-10s	11/16/2010	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-10s	1/19/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-10s	4/25/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-10s	8/9/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-11i	10/21/2009	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-11i	11/18/2010	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-11i	1/18/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-11i	4/27/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-11i	8/11/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-12i	10/13/2009	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-12i	10/21/2009	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-12i	11/17/2010	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-12i	1/17/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-12i	4/26/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-12i	8/9/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-13d	12/7/2010	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-13d	1/20/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-13d	4/27/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-13d	8/10/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
MW-13i	11/18/2010	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U

TABLE 1
GROUNDWATER VOC ANALYTICAL RESULTS SUMMARY
FORMER MILTON'S DRY CLEANERS REMEDIAL INVESTIGATION
VANCOUVER, WA

Sample Location	Sample Date	Acetone (ug/L)	Benzene (ug/L)	Bromobenzene (ug/L)	Bromochloromethane (ug/L)	Bromoform (ug/L)	Bromomethane (ug/L)	Carbon Disulfide (ug/L)	Carbon Tetrachloride (ug/L)	Chlorobenzene (ug/L)	Chloroethane (ug/L)	Chloroform (ug/L)	Chloromethane (ug/L)	Cis-1,3-Dichloropropene (ug/L)	Dibromochloromethane (ug/L)	Dibromomethane (ug/L)	Dichlorobromomethane (ug/L)	Dichlorodifluoromethane (CFC-12) (ug/L)	Ethylbenzene (ug/L)	Hexachlorobutadiene (ug/L)	Isopropylbenzene (Cumene) (ug/L)	Methyl t-butyl ether (ug/L)	Methylene Chloride (ug/L)	Naphthalene (ug/L)	n-Butylbenzene (ug/L)	n-Propylbenzene (ug/L)	p-Isopropyltoluene (ug/L)	Sec-Butylbenzene (ug/L)	Styrene (ug/L)	Tert-Butylbenzene (ug/L)	Toluene (ug/L)	Total Xylenes (ug/L)	Trans-1,3-Dichloropropene (ug/L)	Trichlorofluoromethane (CFC-11) (ug/L)	Xylene, m-,p- (ug/L)	Xylene, o- (ug/L)
MW-19s	11/19/2010	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-19s	1/19/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-19s	4/26/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-19s	8/8/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-20i	11/19/2010	9.8	2.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-20i	1/17/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-20i	4/26/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-20i ^a	8/8/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-20s	11/19/2010	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-20s	1/17/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-20s	4/26/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-20s ^a	8/8/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-21s	5/23/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-21s	8/8/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-22i	5/23/2011	12.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-22i	8/8/2011	7.5 U	1 U	1 U	1 U	1 U	1 U	2.8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-23i	5/23/2011	5.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
MW-23i	8/9/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
ChurchTap	6/17/2010	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
ChurchTap	10/27/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
ChurchWell	9/22/2008	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U		1 U	
ChurchWell	8/31/2009	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
ChurchWell	3/12/2010	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
ChurchWell	4/15/2010	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
ChurchWell	6/17/2010	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
ChurchWell	8/17/2010	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
ChurchWell	11/15/2010	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
ChurchWell	1/24/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
ChurchWell	4/29/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
ChurchWell	8/11/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
ChurchWell	10/27/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
Davis	9/22/2008	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U		1 U	
Davis	8/31/2009	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
Davis	4/9/2010	9.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
Davis	11/15/2010	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
Davis	8/11/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
Ezetta	9/22/2008	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U		1 U	
Ezetta	9/2/2009	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	
Ezetta	3/11/2010	5 U	1 U	1 U	1 U	1 U	3.8	1 U	1 U	1 U	1 U	1 U	41.5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U	

TABLE 1
GROUNDWATER VOC ANALYTICAL RESULTS SUMMARY
FORMER MILTON'S DRY CLEANERS REMEDIAL INVESTIGATION
VANCOUVER, WA

Sample Location	Sample Date	Acetone (ug/L)	Benzene (ug/L)	Bromobenzene (ug/L)	Bromochloromethane (ug/L)	Bromoform (ug/L)	Bromomethane (ug/L)	Carbon Disulfide (ug/L)	Carbon Tetrachloride (ug/L)	Chlorobenzene (ug/L)	Chloroethane (ug/L)	Chloroform (ug/L)	Chloromethane (ug/L)	Cis-1,3-Dichloropropene (ug/L)	Dibromochloromethane (ug/L)	Dibromomethane (ug/L)	Dichlorobromomethane (ug/L)	Dichlorodifluoromethane (CFC-12) (ug/L)	Ethylbenzene (ug/L)	Hexachlorobutadiene (ug/L)	Isopropylbenzene (Cumene) (ug/L)	Methyl t-butyl ether (ug/L)	Methylene Chloride (ug/L)	Naphthalene (ug/L)	n-Butylbenzene (ug/L)	n-Propylbenzene (ug/L)	p-Isopropyltoluene (ug/L)	Sec-Butylbenzene (ug/L)	Styrene (ug/L)	Tert-Butylbenzene (ug/L)	Toluene (ug/L)	Total Xylenes (ug/L)	Trans-1,3-Dichloropropene (ug/L)	Trichlorofluoromethane (CFC-11) (ug/L)	Xylene, m-,p- (ug/L)	Xylene, o- (ug/L)
Ezetta	11/15/2010	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
Ezetta	8/12/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
Ono-Dom	9/22/2008	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ono-Dom	9/2/2009	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
Ono-Dom	3/12/2010	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
Ono-Dom	11/17/2010	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
Ono-Dom	8/12/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
Ono-Irr1	9/22/2008	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ono-Irr1	9/2/2009	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
Ono-Irr1	3/12/2010	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
Ono-Irr1	11/17/2010	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
Ono-Irr1	8/12/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
Ono-Irr2	9/22/2008	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ono-Irr2	9/2/2009	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
Ono-Irr2	3/12/2010	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
Ono-Irr2	11/17/2010	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U
Ono-Irr2	8/12/2011	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	2 U	1 U

Notes:
VOCs analyzed by EPA Method 82
Monitoring well names are apper
ug/L = micrograms per Liter
U = Analyte not detected above n
J = Result is estimated
BOLD = analyte detected above n
blank cells = not reported
MW-7i and MW-10i were also sar
(a) During review of preliminary l

TABLE 2
GROUNDWATER MONITORING WELL SAMPLING FREQUENCY
FORMER MILTON'S DRY CLEANERS REMEDIAL INVESTIGATION
VANCOUVER, WA

Well Identification	VOC Detections/ No. of Events	VOC detection summary	Sampling Frequency	Notes	Vertical	Side by Side
MW-1s	5 detections/5	Low PCE concentrations	Quarterly			
MW-2s	3 detections /5	Low PCE concentrations	Quarterly			
MW-3s	1 detection /5	Low PCE concentrations	Quarterly			
MW-4s	4 detections/5	High PCE concentrations	Quarterly	vertical profile and LF side-by-side comparison	x	x
MW-5s	0 detections/7	VOCs not detected	Quarterly			
MW-5i	0 detections/6	VOCs not detected	Quarterly			
MW-6s	4 detections/7	Low PCE concentrations	Quarterly			
MW-6i	0 detections /7	VOCs not detected	Quarterly			
MW-7i	6 detections/6	High PCE concentrations	Quarterly	vertical profile and LF side-by-side comparison	x	x
MW-7d	0 detections/6	VOCs not detected	Quarterly			
MW-8s	0 detections/6	VOCs not detected	Quarterly			
MW-8i	0 detections/6	VOCs not detected	Quarterly			
MW-9s	1 detection/ 6	Low PCE concentrations	Quarterly			
MW-9i	0 detections/6	VOCs not detected	Quarterly			
MW-10s	0 detections/6	VOCs not detected	Quarterly			
MW-10i	2 detections/6	VOC detected in 2009 and not since	Quarterly	vertical profile	x	
MW-10d	0 detections/4	VOCs not detected	Quarterly			
MW-11i	1detection/5	PCE detected once, just above MRL	Quarterly			
MW-12i	0 detections/6	VOCs not detected	None	Damaged well screen; replace Summer 2012		
MW-13i	4 detections/4	VOCs detected	Quarterly	vertical profile and LF side-by-side comparison	x	x
MW-13d	0 detections/4	VOCs not detected	Quarterly			
MW-14i	4 detections/4	VOCs detected	Quarterly	LF Side by side comparison		x
MW-15s	4 detections/4	VOCs detected	Quarterly			
MW-15i	0 detections/4	VOCs not detected	Quarterly			
MW-16i	0 detections/4	VOCs not detected	Quarterly			
MW-17s	0 detections/4	VOCs not detected	None	upgradient		
MW-17i	0 detections/4	VOCs not detected	None	upgradient		
MW-18s	4 detections/4	Only TCE and DCE detected	Quarterly			
MW-18i	4 detections/4	Only PCE and TCE detected	Quarterly			
MW-19s	4 detections/4	Only PCE detected	Quarterly			
MW-19i	4 detections/4	Only PCE detected	Quarterly			
MW-20s	4 detections/4	Only PCE/TCE detected	Quarterly	vertical profile and LF side-by-side comparison	x	x
MW-20i	4 detections/4	Only PCE detected	Quarterly			
MW-21s	0 detections/2	VOCs not detected	Quarterly			
MW-22i	0 detections/2	VOCs not detected	Quarterly			
MW-23i	2 detection / 2	VOCs detected	Quarterly			
Church Well	4 detections/10	Low PCE concentrations	Quarterly	changed from bimonthly to quarterly		
Ezetta	5 detections/5	Low PCE concentrations	None	well location does not provide information for delineation		
Ono Domestic	0 detections/5 events	VOCs not detected	None	well location is likely outside of historic PCE migration		
Ono Irrigation 1	0 detections/5 events	VOCs not detected	None	well location is likely outside of historic PCE migration		
Ono Irrigation 2	0 detections/5 events	VOCs not detected	None	well location is likely outside of historic PCE migration		
Davis	0 detections/5 events	VOCs not detected	None	well location is likely outside of historic PCE migration		

Notes:
VOC = volatile organic compounds
PCE = tetrachloroethene
TCE = trichloroethene
LF = low flow

ATTACHMENT A

Passive Diffusion Bag Sampling Information and Cascade Analytical Services Passive Diffusion Bag Sampler Instructions

ATTACHMENT A
PASSIVE DIFFUSION BAG SAMPLING RATIONALE

The use of PDBs is an increasingly common method for collecting groundwater samples. PDBs are a proven reliable, repeatable, and representative sampling method for VOC analysis (ITRC, 2006). Because PDBs are dedicated in each well, a consistent groundwater sample is obtained, investigative derived waste from purging is eliminated, field time efficiency is increased, and potential cross-contamination issues from non-dedicated equipment are eliminated. Furthermore, vertical variability across well screens can be evaluated by suspending multiple PDBs in a single well. Use of PDBs for routine groundwater monitoring has been in common use for groundwater monitoring programs over the last decade, including the Port of Vancouver and the Swan/Cadet site in Vancouver, WA. PDBs have been approved as an acceptable groundwater sampling method for both State and Federal agencies. Detailed case studies comparing PDBs and non-passive sampling methods can be found on the ITRC website: http://www.itrcweb.org/teamresources_1.asp.

PDBs are generally 18- to 24-inches in length and constructed of low-density polyethylene semi-permeable bag. The PDB is filled with deionized (DI) water in the laboratory and shipped to the sampling site. Dissolved VOCs transported into a well through a well screen by natural flow and diffusion diffuse across the PDB membrane into the DI water contained within the PDB. The diffusion occurs because a chemical gradient exists between compounds in aquifer water and the clean DI water within the PDB. VOCs in groundwater diffuse into the sampler PDB until the concentration gradient equilibrates. Dynamic equilibrium is maintained such that if VOC concentrations change in the aquifer, VOC concentrations will change in the PDB accordingly. Diffusion rates vary by VOC compound and the water within the PDB typically represents average concentrations over the previous several days prior to removal¹. The minimum 14 day time period needed to reach equilibrium between the

¹ ITRC (Interstate Technology & Regulatory Council), 2006. *Technology Overview of Passive Sampler Technologies*. DSP-4. Washington, D.C.: Interstate Technology & Regulatory Council, Diffusion Sampler Team. www.itrcweb.org, March 2006.

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aquifer and the PDBs has been determined through research. Suspension of PDBs in wells over longer time frames (many months to a year) has been shown to have no adverse effect on analytical results.

Passive Diffusion (PDB) Samplers Instructions

(Contains certified ASTM Type II deionized water)

Thank you for your recent PDB order. Following you will find instructions for storage, deploying and retrieving of your PDB. Please read through the following carefully prior to opening your package.

For an instructional video on how to deploy and retrieve of your PDB visit our website at <http://www.caslab.com/PDB>

PDB Storage:

- Columbia Analytical recommends storing the PDB in their shipping pouch in a dry location (between 50-75° F) until deployment if you will be deploying them within 14 days of receiving them.
- If you will be storing them for over 14 days before deployment, we recommend that they be stored in a foil pouch (These are available from Columbia Analytical) to avert any possible diffusion from the storage ambient air.

PDB Deployment:

1. Deploy the PDB as soon as possible upon removal from the shipping/storage pouch.
2. The long seams of the PDB are designed to resist wear and tearing, however, the construction of some wells may lead to excessive stress on the PDB. To avoid any possible tearing under these circumstances (rock boreholes, pore or uncertain well construction), we recommend placing the PDB in a mesh cover. (These are available from Columbia Analytical.)
3. The PDB should be attached to your hanging line at a depth ensuring they hang at the desired location in the well screen.
4. If using a hanging assembly supplied by Columbia Analytical, secure the line to the plastic disk or well cap before lowering the PDB and assembly into the well.
5. Lower the weight into the well first, followed by the line and PDB.
6. Secure the line to the well head.
7. Secure the well.



PDB Retrieval:

1. Field experience has shown that using a plastic winder or a spool winder to retrieve the PDB allows the sampler to keep the line from tangling and makes deployment of the new PDB easier.
2. If a single individual is retrieving the PDB, it is helpful to have a 2-4 foot long PVC pipe that has been cut in half length-wise. The field sampler can lay the PDB in the pipe after retrieval prior to sample replacement into the VOA vials. A PVC pipe may be procured from any building or hardware supplier.
3. The contents of the PDB should be poured into the VOA vials at the well head. Studies have shown that there is loss of volatile organics from the PDB within 30 minutes after retrieval. Using decontaminated scissors, cut off the angled end of the PDB then pour the contents of the PDB carefully into the VOA vials, taking care to avoid splashing or unnecessary mixing of air into the sample.
4. Fill each vial just to overflowing and maintain a reverse meniscus. Cap the vial, making sure there are no bubbles or headspace.
5. Dispose of the remnants of the PDB and any unused sample appropriately.
6. Deploy a new PDB for your next sampling round.



Unfilled PDB Sampler Instructions:

The only difference in the procedures for deployment of pre-filled and unfilled PDB concerns testing of the water used to fill the PDB. A sample of the water used and rinseate of the equipment used to fill the PDB, if any, should be submitted to the laboratory for testing to verify it does not contain any of the analytes of interest.

All PDB

If trip blanks/equipment blanks are required, an extra PDB should be ordered. This extra PDB should be sampled into VOA vials or appropriate containers and sent to the laboratory for testing to ensure that no contamination took place during the deployment process.