2014 Annual Report
Groundwater Monitoring

TOC Holdings Co.
Facility No. 01-176
24205 56th Avenue West
Mountlake Terrace, WA 98043

now

Prepared for:
TOC Holdings Co.
2737 West Commodore Way
Seattle, WA 98199

Prepared by:
JBR Environmental Consultants, Inc.
now
Stantec Consulting Services Inc.
19101 36th Avenue West, Ste. 203
Lynnwood, WA 98036
Phone: 425.977.4994

September 17, 2014

Sign-off Sheet

Please note that effective May 9, 2014, the employees of **JBR Environmental Consultants, Inc. (JBR)** have joined **Stantec Consulting Services Inc. (Stantec)**. You will continue to see the same people, doing business with you the same way, and with the same goal: to safely deliver the highest level of service while always striving to exceed your expectations.

This document entitled, ***2014 Annual Groundwater Monitoring Report***, was prepared by Stantec on behalf of **TOC Holdings Co. (TOC)** for specific application to TOC Facility No. 01-176 in Mountlake Terrace, Washington. Services performed by JBR (now Stantec) for this project were conducted in accordance with the Environmental Services Contract between **HydroCon Environmental, LLC (HydroCon)** and Stantec. Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between JBR and HydroCon. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

This document was prepared under the supervision and direction of the key staff identified below.

Kim S. Vik

Prepared by: **Kim Vik, LG**
Project Geologist

State of Washington
488
Licensed Geologist
Kim S. Vik

Antonela Vadan

Prepared by: **Antonela Vadan, LG**
Project Geologist

State of Washington
2975
Licensed Geologist
Antonela Ramona Vadan
Antonela R. Vadan

Reviewed by: **Rebekah Brooks, LG, LHg**
Hydrogeologist / Project Manager

State of Washington
Hydrogeologist
1314
Licensed Geologist
Rebekah Brooks

Table of Contents

List of Tables

List of Figures

List of Figures (continued)

List of Appendices

Abbreviations & Acronyms

µg/L	micrograms per liter
AO	Agreed Order
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene and total xylenes
DRPH	diesel-range petroleum hydrocarbons
Ecology	Washington State Department of Ecology
EDB	ethylene dibromide (1,2-dibromoethane)
EDC	ethylene dichloride (1,2-dicholoroethane)
EPA	U.S. Environmental Protection Agency
Friedman & Bruya	Friedman & Bruya, Inc.
ft	feet
GRPH	gasoline-range petroleum hydrocarbons
HydroCon	HydroCon Environmental, LLC
JBR	JBR Environmental Consultants, Inc.
LNAPL	light non-aqueous phase liquid
MDL	method detection limit
MPE	multi-phase extraction
MRL	method reporting limit
MTBE	methyl tert-butyl ether
MTCA	Model Toxics Control Act
MW	monitoring well
NM	not measured
NWTPH-Dx	Northwest Total Petroleum Hydrocarbon for diesel-range organics
NWTPH-Gx	Northwest Total Petroleum Hydrocarbon for gasoline-range organics
ORPH	oil-range petroleum hydrocarbons
PAH	polycyclic aromatic hydrocarbons
RI/FS	Remedial Investigation/Feasibility Study
ROW	right-of-way
SES	SoundEarth Strategies, Inc.
Stantec	Stantec Consulting Services Inc.
TOC	TOC Holdings Co.
TP	top of pump
UST	underground storage tank
VOC	volatile organic compound

List of Properties

Drake	24309 56th Avenue West; Mountlake Terrace, WA
Herman	24311 56th Avenue West; Mountlake Terrace, WA
Shin/Choi	24325 56th Avenue West; Mountlake Terrace, WA
TOC	24205 56th Avenue West; Mountlake Terrace, WA
TOC/Farmasonis	24225 56th Avenue West; Mountlake Terrace, WA

Executive Summary

This report documents the 2014 Annual Groundwater Monitoring Event activities conducted in March-April, 2014 associated with interim remedial actions currently being implemented at TOC Holdings Co. (TOC) Facility No. 01-176 located in Mountlake Terrace, Washington. The interim remedial actions are being implemented within the Interim Remedial Action Project Area, which encompasses the following properties, as defined in the Agreed Order (AO) No. DE 8661 between the Washington Department of Ecology (Ecology) and TOC: 1) TOC Property, located at 24205 56th Avenue West, 2) TOC/Farmasonis Property, located at 24225 56th Avenue West, 3) Drake Property, located at 24309 56th Avenue West, and 4) portions of the 56th Avenue West right-of-way (ROW). These properties constitute the TOC Site, as defined by the AO.

Activities conducted during March 2014 for the 2014 annual groundwater monitoring event, JBR Environmental Consultants, Inc. (JBR now Stantec Consulting Services Inc. [Stantec]) has been hired by HydroCon to take over environmental consulting responsibilities on the project. The activities conducted during January and February 2014 described in this report were completed by SoundEarth Strategies (SES). Since that time, this report has been prepared by Stantec to meet reporting requirements of the AO.

Groundwater monitoring for the 2014 annual event was conducted at 83 monitoring and remediation wells at the Site. Groundwater monitoring activities included measurement of depth to groundwater or depth to light non-aqueous liquid (LNAPL) at each of the existing wells, where possible, and collection of groundwater samples for laboratory analyses. Laboratory analyses included: gasoline-range petroleum hydrocarbons (GRPH); diesel-range petroleum hydrocarbons (DRPH); motor oil-range petroleum hydrocarbons (ORPH); volatile organic compounds (VOCs; e.g., benzene, toluene, ethylbenzene, and xylenes [BTEX]); polycyclic aromatic hydrocarbons (PAHs); total and dissolved lead; and fuel additives and blending compounds, including ethylene dibromide (EDB; 1,2-dibromoethane); ethylene dichloride (EDC; 1,2-dichloroethane) , and methyl tert-butyl ether (MTBE).

Data collected during the 2014 annual event confirmed the presence of three groundwater bearing zones in the heterogeneous, glacial deposits found at the Site, including from ground surface downward: a shallow, perched groundwater zone is encountered at about 5 to 20 feet (ft) below ground surface (bgs); an unconfined, intermediate zone ranging in depth between about 2o and 60 ft bgs; and a deep zone that appears to be interconnected with the intermediate zone at depths (based on well screens) greater than 60 ft bgs.

Groundwater contamination on the TOC, TOC/Farmasonis and Drake Properties appears to have originated from historical gasoline releases on the TOC Property. It is unknown at this time whether groundwater contamination on the downgradient Herman and Shin/Choi Properties also originated from the TOC Property or from historical petroleum-related activities at those properties. As evidenced by downward vertical gradients and the resulting contaminant distribution, gasoline-related petroleum constituents appear to have migrated downward from the shallow to the intermediate groundwater zones below the TOC Property over time and then migrated downgradient with groundwater flow. Minimal residual groundwater contamination remains in the shallow zone likely due to remediation in this zone between 1996 and 2005. Based on an evaluation of trends in the predominant contaminant concentrations (e.g., GRPH, benzene, and to a lesser extent, lead), concentrations of petroleum constituents in the intermediate groundwater zone appear to have decreased over time and only remain at a few locations on the western side of the TOC/Farmasonis Property. The reduction in groundwater concentrations can likely be attributed to operation of three remediation systems: one for the TOC Property (Unit 1), one for the TOC/Farmasonis Property (Unit 2), and one for the

Drake Property (Unit 3). Both Units 2 and 3 are located within a single compound on the TOC/Farmasonis Property. Comparison of contaminant concentrations with groundwater levels over time indicate that an inverse relationship appears to occur, implying that residual contamination in the soil is liberated when groundwater levels decrease during seasonal low periods. Vertical upward gradients between the deep and intermediate zones downgradient of the TOC Property appear to be effective in inhibiting further downward migration of contamination and effectively bounding the extent of vertical contamination.

1.0 INTRODUCTION

JBR Environmental Consultants, Inc. (JBR), now Stantec Consulting Inc. (Stantec), has prepared this report to provide the results of the 2014 annual groundwater monitoring event conducted at and in the vicinity of the TOC Holdings Co. (TOC) Facility No. 01-176 in Mountlake Terrace, Washington (**Figures 1 and 2**). The ongoing groundwater monitoring is being conducted in accordance with a Washington State Department of Ecology (Ecology) Agreed Order (AO) No. DE 8661 between Ecology and TOC, entered October 28, 2011, the Interim Remedial Action Work Plan (SES 2011), included as Exhibit C to the AO, and updated information provided in Stantec's *Groundwater Monitoring Work Plan* (**Appendix A**). As defined by the AO, the following properties constitute the “TOC Site:”

1) TOC Property: 24205 56th Avenue West,
2) TOC/Farmasonis Property: 24225 56th Avenue West,
3) Drake Property: 24309 56th Avenue West, and
4) portions of the 56th Avenue West Right-of-Way (ROW).

The scope of the 2014 annual groundwater monitoring event originally included also the two neighboring properties directly to the south of the Drake Property, namely the Herman Property (located at 24311 56th Avenue West) and the Shin/Choi Property (located at 24325 56th Avenue West). Groundwater from wells on the Herman Property was sampled under an access agreement between the property owner and TOC, dated May 6, 2013. This annual event did not include groundwater sampling at the Shin/Choi Property. The prior access agreement for the Shin/Choi Property was between the prior consultant (SoundEarth Strategies, Inc. [SES]) and the property owner. At the time of the annual event, TOC was in the process of negotiating a new agreement, so access and permission to sample the wells was not received in time for the event; however, groundwater level measurements were conducted under a verbal agreement with the property owner. Properties included within and neighboring the Site and are identified on **Figure 2** and in the List of Properties (page i).

The purpose of the 2014 annual groundwater monitoring event was: to evaluate environmental quality, flow direction, gradient of groundwater beneath the Site; to assess trends in groundwater concentrations and how these are influenced by the three multi-phase extraction (MPE) remediation systems being operated at the TOC Property, TOC/Farmasonis Property, and Drake Property for the interim remedial action; and to evaluate compliance with Washington State Model Toxics Control Act (MTCA) cleanup regulations.

Quarterly groundwater monitoring of selected wells has been conducted at the TOC Site and southern neighboring properties from 2005 through the present. SES conducted the site characterization, groundwater monitoring, and remediation activities at the Site until the beginning of 2014. Stantec has been hired by HydroCon Environmental, LLC (HydroCon), on behalf of TOC, to assume the environmental consulting responsibilities on the project. The evaluation results obtained prior to 2014 and provided with this report have been modified in part by Stantec, where necessary, to accurately represent the data, but the data and data quality evaluations have not been changed.

The 2014 annual groundwater monitoring event was conducted from March 20 through April 3, 2014, and included all monitoring wells, as summarized in **Table 1** and shown on **Figure 3**, with the exception of the Shin/Choi Property wells. This report summarizes groundwater elevation and groundwater quality data for the 2014 annual event, transmits analytical laboratory data packages, and presents an evaluation of data collected during first quarter 2014 for the groundwater interim action in the shallow, intermediate and deep groundwater-bearing zones relative to compliance with defined performance criteria under MTCA. Interim remedial action groundwater monitoring will continue to be conducted and reported on a quarterly basis. Data from this annual event and previous quarterly monitoring events are used to assess contaminant distribution and groundwater level trends for the Site and adjacent properties, as relevant.

The groundwater level measurements and groundwater quality data for the 2014 annual monitoring event at each groundwater monitoring location are provided in **Table 1**. Groundwater level measurements and groundwater quality data collected at the Site and southern neighboring properties for the 2014 annual event and previous sampling events since June 1992 are provided in **Table 2**. Groundwater quality data for the common fuel additives for the 2014 annual event and historical events since 1992 are provided in **Table 3. Table 4 provides** the analytical results for the light non-aqueous phase liquid (LNAPL) for the sample collected on the Herman Property during the annual event. Site location, groundwater monitoring and remediation well locations, groundwater elevation contour maps, groundwater concentrations maps and groundwater concentration/water level trend plots for the primary chemicals of concern are provided on **Figures 1 through 22**. Updated procedures for collection of water level measurements and groundwater samples and methods for evaluation are provided in Stantec's *Groundwater Monitoring Work Plan* in **Appendix A**. The laboratory analytical reports for the March-April 2014 groundwater sampling event are provided in **Appendix B**. Data validation evaluations are documented and maintained in the project files at the Stantec office located in Lynnwood, Washington.

2.0 SITE DESCRIPTION & BACKGROUND

2.1 Site Description

As described above, the Site encompasses three adjacent properties located on 56th Avenue West, in Mountlake Terrace, Washington, and a portion of the 56th Avenues ROW adjacent to these properties. The Site is located in a mixed residential and commercial area, and is bounded to the north by 242nd Street Southwest and Pacific Pipe and Pump, LLC; to the east by 56th Avenue West and residential properties; and to the west by residential properties, including the Mountlake Senior Property (**Figure 2**). The southern property boundary of Shin/Choi Property, located to the south of the Site as described above, borders the Snohomish County/King County boundary. Surface topography slopes gently towards the south.

Except for the building that houses the remediation system (see Section 2.2); the TOC Property is currently vacant land. The TOC/Farmasonis Property consists of one building, which is currently unoccupied, a fenced remediation system compound housing two remediation systems (see Section 2.2), an asphalt parking area, and vacant graveled and vegetated land (western side). The Drake Property consists of one building, currently occupied by the Getaway Tavern, and asphalt and gravel parking areas. The Herman Property consists of one building (currently occupied by Dave's Auto Service), an asphalt parking area, and vegetated land (western side). The Shin/Choi Property consists of one building, currently occupied by the EZ Corner Mart, and an asphalt parking area. The Mountlake Senior Property is located directly west of the Shin/Choi Property and is currently vegetated and vacant.

2.2 Site Background

From approximately 1968 to 1991, the TOC Property was used for operation of a gasoline service station. The facility included three underground storage tanks (USTs), six fuel dispensers, and associated product delivery lines. The USTs, pump island and ancillary equipment were removed from the TOC Property in the early 1990s and petroleum constituents in the form of gasoline range petroleum hydrocarbons (GRPH), benzene, and total xylenes were observed in soil and groundwater in excess of the applicable MTCA Method A cleanup levels. Available information regarding historical operations on the TOC/Farmasonis and Drake Properties do not include the presence of USTs; however, USTs on the Herman and Shin Choi Properties are known to have been present historically and may still exist on these properties. Available information on the historical or current locations of USTs and associated equipment at the Site and the adjacent properties is shown on **Figure 3.**

In 1996, a dual-phase extraction remediation system (former DPE system) was installed at the TOC Property to remediate shallow zone groundwater impacted by petroleum hydrocarbons and remove light non-aqueous phase liquid (LNAPL). This system operated until June 2005 and reportedly effectively remediated shallow zone groundwater at the Site (SES 2013). In 2006, gasoline contamination was observed in groundwater downgradient of the TOC Property to the south and west. In October 2011, TOC and Ecology entered into the AO for performance of a remedial investigation/feasibility study (RI/FS) and interim remedial actions at the Site. In 2011-2012, three remediation systems were installed to remediate residual petroleum-contaminated groundwater, soil vapor and LNAPL, if present, in the intermediate groundwater zone beneath the TOC Site, as follows: TOC Property (Unit 1), TOC/Farmasonis Property (Unit 2) and Drake Property (Unit 3).

As shown on **Figure 3**, Unit 1 is located on the TOC Property and Units 2 and 3 are located within a single fenced compound on the TOC/Farmasonis Property. Operation of these remediation systems is ongoing.

Between 1992 and 2013, subsurface investigations were conducted by TOC at the Site to determine the extent of petroleum contamination. To date, a total of 107 monitoring wells have been installed at the Site and on the two southern neighboring properties for monitoring and remediation purposes. Of these 107 wells, six have been decommissioned by the over-drilling method.

3.0 2014 ANNUAL GROUNDWATER MONITORING EVENT

The 2014 annual groundwater monitoring event included measurement of water levels at all accessible groundwater monitoring wells and recovery wells at the Site and on the Herman and Shin/Choi Properties (**Figure 2**); measurement of LNAPL thickness, where observed; and collection of groundwater quality samples from selected wells. Groundwater from 83 wells was sampled during the 2014 annual sampling event from the following monitoring well (MW) locations: MW02 through MW06; MW08 through MW12; MW15; MW16; MW18 through MW20; MW22 through MW32; MW34 through MW41; MW43; MW48 through MW51; MW53 through MW68; MW70; MW75 through MW81; MW84 through MW93; MW95 though MW98; MW100 through MW104; MW106; and MW107. Of the total of 107 wells at the Site, twenty-four wells were not sampled during this event, as follows : six wells that were previously decommissioned (MW01, MW07, MW14, MW17, MW21, and MW83); fourteen wells that were dry or had insufficient water for sampling(MW13, MW33, MW42, MW44, MW45 though MW47, MW52, MW69, MW82, MW83, MW94, MW99, and MW105); and four wells located on Shin/Choi Property for which permission to collect groundwater samples was not received prior to this event (MW71 through MW74).

A summary of the groundwater level measurements and groundwater quality results conducted for each sample location included in the 2014 annual event is provided in **Table 1**. Sections 3.1 and 3.2 summarize the geologic and hydrogeologic frameworks, respectively. Section 3.3 summarizes the groundwater level and LNAPL evaluation results and evaluations of groundwater flow. The groundwater quality data, contaminant distribution and trends are presented in Section 3.4.

3.1 Geologic Framework

The TOC Site is situated on the glacial upland plateau between Seattle and Everett, Washington, known as the Intercity Plateau (SES 2013). The regional geology in the area of the TOC Site consists of Pleistocene-age glacial till locally overlain by pockets of glacial recessional outwash sand.

The recessional outwash sand, which ranges in thickness from about 25 to 300 feet (ft), is generally loose to medium dense sand and gravel with little or no fines, and may include ice contact deposits and ablation till. The glacial till, which represents the ground moraine of the Vashon glaciations, ranges from a few ft to over 50 ft thick and consists of dense to very dense gravelly, sandy silt to silty sand with variable amounts of clay, cobbles, and boulders. Groundwater is perched above and within the glacial till layer. Bedrock underlying the area consists of tertiary sediment rocks (sandstone, shale, or conglomerate) over 900 ft deep beneath the Site; therefore, bedrock is not relevant for the TOC Site characterization.

Based on the results of previous investigations conducted between 1991 and 2013, subsurface soil beneath the Site consists primarily of local anthropogenic fill overlying Vashon-age glacial deposits. As reported in the *Draft RI Report* (SES 2013), the subsurface soil beneath the Site is interpreted to consist of the following geologic units, from youngest to oldest: artificial (anthropogenic) fill, Vashon recessional outwash deposits, Vashon glacial till and Vashon outwash deposits.

3.2 Hydrogeologic Framework

In the *Draft RI Report* (SES 2013), three separate water-bearing zones were identified at the TOC Site, based on the lithology, well screen intervals, and groundwater level measurements. Stantec has re-evaluated these data as part of an update and revision of the conceptual site model, as required by Ecology, based on its comments on the *Draft RI Report*. The results of the conceptual site model update will be provided to Ecology in a separate, upcoming deliverable and incorporated into the final RI Report.

Stantec agrees with SES that three water-bearing zones can be identified at the Site; however, these zones do not appear to be separate, but are interconnected, as evidenced by the geology, groundwater elevations and contaminant distribution data. Also based on Stantec's re-evaluation of the conceptual site model, several wells were re-assigned to a different water-bearing zone, as shown on **Table 1**. Stantec's conceptualization of the hydrogeology is limited by SES's and other consultants' geologic interpretations because first-hand observations were not possible.

Based on the re-evaluation of the available data, the three groundwater-bearing zones were defined as follows:

- **Shallow Water-Bearing Zone (or Shallow Zone):** The shallow zone is a perched zone in the artificial fill or upper portion of the glacial till, within about 5 to 20 ft of the ground surface throughout the Site, depending on seasonal fluctuations of the water table. The saturation in these horizons can be seasonally discontinuous, as evidenced by some monitoring wells that are seasonally dry (e.g., MW03, MW04, MW05, MW38 and MW79 during the December 2013 event), while others in the same season contain water. The primary source of recharge to the shallow zone is infiltration of natural precipitation. Other potential sources of recharge to the shallow zone reportedly included a former topographically closed depression, where surface runoff previously ponded, and a former stormwater infiltration pit, both of which were located in the southeast portion of the TOC Property (**Figure 3**). According to a TOC blueprint, the stormwater infiltration pit measured 10 ft square by 4 ft deep, and was backfilled with coarse gravel (Time Oil Co. 1975). According to previous investigations, the stormwater infiltration pit is located in proximity to MW18 and MW33. 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. Stantec was unable to confirm the location of the closed depression or the stormwater infiltration pit at the TOC Property during March 2014 site work.
- **Intermediate Water-Bearing Zone (or Intermediate Zone):** The intermediate zone is an unconfined groundwater zone that is observed at depths between approximately 20 and 60 ft below ground surface (bgs). As reported by SES in 2013, this zone consists of glacial till deposits between approximately 20 and 40 ft bgs and discontinuous sand and/or gravel-rich glacial deposits within the lower portion of the glacial till between approximately 40 and 60 ft bgs. As discussed further in Section 3.3, in the area of the TOC Property, groundwater elevations in the intermediate zone appear to be mounded such that the upper boundary of the intermediate zone appears closer to the base of the shallow zone in the vicinity of the former stormwater infiltration pit and UST excavation fill. Explanations for the observed groundwater mounding are related to the deposition of low permeable deposits near the downgradient edge of the property and/or from artificial recharge within the backfill of the former UST cavity, depression, and infiltration pit. The low permeable deposits in the upper portion of the intermediate groundwater bearing zone impede the vertical percolation of water

into the deeper groundwater zones and decrease the horizontal flux of the groundwater in the immediate vicinity. The prevalence of low permeable deposits correlates with the location of steeper horizontal hydraulic gradients in this area. In downgradient areas where the intermediate zone consists primarily of higher permeability units (i.e., sands and gravels), the thickness of unsaturated materials and the distance between the shallow and intermediate zones increase. The higher permeable deposits contribute to a flattening of the horizontal hydraulic gradient. The intermediate zone appears to receive recharge from natural precipitation both directly and indirectly via the shallow zone. A comparison of groundwater elevations and analytical data suggests that the intermediate zone is considered to be the current primary contaminant transport pathway at the Site.

- **Deep Water-Bearing Zone (or Deep Zone):** The deep zone consists of glacial sand and gravel located at depths of more than 60 ft bgs, based on deep well screen intervals. Within and in the vicinity of the artificial recharge area on the TOC Property, the groundwater elevation data indicate that downward vertical gradients appear to exist between all three zones. In downgradient areas, the groundwater elevation data suggest that vertical gradients shift from downward (between the shallow and intermediate zones) to neutral or slightly upward (between the intermediate and deep zones). Based on these observations and the presence of fully saturated well screens, these groundwater level conditions could be a reflection of a higher permeability zone at the base of a single groundwater unit that includes both the intermediate and deep groundwater zones or could represent semi-confined conditions in a separate, but interconnected groundwater zone; however, the presence of a low permeability confining unit between the two zones is not obvious in the available data. The presence of upward vertical gradients between the deep and intermediate zones appear to be effective in inhibiting downward migration of contamination in downgradient areas and effectively bounding the extent of vertical contamination.

Based on a comparison of site specific lithology and groundwater elevations collected during multiple sampling events, many of the wells at the Site appear to cross multiple groundwater bearing zones as a result of the long screened intervals and may create a conduit for cross-contamination via the well casing and screens. At these locations, groundwater elevations do not correlate with a single, unique zone and appear to reflect some combination of the two intersected zones. Wells that are screened in multiple intervals are not considered to be representative of a single, unique groundwater zone and therefore, were not used for groundwater elevation contouring.

3.3 Groundwater Monitoring Results

Groundwater and LNAPL levels were measured during the 2014 annual event at all current and accessible monitoring wells. Groundwater quality samples were collected from the wells shown on **Table 1**, as specified in the AO and attached Interim Removal Action Work Plan (SES 2011). Discussions of the groundwater monitoring results are provided in the following sections.

3.3.1 Groundwater Level and LNAPL Measurement Results

Depth to groundwater and LNAPL (where present) was measured in all accessible monitoring and remediation wells on March 24, 2014, while the remediation systems were turned off for 24 hours and on April 3, 2014, while the remediation systems were operating to evaluate the performance of the remediation systems. Information on performance of the remediation systems are provided in quarterly operation and maintenance reports. After opening the well caps and allowing the water levels to equilibrate with atmospheric pressure, Stantec measured and recorded groundwater and LNAPL levels relative to a survey reference point at a marked location at the top of the well casing (typically the north side) to an accuracy of 0.01 ft. The measurements were conducted using a Solinst Model 122 electronic water level meter with an oil/water interface probe, and recorded on the appropriate field forms. The groundwater and LNAPL level measurements and calculated elevations are provided on **Table 1** for the 2014 annual event.

Depth to groundwater measurements were conducted at all existing wells with the following exceptions. The top of pump was encountered before groundwater or LNAPL at several well locations, including remediation wells MW24, MW96, MW97, and MW101 gauged while the remediation systems were operating; remediation wells MW69 and MW93 gauged while the systems were turned off; and remediation wells MW18, MW57, MW94, and MW99 during both system on and system off measurement events. Measurements for these wells are documented as "top of pump" (TP) in **Tables 1 and 2,** and as “not measured” (NM) in **Figures 4 through 6**.

Additionally, groundwater and LNAPL levels could not be measured at monitoring well MW84 during both system on and system off measurement events and at remediation wells MW57, MW69, and MW98 only while the systems were operating because cars were parked over the wells and were therefore, inaccessible. Groundwater and LNAPL levels could not be measured in 2-inch remediation wells MW27, MW29, MW31, MW41, and MW70, because the well diameter is not large enough to allow the water interface probe to fit down the well with the pump tubing.

LNAPL was encountered during the 2014 annual event in three wells. The wells and the measured LNAPL thicknesses were: MW71, 0.29 ft; MW72, 0.49 ft; and MW102, 1.63 ft, based on measurements conducted on March 24, 2014, when the remediation systems were not operating. Wells MW71 and MW72 are located on the Shin/Choi Property and well MW102 is located on the Herman Property. Monitoring wells at the Site and on the neighboring properties will continue to be monitored for the presence of LNAPL during future quarterly monitoring events, as long as access is allowed. A summary of LNAPL observations and thicknesses is provided in **Tables 1 and 2**.

LNAPL, lighter than water, slightly depresses the groundwater table as a function of the specific gravity difference between the two media. If LNAPL was measured in any monitoring wells, the reported groundwater elevations shown on **Tables 1 and 2** were normalized using the industry-standard specific gravity estimate of 0.8 for LNAPL as gasoline relative to a specific gravity of 1.0 for water.

The following equation was used for the normalization:

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

where H_{TOC} is the top of well 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.

The measurement and evaluation results are presented in the following sections**.** The measurement procedures are provided in **Appendix A**. Groundwater level and LNAPL measurements for the 2014 annual event are provided in **Table 1**. Historical groundwater level and LNAPL measurements for groundwater monitoring events since June 1992 are provided in **Table 2**.

3.3.1.1 Shallow Water-Bearing Zone

Groundwater elevations measured in the shallow water-bearing zone (shallow zone) wells were contoured and used to identify groundwater flow direction and hydraulic gradients. **Figure 4** shows the groundwater elevation contours for the shallow zone based on the groundwater measurements obtained on March 2, 2014, while the remediation system was turned off. Note that well screens in MW82, MW88, and MW100 appear to intersect both the shallow and intermediate zone; therefore, groundwater elevations may be lower than other shallow zone wells due to the influence from the intermediate zone and were not used for groundwater elevation contouring.

Groundwater flow in the shallow zone appears to be predominantly to the south-southwest based on groundwater elevations measured during the 2014 annual event, with a horizontal hydraulic gradient ranging from 0.01 to 0.1 ft/ft across the Site. Steeper hydraulic gradients occur across the TOC and TOC/Farmasonis Properties, and flatter gradients occur across the southern portion of the TOC/Farmasonis Property and Drake Property, as shown on **Figure 4**. The differences in horizontal hydraulic gradients across the Site appear to be related to the presence of lower permeability deposits on the northern and southern portions of the Site and the prevalence of higher permeability deposits in the central portion of the Site. Overall, the data collected over the previous year show that the shallow zone groundwater levels are influenced by seasonal fluctuations up to an average of about 6 ft, and the groundwater flow patterns appear to vary slightly with the seasons from a southwesterly to a south-southwesterly direction. However, groundwater levels measured by SES prior to the March-April 2014 measurement event appear to have been conducted when the system was operating and therefore, may not represent baseline (i.e., non-pumping) groundwater flow patterns.

3.3.1.2 Intermediate Water-Bearing Zone

Groundwater elevations measured in the intermediate water-bearing zone (intermediate zone) wells were contoured and used to identify groundwater flow direction and hydraulic gradients. **Table 1** lists the groundwater elevations obtained during the 2014 annual event. **Table 2** lists the historical groundwater elevations obtained since 1992. **Figure 5** shows the groundwater elevation contours using the groundwater measurements from the intermediate zone wells obtained when the remediation system was turned off. Note that several wells screened in the intermediate water-bearing zone also intersect shallow zone conditions (wells MW08, MW24, MW27, MW37, MW38, and MW43), and were not used for groundwater elevation contouring. Groundwater levels in these wells appear to be influenced by the shallow zone, and groundwater elevations are typically higher than other intermediate zone wells.

Similar to the shallow zone, groundwater flow in the intermediate zone appears to be generally to the south-southwest based on groundwater elevations measured during the 2014 annual event with horizontal hydraulic gradients ranging from 0.02 to 0.28 ft/ft across the Site. As discussed in Section 3.2 and shown on **Figure 5**, steepening in the slope of the horizontal gradient is apparent in the vicinity of the TOC Property's southern boundary and is thought to be related to mounding of groundwater in the area of the TOC Property due to the influence of artificial recharge associated with a stormwater infiltration pit, depression, and fill from the UST soil excavation on the property and the presence of a low permeability material. As groundwater moves downgradient and encounters higher permeability layers (e.g., gravels and sands), the horizontal hydraulic gradient flattens significantly as is evident from the potentiometric surface on **Figure 5.**

Overall, the data collected to date show that the intermediate zone groundwater levels can fluctuate up to about 5 ft seasonally. Data collected by SES in 2013 indicate that water flow patterns are not significantly influenced by seasonal variations in precipitation, but the interpretation is based on evaluation of data that appear to have been collected when the remediation systems were operating.

3.3.1.3 Deep Water-Bearing Zone

Groundwater elevations measured in the deep water-bearing zone (deep zone) were contoured and used to identify groundwater flow direction and hydraulic gradients. The wells included in the deep zone contouring include the deepest screened wells. **Table 1** lists the groundwater elevations obtained during the 2014 annual event. **Table 2** lists the historical groundwater elevations obtained since 1992. **Figure 6** shows the groundwater elevation contours for the deep zone using the groundwater measurements obtained while the remediation system was turned off.

Groundwater flow in the deep zone appears to be generally to the south-southwest based on groundwater elevations measured during the 2014 annual event. The horizontal hydraulic gradient is relatively flat at an average of about 0.013 ft/ft likely because the wells are screened in high permeability material. Overall, the data collected to date show that seasonal variations in groundwater elevations in the deep zone are similar to those in the intermediate zone.

As discussed in Section 3.2, all groundwater zones appear to be interconnected. Within and in the vicinity of the artificial recharge area on the TOC Property, the groundwater elevation data indicate that downward vertical gradients appear to exist between all three zones, as shown on **Figure 7** for wells MW62 (shallow), wells MW20 and MW32 (intermediate) and MW53 (deep); however, deep zone data in this area are limited.

Downgradient of this area, the groundwater elevation data appear to indicate that vertical gradients shift from downward (between the shallow and intermediate zones) to upward (between the intermediate and deep zones), as shown on **Figure 8.** Groundwater elevations between the intermediate and deep zones are similar, but the deep zone elevations are typically slightly elevated above the intermediate zone. The presence of upward vertical gradients between the deep and intermediate zones downgradient of the TOC Property appear to be effective in inhibiting downward vertical flow of groundwater and migration of contamination in downgradient areas and effectively bounding the extent of vertical contamination.

3.3.2 Groundwater Quality Results

Based on historical analytical results, the analyses selected for the 2014 annual event included some or all of the following constituents, as shown in **Tables 2 and 3**:

- VOCs, including one or more of the following compounds: BTEX by U.S. Environmental Protection Agency (EPA) Method SW 8021B; EDB by EPA Method SW 8011M and 8260C; EDC by EPA Method SW 8260C; and/or MTBE by EPA Method SW 8260C;
- GRPH by Northwest Total Petroleum Hydrocarbon for gasoline-range organics (NWTPH-Gx) Method/ EPA SW 8021B;
- DRPH and motor ORPH by Northwest Total Petroleum Hydrocarbon for diesel-range organics (NWTPH-Dx) Method; and/or
- Total and dissolved lead by EPA Method 200.8.

The laboratory analyses were conducted by Friedman & Bruya, Inc. (Friedman & Bruya) of Seattle, Washington. The data were validated and in some cases, qualifiers were assigned. The quality of the data provided by Friedman and Bruya is considered standard and no unusual issues were reported or observed. The laboratory reported results between the method detection limits (MDLs) and the method reporting limits (MRLs) for all data packages. Results are typically reported as “not detected” if the results fall below the MRLs. In cases where the MRL was not less than the MTCA Method A cleanup levels for groundwater, the laboratory reported results between the MDL and MRL; these results are considered estimates and are used for informational purposes only. Results below the MRLs are still considered non-detect at the MRL. Some of the MRLs were elevated during analysis and subsequently fell slightly above the screening levels.

The analytical results reported for the 2014 annual event (March-April 2014) indicate several constituents were reported at concentrations above the MRLs (i.e., detected) and above the MTCA Method A cleanup levels in the tested wells. (Note that MTCA Method A cleanup levels are used for screening purposes, but may not be used in determination for completion of the final remedy based on present and expected future exposure pathways). Analytical results for the 2014 annual event are provided in **Tables 1 through 4.** The laboratory analytical reports are provided in **Appendix B**. Summaries of the results are provided in the following sections and separated based on the groundwater zone.

3.3.2.1 Shallow Water-Bearing Zone

Nineteen shallow zone wells (plus two field duplicates) were sampled and analyzed for the constituents listed above and shown on **Table 1**. None of the analyzed constituents were detected at concentrations exceeding the MTCA Method A cleanup levels in 18 of the shallow wells sampled. The one location with most elevated concentrations of analyzed constituents was well MW104 located on the Herman property. A summary of the concentrations at well MW104 that exceeded the MTCA Method A cleanup level is provided below:

- GRPH was reported in well MW104 at a concentration of 34,500 µg/L (35,000 µg/L in the duplicate sample), which exceeded the MTCA Method A cleanup level of 800 µg/L (based on presence of benzene in shallow zone).
- DRPH was reported in monitoring well MW104 at a concentration of 14,000 µg/L, which exceeded the cleanup level of 500 µg/L.
- ORPH was reported in monitoring well MW104 at a concentration of 810 µg/L (830 µg/L in the duplicate sample), which exceeded the cleanup level of 500 µg/L.
- Benzene was reported in monitoring well MW104 at a concentration of 78 micrograms per liter (µg/L), which exceeded the MTCA Method A cleanup level for groundwater of 5 µg/L
- Toluene was reported in monitoring well MW104 at a concentration of 4,700 µg/L, which exceeded the MTCA Method A cleanup level of 1,000 µg/L.
- Ethylbenzene was reported in monitoring well MW104 at a concentration of 1,100 µg/L, which exceeded MTCA Method A cleanup level of 700 µg/L.
- Total xylene was reported in monitoring well MW104 at a concentration of 4,300 µg/L (4,400 µg/L in the duplicate sample), which exceeded the MTCA Method A cleanup level of 1,000 µg/L.

Concentration distribution maps for GRPH and benzene at the shallow zone wells are provided on **Figures 9 and** respectively. As shown, the distribution of these constituents in shallow zone groundwater during the 2014 annual event is limited to one isolated area near well MW104.

3.3.2.2 Intermediate Water-Bearing Zone

Fifty-four intermediate zone wells (plus three field duplicates) were sampled and analyzed for the constituents listed above and shown on **Table 1**. None of the analyzed constituents were detected at 37 of the wells sampled. DRPH, ORPH, toluene and ethylbenzene concentrations exceeding the MTCA Method A cleanup level was not observed at any intermediate well during this event. The most elevated concentrations of analyzed constituents were observed at well MW48 located in the 56th Avenue ROW, followed by remediation wells MW90 and MW24, located on the TOC Property.

A summary of the concentrations exceeding MTCA Method A cleanup levels in the intermediate groundwater zone is provided below:

- GRPH was reported in the following monitoring wells at concentrations exceeding the MTCA Method A cleanup level for groundwater of 800 µg/L: MW09 at concentrations ranging from 2,600 µg/L to 4,900 µg/L, depending on sampling method (see **Appendix A** for discussion of groundwater sampling methods); MW11 at 1,900 µg/L; MW18 at 5,500 µg/L; MW24 at 11,000 µg/L; MW29 at

3,500 µg/L; MW32 at 4,800 µg/L; MW48 at 33,000 µg/L; MW57 at 3,600 µg/L; MW90 at 18,000 µg/L; and MW91 at 2,200 µg/L.

- Benzene was reported in the following monitoring wells at concentrations exceeding the MTCA Method A cleanup level for groundwater of 5 µg/L: MW32 at 5.3 µg/L; MW48 at 82 µg/L; and MW90 at 10 µg/L.
- Total xylene was reported in the following monitoring wells at concentrations exceeding the MTCA Method A cleanup level for groundwater of 1,000 µg/L: MW24 at 2,200 µg/L; MW48 at 4,700 µg/L; and MW90 at 3,500 µg/L.
- Total lead was reported in the following monitoring wells at concentrations exceeding the MTCA Method A cleanup level for groundwater of 15 µg/L: MW29 at 30 µg/L; MW32 at 45.2 µg/L; and MW48 at 52.6 µg/L. Concentrations of dissolved lead at these same wells were reported at 1.26 µg/L at well MW29 and 6.11 µg/L at MW32, significantly below the MTCA Method A level, and at 48 µg/L at well MW48, which is comparable to the total lead value and also exceeds the MTCA Method A value.

Concentration distribution maps for GRPH and benzene at the intermediate zone wells are provided on **Figures 11 and 12,** respectively. As shown, the highest concentrations of these constituents in intermediate zone groundwater during the 2014 annual event are focused on the TOC Property primarily in the location of the historical UST excavations and at the southwest corner of the TOC/Farmasonis Property near wells MW48 and 57.

3.3.2.3 Deep Water-Bearing Zone

No analyzed constituents were reported at concentrations above the MRLs in the seven deep water-bearing zone wells samples. Therefore, none exceeded the MTCA Method A cleanup levels in deep zone groundwater for the 2014 annual event.

3.4 Groundwater Level and Contaminant Trends

The following sections present a summary of water level and contaminant trends within the shallow and intermediate water bearing zone wells from the beginning of the data record at a particular well location (**Table 2**) through the 2014 annual event. Detections of petroleum hydrocarbons were not observed in the seven wells identified in the deep water bearing zone (wells MW26, MW30, MW39, MW40, MW53, MW64 and MW778); therefore, a discussion regarding the deep water bearing zone will not be included in this section. The 2014 annual data were used to evaluate long-term groundwater level and contaminant trends for groundwater impacted by former gasoline station operations at the TOC Site. Based on contaminant presence and distribution, the primary contaminants of concern include benzene and GRPH. Total lead concentrations were also evaluated where data was available.

The following sections describe trends of the benzene and GRPH reported concentrations in the upper and intermediate zones over time. Contaminant and groundwater level trends will continue to be evaluated and discussed as part of future annual monitoring events.

3.4.1 Upper Water-Bearing Zone

Benzene and GRPH concentrations were evaluated by generating time versus groundwater elevation and time versus concentration plots for the period covered by the quarterly sampling events (February 1992, and as available through the current annual event). A plot of benzene concentrations versus time for shallow zone wells MW02, MW04 and MW12 is shown on Figure 13. A plot of GRPH concentrations versus time for the same wells is provided on Figure 14. Plots of groundwater elevations and GRPH concentrations versus time for shallow zone well MW02 are shown on Figure 15. These wells were selected because they represent shallow zone monitoring locations with long-term groundwater level and concentration data on the TOC Property (MW02 and MW04), where the majority of shallow zone contamination has been observed historically, and directly downgradient on the TOC/Farmasonis Property (MW12). Note that groundwater concentrations in most of the shallow zone wells have been non-detect since at least late 2005. This is likely a result of the former DPE system operation between 1996 and 2005, as described in Section 2.2.

3.4.1.1 Benzene

As shown on **Figure 13**, the benzene concentrations in the selected zone wells show variable concentration trends over time, but have been primarily at non-detect concentrations over the past 12 years. The concentration of benzene in MW02 peaked at 4,600 µg/L in January 1994, but decreased over time to non-detect by September 2002, and has remained non-detect since then. MW02 is located south of the former UST complex on the TOC property.

The benzene concentration in MW04 was at a maximum of 470 µg/L in July 1992, but dropped significantly between July 1992 and September 1996 to a concentration of 77 µg/L. Benzene concentrations dropped to non-detect by March 2003 and have remained non-detect since then. MW04 is located in the right-of-way west of the former UST excavation on the TOC property. Benzene has consistently not been detected in groundwater from wells immediately downgradient of MW02 and MW04.

Figure 13 shows that benzene concentrations in MW12 have been non-detect since the first sampling event at that well in October 2001 through the most recent groundwater sampling event in March 2014. MW12 is located south of the former UST complex on the TOC property and is downgradient of both MW02 and MW04.

3.4.1.2 GRPH

Figure 14 shows that GRPH concentrations in wells MW02, MW04 and MW12 follow the same general trend as the benzene concentrations. GRPH concentrations in MW02 reached a maximum of 50,000 µg/L in January 1994 followed by a steady decrease to 1,400 µg/L in March 2005. The GRPH concentrations dropped to non-detect during the following sampling event in December 2005, and have remained non-detect through the most recent sampling event in March 2014. F**igure 14** also shows GRPH concentrations in MW04 decreasing from a maximum of 100,000 µg/L in July 1992, then fluctuating between 1000 µg/L and 38,100 µg/L between September 1996 to October 2003, and since March 2005 to the present, have been non-detect. MW12 has shown the GRPH has not been detected since the first sampling event in October 2001 through the most recent sampling event in March 2014.

As shown on **Figure 15** at well MW02, GRPH concentration and groundwater elevation trends were variable, but mostly the concentrations of GRPH seem to follow an inverse relationship to the groundwater elevation, (with exceptions between about March 2002 and March 2003 when there was a more direct relationship). The mostly inverse relationship between the groundwater levels and GRPH concentrations implies that residual contamination in the soil is liberated when groundwater levels decrease during seasonal low periods.

3.4.1.3 Other Constituents

Total and dissolved lead has been detected in the shallow zone wells since 2005; however there are not enough data to analyze trends. The only wells that historically contained total lead exceeding the MTCA Method A cleanup level of 15 µg/L were MW100 and MW102, but they were not analyzed for total lead during the 2014 annual event.

3.4.2 Intermediate Water-Bearing Zone

Benzene and GRPH concentrations were evaluated by generating time versus groundwater elevation and time versus concentration plots for the period covered by the quarterly sampling events (September 2005, or first available, through the current annual event). Plots of benzene concentrations versus time for selected intermediate zone wells (MW9, MW11, MW18, MW25, MW31, MW32, MW45, MW48, MW49, MW69, MW57 and MW86) are shown on **Figure 16**. Plots of GRPH concentrations versus time for the same selected intermediate zone wells are provided on **Figure 17**. The selected wells include wells from the TOC Property, TOC/Farmasonis Property, and the Drake Property. Plots of groundwater elevations and total lead concentrations versus time for intermediate zone wells MW31, MW32 and MW91 are shown on **Figure 18**.

3.4.2.1 Benzene

As shown on **Figure 16**, the benzene concentrations in the selected intermediate zone wells listed above show variable concentration trends over time, with the overall trend showing a decrease in concentration. The concentrations were highest prior to February 2008 and have shown a gradual decrease through March 2014. The benzene concentrations in MW48 have been variable over the course of the historical sampling period and have fluctuated between a high of 300 µg/L in September 2012 to a non-detect in June 2012 and June 2013. The most recent sampling event in March 2014 showed benzene concentrations at 82 µg/L at this location. MW48 is located in the right-of-way near the southwest corner of the Drake property. The only wells that contained benzene concentrations exceeding the MTCA Method A cleanup level of 5 µg/L in March 2014 were MW90 (10 µg/L), MW32 (5.3 µg/L) and MW48 (82 µg/L). MW90 was not included in **Figure 16** due to the limited data available at this location. In general, the concentrations of benzene in groundwater show an overall decreasing trend in the intermediate zone, likely reflective of operation of the remediation systems in the intermediate zone since 2012.

3.4.2.2 GRPH

Figure 17 shows that GRPH concentrations in the selected intermediate wells follow a similar overall decreasing trend as the benzene concentrations; with the highest concentrations generally occurring prior to February 2008 and decreasing steadily over time. Exceptions to this trend occurred at three wells: MW32, MW45, and MW48. GRPH concentrations in well MW32 were 120 μg/L in March 2012, but within 6 months the concentrations increased significantly up to 14,000 μg/L. The concentrations in MW32 have shown a consistent decreasing trend since December 2012, but increased slightly in the March-April 2014 event. MW32 is located on the TOC property. MW45 has shown a decreasing trend over time; however, in February 2013 the concentrations of GRPH increased from 4,700 μg/L (September 2012) to 19,000 μg/L (February 2013). The following sampling event (June 2013) showed a decrease in GRPH concentrations. MW45 was not sampled during the 2014 Annual Event because the well was dry at the time of sampling. The GRPH concentrations in MW48 seemed to follow a similar variable trend as the benzene concentrations. The GRPH concentrations in MW48 have fluctuated between a high of 37,000 μg/L in March 2012 and a low of 11,000 μg/L in June 2013.

As shown on **Figure 18**, GRPH concentration and groundwater elevation trends observed in MW48 fluctuate inversely, where increases in GRPH concentrations typically correspond to decreases in the groundwater elevations MW45 and MW48 are both located in the 56th Avenue right-of-way adjacent to the TOC/Farmasonis Property. In general, the concentrations of GRPH in groundwater show an overall decreasing trend in the intermediate zone, again likely due to the operation of the remediation systems in the intermediate zone.

3.4.2.3 Other Constituents

Total and dissolved lead has been detected in the intermediate zone wells since 2005. **Figure 19** shows total lead concentrations in groundwater in intermediate zone wells MW31, MW32 and MW91. These wells were selected because they were the only intermediate wells with enough available data to assess trends; however, data are still limited. MW31 shows total lead concentrations fluctuating between a high of 44.4 μg/L in February 2008 and a low of 3.51 μg/L in May 2006. MW31 was not sampled for lead during the 2014 Annual Event. MW32 and MW91 also show fluctuating total lead concentrations. Groundwater from MW32 contained a total lead concentration of 45.2 μg/L in March 2014 which exceeds the MTCA Method A cleanup level of 15 μg/L. Groundwater from MW91 contained an estimated total lead concentration of 3.02 μg/L which is below the MTCA Method A cleanup level. MW32 and MW91 are located on the TOC property; MW31 is located on the adjacent TOC/Farmasonis Property near the northern property boundary. Historically, detected total lead concentrations in groundwater in the intermediate zone ranged from 1.07 μg/L in MW9 (December 2005) to 193 μg/L in MW6 (June 2006). Wells that historically contained groundwater with total lead concentrations exceeding the MTCA Method A cleanup level include MW29, MW31, MW32, MW35, MW38, MW45, MW48, MW60, MW75, MW91, and MW101.

3.4.3 LNAPL

During the 2014 Annual Event, LNAPL was observed in shallow zone wells MW71 (0.29 ft), MW72 (0.49 ft) and MW102 (1.63 ft). MW71 and MW72 are located on the Shin Choi Property (MW71 near the northern property boundary and MW72 in the former UST excavation). The intermediate wells associated with MW71 (intermediate well MW74) and MW72 (intermediate well MW73) have not contained observed or measureable LNAPL. MW102 is located on the Herman Property near the south end of the former UST excavation. The intermediate zone well associated with MW102 (intermediate well MW103) has not contained observed or measureable LNAPL. None of these wells has enough historical data to assess trends over time; however, **Figure 21** shows available data for LNAPL and groundwater elevations over time in the intermediate well MW48, and **Figure 22** shows LNAPL and groundwater elevations for the shallow zone wells MW29 and MW71 over time. LNAPL thicknesses and groundwater elevations appear to be somewhat inversely related at well MW48, although there is some variability. This is also the case for the product/groundwater elevation trends at well MW29 when product was observed in this well in 2007. Not enough data are available to assess a comparison of these trends in well MW71. This inverse trend could be related to the liberation of residual LNAPL within partially saturated soil pore spaces as the groundwater level decreases.

MW48 has historically contained the largest occurrence of measureable LNAPL. LNAPL in MW48 ranged from a high of 1.86 ft in May 2007 to 0.01 ft in June 2009. LNAPL has not been encountered in MW48 since January 2011. There are currently no wells in the intermediate zone that contain measureable LNAPL based on the most recent sampling event in March 2014.

Shallow zone well MW29 contained LNAPL between December 2005 and February 2007. LNAPL has not been encountered in MW29 since May 2007. MW71, located on the Shin/Choi Property, is currently one of the shallow zone wells that contains measureable LNAPL. LNAPL was measured in MW71 at 0.29 ft in March 2014. The thickness of LNAPL in MW71 has decreased significantly from the highest thickness measured in July 2009 (1.36 ft).

Based on historical information and the current lack of measurable LNAPL in wells on the TOC, TOC/Farmasonis and Drake Properties, the source of the free product in MW71, MW72 and MW102 may be from the former USTs historically located on the Herman and Shin Choi properties, or from downgradient migration. The source of the LNAPL in MW48 is unknown. There are no known sources of petroleum hydrocarbons associated with the southwest corner of the TOC/Farmasonis Property/northwest corner of the Drake Property, where MW48 is located. Due to the location of MW48 near the utilities corridor, it is suspected that the occurrence of LNAPL may be associated with the utilities corridor acting as a preferential pathway from an upgradient source.

4.0 FUTURE GROUNDWATER TASKS

The 2014 second quarterly groundwater sampling event was conducted in June 2014; the third quarterly event is scheduled for September 2014; and the fourth quarterly event is scheduled for December 2014. The groundwater monitoring and analytical program for the 2014 quarterly events include monitoring of all wells for the annual events and selected wells for the quarterly events. The results for quarterly events will be provided in separate reports, namely the *2014 Second Quarter Groundwater Monitoring Report*; *2014 Third Quarter Groundwater Monitoring Report*; and *2014 Fourth Quarter Groundwater Monitoring Report*. The 2015 annual groundwater sampling event is scheduled for March 2015. The results for the 2015 annual groundwater monitoring event will be provided in the *2015 Annual Groundwater Monitoring Report*.

5.0 REFERENCES

SoundEarth Strategies, Inc. (SES). 2011. *Interim Remedial Action Work Plan, TOC Holdings Co. Facility No. 01-176, 24205 56th Avenue West, Mountlake Terrace, Washington 98043*. July 28.

SoundEarth Strategies, Inc. (SES). 2013. *Draft Remedial Investigation Report*, TOC Holdings Co. *No. 01-176, 24205 56th Avenue West, Mountlake Terrace, Washington 98043*. November 27.

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). 1992. *RCRA Ground-Water Monitoring Draft Technical Guidance.* Office of Solid Waste. Washington, D.C. November.

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.

List of Tables

TABLE 1
Summary of 2014 First Quarter/Annual Groundwater Elevation and Quality Results
March - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Property	Date[1]	Sample Method	Groundwater Elevation[2] (feet)	Analytical Results (µg/L)												
					GRPH[3]	DRPH[4]	ORPH[4]	Benzene[5]	Toluene[5]	Ethyl-benzene[5]	Total Xylenes[5]	MTBE[6]	EDC[6]	EDB[6]	EDB[7]	Total Lead[8]	Dissolved Lead[8]
SHALLOW ZONE WELLS (0 TO 20 FEET BGS)																	
MW02	TOC	03/22/14	Peristaltic Pump	347.88	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
		03/22/14	Peristaltic Pump (MLT-01 duplicate)		<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW03	TOC	03/21/14	Peristaltic Pump	350.85	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW04	ROW (56th)	03/21/14	Peristaltic Pump	350.45	<100	--	--	<1	<1	<1	4.4	--	--	--	--	--	--
MW05	ROW (242nd)	03/21/14	Peristaltic Pump	352.20	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW06	TOC	03/20/14	Peristaltic Pump	350.30	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW12	ROW (56th)	03/23/14	Peristaltic Pump	347.65	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW19	TOC	03/21/14	Peristaltic Pump	346.77	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW34	TOC	03/20/14	Peristaltic Pump	349.10	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW54	TOC/Farmasonis	03/22/14	Peristaltic Pump	347.01	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW61	ROW (56th)	03/27/14	Peristaltic Pump	348.88	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW62	ROW (56th)	03/27/14	Peristaltic Pump	350.78	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW67	Drake	03/28/14	Peristaltic Pump	342.68	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW68	Drake	04/01/14	Peristaltic Pump	342.69	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW71	Shin/Choi	03/24/14	*not sampled*	335.16	Not sampled due to delayed approval from property owner to access well.												
MW72	Shin/Choi	03/24/14	*not sampled*	331.59	Not sampled due to delayed approval from property owner to access well.												
MW79	TOC/Farmasonis	03/23/14	Peristaltic Pump	343.45	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW80	TOC/Farmasonis	03/23/14	Peristaltic Pump	342.13	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW82	TOC/Farmasonis	03/23/14	*not sampled*	329.29	Not sampled due to insufficient water to fill sample containers.												
MW88	Drake	03/27/14	Peristaltic Pump	333.09	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW100	TOC/Farmasonis	03/23/14	Peristaltic Pump	341.70	<100	--	--	<1	<1	<1	<3	--	--	--	--	<1	<1
MW102	Herman	03/30/14	Peristaltic Pump (product)	336.77	See Table 4 for results.												
MW104	Herman	04/01/14	Peristaltic Pump	342.52	**34,000**	**14,000 (x)**	**810 (x)**	**78**	**4,700**	**1,100**	**4,300**	<1	<1	<1	<0.01	<1	<1
		04/01/14	Peristaltic Pump (MLT-04 duplicate)		**35,000**	**14,000 (x)**	**830 (x)**	**77**	**4,400**	**1,100**	**4,400**	<1	<1	<1	**0.19 (ca)**	<1	<1
MW106	Herman	04/02/14	Peristaltic Pump	340.57	<100	250x	<250	<1	<1	<1	<3	<1	<1	<1	<0.01	<1	<1
INTERMEDIATE ZONE WELLS THAT INTERSECT SHALLOW ZONE CONDITIONS																	
MW08	ROW (56th)	03/27/14	Peristaltic Pump	342.85	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW24 (RW)	TOC	03/30/14	Pneumatic Pump	347.87	**11,000**	--	--	<1	57	<1	**2,200**	--	--	--	--	--	--
MW27 (RW)	TOC	03/30/14	Pneumatic Pump	*NM*	**1,000**	--	--	<1	3.7	12	120	--	--	--	--	--	--
MW29 (RW)	TOC	03/30/14	Pneumatic Pump	*NM*	**3,500**	--	--	<1	<1	<1	140	--	--	--	--	**30**	1.26
MW37	TOC	03/20/14	Peristaltic Pump	343.93	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW38	TOC	03/21/14	Peristaltic Pump	348.27	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW43	ROW (56th)	03/27/14	Bailer	324.13	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MTCA Method A Cleanup Level[9]					**1,000/800[10]**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 1
Summary of 2014 First Quarter/Annual Groundwater Elevation and Quality Results
March - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Property	Date[1]	Sample Method	Groundwater Elevation[2] (feet)	Analytical Results (µg/L)												
					GRPH[3]	DRPH[4]	ORPH[4]	Benzene[5]	Toluene[5]	Ethyl-benzene[5]	Total Xylenes[5]	MTBE[6]	EDC[6]	EDB[6]	EDB[7]	Total Lead[8]	Dissolved Lead[8]
INTERMEDIATE ZONE WELLS (20 TO 60 FEET BGS)																	
MW09	TOC	03/25/14	Peristaltic Pump	337.88	**2,600**	--	--	<1	3.8	<1	540	--	--	--	--	--	--
			Peristaltic Pump (MLT-02 duplicate)		**2,900**	--	--	<1	4.1	<1	570	--	--	--	--	--	--
			Submersible		**4,900**	--	--	<1	5.1	<1	850	--	--	--	--	--	--
			Bailer		**4,300**	--	--	<1	4.9	<1	750	--	--	--	--	--	--
MW10	TOC	04/22/14	Bailer	327.13	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW11 (RW)	TOC	03/30/14	Pneumatic Pump	341.03	**1,900**	--	--	<1	7.2	10	73	--	--	--	--	--	--
MW13	ROW (56th)	03/23/14	*not sampled*	Dry	Not sampled due to insufficient water to fill sample containers (noted as "dry").												
MW15 (RW)	TOC	03/30/14	Pneumatic Pump	320.86	<100	--	--	<1	1.1	<1	3.6	--	--	--	--	--	--
MW16	ROW (242nd)	03/23/14	*not sampled*	Dry	Not sampled due to insufficient water to fill sample containers (noted as "dry").												
MW18 (RW)	TOC	03/30/14	Pneumatic Pump	NM [11]	**5,500**	--	--	4.2	250	<1	**1,000**	--	--	--	--	--	--
MW20	TOC	03/22/14	Bailer	326.90	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW22	TOC	03/21/14	Peristaltic Pump	330.60	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW23	TOC	03/20/14	Bailer	318.22	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW25	TOC	03/30/27	Submersible	331.06	300	--	--	<1	3.3	2.2	34	--	--	--	--	--	--
MW28	TOC	03/22/14	Bailer	331.42	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
		03/22/14	Peristaltic Pump		<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW31 (RW)	TOC/Farmasonis	03/26/14	Pneumatic Pump	*NM*	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW32 (RW)	TOC	03/30/14	Pneumatic Pump	338.92	**4,800**	--	--	**5.3**	57	57	410	--	--	--	--	**45.2**	6.10
MW33	TOC	03/22/14	*not sampled*	323.73	Not sampled due to insufficient water to fill sample containers.												
MW35	TOC	03/20/14	Bailer	319.10	<100	--	--	<1	<1	<1	<3	--	--	--	--	2.45	<1
MW36	TOC	03/20/14	Bailer	315.70	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW41 (RW)	TOC/Farmasonis	03/26/14	*not sampled*	*NM*	Not sampled due to insufficient water to fill sample containers (noted as "dry").												
MW42	TOC/Farmasonis	03/23/14	*not sampled*	Dry	Not sampled due to insufficient water to fill sample containers (noted as "dry").												
MW44	ROW (56th)	03/30/14	*not sampled*	Dry	Not sampled due to insufficient water to fill sample containers (noted as "dry").												
MW45	ROW (56th)	03/23/14	*not sampled*	Dry	Not sampled due to insufficient water to fill sample containers (noted as "dry").												
MW46	ROW (56th)	03/27/14	*not sampled*	Dry	Not sampled due to insufficient water to fill sample containers (noted as "dry").												
MW47	ROW (56th)	03/27/14	*not sampled*	310.84	Not sampled due to insufficient water to fill sample containers.												
MW48	ROW (56th)	03/23/14	Bailer	312.90	**33,000**	--	--	**82**	99	680	**4,700**	--	--	--	--	**52.6**	**48**
MW49	ROW (56th)	04/01/14	Submersible	313.47	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW50	ROW (56th)	03/28/14	Bailer	326.27	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW51	ROW (56th)	04/01/14	Bailer	311.39	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW52	ROW (56th)	03/27/14	*not sampled*	312.31	Not sampled due to insufficient water to fill sample containers.												
MW55	ROW (56th)	03/31/14	Submersible	312.87	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW56	TOC/Farmasonis	03/31/14	Submersible	313.49	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW57 (RW)	TOC/Farmasonis	03/26/14	Pneumatic Pump	*NM* [11]	**3,600**	--	--	<1	9.1	51	410	--	--	--	--	--	--
MW58	TOC/Farmasonis	03/26/14	Submersible	342.50	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW59	TOC/Farmasonis	03/26/14	Submersible	314.39	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW60	ROW (56th)	03/31/14	Submersible	314.70	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW63	ROW (56th)	04/01/14	Submersible	312.42	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW65	Drake	04/01/14	Bailer	311.89	<100	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
MW66	TOC/Farmasonis	03/23/14	Bailer	313.45	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW69 (RW)	Drake	03/31/14	*not sampled*	*NM* [11]	Not sampled due to insufficient water to fill sample containers (noted as "dry").												
MW70 (RW)	Drake	03/30/14	Pneumatic Pump	*NM*	<100	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
MTCA Method A Cleanup Level[9]					**1,000/800[10]**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 1
Summary of 2014 First Quarter/Annual Groundwater Elevation and Quality Results
March - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Property	Date [1]	Sample Method	Groundwater Elevation [2] (feet)	Analytical Results (µg/L)												
					GRPH [3]	DRPH [4]	ORPH [4]	Benzene [5]	Toluene [5]	Ethyl-benzene [5]	Total Xylenes [5]	MTBE [6]	EDC [6]	EDB [6]	EDB [7]	Total Lead [8]	Dissolved Lead [8]
INTERMEDIATE ZONE WELLS (20 TO 60 FEET BGS), CONTINUED																	
MW73	Shin/Choi	03/24/14	*not sampled*	308.73	Not sampled due to delayed approval from property owner to access well.												
MW74	Shin/Choi	03/24/14	*not sampled*	311.35	Not sampled due to delayed approval from property owner to access well.												
MW75	ROW (56th)	04/03/14	Submersible	310.87	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW76	Drake	03/27/14	Bailer	312.68	<100	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
MW77	Drake	03/27/14	Bailer	311.41	<100	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
MW81	TOC/Farmasonis	03/23/14	Bailer	313.15	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW84	Drake	03/30/14	Submersible	311.12	<100	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
MW85	Drake	04/01/14	Submersible	311.41	<100	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
MW86	Drake	04/01/14	Submersible	311.50	<100	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
		04/01/14	Bladder Pump (MLT-06 duplicate)		<100	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
MW87	Drake	03/27/14	Bailer	311.55	<100	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
MW89	Drake	04/01/14	Submersible	311.79	<100	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
MW90 (RW)	TOC	03/30/14	Pneumatic Pump	339.68	**18,000**	--	--	**10**	990	210	**3,500**	--	--	--	--	4.08	<1
MW91 (RW)	TOC	03/30/14	Pneumatic Pump	340.03	**2,200**	--	--	<1	51	33	270	--	--	--	--	3.02	<1
		03/30/14	Pneumatic Pump (MLT-03 duplicate)		**1,900**	--	--	<1	41	27	230	--	--	--	--	5.35	<1
MW92 (RW)	TOC/Farmasonis	03/26/14	Pneumatic Pump	313.61	<100	--	--	1.1	<1	<1	<3	--	--	--	--	--	--
MW93 (RW)	TOC/Farmasonis	03/26/14	Pneumatic Pump	*NM* [11]	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW94 (RW)	TOC/Farmasonis	03/26/14	*not sampled*	*NM* [11]	Not sampled due to insufficient water to fill sample containers (noted as "dry").												
MW95 (RW)	Drake	03/28/14	Pneumatic Pump	311.32	330	--	--	<1	<1	<1	36	<1	--	--	--	--	--
MW96 (RW)	Drake	03/28/14	Pneumatic Pump	312.75	200	--	--	3.6	1	8	34.0	<1	--	--	--	--	--
MW97 (RW)	Drake	03/28/14	Pneumatic Pump	311.94	<100	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
MW98 (RW)	Drake	03/30/14	Pneumatic Pump	312.29	<100	--	--	2.1	<1	<1	<3	<1	--	--	--	--	--
MW99 (RW)	Drake	03/31/14	*not sampled*	*NM* [11]	Not sampled due to insufficient water to fill sample containers (noted as "dry").												
MW101 (RW)	Drake	03/30/14	Pneumatic Pump	311.69	<100	--	--	<1	<1	<1	<3	<1	--	--	--	<1	<1
MW103	Herman	04/03/14	Bailer	308.94	<100	<50	<250	<1	<1	<1	<3	<1	<1	<1	<0.01	2.76	<1
MW105	Herman	04/01/14	*not sampled*	310.79	Not sampled due to insufficient water to fill sample containers (noted as "dry").												
MW107	Herman	04/02/14	Submersible	310.40	<100	93 [x]	<260	<1	<1	<1	<3	<1	<1	<1	<0.01	<1	<1
MTCA Method A Cleanup Level [9]					**1,000/800** [10]	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**
DEEP ZONE WELLS (OVER 60 FEET BGS)																	
MW26	TOC	03/22/14	Bailer	315.47	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW30	TOC/Farmasonis	03/25/14	Submersible	315.31	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW39	TOC/Farmasonis	03/25/14	Submersible	314.88	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW40	TOC/Farmasonis	03/26/14	Submersible	315.10	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW53	ROW (56th)	03/31/14	Submersible	316.04	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW64	ROW (56th)	03/28/14	Bailer	314.12	<100	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW78	Drake	04/02/14	Submersible	313.57	<100	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
MTCA Method A Cleanup Level [9]					**1,000/800** [10]	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 1

Summary of 2014 First Quarter/Annual Groundwater Elevation and Quality Results
March - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

NOTES:

Red denotes concentration exceeds MTCA Method A cleanup levels for groundwater.
Groundwater samples analyzed by Friedman & Bruya, Inc. of Seattle WA.
Groundwater elevations were measured while the remediation system was turned off.
(1) The recorded date is the date of the groundwater quality sampling. However, if the well was not sampled, the date recorded is the water level measurement date.
(2) Elevations in feet above sea level (NAVD88 Datum) based on survey performed by PACE Engineers in April 2014.
(3) Analyzed by Method NWTPH-Dx.
(4) Analyzed by Method NWTPH-Gx.
(5) Analyzed by EPA Method 8021B.
(6) Analyzed by EPA Method 8260C.
(7) Analyzed by EPA Method 8011.
(8) Analyzed by EPA Method 200.8.
(9) MTCA Method A cleanup levels, Table 720-1 of Section 900 of Chapter 173-340 of the WAC, revised November 2007.
(10) 1,000 µg/L when benzene is not present and 800 µg/L when benzene is present.
(11) During measurement, TP was encountered prior to LNAPL/groundwater level.

LABORATORY NOTES:

(ca) The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.
(ve) Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution was required to obtain an accurate quantification of the analyte.
(x) The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

LIST OF PROPERTIES:

Drake = 24309 56th Avenue West, Mountlake Terrace WA
ROW (56th) = 56th Avenue West, Mountlake Terrace WA
ROW (242nd) = 242nd Street Southwest, Mountlake Terrace WA
TOC = 24205 56th Avenue West, Mountlake Terrace WA
TOC/Farmasonis = 24225 56th Avenue West, Mountlake Terrace WA

DEFINITIONS:

-- = not analyzed
µg/L = micrograms per liter
BGS = below ground surface
DRPH = diesel-range petroleum hydrocarbons
EDB = ethylene dibromide (1,2-dibromoethane)
EDC = ethylene dichloride (1,2-dicholoroethane)
EPA = U.S. Environmental Protection Agency
GRPH = gasoline-range petroleum hydrocarbons
MTBE = methyl tertiary-butyl ether
MTCA = Model Toxics Control Act
MW = monitoring well
NAVD88 = North American Vertical Datum of 1988
NE = cleanup level not established for indicated compound
NM = not measured
NWTPH-Dx = Northwest Total Petroleum Hydrocarbon - diesel-range organics
NWTPH-Gx = Northwest Total Petroleum Hydrocarbon - gasoline-range organics
ORPH = oil-range petroleum hydrocarbons
ROW = right-of-way
RW = remediation well (connected to a multi-phase remediation system)
TP = top of pump
WAC = Washington Administrative Code

TABLE 2
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9] Total	Lead[9] Dissolved
MW01	06/15/92	--	6.01	--	348.86	**33,000**	--	--	--	**2,300**	**1,700**	**1,400**	**9,200**	--	--	--	--	--	--
TOC: 354.87	07/30/92	--	8.07	--	346.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/11/94	--	12.65	--	342.22	**1,600**	--	--	--	**29**	4.6	28	140	--	--	--	--	--	--
TOC: 354.76	09/11/96	--	11.71	--	343.05	320	--	--	--	2.6	<0.5	15	46	--	--	--	--	--	--
	02/05/97	--	3.37	--	351.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	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	--	--	--	<0.5	<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	--	--	--	<0.5	<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	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	10/11/01	--	16.82	--	337.94	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	<1.0	--	--	--	--	--	--
	10/09/03	--	15.94	--	338.82	160	--	--	--	0.548	<0.5	2.84	11.3	--	--	--	--	--	--
	03/09/05	--	9.70	--	345.06	<50	--	--	--	<1	<1	<1	<3	<3	--	--	--	--	--
	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	<53	--	<270	<1	<1	<1	<3	<1	<1	<1	--	1.36	--
	02/24/06	--	6.52	--	348.24	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	06/01/06	--	8.90	--	345.86	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	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	--	--	--	--	--	--
	02/21/07	--	9.86	--	344.90	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	05/24/07	--	11.51	--	343.25	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	08/03/07	--	15.02	--	339.74	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/12/08	--	10.48	--	344.28	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	10/02/09	D E C O M M I S S I O N E D																	
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9]	
																		Total	Dissolved
MW02	06/15/92	--	4.00	--	354.71	**13,000**	--	--	--	**590**	**1,900**	350	**2,500**	--	--	--	--	--	--
TOC: 358.71	07/30/92	--	7.61	--	351.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/11/94	--	15.50	--	343.21	**50,000**	--	--	--	**4,600**	**7,300**	**1,200**	**8,300**	--	--	--	--	--	--
	09/11/96	--	11.99	--	346.72	**33,000**	--	--	--	**1,800**	**4,000**	**780**	**5,400**	--	--	--	--	--	--
	02/05/97	--	4.80	--	353.91	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/11/97	--	6.02	--	352.69	100	--	--	--	4.8	3.7	2.5	16	--	--	--	--	--	--
	09/17/97	--	12.75	--	345.96	**25,700**	--	--	--	**709**	**2,200**	617	**4,050**	--	--	--	--	--	--
	03/16/98	--	8.27	--	350.44	**1,700**	--	--	--	**28.3**	53	55	276	--	--	--	--	--	--
	09/08/98	--	15.90	--	342.81	**15,300**	--	--	--	**259**	**2,040**	<50	**2,700**	--	--	--	--	--	--
	03/19/99	--	2.79	--	355.92	**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	--	351.32	**4,920**	--	--	--	<5	241	133	**1,000**	--	--	--	--	--	--
	09/28/00	--	--	--	343.34	**20,700**	--	--	--	**135**	**1,830**	**845**	**5,390**	--	--	--	--	--	--
	04/03/01	--	13.86	--	344.85	**18,800**	--	--	--	<100	351	**802**	**5,050**	--	--	--	--	--	--
	10/11/01	--	16.33	--	342.38	**16,900**	--	--	--	**69.7**	469	643	**4,650**	--	--	--	--	--	--
	03/27/02	--	6.79	Trace	351.92	**11,500**	--	--	--	**16.3**	23.0	331	**1,930**	--	--	--	--	--	--
	09/26/02	--	14.18	Trace	344.53	**8,260**	--	--	--	<5.0	40.6	226	**2,420**	--	--	--	--	--	--
	03/27/03	--	12.80	--	345.91	**14,700**	--	--	--	<10.0	11.3	324	**3,020**	--	--	--	--	--	--
	10/09/03	--	14.28	--	344.43	**3,600**	--	--	--	<5.0	11.1	67.5	639	--	--	--	--	--	--
	03/09/05	--	9.42	--	349.29	**1,400**	--	--	--	<1	2	4	71	<3	--	--	--	--	--
	09/26/05	--	9.20	--	349.51	Not sampled due to inaccessible wellhead (vehicle parked over wellhead)													
	12/21/05	--	11.50	--	347.21	<100	<56	--	<280	<1	<1	<1	<3	<1	<1	<1	--	<1	--
	02/23/06	--	5.88	--	352.83	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	06/01/06	--	7.86	--	350.85	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	08/23/06	--	12.96	--	345.75	<100	--	--	--	<1	<1	<1	4.2	<1	--	--	--	--	--
	11/15/06	--	15.89	--	342.82	260	--	--	--	<1	1.1	2.0	<8.9	--	--	--	--	--	--
	02/21/07	--	10.38	--	348.33	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	05/23/07	--	11.74	--	346.97	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	08/01/07	--	13.85	--	344.86	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/13/08	--	12.04	--	346.67	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	03/04/10	--	9.94	--	348.77	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	03/08/12	--	12.74	--	345.97	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/04/12	--	11.27	--	347.44	not sampled; gauged only													
	09/10/12	--	13.73	--	344.98	not sampled; gauged only													
	12/03/12	--	12.69	--	346.02	not sampled; gauged only													
	02/20/13	--	6.73	--	351.98	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	10.90	--	347.81	not sampled; gauged only													
	09/03/13	--	14.51	--	344.20	not sampled; gauged only													
	12/02/13	--	16.77	--	341.94	not sampled; gauged only													
	03/22/14	--	10.83	--	347.88	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9] Total	Lead[9] Dissolved
MW03	06/15/92	--	4.83	--	357.02	**92,000**	--	--	--	**5,800**	**22,000**	**1,900**	**16,000**	--	--	--	--	--	--
TOC: 361.85	07/30/92	--	8.05	--	353.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/11/94	--	14.34	--	347.51	**110,000**	--	--	--	**6,100**	**21,000**	**1,600**	**13,000**	--	--	--	--	--	--
	11/20/95	17.34	17.44	0.10	344.41	**LNAPL**													
	09/11/96	13.12	13.17	0.05	348.68	**LNAPL**													
	02/05/97	--	6.10	--	355.75	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/11/97	--	7.02	Trace	354.83	**LNAPL**													
	09/17/97	--	15.82	--	346.03	**80,500**	--	--	--	**836**	**8,740**	**839**	**10,800**	--	--	--	--	--	--
	03/16/98	--	8.75	Trace	353.10	**LNAPL**													
	09/08/98	--	17.44	--	344.41	**63,900**	--	--	--	**303**	**3,700**	**1,030**	**11,800**	--	--	--	--	--	--
	03/19/99	--	4.66	--	357.19	**8,130**	--	--	--	**13.5**	502	50.6	**1,150**	--	--	--	--	--	--
	09/17/99	--	13.30	--	348.55	**15,700**	--	--	--	**27.1**	**2,010**	240	**4,270**	--	--	--	--	--	--
	03/23/00	--	8.14	--	353.71	**25,000**	--	--	--	**88.2**	**2,050**	434	**4,280**	--	--	--	--	--	--
	09/28/00	--	Dry	--	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/03/01	--	15.16	--	346.69	**9,120**	--	--	--	**15.4**	829	124	**2,230**	--	--	--	--	--	--
	10/11/01	--	Dry	--	DRY	Not sampled due to insufficient water to fill sample containers.													
	03/27/02	--	8.63	--	353.22	**1,960**	--	--	--	2.99	88.9	31.6	404	--	--	--	--	--	--
	09/26/02	--	Dry	--	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/27/03	--	12.00	--	349.85	<50	--	--	--	0.663	<0.5	<0.5	<1.0	--	--	--	--	--	--
	10/09/03	--	14.86	--	346.99	**5,040**	--	--	--	**6.79**	166	170	**1,760**	--	--	--	--	--	--
	03/09/05	--	9.77	--	352.08	730	--	--	--	2	2	15	98	<3	--	--	--	--	--
	09/27/05	--	9.35	--	352.50	<50.0	--	--	--	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	--	--	--
	12/22/05	--	11.01	--	350.84	<100	<54	--	<270	<1	<1	<1	<3	--	--	--	--	2.28	--
	02/22/06	--	5.73	--	356.12	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	05/31/06	--	7.33	--	354.52	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	08/23/06	--	13.49	--	348.36	**1,000**	--	--	--	<1	1.1	35	188.4	<1	--	--	--	--	--
	11/14/06	--	17.61	--	344.24	Not sampled due to insufficient water to fill sample containers.													
	02/20/07	--	10.30	--	351.55	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	05/22/07	--	11.78	--	350.07	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	08/01/07	--	14.08	--	347.77	330	--	--	--	<1	<1	6	31	--	--	--	--	--	--
	02/13/08	--	12.49	--	349.36	<100	--	--	--	<1	<1	1	5	--	--	--	--	--	--
	03/04/10	--	9.61	--	352.24	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	03/08/12	--	13.08	--	348.77	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/04/12	--	11.59	--	350.26	not sampled; gauged only													
	09/10/12	--	14.63	--	347.22	not sampled; gauged only													
	12/03/12	--	12.85	--	349.00	not sampled; gauged only													
	02/20/13	--	6.29	--	355.56	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	11.82	--	350.03	not sampled; gauged only													
	09/03/13	--	17.56	--	344.29	not sampled; gauged only													
	12/02/13	--	Dry	--	Dry	not sampled; gauged only													
	03/21/14	--	11	--	350.85	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9] Total	Lead[9] Dissolved
MW04	07/30/92	--	7.19	--	354.77	**100,000**	--	--	--	**470**	**15,000**	**2,500**	**18,000**	--	--	--	--	--	--
TOC: 361.96	01/11/94	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	11/20/95	--	17.21	--	344.75	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/11/96	--	12.65	--	349.31	**22,000**	--	--	--	**77**	480	600	**4,800**	--	--	--	--	--	--
	02/05/97	--	5.15	--	356.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/11/97	--	6.08	--	355.88	**7,200**	--	--	--	3.2	220	170	**1,400**	--	--	--	--	--	--
	09/17/97	--	14.76	--	347.20	**17,400**	--	--	--	**30.1**	92.9	78.4	846	--	--	--	--	--	--
	03/16/98	--	7.95	--	354.01	**37,200**	--	--	--	**44.3**	**3,760**	**804**	**5,970**	--	--	--	--	--	--
	09/08/98	--	18.03	--	343.93	**22,200**	--	--	--	**77.9**	**1,390**	199	**3,520**	--	--	--	--	--	--
	03/19/99	--	3.97	--	357.99	**22,900**	--	--	--	**32.7**	**1,300**	334	**3,440**	--	--	--	--	--	--
	09/17/99	--	12.86	--	349.10	Not sampled due to inaccessible wellhead (vehicle parked over wellhead).													
	03/23/00	--	--	--	Dry	Not sampled or gauged due to inaccessible wellhead (road construction activity).													
	09/28/00	--	16.95	--	345.01	**1,010**	--	--	--	<10.5	34.8	243	829	--	--	--	--	--	--
	04/03/01	--	16.03	--	345.93	**12,900**	--	--	--	<25	102	538	**2,870**	--	--	--	--	--	--
	10/11/01	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	03/27/02	--	6.26	--	355.70	**3,900**	--	--	--	2.95	181	89.1	714	--	--	--	--	--	--
	09/26/02	--	15.30	--	346.66	**1,000**	--	--	--	1.85	5.97	112	135	--	--	--	--	--	--
	03/27/03	--	11.92	--	350.04	**38,100**	--	--	--	<50.0	**3,890**	**1,270**	**7,840**	--	--	--	--	--	--
	10/09/03	--	15.47	--	346.49	**24,900**	--	--	--	<100.0	**1,760**	**1,020**	**7,220**	--	--	--	--	--	--
	03/09/05	--	9.35	--	352.61	<50	--	--	--	<1	<1	<1	<3	<3	--	--	--	--	--
	09/26/05	9.20	9.20	Sheen	352.76	**LNAPL**; Not sampled due to sheen.													
	12/22/05	--	11.11	--	350.85	<100	<54	--	<270	<1	<1	<1	<3	<1	--	--	--	<1	--
	02/22/06	--	4.25	--	357.71	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	05/31/06	--	5.00	--	356.96	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	08/23/06	--	12.76	--	349.20	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	11/14/06	--	--	--	--	Not sampled or gauged due to inaccessible wellhead (road construction activity).													
	02/21/07	--	8.97	--	352.99	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	05/22/07	--	10.84	--	351.12	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	08/01/07	--	13.62	--	348.34	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/13/08	--	11.51	--	350.45	<100	--	--	--	<1	<1	<1	4	--	--	--	--	--	--
	03/02/10	--	8.53	--	353.43	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	03/07/12	--	14.34	--	347.62	<100	--	--	--	<1	<1	1.5	<3	--	--	--	--	--	--
	06/04/12	--	10.41	--	351.55	not sampled; gauged only													
	09/10/12	--	14.31	--	347.65	not sampled; gauged only													
	12/03/12	--	Dry	--	Dry	Not sampled (not included in sampling scope); gauged only													
	02/20/13	--	4.27	--	357.69	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	10.68	--	351.28	not sampled; gauged only													
	09/03/13	--	16.51	--	345.45	not sampled; gauged only													
	12/02/13	--	Dry	--	Dry	not sampled; gauged only													
	03/21/14	--	11.51	--	350.45	<100	--	--	--	<1	<1	<1	4.4	--	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9]	
																		Total	Dissolved
MW05	07/30/92	--	9.10	--	354.60	<50.0	--	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--	--
TOC: 363.70	01/11/94	--	14.48	--	349.22	Not sampled due to insufficient water to fill sample containers.													
	11/20/95	--	14.37	--	349.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/11/96	--	13.33	--	350.37	88	--	--	--	<0.5	0.53	1.1	6.4	--	--	--	--	--	--
	02/05/97	--	5.41	--	358.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/11/97	--	6.15	--	357.55	<100	--	--	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	--
	09/17/97	--	13.79	--	349.91	<50	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	03/16/98	--	7.86	--	355.84	<50	--	--	--	<0.5	<0.5	<0.5	<2.0	--	--	--	--	--	--
	09/08/98	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	03/19/99	--	4.75	--	358.95	<50	--	--	--	<0.5	<0.5	<0.5	1.07	--	--	--	--	--	--
	09/17/99	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	03/23/00	--	7.35	--	356.35	<50	--	--	--	<0.5	1.64	0.501	3.43	--	--	--	--	--	--
	09/28/00	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	04/03/01	--	13.39	--	350.31	<50	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	10/11/01	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	03/27/02	--	6.41	--	357.29	<50	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	09/26/02	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	03/27/03	--	10.80	--	352.90	<50	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	10/09/03	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	03/09/05	--	11.57	--	352.13	<50	--	--	--	<1	<1	<1	<3	<3	--	--	--	--	--
	09/27/05	--	12.57	--	351.13	<50.0	--	--	--	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	--	--	--
	12/22/05	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	02/22/06	--	6.76	--	356.94	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	05/31/06	--	8.42	--	355.28	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	08/23/06	--	14.10	--	349.60	Not sampled due to insufficient water to fill sample containers.													
	11/14/06	--	14.75	--	348.95	Not sampled due to insufficient water to fill sample containers.													
	02/20/07	--	9.50	--	354.20	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	05/22/07	--	11.35	--	352.35	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	08/03/07	--	14.36	--	349.34	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/13/08	--	11.68	--	352.02	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	03/02/10	--	8.75	--	354.95	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	03/02/12	--	8.78	--	354.92	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	03/08/12	--	12.45	--	351.25	<100	--	--	--	<1	<1	<1	12	--	--	--	--	--	--
	06/04/12	--	10.39	--	353.31	not sampled; gauged only													
	09/10/12	--	14.50	--	349.20	not sampled; gauged only													
	12/03/12	--	14.61	--	349.09	not sampled; gauged only													
	02/21/13	--	6.02	--	357.68	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	11.02	--	352.68	not sampled; gauged only													
	09/03/13	--	Dry	--	Dry	not sampled; gauged only													
	12/02/13	--	14.75	--	348.95	not sampled; gauged only													
	03/21/14	--	11.5	--	352.20	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

Stantec

TABLE 2
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9] Total	Lead[9] Dissolved
MW06	07/30/92	--	8.66	--	350.32	<50.0	--	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--	--
TOC: 358.98	01/11/94	--	12.92	--	346.06	<50	--	--	--	<0.50	2.0	<0.50	2.6	--	--	--	--	--	--
	11/20/95	--	14.45	--	344.53	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/11/96	--	12.26	--	346.72	<50	--	--	--	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	02/05/97	--	3.32	--	355.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/11/97	--	4.96	--	354.02	<100	--	--	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	--
	09/17/97	--	12.83	--	346.15	<50	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	03/16/98	--	6.77	--	352.21	<50	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	09/08/98	--	15.00	--	343.98	**868**	--	--	--	1.92	73.0	21.3	172	--	--	--	--	--	--
	03/19/99	--	3.95	--	355.03	<50	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	09/17/99	--	12.53	--	346.45	<50	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	03/23/00	--	7.97	--	351.01	<50	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	09/28/00	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	04/03/01	--	11.64	--	347.34	<50	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	10/11/01	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	03/27/02	--	6.06	--	352.92	<50	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	09/26/02	--	Dry	--	DRY	Not sampled due to insufficient water to fill sample containers.													
	03/27/03	--	8.10	--	350.88	<50	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	10/09/03	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	03/09/05	--	9.30	--	349.68	<50	--	--	--	<1	<1	<1	<3	<3	--	--	--	--	--
	09/26/05	--	12.26	--	346.72	<50.0	--	--	--	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	--	--	--
	12/22/05	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	02/22/06	--	5.93	--	353.05	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	05/31/06	--	9.88	--	349.10	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	08/22/06	--	14.68	--	344.30	Not sampled due to insufficient water to fill sample containers.													
	11/14/06	--	Dry	--	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/21/07	--	10.05	--	348.93	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	05/22/07	--	12.79	--	346.19	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	07/31/07	--	14.71	--	344.27	Not sampled due to insufficient water to fill sample containers.													
	02/13/08	--	10.96	--	348.02	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	03/04/10	--	9.42	--	349.56	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	07/08/10	--	12.49	--	346.49	not sampled; gauged only													
	03/08/12	--	12.87	--	346.11	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/04/12	--	11.82	--	347.16	not sampled; gauged only													
	09/10/12	--	14.69	--	344.29	not sampled; gauged only													
	12/03/12	--	14.65	--	344.33	not sampled; gauged only													
	02/20/13	--	6.81	--	352.17	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	12.17	--	346.81	not sampled; gauged only													
	09/03/13	--	14.71	--	344.27	not sampled; gauged only													
	12/02/13		14.77	--	344.21	not sampled; gauged only													
	03/20/14	--	8.68	--	350.30	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

Stantec

TABLE 2
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date(1)	Depth to LNAPL(2) (feet)	Depth to Groundwater(2) (feet)	LNAPL Thickness(3) (feet)	Groundwater Elevation(4) (feet)	Analytical Results (µg/L)													
						GRPH(5)	DRPH(6)	ORPH(6)	TRPH(6)	Benzene(7)	Toluene(7)	Ethyl-benzene(7)	Total Xylenes(7)	MTBE(7)	EDC(7)	EDB(7)	EDB(8)	Lead(9) Total	Lead(9) Dissolved
MW07	07/30/92	--	8.40	--	344.58	<50.0	--	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--	--
TOC: 352.98	01/11/94	--	12.93	--	340.05	<50	--	--	--	<0.50	<0.50	<0.50	<1.0	--	--	--	--	--	--
	11/20/95	--	13.05	--	339.93	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/11/96	--	11.95	--	341.03	<50	--	--	--	<0.5	<0.5	<0.5	0.5	--	--	--	--	--	--
	02/05/97	--	4.07	--	348.91	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/11/97	--	5.63	--	347.35	<100	--	--	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	--
	09/17/97	--	12.00	--	340.98	<50	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	03/16/98	--	7.70	--	345.28	<50	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	09/08/98	--	Dry	--	--	Not sampled due to insufficient water to fill sample containers.													
	03/19/99	--	2.91	--	350.07	<50	--	--	--	<0.5	1.07	<0.5	2.66	--	--	--	--	--	--
	09/17/99	--	11.77	--	341.21	<50	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	03/23/00	--	6.80	--	346.18	<50	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	09/28/00	--	13.92	--	339.06	<50	--	--	--	<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	--	--	Not sampled due to insufficient water to fill sample containers.													
	03/27/02	--	7.05	--	345.93	<50	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	09/26/02	--	13.52	--	339.46	<50	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	03/27/03	--	11.22	--	341.76	<50	--	--	--	<0.5	1.41	0.745	4.08	--	--	--	--	--	--
	10/09/03	--	14.31	--	338.67	<50	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	11/08/04	--	12.27	--	340.71	<50	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	11/29/04	D E C O M M I S S I O N E D																	
MTCA Method A Cleanup Levels for Groundwater(14)						**800/1,000(15)**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

Stantec

TABLE 2
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L) GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9] Total	Lead[9] Dissolved
MW08	01/11/94	--	24.86	--	335.48	290	--	--	--	0.53	0.54	<0.50	<1.0	--	--	--	--	--	--
TOC: 360.34	11/20/95	--	25.59	--	334.75	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/11/96	--	22.30	--	338.04	<50	--	--	--	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	02/05/97	--	8.20	--	352.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/11/97	--	9.68	--	350.66	<100	--	--	--	<0.5	<0.5	<1.5	<1.5	--	--	--	--	--	--
	09/17/97	--	24.18	--	336.16	<50	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	03/16/98	--	12.53	--	347.81	<50	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	09/08/98	--	25.59	--	334.75	60	--	--	--	<0.5	2.33	1.21	10.5	--	--	--	--	--	--
	03/19/99	--	3.23	--	357.11	<50	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	09/17/99	--	9.30	--	351.04	<50	--	--	--	<0.5	0.508	<0.5	1.30	--	--	--	--	--	--
	03/23/00	--	7.57	--	352.77	<50	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	09/28/00	--	25.70	--	334.64	<50	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	04/03/01	--	24.35	--	335.99	<50	--	--	--	<0.5	<0.5	1.53	7.92	--	--	--	--	--	--
	10/11/01	--	26.61	--	333.73	<50.0	--	--	--	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--
	03/27/02	--	8.08	--	352.26	<50	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	09/26/02	--	24.66	--	335.68	<50	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	03/27/03	--	15.13	--	345.21	<50	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	10/09/03	--	25.82	--	334.52	<50	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	03/09/05	--	12.46	--	347.88	<50	--	--	--	<1	<1	<1	<3	<3	--	--	--	--	--
	09/26/05	--	12.87	Sheen	347.47	Not sampled due to sheen.													
	12/22/05	--	11.30	--	349.04	<100	<53	--	<270	<1	<1	<1	2.6	--	--	--	--	<1	--
	02/22/06	--	4.36	--	355.98	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	05/31/06	--	6.41	--	353.93	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	08/23/06	--	17.30	--	343.04	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	11/14/06	--	23.77	--	336.57	<50	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/21/07	--	10.91	--	349.43	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	05/22/07	--	14.09	--	346.25	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	08/02/07	--	21.83	--	338.51	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/12/08	--	12.56	--	347.78	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	03/02/10	--	9.61	--	350.73	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	03/08/12	--	15.47	--	344.87	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/04/12	--	12.67	--	347.67	not sampled; gauged only													
	09/10/12	--	21.55	--	338.79	not sampled; gauged only													
	12/03/12	--	20.49	--	339.85	not sampled; gauged only													
	02/21/13	--	5.86	--	354.48	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	20.28	--	340.06	not sampled; gauged only													
	09/03/13	--	37.21	--	323.13	not sampled; gauged only													
	12/02/13	--	Dry	--	Dry	not sampled; gauged only													
	03/27/14	--	17.49	--	342.85	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

Stantec

TABLE 2
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9]	
																		Total	Dissolved
MW09[10]	01/11/94	--	30.27	--	330.05	**94,000**	--	--	--	**16,000**	**26,000**	**1,800**	**13,000**	--	--	--	--	--	--
TOC: 360.32	11/20/95	29.93	33.45	3.52	329.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/11/96	26.70	28.41	1.71	333.28	**LNAPL**													
	02/05/97	19.50	21.15	1.65	340.49	**LNAPL**													
	03/11/97	--	21.42	Sheen	338.90	**LNAPL**; Not sampled due to sheen.													
	09/17/97	--	29.90	--	330.42	**17,200**	--	--	--	**157**	82.8	<10	**2,690**	--	--	--	--	--	--
	03/16/98	21.96	21.97	0.01	338.36	**LNAPL**													
	09/08/98	31.83	31.84	0.01	328.49	**LNAPL**													
	03/19/99	16.97	16.98	0.01	343.35	**LNAPL**													
	09/17/99	25.05	25.06	0.01	335.27	**LNAPL**													
	03/23/00	--	20.25	Sheen	340.07	**LNAPL**; Not sampled due to sheen.													
	09/28/00	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	04/03/01	--	28.64	Sheen	331.68	**LNAPL**; Not sampled due to sheen													
	10/11/01	--	29.71	--	330.61	**18,400**	--	--	--	**495**	904	270	**5,110**	--	--	--	--	--	--
	03/27/02	--	19.27	--	341.05	**14,000**	--	--	--	**131**	**1,370**	190	**4,000**	--	--	--	--	--	--
	09/26/02	--	27.47	--	332.85	**26,500**	--	--	--	**740**	**1,940**	669	**5,790**	--	--	--	--	--	--
	03/27/03	--	24.82	--	335.50	**42,700**	--	--	--	**264**	**3,040**	**777**	**9,500**	--	--	--	--	--	--
	10/09/03	--	27.54	Sheen	332.78	**1,400**	--	--	--	**33.2**	119	41.8	386	--	--	--	--	--	--
	03/09/05	--	16.75	--	343.57	**15,000**	--	--	--	**94**	160	120	**2,200**	<30	--	--	--	--	--
	09/27/05	--	NM[11]	--	NM[11]	**2,320**	--	--	--	<1.00	6.21	41.8	575	<5.00	<1.00	<1.00	--	--	--
	12/22/05	--	22.33	--	337.99	**2,200**	**620**[x]	--	**620**[x]	<1	9.2	26	990	--	--	--	--	1.07	--
	02/22/06	--	11.51	--	348.81	660	--	--	--	<1	<1	11	147	<1	--	--	--	--	--
	06/01/06	--	14.34	--	345.98	**1,500**	--	--	--	<1	4	40	450	--	--	--	--	--	--
	08/24/06	--	25.79	--	334.53	**24,000**	--	--	--	**330**	420	550	**4,800**	<1	--	--	--	--	--
	11/15/06	--	34.12	--	326.20	**3,800**	--	--	--	**360**	130	88	**1,820**	--	--	--	--	--	--
	02/20/07	--	19.79	--	340.53	**4,100**	--	--	--	5	32	83	**1,100**	--	--	--	--	--	--
	05/23/07	--	23.19	--	337.13	**13,000**	--	--	--	**91**	270	330	**3,100**	--	--	--	--	--	--
	08/01/07	--	26.98	--	333.34	**4,800**	--	--	--	**59**	120	100	**1,200**	--	--	--	--	--	--
	02/12/08	--	23.30	--	337.02	**5,900**	--	--	--	**23**	100	96	**1,500**	--	--	--	--	--	--
	03/04/10	--	17.50	--	342.82	**5,000**	--	--	--	<1	4	45	980	<1	<1	<1	--	--	--
	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	**3,300**	--	--	--	**21**	21	130	750	--	--	--	--	--	--
	12/04/12	--	27.07	--	333.25	**5,500**	--	--	--	**28**	25	73	720	--	--	--	--	--	--
	02/20/13	--	13.89	--	346.43	**1,200**	--	--	--	<1	<1	28	140	--	--	--	--	--	--
	06/25/13	--	26.25	--	334.07	**960**	--	--	--	2.5	1.3	9.3	69	--	--	--	--	--	--
	09/05/13	--	38.11	--	322.21	300	--	--	--	1.9	1.8	1.7	19	--	--	--	--	--	--
	12/02/13	--	38.75	--	321.57	Not sampled due to insufficient water to fill sample containers (noted as "dry").													
	03/25/14	--	22.44	--	337.88	**4,900**	--	--	--	<1	5.1	<1	850	--	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000**[15]	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2

Summary of Historical Groundwater Elevation and Quality Results

June 1992 - April 2014

TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9] Total	Lead[9] Dissolved
MW10	11/20/95	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
TOC: 357.91	09/11/96	33.36	33.63	Trace	324.28	**LNAPL**													
	02/05/97	35.12	35.39	0.27	322.74	**LNAPL**													
	03/11/97	28.41	28.50	0.09	329.48	**LNAPL**													
	09/17/97	--	35.20	Trace	322.71	**34,500**	--	--	--	**1,430**	**2,710**	188	**5,720**	--	--	--	--	--	--
	03/16/98	--	26.67	--	331.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/08/98	--	35.12	Trace	322.79	**18,400**	--	--	--	**1,470**	**1,050**	283	**3,990**	--	--	--	--	--	--
	03/19/99	24.39	24.43	0.04	333.51	**LNAPL**													
	09/17/99	--	32.43	--	325.48	**26,000**	--	--	--	**1,090**	**2,130**	621	**6,180**	--	--	--	--	--	--
	03/23/00	--	--	--	Dry	**33,200**	--	--	--	**1,290**	**3,650**	**903**	**7,130**	--	--	--	--	--	--
	09/28/00	--	33.02	Trace	324.89	**11,900**	--	--	--	**608**	645	54.0	**3,270**	--	--	--	--	--	--
	04/03/01	--	--	--	Dry	**19,600**	--	--	--	**979**	**1,360**	532	**4,140**	--	--	--	--	--	--
	10/11/01	--	32.73	--	325.18	**9,110**	--	--	--	**342**	478	94.5	**2,050**	--	--	--	--	--	--
	03/27/02	--	25.09	--	332.82	**39,600**	--	--	--	**548**	**1,950**	419	**2,480**	--	--	--	--	--	--
	09/26/02	--	27.90	--	330.01	**72,800**	--	--	--	**5,130**	**8,260**	**1,640**	**11,800**	--	--	--	--	--	--
	03/27/03	--	--	--	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/09/03	--	--	--	Dry	**26,500**	--	--	--	**2,390**	**2,870**	**948**	**6,670**	--	--	--	--	--	--
	03/09/05	--	26.04	--	331.87	**15,000**	--	--	--	**580**	820	320	**2,100**	<150	--	--	--	--	--
	09/26/05	--	25.56	--	332.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/20/05	--	28.40	--	329.51	**15,000**	**1,400**[x]	--	**1,400**[x]	**960**	670	560	**3,700**	<1	<1	<1	--	9.39	--
	02/24/06	--	22.68	--	335.23	**830**	--	--	--	**20**	89	22	141	<1	--	--	--	--	--
	06/01/06	--	24.09	--	333.82	**2,600**	--	--	--	**19**	67	28	360	--	--	--	--	--	--
	08/24/06	--	27.64	--	330.27	**4,800**	--	--	--	**150**	98	110	**1,010**	<1	--	--	--	--	--
	11/14/06	--	34.02	--	323.89	Not sampled as water level was too deep for peristaltic pump and packer obstructed bailer.													
	02/20/07	25.16	25.21	0.05	332.74	**LNAPL**													
	05/22/07	27.10	27.18	0.08	330.79	**LNAPL**													
	08/02/07	--	37.89	--	320.02	**7,700**	--	--	--	**200**	100	92	780	--	--	--	--	--	--
	02/13/08	--	26.64	--	331.27	**1,700**	--	--	--	**66**	29	17	160	--	--	--	--	--	--
	03/04/10	--	25.23	--	332.68	320	--	--	--	3	<1	<1	7	<1	<1	<1	--	--	--
	03/07/12	--	27.45	--	330.46	**1,400**	--	--	--	**62**	7.3	27	89	--	--	--	--	--	--
	06/06/12	--	26.47	--	331.44	**830**	--	--	--	**11**	5.1	28	84	--	--	--	--	--	--
	09/11/12	--	28.26	--	329.65	**1,500**	--	--	--	**38**	<10	110	86	--	--	--	--	--	--
	12/05/12	--	34.59	--	323.32	**4,900**	--	--	--	4.6	<1	19	63	--	--	--	--	--	--
	02/21/13	--	23.46	--	334.45	620	--	--	--	**5.5**	14	8.7	110	--	--	--	--	--	--
	06/25/13	--	29.29	--	328.62	410	--	--	--	4.5	3.1	12	80	--	--	--	--	--	--
	09/03/13	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	12/02/13	--	38.1	--	319.81	Not sampled due to insufficient water to fill sample containers (noted as "dry").													
	03/22/14	--	30.78	--	327.13	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000**[15]	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9] Total	Lead[9] Dissolved
MW11	11/20/95	--	27.55	Sheen	334.79	15,000	--	--	--	1,000	3,800	570	3,300	--	--	--	--	--	--
TOC: 362.34	09/11/96	34.29	34.56	0.27	328.00	LNAPL													
	02/05/97	18.85	18.86	0.01	343.49	LNAPL													
	03/11/97	--	19.83	Trace	342.51	LNAPL													
	09/17/97	--	25.24	--	337.10	17,800	--	--	--	393	2,030	67.4	2,480	--	--	--	--	--	--
	03/16/98	--	20.61	Trace	341.73	LNAPL													
	09/08/98	--	25.41	--	336.93	6,220	--	--	--	189	461	12.5	1,380	--	--	--	--	--	--
	03/19/99	19.39	19.40	0.01	342.95	LNAPL													
	09/17/99	--	24.89	--	337.45	11,200	--	--	--	120	1,250	152	2,790	--	--	--	--	--	--
	03/23/00	--	20.64	Trace	341.70	LNAPL													
	09/28/00	26.22	26.23	0.01	336.12	LNAPL													
	04/03/01	--	25.14	--	337.20	38,700	--	--	--	403	4,950	1,530	9,860	--	--	--	--	--	--
	10/16/01	--	28.49	Trace	333.85	LNAPL													
	03/27/02	20.18	20.20	0.02	342.16	LNAPL													
	09/26/02	--	25.19	--	337.15	15,400	--	--	--	120	556	420	3,500	--	--	--	--	--	--
	03/27/03	--	22.84	--	339.50	72,900	--	--	--	88.2	5,330	2,100	16,900	--	--	--	--	--	--
	10/09/03	--	26.25	--	336.09	21,100	--	--	--	109	1,430	625	7,020	--	--	--	--	--	--
	03/09/05	22.00	22.01	0.01	340.34	LNAPL													
	09/27/05	--	21.86	--	340.48	50,300	--	--	--	22.2	2,710	2,050	14,930	<5.00	<1.00	<1.00	--	--	--
	12/21/05	--	22.69	--	339.65	44,000	3,500 x	--	3,500 x	32	2,200	2,700	17,600	<1	<1	<1	--	<1	--
	02/22/06	--	18.42	--	343.92	45,000	--	--	--	12	1,200	2,200	13,600	<1	--	--	--	--	--
	05/31/06	--	16.85	--	345.49	48,000	--	--	--	55	1,700	2,500	14,000	--	--	--	--	--	--
	08/23/06	--	23.53	--	338.81	53,000	--	--	--	24	2,000	2,200	15,200	<1	--	--	--	--	--
	11/14/06	26.90	27.02	0.12	335.42	LNAPL													
	02/20/07	--	20.58	--	341.76	48,000	--	--	--	68	800	2,000	12,000	--	--	--	--	--	--
	05/22/07	22.40	22.41	0.01	339.94	LNAPL													
	08/01/07	--	24.22	--	338.12	45,000	--	--	--	64	1,100	1,800	12,000	--	--	--	--	--	--
	02/12/08	--	21.71	--	340.63	48,000	--	--	--	41	640	1,700	14,000	--	--	--	--	--	--
	03/04/10	--	19.74	--	342.60	44,000	--	--	--	22	350	1,400	8,400	<1	<1	<1	--	--	--
	03/05/12	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	06/06/12	--	22.86	--	339.48	not sampled; gauged only													
	09/10/12	--	25.15	--	337.19	not sampled; gauged only													
	12/03/12	--	25.75	--	336.59	not sampled; gauged only													
	02/28/13	--	18.73	--	343.61	7,800	--	--	--	14	85	92	4,200	--	--	--	--	--	--
	06/24/13	--	32.81	--	329.53	not sampled; gauged only													
	09/03/13	--	33.06	--	329.28	not sampled; gauged only													
	12/02/13	--	33.54	--	328.80	not sampled; gauged only													
	03/30/14	--	21.31	--	341.03	1,900	--	--	--	<1	7.2	10	73	--	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater[14]						800/1,000[15]	500	500	500	5	1,000	700	1,000	20	5	0.01	0.01	15	15

TABLE 2
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9]	
																		Total	Dissolved
MW12	10/11/01	--	16.34	--	341.31	<50.0	--	--	--	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--
TOC: 357.65	03/27/02	--	7.01	--	350.64	<50	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	09/26/02	--	13.60	--	344.05	<50	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	03/27/03	--	11.20	--	346.45	<50	--	--	--	<0.5	1.00	0.556	2.29	--	--	--	--	--	--
	10/09/03	--	15.10	--	342.55	<50	--	--	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--
	03/09/05	--	11.06	--	346.59	<50	--	--	--	<1	<1	<1	<3	<3	--	--	--	--	--
	09/26/05	--	12.97	--	344.68	<50.0	--	--	--	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	--	--	--
	12/22/05	--	13.37	--	344.28	<100	<56	--	<280	<1	<1	<1	<3	<1	--	--	--	<1	--
	02/22/06	--	6.34	--	351.31	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	05/31/06	--	8.65	--	349.00	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	08/23/06	--	12.12	--	345.53	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	11/16/06	--	15.61	--	342.04	<50	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/21/07	--	9.66	--	347.99	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	05/23/07	--	10.80	--	346.85	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	08/02/07	--	13.02	--	344.63	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/13/08	--	10.59	--	347.06	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	05/14/08	--	10.30	--	347.35	not sampled; gauged only													
	03/02/10	--	9.03	--	348.62	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	03/08/12	--	11.64	--	346.01	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/04/12	--	10.17	--	347.48	not sampled; gauged only													
	09/10/12	--	12.72	--	344.93	not sampled; gauged only													
	12/03/12	--	11.82	--	345.83	not sampled; gauged only													
	02/19/13	--	6.27	--	351.38	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	10.25	--	347.40	not sampled; gauged only													
	09/03/13	--	13.51	--	344.14	not sampled; gauged only													
	12/02/13	--	16.14	--	341.51	not sampled; gauged only													
	03/23/14	--	10	--	347.65	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9] Total	Lead[9] Dissolved
MW13	10/11/01	--	Dry	--	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOC: 357.34	03/27/02	--	40.57	--	316.77	**11,300**	--	--	--	**1,450**	<25.0	**1,210**	**1,470**	--	--	--	--	--	--
	09/26/02	--	Dry	--	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/27/03	--	Dry	--	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/09/03	--	Dry	--	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/09/05	--	Dry	--	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/26/05	--	41.69	--	315.65	Not sampled due to insufficient water to fill sample containers.													
	12/22/05	--	Dry	--	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/02/06	--	41.59	--	315.75	**8,400**	--	--	--	**520**	9.4	680	**1,239**	<1	3.5	<1	--	--	--
	02/22/06	--	41.36	--	315.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/31/06	--	41.29	--	316.05	**6,700**	--	--	--	**340**	22	520	810	--	--	--	--	--	--
	08/23/06	--	Dry	--	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/14/06	--	Dry	--	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/20/07	--	41.21	--	316.13	Not sampled due to insufficient water to fill sample containers.													
	05/22/07	--	Dry	--	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/31/07	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	02/13/08	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	05/14/08	--	Dry	--	Dry	Not sampled; gauged only													
	03/04/10	--	41.23	--	316.11	**1,700**	--	--	--	**60**	17	94	150	<1	1.7	<1	--	--	--
	03/05/12	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers (noted as "dry").													
	06/04/12	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers (noted as "dry").													
	09/10/12	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers (noted as "dry").													
	12/03/12	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers (noted as "dry").													
	02/20/13	--	38.89	--	318.45	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	40.78	--	316.56	not sampled; gauged only													
	09/03/13	--	Dry	--	Dry	not sampled; gauged only													
	12/02/13	--	Dry	--	Dry	not sampled; gauged only													
	03/24/14	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers (noted as "dry").													
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L) GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9] Total	Lead[9] Dissolved
MW14	07/27/04	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	10/29/04	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
TOC: 353.44	11/29/04	D E C O M M I S S I O N E D																	
MW15	07/27/04	--	37.00	--	320.56	**7,290**	--	--	--	**13.2**	24.8	290	**1,050**	--	--	--	--	--	--
TOC: 357.56	10/29/04	--	36.37	--	321.19	**5,400**	--	--	--	<10	46	270	880	--	--	--	--	--	--
	03/09/05	33.12	33.16	0.04	324.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/26/05	32.32	32.67	0.35	325.17	**LNAPL**													
	12/22/05	32.64	32.89	0.25	324.87	**LNAPL**													
	02/22/06	--	29.47	--	328.09	not sampled; absorbent socks in well													
	06/01/06	--	30.55	--	327.01	**12,000**	--	--	--	**28**	23	470	**1,700**	--	--	--	--	--	--
	08/23/06	--	37.29	--	320.27	**LNAPL**													
	11/14/06	36.65	36.68	0.03	320.90	**LNAPL**													
	02/20/07	--	--	--	Dry	**LNAPL**; not sampled; absorbent socks in well													
	05/22/07	33.00	33.00	Trace	324.56	**LNAPL**													
	08/01/07	--	34.31	--	323.25	not sampled; absorbent socks in well													
	02/11/08	34.60	34.62	0.02	322.96	**LNAPL**													
	03/01/10	31.95	32.12	0.17	325.58	**LNAPL**													
	12/06/10	36.29	36.46	0.17	321.24	not sampled; gauged only													
	03/08/12	--	33.12	--	324.44	**8,200**	--	--	--	<5	<5	88	480	--	--	--	--	--	--
	06/04/12	33.69	33.69	Sheen	323.87	**LNAPL**													
	09/12/12	--	36.15	--	321.41	**2,300**	--	--	--	3.23 (j)	<5	14	330	--	--	--	--	--	--
	12/05/12	--	36.50	--	321.06	300	--	--	--	<1	1.8	<1	9.7	--	--	--	--	--	--
	02/28/13	--	32.10	--	325.46	790	--	--	--	3.6 (j)	<5	<5	44	--	--	--	--	--	--
	06/26/13	--	36.34	--	321.22	**1,800**	--	--	--	<1	2.0	49	120	--	--	--	--	--	--
	09/04/13	--	NM (12)	--	NM (12)	<100	--	--	--	<1	<1	<1	3.8	--	--	--	--	--	--
	12/02/13	--	35.17	--	322.39	Not sampled due to insufficient water to fill sample containers (noted as "no water").													
	03/30/14	--	36.70	--	320.86	<100	--	--	--	<1	1.1	<1	3.6	--	--	--	--	--	
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date(1)	Depth to LNAPL(2) (feet)	Depth to Groundwater(2) (feet)	LNAPL Thickness(3) (feet)	Groundwater Elevation(4) (feet)	Analytical Results (µg/L)													
						GRPH(5)	DRPH(6)	ORPH(6)	TRPH(6)	Benzene(7)	Toluene(7)	Ethyl-benzene(7)	Total Xylenes(7)	MTBE(7)	EDC(7)	EDB(7)	EDB(8)	Lead(9)	
																		Total	Dissolved
MW16	07/27/04	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
TOC: 365.18	03/09/05	--	Dry	--	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/26/05	--	Dry	--	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/22/05	--	Dry	--	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/22/06	--	Dry	--	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/01/06	--	45.05	--	320.13	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	08/23/06	--	Dry	--	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/14/06	--	Dry	--	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/20/07	--	46.30	--	318.88	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	05/23/07	--	46.06	--	319.12	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	07/31/07	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers (noted as “no water”).													
	02/11/08	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers (noted as “no water”).													
	03/02/10	--	45.54	--	319.64	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	03/05/12	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers (noted as “dry”).													
	06/04/12	--	45.30	--	319.88	not sampled; gauged only													
	09/10/12	--	47.39	--	317.79	not sampled; gauged only													
	12/03/12	--	Dry	--	Dry	not sampled; gauged only													
	02/21/13	--	42.65	--	322.53	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	44.52	--	320.66	not sampled; gauged only													
	09/03/13	--	47.2	--	317.98	not sampled; gauged only													
	12/02/13	--	Dry	--	Dry	not sampled; gauged only													
	03/21/14	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers (noted as “dry”).													
MTCA Method A Cleanup Levels for Groundwater(14)						**800/1,000(15)**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date(1)	Depth to LNAPL(2) (feet)	Depth to Groundwater(2) (feet)	LNAPL Thickness (3) (feet)	Groundwater Elevation(4) (feet)	Analytical Results (µg/L)													
						GRPH(5)	DRPH(6)	ORPH(6)	TRPH(6)	Benzene(7)	Toluene(7)	Ethyl-benzene(7)	Total Xylenes(7)	MTBE(7)	EDC(7)	EDB(7)	EDB(8)	Lead(9) Total	Lead(9) Dissolved
MW17	07/27/04	--	43.18	--	309.47	<80	--	--	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	--
TOC: 352.65	11/29/04	D E C O M M I S S I O N E D																	
MW18	07/27/04	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
TOC: 357.91	03/09/05	35.18	35.33	0.15	322.70	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/26/05	12.94	13.15	0.21	344.93	**LNAPL**													
	12/22/05	35.72	35.72	0.00	322.19	**LNAPL**													
	02/22/06	--	--	--	Dry	Not sampled or gauged due to inaccessible wellhead (vehicle parked over wellhead).													
	06/01/06	--	29.65	--	328.26	**32,000**	--	--	--	**290**	340	**1,100**	**7,000**	--	--	--	--	--	--
	08/22/06	--	--	--	Dry	**LNAPL**; absorbent socks in well													
	11/14/06	--	--	--	Dry	**LNAPL**; absorbent socks in well													
	02/20/07	--	--	--	Dry	Not sampled or gauged due to inaccessible wellhead (vehicle parked over wellhead).													
	05/22/07	--	36.00	--	321.91	**22,000**	--	--	--	**96**	63	440	**4,200**	--	--	--	--	--	--
	07/31/07	--	37.01	--	320.90	**LNAPL**; absorbent socks in well													
	02/14/08	--	35.58	--	322.33	**13,000**	--	--	--	**98**	28	<10	**2,200**	--	--	--	--	--	--
	03/04/10	--	32.35	--	325.56	**12,000**	--	--	--	**96**	28	270	**1,600**	<1	<1	<1	--	--	--
	03/07/12	--	28.74	--	329.17	**5,900**	--	--	--	**43**	<10	110	720	--	--	--	--	--	--
	06/04/12	--	33.40	--	324.51	not sampled; gauged only													
	09/10/12	--	33.40	--	324.51	not sampled; gauged only													
	12/03/12	--	28.18	--	329.73	not sampled; gauged only													
	02/28/13	--	28.02	--	329.89	**4,200**	--	--	--	3.3	47	73	1,000	--	--	--	--	--	--
	06/24/13	--	NM (12)	--	NM (12)	not sampled; gauged only													
	09/03/13	--	28.44	--	329.47	not sampled; gauged only													
	12/02/13	--	NM (12)	--	NM (12)	not sampled; gauged only													
	03/30/14	--	NM- (12)	--	NM- (12)	**5,500**	--	--	--	4.2	250	<1	**1,000**	--	--	--	--	--	--
NM- (12)						**800/1,000(15)**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9]	
																		Total	Dissolved
MW19	07/24/04	--	11.32	--	347.54	8.4	--	--	--	2.12	2.66	1.99	20.4	--	--	--	--	--	--
TOC: 358.86	03/09/05	--	11.25	--	347.61	<50	--	--	--	<1	<1	<1	<3	<3	--	--	--	--	--
	09/26/05	11.29	11.30	0.01	347.57	**1,440**	--	--	--	**38.4**	79.2	24.9	150.4	<5.00	<1.00	<1.00	--	--	--
	12/21/05	--	13.13	--	345.73	<100	<53	--	<270	<1	<1	<1	<3	<1	--	--	--	<1	--
	02/22/06	--	7.96	--	350.90	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	06/01/06	--	9.91	--	348.95	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	08/24/06	--	14.12	--	344.74	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	11/15/06	--	18.19	--	340.67	<50	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/20/07	--	12.47	--	346.39	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	05/24/07	--	13.63	--	345.23	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	08/01/07	--	14.89	--	343.97	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/12/08	--	13.64	--	345.22	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	03/04/10	--	11.98	--	346.88	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	03/09/12	--	13.56	--	345.30	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/04/12	--	13.15	--	345.71	not sampled; gauged only													
	09/10/12	--	15.65	--	343.21	not sampled; gauged only													
	12/03/12	--	13.72	--	345.14	not sampled; gauged only													
	02/21/13	--	8.32	--	350.54	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	12.62	--	346.24	not sampled; gauged only													
	09/03/13	--	17.21	--	341.65	not sampled; gauged only													
	12/02/13	--	19.86	--	339.00	not sampled; gauged only													
	03/21/14	--	12.09	--	346.77	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2

Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date(1)	Depth to LNAPL(2) (feet)	Depth to Groundwater(2) (feet)	LNAPL Thickness(3) (feet)	Groundwater Elevation(4) (feet)	Analytical Results (µg/L)													
						GRPH(5)	DRPH(6)	ORPH(6)	TRPH(6)	Benzene(7)	Toluene(7)	Ethyl-benzene(7)	Total Xylenes(7)	MTBE(7)	EDC(7)	EDB(7)	EDB(8)	Lead(9)	
																		Total	Dissolved
MW20	07/24/04	--	33.39	--	326.54	**6,440**	--	--	--	**313**	135	85.0	**1,450**	--	--	--	--	--	--
TOC 359.93	03/09/05	27.86	27.88	0.02	332.07	**LNAPL**													
	09/26/05	26.16	28.25	2.09	333.35	**LNAPL**													
	12/20/05	--	29.08	--	330.85	**13,000**	**2,400**[x]	--	**2,400**[x]	**740**	640	330	**2,790**	<1	<5	<1	--	4.69	--
	02/22/06	--	24.60	--	335.33	**25,000**	--	--	--	**710**	**1,800**	**710**	**5,100**	<1	--	--	--	--	--
	05/31/06	26.30	26.41	0.11	333.61	**LNAPL**													
	08/22/06	29.71	29.73	0.02	330.22	**LNAPL**; absorbent socks in well													
	11/14/06	36.00	36.00	0.00	323.93	**LNAPL**; absorbent socks in well													
	02/20/07	27.19	27.22	0.03	332.73	**LNAPL**													
	05/22/07	28.82	28.94	0.12	331.09	**LNAPL**; absorbent socks in well													
	07/31/07	--	31.01	--	328.92	not sampled; absorbent socks in well													
	02/13/08	--	28.65	--	331.28	**20,000**	--	--	--	**450**	990	450	**3,600**	--	--	--	--	--	--
	03/04/10	--	27.16	--	332.77	**11,000**	--	--	--	**390**	**1,100**	390	**1,700**	<1	<5	<1	--	--	--
	03/09/12	--	29.35	--	330.58	**5,800**	--	--	--	**200**	57	310	480	--	--	--	--	--	--
	06/06/12	--	27.99	--	331.94	**7,800**	--	--	--	**220**	250	300	910	--	--	--	--	--	--
	09/11/12	--	30.64	--	329.29	**5,000**	--	--	--	**100**	21	210	450	--	--	--	--	--	--
	12/05/12	--	32.91	--	327.02	**840**	--	--	--	<1	2.5	5.9	14	--	--	--	--	--	--
	02/20/13	--	24.86	--	335.07	**17,000**	--	--	--	**140**	760	620	**3,400**	--	--	--	--	--	--
	06/26/13	--	34.23	--	325.70	**8,600**	--	--	--	**25**	98	200	**1,200**	--	--	--	--	--	--
	09/05/13	--	38.61	--	321.32	150	--	--	<1	<1	<1	<1	<3	--	--	--	--	--	--
	12/02/13	--	39.67	--	320.26	Not sampled due to insufficient water to fill sample containers (noted as "dry").													
	03/22/14	--	33.03	--	326.90	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater(14)						**800/1,000(15)**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9] Total	Lead[9] Dissolved
MW21	10/29/04	--	29.90	--	326.51	**4,800**	--	--	--	**200**	140	9	470	--	--	--	--	--	--
TOC: 356.41	03/09/05	--	28.35	--	328.06	**1,600**	--	--	--	**92**	64	39.0	170	<3	--	--	--	--	--
	09/26/05	--	NM [11]	--	NM [11]	<50.0	--	--	--	<1.00	1.76	<1.00	1.59	<5.00	<1.00	<1.00	--	--	--
	12/20/05	--	29.63	--	326.78	**1,700**	**560** x	--	**560** x	**60**	320	41	240	<1	<1	<1	--	4.52	--
	02/22/06	--	25.00	--	331.41	130	--	--	--	1.9	6.8	3.4	14.8	<1	--	--	--	--	--
	05/31/06	--	26.58	--	329.83	130	--	--	--	2	11	2	20	--	--	--	--	--	--
	08/23/06	--	30.31	--	326.10	340	--	--	--	**38**	25	8.2	100	<1	--	--	--	--	--
	11/14/06	--	39.35	--	317.06	Not sampled due to insufficient water to fill sample containers.													
	02/21/07	--	27.75	--	328.66	310	--	--	--	3	30	6.5	47	--	--	--	--	--	--
	05/23/07	--	29.69	--	326.72	<100	--	--	--	2	1	<1	5	--	--	--	--	--	--
	08/02/07	--	31.69	--	324.72	**2,500**	--	--	--	**140**	17	65	550	--	--	--	--	--	--
	02/13/08	--	29.50	--	326.91	**940**	--	--	--	2	6	6	78	--	--	--	--	--	--
	05/14/08	--	29.38	--	327.03	not sampled; gauged only													
	03/04/10	--	28.65	--	327.76	370	--	--	--	<1	5	3	32	<1	<1	<1	--	--	--
	03/05/12	--	--	--	--	Not sampled due to inaccessible wellhead.													
	04/16/12	D E C O M M I S S I O N E D																	
MW22	10/29/04	--	30.27	--	328.25	130	--	--	--	4	<1	<1	19	--	--	--	--	--	--
TOC: 358.52	03/09/05	--	26.98	--	331.54	<50	--	--	--	1	<1	<1	<3	<3	--	--	--	--	--
	09/26/05	--	NM [11]	--	NM [11]	<50.0	--	--	--	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	--	--	--
	12/20/05	--	28.27	--	330.25	<100	<53	--	<260	<1	<1	<1	<3	<1	<1	<1	--	<1	--
	02/22/06	--	23.02	--	335.50	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	06/01/06	--	25.14	--	333.38	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	08/24/06	--	28.25	--	330.27	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	11/15/06	--	37.62	--	320.90	550	--	--	--	**5.1**	<1	<1	<3	--	--	--	--	--	--
	02/20/07	--	26.45	--	332.07	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	05/24/07	--	28.20	--	330.32	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	08/02/07	--	30.72	--	327.80	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/13/08	--	27.82	--	330.70	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	03/04/10	--	26.55	--	331.97	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	03/05/12	--	--	--	--	Not sampled due to inaccessible wellhead.													
	06/06/12	--	27.07	--	331.45	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	09/11/12	--	29.55	--	328.97	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	12/04/12	--	28.20	--	330.32	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/21/13	--	24.18	--	334.34	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/25/13	--	28.84	--	329.68	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	09/03/13	--	36.03	--	322.49	Not sampled due to insufficient water to fill sample containers (noted as "dry").													
	12/02/13	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers (noted as "dry").													
	03/21/14	--	27.92	--	330.60	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date(1)	Depth to LNAPL(2) (feet)	Depth to Groundwater(2) (feet)	LNAPL Thickness(3) (feet)	Groundwater Elevation(4) (feet)	Analytical Results (µg/L)													
						GRPH(5)	DRPH(6)	ORPH(6)	TRPH(6)	Benzene(7)	Toluene(7)	Ethyl-benzene(7)	Total Xylenes(7)	MTBE(7)	EDC(7)	EDB(7)	EDB(8)	Lead(9) Total	Lead(9) Dissolved
MW23	10/29/04	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
TOC: 357.08	03/09/05	--	Dry	--	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/26/05	--	39.12	--	317.96	Not sampled due to insufficient water to fill sample containers.													
	12/22/05	--	Dry	--	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/22/06	--	38.05	--	319.03	**1,100**	--	--	--	4.9	<1	65	7.8	<1	--	--	--	--	--
	06/01/06	--	38.79	--	318.29	760	--	--	--	3	2.1	18	22	--	--	--	--	--	--
	08/22/06	--	39.12	--	317.96	Not sampled due to insufficient water to fill sample containers.													
	11/14/06	--	39.38	--	317.70	Not sampled due to insufficient water to fill sample containers.													
	02/21/07	--	38.12	--	318.96	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	05/24/07	--	38.88	--	318.20	330	--	--	--	1	<1	<1	<3	--	--	--	--	--	--
	07/31/07	--	39.10	--	317.98	Not sampled due to insufficient water to fill sample containers.													
	02/11/08	--	38.55	--	318.53	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	03/04/10	--	38.46	--	318.62	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	03/05/12	--	38.88	--	318.20	Not sampled due to insufficient water to fill sample containers.													
	06/04/12	--	38.64	--	318.44	not sampled; gauged only													
	09/10/12	--	39.15	--	317.93	not sampled; gauged only													
	12/03/12	--	39.11	--	317.97	not sampled; gauged only													
	02/20/13	--	36.63	--	320.45	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	39.09	--	317.99	not sampled; gauged only													
	09/03/13	--	39.11	--	317.97	not sampled; gauged only													
	12/02/13	--	39.1	--	317.98	not sampled; gauged only													
	03/20/14	--	38.86	--	318.22	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater(14)						**800/1,000(15)**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date(1)	Depth to LNAPL(2) (feet)	Depth to Groundwater(2) (feet)	LNAPL Thickness(3) (feet)	Groundwater Elevation(4) (feet)	Analytical Results (µg/L) GRPH(5)	DRPH(6)	ORPH(6)	TRPH(6)	Benzene(7)	Toluene(7)	Ethyl-benzene(7)	Total Xylenes(7)	MTBE(7)	EDC(7)	EDB(7)	EDB(8)	Lead(9) Total	Lead(9) Dissolved
MW24	10/29/04	--	26.61	--	335.36	**45,000**	--	--	--	**440**	**2,300**	570	**7,800**	--	--	--	--	--	--
TOC: 361.97	03/09/05	--	15.85	--	346.12	**19,000**	--	--	--	**74**	210	98	**2,700**	<30	--	--	--	--	--
	09/27/05	--	NM (11)	--	NM (11)	478	--	--	--	<1.00	1.08	4.19	82.9	<5.00	<1.00	<1.00	--	--	--
	12/22/05	--	11.01	--	350.96	<100	<54	--	<270	<1	<1	1.0	11.8	<1	--	--	--	<1	--
	02/22/06	--	8.91	--	353.06	<100	--	--	--	<1	<1	<1	4.8	<1	--	--	--	--	--
	06/01/06	--	9.98	--	351.99	<100	--	--	--	<1	<1	<1	6	--	--	--	--	--	--
	08/23/06	--	20.21	--	341.76	**8,400**	--	--	--	<1	32	98	**1,930**	<1	--	--	--	--	--
	11/15/06	--	36.05	--	325.92	**16,000**	--	--	--	**75**	250	240	**2,870**	--	--	--	--	--	--
	02/21/07	--	14.24	--	347.73	460	--	--	--	<1	2	6	78	--	--	--	--	--	--
	05/22/07	--	16.73	--	345.24	**5,700**	--	--	--	2	29	41	**1,000**	--	--	--	--	--	--
	08/01/07	--	25.59	--	336.38	**9,000**	--	--	--	**39**	140	97	**2,400**	--	--	--	--	--	--
	02/12/08	--	19.68	--	342.29	**1,800**	--	--	--	<1	4	4	140	--	--	--	--	--	--
	02/04/09	--	21.94	--	340.03	**11,000**	--	--	--	**27**	190	180	**2,290**	<1	--	--	--	--	--
	07/30/09	26.82	26.82	0.00	335.15	**15,000**	--	--	--	**130**	230 (ve)	<1	**3,400**	<1	<1	<1	--	--	--
	03/04/10	--	13.43	0.00	348.54	<100	--	--	--	<1	<1	<1	6	<1	<1	<1	--	--	--
	03/09/12	--	21.01	--	340.96	**4,400**	--	--	--	**7.3**	39	39	770	--	--	--	--	--	--
	06/04/12	--	14.18	--	347.79	not sampled; gauged only													
	09/10/12	--	25.34	--	336.63	not sampled; gauged only													
	12/03/12	--	24.60	--	337.37	not sampled; gauged only													
	02/28/13	--	8.73	--	353.24	**1,000**	--	--	--	<1	1.7	<1	40	--	--	--	--	--	--
	06/24/13	--	NM (12)	--	NM (12)	not sampled; gauged only													
	09/03/13	--	33.23	--	328.74	not sampled; gauged only													
	12/02/13	--	33.4	--	328.57	not sampled; gauged only													
	03/30/14	--	14.1	--	347.87	**11,000**	--	--	--	<1	57	<1	**2,200**	--	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater(14)						**800/1,000(15)**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9] Total	Lead[9] Dissolved
MW25	10/29/04	--	29.40	--	329.30	57,000	2,700 (x)	--	--	860	6,700	810	8,700	--	--	--	--	--	--
TOC: 358.70	03/09/05	--	27.61	--	331.09	38,000	--	--	--	670	2,700	750	6,500	<150	--	--	--	--	--
	09/27/05	--	NM (11)	--	NM (11)	20,800	--	--	--	378	1,070	106	4,390	<5.00	<1.00	<1.00	--	--	--
	12/21/05	--	28.20	--	330.50	25,000	2,700 (x)	--	2,700 (x)	670	2,600	830	6,700	<1	<5	<1	--	8.47	--
	02/22/06	--	23.68	--	335.02	24,000	--	--	--	420	2,300	510	5,400	<1	--	--	--	--	--
	06/01/06	--	25.56	--	333.14	25,000	--	--	--	390	2,100	750	6,300	--	--	--	--	--	--
	08/24/06	--	28.97	--	329.73	21,000	--	--	--	320	840	890	6,300	<1	--	--	--	--	--
	11/15/06	--	36.08	--	322.62	32,000	--	--	--	65	26	17	6,800	--	--	--	--	--	--
	02/22/07	--	26.41	--	332.29	27,000	--	--	--	370	2,100	730	6,500	--	--	--	--	--	--
	05/23/07	--	27.94	--	330.76	26,000	--	--	--	220	1,400	630	5,800	--	--	--	--	--	--
	08/02/07	--	29.75	--	328.95	24,000	--	--	--	280	770	730	5,200	--	--	--	--	--	--
	02/12/08	--	27.80	--	330.90	22,000	--	--	--	260	1,400	380	4,500	--	--	--	--	--	--
	03/04/10	--	26.11	--	332.59	7,600	--	--	--	30	310	90	1,700	<1	<1	<1	--	--	--
	03/05/12	--	--	--	--	Not sampled due to inaccessible wellhead.													
	06/04/12	--	18.99	--	339.71	not sampled; gauged only													
	09/10/12	--	28.28	--	330.42	not sampled; gauged only													
	12/03/12	--	30.40	--	328.30	not sampled; gauged only													
	02/21/13	--	23.05	--	335.65	1,900	--	--	--	1.6	25	31	240	--	--	--	--	--	--
	06/24/13	--	29.08	--	329.62	not sampled; gauged only													
	09/03/13	--	37.48	--	321.22	not sampled; gauged only													
	12/02/13	--	38.46	--	320.24	not sampled; gauged only													
	03/30/14	--	27.64	--	331.06	300	--	--	--	<1	3.3	2.2	34	--	--	--	--	--	--
MW26	12/21/05	--	50.15	--	313.66	120	100 x	--	<280	1.5	38	1.0	5.5	<1	<1	<1	--	5.27	--
TOC: 363.81	02/22/06	--	47.67	--	316.14	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	06/01/06	--	45.62	--	318.19	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	08/24/06	--	47.37	--	316.44	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	11/16/06	--	49.43	--	314.38	<50	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/21/07	--	46.69	--	317.12	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	05/24/07	--	45.76	--	318.05	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	08/03/07	--	47.19	--	316.62	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/11/08	--	47.87	--	315.94	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	03/04/10	--	45.00	--	318.81	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	03/07/12	--	47.48	--	316.33	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/04/12	--	45.24	--	318.57	not sampled; gauged only													
	09/10/12	--	46.99	--	316.82	not sampled; gauged only													
	12/03/12	--	48.14	--	315.67	not sampled; gauged only													
	02/20/13	--	42.47	--	321.34	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	44.34	--	319.47	not sampled; gauged only													
	09/03/13	--	48.64	--	315.17	not sampled; gauged only													
	12/02/13	--	48.78	--	315.03	not sampled; gauged only													
	03/22/14	--	48.34	--	315.47	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000**[15]	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2

Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9]	
																		Total	Dissolved
MW27	12/21/05	--	20.23	--	342.28	**34,000**	**6,000 [x]**	--	**6,000 [x]**	**15**	190	**2,300**	**13,600**	<1	<1	<1	--	4.08	--
TOC: 362.51	02/22/06	--	15.18	--	347.33	**48,000**	--	--	--	**18**	430	**2,400**	**12,600**	<1	--	--	--	--	--
	06/01/06	--	17.00	--	345.51	**41,000**	--	--	--	**30**	580	**1,900**	**11,000**	--	--	--	--	--	--
	08/22/06	21.81	21.82	0.00	340.69	**LNAPL**													
	11/14/06	25.55	25.55	0.00	336.96	**LNAPL**; absorbent socks in well													
	02/20/07	--	17.49	--	345.02	**LNAPL**; absorbent socks in well													
	05/22/07	19.86	19.86	0.00	342.65	**LNAPL**; absorbent socks in well													
	08/01/07	--	22.38	--	340.13	not sampled; absorbent socks in well													
	02/11/08	18.93	19.00	0.07	343.57	**LNAPL**; absorbent socks in well													
	03/04/10	--	16.06	--	346.45	**26,000**	--	--	--	<10	290	**870**	**4,800**	<1	<1	<1	--	--	--
	03/09/12	--	19.16	--	343.35	**23,000**	--	--	--	**8.5**	94	620	**3,900**	--	--	--	--	--	--
	06/05/12	--	17.02	--	345.49	**23,000**	--	--	--	**7.3**	110	**720**	**4,600**	--	--	--	--	--	--
	09/10/12	--	--	--	--	Not sampled due to insufficient water above pump intake.													
	12/05/12	--	19.14	--	343.37	**11,000**	--	--	--	**5.8**	69	220	**2,800**	--	--	--	--	--	--
	02/28/13	--	7.28	--	355.23	**5,500**	--	--	--	<1	6.9	160	**1,300**	--	--	--	--	--	--
	06/26/13	--	18.85	--	343.66	**9,200**	--	--	--	<5	18	180	**3,300**	--	--	--	--	--	--
	09/04/13	--	19.41	--	343.10	**5,900**	--	--	<5	<5	12	<5	940	--	--	--	--	--	--
	12/02/13	--	19.75	--	342.76	Not sampled due to insufficient water to fill sample containers (noted as "dry").													
	03/30/14	--	NM [11]	--	NM [11]	**1,000**	--	--		<1	3.7	12	120	--	--	--	--	--	--
MW28	12/20/05	--	27.11	--	331.30	**20,000**	**2,000 [x]**	--	**2,000 [x]**	**5.7**	86	670	**6,500**	<1	<1	<1	--	10.7	--
TOC: 358.41	02/22/06	--	23.40	--	335.01	**14,000**	--	--	--	3.1	13	390	**2,380**	<1	--	--	--	--	--
	06/01/06	24.57	24.60	0.03	333.83	**8,100**	--	--	--	**4**	17	160	**1,300**	--	--	--	--	--	--
	08/22/06	--	--	--	NM	**LNAPL**													
	11/14/06	28.54	28.54	0.00	329.87	**LNAPL**; absorbent socks in well													
	02/20/07	--	--	--	NM	**LNAPL**; absorbent socks in well													
	05/22/07	26.91	26.91	0.00	331.50	**LNAPL**; absorbent socks in well													
	08/01/07	--	27.79	--	330.62	**LNAPL**; absorbent socks in well													
	02/11/08	26.85	26.86	0.01	331.56	**LNAPL**; absorbent socks in well													
	03/04/10	--	25.56	--	332.85	**7,900**	--	--	--	<5	<5	300	970	<1	<1	<1	--	--	--
	03/05/12	--	--	--	Dry	Not sampled due to inaccessible wellhead.													
	06/04/12	--	26.66	--	331.75	not sampled; gauged only													
	09/10/12	--	27.70	--	330.71	not sampled; gauged only													
	12/03/12	--	27.86	--	330.55	not sampled; gauged only													
	02/20/13	--	23.80	--	334.61	**3,600**	--	--	--	<1	1.8	86	420	--	--	--	--	--	--
	06/24/13	--	28.10	--	330.31	not sampled; gauged only													
	09/03/13	--	29.83	--	328.58	not sampled; gauged only													
	12/02/13	--	Dry	--	Dry	not sampled; gauged only													
	03/22/14	--	26.99	--	331.42	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

<u>TABLE 2</u>
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date(1)	Depth to LNAPL(2) (feet)	Depth to Groundwater(2) (feet)	LNAPL Thickness(3) (feet)	Groundwater Elevation(4) (feet)	Analytical Results (µg/L)													
						GRPH(5)	DRPH(6)	ORPH(6)	TRPH(6)	Benzene(7)	Toluene(7)	Ethyl-benzene(7)	Total Xylenes(7)	MTBE(7)	EDC(7)	EDB(7)	EDB(8)	Lead(9) Total	Lead(9) Dissolved
MW29	12/20/05	18.40	18.61	0.21	340.49	**LNAPL**													
TOC: 358.93	02/23/06	--	9.35	--	349.58	**1,400**	--	--	--	<1	<1	19	82	<1	--	--	--	--	--
	06/02/06	--	10.11	--	348.82	320	--	--	--	<1	2	3	7	--	--	--	--	--	--
	08/22/06	17.81	18.18	0.37	341.05	**LNAPL**													
	11/14/06	22.27	22.27	0.00	336.66	**LNAPL**; absorbent socks in well													
	02/20/07	12.14	12.15	0.01	346.79	**LNAPL**													
	05/22/07	--	14.67	--	344.26	**8,100**	--	--	--	<1	3	**250**	760	--	--	--	--	--	--
	08/01/07	--	18.29	--	340.64	**20,000**	--	--	--	**260**	16	**820**	**3,100**	--	--	--	--	--	--
	02/12/08	--	15.85	--	343.08	**11,000**	--	--	--	**81**	<10	310	**1,200**	--	--	--	--	--	--
	03/04/10	--	12.00	--	346.93	550	--	--	--	<1	<1	7	9	<1	<1	<1	--	--	--
	03/09/12	--	13.68	--	345.25	**6,700**	--	--	--	1.5	2.7	220	840	--	--	--	--	--	--
	06/04/12	--	12.39	--	346.54	not sampled; gauged only													
	09/10/12	--	18.35	--	340.58	not sampled; gauged only													
	12/03/12	--	13.85	--	345.08	not sampled; gauged only													
	02/28/13	--	6.97	--	351.96	**8,500**	--	--	--	<1	50	<1	**1,400**	--	--	--	--	8.79	3.19
	06/24/13	--	12.93	--	346.00	not sampled; gauged only													
	09/03/13	--	NM (11)	--	NM (11)	not sampled; gauged only													
	12/02/13	--	NM (12)	--	NM (12)	not sampled; gauged only													
	03/30/14	--	NM (11)	--	NM (11)	**3,500**	--	--		<1	<1	<1	140	--	--	--	--	**30**	1.26
MW30	12/15/05	--	43.66	--	312.80	350	**640** (x)	--	**640** (x)	**6.9**	13	15	96	<1	--	--	--	4.74	--
TOC: 356.46	02/22/06	--	40.25	--	316.21	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	05/31/06	--	38.43	--	318.03	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	08/24/06	--	41.59	--	314.87	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	11/14/06	--	43.41	--	313.05	<50	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/22/07	--	39.19	--	317.27	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	05/23/07	--	39.69	--	316.77	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	<1	<1
	08/02/07	--	41.16	--	315.30	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	<1	<1
	02/14/08	--	41.29	--	315.17	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	<1	<1
	05/14/08	--	39.86	--	316.60	not sampled; gauged only													
	03/03/10	--	38.71	--	317.75	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	03/07/12	--	41.15	--	315.31	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/04/12	--	38.85	--	317.61	not sampled; gauged only													
	09/10/12	--	40.73	--	315.73	not sampled; gauged only													
	12/03/12	--	41.53	--	314.93	not sampled; gauged only													
	02/19/13	--	36.32	--	320.14	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	38.27	--	318.19	not sampled; gauged only													
	09/03/13	--	40.67	--	315.79	not sampled; gauged only													
	12/02/13	--	42.48	--	313.98	not sampled; gauged only													
	03/25/14	--	41.15	--	315.31	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater(14)						**800/1,000(15)**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

<u>TABLE 2</u>

Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9] Total	Lead[9] Dissolved
MW31	12/15/05	--	31.04	--	326.04	**51,000**	**4,300** [x]	--	**4,300** [x]	**420**	260	**1,200**	**7,200**	<20	--	--	--	12.2	--
TOC: 357.08	02/22/06	--	29.92	--	327.16	**18,000**	--	--	--	**160**	90	440	**2,930**	<1	--	--	--	--	--
	05/31/06	--	29.76	--	327.32	**16,000**	--	--	--	**180**	160	580	**3,700**	--	--	--	--	3.51	--
	08/24/06	--	30.63	--	326.45	**22,000**	--	--	--	**240**	170	500	**3,470**	<1	--	--	--	6.39	6.59
	11/14/06	--	38.48	--	318.60	Not sampled due to insufficient water to fill sample containers.													
	02/21/07	--	30.18	--	326.90	**15,000**	--	--	--	**270**	130	490	**2,800**	--	--	--	--	9.65	12.0
	05/22/07	--	30.68	--	326.40	**20,000**	--	--	--	**210**	100	500	**3,400**	--	--	--	--	9.48	8.20
	08/03/07	--	34.76	--	322.32	**30,000**	--	--	--	**390**	160	**810**	**6,600**	--	--	--	--	14.4	13.9
	02/13/08	--	34.73	--	322.35	**30,000**	--	--	--	**100**	92	**730**	**5,500**	--	--	--	--	**44.4**	**39.9**
	05/14/08	--	33.88	--	323.20	not sampled; gauged only													
	07/29/09	--	35.01	--	322.07	**1,900**	--	--	--	**45**	1.6	7.9	440[ve]	<1	1.7	<1	--	--	--
	03/03/10	--	32.76	--	324.32	**15,000**	--	--	--	**160**	68	160	**2,800**	<1	<1	<1	--	**15.1**	**15.1**
	03/07/12	--	36.78	--	320.30	**2,800**	--	--	--	**7.2**	5.2	23	400	<1	<1	--	--	**26.5**	**24.6**
	06/05/12	--	34.88	--	322.20	**8,200**	--	--	--	**19**	7.7	17	880	--	--	--	--	--	--
	09/10/12	--	--	--	--	Not sampled due to insufficient water above pump intake.													
	12/03/12	--	32.87	--	324.21	Not sampled due to insufficient water above pump intake.													
	02/28/13	--	29.40	--	327.68	**2,000**	--	--	--	4.6	<1	19	45	--	--	--	--	**16.1**	9.28
	06/26/13	--	33.02	--	324.06	170	--	--	--	<1	<1	<1	<3	--	--	--	--	**19.9**	3.09
	09/03/13	--	NM [11]	--	NM [11]	Not sampled due to insufficient water to fill sample containers (noted as "dry").													
	12/02/13	--	NM [12]	--	NM [12]	Not sampled due to insufficient water to fill sample containers (noted as "dry").													
	03/26/14	--	NM [11]	--	NM [11]	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW32	12/20/05	--	23.05	--	336.90	**40,000**	**2,500** [x]	--	**2,500** [x]	**270**	**8,000**	**1,000**	**9,500**	<1	<1	<1	--	**17.5**	--
TOC: 359.95	02/23/06	--	19.93	--	340.02	**24,000**	--	--	--	**67**	**1,700**	580	**5,000**	<1	--	--	--	--	--
	05/31/06	20.98	21.07	0.09	338.95	**LNAPL**													
	08/22/06	24.40	24.42	0.02	335.55	**LNAPL**													
	11/14/06	27.15	27.15	0.00	332.80	**LNAPL**; absorbent socks in well													
	02/20/07	--	21.56	--	338.39	**LNAPL**; absorbent socks in well													
	05/22/07	--	23.29	--	336.66	**LNAPL**; absorbent socks in well													
	07/31/07	--	24.86	--	335.09	not sampled; absorbent socks in well													
	02/12/08	--	22.42	--	337.53	**20,000**	--	--	--	**59**	870	410	**4,600**	--	--	--	--	--	--
	03/04/10	--	20.71	--	339.24	**14,000**	--	--	--	**16**	270	320	2,400	<1	<1	<1	--	--	--
	03/09/12	--	22.71	--	337.24	120	--	--	--	3.1	11	1.1	16	--	--	--	--	--	--
	06/06/12	--	21.58	--	338.37	**4,300**	--	--	--	**14**	160	87	650	--	--	--	--	--	--
	09/11/12	--	24.12	--	335.83	**16,000**	--	--	--	**170**	330	470	**3,000**	--	--	--	--	--	--
	12/05/12	--	24.33	--	335.62	**33,000**	--	--	--	**29**	**790**	**920**	**6,900**	--	--	--	--	--	--
	02/28/13	--	17.18	--	342.77	**28,000**	--	--	--	**23**	210	**1,000**	**7,000**	--	--	--	--	9.37	3.94
	06/26/13	--	28.69	--	331.26	**8,000**	--	--	--	**11**	93	280	**1,900**	--	--	--	--	--	--
	09/04/13	--	28.62	--	331.33	**2,000**	--	--	--	**<5**	5.3	26	**150**	--	--	--	--	--	--
	12/02/13	--	23.61	--	336.34	Not sampled due to insufficient water to fill sample containers (noted as "dry").													
	03/30/14	--	21.03	--	338.92	**4,800**	--	--		**5.3**	57	57	410	--	--	--	--	**45.2**	6.10
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

<u>TABLE 2</u>

Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date (1)	Depth to LNAPL (2) (feet)	Depth to Groundwater (2) (feet)	LNAPL Thickness (3) (feet)	Groundwater Elevation (4) (feet)	Analytical Results (µg/L)													
						GRPH (5)	DRPH (6)	ORPH (6)	TRPH (6)	Benzene (7)	Toluene (7)	Ethyl-benzene (7)	Total Xylenes (7)	MTBE (7)	EDC (7)	EDB (7)	EDB (8)	Lead (9) Total	Lead (9) Dissolved
MW33	12/20/05	--	Dry	--	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOC: 358.24	02/10/06	--	32.73	--	325.51	**14,000**	--	--	--	**190**	110	670	**3,220**	<1	<1	<1	--	7.44	--
	05/31/06	--	33.78	--	324.46	Not sampled due to insufficient water to fill sample containers.													
	08/22/06	--	34.24	--	324.00	Not sampled due to insufficient water to fill sample containers.													
	11/14/06	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	02/20/07	--	--	--	--	**LNAPL**; absorbent socks in well													
	05/22/07	--	34.24	--	324.00	**LNAPL**; absorbent socks in well													
	07/31/07	--	34.33	--	323.91	not sampled; absorbent socks in well													
	02/14/08	--	32.45	--	325.79	**17,000**	--	--	--	**81**	23	210	**2,800**	--	--	--	--	--	--
	03/04/10	--	32.50	--	325.74	**11,000**	--	--	--	**18**	14	300	**1,300**	<1	<1	<1	--	--	--
	03/05/12	--	34.35	--	323.89	Not sampled due to insufficient water to fill sample containers.													
	06/04/12	--	34.27	--	323.97	Not sampled due to insufficient water to fill sample containers.													
	09/10/12	--	34.49	--	323.75	Not sampled due to insufficient water to fill sample containers.													
	12/03/12	--	34.43	--	323.81	Not sampled due to insufficient water to fill sample containers.													
	02/20/13	--	29.13	--	329.11	**2,700**	--	--	--	2.0	1.2	9.3	120	--	--	--	--	--	--
	06/24/13	--	34.26	--	323.98	Not sampled due to insufficient water to fill sample containers.													
	09/03/13	--	34.49	--	323.75	Not sampled due to insufficient water to fill sample containers.													
	12/02/13	--	34.28	--	323.96	Not sampled due to insufficient water to fill sample containers.													
	03/22/14	--	34.51	--	323.73	Not sampled due to insufficient water to fill sample containers.													
MW34	01/27/06	--	7.05	--	350.83	**2,500**	--	--	--	<1	<1	22	90	<1	<1	<1	--	**23.7**	--
TOC: 357.88	02/10/06	--	4.22	--	353.66	Sample for First Quarter collected January 27, 2006.													
	06/02/06	--	10.06	--	347.82	**1,400**	--	--	--	<1	3	21	29	--	--	--	--	4.17	--
	08/23/06	--	13.96	--	343.92	260	--	--	--	<1	3	<1	<3	<1	--	--	--	NM (13)	NM (13)
	11/14/06	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	02/20/07	--	10.22	--	347.66	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	<1	<1
	05/22/07	--	12.40	--	345.48	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	4.36	<1
	07/31/07	--	14.95	--	342.93	Not sampled due to insufficient water to fill sample containers.													
	02/13/08	--	10.79	--	347.09	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	03/04/10	--	9.83	--	348.05	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	07/08/10	--	12.00	--	345.88	not sampled; gauged only													
	03/09/12	--	12.39	--	345.49	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/04/12	--	11.55	--	346.33	not sampled; gauged only													
	09/10/12	--	15.52	--	342.36	not sampled; gauged only													
	12/03/12	--	8.94	--	348.94	not sampled; gauged only													
	02/21/13	--	7.05	--	350.83	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	11.65	--	346.23	not sampled; gauged only													
	09/03/13	--	15.9	--	341.98	not sampled; gauged only													
	12/02/13	--	Dry	--	Dry	not sampled; gauged only													
	03/20/14	--	8.78	--	349.10	<100	--	--	--	<1	<1	<1	<3	<1	<1	--	--	2.45	<1
MTCA Method A Cleanup Levels for Groundwater (14)						**800/1,000 (15)**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L) GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9] Total	Lead[9] Dissolved
MW35	01/27/06	--	38.18	--	320.28	<100	--	--	--	<1	<1	<1	<3	<1	<1	--	--	59.6	--
TOC: 358.46	02/22/06	--	38.54	--	319.92	First Quarter sample collected January 27, 2006													
	05/31/06	--	39.62	--	318.84	Not sampled due to insufficient water to fill sample containers.													
	08/22/06	--	39.64	--	318.82	Not sampled due to insufficient water to fill sample containers.													
	11/14/06	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	02/20/07	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	05/22/07	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	07/31/07	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	02/11/08	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	03/04/10	--	38.86	--	319.60	Not sampled due to well not recharging after purging.													
	03/05/12	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers (noted as "dry").													
	06/04/12	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers (noted as "dry").													
	09/10/12	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers (noted as "dry").													
	12/03/12	--	39.32	--	319.14	not sampled; gauged only													
	02/20/13	--	37.89	--	320.57	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	2.45	<1
	06/24/13	--	39.46	--	319.00	not sampled; gauged only													
	09/03/13	--	39.66	--	318.80	not sampled; gauged only													
	12/02/13	--	39.67	--	318.79	not sampled; gauged only													
	03/20/14	--	39.36	--	319.10	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW36	01/27/06	--	40.10	--	317.88	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	43.4	--
TOC: 357.98	02/22/06	--	40.92	--	317.06	Sample for First Quarter collected January 27, 2006.													
	06/02/06	--	41.13	--	316.85	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	193	--
	08/24/06	--	41.58	--	316.40	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	NM [13]	NM [13]
	11/14/06	--	43.05	--	314.93	Not sampled due to insufficient water to fill sample containers.													
	02/20/07	--	41.15	--	316.83	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	05/23/07	--	41.35	--	316.63	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	08/02/07	--	42.58	--	315.40	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/14/08	--	41.35	--	316.63	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	03/04/10	--	41.16	--	316.82	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	2.78	<1
	03/04/10	--	41.79	--	316.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/08/12	--	41.64	--	316.34	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/04/12	--	41.54	--	316.44	not sampled; gauged only													
	09/10/12	--	42.83	--	315.15	not sampled; gauged only													
	12/03/12	--	42.49	--	315.49	not sampled; gauged only													
	02/20/13	--	39.12	--	318.86	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	41.89	--	316.09	not sampled; gauged only													
	09/03/13	--	42.68	--	315.30	not sampled; gauged only													
	12/02/13	--	43.16	--	314.82	not sampled; gauged only													
	03/20/14	--	42.28	--	315.70	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2

Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9] Total	Lead[9] Dissolved
MW37	01/27/06	--	14.70	--	344.20	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	<1 [j]	--
TOC: 358.90	02/22/06	--	17.34	--	341.56	Sample for First Quarter collected January 27, 2006.													
	06/02/06	--	15.62	--	343.28	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	08/24/06	--	22.29	--	336.61	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	11/15/06	--	34.32	--	324.58	<50	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/21/07	--	16.56	--	342.34	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	05/22/07	--	18.69	--	340.21	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	08/02/07	--	24.79	--	334.11	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/13/08	--	16.45	--	342.45	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	03/04/10	--	13.93	--	344.97	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	03/08/12	--	19.40	--	339.50	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/04/12	--	16.90	--	342.00	not sampled; gauged only													
	09/10/12	--	23.99	--	334.91	not sampled; gauged only													
	12/03/12	--	22.27	--	336.63	not sampled; gauged only													
	02/21/13	--	11.58	--	347.32	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	18.28	--	340.62	not sampled; gauged only													
	09/03/13	--	30.73	--	328.17	not sampled; gauged only													
	12/02/13	--	34.48	--	324.42	not sampled; gauged only													
	03/20/14	--	14.97	--	343.93	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW38	01/27/06	--	14.69	--	349.73	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	<1	--
TOC: 364.42	02/22/06	--	13.52	--	350.90	Sample for First Quarter collected January 27, 2006.													
	05/31/06	--	16.85	--	347.57	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	08/23/06	--	23.08	--	341.34	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	11/14/06	--	26.36	--	338.06	<50	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/22/07	--	16.43	--	347.99	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	05/22/07	--	19.74	--	344.68	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	08/01/07	--	22.84	--	341.58	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/13/08	--	18.14	--	346.28	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	03/04/10	--	14.80	--	349.62	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	03/08/12	--	19.32	--	345.10	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/04/12	--	17.61	--	346.81	not sampled; gauged only													
	09/10/12	--	22.78	--	341.64	not sampled; gauged only													
	12/03/12	--	21.41	--	343.01	not sampled; gauged only													
	02/21/13	--	11.30	--	353.12	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	20.34	--	344.08	not sampled; gauged only													
	09/03/13	--	26.23	--	338.19	not sampled; gauged only													
	12/02/13	--	29.36	--	335.06	not sampled; gauged only													
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9] Total	Lead[9] Dissolved
MW39	03/21/14		16.15		348.27	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
TOC: 355.88	02/02/06	--	41.41	--	314.47	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	<3.55	--
	02/22/06	--	40.18	--	315.70	Sample for First Quarter collected February 2, 2006.													
	05/31/06	--	39.52	--	316.36	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	08/24/06	--	40.56	--	315.32	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	11/15/06	--	43.40	--	312.48	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/22/07	--	39.26	--	316.62	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	05/23/07	--	39.80	--	316.08	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	08/03/07	--	41.22	--	314.66	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/14/08	--	41.22	--	314.66	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/03/09	--	42.11	--	313.77	not sampled; gauged only													
	03/03/10	--	38.76	--	317.12	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	03/07/12	--	41.14	--	314.74	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/04/12	--	39.14	--	316.74	not sampled; gauged only													
	09/10/12	--	40.86	--	315.02	not sampled; gauged only													
	12/03/12	--	41.45	--	314.43	not sampled; gauged only													
	02/20/13	--	36.40	--	319.48	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	38.38	--	317.50	not sampled; gauged only													
	09/03/13	--	40.76	--	315.12	not sampled; gauged only													
	12/02/13	--	42.48	--	313.40	not sampled; gauged only													
	03/25/14	--	41	--	314.88	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9] Total	Lead[9] Dissolved
MW40	02/03/06	--	41.71	--	314.61	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	123	--
TOC: 356.32	02/22/06	--	40.29	--	316.03	Sample for First Quarter collected February 3, 2006.													
	06/01/06	--	39.46	--	316.86	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	<1	--
	08/24/06	--	41.55	--	314.77	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	<1	<1
	11/14/06	--	43.45	--	312.87	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	<1	<1
	02/21/07	--	39.22	--	317.10	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	05/24/07	--	38.75	--	317.57	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	08/03/07	--	41.21	--	315.11	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	<1	<1
	02/14/08	--	41.30	--	315.02	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	<1	<1
	03/03/10	--	38.77	--	317.55	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	03/07/12	--	41.21	--	315.11	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/04/12	--	39.11	--	317.21	not sampled; gauged only													
	09/10/12	--	40.78	--	315.54	not sampled; gauged only													
	12/03/12	--	41.57	--	314.75	not sampled; gauged only													
	02/20/13	--	36.42	--	319.90	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	38.30	--	318.02	not sampled; gauged only													
	09/03/13	--	40.73	--	315.59	not sampled; gauged only													
	12/02/13	--	42.5	--	313.82	not sampled; gauged only													
	03/26/14	--	41.22	--	315.10	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW41	02/04/06	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
TOC: 356.14	02/22/06	--	40.35	--	315.79	Not sampled due to insufficient water to fill sample containers.													
	05/31/06	--	40.22	--	315.92	Not sampled due to insufficient water to fill sample containers.													
	08/22/06	--	40.22	--	315.92	Not sampled due to insufficient water to fill sample containers.													
	11/14/06	--	40.22	--	315.92	Not sampled due to insufficient water to fill sample containers.													
	02/20/07	--	40.23	--	315.91	Not sampled due to insufficient water to fill sample containers.													
	05/22/07	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	07/31/07	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	02/11/08	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	03/04/10	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	03/05/12	--	39.89	--	316.25	Not sampled due to insufficient water to fill sample containers (noted as “dry”).													
	06/04/12	--	39.78	--	316.36	not sampled; gauged only													
	09/10/12	--	Dry	--	Dry	not sampled; gauged only													
	12/03/12	--	34.54	--	321.60	not sampled; gauged only													
	02/28/13	--	35.51	--	320.63	--	--	--	--	--	--	--	--	--	--	--	--	50.0	--
	06/24/13	--	NM [12]	--	NM [12]	not sampled; gauged only													
	09/03/13	--	NM [11]	--	NM [11]	not sampled; gauged only													
	12/02/13	--	NM [12]	--	NM [12]	Not sampled due to insufficient water to fill sample containers.													
	03/26/14	--	NM [11]	--	NM [11]	Not sampled due to insufficient water to fill sample containers (noted as “dry”).													
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

<u>TABLE 2</u>

Summary of Historical Groundwater Elevation and Quality Results

June 1992 - April 2014

TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9]	
																		Total	Dissolved
MW42	02/04/06	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
TOC: 356.43	02/22/06	--	39.75	--	316.68	Not sampled due to insufficient water to fill sample containers.													
	05/31/06	--	39.63	--	316.80	Not sampled due to insufficient water to fill sample containers.													
	08/22/06	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	11/14/06	--	39.71	--	316.72	Not sampled due to insufficient water to fill sample containers.													
	02/20/07	--	39.67	--	316.76	Not sampled due to insufficient water to fill sample containers.													
	05/22/07	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	03/04/10	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	03/05/12	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	06/04/12	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	09/10/12	--	39.84	--	316.59	not sampled; gauged only													
	12/03/12	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	02/18/13	--	39.51	--	316.92	Not sampled due to insufficient water to fill sample containers.													
	06/24/13	--	39.64	--	316.79	not sampled; gauged only													
	09/03/13	--	39.74	--	316.69	not sampled; gauged only													
	12/02/13	--	Dry	--	Dry	not sampled; gauged only													
	03/23/14	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers (noted as "dry").													
MW43	05/31/06	--	37.43	--	321.41	Not sampled due to insufficient water to fill sample containers.													
TOC: 358.84	08/22/06	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	11/14/06	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	02/20/07	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	05/22/07	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	07/31/07	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	03/04/10	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	03/05/12	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	06/04/12	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	09/10/12	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	12/03/12	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	02/18/13	--	33.90	--	324.94	Not sampled due to insufficient water to fill sample containers.													
	06/24/13	--	35.12	--	323.72	not sampled; gauged only													
	09/03/13	--	Dry	--	Dry	not sampled; gauged only													
	12/02/13	--	Dry	--	Dry	not sampled; gauged only													
	03/27/14	--	34.71	--	324.13	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2

Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L) GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9] Total	Lead[9] Dissolved
MW44	05/31/06	--	38.56	--	316.37	Not sampled due to insufficient water to fill sample containers.													
TOC: 354.93	08/22/06	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	11/14/06	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	02/20/07	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	05/22/07	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	07/31/07	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	03/04/10	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	03/05/12	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	06/04/12	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	09/10/12	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	12/03/12	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	02/18/13	--	38.16	--	316.77	Not sampled due to insufficient water to fill sample containers.													
	06/24/13	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	09/03/13	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	12/02/13	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	03/20/14	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers (noted as "dry").													
MW45	05/31/06	--	Dry	--	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOC: 356.49	08/24/06	--	37.86	--	318.63	**57,000**	--	--	--	**920**	180	**1,900**	**13,700**	<1	--	--	--	--	--
	11/14/06	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	02/21/07	--	37.22	--	319.27	**39,000**	--	--	--	**700**	150	**870**	**10,000**	--	--	--	--	--	--
	05/24/07	--	37.59	--	318.90	**39,000**	--	--	--	**470**	120	**760**	**9,800**	--	--	--	--	--	--
	08/02/07	--	38.25	--	318.24	**40,000**	--	--	--	**430**	67	270	**11,000**	--	--	--	--	--	--
	02/11/08	--	37.90	--	318.59	**45,000**	--	--	--	**76**	36	430	**8,900**	--	--	--	--	--	--
	05/14/08	--	37.82	--	318.67	not sampled; gauged only													
	07/29/09	--	38.06	--	318.43	not sampled; gauged only													
	03/02/10	--	37.16	--	319.33	**23,000**	--	--	--	**54**	23	310	**3,700**	<1	<1	<1	--	--	--
	03/05/12	--	38.59	--	317.90	Not sampled due to insufficient water to fill sample containers.													
	06/06/12	--	37.00	--	319.49	**6,900**	--	--	--	**33**	7.6	95	**1,300**	--	--	--	--	--	--
	09/11/12	--	38.01	--	318.48	**4,700**	--	--	--	**10**	5.7	<1	540	--	--	--	--	--	--
	12/03/12	--	39.37	--	317.12	Not sampled due to insufficient water to fill sample containers.													
	02/20/13	--	37.14	--	319.35	**19,000**	--	--	--	<1	13	180	**2,500**	--	--	--	--	**131**	**73.4**
	06/26/13	--	37.89	--	318.60	**8,300**	--	--	--	<1	<1	<1	340	--	--	--	--	--	--
	09/03/13	--	39.4	--	317.09	Not sampled due to insufficient water to fill sample containers.													
	12/02/13	--	39.46	--	317.03	Not sampled due to insufficient water to fill sample containers (noted as "dry").													
	03/23/14	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers (noted as "dry").													
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

<u>TABLE 2</u>

Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date(1)	Depth to LNAPL(2) (feet)	Depth to Groundwater(2) (feet)	LNAPL Thickness(3) (feet)	Groundwater Elevation(4) (feet)	Analytical Results (µg/L)													
						GRPH(5)	DRPH(6)	ORPH(6)	TRPH(6)	Benzene(7)	Toluene(7)	Ethyl-benzene(7)	Total Xylenes(7)	MTBE(7)	EDC(7)	EDB(7)	EDB(8)	Lead(9) Total	Lead(9) Dissolved
MW46	12/13/06	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
TOC: 357.00	02/21/07	--	39.98	--	317.02	**1,100**	--	--	--	**14**	7	13	23	--	--	--	--	--	--
	05/24/07	--	40.60	--	316.40	120	--	--	--	<1	<1	<1	4	--	--	--	--	--	--
	07/31/07	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	02/11/08	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	03/03/10	--	40.31	--	316.69	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	03/05/12	--	42.42	--	314.58	Not sampled due to insufficient water to fill sample containers.													
	06/04/12	--	40.40	--	316.60	not sampled; gauged only													
	09/10/12	--	41.49	--	315.51	not sampled; gauged only													
	12/03/12	--	41.88	--	315.12	not sampled; gauged only													
	02/20/13	--	38.81	--	318.19	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	13.7	6.79
	06/24/13	--	40.20	--	316.80	not sampled; gauged only													
	09/03/13	--	42.42	--	314.58	not sampled; gauged only													
	12/02/13	--	Dry	--	Dry	not sampled; gauged only													
	03/27/14	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers (noted as "dry").													
MW47	12/13/06	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
TOC: 355.47	02/20/07	--	41.50	--	313.97	Not sampled due to insufficient water to fill sample containers.													
	05/22/07	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	07/31/07	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	02/11/08	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	03/04/10	--	41.00	--	314.47	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	03/05/12	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	06/04/12	--	41.17	--	314.30	not sampled; gauged only													
	09/10/12	--	Dry	--	Dry	not sampled; gauged only													
	12/03/12	--	Dry	--	Dry	not sampled; gauged only													
	02/20/13	--	38.53	--	316.94	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	1.50	<1
	06/24/13	--	39.99	--	315.48	not sampled; gauged only													
	09/03/13	--	Dry	--	Dry	not sampled; gauged only													
	12/02/13	--	Dry	--	Dry	not sampled; gauged only													
	03/27/14	--	44.63	--	310.84	Not sampled due to insufficient water to fill sample containers.													
MTCA Method A Cleanup Levels for Groundwater(14)						**800/1,000(15)**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9]	
																		Total	Dissolved
MW48	12/13/06	45.28	46.61	1.33	309.86	LNAPL													
TOC: 355.41	02/20/07	40.61	41.98	1.37	314.53	LNAPL													
	05/22/07	40.75	42.39	1.64	314.33	LNAPL													
	07/31/07	42.42	43.88	1.46	312.70	LNAPL													
	02/11/08	42.98	43.97	0.99	312.23	LNAPL													
	05/06/08	41.21	41.97	0.76	314.05	not sampled; gauged only													
	05/08/08	40.98	41.00	0.02	314.43	not sampled; gauged only													
	08/19/08	42.60	43.41	0.81	312.65	not sampled; gauged only													
	09/12/08	42.98	43.41	0.43	312.34	not sampled; gauged only													
	09/18/08	43.34	43.85	0.51	311.97	not sampled; gauged only													
	10/03/08	43.63	43.81	0.18	311.74	not sampled; gauged only													
	10/09/08	--	43.91	--	311.50	not sampled; gauged only													
	11/07/08	44.25	45.46	1.21	310.92	not sampled; gauged only													
	11/21/08	44.39	45.48	1.09	310.80	not sampled; gauged only													
	12/10/08	44.66	45.73	1.07	310.54	not sampled; gauged only													
	12/16/08	44.74	45.65	0.91	310.49	not sampled; gauged only													
	12/28/08	44.82	45.54	0.72	310.45	not sampled; gauged only													
	12/31/08	44.88	45.23	0.35	310.46	not sampled; gauged only													
	01/23/09	44.33	45.29	0.96	310.89	not sampled; gauged only													
	01/30/09	44.12	44.69	0.57	311.18	not sampled; gauged only													
	02/10/09	44.01	44.30	0.29	311.34	not sampled; gauged only													
	02/24/09	43.85	44.04	0.19	311.52	not sampled; gauged only													
	03/10/09	43.69	44.00	0.31	311.66	not sampled; gauged only													
	03/11/09	43.78	43.81	0.03	311.62	not sampled; gauged only													
	03/12/09	43.70	43.71	0.01	311.71	not sampled; gauged only													
	03/13/09	43.50	43.51	0.01	311.91	not sampled; gauged only													
	04/10/09	43.20	43.21	0.01	312.21	not sampled; gauged only													
	04/30/09	--	43.44	--	311.97	not sampled; gauged only													
	06/12/09	42.57	42.58	0.01	312.84	not sampled; gauged only													
	08/25/09	43.77	44.09	0.32	311.58	not sampled; gauged only													
	09/29/09	44.48	45.11	0.63	310.80	not sampled; gauged only													
	10/15/09	44.90	45.59	0.69	310.37	not sampled; gauged only													
	11/24/09	44.48	44.68	0.20	310.89	not sampled; gauged only													
	01/18/10	42.35	42.45	0.10	313.04	not sampled; gauged only													
	02/26/10	40.50	40.63	0.13	314.88	not sampled; gauged only													
	03/01/10	40.43	40.56	0.13	314.95	not sampled; gauged only													
	04/12/10	39.69	39.80	0.11	315.70	not sampled; gauged only													
	05/07/10	39.72	39.83	0.11	315.67	not sampled; gauged only													
	06/21/10	40.33	40.64	0.31	315.02	not sampled; gauged only													
	07/02/10	--	--	0.04	--	not sampled; gauged only													
MTCA Method A Cleanup Levels for Groundwater[14]						800/1,000[15]	500	500	500	5	1,000	700	1,000	20	5	0.01	0.01	15	15

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9] Total	Lead[9] Dissolved
MW48 (continued)	08/30/10	42.01	42.30	0.29	313.34	not sampled; gauged only													
	09/10/10	42.28	42.42	0.14	313.10	not sampled; gauged only													
	10/11/10	43.00	43.30	0.30	312.35	not sampled; gauged only													
	11/11/10	43.52	43.87	0.35	311.82	not sampled; gauged only													
	12/06/10	43.73	44.00	0.27	311.63	not sampled; gauged only													
	12/15/10	--	--	--	--	not sampled													
	03/18/11	--	39.04	--	316.37	not sampled; gauged only													
	05/02/11	--	37.91	--	317.50	not sampled; gauged only													
	03/08/12	--	43.59	--	311.82	**37,000**	--	--	--	**220**	140	**770**	**5,400** (ve)	--	--	--	--	--	--
	06/05/12	--	40.85	--	314.56	**14,000**	--	--	--	<5	13	210	**1,900**	--	--	--	--	--	--
	09/11/12	--	42.51	--	312.90	**24,000**	--	--	--	300	130	550	**4,300**	--	--	--	--	--	--
	12/04/12	--	42.80	--	312.61	**21,000**	--	--	--	**62**	<40	390	**3,000**	--	--	--	--	--	--
	02/20/13	--	38.23	--	317.18	**19,000**	--	--	--	**170**	100	620	**4,500**	--	--	--	--	5.58	4.07
	06/26/13	--	39.92	--	315.49	**11,000**	--	--	--	<5	12	130	810	--	--	--	--	--	--
	09/05/13	--	42.64	--	312.77	**18,000**	--	--	60	**60**	55	140	**1,100**	--	--	--	--	--	--
	12/03/13	--	43.82	--	311.59	**19,000**	--	--	--	**160**	76	<5	**3,300**	--	--	--	--	--	--
	03/23/14	--	42.51	--	312.90	**33,000**	--	--	--	**82**	99	680	**4,700**	--	--	--	--	**52.6**	**48**
MW49	12/20/06	--	45.72	--	310.72	**2,200**	--	--	--	**24**	2	46	250	--	--	--	--	--	--
TOC: 356.44	02/21/07	--	41.61	--	314.83	**14,000**	--	--	--	**380**	60	**750**	**2,700**	--	--	--	--	--	--
	05/24/07	--	41.85	--	314.59	**21,000**	--	--	--	**440**	62	**770**	**3,400**	--	--	--	--	--	--
	08/03/07	--	43.32	--	313.12	**12,000**	--	--	--	**360**	29	580	**1,300**	--	--	--	--	8.38	2.45
	02/14/08	--	43.90	--	312.54	160	--	--	--	<1	<1	<1	7	--	--	--	--	--	--
	02/05/09	--	43.90	--	312.54	not sampled; gauged only													
	03/04/10	--	41.23	--	315.21	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	03/08/12	--	44.05	--	312.39	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/05/12	--	41.38	--	315.06	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	09/11/12	--	43.10	--	313.34	<100	--	--	--	1.2	<1	<1	<3	--	--	--	--	--	--
	12/04/12	--	43.25	--	313.19	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/19/13	--	38.66	--	317.78	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/26/13	--	40.89	--	315.55	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	09/05/13	--	43.32	--	313.12	<100	--	--	<1	<1	<1	<1	<3	--	--	--	--	--	--
	12/04/13	--	44.04	--	312.40	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	04/01/14	--	42.97	--	313.47	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000**[15]	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9] Total	Lead[9] Dissolved
MW50	08/03/07	--	36.22	--	325.77	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	11.6	NA[7]
TOC: 361.99	02/14/08	--	34.56	--	327.43	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	03/02/10	--	32.23	--	329.76	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	03/08/12	--	35.03	--	326.96	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/05/12	--	33.05	--	328.94	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	09/11/12	--	35.66	--	326.33	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	12/03/12	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers (noted as “dry”).													
	02/20/13	--	29.39	--	332.60	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/26/13	--	35.36	--	326.63	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	09/03/13	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers (noted as “dry”).													
	12/02/13	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers (noted as “dry”).													
	03/28/14	--	35.72	--	326.27	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW51	08/03/07	--	41.58	--	311.08	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	<1	--
TOC: 352.66	02/13/08	--	41.78	--	310.88	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	05/14/08	--	40.67	--	311.99	not sampled; gauged only													
	02/05/09	--	42.47	--	310.19	not sampled; gauged only													
	03/02/10	--	39.73	--	312.93	<100	--	--	--	<1	<1	<1	6	<1	<1	<1	--	--	--
	10/12/10	--	41.60	--	311.06	<100	<50	<250	--	<0.35	<1	<1	<2	<1	<1	<1	--	<1	<1
	03/08/12	--	41.82	--	310.84	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/05/12	--	39.86	--	312.80	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	09/11/12	--	41.35	--	311.31	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	12/04/12	--	41.15	--	311.51	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/20/13	--	36.92	--	315.74	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/26/13	--	38.90	--	313.76	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	09/05/13	--	41.13	--	311.53	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	12/04/13	--	42.23	--	310.43	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	04/01/14	--	41.27	--	311.39	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW52	08/03/07	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
TOC: 355.61	02/14/08	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	03/02/10	--	41.31	--	314.30	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	03/05/12	--	Dry	--	DRY	Not sampled due to insufficient water to fill sample containers.													
	06/06/12	--	41.48	--	314.13	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	09/10/12	--	43.16	--	312.45	Not sampled due to insufficient water to fill sample containers.													
	12/03/12	--	43.04	--	312.57	Not sampled due to insufficient water to fill sample containers.													
	02/20/13	--	38.77	--	316.84	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/26/13	--	40.23	--	315.38	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	09/03/13	--	43.22	--	312.39	Not sampled due to insufficient water to fill sample containers.													
	12/02/13	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers (noted as “dry”).													
	03/27/14	--	43.3	--	312.31	Not sampled due to insufficient water to fill sample containers.													
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9] Total	Lead[9] Dissolved
MW53	08/03/07	--	43.32	--	316.53	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	5.02	<1
TOC: 359.85	02/12/08	--	43.60	--	316.25	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	03/03/10	--	41.10	--	318.75	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	03/07/12	--	43.58	--	316.27	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/05/12	--	41.15	--	318.70	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	09/11/12	--	43.10	--	316.75	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	12/04/12	--	44.16	--	315.69	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/20/13	--	38.76	--	321.09	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/26/13	--	40.73	--	319.12	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	09/05/13	--	43.12	--	316.73	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	12/04/13	--	45.04	--	314.81	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	03/31/14	--	43.81	--	316.04	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW54	08/03/07	--	13.91	--	344.02	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	<1	<1
TOC: 357.93	02/12/08	--	11.80	--	346.13	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	<1	<1
	05/14/08	--	12.41	--	345.52	not sampled; gauged only													
	03/03/10	--	10.25	--	347.68	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	07/08/10	--	11.36	--	346.57	not sampled; gauged only													
	03/07/12	--	12.74	--	345.19	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/04/12	--	11.45	--	346.48	not sampled; gauged only													
	09/10/12	--	13.67	--	344.26	not sampled; gauged only													
	12/03/12	--	13.00	--	344.93	not sampled; gauged only													
	02/19/13	--	7.17	--	350.76	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	10.98	--	346.95	not sampled; gauged only													
	09/03/13	--	14.19	--	343.74	not sampled; gauged only													
	12/02/13	--	16	--	341.93	not sampled; gauged only													
	03/22/14	--	10.92	--	347.01	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW55	08/03/07	--	43.55	--	312.95	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	2.99	<1
TOC: 356.50	02/13/08	--	44.02	--	312.48	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	03/04/10	--	40.62	--	315.88	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	03/08/12	--	44.18	--	312.32	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/06/12	--	40.76	--	315.74	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	09/12/12	--	43.10	--	313.40	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	12/05/12	--	43.78	--	312.72	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/20/13	--	38.80	--	317.70	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/26/13	--	40.19	--	316.31	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	09/04/13	--	43.71	--	312.79	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	12/04/13	--	44.76	--	311.74	<100	--	--	--	<1	<1	<1	5.8	--	--	--	--	--	--
	03/31/14	--	43.63	--	312.87	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9] Total	Lead[9] Dissolved
MW56	08/03/07	--	44.19	--	313.30	<100	--	--	--	4	<1	<1	<3	--	--	--	--	<1	<1
TOC: 357.49	02/14/08	--	44.52	--	312.97	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	05/14/08	--	43.00	--	314.49	not sampled; gauged only													
	02/03/09	--	45.40	--	312.09	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	03/03/10	--	41.88	--	315.61	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	03/06/12	--	44.63	--	312.86	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/06/12	--	42.25	--	315.24	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	09/12/12	--	43.82	--	313.67	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	12/05/12	--	44.24	--	313.25	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/19/13	--	39.41	--	318.08	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/26/13	--	42.79	--	314.70	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	09/04/13	--	44.39	--	313.10	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	12/03/13		45.60		311.89	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	03/31/14		44.00		313.49	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW57	08/03/07	--	44.16	--	312.26	18,000	--	--	--	360	37	320	3,900	--	--	--	--	3.17	3.33
TOC: 356.42	02/13/08	--	44.59	--	311.83	10,000	--	--	--	150	21	370	1,700	--	--	--	--	--	--
	05/14/08	--	42.87	--	313.55	not sampled; gauged only													
	03/03/10	--	41.80	--	314.62	14,000	--	--	--	240	51	610	3,600	<1	2.9	<1	--	--	--
	10/12/10	--	44.50	--	311.92	not sampled; gauged only													
	03/07/12	--	44.38	--	312.04	2,100	--	--	--	9.7	2.3	87	160	--	--	--	--	--	--
	06/04/12	--	41.88	--	314.54	not sampled; gauged only													
	09/10/12	--	43.60	--	312.82	not sampled; gauged only													
	12/03/12	--	43.34	--	313.08	not sampled; gauged only													
	02/28/13	--	39.41	--	317.01	3,100	--	--	--	25	10	<1	710	--	--	--	--	--	--
	06/24/13	--	43.02	--	313.40	not sampled; gauged only													
	09/03/13	--	NM (12)	--	NM (12)	not sampled; gauged only													
	12/02/13	--	NM (12)	--	NM (12)	not sampled; gauged only													
	03/26/14	--	NM (12)	--	NM (12)	3,600	--	--		<1	9.1	51	410	--	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2

Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date(1)	Depth to LNAPL(2) (feet)	Depth to Groundwater(2) (feet)	LNAPL Thickness(3) (feet)	Groundwater Elevation(4) (feet)	Analytical Results (µg/L)													
						GRPH(5)	DRPH(6)	ORPH(6)	TRPH(6)	Benzene(7)	Toluene(7)	Ethyl-benzene(7)	Total Xylenes(7)	MTBE(7)	EDC(7)	EDB(7)	EDB(8)	Lead(9) Total	Lead(9) Dissolved
MW58	08/02/07	--	43.25	--	312.15	<100	--	--	--	2	<1	4	3	--	--	--	--	1.37	<1
TOC: 355.40	02/13/08	--	43.55	--	311.85	360	--	--	--	5	1	13	12	--	--	--	--	--	--
	05/14/08	--	41.93	--	313.47	not sampled; gauged only													
	03/03/10	--	40.88	--	314.52	<100	--	--	--	<1	<1	<1	<3	<1	2.4	<1	--	--	--
	10/12/10	--	43.52	--	311.88	not sampled; gauged only													
	03/07/12	--	43.74	--	311.66	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/06/12	--	41.33	--	314.07	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	09/11/12	--	42.89	--	312.51	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	12/05/12	--	43.30	--	312.10	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/21/13	--	38.46	--	316.94	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/26/13	--	40.22	--	315.18	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	09/04/13	--	42.99	--	312.41	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	12/04/13	--	43.83	--	311.57	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	03/26/14	--	12.90	--	342.50	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW59	08/02/07	--	43.26	--	313.25	140	--	--	--	<1	<1	<1	<3	--	--	--	--	3.04	<1
TOC: 356.51	02/14/08	--	43.66	--	312.85	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	05/14/08	--	42.01	--	314.50	not sampled; gauged only													
	02/03/09	--	45.51	--	311.00	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	03/03/10	--	40.85	--	315.66	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	03/06/12	--	43.70	--	312.81	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/06/12	--	41.33	--	315.18	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	09/12/12	--	42.90	--	313.61	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	12/05/12	--	43.28	--	313.23	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/19/13	--	38.46	--	318.05	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/26/13	--	41.69	--	314.82	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	09/04/13	--	43.21	--	313.30	<101	--	--	--	<1	<1	<1	5.2	--	--	--	--	--	--
	12/04/13	--	44.71	--	311.80	<101	--	--	--	<1	<1	<1	5.2	--	--	--	--	--	--
	03/26/14	--	42.12	--	314.39	<101	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater(14)						**800/1,000(15)**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2

Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date(1)	Depth to LNAPL(2) (feet)	Depth to Groundwater(2) (feet)	LNAPL Thickness(3) (feet)	Groundwater Elevation(4) (feet)	Analytical Results (µg/L)													
						GRPH(5)	DRPH(6)	ORPH(6)	TRPH(6)	Benzene(7)	Toluene(7)	Ethyl-benzene(7)	Total Xylenes(7)	MTBE(7)	EDC(7)	EDB(7)	EDB(8)	Lead(9) Total	Lead(9) Dissolved
MW60	08/03/07	--	43.52	--	315.06	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	20.5	1.94
TOC: 358.58	02/14/08	--	43.88	--	314.70	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	<1	<1
	03/04/10	--	41.64	--	316.94	<100	--	--	--	<1	<1	<1	<3	<1	1.1	<1	--	--	--
	03/08/12	--	44.03	--	314.55	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	<1	<1
	06/06/12	--	41.78	--	316.80	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	09/12/12	--	43.19	--	315.39	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	12/05/12	--	44.07	--	314.51	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/20/13	--	39.64	--	318.94	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/26/13	--	41.44	--	317.14	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	09/04/13	--	43.37	--	315.21	<101	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	12/04/13	--	45.10	--	313.48	<101	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	03/31/14	--	43.88	--	314.70	<101	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW61	08/03/07	--	13.18	--	343.99	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	1.34	<1
TOC: 357.17	02/12/08	--	9.65	--	347.52	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	03/04/10	--	8.21	--	348.96	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	03/08/12	--	10.56	--	346.61	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/04/12	--	10.06	--	347.11	not sampled; gauged only													
	09/10/12	--	12.11	--	345.06	not sampled; gauged only													
	12/03/12	--	7.97	--	349.20	not sampled; gauged only													
	02/21/13	--	5.15	--	352.02	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	10.30	--	346.87	not sampled; gauged only													
	09/03/13	--	13.70	--	343.47	not sampled; gauged only													
	12/02/13	--	15.80	--	341.37	not sampled; gauged only													
	03/27/14	--	8.29	--	348.88	<101	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW62	08/03/07	--	14.47	--	346.03	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	<1	<1
TOC: 360.50	02/12/08	--	10.19	--	350.31	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	03/03/10	--	8.64	--	351.86	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	03/08/12	--	12.05	--	348.45	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/04/12	--	10.82	--	349.68	not sampled; gauged only													
	09/10/12	--	14.59	--	345.91	not sampled; gauged only													
	12/03/12	--	9.73	--	350.77	not sampled; gauged only													
	02/21/13	--	5.09	--	355.41	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	11.62	--	348.88	not sampled; gauged only													
	09/03/13	--	16.35	--	344.15	not sampled; gauged only													
	12/02/13	--	16.8	--	343.70	not sampled; gauged only													
	03/27/14	--	9.72	--	350.78	<101	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater(14)						**800/1,000(15)**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2

Summary of Historical Groundwater Elevation and Quality Results

June 1992 - April 2014

TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9] Total	Lead[9] Dissolved
MW63	08/03/07	--	42.85	--	312.26	190	--	--	--	9	<1	8	14	--	--	--	--	8.21	2.08
TOC: 355.11	02/13/08	--	43.11	--	312.00	240	--	--	--	5	<1	9	11	--	--	--	--	--	--
	05/14/08	--	41.56	--	313.55	not sampled; gauged only													
	02/03/09	--	44.13	--	310.98	not sampled; gauged only													
	03/02/10	--	40.51	--	314.60	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	10/12/10	--	43.14	--	311.97	not sampled; gauged only													
	03/08/12	--	43.34	--	311.77	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/05/12	--	40.93	--	314.18	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	09/11/12	--	42.59	--	312.52	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	12/04/12	--	42.93	--	312.18	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/19/13	--	38.10	--	317.01	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/25/13	--	39.94	--	315.17	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	09/05/13	--	42.69	--	312.42	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	12/04/13	--	43.76	--	311.35	<101	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	04/01/14	--	42.69	--	312.42	<101	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW64	08/02/07	--	40.51	--	314.67	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	<1	<1
TOC: 355.18	02/13/08	--	40.39	--	314.79	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	05/14/08	--	39.34	--	315.84	not sampled; gauged only													
	02/03/09	--	41.59	--	313.59	not sampled; gauged only													
	03/02/10	--	38.09	--	317.09	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	10/12/10	--	40.76	--	314.42	not sampled; gauged only													
	03/08/12	--	40.59	--	314.59	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/04/12	--	38.48	--	316.70	not sampled; gauged only													
	09/10/12	--	40.20	--	314.98	not sampled; gauged only													
	12/03/12	--	40.89	--	314.29	not sampled; gauged only													
	02/21/13	--	35.75	--	319.43	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	37.70	--	317.48	not sampled; gauged only													
	09/03/13	--	40.07	--	315.11	not sampled; gauged only													
	12/02/13	--	41.8	--	313.38	not sampled; gauged only													
	03/28/14	--	41.06	--	314.12	<101	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date(1)	Depth to LNAPL(2) (feet)	Depth to Groundwater(2) (feet)	LNAPL Thickness(3) (feet)	Groundwater Elevation(4) (feet)	Analytical Results (µg/L)													
						GRPH(5)	DRPH(6)	ORPH(6)	TRPH(6)	Benzene(7)	Toluene(7)	Ethyl-benzene(7)	Total Xylenes(7)	MTBE(7)	EDC(7)	EDB(7)	EDB(8)	Lead(9)	
																		Total	Dissolved
MW65	05/14/08	--	40.37	--	312.71	<100	--	--	--	**8.6**	<1	<1	<3	--	--	--	--	2.69	<1
TOC: 353.08	02/03/09	--	42.89	--	310.19	<100	--	--	--	**6.1**	<1	<1	<3	<1	--	--	--	--	--
	03/02/10	--	39.32	--	313.76	<100	--	--	--	3	3	1	6	<1	<1	<1	--	--	--
	07/08/10	--	39.65	--	313.43	not sampled; gauged only													
	10/12/10	--	41.92	--	311.16	not sampled; gauged only													
	03/07/12	--	42.14	--	310.94	<100	--	--	--	<1	<1	<1	<3	<1	<1	--	--	--	--
	06/05/12	--	39.76	--	313.32	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	09/11/12	--	41.63	--	311.45	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	12/05/12	--	41.00	--	312.08	<100	--	--	--	<0.35	<1	<1	<3	<1	<1	--	--	--	--
	02/19/13	--	36.95	--	316.13	<100	--	--	--	0.61	<1	<1	<3	<1	--	--	--	--	--
	06/25/13	--	38.66	--	314.42	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	09/04/13	--	41.33	--	311.75	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	12/03/13	--	42.71	--	310.37	<100	--	--	--	<0.35	<1	<1	<3	<1	--	--	--	--	--
	04/01/14	--	41.19	--	311.89	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
MW66	05/14/08	--	41.27	--	314.48	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	2.00	<1
TOC: 355.75	03/03/10	--	40.16	--	315.59	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	07/08/10	--	40.50	--	315.25	not sampled; gauged only													
	03/07/12	--	42.97	--	312.78	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/05/12	--	40.61	--	315.14	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	09/11/12	--	42.16	--	313.59	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	12/04/12	--	42.52	--	313.23	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	02/20/13	--	37.72	--	318.03	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/26/13	--	40.87	--	314.88	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	09/04/13	--	42.51	--	313.24	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	12/04/13	--	43.70	--	312.05	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	03/23/14	--	42.30	--	313.45	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW67	05/14/08	--	12.79	--	342.94	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	<1	<1
TOC: 355.73	03/01/10	--	11.71	--	344.02	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	07/08/10	--	12.88	--	342.85	not sampled; gauged only													
	03/06/12	--	14.43	--	341.30	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/04/12	--	12.64	--	343.09	not sampled; gauged only													
	09/10/12	--	15.22	--	340.51	not sampled; gauged only													
	12/03/12	--	15.42	--	340.31	not sampled; gauged only													
	02/19/13	--	9.83	--	345.90	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	12.25	--	343.48	not sampled; gauged only													
	09/03/13	--	15.51	--	340.22	not sampled; gauged only													
	12/02/13	--	18.45	--	337.28	not sampled; gauged only													
	03/28/14	--	13.05	--	342.68	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater(14)						**800/1,000(15)**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date(1)	Depth to LNAPL(2) (feet)	Depth to Groundwater(2) (feet)	LNAPL Thickness(3) (feet)	Groundwater Elevation(4) (feet)	Analytical Results (µg/L)													
						GRPH(5)	DRPH(6)	ORPH(6)	TRPH(6)	Benzene(7)	Toluene(7)	Ethyl-benzene(7)	Total Xylenes(7)	MTBE(7)	EDC(7)	EDB(7)	EDB(8)	Lead(9) Total	Lead(9) Dissolved
MW68	05/14/08	--	12.54	--	342.57	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	<1	<1
TOC: 355.11	03/01/10	--	11.29	--	343.82	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	07/08/10	--	12.60	--	342.51	not sampled; gauged only													
	03/06/12	--	14.10	--	341.01	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/04/12	--	12.31	--	342.80	not sampled; gauged only													
	09/10/12	--	14.91	--	340.20	not sampled; gauged only													
	12/03/12	--	14.90	--	340.21	not sampled; gauged only													
	02/19/13	--	9.56	--	345.55	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	12.07	--	343.04	not sampled; gauged only													
	09/03/13	--	15.22	--	339.89	not sampled; gauged only													
	12/02/13	--	17.94	--	337.17	not sampled; gauged only													
	04/01/14	--	12.42	--	342.69	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW69	05/14/08	--	41.59	--	312.17	**15,000**	--	--	--	**14**	1.3	380ve	**1,028 (ve)**	--	--	--	--	9.01	2.08
TOC: 353.76	02/03/09	--	44.20	--	309.56	**19,000**	--	--	--	**9.4**	1.5	450	**2,000**	<1	--	--	--	--	--
	02/05/09	--	44.01	--	309.75	not sampled; gauged only													
	07/30/09	--	43.25	--	310.51	**6,800**	--	--	--	**6.7**	1.2	11	**580**	<1	<1	<1	--	--	--
	03/02/10	--	40.56	--	313.20	**8,200**	--	--	--	**11**	12	250	**1,100**	<1	<1	<1	--	--	--
	03/06/12	--	42.74	--	311.02	**5,400**	--	--	--	1.5	<1	100	440	<1	<1	--	--	--	--
	06/05/12	--	40.19	--	313.57	**9,700**	--	--	--	2,6	15	220	900	<1	--	--	--	--	--
	09/12/12	--	41.77	--	311.99	**7,900**	--	--	--	**7.2**	13	170	750	<1	--	--	--	--	--
	12/04/12	--	41.69	--	312.07	200	--	--	--	1.5	<1	<1	2.8	<1	<1	--	--	--	--
	02/28/13	--	37.54	--	316.22	**7,600**	--	--	--	1.5	1.8	130	964	<1	--	--	--	--	--
	06/24/13	--	38.96	--	314.80	Not sampled due to remediation system offline for repairs.													
	09/03/13	--	NM (11)	--	NM (11)	not sampled													
	12/02/13	--	NM (12)	--	NM (12)	Not sampled due to insufficient water to fill sample containers (noted as “no water”).													
	03/31/14	--	NM (12)	--	NM (12)	Not sampled due to insufficient water to fill sample containers (noted as “dry”).													
MW70	05/14/08	--	41.70	--	312.47	160	--	--	--	**9.9**	<1	<1	<3	--	--	--	--	3.23	<1
TOC: 354.17	02/03/09	--	44.22	--	309.95	390	--	--	--	**20**	<1	<1	15	<1	--	--	--	--	--
	03/02/10	--	40.62	--	313.55	<100	--	--	--	**7**	<1	<1	<3	<1	<1	<1	--	--	--
	07/08/10	--	40.90	--	313.27	not sampled; gauged only													
	10/12/10	--	43.23	--	310.94	not sampled; gauged only													
	03/06/12	--	42.47	--	311.70	280	--	--	--	**7.6**	<1	<1	4.1	<1	<1	--	--	--	--
	06/05/12	--	40.18	--	313.99	<100	--	--	--	2.3	<1	<1	<3	<1	--	--	--	--	--
	09/12/12	--	42.01	--	312.16	<100	--	--	--	2.1	<1	<1	<3	<1	--	--	--	--	--
	12/04/12	--	41.83	--	312.34	<100	--	--	--	1.5	<1	<1	<3	<1	<1	--	--	--	--
	02/28/13	--	37.74	--	316.43	<100	--	--	--	<0.35	<1	<1	<3	<1	--	--	--	--	--
	06/24/13	--	39.28	--	314.89	Not sampled due to remediation system offline for repairs.													
	09/04/13	--	NM (11)	--	NM (11)	<100	--	--	<1	<1	<1	<1	<3	<1	--	--	--	--	--
	12/02/13		NM (12)		NM (12)	Not sampled due to insufficient water to fill sample containers (noted as “no water”).													
	03/28/14	--	NM (11)	--	NM (11)	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater(14)						**800/1,000(15)**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

<u>TABLE 2</u>

Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9]	
																		Total	Dissolved
MW71	10/09/08	--	15.32	--	332.60	**240,000**	**14,000 [x]**	**720**	--	**38,000**	**52,000**	**3,300**	**16,800**	<50	<50	<50	--	13.3	14.1
TOC: 347.92	07/29/09	13.98	15.34	1.36	333.67	**LNAPL**													
	03/01/10	10.42	10.91	0.49	337.40	**LNAPL**													
	3/24/14	--	12.99	0.29	335.16	Not sampled due delayed approval from property owner to sample well.													
MW72	10/09/08	--	17.90	--	329.48	**160,000**	**5,300 [x]**	<250	--	**13,000**	**34,000**	**3,200**	**18,600**	<10	<10	<10	--	2.76	2.99
TOC: 347.38	07/29/09	--	16.67	--	330.71	**98,000**	--	--	--	**9,600**	**24,000 [ve]**	**1,900**	**15,700**	<1	<1	**1.4**	--	--	--
	03/01/10	--	13.03	--	334.35	520	--	--	--	**22**	45	14	37	<1	<1	<1	--	--	--
	3/24/14	--	16.18	0.49	331.59	Not sampled due delayed approval from property owner to sample well.													
MW73	10/09/08	--	39.88	--	307.45	**64,000**	**4,300 [x]**	<250	--	**12,000**	**5,900**	**1,100**	**6,400**	**190**	<10	<10	--	2.36	<1
TOC: 347.33	07/29/09	--	39.28	--	308.05	**83,000**	--	--	--	**18,000 [ve]**	**8,300**	**720**	**3,800**	**71**	<1	<1	--	--	--
	03/01/10	--	36.57	--	310.76	**79,000**	--	--	--	**20,000**	**7,400**	**1,700**	**6,900**	**120**	<1	<1	--	--	--
	03/24/14	--	38.60	--	308.73	Not sampled due delayed approval from property owner to sample well.													
MW74	10/09/08	--	39.35	--	308.59	Not sampled due to insufficient water to fill sample containers.													
TOC: 347.94	03/01/10	--	36.91	--	311.03	**75,000**	--	--	--	**26,000**	**3,500**	**860**	**3,800**	**720**	<1	<1	--	--	--
	03/24/14	--	36.59	--	311.35	Not sampled due delayed approval from property owner to sample well.													
MW75	11/07/08	--	44.64	--	310.14	<100	--	--	--	<1	<1	<1	<2	<1	<1	<1	--	**19.9**	<1
TOC: 354.78	03/02/10	--	40.44	--	314.34	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	<1	<1
	03/07/12	--	43.47	--	311.31	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	<1	<1
	02/19/13	--	32.28	--	322.50	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	<1	<1
	04/03/14	--	43.91	--	310.87	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW76	02/03/09	--	40.18	--	311.51	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	3.46	<1
TOC: 351.69	03/01/10	--	37.28	--	314.41	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	07/08/10	--	37.75	--	313.94	not sampled; gauged only													
	10/12/10	--	40.43	--	311.26	not sampled; gauged only													
	03/06/12	--	40.24	--	311.45	<100	--	--	--	<1	<1	<1	<3	<1	<1	--	--	--	--
	06/04/12	--	37.89	--	313.80	not sampled; gauged only													
	09/10/12	--	39.80	--	311.89	not sampled; gauged only													
	12/03/12	--	39.63	--	312.06	not sampled; gauged only													
	02/19/13	--	35.11	--	316.58	<100	--	--	--	<0.35	<1	<1	<3	<1	--	--	--	--	--
	06/24/13	--	37.25	--	314.44	not sampled; gauged only													
	09/03/13	--	39.94	--	311.75	not sampled; gauged only													
	12/02/13	--	40.95	--	310.74	not sampled; gauged only													
	03/27/14	--	39.01	--	312.68	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

Stantec

<u>TABLE 2</u>

Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9] Total	Lead[9] Dissolved
MW77	02/03/09	--	40.09	--	309.86	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	5.21	<1
TOC: 349.95	03/01/10	--	36.51	--	313.44	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	07/08/10	--	36.91	--	313.04	not sampled; gauged only													
	10/12/10	--	39.22	--	310.73	<100	<50	<250	--	<1	<1	<1	<2	<1	<1	<1	--	<1	<1
	03/06/12	--	39.20	--	310.75	<100	--	--	--	<1	<1	<1	<3	<1	<1	--	--	--	--
	06/05/12	--	37.04	--	312.91	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	09/11/12	--	38.65	--	311.30	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	12/04/12	--	37.33	--	312.62	<100	--	--	--	<0.35	<1	<1	<3	<1	<1	--	--	--	--
	02/19/13	--	34.20	--	315.75	<100	--	--	--	<0.35	<1	<1	<3	<1	--	--	--	--	--
	06/25/13	--	36.07	--	313.88	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	09/04/13	--	38.53	--	311.42	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	12/04/13	--	39.93	--	310.02	<100	--	--	--	<0.35	<1	<1	<3	<1	--	--	--	--	--
	03/27/14	--	38.54	--	311.41	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
MW78	02/03/09	--	37.32	--	312.58	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	2.61	<1
TOC: 349.90	03/01/10	--	34.57	--	315.33	<100	--	--	--	<1	<1	<1	<3	<1	<1	<1	--	--	--
	10/12/10	--	37.30	--	312.60	not sampled; gauged only													
	03/06/12	--	36.88	--	313.02	<100	--	--	--	<1	<1	<1	<3	<1	<1	--	--	--	--
	06/04/12	--	35.06	--	314.84	not sampled; gauged only													
	09/10/12	--	36.73	--	313.17	not sampled; gauged only													
	12/03/12	--	37.06	--	312.84	not sampled; gauged only													
	02/19/13	--	32.38	--	317.52	<100	--	--	--	<0.35	<1	<1	<3	<1	--	--	--	--	--
	06/24/13	--	34.34	--	315.56	not sampled; gauged only													
	09/03/13	--	36.72	--	313.18	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	12/02/13	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	04/01/14	--	36.33	--	313.57	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
MW79	07/08/10	--	13.41	--	340.57	<100	--	--	--	<1	<1	<1	<2	<1	<1	<1	--	<1	<1
TOC: 353.98	03/07/12	--	13.39	--	340.59	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/04/12	--	12.78	--	341.20	not sampled; gauged only													
	09/10/12	--	16.91	--	337.07	not sampled; gauged only													
	12/03/12	--	14.10	--	339.88	not sampled; gauged only													
	02/19/13	--	9.07	--	344.91	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	13.79	--	340.19	not sampled; gauged only													
	09/03/13	--	Dry	--	Dry	Not sampled due to insufficient water to fill sample containers.													
	12/02/13		Dry		Dry	Not sampled due to insufficient water to fill sample containers.													
	03/23/14		10.53		343.45	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2

Summary of Historical Groundwater Elevation and Quality Results

June 1992 - April 2014

TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date(1)	Depth to LNAPL(2) (feet)	Depth to Groundwater(2) (feet)	LNAPL Thickness(3) (feet)	Groundwater Elevation(4) (feet)	Analytical Results (µg/L)													
						GRPH(5)	DRPH(6)	ORPH(6)	TRPH(6)	Benzene(7)	Toluene(7)	Ethyl-benzene(7)	Total Xylenes(7)	MTBE(7)	EDC(7)	EDB(7)	EDB(8)	Lead(9) Total	Lead(9) Dissolved
MW80	07/08/10	--	14.22	--	339.61	<100	--	--	--	<0.35	<1	<1	<2	<1	<1	<1	--	<1	<1
TOC: 353.83	10/12/10	--	18.69	--	335.14	not sampled; gauged only													
	03/07/12	--	14.30	--	339.53	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/04/12	--	13.42	--	340.41	not sampled; gauged only													
	09/10/12	--	17.28	--	336.55	not sampled; gauged only													
	12/03/12	--	15.41	--	338.42	not sampled; gauged only													
	02/19/13	--	9.87	--	343.96	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	14.43	--	339.40	not sampled; gauged only													
	09/03/13	--	18.16	--	335.67	not sampled; gauged only													
	12/02/13	--	20.4	--	333.43	not sampled; gauged only													
	03/23/14	--	11.7	--	342.13	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW81	07/08/10	--	40.78	--	314.82	<100	--	--	--	<0.35	<1	<1	<2	<1	<1	<1	--	<1	<1
TOC: 355.60	10/12/10	--	43.02	--	312.58	not sampled; gauged only													
	03/06/12	--	43.22	--	312.38	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/04/12	--	40.73	--	314.87	not sampled; gauged only													
	09/10/12	--	42.49	--	313.11	not sampled; gauged only													
	12/03/12	--	42.67	--	312.93	not sampled; gauged only													
	02/19/13	--	38.00	--	317.60	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	40.80	--	314.80	not sampled; gauged only													
	09/03/13	--	42.67	--	312.93	not sampled; gauged only													
	12/02/13	--	43.95	--	311.65	not sampled; gauged only													
	03/23/14	--	42.45	--	313.15	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW82	07/08/10	--	26.74	--	328.85	<100	--	--	--	<0.35	<1	<1	<2	<1	<1	<1	--	<1	<1
TOC: 355.59	10/12/10	--	29.64	--	325.95	not sampled; gauged only													
	03/07/12	--	28.58	--	327.01	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/04/12	--	28.99	--	326.60	not sampled; gauged only													
	09/10/12	--	29.63	--	325.96	not sampled; gauged only													
	12/03/12	--	29.51	--	326.08	not sampled; gauged only													
	02/19/13	--	27.87	--	327.72	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	29.60	--	325.99	not sampled; gauged only													
	09/03/13		29.59	--	326.00	not sampled; gauged only													
	12/02/13		29.66		325.93	not sampled; gauged only													
	03/23/14		26.3		329.29	Not sampled due to insufficient water to fill sample containers (noted as “dry”).													
MTCA Method A Cleanup Levels for Groundwater(14)						**800/1,000(15)**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9] Total	Lead[9] Dissolved
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; gauged only													
	11/21/11	DECOMMISSIONED (REPLACED WITH MW100)																	
MW84	10/12/10	--	44.29	--	309.46	1,900	270 [x]	<250	--	0.71	<1	17	48	<1	<1	<1	--	<1	<1
TOC: 353.75	03/07/12	--	42.66	--	311.09	680	--	--	--	<1	1.6	5	14	<1	<1	--	--	--	--
	06/05/12	--	40.78	--	312.97	990	--	--	--	<1	2.5	11	28	<1	--	--	--	--	--
	09/12/12	--	42.09	--	311.66	1,200	--	--	--	2.0	2.9	8.5	28	<1	--	--	--	--	--
	12/05/12	--	42.02	--	311.73	1,000	--	--	--	0.45	<1	17	41	<1	<1	--	--	--	--
	02/28/13	--	37.90	--	315.85	4,700	--	--	--	1.9	2.0	150	551	<1	--	--	--	--	--
	06/24/13	--	--	--	--	Not sampled or gauged due to remediation system offline for repairs.													
	07/12/13	--	--	--	--	240	--	--	--	<0.35	<1	1.1	3.9	<1	<1	<1	--	--	--
	09/03/13	--	NM [11]	--	NM [11]	130	--	--	--	<1	<1	1.1	<3	<1	--	--	--	--	--
	12/03/13	--	43.38		310.37	1,400	--	--	--	<0.35	<1	7.3	31.2	<1	--	--	--	--	--
	03/30/14	--	42.63		311.12	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
MW85	10/11/10	WELL DAMAGED DURING INSTALLATION; REPAIRED ON NOVEMBER 28, 2011																	
TOC: 351.28	03/06/12	--	40.48	--	310.80	<100	--	--	--	3.1	<1	<1	<3	<1	<1	--	--	<1	<1
	06/05/12	--	38.25	--	313.03	<100	--	--	--	1.8	<1	<1	<3	<1	--	--	--	--	--
	09/11/12	--	39.83	--	311.45	<100	--	--	--	1.4	<1	<1	<3	<1	--	--	--	--	--
	12/04/12	--	39.73	--	311.55	<100	--	--	--	<0.35	<1	<1	<3	<1	<1	--	--	--	--
	02/19/13	--	35.44	--	315.84	<100	--	--	--	0.46	<1	<1	<3	<1	--	--	--	--	--
	06/25/13	--	37.21	--	314.07	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	09/04/13	--	39.78	--	311.50	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	12/03/13	--	41.18		310.10	<100	--	--	--	<0.35	<1	<1	<3	<1	--	--	--	--	--
	04/01/14	--	39.87		311.41	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
MW86	10/12/10	--	41.89	--	310.83	1,100	130 [x]	<250	--	1.9	<1	<1	<2	<1	<1	<1	--	<1	<1
TOC: 352.72	03/06/12	--	42.02	--	310.70	140	--	--	--	3.8	<1	<1	<3	<1	<1	--	--	--	--
	06/05/12	--	39.74	--	312.98	130	--	--	--	1.1	<1	<1	<3	<1	--	--	--	--	--
	09/11/12	--	41.24	--	311.48	1,600	--	--	--	2.6	5.8	3.1	4.5	<1	--	--	--	--	--
	12/04/12	--	41.12	--	311.60	860	--	--	--	0.77	<1	1.7	4.6	<1	<1	--	--	--	--
	02/19/13	--	36.95	--	315.77	<100	--	--	--	1.1	<1	<1	<3	<1	--	--	--	--	--
	06/25/13	--	38.69	--	314.03	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	09/04/13	--	41.20	--	311.52	1,100	--	--	--	1.9	3.7	1.7	3.6	<1	--	--	--	--	--
	12/03/13	--	42.70	--	310.02	790	--	--	--	0.71	<1	<1	<3	<1	--	--	--	--	--
	04/01/14	--	41.22	--	311.50	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (μg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9]	
																		Total	Dissolved
MW87	10/12/10	--	39.03	--	310.69	<100	<50	<250	--	<0.35	<1	<1	<2	<1	<1	<1	--	<1	<1
TOC: 349.72	03/06/12	--	38.89	--	310.83	<100	--	--	--	<1	<1	<1	<3	<1	<1	--	--	--	--
	06/04/12	--	36.92	--	312.80	not sampled; gauged only													
	09/10/12	--	38.53	--	311.19	not sampled; gauged only													
	12/03/12	--	38.46	--	311.26	not sampled; gauged only													
	02/19/13	--	34.10	--	315.62	<100	--	--	--	<0.35	<1	<1	<3	<1	--	--	--	--	--
	06/24/13	--	36.10	--	313.62	not sampled; gauged only													
	09/03/13	--	38.54	--	311.18	not sampled; gauged only													
	12/02/13	--	39.77	--	309.95	not sampled; gauged only													
	03/27/14	--	38.17	--	311.55	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
MW88	10/12/10	--	22.11	--	329.52	<100	<50	<250	--	<0.35	<1	<1	<2	<1	<1	<1	--	<1	<1
TOC: 351.63	03/06/12	--	14.91	--	336.72	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/04/12	--	15.13	--	336.50	not sampled; gauged only													
	09/10/12	--	20.05	--	331.58	not sampled; gauged only													
	12/03/12	--	19.04	--	332.59	not sampled; gauged only													
	02/19/13	--	9.74	--	341.89	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	16.45	--	335.18	not sampled; gauged only													
	09/03/13	--	20.38	--	331.25	not sampled; gauged only													
	12/02/13	--	22.83	--	328.80	not sampled; gauged only													
	03/27/14	--	18.54	--	333.09	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MW89	10/12/10	--	42.66	--	311.20	<100	<50	<250	--	<0.35	<1	<1	<2	<1	<1	<1	--	<1	<1
TOC: 353.86	03/06/12	--	42.89	--	310.97	<100	--	--	--	<1	<1	<1	<3	<1	<1	--	--	--	--
	06/05/12	--	40.51	--	313.35	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	09/11/12	--	42.08	--	311.78	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	12/04/12	--	42.12	--	311.74	<100	--	--	--	<0.35	<1	<1	<3	<1	<1	--	--	--	--
	02/19/13	--	37.69	--	316.17	<100	--	--	--	<0.35	<1	<1	<3	<1	--	--	--	--	--
	06/25/13	--	39.31	--	314.55	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	09/04/13	--	42.09	--	311.77	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
	12/03/13	--	43.26	--	310.60	<100	--	--	--	<0.35	<1	<1	<3	<1	--	--	--	--	--
	04/01/14	--	42.07	--	311.79	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

Stantec

<u>TABLE 2</u>

Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L) GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9] Total	Lead[9] Dissolved
MW90	03/05/12	24.66	24.75	0.09	338.19	LNAPL													
TOC: 362.87	06/04/12	22.19	22.33	0.14	340.65	LNAPL													
	09/10/12	24.80	25.18	0.38	337.99	LNAPL													
	12/03/12	--	28.69	--	334.18	not sampled; gauged only													
	02/28/13	19.05	19.10	0.05	343.81	30,000	--	--	--	27	1,900	770	5,500	--	--	--	--	1.19	<1
	06/24/13	--	34.65	--	328.22	not sampled; gauged only													
	09/03/13	--	34.96	--	327.91	not sampled; gauged only													
	12/02/13	--	NM (12)	--	NM (12)	not sampled; gauged only													
	03/30/14	--	23.19	--	339.68	18,000	--	--	--	10	990	210	3,500	--	--	--	--	4.08	<1
MW91	03/08/12	--	24.87	--	337.80	15,000	--	--	--	36	95	410	3,100	--	--	--	--	15.9	<1
TOC: 362.67	06/04/12	23.49	23.50	0.01	339.18	LNAPL													
	09/10/12	26.29	26.48	0.19	336.34	LNAPL													
	12/03/12	--	26.64	--	336.03	not sampled; gauged only													
	02/28/13	--	19.58	--	343.09	22,000	--	--	--	41	380	750	5,400	--	--	--	--	3.01	<1
	06/24/13	--	32.33	--	330.34	not sampled; gauged only													
	09/03/13	--	32.62	--	330.05	not sampled; gauged only													
	12/02/13	--	32.61	--	330.06	not sampled; gauged only													
	03/30/14	--	22.64	--	340.03	2,200	--	--		<1	51	33	270	--	--	--	--	5.35	<1
MW92	03/06/12	--	45.45	--	312.46	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	4.19	<1
TOC: 357.91	06/04/12	--	42.95	--	314.96	not sampled; gauged only													
	09/10/12	--	41.12	--	316.79	not sampled; gauged only													
	12/03/12	--	44.61	--	313.30	not sampled; gauged only													
	02/28/13	--	39.78	--	318.13	<100	--	--	--	1.1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	44.45	--	313.46	not sampled; gauged only													
	09/03/13	--	44.71	--	313.20	not sampled; gauged only													
	12/02/13	--	NM (12)	--	NM (12)	not sampled; gauged only													
	03/26/14	--	44.3	--	313.61	<100	--	--	--	1.1	<1	<1	<3	--	--	--	--	--	--
MW93	03/06/12	--	43.00	--	312.97	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	5.60	<1
TOC: 355.97	06/04/12	--	40.64	--	315.33	not sampled; gauged only													
	09/10/12	--	Dry	--	Dry	not sampled; gauged only													
	12/03/12	--	41.83	--	314.14	not sampled; gauged only													
	02/28/13	--	37.76	--	318.21	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
	06/24/13	--	41.18	--	314.79	not sampled; gauged only													
	09/03/13	--	41.91	--	314.06	not sampled; gauged only													
	12/02/13	--	NM (12)	--	NM (12)	not sampled; gauged only													
	03/26/14	--	NM (12)	--	NM (12)	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2

Summary of Historical Groundwater Elevation and Quality Results

June 1992 - April 2014

TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9] Total	Lead[9] Dissolved
MW94	03/06/12	--	45.13	--	312.81	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	<1	<1
TOC: 357.94	06/04/12	--	43.22	--	314.72	not sampled; gauged only													
	09/10/12	--	Dry	--	Dry	not sampled; gauged only													
	12/03/12	--	39.83	--	318.11	not sampled; gauged only													
	02/28/13	--	38.16	--	319.78	<100	--	--	--	8.9	1.1	<1	<3	--	--	--	--	--	--
	06/24/13	--	NM [12]	--	NM [12]	not sampled; gauged only													
	09/03/13	--	NM [12]	--	NM [12]	not sampled; gauged only													
	12/02/13	--	NM [12]	--	NM [12]	not sampled; gauged only													
	03/26/14	--	NM [12]	--	NM [12]	Not sampled due to insufficient water to fill sample containers (noted as "dry").													
MW95	03/07/12	--	42.95	--	311.72	<100	--	--	--	<1	<1	<1	<3	<1	<1	--	--	2.74	<1
TOC: 354.67	06/04/12	--	40.56	--	314.11	not sampled; gauged only													
	09/10/12	--	42.70	--	311.97	not sampled; gauged only													
	12/03/12	--	42.42	--	312.25	not sampled; gauged only													
	02/28/13	--	37.92	--	316.75	<100	--	--	--	<0.35	<1	<1	<3	<1	--	--	--	--	--
	06/24/13	--	39.60	--	315.07	not sampled; gauged only													
	09/03/13	--	41.97	--	312.70	not sampled; gauged only													
	12/02/13	--	43.97	--	310.70	not sampled; gauged only													
	03/28/14	--	43.35	--	311.32	330	--	--	--	<1	<1	<1	36	<1	--	--	--	--	--
MW96	03/07/12	--	44.01	--	311.99	<100	--	--	--	<1	<1	<1	<3	<1	<1	--	--	11.4	<1
TOC: 356.00	06/04/12	--	41.44	--	314.56	not sampled; gauged only													
	09/10/12	--	45.50	--	310.50	not sampled; gauged only													
	12/03/12	--	42.19	--	313.81	not sampled; gauged only													
	02/28/13	--	37.59	--	318.41	240	--	--	--	6.0	<1	<1	54	<1	--	--	--	--	--
	06/24/13	--	40.63	--	315.37	not sampled; gauged only													
	09/03/13	--	47.44	--	308.56	not sampled; gauged only													
	12/02/13	--	NM [12]	--	NM [12]	not sampled; gauged only													
	03/28/14	--	43.25	--	312.75	200	--	--	--	3.6	1	8	34.0	<1	--	--	--	--	--
MW97	03/07/12	--	43.18	--	311.11	420	--	--	--	9.4	<1	<1	3.4	<1	<1	--	--	2.07	<1
TOC: 354.29	06/04/12	--	40.79	--	313.50	not sampled; gauged only													
	09/10/12	--	42.06	--	312.23	not sampled; gauged only													
	12/03/12	--	41.83	--	312.46	not sampled; gauged only													
	02/28/13	--	37.62	--	316.67	110	--	--	--	1.7	<1	<1	<3	<1	--	--	--	--	--
	06/24/13	--	39.23	--	315.06	not sampled; gauged only													
	09/03/13	--	41.43	--	312.86	not sampled; gauged only													
	12/02/13	--	NM [12]	--	NM [12]	not sampled; gauged only													
	03/28/14	--	42.35	--	311.94	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	--	--
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

Stantec

TABLE 2
Summary of Historical Groundwater Elevation and Quality Results
June 1992 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9] Total	Lead[9] Dissolved
MW98	03/08/11	--	43.04	--	311.71	**3,800**	--	--	--	**13**	4.6	56	130	<1	<1	--	--	1.87	<1
TOC: 354.75	06/04/12	--	40.73	--	314.02	not sampled; gauged only													
	09/10/12	--	43.30	--	311.45	not sampled; gauged only													
	12/03/12	--	42.27	--	312.48	not sampled; gauged only													
	02/28/13	--	38.03	--	316.72	**810**	--	--	--	**7.6**	1.5	13	45	<1	--	--	--	--	--
	06/24/13	--	39.65	--	315.10	not sampled; gauged only													
	09/03/13	--	41.89	--	312.86	not sampled; gauged only													
	12/02/13	--	43.49	--	311.26	not sampled; gauged only													
	03/30/14	--	42.46	--	312.29	<100	--	--	--	2.1	<1	<1	<3	<1	--	--	--	--	--
MW99	03/06/12	--	42.47	--	311.11	<100	--	--	--	2.1	<1	<1	<3	<1	<1	--	--	1.08	<1
TOC: 353.58	06/04/12	--	40.45	--	313.13	not sampled; gauged only													
	09/10/12	--	Dry	--	Dry	not sampled; gauged only													
	12/03/12	--	38.04	--	315.54	not sampled; gauged only													
	02/28/13	--	37.48	--	316.10	<100	--	--	--	<0.35	<1	<1	<3	<1	--	--	--	--	--
	06/24/13	--	NM [12]	--	NM [12]	not sampled; gauged only													
	09/03/13	--	NM [12]	--	NM [12]	not sampled; gauged only													
	12/02/13	--	NM [12]	--	NM [12]	not sampled; gauged only													
	03/31/14	--	NM [12]	--	NM [12]	Not sampled due to insufficient water to fill sample containers (noted as "dry").													
MW100	03/06/12	--	15.73	--	340.02	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	**50.6**	1.15
TOC: 355.75	06/04/12	--	15.61	--	340.14	not sampled; gauged only													
	09/10/12	--	19.18	--	336.57	not sampled; gauged only													
	12/03/12	--	17.48	--	338.27	not sampled; gauged only													
	02/19/13	--	11.45	--	344.30	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	<1	<1
	06/24/13	--	16.15	--	339.60	not sampled; gauged only													
	09/03/13	--	19.73	--	336.02	not sampled; gauged only													
	12/02/13	--	25.36	--	330.39	not sampled; gauged only													
	03/23/14	--	14.05	--	341.70	<100	--	--	--	<1	<1	<1	<3	--	--	--	--	<1	<1
MW101	03/06/12	--	40.90	--	311.15	<100	--	--	--	<1	<1	<1	<3	<1	<1	--	--	**22.6**	<1
TOC: 352.05	06/04/12	--	38.99	--	313.06	not sampled; gauged only													
	09/10/12	--	40.54	--	311.51	not sampled; gauged only													
	12/03/12	--	43.95	--	308.10	not sampled; gauged only													
	02/28/13	--	36.11	--	315.94	<100	--	--	--	<0.35	<1	<1	<3	<1	--	--	--	**20.3**	1.45
	06/24/13	--	37.66	--	314.39	not sampled; gauged only													
	09/03/13	--	39.98	--	312.07	not sampled; gauged only													
	12/02/13	--	NM [12]	--	NM [12]	not sampled; gauged only													
	03/30/14	--	40.36	--	311.69	<100	--	--	--	<1	<1	<1	<3	<1	--	--	--	<1	<1
MW102	07/12/13	--	14.7	--	337.69	**180,000**	**8,400** (x)	<250	--	**9,600**	**48,000**	**3,100**	**20,100**	**52**	**120**	<1	**0.88** (ve)	**15.6**	**16.7**
TOC: 352.39	03/30/14	--	16.92	1.63	336.77	See Table 4 for sample results.													
MW103	07/12/13	--	40.56	--	311.65	**2,900**	**1,500** (x)	<250	--	**1,400**	64	100	240	**260**	**37**	<1	**0.094**	3.16	3.34
TOC: 352.21	04/03/14	--	43.27	--	308.94	<100	<50	<250	--	<1	<1	<1	<3	<1	<1	<1	<0.01	2.76	<1
MW104	07/12/13	--	12.62	--	340.38	**58,000**	**11,000** (x)	320 (x)	--	**17**	**3,200**	**2,600**	**14,600**	<1	<1	<1	**0.034**	<1	<1
353.00	04/01/14	--	10.48	--	342.52	**35,000**	**14,000** (x)	830 (x)	--	**78**	**4,700**	**1,100**	**4,400**	<1	<1	<1	**0.19** (ca)	<1	<1
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

TABLE 2

Summary of Historical Groundwater Elevation and Quality Results

June 1992 - April 2014

TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Sample Date[1]	Depth to LNAPL[2] (feet)	Depth to Groundwater[2] (feet)	LNAPL Thickness[3] (feet)	Groundwater Elevation[4] (feet)	Analytical Results (µg/L)													
						GRPH[5]	DRPH[6]	ORPH[6]	TRPH[6]	Benzene[7]	Toluene[7]	Ethyl-benzene[7]	Total Xylenes[7]	MTBE[7]	EDC[7]	EDB[7]	EDB[8]	Lead[9] Total	Lead[9] Dissolved
MW105	07/12/13	--	39.83	--	313.22	<100	<50	<250	--	<0.35	<1	<1	<3	<1	<1	<1	<0.01	<1	<1
TOC: 353.05	03/25/14	--	42.26	--	310.79	Not sampled due to insufficient water to fill sample containers (noted as "dry").													
MW106	07/12/13	--	14.54	--	334.70	<100	140 [x]	<250	--	<0.35	<1	<1	<3	<1	<1	<1	<0.01	<1	<1
TOC: 349.24	04/02/14	--	8.67	--	340.57	<100	250 [x]	<250	--	<1	<1	<1	<3	<1	<1	<1	<0.01	<1	<1
MW107	07/12/13	--	37.41	--	312.15	<100	62 [x]	<250	--	0.52	<1	<1	<3	<1	<1	<1	<0.01	<1	<1
TOC: 349.56	04/02/14	--	39.16	--	310.40	<100	93 [x]	<260	--	<1	<1	<1	<3	<1	<1	<1	<0.01	<1	<1
MTCA Method A Cleanup Levels for Groundwater[14]						**800/1,000[15]**	**500**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**5**	**0.01**	**0.01**	**15**	**15**

NOTES:

Red denotes concentration exceeds MTCA Method A cleanup levels for groundwater.

Data collected since December 2005; laboratory analysis by Friedman & Bruya, Inc. of Seattle WA.

Data collected from September-December 2005; laboratory analysis by North Creek Analytical, Inc. of Bothell WA.

Data collected prior to July 8, 2005 provided by previous consultants.

According to SoundEarth Strategies, Inc., the LNAPL/groundwater level measurements had been corrected for differences between instruments based on the measurements recorded for MW09.

(1) The recorded date is the date of the groundwater quality sampling. However, if the well was not sampled, the date recorded is the water level measurement date.

(2) LNAPL/groundwater level as measured from a marked measuring point on the well casing rim.

(3) Calculated by subtracting the depth to LNAPL from the depth to groundwater.

(4) 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 gasoline, and 1.0 for groundwater.

(5) Analyzed by WTPH-G between 1992 and 2002, and Method NWTPH-Gx since 2004.

(6) Analyzed by Method NWTPH-Dx.

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

(8) Analyzed by EPA Method 8011.

(9) Analyzed by EPA Method 200.8.

(10) MW09 was sampled using three different methods. The highest reported concentrations are included in this table starting with the 2013 sampling events.

(11) During measurement, TP was encountered prior to LNAPL/groundwater level.

(12) Unable to gauge 2-inch well (probe diameter too large to fit past pump tubing).

(13) Insufficient recharge to fill specified sample containers.

(14) MTCA Method A cleanup levels, Table 720-1 of Section 900 of Chapter 173-340 of the WAC, revised November 2007.

(15) 800 µg/L when benzene is present and 1,000 µg/L when benzene is not present.

LABORATORY NOTES:

(ca) The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

(j) The result is below normal reporting limits. The value reported is 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.

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

DEFINITIONS:

-- = not applicable

< = not detected at concentration exceeding laboratory reporting limit

µg/L = micrograms per liter

DRPH = diesel-range petroleum hydrocarbons

Dry = groundwater not encountered in well

EDB = ethylene dibromide (1,2-dibromoethane)

EDC = ethylene dichloride (1,2-dicholoroethane)

EPA = U.S. Environmental Protection Agency

GRPH = gasoline-range petroleum hydrocarbons

LNAPL = light non-aqueous phase liquid

MTBE = methyl tertiary-butyl ether

MTCA = Model Toxics Control Act

MW = monitoring well

NA = not applicable per referenced footnote number

NAVD88 = North American Vertical Datum of 1988

NE = cleanup level not established for indicated compound

NM = not measured

NWTPH-Dx = Northwest Total Petroleum Hydrocarbon - diesel-range organics

NWTPH-Gx = Northwest Total Petroleum Hydrocarbon - gasoline-range organics

NWTPH-Dx = Northwest Total Petroleum Hydrocarbon - diesel-range organics

Sheen = iridescence on water surface indicative of LNAPL

TOC = top of casing (monitoring wells decommissioned before 2005 from previous consultants)

TP = top of pump

Trace = less than 0.01 of measurable LNAPL

TRPH = total recoverable petroleum hydrocarbons

WAC = Washington Administrative Code

WTPH-G = Washington Total Petroleum Hydrocarbon - gasoline-range organics

TABLE 3
Summary of Historical Groundwater Quality Results
Common Fuel Additives and Blending Compounds
September 2005 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Property	Sample Date	Oxygenates (µg/L)						Lead Scavengers (µg/L)		
			Ethanol[1]	TBA[1]	MTBE[1]	ETBE[1]	TAME[1]	DIPE[1]	EDC[1]	EDB[1]	EDB[2]
MW01	TOC	09/26/05	<150	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	—
		12/20/05	<1,000	<200	<1	<1	<1	<1	<1	<1	—
		02/24/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		08/24/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		D E C O M M I S S I O N E D									
MW02	TOC	12/21/05	<1,000	<200	<1	<1	<1	<1	<1	<1	—
		02/23/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		08/23/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		03/04/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW03	TOC	09/27/05	<150	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	—
		02/22/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		08/23/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		03/04/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW04	ROW (56th)	02/22/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		08/23/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		03/02/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW05	ROW (242nd)	09/27/05	<150	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	—
		02/22/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		03/02/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW06	TOC	09/26/05	<150	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	—
		02/24/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		03/04/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW07	TOC/Farmasonis	D E C O M M I S S I O N E D									
MW08	ROW (56th)	02/22/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		08/23/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		03/02/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW09	TOC	09/27/05	<150	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	—
		02/23/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		08/24/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		03/04/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW10	TOC	09/26/05	<150	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	—
		12/20/05	<1,000	<200	<1	<1	<1	<1	<1	<1	—
		02/24/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		08/24/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		03/04/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW11	TOC	09/27/05	<150	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	—
		12/21/05	<1,000	<200	<1	<1	<1	<1	<1	<1	—
		02/22/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		08/23/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		03/04/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW12	ROW (56th)	09/26/05	<150	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	—
		02/23/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		08/23/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		03/02/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW13	ROW (56th)	02/02/06	<1,000	<50	<1	<1	<1	<1	3.5	<1	—
		03/04/10	<1,000	<50	<1	<1	<1	<1	1.7	<1	—
MW14	TOC/Farmasonis	D E C O M M I S S I O N E D									
MW15	TOC	03/01/10	LNAPL								
MW16	ROW (242nd)	03/02/10	<1,000	<50	<1	<1	<1	<1	<1	<1	--
MW17	TOC/Farmasonis	D E C O M M I S S I O N E D									
MTCA Method A[3]			**NE**	**NE**	**20**	**NE**	**NE**	**NE**	**5**	**0.01**	**0.01**

TABLE 3
Summary of Historical Groundwater Quality Results
Common Fuel Additives and Blending Compounds
September 2005 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Property	Sample Date	Oxygenates (µg/L)						Lead Scavengers (µg/L)		
			Ethanol(1)	TBA(1)	MTBE(1)	ETBE(1)	TAME(1)	DIPE(1)	EDC(1)	EDB(1)	EDB(2)
MW18	TOC	03/04/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW19	TOC	02/24/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		08/24/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		03/04/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW20	TOC	12/20/05	<1,000	<200	<1	<1	<1	<1	<1	<1	—
		02/23/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		03/04/10	<1,000	<50	<1	<1	<1	<1	<5	<1	—
MW21	TOC	09/26/05	<150	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	—
		12/20/05	<1,000	<200	<1	<1	<1	<1	<1	<1	—
		02/23/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		08/23/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		03/04/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW22	TOC	09/26/05	<150	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	—
		12/20/05	<1,000	<200	<1	<1	<1	<1	<1	<1	—
		02/24/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		08/24/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		03/04/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW23	TOC	02/23/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		03/04/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW24	TOC	09/27/05	<150	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	—
		02/22/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		08/23/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		02/03/09	—	—	<1	—	—	—	—	—	—
		07/30/09	—	<50	<1	<1	<1	<1	<1	<1	—
		03/04/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW25	TOC	09/27/05	<150	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	—
		12/21/05	<1,000	<200	<1	<1	<1	<1	<5	<1	—
		02/23/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		08/24/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		03/04/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW26	TOC	12/21/05	<1,000	<200	<1	<1	<1	<1	<1	<1	—
		02/23/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		08/24/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		03/04/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW27	TOC	12/20/05	<1,000	<200	<1	<1	<1	<1	<1	<1	—
		02/22/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		03/04/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW28	TOC	12/20/05	<1,000	<200	<1	<1	<1	<1	<1	<1	—
		02/24/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		03/04/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW29	TOC	02/23/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		03/04/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MTCA Method A(3)			**NE**	**NE**	**20**	**NE**	**NE**	**NE**	**5**	**0.01**	**0.01**

TABLE 3
Summary of Historical Groundwater Quality Results
Common Fuel Additives and Blending Compounds
September 2005 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Property	Sample Date	Oxygenates (µg/L)						Lead Scavengers (µg/L)		
			Ethanol(1)	TBA(1)	MTBE(1)	ETBE(1)	TAME(1)	DIPE(1)	EDC(1)	EDB(1)	EDB(2)
MW30	TOC/Farmasonis	12/15/05	<1,000	<200	<1	<1	<1	<1	—	—	—
		02/23/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		08/24/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		03/03/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW31	TOC/Farmasonis	12/15/05	<20,000	<4,000	<20	<20	<20	<20	—	—	—
		02/23/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		08/24/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		07/29/09	—	<50	<1	<1	<1	<1	1.7	<1	—
		03/03/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW32	TOC	12/20/05	<1,000	<200	<1	<1	<1	<1	<1	<1	—
		02/23/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		03/04/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW33	TOC	02/10/06	<1,000	<50	<1	<1	<1	<1	<1	<1	—
		03/04/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW34	TOC	01/27/06	<1,000	<50	<1	<1	<1	<1	<1	<1	—
		08/23/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		03/04/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW35	TOC	01/27/06	<1,000	<50	<1	<1	<1	<1	<1	<1	—
		03/04/10	—	—	—	—	—	—	—	—	—
MW36	TOC	01/27/06	<1,000	<50	<1	<1	<1	<1	<1	<1	—
		08/24/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		03/04/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW37	TOC	01/27/06	<1,000	<50	<1	<1	<1	<1	<1	<1	—
		08/24/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		03/04/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW38	TOC	01/27/06	<1,000	<50	<1	<1	<1	<1	<1	<1	—
		08/23/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		03/04/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW39	TOC/Farmasonis	02/02/06	<1,000	<50	<1	<1	<1	<1	<1	<1	—
		08/24/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		03/03/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW40	TOC/Farmasonis	08/24/06	<1,000	<50	<1	<1	<1	<1	—	—	—
		03/03/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW41	TOC/Farmasonis	03/04/10	DRY								
MW42	TOC/Farmasonis	03/04/10	DRY								
MW43	ROW (56th)	03/04/10	DRY								
MW44	ROW (56th)	03/04/10	DRY								
MW45	ROW (56th)	08/24/06	<1,000	<50	<1	<1	<1	<1	—	—	—
	ROW (56th)	03/02/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW46	ROW (56th)	03/03/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW47	ROW (56th)	03/04/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW48	ROW (56th)	03/01/10	LNAPL								
MW49	ROW (56th)	03/04/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW50	ROW (56th)	03/02/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW51	ROW (56th)	03/02/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
	ROW (56th)	10/12/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW52	ROW (56th)	03/02/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MTCA Method A(3)			**NE**	**NE**	**20**	**NE**	**NE**	**NE**	**5**	**0.01**	**0.01**

TABLE 3
Summary of Historical Groundwater Quality Results
Common Fuel Additives and Blending Compounds
September 2005 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Property	Sample Date	Oxygenates (µg/L)						Lead Scavengers (µg/L)		
			Ethanol(1)	TBA(1)	MTBE(1)	ETBE(1)	TAME(1)	DIPE(1)	EDC(1)	EDB(1)	EDB(2)
MW53	ROW (56th)	03/03/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW54	TOC/Farmasonis	03/03/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW55	ROW (56th)	03/04/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW56	TOC/Farmasonis	02/03/09	—	—	<1	—	—	—	—	—	—
		03/03/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW57	TOC/Farmasonis	03/03/10	<1,000	<50	<1	<1	<1	<1	2.9	<1	—
MW58	TOC/Farmasonis	03/03/10	<1,000	<50	<1	<1	<1	<1	2.4	<1	—
MW59	TOC/Farmasonis	02/03/09	—	—	<1	—	—	—	—	—	—
		03/03/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW60	ROW (56th)	03/04/10	<1,000	<50	<1	<1	<1	<1	1.1	<1	—
MW61	ROW (56th)	03/04/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW62	ROW (56th)	03/03/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW63	ROW (56th)	03/02/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW64	ROW (56th)	03/02/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW65	Drake	02/03/09	—	—	<1	—	—	—	—	—	—
		03/02/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
		03/07/12	—	—	<1	—	—	—	<1	—	—
		06/05/12	—	—	<1	—	—	—	—	—	—
		09/11/12	—	—	<1	—	—	—	—	—	—
		12/05/12	—	—	<1	—	—	—	<1	—	—
		02/19/13	—	—	<1	—	—	—	—	—	—
		06/25/13	—	—	<1	—	—	—	—	—	—
		09/04/13	—	—	<1	—	—	—	—	—	—
		12/03/13	—	—	<1	—	—	—	—	—	—
		04/01/14	—	—	<1	—	—	—	—	—	—
MW66	TOC/Farmasonis	03/03/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW67	Drake	03/01/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW68	Drake	03/01/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW69	Drake	02/03/09	—	—	<1	—	—	—	—	—	—
		07/30/09	—	<50	<1	<1	<1	<1	<1	<1	—
		03/02/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
		03/06/12	—	—	<1	—	—	—	<1	—	—
		06/05/12	—	—	<1	—	—	—	—	—	—
		09/12/12	—	—	<1	—	—	—	—	—	—
		12/04/12	—	—	<1	—	—	—	<1	—	—
		02/28/13	—	—	<1	—	—	—	—	—	—
MW70	Drake	02/03/09	—	—	<1	—	—	—	—	—	—
		03/02/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
		03/06/12	—	—	<1	—	—	—	<1	—	—
		06/05/12	—	—	<1	—	—	—	—	—	—
		09/12/12	—	—	<1	—	—	—	—	—	—
		12/04/12	—	—	<1	—	—	—	<1	—	—
		02/28/13	—	—	<1	—	—	—	—	—	—
		09/04/13	—	—	<1	—	—	—	—	—	—
MW71	Shin/Choi	10/9/2008	<50,000	<2,500	<50	<50	<50	<50	<50	<50	—
		03/01/10	LNAPL								
MTCA Method A(3)			**NE**	**NE**	**20**	**NE**	**NE**	**NE**	**5**	**0.01**	**0.01**

TABLE 3
Summary of Historical Groundwater Quality Results
Common Fuel Additives and Blending Compounds
September 2005 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Property	Sample Date	Oxygenates (µg/L)						Lead Scavengers (µg/L)		
			Ethanol[(1)]	TBA[(1)]	MTBE[(1)]	ETBE[(1)]	TAME[(1)]	DIPE[(1)]	EDC[(1)]	EDB[(1)]	EDB[(2)]
MW72	Shin/Choi	10/9/2008	<10,000	<500	<10	<10	<10	<10	<10	<10	—
		07/29/09	—	<50	<1	<1	<1	<1	<1	**1.4**	—
		03/01/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW73	Shin/Choi	10/9/2008	<10,000	<500	**190**	<10	<10	<10	<10	<10	—
		07/29/09	—	<50	**71**	<1	<1	<1	<1	<1	—
		03/01/10	<1,000	<50	**120**	<1	<1	<1	<1	<1	—
MW74	Shin/Choi	03/01/10	<1,000	130	**720**	<1	<1	<1	<1	<1	—
MW75	ROW (56th)	11/07/08	<1,000	<50	<1	<1	<1	<1	<1	<1	—
		03/02/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW76	Drake	02/03/09	—	—	<1	—	—	—	—	—	—
		03/01/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
		03/06/12	—	—	<1	—	—	—	<1	—	—
		02/19/13	—	—	<1	—	—	—	—	—	—
		03/27/14	—	—	<1	—	—	—	—	—	—
MW77	Drake	02/03/09	—	—	<1	—	—	—	—	—	—
		03/01/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
		10/12/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
		03/06/12	—	—	<1	—	—	—	<1	—	—
		06/05/12	—	—	<1	—	—	—	—	—	—
		09/11/12	—	—	<1	—	—	—	—	—	—
		12/04/12	—	—	<1	—	—	—	<1	—	—
		02/19/13	—	—	<1	—	—	—	—	—	—
		06/25/13	—	—	<1	—	—	—	—	—	—
		09/04/13	—	—	<1	—	—	—	—	—	—
		12/04/13	—	—	<1	—	—	—	—	—	—
		03/27/14	—	—	<1	—	—	—	—	—	—
MW78	Drake	02/03/09	—	—	<1	—	—	—	—	—	—
		03/01/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
		03/06/12	—	—	<1	—	—	—	<1	—	—
		02/19/13	—	—	<1	—	—	—	—	—	—
MW79	TOC/Farmasonis	07/08/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW80	TOC/Farmasonis	07/08/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW81	TOC/Farmasonis	07/08/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW82	TOC/Farmasonis	07/08/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW83	TOC/Farmasonis	07/08/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
		11/21/11	DECOMMISSIONED (REPLACED WITH MW100)								
MW84	Drake	10/12/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
		03/07/12	—	—	<1	—	—	—	<1	—	—
		06/05/12	—	—	<1	—	—	—	—	—	—
		09/12/12	—	—	<1	—	—	—	—	—	—
		12/05/12	—	—	<1	—	—	—	<1	—	—
		02/28/13	—	—	<1	—	—	—	—	—	—
		07/12/13	—	—	<1	—	—	—	<1	<1	—
		12/03/13	—	—	<1	—	—	—	—	—	—
		03/30/14	—	—	<1	—	—	—	—	—	—
MTCA Method A[(3)]			**NE**	**NE**	**20**	**NE**	**NE**	**NE**	**5**	**0.01**	**0.01**

TABLE 3
Summary of Historical Groundwater Quality Results
Common Fuel Additives and Blending Compounds
September 2005 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Property	Sample Date	Oxygenates (µg/L)						Lead Scavengers (µg/L)		
			Ethanol[1]	TBA[1]	MTBE[1]	ETBE[1]	TAME[1]	DIPE[1]	EDC[1]	EDB[1]	EDB[2]
MW85	Drake	10/11/10	WELL DAMAGED DURING INSTALLATION, REPAIRED ON 11/28/2011								
		03/06/12	—	—	<1	—	—	—	<1	—	—
		06/05/12	—	—	<1	—	—	—	—	—	—
		09/11/12	—	—	<1	—	—	—	—	—	—
		12/04/12	—	—	<1	—	—	—	<1	—	—
		02/19/13	—	—	<1	—	—	—	—	—	—
		06/25/13	—	—	<1	—	—	—	—	—	—
		09/04/13	—	—	<1	—	—	—	—	—	—
		12/03/13	—	—	<1	—	—	—	—	—	—
		04/01/14	—	—	<1	—	—	—	—	—	—
MW86	Drake	10/12/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
		03/06/12	—	—	<1	—	—	—	<1	—	—
		06/05/12	—	—	<1	—	—	—	—	—	—
		09/11/12	—	—	<1	—	—	—	—	—	—
		12/04/12	—	—	<1	—	—	—	<1	—	—
		02/19/13	—	—	<1	—	—	—	—	—	—
		06/25/13	—	—	<1	—	—	—	—	—	—
		09/04/13	—	—	<1	—	—	—	—	—	—
		12/03/13	—	—	<1	—	—	—	—	—	—
		04/01/14	—	—	<1	—	—	—	—	—	—
MW87	Drake	10/12/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
		03/06/12	—	—	<1	—	—	—	<1	—	—
		02/19/13	—	—	<1	—	—	—	—	—	—
		03/27/14	—	—	<1	—	—	—	—	—	—
MW88	Drake	10/12/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
MW89	Drake	10/12/10	<1,000	<50	<1	<1	<1	<1	<1	<1	—
		03/06/12	—	—	<1	—	—	—	<1	—	—
		06/05/12	—	—	<1	—	—	—	—	—	—
		09/11/12	—	—	<1	—	—	—	—	—	—
		12/04/12	—	—	<1	—	—	—	<1	—	—
		02/19/13	—	—	<1	—	—	—	—	—	—
		06/25/13	—	—	<1	—	—	—	—	—	—
		09/04/13	—	—	<1	—	—	—	—	—	—
		12/03/13	—	—	<1	—	—	—	—	—	—
		04/01/14	—	—	<1	—	—	—	—	—	—
MW95	Drake	03/07/12	—	—	<1	—	—	—	<1	—	—
		02/28/13	—	—	<1	—	—	—	—	—	—
		03/28/14	—	—	<1	—	—	—	—	—	—
MW96	Drake	03/07/12	—	—	<1	—	—	—	<1	—	—
		02/28/13	—	—	<1	—	—	—	—	—	—
		03/28/14	—	—	<1	—	—	—	—	—	—
MW97	Drake	03/07/12	—	—	<1	—	—	—	<1	—	—
		02/28/13	—	—	<1	—	—	—	—	—	—
		03/28/14	—	—	<1	—	—	—	—	—	—
MTCA Method A[3]			**NE**	**NE**	**20**	**NE**	**NE**	**NE**	**5**	**0.01**	**0.01**

TABLE 3
Summary of Historical Groundwater Quality Results
Common Fuel Additives and Blending Compounds
September 2005 - April 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Property	Sample Date	Oxygenates (µg/L)						Lead Scavengers (µg/L)		
			Ethanol[1]	TBA[1]	MTBE[1]	ETBE[1]	TAME[1]	DIPE[1]	EDC[1]	EDB[1]	EDB[2]
MW98	Drake	03/08/12	—	—	<1	—	—	—	<1	—	—
		02/28/13	—	—	<1	—	—	—	—	—	—
		03/30/14	—	—	<1	—	—	—	—	—	—
MW99	Drake	03/06/12	—	—	<1	—	—	—	<1	—	—
		02/28/13	—	—	<1	—	—	—	—	—	—
MW101	Drake	03/06/12	—	—	<1	—	—	—	<1	—	—
		02/28/13	—	—	<1	—	—	—	—	—	—
		03/30/14	—	—	<1	—	—	—	—	—	—
MW102	Herman	07/12/13	—	—	**52**	—	—	—	**120**	<1	**0.88** [ve]
MW103	Herman	07/12/13	—	—	**260**	—	—	—	**37**	<1	**0.094**
		04/03/14	—	—	<1	—	—	—	<1	<1	<0.01
MW104	Herman	07/12/13	—	—	<1	—	—	—	<1	<1	**0.034**
		04/01/14	—	—	<1	—	—	—	<1	<1	**0.19** [ca]
MW105	Herman	07/12/13	—	—	<1	—	—	—	<1	<1	<0.01
MW106	Herman	04/02/14	—	—	<1	—	—	—	<1	<1	<0.01
		07/12/13	—	—	<1	—	—	—	<1	<1	<0.01
MW107	Herman	04/02/14	—	—	<1	—	—	—	<1	<1	<0.01
		07/12/13	—	—	<1	—	—	—	<1	<1	<0.01
MTCA Method A[3]			**NE**	**NE**	**20**	**NE**	**NE**	**NE**	**5**	**0.01**	**0.01**

NOTES:

Red denotes concentration exceeds MTCA Method A cleanup levels for groundwater.
Data collected since December 2005; laboratory analysis by Friedman & Bruya, Inc. of Seattle WA.
Data collected from September-December 2005; laboratory analysis by North Creek Analytical, Inc. of Bothell WA.
Data collected prior to July 8, 2005 provided by previous consultants.
[1] Analyzed by EPA Method 8260C.
[2] Analyzed by EPA Method 8011.
[3] MTCA Method A cleanup levels, Table 720-1 of Section 900 of Chapter 173-340 of the WAC, revised November 2007.

LABORATORY NOTES:

[ca] The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.
[ve] Estimated concetration calculated for an analyte response above the valid instrument calibration range.
A duilution is required to obtain an accurate quantification of the analyte.

LIST OF PROPERTIES:

Drake = 24309 56th Avenue West, Mountlake Terrace WA
ROW (56th) = Right-of-Way located at 56th Avenue West, Mountlake Terrace WA
ROW (242nd) = Right-of-Way located at 242nd Street Southwest, Mountlake Terrace WA
TOC = 24205 56th Avenue West, Mountlake Terrace WA
TOC/Farmasonis = 24225 56th Avenue West, Mountlake Terrace WA
Herman = 24311 56th Avenue West, Mountlake Terrace WA
Shin/Choi = 24325 56th Avenue West, Mountlake Terrace WA

DEFINITIONS:

-- = not sampled/not analyzed
< = not detected at concentration exceeding laboratory reporting limit
µg/L = micrograms per liter
DIPE = diisopropyl ether
Dry = groundwater not encountered in well
EDB = ethylene dibromide (1,2-dibromoethane)
EDC = ethylene dichloride (1,2-dicholoroethane)
EPA = U.S. Environmental Protection Agency
ETBE = ethyl tertiary-butyl ether
LNAPL = light non-aqueous phase liquid
MTBE = methyl tertiary-butyl ether
MTCA = Model Toxics Control Act
MW = monitoring well
NAVD88 = North American Vertical Datum of 1988
NE = cleanup level not established for indicated compound
ROW = right-of-way
TAME = tertiary-amyl methyl ether
TBA = tertiary-butyl alcohol
WAC = Washington Administrative Code

TABLE 4
Summary of LNAPL Laboratory Results for Herman Property
March 2014
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Property	Date[1]	Sample Method	Groundwater Elevation[2] (feet)	Analytical Results (mg/kg)													
					DRPH[3]	ORPH[3]	GRPH[4]	Benzene[5]	Toluene[5]	Ethyl-benzene[5]	Total Xylenes[5]	MTBE[6]	EDB[4]	EDC[6]	EDB[6]	EDB[7]	Total Lead[8]	Dissolved Lead[8]
SHALLOW WATER-BEARING ZONE (0 TO 20 FEET BGS)																		
MW102	Herman	3/30/2014 (LNAPL)	Peristaltic Pump	336.77	270,000 (x)	<5,000	1,300,000	11,000	72,000 (ve)	26,000 (ve)	123,000 (ve)	--	--	--	--	--	53.1	--

NOTES:
Red denotes concentration exceeds MTCA Method A cleanup levels for groundwater.
Samples analyzed by Friedman & Bruya, Inc. of Seattle WA.
(1) Date sample was collected. The date of the groundwater elevation measurement could be different. (See Table 1)
(2) Elevations in feet above sea level (NAVD88 Datum) based on survey performed by PACE Engineers in April 2014.
(3) Analyzed by Method NWTPH-Dx.
(4) Analyzed by Method NWTPH-Gx.
(5) Analyzed by EPA Method 8021B.
(6) Analyzed by EPA Method 8260C.
(7) Analyzed by EPA Method 8011.
(8) Analyzed by EPA Method 200.8.

LABORATORY NOTES:
(ve) Estimated concetration calculated for an analyte response above the valid instrument calibration range. A duilution is required to obtain an accurate quantification of the analyte.
(X) The sample chromathographic pattern does not resemble the fule standard used for quantitation.

LIST OF PROPERTIES:
Herman = 24311 56th Avenue West, Mountlake Terrace WA

DEFINITIONS:
-- = not sampled/not analyzed
< = not detected at concentration exceeding laboratory reporting limit
BGS = below ground surface
DRPH = diesel-range petroleum hydrocarbons
EDB = ethylene dibromide (1,2-dibromoethane)
EDC = ethylene dichloride (1,2-dicholoroethane)
EPA = U.S. Environmental Protection Agency
GRPH = gasoline-range petroleum hydrocarbons
LNAPL = light non-aqueous phase liquid
mg/kg = milligram / kilogram
MTBE = methyl tertiary-butyl ether
MW = monitoring well
NAVD88 = North American Vertical Datum of 1988
NWTPH-Dx = Northwest Total Petroleum Hydrocarbon - diesel-range organics
NWTPH-Gx = Northwest Total Petroleum Hydrocarbon - gasoline-range organics
ORPH = oil-range petroleum hydrocarbons

List of Figures

X:\WA\Clients\Time_Oil\TOC-MountlakeTerrace_BA1402800\MXDs\WorkingMXDs\Figure1_ProjectLocation.mxd

Legend

Site Boundary

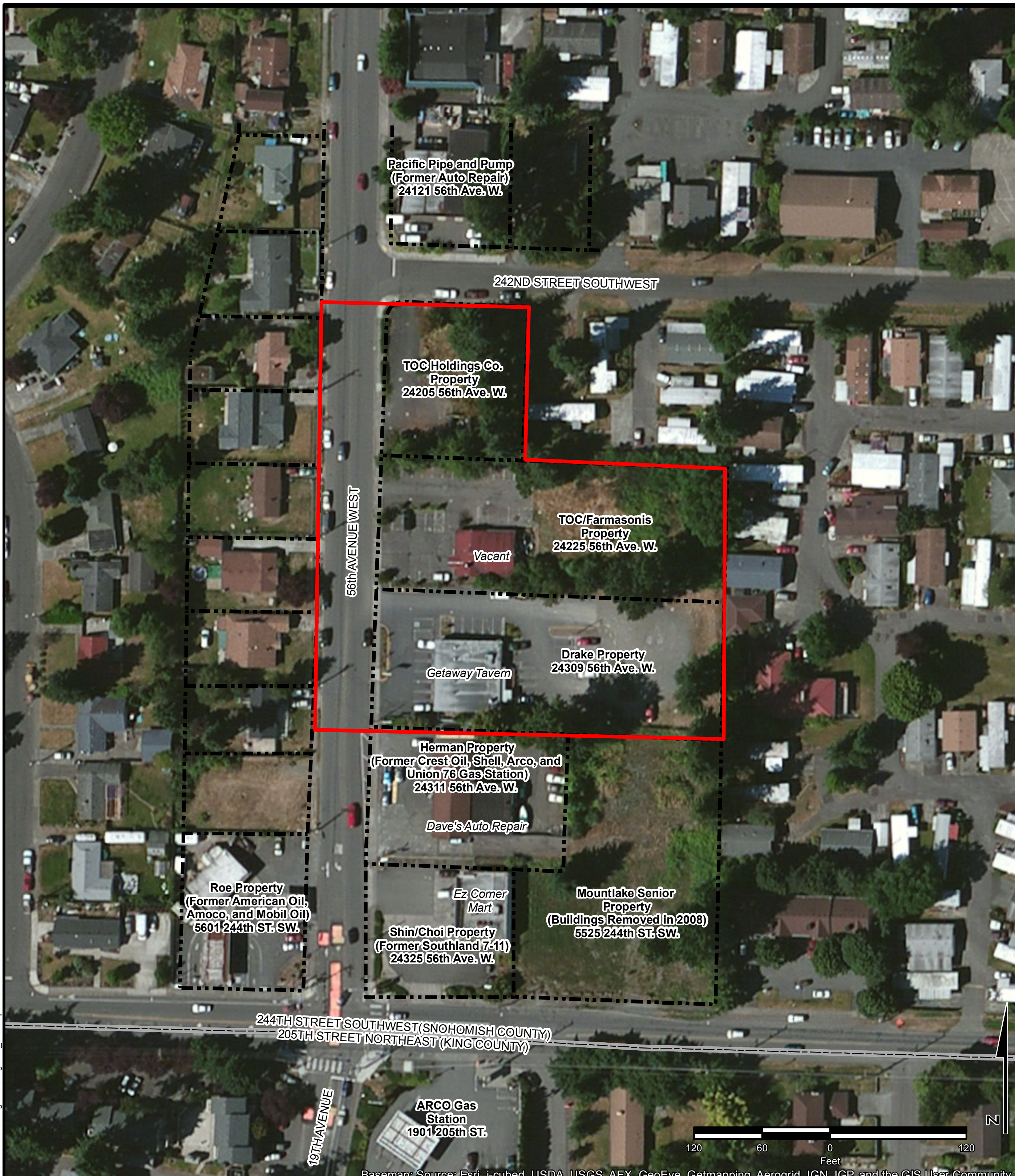
TOC Holdings Co. Facility 01-176
24205 56th Avenue West
Mountlake Terrace, Washington

FIGURE 1: PROJECT LOCATION

Stantec JBR

DRAWN BY	D.H.	DATE DRAWN	8/27/2014
SCALE	1 in = 0.05 miles		
PROJECT	203714085		

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



X:\WA\Clients\Time_Oil\TOC-MountlakeTerrace_BA1402800\MXDs\WorkingMXDs\Figure2_SiteMap.mxd

Legend

Site Boundary

PARCELS

TOC Holdings Co. Facility 01-176
24205 56th Avenue West
Mountlake Terrace, Washington

FIGURE 2: SITE MAP

Stantec JBR

DRAWN BY	D.H.	DATE DRAWN	8/27/2014
SCALE	1 in = 120 feet		
PROJECT	203714085		

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.

Legend

- Site Boundary
- Historic Pump Islands (Removed)
- Parcels
- Remediation System Piping
- Compound Fence
- Historic Excavation
- Historic UST Location

Monitoring Wells

- Abandoned Well
- Deep Well
- Intermediate Well
- Shallow Well

Washington

Project Location

TOC Holdings Co. Facility 01-176
24205 56th Avenue West
Mountlake Terrace, Washington

FIGURE 3: LOCATIONS OF WELLS AND REMEDIATION SYSTEMS

Stantec JBR

DRAWN BY	D.H.
DATE DRAWN	9/15/2014
SCALE	1 in = 50 ft
PROJECT	203714085

Path: X:\WA\Clients\Time_Oil\TOC-MountlakeTerrace_BA1402800\MXDs\WorkingMXDs\Figure3_SiteMap With Well Locations(11x17).mxd

Note:

1. Monitoring wells MW100, MW88, and MW82 displayed in red, have screened intervals that appear to correspond with shallow zone elevations; however, the groundwater elevations appear to be anomalous based on available data and were not used for contouring. The conceptual site model in this area is still being assessed.

X:\WA\Clients\Time_Oil\TOC-Mountlake Terrace_BA1402800\MXDs\Working\MXDs\1Q14 Annual GW Report\Figure4_1Q14_GWE_UZ_Map.mxd

Legend

Parcels

MW72 343.04 Groundwater Sample Location Identifier and Groundwater Elevation (ft, MSL) (NM = Not Measured)

343.0 Estimated Groundwater Elevation Contour (ft, MSL)

Site Boundary

Compound Fence

System Compound

Equipment Shed

Historic Excavation

TOC Holdings Co. Facility 01-176
24205 56th Avenue West
Mountlake Terrace, Washington

FIGURE 4: GROUNDWATER ELEVATION CONTOURS, SHALLOW ZONE, MARCH 24, 2014 (SYSTEM OFF)

Stantec JBR

DRAWN BY	D.H.	DATE DRAWN	9/15/2014
SCALE	1 in = 50 feet		
PROJECT	203714085		

Note:

1. DTW Measurements displayed in red indicate wells that are screened in both the shallow and intermediate aquifers, and were not used to create contours.
2. MW58 was not used in contouring due to anomalous results believed to be a clerical error.
3. Dry/TP indicates that the top of the pump was encountered prior to the water surface.

Legend

Parcels

MW73 343.04 Groundwater Sample Location Identifier and Groundwater Elevation (ft, MSL) (NM = Not Measured)

315.0 Estimated Groundwater Elevation Contour (ft, MSL)

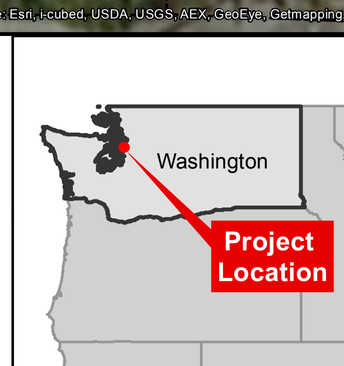
Site Boundary

Compound Fence

Equipment Shed

System Compound

Historic Excavation



TOC Holdings Co. Facility 01-176
24205 56th Avenue West
Mountlake Terrace, Washington

FIGURE 5: GROUNDWATER ELEVATION CONTOURS, INTERMEDIATE ZONE, MARCH 24, 2014 (SYSTEM OFF)

Stantec JBR

DRAWN BY	D.H.	DATE DRAWN	9/15/2014
SCALE	1 in = 50 feet		
PROJECT	203714085		

X:\WA\Clients\Time_Oil\TOC-MountlakeTerrace_BA1402800\MXDs\WorkingMXDs\1Q14 Annual GW Report\Figure5_1Q14_GWE_IZ_Map.mxd

Legend

	Parcels		Site Boundary
343.04	Groundwater Sample Location Identifier and Groundwater Elevation (ft, MSL) (NM = Not Measured)	× — ×	Compound Fence
			Equipment Shed
			System Compound
315.0	Estimated Groundwater Elevation Contour (ft, MSL)		Historic Excavation

TOC Holdings Co. Facility 01-176
24205 56th Avenue West
Mountlake Terrace, Washington

FIGURE 6: GROUNDWATER ELEVATION CONTOURS, DEEP ZONE, MARCH 24, 2014 (SYSTEM OFF)

Stantec JBR

DRAWN BY	D.H.	DATE DRAWN	9/15/2014
SCALE	1 in = 50 feet		
PROJECT	203714085		

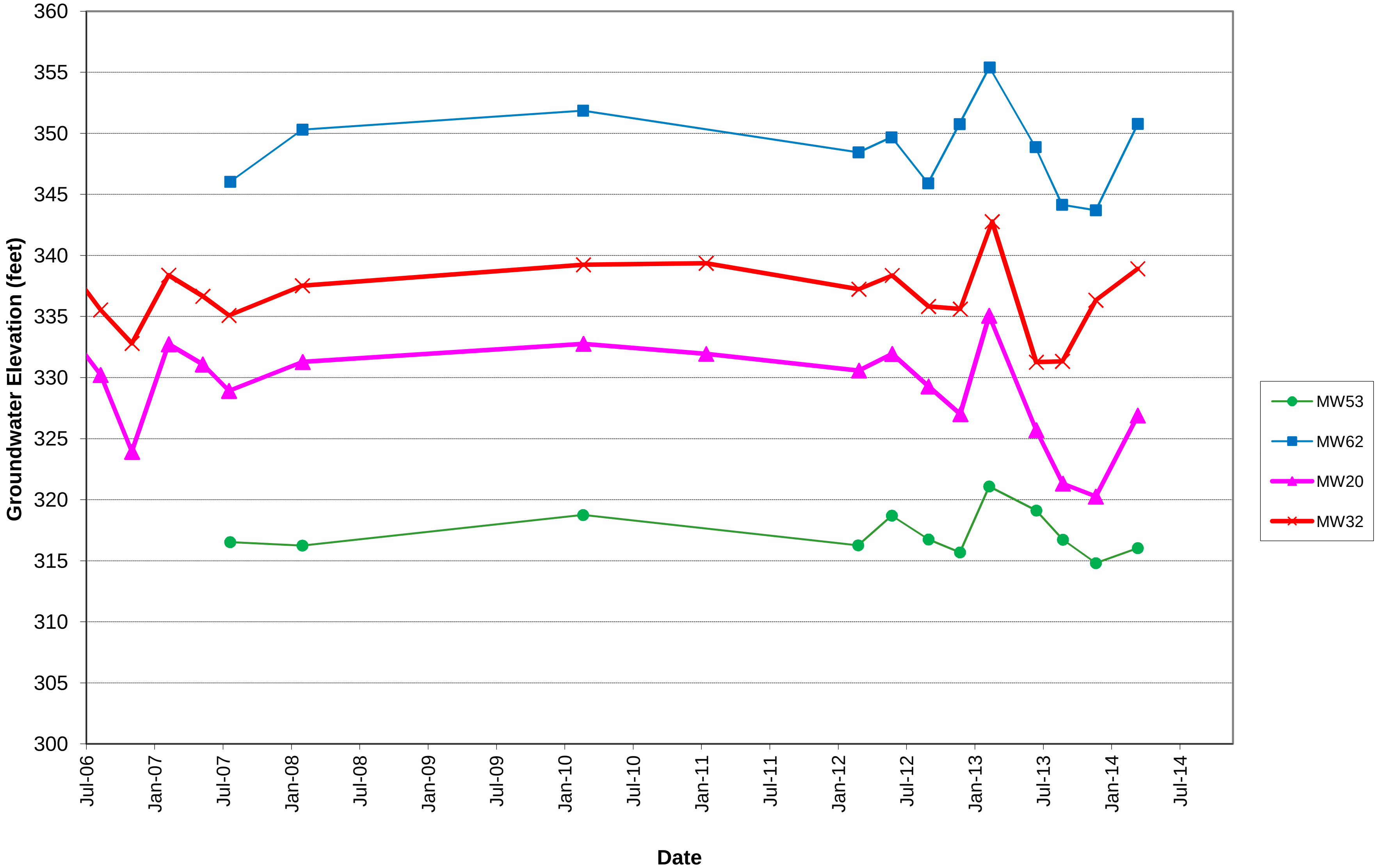
X:\WA\Clients\Time_Oil\TOC-MountlakeTerrace_BA1402800\MXDs\WorkingMXDs\1Q14 Annual GW Report\Figure6_1Q14_GWE_LZ_Map.mxd

FIGURE 7

Shallow (MW62), Intermediate (MW20 and MW32) and Deep (MW53) Zone Groundwater Elevations

December 2006 - March 2014

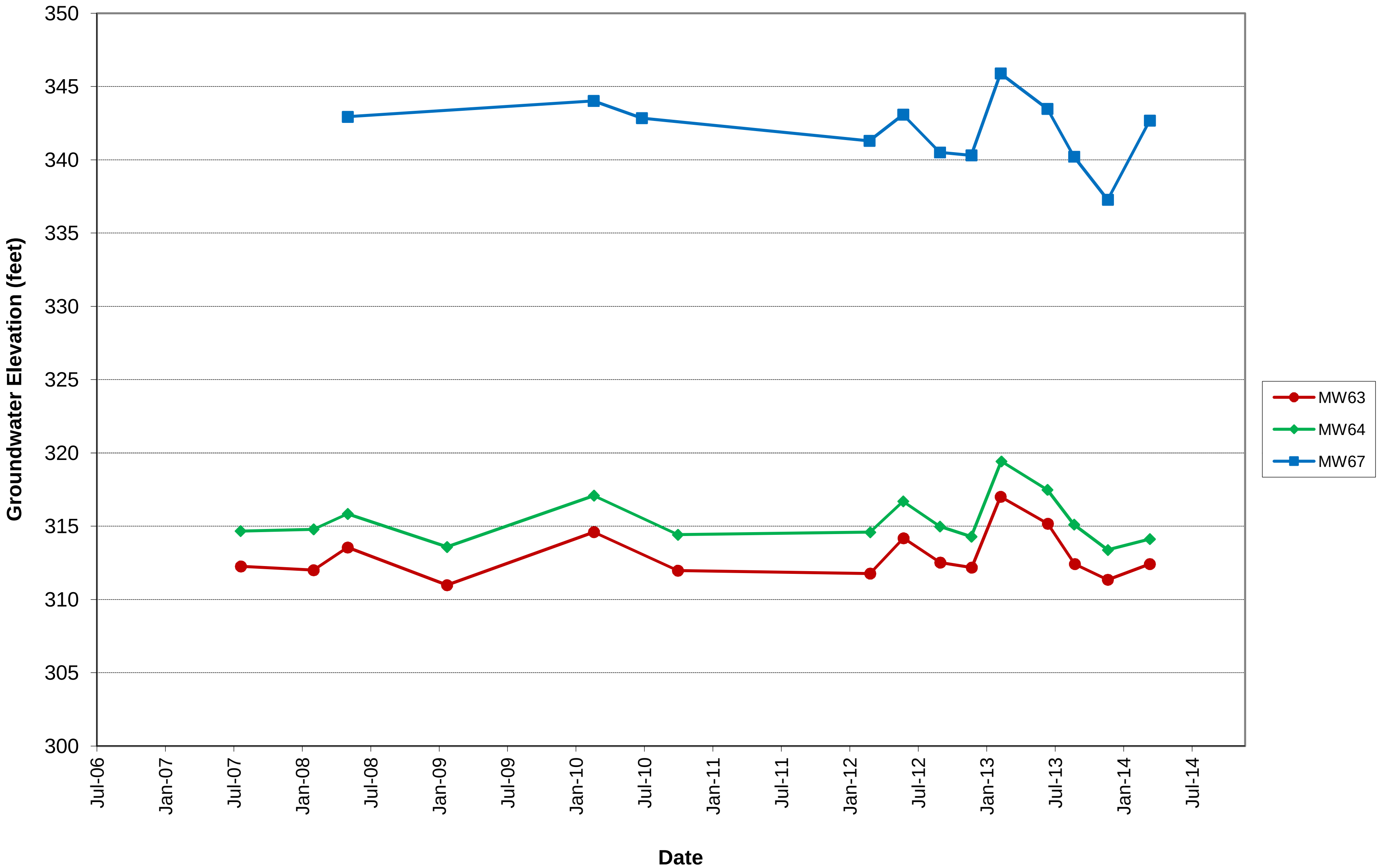
TOC Holdings Co. Mountlake Terrace



Stantec

FIGURE 8

Shallow (MW67), Intermediate (MW63) and Deep (MW64) Zone Groundwater Elevations
December 2006 - March 2014
TOC Holdings Co. Mountlake Terrace Facility, No. 01-176



Stantec

Notes:

1. ND = Not Detected
   NS = Well Not Sampled
   NA= Constituent Not Analyzed
2. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation
3. If a duplicate sample was collected, the higher result between the original and the duplicate is shown.

Legend

Parcels

MW72 800 — Groundwater Sample Location Identifier and GRPH Concentration (µg/L)

Minimum Preliminary Screening Level For GRPH (800 µg/L;MTCA Method A Cleanup Level)

Site Boundary

Compound Fence

System Compound

Equipment Shed

Historic Excavation

TOC Holdings Co. Facility 01-176
24205 56th Avenue West
Mountlake Terrace, Washington

FIGURE 9: GRPH CONCENTRATIONS IN GROUNDWATER, SHALLOW ZONE, MARCH 2014

Stantec JBR

DRAWN BY	D.H.	DATE DRAWN	9/15/2014
SCALE	1 in = 50 feet		
PROJECT	203714085		

X:\WA\Clients\Time_Oil\TOC-Mountlake Terrace_BA140280\MXDs\Working\MXDs\1Q14 Annual GW Report\Figure9_1Q14_GRPH_UZ_Map.mxd

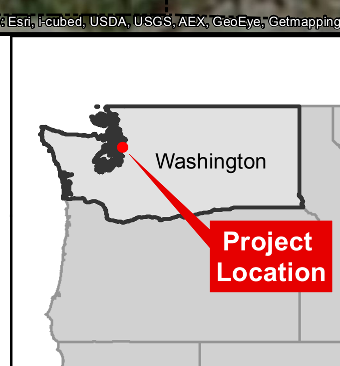
Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.

Notes:

1. ND = Not Detected
   NS = Well Not Sampled
   NA= Constituent Not Analyzed
2. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation
3. If a duplicate sample was collected, the higher result between the original and the duplicate is shown.

Legend

- Parcels
- MW72 / 10 — Groundwater Sample Location Identifier and Benzene Concentration (µg/L)
- Minimum Preliminary Screening Level For Benzene(5 µg/L;MTCA Method A Cleanup Level)
- Site Boundary
- Compound Fence
- System Compound
- Equipment Shed
- Historic Excavation



TOC Holdings Co. Facility 01-176
24205 56th Avenue West
Mountlake Terrace, Washington

FIGURE 10: BENZENE CONCENTRATIONS IN GROUNDWATER, SHALLOW ZONE, MARCH 2014

Stantec JBR

DRAWN BY	D.H.	DATE DRAWN	9/15/2014
SCALE	1 in = 50 feet		
PROJECT	203714085		

X:\WA\Clients\Time_Oil\TOC-Mountlake Terrace_BA1402800\MXDs\Working\MXDs\1Q14 Annual GW Report\Figure10_1Q14_Benzene_UZ_Map.mxd

Notes:

1. ND = Not Detected
   NS = Well Not Sampled
   NA= Constituent Not Analyzed
2. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation
3. If a duplicate sample was collected, the higher result between the original and the duplicate is shown.
4. * Indicates well may be screened across both the shallow and intermediate aquifers.

Legend

- Parcels
- MW73 / 800 — Groundwater Sample Location Identifier and GRPH Concentration (µg/L)
- Minimum Preliminary Screening Level For GRPH(800 µg/L;MTCA Method A Cleanup Level)
- Site Boundary
- Compound Fence
- Equipment Shed
- System Compound
- System Piping
- Historic Excavation

TOC Holdings Co. Facility 01-176
24205 56th Avenue West
Mountlake Terrace, Washington

FIGURE 11: GRPH CONCENTRATIONS IN GROUNDWATER, INTERMEDIATE ZONE, MARCH 2014

Stantec JBR

DRAWN BY	D.H.	DATE DRAWN	9/15/2014
SCALE	1 in = 50 feet		
PROJECT	203714085		

X:\WAClients\Time_Oil\TOC-MountlakeTerrace_BA1402800\MXDs\WorkingMXDs\1Q14 Annual GW Report\Figure11_1Q14_GRPH_IZ_Map.mxd

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.

Legend

Parcels	Site Boundary
MW73 / 5 — Groundwater Sample Location Identifier and Benzene Concentration (µg/L)	Compound Fence
	Equipment Shed
	System Compound
Minimum Preliminary Screening Level For Benzene(5 µg/L;MTCA Method A Cleanup Level)	System Piping
	Historic Excavation

TOC Holdings Co. Facility 01-176
24205 56th Avenue West
Mountlake Terrace, Washington

FIGURE 12: BENZENE CONCENTRATIONS IN GROUNDWATER, INTERMEDIATE ZONE, MARCH 2014

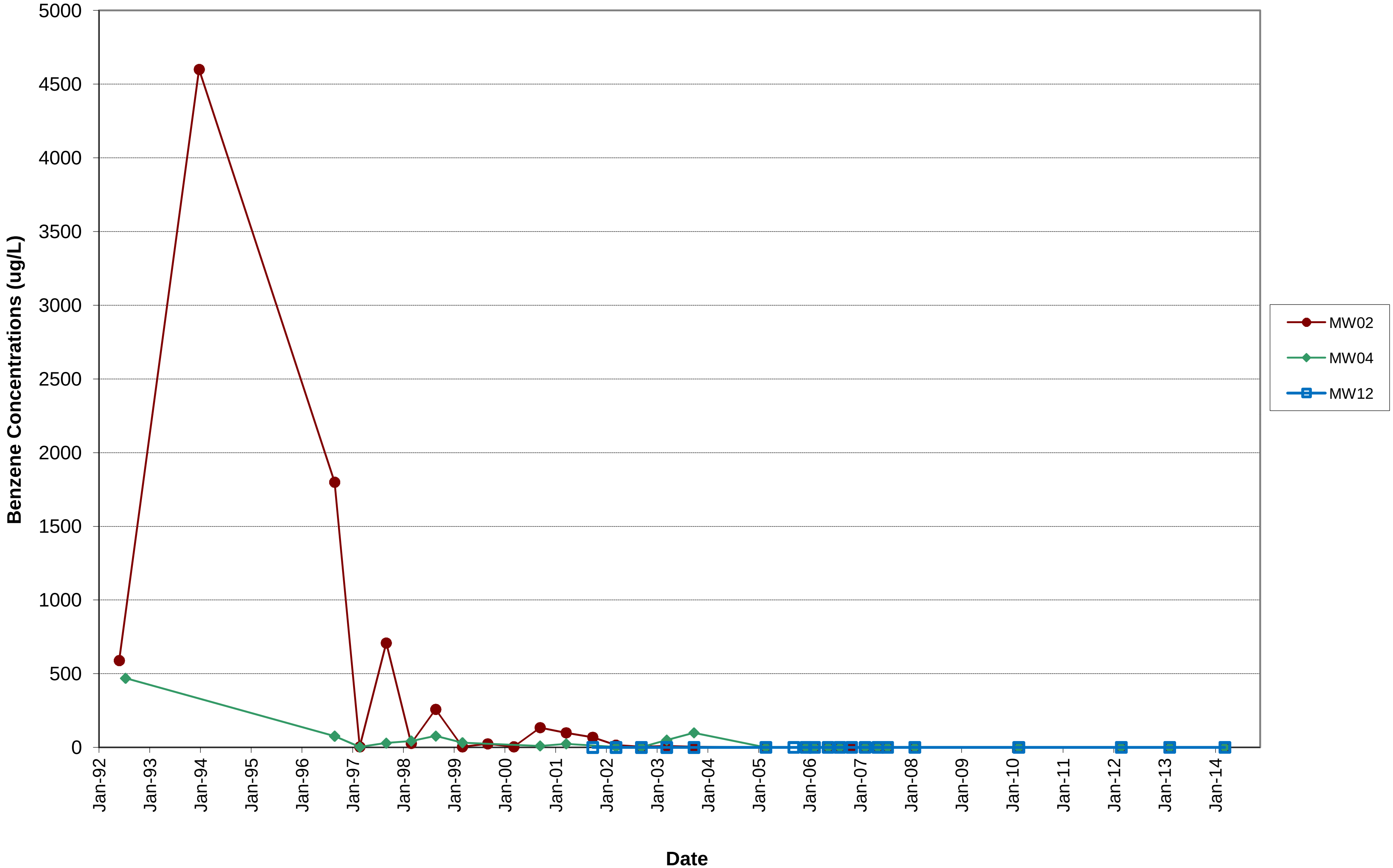
Stantec JBR

DRAWN BY	D.H.	DATE DRAWN	9/15/2014
SCALE	1 in = 50 feet		
PROJECT	203714085		

X:\WA\Clients\Time_Oil\TOC-MountlakeTerrace_BA140280\MXDs\WorkingMXDs\1Q14 Annual GW Report\Figure12_1Q14_Benzene_IZ_Map.mxd

FIGURE 13

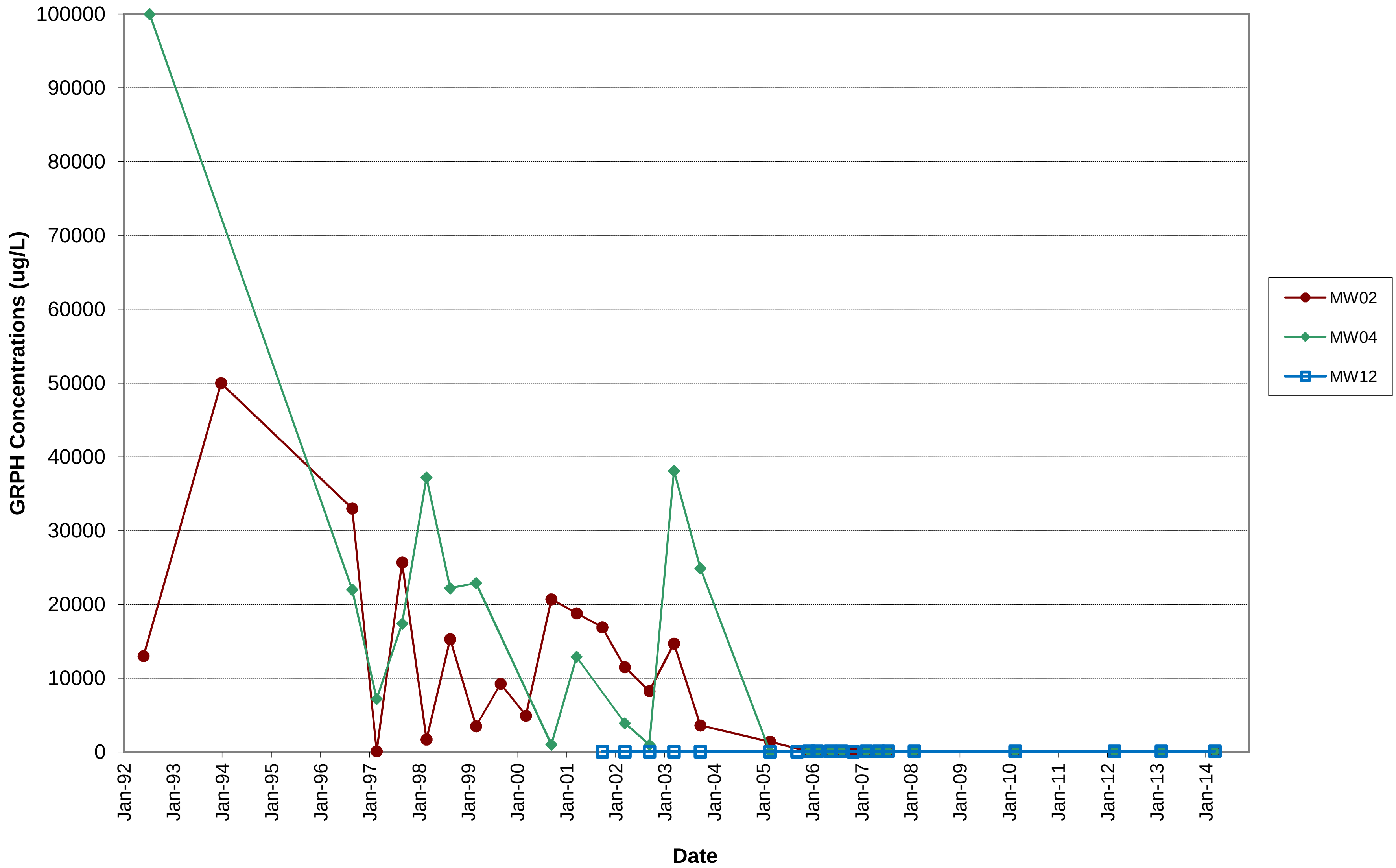
Benzene Concentrations in Groundwater, Shallow Zone Wells MW02, MW04 and MW12
June 1992 - March 2014
TOC Holdings Co. Mountlake Terrace Facility, No. 01-176



Stantec

FIGURE 14

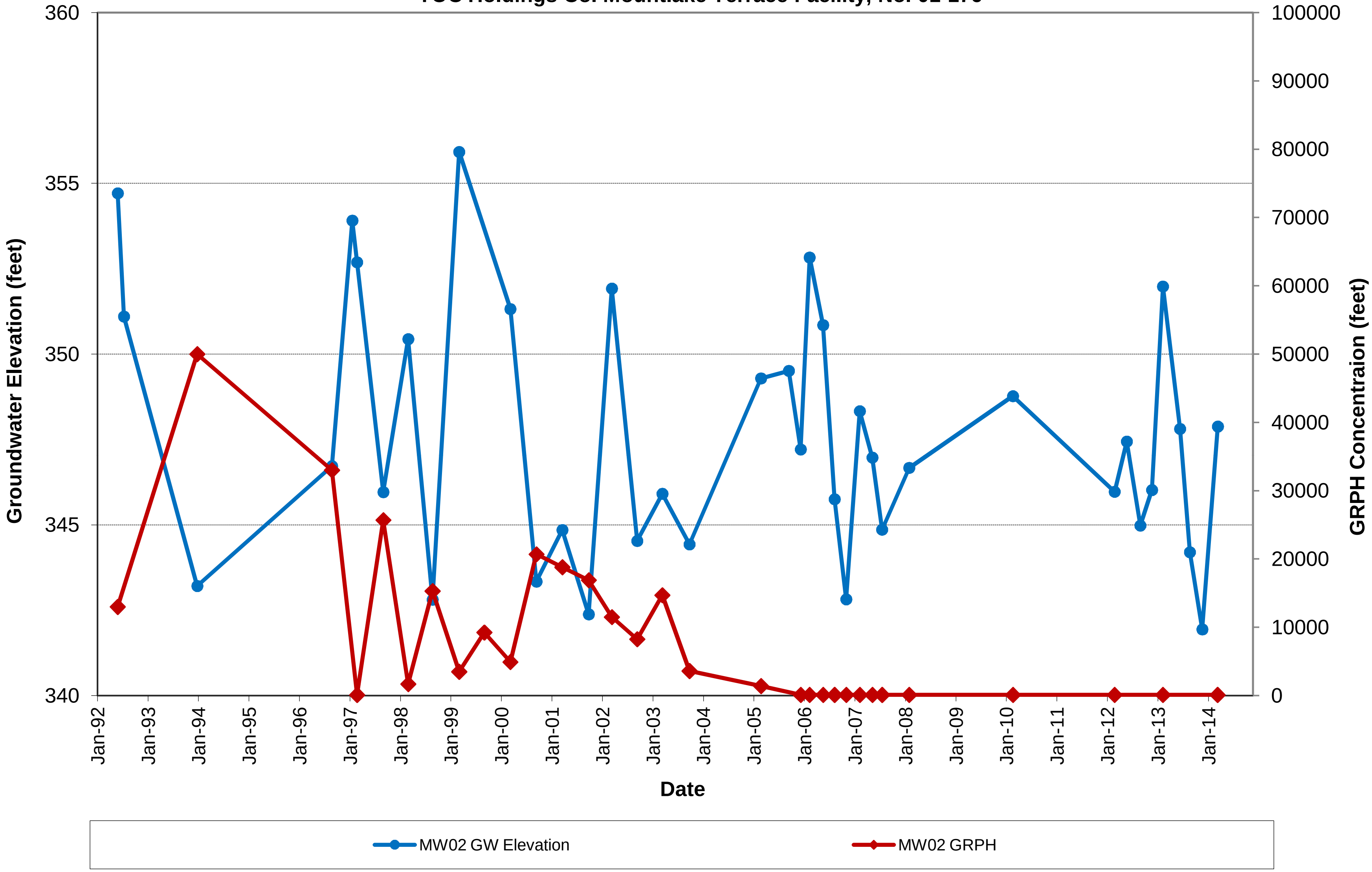
GRPH Concentrations in Groundwater, Shallow Zone Wells MW02, MW04 and MW12
June 1992 - March 2014
TOC Holdings Co. Mountlake Terrace Facility, No. 01-176



Stantec

FIGURE 15

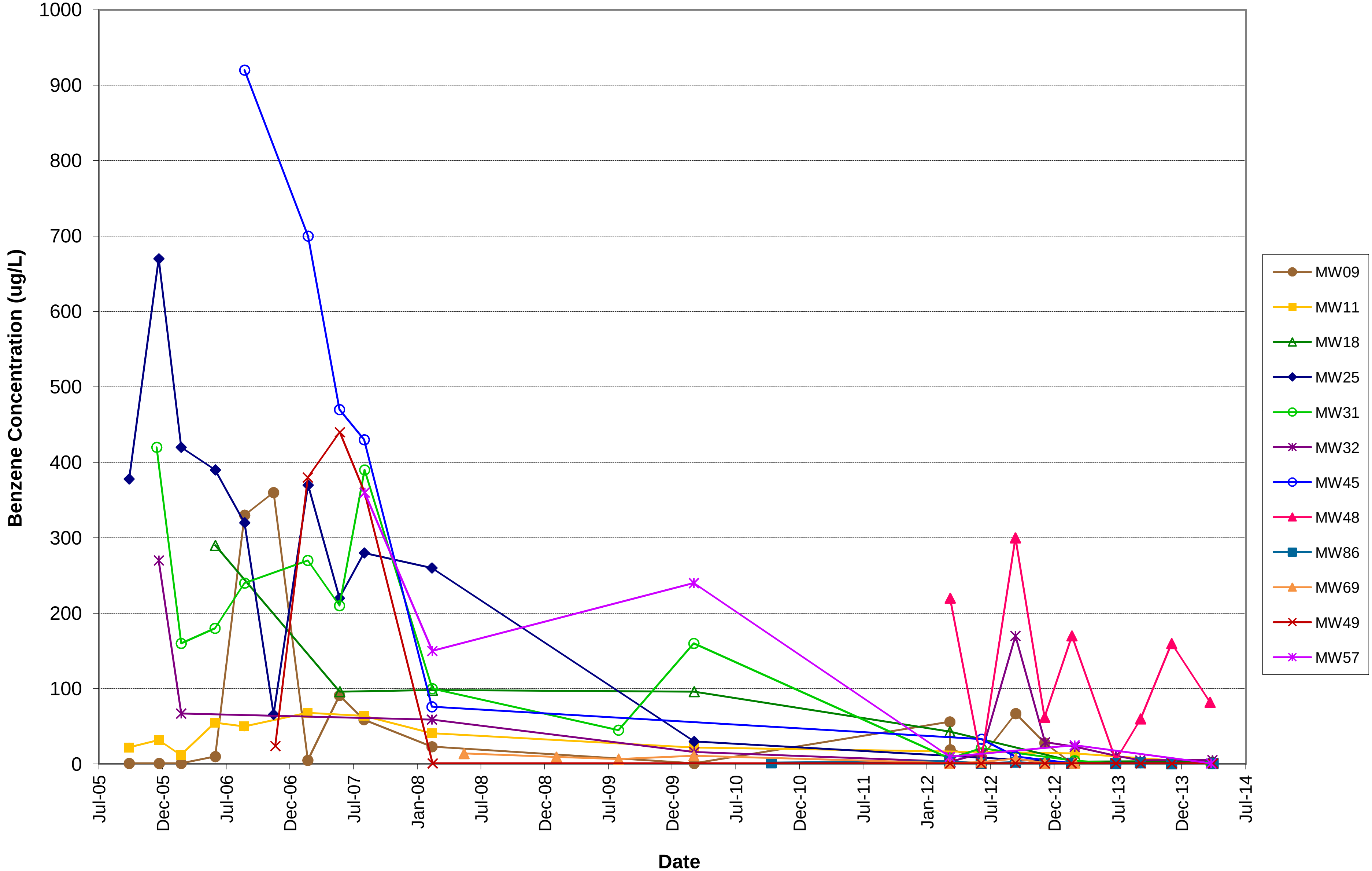
Groundwater Elevation and GRPH Concentrations in Groundwater, Shallow Zone Well MW02
June 1992 - March 2014
TOC Holdings Co. Mountlake Terrace Facility, No. 01-176



Stantec

FIGURE 16

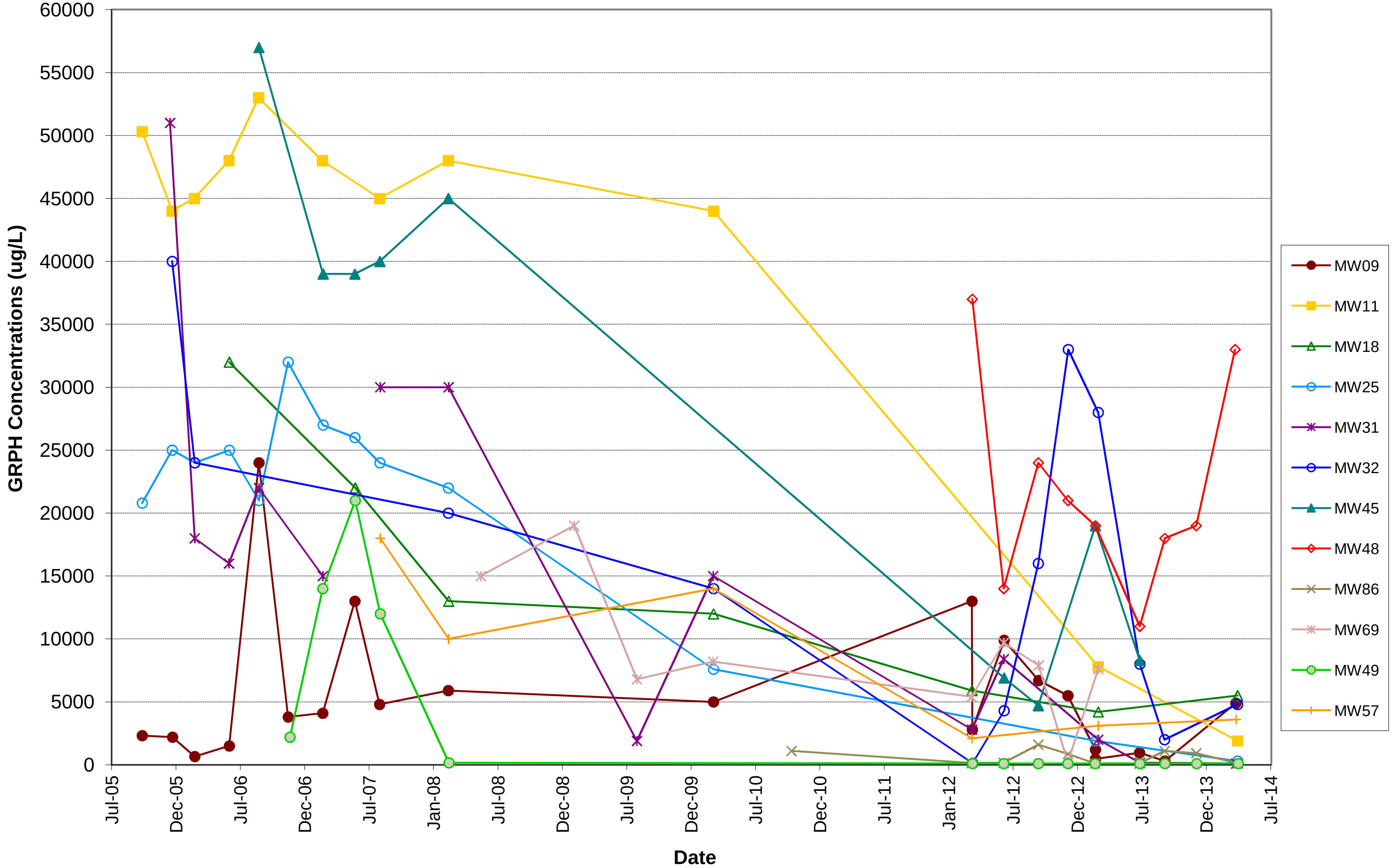
Benzene Concentrations in Groundwater, Selected Intermediate Zone Wells
September 2005 - March 2014
TOC Holdings Co. Mountlake Terrace Facility, No. 01-176



Stantec

FIGURE 17

GRPH Concentrations in Groundwater, Selected Intermediate Zone Wells
September 2005 - March 2014
TOC Holdings Mountlake Terrace Facility, No. 01-176



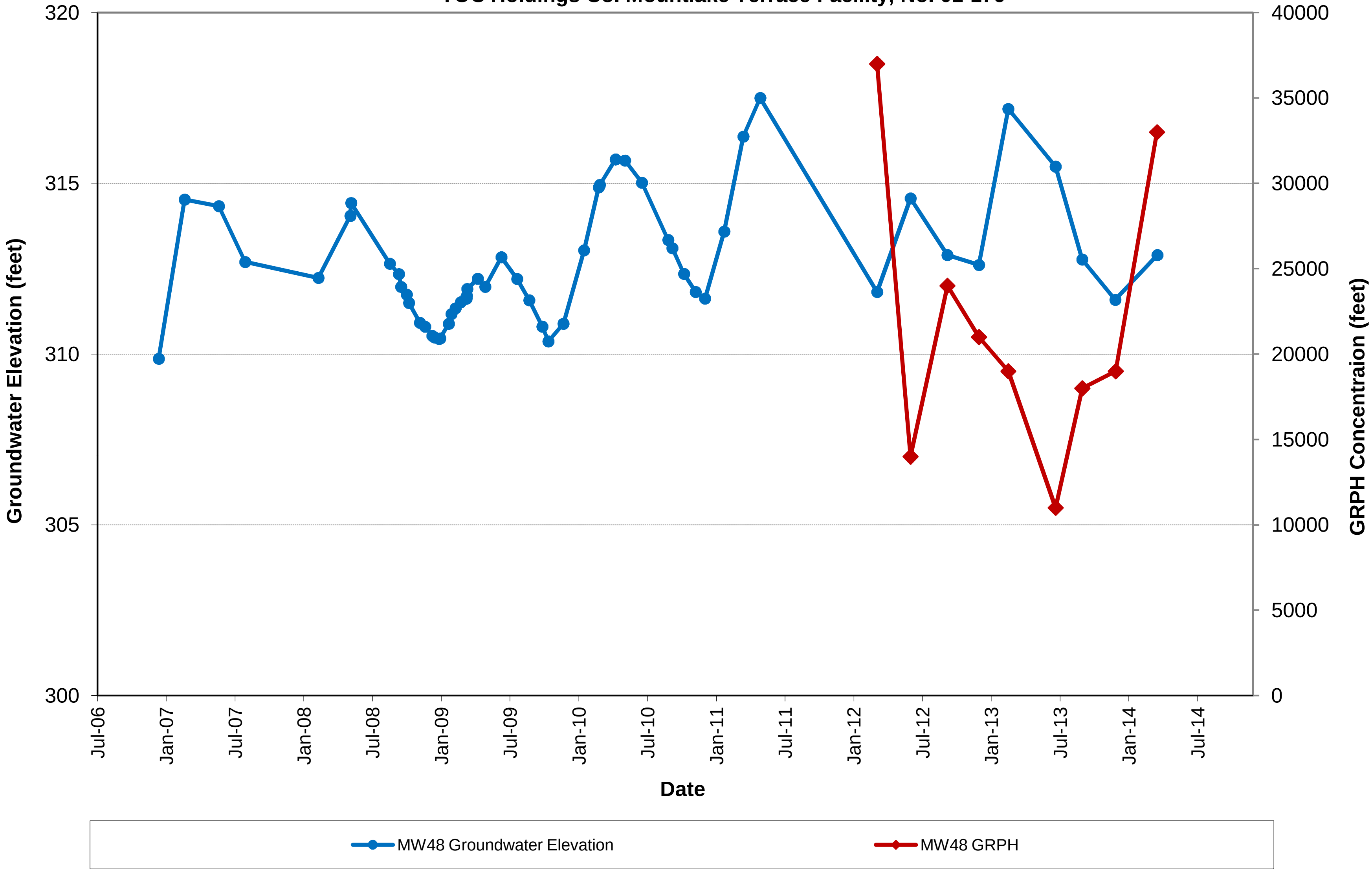
Stantec

FIGURE 18

Groundwater Elevation and GRPH Concentrations in Groundwater, Intermediate Zone Well MW48

December 2006 - March 2014

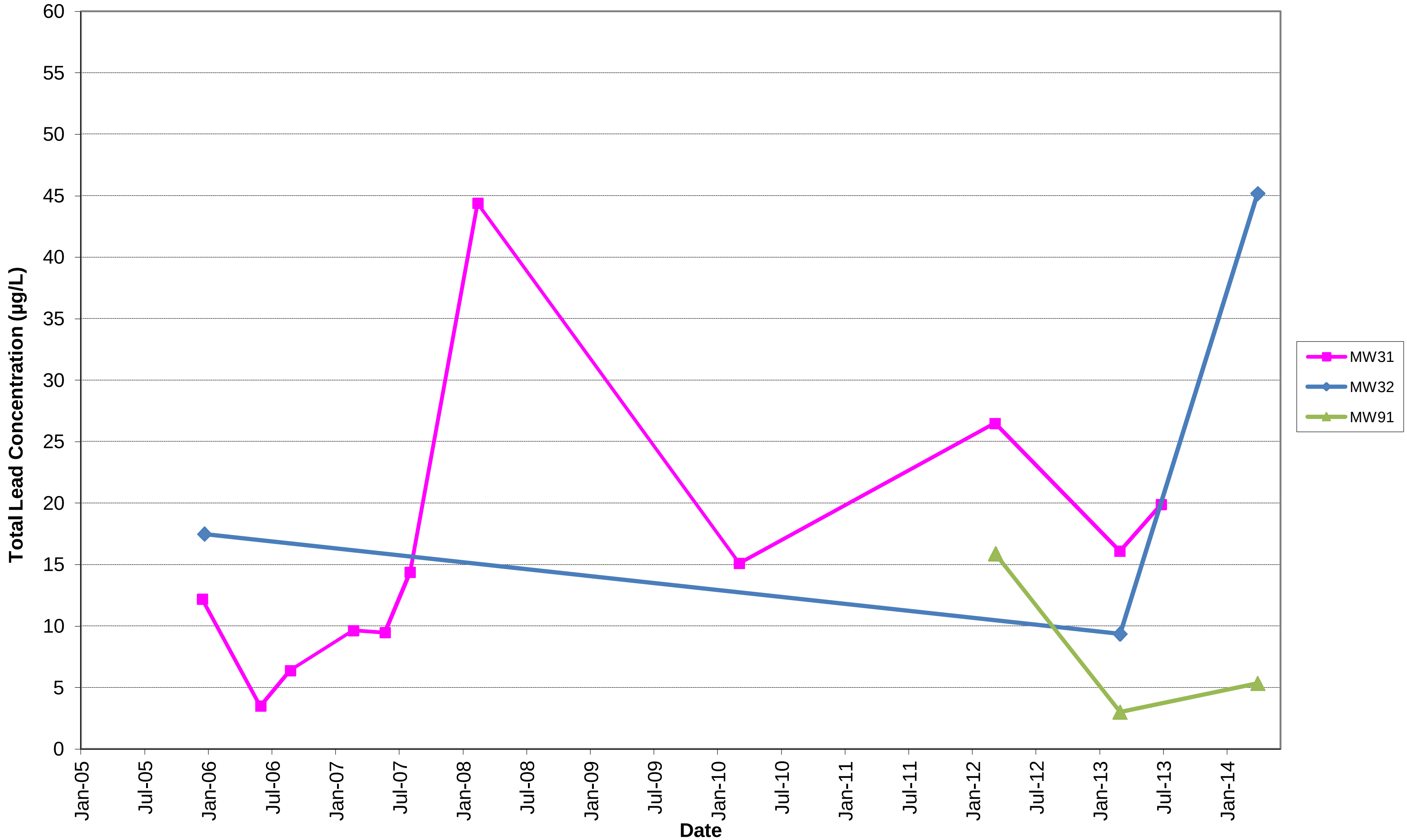
TOC Holdings Co. Mountlake Terrace Facility, No. 01-176



Stantec

FIGURE 19

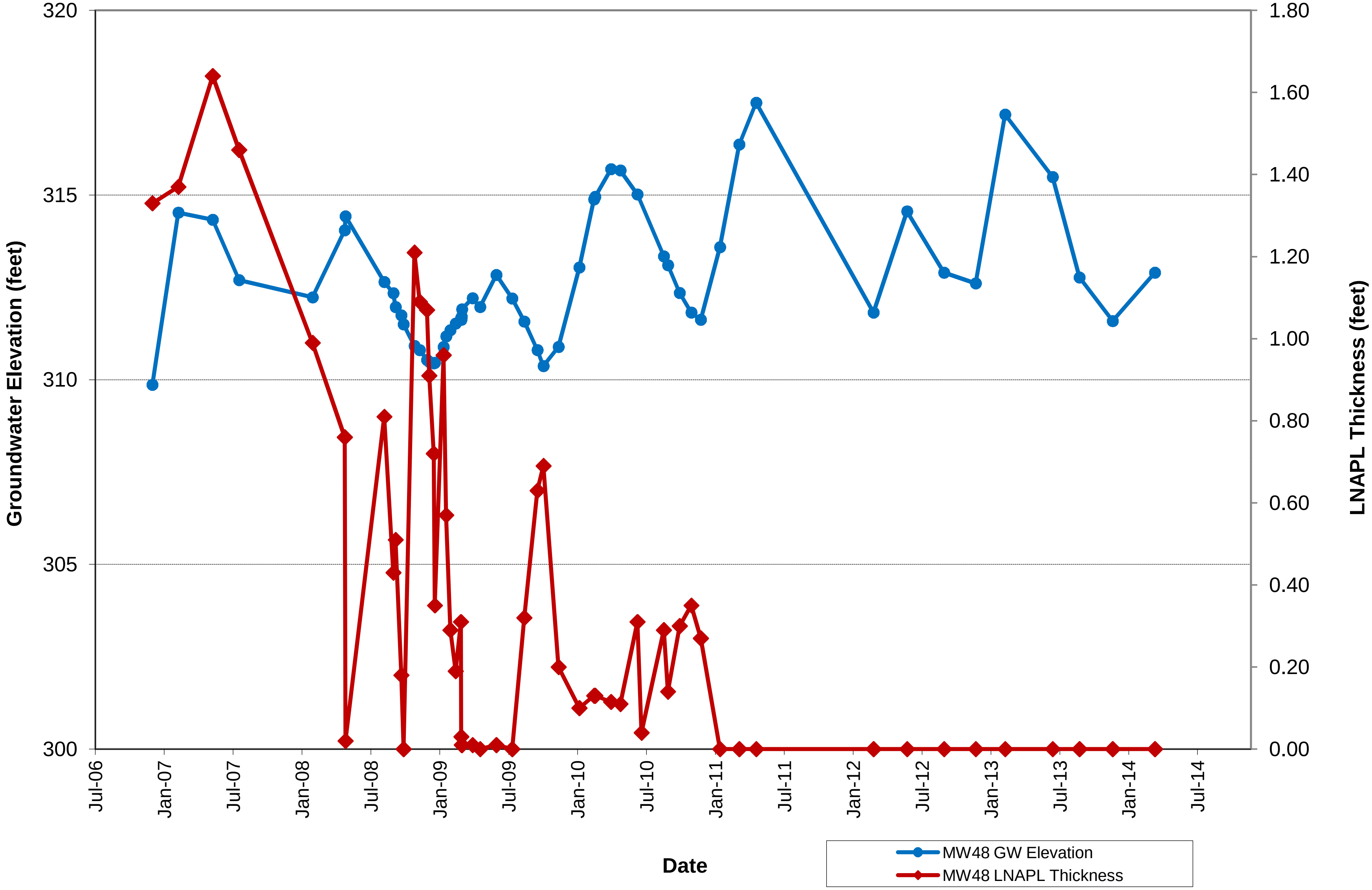
Total Lead Concentrations in Groundwater, Intermediate Zone Wells MW31, MW32 and MW91
December 2005 - March 2014
TOC Holdings Co. Mountlake Terrace Facility, No. 01-176



Stantec

FIGURE 20

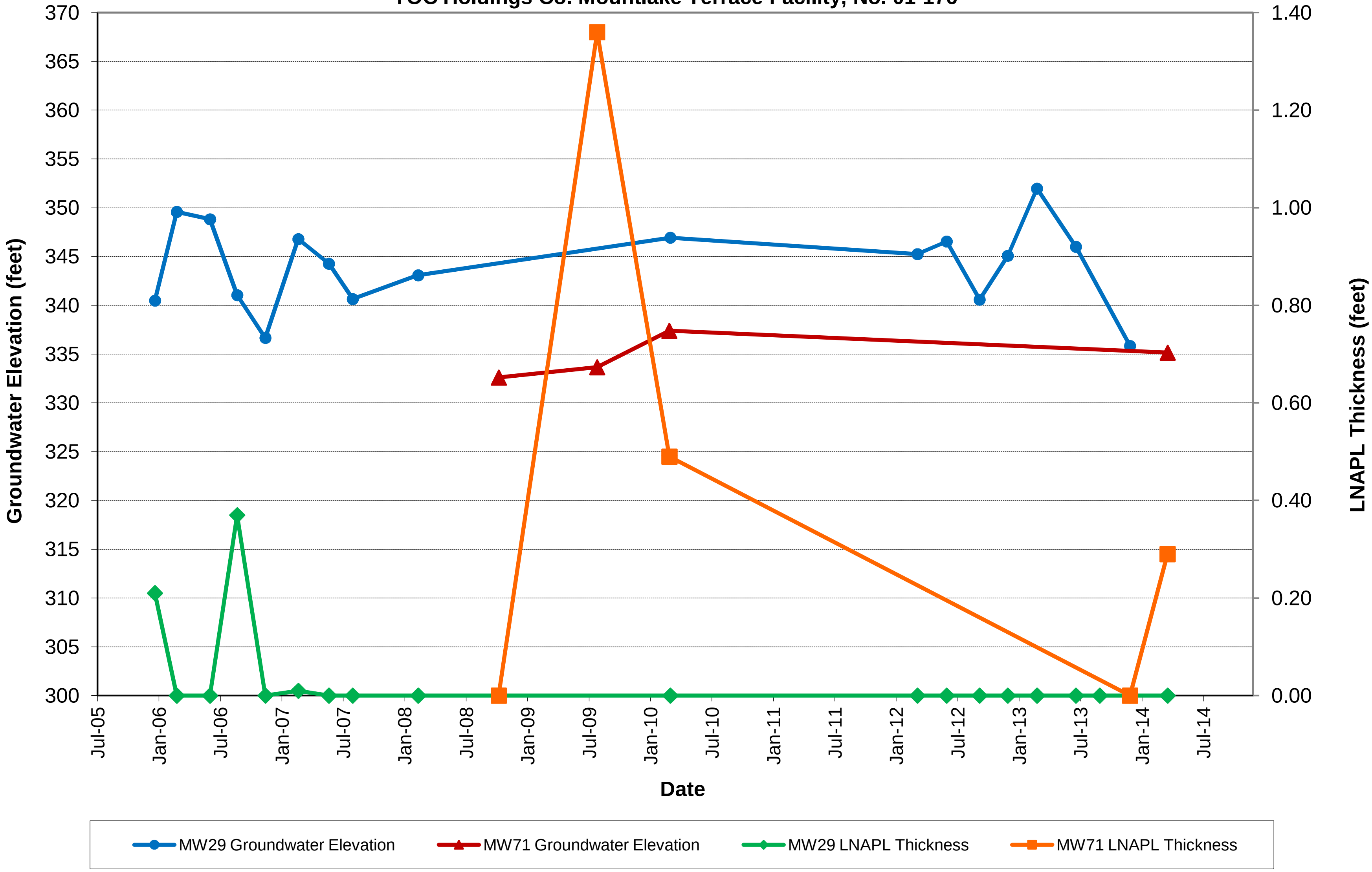
Groundwater Elevation and LNAPLThickness, Intermediate Zone Well MW48
December 2006 - March 2014
TOC Holdings Co. Mountlake Terrace Facility, No. 01-176



Stantec

FIGURE 21

Groundwater Elevation and LNAPLThickness, Shallow Zone Wells MW29 and MW71
December 2005 - March 2014
TOC Holdings Co. Mountlake Terrace Facility, No. 01-176



Stantec

Appendix A
Groundwater Monitoring Work Plan

Groundwater Monitoring Work Plan

TOC Holdings Co.
Facility No. 01-176
24205 56th Avenue West
Mountlake Terrace, WA 98043

now

Prepared for:
TOC Holdings Co.
2737 West Commodore Way
Seattle, WA 98199

Prepared by:
JBR Environmental Consultants, Inc.
now
Stantec Consulting Services Inc.
19101 36th Avenue West, Ste. 203
Lynnwood, WA 98036
Phone: 425.977.4994

March 5, 2014

Sign-off Sheet

Please note that effective May 9, 2014, the employees of **JBR Environmental Consultants, Inc. (JBR)** have joined **Stantec Consulting Services Inc. (Stantec)**. You will continue to see the same people, doing business with you the same way, and with the same goal: to safely deliver the highest level of service while always striving to exceed your expectations.

This document, entitled ***Groundwater Monitoring Work Plan***, was prepared by JBR (now Stantec) on behalf of **TOC Holdings Co. (TOC)** for specific application to TOC Facility No. 01-176 in Mountlake Terrace, Washington. Services conducted by JBR (now Stantec) for this project were conducted in accordance with the Environmental Services Contract between **HydroCon Environmental, LLC (HydroCon)** and JBR, which has been now transferred over to Stantec. Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and HydroCon. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

This document was prepared under the supervision and direction of the following key staff.

Prepared by: **Dana Hutchins, GIT**
Project Specialist, Geology

Reviewed by: **Rebekah Brooks, LG, LHg**
Hydrogeologist / Project Manager

State of Washington
Hydrogeologist
1314
Licensed Geologist
Rebekah Brooks

Table of Contents

LIST OF TABLES

LIST OF FORMS

Abbreviations & Acronyms

bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and total xylenes
CFR	Code of Federal Regulations
COC	chain of custody
DO	dissolved oxygen
DOT	U.S. Department of Transportation
DRPH	diesel-range petroleum hydrocarbons
DTP	depth to product
DTW	depth to water
EDB	ethylene dibromide (1,2-dibromoethane)
EDC	ethylene dichloride (1,2-dicholoroethane)
EPA	U.S. Environmental Protection Agency
FSDS	Field Sample Data Sheet
GRPH	gasoline-range petroleum hydrocarbons
HCl	hydrochloric acid
HNO_3	nitric acid
HydroCon	HydroCon Environmental, LLC
JBR	JBR Environmental Consultants, Inc.
L	liter
LNAPL	light non-aqueous phase liquid
mL	milliliters
mL/min	milliliters per minute
MTBE	methyl tertiary-butyl ether
MW	monitoring well
NTU	Nephelometric Turbidity Unit
NWTPH-Dx	Northwest Total Petroleum Hydrocarbon for diesel-range organics
NWTPH-Gx	Northwest Total Petroleum Hydrocarbon for gasoline-range organics
ORP	oxidation-reduction potential
OWS	oil-water separator
PAH	polycyclic aromatic hydrocarbons
QA/QC	Quality Assurance / Quality Control
RCRA	Resource Conservation and Recovery Act
RPD	relative percent difference
Stantec	Stantec Consulting Services Inc.
TOC	TOC Holdings Co.
USGS	U.S. Geology Survey
VOA	volatile organic analysis
VOC	volatile organic compound

1.0 SCOPE & APPLICABILITY

This work plan describes the procedures and protocol to be followed during performance of groundwater monitoring events at the TOC Holdings Co. (TOC) Facility No. 01-176 located in Mountlake Terrace, Washington (TOC Site). The groundwater monitoring events include: measurement of depth of groundwater or depth to the light non-aqueous phase liquid (LNAPL) surface and groundwater quality sampling from monitoring wells. Procedures are also provided for measuring the total well depth in cases where this information needs to be confirmed in existing wells. The procedures presented herein are intended to be general in nature and, as the work progresses and when warranted, appropriate revisions may be made when approved in writing by the Project Manager.

2.0 BASIS FOR METHODOLOGY

The methods and procedures described in this plan were developed primarily from the sources identified below.

U.S. Environmental Protection Agency (EPA), Region 9 (undated). *Standard Operating Procedure for the Standard/Well-Volume Method for Collecting a Ground-Water Sample from Monitoring Wells for Site Characterization.*

EPA, Region 1. 2010. *Low Stress (low flow) Purging and Sampling Procedure for the Collection of Ground Water Samples from Monitoring Wells.*

EPA. May 2002. *Ground-Water Sampling Guidelines for Superfund and RCRA Project Managers. Ground Water Forum Issue Paper.*

U.S. Geological Survey (USGS). variously dated. *National field manual for the collection of water-quality data: U.S. Geological Survey Techniques of Water-Resources Investigations*, Book 9, Chapters A1-A9. Available online at http://pubs.water.usgs.gov/twri9A.

3.0 LNAPL/GROUNDWATER LEVEL & WELL DEPTH MEASUREMENT PROCEDURES

Depth to the LNAPL surface and/or depth to groundwater are measured at monitoring wells during each groundwater monitoring event for determination of groundwater flow characteristics and contaminant distribution. Typically, these measurements are conducted even when the well is not scheduled to be sampled for water quality.

Upon arrival at the TOC Site for each groundwater monitoring event, each monitoring well to be measured will be opened for a minimum of 15 minutes prior to measurements to allow for atmospheric pressure to equilibrate water levels in wells. Groundwater levels and LNAPL measurements shall be conducted in wells prior to purging or sampling.

Prior to performing groundwater level and well depth measurements, the well construction details and previous measurements for each well shall be reviewed by the sampling staff to familiarize them with the total depth, screen location, and previous water level measurements.

3.1 Materials & Equipment

Materials and equipment that are necessary to perform LNAPL/groundwater level measurements include:

- records of well construction details and previous measurements;
- electronic oil-water interface probe with an accuracy of 0.01 feet; and
- Groundwater Depth-to-Water (DTW) Form (see attached forms).

3.2 Measuring Point

A measuring point shall be established and marked at the top of the inner casing for each monitoring well from which water level measurements will be made based on the location on the well casing from which the topographic survey was conducted. Generally, this point will be the top of the casing on the north side. The measuring point will be permanently marked using an indelible marker or a notch cut into the casing. When the top-of-casing elevation of a monitoring well is surveyed, the licensed surveyor shall measure the elevation of the measuring point and reference this measurement to the local datum for location and elevation.

3.3 LNAPL/Groundwater Level Measurement Procedures

LNAPL/groundwater level measurements will be conducted using an electronic water level indicator or electronic oil-water interface probe. An electronic probe consists of a contact electrode attached to the end of an insulated electrical cable marked with length indicators, and a reel which houses an ammeter, buzzer or other closed circuit indicator. The indicator shows a closed circuit and flow of current when the electrode touches a water or LNAPL surface.

The procedure for measuring LNAPL/groundwater levels with an electric probe is as follows:

1. Switch on and test that the battery is charged.
2. Lower the probe into the well until the ammeter or buzzer indicates a closed circuit. Raise and lower the probe slightly until the shortest length of cable that gives the maximum response on the indicator is found. In the event LNAPL is encountered in the well, first note the LNAPL level and then groundwater level. The LNAPL level will be identified by a solid continuous sound by the buzzer and the groundwater level will be identified by a pulsating buzzer sound.
3. With the cable in this fixed position, note the DTW or LNAPL from the measuring point. The LNAPL/groundwater level data will be recorded to the nearest 0.01 foot below the measuring point.
4. Repeat as necessary until at least two identical duplicate measurements are obtained.

The LNAPL/groundwater level measurement, and date and time of each measurement will be recorded on the Groundwater DTW Form (see attached forms). The meter serial number will also be identified in the field logs for each sampling event. To avoid cross contamination between wells, the indicator probe and affected cable will be rinsed with deionized or tap water before the first measurement of the day, between each well, and at the end of the day. If LNAPL is observed, The measurements will be used to calculate groundwater level elevations from the DTW measurement and the surveyed elevation of the measuring point at each well. If LNAPL is identified in the well, the LNAPL thickness will be determined by subtracting the depth-to-product (DTP) from the DTW in the well.

LNAPL, lighter than water, slightly depresses the groundwater table as a function of the specific gravity difference between the two media. If LNAPL is measured in any monitoring wells, the reported groundwater elevations will be normalized using the industry-standard specific gravity estimate of the LNAPL relative to a specific gravity of 1.0 for water.

The following equation will be used for the normalization:

$$\textit{Normalized Groundwater Elevation (feet)} = [(H_{TOC} - H_W) * 1.0] + [(H_W - H_{LNAPL}) * SG]$$

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

Calibration of the electronic probe will be checked at least annually as part of regular maintenance measuring the position of the electrode to check that the length marks on the electronic probe cable correspond to those on a steel surveyors tape. The electronic probes will be calibrated more frequently if there is reason to suspect the probe was stretched because it became stuck in a well and was pulled vigorously for retrieval, or if the probe requires repair that could have affected the length of the cable. Calibration will be conducted by comparing the DTW readings between the electronic probe and a steel surveyors' tape.

3.4 Total Well Casing Depth Measurement Procedures

As necessary to confirm the total depth of an existing well casing, the total depth of a well casing will be measured immediately after construction by sounding the bottom of the well with a weighted steel surveyor tape or other weighted steel or fiberglass measuring tape. The electronic water level probe may also be used as a measuring device, if weighted.

To measure the total depth of the well, lower the weighted tape or probe into the well until the tape becomes slack or there is a noticeable decrease in weight, which indicates the bottom of the well. Care should be taken to lower the tape slowly to avoid damage to the bottom of the well by the weight. Raise the tape slowly until it just becomes taut, and with the tape in this fixed position, note the tape reading opposite the measuring point to the nearest 0.1 foot.

4.0 GROUNDWATER QUALITY SAMPLE COLLECTION PROCEDURES

Groundwater quality samples are collected from monitoring wells and remediation wells primarily during quarterly events to monitor groundwater contaminant concentrations and distribution and to evaluate the performance of the remediation systems. The methodologies used to collect groundwater samples depend on depth to water, the use of the well for remediation purposes, or when the volume of the water in the well available for sampling is limited.

4.1 Materials & Equipment

Materials and equipment that are necessary to perform groundwater quality sampling include:

- records of well construction details;
- groundwater sampling pumps and tubing or bailers;
- field parameter meters;
- flow-through cells and filters;
- sample containers (provided by analytical laboratory);
- insulated coolers and ice;
- field notebook;
- Field Sample Data Sheet (FSDS) (see attached forms); and
- Chain of Custody (COC) Form (provided by analytical laboratory).

4.2 Equipment Calibration

Stantec monitors water quality parameters during well purging and groundwater sampling using an YSI Pro Plus or similar water quality meter equipped with a flow-through cell. The water quality parameters that are monitored and recorded include the following: temperature, pH, specific conductance, dissolved oxygen (DO), turbidity and oxidation-reduction potential (ORP). Equipment used to measure field parameters will be calibrated in the field by field personnel according to manufacturer's instructions prior to any measurements being taken. Calibration checks will be performed at least daily for instruments used in the field and the results will be documented in the field notebook for each day of sampling.

4.3 Groundwater Sampling Procedures

Stantec is currently using four different methods to collect groundwater samples at the TOC Site, including: peristaltic pumps, bailers, submersible pumps, and pneumatic pumps. The rational for using each method is described below:

- In general, when DTW measurements are less than 30 feet below ground surface (bgs) and the monitoring well (MW) is not connected to the remediation system installed in 2012, Stantec collects groundwater samples in accordance with low-flow protocols (EPA 1996) using a peristaltic pump.
- In wells that are connected to the 2012 remediation system, Stantec collects groundwater samples using the dedicated downhole pneumatic pump installed in each remediation well (MW11, MW15, MW18, MW24, MW27, MW29, MW31, MW32, MW41, MW57, MW69, MW70, MW84, MW90 through MW99 and MW101). The pneumatic pumps deliver groundwater to the wellhead whenever the water level rises above the top of the pump, or when the float switch connected to the oil-water separator (OWS) for the associated remediation system turns the pump on when empty and off when full.
- In wells where DTW measurements exceed approximately 30 feet bgs, Stantec collect samples using a submersible pump in accordance with low-flow protocols (EPA 1996) or disposable polyethylene bailers. Bailers are used under the following circumstances:
  - When the volume of groundwater in the water column is too small for a sample to be collected using a submersible pump,
  - Or when very poor recovery is noted in previous field observations

During purging, Stantec monitors water quality parameters using an YSI Pro Plus or similar water quality meter equipped with a flow-through cell. The water quality parameters that are monitored and recorded include the following: temperature, pH, specific conductance, DO, turbidity and ORP. The following stabilization criteria are met prior to sampling using three field readings taken approximately 5 minutes apart:

- turbidity (10% for values greater than 5 Nephelometric Turbidity Unit (NTU); if three turbidity values are less than 5 NTU, the values are considered stabilized);
- DO (readings are within 10% of each other);
- specific conductance (readings are within 3% of each other);
- temperature (readings are within 3% of each other);
- pH (readings are within +, - 0.1 units of each other); and
- ORP (readings are within +, -10 millivolts of each other).

Low-flow sampling procedures include using a peristaltic or submersible pump with polyethylene tubing at flow rates ranging from approximately 100 to 500 milliliters per minute (mL/min). The tubing intake is placed at approximately the middle of the screen interval in each monitoring well or in the center of the water column if the screened interval is not completely saturated.

Purging and sampling using a disposable bailer consists of purging each well a minimum of three well volumes prior to sampling whenever recharge rates allow. In some cases, recharge rates are insufficient to remove three well volumes prior to sampling, or to produce a sufficient quantity of groundwater for sampling. Under those circumstances Stantec purges the well dry and waits either until it recovers close to the original DTW, or returns the next day to collect the groundwater sample.

Following purging, groundwater samples are collected from the pump outlet tubing located upstream of the flow-through cell, or from a disposable bailer, and placed directly into laboratory-prepared sample containers. Clean gloves will be worn by field personnel when collecting each sample to avoid cross-contamination.

The water sample will be discharged or poured slowly and carefully into the appropriate sample containers (see Section 4.6) to minimize aeration. Groundwater samples collected for Volatile Organic Compounds (VOCs) will be collected in vials and completely filled so no head space remains. VOC sample containers will be checked for air bubbles. If air bubbles are observed, the container will be emptied and a new container used.

4.4 Sample Filtration

Groundwater samples collected for dissolved parameters (e.g., metals) are field-filtered using a disposable, in-line, 0.45 micron filter. The water sample will be pumped through the filter attached directly to the discharge tubing of the groundwater pumping system (low-flow procedures) or a peristaltic pump and a section of Tygon (polyvinylchloride) tubing or other appropriate method may be used if the sample is first collected in a clean container (volume based sampling). The filter cartridge will be rinsed with an aliquot of sample prior to collection of sample in the containers or as per the filter manufacturer's recommendations. A new filter and tubing will be used for each sample. A note will be made on the sample label, FSDS, and COC form to indicate the sample has been field filtered.

4.5 Field Parameter Measurements

Specific conductance, pH, DO, temperature and turbidity measurements will be performed on the groundwater samples to be submitted to the laboratory at the time of sample collection and following purging. Data obtained from these field water quality measurements will be recorded on the FSDS. Separate aliquots of water will be used for taking field measurements (i.e., sample containers for laboratory analysis will not be reopened). For groundwater samples, field measurement intervals will be as presented above. If the parameters have not stabilized, the field instruments will be checked to determine if they are operating correctly and are still calibrated. The instruments will be recalibrated if needed; if an instrument cannot be calibrated it will be labeled as needing repair and removed from service.

4.6 Sample Containers & Volumes

The sample containers will be appropriate for the analytical method and will be obtained from the licensed analytical laboratory performing the analyses. Different containers will be required for specific groups of analytes in accordance with EPA Methods. **Table A-1** (subject to change, confirm with project manager prior to event) describes a sampling schedule and analyses for each well for each quarterly sampling event. The sampling staff will confirm with the laboratory performing the analyses that appropriate containers and preservatives are provided for use in the sampling event. It is anticipated that each sample will consist of the following containers:

- Three 40-milliliter (mL) volatile organic analysis (VOA) glass vials preserved with hydrochloric acid (HCl) for gasoline-range petroleum hydrocarbons (GRPH),ethylene dichloride (EDC; 1,2-dicholoroethane) and ethylene dibromide (EDB; 1,2-dibromoethane) when needed, by the Northwest Total Petroleum Hydrocarbon - Gasoline Range Organics (NWTPH-Gx) method; and benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 8260B.
- One 40-mL VOA glass vial preserved with HCl for methyl tertiary-butyl ether (MTBE) by EPA Method 8260C.
- One 500-mL plastic bottle preserved with nitric acid (HNO3) for Total Lead by EPA Method 200.8.
- One 500-mL plastic bottle preserved with HNO3 for Dissolved Lead by EPA Method 200.8. Groundwater samples for this analysis will typically be field-filtered using the procedure described in Section 4.1.
- One 1- Liter (L) amber glass bottle, unpreserved, for diesel-range petroleum hydrocarbons (DRPH) by the Northwest Total Petroleum Hydrocarbon for diesel-range organics method (NWTPH-Dx) and polycyclic aromatic hydrocarbons (PAHs).

4.7 Sample Labeling

Sample containers will be labeled with self-adhesive tags. Each sample will be labeled with the following information using waterproof ink.

1. Project identification
2. Sample identification
3. Date and time samples were collected
4. Treatment (preservative added, filtered, etc.)

Groundwater samples collected from monitoring/remediation wells will be assigned a unique sample identifier that will include the number of the monitoring/remediation well from which the sample was collected (e.g., MW01, MW107). Field duplicate samples (see Section 5.2) will be given a random label (e.g., MLT-01 to MLT-100) that will be identified on the FSDS sheet. All multi-method samples that use different pumping methods at the same location will be labeled identically except for the sample time and will have the sample method noted on the COC Form (e.g., Bailer, Peristaltic, Submersible).

4.8 Sample Packaging, Preservation & Shipping

Samples will be packaged and transported in a manner that protects the integrity of the sample and prevents detrimental effects due to the possible hazardous nature of the samples. Regulations for packaging, marking, labeling and shipping hazardous materials are promulgated by the U.S. Department of Transportation (DOT) in the Code of Federal Regulations (CFR), 49 CFR 171 through 177. The sample containers will be packaged carefully to avoid breakage or cross contamination using sufficient packing material.

If required by the analytical method, groundwater samples to be submitted for chemical analysis will be stored at approximately 4 °C (39.2 °F) in ice-cooled insulated containers immediately after collection. This approximate cooler temperature will be maintained until delivery to the laboratory.

4.9 Sample Custody

The primary objective of sample custody is to create an accurate record that can be used to trace the possession and handling of samples so that their quality and integrity can be documented and maintained from collection until completion of all required analyses. Sample custody will be achieved by completing the COC form initially completed by the sampler, and thereafter signed by each individual who accepts custody of the sample. A sample will be considered to be in custody under the following conditions:

- field or laboratory personnel have the sample in physical possession;
- field or laboratory personnel have the sample in view;
- the sample is locked or secured in a locked container or otherwise sealed so that tampering is evident; and/or
- the sample is kept in a secured area, restricted to authorized personnel only.

The coolers in which the samples are packaged will be accompanied by the COC form(s) identifying their contents. If coolers are shipped by a commercial mail carrier, the COC form will be sealed inside the coolers in sealable plastic bags, and the coolers will be sealed with custody seals.

The person collecting the sample will be responsible for completing the COC form and for the care and custody of the collected samples under they are transferred to another person under the COC protocols. When samples are transferred to another entity, the individual(s) relinquishing and receiving the samples will sign the COC form and document the date and time of transfer. If the samples are shipped via commercial carriers, the COC form will be sealed inside the cooler before delivery and the custody signature will be from the person who receives the samples at the analytical laboratory. Laboratory personnel will note any integrity issues on the COC form and will maintain sample security and custody through the analytical process.

4.10 Documentation

The field documentation for the FSDS shall include the following information:

- Project identification;
- Location identification;
- Sample identification(s) (including quality control samples);
- Date and time of sampling;
- Purge and sampling methods;
- Sampling depth;
- Name(s) of sample collector(s) and their signature(s);
- Inventory of sample bottles collected including sample preservation (if any), number, and types of sample bottles;
- Total volume of water purged;
- Results of field measurements and observations (i.e., time and cumulative purge volume, temperature, pH, specific conductance, turbidity, DO, ORP, and purge rate);
- Description and identification of field instruments and equipment;
- Static DTW;
- Screen interval; and
- Total depth of well.

Depth to water measurements and corresponding date and time will be recorded on the DTW form (see attached forms), as described in Section 3.0. COC forms will be used to document sample custody, sample identifications, sample date and time, requested laboratory analyses, and other pertinent information. Other field information will be recorded in a field notebook or by photographs.

When the sampling activity is completed, the field records will be checked by the Project Manager or his/her designee, and the original record will be placed in the project file.

5.0 EQUIPMENT DECONTAMINATION PROCEDURES

Decontamination procedures for groundwater sampling equipment will be used to minimize the possibility of cross-contaminating samples. Sampling equipment that comes in contact with potentially contaminated material will be decontaminated before and after each use.

Steel surveyors' tape, electric well probes and other measuring tapes shall be cleaned prior to use and after measurements in each well are completed. Cleaning shall be accomplished by washing visible contamination off with a laboratory-grade detergent/water solution and rinsing with clean, potable, municipal water, then rinsing with distilled or deionized water. If equipment is potentially contaminated by metals, it should be rinsed with a weak acid solution before the final distilled or deionized water rinse. After cleaning, equipment will be handled carefully to minimize contact with contaminants. Sample bottles and bottle caps will be cleaned and prepared by the analytical laboratory or their supplier using standard EPA-approved protocols. Sample bottles and bottle caps will be protected from contamination between time of receipt by the sampler(s) and time of actual usage.

Sampling equipment that will be used at multiple wells or sampling locations will be cleaned after sampling at each location is completed. Equipment cleaning methods will be recorded in the field sampling records.

6.0 QUALITY ASSURANCE / QUALITY CONTROL

The overall objective of project quality assurance/quality control (QA/QC) is to establish confidence that project data are of known and appropriate quality and integrity, and sufficient to support their intended use. QA/QC on this project will be accomplished by collection of specific QC samples or measurements in the field and laboratory. The QC samples are used to evaluate precision, accuracy, representativeness, completeness and comparability of the analytical results.

6.1 Field & Laboratory QC Samples

Field and laboratory QC samples will be used to evaluate data validity and representativeness. Field and laboratory QC samples will include blind field duplicates, field equipment blanks, field trip blanks, laboratory matrix or method spikes, laboratory matrix spike duplicates, laboratory duplicates, and laboratory method blanks.

The following field and laboratory QC samples will be collected and analyzed to evaluate precision and reproducibility:

- **Blind Field Duplicates:** Groundwater field duplicate samples are collected at a sampling point following the same procedures as the original sample, and are used to evaluate whether sample collection methods are reproducible. Field duplicate samples are collected at the same location and time as the original sample, but are placed in different bottles and labeled such that the laboratory cannot determine the sample station number (blind samples). Duplicate groundwater samples will be collected by alternately filling sample containers for both the original and corresponding duplicate sample at the same location to decrease variability between samples, except for samples collected for VOC analysis. In general, one duplicate sample will be collected for every 10 original samples, or one per day. The relative percent difference (RPD) between the original and duplicate sample should be less than 20.

- **Laboratory Matrix Spike Duplicate or Laboratory Duplicate Samples:** Laboratory matrix duplicate or laboratory duplicate samples are duplicate samples prepared by the laboratory to assess laboratory precision. One laboratory duplicate sample is analyzed for every 20 samples in a batch. The RPD between the original and duplicate sample should be within the laboratory method requirements.

The following quality control samples will be collected and/or analyzed to evaluate accuracy.

- **Water Blanks:** A blank sample set is prepared in the field to evaluate the potential presence of contamination originating from sources not associated with sample collection procedures. Each blank bottle is filled with deionized or distilled water in the field, preserved as required, and returned to the laboratory for analysis along with the other samples. The bottles for the blank are labeled such that the laboratory cannot determine the samples are blanks. In general, one blank sample will be collected for every 20 original samples.
- **Equipment Rinsates:** Following the last equipment decontamination of each sampling day, a distilled water rinse of the down hole equipment used to collect the groundwater sample will be collected, preserved as required, and returned to the laboratory for analysis along with the other samples. The bottles for the blank are labeled such that the laboratory cannot determine the samples are blanks. Equipment rinsate samples for this project will only be collected on days that a submersible pump was used.
- **Trip Blanks:** A blank sample set is prepared by the laboratory to evaluate the presence of contamination (volatiles) during transit, from sample bottles, or from laboratory conditions. Each blank bottle is filled with deionized or distilled water in the laboratory, preserved as required, and returned to the laboratory for analysis along with the other samples. In general, one trip blank sample will be included in each shipping container. There should be no analytes detected in the trip blank.
- **Laboratory Method Blank Samples:** Laboratory method blanks are blank samples that are prepared in the laboratory to identify any potential contamination introduced within the laboratory. One method blank will be analyzed with each batch of 20 samples. There should be no analytes detected in the laboratory method blank.
- **Laboratory Matrix Spike Samples:** These are used to evaluate potential matrix effects on sample analysis for inorganic parameters. One matrix spike and one matrix spike duplicate sample (generally run as a pair) will be included with analyses of each batch of 20 or fewer water samples, and a minimum of one per sampling event. The percent recoveries of target analytes from the matrix spike sample should be within the laboratory method requirements. As described, above, the matrix spike duplicate evaluates precision and the RPD should be within the laboratory method requirements.

- **Laboratory Control Samples:** A laboratory control sample is a sample of known analyte concentrations that is similar to the field sample matrix and is analyzed identically with the field samples in a sample batch. The laboratory control sample demonstrates that the analytical method and instrumentation are within specified control limits for acceptability. One laboratory control sample and one laboratory control sample duplicate (generally run as a pair) will be analyzed with each batch of 20 or fewer samples. The percent recoveries of analytes from the laboratory control sample should be within the laboratory method requirements. The laboratory control sample duplicate evaluates precision and the RPD should be within the laboratory method requirements.

6.2 Data Validation

Both field and laboratory QA/QC results will be evaluated to ensure sample integrity and the generation of data of known quality. Analytical reports from the laboratory will be accompanied by QA/QC results necessary to enable data reviewers to determine the quality of the data. The data validation process will identify QC problems and potential limitations on the use of the data, if any. Samples that are outside of the laboratory or field quality assurance requirements will have their analysis results marked with qualifiers (flags). Data validation will be conducted using the appropriate EPA guidelines for inorganics and organics (EPA 2008 and 2010). The QA/QC checks will include evaluation of the following components:

- COC records;
- laboratory data completeness;
- laboratory sample integrity and holding times;
- laboratory blank samples (i.e., method, trip and equipment);
- laboratory accuracy;
- laboratory precision;
- field sampling and analysis precision;
- field comparability (similar site conditions, collection techniques, measurement procedures, and methods and reporting); and
- sample representativeness.

Copies of the evaluations conducted for the data validation will be maintained in the Stantec project files. Any data qualifiers applied to the data will be documented in tabulated results within project deliverables.

7.0 REFERENCES

EPA, Region 9. *Standard Operating Procedure for the Standard/Well-Volume Method for Collecting a Ground-Water Sample from Monitoring Wells for Site Characterization*. Available online at: earth1.epa.gov/region09/qa/pdfs/finalgwsamp_sop.pdf.

EPA, Region 1. 1996. *Low Stress (low flow) Purging and Sampling Procedure for the Collection of Ground Water Samples from Monitoring Wells.* July 30, 1996.

EPA. 2002. *Ground-Water Sampling Guidelines for Superfund and RCRA Project Managers*. EPA 542-S-02-001. May 2002.

EPA. 2010. *USEPA Contract Laboratory Program, National Functional Guidelines for Inorganic Superfund Data Review*, USEPA 540-R-10-011. January 2010.

EPA. 2008. *USEPA Contract Laboratory Program, National Functional Guidelines for Organic Superfund Data Review*, USEPA-540-R-08-01. June 2008.

USGS. variously dated. *National field manual for the collection of water quality data: U.S. Geological Survey Techniques of Water-Resources Investigations*, Book 9, Chapters A1-A9, available online at http://pubs.water.usgs.gov/twri9A.

8.0 LIMITATIONS

This document, ***Groundwater Sampling Work Plan,*** was prepared by Stantec Consulting Services Inc. on behalf of TOC Holdings Co. The services described in this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

The material presented reflects Stantec's best judgment in light of the information available to it at the time of preparation. Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, nor the use of segregated portions of this report.

Any use which a third party makes of this document, or any reliance on or decisions made based on it, are the responsibilities of such third parties. Stantec Consulting Services Inc. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this document.

List of Tables

TABLE A-1
Groundwater Sampling Work Plan
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Property	Current Use	Sampled Analysis				40mL VOA				250mL HNO_3				500mL UN-P Amber			
			1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
MW01	TOC	*Decommissioned (10/01/09)*	NS	NS	NS	NS												
MW02	TOC	Monitoring	Gx, BTEX	NS	NS	NS	3											
MW03	TOC	Monitoring	Gx, BTEX,MS/MSD	NS	NS	NS	9											
MW04	ROW (56th)	Monitoring	Gx, BTEX	NS	NS	NS	3											
MW05	ROW (242nd)	Monitoring	Gx, BTEX	NS	NS	NS	3											
MW06	TOC	Monitoring	Gx, BTEX	NS	NS	NS	3											
MW07	TOC/Farmasonis	*Decommissioned (11/29/04)*	NS	NS	NS	NS												
MW08	ROW (56th)	Monitoring	Gx, BTEX	NS	NS	NS	3											
MW09 (1)	TOC	Monitoring	Gx, BTEX (QA/QC), multi-method	Gx, BTEX (QA/QC), multi-method	Gx, BTEX (QA/QC), multi-method	Gx, BTEX (QA/QC), multi-method	12	12	12	12								
MW10 (1)	TOC	Monitoring	Gx, BTEX	Gx, BTEX	Gx, BTEX	Gx, BTEX	3	3	3	3								
MW11	TOC	Monitoring	Gx, BTEX	NS	NS	NS	3											
MW12	ROW (56th)	Monitoring	Gx, BTEX	NS	NS	NS	3											
MW13	ROW (56th)	Monitoring	Gx, BTEX	NS	NS	NS	3											
MW14	TOC/Farmasonis	*Decommissioned (11/29/04)*	NS	NS	NS	NS												
MW15 (1)	TOC	Monitoring	Gx, BTEX	Gx, BTEX	Gx, BTEX	Gx, BTEX	3	3	3	3								
MW16	ROW (242nd)	Monitoring	Gx, BTEX	NS	NS	NS	3											
MW17	TOC/Farmasonis	*Decommissioned (11/29/04)*	NS	NS	NS	NS												
MW18	TOC	Monitoring	Gx, BTEX	NS	NS	NS	3											
MW19	TOC	Monitoring	Gx, BTEX	NS	NS	NS	3											
MW20 (1)	TOC	Monitoring	Gx, BTEX	Gx, BTEX, MTBE, Dx, PAH (QA/QC)	Gx, BTEX,MTBE, Dx, PAH (QA/QC)	Gx, BTEX,MTBE, Dx, PAH (QA/QC)	3	8	8	8						2	2	2
MW21 (1)	TOC	*Decommissioned (04/16/12)*	NS	NS	NS	NS												
MW22	TOC	Monitoring	Gx, BTEX	Gx, BTEX	Gx, BTEX	Gx, BTEX	3	3	3	3								
MW23	TOC	Monitoring	Gx, BTEX	NS	NS	NS	3											
MW24	TOC	Monitoring	Gx, BTEX	NS	NS	NS	3											
MW25	TOC	Monitoring	Gx, BTEX	NS	NS	NS	3											
MW26	TOC	Monitoring	Gx, BTEX	NS	NS	NS	3											
MW27 (1)	TOC	Monitoring	Gx, BTEX	Gx, BTEX	Gx, BTEX	Gx, BTEX	3	3	3	3								
MW28	TOC	Monitoring	Gx, BTEX (QA/QC)	NS	NS	NS	6											
MW29	TOC	Monitoring	Gx, BTEX, T/D Pb	NS	NS	NS	3				2							
MW30	TOC/Farmasonis	Monitoring	Gx, BTEX	NS	NS	NS	3											
MW31 (1)	TOC/Farmasonis	Monitoring	Gx, BTEX, T/D Pb	Gx, BTEX, T/D Pb	Gx, BTEX, T/D Pb	Gx, BTEX, T/D Pb	3	3	3	3	2	2	2	2				
MW32 (1)	TOC	Monitoring	Gx, BTEX, T/D Pb	Gx, BTEX	Gx, BTEX	Gx, BTEX	3	3	3	3	2							
MW33 (1)	TOC	Monitoring	Gx, BTEX	Gx, BTEX	Gx, BTEX	Gx, BTEX	3	3	3	3								
MW34	TOC	Monitoring	Gx, BTEX	NS	NS	NS	3											
MW35	TOC	Monitoring	Gx, BTEX, T/D Pb	NS	NS	NS	3				2							
MW36	TOC	Monitoring	Gx, BTEX	NS	NS	NS	3											
MW37	TOC	Monitoring	Gx, BTEX	NS	NS	NS	3											
MW38	TOC	Monitoring	Gx, BTEX	NS	NS	NS	3											
MW39	TOC/Farmasonis	Monitoring	Gx, BTEX	NS	NS	NS	3											
MW40	TOC/Farmasonis	Monitoring	Gx, BTEX	NS	NS	NS	3											
MW41	TOC/Farmasonis	Monitoring	Gx, BTEX, T/D Pb	NS	NS	NS	3				2							
MW42	TOC/Farmasonis	Monitoring (Dry)	NS	NS	NS	NS												
MW43	ROW (56th)	Monitoring (Dry)	NS	NS	NS	NS												
MW44	ROW (56th)	Monitoring (Dry)	NS	NS	NS	NS												
MW45 (1)	ROW (56th)	Monitoring	Gx, BTEX, T/D Pb	Gx, BTEX, T/D Pb	Gx, BTEX, T/D Pb	Gx, BTEX, T/D Pb	3	3	3	3	2	2	2	2				
MW46	ROW (56th)	Monitoring	Gx, BTEX, T/D Pb	NS	NS	NS	3				2							
MW47	ROW (56th)	Monitoring	Gx, BTEX, T/D Pb	NS	NS	NS	3				2							
MW48 (1)	ROW (56th)	LNAPL Recovery	Gx, BTEX, T/D Pb	Gx, BTEX, T/D Pb	Gx, BTEX, T/D Pb	Gx, BTEX, T/D Pb	3	3	3	3	2	2	2	2				
MW49 (1)	ROW (56th)	Monitoring	Gx, BTEX	Gx, BTEX	Gx, BTEX	Gx, BTEX	3	3	3	3								

TABLE A-1
Groundwater Sampling Work Plan
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Property	Current Use	Sampled Analysis				40mL VOA				250mL HNO_3				500mL UN-P Amber			
			1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
MW50 (1)	ROW (56th)	Monitoring	Gx, BTEX	Gx, BTEX	Gx, BTEX	Gx, BTEX	3	3	3	3								
MW51 (1)	ROW (56th)	Monitoring	Gx, BTEX	Gx, BTEX	Gx, BTEX	Gx, BTEX	3	3	3	3								
MW52 (1)	ROW (56th)	Monitoring	Gx, BTEX	Gx, BTEX	Gx, BTEX	Gx, BTEX	3	3	3	3								
MW53 (1)	ROW (56th)	Monitoring	Gx, BTEX	Gx, BTEX	Gx, BTEX	Gx, BTEX	3	3	3	3								
MW54	TOC/Farmasonis	Monitoring	Gx, BTEX	Gx, BTEX,MTBE, Dx, PAH (MS/MSD)	Gx, BTEX,MTBE, Dx, PAH (MS/MSD)	Gx, BTEX,MTBE, Dx, PAH (MS/MSD)	3	12	12	12						3	3	3
MW55 (1)	ROW (56th)	Monitoring	Gx, BTEX	Gx, BTEX	Gx, BTEX	Gx, BTEX	3	3	3	3								
MW56 (1)	TOC/Farmasonis	Monitoring	Gx, BTEX	Gx, BTEX	Gx, BTEX	Gx, BTEX	3	3	3	3								
MW57	TOC/Farmasonis	Monitoring	Gx, BTEX	NS	NS	NS	3											
MW58 (1)	TOC/Farmasonis	Monitoring	Gx, BTEX	Gx, BTEX	Gx, BTEX	Gx, BTEX	3	3	3	3								
MW59 (1)	TOC/Farmasonis	Monitoring	Gx, BTEX	Gx, BTEX	Gx, BTEX	Gx, BTEX	3	3	3	3								
MW60 (1)	ROW (56th)	Monitoring	Gx, BTEX	Gx, BTEX	Gx, BTEX	Gx, BTEX	3	3	3	3								
MW61	ROW (56th)	Monitoring	Gx, BTEX	NS	NS	NS	3											
MW62	ROW (56th)	Monitoring	Gx, BTEX	NS	NS	NS	3											
MW63 (1)	ROW (56th)	Monitoring	Gx, BTEX	Gx, BTEX	Gx, BTEX	Gx, BTEX	3	3	3	3								
MW64	ROW (56th)	Monitoring	Gx, BTEX	NS	NS	NS	3											
MW65 (1)	Drake	Monitoring	Gx, BTEX, MTBE	Gx, BTEX, MTBE	Gx, BTEX, MTBE	Gx, BTEX, MTBE	4	4	4	4								
MW66 (1)	TOC/Farmasonis	Monitoring	Gx, BTEX	Gx, BTEX, MTBE, Dx, PAH	Gx, BTEX, MTBE, Dx, PAH	Gx, BTEX, MTBE, Dx, PAH	3	4	4	4						1	1	1
MW67	Drake	Monitoring	Gx, BTEX	Gx, BTEX, MTBE	Gx, BTEX, MTBE	Gx, BTEX, MTBE	3	4	4	4								
MW68	Drake	Monitoring	Gx, BTEX	Gx, BTEX, MTBE	Gx, BTEX, MTBE	Gx, BTEX, MTBE	3	4	4	4								
MW69 (1)	Drake	Monitoring	Gx, BTEX, MTBE	Gx, BTEX, MTBE, Dx, PAH	Gx, BTEX, MTBE, Dx, PAH	Gx, BTEX, MTBE, Dx, PAH	4	4	4	4						1	1	1
MW70 (1)	Drake	Monitoring	Gx, BTEX, MTBE	Gx, BTEX, MTBE, T/D Pb, EDC, EDB, Dx, PAH	Gx, BTEX, MTBE, T/D Pb, EDC, EDB, Dx, PAH	Gx, BTEX, MTBE, T/D Pb, EDC, EDB, Dx, PAH	4	4	4	4		2	2	2		1	1	1
MW71 (2)	Shin/Choi	Monitoring	Gx, BTEX, MTBE, T/D Pb, EDC, EDB	Gx, BTEX, MTBE, T/D Pb, EDC, EDB, Dx, PAH	Gx, BTEX, MTBE, T/D Pb, EDC, EDB, Dx, PAH	Gx, BTEX, MTBE, T/D Pb, EDC, EDB, Dx, PAH	4	4	4	4	2	2	2	2		1	1	1
MW72 (2)	Shin/Choi	Monitoring	Gx, BTEX, MTBE, T/D Pb, EDC, EDB	Gx, BTEX, MTBE, T/D Pb, EDC, EDB, Dx, PAH	Gx, BTEX, MTBE, T/D Pb, EDC, EDB, Dx, PAH	Gx, BTEX, MTBE, T/D Pb, EDC, EDB, Dx, PAH	4	4	4	4	2	2	2	2		1	1	1
MW73	Shin/Choi	Monitoring	Gx, BTEX, MTBE, T/D Pb, EDC, EDB	Gx, BTEX, MTBE, T/D Pb, EDC, EDB, Dx, PAH	Gx, BTEX, MTBE, T/D Pb, EDC, EDB, Dx, PAH	Gx, BTEX, MTBE, T/D Pb, EDC, EDB, Dx, PAH	4	4	4	4	2	2	2	2		1	1	1
MW74	Shin/Choi	Monitoring	Gx, BTEX, MTBE, T/D Pb, EDC, EDB	Gx, BTEX, MTBE, T/D Pb, EDC, EDB, Dx, PAH	Gx, BTEX, MTBE, T/D Pb, EDC, EDB, Dx, PAH	Gx, BTEX, MTBE, T/D Pb, EDC, EDB, Dx, PAH	4	4	4	4	2	2	2	2		1	1	1
MW75	ROW (56th)	Monitoring	Gx, BTEX	NS	NS	NS	3				2							
MW76	Drake	Monitoring	Gx, BTEX, MTBE	NS	NS	NS	4											
MW77 (1)	Drake	Monitoring	Gx, BTEX, MTBE	Gx, BTEX, MTBE	Gx, BTEX, MTBE	Gx, BTEX, MTBE	4	4	4	4								
MW78	Drake	Monitoring	Gx, BTEX, MTBE	NS	NS	NS	4											
MW79	TOC/Farmasonis	Monitoring	Gx, BTEX	NS	NS	NS	3											
MW80	TOC/Farmasonis	Monitoring	Gx, BTEX	NS	NS	NS	3											
MW81	TOC/Farmasonis	Monitoring	Gx, BTEX	NS	NS	NS	3											
MW82	TOC/Farmasonis	Monitoring	Gx, BTEX	NS	NS	NS	3											
MW83	TOC/Farmasonis	*Decommissioned (11/21/11)*	NS	NS	NS	NS												
MW84 (1)	Drake	Monitoring	Gx, BTEX, MTBE	Gx, BTEX, MTBE	Gx, BTEX, MTBE	Gx, BTEX, MTBE	4	4	4	4								
MW85 (1)	Drake	*Decommissioned (11/28/11)*	Gx, BTEX, MTBE	Gx, BTEX, MTBE	Gx, BTEX, MTBE	Gx, BTEX, MTBE	4	4	4	4								
MW86 (1)	Drake	Monitoring	Gx, BTEX, MTBE (QA/QC)	Gx, BTEX, MTBE, T/D Pb, EDC, EDB, Dx, PAH (QA/QC)	Gx, BTEX, MTBE, T/D Pb, EDC, EDB, Dx, PAH (QA/QC)	Gx, BTEX, MTBE, T/D Pb, EDC, EDB, Dx, PAH (QA/QC)	8	8	8	8		4	4	4		2	2	2
MW87	Drake	Monitoring	Gx, BTEX, MTBE	NS	NS	NS	4											

Stantec

TABLE A-1
Groundwater Sampling Work Plan
TOC Holdings Co. Facility No. 01-176; Mountlake Terrace WA

Well ID	Property	Current Use	Sampled Analysis				40mL VOA				250mL HNO_3				500mL UN-P Amber			
			1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
MW88	Drake	Monitoring	Gx, BTEX	NS	NS	NS	3											
MW89 (1)	Drake	Monitoring	Gx, BTEX, MTBE	Gx, BTEX, MTBE	Gx, BTEX, MTBE	Gx, BTEX, MTBE	4	4	4	4								
MW90	TOC	Remediation	Gx, BTEX, T/D Pb	NS	NS	NS	3				2							
MW91	TOC	Remediation	Gx, BTEX, T/D Pb	NS	NS	NS	3				2							
MW92	TOC/Farmasonis	Remediation	Gx, BTEX	NS	NS	NS	3											
MW93	TOC/Farmasonis	Remediation	Gx, BTEX	NS	NS	NS	3											
MW94	TOC/Farmasonis	Remediation	Gx, BTEX	NS	NS	NS	3											
MW95	Drake	Remediation	Gx, BTEX, MTBE	NS	NS	NS	4											
MW96	Drake	Remediation	Gx, BTEX, MTBE	NS	NS	NS	4											
MW97	Drake	Remediation	Gx, BTEX, MTBE	NS	NS	NS	4											
MW98	Drake	Remediation	Gx, BTEX, MTBE	NS	NS	NS	4											
MW99	Drake	Remediation	Gx, BTEX, MTBE	NS	NS	NS	4											
MW100	TOC/Farmasonis	Monitoring	Gx, BTEX, T/D Pb	NS	NS	NS	4				2							
MW101	Drake	Remediation	Gx, BTEX, MTBE, T/D Pb	NS	NS	NS	4				2							
MW102 (2)	Herman	Monitoring	Gx, Dx, BTEX, MTBE, T/D Pb, EDC, EDB	Gx, Dx, BTEX, MTBE, T/D Pb, EDC, EDB, PAH	Gx, Dx, BTEX, MTBE, T/D Pb, EDC, EDB, PAH	Gx, Dx, BTEX, MTBE, T/D Pb, EDC, EDB, PAH	4	4	4	4	2	2	2	2	1	1	1	1
MW103	Herman	Monitoring	Gx, Dx, BTEX, MTBE, T/D Pb, EDC, EDB	Gx, Dx, BTEX, MTBE, T/D Pb, EDC, EDB, PAH	Gx, Dx, BTEX, MTBE, T/D Pb, EDC, EDB, PAH	Gx, Dx, BTEX, MTBE, T/D Pb, EDC, EDB, PAH	4	4	4	4	2	2	2	2	1	1	1	1
MW104 (2)	Herman	Monitoring	Gx, Dx, BTEX, MTBE, T/D Pb, EDC, EDB, QA/QC	Gx, Dx, BTEX, MTBE, T/D Pb, EDC, EDB, PAH	Gx, Dx, BTEX, MTBE, T/D Pb, EDC, EDB, PAH	Gx, Dx, BTEX, MTBE, T/D Pb, EDC, EDB, PAH	8	4	4	4	4	2	2	2	1	1	1	1
MW105	Herman	Monitoring	Gx, Dx, BTEX, MTBE, T/D Pb, EDC, EDB	Gx, Dx, BTEX, MTBE, T/D Pb, EDC, EDB, PAH	Gx, Dx, BTEX, MTBE, T/D Pb, EDC, EDB, PAH	Gx, Dx, BTEX, MTBE, T/D Pb, EDC, EDB, PAH	4	4	4	4	2	2	2	2	1	1	1	1
MW106	Herman	Monitoring	Gx, Dx, BTEX, MTBE, T/D Pb, EDC, EDB	Gx, Dx, BTEX, MTBE, T/D Pb, EDC, EDB, Dx, PAH	Gx, Dx, BTEX, MTBE, T/D Pb, EDC, EDB, Dx, PAH	Gx, Dx, BTEX, MTBE, T/D Pb, EDC, EDB, Dx, PAH	4	4	4	4	2	2	2	2	1	1	1	1
MW107	Herman	Monitoring	Gx, Dx, BTEX, MTBE, T/D Pb, EDC, EDB	Gx, Dx, BTEX, MTBE, T/D Pb, EDC, EDB, PAH	Gx, Dx, BTEX, MTBE, T/D Pb, EDC, EDB, PAH	Gx, Dx, BTEX, MTBE, T/D Pb, EDC, EDB, PAH	4	4	4	4	2	2	2	2	1	1	1	1
Rinsate Blankx4		QA/QC	As needed/All	As needed/All	As needed/All	As needed/All	16	16	16	16	8	8	8	8	4	4	4	4
Water Blankx2		QA/QC	As needed/All	As needed/All	As needed/All	As needed/All	8	8	8	8	4	4	4	4	2	2	2	2
						Sample Bottle Totals:	**372**	**204**	**204**	**204**	**62**	**44**	**44**	**44**	**12**	**26**	**26**	**26**

NOTES:

This schedule does not include future sampling at the Shin/Choi or Herman Properties

(1) Wells are included in the agreed order to sample quarterly

(2) Only sample wells with no product

LIST OF PROPERTIES:

Drake = 24309 56th Avenue West, Mountlake Terrace WA
Herman = 24311 56th Avenue West, Mountlake Terrace WA
ROW (242nd) = Right-of-Way located at 242nd Street Southwest, Mountlake Terrace WA
ROW (56th) = Right-of-Way located at 56th Avenue West, Mountlake Terrace WA
Shin/Choi = 24325 56th Avenue West, Mountlake Terrace WA
TOC = 24205 56th Avenue West, Mountlake Terrace WA
TOC/Farmasonis = 24225 56th Avenue West, Mountlake Terrace WA

DEFINITIONS:

BTEX = benzene, toluene, ethylbenzene and total xylenes
Dx = Northwest Total Petroleum Hydrocarbon for diesel-range organics
EDB = ethylene dibromide (1,2-dibromoethane)
EDB = ethylene dibromide (1,2-dibromoethane)
EDC = ethylene dichloride (1,2-dicholoroethane)
EDC = ethylene dichloride (1,2-dicholoroethane)
Gx = Northwest Total Petroleum Hydrocarbon for gasoline-range organics
HNO_3 = nitric acid
LNAPL = light non-aqueous phase liquid
mL = milliLiter
MS/MSD = matrix spike / matrix spike duplicate sample location
MTBE = methyl tertiary-butyl ether
multi-method = several types of sampling equipment were used for comparison
MW = monitoring well
NS = not sampled
PAH = polycyclic aromatic hydrocarbons
T/D Pb = total and dissolved lead
QA/QC = quality assurance / quality control (sample location)
ROW = right-of-way
VOA = volatile organic analysis

List of Forms

Stantec

Well ID: ____________________

Sample ID: ____________________

Duplicate ID: ____________________

Low-Flow and Volumetric Groundwater Sampling Data Sheet

TOC Facility #01-176; Mountlake Terrace, WA

GENERAL INFO			
Client Name: HydroCon **Owner Name:** TOC Holdings Co.	**Weather:** ☐Sunny ☐Cloudy ☐Rain	**Sample Date:** **Sample Time:**	
Project No: B.A14085.00	**Temp:** ______ °F ______ °C	**Duplicate Sample Time:**	

EQUIPMENT			
Type	**Make**	**Model**	**Serial No.**
Water Tape			
Multimeter			
Turbidity			
Pump Controller			

SAMPLE METHOD ☐ Bailer ☐ Bladder Pump ☐ Submersible Pump ☐ Peristaltic Pump ☐ Pneumatic Pump ☐ Other (describe):

WELL DETAILS							
Date	**Time**	**Casing Diam.**	**DTP**	**DTW**	**DTB**	**Screen Interval**	**Pump Depth**
Purge Volume(3 Volumes)	**Casing Diameter Volume Conversion Factor (VC)**						
_____ gal = water column (ft)*VC*3	**1" = 0.041**	**2" = 0.163**	**3" = 0.367**	**4" = 0.653**	**6" = 1.469**	**10" = 4.080**	**12" = 5.875**

SAMPLE DATA								
Time (5 min intervals)	**DTW (feet)**	**Liters**	**pH**	**Temp. (°C)**	**DO (mg/L)**	**Spec Cond (μS/cm)**	**ORP (mV)**	**Turbidity (NTU)**
		Stabilization Criteria	±0.1	3%	10%	3%	±10mV	10%
		Flow Rate Range	0.1-0.5 L/min; Optimal Total Drawdown <0.3'					

SAMPLE BOTTLES						
Bottle Type	√	**Quantity**	**Volume**	**Preservative**	**Filter**	**Other**
VOA Glass			40 ml	HCL	No	
Poly			250 ml	HNO3	No	
Poly			250 ml	HNO3	Yes	
Total Bottles:						

NOTES

Sampled By: ____________________ **Signature:** ____________________ Page ____ of ____

DTW Meter Serial Number:
Field Personnel:

Depth to LNAPL/Groundwater Level Measurement Form

TOC Holdings CO. Facility No. 01-176; Mountlake Terrace WA

WELL ID	PROPERTY	PREVIOUS DTP/DTW SYSTEM OFF (3/24/14)	PREVIOUS DTP/DTW SYSTEM ON (4/3/14)	DTP/DTW SYSTEM OFF DATE	TIME (24:00)	DTP/DTW SYSTEM ON DATE	TIME (24:00)	NOTES
DRAKE PROPERTY WELLS								
MW65	Drake	41.19	41.82					
MW67	Drake	13.05	12.34					
MW68	Drake	12.42	11.65					
MW69	Drake	Dry	NM (1)					RW
MW70	Drake	NM	NM					2" RW
MW76	Drake	39.01	40.57					
MW77	Drake	38.54	39.73					
MW78	Drake	36.33	36.72					
MW84	Drake	NM (1)	NM (1)					RW/no pump
MW85	Drake	39.87	40.95					
MW86	Drake	41.22	42.41					
MW87	Drake	38.17	39.26					
MW88	Drake	18.54	12.00					
MW89	Drake	42.07	44.00					
MW95	Drake	43.35	45.55					RW
MW96	Drake	43.25	Dry					RW; TP at 47.5
MW97	Drake	42.35	Dry					RW; TP at 42.77
MW98	Drake	42.46	NM (1)					RW
MW99	Drake	Dry	Dry					RW; TP at 38.55
MW101	Drake	40.36	Dry					RW; TP at 42.35
MW44	ROW (56th)	Dry	Dry					
MW47	ROW (56th)	44.63 (2)	Dry					
MW48	ROW (56th)	42.51	42.19					
MW52	ROW (56th)	43.30	43.45					
MW55	ROW (56th)	43.63	43.78					
MW63	ROW (56th)	42.69	42.68					
MW64	ROW (56th)	41.06	41.19					
MW75	ROW (56th)	NM	43.91					In road way

DTW Meter Serial Number:
Field Personnel:

Depth to LNAPL/Groundwater Level Measurement Form

TOC Holdings CO. Facility No. 01-176; Mountlake Terrace WA

WELL ID	PROPERTY	PREVIOUS DTP/DTW SYSTEM OFF (3/24/14)	PREVIOUS DTP/DTW SYSTEM ON (4/3/14)	DTP/DTW SYSTEM OFF DATE	TIME (24:00)	DTP/DTW SYSTEM ON DATE	TIME (24:00)	NOTES
HERMAN PROPERTY WELLS								
MW102	Herman	15.29/16.92	14.78/16.26					
MW103	Herman	43.27	43.55					
MW104	Herman	10.84	10.31					
MW105	Herman	42.26 (2)	Dry					
MW106	Herman	8.64	9.02					
MW107	Herman	39.16	39.89					
MW51	ROW (56th)	41.27	41.88					
SHIN/CHOI PROPERTY WELLS								
MW71	Shin/Choi	12.70/12.99	11.91/12.16					
MW72	Shin/Choi	15.69/16.18	14.67/14.96					
MW73	Shin/Choi	38.60	38.90					
MW74	Shin/Choi	39.10	39.10					
TOC PROPERTY WELLS								
MW02	TOC	10.83	10.66					
MW03	TOC	11.00	11.61					
MW06	TOC	8.68	9.18					
MW09	TOC	22.44	27.43					
MW10	TOC	30.78	Dry					
MW11	TOC	21.31	33.00					RW
MW15	TOC	36.70	29.40					RW
MW18	TOC	Dry	Dry					RW; TP at 27.85
MW19	TOC	12.09	12.11					
MW20	TOC	33.03	36.30					
MW22	TOC	27.92	29.41					
MW23	TOC	38.86	38.56					
MW24	TOC	14.10	Dry					RW; TP at 31.75
MW25	TOC	27.64	32.82					
MW26	TOC	48.34	47.77					

DTW Meter Serial Number:
Field Personnel:

Depth to LNAPL/Groundwater Level Measurement Form
TOC Holdings CO. Facility No. 01-176; Mountlake Terrace WA

WELL ID	PROPERTY	PREVIOUS DTP/DTW SYSTEM OFF (3/24/14)	PREVIOUS DTP/DTW SYSTEM ON (4/3/14)	DTP/DTW SYSTEM OFF DATE	TIME (24:00)	DTP/DTW SYSTEM ON DATE	TIME (24:00)	NOTES
TOC PROPERTY WELLS (continued)								
MW27	TOC	NM	NM					2" RW
MW28	TOC	26.99	28.50					
MW29	TOC	NM	NM					2" RW
MW30	TOC	41.15	41.29					
MW32	TOC	21.03	28.95					RW
MW33	TOC	34.51	33.98					
MW34	TOC	8.78	9.26					
MW35	TOC	39.36	39.64					
MW36	TOC	42.28	42.41					
MW37	TOC	14.97	15.91					
MW38	TOC	16.15	18.44					
MW90	TOC	23.19	34.94					RW
MW91	TOC	22.64	32.60					RW
MW04	ROW (56th)	11.51	10.87					
MW05	ROW (242nd)	11.50	10.73					
MW08	ROW (56th)	17.49	23.32					
MW16	ROW (242nd)	Dry	Dry					
MW50	ROW (56th)	35.72	35.88					
MW53	ROW (56th)	43.81	44.00					
MW62	ROW (56th)	9.72	9.56					

DTW Meter Serial Number:
Field Personnel:

Depth to LNAPL/Groundwater Level Measurement Form
TOC Holdings CO. Facility No. 01-176; Mountlake Terrace WA

WELL ID	PROPERTY	PREVIOUS DTP/DTW SYSTEM OFF (3/24/14)	PREVIOUS DTP/DTW SYSTEM ON (4/3/14)	DTP/DTW SYSTEM OFF DATE	TIME (24:00)	DTP/DTW SYSTEM ON DATE	TIME (24:00)	NOTES
TOC / FARMASONIS PROPERTY WELLS								
MW31	TOC / Farmasonis	NM	NM					2" RW
MW39	TOC / Farmasonis	41.00	41.19					
MW40	TOC / Farmasonis	41.22	41.34					
MW41	TOC / Farmasonis	NM	NM					2" RW
MW42	TOC / Farmasonis	Dry	Dry					
MW54	TOC / Farmasonis	10.92	10.53					
MW56	TOC / Farmasonis	44.00	45.55					
MW57	TOC / Farmasonis	Dry	NM (1)					RW
MW58	TOC / Farmasonis	FSDS is 44.15 (03/26/14)	44.89					
MW59	TOC / Farmasonis	42.12	45.14					
MW66	TOC / Farmasonis	42.30	43.78					
MW79	TOC / Farmasonis	10.53	10.50					
MW80	TOC / Farmasonis	11.70	11.58					
MW81	TOC / Farmasonis	42.45	44.14					
MW82	TOC / Farmasonis	26.30	28.96					
MW92	TOC / Farmasonis	44.30	44.80					RW
MW93	TOC / Farmasonis	Dry	42.15					RW
MW94	TOC / Farmasonis	Dry	Dry					RW; TP at 40.44
MW100	TOC / Farmasonis	14.05	13.94					
MW12	ROW (56th)	10.00	9.60					
MW13	ROW (56th)	Dry	Dry					
MW43	ROW (56th)	34.71	34.72					
MW45	ROW (56th)	Dry	Dry					
MW46	ROW (56th)	Dry	43.40 (2)					
MW49	ROW (56th)	42.97	44.74					
MW60	ROW (56th)	43.88	44.87					
MW61	ROW (56th)	8.29	8.38					

DTW Meter Serial Number:
Field Personnel:

Depth to LNAPL/Groundwater Level Measurement Form
TOC Holdings CO. Facility No. 01-176; Mountlake Terrace WA

WELL ID	PROPERTY	PREVIOUS DTP/DTW SYSTEM OFF (3/24/14)	PREVIOUS DTP/DTW SYSTEM ON (4/3/14)	DTP/DTW SYSTEM OFF DATE	TIME (24:00)	DTP/DTW SYSTEM ON DATE	TIME (24:00)	NOTES
DECOMMISSIONED WELLS								
MW01	*Decommissioned*							
MW07	*Decommissioned*							
MW14	*Decommissioned*							
MW17	*Decommissioned*							
MW21	*Decommissioned*							
MW83	*Decommissioned*							

NOTES:
(1) Not measured due to inaccessible wellhead (vehicle parked over wellhead).
(2) Unclear if well was dry or if water was in end cap of well.

LIST OF PROPERTIES:
Drake = 24309 56th Avenue West, Mountlake Terrace WA
Herman = 24311 56th Avenue West, Mountlake Terrace WA
ROW (242nd) = Right-of-Way located at 242nd Street Southwest, Mountlake Terrace WA
ROW (56th) = Right-of-Way located at 56th Avenue West, Mountlake Terrace WA
Shin/Choi = 24325 56th Avenue West, Mountlake Terrace WA
TOC = 24205 56th Avenue West, Mountlake Terrace WA
TOC/Farmasonis = 24225 56th Avenue West, Mountlake Terrace WA

DEFINITIONS:
DTP = depth-to-product (LNAPL)
DTW = depth-to-water
FSDS = Field Sample Data Sheet
LNAPL = light non-aqueous phase liquid
MW = monitoring well
NM = not measured
ROW= right-of-way
RW = remediation well
TP = top of pump

Appendix B
Laboratory Analytical Data

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Kurt Johnson, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

March 27, 2014

Rebekah Brooks, Project Manager
JBR Environmental Consultants
19101 36th Ave W, Suite 203
Lynnwood, WA 98036

Dear Ms. Brooks:

Included are the results from the testing of material submitted on March 24, 2014 from the TOC 01-176_MLT, PO B.A14085.00, WORFDB8 F&BI 403326 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: Kim Vik
JBR0327R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on March 24, 2014 by Friedman & Bruya, Inc. from the JBR Environmental Consultants TOC 01-176_MLT, PO B.A14085.00, WORFDB8 F&BI 403326 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	JBR Environmental Consultants
403326-01	MW12
403326-02	MW66
403326-03	MW100
403326-04	MW81
403326-05	MW80
403326-06	MW79
403326-07	MW54
403326-08	TB-02

All quality control requirements were acceptable.

Date of Report: 03/27/14
Date Received: 03/24/14
Project: TOC 01-176_MLT, PO B.A14085.00, WORFDB8 F&BI 403326
Date Extracted: 03/24/14
Date Analyzed: 03/24/14 and 03/25/14

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 52-124)
MW12 403326-01	<1	<1	<1	<3	<100	93
MW66 403326-02	<1	<1	<1	<3	<100	93
MW100 403326-03	<1	<1	<1	<3	<100	90
MW81 403326-04	<1	<1	<1	<3	<100	89
MW80 403326-05	<1	<1	<1	<3	<100	88
MW79 403326-06	<1	<1	<1	<3	<100	90
MW54 403326-07	<1	<1	<1	<3	<100	90
TB-02 403326-08	<1	<1	<1	<3	<100	79
Method Blank 04-0565 MB	<1	<1	<1	<3	<100	88

Date of Report: 03/27/14
Date Received: 03/24/14
Project: TOC 01-176_MLT, PO B.A14085.00, WORFDB8 F&BI 403326

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: 403308-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	88	65-118
Toluene	ug/L (ppb)	50	93	72-122
Ethylbenzene	ug/L (ppb)	50	96	73-126
Xylenes	ug/L (ppb)	150	94	74-118
Gasoline	ug/L (ppb)	1,000	93	69-134

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.

Farmasonis wells

403326

SAMPLE CHAIN OF CUSTODY ME 3/24/14

V2

Send Report To Rebekah Brooks

Company JBR Environmental Con.

Address 19101 36th Ave, West, ste203

City, State, ZIP Lynnwood Wa 98036

Phone # 425-977-4994 Fax # 425-449-4097

SAMPLERS (*signature*) Dana Hutchins

PROJECT NAME/NO.	PO#
TOC-MLT	B.A14085.00

REMARKS

Page # 1 of 1

TURNAROUND TIME
☒ Standard (2 Weeks)
☐ RUSH
Rush charges authorized by

SAMPLE DISPOSAL
☒ Dispose after 30 days
☐ Return samples
☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS							Notes
MW12	01 A-C	3-23-14	0900	W	3		X	X										
MW66	02	3-23-14	1030	W	3		X	X										
MW100	03	3-23-14	1120	W	3		X	X										
MW81	04	3-23-14	1330	W	3		X	X										
MW80	05	3-23-14	1500	W	3		X	X										
MW79	06	3-23-14	1510	W	3		X	X										
MW54	07	3-22-14	1510	W	3		X	X										
TB-02	08	NA	NA	W	1		X	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:	Dana Hutchins	Dana Hutchins	JBR	3-24-14	1200
Received by:	Thao Molsness	Thao Molsness	F&BI	3/24/14	2:50
Relinquished by:					
Received by:			Samples received at 6 °C		

FORMS\COC\COC.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Kurt Johnson, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

March 27, 2014

Rebekah Brooks, Project Manager
JBR Environmental Consultants
19101 36th Ave W, Suite 203
Lynnwood, WA 98036

Dear Ms. Brooks:

Included are the results from the testing of material submitted on March 24, 2014 from the TOC_01-176 MLT, PO B.A14085.00, WORFDB8 F&BI 403327 project. There are 5 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: Kim Vik
JBR0327R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on March 24, 2014 by Friedman & Bruya, Inc. from the JBR Environmental Consultants TOC_01-176 MLT, PO B.A14085.00, WORFDB8 F&BI 403327 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	JBR Environmental Consultants
403327-01	MW06
403327-02	MW37
403327-03	MW34
403327-04	MW36
403327-05	MW35
403327-06	MW23
403327-07	MW38
403327-08	MW05
403327-09	MW03
403327-10	MW04
403327-11	MW22
403327-12	MW19
403327-13	MW28
403327-14	MW10
403327-15	MW02
403327-16	MLT-01
403327-17	MW20
403327-18	MW28
403327-19	MW26
403327-20	TB-01

All quality control requirements were acceptable.

Date of Report: 03/27/14
Date Received: 03/24/14
Project: TOC_01-176 MLT, PO B.A14085.00, WORFDB8 F&BI 403327
Date Extracted: 03/25/14
Date Analyzed: 03/25/14

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
MW06 403327-01	<1	<1	<1	<3	<100	79
MW37 403327-02	<1	<1	<1	<3	<100	79
MW34 403327-03	<1	<1	<1	<3	<100	79
MW36 403327-04	<1	<1	<1	<3	<100	79
MW35 403327-05	<1	<1	<1	<3	<100	78
MW23 403327-06	<1	<1	<1	<3	<100	82
MW38 403327-07	<1	<1	<1	<3	<100	78
MW05 403327-08	<1	<1	<1	<3	<100	77
MW03 403327-09	<1	<1	<1	<3	<100	78
MW04 403327-10	<1	<1	<1	4.4	<100	79
MW22 403327-11	<1	<1	<1	<3	<100	79

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/27/14
Date Received: 03/24/14
Project: TOC_01-176 MLT, PO B.A14085.00, WORFDB8 F&BI 403327
Date Extracted: 03/25/14
Date Analyzed: 03/25/14

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
MW19 403327-12	<1	<1	<1	<3	<100	79
MW28 403327-13	<1	<1	<1	<3	<100	79
MW10 403327-14	<1	<1	<1	<3	<100	80
MW02 403327-15	<1	<1	<1	<3	<100	79
MLT-01 403327-16	<1	<1	<1	<3	<100	79
MW20 403327-17	<1	<1	<1	<3	<100	79
MW28 403327-18	<1	<1	<1	<3	<100	79
MW26 403327-19	<1	<1	<1	<3	<100	77
TB-01 403327-20	<1	<1	<1	<3	<100	79
Method Blank 04-0567 MB	<1	<1	<1	<3	<100	83

Date of Report: 03/27/14
Date Received: 03/24/14
Project: TOC_01-176 MLT, PO B.A14085.00, WORFDB8 F&BI 403327

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: 403327-09 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Benzene	ug/L (ppb)	50	<1	80	78	50-150	3
Toluene	ug/L (ppb)	50	<1	83	81	50-150	2
Ethylbenzene	ug/L (ppb)	50	<1	87	86	50-150	1
Xylenes	ug/L (ppb)	150	<3	77	77	50-150	0
Gasoline	ug/L (ppb)	1,000	<100	97	95	50-150	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	78	72-119
Toluene	ug/L (ppb)	50	80	71-113
Ethylbenzene	ug/L (ppb)	50	84	72-114
Xylenes	ug/L (ppb)	150	75	72-113
Gasoline	ug/L (ppb)	1,000	105	70-119

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.

TOC Wells

403327

SAMPLE CHAIN OF CUSTODY

ME 03/24/14

VS

Page # 1 of 2

Send Report To: Rebekah Brooks

Company: JBR Environmental Con.

Address: 19101 36th Ave, West, STE203

City, State, ZIP: Lynnwood Wa 98036

Phone #: 425-977-4994 Fax #: 425-449-4097

SAMPLERS (signature): Dana Hutchins

PROJECT NAME/NO.: TOC-MLT

PO#: B.A14085.00

REMARKS

TURNAROUND TIME
- ☒ Standard (2 Weeks)
- ☐ RUSH
- Rush charges authorized by

SAMPLE DISPOSAL
- ☒ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS	Notes
MWØ6	01 A-C	3-20-14	1140	W	3		X	X				
MW37	02	3-20-14	1255	W	3		X	X				
MW34	03	3-20-14	1340	W	3		X	X				
MW36	04	3-20-14	1420	W	3		X	X				
MW35	05	3-20-14	1430	W	3		X	X				
MW23	06	3-20-14	1500	W	3		X	X				
MW38	07	3-21-14	1340	W	3		X	X				
MWØ5	08	3-21-14	1415	W	3		X	X				
MWØ3	09 A-I	3-21-14	1520	W	9		X	X				MS/MSD
MWØ4	10 A-C	3-21-14	1615	W	3		X	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: Dana Hutchins	Dana Hutchins	JBR	3-24-14	1200
Received by: [signature]	Eric Young	F&B	3/24	12
Relinquished by:				
Received by:		Samples received at 2 °C		

TOC wells

403327

SAMPLE CHAIN OF CUSTODY

ME 03/24/14

V5

Page # 2 of 2

Send Report To Rebekah Brooks

Company JBR Environmental Con

Address 19101 36th Ave, WEST, STE 203

City, State, ZIP Lynnwood Wa, 98036

Phone # 425-977-4994 Fax # 425-449-4097

SAMPLERS (signature) Dana Hutchins

PROJECT NAME/NO. TOC - MLT

PO# B. A14085.00

REMARKS

TURNAROUND TIME
- ☒ Standard (2 Weeks)
- ☐ RUSH
- Rush charges authorized by

SAMPLE DISPOSAL
- ☒ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS	Notes
MW22	11 A-C	3-21-14	1720	W	3		X	X				
mw19	12	3-21-14	1735	W	3		X	X				
mw28	13	3-22-14	0940	W	3		X	X				Peristaltic
[redacted] mw10	14	3-22-14	1100	W	3		X	X				
mw02	15	3-22-14	1140	W	3		X	X				
MLT-01	16	3-22-14	1200	W	3		X	X				
MW20	17	3-22-14	1400	W	3		X	X				
MW28	18	3-22-14	1400	W	3		X	X				Bailer
mw26	19	3-22-14	1420	W	3		X	X				
TB-01	20	NA	NA	W	1		X	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:	Dana Hutchins	Dana Hutchins	JBR	3-24-14	1200
Received by:	[signature]	Eric Young	F&B	3/24	12
Relinquished by:					
Received by:			Samples received at 2 °C		

FORMS\COC\COC.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Kurt Johnson, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

April 4, 2014

Rebekah Brooks, Project Manager
JBR Environmental Consultants
19101 36th Ave W, Suite 203
Lynnwood, WA 98036

Dear Ms. Brooks:

Included are the results from the testing of material submitted on March 27, 2014 from the TOC_MLT 01-176 PO B.A14085.00, WORFDB8 F&BI 403414 project. There are 10 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: Kim Vik
JBR0404R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on March 27, 2014 by Friedman & Bruya, Inc. from the JBR Environmental Consultants TOC_MLT 01-176 PO B.A14085.00, WORFDB8 F&BI 403414 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	JBR Environmental Consultants
403414 -01	MW48

All quality control requirements were acceptable.

Date of Report: 04/04/14
Date Received: 03/27/14
Project: TOC_MLT 01-176 PO B.A14085.00, WORFDB8 F&BI 403414
Date Extracted: 04/02/14
Date Analyzed: 04/02/14

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
MW48 403414-01 1/40	82	99	680	4,700	33,000	89
Method Blank 04-0604 MB	<1	<1	<1	<3	<100	95

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW48	Client:	JBR Environmental Consultants
Date Received:	03/27/14	Project:	TOC_MLT 01-176 PO B.A14085.00
Date Extracted:	04/01/14	Lab ID:	403414-01
Date Analyzed:	04/01/14	Data File:	403414-01.063
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	92	60	125

Analyte:	Concentration ug/L (ppb)
Lead	52.6

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	JBR Environmental Consultants
Date Received:	NA	Project:	TOC_MLT 01-176 PO B.A14085.00,
Date Extracted:	04/01/14	Lab ID:	I4-200 mb
Date Analyzed:	04/01/14	Data File:	I4-200 mb.041
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	86	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW48	Client:	JBR Environmental Consultants
Date Received:	03/27/14	Project:	TOC_MLT 01-176 PO B.A14085.00
Date Extracted:	03/28/14	Lab ID:	403414-01
Date Analyzed:	03/28/14	Data File:	403414-01.027
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	84	60	125

Analyte:	Concentration ug/L (ppb)
Lead	48.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	JBR Environmental Consultants
Date Received:	NA	Project:	TOC_MLT 01-176 PO B.A14085.00
Date Extracted:	03/28/14	Lab ID:	I4-195 mb
Date Analyzed:	03/28/14	Data File:	I4-195 mb.018
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	98	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Date of Report: 04/04/14
Date Received: 03/27/14
Project: TOC_MLT 01-176 PO B.A14085.00, WORFDB8 F&BI 403414

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: 403426-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	2.8	2.8	0
Xylenes	ug/L (ppb)	5.8	5.8	1
Gasoline	ug/L (ppb)	310	310	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	90	72-119
Toluene	ug/L (ppb)	50	95	71-113
Ethylbenzene	ug/L (ppb)	50	99	72-114
Xylenes	ug/L (ppb)	150	90	72-113
Gasoline	ug/L (ppb)	1,000	101	70-119

Date of Report: 04/04/14
Date Received: 03/27/14
Project: TOC_MLT 01-176 PO B.A14085.00, WORFDB8 F&BI 403414

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

Laboratory Code: 403438-05 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Lead	ug/L (ppb)	10	1.03	99	103	79-121	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Lead	ug/L (ppb)	10	99	83-115

Date of Report: 04/04/14
Date Received: 03/27/14
Project: TOC_MLT 01-176 PO B.A14085.00, WORFDB8 F&BI 403414

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

Laboratory Code: 403388-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Lead	ug/L (ppb)	10	<1	80	80	79-121	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Lead	ug/L (ppb)	10	95	83-115

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.

Drake Wells

403414

[redacted]

SAMPLE CHAIN OF CUSTODY

ME 03/27/14 [redacted] Page # 1 of 1 AE6 V2

Send Report To Rebekah Brooks

Company JBR Environmental Con.

Address 19101 36th Ave, West, Ste 203

City, State, ZIP Lynnwood Wa 98036

Phone # 425-977-4994 Fax # 425-449-4097

SAMPLERS (*signature*) Dana Hutchins

PROJECT NAME/NO. TOC-MLT

PO# BA14085.00

REMARKS
Total lead Bottles are Labled (Tot)
Dissolved lead Bottles are LaBled (diss)

TURNAROUND TIME
☒ Standard (2 Weeks)
☐ RUSH
Rush charges authorized by

SAMPLE DISPOSAL
☒ Dispose after 30 days
☐ Return samples
☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS	T/diss Lead						Notes
MW48	01 A E	3-23-14	0930	W	5		X	X				X						

Samples received at 2 °C

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: Dana Hutchins	Dana Hutchins	JBR	3-27-14	1200
Received by: [signature]	Nhan Phan	FeBT	3-27-14	1500
Relinquished by:				
Received by:				

FORMS\COC\COC.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Kurt Johnson, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

April 4, 2014

Rebekah Brooks, Project Manager
JBR Environmental Consultants
19101 36th Ave W, Suite 203
Lynnwood, WA 98036

Dear Ms. Brooks:

Included are the results from the testing of material submitted on March 27, 2014 from the TOC_01-176_MLT 01-176 PO B.A14085.00, WORFDB8 F&BI 403415 project. There are 5 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: Kim Vik
JBR0404R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on March 27, 2014 by Friedman & Bruya, Inc. from the JBR Environmental Consultants TOC_01-176_MLT 01-176 PO B.A14085.00, WORFDB8 F&BI 403415 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	JBR Environmental Consultants
403415 -01	MW30
403415 -02	MW39
403415 -03	EB-032514
403415 -04	MW59
403415 -05	MW40
403415 -06	MW58
403415 -07	MW93
403415 -08	MW31
403415 -09	MW92
403415 -10	MW57
403415 -11	WB-032614
403415 -12	EB-032614

All quality control requirements were acceptable.

Date of Report: 04/04/14
Date Received: 03/27/14
Project: TOC_01-176_MLT 01-176 PO B.A14085.00, WORFDB8 F&BI 403415
Date Extracted: 03/28/14
Date Analyzed: 03/28/14, 03/31/14 and 04/02/14

RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES AND TPH AS GASOLINE
USING METHODS 8021B AND NWTPH-Gx
Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
MW30 403415-01	<1	<1	<1	<3	<100	84
MW39 403415-02	<1	<1	<1	<3	<100	85
EB-032514 403415-03	<1	<1	<1	<3	<100	90
MW59 403415-04	<1	<1	<1	<3	<100	90
MW40 403415-05	<1	<1	<1	<3	<100	91
MW58 403415-06	<1	<1	<1	<3	<100	90
MW93 403415-07	<1	<1	<1	<3	<100	89
MW31 403415-08	<1	<1	<1	<3	<100	89
MW92 403415-09	<1	<1	<1	<3	<100	91
MW57 403415-10	<1	9.1	51	410	3,600	92
WB-032614 403415-11	<1	<1	<1	<3	<100	89

Date of Report: 04/04/14
Date Received: 03/27/14
Project: TOC_01-176_MLT 01-176 PO B.A14085.00, WORFDB8 F&BI 403415
Date Extracted: 03/28/14
Date Analyzed: 03/28/14, 03/31/14 and 04/02/14

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
EB-032614 403415-12	<1	<1	<1	<3	<100	88
Method Blank 04-0604 MB	<1	<1	<1	<3	<100	95

Date of Report: 04/04/14
Date Received: 03/27/14
Project: TOC_01-176_MLT 01-176 PO B.A14085.00, WORFDB8 F&BI 403415

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: 403426-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	2.8	2.8	0
Xylenes	ug/L (ppb)	5.8	5.8	1
Gasoline	ug/L (ppb)	310	310	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	90	72-119
Toluene	ug/L (ppb)	50	95	71-113
Ethylbenzene	ug/L (ppb)	50	99	72-114
Xylenes	ug/L (ppb)	150	90	72-113
Gasoline	ug/L (ppb)	1,000	101	70-119

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.

Farmasonis Wells
403415

SAMPLE CHAIN OF COUSTODY

ME 03/27/14

[redacted] of 2 V5

Send Report To Rebekah Brooks
Company JBR Environmental Con.
Address 19101 36th Ave, West, Ste 203
City, State, ZIP Lynnwood, Wa, 98036
Phone # 425-977-4994 Fax # 425-449-4093

SAMPLERS (signature) Dana Hutchins

PROJECT NAME/NO.	PO#
TOC-MLT	B-A14085.00

REMARKS

TURNAROUND TIME
- ☒ Standard (2 Weeks)
- ☐ RUSH
- Rush charges authorized by

SAMPLE DISPOSAL
- ☒ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS	Notes
MW30	01 A-C	3-25-14	1445	W	3		X	X				
MW39	02	3-25-14	1520	W	3		X	X				
EB-032514	03	3-25-14	1645	W	3		X	X				
MW59	04	3-26-14	1245	W	3		X	X				
MW40	05	3-26-14	1430	W	3		X	X				
MW58	06	3-26-14	1520	W	3		X	X				
MW93	07	3-26-14	1050	W	3		X	X				
MW31	08	3-26-14	1115	W	3		X	X				
MW92	09	3-26-14	1200	W	3		X	X				
MW57	10	3-26-14	1220	W	3		X	X				

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

FORMS\COC\COC.DOC

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Dana Hutchins	Dana Hutchins	JBR	3-27-14	1200
Received by: [illegible]	Nhan Phan	FEB_T	3/27/14	1500
Relinquished by:				
Received by:		Samples received at 3 °C		

403415
[redacted]

SAMPLE CHAIN OF COUSTODY

ME 03/27/14
[redacted]

VS

Send Report To Rebekah Brooks

Company JBR Environmental con.

Address 19101 36th Ave, west, ste 203

City, State, ZIP Lynnwood, Wa, 98036

Phone # 425-977-4994 Fax # 425-449-4093

SAMPLERS (signature) Dana Hutchins

PROJECT NAME/NO.	PO#
TOC-MLT	B.A14085ca

REMARKS

Page # 2 of 2

TURNAROUND TIME
☒ Standard (2 Weeks)
☐ RUSH
Rush charges authorized by

SAMPLE DISPOSAL
☒ Dispose after 30 days
☐ Return samples
☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS							Notes
WB-032614	11 A-C	3-26-14	1555	W	3		X	X										
EB-032614	12 A-C	3-26-14	1605	W	3		X	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:				
Received by: [signature]	Nhan Phan	FeBI	3/27/14	1500
Relinquished by:				
Received by:		Samples received at 3 °C		

FORMS\COC\COC.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Kurt Johnson, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

April 4, 2014

Rebekah Brooks, Project Manager
JBR Environmental Consultants
19101 36th Ave W, Suite 203
Lynnwood, WA 98036

Dear Ms. Brooks:

Included are the results from the testing of material submitted on March 27, 2014 from the TOC_MLT 01-176 PO B.A14085.00, WORFDB8 F&BI 403416 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: Kim Vik
JBR0404R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on March 27, 2014 by Friedman & Bruya, Inc. from the JBR Environmental Consultants TOC_MLT 01-176 PO B.A14085.00, WORFDB8 F&BI 403416 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	JBR Environmental Consultants
403416 -01	MW09 (Bailer)
403416 -02	MW09 (Submersible)
403416 -03	MW09 (Peri)
403416 -04	MLT-02

All quality control requirements were acceptable.

Date of Report: 04/04/14
Date Received: 03/27/14
Project: TOC_MLT 01-176 PO B.A14085.00, WORFDB8 F&BI 403416
Date Extracted: 03/28/14
Date Analyzed: 03/28/14 and 04/01/14

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 52-124)
MW09 (Bailer) 403416-01	<1	4.9	<1	750	4,300	109
MW09 (Submersible) 403416-02	<1	5.1	<1	850	4,900	106
MW09 (Peri) 403416-03	<1	3.8	<1	540	2,600	101
MLT-02 403416-04	<1	4.1	<1	570	2,900	101
Method Blank 04-0605 MB	<1	<1	<1	<3	<100	92

Date of Report: 04/04/14
Date Received: 03/27/14
Project: TOC_MLT 01-176 PO B.A14085.00, WORFDB8 F&BI 403416

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: 403388-04 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	5.0	4.5	11
Xylenes	ug/L (ppb)	<3	<3	nm
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	89	65-118
Toluene	ug/L (ppb)	50	94	72-122
Ethylbenzene	ug/L (ppb)	50	95	73-126
Xylenes	ug/L (ppb)	150	95	74-118
Gasoline	ug/L (ppb)	1,000	100	69-134

FRIEDMAN & BRUYA, INC.

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.

TOC Wells
403416

[redacted]

SAMPLE CHAIN OF CUSTODY

ME [redacted] 03/27/14 V3

Send Report To Rebekah Brooks
Company JBR Environmental Con.
Address 19101 36th Ave, West, STE 203
City, State, ZIP Lynnwood, Wa, 98036
Phone # 425-977-4994 Fax # 425-449-4093

SAMPLERS (*signature*) Dana Hutchins

PROJECT NAME/NO.	PO#
TOC-MLT	B.A14085.00

REMARKS

Page # 1 of 1

TURNAROUND TIME
- ☒ Standard (2 Weeks)
- ☐ RUSH
- Rush charges authorized by

SAMPLE DISPOSAL
- ☒ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS	Notes
mw09	01 A-C	3-25-14	1245	W	3		X	X				Bailer
mw09	02	3-25-14	1225	W	3		X	X				Submersible
mw09	03	3-25-14	1020	W	3		X	X				Peri
MLT-02	04	3-25-14	1040	W	3		X	X				

Samples received at 2 °C

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: Dana Hutchins	Dana Hutchins	JBR	3-27-14	1200
Received by: [signature]	Nhan Phan	FeBI	3/27/14	1500
Relinquished by:				
Received by:				

FORMS\COC\COC.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Kurt Johnson, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

April 7, 2014

Rebekah Brooks, Project Manager
JBR Environmental Consultants
19101 36th Ave W, Suite 203
Lynnwood, WA 98036

Dear Ms. Brooks:

Included is the amended report from the testing of material submitted on April 1, 2014 from the TOC_01-176__B.A14085.00, WORFDB8 F&BI 404015 project. The total and dissolved lead results have been added to the report.

We apologize for the inconvenience and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Kim Vik
JBR0404R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Kurt Johnson, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

April 4, 2014

Rebekah Brooks, Project Manager
JBR Environmental Consultants
19101 36th Ave W, Suite 203
Lynnwood, WA 98036

Dear Ms. Brooks:

Included are the results from the testing of material submitted on April 1, 2014 from the TOC_01-176__B.A14085.00, WORFDB8 F&BI 404015 project. There are 26 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: Kim Vik
JBR0404R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 1, 2014 by Friedman & Bruya, Inc. from the JBR Environmental Consultants TOC_01-176__B.A14085.00, WORFDB8 F&BI 404015 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	JBR Environmental Consultants
404015 -01	MW76
404015 -02	MW88
404015 -03	MW87
404015 -04	MW77
404015 -05	MW95
404015 -06	MW97
404015 -07	MW67
404015 -08	MW96
404015 -09	MW64
404015 -10	MW70
404015 -11	MW98
404015 -12	MW101
404015 -13	MW84
404015 -14	WB-033014
404015 -15	EB-033014
404015 -16	TB-033114-2
404015 -17	MW55

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/04/14
Date Received: 04/01/14
Project: TOC_01-176__B.A14085.00, WORFDB8 F&BI 404015
Date Extracted: 04/02/14
Date Analyzed: 04/02/14

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 52-124)
MW76 404015-01	<1	<1	<1	<3	<100	96
MW88 404015-02	<1	<1	<1	<3	<100	98
MW87 404015-03	<1	<1	<1	<3	<100	94
MW77 404015-04	<1	<1	<1	<3	<100	93
MW95 404015-05	<1	<1	<1	36	330	98
MW97 404015-06	<1	<1	<1	<3	<100	94
MW67 404015-07	<1	<1	<1	<3	<100	93
MW96 404015-08	3.6	1.2	8.4	34	200	92
MW64 404015-09	<1	<1	<1	<3	<100	92
MW70 404015-10	<1	<1	<1	<3	<100	88
MW98 404015-11	2.1	<1	<1	<3	<100	91

Date of Report: 04/04/14
Date Received: 04/01/14
Project: TOC_01-176__B.A14085.00, WORFDB8 F&BI 404015
Date Extracted: 04/02/14
Date Analyzed: 04/02/14

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 52-124)
MW101 404015-12	<1	<1	<1	<3	<100	94
MW84 404015-13	<1	1.3	5.5	14	600	94
WB-033014 404015-14	<1	<1	<1	<3	<100	93
EB-033014 404015-15	<1	<1	<1	<3	<100	94
TB-033114-2 404015-16	<1	<1	<1	<3	<100	100
MW55 404015-17	<1	<1	<1	<3	<100	92
Method Blank 04-0611 MB	<1	<1	<1	<3	<100	92

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW101	Client Client:	JBR Environmental Consultants
Date Received:	04/01/14	Project:	TOC_01-176__B.A14085.00
Date Extracted:	04/03/14	Lab ID:	404015-12
Date Analyzed:	04/03/14 11:01:03	Data File:	404015-12.021
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

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

Analyte:	Concentration ug/L (ppb)
Lead	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	JBR Environmental Consultants
Date Received:	NA	Project:	TOC_01-176__B.A14085.00
Date Extracted:	04/03/14	Lab ID:	I4-208 mb
Date Analyzed:	04/03/14 10:10:37	Data File:	I4-208 mb.009
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	100	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW101	Client:	JBR Environmental Consultants
Date Received:	04/01/14	Project:	TOC_01-176__B.A14085.00
Date Extracted:	04/03/14	Lab ID:	404015-12
Date Analyzed:	04/03/14 11:55:14	Data File:	404015-12.034
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	105	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client Client:	JBR Environmental Consultants
Date Received:	NA	Project:	TOC_01-176__B.A14085.00
Date Extracted:	04/03/14	Lab ID:	I4-207 mb
Date Analyzed:	04/03/14 11:32:27	Data File:	I4-207 mb.028
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	105	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW76	Client:	JBR Environmental Consultants
Date Received:	04/01/14	Project:	TOC_01-176__B.A14085.00
Date Extracted:	04/01/14	Lab ID:	404015-01
Date Analyzed:	04/01/14	Data File:	040112.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	94	108
Toluene-d8	97	91	107
4-Bromofluorobenzene	101	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW87	Client:	JBR Environmental Consultants
Date Received:	04/01/14	Project:	TOC_01-176__B.A14085.00
Date Extracted:	04/01/14	Lab ID:	404015-03
Date Analyzed:	04/01/14	Data File:	040113.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	94	108
Toluene-d8	98	91	107
4-Bromofluorobenzene	102	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW77	Client:	JBR Environmental Consultants
Date Received:	04/01/14	Project:	TOC_01-176__B.A14085.00
Date Extracted:	04/01/14	Lab ID:	404015-04
Date Analyzed:	04/01/14	Data File:	040114.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	94	108
Toluene-d8	99	91	107
4-Bromofluorobenzene	102	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW95	Client:	JBR Environmental Consultants
Date Received:	04/01/14	Project:	TOC_01-176__B.A14085.00
Date Extracted:	04/01/14	Lab ID:	404015-05
Date Analyzed:	04/01/14	Data File:	040115.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	94	108
Toluene-d8	98	91	107
4-Bromofluorobenzene	99	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW97	Client:	JBR Environmental Consultants
Date Received:	04/01/14	Project:	TOC_01-176__B.A14085.00
Date Extracted:	04/01/14	Lab ID:	404015-06
Date Analyzed:	04/01/14	Data File:	040116.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	94	108
Toluene-d8	98	91	107
4-Bromofluorobenzene	102	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW96	Client:	JBR Environmental Consultants
Date Received:	04/01/14	Project:	TOC_01-176__B.A14085.00
Date Extracted:	04/01/14	Lab ID:	404015-08
Date Analyzed:	04/01/14	Data File:	040117.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	94	108
Toluene-d8	98	91	107
4-Bromofluorobenzene	100	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW70	Client:	JBR Environmental Consultants
Date Received:	04/01/14	Project:	TOC_01-176__B.A14085.00
Date Extracted:	04/01/14	Lab ID:	404015-10
Date Analyzed:	04/01/14	Data File:	040118.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	94	108
Toluene-d8	99	91	107
4-Bromofluorobenzene	103	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW98	Client:	JBR Environmental Consultants
Date Received:	04/01/14	Project:	TOC_01-176__B.A14085.00
Date Extracted:	04/01/14	Lab ID:	404015-11
Date Analyzed:	04/01/14	Data File:	040119.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	94	108
Toluene-d8	97	91	107
4-Bromofluorobenzene	101	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW101	Client:	JBR Environmental Consultants
Date Received:	04/01/14	Project:	TOC_01-176__B.A14085.00
Date Extracted:	04/01/14	Lab ID:	404015-12
Date Analyzed:	04/01/14	Data File:	040120.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	94	108
Toluene-d8	99	91	107
4-Bromofluorobenzene	104	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW84	Client:	JBR Environmental Consultants
Date Received:	04/01/14	Project:	TOC_01-176__B.A14085.00
Date Extracted:	04/01/14	Lab ID:	404015-13
Date Analyzed:	04/01/14	Data File:	040121.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	94	108
Toluene-d8	98	91	107
4-Bromofluorobenzene	101	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	WB-033014	Client:	JBR Environmental Consultants
Date Received:	04/01/14	Project:	TOC_01-176__B.A14085.00
Date Extracted:	04/01/14	Lab ID:	404015-14
Date Analyzed:	04/01/14	Data File:	040122.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	94	108
Toluene-d8	100	91	107
4-Bromofluorobenzene	104	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	EB-033014	Client:	JBR Environmental Consultants
Date Received:	04/01/14	Project:	TOC_01-176__B.A14085.00
Date Extracted:	04/01/14	Lab ID:	404015-15
Date Analyzed:	04/01/14	Data File:	040123.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	94	108
Toluene-d8	98	91	107
4-Bromofluorobenzene	103	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	TB-033114-2	Client:	JBR Environmental Consultants
Date Received:	04/01/14	Project:	TOC_01-176__B.A14085.00
Date Extracted:	04/01/14	Lab ID:	404015-16
Date Analyzed:	04/01/14	Data File:	040111.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	94	108
Toluene-d8	97	91	107
4-Bromofluorobenzene	101	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	JBR Environmental Consultants
Date Received:	NA	Project:	TOC_01-176__B.A14085.00
Date Extracted:	04/01/14	Lab ID:	04-0646 mb
Date Analyzed:	04/01/14	Data File:	040110.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	94	108
Toluene-d8	98	91	107
4-Bromofluorobenzene	102	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1

Date of Report: 04/04/14
Date Received: 04/01/14
Project: TOC_01-176__B.A14085.00, WORFDB8 F&BI 404015

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: 404015-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	93	65-118
Toluene	ug/L (ppb)	50	98	72-122
Ethylbenzene	ug/L (ppb)	50	99	73-126
Xylenes	ug/L (ppb)	150	98	74-118
Gasoline	ug/L (ppb)	1,000	97	69-134

Date of Report: 04/04/14
Date Received: 04/01/14
Project: TOC_01-176__B.A14085.00, WORFDB8 F&BI 404015

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

Laboratory Code: 403434-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Lead	ug/L (ppb)	10	<1	91	91	79-121	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Lead	ug/L (ppb)	10	100	83-115

Date of Report: 04/04/14
Date Received: 04/01/14
Project: TOC_01-176__B.A14085.00, WORFDB8 F&BI 404015

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

Laboratory Code: 404044-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Lead	ug/L (ppb)	10	<1	102	105	79-121	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Lead	ug/L (ppb)	10	105	83-115

Date of Report: 04/04/14
Date Received: 04/01/14
Project: TOC_01-176__B.A14085.00, WORFDB8 F&BI 404015

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

Laboratory Code: 404015-15 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	<1	107	80-114

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	106	93	81-118	13

FRIEDMAN & BRUYA, INC.

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.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Kurt Johnson, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

April 8, 2014

Rebekah Brooks, Project Manager
JBR Environmental Consultants
19101 36th Ave W, Suite 203
Lynnwood, WA 98036

Dear Ms. Brooks:

Included are the results from the testing of material submitted on April 1, 2014 from the TOC_01-176_B.A14085.00, WORFDB8 F&BI 404016 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: Kim Vik
JBR0408R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 1, 2014 by Friedman & Bruya, Inc. from the JBR Environmental Consultants TOC_01-176_B.A14085.00, WORFDB8 F&BI 404016 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	JBR Environmental Consultants
404016 -01	MW08
404016 -02	MW62
404016 -03	MW50
404016 -04	MW32
404016 -05	MW18
404016 -06	MW29
404016 -07	MW24
404016 -08	MW91
404016 -09	MLT-03
404016 -10	MW25
404016 -11	MW11
404016 -12	MW90
404016 -13	MW27
404016 -14	MW15
404016 -15	TB-033114-1
404016 -16	MW53
404016 -17	WB-033114
404016 -18	EB-033114

All quality control requirements were acceptable.

Date of Report: 04/08/14
Date Received: 04/01/14
Project: TOC_01-176_B.A14085.00, WORFDB8 F&BI 404016
Date Extracted: 04/02/14
Date Analyzed: 04/02/14 and 04/03/14

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
MW08 404016-01	<1	<1	<1	<3	<100	86
MW62 404016-02	<1	<1	<1	<3	<100	83
MW50 404016-03	<1	<1	<1	<3	<100	87
MW32 404016-04	5.3	57	57	410	4,800	90
MW18 404016-05	4.2	250	<1	1,100	5,500	84
MW29 404016-06	<1	<1	<1	140	3,500	89
MW24 404016-07	<1	57	<1	2,200	11,000	83
MW91 404016-08	<1	51	33	270	2,200	87
MLT-03 404016-09	<1	41	27	230	1,900	84
MW25 404016-10	<1	3.3	2.2	34	300	87
MW11 404016-11	<1	7.2	10	73	1,900	88

Date of Report: 04/08/14
Date Received: 04/01/14
Project: TOC_01-176_B.A14085.00, WORFDB8 F&BI 404016
Date Extracted: 04/02/14
Date Analyzed: 04/02/14 and 04/03/14

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
MW90 404016-12	10	990	210	3,500	18,000	85
MW27 404016-13	<1	3.7	12	120	1,000	88
MW15 404016-14	<1	1.1	<1	3.6	<100	87
TB-033114-1 404016-15	<1	<1	<1	<3	<100	87
MW53 404016-16	<1	<1	<1	<3	<100	85
WB-033114 404016-17	<1	<1	<1	<3	<100	86
EB-033114 404016-18	<1	<1	<1	<3	<100	88
Method Blank 04-0612 MB	<1	<1	<1	<3	<100	87

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW32	Client:	JBR Environmental Consultants
Date Received:	04/01/14	Project:	TOC_01-176_B.A14085.00, WORFDB8
Date Extracted:	04/03/14	Lab ID:	404016-04
Date Analyzed:	04/03/14	Data File:	404016-04.035
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	107	60	125

Analyte:	Concentration ug/L (ppb)
Lead	45.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW29	Client:	JBR Environmental Consultants
Date Received:	04/01/14	Project:	TOC_01-176_B.A14085.00, WORFDB8
Date Extracted:	04/03/14	Lab ID:	404016-06
Date Analyzed:	04/03/14	Data File:	404016-06.036
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

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

Analyte:	Concentration ug/L (ppb)
Lead	30.0

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW91	Client:	JBR Environmental Consultants
Date Received:	04/01/14	Project:	TOC_01-176_B.A14085.00, WORFDB8
Date Extracted:	04/03/14	Lab ID:	404016-08
Date Analyzed:	04/03/14	Data File:	404016-08.037
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	106	60	125

Analyte:	Concentration ug/L (ppb)
Lead	3.02

Analysis For Total Metals By EPA Method 200.8

Client ID:	MLT-03	Client:	JBR Environmental Consultants
Date Received:	04/01/14	Project:	TOC_01-176_B.A14085.00, WORFDB8
Date Extracted:	04/03/14	Lab ID:	404016-09
Date Analyzed:	04/03/14	Data File:	404016-09.038
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	104	60	125

Analyte:	Concentration ug/L (ppb)
Lead	5.35

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW90	Client:	JBR Environmental Consultants
Date Received:	04/01/14	Project:	TOC_01-176_B.A14085.00, WORFDB8
Date Extracted:	04/03/14	Lab ID:	404016-12
Date Analyzed:	04/03/14	Data File:	404016-12.039
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	108	60	125

Analyte:	Concentration ug/L (ppb)
Lead	4.08

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	JBR Environmental Consultants
Date Received:	NA	Project:	TOC_01-176_B.A14085.00, WORFDB8
Date Extracted:	04/03/14	Lab ID:	I4-207 mb
Date Analyzed:	04/03/14	Data File:	I4-207 mb.028
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	105	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW32	Client:	JBR Environmental Consultants
Date Received:	04/01/14	Project:	TOC_01-176_B.A14085.00, WORFDB8
Date Extracted:	04/03/14	Lab ID:	404016-04
Date Analyzed:	04/03/14	Data File:	404016-04.022
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

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

Analyte:	Concentration ug/L (ppb)
Lead	6.11

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW29	Client:	JBR Environmental Consultants
Date Received:	04/01/14	Project:	TOC_01-176_B.A14085.00, WORFDB8
Date Extracted:	04/03/14	Lab ID:	404016-06
Date Analyzed:	04/03/14	Data File:	404016-06.023
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	102	60	125

Analyte:	Concentration ug/L (ppb)
Lead	1.26

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW91	Client:	JBR Environmental Consultants
Date Received:	04/01/14	Project:	TOC_01-176_B.A14085.00, WORFDB8
Date Extracted:	04/03/14	Lab ID:	404016-08
Date Analyzed:	04/03/14	Data File:	404016-08.024
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	108	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MLT-03	Client:	JBR Environmental Consultants
Date Received:	04/01/14	Project:	TOC_01-176_B.A14085.00, WORFDB8
Date Extracted:	04/03/14	Lab ID:	404016-09
Date Analyzed:	04/03/14	Data File:	404016-09.025
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	106	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW90	Client:	JBR Environmental Consultants
Date Received:	04/01/14	Project:	TOC_01-176_B.A14085.00, WORFDB8
Date Extracted:	04/03/14	Lab ID:	404016-12
Date Analyzed:	04/03/14	Data File:	404016-12.026
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	108	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	JBR Environmental Consultants
Date Received:	NA	Project:	TOC_01-176_B.A14085.00, WORFDB8
Date Extracted:	04/03/14	Lab ID:	I4-208 mb
Date Analyzed:	04/03/14	Data File:	I4-208 mb.009
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	100	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Date of Report: 04/08/14
Date Received: 04/01/14
Project: TOC_01-176_B.A14085.00, WORFDB8 F&BI 404016

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: 404016-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	88	72-119
Toluene	ug/L (ppb)	50	94	71-113
Ethylbenzene	ug/L (ppb)	50	97	72-114
Xylenes	ug/L (ppb)	150	90	72-113
Gasoline	ug/L (ppb)	1,000	102	70-119

Date of Report: 04/08/14
Date Received: 04/01/14
Project: TOC_01-176_B.A14085.00, WORFDB8 F&BI 404016

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

Laboratory Code: 404044-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Lead	ug/L (ppb)	10	<1	102	105	79-121	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Lead	ug/L (ppb)	10	105	83-115

Date of Report: 04/08/14
Date Received: 04/01/14
Project: TOC_01-176_B.A14085.00, WORFDB8 F&BI 404016

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

Laboratory Code: 403434-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Lead	ug/L (ppb)	10	<1	91	91	79-121	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Lead	ug/L (ppb)	10	100	83-115

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.

TOC wells

404016

SAMPLE CHAIN OF CUSTODY

ME 04/01/14

V6/BI4

Page # 1 of 2

Send Report To Rebekah Brooks

Company JBR Environmental Con.

Address 19101 36th Ave, West, STe 203

City, State, ZIP Lynnwood, Wa, 98036

Phone # 425-977-4994 Fax # 425-449-4097

SAMPLERS (signature) Dana Hutchins

PROJECT NAME/NO. TOC -MLT

PO# B.414085.00

REMARKS

TURNAROUND TIME
☒ Standard (2 Weeks)
☐ RUSH
Rush charges authorized by

SAMPLE DISPOSAL
☒ Dispose after 30 days
☐ Return samples
☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS	Total lead	Diss Lead					Notes
MW08	01 A-C	3-27-14	1030	W	3		X	X										
MW62	02	3-27-14	1115	W	3		X	X										
MW 50	03	3-28-14	1020	W	3		X	X										
MW 32	04 A-E	3-30-14	1140	W	5		X	X				X	X					
MW 18	05 A-C	3-30-14	1120	W	3		X	X										
MW 29	06 A-E	3-30-14	1200	W	5		X	X				X	X					
MW 24	07 A-C	3-30-14	1225	W	3		X	X										
MW 91	08 A-E	3-30-14	1245	W	5		X	X				X	X					
MLT-Ø3	09	3-30-14	1300	W	5		X	X				X	X					
MW 25	10 A-C	3-30-14	1310	W	3		X	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:					
Received by:	[illegible]	Nhan Phan	FeBI	04/01/14	1130
Relinquished by:					
Received by:			Samples received at 2 °C		

FORMS\COC\COC.DOC

404016

SAMPLE CHAIN OF CUSTODY

ME 04/01/14

V6/ BI4

Page # 2 of 2

Send Report To Rebekah Brooks

Company JBR Environmental CON

Address 19101 36th Ave, west, STE 203

City, State, ZIP Lynnwood, WA, 98036

Phone # 425-477-4994 Fax # 425-449-4097

SAMPLERS (*signature*) Dana Hutchins

PROJECT NAME/NO. TOC-MLT

PO# B-A14085 00

REMARKS

TURNAROUND TIME
- ☒ Standard (2 Weeks)
- ☐ RUSH
- Rush charges authorized by

SAMPLE DISPOSAL
- ☒ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS	Total Lead	Diss Lead					Notes
MW11	11 A-C	3-30-14	1315	W	3		X	X										
MW90	12 A-E	3-30-14	1340	W	[redacted] 5		X	X				X	X					
MW27	13 A-C	3-30-14	1410	W	3		X	X										
MW15	14 A-C	3-30-14	1645	W	3		X	X										
TB-033114-1	15	[redacted]		W	1		X	X										
MW53	16 A-C	3-31-14	1135	W	3		X	X										
WB-033114	17 A-C	3-31-14	1718	W	3		X	X										
EB-033114	18 A-C	3-31-14	1700	W	3		X	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: Dana Hutchins	Dana Hutchins	JBR	3-31-14	1200
Received by: Nhan Phan	Nhan Phan	Fe[redacted]T	4-1-14	1130
Relinquished by:				
Received by:		Samples received at 2 °C		

FORMS\COC\COC.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Kurt Johnson, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

April 8, 2014

Rebekah Brooks, Project Manager
JBR Environmental Consultants
19101 36th Ave W, Suite 203
Lynnwood, WA 98036

Dear Ms. Brooks:

Included are the results from the testing of material submitted on April 2, 2014 from the TOC_01-176_MLT B.A14085.00, WORFDB8 F&BI 404044 project. There are 8 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: Kim Vik
JBR0408R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 2, 2014 by Friedman & Bruya, Inc. from the JBR Environmental Consultants TOC_01-176_MLT B.A14085.00, WORFDB8 F&BI 404044 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	JBR Environmental Consultants
404044 -01	MW100

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW100	Client:	JBR Environmental Consultants
Date Received:	04/02/14	Project:	TOC_01-176_MLT B.A14085.00
Date Extracted:	04/03/14	Lab ID:	404044-01
Date Analyzed:	04/03/14	Data File:	404044-01.031
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	107	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	JBR Environmental Consultants
Date Received:	Not Applicable	Project:	TOC_01-176_MLT B.A14085.00
Date Extracted:	04/03/14	Lab ID:	I4-207 mb
Date Analyzed:	04/03/14	Data File:	I4-207 mb.028
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	105	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW100	Client:	JBR Environmental Consultants
Date Received:	04/02/14	Project:	TOC_01-176_MLT B.A14085.00
Date Extracted:	04/03/14	Lab ID:	404044-01
Date Analyzed:	04/03/14	Data File:	404044-01.027
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	110	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	JBR Environmental Consultants
Date Received:	Not Applicable	Project:	TOC_01-176_MLT B.A14085.00
Date Extracted:	04/03/14	Lab ID:	I4-208 mb
Date Analyzed:	04/03/14	Data File:	I4-208 mb.009
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	100	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Date of Report: 04/08/14
Date Received: 04/02/14
Project: TOC_01-176_MLT B.A14085.00, WORFDB8 F&BI 404044

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

Laboratory Code: 404044-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Lead	ug/L (ppb)	10	<1	102	105	79-121	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Lead	ug/L (ppb)	10	105	83-115

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/08/14
Date Received: 04/02/14
Project: TOC_01-176_MLT B.A14085.00, WORFDB8 F&BI 404044

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

Laboratory Code: 403434-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Lead	ug/L (ppb)	10	<1	91	91	79-121	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Lead	ug/L (ppb)	10	100	83-115

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.

Rem
404
(NP) 404B044

SAMPLE CHAIN OF CUSTODY

ME 04/02/14

AI6

Page # 1 of 1

Send Report To Rebekah Brooks
Company JBR Environmental Con.
Address 19101 36Th Ave, West, STE 203
City, State, ZIP Lynnwood, Wa, 98036
Phone # 425-977-4994 Fax # 425-499-4097

SAMPLERS (*signature*) Dana Hutchins

PROJECT NAME/NO. TOC-MLT

PO# B A14085.00

REMARKS Total and Diss lead BOTTLES are Labled.

TURNAROUND TIME
☒ Standard (2 Weeks)
☐ RUSH
Rush charges authorized by

SAMPLE DISPOSAL
☒ Dispose after 30 days
☐ Return samples
☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS	Total lead	Diss Lead					Notes
MW100	01 A B	3-31-14	1645	W	2							X	X					

Samples received at 2 °C

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: Dana Hutchins	Dana Hutchins	JBR	3-31-14	1700
Received by: [signature]	Nhan Phan	FeBI	4/2/14	1230
Relinquished by:				
Received by:				

FORMS\COC\COC.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Kurt Johnson, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

April 8, 2014

Rebekah Brooks, Project Manager
JBR Environmental Consultants
19101 36th Ave W, Suite 203
Lynnwood, WA 98036

Dear Ms. Brooks:

Included are the results from the testing of material submitted on April 2, 2014 from the TOC_01-176_MLT B.A14085.00, WORFDB8 F&BI 404045 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: Kim Vik
JBR0408R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 2, 2014 by Friedman & Bruya, Inc. from the JBR Environmental Consultants TOC_01-176_MLT B.A14085.00, WORFDB8 F&BI 404045 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	JBR Environmental Consultants
404045 -01	MW43
404045 -02	MW61
404045 -03	MW60
404045 -04	MW56

All quality control requirements were acceptable.

Date of Report: 04/08/14
Date Received: 04/02/14
Project: TOC_01-176_MLT B.A14085.00, WORFDB8 F&BI 404045
Date Extracted: 04/03/14
Date Analyzed: 04/03/14

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES AND TPH AS GASOLINE
USING METHODS 8021B AND NWTPH-Gx**
Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 52-124)
MW43 404045-01	<1	<1	<1	<3	<100	92
MW61 404045-02	<1	<1	<1	<3	<100	89
MW60 404045-03	<1	<1	<1	<3	<100	88
MW56 404045-04	<1	<1	<1	<3	<100	94
Method Blank 04-0654 MB	<1	<1	<1	<3	<100	86

Date of Report: 04/08/14
Date Received: 04/02/14
Project: TOC_01-176_MLT B.A14085.00, WORFDB8 F&BI 404045

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: 404026-04 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	95	65-118
Toluene	ug/L (ppb)	50	102	72-122
Ethylbenzene	ug/L (ppb)	50	102	73-126
Xylenes	ug/L (ppb)	150	101	74-118
Gasoline	ug/L (ppb)	1,000	97	69-134

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.

FARMASONIS Wells
404045

SAMPLE CHAIN OF CUSTODY

ME 04-02-14

V3

Page # 1 of 1

Send Report To Rebekah Brooks
Company JBR EnvironmenTal Con.
Address 19101 36th Ave, West, STe203
City, State, ZIP Lynnwood, Wa, 98036
Phone # 425-977-4994 Fax # 425-449-4097

SAMPLERS (*signature*) Dana Hutchins

PROJECT NAME/NO.	PO#
TOC MLT	B-A14085.00

REMARKS

TURNAROUND TIME
☒ Standard (2 Weeks)
☐ RUSH
Rush charges authorized by

SAMPLE DISPOSAL
☒ Dispose after 30 days
☐ Return samples
☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS							Notes
MW43	01 A-C	3-27-14	1300	W	3		X	X										
MW61	02	3-27-14	1400	W	3		X	X										
MW60	03	3-31-14	1235	W	3		X	X										
MW 56	04	3-31-14	1430	W	3		X	X										

Samples received at 2 °C

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: Dana Hutchins	Dana Hutchins	JBR	3-31-14	1200
Received by: [signature]	Nhan Phan	FeBI	4/2/14	1230
Relinquished by:				
Received by:				

FORMS\COC\COC.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Kurt Johnson, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

April 11, 2014

Rebekah Brooks, Project Manager
JBR Environmental Consultants
19101 36th Ave W, Suite 203
Lynnwood, WA 98036

Dear Ms. Brooks:

Included are the results from the testing of material submitted on April 4, 2014 from the TOC_01-076, WORFDB8 F&BI 404100 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: Kim Vik
JBR0411R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on April 4, 2014 by Friedman & Bruya, Inc. from the JBR Environmental Consultants TOC_01-076, WORFDB8 F&BI 404100 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	JBR Environmental Consultants
404100 -01	MW49

All quality control requirements were acceptable.

Date of Report: 04/11/14
Date Received: 04/04/14
Project: TOC_01-076, WORFDB8 F&BI 404100
Date Extracted: 04/09/14
Date Analyzed: 04/09/14

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 52-124)
MW49 404100-01	<1	<1	<1	<3	<100	92
Method Blank 04-0660 MB	<1	<1	<1	<3	<100	97

Date of Report: 04/11/14
Date Received: 04/04/14
Project: TOC_01-076, WORFDB8 F&BI 404100

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: 404132-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	96	65-118
Toluene	ug/L (ppb)	50	104	72-122
Ethylbenzene	ug/L (ppb)	50	105	73-126
Xylenes	ug/L (ppb)	150	103	74-118
Gasoline	ug/L (ppb)	1,000	90	69-134

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.

Farmasonis Chain
~~404100~~ (SP) 404100

SAMPLE CHAIN OF CUSTODY

ME 04-04-14

V2

Page # 1 of 1

Send Report To Rebekah Brooks

Company JBR EnvironmenTal Con

Address 19101 36Th Ave West, STe 203

City, State, ZIP Lynnwood Wa, 98036

Phone # 425-977-4994 Fax # 425-449-4097

SAMPLERS (signature) Dana Hutchins

PROJECT NAME/NO.	PO#
TA-MLT	B-A14085.00

REMARKS

TURNAROUND TIME
- ☒ Standard (2 Weeks)
- ☐ RUSH
- Rush charges authorized by

SAMPLE DISPOSAL
- ☒ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS	Notes
MW49	01 A-C	4-1-14	0935	W	3		X	X				

Samples received at 4 °C

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Dana Hutchins	Dana Hutchins	JBR	4-4-14	1200
Received by:	[signature]	Nhan Phan	FeBI	4-4-14	1430
Relinquished by:					
Received by:					

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

FORMS\COC\COC.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Kurt Johnson, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

April 11, 2014

Rebekah Brooks, Project Manager
JBR Environmental Consultants
19101 36th Ave W, Suite 203
Lynnwood, WA 98036

Dear Ms. Brooks:

Included are the results from the testing of material submitted on April 4, 2014 from the TOC_01-076, WORFDB8 F&BI 404101 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: Kim Vik
JBR0411R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on April 4, 2014 by Friedman & Bruya, Inc. from the JBR Environmental Consultants TOC_01-076, WORFDB8 F&BI 404101 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	JBR Environmental Consultants
404101 -01	MW68
404101 -02	MW63
404101 -03	MW89
404101 -04	MW65
404101 -05	MLT-06
404101 -06	MW86
404101 -07	MW85
404101 -08	EB-040114
404101 -09	MW78
404101 -10	TB-040314-1
404101 -11	MW75
404101 -12	EB-040314

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/11/14
Date Received: 04/04/14
Project: TOC_01-076, WORFDB8 F&BI 404101
Date Extracted: 04/08/14
Date Analyzed: 04/08/14

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 52-124)
MW68 404101-01	<1	<1	<1	<3	<100	95
MW63 404101-02	<1	<1	<1	<3	<100	95
MW89 404101-03	<1	<1	<1	<3	<100	94
MW65 404101-04	<1	<1	<1	<3	<100	94
MLT-06 404101-05	<1	<1	<1	<3	<100	90
MW86 404101-06	<1	<1	<1	<3	<100	93
MW85 404101-07	<1	<1	<1	<3	<100	90
EB-040114 404101-08	<1	<1	<1	<3	<100	95
MW78 404101-09	<1	<1	<1	<3	<100	92
TB-040314-1 404101-10	<1	<1	<1	<3	<100	98

Date of Report: 04/11/14
Date Received: 04/04/14
Project: TOC_01-076, WORFDB8 F&BI 404101
Date Extracted: 04/08/14
Date Analyzed: 04/08/14

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 52-124)
MW75 404101-11	<1	<1	<1	<3	<100	95
EB-040314 404101-12	<1	<1	<1	<3	<100	93
Method Blank 04-0660 MB	<1	<1	<1	<3	<100	97

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW89	Client:	JBR Environmental Consultants
Date Received:	04/04/14	Project:	TOC_01-076, F&BI 404101
Date Extracted:	04/04/14	Lab ID:	404101-03
Date Analyzed:	04/04/14	Data File:	040422.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	94	108
Toluene-d8	102	91	107
4-Bromofluorobenzene	104	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW65	Client:	JBR Environmental Consultants
Date Received:	04/04/14	Project:	TOC_01-076, F&BI 404101
Date Extracted:	04/04/14	Lab ID:	404101-04
Date Analyzed:	04/04/14	Data File:	040423.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	94	108
Toluene-d8	103	91	107
4-Bromofluorobenzene	105	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MLT-06	Client:	JBR Environmental Consultants
Date Received:	04/04/14	Project:	TOC_01-076, F&BI 404101
Date Extracted:	04/04/14	Lab ID:	404101-05
Date Analyzed:	04/04/14	Data File:	040424.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	94	108
Toluene-d8	102	91	107
4-Bromofluorobenzene	106	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW86	Client:	JBR Environmental Consultants
Date Received:	04/04/14	Project:	TOC_01-076, F&BI 404101
Date Extracted:	04/04/14	Lab ID:	404101-06
Date Analyzed:	04/04/14	Data File:	040425.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	94	108
Toluene-d8	101	91	107
4-Bromofluorobenzene	106	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW85	Client:	JBR Environmental Consultants
Date Received:	04/04/14	Project:	TOC_01-076, F&BI 404101
Date Extracted:	04/04/14	Lab ID:	404101-07
Date Analyzed:	04/04/14	Data File:	040427.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	94	108
Toluene-d8	102	91	107
4-Bromofluorobenzene	106	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	EB-040114	Client:	JBR Environmental Consultants
Date Received:	04/04/14	Project:	TOC_01-076, F&BI 404101
Date Extracted:	04/04/14	Lab ID:	404101-08
Date Analyzed:	04/04/14	Data File:	040428.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	94	108
Toluene-d8	102	91	107
4-Bromofluorobenzene	105	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW78	Client:	JBR Environmental Consultants
Date Received:	04/04/14	Project:	TOC_01-076, F&BI 404101
Date Extracted:	04/04/14	Lab ID:	404101-09
Date Analyzed:	04/04/14	Data File:	040429.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	94	108
Toluene-d8	102	91	107
4-Bromofluorobenzene	104	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	TB-040314-1	Client:	JBR Environmental Consultants
Date Received:	04/04/14	Project:	TOC_01-076, F&BI 404101
Date Extracted:	04/04/14	Lab ID:	404101-10
Date Analyzed:	04/04/14	Data File:	040430.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	94	108
Toluene-d8	101	91	107
4-Bromofluorobenzene	104	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	JBR Environmental Consultants
Date Received:	NA	Project:	TOC_01-076, F&BI 404101
Date Extracted:	04/04/14	Lab ID:	04-0677 mb
Date Analyzed:	04/04/14	Data File:	040407.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	94	108
Toluene-d8	100	91	107
4-Bromofluorobenzene	105	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1

Date of Report: 04/11/14
Date Received: 04/04/14
Project: TOC_01-076, WORFDB8 F&BI 404101

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: 404132-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	96	65-118
Toluene	ug/L (ppb)	50	104	72-122
Ethylbenzene	ug/L (ppb)	50	105	73-126
Xylenes	ug/L (ppb)	150	103	74-118
Gasoline	ug/L (ppb)	1,000	90	69-134

Date of Report: 04/11/14
Date Received: 04/04/14
Project: TOC_01-076, WORFDB8 F&BI 404101

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

Laboratory Code: 404070-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	<1	99	80-114

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	100	103	81-118	3

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.

DRake Chain
404101

SAMPLE CHAIN OF CUSTODY ME 04/04/14

V3

Page # 1 of 2

Send Report To Rebekah Brooks
Company JBR Environmental Con
Address 19101 36th Ave, West, Ste203
City, State, ZIP Lynnwood Wa, 98036
Phone # 425-977-4994 Fax # 425-449-4097

SAMPLERS (*signature*) Dana Hutchins

PROJECT NAME/NO. TOC-MLT

PO# B.114085.00

REMARKS

TURNAROUND TIME
- ☒ Standard (2 Weeks)
- ☐ RUSH
- Rush charges authorized by

SAMPLE DISPOSAL
- ☒ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS	MTBE (EPA 8260C)	Notes
MW68	01 A-C	4-1-14	0940	W	3		X	X					
MW63	02	4-1-14	1040	W	3		X	X					
MW89	03 A-D	4-1-14	1230	W	4		X	X				X	
MW65	04	4-1-14	1345	W	4		X	X				X	
MLT-ϕ6	05	4-1-14	1330	W	4		X	X				X	
MW86	06	4-1-14	1425	W	4		X	X				X	
MW85	07	4-1-14	1535	W	4		X	X				X	
EB-040114	08	4-1-14	1630	W	4		X	X				X	
MW78	09	4-2-14	1010	W	4		X	X				X	
TB-040314-1	10			W	1		X	X				X	Samples received at 4 °C

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: Dana Hutchins	Dana Hutchins	JBR	4-4-14	1200
Received by: [signature]	Nhan Phan	FeBI	4-4-14	1430
Relinquished by:				
Received by:				

FORMS\COC\COC.DOC

Drake Chain
404101

SAMPLE CHAIN OF CUSTODY

ME 04/04/14 V3

Page # 2 of 2

Send Report To Rebekah Brooks
Company JBR Environmental Con
Address 19101 36Th Ave, West, STE 203
City, State, ZIP Lynnwood, Wa, 98036
Phone # 425-977-4994 Fax # 425-449-4097

SAMPLERS (*signature*) Dana Hutchins

PROJECT NAME/NO. TOC-MLT

PO# B.A14085.00

REMARKS

TURNAROUND TIME
- [x] Standard (2 Weeks)
- [ ] RUSH
Rush charges authorized by

SAMPLE DISPOSAL
- [x] Dispose after 30 days
- [ ] Return samples
- [ ] Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS							Notes
[redacted]																		
MW75	11 A-C	4-3-14	1010	W	3		X	X										
EB-040314	12 A-C	4-3-14	1200	W	3		X	X										
																		Samples received at 4 °C

ANALYSES REQUESTED

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: Dana Hutchins	Dana Hutchins	JBR	4-4-14	1200
Received by: [signature]	Nhan Phan	FEBI	4-4-14	1430
Relinquished by:				
Received by:				

FORMS\COC\COC.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Kurt Johnson, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

April 17, 2014

Rebekah Brooks, Project Manager
JBR Environmental Consultants
19101 36th Ave W, Suite 203
Lynnwood, WA 98036

Dear Ms. Brooks:

Included are the results from the testing of material submitted on April 2, 2014 from the TOC_01-176_MLT, WORFDB8 F&BI 404042 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: Kim Vik
JBR0417R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on April 2, 2014 by Friedman & Bruya, Inc. from the JBR Environmental Consultants TOC_01-176_MLT, WORFDB8 F&BI 404042 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	JBR Environmental Consultants
404042 -01	MW102-P

The NWTPH-Gx value exceeded one million parts per million. This is due to the difference in response between standard used for calibration and the sample MW102-P.

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/17/14
Date Received: 04/02/14
Project: TOC_01-176_MLT, WORFDB8 F&BI 404042
Date Extracted: 04/03/14
Date Analyzed: 04/03/14

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

Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
MW102-P 404042-01 1/100	1,300,000	116
Method Blank 04-0655 MB	<100	97

Date of Report: 04/17/14
Date Received: 04/02/14
Project: TOC_01-176_MLT, WORFDB8 F&BI 404042
Date Extracted: 04/16/14
Date Analyzed: 04/16/14

RESULTS FROM THE ANALYSIS OF SOIL/PRODUCT SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 53-144)
MW102-P 404042-01	270,000 x	<5,000	97
Method Blank 04-755 MB	<50	<250	99

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW102-P	Client:	JBR Environmental Consultants
Date Received:	04/02/14	Project:	TOC_01-176_MLT, WORFDB8 F&BI 404042
Date Extracted:	04/08/14	Lab ID:	404042-01
Date Analyzed:	04/09/14	Data File:	404042-01.070
Matrix:	Soil/Product	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	76	60	125
Indium	72	60	125
Holmium	79	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	1.25
Arsenic	<1
Selenium	<1
Silver	<1
Cadmium	<1
Barium	<1
Lead	53.1

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	JBR Environmental Consultants
Date Received:	NA	Project:	TOC_01-176_MLT, WORFDB8 F&BI 404042
Date Extracted:	04/08/14	Lab ID:	I4-214 mb
Date Analyzed:	04/09/14	Data File:	I4-214 mb.061
Matrix:	Soil/Product	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	85	60	125
Indium	81	60	125
Holmium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	<1
Arsenic	<1
Selenium	<1
Silver	<1
Cadmium	<1
Barium	<1
Lead	<1

Date of Report: 04/17/14
Date Received: 04/02/14
Project: TOC_01-176_MLT, WORFDB8 F&BI 404042
Date Extracted: 04/08/14
Date Analyzed: 04/08/14

RESULTS FROM THE ANALYSIS OF SOIL/PRODUCT SAMPLES
FOR TOTAL MERCURY
USING EPA METHOD 1631E

Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Total Mercury
MW102-P 404042-01	<0.1
Method Blank	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW102-P	Client:	JBR Environmental Consultants
Date Received:	04/02/14	Project:	TOC_01-176_MLT, WORFDB8 F&BI 404042
Date Extracted:	04/02/14	Lab ID:	404042-01 1/2000
Date Analyzed:	04/02/14	Data File:	040220.D
Matrix:	Soil/Product	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	103	51	121
4-Bromofluorobenzene	100	32	146

Compounds:	Concentration mg/kg (ppm)
Methyl t-butyl ether (MTBE)	<100
Benzene	11,000
Toluene	72,000 ve
Ethylbenzene	26,000 ve
m,p-Xylene	85,000 ve
o-Xylene	38,000 ve
Vinyl chloride	<100
Chloroethane	<100
1,1-Dichloroethene	<100
Methylene chloride	<500
trans-1,2-Dichloroethene	<100
1,1-Dichloroethane	<100
cis-1,2-Dichloroethene	<100
1,2-Dichloroethane (EDC)	<100
1,1,1-Trichloroethane	<100
Trichloroethene	<100
Tetrachloroethene	<100

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW102-P	Client:	JBR Environmental Consultants
Date Received:	04/02/14	Project:	TOC_01-176_MLT, WORFDB8 F&BI 404042
Date Extracted:	04/02/14	Lab ID:	404042-01 1/20000
Date Analyzed:	04/03/14	Data File:	040308.D
Matrix:	Soil/Product	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	100	51	121
4-Bromofluorobenzene	99	32	146

Compounds:	Concentration mg/kg (ppm)
Methyl t-butyl ether (MTBE)	<1,000
Benzene	9,700
Toluene	91,000
Ethylbenzene	22,000
m,p-Xylene	92,000
o-Xylene	35,000
Vinyl chloride	<1,000
Chloroethane	<1,000
1,1-Dichloroethene	<1,000
Methylene chloride	<5,000
trans-1,2-Dichloroethene	<1,000
1,1-Dichloroethane	<1,000
cis-1,2-Dichloroethene	<1,000
1,2-Dichloroethane (EDC)	<1,000
1,1,1-Trichloroethane	<1,000
Trichloroethene	<1,000
Tetrachloroethene	<1,000

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	JBR Environmental Consultants
Date Received:	Not Applicable	Project:	TOC_01-176_MLT, WORFDB8 F&BI 404042
Date Extracted:	04/02/14	Lab ID:	04-0648 mb 1/2000
Date Analyzed:	04/02/14	Data File:	040210.D
Matrix:	Soil/Product	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	62	142
Toluene-d8	97	51	121
4-Bromofluorobenzene	98	32	146

Compounds:	Concentration mg/kg (ppm)
Methyl t-butyl ether (MTBE)	<100
Benzene	<100
Toluene	<100
Ethylbenzene	<100
m,p-Xylene	<200
o-Xylene	<100
Vinyl chloride	<100
Chloroethane	<100
1,1-Dichloroethene	<100
Methylene chloride	<500
trans-1,2-Dichloroethene	<100
1,1-Dichloroethane	<100
cis-1,2-Dichloroethene	<100
1,2-Dichloroethane (EDC)	<100
1,1,1-Trichloroethane	<100
Trichloroethene	<100
Tetrachloroethene	<100

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/17/14
Date Received: 04/02/14
Project: TOC_01-176_MLT, WORFDB8 F&BI 404042

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/PRODUCT SAMPLES FOR TPH AS GASOLINE USING METHOD NWTPH-Gx

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Gasoline	mg/kg (ppm)	2000	103	110	71-131	7

Date of Report: 04/17/14
Date Received: 04/02/14
Project: TOC_01-176_MLT, WORFDB8 F&BI 404042

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL/PRODUCT SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	100,000	111	114	58-147	3

Date of Report: 04/17/14
Date Received: 04/02/14
Project: TOC_01-176_MLT, WORFDB8 F&BI 404042

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/PRODUCT SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 404077-10 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Chromium	mg/kg (ppm)	50	8.62	84	87	57-128	4
Arsenic	mg/kg (ppm)	10	1.57	96	97	70-118	1
Selenium	mg/kg (ppm)	5	<1	98	94	64-117	4
Silver	mg/kg (ppm)	10	<1	96	97	73-122	1
Cadmium	mg/kg (ppm)	10	<1	106	106	83-116	0
Barium	mg/kg (ppm)	50	22.1	105 b	100 b	60-141	5 b
Lead	mg/kg (ppm)	50	1.75	96	97	59-148	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Chromium	mg/kg (ppm)	50	93	78-121
Arsenic	mg/kg (ppm)	10	101	83-113
Selenium	mg/kg (ppm)	5	103	84-115
Silver	mg/kg (ppm)	10	97	81-116
Cadmium	mg/kg (ppm)	10	106	54-114
Barium	mg/kg (ppm)	50	104	85-116
Lead	mg/kg (ppm)	50	100	80-120

Date of Report: 04/17/14
Date Received: 04/02/14
Project: TOC_01-176_MLT, WORFDB8 F&BI 404042

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL/PRODUCT SAMPLES FOR
TOTAL MERCURY
USING EPA METHOD 1631E**

Laboratory Code: 404077-10 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Mercury	mg/kg (ppm)	0.125	<0.1	98	101	71-125	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Mercury	mg/kg (ppm)	0.125	81	63-131

Date of Report: 04/17/14
Date Received: 04/02/14
Project: TOC_01-176_MLT, WORFDB8 F&BI 404042

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/PRODUCT SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 404042-01 1/2,000 and 404042-01 1/20,000 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet wt)	Duplicate Result (Wet wt)	RPD (Limit 20)
Vinyl chloride	mg/kg (ppm)	<100	<100	nm
Chloroethane	mg/kg (ppm)	<100	<100	nm
1,1-Dichloroethene	mg/kg (ppm)	<100	<100	nm
Methylene chloride	mg/kg (ppm)	<500	<500	nm
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	<100	<100	nm
trans-1,2-Dichloroethene	mg/kg (ppm)	<100	<100	nm
1,1-Dichloroethane	mg/kg (ppm)	<100	<100	nm
cis-1,2-Dichloroethene	mg/kg (ppm)	<100	<100	nm
1,2-Dichloroethane (EDC)	mg/kg (ppm)	<100	<100	nm
1,1,1-Trichloroethane	mg/kg (ppm)	<100	<100	nm
Benzene	mg/kg (ppm)	11,000	9,900	11
Trichloroethene	mg/kg (ppm)	<100	<100	nm
Toluene	mg/kg (ppm)	91,000	110,000	19
Tetrachloroethene	mg/kg (ppm)	<100	<100	nm
Ethylbenzene	mg/kg (ppm)	22,000	26,000	17
m,p-Xylene	mg/kg (ppm)	92,000	110,000	18
o-Xylene	mg/kg (ppm)	35,000	40,000	13

Laboratory Code: Laboratory Control Sample 1/2000

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	mg/kg (ppm)	500	75	75	38-134	0
Chloroethane	mg/kg (ppm)	500	125	125	10-152	0
1,1-Dichloroethene	mg/kg (ppm)	500	85	85	39-154	0
Methylene chloride	mg/kg (ppm)	500	75	80	31-150	6
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	500	90	90	53-144	0
trans-1,2-Dichloroethene	mg/kg (ppm)	500	80	80	44-141	0
1,1-Dichloroethane	mg/kg (ppm)	500	90	90	60-130	0
cis-1,2-Dichloroethene	mg/kg (ppm)	500	90	90	53-130	0
1,2-Dichloroethane (EDC)	mg/kg (ppm)	500	90	90	41-149	0
1,1,1-Trichloroethane	mg/kg (ppm)	500	90	90	35-154	0
Benzene	mg/kg (ppm)	500	80	85	66-126	6
Trichloroethene	mg/kg (ppm)	500	85	85	65-127	0
Toluene	mg/kg (ppm)	500	80	80	70-118	0
Tetrachloroethene	mg/kg (ppm)	500	80	80	65-115	0
Ethylbenzene	mg/kg (ppm)	500	80	80	68-125	0
m,p-Xylene	mg/kg (ppm)	1,000	85	80	69-127	6
o-Xylene	mg/kg (ppm)	500	85	85	63-127	0

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.

404042

SAMPLE CHAIN OF CUSTODY

ME 04/02/14 A02

Page # 1 of 1

Send Report To Rebekah Brooks

Company JBR Environmental Con

Address 19101 36th Ave, West, STe203

City, State, ZIP Lynnwood, Wa, 98036

Phone # 425-977-4994 Fax # 425-449-4097

SAMPLERS (signature) Dana Hutchins

PROJECT NAME/NO. TOC - MLT

PO# BA14085.00

REMARKS

TURNAROUND TIME
- ☒ Standard (2 Weeks)
- ☐ RUSH
- Rush charges authorized by

SAMPLE DISPOSAL
- ☒ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS	MTBE (epa 8260)	chlorinated solvents (8260)	RCRA 8 metals				Notes
MW102-P	01	3-30-14	1600	Product	1	X	X	X				X	X	X				
																		Samples received at 2 °C

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: Dana Hutchins	Dana Hutchins	JBR	3-31-14	1200
Received by: [signature]	Nhan Phan	FeBI	4-2-14	1230
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Kurt Johnson, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

April 23, 2014

Rebekah Brooks, Project Manager
JBR Environmental Consultants
19101 36th Ave W, Suite 203
Lynnwood, WA 98036

Dear Ms. Brooks:

Included are the results from the testing of material submitted on April 4, 2014 from the TOC_01-176, WORFDB8 F&BI 404102 project. There are 36 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: Kim Vik
JBR0423R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on April 4, 2014 by Friedman & Bruya, Inc. from the JBR Environmental Consultants TOC_01-176, WORFDB8 F&BI 404102 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	JBR Environmental Consultants
404102 -01	MW104
404102 -02	MLT-04
404102 -03	MW51
404102 -04	MW106
404102 -05	MW107
404102 -06	EB-040214
404102 -07	WB-040214
404102 -08	TB-040314-2
404102 -09	MW103

The NWTPH-Dx surrogate for sample EB-040214 exceeded the acceptance criteria. No material was detected in the diesel or motor oil range of the sample, therefore the data were acceptable.

The 8011 EDB analysis of sample MW104 was done from a VOA with headspace due to limited sample volume. The data were flagged accordingly. In addition, the calibration standard did not pass the acceptance criteria for sample MLT-04. There was insufficient volume for sample reanalysis. The data were flagged accordingly.

All other quality control requirements were acceptable.

Date of Report: 04/23/14
Date Received: 04/04/14
Project: TOC_01-176, WORFDB8 F&BI 404102
Date Extracted: 04/08/14
Date Analyzed: 04/08/14 and 04/09/14

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
MW104 404102-01 1/20	78	4,700	1,100	4,300	34,000	81
MLT-04 404102-02 1/20	77	4,400	1,100	4,400	35,000	79
MW51 404102-03	<1	<1	<1	<3	<100	82
MW106 404102-04	<1	<1	<1	<3	<100	80
MW107 404102-05	<1	<1	<1	<3	<100	81
EB-040214 404102-06	<1	<1	<1	<3	<100	83
WB-040214 404102-07	<1	<1	<1	<3	<100	85
TB-040314-2 404102-08	<1	<1	<1	<3	<100	86
MW103 404102-09	<1	<1	<1	<3	<100	81
Method Blank 04-0661 MB	<1	<1	<1	<3	<100	84

Date of Report: 04/23/14
Date Received: 04/04/14
Project: TOC_01-176, WORFDB8 F&BI 404102
Date Extracted: 04/09/14
Date Analyzed: 04/10/14 and 04/14/14

RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 47-140)
MW104 404102-01	14,000 x	810 x	82
MLT-04 404102-02	14,000 x	830 x	87
MW106 404102-04	250 x	<250	132
MW107 404102-05	93 x	<260	131
EB-040214 404102-06	<50	<250	141 vo
WB-040214 404102-07	<50	<250	124
MW103 404102-09	<50	<250	126
Method Blank 04-690 MB2	<50	<250	120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW104	Client:	JBR Environmental Consultants
Date Received:	04/04/14	Project:	TOC_01-176, WORFDB8 F&BI 404102
Date Extracted:	04/15/14	Lab ID:	404102-01
Date Analyzed:	04/15/14	Data File:	404102-01.010
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	90	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MLT-04	Client:	JBR Environmental Consultants
Date Received:	04/04/14	Project:	TOC_01-176, WORFDB8 F&BI 404102
Date Extracted:	04/15/14	Lab ID:	404102-02
Date Analyzed:	04/15/14	Data File:	404102-02.013
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	93	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW106	Client:	JBR Environmental Consultants
Date Received:	04/04/14	Project:	TOC_01-176, WORFDB8 F&BI 404102
Date Extracted:	04/15/14	Lab ID:	404102-04
Date Analyzed:	04/15/14	Data File:	404102-04.014
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	99	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW107	Client:	JBR Environmental Consultants
Date Received:	04/04/14	Project:	TOC_01-176, WORFDB8 F&BI 404102
Date Extracted:	04/15/14	Lab ID:	404102-05
Date Analyzed:	04/15/14	Data File:	404102-05.015
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	92	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	EB-040214	Client:	JBR Environmental Consultants
Date Received:	04/04/14	Project:	TOC_01-176, WORFDB8 F&BI 404102
Date Extracted:	04/15/14	Lab ID:	404102-06
Date Analyzed:	04/15/14	Data File:	404102-06.016
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	94	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	WB-040214	Client:	JBR Environmental Consultants
Date Received:	04/04/14	Project:	TOC_01-176, WORFDB8 F&BI 404102
Date Extracted:	04/15/14	Lab ID:	404102-07
Date Analyzed:	04/15/14	Data File:	404102-07.017
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	90	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW103	Client:	JBR Environmental Consultants
Date Received:	04/04/14	Project:	TOC_01-176, WORFDB8 F&BI 404102
Date Extracted:	04/15/14	Lab ID:	404102-09
Date Analyzed:	04/15/14	Data File:	404102-09.019
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	86	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	JBR Environmental Consultants
Date Received:	NA	Project:	TOC_01-176, WORFDB8 F&BI 404102
Date Extracted:	04/15/14	Lab ID:	I4-232 mb
Date Analyzed:	04/15/14	Data File:	I4-232 mb.008
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	93	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW104	Client:	JBR Environmental Consultants
Date Received:	04/04/14	Project:	TOC_01-176, WORFDB8 F&BI 404102
Date Extracted:	04/08/14	Lab ID:	404102-01
Date Analyzed:	04/09/14	Data File:	404102-01.033
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	83	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Analysis For Total Metals By EPA Method 200.8

Client ID:	MLT-04	Client:	JBR Environmental Consultants
Date Received:	04/04/14	Project:	TOC_01-176, WORFDB8 F&BI 404102
Date Extracted:	04/08/14	Lab ID:	404102-02
Date Analyzed:	04/09/14	Data File:	404102-02.034
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	78	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW106	Client:	JBR Environmental Consultants
Date Received:	04/04/14	Project:	TOC_01-176, WORFDB8 F&BI 404102
Date Extracted:	04/08/14	Lab ID:	404102-04
Date Analyzed:	04/09/14	Data File:	404102-04.035
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	83	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW107	Client:	JBR Environmental Consultants
Date Received:	04/04/14	Project:	TOC_01-176, WORFDB8 F&BI 404102
Date Extracted:	04/08/14	Lab ID:	404102-05
Date Analyzed:	04/09/14	Data File:	404102-05.036
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	89	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Analysis For Total Metals By EPA Method 200.8

Client ID:	EB-040214	Client:	JBR Environmental Consultants
Date Received:	04/04/14	Project:	TOC_01-176, WORFDB8 F&BI 404102
Date Extracted:	04/08/14	Lab ID:	404102-06
Date Analyzed:	04/09/14	Data File:	404102-06.037
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	81	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Analysis For Total Metals By EPA Method 200.8

Client ID:	WB-040214	Client:	JBR Environmental Consultants
Date Received:	04/04/14	Project:	TOC_01-176, WORFDB8 F&BI 404102
Date Extracted:	04/08/14	Lab ID:	404102-07
Date Analyzed:	04/09/14	Data File:	404102-07.038
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

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

Analyte:	Concentration ug/L (ppb)
Lead	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW103	Client:	JBR Environmental Consultants
Date Received:	04/04/14	Project:	TOC_01-176, WORFDB8 F&BI 404102
Date Extracted:	04/08/14	Lab ID:	404102-09
Date Analyzed:	04/09/14	Data File:	404102-09.039
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	81	60	125

Analyte:	Concentration ug/L (ppb)
Lead	2.76

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	JBR Environmental Consultants
Date Received:	NA	Project:	TOC_01-176, WORFDB8 F&BI 404102
Date Extracted:	04/08/14	Lab ID:	I4-215 mb
Date Analyzed:	04/09/14	Data File:	I4-215 mb.015
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	94	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW104	Client:	JBR Environmental Consultants
Date Received:	04/04/14	Project:	TOC_01-176, WORFDB8 F&BI 404102
Date Extracted:	04/07/14	Lab ID:	404102-01
Date Analyzed:	04/08/14	Data File:	040812.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	94	108
Toluene-d8	104	91	107
4-Bromofluorobenzene	100	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
1,2-Dibromoethane (EDB)	<1
1,2-Dichloroethane (EDC)	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MLT-04	Client:	JBR Environmental Consultants
Date Received:	04/04/14	Project:	TOC_01-176, WORFDB8 F&BI 404102
Date Extracted:	04/07/14	Lab ID:	404102-02
Date Analyzed:	04/07/14	Data File:	040717.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	94	108
Toluene-d8	105	91	107
4-Bromofluorobenzene	101	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
1,2-Dibromoethane (EDB)	<1
1,2-Dichloroethane (EDC)	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW106	Client:	JBR Environmental Consultants
Date Received:	04/04/14	Project:	TOC_01-176, WORFDB8 F&BI 404102
Date Extracted:	04/07/14	Lab ID:	404102-04
Date Analyzed:	04/07/14	Data File:	040718.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	94	108
Toluene-d8	104	91	107
4-Bromofluorobenzene	106	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
1,2-Dibromoethane (EDB)	<1
1,2-Dichloroethane (EDC)	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW107	Client:	JBR Environmental Consultants
Date Received:	04/04/14	Project:	TOC_01-176, WORFDB8 F&BI 404102
Date Extracted:	04/07/14	Lab ID:	404102-05
Date Analyzed:	04/07/14	Data File:	040719.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	94	108
Toluene-d8	103	91	107
4-Bromofluorobenzene	106	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
1,2-Dibromoethane (EDB)	<1
1,2-Dichloroethane (EDC)	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	EB-040214	Client:	JBR Environmental Consultants
Date Received:	04/04/14	Project:	TOC_01-176, WORFDB8 F&BI 404102
Date Extracted:	04/07/14	Lab ID:	404102-06
Date Analyzed:	04/07/14	Data File:	040720.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	94	108
Toluene-d8	103	91	107
4-Bromofluorobenzene	108	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
1,2-Dibromoethane (EDB)	<1
1,2-Dichloroethane (EDC)	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	WB-040214	Client:	JBR Environmental Consultants
Date Received:	04/04/14	Project:	TOC_01-176, WORFDB8 F&BI 404102
Date Extracted:	04/07/14	Lab ID:	404102-07
Date Analyzed:	04/07/14	Data File:	040721.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	94	108
Toluene-d8	102	91	107
4-Bromofluorobenzene	106	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
1,2-Dibromoethane (EDB)	<1
1,2-Dichloroethane (EDC)	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	TB-040314-2	Client:	JBR Environmental Consultants
Date Received:	04/04/14	Project:	TOC_01-176, WORFDB8 F&BI 404102
Date Extracted:	04/07/14	Lab ID:	404102-08
Date Analyzed:	04/07/14	Data File:	040714.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	94	108
Toluene-d8	103	91	107
4-Bromofluorobenzene	105	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
1,2-Dibromoethane (EDB)	<1
1,2-Dichloroethane (EDC)	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW103	Client:	JBR Environmental Consultants
Date Received:	04/04/14	Project:	TOC_01-176, WORFDB8 F&BI 404102
Date Extracted:	04/07/14	Lab ID:	404102-09
Date Analyzed:	04/07/14	Data File:	040722.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	94	108
Toluene-d8	102	91	107
4-Bromofluorobenzene	107	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
1,2-Dibromoethane (EDB)	<1
1,2-Dichloroethane (EDC)	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	JBR Environmental Consultants
Date Received:	Not Applicable	Project:	TOC_01-176, WORFDB8 F&BI 404102
Date Extracted:	04/07/14	Lab ID:	04-0679 mb
Date Analyzed:	04/07/14	Data File:	040707.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	94	108
Toluene-d8	104	91	107
4-Bromofluorobenzene	105	91	110

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
1,2-Dibromoethane (EDB)	<1
1,2-Dichloroethane (EDC)	<1

Date of Report: 04/23/14
Date Received: 04/04/14
Project: TOC_01-176, WORFDB8 F&BI 404102
Date Extracted: 04/15/14
Date Analyzed: 04/15/14 and 04/16/14

RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR 1,2-DIBROMOETHANE BY EPA METHOD 8011 MODIFIED
Results Reported as µg/L (ppb)

Sample ID Laboratory ID	EDB
MW104 404102-01	<0.01
MLT-04 404102-02	0.19 ca
MW106 404102-04	<0.01
MW107 404102-05	<0.01
EB-040214 404102-06	<0.01
WB-040214 404102-07	<0.01
MW103 404102-09	<0.01
Method Blank	<0.01

EDB 1,2-Dibromoethane

Note: Sample MW104 was analyzed from a container with headspace due to limited sample volume. The result should be considered an estimate.

Date of Report: 04/23/14
Date Received: 04/04/14
Project: TOC_01-176, WORFDB8 F&BI 404102

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: 404117-03 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	98	72-119
Toluene	ug/L (ppb)	50	95	71-113
Ethylbenzene	ug/L (ppb)	50	98	72-114
Xylenes	ug/L (ppb)	150	92	72-113
Gasoline	ug/L (ppb)	1,000	99	70-119

Date of Report: 04/23/14
Date Received: 04/04/14
Project: TOC_01-176, WORFDB8 F&BI 404102

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	92	98	61-133	6

Date of Report: 04/23/14
Date Received: 04/04/14
Project: TOC_01-176, WORFDB8 F&BI 404102

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

Laboratory Code: 404102-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Lead	ug/L (ppb)	10	<1	93	99	79-121	6

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Lead	ug/L (ppb)	10	101	83-115

Date of Report: 04/23/14
Date Received: 04/04/14
Project: TOC_01-176, WORFDB8 F&BI 404102

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

Laboratory Code: 404119-06 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Lead	ug/L (ppb)	10	<1	101	97	79-121	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Lead	ug/L (ppb)	10	100	83-115

Date of Report: 04/23/14
Date Received: 04/04/14
Project: TOC_01-176, WORFDB8 F&BI 404102

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

Laboratory Code: 404117-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	<1	104	80-114
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	102	81-114
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	<1	99	81-120

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	110	107	81-118	3
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	105	102	81-113	3
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	104	101	85-115	3

Date of Report: 04/23/14
Date Received: 04/04/14
Project: TOC_01-176, WORFDB8 F&BI 404102

**QUALITY ASSURANCE RESULTS
FROM THE ANALYSIS OF WATER SAMPLES FOR
1,2-DIBROMOETHANE BY EPA METHOD 8011 MODIFIED**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 10)
1,2-Dibromoethane	ug/L (ppb)	0.10	94	93	70-130	1

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

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

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

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

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

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

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

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

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

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

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

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

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

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

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Herman Chair
404102

SAMPLE CHAIN OF CUSTODY

ME 04-04-14 V3/BE4/A05

Send Report To: Rebekah Brooks
Company: JBR Environmental con.
Address: 19101 36th Ave, West, STE203
City, State, ZIP: Lynnwood, Wa, 98036
Phone #: 425-977-4994 Fax #: 425-449-4097

SAMPLERS (signature): Dana Hutchins
PROJECT NAME/NO.: TOC-MLT
PO#: B-#14085.06
REMARKS: Dissolved Lead samples are marked and field Filtered.

Page # 1 of 1

TURNAROUND TIME
- ☒ Standard (2 Weeks)
- ☐ RUSH
- Rush charges authorized by

SAMPLE DISPOSAL
- ☒ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS	MTBE (EPH 8260)	Total Pb	Diss Pb	EDC	EDB (8021B)	EDB by 8011	Notes
MW104	01 A-G	4-1-14	1040	W	7	X	X	X				X	X	X	X	X	✓	✓ per RB 4/10/14
MLT-04	02 A-G	4-1-14	1100	W	7	X	X	X				X	X	X	X	X	✓	ML
MW51	03 A-C	4-1-14	1220	W	3		X	X										
~~[illegible]~~																		
MW106	04 A-G	4-2-14	1115	W	7	X	X	X				X	X	X	X	X	✓	
MW107	05	4-2-14	1210	W	7	X	X	X				X	X	X	X	X	✓	
EB-040214	06	4-2-14	1306	W	7	X	X	X				X	X	X	X	X	✓	
WB-040214	07	4-2-14	1330	W	7	X	X	X				X	X	X	X	X	✓	
TB-040314-2	08			W	1	X	X	X				X			X	X		O-analyze X-canceled per RB 4/7/14
MW103	09 A-G	4-3-14	1115	W	7	X	X	X				X	X	X	X	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: Dana Hutchins	Dana Hutchins	JBR	4-4-14	1200
Received by: [signature]	Nhan Phan	FEBI	4-4-14	1930
Relinquished by:				
Received by:		Samples received at 3 °C		