



SoundEarth Strategies, Inc. 2811 Fairview Avenue East, Suite 2000 Seattle, Washington 98102

Date: June 27, 2013

GROUNDWATER MONITORING REPORT First Quarter 2013

TOC Holdings Co. Facility No. 01-176 Mountlake Terrace, Washington

24205 56th Avenue West, Mountlake Terrace, Washington Property Address: Client Contact: Mark Chandler, Vice President of Environmental Services Client Work Order/Purchase Order: WOR1176SES19 Washington Department of Ecology Site ID #6885/Agreed Primary Regulatory Agency/ID: Order #DE8661 Project Number: 0440-030 Project Manager: Deborah Gardner, LG #1243 Frequency of Groundwater Sampling: Quarterly (Comprehensive First Quarter, Otherwise Limited) Property Owner/Land Use Vacant/Romio's Pizza/Getaway Spirits Tavern Off-Property Land Use Commercial/Residential

SoundEarth Strategies, Inc. (SoundEarth) prepared this report to present the results of the First Quarter 2013 groundwater monitoring event (monitoring event) conducted at TOC Holdings Co. Facility No. 01-176 located at 24205 56th Avenue West in Mountlake Terrace, Washington (the TOC Property). The TOC Property location is shown on Figures 1 and 2.

A petroleum hydrocarbon plume has migrated west and south off the TOC Property to the 56th Avenue West right-of-way (ROW), the private property located at 24225 56th Avenue West (TOC/Farmasonis Property), and the private property located at 24309 56th Avenue West (Drake Property). The TOC Property, TOC/Farmasonis Property, Drake Property, and portions of the 56th Avenue West ROW are collectively referred to as the Interim Remedial Action Project Area, as defined in the Interim Remedial Action Work Plan (IRAWP; SoundEarth 2011) attached to Agreed Order #DE8661. The monitoring well network employed for this monitoring event extends as far south as the private property located at 24325 56th Avenue West (Shin/Choi Property). Per the IRAWP, the monitoring wells located at the Shin/Choi Property were not included in the scope of groundwater monitoring.

Time Oil Co. (currently TOC Holdings Co.) formerly operated a retail gasoline station on the TOC Property, which is currently vacant. One 8,000-gallon and two 6,000-gallon underground storage tanks (USTs) were removed from the TOC Property in 1991 (ES&E 1992). A dual-phase extraction remediation system (former DPE system) was installed at the TOC Property in 1996 and operated until October 2004 (Landau 2005). Since August 2005, SoundEarth has conducted groundwater monitoring and resumed remedial investigations to the south and west of the TOC Property, as well as designed remediation

system upgrades and expansion. In 2012, three in situ groundwater monitoring systems were constructed at the TOC Property, TOC/Farmasonis Property, and Drake Property. Operation of the remediation systems commenced in October 2012.

In 2006, SoundEarth confirmed that gasoline contamination extends off the TOC Property to the south and west, and identified at least three separate water-bearing zones at the TOC Property: the Shallow Zone, the Intermediate Zone, and the Deep Zone (Figures 3, 4.1, 4.2, and 4.3).

Construction of three in situ groundwater remediation systems for the TOC Property, TOC/Farmasonis Property, and the Drake Property, respectively, was completed during Third Quarter 2012. The remediation systems were started at the beginning of Fourth Quarter 2012 on October 3, 2012.

Shallow Zone

The Shallow Zone occurs within 20 feet of the ground surface, perched within glacial till soil consisting of poorly sorted, ice-laid silty sand with varying amounts of gravel. The primary source of recharge to the Shallow Zone is natural precipitation that infiltrates pervious land surfaces. Other potential sources of recharge to the Shallow Zone include a topographic closed depression where surface runoff ponds and a former stormwater infiltration pit, both of which are located in the southeast portion of the TOC Property. According to a TOC Holdings Co. blueprint, the stormwater infiltration pit measured 10 feet square by 4 feet deep and was backfilled with coarse gravel (Time, Oil Co. 1975). Surface runoff intercepted by a catch basin located near the southeast corner of the paved parking area formerly discharged into the stormwater infiltration pit via a 6-inch-diameter drain pipe, which has been capped. The locations of the southern catch basin and former stormwater infiltration pit at the TOC Property are shown on Figures 3, 4.1, 4.2, and 4.3. Monitoring wells MW02 through MW06, MW12, MW19, MW34, MW54, MW61, MW62, MW67, MW68, and MW79 are screened within the Shallow Zone (Figures 3 and 4.1).

Intermediate Zone

The Intermediate Zone is situated at depths of approximately 20 to 60 feet below ground surface (bgs) and is perched within glacial till soil consisting of poorly sorted, ice-laid silty sand with varying amounts of gravel. The Intermediate Zone is the primary zone of contaminant transport at the Interim Remedial Action Project Area. The stratigraphy of the Intermediate Zone includes water-laid silty sands with varying amounts of gravel. The Intermediate Zone appears to receive recharge from artificial sources in the proximity of natural and/or artificial pathways, in addition to natural precipitation. The primary source of artificial recharge appears to be Shallow Zone groundwater accumulations within the backfill of the former UST cavity. Monitoring wells MW09 through MW11, MW13, MW15, MW16, MW18, MW20, MW23, MW31 through MW33, MW35, MW36, MW41 through MW53, MW55 through MW60, MW63, MW65, MW66, MW69, MW70, MW75 through MW77, MW81, MW84 through MW87, MW89 through MW99, and MW101 are screened in the Intermediate Zone (Figures 3 and 4.2). Intermediate Zone monitoring wells MW09, MW10, MW11, MW21, MW22, MW24, and MW25 were connected to the former remediation system between 1996 and 2004.

The following monitoring wells have been adapted for use as remediation wells: MW11, MW15, MW18, MW24, MW27, MW29, MW31, MW32, MW41, MW57, MW69, MW70, MW84, MW90 through MW99, and MW101. The following wells were connected to the former remediation system between 1996 and 2004: MW09, MW10, MW11, MW21, MW22, MW24, and MW25.

Monitoring wells MW80, MW82, MW88, and MW100 are screened in the upper Intermediate Zone, between approximate depths of 20 and 30 feet bgs. The screened intervals for monitoring wells MW08, MW22, MW24, MW25, MW27, MW28, MW29, MW37, and MW38 are shallower than 20 feet bgs, potentially intersecting both the Shallow and Intermediate Zones; data obtained from those monitoring wells and any current or former remediation wells may be used, qualified, or rejected based on seasonal variations in the two water-bearing zones, as discussed in the "Results" section of this report.

Deep Zone

The Deep Zone is a semi-confined aquifer situated within glacial advance sand and gravel located at depths of more than 60 feet bgs. The term "semi-confined" describes an aquifer that is trapped beneath a stratigraphic confining layer that prevents groundwater from equilibrating with atmospheric pressure. Groundwater within a semi-confined aquifer can equilibrate with atmospheric pressure inside a properly constructed well. Deep Zone groundwater equilibrates at an elevation higher than the bottom of the glacial till deposit, while Intermediate Zone groundwater elevations equilibrate with atmospheric pressure under unconfined conditions near the bottom of the glacial till deposits. South of the TOC Property, Intermediate Zone groundwater descends through the glacial till to an elevation deeper than the elevation at which the Deep Zone equilibrates with atmospheric pressure. Under those circumstances, the Deep Zone gives the appearance of being approximately 0.2 to 2.8 feet shallower than the Intermediate Zone, maintaining an upward vertical gradient between the two zones. During First Quarter 2013, the Deep Zone groundwater table equilibrated 1.81 to 2.43 feet higher than the Intermediate Zone groundwater table. Monitoring wells MW26, MW30, MW39, MW40, MW64, and MW78 are screened in the Deep Zone (Figures 3 and 4.3).

Decommissioned Wells

Of the 101 monitoring wells that have been installed at the Interim Remedial Action Project Area and the Shin/Choi Property, six have been decommissioned. Monitoring wells MW01, MW07, MW14, MW17, MW21, and MW83 were decommissioned by a licensed well driller in accordance with *Minimum Standards for Construction and Maintenance of Wells*, Chapter 173-160 of the Washington Administrative Code, by overdrilling and removing the well casing. Monitoring well MW01, located on the TOC Property, was decommissioned on October 2, 2009, immediately upon the discovery that its surface seal had been removed in 1996 during the installation of the former DPE system and that it was situated in an area where surface water ponded seasonally. Monitoring wells MW07, MW14, and MW17, located beyond the TOC Property boundaries, were decommissioned on November 29, 2004, in accordance with an agreement between Time Oil Co. and the neighboring property owner (Landau 2005). Monitoring/remediation well MW21 was damaged during spring 2012 and decommissioned on April 16, 2012. Well MW83, also located beyond the TOC Property boundaries, was damaged during autumn 2011, decommissioned on November 21, 2011, and replaced with well MW100 on November 22, 2012.

QUARTERLY GROUNDWATER MONITORING

The monitoring event was conducted on February 18 through 28, 2013, to evaluate the environmental quality, flow direction, and gradient of groundwater beneath the Interim Remedial Action Project Area and to eventually demonstrate compliance with Washington State Model Toxics Control Act cleanup regulations. This report presents field activities performed during the monitoring event, laboratory analytical results, and a description of upcoming work. In the preparation of Figures 2 through 5.2, which are attached to this report, SoundEarth referenced one or more of the following sources of information: as-built utility maps (City of Mountlake Terrace 2005), Herman Short Plat No. 106 (Reisdorff 1985), Snohomish County Assessor maps (Snohomish County Assessor's Office 2009, facility drawings (Time Oil Co. 1975), maps prepared by previous consultants (Landau 2005), and recent aerial photographs (USGS 2002). The base map for Figures 2 through 5.2 was developed in 2012 by Axis Survey & Mapping, professional land surveyors of Kirkland, Washington.

The monitoring event included measuring depth to groundwater and collecting groundwater samples from wells MW02 through MW06, MW08 through MW13, MW15, MW16, MW18 through MW20, MW22 through MW70, MW75 through MW82, and MW84 through MW101. Wells MW41 through MW44 were nominally dry or recharge was insufficient to fill the complete the suite of analyses; SoundEarth was able to collected a partial sample from well MW41. The scope of work included collection and analysis of 88 groundwater samples and 10 quality assurance/quality control (QA/QC) samples.

First Quarter 2013 groundwater elevations and sample analytical results are summarized on Table 1. Historical groundwater elevations and sample analytical results from June 1992 through February 2013 are presented in Table 2. Fuel additive analytical results from September 2005 through February 2013 are presented on Table 3. The results of First Quarter 2013 QA/QC sample analyses are presented on Table 4.

Depth-to-Liquid Level Measurements

Upon arrival at the Interim Remedial Action Project Area on February 18, 2013, SoundEarth personnel opened the existing monitoring wells. Water levels were permitted to equilibrate with atmospheric pressure prior to recording depth-to-liquid-level measurements on February 18, 2013, except at monitoring well MW75, which was accessed, gauged, and sampled on February 19, 2013, in accordance with the traffic control plan. SoundEarth measured and recorded groundwater levels relative to the top of the well casings to an accuracy of 0.01 feet using an electronic water level meter or an oil/water interface probe. SoundEarth personnel recorded the depth to liquid level in monitoring well MW24 using each of the water level meters and interface probes used during the monitoring event. The depth-to-liquid-level measurements shown on Table 2 have been corrected for differences between instruments based on the measurements recorded for monitoring well MW24 (maximum 0.09 feet). Whenever separate-phase hydrocarbons ((i.e., light nonaqueous-phase liquid [LNAPL]) were encountered, SoundEarth used an interface probe to measure the depth to LNAPL and the depth to groundwater.

LNAPL, lighter than water, slightly depresses the groundwater table as a function of the specific gravity difference between the two media. In wells where LNAPL was measureable, the reported groundwater elevations shown on Tables 1 and 2 were normalized using the industry-standard specific gravity

estimate of 0.8 for LNAPL relative to 1.0 for water. The following equation was used for the normalization:

Normalized Groundwater Elevation (feet) = $[(H_{TOC} - H_W) * 1.0] + [(H_W - H_{INAPL}) * 0.8]$

where H_{TOC} is the top of casing elevation, H_W is the measured depth to groundwater below the top of casing, and H_{LNAPL} is the measured depth to LNAPL below the top of casing.

Sample Collection Methods

Peristaltic pumps are the default, low-flow sample collection method at the Interim Remedial Action Project Area, but they are ineffective for collection of samples deeper than approximately 31 feet. Because depths to groundwater exceed 31 feet in over half of the monitoring wells at the Interim Remedial Action Project Area, SoundEarth considered the advantages and disadvantages of the following sampling methods:

- Peristaltic pumps and dedicated tubing collect representative low turbidity samples, pose the least risk of sample cross-contamination, and meet the criteria for low-flow protocols (EPA 1996) but are limited to collection of samples shallower than approximately 31 feet.
- Disposable bailers are not depth-limited and do not pose any greater risk of cross-contamination than peristaltic pumps but retrieve turbid samples and potentially volatilize petroleum hydrocarbons, resulting in overstated or understated petroleum hydrocarbon concentrations compared to samples collected in accordance with low-flow protocols.
- Bladder pumps and submersible pumps are not depth-limited and retrieve representative low turbidity samples but pose risks for sample cross-contamination because each sample contacts the interior of the pump, requiring extensive decontamination between samples.
- The use of submersible pumps to collect groundwater samples from the Intermediate Zone is precluded by insufficient groundwater recharge rates, insufficient water column heights, and/or the potential to entrain pump-damaging levels of turbidity. Submersible pumps are feasible for sampling Deep Zone monitoring wells, but so are bailers and bladder pumps. Furthermore, historical analytical results indicated that purging and sampling Deep Zone monitoring wells by bailer method would be protective of the project data quality objectives.
- Each remediation well is equipped with a dedicated pneumatic pump to suppress groundwater elevations under induced vacuum. A pneumatic pump delivers groundwater to surface elevations using pulses of compressed air, resulting in a loss of volatile compounds. Pneumatic wells obstruct the use of other groundwater sampling methods; therefore, pneumatic pumps are used to collect performance groundwater samples from selected remediation wells.

SoundEarth decided to restrict the number of sampling methods to four (peristaltic pump, bladder pump, bailer, and pneumatic pump) and elected not to use a fifth sampling method (submersible pumps). The sampling method used to collect each sample is indicated on Tables 1 and 4 with the sample analytical results.

On February 19 through 28, 2013, SoundEarth collected groundwater samples from each of the wells in accordance with the following methods, protocols, and rationale:

- In wells that had been connected to the remediation system, SoundEarth collected groundwater samples using the downhole pneumatic pump installed in each remediation well (wells MW11, MW15, MW18, MW24, MW27, MW29, MW31, MW32, MW41, MW57, MW69, MW70, MW84, MW90 through MW99, and MW101. The pneumatic pumps deliver a pulse of groundwater to the wellhead whenever the groundwater table rises above the top of the pump.
- In general, whenever depths to groundwater were shallower than approximately 31 feet bgs and the well was not connected to a remediation system, SoundEarth collected groundwater samples in accordance with low-flow protocols using a peristaltic pump (monitoring wells MW02 through MW06, MW08, MW10, MW12, MW19, MW20, MW22, MW25, MW34, MW37, MW38, MW54, MW61, MW62, MW67, MW68, MW79, MW80, MW82, MW88, and MW100).
- In wells where depths to groundwater exceeded approximately 31 feet bgs, SoundEarth collected samples using bottom-loading bladder pumps in accordance with low-flow protocols (monitoring wells MW49, MW55, MW56, MW58 through MW60, MW63, MW65, MW75, MW85, MW86, and MW89), or disposable polyethylene bailers. Bailers were used under the following circumstances:
 - Historical analytical results indicated that elevated turbidity associated with bailing likely would not result in detectable concentrations of petroleum hydrocarbons in groundwater samples (monitoring wells MW13, MW16, MW23, MW26, MW30, MW36, MW39, MW40, MW46, MW47, MW50 through MW53, MW64, MW66, MW76, MW77, MW78, MW81, and MW87).
 - Historical analytical results exceeded their respective cleanup levels to an extent that sampling method would have no bearing on the status of contamination or interpretation of the extent of contamination in groundwater (monitoring wells MW28, MW33, MW45, and MW48).
- In order to evaluate the effects of sample method on data quality, SoundEarth collected one sample and three QA/QC samples from monitoring well MW09 in the following order: (1) bladder pump, (2) peristaltic pump, (3) blind field duplicate by peristaltic pump, and (4) method duplicate by bailer. SoundEarth collected field duplicate samples from monitoring wells MW20 using a peristaltic pump, MW55 using a bladder pump, MW86 using a bladder pump, and MW98 using a pneumatic pump. SoundEarth also collected a sample and QA/QC sample from monitoring well MW28 using a peristaltic pump and bailer, respectively, and a sample and QA/QC sample from monitoring well MW65 using a bladder pump and bailer, respectively.
- Monitoring wells MW41 through MW44 were either nominally dry or insufficient water was present for complete sample collection.

The sampling method used to collect each sample is indicated on Tables 1 and 4 and presented with the sample analytical results.

Purging and Sampling

Purging and sampling with a peristaltic pump was performed using dedicated polyethylene tubing at flow rates ranging from 42 to 220 milliliters per minute. The tubing intake was placed approximately 2 to 3 feet below the surface of the groundwater in each monitoring well. Purging and sampling with a

bottom-loading bladder pump was performed using disposable polyethylene tubing at flow rates ranging from 37 to 184 milliliters per minute. Bladder pumps were suspended approximately 2 to 3 feet below the surface of the groundwater or at least 1 foot above the bottom of each monitoring well.

When purging and sampling in accordance with low-flow protocols, SoundEarth monitored water quality using a YSI ProPlus or YSI Model 556 water quality meter equipped with a flow-through cell. The water quality parameters that were monitored and recorded included temperature, pH, specific conductance, dissolved oxygen, turbidity, and oxidation-reduction potential. Following purging and stabilization of water quality parameters, groundwater samples were collected from the pump outlet tubing located upstream of the flow-through cell and placed directly into laboratory-prepared sample containers.

Purging and sampling with disposable bailers required the removal of at least three well volumes to purge each monitoring well prior to sampling. Water quality parameters were not monitored during purging and sampling with bailers, or sampling with the pneumatic pumps. Upon removal of at least three well volumes of groundwater, water samples were discharged from the bailer directly into laboratory-prepared sample containers. Fewer than three well volumes were purged from the following wells prior to collecting a groundwater sample:

- Monitoring wells MW35, MW45 and MW46 bailed dry upon removal of one well-volume of groundwater, were allowed to recharge, and were sampled later the same day.
- Monitoring wells MW50 and MW53 bailed dry upon removal of approximately two well-volumes of groundwater, were allowed to recharge, and were sampled later the same day.

Each set of sample containers was labeled with a unique sample identification number, placed on ice in a cooler, and transported to Friedman & Bruya, Inc. of Seattle, Washington, under standard chain-of-custody protocols for laboratory analysis. The groundwater samples were submitted for analysis of gasoline-range petroleum hydrocarbons (GRPH) by Northwest Total Petroleum Hydrocarbon (NWTPH) Method NWTPH-Gx and for benzene, toluene, ethylbenzene, and total xylenes (BTEX) by U.S. Environmental Protection Agency (EPA) Method 8021B or 8260C. The groundwater samples collected from monitoring wells MW65, MW69, MW70, MW76 through MW78, MW84 through MW87, MW89, MW95 through MW99, and MW101 were analyzed for methyl tertiary-butyl ether (MTBE) by EPA Method 8260C. In addition, samples collected from monitoring wells MW29, MW31, MW32, MW35, MW46, MW47, MW48, MW90, MW91, and MW101 were analyzed for total and dissolved lead by EPA Method 200.8. The groundwater sample collected from well MW41 was analyzed only for total lead due to insufficient groundwater recharge. SoundEarth field-filtered samples intended for dissolved lead analysis using disposable 0.45 micron filters.

Purge water generated during this sampling event was placed in labeled 55-gallon steel drums and temporarily stored on the TOC Property for transfer to the remediation systems for treatment and permitted discharge to the sanitary sewer.

Sampling activities conducted within the 56th Avenue West ROW were performed in accordance with an approved traffic control plan.

RESULTS

Groundwater levels measured on February 18 and 19, 2013, ranged from 4.27 feet (Shallow Zone monitoring well MW04) to 42.65 feet (Intermediate Zone monitoring well MW16) below the top of the well casings (Table 2). Groundwater elevations from the monitoring wells were contoured using the water level measurements collected on February 18, 2013 (Figures 4.1, 4.2, and 4.3).

During the First Quarter 2013 monitoring event, the overall direction of groundwater flow within the Shallow and Deep Zones generally trended south—southeast, while groundwater appears mounded within the Intermediate Zone (Figures 4.1, 4.2, and 4.3) across the following elevation ranges:

- Shallow Zone groundwater elevations ranged from 344.96 feet (monitoring well MW79) to 357.75 feet (monitoring well MW04). There is no evidence of groundwater mounding in the Shallow Zone in the vicinity of the former stormwater infiltration pit (Figure 4.1).
- Intermediate Zone groundwater elevations ranged from 346.43 feet (monitoring well MW09) to 315.68 feet (monitoring well MW87). Groundwater mounds within the Intermediate Zone between approximately 318 feet (monitoring wells MW56, MW59, and MW93) and 342 to 344 feet (monitoring wells MW11, MW32, MW90, and MW91) are characterized by the following conditions:
 - The 26-foot-high mound is centered beneath the southern end of the former UST excavation (Figure 4.2).
 - The range of groundwater elevations observed in the mounded portion of the Intermediate Zone (elevations 318 to 344 feet) approaches the range of elevations in the Shallow Zone (elevations 347 to 351 feet). The mounded conditions are attributed to leakage from the Shallow Zone into the Intermediate Zone where the confining conditions between the two layers have been breached (e.g., by the former UST excavation).
 - The flattening of the groundwater gradient south of the TOC Property (such as the flattening observed between monitoring wells MW31 and MW59, MW31 and MW56, MW20 and MW92, and MW20 and MW60) signifies the apparent southern limits of the mounded conditions.
- The Intermediate Zone groundwater table flattens beyond the apparent limits of the mounded groundwater conditions; groundwater elevations ranged from 318.14 in monitoring well MW56 at the TOC/Farmasonis Property to 315.68 feet at the Drake Property, in monitoring well MW87 (Figure 4.2). The northern limits of the mounded groundwater conditions are not readily apparent relative to MW16 because groundwater gradients do not appear to flatten between monitoring wells MW16 and MW90 when compared to gradients descending on the south side of the mound.
- Deep Zone groundwater elevations ranged from 317.59 feet in monitoring well MW78 to 321.39 in monitoring well MW26 (Figure 4.3). The range of groundwater elevations observed in the Deep Zone equilibrate at higher elevations than the range of elevations observed in the Intermediate Zone outside the area where mounded groundwater conditions exist, even though the Deep Zone monitoring wells are screened at greater depth intervals than the Intermediate Zone monitoring wells. During First Quarter 2013, an upward vertical gradient of 2.43 feet was

measured between Intermediate Zone monitoring well MW63 (elevation 317.04 feet) and Deep Zone monitoring well MW64 (elevation 319.47 feet). Similarly, a vertical upward gradient of 1.81 feet was recorded between Intermediate Zone monitoring well MW77 (elevation 315.78 feet) and Deep Zone monitoring well MW78 (elevation 317.59 feet). These conditions signify confined or semiconfined conditions within the Deep Zone and substantiate evidence of an aquitard between the two water-bearing zones, based on differential groundwater elevations.

The following wells potentially intersect both Intermediate and Shallow Zones: MW08, MW24, MW27, MW28, MW29, MW37, and MW38. SoundEarth attributes the elevated Intermediate Zone groundwater elevations in wells MW09, MW11, MW90, and MW91 to induced vacuum uplift from operation of the remediation system. During the First Quarter 2013 monitoring event, groundwater elevation data associated with those wells were consistent with the Shallow Zone groundwater elevations. Groundwater elevation data associated with wells MW08, MW09, MW24, MW27, MW29, MW37, and MW38 were disregarded in the calculation of First Quarter 2013 groundwater contours for the Shallow Zone (Figure 4.1) and Intermediate Zone (Figure 4.2). SoundEarth calculated the following hydraulic gradients for each zone:

- Hydraulic gradients in the Shallow Zone range from 0.036 feet per foot between wells MW06 and MW79 to 0.111 feet per foot between wells MW04 and MW19, toward the south-southeast, perpendicular to the groundwater contours.
- The hydraulic gradient in the Intermediate Zone outside the mounded conditions is approximately 0.012 feet per foot between wells MW92 and MW69, toward the south southeast, perpendicular to the groundwater contours.
- Hydraulic gradients within the mounded portion of the Intermediate Zone range from 0.00 at the crest of the mound to 0.417 feet per foot between wells MW32 and MW94, perpendicular to the groundwater contours.
- The hydraulic gradient in the Deep Zone is 0.009 feet per foot between wells MW26 and MW78, perpendicular to the groundwater contours.

Although groundwater elevation data for monitoring wells MW08, MW09, MW24, MW27, MW29, MW37, and MW38 were excluded from calculation of Intermediate Zone groundwater contours, groundwater analytical results for those wells are considered representative of Intermediate Zone conditions for the purpose of evaluating the lateral distribution of petroleum hydrocarbons. Specifically, monitoring wells where petroleum hydrocarbons have never been detected (monitoring wells MW37 and MW38) define the northeast lateral extent of contamination in the Intermediate Zone, regardless of groundwater elevation. Furthermore, in cases where petroleum hydrocarbons are detected in Intermediate Zone wells, historical maximum concentrations of petroleum hydrocarbons coincide with deeper groundwater elevations (monitoring wells MW08, MW24, MW27, and MW29) that are consistent with the hypothesis that the Intermediate Zone remains the primary zone of contaminant transport. Laboratory analytical results from the monitoring event indicated the following (Figures 5.1 and 5.2; Tables 1, 2, and 3).

Shallow Zone

■ . GRPH and BTEX were not detected in groundwater samples collected from any of the Shallow Zone monitoring wells (MW02, MW03, MW04, MW05, MW06, MW12, MW19, MW34, MW54, MW61, MW62, MW67, MW68, and MW79).

Intermediate Zone Seasonally Intersecting Shallow Conditions/Upper Intermediate Zone

- GRPH and BTEX were not detected in groundwater samples collected from the monitoring wells that potentially intersect more than one water-bearing zone (MW08, MW37, and MW38).
- GRPH and BTEX were not detected in groundwater samples collected from the Upper Intermediate Zone monitoring wells MW80, MW82, MW88, and MW100.
- Concentrations of GRPH exceeded the cleanup level in monitoring wells MW24, MW25, MW27, MW28, and MW29.
- Concentrations of total xylenes exceeded the cleanup level in monitoring wells MW27 and MW29.
- Concentrations of total xylenes and/or benzene, toluene, and ethylbenzene either were not detected or were below their respective cleanup levels in monitoring wells MW24, MW25, and MW28.
- The concentration of total lead was below the cleanup level in well MW29.

Intermediate Zone

- LNAPL conditions were observed at the TOC Property in well MW90 at an elevation of 343.84 feet (0.05 feet thick).
- Concentrations of GRPH exceeded the cleanup level in monitoring wells MW11, MW18, MW20, MW31, MW32, MW33, MW45, MW48, MW57, MW69, MW84, MW90, MW91, and MW98.
- Concentrations of benzene exceeded the cleanup level in monitoring wells MW10, MW11, MW20, MW32, MW48, MW57, MW90, MW91, MW94, MW96, and MW98.
- Concentrations of toluene exceeded the cleanup level in monitoring well MW90.
- Concentrations of ethylbenzene exceeded the cleanup level in monitoring wells MW32, MW90, and MW91.
- Concentrations of total xylenes exceeded the cleanup level in monitoring wells MW11, MW20, MW32, MW45, MW48, MW90, and MW91.
- Concentrations of GRPH and BTEX either were not detected or were below the cleanup level in groundwater samples collected from monitoring wells MW09, MW13, MW15, MW16, MW22, MW23, MW35, MW36, MW46, MW47, MW49 through MW53,MW55, MW56, MW58 through MW60, MW63, MW65, MW66, MW75 through MW77, MW81, MW85 through MW87, MW89, MW92, MW93, MW95, MW97, MW99, and MW101.
- Concentrations of total lead exceeded the cleanup level in groundwater samples collected from monitoring wells MW31, MW41, MW45, and MW101. The dissolved lead concentrations in the samples collected from monitoring wells MW31 and MW45 were more than 50 percent of their

respective total concentrations, suggesting that the source of lead in groundwater at MW31 and MW45 is not attributable to sample turbidity. Groundwater recharge in well MW41 was insufficient to collect a sample for dissolved lead analysis.

- Concentrations of total lead were detected below the cleanup level in wells MW32, MW35, MW46, MW47, MW48, MW90, and MW91.
- Concentrations of the fuel additive MTBE were not detected groundwater samples collected from monitoring wells at the Drake Property MW65, MW69, MW70, MW76, MW77, MW78, MW84 through MW87, MW89, MW95 through MW99, and MW101. MTBE has been detected in soil and groundwater at the Shin/Choi Property, over 120 feet south of and downgradient from the Drake Property; therefore, other sources of MTBE are suspected between the Drake Property and the Shin/Choi Property.

The subsurface distributions of GRPH and benzene in Intermediate Zone groundwater are illustrated on Figures 5.1 and 5.2, respectively, in relation to surface features and approximate property boundaries. These illustrations were prepared using ESRI ArcGIS 3D Analyst software (version 9.3.1) and Rockware Surfer software (version 8.2) to map three-dimensional surfaces according to the methods described in Attachment A.

Actual concentrations may vary from those illustrated on Figures 5.1 and 5.2 due to lithology, stratigraphy, well screen interval depths, and/or spacing between individual monitoring wells.

Deep Zone

- Concentrations of GRPH and BTEX were not detected in groundwater samples collected from any of the Deep Zone monitoring wells (MW26, MW30, MW39, MW40, MW64, and MW78).
- MTBE was not detected in the groundwater sample collected from monitoring well MW78.

DATA QUALITY REVIEW

The scope of groundwater monitoring included the collection and laboratory analysis of 88 groundwater samples and 10 QA/QC samples. SoundEarth performed a QA/QC review of the analytical results, which included a review of accuracy and precision of the data supplied by the laboratory. The QA/QC program for this sampling event included collection and analysis of the following samples:

- SoundEarth collected blind field duplicate sample MW999-20130220-PE from monitoring well MW09 using a peristaltic pump. SoundEarth submitted this sample for analysis by GRPH and BTEX analysis by Method NWTPH-Gx and EPA Method 8021B, respectively.
- SoundEarth collected a sample of the rinsate water poured through the bladder pump that was specified for deployment at monitoring well MW86 (01176-20130219-R1). SoundEarth submitted this sample for analysis of BTEX by EPA Method 8021B.
- SoundEarth collected samples and method duplicate samples from monitoring wells with the objective of comparing the effect(s), if any, of sample method on the variability of analytical results:

- MW09 using a bladder pump, a peristaltic pump, and a bailer (sample MW09-20130220-BL, and method duplicate samples MW09-20130220-PE and MW09-20130220-BA). SoundEarth submitted all three samples for GRPH and BTEX analyses.
- MW20 using a peristaltic pump (sample MW20-20130220-PE and method duplicate sample MW20-20130220-PE2). SoundEarth submitted both samples for GRPH and BTEX analyses.
- MW28 using a peristaltic pump (sample MW20-20130220-PE and a bailer (method duplicate sample MW20-20130220-BA). SoundEarth submitted both samples for GRPH and BTEX analyses.
- MW55 using a bladder pump (sample MW55-20130220-BL and method duplicate sample MW55-20130220-BL2). SoundEarth submitted both samples for GRPH and BTEX analyses.
- MW65 using a bladder pump and a bailer (sample MW65-20130219-BL and duplicate sample MW65-20130219-BA). SoundEarth submitted both samples for GRPH and BTEX analyses. Sample MW65-20130219-BL was also analyzed for MTBE.
- MW86 using a bladder pump (sample MW86-20130219-BL and method duplicate sample MW86-20130219-BL2). SoundEarth submitted both samples for GRPH and BTEX analyses; sample MW86-20120306-BL was also analyzed for MTBE.
- MW98 using a pneumatic pump (sample MW98-20130228-PN and method duplicate sample MW98-20130228-PN2). SoundEarth submitted both samples for GRPH, BTEX, and MTBE analyses.

Analytical results for field quality assurance samples are summarized on Table 4. In the event that a QA/QC result for any chemical of concern exceeded the sample result, and the QA/QC sample was collected using the same method as the sample, then the higher of the two values is reported on Table 1 and 2; however, if the sample collection methods differed, then the primary sample results are reported on Tables 1 and 2, regardless of the QA/QC analytical result. Analytical results for laboratory quality assurance samples are included in the laboratory analytical reports, which are appended to this report (Attachment B). The results of the QA/QC review indicated the following:

- The relative percent difference calculations (RPD) for each analyte that was detected were within acceptable limits for the field duplicate samples collected from monitoring wells MW20 (peristaltic pump), MW86 (bladder pump), MW98 (pneumatic pump), and for the two method duplicate samples that were collected from well MW09 using a peristaltic pump. RPDs generally were not within acceptable limits for field duplicate samples collected from monitoring well MW09 using different methods (bladder pump vs. bailer, peristaltic vs. bailer); in each case, analyte concentrations were overstated in samples collected using peristaltic pump or bailer compared to bladder pump. Each analyte was not detected in at least one of each groundwater sample collected from monitoring wells MW55 and MW65; therefore, RPDs could not be calculated for those QA/QC samples. The field duplicate sample RPD serves as a measure of the reproducibility of sampling and analysis procedures.
- GRPH and BTEX detection limits for groundwater samples collected from monitoring wells MW10, MW15, MW20, MW32, MW48, MW69, MW84, MW90, and MW91 were elevated because of sample dilution. With the exception of benzene in well MW15, each of the GRPH and

BTEX concentrations for these groundwater samples exceeded the elevated laboratory detection limits. The laboratory estimated the benzene concentration in well MW15 and qualified the data as "estimated," as reported in Tables 1 and 2. Therefore, the analytical results for the groundwater samples and field duplicates are considered usable to meet the objectives of the First Quarter 2013 monitoring event.

- The analytical results for the sample method duplicates (Table 4) indicated the following:
 - Sampling by bailer resulted in overstated GRPH and BTEX concentrations in one groundwater sample (method duplicate sample MW09-20130220-BA) and understated concentrations in another sample (method duplicate sample MW28-20130220-BA) when compared to low-flow methods (samples MW09-20130220-BL and MW28-20130220-PE, and method duplicate sample MW09-20130220-PE). The effects of overstatement (RPD values of 74 to 96 percent for data associated with well MW09) were greater than the effects of understatement (RPD values of 3 to 51 percent for data associated with well MW28).
 - In cases where analyte concentrations are at or below the laboratory reporting limits, the effects of sampling by bailer (method duplicate sample MW65-20130219-BA) were inconclusive compared to low-flow methods (sample MW65-20130219-BL).
 - Sampling by peristaltic pump (method duplicate sample MW09-20130220-PE and field duplicate sample MW999-20130220-PE) resulted in overstated GRPH and BTEX concentrations in groundwater when compared to sampling by bladder pump (sample MW09-20130220-BL).
- Low-flow criteria for turbidity were not achieved prior to collecting groundwater samples from monitoring wells MW09, MW25, and MW89, even though the wells were purged at minimum pump flow rates. Turbidity at the time of sample collection ranged from 11.4 to 348 nephelometric turbidity units, and final turbidity readings varied more than plus or minus 10 percent in each case. GRPH and BTEX were not detected in the groundwater sample collected from monitoring well MW89, despite relatively high sample turbidity. Concentrations of GRPH and/or BTEX in the groundwater samples collected from MW09 and MW25 may be overstated or exaggerated due to elevated/unstable turbidity.
- Monitoring wells MW35, MW45, MW46, MW50, and MW53 ran dry during purging upon or prior to removal of one to two well-volumes of groundwater. SoundEarth allowed the wells to recharge and collected samples the same day. The groundwater analytical data associated with these wells should be qualified as screening results appropriate for assessing the presence or absence of petroleum hydrocarbons in groundwater as follows:
 - In wells where petroleum hydrocarbons are present (MW45), concentrations of GRPH and BTEX may be understated due to excessive volatilization and/or overstated due to elevated turbidity.
 - In wells where GRPH and BTEX are not detected (MW35, MW46, MW50, and MW53), the GRPH and benzene data are assumed to be representative of unimpaired groundwater quality, primarily because the groundwater cleanup levels for GRPH, BTEX, MTBE, and 1,2-

dichloroethane (ethylene dichloride) are between 5 and 1,000 times their respective laboratory reporting limits.

The remaining QA/QC criteria are acceptable for the groundwater samples; therefore, no action is required and analytical results meet the project objectives. Copies of the laboratory analytical reports are provided in Attachment B.

CONCLUSIONS

SoundEarth draws the following conclusions from an evaluation of the data obtained during the First Quarter 2013 groundwater monitoring event:

- The overall direction of groundwater flow through the Shallow, Intermediate, and Deep Zones are toward the south—southeast. Although groundwater flow directions appear to radiate away from the center of the mounded groundwater conditions in the Intermediate Zone, the distribution of petroleum hydrocarbons in Intermediate Zone groundwater is consistent with the overall direction of groundwater flow toward the south—southeast.
- Mounded groundwater conditions within the Intermediate Zone appear to be centered beneath the southern end of the former UST excavation. The location and elevation of the mounded conditions, as well as the vertical and lateral distributions of petroleum hydrocarbons, support the working hypothesis that the former UST excavation cross-connects with the Shallow Zone and portions of the Intermediate Zone.
- The current conceptual model for the Interim Remedial Action Project Area assumes the following:
 - The former UST excavation intersects the Shallow Zone and granular strata within the Upper Intermediate Zone. Seasonal diminishment of saturated conditions within the Shallow Zone facilitates vertical downward migration of petroleum hydrocarbons into the Intermediate Zone where they become adsorbed to the soil formation. Seasonal recharge of the Shallow Zone traps and surcharges the adsorbed petroleum hydrocarbons. One basis for this working hypothesis is the former occurrence of LNAPL in monitoring well MW48, which is located more than 180 feet from the southern end of the former UST excavation, and at elevations between 308 and 312 feet, over 36 feet deeper than the bottom of the former UST excavation.
 - Intermittent saturation, soil adsorption, wicking, and anisotropic stratigraphy contribute to the lateral and downward vertical migration of petroleum hydrocarbons through the icemelt and water-laid glacial deposits of the Intermediate Zone, while the vertical upward gradient between the Intermediate Zone and Deep Zone inhibits the descent of petroleum hydrocarbons through the lower reaches of the Intermediate Zone.
 - The apparently separated plumes depicted on Figures 5.1 and 5.2 are connected laterally between the TOC Property and the Drake Property via a preferential pathway that meanders west of the TOC/Farmasonis Property beneath the 56th Avenue West ROW. This working hypothesis is based on historical distributions of LNAPL in monitoring wells MW20, MW32, MW48, and MW90, which contrast with the apparent absence of a connecting plume beneath the TOC/Farmasonis Property (monitoring wells MW23, MW56, MW59,

MW66, MW81, MW92, MW93, and MW94) and the opposite side of 56th Avenue West (monitoring wells MW08, MW50, MW52, MW53, MW55, MW60, and MW75). Consistent with the current hypothesis, and historical groundwater analytical results for monitoring wells MW13 and MW45, elevated concentrations of GRPH and BTEX have been documented beneath the east margin of the 56th Avenue ROW between monitoring wells MW20, MW32, and MW48. Furthermore, in First Quarter 2013, concentrations of benzene were detected for the first time in western remediation wells MW92, MW94, and MW96, suggesting that the radius of influence of the remediation system may intersect a previously uncharacterized source of benzene beneath the ROW.

- The extent of petroleum hydrocarbons in groundwater south of the Drake Property remains the focus of an ongoing remedial investigation. Currently the southernmost line of Intermediate Zone monitoring wells is defined, from west to east, by wells MW52, MW75, MW51, MW89, MW84, MW86, MW85, MW77, and MW87. In First Quarter 2013, concentrations of GRPH exceeded the cleanup level in well MW84 (Figure 5.1). Concentrations of benzene were detected below their respective cleanup levels in wells MW84, MW85, and MW86 (Figure 5.2). Further investigation of Intermediate Zone groundwater south and downgradient from monitoring wells MW84, MW85, and MW86 is pending.
- SoundEarth evaluated of the analytical results for method duplicate samples collected using various combinations of bladder pump, peristaltic pump, pneumatic pump, and bailer (Table 4). Concentrations of analytes tend to be overstated in samples collected by peristaltic pump and bailer, compared to the bladder pump, which is EPA's preferred sampling device (EPA 1992). SoundEarth will continue to collect groundwater samples using bailers and peristaltic pumps for screening and performance monitoring purposes, and will collect groundwater samples using bladder pumps for compliance monitoring and plume boundary documentation purposes. In addition to the above-listed sampling devices, SoundEarth will continue to use pneumatic pumps to collect performance samples from remediation wells. SoundEarth will also continue to collect method duplicate samples for data qualification purposes.

REFERENCES

- Axis Survey & Mapping. 2012. Existing Site Exhibit, Sheet 1 OF 1, SE ¼, SW ¼, SEC. 33, TWP. 27 N., RGE. 4 E., W.M. Mountlake Terrace, Snohomish County, Washington. April 6.
- City of Mountlake Terrace. 2005. As-Built Utilities, 24205 56th Ave. W. Area. October 3.
- Environmental Science & Engineering, Inc. (ES&E). 1992. Results of Site Assessment, Time Oil Property #01-176, Located at 24205 56th Avenue West, Mountlake Terrace, Washington. September 16.
- K&S Environmental, Inc. (K&S). 2001. UST Decommissioning and Site Assessment Report, R&R Auto, 24311 56th Ave. W., Mountlake Terrace, WA. January 16.
- Landau Associates, Inc. (Landau). 2005. *Groundwater Status Report, Time Oil Property 01-176, 24205 56th Avenue West, Mountlake Terrace, Washington.* January 25.
- Reisdorff, Thomas D. 1985. Herman Short Plat No. 106. January 31.
- Snohomish County Assessor's Office. 2009. Snohomish County On-Line Property Information, accessed at http://gis.snoco.org/maps/property/index.htm. November.
- SoundEarth Strategies, Inc. (SoundEarth). 2011. Interim Remedial Action Work Plan, TOC Holdings Co. Facility No. 01-176, 24205 56th Avenue West, Mountlake Terrace, Washington 98043. July 28.
- Time Oil Company [sic] (Time Oil Co.). 1975. Blueprint Drawing No. 1390: Conduits, Piping, Electrical Service, Lighting, Retaining Wall & Lot Drainage, Mountlake Terrace, Wash. September 8 with undated maintenance notes in red-orange pencil.
- U.S. Environmental Protection Agency (EPA). 1996. Low Stress (low flow) Purging and Sampling Procedure for the Collection of Ground Water Samples from Monitoring Wells. July 30.
- ______. 1992. RCRA Ground-Water Monitoring Draft Technical Guidance. Office of Solid Waste. Washington, D.C. November.
- U.S. Geological Survey (USGS). 2002. Urban-250mm Aerial Photograph of 24200 Block of Mountlake Terrace, Washington.

WORK PLANNED

In Second Quarter 2013, SoundEarth will conduct a limited groundwater monitoring event at the Interim Remedial Action Project Area in accordance with the IRAWP. The results will be presented in a groundwater monitoring summary report.

CLOSING

SoundEarth appreciates the opportunity to work with you on this project. Please contact the undersigned at (206) 306-1900 if you have any questions or require additional information.

Respectfully,

SoundEarth Strategies, Inc.



Deborah H. Gardner, LG #1243 Associate Geologist Erin Rothman

Principal Scientist

Attachments:

Figure 1, Physiographic Setting

Figure 2, Property Location Map

Figure 3, Exploration Location Map

Figure 4.1, Groundwater Contour Map, Shallow Zone, February 18, 2013

Figure 4.2, Groundwater Contour Map, Intermediate Zone, February 18, 2013

Figure 4.3, Groundwater Contour Map, Deep Zone, February 18, 2013

Figure 5.1, Concentrations of GRPH in Intermediate Zone Groundwater, February 2013

Figure 5.2, Concentrations of Benzene in Intermediate Zone Groundwater, February

2013

Table 1, Summary of First Quarter 2013 Groundwater Analytical Results Sorted by Water-Bearing Zone

Table 2, Summary of Historical Groundwater Analytical Results, June 1992 through February 2013

Table 3, Summary of Groundwater Analytical Results, Eight Common Fuel Additives

Table 4, Summary of Quality Assurance/Quality Control Analytical Results, First Quarter 2013

A, Preparation of GRPH and Benzene Distribution Figures

B, Laboratory Analytical Reports

Friedman & Bruya, Inc. #302333
Friedman & Bruya, Inc. #302334
Friedman & Bruya, Inc. #302335
Friedman & Bruya, Inc. #302336
Friedman & Bruya, Inc. #302400
Friedman & Bruya, Inc. #303012

cc: Ms. Chris Smith, Washington State Department of Ecology, Northwest Region Ms. Louise Bardy, Washington State Department of Ecology, Northwest Region

DHG/RKB:mdb/amr

FIGURES

Printed from TOPO! ©2001 National Geographic Holdings (w



DATE: _______06/20/2013
DRAWN BY: ______JQC
CHECKED BY: _____RKB
CAD FILE: ______01-176_Fig 1_TO

122°22.000' W

122°24.000' W

NOT TO SCALE

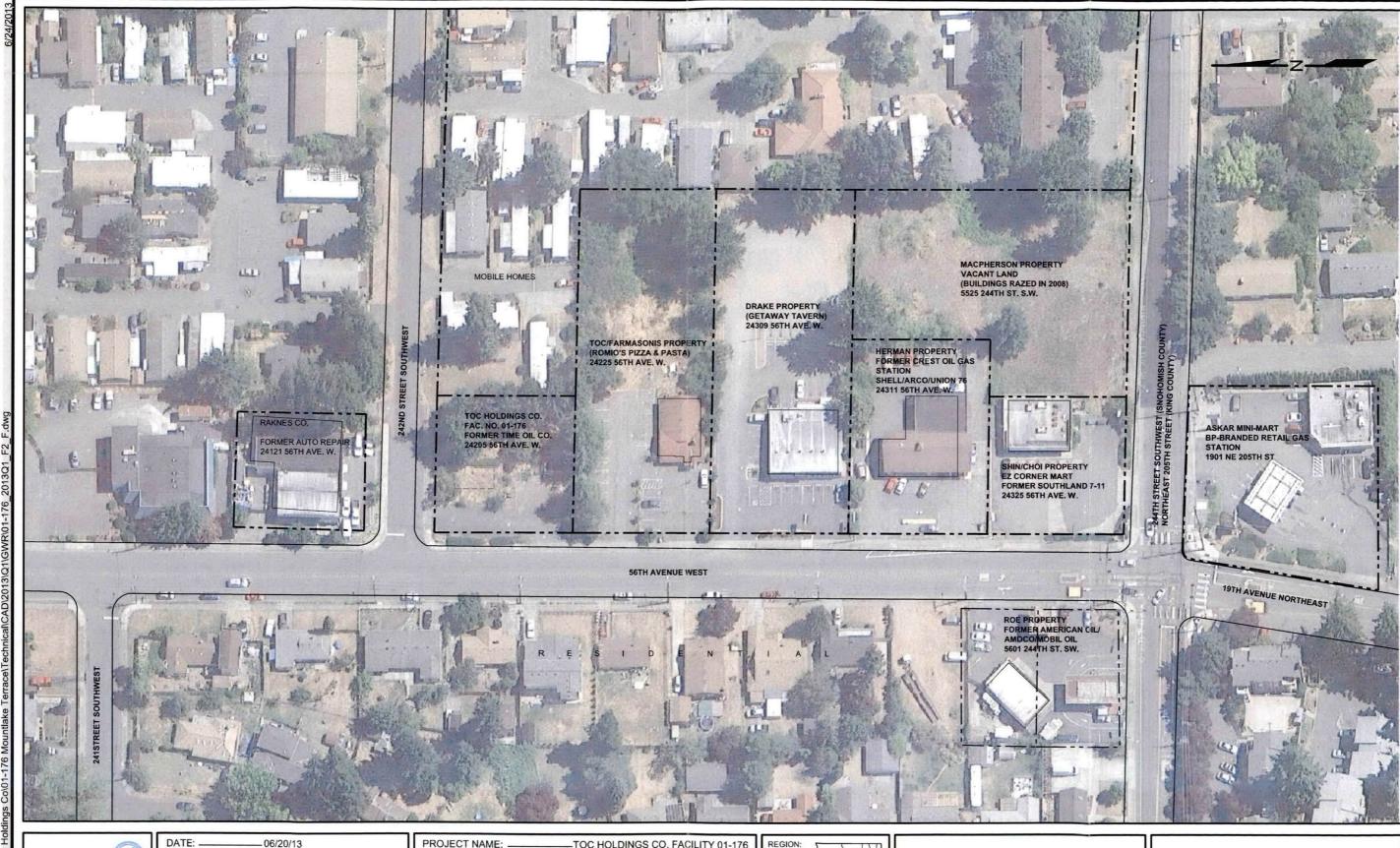
FIGURE 1
PHYSIOGRAPHIC SETTING

Kirkland

WGS84 122°12.000' W

47941.000

AW, SOUNDEARTHING, COM



SoundEarth Strategies
www.soundearthinc.com

CAD FILE: _____01-176_2013Q1_F2

PROJECT NAME: ______TOC HOLDINGS CO. FACILITY 01-176
PROJECT NUMBER: _____0440-030
STREET ADDRESS: ____24205 56TH AVENUE WEST

-MOUNTLAKE TERRACE, WASHINGTON

CITY, STATE:



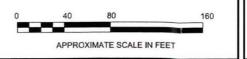
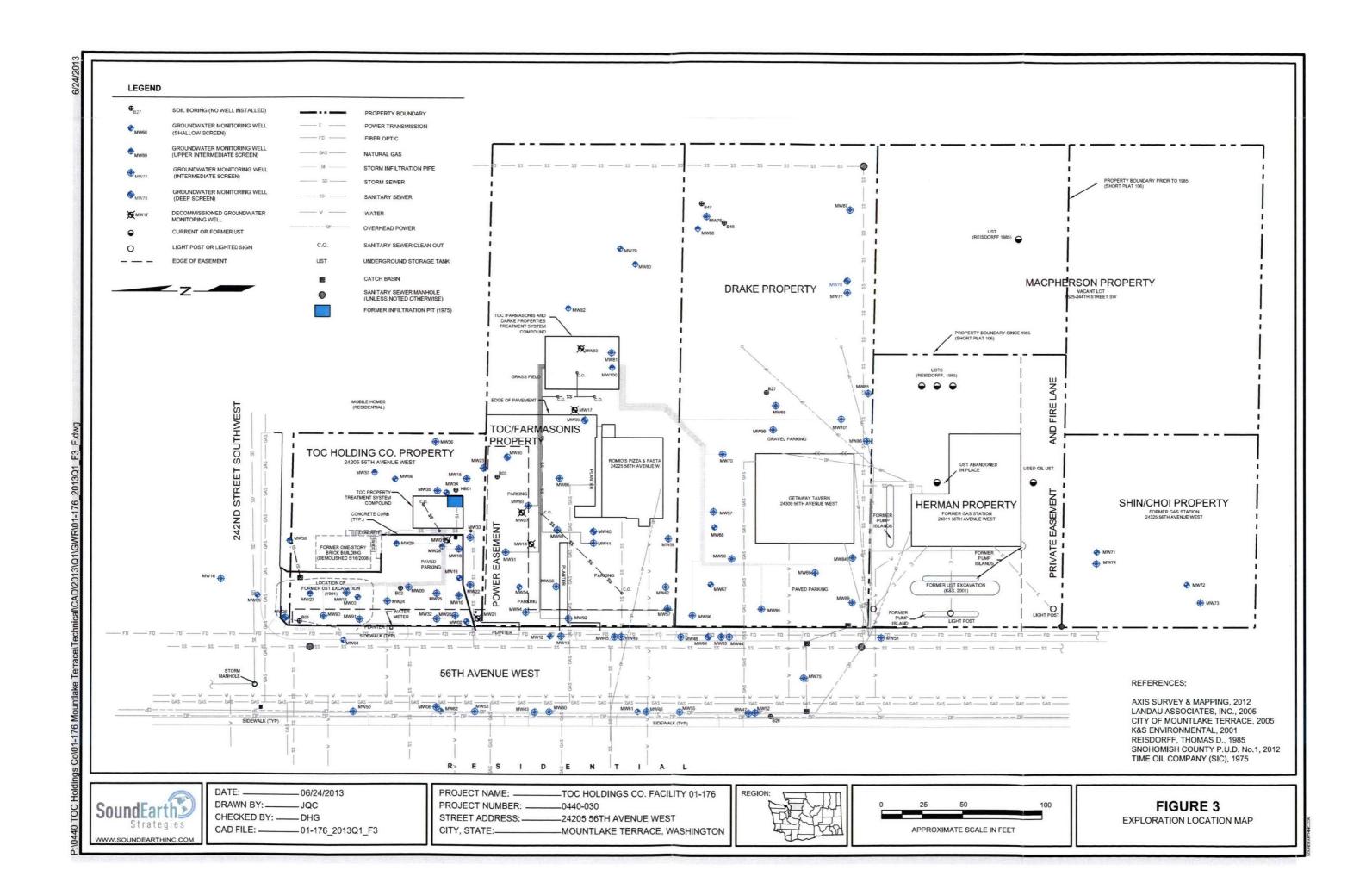
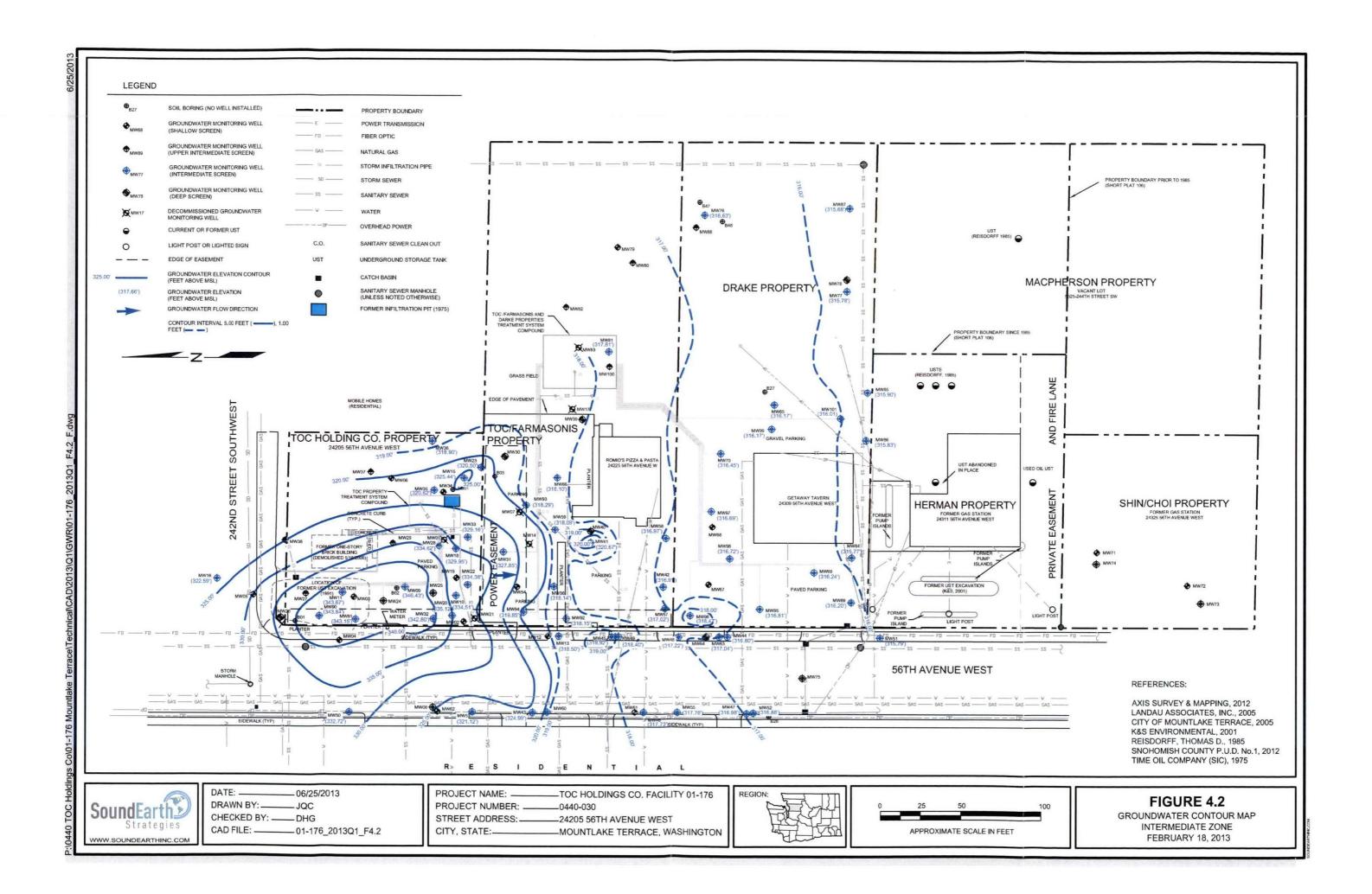
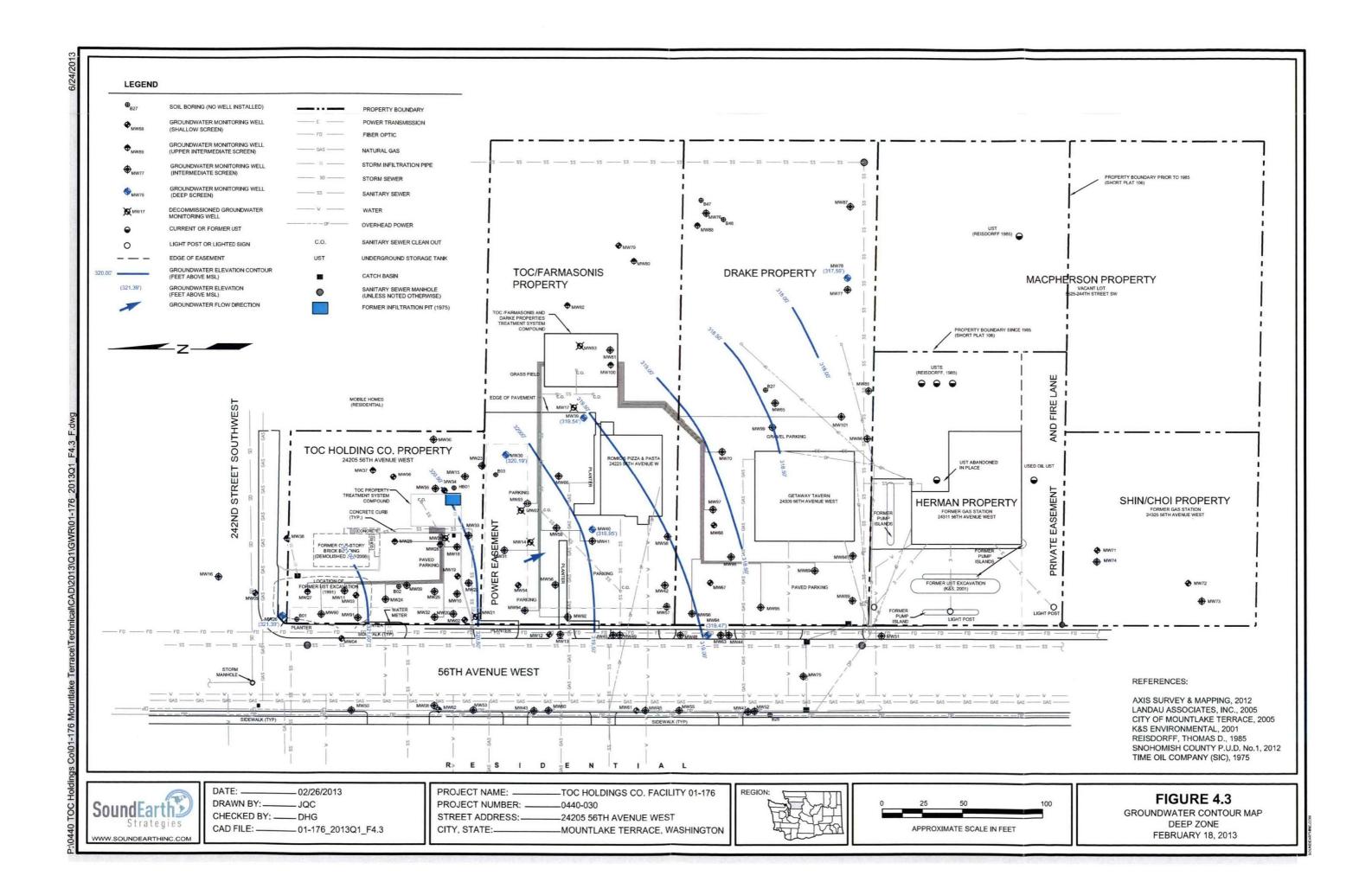


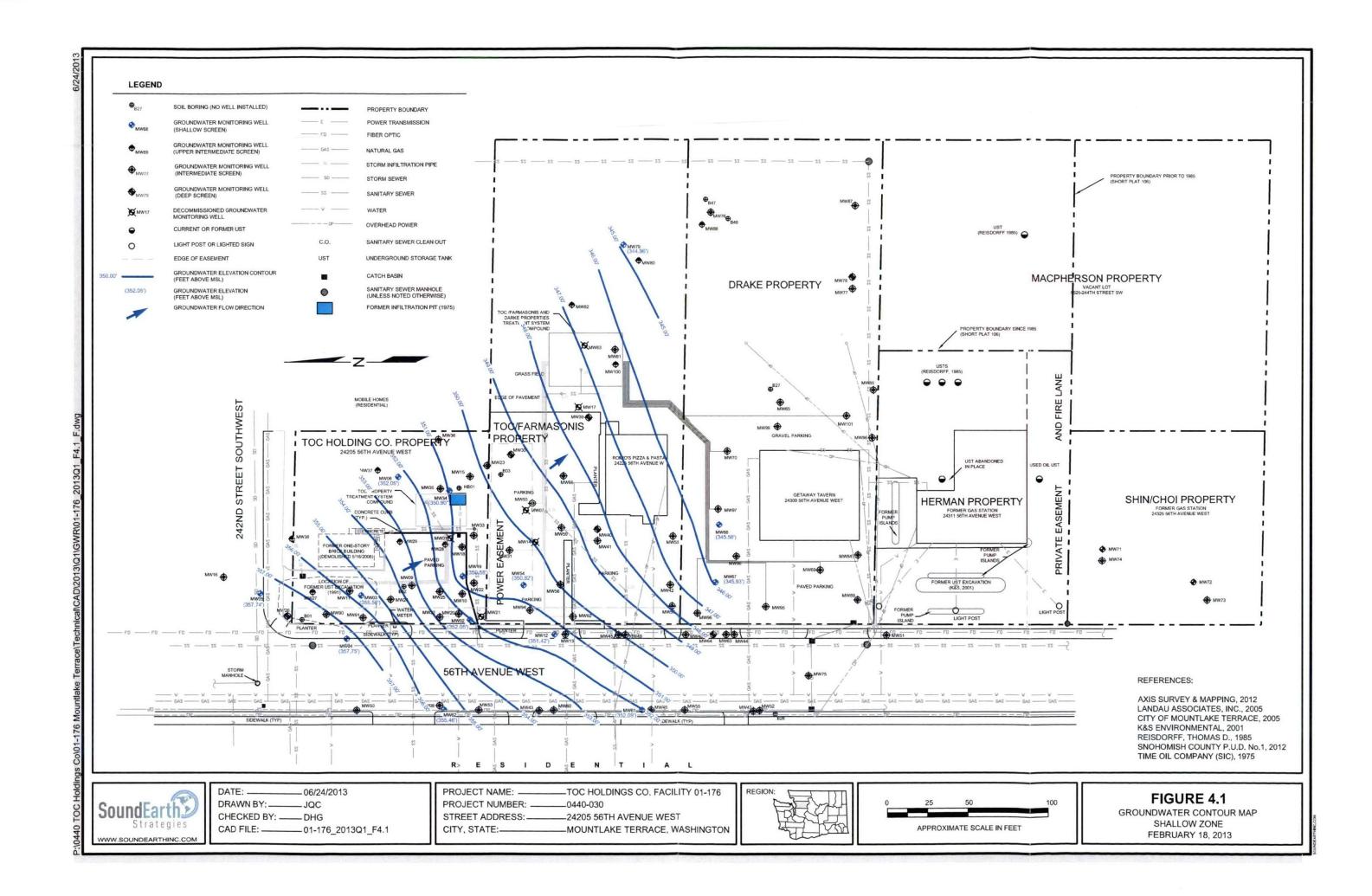
FIGURE 2

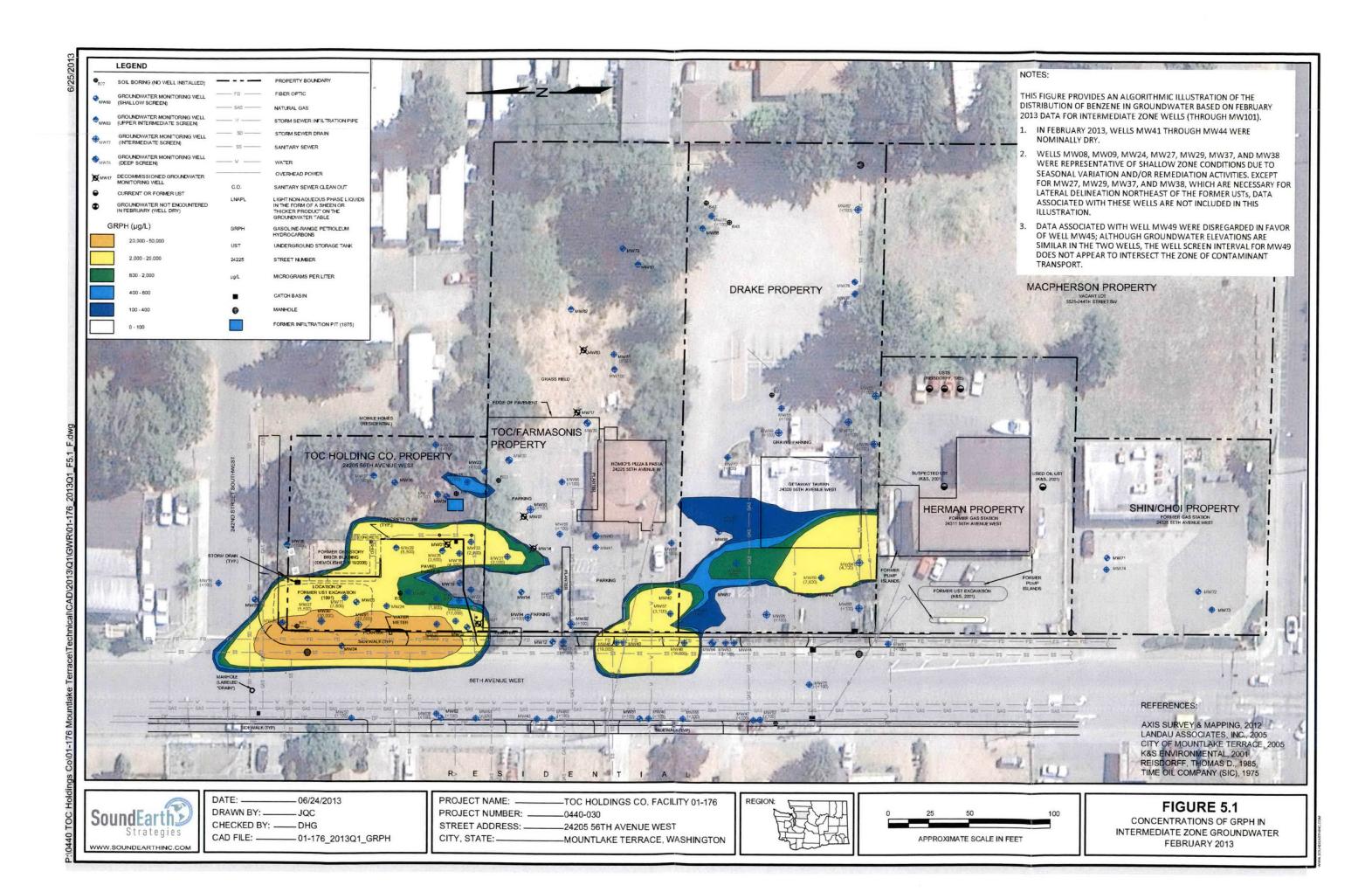
PROPERTY LOCATION MAP

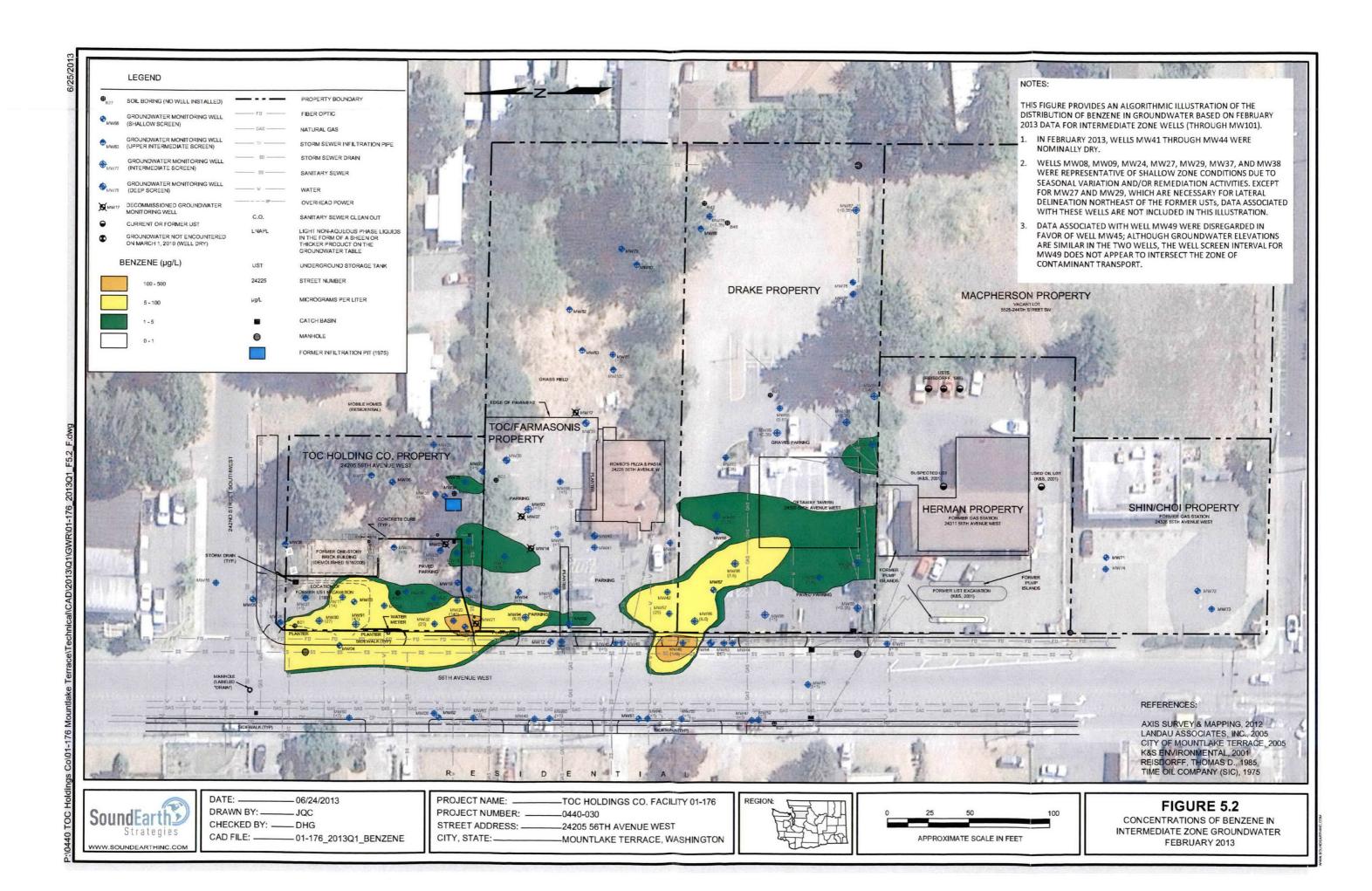












TABLES



Table 1 Summary of First Quarter 2013 Groundwater Analytical Results Sorted by Water-Bearing Zone TOC Holdings Co. Facility No. 01-176 24205 56th Avenue West Mountlake Terrace, Washington

Well ID	Property Owner	Date	Sample Method	Groundwater Elevation (feet) ⁽¹⁾	GRPH ⁽²⁾	Benzene ⁽³⁾	Toluene ⁽³⁾	Ethyl- benzene ⁽³⁾	Total Xylenes ⁽³⁾	MTBE ⁽⁴⁾	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Dissolved Lead ⁽⁵⁾
				SHALL	OW WATER-BEA		TO 20 FEET B						
MW02	тос	02/20/13	Peristaltic Pump	352.05	<100	<1	<1	<1	<3			- "	-
MW03	TOC	02/20/13	Peristaltic Pump	355.58	<100	<1	<1	<1	<3		-		
MW04	ROW (56th)	02/20/13	Peristaltic Pump	357.75	<100	<1	<1	<1	<3				
MW05	ROW (242nd)	02/21/13	Peristaltic Pump	357.74	<100	<1	<1	<1	<3		- 1		
MW06	TOC	02/20/13	Peristaltic Pump	352.05	<100	<1	<1	<1	<3				
MW12	ROW (56th)	02/19/13	Peristaltic Pump	351.42	<100	<1	<1	<1	<3				
MW19	TOC	02/21/13	Peristaltic Pump	350.58	<100	<1	<1	<1	<3				
MW34	тос	02/21/13	Peristaltic Pump	350.90	<100	<1	<1	<1	<3				
MW54	TOC/Farmasonis	02/19/13	Peristaltic Pump	350.82	<100	<1	<1	<1	<3				
MW61	ROW (56th)	02/21/13	Peristaltic Pump	352.09	<100	<1	<1	<1	<3				
MW62	ROW (56th)	02/21/13	Peristaltic Pump	355.46	<100	<1	<1	<1	<3				
MW67	Drake	02/19/13	Peristaltic Pump	345.93	<100	<1	<1	<1	<3				-
MW68	Drake	02/19/13	Peristaltic Pump	345.58	<100	<1	<1	<1	<3				
MW79	TOC/Farmasonis	02/19/13	Peristaltic Pump	344.96	<100	<1	<1	<1	<3				
			1	NTERMEDIATE ZO	ONE WELLS THA	T INTERSECT S	HALLOW ZON	E CONDITIONS					
MW08	ROW (56th)	02/21/13	Peristaltic Pump	354.54	<100	<1	<1	<1	<3		-		
MW24 (RW)	тос	02/28/13	Pneumatic Pump	353.27	1,000	<1	1.7	<1	40				
MW25	TOC	02/21/13	Peristaltic Pump	335.96	1,900	1.6	25	31	240				
MW27 (RW)	тос	02/28/13	Pneumatic Pump	355.36	5,500	<1	6.9	160	1,300				
MW28	тос	02/20/13	Bailer	334.62	3,600	<1	1.8	86	420				-
MW29 (RW)	тос	02/28/13	Pneumatic Pump	352.05	8,500	<1	50	<1	1,400			8.79	3.19
MW37	тос	02/21/13	Peristaltic Pump	347.38	<100	<1	<1	<1	<3		-		-
MW38	тос	02/21/13	Peristaltic Pump	353.19	<100	<1	<1	<1	<3				
-	MAINTEN CHARLES			UPPER INTER	MEDIATE WATE	R-BEARING ZO	ONE (20 TO 30	FEET BGS)			THE STATE OF		37454
MW80	TOC/Farmasonis	02/19/13	Peristaltic Pump	344.01	<100	<1	<1	<1	<3				
MW82	TOC/Farmasonis	02/19/13	Peristaltic Pump	327.78	<100	<1	<1	<1	<3	-	-		
MW88	Drake	02/19/13	Peristaltic Pump	341.93	<100	<1	<1	<1	<3			-	
MW100	TOC/Farmasonis	02/19/13	Peristaltic Pump	344.36	<100	<1	<1	<1	<3		-	-	
MTCA Method	A Cleanup Level ⁽⁶⁾				1,000/800 ⁽⁷⁾	5	1,000	700	1,000	20	5	15	NE



Table 1 Summary of First Quarter 2013 Groundwater Analytical Results Sorted by Water-Bearing Zone TOC Holdings Co. Facility No. 01-176 24205 56th Avenue West Mountlake Terrace, Washington

Well ID	Property Owner	Date	Sample Method	Groundwater Elevation (feet) ^[1]	GRPH ⁽²⁾	Benzene ⁽³⁾	Toluene ⁽³⁾	Ethyl- benzene ⁽³⁾	Total Xylenes ⁽³⁾	MTBE ⁽⁴⁾	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Dissolved Lead ⁽⁵⁾
					DIATE WATER-E		(20 TO 60 FEE						
MW09	тос	02/20/13	Bladder Pump	346.43	270	<1	<1	5.8	59		-	-	
MW10	тос	02/21/13	Peristaltic Pump	334.51	620	5.5	14	8.7	110				
MW11 (RW)	тос	02/28/13	Pneumatic Pump	343.67	7,800	14	85	92	4,200	7.00		-	
MW13	ROW (56th)	02/20/13	Bailer	318.50	<100	<1	<1	<1	<3		**		
MW15 (RW)	тос	02/28/13	Pneumatic Pump	325.44	790	3.6 ^j	<5	<5	44				-
MW16	ROW (242nd)	02/21/13	Bailer	322.59	<100	<1	<1	<1	<3				
MW18 (RW)	тос	02/28/13	Pneumatic Pump	329.95	4,200	3.3	47	73	1,000				-
MW20	TOC	02/20/13	Peristaltic Pump	335.12	17,000	140	760	620	3,400				
MW22	TOC	02/21/13	Peristaltic Pump	334.38	<100	<1	<1	<1	<3				-
MW23	TOC	02/20/13	Bailer	320.50	<100	<1	<1	<1	<3				
MW31 (RW)	TOC/Farmasonis	02/28/13	Pneumatic Pump	327.85	2,000	4.6	<1	19	45			16.1	9.28
MW32 (RW)	тос	02/28/13	Pneumatic Pump	342.80	28,000	23	210	1,000	7,000			9.37	3.94
MW33	тос	02/20/13	Bailer	329.16	2,700	2.0	1.2	9.3	120				
MW35	тос	02/20/13	Bailer	320.62	<100	<1	<1	<1	<3			2.45	<1
MW36	TOC	02/20/13	Bailer	318.90	<100	<1	<1	<1	<3	-			
MW41 (RW)	TOC/Farmasonis	02/28/13	Pneumatic Pump	320.67		-				•		50.0	
MW42	TOC/Farmasonis	02/18/13	Not Sampled	316.91	-	1				-			-
MW43	ROW (56th)	02/18/13	Not Sampled	324.99	-	-		1		-			
MW44	ROW (56th)	02/18/13	Not Sampled	316.80	-	1	-			-			1 12
MW45	ROW (56th)	02/20/13	Bailer	319.92	19,000	<1	13	180	2,500	-		131	73.4
MW46	ROW (56th)	02/20/13	Bailer	317.73	<100	<1	<1	<1	<3	1		13.7	6.79
MW47	ROW (56th)	02/20/13	Bailer	316.98	<100	<1	<1	<1	<3	-	-	1.50	<1
MW48	ROW (56th)	02/20/13	Bailer	317.22	19,000	170	100	620	4,500	- 1		5.58	4.07
MW49	ROW (56th)	02/19/13	Bladder Pump	318.40	<100	<1	<1	<1	<3				
MW50	ROW (56th)	02/20/13	Bailer	332.72	<100	<1	<1	<1	<3	-	-		
MW51	ROW (56th)	02/20/13	Bailer	315.79	<100	<1	<1	<1	<3				
MW52	ROW (56th)	02/20/13	Bailer	316.88	<100	<1	<1	<1	<3	-	-		
MW53	ROW (56th)	02/20/13	Bailer	321.12	<100	<1	<1	<1	<3	-			
MW55	ROW (56th)	02/20/13	Bladder Pump	317.78	<100	<1	<1	<1	<3	-			7-
MW56	TOC/Farmasonis	02/19/13	Bladder Pump	318.14	<100	<1	<1	<1	<3				
MW57 (RW)	TOC/Farmasonis	02/28/13	Pneumatic Pump	317.02	3,100	25	10	<1	710			-	-
MTCA Method	A Cleanup Level ⁽⁶⁾				1,000/800 ^[7]	5	1,000	700	1,000	20	5	15	NE

Table 1 Summary of First Quarter 2013 Groundwater Analytical Results Sorted by Water-Bearing Zone TOC Holdings Co. Facility No. 01-176 24205 56th Avenue West Mountlake Terrace, Washington



bodteM ADT	Cleanup Level ⁽⁶⁾				τ'000/800	S	τ'000	002	000'τ	70	S	ST	NE
W101 (RW)	Drake	02/28/13	Pneumatic Pump	10.918	<100	<0.35	τ>	Ţ>	£>	τ>		20.3	Sp.1
(WA) 66W	Drake	02/28/13	Pneumatic Pump	71.915	<100	25.0>	1>	Ţ>	£>	Ţ>	-		
(WA) 86W	Drake	02/28/13	Pneumatic Pump	316.72	810	9.7	S'T	13	St	Ţ>			
(WA) \ \(\text{VeW} \)	Drake	02/28/13	Pneumatic Pump	93.615	OTT	7.1	Ţ>	1>	£>	Ţ>		-	
(WA) 96W	Drake	02/28/13	Pneumatic Pump	74.815	240	0.9	1>	Ţ>	7 S	1>			
(WA) 26W)	Drake	02/28/13	Pneumatic Pump	18.315	00T>	25.0>	T>	T>	£>	T>			
(WA) 46W	TOC/Farmasonis	02/28/13	Pneumatic Pump	28.918	<100	6.8	1.1	Ţ>	£>				
(WA) EEW	TOC/Farmasonis	02/28/13	Pneumatic Pump	818.29	<100	Ţ>	1>	Ţ>	£>	-	-		
(WA) 26W	TOC/Farmasonis	02/28/13	Pneumatic Pump	318.15	<100	1.1	T>	1>	£>				
(WA) 16W	201	02/28/13	Pneumatic Pump	343.15	22,000	Tb	380	054	001/5			3.01	1>
(WA) 06W	OOT	02/28/13	Pneumatic Pump	48.545	30,000	77	006'T	077	005'S			6I.I	1>
68M	Drake	61/61/20	Bladder Pump	316.20	<100	25.0>	T>	1>	£>	1>			
78W	Drake	62/19/13	Bailer	89.215	<100	25.0>	τ>	T>	£>	7>		-	
98MI	Drake	61/61/20	Bladder Pump	58.215	00t>	1.1	T>	τ>	£>	1>			
S8W1	Drake	62/19/13	Bladder Pump	06.215	00T>	94.0	τ>	1>	£>	1>			
(WR) 48W	Drake	02/28/13	Pneumatic Pump	TT.ZIE	00L't	6.1	0.2	OST	ISS	1>			
18W	TOC/Farmasonis	61/61/20	Bailer	18.718	001>	1>	T>	1>	£>				
LLM	Drake	61/61/20	Bailer	81.215	001>	25.0>	τ>	1>	£>	Ţ>			**
9/M	Drake	61/91/20	Bailer	316.63	001>	25.0>	1>	1>	£>	T>			
SZMI	ROW (56th)	61/61/20	Bladder Pump	32.556	<100	ţ>	Ţ>	1>	£>				
(WA) 07W	Drake	02/28/13	Pneumatic Pump	316.45	001>	25.0>	τ>	τ>	£>	1>			
(WA) 69W	Drake	02/28/13	Pneumatic Pump	316.24	009'L	2.1	1.8	130	t/96	1>			
99M	TOC/Farmasonis	02/20/13	Bailer	318.10	001>	T>	T>	1>	£>		-		
S9M	Drake	61/91/20	Bladder Pump	71.915	<100	19.0	t>	1>	£>	Ţ>	-		
E9M	ROW (56th)	61/91/20	Bladder Pump	\$0.718	001>	τ>	T>	1>	£>				**
09M	ROW (56th)	02/20/13	Bladder Pump	76.815	<100	Ţ>	T>	Ţ>	£>				
6SM	TOC/Farmasonis	61/61/20	Bladder Pump	90.818	<100	Ţ>	T>	Ţ>	£>				
8SM	TOC/Farmasonis	62/21/13	Bladder Pump	76.315	001>	T>	T>	1>	£>				
				INTERMEDIATE L	NATER-BEARIN	G ZONE (20 TC	(SOB LEET BGS)	CONTINUED,					
Mell ID	Property Owner	Date	Sample Method	Groundwater Elevation (1)(1)	CKPH(z)	Benzene ⁽³⁾	Toluene ⁽³⁾	penzene ₍₃₎	Total (s)	MTBE ⁽⁴⁾	EDC ₍₄₎	Total (5)	Dissolve Lead ^(s)



Table 1

Summary of First Quarter 2013 Groundwater Analytical Results Sorted by Water-Bearing Zone TOC Holdings Co. Facility No. 01-176 24205 56th Avenue West Mountlake Terrace, Washington

Well ID	Property Owner	Date	Sample Method	Groundwater Elevation (feet) ⁽¹⁾	GRPH ⁽²⁾	Benzene ⁽³⁾	Toluene ⁽³⁾	Ethyl- benzene ⁽³⁾	Total Xylenes ⁽³⁾	MTBE ⁽⁴⁾	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Dissolved Lead ⁽⁵⁾
				DEEP	WATER-BEAR	ING ZONE (OV	ER 60 FEET BG.	5)	LANGE PROPERTY.	THE PERSON SE			
MW26	TOC	02/20/13	Bailer	321.39	<100	<1	<1	<1	<3				
MW30	TOC/Farmasonis	02/19/13	Bailer	320.19	<100	<1	<1	<1	<3				
MW39	TOC/Farmasonis	02/20/13	Bailer	319.54	<100	<1	<1	<1	<3				
MW40	TOC/Farmasonis	02/20/13	Bailer	319.95	<100	<1	<1	<1	<3				
MW64	ROW (56th)	02/21/13	Bailer	319.47	<100	<1	<1	<1	<3				
MW78	Drake	02/19/13	Bailer	317.59	<100	<0.35	<1	<1	<3	<1			
MTCA Method	A Cleanup Level ⁽⁶⁾		1,000/800 ⁽⁷⁾	5	1,000	700	1,000	20	5	15	NE		

NOTES:

Results measured in µg/L.

Red denotes concentration exceeds MTCA Method A Cleanup Levels for groundwater.

Samples analyzed by Friedman & Bruya, Inc. of Seattle, Washington.

Laboratory Note:

-- = not sampled/not analyzed

< = not detected at concentration exceeding the value of the laboratory reporting limit

μg/L = micrograms per liter

bgs = below ground surface

Drake = Property at 24309 56th Avenue West

EDC = 1,2-Dichloroethane

EPA = U.S. Environmental Protection Agency

GRPH = gasoline-range petroleum hydrocarbons

MTBE = methyl tertiary-butyl ether

MTCA = Washington State Model Toxics Control Act

NE = cleanup level not established

ROW (56th) = 56th Avenue West right-of-way

ROW (242nd) = 242nd Street Southwest right-of-way

RW = Remediation well, connected to a multi-phase remediation system

TOC = Property at 24205 56th Avenue West (TOC Holdings Co. Facility No. 01-176)

TOC/Farmasonis = Property at 24225 56th Avenue West

⁽¹⁾ Elevations in feet above sea level (NAVD88 Datum) by Axis Survey & Mapping, April 2012.

⁽²⁾Analyzed by Northwest Total Petroleum Hydrocarbon Method NWTPH-Gx.

⁽³⁾ Analyzed by EPA Method 8021B.

⁽⁴⁾ Analyzed by EPA Method 8260C.

⁽⁵⁾ Analyzed by EPA Method 200.8.

⁽⁶⁾ MTCA Cleanup Regulation, Method A Cleanup Levels, Table 720-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, revised November 2007.

 $^{^{(7)}1,000~\}mu g/L$ when benzene is not present and 800 $\mu g/L$ when benzene is present.

The result is below normal reporting limits. The value reported is an estimate.



Well I	ID	Sample Date	Depth to LNAPL ⁽¹⁾ (feet)	Depth to Groundwater ⁽¹⁾ (feet)	LNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾ (feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl- benzene ⁽⁵⁾	Total Xylenes ⁽⁴⁾	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Dissolved Lead ⁽⁵⁾
иw01 ⁽⁸⁾		06/15/92	_	6.01	_	348.86	33,000	2,300	1,700	1,400	9,200	_	_	_	_	_
TOC: 3	54.87	07/30/92	-	8.07	_	346.80	_	_	_	_	-	_	_	_	_	_
		01/11/94	_	12.65	_	342.22	1,600	29	4.6	28	140	_	_	_		_
TOC: 3	54.76	09/11/96	_	11.71	-	343.05	320	2.6	<0.5	15	46	_	_	-	_	_
		03/11/97	-	4.93	_	349.83	<100	<0.5	<0.5	0.6	<1.5	_	_	_	_	_
		09/17/97	_	12.32	_	342.44	76.7	0.595	2.9	1.99	13.4	_	_	_		_
		03/16/98	_	6.93	_	347.83	490	1.15	<0.5	7.38	18.2	_	_	_		_
		09/08/98	_	17.88	_	336.88	9,320	42.5	998	346	1,550	_	_	_	_	_
		03/19/99	_	2.00	_	352.76	<50.0	<0.5	<0.5	<0.5	<1.0	_	_	_	_	_
		09/17/99	_	11.02	_	343.74	910	<0.5	1.07	4.39	5.57	_	_	_	_	_
		03/23/00	_	5.72	_	349.04	<50.0	<0.5	<0.5	<0.5	<1.0	_	_	_	_	_
		09/28/00	_	16.52	_	338.24	163	0.610	1.31	1.95	38.3	_	_	_		_
		04/03/01	_	11.03	_	343.73	<50.0	<0.5	<0.5	<0.5	<1.0	_	_	_	_	_
		10/11/01	_	16.62	_	338.14	191	<0.5	1.41	13.4	54.7	_	_	_	_	-
		03/27/02	_	6.18	_	348.58	142	<0.5	0.741	4.84	33.3	_	_	_	_	-
		09/26/02	_	14.22	_	340.54	544	1.15	<0.5	8.38	11.2	_	_	_	_	_
		03/27/03	_	9.12	_	345.64	78.9	<0.5	<0.5	0.634	<1.00	-	_	_	_	_
		10/09/03	_	15.94	_	338.82	160	0.548	<0.5	2.84	11.3	_	_	_	_	_
		03/09/05	_	9.79	_	344.97	<50.0	<1.00	<1.00	<1.00	<3.00	<3.00	_	_	_	_
		09/26/05	_	11.33	_	343.43	<50.0	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	_	_
		12/20/05		11.63	_	343.13	<100	<1	<1	<1	<3	<1	<1	<1	1.36	_
	- 1	02/24/06		6.52	_	348.24	<100	<1	<1	<1	<3	<1	-	_	_	_
	ļ	06/01/06	_	8.90	_	345.86	<100	<1	<1	<1	<3	-	-	_	_	_
	ļ	08/24/06		13.23	_	341.53	<100	<1	<1	<1	<3	<1		_	_	_
	- [11/16/06	_	11.53	_	343.23	<50	<1	<1	<1	<3	_	1-1	_	_	_
	- 1	02/21/07	_	9.86	-	344.90	<100	<1	<1	<1	<3	_		_	_	_
		05/24/07	_	11.51	_	343.25	<100	<1	<1	<1	<3	_	.—	-	_	_
		07/31/07	_	15.02	_	339.74	<100	<1	<1	<1	<3	_			_	_
		02/12/08	_	10.48	_	344.28	<100	<1	<1	<1	<3	-	_			_
		10/02/09						DECO	MMIS	SION	E D					
TCA Metho	od A Clear	nup Levels for Gro	undwater ⁽⁶⁾				1,000/800 ⁽⁹⁾	5	1,000	700	1,000	20	0.01	5	15	NE

P:\0440 TOC Holdings Co\01-176 Mountlake Terrace\Technical\Tables\2013\QGW\Q1\01-176_2013Q1_GD_F.xlsxTable 2 GD



W	ell ID	Sample Date	Depth to LNAPL ⁽¹⁾ (feet)	Depth to Groundwater ⁽¹⁾ (feet)	LNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾ (feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl- benzene ⁽⁵⁾	(4)	(4)	(4)	EDC ⁽⁴⁾	45)	Dissolved
MW02 ⁽⁸⁾	CH ID	06/15/92	(1001)								Total Xylenes ⁽⁴⁾	MTBE ⁽⁴⁾	EDB ⁽⁴⁾		Total Lead ⁽⁵⁾	Lead ⁽⁵⁾
TOC:	356.44	07/30/92		4.00 7.61		352.44	13,000	590	1,900	350	2,500		_		_	_
TOC:	350.44					348.83				_	-	-	_	_	_	_
TOC.	355.25	01/11/94	_	15.50	_	340.94	50,000	4,600	7,300	1,200	8,300	-	_	_	_	_
TOC:	355.25	09/11/96	_	11.99	_	343.26	33,000	1,800	4,000	780	5,400	_	_	_	_	_
		03/11/97	_	6.02	_	349.23	100	4.8	3.7	2.5	16	-	_	-	_	_
		09/17/97	_	12.75		342.50	25,700	709	2,200	617	4,050	-	-		_	-
		03/16/98		8.27		346.98	1,700	28.3	53	55	276		_	-	-	_
		09/08/98		15.90		339.35	15,300	259	2,040	<50	2,700	_	-		_	_
		03/19/99		2.79	_	352.46	3,490	4.94	41.7	30.6	310	_	_	_	_	_
		09/17/99	_	_	_	(-	9,250	<25	1,300	173	1,910	_	-	_		
		03/23/00	_	7.39	-	347.86	4,920	<5.0	241	133	1,000	_	-	-		-
		09/28/00		15.37	_	339.88	20,700	135	1,830	845	5,390	_	_	_	_	_
		04/03/01		13.86	_	341.39	18,800	<100	351	802	5,050	_	_	_	_	-
		10/11/01	_	16.33	_	338.92	16,900	69.7	469	643	4,650	_	_	_	_	_
		03/27/02	_	6.79	Trace	348.46	11,500	16.3	23.0	331	1,930	-	_	_		_
		09/26/02	_	14.18	Trace	341.07	8,260	<5.0	40.6	226	2,420	_	_	_		
		03/27/03	_	12.80	_	342.45	14,700	<10.0	11.3	324	3,020	_	_	_		_
		10/09/03	-	14.28	_	340.97	3,600	<5.0	11.1	67.5	639	_	_			_
		03/09/05	_	9.42		345.83	1,400	<1.00	2.00	4.00	71.0	<3.00	_		_	_
		09/26/05	_	9.20	_	346.05				No	t sampled; truck pa		ead			
		12/21/05	_	11.50	_	343.75	<100	<1	<1	<1	<3	<1	<1	<1	<1	_
		02/23/06	_	5.88	_	349.37	<100	<1	<1	<1	<3	<1	_	_	_	
		06/01/06	_	7.86	_	347.39	<100	<1	<1	<1	<3	_			_	
		08/23/06	_	12.96	_	342.29	<100	<1	<1	<1	4.2	<1	_		_	
		11/15/06	_	15.89	_	339.36	260	<1	1.1	2	<8.9	-			_	
		02/21/07	_	10.38	_	344.87	<100	<1	<1	<1	<3	_				
		05/23/07	_	11.74	_	343.51	<100	<1	<1	<1	<3	_	_			
		08/01/07	_	13.85		341.40	<100	<1	<1	<1	<3	_	_			
		02/13/08	_	12.04	_	343.21	<100	<1	<1	<1	<3	_	_		- -	
		03/04/10	_	9.94		345.31	<100	<1	<1	<1	<3	<1	<1	-1		
TOC:	358.78	03/08/12	_	12.74	_	346.04	<100	<1	<1	<1	<3	-	-	<1	-	
		06/04/12	_	11.27	_	347.51	1100	-,1	'1	`1	Not sampled;				_	
		09/10/12	_	13.73	_	345.05										
		12/03/12	_	12.69	_	346.09					Not sampled;					
		02/20/13		6.73		352.05	<100	-1	-1	-1	Not sampled;					
TC 4 14	4h a d A C!	nup Levels for Gro		0.73		332.03	1,000/800 ⁽⁹⁾	<1 5	1,000	<1 700	1,000	20	0.01		15	NE

 $P: \label{thm:condition} P: \label{thm:condi$



Well II	D	Sample Date	Depth to LNAPL ⁽¹⁾ (feet)	Depth to Groundwater ⁽¹⁾ (feet)	LNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾ (feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl- benzene ⁽⁵⁾	Total Xylenes ⁽⁴⁾	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Dissolved Lead ⁽⁵⁾
/W03 ⁽⁸⁾		06/15/92	_	4.83	_	354.33	92,000	5,800	22,000							
	9.16	07/30/92	_	8.05		351.11	92,000	5,800	22,000	1,900	16,000	_	_	_	-	
100.	,3.10	01/11/94	_	14.34		344.82	110,000	6,200	21,000	4 500	-	_	_		-	
TOC: 35	8.40	09/11/96	13.12	13.17	0.05	345.23	110,000		-	1,600	13,000	_	_		_	
100.	70.40	03/11/97	-	7.02		351.38				_	-		_		-	
	ł	09/17/97		15.82	Trace	351.38		-		-			_		-	_
	ł	03/16/98		8.75			80,500	836	8,740	839	10,800		_		-	_
	ŀ	09/08/98			Trace	349.65		_		_			-	-	-	_
			_	17.44	_	340.96	63,900	303	3,700	1,030	11,800	-	_	-	-	_
		03/19/99		4.66		353.74	8,130	13.5	502	50.6	1,150		_	-	_	_
	}	09/17/99		13.30	_	345.10	15,700	27.1	2,010	240	4,270	_	_	_	-	_
		03/23/00	_	8.14	_	350.26	25,000	88.2	2,050	434	4,280	_	_	-	_	-
	-	09/28/00		Dry		-	-	-	_	-	-	_	_	_	_	_
		04/03/01	_	15.16		343.24	9,120	15.4	829	124	2,230	_	_	_	_	. –
		10/11/01		Dry	_	-	-		_	_	-	_	_	_	_	_
		03/27/02	_	8.63	_	349.77	1,960	2.99	88.9	31.6	404	-	_	_	_	_
		09/26/02	-	Dry	_	_	_	-	_	_	_	_	_	_	_	_
		03/27/03	_	12.00	_	346.40	<50.0	0.663	<0.50	<0.50	<1.0	_	-	-	_	_
		10/09/03	-	14.86	_	343.54	5,040	6.79	166	170	1,760	_	_	-	_	_
	L	03/09/05	-	9.77	_	349.39	730	2.00	2.00	15.0	98.0	<3.00	_	_		-
		09/27/05	-	9.35	_	349.81	<50.0	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00		_
		12/22/05	_	11.01	_	348.15	<100	<1	<1	<1	<3	_	_	_	2.28	_
		02/22/06	-	5.73	_	353.43	<100	<1	<1	<1	<3	<1	_	_		_
		05/31/06	_	7.33	-	351.83	<100	<1	<1	<1	<3	_	_	_	_	_
		08/23/06	_	13.49	_	345.67	1,000	<1	1.1	35	188.4	<1	_	_	_	
		11/14/06	-	17.61	_	340.79					led; insufficient wat		containers			
		02/20/07	_	10.30	_	348.10	<100	<1	<1	<1	<3			_	T - T	
		05/22/07	_	11.78	_	346.62	<100	<1	<1	<1	<3	_	_		- -	
	İ	08/01/07	_	14.08	_	344.32	330	<1	<1	6	31		_		- -	
		02/13/08	_	12.49	_	345.91	<100	<1	<1	1	5					
	ı	03/04/10	_	9.61	-	348.79	<100	<1	<1	<1	<3	<1	<1	<1	-	
TOC: 36	1.87	03/08/12	_	13.08	_	348.79	<100	<1	<1	<1	<3	/1	- <1	-	-	_
		06/04/12	_	11.59	_	350.28	100	1	1		Not sampled;	iust gauged				-
	ŀ	09/10/12	_	14.63	_	347.24										
	1	12/03/12	_	12.85		349.02					Not sampled;					
	-	02/20/13	_	6.29		355.58	<100	-21	-1	-4	Not sampled;	just gauged				
TCA March	4 4 61			0.29		553.58		<1	<1	<1	<3					
TCA Wietho	u A Clear	nup Levels for Gro	oundwater.				1,000/800 ⁽⁹⁾	5	1,000	700	1,000	20	0.01	5	15	NE



Well ID	Sample Date	Depth to LNAPL ⁽¹⁾ (feet)	Depth to Groundwater ⁽¹⁾ (feet)	LNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾ (feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl- benzene ⁽⁵⁾	Total Xylenes ⁽⁴⁾	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Dissolved Lead ⁽⁵⁾
MW04	07/30/92	_	7.19	_	351.32	100,000	470	15,000	2,500	18,000	_		_	Total Leau	Leau
TOC: 358.51	01/11/94	-	Dry	_	_	_	_	_		-	-	_	_	 	
	09/11/96	_	12.65	_	345.86	22,000	77	480	600	4,800	_	_	_		
	03/11/97	_	6.08	_	352.43	7,200	3.2	220	170	1,400	_	_	_		
	09/17/97	_	14.76	_	343.75	17,400	30.1	92.9	78.4	846	_			 	
	03/16/98	_	7.95	_	350.56	37,200	44.3	3,760	804	5,970	_	_	_		
	09/08/98	_	18.03	_	340.48	22,200	77.9	1,390	199	3,520	_	_			
	03/19/99	_	3.97	_	354.54	22,900	32.7	1,300	334	3,440	_	_	_		
	09/17/99	_	12.86	_	345.65	-	_	_	-	-	_	_		-	
	03/23/00	_	_	_	_	-	_	_	_		_	_	_	_	
	09/28/00	_	16.95	_	341.56	1,010	<10.5	34.8	243	829	_	_			
	04/03/01	-	16.03	_	342.48	12,900	<25	102	538	2,870		_	_		
	10/11/01	_	Dry	_	_	_	_	_	_	_	12	_	_	<u> </u>	
	03/27/02	-	6.26	_	352.25	3,900	2.95	181	89.1	714		_	_		
	09/26/02	_	15.30	-	343.21	1,000	1.85	5.97	112	135	_	_	_	_	
	03/27/03	_	11.92	_	346.59	38,100	<50.0	3,890	1,270	7,840	_	_		+ - -	
	10/09/03	-	15.47	1-1	343.04	24,900	<100.0	1,760	1,020	7,220	_	_	_	_	
	03/09/05	—	9.35	1-1	349.16	<50.0	<1.00	<1.00	<1.00	<3.00	<3.00	_	_	_	
	09/26/05	9.20	9.20	0.00	349.31					APL; not sampled d					
	12/22/05	_	11.11	_	347.40	<100	<1	<1	<1	<3	<1	_	_	<1	_
	02/22/06	_	4.25	·—	354.26	<100	<1	<1	<1	<3	<1	_	_	_	_
	05/31/06	_	5.00	_	353.51	<100	<1	<1	<1	<3	_	_	_	_	
	08/23/06	-	12.76	_	345.75	<100	<1	<1	<1	<3	<1	_	_	_	_
	11/14/06			•		Not	gauged or sample	ed; inaccessible d	ue to road const	ruction activity					
	02/21/07	_	8.97	_	349.54	<100	<1	<1	<1	<3	_	_	_		_
	05/22/07	_	10.84	_	347.67	<100	<1	<1	<1	<3	-	_	_	_	_
	08/01/07	-	13.62	-	344.89	<100	<1	<1	<1	<3	_	_	_	_	
	02/13/08	_	11.51	-	347.00	<100	<1	<1	<1	4	_	_	_	_	_
	03/02/10	_	8.53	-	349.98	<100	<1	<1	<1	<3	<1	<1	<1	_	_
OC: 362.02	03/07/12	_	14.34	-	347.68	<100	<1	<1	1.5	<3	_	_	_	_	
	06/04/12	-	10.41	-	351.61					Not sampled; j	ust gauged				
	09/10/12	_	14.31	_	347.71					Not sampled; j					
	12/03/12	_	Dry	_	-				Not in	cluded in scope of		auged			
	02/20/13		4.27	_	357.75	<100	<1	<1	<1	<3	-	_	_		_
ATCA Method A Clea	nup Levels for Gro	undwater ⁽⁶⁾				1,000/800(9)	5	1.000	700	1,000	20	0.01	5	15	NE



Well ID	Sample Date	Depth to LNAPL ⁽¹⁾ (feet)	Depth to Groundwater ⁽¹⁾ (feet)	LNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾ (feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl- benzene ⁽⁵⁾	[4]	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC ⁽⁴⁾	45)	Dissolved
MW05	07/30/92	-	9.10	- (1661)	351.15	<50.0	<0.5	<0.5	<0.5	Total Xylenes (4)				Total Lead ⁽⁵⁾	Lead ⁽⁵⁾
TOC: 360.25	01/11/94	_	Dry	_	331.13	- 30.0	- 0.5	-		<0.5	-	-	-	-	i—.
100.	09/11/96	_	13.33	_	346.92	88.0	<0.5	0.53	-	-	_			_	
	03/11/97	_	6.15	_	354.10	<100	<0.5	<0.5	1.1 <0.5	6.4		_			-
	09/17/97	_	13.79	_	346.46	<50.0	<0.5	<0.5	<0.5	<1.5	_	_	-	_	
	03/16/98	_	7.86	_	352.39	<50.0	<0.5	<0.5	<0.5	<1.0	_	-	-	-	_
	09/08/98	_	Dry	_	-	- 30.0	-	-	<0.5	<2.0	-	_		-	_
	03/19/99	_	4.75	_	355.50	<50.0	<0.5	<0.5	<0.5	1.07	_	_		-	_
	09/17/99	_	Dry	_	-	-	-	- 0.5	<0.5	1.07	-	_		-	_
	03/23/00	_	7.35	_	352.90	<50.0	<0.5	1.64	0.501	3.43			-	-	_
	09/28/00	_	Dry	_	-	-	-	1.04	0.501	3.43		_		1-	_
	04/03/01	_	13.39	_	346.86	<50.0	<0.5	<0.5			_	_	-	-	_
	10/11/01	_	Dry	_	J40.80	-	-	- CU.5	<0.5	<1.0	_	_	, — ·	-	
	03/27/02	_	6.41	_	353.84	<50.0	<0.5	<0.5	<0.5	- 10		_		_	-
	09/26/02	_	Dry	_	333.64	- 30.0	-	<0.5	<0.5	<1.0			-	-	
	03/27/03	_	10.80	_	349.45	<50.0	<0.5	<0.5	<0.5	- 10	_	_		_	
	10/09/03	_	Dry	_	J43.43 —	- 30.0	-	<0.5 —	<0.5	<1.0	_	_		-	-
	03/09/05	_	11.57	_	348.68	<50.0	<1.00	<1.00	<1.00	<3.00	-	_		-	
	09/27/05	_	12.57	_	347.68	<50.0	<1.00	<1.00	<1.00	<3.00	<3.00	-			_
	12/22/05	_	Dry	_	J47.06 —	- 430.0	<1.00 —	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	-	_
	02/22/06	_	6.76	_	353.49	<100	<1	<1			_	_	-	-	_
	05/31/06	_	8.42	_	351.83	<100	<1	<1	<1	<3	<1	_	_	-	_
	08/23/06	_	14.10	_	346.15	<100	<1	<1		led; insufficient wa	—			_	_
	11/14/06	_	14.75	_	345.50					led; insufficient wa					
	02/20/07		9.50	_	350.75	<100	<1	<1	<1		ter to fill sample			1	
	05/22/07	_	11.35	_	348.90	<100	<1	<1	<1	<3 <3		_	-	-	
	08/03/07	_	14.36	_	345.89	<100	<1	<1	<1	<3		_		-	
	02/13/08	_	11.68	_	348.57	<100	<1	<1	<1	<3		_			-
	03/02/12	_	11.68	_	348.57	<100	<1	<1	<1	<3	-	-	-	-	
TOC: 363.76	03/08/12	_	12.45	_	351.31	<100	<1	<1	<1	12	<1	<1	<1	-	
	06/04/12	_	10.39	_	353.37	100	\1	<1	<1	Not sampled;		_	_	_	
	09/10/12		14.50	_	349.26					Not sampled;					
	12/03/12	_	14.61	_	349.15										
	02/21/13	_	6.02	_	357.74	<100	<1	<1	-1	Not sampled;					
MTCA Method A Cle		undurator(6)	0.02		337.74	1,000/800 ⁽⁹⁾	5	1.000	<1 700	1,000	20	0.01	5	15	NE



		Depth to	Depth to Groundwater ⁽¹⁾	LNAPL Thickness	Groundwater Elevation ⁽²⁾				Ethyl-						Dissolved
Well ID	Sample Date	(feet)	(feet)	(feet)	(feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	benzene ⁽⁵⁾	Total Xylenes (4)	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Lead ⁽⁵⁾
MW06	07/30/92	-	8.66	1	346.71	<50.0	<0.5	<0.5	<0.5	<0.5	-	-	_	_	_
TOC: 355.37	01/11/94	_	12.92	-	342.45	<50.0	<0.5	2	<0.5	2.6	_	_	_	_	_
	09/11/96	_	12.26	_	343.11	<50.0	<0.5	<0.5	<0.5	<0.5	-	_	_	_	_
	03/11/97	-	4.96	_	350.41	<100	<0.5	<0.5	<0.5	<1.5	N-1	_	_	_	_
	09/17/97	-	12.83	_	342.54	<50.0	<0.5	<0.5	<0.5	<1.0	-	_	_	_	_
	03/16/98	_	6.77	_	348.60	<50.0	<0.5	<0.5	<0.5	<1.0	y—	_	_	_	_
	09/08/98	_	15.00	-	340.37	868	1.92	73.0	21.3	172	-	_	_	_	-
	03/19/99	_	3.95	_	351.42	<50.0	<0.5	<0.5	<0.5	<1.0	-	_	_	_	_
	09/17/99	_	12.53	_	342.84	<50.0	<0.5	<0.5	<0.5	<1.0	_	_	_	_	_
	03/23/00	_	7.97	_	347.40	<50.0	<0.5	<0.5	<0.5	<1.0	_	_	_	_	_
	09/28/00	_	Dry	_	_	-	_	_	_	-	_	_	_	_	_
	04/03/01	-	11.64	_	343.73	<50.0	<0.5	<0.5	<0.5	<1.0	1-	_	_	_	_
	10/11/01	-	Dry	_	-	_	_	_	_	-	_	_	_	_	_
	03/27/02	_	6.06	_	349.31	<50.0	<0.5	<0.5	<0.5	<1.0	_	_	_	_	_
	09/26/02	-	Dry	_	-	i—	-	-	-	_	_	-	_	_	_
	03/27/03	_	8.10		347.27	<50.0	<0.5	<0.5	<0.5	<1.0	_	_	_	_	_
	10/09/03	=	Dry	_		_	_	_	-	_	_	_	_	_	_
	03/09/05	_	9.30	_	346.07	<50.0	<1.00	<1.00	<1.00	<3.00	<3.00	_	_	_	
	09/26/05	_	12.26	_	343.11	<50.0	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	_	-
	12/22/05	_	Dry	_	_	-	_	_	_	_	_	_	_	_	-
	02/22/06	_	5.93	_	349.44	<100	<1	<1	<1	<3	<1	_	_	_	
	05/31/06	_	9.88	_	345.49	<100	<1	<1	<1	<3	_	_			-
	08/22/06	_	14.68	_	340.69				Not sampl	led; insufficient wa	ater to fill sample	containers			
	11/14/06	-	Dry	_	-		_	_	_	T - 1		_	_		_
	02/21/07	_	10.05	_	345.32	<100	<1	<1	<1	<3	_	_	_	_	_
	05/22/07	·	12.79	_	342.58	<100	<1	<1	<1	<3	_	_			_
	07/31/07	_	14.71		340.66					led; insufficient wa	ater to fill sample	containers			
	02/13/08	-	10.96	_	344.41	<100	<1	<1	<1	<3		_		_	_
	03/04/10	_	9.42	_	345.95	<100	<1	<1	<1	<3	<1	<1	<1	_	
	07/08/10	_	12.49	_	342.88		•			Not sampled,	just gauged.				
OC: 358.86	03/08/12		12.87	· —	345.99	<100	<1	<1	<1	<3	_	_	_	_	-
	06/04/12	_	11.82	-	347.04		•	•		Not sampled,	just gauged.	•			
	09/10/12		14.69		344.17					Not sampled,					
	12/03/12		14.65	_	344.21					Not sampled,					
	02/20/13	_	6.81	_	352.05	<100	<1	<1	<1	<3	_	_	_	_	_
MW07	07/30/92	_	8.40	_	344.58	<50.0	<0.5	<0.5	<0.5	<0.5	_	_	_	_	_
TOC: 352.98	01/11/94	_	12.93	_	340.05	<50.0	<0.5	<0.59	<0.5	<1.0	-	_	_	_	i
	09/11/96	_	11.95		341.03	<50.0	<0.5	<0.5	<0.5	<0.5	i—.	_	_	_	_
	03/11/97	_	5.63	_	347.35	<100	<0.5	<0.5	<0.5	<1.5	_	_	_	_	_
	09/17/97	_	12.00	_	340.98	<50.0	<0.5	<0.5	<0.5	<1.0	_	-			_
	03/16/98	-	7.70	-	345.28	<50.0	<0.5	<0.5	<0.5	<1.0	_	_	_	_	-
	09/08/98	_	Dry	_	-	-	_	-	_	-	_	_	_	_	
	03/19/99	8-4	2.91	_	350.07	<50.0	<0.5	1.07	<0.5	2.66	_	_	_	-	_
	09/17/99	_	11.77	_	341.21	<50.0	<0.5	<0.5	<0.5	<1.0	_	_	_	_	_
	03/23/00	-	6.80		346.18	<50.0	<0.5	<0.5	<0.5	<1.0	_	_	_		_
	09/28/00	_	13.92	_	339.06	<50.0	<0.5	<0.5	<0.5	<1.0	_	_		_	_
	04/03/01	-	12.51	_	340.47	604	<0.5	<0.5	<0.5	3.17	_	_	_		_
	10/11/01	-	Dry	_	-	-	_	-	_	-	_	_	_	_	_
	03/27/02	_	7.05	_	345.93	<50.0	<0.5	<0.5	<0.5	<1.0	_	_	_		_
	09/26/02	_	13.52	_	339.46	<50.0	<0.5	<0.5	<0.5	<1.0	_	_	_	_	_
	03/27/03	_	11.22	_	341.76	<50.0	<0.5	1.41	0.745	4.08	_	_	_		_
	10/09/03	_	14.31	_	338.67	<50.0	<0.5	<0.5	<0.5	<1.0	_	_			_
	11/08/04	_	12.27	_	340.71	<50.0	<1.00	<1.00	<1.00	<3.00	<3.00	_			
	11/29/04				2.577.2	20.0		M M I S			-5.00				
							(111 111 1 3							

6 of 34



Table 2 Summary of Historical Groundwater Analytical Results June 1992 through February 2013 TOC Holdings Co. Facility No. 01-176

24205 56th Avenue West Mountlake Terrace, Washington

Well	IID	Sample Date	Depth to LNAPL ⁽¹⁾ (feet)	Depth to Groundwater ⁽¹⁾ (feet)	LNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾ (feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl- benzene ⁽⁵⁾	Total Xylenes ⁽⁴⁾	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Dissolved Lead ⁽⁵⁾
1W08		01/11/94	-	24.86	-	332.06	290	0.53	0.54	<0.5	<1.0	_	_	_	-	_
TOC: 3	356.92	09/11/96	-	22.30	_	334.62	<50.0	<0.5	<0.5	<0.5	<0.5	_	_	_	_	_
		03/11/97	_	9.68	_	347.24	<100	<0.5	<0.5	<1.5	<1.5	_	_	_	_	_
		09/17/97		24.18	_	332.74	<50.0	<0.5	<0.5	<0.5	<1.0	_	_	_	_	_
		03/16/98	_	12.53	_	344.39	<50.0	<0.5	<0.5	<0.5	<1.0	_	_	_		_
		09/08/98	_	25.59	_	331.33	60.0	<0.5	2.33	1.21	10.5	_	_	_	_	_
		03/19/99	_	3.23	-	353.69	<50.0	<0.5	<0.5	<0.5	<1.0	_	_	_		_
		09/17/99	_	9.30	_	347.62	<50.0	<0.5	0.508	<0.5	1.30	_	_	_	- 1	_
		03/23/00	_	7.57	_	349.35	<50.0	<0.5	<0.5	<0.5	<1.0	_	_	_		_
		09/28/00	-	25.70	_	331.22	<50.0	<0.5	<0.5	<0.5	<1.0	_	_	_		
		04/03/01	_	24.35	_	332.57	<50.0	<0.5	<0.5	1.53	7.92	_	_	_		_
		10/11/01	_	26.61	_	330.31	<50.0	<0.5	<0.5	<0.5	<1.0	_	_		_	_
		03/27/02	_	8.08	_	348.84	<50.0	<0.5	<0.5	<0.5	<1.0	_	_		_	
		09/26/02	-	24.66	_	332.26	<50.0	<0.5	<0.5	<0.5	<1.0	_	_	_		
		03/27/03	_	15.13	-	341.79	<50.0	<0.5	<0.5	<0.5	<1.0	_	_	_	_	
		10/09/03	_	25.82	_	331.10	<50.0	<0.5	<0.5	<0.5	<1.0	_	_	_	_	
		03/09/05	_	12.46	_	344.46	<50.0	<1.00	<1.00	<1.00	<3.00	<3.00	_		- -	
	- [09/26/05	_	12.87	Sheen	344.05					Not sampled due to					
		12/22/05	_	11.30	_	345.62	<100	<1	<1	<1	<3.6		_	1-1	<1	
	[02/22/06	_	4.36	_	352.56	<100	<1	<1	<1	<3	<1	_		- 1	
	- [05/31/06		6.41	_	350.51	<100	<1	<1	<1	<3	_	_		1	
		08/23/06	-	17.30	_	339.62	<100	<1	<1	<1	<3	<1	_		1 = 1	
		11/14/06	-	23.77	_	333.15	<50	<1	<1	<1	<3	_	_		 	
	[02/21/07	-	10.91	_	346.01	<100	<1	<1	<1	<3	_	_			
		05/22/07	_	14.09	_	342.83	<100	<1	<1	<1	<3	_	_			
		08/02/07	_	21.83	-	335.09	<100	<1	<1	<1	<3	_				
		02/12/08	_	12.56	_	344.36	<100	<1	<1	<1	<3					
	[03/02/10	_	9.61	_	347.31	<100	<1	<1	<1	<3	<1	<1	<1	-	
OC: 3	360.40	03/08/12	_	15.47	_	344.93	<100	<1	<1	<1	<3		- <1	<1		_
		06/04/12	_	12.67	_	347.73	10000				Not sampled; j					_
		09/10/12	_	21.55	_	338.85					Not sampled; j					
		12/03/12	_	20.49	_	339.91					Not sampled; j					
		02/21/13	_	5.86	_	354.54	<100	<1	<1	<1	<3 <3	ust gauged 				
TCA Metho	od A Clear	nup Levels for Gro	undwater(6)				1,000/800 ⁽⁹⁾	5	1,000	700	1,000	20	0.01		-	



Mountlake Terrace, Washington

Well ID	Sample Date	Depth to LNAPL ⁽¹⁾ (feet)	Depth to Groundwater ⁽¹⁾ (feet)	LNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾ (feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl- benzene ⁽⁵⁾	Total Xylenes ⁽⁴⁾	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Dissolved Lead ⁽⁵⁾
1W09 ⁽⁸⁾	01/11/94	_	30.27	_	327.57	94,000	16,000	26,000	1,800	13,000	_	_	_	_	_
TOC: 357.84	09/11/96	26.70	28.41	1.71	328.45		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			LNA					
TOC: 356.86	03/11/97	_	21.42	_	335.44					LNAPL; not sample		i			
	09/17/97	3-0	29.90	_	326.96	17,200	157	82.8	<10	2,690	_	_	1 -	T -	_
	03/16/98	21.96	21.97	0.01	334.89					LNA	PL				
	09/08/98	31.83	31.84	0.01	325.02					LNA	PL				
	03/19/99	16.97	16.98	0.01	339.88					LNA	PL				
	09/17/99	25.05	25.06	0.01	331.80					LNA					
	03/23/00 - 20.25 - 336.61 LNAPL; not sampled due to sheen														
	09/28/00	-	Dry	_	-	-	_	_	_	T - T	_	_	_	T -	_
	04/03/01	_	28.64	_	328.22					LNAPL; not sample	ed due to sheen				
	10/11/01	_	29.71	_	327.15	18,400	495	904	270	5,110	_	_	_	_	_
	03/27/02	_	19.27	_	337.59	14,000	131	1,370	190	4,000	_	_	_	-	_
	09/26/02	_	27.47	-	329.39	26,500	740	1,940	669	5,790	_	_		_	_
	03/27/03		24.82	_	332.04	42,700	264	3,040	777	9,500	_	_		_	_
	10/09/03	_	27.54	_	329.32	1,400	33.2	119	41.8	386	_	_	_	_	_
	03/09/05	-	16.75	_	340.11	15,000	94.0	160	120	2,200	<30.0	_	_	_	_
	09/27/05		Unable to gauge; pro	be diameter too	large	2,320	<1.00	6.21	41.8	575	<5.00	<1.00	<1.00	_	_
	12/22/05	_	22.33	_	334.53	2,200	<1	10	26	990	_	_	-	1.07	_
	02/22/06	_	11.51	_	345.35	660	<1	<1	11	147	<1	_	_	-	_
	06/01/06	-	14.34	_	342.52	1,500	1,500	4	40	450	_	_		_	_
	08/24/06	-	25.79	_	331.07	24,000	330	420	550	4,800	<1	_		_	_
	11/15/06	-	34.12	_	322.74	3,800	360	150	68	1,820	_	_	_	_	_
	02/20/07	_	19.79	_	337.07	4,100	5	32	83	1,100	_	_	_	_	_
	05/23/07	_	23.19	_	333.67	13,000	91	270	330	3,100	_	_		_	_
	08/01/07	_	26.98	_	329.88	4,800	59	120	100	1,200	_	_		_	_
	02/12/08	_	23.30	_	333.56	5,900	23	100	96	1,500	-	_			_
	03/04/10	_	17.50	_	339.36	5,000	<1	4	45	980	<1	<1	<1	_	_
OC: 360.32	03/07/12	-	23.35	_	336.97	11,000	30	76	370	2,400	_	_		_	_
	06/06/12	_	21.41	-	338.91	6,400	6.4	22	180	1,000	_	_		_	_
	09/11/12	_	27.04	-	333.28	3,400	21	21	130	750	_	_	_	_	_
	12/04/12	_	27.07	-	333.25	5,500	28	25	73	720	_	_		_	_
	02/20/13	_	13.89	_	346.43	270	<1	<1	5.8	59	_	_		-	_
TCA Method A (leanup Levels for Gro	nundwater(6)				1,000/800 ⁽⁹⁾	5	1,000	700	1,000	20	0.01	5	15	NE

P:\0440 TOC Holdings Co\01-176 Mountlake Terrace\Technical\Tables\2013\QGW\Q1\01-176_2013\Q1_GD_F.xisxTable 2 GD



Well ID	Sample Date	Depth to LNAPL ⁽¹⁾ (feet)	Depth to Groundwater ⁽¹⁾ (feet)	LNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾ (feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl- benzene ⁽⁵⁾	Total Xylenes ⁽⁴⁾	MTBE ⁽⁴⁾	EDB ^{[4)}	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Dissolved Lead ⁽⁵⁾
MW10 ⁽⁸⁾	11/20/95	_	Dry	_	_	_	_	_	_	_	_	-	_	TOTAL ECUO	
TOC: 354.43	09/11/96	33.36	33.63	0.27	320.80					LNA	PL				
	03/11/97	28.41	28.50	0.09	325.93					LNA					
	09/17/97	_	35.20	Trace	319.23	34,500	1,430	2,710	188	5,720	_	_	_	T -	_
	03/16/98	_	26.67	_	327.76	-	_	-	_	_	_	_	_	_	_
	09/08/98	_	35.12	_	319.31	18,400	1,470	1,050	283	3,990	_	_	_	_	_
	03/19/99	24.39	24.43	0.04	330.00					LNA	PL				
	09/17/99	_	32.43	_	322.00	26,000	1,090	2,130	621	6,180	_	_	_	_	_
	03/23/00	_	_	_		33,200	1,290	3,650	903	7,130	_	_	_		
	09/28/00	_	33.02	Trace	321.41	11,900	608	645	54.0	3,270	_	_	_	_	_
	04/03/01	_	_	_	_	19,600	979	1,360	532	414	_	_	_	_	_
	10/11/01	_	32.73	_	321.70	9,110	342	478	94.5	2,050	_	_	_	_	_
	03/27/02	_	25.09	_	329.34	39,600	548	1,950	419	2,480	_	_	_	_	_
	09/26/02	_	27.90	_	326.53	72,800	5,130	8,260	1,640	11,800	_	_	_		_
	03/27/03	_	-	_	-	_	_	_	_	_	_	_	_	—	_
	10/09/03	_	-	_	_	26,500	2,390	2,870	948	6,670	_	_	_		_
	03/09/05	_	26.04	_	328.39	15,000	580	820	320	2,100	<150	_	_		
	09/26/05		25.56	_	328.87	1,440	38.4	79.2	24.9	150.4	<5.00	<1.00	<1.00		_
	12/20/05		28.40	_	326.03	15,000	960	670	560	3,700	<1	<1	<1	9.39	_
	02/24/06	_	22.68	_	331.75	830	20	89	22	141	<1	_	_	_	
	06/01/06		24.09	_	330.34	2,600	19	67	28	360	_	_	_	_	-
	08/24/06	-	27.64		326.79	4,800	150	98	110	1,010	<1	-	_	_	_
	11/14/06	_	34.02	_	320.41			Not	t sampled; too de	ep for peristaltic p	ump and bailer	bstructed by pac	ker		
	02/20/07	25.16	25.21	0.05	329.26					LNA	PL				
	05/22/07	27.10	27.18	0.08	327.31					LNA	PL				
	08/02/07	_	37.89	_	316.54	7,700	200	100	92	780	_		_	-	-
	02/13/08		26.64	_	327.79	1,700	66	29	17	160	_	_	-	_	_
	03/04/10	_	25.23	_	329.20	320	3	<1	<1	7	<1	<1	<1	_	_
OC: 357.97	03/07/12	_	27.45		330.52	1,400	62	7.3	27	89	_		_	_	_
	06/06/12		26.47		331.50	830	11	5.1	28	84	_		_	_	_
	09/11/12	_	28.26	-	329.71	1,500	38	<10	110	86	_	_	_	_	_
	12/05/12	_	34.59	_	323.38	4,900	4.6	<1	19	63	_	_	-	_	_
	02/21/13	-	23.46	-	334.51	620	5.5	14	8.7	110		2-0	_	_	_
ATCA Method A C	eanup Levels for Gro	oundwater ⁽⁶⁾				1,000/800 ⁽⁹⁾	5	1,000	700	1,000	20	0.01	5	15	NE

9 of 34



Table 2
Summary of Historical Groundwater Analytical Results
June 1992 through February 2013
TOC Holdings Co. Facility No. 01-176
24205 56th Avenue West
Mountlake Terrace, Washington

N:4								tlake Terrace, V								
4 100	/ell ID	Sample Date	Depth to LNAPL ⁽¹⁾ (feet)	Depth to Groundwater ⁽¹⁾ (feet)	LNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾ (feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl- benzene ⁽⁵⁾	Total Xylenes ⁽⁴⁾	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Dissolved Lead ⁽⁵⁾
MW11 ⁽⁸⁾		11/20/95	27.33	27.33	_	330.79	15,000	1,000	3,800	570	3,300	_	_	_	_	_
TOC:	358.12	09/11/96	34.29	34.56	0.27	323.56	_	_	_	_	-	_	_	-	_	_
		03/11/97	_	19.83	Trace	338.29	_	_	_	_		_	_	_	_	_
		09/17/97	_	25.24	_	332.88	17,800	393	2,030	67.4	2,480	_	_	_	_	
		03/16/98	_	20.61	Trace	337.51	·-	-	_	_		_	_	_	_	_
		09/08/98	_	25.41	_	332.71	6,220	189	461	12.5	1,380	_	_	_		
		03/19/99	19.39	19.40	0.01	338.72	_	_	_	_	-	_	_	_		_
		09/17/99	_	24.89	_	333.23	11,200	120	1,250	152	2,790	_	_	_		
		03/23/00	_	20.64	Trace	337.48	_		_	-	-	_	_	-		
		09/28/00	26.22	26.23	0.01	331.89		_	_	_		_		 		_
		04/03/01	_	25.14	_	332.98	38,700	403	4,950	1,530	9,860	_				
		10/16/01	_	28.49	Trace	329.63	-	-	-,550	-	- 3,800			_		
		04/02/02	20.18	20.20	0.02	337.92			_	_					_	_
		09/26/02	_	25.19	-	332.93	15,400	120	556	420	3,500		_		-	_
		03/27/03	_	22.84	_	335.28	72,900	88.2	5,330	2,100			_		-	-
		10/09/03	_	26.25	_	331.87	21,100	109	1,430	625	16,900		_	_	-	_
		03/09/05	22.00	22.01	0.01	336.11	21,100	109	- 1,430	- 625	7,020			-	1-	-
		09/27/05	_	21.86	-	336.26	50,300	22.2			- 44.020	-	-			
									2,710	2,050	14,930	<5.00	<1.00	<1.00	_	
		12/21/05	_	22.69		335.43	44,000	32	2,200	2,700	17,600	<1	<1	<1	<1	
		02/22/06	_	18.42	_	339.70	45,000	12	1,200	2,200	13,600	<1	-	_	·—	_
		05/31/06	-	16.85		341.27	48,000	55	1,700	2,500	14,000		_	_	-	_
		08/23/06	-	23.53		334.59	53,000	24	2,000	2,200	15,200	<1	_	_	_	
		11/14/06	26.90	27.02	0.12	331.20					LNA	PL				
		02/20/07		20.58		337.54	48,000	68	800	2,000	12,000		_		_	_
		05/22/07	22.40	22.41	0.01	335.72					LNAI	PL				
		08/01/07		24.22	-	333.90	45,000	64	1,100	1,800	12,000	-	-			_
		02/12/08		21.71	-	336.41	48,000	41	640	1,700	14,000	-	_	_	_	_
		03/04/10		19.74		338.38	44,000	22	350	1,400	8,400	<1	<1	<1	-	_
TOC:	362.25	03/05/12		Dry							Dr					
TO 6	252.40	06/06/12	-	22.86		339.39					Not sampled;	just gauged				
TOC:	362.40	09/10/12	·—»	25.15	_	337.25					Not sampled;	just gauged				
		12/03/12	(- 0	25.75		336.65					Not sampled;	just gauged				
		02/28/13		18.73		343.67	7,800	14	85	92	4,200			_	_	_
MW12		10/11/01		16.34		337.85	<50.0	<0.5	<0.5	<0.5	<1.0	_	_	_	_	_
TOC:	354.19	03/27/02		7.01	_	347.18	<50.0	<0.5	<0.5	<0.5	<1.0	-	_	-	-	_
		09/26/02		13.60		340.59	<50.0	<0.5	<0.5	<0.5	<1.0	_		_	-	_
		03/27/03	_	11.20	_	342.99	<50.0	<0.5	1.00	0.556	2.29	_	_	_	-	_
		10/09/03		15.10	_	339.09	<50.0	<0.5	<0.5	<0.50	<1.0	_	_	-	_	-
		03/09/05	_	11.06		343.13	<50.0	<1.00	<1.00	<1.00	<3.00	<3.00	_	_	_	_
		09/26/05	_	12.97	_	341.22	<50.0	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	_	_
		12/22/05		13.37		340.82	<100	<1	<1	<1	<3	<1	_	_	<1	_
		02/22/06		6.34		347.85	<100	<1	<1	<1	<3	<1	_	_	_	_
		05/31/06		8.65		345.54	<100	<1	<1	<1	<3	_	_	_	_	_
		08/23/06	_	12.12	_	342.07	<100	<1	<1	<1	<3	<1	_	_	_	_
		11/16/06	_	15.61	-	338.58	<50	<1	<1	<1	<3		_	-	-	_
	ļ	02/21/07	_	9.66	-	344.53	<100	<1	<1	<1	<3	_	_	_	-	_
		05/23/07	_	10.80	-	343.39	<100	<1	<1	<1	<3	_	_	-	_	_
		08/02/07	_	13.02	_	341.17	<100	<1	<1	<1	<3	_	_	_	-	_
		02/13/07	_	10.59	_	343.60	<100	<1	<1	<1	<3	_	_	_	_	_
		05/14/08	_	10.30		343.89					Not sampled;	just gauged				
		03/02/10		9.03	_	345.16	<100	<1	<1	<1	<3	<1	<1	<1	_	-
TOC:	357.69	03/08/12	_	11.64	_	346.05	<100	<1	<1	<1	<3	_	-	_	_	
		06/04/12	_	10.17	_	347.52					Not sampled;	just gauged				
	[09/10/12	_	12.72	_	344.97					Not sampled;					
		12/03/12	_	11.82	_	345.87					Not sampled;					
		02/19/13	_	6.27	_	351.42	<100	<1	<1	<1	<3	_	_	_		_
			undwater ⁽⁶⁾				1,000/800 ⁽⁹⁾									



V	Well ID	Sample Date	Depth to LNAPL ⁽¹⁾ (feet)	Depth to Groundwater ⁽¹⁾ (feet)	LNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾ (feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl- benzene ⁽⁵⁾	Total Xylenes ⁽⁴⁾	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Dissolved Lead ⁽⁵⁾
MW13		10/11/01	_	Dry	-	Dry	_	_	_	_	_	_	-		- Iotai Leau	Leau
TOC:	353.87	03/27/02	-	40.57	-	313.30	11,300	1,450	<25.0	1,210	1,470	_	_	_	_	
		09/26/02	_	Dry	-	_	_	_	_	_		_	_		_	
		03/27/03	_	Dry	_	3—2	_	_	-	_	_	_	_		+	
		10/09/03 - Dry														
		03/09/05	-	Dry	_	9	-	_	_	_	_	_		 		 _ _
		09/26/05	_	41.69	_	312.18	NA ⁽⁷⁾	NA ⁽⁷⁾	NA ⁽⁷⁾	NA ⁽⁷⁾	NA ⁽⁷⁾	NA ⁽⁷⁾	_		—	
		12/22/05	_	Dry	_	_	_	_				_			 	_
		02/02/06	-	41.59	_	312.28	8,400	520	9.4	680	1,239	<1	<1	3.5	 	
		02/22/06	_	41.36	_	312.51	_	_	_	_		_		-	-	
		05/31/06	5-2	41.29	_	312.58	6,700	340	22	520	810	_	_			
		08/23/06		Dry	_	_	_	_	_	_	-	_	_			
		11/14/06	-	Dry	_	-	_	_	-	_		_	_		_	_
		02/20/07	n—2	41.21	_	312.66				Not samp	led; insufficient wa	ter to fill sample	containers			
		05/22/07	_	Dry	_	_	-	_	_	_	I - I	_	_		_	_
		07/31/07	—	Dry	_					Not samp	led; insufficient wa	iter to fill sample	containers	1		
		02/13/08	0-3	Dry	_	_				Not samp	led; insufficient wa	iter to fill sample	containers	-		
		05/14/08	8—3°	Dry	_	_					Not sampled;					
		03/04/10	7 	41.23	_	312.64	1,700	60	17	94	150	<1	<1	1.7		_
OC:	357.39	03/05/12	_	Dry	_						Dr	У	•			
		06/04/12	_	Dry	-						Dr	У				
		09/10/12	_	Dry	2-	-					Dr	У				
		12/03/12	- -	Dry	-						Dr	У				
		02/20/13		38.89		318.50	<100	<1	<1	<1	<3		_	_	_	_
MW14		11/29/04							MMIS							
W15	254.20	10/29/04	_	36.37		318.02	5,400	<10.0	46.0	270	880	_	_	_	_	_
TOC:	354.39	03/09/05	33.12	33.16	0.04	321.23		_	-	_	_	_	_	_	-	-
		09/26/05	32.32	32.67	0.35	322.00					LNA					
		12/22/05	32.64	32.89	0.25	321.70					LNA					
		02/22/06 06/01/06		29.47 30.55	_	324.92					Not sampled; absor		ell			
	-	08/23/06		30.55		323.84	12,000	28	23	470	1,700		_	_	_	-
		11/14/06	36.65	36.68	0.03	317.10					LNA					
	1	02/20/07	30.03	30.00	0.03	317.73				N-4	LNA		I constant with the second sec			
	1	05/22/07	33.00	33.00	0.00	321.39				Not m	easured; LNAPL, a		n well.			
	ŀ	08/01/07	-	34.31	- 0.00	320.08					LNA					
	ı	02/11/08	34.60	34.62	0.02	319.79				IN	ot sampled; absor		ell			
	Ì	03/01/10	31.95	32.12	0.02	322.41					LNA					
		12/06/10	36.29	36.46	0.17	318.07				Not			0110211			
OC:	357.50	03/08/12	-	33.12	- 0.17	324.38	8,200	<5	<5	88	sampled, just gauge 480	ed for LNAPL rec			1	
		06/04/12	33.69	33.69	Heavy Sheen	323.81	0,200	73	73	00	LNA		_	_	_	_
OC:	357.54	09/12/12	-	36.15	-	321.39	2 200	2 22	je i		1				1	
JC.	337.34	12/05/12		36.50		321.39	2,300	3.23 ^j	<5	14	330	_	_		_	
	1						300	<1	1.8	<1	9.7	_	-			_
		02/28/13		32.10		325.44	790	3.6 ^j	<5	<5	44	_	_	_		
лтса м	lethod A Clear	nup Levels for Gro	undwater(°)				1,000/800(9)	5	1.000	700	1,000	20	0.01	5	15	NE

P:\0440 TOC Holdings Co\01-176 Mountlake Terrace\Technical\Tables\2013\QGW\Q1\01-176_2013Q1_GD_F.xlsxTable 2 GD



	Vell ID	Sample Date	Depth to LNAPL ⁽¹⁾ (feet)	Depth to Groundwater ⁽¹⁾ (feet)	LNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾ (feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl-	(4)	(4)		(0)		Dissolved		
MW16	WEII ID	03/09/05	(leet)	Dry	(reet)	(reet)	- GRPH			benzene ⁽⁵⁾	Total Xylenes (4)	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Lead ⁽⁵⁾		
TOC:	361.89	09/26/05		Dry					_		-		_		_	_		
TOC.	301.09	12/22/05		Dry				_	_		-		-		_			
		02/22/06		-		_	_	_			-		_		_	_		
		06/01/06		Dry	_		-		_		-	_	-	-	_	_		
				45.05		316.84	<100	<1	<1	<1	<3	_	-	_	-	_		
		08/23/06		Dry	_	_	_				_	_	_		-	_		
		11/14/06	\—	Dry			_			_	_	_	_	_				
		02/20/07	_	46.30		315.59	<100	<1	<1	<1	<3			_	_	-		
		05/23/07		46.06		315.83	<100	<1	<1	<1	<3	_	_	_	_	3 -		
		07/31/07	_	Dry	_	-				Not samp	led; insufficient wa	ter to fill sample	containers		•			
		02/11/08	_	Dry	-	-				Not samp	led; insufficient wa	ter to fill sample	containers					
		03/02/10	_	45.54		316.35	<100	<1	<1	<1	<3	<1	<1	<1	_	_		
TOC:	365.24	03/05/12	_	Dry	_	_					Dr	у	•	•				
		06/04/12	_	45.30	_	319.94	The samples, just Budges											
		09/10/12	_	47.39	_	317.85					Not sampled, just gauged							
		12/03/12	_	Dry	_	-				Not in		pled, just gauged pe of sampling; just gauged						
		02/21/13	-	42.65	_	322.59	<100	<1	<1	<1	<3	_	_			-		
MW17		07/27/04		43.18	_	309.47	<80	<0.5	<0.5	<0.5	<1.5	_						
TOC:	352.65	11/29/04		•			•	DECC	MMIS					1				
MW18		03/09/05	35.18	35.33	0.15	319.49	_	_	_	_		_	_					
TOC:	354.82	09/26/05	12.94	13.15	0.21	341.84					LNA							
		12/22/05	35.72	35.72	0.00	319.10					LNAI							
		02/22/06						Not gauged o	or sampled; vehic	le parked over va		•						
		06/01/06		29.65	_	325.17	32,000	290	340	1.100	7,000	_	_					
		08/22/06					52/656		NAPL; absorbent :	and the second s	7,000							
		11/14/06							NAPL; absorbent									
		02/20/07							mpled; truck park		d							
		05/22/07	_	36.00	_	318.82	22,000	96	63	440	4,200			I				
		07/31/07	_	37.01	_	317.81	22,000	30	03	440	LNAPL; absorber	t sasks in wall		_	_			
		02/14/08	_	35.58	_	319.24	13,000	98	28	<10	2,200	it socks in well						
		03/04/10	_	32.35		322.47	12,000	96	28	270					_			
OC:	357.86	03/07/12	_	28.74		329.12	5,900	43	28 <10		1,600	<1	<1	<1	-	_		
50.	337.00	06/04/12		33.40		329.12	5,300	45	<10	110	720		_	_		_		
OC:	357.97	09/10/12		33.40							Not sampled,	Just gauged						
OC.	337.37	12/03/12		28.18	_	324.57					Not sampled;	just gauged						
					_	329.79					Not sampled;	just gauged						
		02/28/13	- (6)	28.02		329.95	4,200	3.3	47	73	1,000	_	_	_	_	_		
MTCA M	lethod A Clea	nup Levels for Gro	oundwater ⁽⁶⁾				1,000/800 ⁽⁹⁾	5	1,000	700	1,000	20	0.01	5	15	NE		



We	ell ID	Sample Date	Depth to LNAPL ⁽¹⁾ (feet)	Depth to Groundwater ⁽¹⁾ (feet)	LNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾ (feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl- benzene ⁽⁵⁾	Total Xylenes ⁽⁴⁾	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC ⁽⁴⁾	T-4-11 (5)	Dissolved
MW19		03/09/05	_	11.25	_	344.17	<50.0	<1.00	<1.00	<1.00	<3.00	<3.00	EDB	ELC	Total Lead ⁽⁵⁾	Lead ⁽⁵⁾
TOC:	355.42	09/26/05	11.29	11.30	0.01	344.13	450.0	1.00	1.00	1.00	LNAI				_	_
		12/21/05	_	13.13	_	342.29	<100	<1	<1	<1	<3	<1		1		
		02/22/06	_	7.96	_	347.46	<100	<1	<1	<1	<3	<1			<1	_
		06/01/06	_	9.91	_	345.51	<100	<1	<1	<1	<3	- <1			-	_
		08/24/06	_	14.12	_	341.30	<100	<1	<1	<1	<3	<1			-	
		11/15/06	5/06 - 18.19 - 337.23 <50 <1 <1 <1 <3 -											-	-	_
		02/20/07	_	12.47	_	342.95	<100	<1	<1	<1	<3		_	-	-	_
		05/24/07	_	13.63	_	341.79	<100	<1	<1	<1	<3		_		-	_
		08/01/07	_	14.89	_	340.53	<100	<1	<1	<1	<3			-	-	_
		02/12/08	_	13.64	_	341.78	<100	<1	<1	<1	<3				-	_
		03/04/10	_	11.98	_	343.44	<100	<1	<1	<1	<3	<1	<1	<1	_	
TOC:	358.90	03/09/12	_	13.56	_	345.34	<100	<1	<1			1			-	_
	358.90 03/09/12 - 13.56 - 345.34 <100 <1 <1 <1 <3											_	_			
		09/10/12	_	15.65	_	343.25					Not sampled,					
		12/03/12	-	13.72	_	345.18					Not sampled;					
		02/21/13	_	8.32	_	350.58	<100	<1	<1	<1	<3	Just gaugeu —	_			_
MW20		03/09/05	27.86	27.88	0.02	328.59	1200			- 1	LNAF				_	
TOC	356.47	09/26/05	26.16	28.25	2.09	329.89					LNAF					
		12/20/05	_	29.08	_	327.39	13,000	740	640	330	2,790	<1			1.00	
		02/22/06	_	24.60	_	331.87	25,000	710	1,800	710	5,100	<1			4.69	
		05/31/06	26.30	26.41	0.11	330.15	23,000	710	1,000	710	LNAF		_			_
		08/22/06	29.71	29.73	0.02	326.76					LNAPL; absorben					
		11/14/06	36.00	36.00	0.00	320.47					LNAPL; absorben					
		02/20/07	27.19	27.22	0.03	329.27					LNAF					
		05/22/07	28.82	28.94	0.12	327.63					LNAPL; absorben					
		07/31/07	_	31.01	_	325.46				N	lot sampled; absorb		ıll			
		02/13/08	_	28.65	_	327.82	20,000	450	990	450	3,600	—	_		1 - 1	
		03/04/10	_	27.16	_	329.31	11,000	390	1,100	390	1,700	<1	<1	<5	 	
OC:	359.98	03/09/12	_	29.35	-	330.63	5,800	200	57	310	480	_	_	-	 	
		06/06/12	_	27.99	_	331.99	7,800	220	250	300	910	_			1 -	
		09/11/12	_	30.64	_	329.34	5,000	100	21	210	450	_			+ = +	
		12/05/12	_	32.91	_	327.07	840	<1	2.5	5.9	14	_	_		1 - 1	
		02/20/13	_	24.86	_	335.12	17,000	140	760	620	3,400	_	_		+ - - +	
MTCA Met	thod A Clea	nup Levels for Gro	undwater ⁽⁶⁾				1,000/800(9)	5	1.000	700	1,000	20	0.01	5	15	NE



		Depth to	Depth to	LNAPL	Groundwater								LOVE A		
		LNAPL(1)	Groundwater ⁽¹⁾	Thickness	Elevation ⁽²⁾				Ethyl-						Dissolved
Well ID	Sample Date	(feet)	(feet)	(feet)	(feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	benzene ⁽⁵⁾	Total Xylenes (4)	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC(4)	Total Lead ⁽⁵⁾	Lead ⁽⁵⁾
MW21 ⁽⁸⁾	10/29/04	-	29.90	_	326.51	4,800	200	140	9.00	470	_	_	_	_	_
TOC: 356.41	03/09/05	_	28.35	_	328.06	1,600	92.0	64.0	39.0	170	<3.00	-	-	_	
	09/26/05		Unable to gauge; pr	obe diameter too	large	<50.0	<1.00	1.76	<1.00	<3.59	<5.00	<1.00	<1.00	-	_
	12/20/05	_	29.63	_	326.78	1,700	61	320	42	249				_	
	02/22/06	_	25.00	_	331.41	130	1.9	6.8	3.4	14.8	<1	<1	<1	4.52	-
	05/31/06	_	26.58	_	329.83	130	2	11			<1	-	-	-	_
	08/23/06	_	30.31		326.10	340	38	25	2 8.2	20 100	_	-	_	_	_
	11/14/06	_	39.35	_	317.06	340	30	25		led; insufficient wa	<1		_	_	_
	02/21/07	_	27.75	_	328.66	310	3	20	1		-	1	1	_	
	05/23/07		29.69		326.72	<100	2	30	6.5	47	_	-		-	-
	08/02/07		31.69		324.72			1	<1	5	_	-		-	_
	02/13/08		29.50		324.72	2,500	140	17	65	550		_		-	_
	05/14/08		29.38			940	2	6	6	78		_	_		_
	03/04/10		28.65		327.03 327.76	270		-		Not sampled;				1	
	03/05/12		28.05			370	<1	5	3	32	<1	<1	<1		
	04/16/12		_	_	_	1	5 5 6 6		c 1 0 11	Wellhead in	naccessible				
MW22 ⁽⁸⁾								MMIS							
	10/29/04	_	30.27	-	325.34	130	4.00	<1.00	<1.00	19.0	_	_	-	_	_
TOC: 355.61	03/09/05	_	26.98	<u> </u>	328.63	<50.0	1.00	<1.00	<1.00	<3.00	<3.00	_	_	_	_
	09/26/05		Unable to gauge; pro		1	<50.0	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	-	_
	12/20/05	_	28.27		327.34	<100	<1	<1	<1	<3	<1	<1	<1	<1	-
	02/22/06		23.02		332.59	<100	<1	<1	<1	<3	<1	-	_	-	_
	06/01/06	_	25.14	_	330.47	<100	<1	<1	<1	<3	-	-	_	-	-
	08/24/06	_	28.25	_	327.36	<100	<1	<1	<1	<3	<1	_	_	-	_
	11/15/06	_	37.62		317.99	550	5.1	<1	<1	<3	, -	_	-	_	_
	02/20/07		26.45	_	329.16	<100	<1	<1	<1	<3	-	_	_	_	_
	05/24/07		28.20	-	327.41	<100	<1	<1	<1	<3	_	_	_	-	_
	08/02/07	_	30.72	_	324.89	<100	<1	<1	<1	<3	-	_	_	-	_
	02/13/08		27.82	-	327.79	<100	<1	<1	<1	<3	_	-	_	_	_
	03/04/10		26.55	-	329.06	<100	<1	<1	<1	<3	<1	<1	<1	-	_
TOC: 358.56	03/05/12		-	-	-					Wellhead in	accessible				
	06/06/12	_	27.07	_	331.49	<100	<1	<1	<1	<3	-	_	-	-	_
	09/11/12	_	29.55	_	329.01	<100	<1	<1	<1	<3	_	-	-	-	_
	12/04/12		28.20	-	330.36	<100	<1	<1	<1	<3	-	-	-	_	-
	02/21/13		24.18	_	334.38	<100	<1	<1	<1	<3	i—	_		_	_
MW23	10/29/04	-	Dry	_	_	_	_	_	_	_	-	_	-	-	_
TOC: 356.61	03/09/05		Dry	_	-	-	_	_	-		_	_	-	-	, — , — ,
	09/26/05		39.12	-	317.49				Not sampl	led; insufficient wa	ter to fill sample	containers			
	12/22/05		Dry		_	-	-	-	-	-	-	_	_	_	-
	02/22/06	-	38.05	-	318.56	1,100	4.9	<1	65	7.8	<1	-	_	_	_
	06/01/06	_	38.79	-	317.82	760	3	2.1	18	22	-	_	-	-	_
	08/22/06	_	39.12	.—	317.49				Not sampl	led; insufficient wa	ter to fill sample	containers			
	11/14/06	_	39.38	-	317.23				Not sampl	led; insufficient wa	ter to fill sample	containers			
	02/21/07	_	38.12	_	318.49	<100	<1	<1	<1	<3	-	_	_	_	_
	05/24/07	_	38.88	_	317.73	330	1	<1	<1	<3		_	_	_	-
	07/31/07	_	39.10	_	317.51				Not sampl	led; insufficient wa	ter to fill sample	containers			
	02/11/08	_	38.55	_	318.06	<100	<1	<1	<1	<3	_	_	_	_	_
	03/04/10	1-1	38.46	_	318.15	<100	<1	<1	<1	<3	<1	<1	<1	-	_
TOC: 357.13	03/05/12	-	38.88	_	318.25				Not sampl	ed; insufficient wa					
	06/04/12		38.64	-	318.49					Not sampled;					
	09/10/12	— s	39.15	_	317.98					Not sampled;					
	12/03/12	-	39.11	-	318.02					Not sampled;					
	02/20/13	_	36.63	_	320.50	<100	<1	<1	<1	<3		_	_	_	_
	anup Levels for Gro	nundwater (6)				1,000/800 ⁽⁹⁾	5	1,000	700	1,000	20	0.01	5	15	NE



TALLS:						A Marchael Committee		Tiake Terrace, v	Tushing ton							
VA	Vell ID	Samula Data	Depth to LNAPL ⁽¹⁾	Depth to Groundwater ⁽¹⁾	LNAPL Thickness	Groundwater Elevation ⁽²⁾	CDD1/(3)	(4)		Ethyl-	40					Dissolved
MW24 ⁽⁸⁾		Sample Date	(feet)	(feet)	(feet)	(feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	benzene ⁽⁵⁾	Total Xylenes (4)	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Lead ⁽⁵⁾
		10/29/04	-	26.61	_	332.64	45,000	440	2,300	570	7,800	_	_	-	_	_
TOC:	359.25	03/09/05	_	15.85		343.40	19,000	74.0	210	98.0	2,700	<30.0	_	-	-	_
		09/27/05		Unable to gauge; pr	T		478	<1.00	1.08	4.19	82.9	<5.00	<1.00	<1.00	_	-
		12/22/05		11.01		348.24	<100	<1	<1	1.0	11.8	<1	-	_	<1	_
		02/22/06	_	8.91	-	350.34	<100	<1	<1	<1	4.8	<1	_	_	_	_
		06/01/06	-	9.98	-	349.27	<100	<1	<1	<1	6	_	_	-		_
		08/23/06	-	20.21		339.04	8,400	<1	32	98	1,930	<1	-	-	_	-
		11/15/06	_	36.05	-	323.20	16,000	77	250	240	2,870	-	-	_	_	_
		02/21/07	_	14.24	-	345.01	460	<1	2	6	78	-	-	-	_	_
		05/22/07	-	16.73	-	342.52	5,700	2	29	41	1,000	-	-	-	_	_
		08/01/07	-	25.59	_	333.66	9,000	39	140	97	2,400	i —	-	_	-	_
		02/12/08	-	19.68	-	339.57	1,800	<1	4	4	140	-	-	-	_	_
		02/04/09	_	21.94	-	337.31	11,000	27	190	180	2,290	<1	-		i—,	_
		07/30/09	26.82	26.82	0.00	332.43	15,000	130	230 ^{ve}	<1	3,400	<1	<1	<1	_	-
		03/04/10		13.43	0.00	345.82	<100	<1	<1	<1	<3	<1	<1	<1	_	
TOC:	361.85	03/09/12		21.01	-	340.84	4,400	7.3	39	39	770	-	_	_	_	_
TO 6	252.00	06/04/12	_	14.18		347.67					Not sampled;	just gauged				
TOC:	362.00	09/10/12		25.34	-	336.66					Not sampled;				_	
		12/03/12	_	24.60	-	337.40					Not sampled;	just gauged				
/87		02/28/13		8.73	_	353.27	1,000	<1	1.7	<1	40	_	_	_	_	
MW25 ⁽⁸⁾		10/29/04	-	29.40	-	326.91	57,000	860	6,700	810	8,700	_	_	_	-	_
TOC:	356.31	03/09/05	-	27.61	-	328.70	38,000	670	2,700	750	6,500	<150	_	_	_	_
		09/27/05		Unable to gauge; pro	obe diameter too	large	20,800	378	1,070	106	4,390	<5.00	<1.00	<1.00	_	_
		12/21/05	-	28.20	_	328.11	25,000	670	2,600	830	6,700	<1	<1	<5	8.47	_
		02/22/06	_	23.68	_	332.63	24,000	420	2,300	510	5,400	<1	_	_	_	_
		06/01/06	_	25.56	_	330.75	25,000	390	2,100	750	6,300		_	_	_	_
		08/24/06	_	28.97	_	327.34	21,000	320	840	890	7,300	<1	-	-	_	_
		11/15/06	_	36.08	_	320.23	32,000	66	<50	<50	6,800	_	-	_	_	_
		02/22/07	-	26.41	_	329.90	27,000	370	2,100	730	6,500	_	_	_	_	_
		05/23/07	_	27.94	_	328.37	26,000	220	1,400	630	5,800	_	-	_	_	_
		08/02/07	_	29.75	_	326.56	24,000	280	770	730	5,200	_	-	_	_	
		02/12/08	_	27.80	_	328.51	22,000	260	1,400	380	4,500	_	_	_	_	_
		03/04/10	_	26.11	_	330.20	7,600	30	310	90	1,700	<1	<1	<1	_	_
TOC:	359.01	03/05/12	_	_	_	-					Wellhead in	accessible				
		06/04/12	_	18.99	_	340.02					Not sampled;	just gauged				
		09/10/12	_	28.28	_	330.73					Not sampled;	just gauged				
		12/03/12		30.40	_	328.61					Not sampled;					
		02/21/13		23.05	_	335.96	1,900	1.6	25	31	240	_	_	_	_	_
MW26		12/21/05	_	50.15	_	311.25	120	1.5	38	1.0	5.5	<1	<1	<1	5.27	_
TOC:	361.40	02/22/06	_	47.67	-	313.73	<100	<1	<1	<1	<3	<1	_	-	J.27	
		06/01/06	_	45.62	-	315.78	<100	<1	<1	<1	<3	_	_		-	
		08/24/06	_	47.37	-	314.03	<100	<1	<1	<1	<3	<1	_			
		11/16/06	_	49.43	_	311.97	<50	<1	<1	<1	<3	_	_			
		02/21/07	-	46.69	_	314.71	<100	<1	<1	<1	<3	_	_		-	
		05/24/07	-	45.76	-	315.64	<100	<1	<1	<1	<3	_	_			
		08/03/07	_	47.19	_	314.21	<100	<1	<1	<1	<3	_	_		- -	
		02/11/08	-	47.87	_	313.53	<100	<1	<1	<1	<3	_		=		
		03/04/10	_	45.00	_	316.40	<100	<1	<1	<1	<3	<1	<1	<1		
TOC:	363.86	03/07/12	_	47.48	_	316.38	<100	<1	<1	<1	<3	_	-			
		06/04/12	_	45.24	_	318.62	-200	-4	~1	-1	Not sampled;			_		-
		09/10/12	_	46.99	_	316.87					Not sampled;					
	-	12/03/12	_	48.14	_	315.72					Not sampled;					
		02/20/13	_	42.47	_	321.39	<100	<1	<1	-11	Not sampled;					
MTCA M	ethod A Clas			.2.77		521.33				<1	_				-	
MTCA Method A Cleanup Levels for Groundwater (6) 1,000/800 9 5 1,000 700 1,000 20 0.01 5 15									1,000	700	1,000	0.01	5	15	NE	



	Well ID	Sample Date	Depth to LNAPL ⁽¹⁾ (feet)	Depth to Groundwater ⁽¹⁾ (feet)	LNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾ (feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl- benzene ⁽⁵⁾	Total Xylenes ⁽⁴⁾	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Dissolved Lead ⁽⁵⁾	
MW27		12/21/05	_	20.23	_	336.08	34,000	15	190	2,300	13,600	<1	<1	<1	4.08	_	
TOC:	360.59	02/22/06	_	15.18	_	345.41	48,000	18	430	2,400	12,600	<1	-	_	_	_	
		06/01/06	_	17.00	-	343.59	2,500										
		08/22/06	21.81	21.82	0.00	338.77				•	LNA	PL					
		11/14/06	25.55	25.55	0.00	335.04					LNAPL; absorben	t socks in well					
		02/20/07	-	17.49	-	343.10					LNAPL; absorben	t socks in well					
		05/22/07	19.86	19.86	0.00	340.73					LNAPL; absorben	t socks in well					
		08/01/07	_	22.38	-	338.21				N	Not sampled; absort	bent socks in we	ell				
		02/11/08	18.93	19.00	0.07	341.59					LNAPL; absorben						
		03/04/10	-	16.06	_	344.53	26,000	<10	290	870	4,800	<1	<1	<1	_	_	
TOC:	362.40	03/09/12	-	19.16	_	343.24	23,000	8.5	94	620	3,900	_	_	-	_	_	
		06/05/12	_	17.02	_	345.38	23,000	7.3	110	720	4,600	_	_	_	_	_	
TOC:	362.64	09/10/12	_	_	_	-		•		Not san	npled; insufficient w	vater above pum	p intake			L	
		12/05/12	_	19.14	_	343.50	11,000	5.8	69	220	2,800	_	-	-	_	_	
		02/28/13	_	7.28	_	355.36	5,500	<1	6.9	160	1,300	_	_	_	_	_	
MW28		12/20/05	_	27.11	_	330.91	20,000	5.7	98	670	6,500	<1	<1	<1	10.7	_	
TOC:	358.02	02/22/06	-	23.40	_	334.62	14,000	3.1	13	390	2,380	<1	-	_	_	_	
		06/01/06	24.57	24.60	0.03	333.44	8,100	4	17	160	1,300	_	-	_	_	_	
		08/22/06	-	-	-	_		•		•	LNAF	PL				-	
		11/14/06	28.54	28.54	0.00	329.48					LNAPL; absorben	t socks in well					
		02/20/07	_	_	-	-					LNAPL; absorben	t socks in well					
		05/22/07	26.91	26.91	0.00	331.11					LNAPL; absorben	t socks in well					
		08/01/07	_	27.79	-	330.23					LNAPL; absorben	t socks in well					
		02/11/08	26.85	26.86	0.01	331.16		×			LNAPL; absorben	t socks in well					
		03/04/10	_	25.56	_	332.46	7,900	<5	<5	300	970	<1	<1	<1	_	_	
TOC:	358.42	03/05/12	_	_	-	_			•	•	Wellhead in:	accessible				-	
		06/04/12	_	26.66	_	331.76					Not sampled;	just gauged					
		09/10/12	_	27.70	_	330.72					Not sampled;						
		12/03/12	_	27.86	_	330.56					Not sampled;						
		02/20/13	_	23.80		334.62	3,600	<1	1.8	86	420	_	-	_	_	_	
MTCA N	lethod A Clea	nup Levels for Gro	undwater ⁽⁶⁾				1,000/800 ⁽⁹⁾	5	1.000	700	1,000	20	0.01	5	15	NE	



V	Vell ID	Sample Date	Depth to LNAPL ⁽¹⁾ (feet)	Depth to Groundwater ⁽¹⁾ (feet)	LNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾ (feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl- benzene ⁽⁵⁾	Total Xylenes ⁽⁴⁾	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC ⁽⁴⁾	4(5)	Dissolved
MW29		12/20/05	18.40	18.61	0.21	335.65	G.I.I.I.	Delizene	Totale	Delizelle	LNA		EDR.	EDC	Total Lead ⁽⁵⁾	Lead ⁽⁵⁾
TOC:	354.09	02/23/06	_	9.35	_	344.74	1,400	<1	<1	19	82	<1	<1	<1		
		06/02/06	_	10.11	_	343.98	320	<1	2	3	7	_			-	
		08/22/06	17.81	18.18	0.37	336.21					LNA				_	_
		11/14/06	22.27	22.27	0.00	331.82					LNAPL; absorber					
		02/20/07	12.14	12.15	0.01	341.95					LNA					
		05/22/07	_	14.67	_	339.42	8,100	<1	3	250	760	_		_		
		08/01/07	_	18.29	-	335.80	20,000	260	16	820	3,100				-	
		02/12/08	_	15.85	_	338.24	11,000	81	<10	310	1,200				-	
		03/04/10	_	12.00	_	342.09	550	<1	<1	7	9	<1	<1		-	
TOC:	358.89	03/09/12	_	13.68	_	345.21	6,700	1.5	2.7	220	840	_	-	<1		
		06/04/12	_	12.39	_	346.50				220	Not sampled;					
TOC:	359.02	09/10/12	-	18.35	_	340.67					Not sampled;					
		12/03/12	-	13.85	_	345.17					Not sampled;					
		02/28/13	-	6.97	_	352.05	8,500	<1	50	<1	1,400		_	_	8.79	240
MW30		12/15/05	-	43.66	_	310.46	350	6.9	13	15	96	<1	_		4.74	3.19
TOC:	354.12	02/22/06	-	40.25	_	313.87	<100	<1	<1	<1	<3	<1	_		4.74	
		05/31/06	_	38.43	_	315.69	<100	<1	<1	<1	<3	_	_			
		08/24/06		41.59	_	312.53	<100	<1	<1	<1	<3	<1				
		11/14/06	_	43.41	_	310.71	<50	<1	<1	<1	<3	_	_			
		02/22/07	_	39.19	_	314.93	<100	<1	<1	<1	<3	_	_	_	 	
		05/23/07	-	39.69	_	314.43	<100	<1	<1	<1	<3	_	_	_	<1	<1
		08/02/07	_	41.16	-	312.96	<100	<1	<1	<1	<3	_	_	_	<1	<1
		02/14/08	-	41.29	1-1	312.83	<100	<1	<1	<1	<3	_	_	_	<1	<1
		05/14/08	_	39.86	_	314.26					Not sampled;	iust gauged			1	
		03/03/10	_	38.71	_	315.41	<100	<1	<1	<1	<3	<1	<1	<1		_
TOC:	356.51	03/07/12	_	41.15	_	315.36	<100	<1	<1	<1	<3	_	_	_	_	
		06/04/12	_	38.85	-	317.66					Not sampled;	iust gauged				
		09/10/12	_	40.73	_	315.78					Not sampled;					
		12/03/12	_	41.53	-	314.98					Not sampled;					
		02/19/13	_	36.32	_	320.19	<100	<1	<1	<1	<3	_	_	_	I - I	_
мтса м	ethod A Clea	nup Levels for Gro	oundwater ⁽⁶⁾				1,000/800 ⁽⁹⁾	5	1,000	700	1,000	20	0.01	5	15	NE NE



							Ivioun	tlake Terrace, V	vasnington									
W	ell ID	Sample Date	Depth to LNAPL ⁽¹⁾ (feet)	Depth to Groundwater ⁽¹⁾ (feet)	LNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾ (feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl- benzene ⁽⁵⁾	Total Xylenes ⁽⁴⁾	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Dissolved Lead ⁽⁵⁾		
MW31		12/15/05		31.04	-	324.18	51,000	420	260	1,200	7,200	<20	_	-	12.2	_		
TOC:	355.22	02/22/06	_	29.92	_	325.30	18,000	160	88	440	2,930	<1	_	_	_	_		
		05/31/06	_	29.76	_	325.46	16,000	180	160	580	3,700	_	1-1	-	3.51	_		
		08/24/06	_	30.63	_	324.59	22,000	240	170	500	3,470	<1	_	_	6.39	_		
		11/14/06	_	38.48	_	316.74				Not sampl	led; insufficient wa	ater to fill sample	containers					
		02/21/07	_	30.18	_	325.04	15,000	270	130	490	2,800	-	_	_	9.65	_		
		05/22/07	_	30.68	-	324.54	20,000	210	100	500	3,400	-	_	-	9.48	_		
		08/03/07	_	34.76	_	320.46	30,000	390	160	810	6,600	_	_	_	14.4	13.9		
		02/13/08	_	34.73	_	320.49	30,000	100	92	730	5,500	_	_	_	44.4	39.9		
		05/14/08	_	33.88	_	321.34					Not sampled:	: iust gauged	1		71.7	33.3		
		07/29/09	-	35.01	_	320.21	1,900	45	1.6	7.9	440 ^{ve}	<1	<1	1.7		_		
		03/03/10	_	32.76	_	322.46	15,000	160	68	160	2,800	<1	<1	<1	15.1	15.1		
TOC:	357.52	03/07/12	_	36.78	_	320.74	2,800	7.2	5.2	23	400	<1	_	<1	26.5	24.6		
		06/05/12	_	34.88	-	322.64	8,200	19	7.7	17	880	_	_	_	_	_		
TOC:	357.25	09/10/12	_	_	_	-					npled; insufficient	water above num						
		12/03/12	_	32.87	_	_					pled; insufficient							
		02/28/13	_	29.40	_	327.85	2,000	4.6	<1	19	45	_	_		16.1	9.28		
MW32		12/20/05	_	23.05	_	334.98	40,000	270	8,000	1,000	9,500	<1	<1	<1	17.5	- -		
TOC:	358.05	02/23/06	_	19.93	_	338.12	24,000	67	1,700	580	5,000	<1	_	_				
		05/31/06	20.98	21.07	0.09	337.05	•				LNA							
		08/22/06	24.40	24.42	0.02	333.65					LNA							
		11/14/06	27.15	27.15	0.00	330.90					LNAPL; absorber							
		02/20/07	-	21.56	_	336.49					LNAPL; absorber							
		05/22/07	_	23.29	_	334.76					LNAPL; absorber							
		07/31/07	_	24.86	_	333.19				N	ot sampled; absor		all					
		02/12/08	_	22.42	_	335.63	20,000	59	870	410	4,600	—	_	_	Т			
		03/04/10	_	20.71	_	337.34	14,000	16	270	320	2,400	<1	<1					
TOC:	359.87	03/09/12	_	22.71	_	337.16	120	3.1	11	1.1	16	_	-	<1				
	333.07	06/06/12	_	21.58		338.29	4,300	14	160	87	650	_		-				
TOC:	359.98	09/11/12	_	24.12	_	335.86	16,000	170	330	470	3,000			_	-			
1000000		12/05/12	_	24.33	_	335.65	33,000	29	790	920	6,900		_			_		
		02/28/13	_	17.18	_	342.80	28,000	23	210	1,000	7,000		-	-	-	_		
MW33		12/20/05	-	Dry	_	J42.00 —	28,000	-	_	-	7,000		_	-	9.37	3.94		
TOC:	355.42	02/10/06	_	32.73	_	322.69	14,000	190	140	670	3,220	<1			_			
		05/31/06	_	33.78	_	321.64	21,000	130	140		ed; insufficient wa		<1	<1	7.44			
		08/22/06		34.24	_	321.18					ed; insufficient wa							
		11/14/06	_	Dry	_	-					ed; insufficient wa				_			
		02/20/07	_	_	_	_				NOT Sample			containers					
		05/22/07		34.24		321.18					LNAPL; absorber							
		07/31/07		34.33		321.18					LNAPL; absorber							
	-	02/14/08		34.33		322.97	17.000	04	22	NGC 7 L 11	ot sampled; absor		211					
		03/04/10		32.45	_	322.92	17,000	81	23	210	2,800		_	-	-			
TOC:	358.29	03/04/10	_				11,000	18	14	300	1,300	<1	<1	<1		_		
oc.	330.29			34.35	-	323.94					ed; insufficient wa							
	-	06/04/12		34.27		324.02					ed; insufficient wa							
	-	09/10/12		34.49		323.80					ed; insufficient wa							
		1//114/17		34.43	- 1	323.86			Not sample, insurince water to misample containers									
	-	02/20/13	_	29.13	_	329.16	2,700	2.0	1.2	9.3	120	_	Containers					



v	Vell ID	Sample Date	Depth to LNAPL ⁽¹⁾ (feet)	Depth to Groundwater ⁽¹⁾ (feet)	LNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾ (feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl- benzene ⁽⁵⁾	Total Xylenes ⁽⁴⁾	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Dissolved
MW34		01/27/06	-	7.05		348.54	2,500	<1	<1	22	90			-		Lead ⁽⁵⁾
TOC:	355.59	02/10/06	_	4.22	_	351.37	2,300	\1			Quarter sample coll	<1	<1	<1	23.7	_
	555.55	06/02/06	7.—-	10.06	_	345.53	1,400	<1	3	21	29		ľ –	1	1	
		08/23/06	_	13.96		341.63	260	<1	3	<1	<3	<1	_	_	4.17 NA ⁽⁷⁾	NA ⁽⁷⁾
		11/14/06	_	Dry		341.03	200	\1			1			_	NA''	NA'''
		02/20/07		10.22		345.37	<100	<1			ed; insufficient wa			I	1	
		05/22/07		12.40		343.19	<100		<1	<1	<3			-	<1	<1
		07/31/07		14.95	_	343.19	<100	<1	<1	<1	<3				<1	<1
		02/13/08		10.79			400				ed; insufficient war			Г		1
		03/04/10		9.83	_	344.80	<100	<1	<1	<1	<3			-		
		03/04/10				345.76	<100	<1	<1	<1	<3	<1	<1	<1	_	
OC:	357.95			12.00		343.59	100	Ι			Not sampled;			1		T
OC:	357.95	03/09/12		12.39		345.56	<100	<1	<1	<1	<3	_		_		
		06/04/12	_	11.55		346.40					Not sampled;					
		09/10/12	_	15.52		342.43					Not sampled;					
		12/03/12		8.94		349.01					Not sampled;	just gauged				
*****		02/21/13		7.05		350.90	<100	<1	<1	<1	<3		_		_	_
1W35	0.00.4.0	01/27/06		38.18	1-0	317.97	<100	<1	<1	<1	<3	<1	<1	<1	59.6	_
OC:	356.15	02/22/06		38.54		317.61					uarter sample colle		•			
		05/31/06		39.62		316.53				Not sampl	ed; insufficient wat	ter to fill sample	containers			
		08/22/06	_	39.64		316.51					ed; insufficient wat	The state of the s				
		11/14/06	_	Dry		_				Not sampl	ed; insufficient wat	ter to fill sample	containers			
		02/20/07	_	Dry		_				Not sampl	ed; insufficient wat	ter to fill sample	containers			
		05/22/07		Dry	_	_				Not sampl	ed; insufficient wat	ter to fill sample	containers			
		07/31/07		Dry	_	-				Not sampl	ed; insufficient wat	ter to fill sample	containers			
		02/11/08		Dry	_	-				Not sampl	ed; insufficient wat	ter to fill sample	containers			
		03/04/10	_	38.86	_	317.29					mpled; well did not					
OC:	358.51	03/05/12	-	Dry	_	_					Dry					
		06/04/12	_	Dry	_	_					Dn					
		09/10/12	_	Dry	-	_					Dn					
12/03/12 — 39.32 — 319.19 Not sampled; just gauged																
12/03/12 — 39.32 — 319.19 Not sampled; just gauged 02/20/13 — 37.89 — 320.62 <100 <1 <1 <1 <3 — —													2.45	<1		
ATCA M	lethod A Clea	nup Levels for Gro	oundwater ⁽⁶⁾				1,000/800 ⁽⁹⁾	5	1,000	700	1,000	20	0.01	5	15	NE NE

P:\0440 TOC Holdings Co\01-176 Mountlake Terrace\Technical\Tables\2013\QGW\Q1\01-176_2013Q1_GD_F.xisxTable 2 GD



							IVIOUII	tlake Terrace, V	vasilington	_						
V	Vell ID	Sample Date	Depth to LNAPL ⁽¹⁾ (feet)	Depth to Groundwater ⁽¹⁾ (feet)	LNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾ (feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl- benzene ⁽⁵⁾	Total Xylenes ⁽⁴⁾	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Dissolved Lead ⁽⁵⁾
MW36		01/27/06	_	40.10	_	318.19	<100	<1	<1	<1	<3	<1	<1	<1	43.4	_
TOC:	355.65	02/22/06	_	40.92	_	314.73		•	•	First (Quarter sample col	lected January 2				
		06/02/06	_	41.13	_	314.52	<100	<1	<1	<1	<3	_	_	_	193	_
		08/24/06	_	41.58	_	314.07	<100	<1	<1	<1	<3	<1	_		NA ⁽⁷⁾	NA ⁽⁷⁾
		11/14/06	_	43.05	_	312.60				Not samp	led; insufficient wa		containers		147	110
		02/20/07	_	41.15	_	314.50	<100	<1	<1	<1	<3	_	_	_	_	_
		05/23/07	_	41.35	_	314.30	<100	<1	<1	<1	<3	_	_	_	_	
		08/02/07	-	42.58	_	313.07	<100	<1	<1	<1	<3	_	_	_	_	_
		02/14/08	_	41.35	_	314.30	<100	<1	<1	<1	<3	_	_	_		_
		03/04/10	_	41.16	_	314.49	<100	<1	<1	<1	<3	<1	<1	<1	2.78	
		03/04/10	_	41.79	_	313.86	3200		1		Not sampled;		\1	_ <1	2.78	<1
TOC:	358.02	03/08/12	_	41.64	-	316.38	<100	<1	<1	<1	<3 <	Just gaugeu	_	_		
		06/04/12	_	41.54	_	316.48	1100		- 1	\1	Not sampled;	iust gauged	_			_
		09/10/12	_	42.83		315.19					Not sampled;					
		12/03/12	_	42.49	_	315.53					Not sampled;					
		02/20/13	_	39.12		318.90	<100	<1	<1	<1	<3	Just gaugeu				
MW37		01/27/06	_	14.70		341.88	<100	<1	<1	<1	<3	<1	<1			
TOC:	356.58	02/22/06	_	17.34	_	339.24	100	\1	\1		Quarter sample coll			<1	<1	_
		06/02/06	_	15.62	_	340.96	<100	<1	<1	<1	1	ected January 2		1		
		08/24/06	_	22.29	_	334.29	<100	<1	<1		<3	_	_			
		11/15/06	_	34.32	_	322.26	<50	<1		<1	<3	<1	-			_
		02/21/07	_	16.56		340.02			<1	<1	<3	_	_			_
		05/23/07	_	18.69		337.89	<100	<1	<1	<1	<3	-	_	_	-	_
		08/02/07	_	24.79	_	337.89	<100	<1	<1	<1	<3		-		-	
		02/13/08		16.45		340.13	<100	<1	<1	<1	<3		-		-	_
		03/04/10		1			<100	<1	<1	<1	<3	_	-	_	_	_
TOC:	358.96	03/04/10		13.93		342.65	<100	<1	<1	<1	<3	<1	<1	<1	-	
TOC.	336.90	06/04/12		19.40	_	339.56	<100	<1	<1	<1	<3		-			_
		24 8		16.90		342.06					Not sampled;					
		09/10/12		23.99	_	334.97					Not sampled;					
		12/03/12		22.27		336.69					Not sampled;	just gauged				
*****		02/21/13		11.58	_	347.38	<100	<1	<1	<1	<3		_		_	_
MW38	252.02	01/27/06		14.69	-	347.34	<100	<1	<1	<1	<3	<1	<1	<1	<1	_
TOC:	362.03	02/22/06		13.52	_	348.51					Quarter sample coll	ected January 27	, 2006			
		05/31/06	_	16.85	_	345.18	<100	<1	<1	<1	<3	_		-	-	_
		08/23/06		23.08	_	338.95	<100	<1	<1	<1	<3	<1	_	-	_	_
		11/14/06	_	26.36	_	335.67	<50	<1	<1	<1	<3	-	_	-	_	-
		02/22/07	_	16.43		345.60	<100	<1	<1	<1	<3	_	_	_	_	_
		05/22/07	_	19.74		342.29	<100	<1	<1	<1	<3	_	_	-	_	_
		08/01/07	_	22.84	-	339.19	<100	<1	<1	<1	<3	_	_	_	_	_
		02/13/08	_	18.14	_	343.89	<100	<1	<1	<1	<3	_	1	-	_	_
		03/04/10	_	14.80	-	347.23	<100	<1	<1	<1	<3	<1	<1	<1	_	_
TOC:	364.49	03/08/12	-	19.32	-	345.17	<100	<1	<1	<1	<3	_	-	_	_	_
		06/04/12	_	17.61	_	346.88					Not sampled;	just gauged				
		09/10/12		22.78	_	341.71					Not sampled;					
		12/03/12	_	21.41	_	343.08					Not sampled;					
		02/21/13		11.30	-	353.19	<100	<1	<1	<1	<3	_	_	-	_	_
MTCA M	ethod A Clea	nup Levels for Gro	oundwater ⁽⁶⁾				1,000/800 ⁽⁹⁾	5	1,000	700	1,000	20	0.01	5	15	NE



								tiake Terrace, V	• asimigton							
V	Vell ID	Sample Date	Depth to LNAPL ⁽¹⁾ (feet)	Depth to Groundwater ⁽¹⁾ (feet)	LNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾ (feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl- benzene ⁽⁵⁾	Total Xylenes ⁽⁴⁾	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Dissolved Lead ⁽⁵⁾
MW39		02/02/06	_	41.41	_	312.15	<100	<1	<1	<1	<3	<1	<1	<1	<3.55	
TOC:	353.56	02/22/06	_	40.18	_	313.38				First C	Quarter sample col	lected February	2, 2006			
		05/31/06	_	39.52	_	314.04	<100	<1	<1	<1	<3	_	_	_		_
		08/24/06	_	40.56	_	313.00	<100	<1	<1	<1	<3	<1	_	_	_	_
1		11/15/06	_	43.40	_	310.16	<100	<1	<1	<1	<3	_	_	_	_	_
1		02/22/07	_	39.26	_	314.30	<100	<1	<1	<1	<3	_	_	_	-	_
		05/23/07	·	39.80	_	313.76	<100	<1	<1	<1	<3	_	_	_	_	_
1		08/03/07	-	41.22	-	312.34	<100	<1	<1	<1	<3	_	_	_	_	-
1		02/14/08	_	41.22	_	312.34	<100	<1	<1	<1	<3	_	_	_	_	_
		02/03/09	-	42.11	-	311.45				•	Not sampled	; just gauged				
		03/03/10	_	38.76		314.80	<100	<1	<1	<1	<3	<1	<1	<1	_	_
TOC:	355.94	03/07/12	_	41.14	1	314.80	<100	<1	<1	<1	<3	_	_	_	_	_
		06/04/12	_	39.14	_	316.80					Not sampled	; just gauged				
		09/10/12	_	40.86	-	315.08					Not sampled	; just gauged				
		12/03/12	_	41.45	_	314.49					Not sampled	; just gauged				
		02/20/13	-	36.40	_	319.54	<100	<1	<1	<1	<3	_	_	_	_	_
MW40		02/03/06	-	41.71	_	312.28	<100	<1	<1	<1	<3	<1	_	_	123	_
TOC:	353.99	02/22/06	_	40.29	-	313.70				First C	Quarter sample col	lected February	3, 2006	•		
		06/01/06	_	39.46	_	314.53	<100	<1	<1	<1	<3	_	_	_	<1	_
		08/24/06	-	41.55	_	312.44	<100	<1	<1	<1	<3	<1	_	-	_	_
		11/14/06	-	43.45	_	310.54	<100	<1	<1	<1	<3	_	_	_	<1	_
		02/21/07	_	39.22	_	314.77	<100	<1	<1	<1	<3	_	_	_	_	_
		05/24/07	_	38.75	_	315.24	<100	<1	<1	<1	<3	_	_	-	_	_
		08/03/07	-	41.21	_	312.78	<100	<1	<1	<1	<3	_	_	-	<1	<1
		02/14/08	-	41.30	_	312.69	<100	<1	<1	<1	<3	_	-	_	<1	<1
		03/03/10	_	38.77	_	315.22	<100	<1	<1	<1	<3	<1	<1	<1	_	_
TOC:	356.37	03/07/12	_	41.21	_	315.16	<100	<1	<1	<1	<3	_	_	-	_	_
		06/04/12	-	39.11	_	317.26					Not sampled;	just gauged				
1		09/10/12	_	40.78	_	315.59					Not sampled;	just gauged				
		12/03/12	_	41.57	_	314.80					Not sampled;	just gauged				
		02/20/13	_	36.42	_	319.95	<100	<1	<1	<1	<3	_	_	_	_	_
MW41		02/04/06	-	Dry	-	-				Not sampl	ed; insufficient wa	ter to fill sample	containers			
TOC:	354.02	02/22/06	-	40.35	-	313.67				Not sampl	ed; insufficient wa	ter to fill sample	containers			
1		05/31/06	_	40.22	-	313.80				Not sampl	ed; insufficient wa	ter to fill sample	containers			
		08/22/06	_	40.22	-	313.80				Not sample	ed; insufficient wa	ter to fill sample	containers			
		11/14/06	_	40.22	_	313.80				Not sample	ed; insufficient wa	ter to fill sample	containers			
		02/20/07	-	40.23	_	313.79				Not sampl	ed; insufficient wa	ter to fill sample	containers			
		05/22/07	-	Dry	_					Not sample	ed; insufficient wa	ter to fill sample	containers			
		07/31/07	-	Dry	-	-				Not sample	ed; insufficient wa	ter to fill sample	containers			
		02/11/08	-	Dry	-	_				Not sampl	ed; insufficient wa	ter to fill sample	containers			
		03/04/10	_	Dry	_	-					ed; insufficient wa					
TOC:	356.02	03/05/12	-	39.89	-	316.13					Dr	У				
		06/04/12	_	39.78	_	316.24					Not sampled;					
TOC:	356.18	09/10/12	_	Dry	_	_					Not sampled;					
		12/03/12	_	34.54	_	321.64					Not sampled;					
			-	35.51	_	320.67	_		_	_	_	_	_	-	50.0	_
MTCA M	ethod A Clea	nup Levels for Gro	oundwater ⁽⁶⁾				1,000/800 ⁽⁹⁾	5	1,000	700	1,000	20	0.01	5	15	NE



V	Vell ID	Sample Date	Depth to LNAPL ⁽¹⁾ (feet)	Depth to Groundwater ⁽¹⁾ (feet)	LNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾ (feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl- benzene ⁽⁵⁾	Total Xylenes ⁽⁴⁾	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Dissolved Lead ⁽⁵⁾
MW42		02/04/06	_	Dry	_	_					led; insufficient wa				Total Leau	Leau
TOC:	354.08	02/22/06		39.75	_	314.33					led; insufficient wa					
		05/31/06	-	39.63	_	314.45					led; insufficient wa					
		08/22/06	_	Dry	_	_					led; insufficient wa					
		11/14/06	_	39.71	_	314.37					led; insufficient wa					
		02/20/07	_	39.67	_	314.41					led; insufficient wa					
		05/22/07	_	Dry	_	_										
		03/04/10	_	Dry	_	_	Not sampled; insufficient water to fill sample containers Not sampled; insufficient water to fill sample containers									
TOC:	356.42	03/05/12	_	Dry	_	-										
		06/04/12		Dry	_	_										
		09/10/12	_	39.84	_	316.58	Diy									
		12/03/12	_	Dry	_	_	- Dry									
		02/18/13	-	39.51	_	316.91	316.91 Not sampled; insufficient water to fill sample containers									
MW43		05/31/06	_	37.43	_	319.15	the complete in the containers									
TOC:	356.58	08/22/06		Dry	_	_	the contract which the containers									
		11/14/06	_	Dry	_	_					led; insufficient wa					
		02/20/07	_	Dry	_	_					led; insufficient wa					
		05/22/07	(-)	Dry	_	·—·					led; insufficient wa					
		07/31/07	·	Dry	-	1-					led; insufficient wa					
		03/04/10	_	Dry	i.—.	_					led; insufficient wa					
TOC:	358.89	03/05/12	_:	Dry	—	_					led; insufficient wa					
		06/04/12	_	Dry	_	-					Dr					
		09/10/12	_	Dry	_	<u> </u>					Dr					
		12/03/12	_	Dry	_						Dr					
		02/18/13	_	33.90	_	324.99				Not sampl	led; insufficient wa	ter to fill sample	containers			
MW44		05/31/06	_	38.56	_	314.08				Not sampl	ed; insufficient wa	ter to fill sample	containers			
TOC:	352.64	08/22/06	_	Dry	_	-					ed; insufficient wa	C2111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
		11/14/06	_	Dry		_				Not sampl	ed; insufficient wa	ter to fill sample	containers			
		02/20/07	_	Dry	_	_				Not sampl	ed; insufficient wa	ter to fill sample	containers			
		05/22/07	-	Dry		_				Not sampl	ed; insufficient wa	ter to fill sample	containers			
		07/31/07	_	Dry	_	_					ed; insufficient wa					
		03/04/10	_	Dry	-	_					ed; insufficient wa					
TOC:	354.96	03/05/12	_	Dry	-	_					ed; insufficient wa					
		06/04/12	_	Dry	<u>-</u> -	_					Dr	•				
		09/10/12	_	Dry	- 2	_					Dr					
		12/03/12	_	Dry	<u>-</u> -	_					Dr	y				
		02/18/13		38.16		316.80				Not sampl	ed; insufficient wa	ter to fill sample	containers			
MTCA M	ethod A Clea	nup Levels for Gro	undwater ⁽⁶⁾				1,000/800 ⁽⁹⁾	5	1,000	700	1.000	20	0.01	5	15	NE



							Would	tiake Terrace, v	washington							
	Well ID	Sample Date	Depth to LNAPL ⁽¹⁾ (feet)	Depth to Groundwater ⁽¹⁾ (feet)	LNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾ (feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl- benzene ⁽⁵⁾	Total Xylenes ⁽⁴⁾	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Dissolved Lead ⁽⁵⁾
MW45		05/31/06	_	Dry	_	_	-	_	_	_	_	-	_	_	-	_
TOC:	354.24	08/24/06	_	37.86	_	316.38	57,000	920	180	1,900	13,700	<1	_	_	_	_
		11/14/06	-	Dry	-	_		•	•	Not samp	led; insufficient wa		containers			
		02/21/07	_	37.22	_	317.02	39,000	700	150	870	10,000	_	_	_		_
		05/24/07	-	37.59	_	316.65	39,000	470	120	760	9,800	_	_	_		
		08/02/07	_	38.25	_	315.99	40,000	430	67	270	11,000	_	_	_		
		02/11/08	_	37.90	_	316.34	45,000	76	36	430	8,900	_	_	_	<u> </u>	
		05/14/08	_	37.82	_	316.42				1,50	Not sampled;	iust gauged				
		07/29/09	_	38.06	_	316.18					Not sampled;					
		03/02/10	_	37.16	_	317.08	23,000	54	23	310	3,700	<1	<1	<1	II	_
TOC:	357.06	03/05/12	_	38.59	_	318.47					led; insufficient wa					_
		06/06/12	_	37.00	_	320.06	6,900	33	7.6	95	1,300		Containers	_		
		09/11/12	_	38.01	_	319.05	4,700	10	5.7	<1	540				- -	
		12/03/12	_	39.37	_	317.69	7.00		3.7		led; insufficient wa	ter to fill sample				
		02/20/13	_	37.14	-	319.92	19,000	<1	13	180	2.500	_	_		131	72.4
MW46		12/13/06	_	Dry	_	_			15		led; insufficient wa	ter to fill sample			151	73.4
TOC:	354.64	02/21/07	_	39.98	_	314.66	1,100	14	7	13	23	—	—	_	I - I	_
		05/24/07	_	40.60	-	314.04	120	<1	<1	<1	4	_			- -	
		07/31/07	_	Dry	_	_					led; insufficient wa	ter to fill sample	containers			
		02/11/08	_	Dry	_	_					led; insufficient wat					
		03/03/10	-	40.31		314.33	<100	<1	<1	<1	<3	<1	<1	<1		_
TOC:	356.54	03/05/12	.—	42.42	_	314.12		-			led; insufficient wat					
		06/04/12	_	40.40	_	316.14				not samp	Not sampled;		containers			
		09/10/12	_	41.49	_	315.05					Not sampled;					
		12/03/12	_	41.88	_	314.66					Not sampled;					
		02/20/13	_	38.81	_	317.73	<100	<1	<1	<1	<3 ×3	Just Baugeu		_	13.7	6.70
MW47		12/13/06	_	Dry	_	_			1		ed; insufficient wat	ter to fill sample	containers		15./	6.79
TOC:	352.96	02/20/07	_	41.50		311.46					ed; insufficient wat					
		05/22/07		Dry	_	_					ed; insufficient wat					
		07/31/07	-	Dry		_					ed; insufficient wat					
		02/11/08	_	Dry	-	-				Not sampl	ed; insufficient wat	ter to fill sample	containers			
TOC	255.54	03/04/10	_	41.00	_	311.96	<100	<1	<1	<1	<3	<1	<1	<1	_	_
TOC:	355.51	03/05/12	_	Dry	_	-				Not sampl	ed; insufficient wat		containers			
		06/04/12 09/10/12		41.17	_	314.34					Not sampled;					
		12/03/12		Dry Dry	_						Not sampled;					
		02/20/13	==	38.53		316.98	<100	<1	<1		Not sampled;	just gauged			1.55	
MTCA N	lethod A Clea	nup Levels for Gro		50.55		310.30	1,000/800 ⁽⁹⁾	5		<1	<3				1.50	<1
	- Cilou A Cica	nup Levels for die	oundwater				1,000/800	5	1,000	700	1,000	20	0.01	5	15	NE

P:\0440 TOC Holdings Co\01-176 Mountlake Terrace\Technical\Tables\2013\QGW\Q1\01-176_2013Q1_GD_F.xlsxTable 2 GD



						Would	tiake Terrace, v	vasimigton							
		Depth to LNAPL ⁽¹⁾	Depth to Groundwater ⁽¹⁾	LNAPL Thickness	Groundwater Elevation ⁽²⁾				Ethyl-						Dissolved
Well ID	Sample Date	(feet)	(feet)	(feet)	(feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	benzene ⁽⁵⁾	Total Xylenes (4)	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Lead ⁽⁵⁾
/W48	12/13/06	45.28	46.61	1.33	307.42					LNA					
OC: 352.97	02/20/07	40.61	41.98	1.37	312.09					LNA					
	05/22/07	40.75	42.39	1.64	311.89					LNA					
	07/31/07	42.42	43.88	1.46	310.26					LNA					
	02/11/08 05/06/08	42.98 41.21	43.97 41.97	0.99	309.79					LNA					
	05/08/08	40.98	41.00	0.76	311.61 311.99					sampled; just gaug					
	08/19/08	42.60	43.41	0.81	310.21					sampled; just gaug sampled; just gaug					
	09/12/08	42.98	43.41	0.43	309.90					sampled; just gaug sampled; just gaug					
	09/18/08	43.34	43.85	0.51	309.53					sampled; just gaug sampled; just gaug					
	10/03/08	43.63	43.81	0.18	309.30					sampled; just gaug					
	10/09/08	_	43.91	-	309.06					sampled; just gaug					
	11/07/08	44.25	45.46	1.21	308.48					sampled; just gaug					
	11/21/08	44.39	45.48	1.09	308.36					sampled; just gaug					
	12/10/08	44.66	45.73	1.07	308.10					sampled; just gaug					
	12/16/08	44.74	45.65	0.91	308.05					sampled; just gaug					
	12/28/08	44.82	45.54	0.72	308.01					sampled; just gaug					
	12/31/08	44.88	45.23	0.35	308.02					sampled; just gaug					
	01/23/09	44.33	45.29	0.96	308.45				Not	sampled; just gaug	ed for LNAPL red	covery			
	01/30/09	44.12	44.69	0.57	308.74					sampled; just gaug					
	02/10/09	44.01	44.30	0.29	308.90					sampled; just gaug					
	02/24/09	43.85	44.04	0.19	309.08				Not	sampled; just gaug	ed for LNAPL red	covery			
	03/10/09	43.69	44.00	0.31	309.22				Not	sampled; just gaug	ed for LNAPL red	overy			
	03/11/09	43.78	43.81	0.03	309.18				Not	sampled; just gaug	ed for LNAPL red	covery			
	03/12/09	43.70	43.71	0.01	309.27				Not	sampled; just gaug	ed for LNAPL red	covery			
	03/13/09	43.50	43.51	0.01	309.47				Not	sampled; just gaug	ed for LNAPL red	overy			
	04/10/09	43.20	43.21	0.01	309.77				Not	sampled; just gaug	ed for LNAPL red	overy			
	04/30/09	_	43.44	-	309.53				Not	sampled; just gaug	ed for LNAPL red	covery			
	06/12/09	42.57	42.58	0.01	310.40					sampled; just gaug					
	08/25/09	43.77	44.09	0.32	309.14					sampled; just gaug					
	09/29/09	44.48	45.11	0.63	308.36					sampled; just gaug					
	10/15/09	44.90	45.59	0.69	307.93					sampled; just gaug					
	11/24/09	44.48	44.68	0.20	308.45				Not	sampled; just gaug	ed for LNAPL red	overy			
	01/18/10	42.35	42.45	0.10	310.60					sampled; just gaug					
	02/26/10	40.50	40.63	0.13	312.44					sampled; just gaug					
	03/01/10	40.43	40.56	0.13	312.51					sampled; just gaug					
	04/12/10	39.69	39.80	0.11	313.26					sampled; just gaug					
	05/07/10 06/21/10	39.72	39.83	0.11	313.23					sampled; just gaug					
	07/02/10	40.33	40.64	0.31	312.58					sampled; just gaug					
	08/30/10	42.01	42.30	0.04	310.90					sampled; just gaug					
	09/10/10	42.01	42.42	0.29	310.90					sampled; just gaug sampled; just gaug					
	10/11/10	43.00	43.30	0.30	309.91										
	11/11/10	43.52	43.87	0.35	309.38					sampled; just gaug sampled; just gaug					
	12/06/10	43.73	44.00	0.35	309.38					sampled; just gaug sampled; just gaug					
	12/15/10	45.75	44.00	-	309.19				INOU	Pilot test perfor		overy			
	03/18/11	_	39.04		313.93				Not	sampled; just gaug		OVERV			
	05/02/11	_	37.91	_	315.06					sampled; just gaug sampled; just gaug					
OC: 355.45	03/08/12		43.59		311.86	37,000	220	140	770	5,400 ^{ve}	ed for LIVAPL rec	overy _	T		
555.45	06/05/12		40.85	_	314.60	14,000	<5	140	210	1,900				_	
	09/11/12	_	42.51		312.94	24,000	300	130	550	4,300					
	12/04/12	_	42.80		312.65	21,000	62	<40	390	3,000				_	
	02/20/13	_	38.23	_	317.22	19,000	170	100	620	4,500				5.58	4.07
TC 4 14 - 4 1 4 6 1	anup Levels for Gro				027166	1,000/800 ⁽⁹⁾	5	1,000	700	1,000	20	0.01	5	15	4.07 NE



v	Vell ID	Sample Date	Depth to LNAPL ⁽¹⁾ (feet)	Depth to Groundwater ⁽¹⁾ (feet)	LNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾ (feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl- benzene ⁽⁵⁾	Total Xylenes ⁽⁴⁾	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Dissolved Lead ⁽⁵⁾
MW49		12/20/06	_	45.72	_	308.33	2,200	24	2	46	250	_	_	_	_	_
TOC:	354.05	02/21/07	_	41.61	_	312.44	14,000	380	60	750	2,700	_	_	-	_	_
		05/24/07	_	41.85	_	312.20	21,000	440	62	770	3,400	_	_	_	_	_
		08/03/07		43.32	_	310.73	12,000	360	29	580	1,300	_	_	_	8.38	_
		02/14/08	1—1	43.90	_	310.15	160	<1	<1	<1	7	_	_	-	_	_
		02/05/09	_	43.90	_	310.15					Not sampled	just gauged	•			
		03/04/10		41.23	_	312.82	<100	<1	<1	<1	<3	<1	<1	<1	_	_
TOC:	357.06	03/08/12		44.05	-	313.01	<100	<1	<1	<1	<3	_	_	_	_	_
		06/05/12		41.38	_	315.68	<100	<1	<1	<1	<3	_	_	-	_	_
		09/11/12		43.10	_	313.96	<100	1.2	<1	<1	<3	_	1-1	-	_	-
		12/04/12	_	43.25	_	313.81	<100	<1	<1	<1	<3	-	_		_	_
		02/19/13	_	38.66		318.40	<100	<1	<1	<1	<3	-	_	_	_	_
MW50		08/03/07	_	36.22	1-	323.49	<100	<1	<1	<1	<3	-	-		11.6	NA ⁷
TOC:	359.71	02/14/08		34.56	·-	325.15	<100	<1	<1	<1	<3	-	-	-	_	,_,
		03/02/10	-	32.23	-	327.48	<100	<1	<1	<1	<3	<1	<1	<1	_	
TOC:	362.11	03/08/12	-	35.03	_	327.08	<100	<1	<1	<1	<3	_	_	-	_	.—
		06/05/12	-	33.05	-	329.06	<100	<1	<1	<1	<3	_	_	-	_	-
		09/11/12	-	35.66	-	326.45	<100	<1	<1	<1	<3	-	_	_	_	-
		12/03/12	_	Dry	-	-					Dr	У				
		02/20/13	_	29.39	_	332.72	<100	<1	<1	<1	<3	_	_		_	_
MW51		08/03/07		41.58	-	308.76	<100	<1	<1	<1	<3	_	-	·-	<1	_
TOC:	350.34	02/13/08	_	41.78	-	308.56	<100	<1	<1	<1	<3	_	_		-	_
		05/14/08	_	40.67	-	309.67					Not sampled;	just gauged				
		02/05/09		42.47	_	307.87					Not sampled;	just gauged				
		03/02/10	_	39.73	_	310.61	<100	<1	<1	<1	6	<1	<1	<1	-	_
		10/12/10		41.60	-	308.74	<100	<0.35	<1	<1	<2	<1	<1	<1	<1	<1
TOC:	352.71	03/08/12	_	41.82	-	310.89	<100	<1	<1	<1	<3	_	_		_	_
		06/05/12		39.86	_	312.85	<100	<1	<1	<1	<3	-	_		_	_
		09/11/12	_	41.35		311.36	<100	<1	<1	<1	<3	_	_		_	_
		12/04/12	_	41.15	_	311.56	<100	<1	<1	<1	<3	_	_		-	_
		02/20/13	_	36.92		315.79	<100	<1	<1	<1	<3	_	_	-	_	_
MW52		08/03/07	_	Dry	_	-				Not sampl	ed; insufficient wa	ter to fill sample	containers			
TOC:	353.28	02/14/08	_	Dry	-	-				Not sampl	ed; insufficient wa	ter to fill sample	containers			
		03/02/10	_	41.31	_	311.97	<100	<1	<1	<1	<3	<1	<1	<1	_	-
TOC:	355.65	03/05/12	_	Dry	_	-				Not sampl	ed; insufficient wa	ter to fill sample	containers			
		06/06/12		41.48		314.17	<100	<1	<1	<1	<3	_	_		_	_
		09/10/12	-	43.16	-	312.49				Not sampl	ed; insufficient wa	ter to fill sample	containers			
		12/03/12	-	43.04	-	312.61				Not sampl	ed; insufficient wa	ter to fill sample	containers			
		02/20/13		38.77	-	316.88	<100	<1	<1	<1	<3	_	-		_	_
MTCA M	ethod A Clea	nup Levels for Gro	oundwater ⁽⁶⁾				1,000/800 ⁽⁹⁾	5	1,000	700	1,000	20	0.01	5	15	NE

P:\0440 TOC Holdings Co\01-176 Mountlake Terrace\Technica\Tables\2013\QGW\Q1\01-176_2013Q1_GO_F.xlsxTable 2 GD



1000		Service No.			Meridian	Marie Services	A SAME AND ASSESSMENT OF THE PARTY OF THE PA	tiake Terrace, v	vasinington	AND SHAPE	Contract Charles			E was his to		
	/ell ID	Sample Date	Depth to LNAPL ⁽¹⁾ (feet)	Depth to Groundwater ⁽¹⁾ (feet)	LNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾ (feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl- benzene ⁽⁵⁾	[4]	(4)	[4]	(4)		Dissolved
MW53	TEII ID	08/03/07	(reet)	43.32	(reet)	314.15	<100	<1	<1		Total Xylenes ⁽⁴⁾	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Lead ⁽⁵⁾
TOC:	357.47	02/12/08	_	43.60	_	313.87	<100	<1	<1	<1 <1	<3		_	-	5.02	<1
TOC.	337.47	03/03/10		41.10	_	316.37	<100	<1	<1	<1	<3					
TOC:	359.88	03/03/10		43.58		316.30	<100	<1	<1		<3	<1	<1	<1	-	
100.	333.00	06/05/12		41.15		318.73	<100	<1	<1	<1	<3		-	-	_	
		09/11/12		43.10		316.78	<100	<1	<1	<1	<3					_
		12/04/12		44.16		315.72	<100	<1	<1	<1	<3	_		-		
		02/20/13		38.76		321.12	<100	<1	<1	<1	<3			-	-	_
MW54		08/03/07		13.91		341.66	<100	<1	<1	<1	<3				-	
TOC:	355.57	02/12/08		11.80		343.77	<100	<1	<1	<1	<3		_		<1	<1
roc.	333.37	05/14/08		12.41		343.16	<100	<1	<1	<1	<3		_		<1	<1
		03/03/10	_	10.25		345.32	<100	<1			Not sampled;			Ι .	T	
		07/08/10		11.36		344.21	<100	<1	<1	<1	<3	<1	<1	<1		_
TOC:	357.99	03/07/12	_	12.74		345.25	<100	<1	<1	<1	Not sampled;	just gauged	I	1	1	
100.	557.55	06/04/12	_	11.45		345.23	100		<1	<1	1			_	_	_
		09/10/12	_	13.67		344.32					Not sampled;					
		12/03/12	_	13.00		344.99					Not sampled;					
		02/19/13	_	7.17		350.82	<100	<1	<1	<1	Not sampled;	Just gauged		1	1	
MW55		08/03/07	_	43.55		310.62	<100	<1	<1	<1	<3					
TOC:	354.17	02/13/08	_	44.02	_	310.15	<100	<1	<1	<1	<3				2.99	<1
		03/04/10	_	40.62	_	313.55	<100	<1	<1	<1	<3	<1	<1	<1	-	
TOC:	356.58	03/08/12	_	44.18	_	312.40	<100	<1	<1	<1	<3	_	-	- '1		
	550,50	06/06/12	_	40.76		315.82	<100	<1	<1	<1	<3		_			
		09/12/12	_	43.10	_	313.48	<100	<1	<1	<1	<3					
	İ	12/05/12	_	43.78	_	312.80	<100	<1	<1	<1	<3	_				
		02/20/13	_	38.80	_	317.78	<100	<1	<1	<1	<3	_	_			
MW56		08/03/07	_	44.19	_	310.93	<100	4	<1	<1	<3	_			<1	
TOC:	355.12	02/14/08	_	44.52	_	310.60	<100	<1	<1	<1	<3		_		-	<1
		05/14/08	_	43.00	_	312.12	1200				Not sampled;					
		02/03/09	_	45.40	_	309.72	<100	<1	<1	<1	<2	/ust gaugeu	_	_		_
		03/03/10	_	41.88	_	313.24	<100	<1	<1	<1	<3	<1	<1	<1		
TOC:	357.55	03/06/12	_	44.63	_	312.92	<100	<1	<1	<1	<3	_	-	-		
		06/06/12	_	42.25	_	315.30	<100	<1	<1	<1	<3	_			+ -	
		09/12/12	_	43.82	_	313.73	<100	<1	<1	<1	<3				- -	
	ŀ	12/05/12		44.24	_	313.31	<100	<1	<1	<1	<3				+ - -	
		02/19/13	_	39.41	_	318.14	<100	<1	<1	<1	<3				- -	
МТСА М	ethod A Clear	nup Levels for Gro				04014	1,000/800 ⁽⁹⁾	5	1,000	700	1,000	20	0.01	5	15	NE NE

P:\0440 TOC Holdings Co\01-176 Mountlake Terrace\Technical\Tables\2013\QGW\01\01-176_2013Q_GD_F.xlssTable 2 GD



V	/ell ID	Sample Date	Depth to LNAPL ⁽¹⁾ (feet)	Depth to Groundwater ⁽¹⁾ (feet)	LNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾ (feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl- benzene ⁽⁵⁾	Total Xylenes ⁽⁴⁾	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Dissolved Lead ⁽⁵⁾
MW57		08/03/07	_	44.16	-	310.19	18,000	360	37	320	3,900	_	-	-	3.17	3.33
TOC:	354.35	02/13/08	_	44.59	-	309.76	10,000	150	21	370	1,700	_	_	_		-
		05/14/08	_	42.87	_	311.48				•	Not sampled;	just gauged				
		03/03/10	_	41.80	_	312.55	14,000	240	51	610	3,600	<1	<1	2.9		_
		10/12/10		44.50	_	309.85					Not sampled;	just gauged				
OC:	356.34	03/07/12	_	44.38	_	311.96	2,100	9.7	2.3	87	160	_	_	_		_
		06/04/12		41.88	_	314.46					Not sampled;	just gauged				
TOC:	356.43	09/10/12	_	43.60	_	312.83					Not sampled;					
		12/03/12	_	43.34	_	313.09					Not sampled;					
		02/28/13	_	39.41	-	317.02	3,100	25	10	<1	710	_	_	_		_
MW58		08/02/07	_	43.25	-	309.76	<100	2	<1	4	3	_	_		1.37	<1
TOC:	353.01	02/13/08	_	43.55	_	309.46	360	5	1	13	12	_	_	_	_	_
		05/14/08	_	41.93	_	311.08					Not sampled;	iust gauged				
		03/03/10	_	40.88	_	312.13	<100	<1	<1	<1	<3	<1	<1	2.4		_
		10/12/10	_	43.52	_	309.49					Not sampled;			2		
TOC:	355.43	03/07/12	_	43.74	_	311.69	<100	<1	<1	<1	<3	_	_	_		_
		06/06/12	_	41.33	-	314.10	<100	<1	<1	<1	<3	_	_	_		_
		09/11/12	_	42.89	-	312.54	<100	<1	<1	<1	<3	_	_	_	_	_
		12/05/12	_	43.30	-	312.13	<100	<1	<1	<1	<3	_	_	_	_	_
		02/21/13	_	38.46	_	316.97	<100	<1	<1	<1	<3	_	_	_	_	_
MW59		08/02/07	_	43.26	_	310.87	140	<1	<1	<1	<3	_	_	_	3.04	<1
TOC:	354.13	02/14/08	_	43.66	_	310.47	<100	<1	<1	<1	<3	_	_	_	-	_
		05/14/08	-	42.01		312.12					Not sampled;	just gauged				
		02/03/09	_	45.51	_	308.62	<100	<1	<1	<1	<2	<1	_	_	_	_
		03/03/10	_	40.85	_	313.28	<100	<1	<1	<1	<3	<1	<1	<1	_	_
OC:	356.56	03/06/12	_	43.70	_	312.86	<100	<1	<1	<1	<3	-	_	_		_
		06/06/12	_	41.33	_	315.23	<100	<1	<1	<1	<3	_	_	_	_	_
		09/12/12	_	42.90	-	313.66	<100	<1	<1	<1	<3	-	-	_	_	_
		12/05/12	_	43.28	-	313.28	<100	<1	<1	<1	<3	_	_	_	_	_
		02/19/13	_	38.46	_	318.10	<100	<1	<1	<1	<3	_	_	_	_	_
1W60		08/03/07	_	43.52	_	312.69	<100	<1	<1	<1	<3	_	_	_	20.5	1.94
OC:	356.21	02/14/08	_	43.88	-	312.33	<100	<1	<1	<1	<3	_	_	_	<1	<1
		03/04/10	<u> </u>	41.64		314.57	<100	<1	<1	<1	<3	<1	<1	1.1		_
OC:	358.61	03/08/12	_	44.03	_	314.58	<100	<1	<1	<1	<3	_	_	_	<1	<1
		06/06/12	_	41.78	5-6	316.83	<100	<1	<1	<1	<3	_	_	_	_	
		09/12/12	_	43.19	_	315.42	<100	<1	<1	<1	<3	_	_	_		_
		12/05/12	_	44.07	_	314.54	<100	<1	<1	<1	<3	_	_	_	_	
		02/20/13	_	39.64	_	318.97	<100	<1	<1	<1	<3	_		_		
ITCA M	ethod A Clea	nup Levels for Gro	undwater ⁽⁶⁾				1,000/800 ⁽⁹⁾	5	1,000	700	1,000	20	0.01	5	15	NE



			Depth to	Depth to	LNAPL	Groundwater		tiake refrace, v	Vasimigton		1.00					9-1-1-1-1
v	Vell ID	Sample Date	LNAPL ⁽¹⁾ (feet)	Groundwater ⁽¹⁾ (feet)	Thickness (feet)	Elevation ⁽²⁾ (feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl- benzene ⁽⁵⁾	Total Xylenes ⁽⁴⁾	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Dissolved Lead ⁽⁵⁾
MW61		08/03/07	_	13.18	_	341.65	<100	<1	<1	<1	<3	_	_	_	1.34	<1
TOC:	354.83	02/12/08	_	9.65	_	345.18	<100	<1	<1	<1	<3	_	_	_	_	_
		03/04/10	_	8.21	_	346.62	<100	<1	<1	<1	<3	<1	<1	<1	_	_
TOC:	357.24	03/08/12	_	10.56	_	346.68	<100	<1	<1	<1	<3	_	_	_	_	_
		06/04/12	_	10.06	-	347.18					Not sampled	; just gauged	•		•	
		09/10/12	-	12.11	-	345.13					Not sampled	; just gauged				
		12/03/12	_	7.97	-	349.27					Not sampled	; just gauged				
		02/21/13	_	5.15	-	352.09	<100	<1	<1	<1	<3	_	_	_	_	_
MW62		08/03/07	_	14.47	-	343.65	<100	<1	<1	<1	<3	_	_	_	<1	<1
TOC:	358.12	02/12/08	_	10.19	-	347.93	<100	<1	<1	<1	<3	-	-	_	_	_
		03/03/10		8.64	-	349.48	<100	<1	<1	<1	<3	<1	<1	<1	_	_
TOC:	360.55	03/08/12	-	12.05	-	348.50	<100	<1	<1	<1	<3	_	-	_	_	_
		06/04/12		10.82	_	349.73					Not sampled	; just gauged			•	
		09/10/12	_	14.59	-	345.96					Not sampled:	; just gauged				
		12/03/12	-	9.73	_	350.82					Not sampled:	just gauged				
		02/21/13	_	5.09	-	355.46	<100	<1	<1	<1	<3	_	_	_	_	_
MW63		08/03/07	_	42.85	-	309.88	190	9	<1	8	14	_	-	_	8.21	2.08
TOC:	352.73	02/13/08	_	43.11	-	309.62	240	5	<1	9	11	_	-	_	_	_
		05/14/08	_	41.56	-	311.17					Not sampled;	just gauged				
		02/03/09		44.13	_	308.60					Not sampled;	just gauged				
		03/02/10	_	40.51	-	312.22	<100	<1	<1	<1	<3	<1	<1	<1	_	_
		10/12/10	_	43.14	_	309.59					Not sampled;	just gauged				
TOC:	355.14	03/08/12	_	43.34		311.80	<100	<1	<1	<1	<3	-	_	_	_	_
		06/05/12	-	40.93		314.21	<100	<1	<1	<1	<3	_	_	_	_	_
		09/11/12	_	42.59	_	312.55	<100	<1	<1	<1	<3	_	_	_	_	_
	1	12/04/12	_	42.93	_	312.21	<100	<1	<1	<1	<3	_	_	_		_
		02/19/13	_	38.10	_	317.04	<100	<1	<1	<1	<3	_	_		_	_
MW64		08/02/07	_	40.51	-	312.31	<100	<1	<1	<1	<3	_	_		<1	<1
TOC:	352.82	02/13/08	_	40.39	_	312.43	<100	<1	<1	<1	<3	_			-	-
		05/14/08	_	39.34	_	313.48					Not sampled;	just gauged				
		02/03/09	_	41.59	_	311.23					Not sampled;					
		03/02/10	_	38.09	_	314.73	<100	<1	<1	<1	<3 <	<1	<1	<1		_
		10/12/10	_	40.76	_	312.06					Not sampled;			1 1		
TOC:	355.22	03/08/12	_	40.59	_	314.63	<100	<1	<1	<1	<3 <	_	_	_	T -	_
		06/04/12	_	38.48	-	316.74			-	-	Not sampled;	just gauged				
		09/10/12	_	40.20	_	315.02					Not sampled;					
		12/03/12	_	40.89	1_	314.33					Not sampled;					
		02/21/13	_	35.75	_	319.47	<100	<1	<1	<1	<3 <	_	_	_		_
МТСА М	ethod A Clear	nup Levels for Gro	undwater ⁽⁶⁾				1,000/800 ⁽⁹⁾	5	1.000	700	1,000	20	0.01	5	15	NE NE

P:\0440 TOC Holdings Co\01-176 Mountlake Terrace\Technical\Tables\2013\QGW\Q1\01-176_2013Q1_GD_F.xlsxTable 2 GD



	Vell ID	Sample Date	Depth to LNAPL(1) (feet)	Depth to Groundwater ⁽¹⁾ (feet)	LNAPL Thickness	Groundwater Elevation ⁽²⁾	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl-	10		141			Dissolved
MW65	VEHID	05/14/08	(reet)	40.37	(feet)	(feet) 310.37	<100			benzene ⁽⁵⁾	Total Xylenes ⁽⁴⁾	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Lead ⁽⁵⁾
TOC:	350.74	02/03/09	_	42.89		310.37	<100	8.6	<1	<1	<3		-	-	2.69	<1
100.	330.74	03/02/10		39.32		307.85	<100	6.1	<1	<1	<2	<1	-	-	-	,—·
		07/08/10		39.65		311.42	<100	5	5	1	6	<1	<1	<1		_
		10/12/10		41.92		308.82					Not sampled;					
TOC:	353.12	03/07/12					400			1	Not sampled;					
100.	555.12	06/05/12		42.14 39.76	_	310.98	<100	<1	<1	<1	<3	<1	_	<1		-
						313.36	<100	<1	<1	<1	<3	<1	_		-	_
		09/11/12		41.63	_	311.49	<100	<1	<1	<1	<3	<1	_	-	-	_
		12/05/12		41.00		312.12	<100	<0.35	<1	<1	<3	<1	_	<1	-	
MW66		02/19/13		36.95		316.17	<100	0.61	<1	<1	<3	<1	_	-	-	_
	252.42	05/14/08		41.27	_	312.15	<100	<1	<1	<1	<3	_	-	-	2.00	<1
TOC:	353.42	03/03/10	_	40.16	_	313.26	<100	<1	<1	<1	<3	<1	<1	<1	-	_
TO6	255.00	07/08/10	_	40.50	_	312.92					Not sampled;	just gauged				
TOC:	355.82	03/07/12		42.97		312.85	<100	<1	<1	<1	<3	-	-	-	_	_
		06/05/12	_	40.61	_	315.21	<100	<1	<1	<1	<3	-	-	-	_	_
		09/11/12		42.16	_	313.66	<100	<1	<1	<1	<3	_	_	-	_	_
		12/04/12	_	42.52	_	313.30	<100	<1	<1	<1	<3	_	_	-	_	_
		02/20/13		37.72		318.10	<100	<1	<1	<1	<3	_	_	_	_	_
MW67		05/14/08	_	12.79	-	340.58	<100	<1	<1	<1	<3	_	-	_	<1	<1
TOC:	353.37	03/01/10	_	11.71		341.66	<100	<1	<1	<1	<3	<1	<1	<1	-	-
		07/08/10	_	12.88	_	340.49					Not sampled;	just gauged				
TOC:	355.76	03/06/12		14.43	_	341.33	<100	<1	<1	<1	<3	_	_	-	_	_
		06/04/12	_	12.64	_	343.12					Not sampled;	just gauged			•	
		09/10/12	_	15.22		340.54					Not sampled;	just gauged				
		12/03/12	1-	15.42	-	340.34					Not sampled;	just gauged				
		02/19/13		9.83		345.93	<100	<1	<1	<1	<3	_	_	_	_	_
MW68		05/14/08	_	12.54	_	340.23	<100	<1	<1	<1	<3	-	-	-	<1	<1
TOC:	352.77	03/01/10		11.29	_	341.48	<100	<1	<1	<1	<3	<1	<1	<1	_	_
		07/08/10	_	12.60	-	340.17					Not sampled;	just gauged		•		
TOC:	355.14	03/06/12		14.10	-	341.04	<100	<1	<1	<1	<3	_	_	-	_	_
		06/04/12	_	12.31	_	342.83					Not sampled;	just gauged				
		09/10/12	1-1	14.91	_	340.23					Not sampled;					
		12/03/12	-	14.90	_	340.24					Not sampled;					
		02/19/13	-	9.56		345.58	<100	<1	<1	<1	<3	_	_	_	_	_
MTCA M	ethod A Clea	nup Levels for Gro	oundwater ⁽⁶⁾				1,000/800 ⁽⁹⁾	5	1,000	700	1,000	20	0.01	5	15	NE

P:\0440 TOC Holdings Co\01-176 Mountlake Terrace\Technical\Tables\2013\QGW\Q1\01-176_2013Q1_GD_F.xisxTable 2 GD



							Ivioun	itlake Terrace, V	Vashington							
V	Vell ID	Sample Date	Depth to LNAPL ⁽¹⁾ (feet)	Depth to Groundwater ⁽¹⁾ (feet)	LNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾ (feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl- benzene ⁽⁵⁾	Total Xylenes ⁽⁴⁾	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Dissolved Lead ⁽⁵⁾
MW69		05/14/08	_	41.59	-	310.37	15,000	14	1.3	380	1,028	_	_	_	9.01	<1
TOC:	351.96	02/03/09	-	44.20	_	307.76	19,000	9.4	1.5	450	2,000	<1	_		_	_
		02/05/09	-	44.01	_	307.95			•	•	Not sampled	; just gauged				
		07/30/09		43.25	_	308.71	6,800	6.7	1.2	11	579	<1	<1	<1	_	_
		03/02/10	<u>-</u>	40.56	_	311.40	8,200	11	12	250	1,100	<1	<1	<1	_	_
TOC:	353.62	03/06/12	_	42.74	_	310.88	5,400	1.5	<1	100	440	<1	_	<1	_	_
		06/05/12	-	40.19	_	313.43	9,700	2,6	15	220	900	<1	_	-	_	_
TOC:	353.78	09/12/12	_	41.77	_	312.01	7,900	7.2	13	170	750	<1	_	-	_	_
		12/04/12	_	41.69	_	312.09	200	1.5	<1	<1	2.8	<1	_	<1	_	_
		02/28/13	-	37.54	_	316.24	7,600	1.5	1.8	130	964	<1	_	_	_	_
MW70		05/14/08	_	41.70	_	310.66	160	9.9	<1	<1	<3	_	_	_	3.23	<1
TOC:	352.36	02/03/09	_	44.22	_	308.14	390	20	<1	<1	15	<1	-	_	_	-
		03/02/10	_	40.62	_	311.74	<100	7	<1	<1	<3	<1	<1	<1	_	_
		07/08/10	_	40.90	_	311.46					Not sampled	; just gauged		•	•	
		10/12/10	-	43.23	_	309.13					Not sampled	; just gauged				
TOC:	353.84	03/06/12	_	42.47	_	311.37	280	7.6	<1	<1	4.1	<1	_	<1	_	-
		06/05/12	-	40.18	_	313.66	<100	2.3	<1	<1	<3	<1	-	-	-	_
TOC:	354.19	09/12/12	_	42.01	_	312.18	<100	2.1	<1	<1	<3	<1	_	_	_	_
		12/04/12		41.83	_	312.36	<100	1.5	<1	<1	<3	<1	-	<1	_	_
		02/28/13	_	37.74	-	316.45	<100	< 0.35	<1	<1	<3	<1	-	-	_	_
MW71		10/09/08		15.32	_	330.28	240,000	38,000	52,000	3,300	16,800	<50	<50	<50	13.3	14.1
TOC:	345.60	07/29/09	13.98	15.34	1.36	331.35					LNA	APL				
		03/01/10	10.42	10.91	0.49	335.08					LNA	APL				
MW72		10/09/08	_	17.90	_	327.17	160,000	13,000	34,000	3,200	18,600	<10	<10	<10	2.76	2.99
TOC:	345.07	07/29/09	_	16.67	_	328.40	98,000	9,600	24,000 ^{ve}	1,900	15,700	<1	1.4	<1	_	_
		03/01/10	_	13.03	_	332.04	520	22	45	14	37	<1	<1	<1	_	-
MW73		10/09/08	-	39.88	_	305.15	64,000	12,000	5,900	1,100	6,400	190	<10	<10	2.36	<1
TOC:	345.03	07/29/09	-	39.28	-	305.75	83,000	18,000 ^{ve}	8,300	720	3,800	71	<1	<1	-	_
		03/01/10		36.57	_	308.46	79,000	20,000	7,400	1,700	6,900	120	<1	<1	_	
MW74		10/09/08	_	39.35	_	306.27				Not samp	led; insufficient wa	iter to fill sample	containers		_	
TOC:	345.62	03/01/10		36.91	_	308.71	75,000	26,000	3,500	860	3,800	720	<1	<1	-	_
MW75		11/07/08		44.64	_	307.79	<100	<1	<1	<1	<2	-	-	-	19.9	<1
TOC:	352.43	03/02/10	_	40.44	_	311.99	<100	<1	<1	<1	<3	<1	<1	<1	<1	<1
TOC:	354.84	03/07/12		43.47		311.37	<100	<1	<1	<1	<3	_	-	-	<1	<1
		02/19/13		32.28		322.56	<100	<1	<1	<1	<3		_	-	-	
MW76	Sport 1002	02/03/09		40.18	_	309.18	<100	<1	<1	<1	<2	<1	-	-	3.46	<1
TOC:	349.36	03/01/10		37.28		312.08	<100	<1	<1	<1	<3	<1	<1	<1	-	_
TOC:	351.74	07/08/10	-	37.75		313.99					Not sampled;					
		10/12/10		40.43	-	311.31					Not sampled;	; just gauged				
		03/06/12		40.24	-	311.50	<100	<1	<1	<1	<3	<1	_	<1	-	_
		06/04/12	_	37.89	_	313.85					Not sampled;					
		09/10/12	_	39.80		311.94					Not sampled;					
		12/03/12	_	39.63	-	312.11					Not sampled;	; just gauged				
		02/19/13	-	35.11		316.63	<100	<0.35	<1	<1	<3	<1	-		-	_
MTCA M	ethod A Clea	nup Levels for Gro	oundwater ⁽⁶⁾				1,000/800 ⁽⁹⁾	5	1,000	700	1,000	20	0.01	5	15	NE

P:\0440 TOC Holdings Co\01-176 Mountlake Terrace\Technical\Tables\2013\QGW\\Q1\01-176_2013Q1_GD_F.xisxTable 2 GD



W	ell ID	Sample Date	Depth to LNAPL ⁽¹⁾ (feet)	Depth to Groundwater ⁽¹⁾ (feet)	LNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾ (feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl- benzene ⁽⁵⁾	Total Xylenes ⁽⁴⁾	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Dissolved Lead ⁽⁵⁾
MW77		02/03/09	_	40.09		307.53	<100	<1	<1	<1	<2	<1	_	_	5.21	<1
TOC:	347.62	03/01/10	-	36.51	_	311.11	<100	<1	<1	<1	<3	<1	<1	<1	J.21 —	-
TOC:	349.98	07/08/10	_	36.91	_	313.07					Not sampled;		- 1	1 12		
		10/12/10	_	39.22	_	310.76	<100	<1	<1	<1	<2	<1	<1	<1	<1	<1
		03/06/12	_	39.20	-	310.78	<100	<1	<1	<1	<3	<1	_	<1	_	
		06/05/12	_	37.04	_	312.94	<100	<1	<1	<1	<3	<1	_		_	-
		09/11/12	-	38.65	_	311.33	<100	<1	<1	<1	<3	<1	_	_	_	_
		12/04/12		37.33	_	312.65	<100	<0.35	<1	<1	<3	<1	_	<1	1 -	_
		02/19/13	_	34.20	_	315.78	<100	<0.35	<1	<1	<3	<1	_	_		_
MW78		02/03/09	_	37.32	-	310.26	<100	<1	<1	<1	<2	<1	_		2.61	<1
TOC:	347.58	03/01/10	_	34.57	1-0	313.01	<100	<1	<1	<1	<3	<1	<1	<1		_
TOC:	349.97	10/12/10	_	37.30	_	312.67					Not sampled;		1	1 1		
		03/06/12	_	36.88	_	313.09	<100	<1	<1	<1	<3	<1		<1	_	_
		06/04/12	_	35.06	_	314.91	1200			- 12	Not sampled;			\1		
		09/10/12	_	36.73	_	313.24					Not sampled;					
		12/03/12	_	37.06	_	312.91					Not sampled;					
		02/19/13	-	32.38	_	317.59	<100	<0.35	<1	<1	<3	<1	_	I -	T -	_
MW79		07/08/10	_	13.41	_	340.62	<100	<0.35	<1	<1	<2	<1	<1	<1	<1	<1
TOC:	354.03	03/07/12		13.39	_	340.64	<100	<1	<1	<1	<3	_	_	-		
		06/04/12	_	12.78	_	341.25	100	11	1	1	Not sampled;	just gauged				
		09/10/12	-	16.91	_	337.12					Not sampled;					
		12/03/12	_	14.10	_	339.93					Not sampled,					
		02/19/13	_	9.07	_	344.96	<100	<1	<1	<1	<3	Just gaugeu			_	_
MW80		07/08/10	_	14.22	_	339.66	<100	<0.35	<1	<1	<2	<1	<1	<1	<1	<1
TOC:	353.88	10/12/10	_	18.69	_	335.19	100	10.55		1	Not sampled;		'1	1	(1	<1
		03/07/12	_	14.30	_	339.58	<100	<1	<1	<1	<3	Just gaugeu	_	_	T -	_
		06/04/12	_	13.42	_	340.46	1200			1	Not sampled;	iust gauged				
		09/10/12	_	17.28	_	336.60					Not sampled;					
		12/03/12	_	15.41	_	338.47					Not sampled;					
		02/19/13	_	9.87	_	344.01	<100	<1	<1	<1	<3	–	_	_	1 -	_
W81		07/08/10	_	40.78	_	315.03	<100	<0.35	<1	<1	<2	<1	<1	<1	<1	<1
TOC:	355.81	10/12/10	_	43.02	_	312.79	1200	10.55		- 1	Not sampled;		12	1	1 1	<u> </u>
		03/06/12	_	43.22	_	312.59	<100	<1	<1	<1	<3	Just gaugeu	_	_	_	_
		06/04/12	_	40.73	_	315.08	-200	-1	-11	11	Not sampled;	iust gauged				
		09/10/12	_	42.49	_	313.32					Not sampled;					
		12/03/12	_	42.67	_	313.14					Not sampled;					
		02/19/13	_	38.00	_	317.81	<100	<1	<1	<1	<3	Just gauged —				
MW82		07/08/10	_	26.74	_	328.91	<100	<0.35	<1	<1	<2	<1	<1	<1	-	-
TOC:	355.65	10/12/10		29.64	_	326.01	100	NU.33	\1	×1	Not sampled;			<1	<1	<1
	355.05	03/07/12	_	28.58		327.07	<100	<1	<1	<1		Just gauged			1	
	ŀ	06/04/12		28.99	_	326.66	<100	<1	<1	<1	<3		_	_	_	_
	ŀ	09/10/12	_	29.63		326.02					Not sampled;					
	ŀ	12/03/12	_	29.53							Not sampled;					
	-	02/19/13		29.51		326.14	.100				Not sampled;	just gauged		ı —		
		nup Levels for Gro		21.81		327.78	<100 1,000/800 ⁽⁹⁾	<1 5	<1 1,000	700	1,000	20	0.01	-	15	NE

P:\0440 TOC Holdings Co\01-176 Mountlake Terrace\Technical\Tables\2013\QGW\Q1\01-176_2013Q1_GD_F.xlsxTable 2 GD



			Depth to	Depth to Groundwater ⁽¹⁾	LNAPL Thickness	Groundwater Elevation ⁽²⁾		dake ferrace, v		Ethyl-						Dissolved
	Vell ID	Sample Date	(feet)	(feet)	(feet)	(feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	benzene ⁽⁵⁾	Total Xylenes ⁽⁴⁾	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Lead ⁽⁵⁾
MW83		07/08/10	_	19.56	-	334.02	<100	<0.35	<1	<1	<2	<1	<1	<1	16.1	<1
TOC:	353.58	10/12/10	_	28.74	_	324.84					Not sampled	; just gauged				
		11/21/11							NED (REPL	ACED WITH	MW100)					
MW84		10/12/10	_	44.29	-	309.38	1,900	0.71	<1	17	48	<1	<1	<1	<1	<1
TOC:	353.67	03/07/12	-	42.66	-	311.01	680	<1	1.6	5	14	<1	_	<1	_	_
		06/05/12	-	40.78	_	312.89	990	<1	2.5	11	28	<1	_	_	-	_
		09/12/12	-	42.09	_	311.58	1,200	2.0	2.9	8.5	28	<1	_	_	_	_
		12/05/12		42.02	_	311.65	1,000	0.45	<1	17	41	<1	_	<1	_	_
		02/28/13		37.90		315.77	4,700	1.9	2.0	150	551	<1	_	_	_	_
MW85		10/11/10				WELL	DAMAGED D	URING INST	TALLATION,	REPAIRED	ON NOVEMB	ER 28, 201	1		•	
TOC:	351.34	03/06/12	_	40.48	_	310.86	<100	3.1	<1	<1	<3	<1	_	<1	<1	<1
		06/05/12	_	38.25	_	313.09	<100	1.8	<1	<1	<3	<1	_	_	_	_
		09/11/12	-	39.83	_	311.51	<100	1.4	<1	<1	<3	<1	_	_	-	_
		12/04/12	_	39.73	_	311.61	<100	<0.35	<1	<1	<3	<1	_	<1	_	_
		02/19/13	5 4_	35.44	_	315.90	<100	0.46	<1	<1	<3	<1	_	_	-	1-
MW86		10/12/10	-	41.89	_	310.89	1,100	1.9	<1	<1	<2	<1	<1	<1	<1	<1
TOC:	352.78	03/06/12	::	42.02	_	310.76	140	3.8	<1	<1	<3	<1	_	<1	_	_
		06/05/12	_	39.74	_	313.04	130	1.1	<1	<1	<3	<1	_	_	_	_
		09/11/12	-	41.24	_	311.54	1,600	2.6	5.8	3.1	4.5	<1	_		_	_
		12/04/12	_	41.12	_	311.66	860	0.77	<1	1.7	4.6	<1	_	<1		_
		02/19/13	_	36.95	_	315.83	<100	1.1	<1	<1	<3	<1	_	_	_	_
MW87		10/12/10	_	39.03	_	310.75	<100	< 0.35	<1	<1	<2	<1	<1	<1	<1	<1
TOC:	349.78	03/06/12	_	38.89	_	310.89	<100	<1	<1	<1	<3	<1	_	<1		_
		06/04/12	_	36.92	_	312.86					Not sampled:					
		09/10/12	a	38.53	_	311.25					Not sampled;					
		12/03/12	_	38.46	_	311.32					Not sampled;					
		02/19/13	_	34.10	_	315.68	<100	< 0.35	<1	<1	<3	<1	_	_	_	_
MW88		10/12/10	_	22.11	-	329.56	<100	<0.35	<1	<1	<2	<1	<1	<1	<1	<1
TOC:	351.67	03/06/12	_	14.91	-	336.76	<100	<1	<1	<1	<3	_	_	_		_
		06/04/12	_	15.13		336.54					Not sampled;	iust gauged				
		09/10/12	_	20.05	_	331.62					Not sampled;					
		12/03/12	_	19.04	_	332.63					Not sampled;					
		02/19/13	_	9.74	_	341.93	<100	<1	<1	<1	<3	, Just gaugeu —	_	_	_	_
MW89		10/12/10	_	42.66	_	311.23	<100	<0.35	<1	<1	<2	<1	<1	<1	<1	<1
TOC:	353.89	03/06/12	_	42.89	_	311.00	<100	<1	<1	<1	<3	<1	-	<1	-	
		06/05/12	_	40.51	_	313.38	<100	<1	<1	<1	<3	<1		-		
		09/11/12	_	42.08	_	311.81	<100	<1	<1	<1	<3	<1			-	
		12/04/12	_	42.12		311.77	<100	<0.35	<1	<1	<3					
		02/19/13		37.69		316.20	<100	<0.35	<1	<1		<1		<1	-	
MTCA NA	othod A Class	nup Levels for Gro		37.03	_	310.20	1,000/800 ⁽⁹⁾	<0.35 5	1,000	700	1,000	<1 20	0.01	5	15	NE



V	Vell ID	Sample Date	Depth to LNAPL ⁽¹⁾ (feet)	Depth to Groundwater ⁽¹⁾ (feet)	LNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾ (feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl- benzene ⁽⁵⁾	Total Xylenes ⁽⁴⁾	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Dissolved Lead ⁽⁵⁾
MW90		03/05/12	24.66	24.75	0.09	338.03					LNA					2000
TOC:	362.71	06/04/12	22.19	22.33	0.14	340.49					LNA	APL				
TOC:	362.90	09/10/12	24.80	25.18	0.38	338.02					LNA	APL				
		12/03/12	_	28.69	-	334.21					Not sampled	, just gauged				
		02/28/13	19.05	19.10	0.05	343.84	30,000	27	1,900	770	5,500	_	_	_	1.19	<1
MW91		03/08/12	-	24.87	1	337.71	15,000	36	95	410	3,100	_	_	_	15.9	<1
TOC:	362.58	06/04/12	23.49	23.50	0.01	339.09					LNA	APL				
TOC:	362.73	09/10/12	26.29	26.48	0.19	336.40					LNA	APL				
		12/03/12	_	26.64	_	336.09					Not sampled,	iust gauged				
		02/28/13	_	19.58	_	343.15	22,000	41	380	750	5,400	_	_	_	3.01	<1
MW92		03/06/12	_	45.45	_	312.87	<100	<1	<1	<1	<3	_	_		4.19	<1
TOC:	358.32	06/04/12	-	42.95	_	315.37			•	•	Not sampled:	iust gauged				
TOC:	357.93	09/10/12	-	41.12	-	317.20					Not sampled:					
		12/03/12	-	44.61	_	313.32					Not sampled:					
		02/28/13	·—	39.78	_	318.15	<100	1.1	<1	<1	<3	_	_			_
MW93		03/06/12	_	43.00	_	312.73	<100	<1	<1	<1	<3	_	_		5.60	<1
TOC:	355.73	06/04/12	_	40.64	_	315.09					Not sampled;	iust gauged				
TOC:	356.05	09/10/12	-	Dry	_	-					Not sampled;					
		12/03/12	_	41.83	_	314.22					Not sampled;					
		02/28/13		37.76	_	318.29	<100	<1	<1	<1	<3	_	_	_		_
MW94		03/06/12	-	45.13	-	313.11	<100	<1	<1	<1	<3	_	-		<1	<1
TOC:	358.24	06/04/12	_	43.22	_	315.02					Not sampled;	iust gauged	I.	1		
TOC:	358.01	09/10/12	-	Dry	-	1-					Not sampled;					
		12/03/12	_	39.83	_	318.18					Not sampled;					
		02/28/13	_	38.16	_	319.85	<100	8.9	1.1	<1	<3	_		_		_
MW95		03/07/12	_	42.95	_	311.47	<100	<1	<1	<1	<3	<1	_	<1	2.74	<1
TOC:	354.42	06/04/12	_	40.56	-	313.86					Not sampled;				2.74	
TOC:	354.73	09/10/12	_	42.70	_	312.03					Not sampled;					
		12/03/12	_	42.42	-	312.31			_		Not sampled;					
		02/28/13	_	37.92	_	316.81	<100	<0.35	<1	<1	<3	<1	_		T - T	_
MW96		03/07/12	_	44.01	-	311.82	<100	<1	<1	<1	<3	<1		<1	11.4	<1
TOC:	355.83	06/04/12	-	41.44	-	314.39					Not sampled;				****	
гос:	356.06	09/10/12	-	45.50	_	310.56					Not sampled;					
		12/03/12	_	42.19	-	313.87					Not sampled;					
		02/28/13	_	37.59	_	318.47	240	6.0	<1	<1	54	<1	_	_	T _ I	_
MW97		03/07/12	_	43.18	-	311.46	420	9.4	<1	<1	3.4	<1		<1	2.07	<1
гос:	354.64	06/04/12	-	40.79	_	313.85				-	Not sampled;			1 1	2.07	<u></u>
TOC:	354.31	09/10/12	_	42.06	_	312.25					Not sampled;					
		12/03/12	_	41.83	-	312.48					Not sampled;					
		02/28/13	_	37.62	_	316.69	110	1.7	<1	<1	<3	Just gauged <1	_		T _ T	
ИТСА М	ethod A Clea	nup Levels for Gro	undwater ⁽⁶⁾				1,000/800 ⁽⁹⁾	5	1,000	700	1,000	20	0.01	5	15	NE NE

33 of 34



Table 2 Summary of Historical Groundwater Analytical Results June 1992 through February 2013

TOC Holdings Co. Facility No. 01-176 24205 56th Avenue West Mountlake Terrace, Washington

W	Vell ID	Sample Date	Depth to LNAPL ⁽¹⁾ (feet)	Depth to Groundwater ⁽¹⁾ (feet)	LNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾ (feet)	GRPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl- benzene ⁽⁵⁾	Total Xylenes ⁽⁴⁾	MTBE ⁽⁴⁾	EDB ⁽⁴⁾	EDC ⁽⁴⁾	Total Lead ⁽⁵⁾	Dissolved Lead ⁽⁵⁾
MW98		03/08/11	-	43.04	-	311.45	3,800	13	4.6	56	130	<1	_	<1	1.87	<1
гос:	354.49	06/04/12	-	40.73	_	313.76					Not sampled;	just gauged				
TOC:	354.75	09/10/12	-	43.30	-	311.45					Not sampled;	just gauged				
		12/03/12	-	42.27	_	312.48					Not sampled;	just gauged				
		02/28/13	_	38.03	_	316.72	810	7.6	1.5	13	45	<1	_	_	_	_
MW99		03/06/12	_	42.47	-	310.95	<100	2.1	<1	<1	<3	<1	_	<1	1.08	<1
TOC:	353.42	06/04/12	_	40.45	-	312.97					Not sampled;	just gauged				
TOC:	353.65	09/10/12	_	Dry	-	-					Not sampled;	just gauged				
		12/03/12	_	38.04	-	315.61					Not sampled;	just gauged				
		02/28/13		37.48	_	316.17	<100	<0.35	<1	<1	<3	<1	_	_	_	_
MW100		03/06/12	_	15.73	-	340.08	<100	<1	<1	<1	<3	_	_	_	50.6	1.15
TOC:	355.81	06/04/12	_	15.61	-	340.20					Not sampled;	just gauged				
		09/10/12	_	19.18	_	336.63					Not sampled;					
		12/03/12	_	17.48	_	338.33					Not sampled;	just gauged				
		02/19/13		11.45		344.36	<100	<1	<1	<1	<3	_	_	_	<1	<1
MW101		03/06/12	_	40.90	-	311.02	<100	<1	<1	<1	<3	<1	_	<1	22.6	<1
OC:	351.92	06/04/12	-	38.99	-	312.93					Not sampled;	just gauged				
OC:	352.12	09/10/12	-	40.54	_	311.58					Not sampled;					
		12/03/12	_	43.95	_	308.17					Not sampled;					
		02/28/13	_	36.11	-	316.01	<100	<0.35	<1	<1	<3	<1	_	_	20.30	1.45
итса м	ethod A Clea	nup Levels for Gro	undwater ⁽⁶⁾				1,000/800(9)	5	1,000	700	1,000	20	0.01	5	15	NE

NOTES:

Results measured in µg/L.

Red denotes concentration exceeds MTCA Method A cleanup level.

Data collected since December 2005 analyzed by Friedman & Bruya, Inc. of Seattle, Washington. Data collected from September through December 2005 analyzed by North Creek Analytical, Inc., of Bothell, Washington. Data collected prior to 7/8/05 provided by previous consultants.

Laboratory Notes

³The pattern of peaks present is not indicative of diesel. The result is due to overlap from the gasoline range.

^{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. ¹The result is below normal reporting limits. The value reported is an estimate.

— = not measured/not applicable

< = not detected at concentration exceeding the laboratory reporting limit

μg/L = micrograms per liter

Dry = groundwater not encountered in well

EDB = 1,2-dibromoethane

EDC = 1,2-dichloroethane

EPA = U.S. Environmental Protection Agency

 ${\sf GRPH = gasoline\text{-}range\ petroleum\ hydrocarbons}$

LNAPL = light non-aqueous phase liquid

MTBE = methyl tertiary-butyl ether

MTCA = Washington State Model Toxics Control Act

NA = not applicable per referenced footnote number

NE = Cleanup level not established for indicated compound

Sheen = iridescence on water surface indicative of LNAPL

TOC = top of casing (elevations for monitoring wells MW01 through MW25 from previous consultants)

Trace = less than 0.01 of measurable LNAPL

⁽¹⁾ Depth to water and LNAPL as measured from a fixed spot on the well casing rim.

⁽²⁾ Groundwater elevation measured relative to a temporary benchmark (data from previous consultants). Since July 2005, groundwater elevations corrected for LNAPL thickness, assuming specific gravities of 0.80 for a mixture of gasoline and diesel, and 1.0 for groundwater.

⁽³⁾ Analyzed by Northwest Total Petroleum Hydrocarbon Method NWTPH-Gx.

⁽⁴⁾ Analyzed by EPA Method 8260B, 8021B, or 8260C.

⁽⁵⁾ Analyzed by EPA Method 200.8.

⁽⁶⁾ MTCA Cleanup Regulation, Method A Cleanup Levels, Table 720-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, revised November 2007.

⁽⁷⁾Insufficient recharge to fill specified sample container.

⁽⁸⁾ Monitoring well converted to a remediation well; TOC elevation change presented where appropriate.

 $^{^{(9)}}$ 1,000 µg/L when benzene is not present and 800 µg/L when benzene is present.



Sample P	Property	Sample	Ethanol ⁽¹⁾	ТВД(1)	Oxyge MTRE ⁽¹⁾	Oxygenates (1) FTRE(1)	TAME ⁽¹⁾	DIPE ⁽¹⁾	
		09/26/05	<150	<50.0	<5.00	<1.00	<1.00	<1.00	00
MW01	Toc	02/24/06	<1,000	<50	ΔΔ	4 4	Δ Δ	4	
		08/24/06	<1,000	<50	Δ	Δ	Δ	Δ	
				D	E C O M	M I S S	т	D	
		12/21/05	<1,000	<200	Δ	Δ		Δ	Ц
- 11100	1	02/23/06	<1,000	<50	Δ	4	Δ	Δ	
MW02	TOC	08/23/06	<1,000	<50	Δ	<1	Δ	Δ	
		03/04/10	<1,000	<50	<1	<1	4	<1	Ц
-		09/27/05	<150	<50.0	<5.00	<1.00	<1.00	<1.00	
MWOS	TOC	02/22/06	<1,000	<50	Δ	Δ	Δ	4	
INTERNATION OF	Š	08/23/06	<1,000	<50	Δ	Δ	Δ	Δ	
		03/04/10	<1,000	<50	Δ	Δ	Δ	4	L
		02/22/06	<1,000	<50	Δ	4	Δ	4	_
MW04	ROW	08/23/06	<1,000	<50	Δ	Δ	Δ	Δ	_
		03/02/10	<1,000	<50	Δ	41	Δ	<1	1
		09/27/05	<150	<50.0	<5.00	<1.00	<1.00	<1.00	+
MW05	ROW	02/22/06	<1,000	<50	4	41	Δ	4	-
		03/02/10	<1,000	<50	Δ	4	Δ	Δ	1
		09/26/05	<150	<50.0	<5.00	<1.00	<1.00	<1.00	-
MW06	TOC	02/24/06	<1,000	<50	Δ	Δ	Δ	Δ	-
+		03/04/10	<1,000	<50	Δ	4	Δ	4	-
MW07 TOC,	TOC/Farmasonis			D	E	M - S S	m	D	-
NAMOS	BOW	02/22/06	<1,000	<50	Δ	Δ	Δ	Δ	+
MW08	ROW	08/23/06	<1,000	<50	4	4	Δ	4	+
		03/02/10	<1,000	<50	Δ	41	Δ	Δ	+
		09/27/05	<150	<50.0	<5.00	<1.00	<1.00	<1.00	+
WW09	TOC	02/23/06	<1,000	<50	4	7	Δ	Δ	+
		08/24/06	<1,000	<50	Δ	4	Δ	Δ	+
		03/04/10	<1,000	<50	41	4	4	Δ	-
		09/26/05	<150	<50.0	<5.00	<1.00	<1.00	<1.00	+
		12/20/05	<1,000	<200	41	4	Δ	Δ	_
MW10	TOC	02/24/06	<1,000	<50	Δ	4	Δ	4	-
		08/24/06	<1,000	<50	Δ	Δ	Δ	Δ	
		03/04/10	<1,000	<50	Δ	Δ	Δ	Δ	+
		09/27/05	<150	<50.0	<5.00	<1.00	<1.00	<1.00	-
		12/21/05	<1,000	<200	Δ	Δ	Δ	Δ	
MW11	TOC	02/22/06	<1,000	<50	Δ	Δ	Δ	Δ	-
		08/23/06	<1,000	<50	4	4	Δ	Δ	-
		03/04/10	<1,000	<50	4	4	Δ	4	-
		09/26/05	<150	<50.0	<5.00	<1.00	<1.00	<1.00	-
MW12	ROW	02/23/06	<1,000	<50	Δ	Δ	Δ	Δ	-
-		08/23/06	<1,000	<50	Δ	Δ	Δ	Δ	-
		03/02/10	<1,000	<50	Δ	4	Δ	Δ	-
MW13	ROW	02/02/06	<1,000	<50	4	<1	Δ	Δ	
- TANISI	NOW	03/04/10	<1,000	<50	Δ	4	Δ	Δ	\vdash
MW14 TOC/	TOC/Farmasonis	The second second		D	E C O M	MISS	ONE	D	
+	Toc	03/01/10							- 1
MW16	ROW	03/02/10	<1.000	<50	Δ	4	Δ	Δ	\dashv
+	/Farmasonis	01/20/50	, T,000	000	F C	N	7	4	H
+	I OC/Farmasonis					-	2	1	-
MW18	TOC	03/04/10	<1,000	<50	4	4	Δ	4	-
		02/24/06	<1,000	<50	Δ	4	Δ	Δ	-
MW19	TOC	08/24/06	<1,000	<50	Δ	<1	Δ	4	_
		03/04/10	<1,000	<50	Δ	Δ	Δ	Δ	-
		12/20/05	<1,000	<200	<1	<1	42	4	
MW20	TOC	02/23/06	<1,000	<50	Δ	Δ	Δ	Δ	-
		03/04/10	<1,000	<50	41	<1	Δ	Δ	-
				NE	30		-	NIT	-



Sample Location	Property Owner	Sample Date	Ethanol ⁽¹⁾	TBA ⁽¹⁾	Oxyge MTBE ⁽¹⁾	Oxygenates [1] ETBE ^[1]	TAME ⁽¹⁾			DIPE(a)
		12/20/05	<1,000	<200	<5.00	<1.00		<1.00	<1.00 <1.00	
MW21	TOC	02/23/06	<1,000	<50	. Δ	Δ		Δ		Δ
		08/23/06	<1,000	<50	ΔΔ	Δ Δ		ΔΔ	Δ Δ	+
		09/26/05	<150	<50.0	<5.00	<1.00		<1.00		<1.00
MW22	Toc	12/20/05	<1,000	<200	Δ	Δ		2 4	+	+
	į	08/24/06	<1,000	< 50	Δ	Δ 4		۵	Δ .	Δ ,
		03/04/10	<1,000	<50	Δ	4		<1		
MW23	TOC	02/23/06	<1,000	<50	Δ	Δ		. 4		Δ
		09/27/05	<150	<50.0	<5.00	<1.00	0	0 <1.00	+	4.00
		02/22/06	<1,000	<50	Δ	4			Δ	Δ Δ
ACMM	100	08/23/06	<1,000	<50	Δ	Δ	1		Δ	Δ
#7 AA IAI	Š	02/03/09	1	1	Δ	1	ľ	1	1	1
		07/30/09	1	<50	Δ	^	4		Δ	4
		03/04/10	<1,000	<50	Δ		<1			Δ
		09/27/05	<150	<50.0	<5.00	^	<1.00	_	<1.00 <	<1.00 <1.00
		12/21/05	<1,000	<200	4		4	4 4		Δ
MW25	TOC	02/23/06	<1,000	<50	Δ		Δ			Δ
		08/24/06	<1,000	<50	Δ		Δ		Δ	7 7 0
		12/21/05	<1,000	<200	Δ 4		2 4	A 4	1	Δ 4
	100	02/23/06	<1,000	<50	Δ		Δ.	1	Δ	Δ Δ
OZ AAIAI	Ö	08/24/06	<1,000	<50	Δ	4	1		Δ	D D
		03/04/10	<1,000	<50	Δ	_	4	1 4		Δ
	100	12/20/05	<1,000	<200	Δ	4			Δ.	Δ. Δ
17 44 141	5	03/04/10	<1,000	^50	ΔΔ	۵ ۵		2 0		2 0
		12/20/05	<1,000	<200	Δ 4	4		1	Δ 4	Δ Δ
MW28	Toc	02/24/06	<1,000	<50	Δ	Δ 4		Δ ,		
		03/04/10	<1,000	<50	Δ	Δ			Δ	4
MW29	201	02/23/06	<1,000	<50	Δ	4			Δ	4
		03/04/10	<1,000	<50	Δ	4			Δ	Δ
_		90/25/50	<1,000	450	2 4	2 4		Δ 4	1	Δ 4
MW30	TOC/Farmasonis	08/24/06	<1,000	<50	Δ	1			Δ	Δ Δ
		03/03/10	<1,000	<50	Δ	Δ			Δ	Δ
		12/15/05	<20,000	<4,000	<20	<20			<20	<20 <20
_	100/1	02/23/06	<1,000	<50	Δ	Δ		. Δ		Δ
MWSI	IOC/Farmasonis	08/24/06	<1,000	<50	Δ	4 4		Δ		Δ Δ
		03/03/10	<1.000	<50	ΔΔ	Δ Δ		ΔΔ	Δ Δ	
		12/20/05	<1,000	<200	Δ	1>		Δ		Δ
MW32	TOC	02/23/06	<1,000	<50	Δ	7		Δ	4 4	Δ
		03/04/10	<1,000	<50	Δ	<1		Δ	Δ	<1 <1
EEWM	TOC	02/10/06	<1,000	<50	Δ	1>				4
CCAAIAI	ioc	03/04/10	<1,000	<50	Δ	12		4	-	Δ
		01/27/06	<1,000	<50	Δ	4		Δ		Δ
MW34	TOC	08/23/06	<1,000	<50	Δ	Δ		Δ		Δ
		03/04/10	<1,000	<50	Δ	Δ		Δ		Δ
MW35	Toc	01/27/06	<1,000	<50	Δ	Δ		Δ		Δ
		03/04/10	1	1	1	1		1		1
2000	100	01/27/06	<1,000	<50	Δ	Δ		Δ		Δ
		03/04/10	<1,000	<50	Δ	Δ .		Δ ,	Δ .	
(2)	(2)		NE	NE	20	NE	"	+	NE.	NE NE



					CONTRACTOR OF THE PROPERTY OF					MODELLE DESCRIPTION OF THE PROPERTY AND
Sample	Property	Sample	Ethanol ⁽³⁾	TBA ⁽¹⁾	MTBE ⁽¹⁾	ETBE ⁽¹⁾	TAME(1)	DIPE ⁽¹⁾	EDB ⁽¹⁾	EDC ⁽¹⁾
		90/12/10	21,000	VEO	7	7	7	7	7	7
MW37	TOC	00/17/10	7,000	250	7 7	7 7	7 7	7 5	7 1	7 1
	2	08/24/06	7,000	200	7 7	7 7	7 7	7 7	1 7	7
		01/27/06	<1,000	\$50 \$50	7 0	7 0	7 5	7 0	7 0	7 0
MW38	700	08/23/06	<1,000	<50	7 0	, .	· V	7	1	1
		03/04/10	<1,000	<50	7 17	7 0	7 0	7 0	D	7
		02/02/06	<1,000	<50	7	₽	7	7	D	7
MW39	TOC/Farmasonis	08/24/06	<1,000	<50	7	₽	7	4	1	1
	200	03/03/10	<1,000	<50	<1	7	7	Þ	₽	7
NAVA/AO	TOC/Earmaconic	08/24/06	<1,000	<50	4	41	4	D		1
O. Land	2000	03/03/10	<1,000	<50	<1	₽	4	d	₽	7
MW41	TOC/Farmasonis	03/04/10				DRY	4.4			
MW42	TOC/Farmasonis	03/04/10				DRY	37			
MW43	ROW	03/04/10				D	48			
MW44	ROW	03/04/10				DRY	44			THE CO.
AANA/AE	WOR	08/24/06	<1,000	<50	41	4	41	<1	1	1
IVIVA43	NOW Y	03/02/10	<1,000	<50	<1	₽	<1	<1	7	7
MW46	ROW	03/03/10	<1,000	<50	41	₽	₽	7	4	₽
MW47	ROW	03/04/10	<1,000	<50	<1	4	4	<1	4	7
MW48	ROW	03/01/10				LNAPL	4PL			
MW49	ROW	03/04/10	<1,000	<50	₽	7	7	4	4	7
MWS0	ROW	03/02/10	<1,000	<50	<1	7	4	<1	4	7
MWS1	BOW	03/02/10	<1,000	<50	₽	4	7	4	41	4
		10/12/10	<1,000	<50	₽	41	41	41	41	7
MW52	ROW	03/02/10	<1,000	<50	7	7	7	41	<1	7
MW53	ROW	03/03/10	<1,000	<50	₽	₽	7	D	4	₽
MW54	TOC/Farmasonis	03/03/10	<1,000	<50	₽	₽	7	₽	7	7
MW55	ROW	03/04/10	<1,000	<50	₽	₽	₽	D	<1	7
MW56	TOC/Farmasonis	02/03/00	1	1 4	₽ ;	1 3	1 3	1 3	1 ,	1
201010	Toole	03/03/10	7,000	200	7 1	7 1	7 5	7 1	7 1	7 00
MWS8	TOC/Farmasonis	03/03/10	<1,000	250	7 0	7 0	7 0	7 0	7 5	2.4
200		02/03/00	200/7	25	7 7	7 1	, ,	, 1	, ,	-
MW59	TOC/Farmasonis	03/03/10	<1.000	<50	7 5	7	7	V	12	0
MWED	BOW	03/03/10	<1,000	<50	7 7	7 5	7 5	7 0	7 0	1.1
MW61	ROW	03/04/10	<1.000	<50	7 5	7 1	7 5		7	1
MW62	ROW	03/03/10	<1.000	<50	7 0	7 0	7 1	7 5	7 5	7
MW63	ROW	03/02/10	<1.000	<50	₽	7	₩ ₩	₩ ₩	7	7
MW64	ROW	03/02/10	<1.000	<50	V	V	7	V	1	2
		02/03/09	200/2	3 1	7	1	1	1	, 1	1
		03/02/10	<1.000	<50	· 5	5	7	V	7	2
		03/07/12	. 1	1	₽	1	1	1	1	7
MW65	Drake	06/05/12	1	1	₽	1	1	1	1	1
		09/11/12	1	ı	7	1	1	1	1	1
		12/05/12	1	1	<1	ı	1	1	1	⊽
		02/19/13	1	_	₽	1	1	1	1	1
MW66	TOC/Farmasonis	03/03/10	<1,000	<50	7	D	4	D	<1	₽
MW67	Drake	03/01/10	<1,000	<50	₽	Cl	4	<1	<1	4
MW68	Drake	03/01/10	<1,000	<50	4	D	4	4	<1	₽
		02/03/09	1	1	7	í	1	1	1	1
		60/30/00	1	<50	7	₽	₽	7	4	⊽
		03/02/10	<1,000	<50	77	7	7	4	7	₽
MW69	Drake	03/06/12	1	1	7	1	1	1	1	₽
		06/05/12	1	1	₹	1	1	1	1	1
		12/21/20	i	1	7 7	ı	1	ı	1	1 7
		12/04/12	1	1	7	ı	1	1	1	75
		7 17 17 17 17	1	1	7					



MTCA Method A(2)	88WM		MW87				MW86					COAAIAI	NAW/85					MW84				MW83	MW82	MW81	MW80	MW79			MW78	2				MW77						MW76		NW/S		MW74	CVANIAI	NAW73		MW72		MW71				MW70				Location	Sample
	Drake		Drake				Drake					Clase			21			Drake				TOC/Farmasonis	TOC/Farmasonis	TOC/Farmasonis	TOC/Farmasonis	TOC/Farmasonis			Drake					Drake						Drake		ROW	7	Shin/Choi	Simily Critici	shin/Choi		Shin/Choi		Shin/Choi				Drake				Owner	Property
	10/12/10	02/19/13	03/06/12	10/12/10	12/04/13	09/11/12	06/05/12	03/06/12	10/12/10	02/19/13	12/04/12	09/11/12	06/05/12	03/06/12	10/11/12	02/28/13	12/05/12	09/12/12	06/05/13	10/12/10	11/21/11	07/08/10	07/08/10	07/08/10	07/08/10	07/08/10	02/19/13	03/06/12	03/01/10	02/03/09	02/19/13	12/04/12	09/11/12	06/05/12	03/06/12	10/12/10	02/03/09	02/19/13	03/06/12	03/01/10	02/03/09	03/02/10	11/07/08	03/01/10	03/01/10	10/9/2008	03/01/10	07/29/09	10/9/2008	03/01/10	10/9/2008	02/28/13	09/12/12	06/05/12	03/06/12	03/02/10	02/03/09	Date	Sample
NE	<1,000	ı	1,000	<1.000	1	1	1	1	<1,000	1	ı	1	1	1		ſ	1	1. 1		<1,000		<1,000	<1,000	<1,000	<1,000	<1,000	1	L	<1,000	(I	1	1	I	1 000	×1,000	21 000	1	1	<1,000	1	<1,000	<1,000	<1,000	<1.000	<10,000	<1,000	1	<10,000		<50,000	i 1	1	1	1	<1,000	1	Ethanol ⁽¹⁾	
NE	<50	ı	1 6	<50		1	1	1	<50	1	ı	1	L		WELL DAMAGED	1	1	1 1	1	<50	1		<50	<50	<50	<50	1	j	<50	ł	1	ļ	1	ſ	1 6	250	1	1	1	<50	ı	<50	<50	130	<50	<500	<50	<50	<500		<2,500	1 1	1	1	1	<50	1	TBA ⁽¹⁾	
20	<1	Δ	Δ 4	4	2 2	2 4	Δ	Δ	Δ	Δ	Δ	Δ	<1	Δ	GED DURIN	Δ	Δ	2 4	7 2	2 4	DECOMMISSIONED	<1	4	Δ	Δ	4	4	Δ	41	4	Δ	4	4	Δ,	<u> </u>	2 4	2 4	4	Δ	4	<1	4	Δ	720	120	190	4	Δ	<10		<50	2 2	Δ	Δ	4	Δ	Δ	MTBE(1)	Охуве
NE	4	ı	1 4	Δ 1		1	T	1	Δ	1	1	1	1	1	DURING INSTALLATION	1	ı	1 1		Δ		1	Δ	Δ	Δ	Δ	1	I	Δ	ſ	ľ	1	I	ľ	1 4	2 4	1 2	1	1	Δ	Ī	Δ	Δ	Δ	Δ Δ	<10	Δ	Δ	<10	LNAPL	<50	1 1	1	I	I	Δ	1	ETBE ⁽¹⁾	Oxygenates
NE	4	ı	1 4	۱ ۵	1 1	1	1	1	Δ	1	1	1	1		`	1	ı	1 1		Δ	0		Δ	Δ	Δ	Δ	ı	1	Δ	ı	ı	1	L	1	1 4	2 2	2 1	1	1	4	1	4	Δ	Δ	Δ Δ	<10	Δ	Δ	<10		<50	1 1	1	1	ı	Δ	1	TAME(1)	
NE	4	ı	1 4	Δ		-	1	1	Δ	1	1	1	1		REPAIRED ON	1	1	1 1	1	Δ	WITH MW100		Δ	<1	4	Δ	-	1	41	ı	1	1	1	1	1 6	2 4	2 1	1	1	4	1	Δ	4	Δ	Δ Δ	<10	4	4	<10		<50	1 1	1	1	1	Δ	1	DIPE(1)	
0.01	4	1	1 4	۱ ۵	1 1	1	1	1	Δ	1	1	1	ı	1	11/28/2011	1	ı	1 1				4	Δ	Δ	Δ	Δ	1	1	Δ	1	1	1	1	t	1 4	2 4	2 1	1	1	Δ	ı	Δ	Δ	Δ	Δ Δ	<10	Δ	1.4	<10		<50	1 1	1	1	1	Δ	1	EDB(11)	Lead Sca
5	41	1 1	Δ	Δ	1 4	2 1	Ĩ	Δ	Δ	ì	Δ	1	1	Δ	11	1 6	Δ	1 1	1 4	Δ		Δ	Δ	Δ	Δ	Δ	1	Δ	Δ	İ	I	Δ	ĵ	1 6	Δ 4	2 4	1 2	-	Δ	Δ	ſ	Δ	Δ	Δ	Δ Δ	<10	Δ	Δ	<10		<50	1 4	1 2	1	Δ	Δ	I	EDC ⁽¹⁾	Lead Scavengers



Table 3 **Summary of Groundwater Analytical Results**

Eight Common Fuel Additives TOC Holdings Co. Facility No. 01-176 24205 56th Avenue West Mountlake Terrace, Washington

Sample	Property	Sample			Oxyge	enates			Lead Sca	vengers
Location	Owner	Date	Ethanol ⁽¹⁾	TBA ⁽¹⁾	MTBE ⁽¹⁾	ETBE ⁽¹⁾	TAME ⁽¹⁾	DIPE ⁽¹⁾	EDB ⁽¹⁾	EDC ⁽¹⁾
		10/12/10	<1,000	<50	<1	<1	<1	<1	<1	<1
		03/06/12	_	_	<1	-	-		-	<1
MW89	Drake	06/05/12	_	_	<1	_	-	_		-
WIWOS	Diake	09/11/12	_	—	<1	-	_	-		-
		12/04/12	_	-	<1	-	-	-	-	<1
		02/19/13	-	_	<1	_	-	_		_
MW95	Drake	03/07/12	-	-	<1	_			-100	<1
IVIVVSS	Diake	02/28/13	-	_	<1	-	-	-	Internal - 177	_
MW96	Drake	03/07/12	-	-	<1	-	_	_	_	<1
WWSO	Diake	02/28/13	_	_	<1	_	_	_	-	-
MW97	Drake	03/07/12	-	-	<1	_	-	_	_	<1
1010097	Diake	02/28/13	-	-	<1		-	_	_	-
MW98	Drake	03/08/12	-	_	<1	_	_		_	<1
IVIVV96	Drake	02/28/13	_	_	<1	_	_	_		
MW99	Drake	03/06/12	-	-	<1	_	-	_	_	<1
IVIVVE	Diake	02/28/13	_	-	<1	_	_	_	_	-
MW101	Drake	03/06/12	-	_	<1	_	-	-	_	<1
	100000000000000000000000000000000000000	02/28/13	-		<1	_		_	_	_
TCA Method	A ⁽²⁾		NE	NE	20	NE	NE	NE	0.01	5

NOTES:

Results measured in micrograms per liter.

Red denotes concentration exceeds MTCA Method A cleanup level.

Samples analyzed by North Creek Analytical, Inc., of Bothell, Washington. Data collected prior to $7/8/05\ provided\ by\ previous\ consultants.\ Data\ collected\ since\ December\ 2005\ analyzed\ by\ Friedman\ \&\ Bruya\ of\ Seattle,\ Washington.$

⁽¹⁾Analyzed by U.S. Environmental Protection Agency Method 8260C.

(2)MTCA Cleanup Regulation, Method A Cleanup Levels, Table 720-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, revised November 2007.

- = not sampled/not analyzed

< = not detected at concentration exceeding the laboratory reporting limit

Dry = groundwater not encountered in well

EDB = 1,2-dibromoethane

EDC = 1,2-dichloroethane DIPE = diisopropyl ether

Drake = Property at 24309 56th Avenue West

Dry = groundwater not encountered in well

ETBE = ethyl tertiary-butyl ether

LNAPL = light non-aqueous phase liquid

MTBE = methyl tertiary-butyl ether

MTCA = Washington State Model Toxics Control Act NE = cleanup level not established ROW = right-of-way

Shin/Choi = Property at 24325 56th Avenue West

TAME = tertiary amyl methyl ether TBA = tertiary butyl alcohol

TOC = Property at 24205 56th Avenue West (TOC Holdings Co. Facility No. 01-176)

TOC/Farmasonis = Property at 24225 56th Avenue West



Table 4

Summary of Quality Assurance/Quality Control Analytical Results First Quarter 2013 TOC Holdings Co. Facility No. 01-176 24205 56th Avenue West Mountlake Terrace, Washington

of Blank Sample	Sample ID	Property Identification	Sample Date	Sample Method	GRPH ⁽¹⁾	Benzene ⁽²⁾	Toluene ⁽²⁾	Ethyl- benzene ⁽²⁾	Total Xylenes ⁽²⁾	MTBE ⁽³⁾	EDB ⁽³⁾	EDC ⁽³⁾
MW09	MW09-20130220-BL	TOC	02/20/13	Bladder Pump	270	<1	<1	5.8	59			
MW09	MW09-20130220-PE	TOC	02/20/13	Peristaltic Pump	460	<1	<1	7.0	74	_	·	-
MW09	MW999-20130220-PE	TOC	02/20/13	Peristaltic Pump	420	<1	<1	6.1	65	10 N 12 1 N 10		18 Y
MW09	MW09-20130220-BA	TOC	02/20/13	Bailer	1,200	<1	<1	28	140		-	
MW20	MW20-20130220-PE	TOC	02/20/13	Peristaltic Pump	17,000	140	750	620	3,400		-	
MW20	MW20-20130220-PE2	TOC	02/20/13	Peristaltic Pump	17,000	140	760	610	3,300	-		
MW28	MW28-20130220-PE	TOC	02/20/13	Peristaltic Pump	3,600	<1	1.8	86	420			
MW28	MW28-20130220-BA	TOC	02/20/13	Bailer	3,500	<1	1.7	51	330	-		-
MW55	MW55-20130220-BL	ROW	02/20/13	Bladder Pump	<100	<1	<1	<1	<3			
MW55	MW55-20130220-BL2	ROW	02/20/13	Bladder Pump	<100	<1	<1	<1	<3	TT-VE	-	-
MW65	MW65-20130219-BL	Drake	02/19/13	Bladder Pump	<100	0.61	<1	<1	<3	<1		
MW65	MW65-20130219-BA	Drake	02/19/13	Bailer	<100	<1	<1	<1	<3		2 - 2	18 C 44 A
MW86	MW86-20130219-BL	Drake	02/19/13	Bladder Pump	<100	1.1	<1	<1	<3	<1		
MW86	MW86-20130219-BL2	Drake	02/19/13	Bladder Pump	<100	1.2	<1	<1	<3	-		-
MW98	MW98-20130228-PN	Drake	02/28/13	Pneumatic	770	7.6	1.5	13	45	<1		
MW98	MW98-20130228-PN2	Drake	02/28/13	Pneumatic	810	7.6	1.5	13	44	<1	4,2.2	-
Rinsate Blank	01176-20130219-R1	NA	02/19/13	NA	-	<1	<1	<1	<3	1 7-44	10 m - 10 m	
TCA Method A	Cleanup Level ⁽⁴⁾				1,000/800 ⁽⁵⁾	5	1,000	700	1,000	20	0.01	5

NOTES:

Results measured in µg/L.

Red denotes concentration exceeds MTCA Method A Cleanup Levels for groundwater.

Gray shading signifies QA/QC sample and results.

Samples analyzed by Friedman & Bruya, Inc. of Seattle, Washington.

(1) Analyzed by Northwest Total Petroleum Hydrocarbon Method NWTPH-Gx.

(2) Analyzed by EPA Method 8021B or 8260C.

(3) Analyzed by EPA Method 8260C.

(4)MTCA Cleanup Regulation, Method A Cleanup Levels, Table 720-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, revised November 2007.

 $^{(5)}\!1,\!000~\mu\text{g/L}$ when benzene is not present and 800 $\mu\text{g/L}$ when benzene is present.

-- = not sampled/not analyzed

< = not detected at concentration exceeding the value of the laboratory reporting limit

 μ g/L = micrograms per liter

Drake = Property at 24309 56th Avenue West

EDB = 1,2-dibromoethane

EDC = 1,2-dichloroethane

EPA = U.S. Environmental Protection Agency

GRPH = gasoline-range petroleum hydrocarbons

ID = identification

MTBE = methyl tertiary-butyl ether

MTCA = Washington State Model Toxics Control Act

NA = not applicable

QA/QC = quality assurance, quality control

ROW = right-of-way

TOC = Property at 24205 56th Avenue West (TOC Holdings Co. Facility No. 01-176)

ATTACHMENT A PREPARATION OF GRPH AND BENZENE DISTRIBUTION FIGURES

Attachment A

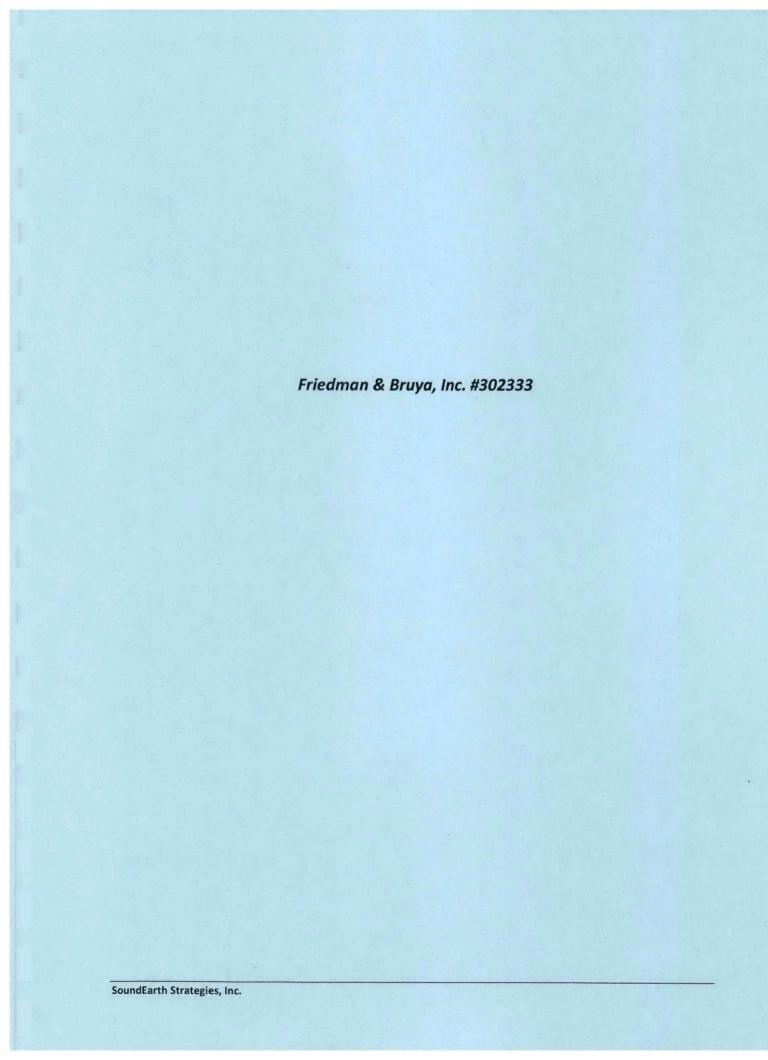
PREPARATION OF GRPH AND BENZENE DISTRIBUTION FIGURES

SoundEarth prepared Figures 5.1 and 5.2 using Rockware Surfer software (version 8.2) to illustrate subsurface conditions according to the methods described below:

- The base map for Figures 5.1 and 5.2 is based on a professional survey of the TOC Property, the TOC/Farmasonis Property, the Drake Property, and adjoining rights-of-way by Axis Survey & Mapping of Kirkland, Washington (Axis 2012) and supplemented by drawings by others (Time Oil Company [sic] 1975, Reisdorff 1985, and K&S Environmental 2001). The property boundaries shown south of the Drake Property are approximate and are based on the parcel layout shown on county tax lot maps (Snohomish County Assessor's Office 2010). The backdrop photograph used for Figures 5.1 and 5.2 is an aerial photograph (USGS 2002) which has been scaled approximately to align with the base map in a manner that relates subsurface interpretations to surface features. Minor discrepancies between the survey and the aerial photograph are the result of photographic lens distortion.
- The GRPH and benzene distributions shown on Figures 5.1 and 5.2 were prepared using an inverse distance-weighted algorithm on the natural log value of the GRPH or benzene concentration. The natural log value was used because of the large variation in magnitude of the concentrations. This minimized the bias on the high concentration zones, "hot spots", by distributing the contours and color ramp on a logarithmic scale rather than a linear scale where there would be no contours on the lower side and all values would be biased high. The inverse distance-weighted algorithm scales concentration values proportional to the distance between data points. In other words, influence of values decreases with distance. The weighting can be increased or decreased by adjusting the power value in the equation. The higher the power, the more value is placed on close data points. SoundEarth used a high power value (power of 8) to leverage the effect of data at closer distances, especially between the two apparently separate plumes. Therefore, the shapes of the plumes are derivative of the configuration of the monitoring well network, the distances between individual monitoring wells, and interpolation of concentrations between data points. SoundEarth applied a linear drift of 90 degrees to preferentially connect data points in the north-south direction, rather than the default eastwest setting, consistent with the overall direction of groundwater flow at the Site. The linear drift algorithm interpolates data using an anisotropic ratio of 2 to limit the search neighborhood ellipse setting, such that concentrations appear to attenuate across shorter distances along the east—west axis than along the north—south axis between each pair of data points.
- In cases where concentrations of GRPH were not detected above the standard laboratory reporting limit of 100 micrograms per liter (μg/L), SoundEarth assigned a value of 0.00001 μg/L to each data point.
- In cases where concentrations of benzene were not detected above the standard laboratory reporting limit of 1 μg/L, SoundEarth assigned a value of 0.00001 μg/L to each data point. In the case where the benzene reporting limit was elevated due to sample dilution, SoundEarth assigned a value equal to one-half the elevated detection limit, 2.5 μg/L for monitoring well MW48.

Actual concentrations may vary from those illustrated on Figures 5.1 and 5.2 due to lithology, stratigraphy, well screen interval depths, and/or spacing between individual monitoring wells.

ATTACHMENT B LABORATORY ANALYTICAL 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

February 28, 2013

Dee Gardner, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Ms. Gardner:

Included are the results from the testing of material submitted on February 22, 2013 from the TOC_01-176_20130222 WORFDB7, F&BI 302333 project. There are 15 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 should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures c: Audrey Hackett, Suzy Stumpf sou0228R.DOC

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on February 22, 2013 by Friedman & Bruya, Inc. from the SoundEarth Strategies TOC_01-176_20130222 WORFDB7, F&BI 302333 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
302333 -01	MW65-20130219-BA
302333 -02	MW65-20130219-BL
302333 -03	MW67-20130219-PE
302333 -04	MW68-20130219-PE
302333 -05	MW76-20130219-BA
302333 -06	MW77-20130219-BA
302333 -07	MW78-20130219-BA
302333 -08	MW85-20130219-BL
302333 -09	MW86-20130219-BL
302333 -10	MW86-20130219-BL2
302333 -11	MW87-20130219-BA
302333 -12	MW88-20130219-PE
302333 -13	MW89-20130219-BL
302333 -14	Trip Blank

All quality control requirements were acceptable.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/28/13 Date Received: 02/22/13

Project: TOC_01-176_20130222 WORFDB7, F&BI 302333

Date Extracted: 02/22/13

Date Analyzed: 02/22/13 and 02/23/13

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE USING METHOD NWTPH-Gx

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 51-134)
MW65-20130219-BL 302333-02	<100	103
MW76-20130219-BA 302333-05	<100	104
MW77-20130219-BA 302333-06	<100	104
MW78-20130219-BA 302333-07	<100	104
MW85-20130219-BL 302333-08	<100	103
MW86-20130219-BL ₃₀₂₃₃₃₋₀₉	<100	108
MW87-20130219-BA 302333-11	<100	105
MW89-20130219-BL 302333-13	<100	104
Method Blank 03-0276 MB	<100	102

ENVIRONMENTAL CHEMISTS

Date of Report: 02/28/13 Date Received: 02/22/13

Project: TOC_01-176_20130222 WORFDB7, F&BI 302333

Date Extracted: 02/22/13

Date Analyzed: 02/22/13 and 02/23/13

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

Sample ID Laboratory ID	Benzene	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Gasoline <u>Range</u>	Surrogate (% Recovery) (Limit 52-124)
MW65-20130219-BA	<1	<1	<1	<3	<100	100
MW67-20130219-PE	<1	<1	<1	<3	<100	103
MW68-20130219-PE 302333-04	<1	<1	<1	<3	<100	100
MW86-20130219-BL	2 1.2	<1	<1	<3	<100	100
MW88-20130219-PE 302333-12	<1	<1	<1	<3	<100	105
Method Blank 03-0276 MB	<1	<1	<1	<3	<100	100

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW65-20130219-BL	Client:	SoundEarth Strategies
Date Received:	02/22/13	Project:	TOC_01-176_20130222 WORFDB7, F&BI 302333
Date Extracted:	02/25/13	Lab ID:	302333-02
Date Analyzed:	02/25/13	Data File:	022512.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS
	'	-	

$_{ m pper}$
imit:
150
150
150

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
Benzene	0.61
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

ENVIRONMENTAL CHEMISTS

50

50

50

Analysis For Volatile Compounds By EPA Method 8260C

% Recovery:

100

99

MW76-20130219-BA
02/22/13
02/25/13
02/25/13
Water
ug/L (ppb)

Surrogates:

Toluene-d8

1,2-Dichloroethane-d4

Client:	SoundEarth Strategies	
Project:	TOC_01-176_20130222 WORFDB7, F&BI 3023	333
Lab ID:	302333-05	:
Data File:	022513.D	į
Instrument:	GCMS9	
Operator:	JS	
T	T T	1
Lower	Upper	
Limit:	Limit:	ć

150

150

150

	• • • • • • • • • • • • • • • • • • • •
4-Bromofluorobenzene	1 02
Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
Benzene	< 0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW77-20130219-BA	Client:	SoundEarth Strategies TOC_01-176_20130222 WORFDB7, F&BI 302333
Date Received:	02/22/13	Project:	
Date Extracted:	02/25/13	Lab ID:	302333-06
Date Analyzed:	02/25/13	Data File:	022514.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

		Lower	Opper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	104	50	150
	O		

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
Benzene	< 0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

ENVIRONMENTAL CHEMISTS

Lower

Limit:

50

50

50

Analysis For Volatile Compounds By EPA Method 8260C

% Recovery:

101

99

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix:	MW78-20130219-BA 02/22/13 02/25/13 02/25/13 Water	•
Units:	ug/L (ppb)	

Surrogates:

 $To lue ne \hbox{-} d8$

1,2-Dichloroethane-d4

Client: Project: Lab ID: Data File: Instrument:	SoundEarth Strategies TOC_01-176_20130222 WORFDB7, F&BI 302333 302333-07 022515.D GCMS9
Operator:	JS

Upper

Limit:

150

150

150

4-Bromofluorobenzene	102
Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
Benzene	< 0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW85-20130219-BL
Date Received:	02/22/13
Date Extracted:	02/25/13
Date Analyzed:	02/25/13
Matrix:	Water
Units:	ug/L (ppb)

Client:	SoundEa
Project:	TOC 01

SoundEarth Strategies FOC_01-176_20130222 WORFDB7, F&BI 302333

r rojecu.	100_01-1
Lab ID:	302333-08
Data File:	022516.D
Instrument:	GCMS9
Operator:	JS

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	103	50	150

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
Benzene	0.46
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: MW86-20130219- Date Received: 02/22/13 Date Extracted: 02/25/13 Date Analyzed: 02/25/13 Matrix: Water Units: ug/L (ppb)	3L Client: Project: Lab ID: Data File: Instrument: Operator:	SoundEarth Strategies TOC_01-176_20130222 WORFDB7, F&BI 302333 302333-09 022517.D GCMS9 JS
---	--	---

	•	Lower	$\cup pper$
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	96	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	103	50	150
	Concentration		

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
Benzene	1.1
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client:	SoundEarth Strategies
Project:	TOC_01-176_20130222 WORFDB7, F&BI 302333
Lab ID:	302333-11
Data File:	022522.D
Instrument:	GCMS9
Operator:	JS

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	103	50	150
Toluene-d8	101	50	150
4-Bromofluorobenzene	104	50	150
	Concentration		
Δ 1			

Compounds:	ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
Benzene	< 0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method $8260\mathrm{C}$

Oliont Comple ID:	MWOO OOLOOOLO DI	Ol:+	C 1Th
Client Sample ID:	MW89-20130219-BL	Client:	SoundEarth Strategies
Date Received:	02/22/13	Project:	TOC_01-176_20130222 WORFDB7, F&BI 30233
Date Extracted:	02/25/13	Lab ID:	302333-13
Date Analyzed:	02/25/13	Data File:	022523 .D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

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

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
Benzene	< 0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

ENVIRONMENTAL CHEMISTS

Limit:

50

50 50

Analysis For Volatile Compounds By EPA Method 8260C

% Recovery:

Surrogates:

Client: Project: Lab ID:	SoundEarth Strategies TOC_01-176_20130222 WORFDB7, F&BI 302333 03-0338 mb
Data File:	022507.D
Instrument:	GCMS9
Operator:	JS
Lower	Upper

Limit:

150 150

150

·	
1,2-Dichloroethane-d4	102
Toluene-d8	101
4-Bromofluorobenzene	105
	Concentration
Compounds:	ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
Benzene	< 0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

ENVIRONMENTAL CHEMISTS

Date of Report: 02/28/13 Date Received: 02/22/13

Project: TOC_01-176_20130222 WORFDB7, F&BI 302333

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 302333-02 (Duplicate)

	Reporting	Sample	Duplicate	Relative Percent Difference
Analyte	Units	Result	Result	(Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	${f nm}$
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	nm
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

			$\mathbf{Percent}$	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	ug/L (ppb)	50	94	65-118
Toluene	ug/L (ppb)	50	95	72-122
Ethylbenzene	ug/L (ppb)	50	100	73-126
Xylenes	ug/L (ppb)	150	97	74-118
Gasoline	ug/L (ppb)	1,000	99	69-134

ENVIRONMENTAL CHEMISTS

Date of Report: 02/28/13 Date Received: 02/22/13

Project: TOC_01-176_20130222 WORFDB7, F&BI 302333

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

Laboratory Code: 302330-01 (Matrix Spike)

			Percent	
Reporting	Spike	Sample	Recovery	Acceptance
Units	Level	Result	MS	Criteria
ug/L (ppb)	50	<1	106	73-123
ug/L (ppb)	50	< 0.35	100	80-108
ug/L (ppb)	50	<1	103	74-116
ug/L (ppb)	50	<1	100	71-120
ug/L (ppb)	100	<2	99	64-128
ug/L (ppb)	50	<1	101	66-129
	Units ug/L (ppb) ug/L (ppb) ug/L (ppb) ug/L (ppb) ug/L (ppb)	Units Level ug/L (ppb) 50 ug/L (ppb) 50 ug/L (ppb) 50 ug/L (ppb) 50 ug/L (ppb) 100	Units Level Result ug/L (ppb) 50 <1	Reporting Units Spike Level Level Sample Recovery Result MS ug/L (ppb) 50 <1

Laboratory Code: Laboratory Control Sample

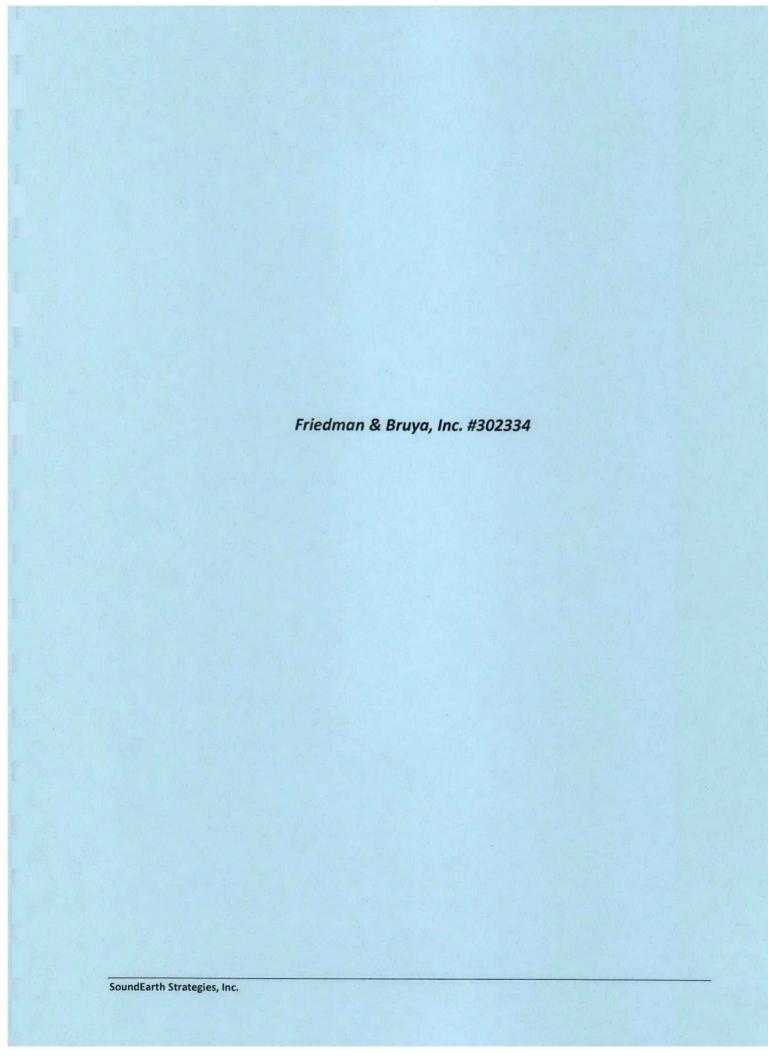
•	-		Percent	Percent		
•	Reporting	Spike	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 20)
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	101	107	76-122	6
Benzene	ug/L (ppb)	50	99	102	81-108	3
Toluene	ug/L (ppb)	50	102	105	83-108	3
Ethylbenzene	ug/L (ppb)	50	101	104	84-110	3
m,p-Xylene	ug/L (ppb)	100	100	103	84-112	3
o-Xylene	ug/L (ppb)	50	100	104	82-113	4

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.
- dy Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.
- fb Analyte present in the blank and the sample.
- fc The compound is a common laboratory and field contaminant.
- hr The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.
- ht Analysis performed outside the method or client-specified holding time requirement.
- ip Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j The result is below normal reporting limits. The value reported is an estimate.
- J The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.
- jr The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- js The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc The presence of the compound indicated is likely due to laboratory contamination.
- L The reported concentration was generated from a library search.
- $\rm nm$ 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.

HMIL	IS Weel	NRU	<u> </u>		509	.하 09	19176		ण्डिपल [Rdor 10	RS (stonoth Canach N T NAME/N	- Canacaa PROJEC	Jan	• • •	daer/su		Send Report	
rized by:		H	D RUS					ንመ	क्री अ	oHanos 19 -19	n-2607b10 250-6446 151-10	H SOL -	# Suite .				Address 2811	
	शत अप १६ च्या	8 9 60(Teid E		/ X S	EWS		Judg.	طبيها		ns 947 81	I —	e e e	•		an an	City, State, 21	
Sugnan	mpies veh inst	टश्रा #	TEA D				ाभा-	(इंडा	w (3)	18 (49)	POE02	-81	201,1908	- 10e	# xe4	0061:102	Phone # 206.	
		TED	Sauç	SEE	KZE	VNV						*						
Notes.			bissolved Pbi by 20038	Total Pb	BLEY + YALLS	VOC's by 8260	BTEX by 8021B	NWTPH-Gx	NWTPH-D _X	io # exet	xittaM	Time Sampled	Date bəlqma8	de I.	. Sam ple . Arge (I	Sample	Clasiq mas	
				7 - 3			1	^		٤	water	5091	E1/P1/-20	> 4 D		SOWM	48-1915 0 21 OC	
1		. • •.			1			/		٦,	لتاعلوت	<u>\$111</u>	21/8/20	.		SOMW	न श्रु—५/ ट्वरायट - ५५००	
								1		h	Jotel W	21/1	द्याधाय			Lomu	39-61 SDC100	
							/			ξ,	Weatrear	PEEL	हा/भारत	3, ha		89mW	-07:00 TICLS	
					/	,				Н	moter	0101	£1/6/70	1.4		PLPIW	AB - PLANTOR	
						-				<i>h</i>	morter	LIII	21/61/20	11 7	<u> </u>	LLMW	-81 COM	
				,	7	-	-			<i>J</i> ₇	- wole	<u>इस्टा</u>	51/61/20	11 **	1	S8MW	-580W	
			1		1		-			h	Jakoll Jakoll	Inhl Selt and	£1/61/20		<u></u>	<u> १८००</u>	78-61202107 -78(hill -78-61202107	
						-	┼	1		Fr	Water Water	* ·	1	1-1/		0800	-980M	
			 	-	/	-	1		+	۴		32h1	21/61/20	1-#	E0 E	78Wm	- 48 - 612 (72) 0.7	
		<u> </u>	 	 -	-	-		+-	 	{	water	57.01	E1/61/20		≤40°	WM88	-88(4)	
<i>y</i> • • • • • • • • • • • • • • • • • • •		<u> </u>	-		<u> </u>	-		-	-	ار ج	Water	5011 2221	Elleitz	9 €	Silph	68mm	-15 -15 UM	
72) 4	1 12	720		T		7	1	· · · · ·	<u></u>	Υ.,	Water			9-17 h			Shadanan & Ban	
BAIL	TA	\dot{a}	- '	YNAG			╁			AN TN		 	asum.		elimpaile.		3012 1 <i>6th Aven</i>	
SIFI	17.7	12	· · · ·		233		+-	ACAMARCA					The they bear they		7	7		
C/h/	61/22	1/2	``	Z	\(\frac{1}{2} \) \(\frac{1}{2} \)	\exists	+	Man			Lan	201		Kelinduisbed.by:				
				-	- 1	<u> </u>					<u> </u>			<u>.</u> · .	red bavisos	<u>u</u> ++0	2-E82 (302) xp	
	Ι.	. 1-								7	-	- 44 - 55 -						



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

February 28, 2013

Dee Gardner, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Ms. Gardner:

Included are the results from the testing of material submitted on February 22, 2013 from the TOC_01-176_20130222 WORFDB7, F&BI 302334 project. There are 19 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 should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures c: Suzy Stumpf SOU0228R.DOC

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on February 22, 2013 by Friedman & Bruya, Inc. from the SoundEarth Strategies TOC_01-176_20130222 WORFDB7, F&BI 302334 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	SoundEarth Strategies
302334 -01	MW04-20130220-PE
302334 -02	MW05-20130221-PE
302334 -03	MW08-20130221-PE
302334 -04	MW12-20130219-PE
302334 -05	MW13-20130220-BA
302334 -06	MW16-20130221-BA
302334 -07	MW45-20130220-BA
302334 -08	MW46-20130220-BA
302334 -09	MW47-20130220-BA
302334 -10	MW48-20130220-BA
302334 -11	MW49-20130219-BL
302334 -12	MW50-20130220-BA
302334 -13	MW51-20130220-BA
302334 -14	MW52-20130220-BA
302334 -15	MW53-20130220-BA
302334 -16	MW55-20130220-BL
302334 -17	MW55-20130220-BL2
302334 -18	MW60-20130220-BL
302334 -19	MW61-20130221-PE
302334 -20	MW62-20130221-PE
302334 -21	MW63-20130219-BL
302334 -22	MW64-20130221-BA
302334 -23	MW75-20130219-BL
302334 -24	Trip Blank

All quality control requirements were acceptable.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/28/13 Date Received: 02/22/13

Project: TOC_01-176_20130222 WORFDB7, F&BI 302334

Date Extracted: 02/25/13

Date Analyzed: 02/25/13 and 02/26/13

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

Sample ID Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Gasoline <u>Range</u>	Surrogate (% Recovery) (Limit 50-150)
MW04-20130220-PI	E <1	<1	<1	<3	<100	86
MW05-20130221-PI	E <1	<1	<1	<3	<100	89
MW08-20130221-PI	E <1	<1	<1	<3	<100	89
MW12-20130219-PI	E <1	<1	<1	<3	<100	86
MW13-20130220-Ba	A <1	<1	<1	<3	<100	90
MW16-20130221-Ba	A <1	<1	<1	<3	<100	91
MW45-20130220-Ba	A <1	13	180	2,500	19,000	139
MW46-20130220-Ba	A <1	<1	<1	<3	<100	90
MW47-20130220-Ba	A <1	<1	<1	<3	<100	89
MW48-20130220-Ba 302334-10 1/40	A 170	100	620	4,500	19,000	93
MW49-20130219-BI	L <1	<1	<1	<3	<100	83

ENVIRONMENTAL CHEMISTS

Date of Report: 02/28/13 Date Received: 02/22/13

Project: TOC_01-176_20130222 WORFDB7, F&BI 302334

Date Extracted: 02/25/13

Date Analyzed: 02/25/13 and 02/26/13

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

Sample ID Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Gasoline <u>Range</u>	Surrogate (% Recovery) (Limit 50-150)
MW50-20130220-F	3A <1	<1	<1	<3	<100	134
MW51-20130220-E	3A <1	<1	<1	<3	<100	91
MW52-20130220-E	3A <1	<1	<1	<3	<100	90
MW53-20130220-E	3A <1	<1	<1	<3	<100	90
MW55-20130220-E	BL <1	<1	<1	<3	<100	89
MW55-20130220-E	3L2 <1	<1	<1	<3	<100	91
MW60-20130220-F 302334-18	BL <1	<1	<1	<3	<100	89
MW61-20130221-F 302334-19	PE <1	<1	<1	<3	<100	90
MW62-20130221-F	PE <1	<1	<1	<3	<100	90
MW63-20130219-E	3L <1	<1	<1	<3	<100	89
MW64-20130221-E	BA <1	<1	<1	<3	<100	90

ENVIRONMENTAL CHEMISTS

Date of Report: 02/28/13 Date Received: 02/22/13

Project: TOC_01-176_20130222 WORFDB7, F&BI 302334

Date Extracted: 02/25/13

Date Analyzed: 02/25/13 and 02/26/13

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

Sample ID Laboratory ID	Benzene	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Gasoline <u>Range</u>	Surrogate (% Recovery) (Limit 50-150)
MW75-20130219-B 302334-23	L <1	<1	<1	<3	<100	90
Method Blank 03-0327 MB	<1	<1	<1	<3	<100	130
Method Blank 03-0328 MB	<1	<1	<1	<3	<100	118

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:

MW45-20130220-BA

Date Received: 02/22/13

Date Extracted: Date Analyzed:

Matrix: Units:

Internal Standard:

02/26/13 Water

02/25/13

ug/L (ppb)

Client: Project: SoundEarth Strategies

Lab ID:

TOC_01-176_20130222 WORFDB7 302334-07

Data File: Instrument:

302334-07.034 ICPMS1

Operator: AP

Lower Limit: 60

Upper Limit:

125

Concentration

% Recovery:

95

Analyte:

Holmium

ug/L (ppb)

Lead

131

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID: Date Received: MW46-20130220-BA

02/22/13

Date Extracted: Date Analyzed: Matrix:

02/25/13 02/26/13 Water

ug/L (ppb)

Client: Project: SoundEarth Strategies

Lab ID:

TOC_01-176_20130222 WORFDB7 302334-08

Data File: Instrument:

302334-08.035 ICPMS1

Operator: AΡ

Internal Standard:

99

% Recovery:

Lower Limit:

Upper Limit:

60

125

Concentration

Analyte:

Holmium

Units:

ug/L (ppb)

Lead

13.7

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:

MW47-20130220-BA

Date Received:

02/22/13 02/25/13

Date Extracted: Date Analyzed: Matrix:

02/26/13 Water ug/L (ppb) Client:

SoundEarth Strategies

Project:

TOC_01-176_20130222 WORFDB7

Lab ID: Data File:

302334-09 302334-09.036

Instrument:

ICPMS1

Operator: AP

Internal Standard: Holmium

% Recovery: 89

Lower Limit: 60

Upper Limit: 125

Concentration

Analyte:

Units:

ug/L (ppb)

Lead

1.50

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID: Date Received: MW48-20130220-BA

02/22/13

Date Extracted: Date Analyzed: Matrix:

02/25/13 02/26/13 Water

Units:

ug/L (ppb)

Client: Project: SoundEarth Strategies

Lab ID:

TOC_01-176_20130222 WORFDB7 302334-10

125

Data File:

302334-10.037 ICPMS1

Instrument: Operator:

AP

Lower Limit:

60

Upper Limit:

Internal Standard:

Holmium

% Recovery: 93

Concentration ug/L (ppb)

Lead

Analyte:

5.58

8

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:

Method Blank

Date Received: Date Extracted: Date Analyzed:

NA 02/25/13 02/26/13

Matrix: Units:

Water ug/L (ppb)

Client: Project: SoundEarth Strategies

TOC_01-176_20130222 WORFDB7

Lab ID: Data File: I3-79 mb I3-79 mb.065

Instrument: Operator:

ICPMS1 AP

Internal Standard:

Holmium

% Recovery:

91

Lower Limit: 60

Upper Limit:

125

Concentration

Analyte:

ug/L (ppb)

Lead

<1

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID: Date Received: Date Extracted:

Date Analyzed:

MW45-20130220-BA

02/22/13 02/25/13

Matrix: Units:

02/26/13 Water

ug/L (ppb)

Client: Project: SoundEarth Strategies TOC_01-176_20130222 WORFDB7

Lab ID: Data File:

302334-07 302334-07.016

Instrument: ICPMS1 AP

Operator:

Lower

Limit: 60

Upper

Limit: 125

Internal Standard:

Holmium

% Recovery: 88

Concentration ug/L (ppb)

Analyte:

Lead

73.4

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID: Date Received: MW46-20130220-BA

Client: Project: SoundEarth Strategies

Date Extracted: Date Analyzed:

Matrix:

Holmium

Analyte:

Units:

02/22/13 02/25/13 02/26/13 Water

ug/L (ppb)

Lab ID:

TOC_01-176_20130222 WORFDB7

Data File:

302334-08

Instrument:

302334-08.017 ICPMS1

Operator:

AP

Internal Standard:

% Recovery: 98

Lower Limit: 60

Upper Limit: 125

Concentration ug/L (ppb)

Lead

6.79

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:

MW47-20130220-BA

Date Received:
Date Extracted:

02/22/13 02/25/13

Date Analyzed: Matrix: Units: 02/26/13 Water

ug/L (ppb)

Client:

SoundEarth Strategies

Project:

TOC_01-176_20130222 WORFDB7 302334-09

Lab ID: Data File:

302334-09.019

Instrument: Operator:

ICPMS1 AP

Oper

Lower

Upper

Internal Standard:

Holmium

% Recovery: 96

Limit:

Limit: 125

Concentration

Analyte:

ug/L (ppb)

Lead

<1

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:

MW48-20130220-BA

Date Received:

02/22/13

Date Extracted: Date Analyzed: 02/25/13 02/26/13 Water

Matrix: Units:

ug/L (ppb)

Client:

SoundEarth Strategies

Project:

TOC_01-176_20130222 WORFDB7

Lab ID: Data File:

302334-10 302334-10.020

Instrument:

ICPMS1 AP

Operator:

i. Ai

Internal Standard:

Holmium

% Recovery: 96

Lower Limit: 60

T Upper : Limit: 125

Concentration

Analyte:

ug/L (ppb)

Lead

4.07

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:

Method Blank

Date Received: Date Extracted: Date Analyzed:

NA 02/25/13 02/26/13

Matrix: Units:

Water

ug/L (ppb)

Client:

SoundEarth Strategies

Project:

TOC_01-176_20130222 WORFDB7

Lab ID: Data File:

I3-81 mb I3-81 mb.008 ICPMS1

Instrument: Operator:

AP

Lower

Upper

Internal Standard:

Holmium

% Recovery:

91

Limit: 60

Limit: 125

Concentration

Analyte:

ug/L (ppb)

Lead

ENVIRONMENTAL CHEMISTS

Date of Report: 02/28/13 Date Received: 02/22/13

Project: TOC_01-176_20130222 WORFDB7, F&BI 302334

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 302334-12 (Duplicate)

				Relative Percent
	Reporting	\mathbf{Sample}	Duplicate	Difference
Analyte	Units	Result	Result	(Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	$\mathbf{n}\mathbf{m}$
Gasoline	ug/L (ppb)	<100	<100	$\mathbf{n}\mathbf{m}$

			Percent	
	Reporting	\mathbf{Spike}	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	ug/L (ppb)	50	98	72-119
Toluene	ug/L (ppb)	50	96	71-113
Ethylbenzene	ug/L (ppb)	50	99	72-114
Xylenes	ug/L (ppb)	150	96	72-113
Gasoline	ug/L (ppb)	1,000	92	70-119

ENVIRONMENTAL CHEMISTS

Date of Report: 02/28/13 Date Received: 02/22/13

Project: TOC_01-176_20130222 WORFDB7, F&BI 302334

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 302335-05 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	nm
Gasoline	ug/L (ppb)	<100	<100	nm

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	ug/L (ppb)	50	96	72-119
Toluene	ug/L (ppb)	50	95	71-113
Ethylbenzene	ug/L (ppb)	50	97	72-114
Xylenes	ug/L (ppb)	150	95	72-113
Gasoline	ug/L (ppb)	1,000	92	70-119

ENVIRONMENTAL CHEMISTS

Date of Report: 02/28/13 Date Received: 02/22/13

Project: TOC_01-176_20130222 WORFDB7, F&BI 302334

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 302313-01 (Matrix Spike)

				Percent	Percent		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Lead	ug/L (ppb)	10	<1	103	102	85-115	1

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Lead	ug/L (ppb)	10	105	84-120

ENVIRONMENTAL CHEMISTS

Date of Report: 02/28/13 Date Received: 02/22/13

Project: TOC_01-176_20130222 WORFDB7, F&BI 302334

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR DISSOLVED METALS USING EPA METHOD 200.8

Laboratory Code: 302335-13 (Matrix Spike)

				Percent	Percent		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Lead	ug/L (ppb)	10	<1	100	101	85-115	1

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Lead	ug/L (ppb)	10	108	84-120

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.
- J The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.
- jr The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- js The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc The presence of the compound indicated is likely due to laboratory contamination.
- L The reported concentration was generated from a library search.
- nm The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc The sample was received in a container not approved by the method. The value reported should be considered an estimate.
- pr The sample was received with incorrect preservation. The value reported should be considered an estimate.
- ve Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.
- vo The value reported fell outside the control limits established for this analyte.
- x The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Samples received at 5 FORMS/COC/SESCEMBRI DOC (Revision 1) Fax (206) 283-5044 Received by: Z8Z8-S8Z (90Z) VA Relinquished by: शिवनिष् Phan Man _5131 Igr-UUUU -61186 NW 9BII9-Received by: 21/22/12 535 SIBL HOSHWAD SSIW Relinquished 3012 16th Avenue West TIME DATE COMPANY PRINT NAME SIGNATORE Friedman & Bruga, Inc. 1stow ShSI ε 81/01/20 EI 48-0220E10Z 15MW -1.5MW Z Water 1.221 18-01305102 81/02/20 asmu _asmu J& FRM ε 18ES1 2. bh MW 78 -6/202102 - h+ MW کر Water 5781 水 D E1/02/20 HE -05-208102 84 1944 -Shmu Water aani 21/02/20 48-02708102 LHMU -Lhmw 乏 Water 52.51 21/02/20 80 48-02-208105 nhmu -95MW يخ. 1) A - OF E1/02/20 13. 10 7257 48-06-202102 SHMU -St. MW ٤ Matic 7160 8/112/20 90 #8 - FZ ZOFT@Z mula -91MW ξ Notel 21/02/20 30 0/17 48-0550210X टा लाш Water 3 96*61* 21/6/120 ho 31 - 6 202102 - Zlow 710W Ь A501, ٤ mater-E1/10/20 60 516 33-12-70 5102 z 501 **ASOCIU** - Backy JOJEM M £ 9821 &1112120 G 0/ 20-12202102 SOMW - Samw Joteld . h511 #1:0120200 Σ 21/02/20 P/10 homu -bomw Prince Agreed & BTEX by 8021E VOC's by 8260 NWIPH-Cx NWIPH-Dx & bay Jera 2ampled Sampled Depth ai Location Notes Matrix Sample ID T JO # Time Date Sample Sam bie Tup ANALYSES REQUESTED O Will cell with instructions 13- Row (Ex. BIEX) - HOLD N TOP 1.30E . DOG # XET Phone # 206, 306, 1900 D Return samples GEWS Y - boildens protoredas N Dispose after 30 days RENVERS Maso wed treserved. This bimes City, State, ZIP Sen IIL SAMPLE DISPOSAL 941-10 Fairview Avenue East, Suite 2000 Tochtoldings-mountake Iemack PI-050-8440 Rush charges authorized by: HEUR O Company Sound (solsoW S) brahmad B PROJECT NAME/NO. Camerda, General, Mader, Iwasaki, Botter, TURNAROUND TIME Send Keport To Dee Guirdage SAMPLERS (signature) ኯዸዸዸዾፘ SYMMETE CHYIN OF CUSTODY

Received by: -6[[86 VM '9]]]9-2/22/13 525 SIM CHMACLOR רחורה Relinquished by: 3012 16th Avenue West LIME **TAG** COMPANY PRINT NAME SIGNATURE Priedman & Braya, inc. E 1/22/2 (ON) Addad 7 Natoni 9,50 जप्राधिष्ठार 乏 زبار) باور 2191 E1/4/20 3146 SLMW ~ 61-205102 -:SEMW ξ Water 877/ E1112120 77 Fol MA 481-12205102 - 129 MM Water ٤ Z0Z. 81/61/20 12 Enmra 41 78 - 612 05102 - 29mw ट्ट JAWM1 ZIA1 زر E1/12/20 07 77 20 MM -127,08/02 Ŧ -3+AM 5h17 21/12/20 न ₹7 79-12202162 monu -07 2051 GZ -07 2051 GZ ٤ Water 9/9/ 21/02/20 5'2h · 09M4 Ē 13+401 1011 E1/92/20 514 SEMIL 2781-02206102 ーエテベル 2 6591 worker 21/02/29 والنكر SEMU 78 - 02 202102 -_55MW \mathcal{Z} MATER 1991 21/02/20 48-02 2021 CT SI ESMU -EGMW E Water *ከኪናየ* 21/02/20 -ZSMW 744 ¥8 -02205102 -ZEMM . BIEX by 8021B VOC's by 8260 NWIPH-Gx XQ-HALAN 200,S Jars Sam pled Sampled Depth Notes **Q**I Location. Matrix 70 al sigmas JO # Sample 3 mi T Date 2sm bie ANALYSES REQUESTED D Will call with instructions (170H (KAT8, 72) WOR - OI N 70P1.80E . 306 # XBT Phone # 206, 306, 1900 esigmes munick D REMARKS Dissolved Lead Somples were treed filt and preserved anibe state of the search supplied GEWS X \ N Dispose after 30 days. City, State, ZP Seh III. SYMILE DISLOSET 941-10 Rush charges authorized by: 61-080-84HP D RUSH TOC Holdings-Mountlake Temper (solsoW S) brabnate & # Odi PROJECT NAME/NO. Camerda, Gracett, Mader, Juasaki TURNAROUND TIME Send report to Dee Gardner SAMPLERS (signature) Eller 100 3M SYMELE CHAIN OF CUSTODY

UKGA

FORMS/COC/SESCEMBRI.DOC (Revision 1)

Received by:

Relinquished by:

Fax (206) 283-5044

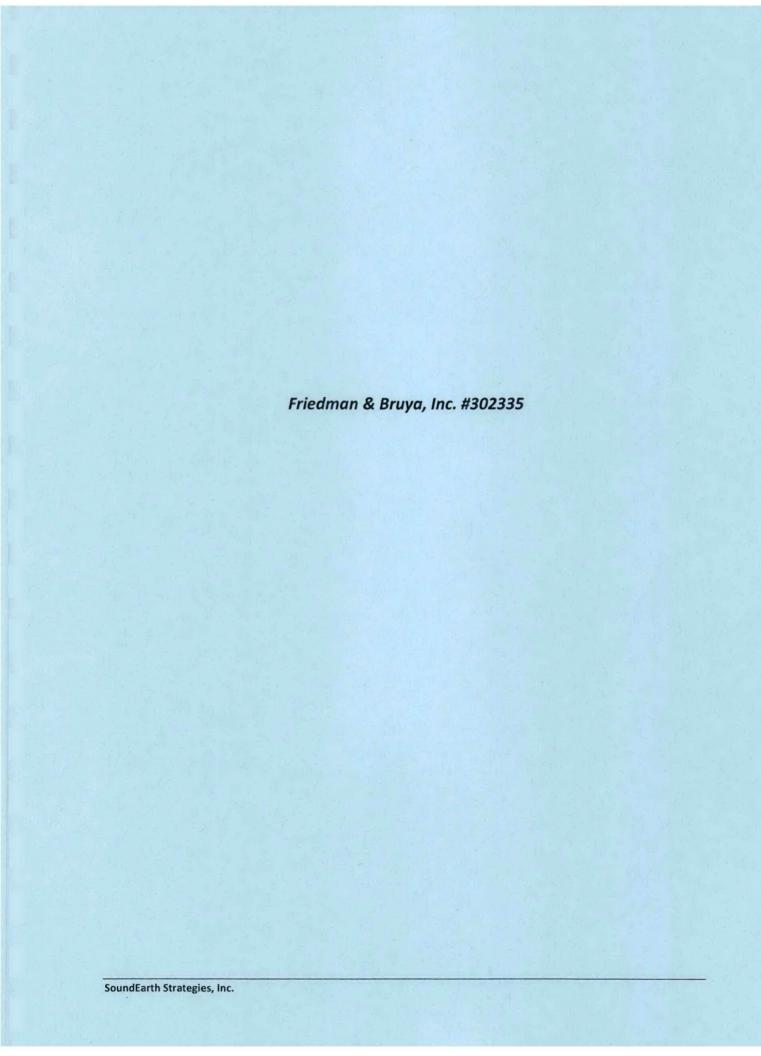
Z8Z8-S8Z (90Z) YA

camples received at

8/22/13

5121

1827



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

February 28, 2013

Dee Gardner, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Ms. Gardner:

Included are the results from the testing of material submitted on February 22, 2013 from the TOC_01-176_20130222 WORFDB7, F&BI 302335 project. There are 11 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 should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures c: Suzy Stumpf SOU0228R.DOC

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on February 22, 2013 by Friedman & Bruya, Inc. from the SoundEarth Strategies TOC_01-176_20130222 WORFDB7, F&BI 302335 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	SoundEarth Strategies
302335 -01	MW30-20130219-BA
302335 -02	MW39-20130220-BA
302335 -03	MW40-20130220-BA
302335 -04	MW54-20130219-PE
302335 -05	MW56-20130219-BL
302335 -06	MW58-20130221-BL
302335 -07	MW59-20130219-BL
302335 -08	MW66-20130220-BA
302335 -09	MW79-20130219-PE
302335 -10	MW80-20130219-PE
302335 -11	MW81-20130219-BA
302335 -12	MW82-20130219-PE
302335 -13	MW100-20130219-PE
302335 -14	Trip Blank

All quality control requirements were acceptable.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/28/13 Date Received: 02/22/13

Project: TOC_01-176_20130222 WORFDB7, F&BI 302335

Date Extracted: 02/25/13

Date Analyzed: 02/25/13 and 02/26/13

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

Sample ID Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Gasoline <u>Range</u>	Surrogate (% Recovery) (Limit 50-150)
MW30-20130219-Ba	A <1	<1	<1	<3	<100	88
MW39-20130220-BA	A <1	<1	<1	<3	<100	89
MW40-20130220-BA	A <1	<1	<1	<3	<100	91
MW54-20130219-PI 302335-04	E <1	<1	<1	<3	<100	90
MW56-20130219-BJ 302335-05	· <1	<1	<1	<3	<100	133
MW58-20130221-BI 302335-06	. <1	<1	<1	<3	<100	84
MW59-20130219-BI 302335-07	\ <1	<1	<1	<3	<100	90
MW66-20130220-Ba 302335-08	A <1	<1	<1	<3	<100	89
MW79-20130219-PI 302335-09	E <1	<1	<1	<3	<100	86
MW80-20130219-PI 302335-10	E <1	<1	<1	<3	<100	89
MW81-20130219-Ba 302335-11	A <1	<1	<1	<3	<100	89

ENVIRONMENTAL CHEMISTS

Date of Report: 02/28/13 Date Received: 02/22/13

Project: TOC_01-176_20130222 WORFDB7, F&BI 302335

Date Extracted: 02/25/13

Date Analyzed: 02/25/13 and 02/26/13

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

Sample ID Laboratory ID	Benzene	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Gasoline <u>Range</u>	Surrogate (% Recovery) (Limit 50-150)
MW82-20130219-P	E <1	<1	<1	<3	<100	85
MW100-20130219- 302335-13	PE <1	<1	<1	<3	<100	90
Method Blank	<1	<1	<1	<3	<100	118

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:

MW100-20130219-PE

Date Received: Date Extracted:

Internal Standard:

02/22/13 02/25/13

Date Analyzed: Matrix: Units:

02/26/13 Water

ug/L (ppb)

Client:

SoundEarth Strategies

Project:

TOC_01-176_20130222 WORFDB7

Lab ID: Data File:

302335-13 302335-13.038

ICPMS1

Instrument:

AP Operator:

Lower Limit: Upper Limit:

60

125

Concentration

Analyte:

Holmium

ug/L (ppb)

% Recovery:

98

Lead

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:

Method Blank

Date Received: Date Extracted:

NA 02/25/13 02/26/13

Date Analyzed: Matrix: Units:

Water

ug/L (ppb)

Client:

SoundEarth Strategies

Project:

TOC_01-176_20130222 WORFDB7

Lab ID: Data File: I3-79 mb I3-79 mb.065

Instrument: Operator:

ICPMS1

AP

Internal Standard:

Holmium

% Recovery:

91

Lower Limit: 60

Upper Limit:

125

Concentration ug/L (ppb)

Analyte:

Lead

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID: Date Received: MW100-20130219-PE

Client: Project: SoundEarth Strategies

Date Extracted:

02/22/13 02/25/13 02/26/13

Lab ID:

TOC_01-176_20130222 WORFDB7 302335-13

Date Analyzed: Matrix: Units:

Water ug/L (ppb) Data File:

302335-13.010 ICPMS1

Instrument: Operator:

AP

Internal Standard:

Lower Limit: Upper

Holmium

% Recovery: 89

60

Limit: 125

Concentration

ug/L (ppb)

Lead

Analyte:

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:

Method Blank

Date Received: Date Extracted: Date Analyzed:

NA 02/25/13 02/26/13

Matrix: Units:

Water ug/L (ppb) Client:

SoundEarth Strategies

Project:

TOC_01-176_20130222 WORFDB7

Lab ID: Data File: I3-81 mb I3-81 mb.008

Instrument:

ICPMS1 AP

Operator:

Lower

Limit:

Upper Limit:

60

125

Internal Standard:

Holmium

% Recovery:

91

Concentration

ug/L (ppb)

Lead

Analyte:

ENVIRONMENTAL CHEMISTS

Date of Report: 02/28/13 Date Received: 02/22/13

Project: TOC_01-176_20130222 WORFDB7, F&BI 302335

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 302335-05 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	$\mathbf{n}\mathbf{m}$
Gasoline	ug/L (ppb)	<100	<100	nm

	Percent					
	Reporting	Spike	Recovery	Acceptance		
Analyte	Units	Level	LCS	Criteria		
Benzene	ug/L (ppb)	50	96	72-119		
Toluene	ug/L (ppb)	50	95	71-113		
Ethylbenzene	ug/L (ppb)	50	97	72-114		
Xylenes	ug/L (ppb)	150	95	72-113		
Gasoline	ug/L (ppb)	1,000	92	70-119		

ENVIRONMENTAL CHEMISTS

Date of Report: 02/28/13 Date Received: 02/22/13

Project: TOC_01-176_20130222 WORFDB7, F&BI 302335

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 302313-01 (Matrix Spike)

	Reporting	Spike	Sample	Percent Recovery	Percent Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Lead	ug/L (ppb)	10	<1	103	102	85-115	<u> </u>

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Lead	ug/L (ppb)	10	105	84-120

ENVIRONMENTAL CHEMISTS

Date of Report: 02/28/13 Date Received: 02/22/13

Project: TOC_01-176_20130222 WORFDB7, F&BI 302335

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR DISSOLVED METALS USING EPA METHOD 200.8

Laboratory Code: 302335-13 (Matrix Spike)

	Danaskian	G - 11	C1-	Percent	Percent	At	RPD
Analyte	Reporting Units	Spike Level	Sample Result	Recovery MS	Recovery MSD	Acceptance Criteria	(Limit 20)
Lead	ug/L (ppb)	10	<1	100	101	85-115	1

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level_	LCS	<u>Criteria</u>
Lead	ug/L (ppb)	10	108	84-120

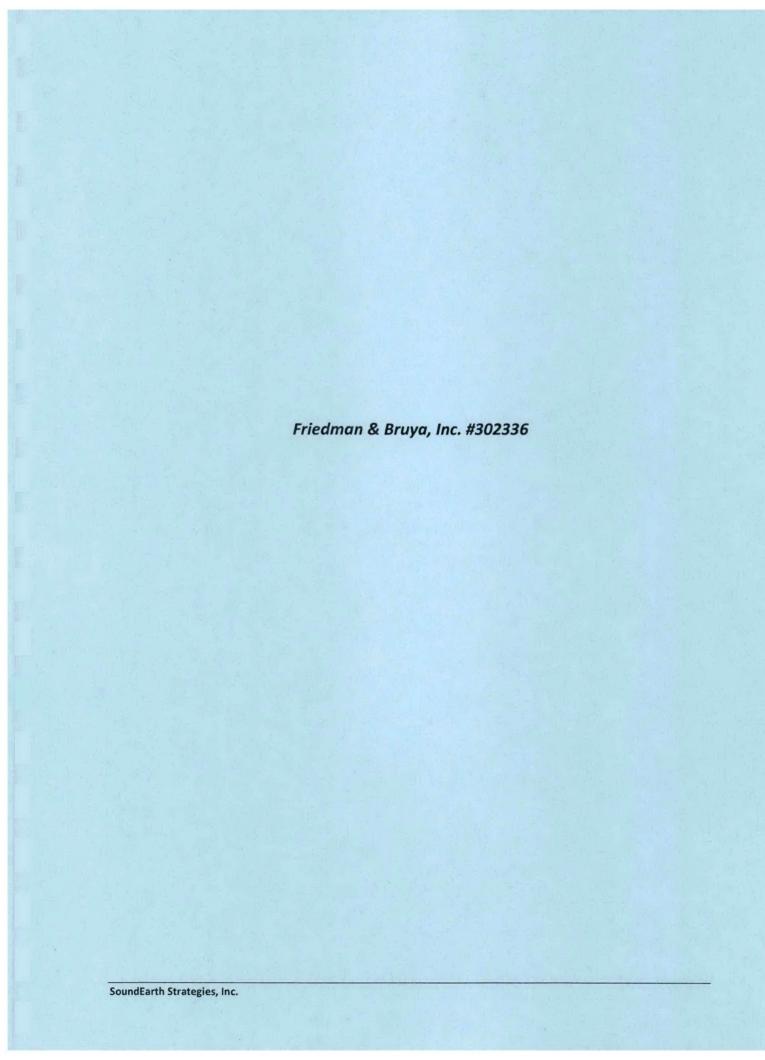
ENVIRONMENTAL CHEMISTS

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.
- J The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.
- jr The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- js The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc The presence of the compound indicated is likely due to laboratory contamination.
- L The reported concentration was generated from a library search.
- nm The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc The sample was received in a container not approved by the method. The value reported should be considered an estimate.
- pr The sample was received with incorrect preservation. The value reported should be considered an estimate.
- ve Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.
- vo The value reported fell outside the control limits established for this analyte.
- x The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Camples received at

FORMS\COC\SESGEMBR1,DOC (Revision 1)



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

March 4, 2013

Dee Gardner, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Ms. Gardner:

Included are the results from the testing of material submitted on February 22, 2013 from the TOC_01-176_20130222 WORFDB7, F&BI 302336 project. There are 13 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 should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures c: Suzy Stumpf SOU0304R.DOC

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on February 22, 2013 by Friedman & Bruya, Inc. from the SoundEarth Strategies TOC_01-176_20130222 WORFDB7, F&BI 302336 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
302336 -01	MW02-20130220-PE
302336 -02	MW03-20130220-PE
302336 -03	MW06-20130220-PE
302336 -04	MW09-20130220-PE
302336 -05	MW09-20130220-BL
302336 -06	MW09-20130220-BA
302336 -07	MW10-20130221-PE
302336 -08	MW19-20130221-PE
302336 -09	MW20-20130220-PE
302336 -10	MW20-20130220-PE2
302336 -11	MW22-20130221-PE
302336 -12	MW23-20130220-BA
302336 -13	MW25-20130221-PE
302336 -14	MW26-20130220-BA
302336 -15	MW28-20130220-PE
302336 -16	MW28-20130220-BA
302336 -17	MW33-20130220-BA
302336 -18	MW34-20130221-PE
302336 -19	MW35-20130220-BA
302336 -20	MW36-20130220-BA
302336 -21	MW37-20130221-PE
302336 -22	MW38-20130221-PE
302336 -23	MW99-20130220-PE
302336 -24	Trip Blank

All quality control requirements were acceptable.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/04/13 Date Received: 02/22/13

Project: TOC_01-176_20130222 WORFDB7, F&BI 302336

Date Extracted: 02/25/13

Date Analyzed: 02/25/13, 02/26/13, and 02/27/13

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

Sample ID Laboratory ID	Benzene	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Gasoline <u>Range</u>	Surrogate (% Recovery) (Limit 52-124)
MW02-20130220-PE 302336-01	<1	<1	<1	<3	<100	100
MW03-20130220-PE 302336-02	<1	<1	<1	<3	<100	97
MW06-20130220-PE 302336-03	<1	<1	<1	<3	<100	102
MW09-20130220-PE 302336-04	<1	<1	7.0	74	460	107
MW09-20130220-BL 302336-05	<1	<1	5.8	59	270	106
MW09-20130220-BA	<1	<1	28	140	1,200	111
MW10-20130221-PE 302336-07 1/5	5.5	14	8.7	110	620	102
MW19-20130221-PE 302336-08	<1	<1	<1	<3	<100	100
MW20-20130220-PE 302336-09 1/40	140	750	620	3,400	17,000	107
MW20-20130220-PE 302336-10 1/40	2 140	760	610	3,300	17,000	106
MW22-20130221-PE 302336-11	<1	<1	<1	<3	<100	98

ENVIRONMENTAL CHEMISTS

Date of Report: 03/04/13 Date Received: 02/22/13

Project: TOC_01-176_20130222 WORFDB7, F&BI 302336

Date Extracted: 02/25/13

Date Analyzed: 02/25/13, 02/26/13, and 02/27/13

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

Sample ID Laboratory ID	Benzene	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Gasoline <u>Range</u>	Surrogate (% Recovery) (Limit 52-124)
MW23-20130220-BA	<1	<1	<1	<3	<100	99
MW25-20130221-PE	1.6	25	31	240	1,900	113
MW26-20130220-BA	<1	<1	<1	<3	<100	101
MW28-20130220-PE 302336-15	<1	1.8	86	420	3,600	104
MW28-20130220-BA	<1	1.7	51	330	3,500	103
MW33-20130220-BA	2.0	1.2	9.3	120	2,700	113
MW34-20130221-PE 302336-18	<1	<1	<1	<3	<100	102
MW35-20130220-BA	<1	<1	<1	<3	<100	102
MW36-20130220-BA	<1	<1	<1	<3	<100	101
MW37-20130221-PE	<1	<1	<1	<3	<100	99
MW38-20130221-PE	<1	<1	<1	<3	<100	104

ENVIRONMENTAL CHEMISTS

Date of Report: 03/04/13 Date Received: 02/22/13

Project: TOC_01-176_20130222 WORFDB7, F&BI 302336

Date Extracted: 02/25/13

Date Analyzed: 02/25/13, 02/26/13, and 02/27/13

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

Sample ID Laboratory ID	Benzene	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Gasoline <u>Range</u>	Surrogate (% Recovery) (Limit 52-124)
MW99-20130220-PE 302336-23	<1	<1	6.1	65	420	107
Method Blank 03-0329 MB	<1	<1	<1	<3	<100	101
Method Blank 03-0330 MB	<1	<1	<1	<3	<100	98

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID: Date Received: MW35-20130220-BA

02/22/13

Date Extracted: Date Analyzed: Matrix:

02/25/13 02/26/13 Water ug/L (ppb)

Client: Project: SoundEarth Strategies TOC_01-176_20130222 WORFDB7

Lab ID: 302336-19 Data File:

302336-19.040

Instrument:

ICPMS1

Operator:

AP

Internal Standard:

Holmium

Units:

% Recovery: 89

Lower Limit: 60

Upper Limit: 125

Concentration

Analyte:

ug/L (ppb)

Lead

2.45

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:

Method Blank

Date Received:

NA

Date Extracted: Date Analyzed:

02/25/13 02/26/13 Water

Matrix: Units:

ug/L (ppb)

Client:

SoundEarth Strategies

Project:

TOC_01-176_20130222 WORFDB7

Lab ID: Data File: I3-79 mb I3-79 mb.065

Instrument: Operator:

ICPMS1 AP

Internal Standard:

% Recovery:

91

Lower Limit: 60 Upper

Limit:

Concentration

Analyte:

Holmium

ug/L (ppb)

Lead

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID: Date Received: MW35-20130220-BA

Client: Project: SoundEarth Strategies

Date Extracted:

02/22/13 02/25/13

TOC_01-176_20130222 WORFDB7

Date Analyzed: Matrix:

02/26/13 Water ug/L (ppb) Lab ID: Data File: 302336-19 302336-19.021

Instrument:

ICPMS1

Operator:

AP

Internal Standard:

Lower Limit:

Upper Limit:

Holmium

Units:

% Recovery: 95

60

125

Concentration

Analyte:

ug/L (ppb)

Lead

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID: Date Received:

Date Extracted:

Method Blank

NA 02/25/13

Date Analyzed: Matrix: Units:

02/26/13 Water

ug/L (ppb)

Client: Project:

Lab ID:

Data File:

SoundEarth Strategies TOC_01-176_20130222 WORFDB7

I3-81 mb

I3-81 mb.008 ICPMS1

Instrument: Operator: AP

Lower

Upper

Internal Standard:

Holmium

% Recovery:

91

Limit: 60

Limit: 125

Concentration ug/L (ppb)

Analyte:

Lead

ENVIRONMENTAL CHEMISTS

Date of Report: 03/04/13 Date Received: 02/22/13

Project: TOC_01-176_20130222 WORFDB7, F&BI 302336

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING METHOD 8021B AND NWTPH-Gx

Laboratory Code: 302336-11 (Duplicate)

	Reporting	Sample	Duplicate	Relative Percent Difference
Analyte	Ûnits	Result	Result	(Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	${f nm}$
Ethylbenzene	ug/L (ppb)	<1	<1	\mathbf{nm}
Xylenes	ug/L (ppb)	<3	<3	${f nm}$
Gasoline	ug/L (ppb)	<100	<100	nm

•	Percent						
	Reporting	Spike	Recovery	Acceptance			
Analyte	Units	Level	LCS	Criteria			
Benzene	ug/L (ppb)	50	93	65-118			
Toluene	ug/L (ppb)	50	93	72-122			
Ethylbenzene	ug/L (ppb)	50	97	73-126			
Xylenes	ug/L (ppb)	150	94	74-118			
Gasoline	ug/L (ppb)	1,000	102	69-134			

ENVIRONMENTAL CHEMISTS

Date of Report: 03/04/13 Date Received: 02/22/13

Project: TOC_01-176_20130222 WORFDB7, F&BI 302336

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING METHOD 8021B AND NWTPH-Gx

Laboratory Code: 302336-21 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	$\mathbf{n}\mathbf{m}$
Gasoline	ug/L (ppb)	<100	<100	$\mathbf{n}\mathbf{m}$

		Percent			
	Reporting	\mathbf{Spike}	Recovery	Acceptance	
Analyte	Units	Level	LCS	Criteria	
Benzene	ug/L (ppb)	50	91	65-118	
Toluene	ug/L (ppb)	50	90	72-122	
Ethylbenzene	ug/L (ppb)	50	94	73-126	
Xylenes	ug/L (ppb)	150	92	74-118	
Gasoline	ug/L (ppb)	1,000	102	69-134	

ENVIRONMENTAL CHEMISTS

Date of Report: 03/04/13 Date Received: 02/22/13

Project: TOC_01-176_20130222 WORFDB7, F&BI 302336

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 302313-01 (Matrix Spike)

				$\mathbf{Percent}$	Percent		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Lead	ug/L (ppb)	10	<1	103	102	85-115	1

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Lead	ug/L (ppb)	10	105	84-120

ENVIRONMENTAL CHEMISTS

Date of Report: 03/04/13 Date Received: 02/22/13

Project: TOC_01-176_20130222 WORFDB7, F&BI 302336

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR DISSOLVED METALS USING EPA METHOD 200.8

Laboratory Code: 302335-13 (Matrix Spike)

				Percent	Percent		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Lead	ug/L (ppb)	10	<1	100	101	85-115	1

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Lead	ug/L (ppb)	10	108	84-120

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.
- J The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.
- jr The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- js The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc The presence of the compound indicated is likely due to laboratory contamination.
- L The reported concentration was generated from a library search.
- nm The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc The sample was received in a container not approved by the method. The value reported should be considered an estimate.
- pr The sample was received with incorrect preservation. The value reported should be considered an estimate.
- ve Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.
- vo The value reported fell outside the control limits established for this analyte.
- x The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

FORMS/COC/SESCEMBRI.DOC (Revision 1) Received by: 14x (202) 283-2044 Reimquienc<mark>d</mark> by: 7878-987 (907) YA Igzt NKan _S/わ El/27/2 UUUU -61186 AW ,91119-8 SIHL 21/22/2 **SES** CHAMPICOA 22102Relinquishedoy 3012 16th Avenue West LIME DATE COMPANY PRINT NAME SIGNATURE oni agund & mundairi ٤ Water 20E1 21/12/20 29-12-20-519-ST MW 17 ~ 52MU JOHOM $\overline{\varepsilon}$ 0511 E1/02/20 EZMU #8-01902102 7/ - 52 MW MAPER इंग्निस् रिव स्ट ٤ 0711 11 LZ 27 MW 39-12205102 - マスグ Mortor 21/02/20 7.5h1 0/ 39 OZMW 234-02-205105 -OZ MW ٤ الكوراوا 5551 21/11/12/20 10 h8 34 -02 20 5102 _ <u>क्टल</u> -azoru Mapor ε OhOI 21/12/13 20 51 31-12202102 MM =614H <u>=614H</u> 3 Water h550 81/12/20 Ю LZ a/mui -DIMM 70/1/4 ٤ くろんりん 21/02/20 90 -900M 60 MW Jaten) ε 222 20 21/02/20 LF78 -02-202108 DOME - GOMN ٤. Japan H581 21/22/20 60 37-05505105 41 60MK www-Water 508/ ٤ 21/02/20 EO 25.0 90 mu 30-0270200 -90M4 24-02-105 Mater 5111 E E1/02/20 9% Eam W - Eaww WATER 2/02/20 0201 ط نگر 39-06202105 10 ZOMW WMDY BIEY BTEX by 8021B **VOC!** NWIPH-Dx 100 RIBL Sam pled by 8260 Sampled Notes ID Depth Location Matrix 99 Sample ID IO # M STE Time . Sample Date Sample 20 ANALYSES REQUESTED enoitourseni rive lles liw O TB-24205 (6x, STEX) - HOLD N TOP 1. 30E - 40E # XEN Phone # 206, 306, 1900 D Repara samples GEMS X \ be make - whoshipy supplied N Dispose after 30 days Survisor hand bettered out reserved. City, State, AP Sealle SYMBLE DISPOSAL REMARKS Total and Pisselved Lead 911-10 Avenue East, Suite 2000 Rush charges authorized by: 61-0E 0- 26HP HEUX D TOC Holdings-Mountake Temple (adasw 2) brabnata & ьколест имме/ио. # Od TURNAROUND TIME Camarda Grainett, Mador, Juscaki Send Report To Dee Gardner SAMPLERS (Signature) Symple Chain of Custody

Samples received at

J.

TIME DATE COMPANY PRINT NAME SIGNATURE Friedman & Bruya, Inc. TUD SIST 95 Added to un water 8,10 Trioblank 8 3 LSEI Worter 51/00/13 666MU 31-01-20-2107 133 2.7 -bbbmw 8 MOHER 8501 E1/14/20 31-12-10E102 hZ 8EMW 32 - SEMW 79-1019 8001 8/12/20 2 15 5:57 LEMMY 38-172021m 18-05-50-51 OF E Marer 27/1/ 81/02/20 R DEMILL JV9 -95MW 夕 5 Mostal 5451 AG-OLEGEIDE -ZEWM E1/02/20 SEMU 1 10 80 TO 100 13 26 -12 202105 -12 202105 -12 202105 -12 202105 -22 MM 2451 Water 8 21/12/20 81 11 17EMW 33-20130220-88 D 3 -Water 21H1 8//02/20 H EE MW 18-2030220-8A 8 Water azhi 21/02/20 4 91 87MW 3 Water 0221 8/02/20 197 34-02205100 SI STOW - 52 MW Water ٤ 2591 E1/20/20 48-02209102 97MW -97 MW Dissolved BTEX by 8021B VOC's by 8260 NWIPH-Dx 100 BIB Sampled Sampled Notes ID Depth Location Matrix 0 Sample ID JO # Time Date Lab Sample Sam ple 100 0 ANALYSES REQUESTED Served Trip Blank - Laberatory
Supplied The Zylog (Gy, BTEX) - Hold O Will call with instructions N 70P1,30E . JOE # XBH Phone # 206, 306, 1900 D Return samples GEWS X \ White ose after 30 days REMARKS 10 tal (1) tered tend somples were free fill the form City, State, ZIP Sen Ille, WA SAMPLE DISPOSAL Address 2811 Fairview Avenue East, Suite 2000 Rush charges authorized by: TO Holdings-mountake Temper D RUSH S Standard (2 Weeks) # Od PROJECT NAME/NO. Camerda brancth, Mador, Iwasaki, Botter, Forbes TURNAROUND TIME DEIN REPORT TO DER GRANARE SAMPLERS (signature) EIH/SA 358808 SYMPLE CHAIN OF CUSTODY

FORMS/COC/SESGEMSRI.DOC (Revision 1)

Ph. (206) 285-5282 Fax (206) 283-5044

-61186 AW ,91119-8

3012 16th Avenue West

Received by:

Becelhed by

Relinquished by:

Relinquished by:

Camples received at.

IBST

535

UDUG

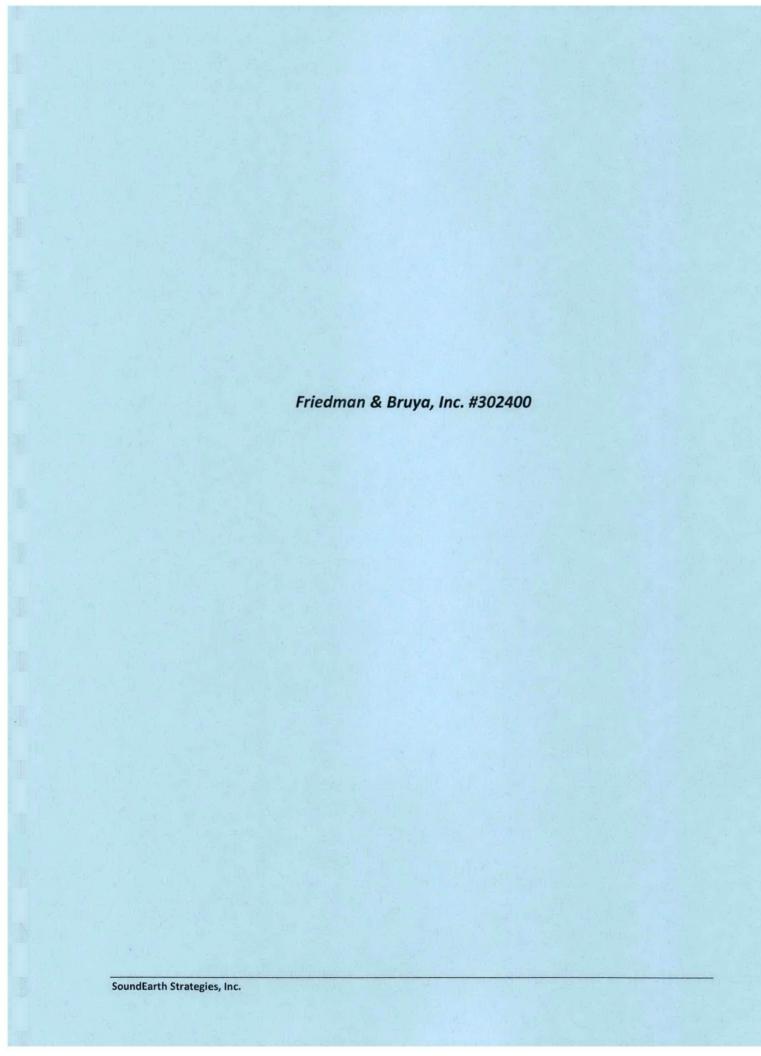
WILL CAMPTEDA

81/27/2

81/22/2

J.

SIHI



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

March 5, 2013

Dee Gardner, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Ms. Gardner:

Included are the results from the testing of material submitted on February 27, 2013 from the TOC_01-176_20130227 WORFDB7, F&BI 302400 project. There are 4 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 should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures c: Audrey Hackett, Beau Johnson SOU0305R.DOC

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on February 27, 2013 by Friedman & Bruya, Inc. from the SoundEarth Strategies TOC_01-176_20130227 WORFDB7, F&BI 302400 project. Samples were logged in under the laboratory ID's listed below.

 $\begin{array}{cc} \underline{\text{Laboratory ID}} & \underline{\text{SoundEarth Strategies}} \\ 302400 \text{ -}01 & 01176 \text{-}20130219 \text{-}R1 \end{array}$

All quality control requirements were acceptable.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/05/13 Date Received: 02/27/13

Project: TOC_01-176_20130227 WORFDB7, F&BI 302400

Date Extracted: 02/27/13 Date Analyzed: 02/27/13

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES USING METHOD 8021B

Sample ID Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Surrogate (% Recovery) Limit (52-124)
01176-20130219-R1 302400-01	<1	<1	<1	<3	101
Method Blank	<1	<1	<1	<3	99

ENVIRONMENTAL CHEMISTS

Date of Report: 03/05/13 Date Received: 02/27/13

Project: TOC_01-176_20130227 WORFDB7, F&BI 302400

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES USING EPA METHOD 8021B

Laboratory Code: 302400-01 (Duplicate)

				Relative Percent
	Reporting	Sample	Duplicate	Difference
Analyte	Units	Result	Result	(Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	<1	<1	\mathbf{nm}
Xylenes	ug/L (ppb)	<3	<3	nm

Laboratory Code: Laboratory Control Sample

	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	ug/L (ppb)	50	88	65-118
Toluene	ug/L (ppb)	50	88	72-122
Ethylbenzene	ug/L (ppb)	50	92	73-126
Xylenes	ug/L (ppb)	150	91	74-118

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.
- J The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.
- jr The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- js The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc The presence of the compound indicated is likely due to laboratory contamination.
- L The reported concentration was generated from a library search.
- nm The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc The sample was received in a container not approved by the method. The value reported should be considered an estimate.
- pr-The sample was received with incorrect preservation. The value reported should be considered an estimate.
- ve Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.
- vo The value reported fell outside the control limits established for this analyte.
- x The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

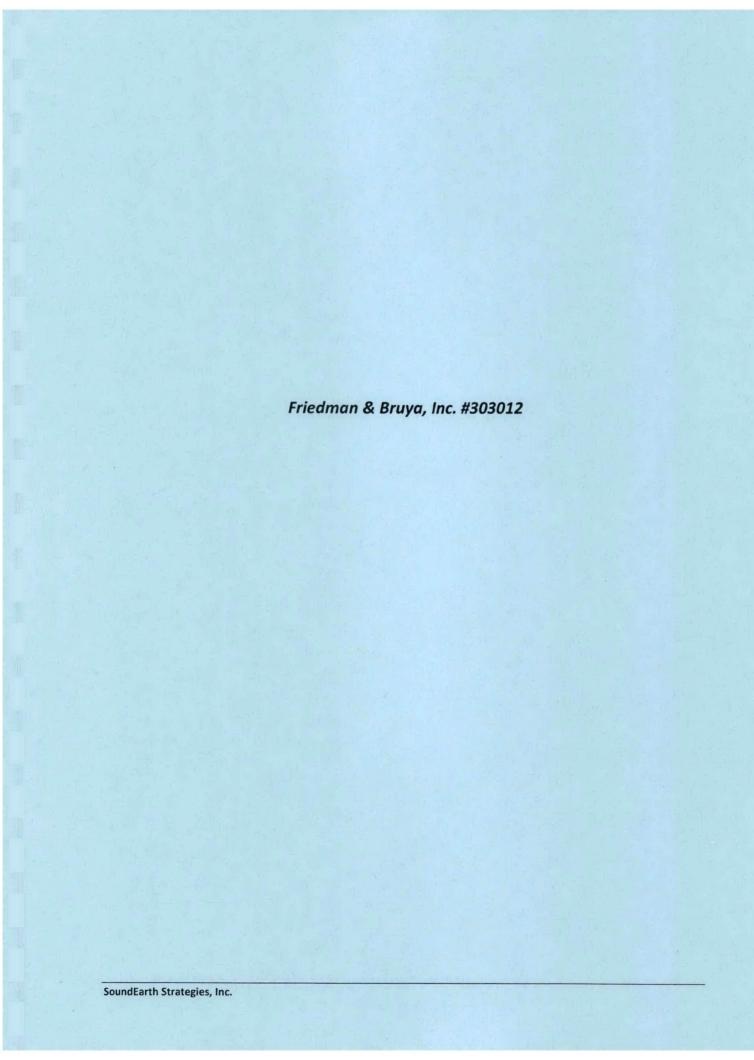
Seattle, WA 98119-

Ph. (206) 285-8282 Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	DEE GARDINER	SOUNDEARTH)	Ce. 27,202	1050
Received by: monay au	Nhan phan	FeBT	2/27/17	1050
Relinquished by:				
Received by:				

FORMS\COC\SESGEMSRI.DOC (Revision 1)

Samples received at 4



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

March 13, 2013

Dee Gardner, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Ms. Gardner:

Included are the results from the testing of material submitted on March 1, 2013 from the TOC_01-176_20130301 WORFDB7, F&BI 303012 project. There are 40 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 should have any questions.

Sincerely,

FRIEDMAN & BRUYA. INC.

Michael Erdahl Project Manager

Enclosures c: Audrey Hackett, Beau Johnson SOU0313R.DOC

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on March 1, 2013 by Friedman & Bruya, Inc. from the SoundEarth Strategies TOC_01-176_20130301 WORFDB7, F&BI 303012 project. Samples were logged in under the laboratory ID's listed below.

Corred Trouth Chustonian
SoundEarth Strategies
MW11-20130228-PN
MW15-20130228-PN
MW18-20130228-PN
MW24-20130228-PN
MW27-20130228-PN
MW29-20130228-PN
MW31-20130228-PN
MW32-20130228-PN
MW41-20130228-PN
MW57-20130228-PN
MW69-20130228-PN
MW70-20130228-PN
MW84-20130228-PN
MW90-20130228-PN
MW91-20130228-PN
MW92-20130228-PN
MW93-20130228-PN
MW94-20130228-PN
MW95-20130228-PN
MW96-20130228-PN
MW97-20130228-PN
MW98-20130228-PN
MW98-20130228-PN2
MW99-20130228-PN
MW101-20130228-PN

All quality control requirements were acceptable.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/13/13 Date Received: 03/01/13

Project: TOC_01-176_20130301 WORFDB7, F&BI 303012

Date Extracted: 03/01/13

Date Analyzed: 03/01/13, 03/02/13, and 03/06/13

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE USING METHOD NWTPH-Gx

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
MW69-20130228-PN 303012-11 1/5	7,600	104
MW70-20130228-PN 303012-12	<100	89
MW84-20130228-PN 303012-13 1/5	4,700	101
MW95-20130228-PN 303012-19	<100	85
MW96-20130228-PN 303012-20	240	88
MW97-20130228-PN 303012-21	110	91
MW98-20130228-PN 303012-22	770	115
MW98-20130228-PN2 303012-23	810	123
MW99-20130228-PN ³⁰³⁰¹²⁻²⁴	<100	84
MW101-20130228-PN 303012-25	<100	86
Method Blank 03-0368 MB	<100	83
Method Blank 03-0369 MB	<100	84

ENVIRONMENTAL CHEMISTS

Date of Report: 03/13/13 Date Received: 03/01/13

Project: TOC_01-176_20130301 WORFDB7, F&BI 303012

Date Extracted: 03/01/13

Date Analyzed: 03/01/13, 03/02/13, 03/05/13, and 03/06/13

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

Sample ID Laboratory ID	Benzene	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Gasoline <u>Range</u>	Surrogate (% Recovery) (Limit 50-150)
MW11-20130228-P	N 14	85	92	4,200	7,800	99
MW15-20130228-P 303012-02 1/5	N 3.6 j	<5	<5	44	790	92
MW18-20130228-P	N 3.3	47	73	1,000	4,200	97
MW24-20130228-P	N <1	1.7	<1	40	1,000	93
MW27-20130228-P	N <1	6.9	160	1,300	5,500	104
MW29-20130228-P	N <1	50	<1	1,400	8,500	104
MW31-20130228-P	N 4.6	<1	19	45	2,000	100
MW32-20130228-P3	N 23	210	1,000	7,000	28,000	94
MW57-20130228-P2	N 25	10	<1	710	3,100	93
MW90-20130228-P2	N 27	1,900	770	5,500	30,000	91
MW91-20130228-P3	N 41	380	750	5,400	22,000	105

ENVIRONMENTAL CHEMISTS

Date of Report: 03/13/13 Date Received: 03/01/13

Project: TOC_01-176_20130301 WORFDB7, F&BI 303012

Date Extracted: 03/01/13

Date Analyzed: 03/01/13, 03/02/13, 03/05/13, and 03/06/13

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

Sample ID Laboratory ID	Benzene	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Gasoline <u>Range</u>	Surrogate (% Recovery) (Limit 50-150)
MW92-20130228-P	N 1.1	<1	<1	<3	<100	87
MW93-20130228-P	N <1	<1	<1	<3	<100	87
MW94-20130228-P 303012-18	N 8.9	1.1	<1	<3	<100	86
Method Blank 03-0368 MB	<1	<1	<1	<3	<100	87
Method Blank 03-0369 MB	<1	<1	<1	<3	<100	85

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID: Date Received: MW29-20130228-PN

03/01/13

Date Extracted: Date Analyzed:

Internal Standard:

03/04/13 03/04/13

Matrix: Units:

Water

ug/L (ppb)

Client:

SoundEarth Strategies

Project: TOC_01-176_20130301 WORFDB7

Lab ID: Data File: 303012-06 303012-06.045

Instrument: Operator:

ICPMS1 AP

Lower

Limit: 60

Upper

Limit: 125

Concentration

% Recovery:

97

Analyte:

Holmium

ug/L (ppb)

Lead

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:

MW31-20130228-PN

Client:

SoundEarth Strategies

Date Received: Date Extracted: 03/01/13 03/04/13

Project: Lab ID: TOC_01-176_20130301 WORFDB7 303012-07

Date Analyzed: Matrix:

03/04/13 Water

Data File:

303012-07.046

Units:

Instrument:

ICPMS1

ug/L (ppb)

Operator:

AP

Internal Standard:

% Recovery:

Lower Limit:

Upper Limit:

Holmium

98

60

125

Concentration

Analyte:

ug/L (ppb)

Lead

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID: MW32-20130228-PN Client: SoundEarth Strategies

 Date Received:
 03/01/13
 Project:
 TOC_01-176_20130301 WORFDB7

 Date Extracted:
 03/04/13
 Lab ID:
 303012-08

Date Analyzed:03/04/13Data File:303012-08.047Matrix:WaterInstrument:ICPMS1Units:ug/L (ppb)Operator:AP

Lower Upper Internal Standard: % Recovery: Limit: Limit: Holmium 101 60 125

Concentration

Analyte: ug/L (ppb)

Lead 9.37

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID: Date Received: MW41-20130228-PN

Client:

SoundEarth Strategies

Date Extracted:

03/01/13 03/04/13 Project: Lab ID: TOC_01-176_20130301 WORFDB7

Date Analyzed:

03/04/13 Water

Data File:

303012-09 303012-09.048

Matrix: Units:

ug/L (ppb)

Instrument:

ICPMS1

Operator: AP

Internal Standard:

% Recovery:

Lower Limit: Upper

Holmium

113

60

Limit: 125

Concentration

Analyte:

ug/L (ppb)

Lead

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID: Date Received: MW90-20130228-PN

Client: Project: SoundEarth Strategies

Date Extracted:

03/01/13 03/04/13 03/04/13

TOC 01-176 20130301 WORFDB7

Date Analyzed:

Water

Lab ID: Data File: 303012-14 303012-14.049

Matrix:

Instrument:

Units:

ug/L (ppb)

Operator:

ICPMS1 AP

Internal Standard:

% Recovery:

Lower Limit:

Upper Limit:

Holmium

106

60

125

Concentration

Analyte:

ug/L (ppb)

Lead

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID: Date Received:

MW91-20130228-PN 03/01/13

Client: Project: SoundEarth Strategies

Date Extracted: Date Analyzed:

03/04/13 03/04/13 Water

ug/L (ppb)

Lab ID:

TOC_01-176_20130301 WORFDB7 303012-15

Data File:

303012-15.051

Instrument: Operator:

ICPMS1 AP

Internal Standard:

% Recovery:

Lower Limit:

Upper Limit:

Holmium

108

60

125

Concentration

Analyte:

Matrix:

Units:

ug/L (ppb)

Lead

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:

MW101-20130228-PN

Client: Project: SoundEarth Strategies

Date Received:

03/01/13 03/04/13 03/04/13

roject: TOC

TOC_01-176_20130301 WORFDB7

Date Extracted: Date Analyzed:

Internal Standard:

03/04/13 03/04/13 Water Lab ID: Data File: 303012-25 303012-25.059

ICPMS1

Matrix: Water Units: ug/L (ppb)

Instrument:

Operator: AP

% Recovery: 102

Lower Limit: 60 Upper

Limit: 125

Concentration

Analyte:

Holmium

ug/L (ppb)

Lead

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:

Method Blank

Date Received:

NA

Date Extracted:
Date Analyzed:

03/04/13 03/04/13 Water

Matrix: Units:

ug/L (ppb)

Client:

SoundEarth Strategies

Project:

TOC 01-176 20130301 WORFDB7

Lab ID: Data File: I3-89 mb I3-89 mb.057

Instrument:

ICPMS1

Operator:

ator: AP

Lower

Upper

Internal Standard:

al Standard: % Rec

Holmium

% Recovery:

89

Limit:

Limit:

 ${\bf Concentration}$

Analyte:

ug/L (ppb)

Lead

<1

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID: Date Received: MW29-20130228-PN

Client: Project: SoundEarth Strategies

Date Extracted: Date Analyzed:

Matrix:

Units:

03/01/13 03/04/13 03/04/13 Water

ug/L (ppb)

Lab ID:

TOC_01-176_20130301 WORFDB7

Data File:

303012-06 303012-06.031

Instrument:

ICPMS1

Operator:

AP

Internal Standard:

% Recovery:

Lower Limit: 60

Upper Limit:

Holmium

102

Concentration ug/L (ppb)

125

Lead

Analyte:

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID: Date Received: MW31-20130228-PN

Client: Project: SoundEarth Strategies

Date Extracted:

03/01/13 03/04/13 03/04/13

Lab ID:

TOC_01-176_20130301 WORFDB7 303012-07

Date Analyzed: Water

Data File:

303012-07.034

Matrix: Units:

Instrument:

ICPMS1

ug/L (ppb)

Operator: AP

Lower

Upper

Internal Standard:

% Recovery: 100

Limit: 60

Limit: 125

Holmium

Concentration

Analyte:

ug/L (ppb)

Lead

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID: Date Received: MW32-20130228-PN

Client: Project: SoundEarth Strategies

Date Extracted: Date Analyzed:

03/01/13 03/04/13 03/04/13 Water

Lab ID:

TOC_01-176_20130301 WORFDB7 303012-08

Data File:

303012-08.035

Instrument:

ICPMS1 AP

Units:

ug/L (ppb)

Operator:

Lower

Upper

Internal Standard:

% Recovery:

Limit: 60

Limit: 125

Holmium

104

Concentration ug/L (ppb)

Analyte:

Lead

Matrix:

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:

MW90-20130228-PN

Client:

SoundEarth Strategies

Date Received: Date Extracted:

03/01/13 03/04/13 03/04/13 Project: Lab ID: TOC_01-176_20130301 WORFDB7 303012-14

Date Analyzed:

Data File:

303012-14.036

Matrix:

Water

Instrument:

ICPMS1

Units:

ug/L (ppb)

Operator:

AP

Internal Standard:

% Recovery:

Lower Limit: 60

Upper Limit: 125

Holmium

104

Concentration ug/L (ppb)

Analyte: Lead

<1

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:

MW91-20130228-PN

Client:

SoundEarth Strategies

Date Received: Date Extracted: 03/01/13 03/04/13 03/04/13 Project:

TOC_01-176_20130301 WORFDB7

Date Analyzed:

Lab ID: Data File: 303012-15 303012-15.037

Matrix: Units:

Water ug/L (ppb) Instrument:

ICPMS1

Operator:

AP

Internal Standard:

% Recovery:

Lower Limit:

Upper Limit:

Holmium

102

60

125

Concentration

Analyte:

ug/L (ppb)

Lead

<1

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID: Date Received: MW101-20130228-PN

Client: Project: SoundEarth Strategies

Date Extracted: Date Analyzed:

Matrix:

Units:

03/01/13 03/04/13 03/04/13 Water

ug/L (ppb)

Lab ID:

TOC_01-176_20130301 WORFDB7 303012-25

Data File:

303012-25.038

Instrument:

ICPMS1

Operator:

AP

Internal Standard:

% Recovery:

Lower Limit: 60

Upper Limit: 125

Holmium

96

Concentration ug/L (ppb)

Lead

Analyte:

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:

Date Analyzed:

Method Blank

Date Received:
Date Extracted:

NA 03/04/13 03/04/13

Matrix: Units:

Water ug/L (ppb) Client:

SoundEarth Strategies

Project:

TOC_01-176_20130301 WORFDB7

Lab ID: Data File: I3-93 mb I3-93 mb.029

Instrument:

ICPMS1

Operator: AP

Lower

Internal Standard:

Holmium

% Recovery:

99

Lower Limit: 60 Upper Limit:

125

Concentration

Analyte:

ug/L (ppb)

Lead

<1

ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed:	MW69-20130228-PN	Client:	SoundEarth Strategies
	03/01/13	Project:	TOC_01-176_20130301 WORFDB7
	03/06/13	Lab ID:	303012-11rr
	03/06/13	Data File:	030612.D
Matrix: Units:	Water ug/L (ppb)	Instrument: Operator: Lower	GCMS9 JS Upper

		TOMET	Obber
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	97	50	150
Toluene-d8	101	50	150
4-Bromofluorobenzene	109	50	150
	Concentration		

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
Benzene	1.5
Toluene	1.8
Ethylbenzene	130
m,p-Xylene	680 ve
o-Xylene	14

ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix:	MW69-20130228-PN	Client:	SoundEarth Strategies
	03/01/13	Project:	TOC_01-176_20130301 WORFDB7
	03/01/13	Lab ID:	303012-11 1/10
	03/04/13	Data File:	030408.D
	Water	Instrument:	GCMS9
Matrix:	water	Instrument:	JS
Units:	ug/L (ppb)	Operator:	
		-	

		Lower	∪pper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	102	50	150
4-Bromofluorobenzene	109	50	150

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<10
Benzene	<3.5
Toluene	<10
Ethylbenzene	160
m,p-Xylene	950
o-Xylene	23

ENVIRONMENTAL CHEMISTS

Client Sample ID:	MW70-20130228-PN	Client:	SoundEarth Strategies
Date Received:	03/01/13	Project:	TOC_01-176_20130301 WORFDB7
Date Extracted:	03/01/13	Lab ID:	303012-12
Date Analyzed:	03/01/13	Data File:	030118.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS
		Torrow	Unnon

		\mathbf{Lower}	Upper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	98	50	150
Toluene-d8	97	50	150
4-Bromofluorobenzene	103	50	150

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
Benzene	< 0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

ENVIRONMENTAL CHEMISTS

Client Sample ID:	MW84-20130228-PN	Client:	SoundEarth Strategies
Date Received:	03/01/13	Project:	TOC_01-176_20130301 WORFDB7
Date Extracted:	03/01/13	Lab ID:	303012-13
Date Analyzed:	03/01/13	Data File:	030119.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

		Lower	∪pper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	103	50	150
Toluene-d8	102	50	150
4-Bromofluorobenzene	108	50	150

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
Benzene	1.9
Toluene	2.0
Ethylbenzene	160 ve
m,p-Xylene	470 ve
o-Xylene	31

ENVIRONMENTAL CHEMISTS

Lower

Limit: **50**

50

50

Analysis For Volatile Compounds By EPA Method 8260C

520

31

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	MW84-20130228-PN 03/01/13 03/01/13 03/04/13 Water
Units:	ug/L (ppb)

Client:	SoundEarth Strategies
Project:	TOC_01-176_20130301 WORFDB7
Lab ID:	303012-13 1/10
Data File:	030409.D
Instrument:	GCMS9
Operator:	JS

Upper Limit:

150

150

150

Surrogates:	% Recovery:
1,2-Dichloroethane-d4	101
Toluene-d8	102
4-Bromofluorobenzene	110
	Concentration
Compounds:	ug/L (ppb)
Methyl t-butyl ether (MTBE)	<10
Benzene	<3.5
Toluene	<10
Ethylbenzene	150

m,p-Xylene

o-Xylene

ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix:	MW95-20130228-PN	Client:	SoundEarth Strategies
	03/01/13	Project:	TOC_01-176_20130301 WORFDB7
	03/01/13	Lab ID:	303012-19
	03/01/13	Data File:	030120.D
	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS .

		rower.	$\cup \mathrm{pper}$
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	106	50	150
	a :		

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
Benzene	< 0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received:	MW96-20130228-PN 03/01/13	Client: Project:	SoundEarth Strategies TOC 01-176 20130301 WORFDB7
Date Extracted:	03/01/13	Lab ID:	303012-20
Date Analyzed:	03/01/13	Data File:	030121.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS
		Lower	Upper

Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	107	50	150
	Concentration		
Compounds:	ug/L (ppb)		

Compounds:	ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
Benzene	6.0
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	50
o-Xylene	4.4

ENVIRONMENTAL CHEMISTS

Client Sample ID:	MW97-20130228-PN	Client:	SoundEarth Strategies
Date Received:	03/01/13	Project:	TOC 01-176 20130301 WORFDB7
Date Extracted:	03/01/13	Lab ID:	303012-21
Date Analyzed:	03/01/13	Data File:	030122.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	9 8	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	105	50	150

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
Benzene	1.7
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

ENVIRONMENTAL CHEMISTS

Client Sample ID:	MW98-20130228-PN	Client:	SoundEarth Strategies
Date Received:	03/01/13	Project:	TOC_01-176_20130301 WORFDB7
Date Extracted:	03/01/13	Lab ID:	303012-22
Date Analyzed:	03/01/13	Data File:	030123.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS
		т	T.T.

		Lower	∪pper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	98	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	105	50	150
	Concentration		

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
Benzene	7.6
Toluene	1.5
Ethylbenzene	13
m,p-Xylene	43
o-Xylene	1.5

ENVIRONMENTAL CHEMISTS

Client Sample ID:	MW98-20130228-PN2	Client:	SoundEarth Strategies
Date Received:	03/01/13	Project:	TOC_01-176_20130301 WORFDB7
Date Extracted:	03/01/13	Lab ID:	303012-23
Date Analyzed:	03/01/13	Data File:	030124.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS
		Lower	Upper

		TOMET	Opper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	105	50	150
	0 , , , ,		

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
Benzene	7.6
Toluene	1.5
Ethylbenzene	13
m,p-Xylene	42
o-Xylene	1.6

ENVIRONMENTAL CHEMISTS

		T	I Innon
Units:	ug/L (ppb)	Operator:	JS
Matrix:	Water	Instrument:	GCMS9
Date Analyzed:	03/01/13	Data File:	030125.D
Date Extracted:	03/01/13	Lab ID:	303012-24
Date Received:	03/01/13	Project:	TOC_01-176_20130301 WORFDB7
Client Sample ID:	MW99-20130228-PN	Client:	SoundEarth Strategies

		TOMET	Obber
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	106	50	150
	Concentration		

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
Benzene	< 0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

ENVIRONMENTAL CHEMISTS

Client Comple ID:	MW101-20130228-PN	Client:	CoundForth Ctrotogics
Client Sample ID:	WIW 101-20130226-PW	сцепт.	SoundEarth Strategies
Date Received:	03/01/13	Project:	TOC_01-176_20130301 WORFDB7
Date Extracted:	03/01/13	Lab ID:	303012-25
Date Analyzed:	03/01/13	Data File:	030126.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS
		_	

		Lower	∪pper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	106	50	150

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
Benzene	< 0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

ENVIRONMENTAL CHEMISTS

Lower

Limit:

50

50 50

Analysis For Volatile Compounds By EPA Method 8260C

% Recovery:

<2

<1

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Method Blank NA 03/01/13 03/01/13 Water ug/L (ppb)
Units:	ug/L (ppb)

Surrogates:

m,p-Xylene

o-Xylene

Client:	SoundEarth Strategies
Project:	TOC_01-176_20130301 WORFDB7
Lab ID:	03-0346 mb
Data File:	030115.D
Instrument:	GCMS9
Operator:	JS

Upper Limit:

150 150

150

1,2-Dichloroethane-d4	99
Toluene-d8	99
4-Bromofluorobenzene	105
Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
Benzene	< 0.35
Toluene	<1
Ethylbenzene	<1

ENVIRONMENTAL CHEMISTS

Lower

Limit:

50

50

50

Analysis For Volatile Compounds By EPA Method 8260C

% Recovery:

<1

<2

<1

Surrogates:

Ethylbenzene

m,p-Xylene

o-Xylene

Client:	SoundEarth Strategies
Project:	TOC_01-176_20130301 WORFDB7
Lab ID:	03-0386 mb
Data File:	030607.D
Instrument:	GCMS9
Operator:	JS

Upper

Limit:

150

150

150

1,2-Dichloroethane-d4	100	
Toluene-d8	99	
4-Bromofluorobenzene	106	
Compounds:	Concentration ug/L (ppb)	
Methyl t-butyl ether (MTBE)	<1	
Benzene	< 0.35	
Toluene	<1	

ENVIRONMENTAL CHEMISTS

Date of Report: 03/13/13 Date Received: 03/01/13

Project: TOC_01-176_20130301 WORFDB7, F&BI 303012

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING METHOD 8021B AND NWTPH-Gx

Laboratory Code: 302371-17 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	${f nm}$
Ethylbenzene	ug/L (ppb)	<1	<1	${f nm}$
Xylenes	ug/L (ppb)	<3	<3	${f nm}$
Gasoline	ug/L (ppb)	<100	<100	${f nm}$

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	ug/L (ppb)	50	99	72-119
Toluene	ug/L (ppb)	50	97	71 - 113
Ethylbenzene	ug/L (ppb)	50	99	72-114
Xylenes	ug/L (ppb)	150	97	72-113
Gasoline	ug/L (ppb)	1,000	98	70-119

ENVIRONMENTAL CHEMISTS

Date of Report: 03/13/13 Date Received: 03/01/13

Project: TOC_01-176_20130301 WORFDB7, F&BI 303012

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING METHOD 8021B AND NWTPH-Gx

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Benzene	ug/L (ppb)	50	92	92	72-119	0
Toluene	ug/L (ppb)	50	92	91	71-113	1
Ethylbenzene	ug/L (ppb)	50	94	94	72-114	0
Xylenes	ug/L (ppb)	150	91	91	72-11 3	0
Gasoline	ug/L (ppb)	1,000	95	96	70-119	1

ENVIRONMENTAL CHEMISTS

Date of Report: 03/13/13 Date Received: 03/01/13

Project: TOC_01-176_20130301 WORFDB7, F&BI 303012

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 303012-25 (Matrix Spike)

				Percent	Percent		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Lead	ug/L (ppb)	10	20.3	98 b	121 b	85-115	21 b

			$\operatorname{Percent}$	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Lead	ug/L (ppb)	10	110	84-120

ENVIRONMENTAL CHEMISTS

Date of Report: 03/13/13 Date Received: 03/01/13

Project: TOC_01-176_20130301 WORFDB7, F&BI 303012

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR DISSOLVED METALS USING EPA METHOD 200.8

Laboratory Code: 303012-06 (Matrix Spike)

				Percent	$\mathbf{Percent}$		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	\mathbf{Result}	MS	MSD	Criteria	(Limit 20)
Lead	ug/L (ppb)	10	3.19	92 b	92 b	85-115	0 b

			Percent		
	Reporting	\mathbf{Spike}	Recovery	Acceptance	
Analyte	Units	Level	LCS	Criteria	
Lead	ug/L (ppb)	10	94	84-120	

ENVIRONMENTAL CHEMISTS

Date of Report: 03/13/13 Date Received: 03/01/13

Project: TOC_01-176_20130301 WORFDB7, F&BI 303012

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

Laboratory Code: 302331-19 (Matrix Spike)

				Percent	
	Reporting	Spike	Sample	Recovery	Acceptance
Analyte	\mathbf{Units}	Level	Result	MS	Criteria
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	<1	74	73-123
Benzene	ug/L (ppb)	50	< 0.35	71 vo	80-108
Toluene	ug/L (ppb)	50	<1	72 vo	74-116
Ethylbenzene	ug/L (ppb)	50	<1	71	71-120
m,p-Xylene	ug/L (ppb)	100	<2	70	64-128
o-Xylene	ug/L (ppb)	50	<1	71	66-129

			Percent	Percent		
	Reporting	Spike	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 20)
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	103	102	76-122	1
Benzene	ug/L (ppb)	50	98	99	81-108	1
Toluene	ug/L (ppb)	50	101	101	83-108	0
Ethylbenzene	ug/L (ppb)	50	99	99	84-110	0
m,p-Xylene	ug/L (ppb)	100	98	97	84-112	1
o-Xylene	ug/L (ppb)	50	99	99	82-113	0

ENVIRONMENTAL CHEMISTS

Date of Report: 03/13/13 Date Received: 03/01/13

Project: TOC_01-176_20130301 WORFDB7, F&BI 303012

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

Laboratory Code: 303054-12 (Matrix Spike)

				Percent	
	Reporting	Spike	Sample	Recovery	Acceptance
Analyte	Units _	Level	Result	MS	Criteria
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	<1	98	73-123
Benzene	ug/L (ppb)	50	< 0.35	94	80-108
Toluene	ug/L (ppb)	50	<1	98	74-116
Ethylbenzene	ug/L (ppb)	50	<1	95	71-120
m,p-Xylene	ug/L (ppb)	100	<2	94	64-128
o-Xylene	ug/L (ppb)	50	<1	95	66-129

			Percent	Percent		
	Reporting	Spike	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 20)
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	99	99	76-122	0
Benzene	ug/L (ppb)	50	96	95	81-108	1
Toluene	ug/L (ppb)	50	98	97	83-108	1
Ethylbenzene	ug/L (ppb)	50	96	96	8 4-110	0
m,p-Xylene	ug/L (ppb)	100	94	95	84-112	1
o-Xylene	ug/L (ppb)	50	96	96	82-113	0

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.
- dy Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.
- fb Analyte present in the blank and the sample.
- fc The compound is a common laboratory and field contaminant.
- hr The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.
- ht Analysis performed outside the method or client-specified holding time requirement.
- ip Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j The result is below normal reporting limits. The value reported is an estimate.
- J The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.
- jr The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- js The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc The presence of the compound indicated is likely due to laboratory contamination.
- L The reported concentration was generated from a library search.
- nm The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc The sample was received in a container not approved by the method. The value reported should be considered an estimate.
- pr- The sample was received with incorrect preservation. The value reported should be considered an estimate.
- ve Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.
- vo The value reported fell outside the control limits established for this analyte.
- x The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

303012	3	0,3	0	Į	2	
--------	---	-----	---	---	---	--

Send Report To <u>Dee Gardner</u>
Company SoundEarth Strategies
Address 2811 Fairview Ave E, Suite 200
City, State, ZIPSeattle, WA, 98102
Phone # 206-306-1900

AMPLE CHAIN OF CUSIODY HE	= 03/01/13
SAMPLERS (signature)	
PROJECT NAME/NO.	1 PO#
TOC Holdings Co 01-176	1
REMARKS	GEMS Y / N
Only collected 1/2 bottle for sample MW41- 20130228-PN	

_	4/09
	Page #1 of2
	TURNAROUND TIME
	X Standard (2 Weeks) U RUSH
	Rush charges authorized by:
1	SAMPLE DISPOSAL
	X Dispose after 30 days
	□ Return samples
	Will call with instructions

ATulan

	··-			.				L			AN.	ALYSE	S REQ	UESTE	D	
Sample ID	Sample Location	Sample Depth	tab ID	Date Sampled	Time Sampled	Matrix	# of jars	NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	MTBE	CVOC's by 8260C	RCRA-8 Metals	Dissolved Lead	Total Lead	
MW11-20130228-PN	MWIT		OIAC	2/28/13	1150	H20	3		×	×						}
MW15-20130228-PN	MW15		02	2/28/13	1303	H20	3		×	×					ļ	
MW18-20130228-PN	MW18		Ø2	2/28/13	1145	H20	3	 	×	×						
MW24-20130228-PN	MW24	7. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	04	2/28/13	1230	H20	3	<u> </u>	×	×						1
MW27-20130228-PN	MW27		05	2/28/13	1203	H20	3		×	×						
MW29-20130228-PN	MW29		06 A-E	2/28/13	1255	H20	5	h	×	х				х	×	
MW31-20130228-PN	MW31		07	2/28/13	1313	H20	5		х	×				х	X	
MW32-20130228-PN	MW32	,	084	2/28/13	1234	H20	5		×	×				×	×	
MW41-20130228-PN	MW41		09	2/28/13	1315	H20	<u>, 1</u>								×	
MW57-20130228-PN	MW57		IOA-C	2/28/13	1057	H20	3		×	×		<u> </u>				
MW69-20130228-PN	MW69		11 A.D		1035	H20	· 4		ж	х	×					
MW70-20130228-PN	MW70		12	2/28/13	1020	H20	4		×	X	×					
MW84-20130228-PN	MW84		13 4	2/28/13	1039	H20	4	· · · · · · · · · · · · · · · · · · ·	×	×	×	!	<u> </u>			

Friedman & Bruya, Inc. 3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	David Mondel	563	3/1/13	O850
Received by: malapan	Nhan Phan	FeBI	3/1/13	0850
Relinquished by:				

Samples received at _____ oc

303012

Send Report To <u>Dee Gardner</u>
Company SoundEarth Strategies
Address 2811 Fairview Ave E, Suite 200
City, State, ZIP <u>Seattle, WA, 98102</u>
Phone # <u>206-306-1900</u> Fax # <u>206-306-1907</u>

SAMPLE CHAIN OF CUSTODY HE 03/01/13

SAMPLERS (signature)	M
PROJECT NAME/NO.	! PO#
- TOC Holdings Co 01-176	,
REMARKS	GEMS Y / N

BI4	/v4
214	[V4

Γ	Page #2 of2
	TURNAROUND TIME
] :	X Standard (2 Weeks)
	□ RUSH
•	Rush charges authorized by:
	SAMPLE DISPOSAL
	X Dispose after 30 days
	□ Return samples
	☐ Will call with instructions

							ANALYSES REQUESTED									
Sample ID	Sample Location	Sample Depth	Lap ID	Date Sampled	Time Sampled	Matrix	# of jars	NWTPH-Dx	NWTPH-Gx	BTEX by 80218	MTBE	CVOC's by 8260C	RCRA-8 Metals	Dissolved Lead	Total Lead	
MW90-20130228-PN	MW90		14A-E	2/28/13	1208	H20	5		х	x				×	Х	
MW91-20130228-PN	MW91		15 A.E	2/28/13	1219	H20	5		x	X	i			×	×	
MW92-20130228-PN	MW92	· · · · · · · · · · · · · · · · · · ·	16AC	2/28/13	1119	H20	3		×	ж						<u></u>
MW93-20130228-PN	MW93		17AC	2/28/13	0940	H20	3		×	×			`			
MW94-20130228-PN	MW94		18 A 65	2/28/13	1125	H20	3		×	×						
MW95-20130228-PN	MW95		19A-D	2/28/13	1046	H20	4		×	×	×	,	*			
MW96-20130228-PN	MW96		20	2/28/13	1051	H20	4	—	×	×	×					
MW97-20130228-PN	MW97			2/28/13	1026	H20	4	I		×	×					
MW98-20130228-PN	MW98		22	2/28/13	1030	H20	4		×	×	x					
MW98-20130228- PN2	MW98		23	2/28/13	1032	H20	4) ************************************	×	×	×				***************************************	
MW99-20130228-PN	MW99		SYA.B	2/28/13	1007	H20	4		×	×	х					
MW101-20130228- PN	MW101		25AF	2/28/13	1000	H20	6		×	x	×			×	×	

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

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	David Mentel	262	311/13	0550
Received by:	Nhan Phan	FLBI	3/1/13	085
Relinquished by:				
Received by:				
		l		<u> </u>

Samples received at ______ °C