SITE CLOSURE PLAN

PC&F Site 01-056
500 George Washington Way
Richland, Washington

prepared for

Pacific Convenience & Fuels, LLC
2603 Camino Ramon, Suite 350
San Ramon, California 94583

January 21, 2011

Project No. 611

environ strategy consultants, inc.

One Technology Drive, Ste. B-123
Irvine, California 92618
tel 949.486.0884
fax 949.486.0885
environstrategy.com

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ABBREVIATIONS AND ACRONYMS

amsl:	above mean sea level
bgs:	below ground surface
BTEX:	benzene, toluene, ethylbenzene and total xylenes
btoc:	below top of casing
COC:	contaminant of concern
DOE:	Washington State Department of Ecology
EPA:	Environmental Protection Agency
ft:	feet
mg/kg:	milligrams per kilogram
MTCA:	Model Toxics Control Act
MTBE:	methyl tert-butyl ether
NA:	not applicable
ND:	not detected
NFA:	No Further Action
O&M:	operation and maintenance
PC&F:	Pacific Convenience & Fuels LLC
SCP:	Soil Closure Plan
SVE:	soil vapor extraction
TPH:	total petroleum hydrocarbons
TPH-Gx:	total petroleum hydrocarbons quantified as gasoline
TPH-Dx:	total petroleum hydrocarbons quantified as diesel
USTs:	underground storage tanks
VOC:	volatile organic compound

1.0 INTRODUCTION

Environ Strategy Consultants, Inc. (Environ Strategy) is pleased to present to Pacific Convenience & Fuels, LLC (PC&F), this ***Site Closure Plan*** (SCP) for the real property at 500 George Washington Way in Richland, Washington (Figure 1). The site is an active retail fueling station with a convenience store, two pump islands with one dispenser each and three underground storage tanks (USTs). A site plan showing pertinent site features is provided as Figure 2.

In 1993, soil and groundwater impacts were identified in the area of the former UST cavity located at the southwest corner of the property. Soil sampling and installation of an array of monitoring wells adequately defined the extent of adsorbed- and dissolved-phase contamination. In 1995 a remediation system, consisting of soil vapor extraction (SVE) and air sparge (AS), operated in different areas of the site and was effective at reducing residual fuel hydrocarbon concentrations in soil and groundwater. The remediation system was shut down in December 2006. In 2004, hydrogen peroxide pilot testing was performed and in 2005 hydrogen peroxide was injected into to monitoring wells.

Since 1995, groundwater monitoring has been ongoing at the site. Recent and historical groundwater monitoring results indicate that past site remediation has significantly reduced dissolved-phase hydrocarbon levels. Specifically, Third Quarter 2010 groundwater monitoring results show that detected levels of fuel hydrocarbons in groundwater are below the Washington Department of Ecology (DOE) Model Toxics Control Act (MTCA) Method A Cleanup Levels. The depth to groundwater is variable across the site and ranges between 10.71 feet to 32.32 feet below top of casing (btoc).

1.1 OBJECTIVES

The primary objectives of the SCP are as follows:

- Summarize the site history and assess the nature and extent of contamination detected in subsurface soil and groundwater.
- Present a cleanup strategy to achieve closure in the form of a No Further Action (NFA) determination from the DOE.
- Provide estimated costs and schedule to implement the cleanup strategy outlined herein.

The primary objective of this document is to provide a viable, cost-effective approach toward remediating hydrocarbon-affected soil and groundwater and to secure a NFA determination from the DOE for Site 01-056 in Richland, Washington. To achieve successful closure, the recommended approach is to further evaluate groundwater quality and to advance confirmation soil borings.

Recent (July 2010) and historical groundwater monitoring data indicate that residual dissolved-phase hydrocarbons are below applicable MTCA Method A Cleanup Levels. It is anticipated that four (4) consecutive quarters of groundwater monitoring and the installation of up to 7 confirmation soil borings will provide sufficient data to support DOE site closure. Groundwater monitoring will be conducted at select wells to provide sufficient coverage of the site. Confirmation borings will be advanced onsite and offsite where elevated fuel hydrocarbons were detected in soil and groundwater before site remediation was implemented. Results of the groundwater monitoring and confirmation sampling will be used to support site closure.

It is anticipated that site cleanup and closure can be achieved within 15 months upon implementation of the SCP, which includes time allowances for permitting, groundwater monitoring, confirmation soil sampling, reporting, DOE closure concurrence, and well abandonment. The estimated project completion costs and schedule to implement the cleanup strategy are provided in Appendix A and Appendix B, respectively.

This document contains eight sections, including this introduction as Section 1.0. Section 2.0 includes a description of the historical site assessment and remedial activities and a summary of regional and local geology and hydrogeology. Section 3.0 includes an assessment of known soil and groundwater impacts. Section 4.0 identifies site cleanup goals, and Section 5.0 presents the site cleanup strategy. The estimated costs and schedule to implement the cleanup strategy are presented in Section 6.0 and Section 7.0, respectively; Section 8.0 includes closing remarks and references used to prepare this document.

2.0 BACKGROUND

Presented in the following subsections are a description of the existing site layout, a review of historical environmental assessment activities and a summary of the regional and site-specific geology and hydrogeology.

2.1 SITE DESCRIPTION

The site is located at 500 George Washington Way in Richland, Washington. The site is an approximate 1.42-acre parcel located on the east side of George Washington Way approximately 800 feet west of the Columbia River. The site is currently an active retail fueling station with a convenience store, two pump islands with one dispenser each and three 10,000-gallon underground storage tanks (USTs). The site is located in a commercial and residential land-use area with a large public park located to the east. Pertinent site features are shown on Figure 2.

The subject site lies at an elevation of approximately 375 feet above mean sea level (amsl). The topography slopes to the east-northeast toward the Columbia River (Lake Wallula) in the immediate vicinity of the site. The Columbia River is located adjacent to the site and flows in a southerly direction.

2.2 HISTORICAL SITE ASSESSMENT

The following historical summary is based on a review of available documents and summaries including a draft letter report of results of a *Soil Vapor Survey* dated April 30, 1993 by Environmental Science and Engineering, Inc. (ESE), *Subsurface Petroleum Hydrocarbon Assessment and Remedial Investigation,* dated June 19, 1995 by AGRA Earth and Environmental, Inc. (AGRA), *Pilot Study Report*, dated April 30, 1997 by AGRA, *Remedial Pilot Testing – Howard Amon Park*, dated May 7, 1998 by GeoEngineers, Inc. (GeoEngineers), *Report Remedial Activities – April 1997 through July 1998*, dated September 3, 1998 by GeoEngineers, various groundwater monitoring reports completed by Sound Environmental Strategies (SES) from 2003 to 2008, *Remedial Action Alternatives Analyses*, dated May 19, 2006 by SES and other various transmittal letters and agency correspondence from 2003 to 2006. For reference, a summary of soil sample analytical results from AGRA's site assessment activities is provided as Appendix C. In addition, the soil boring locations for each assessment relative to pertinent site features are shown on Figure 2.

In 1990, three steel underground storage tanks (USTs), associated piping and dispensers were removed from the site. New dispensers were installed in the same location as the previous dispensers and the new USTs were installed to the northwest. A fourth UST, known to have existed adjacent to the former USTs, was not found and is believed to have been removed prior to 1990. In addition, a 750-gallon heating oil tank is believed to have been located along the western wall of the property. Removal records such as a tank closure report or field notes were not available for review.

In 1993, a soil and groundwater site assessment was performed where five groundwater monitoring wells (MW-1 through MW-5) and one vapor extraction well (VW-1) were installed. Soil and groundwater contamination were identified in the area of former UST cavity.

In 1995, an additional subsurface assessment was completed including the installation of six groundwater monitoring wells (MW-6 through MW-7), one vapor recovery well (RW-1), one air sparging well (SW-1) and the collection of soil and groundwater samples. Several rounds of groundwater elevation data were collected during this study. It was reported that the fluctuations in groundwater elevation and flow direction were likely the direct result of water level changes in nearby Lake Wallula (Columbia River) and the Yakima River. On February 1, 1995 and April 4, 1995 groundwater samples were collected from existing monitoring wells. Fuel hydrocarbons were detected in groundwater above MTCA Method A Cleanup Levels. During the February event, the maximum concentrations of dissolved-phase hydrocarbons were identified in Well MW-1 as follows: TPH-Gx (30,000 parts per billion [ppb]); benzene (39 ppb); toluene (890 ppb); ethylbenzene (430 ppb); total xylenes (3,700 ppb); and TPH-Dx (1,800 micrograms per Liter [µg/L]). TCE and PCE were detected in two wells (MW-2 and MW-5); however, levels did not exceed the MTCA Method A Cleanup Levels. During the April event, maximum concentrations of toluene (850 µg/L) were detected in Well MW-1. Maximum concentrations of benzene (72 µg/L), ethylbenzene (1,400 µg/L) and total xylenes (6,400 µg/L) were identified in Well MW-7. Maximum concentrations of TPH-Gx (44,000 µg/L) and TPH-Dx (2,700 µg/L) were detected in Well RW-1. PCE and TCE were detected in several wells at levels below the MTCA Method A Cleanup Levels.

During March 1995, seven borings were advanced at offsite locations to the east and west of the site. Of the soil samples collected from these borings, only one (RW-1 S-2) contained detectable concentrations of fuel hydrocarbons.

On April 19 and 20, 1995 a 24-hour in-situ air sparge (AS) pilot test and two one-hour soil vapor extraction (SVE) pilot tests were conducted. Results indicated that AS/SVE was a viable method to remediate subsurface soils.

In August 1995 soil sampling activities were conducted along the west bank of the Columbia River located to the east and downgradient of the site. Soil samples were collected along an approximate 500 foot section of the river bank. Analytical results indicated that the soil along the river had not been impacted.

In October 1995, a limited risk assessment was conducted to evaluate the risk to users of the park, baseball field and river shoreline located east of the site. The potential risk was from petroleum hydrocarbons volatilizing from subsurface soil and groundwater into the ambient air and breathing zone for park users. Based on the results of the risk assessment, exposure risk was determined to be minimal.

In November 1995, an additional twelve groundwater monitoring wells were installed. Nine wells were installed in the park, one well was installed onsite, and two wells were installed approximately 300 feet west of the site. In addition, six soil borings were advanced in the park. Onsite, five dedicated air sparging (AS) wells and four dedicated vapor extraction (VE) wells were installed as part of an AS/SVE remedial system.

In 1996/1997 a six-month SVE/AS pilot study was conducted using two separate operating systems, a constantly operating SVE system (4 wells) and a pulsed SVE/AS system (12 wells). The SVE/AS wells were aligned to form a subsurface "sparge fence" oriented perpendicular to groundwater flow and extending the width of the dissolved-phase plume. Approximately 771 pounds of TPHg and 50 pounds of BTEX were recovered from the subsurface. Asymptotic conditions were reached in 90 days.

During December 1997, two remedial pilot tests were conducted at Howard Amon Park, located east of the site, to evaluate design parameters for an expansion of the remediation system operating at the site. As part of the pilot test design, two monitoring wells and two air sparge wells were installed. The pilot tests were conducted in two areas referred to as the West Park Pilot Test and East Park Pilot Test. Results of the pilot tests indicated that AS/SVE was successful in terms of the distribution of dissolved oxygen and in reducing the concentrations of petroleum hydrocarbons. The West Park Pilot Test determined that SVE should be used in conjunction with AS in that part of the system; however, SVE was not necessary in the East Park part of the system. Based on the results of the remedial pilot tests, four additional AS wells, five additional SVE wells and a vapor extraction trench were installed in the areas of the West Park and East Park pilot test systems.

Remedial operation and maintenance (O&M) and quarterly groundwater monitoring and sampling were performed during 1997 and 1998. Monitoring results showed that onsite and the East Park remedial systems were effective in reducing petroleum hydrocarbon concentrations from the groundwater. In May 1998, the West Park remedial system was completed and brought online. This included installing four more air sparge wells and a vapor extraction trench.

Operation of the three remedial systems from start-up (1996 through 1998) through 2006 was effective in lowering the concentrations of petroleum hydrocarbons at the site.

During the October 2003 groundwater monitoring event, groundwater flow direction had changed from easterly to southerly, presumably due to pumping at the nearby Wellsian Well Field resulting in the migration of contaminants beyond the existing well network. Previously non-impacted wells had concentrations of dissolved-phase hydrocarbons exceeding Method A Cleanup Levels.

A peroxide injection pilot test was conducted in January 2004; however, details from that test are not available. In July 2004, four wells were installed to the south in order to delineate the dissolved-phase plume in that direction.

In 2005, approximately 90 gallons of a 17% peroxide solution was injected into two site wells and the East Park remediation system was shut down.

Groundwater monitoring has been ongoing at the site since 1995. Results indicate that active remediation and natural attenuation has significantly decreased the levels petroleum hydrocarbons in groundwater beneath the site. Based on current (July 2010) and historical groundwater analytical results, it appears that residual dissolved-phase hydrocarbons are localized to Wells MW-05, MW-06, MW-32 and MW-33 and that the plume is adequately defined. Only lead was detected at a concentration exceeding the respective cleanup level.

2.3 HISTORICAL SITE REMEDIATION

From 1996 through 2006, a SVE/AS remediation system operated at the site. Initially, the remediation system operated as an extended pilot test for the first six months of operation and consisted of a series of vapor extraction wells and air sparge wells placed in and across a soil and groundwater plume in the vicinity and downgradient (east) of the former USTs and pump islands. The remediation system was later expanded to areas of Howard Amon Park, and consisted of air sparging along the east side of the former baseball field and air sparging and SVE along the west side of the former baseball field, which is now the Richland Community Center property. The three subsystems comprising the remediation system are referenced as: 1) the Subject Property Remediation System (SPRS) located at the eastern boundary of the property; 2) the West Park Remedial System (WPRS) located between the subject property and

western edge of the community center parking lot and 3) the East Park Remedial System (EPRS-2) located near the southeast corner of the Richland Community Center.

Each remediation system includes a line of groundwater air sparge wells installed perpendicular to the axis of the groundwater plume. Vapor extraction wells are included in each of the systems to capture hydrocarbon vapors produced from air sparging activities, but were primarily used in association with the SPRS. Vapor extraction was typically not needed in association with the WPRS and EPRS-2 due to sufficiently low hydrocarbon vapors produced in these areas. Additional details regarding the remediation system design and installation are provided in AGRA's *Subsurface Petroleum Hydrocarbon Assessment and Remedial Investigation,* dated June 19, 1995 and GeoEngineers' *Remedial System Installation Report*, dated May 7, 2003.

Based on SES' *Groundwater Monitoring and Operations and Maintenance Report – Fourth Quarter 2006*, dated January 25, 2007, the SPRS consists of a SVE system and an AS system. The SVE system extracts vapors from subsurface soil via six vapor extraction wells (VW-02 through VW-05, RW-01 and MW-05). The AS system injects air into the groundwater via six additional wells (SW-01 through SW-06) to volatilize organic compounds within the groundwater. Similarly, the WRPS is an AS system that utilizes a series of five AS wells (SW-7 and SW-12 through SW-15) to facilitate the volatilization of organic compounds through air injection into the groundwater. The ESPS-2 was shut down and decommissioned in 2006 due to significantly low hydrocarbon vapors being recovered by the system. An estimated 2,011 pounds of vapor-phase TPH-Gx and an estimated 9.8 pounds of vapor-phase BTEX were recovered from the subsurface between 2005 through December 2006. The remediation system is currently shutdown.

A peroxide injection pilot test was conducted in January 2004. In 2005, approximately 90 gallons of a 17% peroxide solution was injected into two site wells. Documentation was not found detailing the performance of peroxide pilot testing and its subsequent application in site wells.

2.4 REGIONAL GEOLOGY AND HYDROGEOLOGY

A description of the regional geology and hydrogeology is provided in AGRA's *Subsurface Petroleum Hydrocarbon Assessment and Remedial Investigation,* dated June 19, 1995 and is summarized below.

The site is located in east-central part of the Pasco Basin, a structural downwarp within a flat-lying sequence of basalt flows of the Miocene Columbia River Group. The basalt was deposited during Miocene time (26 million years before present) as widespread flows generated from numerous fissures located across southeastern Washington, northeastern Oregon and southern Idaho. The basalt flows periodically diverted the Columbia River and Snake River to new courses, as is evident by the presence of ancient river channels of interbedded river gravels and basalt.

Recent geologic history includes advances and retreats of continental glaciations occurring during the Pleistocene Epoch (2.5 million to 11,000 years ago). During this time, several vast glaciers advanced into part of the Columbia Plateau, northern Idaho and Montana. Each advancing glacier was responsible for depositing varying assortments of glacial till, outwash sand and gravel and glacial lacustrine deposits. In the immediate vicinity of the study area, are large gravel bars which were deposited by the large flood "rivers" of glacial meltwater which passed through the Columbia River.

The geology of the site is characterized by these glacio-fluvial sediments deposited over basalt bedrock of the Columbia River Group. The glacio-fluvial sediments, consisting of thick intervals of flood deposits (sand, gravel and cobbles), were likely deposited during the last major glacial advance, which ended approximately 12,000 years ago. Following the glacial flood period, the deposits were reworked by local streams and rivers, predominantly the Columbia River in the site area.

The Columbia River is located approximately 800 feet east-northeast of the subject property. The Columbia River is presently dammed by the McNary Dam, which forms Lake Wallula east of the site. Groundwater is encountered at depths between 10 and 33 feet below ground surface in the subject area. Shallow groundwater beneath the site appears to be associated with the current lake water table and fluctuates seasonally with river and lake levels. Groundwater flow direction may also be directly effected by river levels and discharge of the Yakima River which confluences with the Columbia River approximately 2 miles southeast of the site. The Yakima River flows in a southerly direction and is located approximately 6,500 feet west-southwest of the site.

2.5 SITE GEOLOGY AND HYDROGEOLOGY

The following site geology is based on AGRA's *Subsurface Petroleum Hydrocarbon Assessment*, dated June 19, 1995, and Environ Strategy's *Third Quarter 2010 Groundwater Monitoring Report*, dated August 25th 2010.

According to AGRA's site assessment, soils beneath the site consist of coarse gravels with some cobbles in a sandy matrix. Soil cobbles consist predominantly of rounded basalt fragments of the Columbia River Group and rounded Precambrian argillites and quartzites and Cretaceous granites. These soils are consistent with glacial flood deposits and were likely derived from the large floods that occurred approximately 12,000 years ago.

Subsurface soil conditions for two areas of exploration were described by AGRA: 1) an elevated grade immediately below the paved parking area of the site and across George Washington Way and 2) a lower grade located in the vicinity of the park east of the subject site. In general, subsurface soils beneath the site consist of a thin (approximately 3 feet) gravelly sand (fill) layer above sandy silt and/or silty SAND with gravel to a depth of approximately 8 to 10.5 feet. The sand and silt overlie a medium dense, brown to grayish brown sandy GRAVEL with cobbles which grades into a gravelly SAND with trace silt to a depth of approximately 45 feet. At location MW-9, a hard very stiff, dry, dark tan clayey SILT to silty CLAY was encountered at approximately 42.5 to 45.5 feet bgs. At the deep in-situ sparging well, very coarse gravels, cobbles and boulders were encountered at approximately 48 feet to 50.5 feet (total depth). Borings completed in the vicinity of the Howard Amon Park encountered medium dense, damp, brown gravelly SAND (fill) over native sandy GRAVEL and gravelly SAND with interbedded medium to coarse (well sorted) sand (glacio-fluvial deposits). A site plan and generalized geologic cross-sections prepared by AGRA are included as Appendix C.

Groundwater was encountered during drilling at depths ranging from 27.2 to 28.5 feet bgs at the elevated grade at the subject site and from 9.6 to 11.7 feet bgs at the lower grade by the park.

Groundwater monitoring was initiated at the site in 1995. On July 12 and 13, 2010 (Third Quarter 2010), Environ Strategy conducted groundwater monitoring activities at the site. Depth to groundwater information is summarized in Table 1 with historical water level measurements shown in Table 2 and in Appendix D (data tables prepared by others).

On July 12 and 13, 2010, depth to groundwater ranged from 10.71 feet to 32.32 btoc in site monitoring wells. Groundwater elevations ranged from 339.99 to 341.74 feet above mean sea

level. Groundwater elevation data indicates that groundwater flow is variable across the site due to an extremely flat gradient. A flow gradient of 0.0008 feet per foot (ft/ft) or 0.08 percent was calculated between Wells MW-2 and MW-23. Groundwater elevation data are shown on Figure 3; however due to the variability in groundwater flow direction, groundwater flow contours are not shown. The historic groundwater flow direction has been generally toward the east at a gradient of 0.00053 to 0.005 feet per foot (ft/ft).

Historic groundwater levels and flow direction beneath the site have varied and are attributed to seasonal fluctuations in precipitation and water levels in Lake Wallula (Columbia River) and with flow/discharge variations within the Yakima River. Based on the distribution of adsorbed-phase (pre-remediation) and dissolved-phase hydrocarbons, groundwater flow appears to have been predominantly to the east.

3.0 CONTAMINANT DISTRIBUTION

A discussion of the nature and extent of contaminant distribution in the subsurface soil and groundwater is provided in the following subsections.

3.1 HYDROCARBON-AFFECTED SOIL

Analytical results from previous assessments (pre-remediation) indicate that residual fuel hydrocarbons (TPH-Dx, TPH-Gx, benzene, ethylbenzene and total xylenes) may be present in subsurface soil. A cumulative summary of soil sample analytical results is presented in Table 3. There was no available documentation regarding soil conditions encountered during the UST removal activities. Additionally, there is no record of the collection of confirmation soil samples following operation of the SVE/AS remediation system. Consequently, the nature and extent of soil contamination is based on analytical results from soil samples collected before remedial efforts at the site.

As shown in Table 3, soil samples collected from Boring RW-1 (pre-remediation) contained TPH-Dx, TPH-Gx, benzene, ethylbenzene and total xylenes concentrations exceeding the respective MTCA Method A cleanup levels. Boring VE-1 is located immediately east-northeast of the former UST cavity (Figure 2). The soil sample collected at a depth of approximately 33 to 34.5 feet at VE-1 contained TPH-Dx at 2,900 mg/kg, TPH-Gx at 220 mg/kg, benzene at <22.0 mg/kg (detection limit exceeded clean up level), ethylbenzene at 27.0 mg/kg and xylenes at 110.0 mg/kg. Analytical results indicate that residual hydrocarbons in soil exceeding MTCA

cleanup levels may be present in saturated subsurface soils at depths of approximately 35 feet bgs.

3.2 HYDROCARBON-AFFECTED GROUNDWATER

Prior to remedial activities, hydrocarbon-affected groundwater extended from the subject property to the east (downgradient) approximately 800 feet to the Columbia River. Operation of the SVE/AS remediation system from 1996 to 2006 was effective in reducing dissolved-phase hydrocarbon concentrations beneath the site.

On July 12 and 13, 2010, Environ Strategy performed groundwater monitoring activities consisting of well gauging and collection and analysis of groundwater samples from thirteen (13) site wells identified as Monitoring Wells MW-2, MW-5 through MW-7, MW-13, MW-17, MW-23, MW-25, MW-27 and MW-30 through MW-33. The monitoring well network is shown on Figure 2.

Static water levels measured in site monitoring wells ranged from 10.71 feet to 32.32 feet btoc. Groundwater elevation data indicates that groundwater flow is variable across the site due to an extremely flat gradient. A flow gradient of 0.0008 feet per foot (ft/ft) or 0.08 percent was calculated between Wells MW-2 and MW-23. Groundwater elevation data are shown on Figure 3. Due to the flat groundwater gradient, groundwater flow contours are not shown. Historically, groundwater flow has been predominantly toward the east in the direction of the Columbia River.

Groundwater analytical results for the July 2010 sampling event indicate that dissolved-phase fuel hydrocarbons are present in shallow groundwater beneath the site at levels below the MTCA Method A Cleanup Levels. The analytical results are summarized on Table 1 and are shown on Figure 4. A narrative of the July 2010 groundwater analytical results is bulleted below.

- Dissolved-phase TPH-Gx was detected in four well samples at concentrations of 67.8 micrograms per Liter [µg/L (MW-05)], 377 µg/L (MW-06), 52.2 µg/L (MW-32) and 57.6 µg/L (MW-33), which are below the Model Toxics Control Act (MTCA) Method A Cleanup Level for TPH-Gx. The remaining wells sampled did not contain TPH-Gx levels at or above the laboratory detection limit.

- Benzene was detected in Well MW-32 (0.65 J µg/L) and ethylbenzene was detected in Wells MW-06 (0.52 J µg/L) and MW-32 (0.61 J µg/L). The remaining wells sampled did not contain benzene or ethylbenzene levels at or above the laboratory detection limit. Note that the J qualifier indicates a value estimated between the laboratory method detection limit and reporting limit.

- Toluene, total xylenes and methyl tert-butyl ether (MTBE) were not detected at or above the laboratory detection limit in the wells sampled.

- Dissolved lead was detected in Wells MW-02 (12.5 µg/L), MW-05 (22 µg/L), MW-07 (14.2 µg/L), MW-32 (13.4 µg/L) and MW-33 (9.28 µg/L). The lead concentration in Well MW-05 exceeds the MTCA Method A Cleanup Level of 15 µg/L.

- Well MW-06, which contained the highest detected TPH-Gx result, was analyzed for the full scan of volatile organic compounds (VOCs). Detectable levels of "other" VOCs in Well MW-06 were sec-butylbenzene (2.49 µg/L), n-butylbenzene (2.02 µg/L), trichloroethene (1.93 µg/L), n-propyl benzene (12.8 µg/L), 1,3,5-trimethyl benzene (4.67 µg/L) and 1,2,4-trimethyl benzene (1.57 µg/L). The MTCA Cleanup regulation Table 720-1, "Method A Ground Water Cleanup Levels" does not designate a cleanup level for the additional VOCs.

- Dissolved oxygen was measured in site wells at levels ranging from 0.50 milligrams per Liter [(mg/L), MW-33] to 2.80 mg/L (MW-13). ORP levels ranged from minus 113.8 millivolts [(mV), MW-32] to 117.3 mV (MW-27). Fe+2 levels were measured up to 1.2 mg/L in Well MW-23.

Based on the Third Quarter 2010 monitoring results, dissolved-phase hydrocarbon levels in the wells sampled are below respective MTCA Method A Cleanup Levels, with the exception of dissolved lead. Dissolved lead was detected at a level just exceeding the MTCA Method A Cleanup Level in Well MW-05. Field redox measurements for wells with detectible levels of fuel hydrocarbons, namely MW-05, MW-32 and MW-33, show depressed levels of dissolved-oxygen, negative ORP values and moderate levels of ferrous iron, which suggest that natural biodegradation of fuel hydrocarbons is occurring, albeit at a reduced rate due to the limited availability of dissolved oxygen.

3.2.1 Hydrocarbon Trend and Distribution Analysis

A summary of current and historical groundwater sample results dating back to the Third Quarter 2005 is shown in Table 1 and Table 2, respectively. Additional historical groundwater monitoring results as tabulated by others is provided in Appendix D. As shown in Table 2, dissolved-phase hydrocarbons, specifically TPH-Gx and benzene, appear stable or decreasing. This observation is more clearly shown in Chart 1 and Chart 2 where TPH-Gx and benzene concentration trends are displayed, respectively. All available groundwater data from 1996 to 2010 was utilized for each chart.

As shown in Chart 1 and Chart 2, dissolved-phase TPH-Gx and benzene levels in site wells exhibit a stable or decreasing contaminant trend from 1995 to 2010. For example, the reported level of TPH-Gx in Well MW-7 on October 11, 1995 was 67,000 µg/L and on July 13, 2010 was below the detection limit of 50 µg/L. Similarly, as shown on Chart 2, benzene was detected in Well MW-7 at 190 µg/L on October 11, 1995 and was below the detection limit of 0.5 µg/L on July 13, 2010.

A review of historical documents indicates that three air sparge/soil vapor extraction (AS/SVE) systems intermittently operated at the site from 1998 to 2003; and in 2004, a hydrogen peroxide (H_2O_2) injection pilot test was conducted. These remedial actions appeared to be effective at reducing dissolved-phase fuel hydrocarbons.

Based on current and historical groundwater analytical results, it appears that residual dissolved-phase hydrocarbons are localized to Wells MW-05, MW-06, MW-32 and MW-33 and that the plume is adequately defined.

4.0 CLEANUP REQUIREMENTS

The statutory authority in Washington for cleanup of contaminated soil and protection of water quality in groundwater is the DOE's *MTCA Chapter 70.105D RCW and Cleanup Regulation Chapter 173-340 WAC*, dated October 2005 (DEQ Publication No. 94-06). The DOE requires the protection and restoration, if applicable, of the state's water resources, which is inclusive of groundwater. Where applicable, the DOE has established the goal to remove contamination to the extent feasible from the soil affiliated with the site. However, it has been recognized by government regulators that most cleanup actions cannot achieve a "zero" contamination level, due to technical and resource allocation limitations.

4.1 APPLICABLE CLEANUP LEVELS

To facilitate closure of sites impacted by leaking underground fuel storage tanks, while remaining protective of public health and the environment, the DOE has established soil cleanup guidelines for indicator chemicals [e.g., TPH-Gx and BTEX] commonly associated with gasoline. The guidelines are promulgated by local jurisdictions. In the case of this site, the regulating agency is the DOE-Central Region headquartered in Yakima.

For soil, the DOE requires that specific standards be utilized as the cleanup goals. These guidelines are often re-evaluated based upon site specific geology/hydrogeology, contaminant type and potential risk to receptors. For the purpose of this document, the DOE's MTCA Method A Cleanup Levels for soil using an Unrestricted Land Use scenario will be applied. Note that the Method A Soil Cleanup Levels for Industrial Properties (MTCA Method A Table 745-1) for petroleum hydrocarbons of interest do not differ significantly with respect to petroleum constituents from those given under the unrestricted land use scenario. The following summarizes the cleanup criteria for fuel hydrocarbon constituents in soil Site 01-056 in Richland, Washington.

Contaminants of Concern (COCs)	Soil Action Level [(1)]	Groundwater Action Level [(2)]
TPH-Dx	2,000 mg/kg	500 µg/L
TPH-Gx	100*/30 mg/kg	1,000*/800 µg/L
Benzene	0.03 mg/kg [(3)]	5.0 µg/L
Toluene	7 mg/kg [(3)]	1,000 µg/L
Ethylbenzene	6 mg/kg [(3)]	700 µg/L
Xylenes	9 mg/kg [(3)]	1,000 µg/L
Lead	1,000 mg/kg [(3)]	15 µg/L

Notes:
*- When benzene is not present.
(1) - MTCA Method A Table 740-1 for soil.
(2) - MTCA Method A Table 720-1 for groundwater.
(3) - Cleanup level based on protection of groundwater for drinking water use.

Soil analytical results for previous assessments are presented in Table 3. Based on laboratory analytical results, it appears that hydrocarbon-affected soil with concentrations above the cleanup levels established for TPH-Dx, TPH-Gx, ethylbenzene and total xylenes is present in shallow soil in the vicinity of the former UST cavity. The highest levels of fuel constituents were detected in a sample collected from RW-1, located north-northeast of the former UST cavity.

Specifically, the soil sample collected at a depth of approximately 33.0 to 34.5 feet at RW-1 (identified as RW-1 S2) contained TPH-Dx at 220 mg/kg, TPH-Gx at 2,900 mg/kg, ethylbenzene at 27 mg/kg and total xylenes at 110 mg/kg.

Based on the July 12 and 13, 2010 groundwater monitoring results, the following COC exceeded its respective cleanup level:

COC - Cleanup Level	Monitoring Wells
Lead – 15 µg/L	1 well: MW-05 at 22 µg/L

Table 1 and Figure 4 present the most recent (July1 12 and 13, 2010) groundwater analytical results. As shown in the Table 1 and Figure 4, TPH-Gx was detected in four wells (MW-05, MW-06 MW-32 and MW-33) at levels below the cleanup level for TPH-Gx. Note Wells MW-05, MW-06, MW-32 and MW-33 are located offsite and southeast of the former UST cavity. Benzene was detected in one well (MW-32) and ethylbenzene was detected in two wells (MW-06 and MW-32), at levels below their respective cleanup levels. Dissolved lead was detected in five wells (MW-02, MW-05, MW-06, MW-32 and MW-33), however only the sample collected from Well MW-05 contained lead at a level slightly exceeding the cleanup level. Additionally, COC's (as listed above) were not detected above their respective cleanup levels in the remaining wells sampled on July 12 and 13, 2010. Note that additional VOCs were detected in the groundwater samples from MW-06 (see Table 1); however, the MTCA Cleanup regulation Table 720-1, "Method A Ground Water Cleanup Levels" does not designate cleanup levels for the additional VOCs detected.

5.0 SITE CLEANUP STRATEGY

To achieve successful site cleanup, the recommended remedial approach is to perform consecutive quarterly groundwater monitoring and confirmation soil sampling. A review of historical documents indicates that three air sparge/soil vapor extraction (AS/SVE) systems operated at the site from 1996 to 2006; and in 2004, a hydrogen peroxide (H_2O_2) injection pilot test was conducted. These remedial actions were effective at reducing dissolved-phase fuel hydrocarbons.

Third Quarter 2010 groundwater monitoring results (July 12 and 13, 2010) indicate that residual hydrocarbon concentrations in groundwater are below MTCA Method A Cleanup Levels for

groundwater, with the exception of dissolved lead. Dissolved lead was only detected in one well (MW-05) at a level just exceeding the respective Cleanup Level. Dissolved-phase hydrocarbon concentrations were detected in four (4) Wells: MW-05, MW-06, MW-32 and MW-33.

It is anticipated that four (4) quarters of groundwater monitoring at select site wells will be required to provide sufficient data to support DOE site closure. This time estimate is based on the Third Quarter 2010 groundwater monitoring data which indicates residual dissolved-phase hydrocarbons are below MTCA Method A Cleanup Levels, with the exception of dissolved-lead, and that the plume is localized (adequately defined) and stable. Additionally, confirmation soil sampling will be conducted to show that adsorbed-phase hydrocarbon levels are below the MTCA cleanup levels. Confirmation soil samples will be collected at locations onsite and offsite of the subject property. Figure 5 shows the approximate location of the proposed confirmation soil borings.

It is anticipated that site cleanup and closure can be achieved within 15 months, which includes time allowances for four quarters of consecutive groundwater monitoring, confirmation soil sampling, regulatory reporting, DOE closure concurrence and well abandonment. Additional details pertaining to specific tasks to implement the site cleanup and closure are discussed in the following sections.

5.1 SCOPE OF WORK

Before commencing with field activities, such as confirmation soil sampling activities, it is preferred that the permitting phase (Task 1) be performed. Upon completion of the permitting phase, the confirmation soil sampling phase will be implemented. Prior to proceeding with site closure (Task 5), it is important that findings and results from the groundwater monitoring and confirmation sampling be considered supportive. If the groundwater monitoring and confirmation sampling findings and results indicate that applicable cleanup levels are exceeded, the cleanup strategy will be modified to address current conditions or an alternative cleanup approach identified.

5.1.1 Task 1 –Permitting, Access Agreements and Health and Safety

Prior to implementing field activities, permits and access agreements necessary to implement the groundwater monitoring and installation of the confirmation borings will be secured. Additionally, a site-specific Health and Safety Plan will be prepared for the proposed scope of work.

5.1.2 Task 2 – Groundwater Monitoring

Groundwater monitoring will be conducted on a quarterly basis for four (4) consecutive quarters to evaluate groundwater quality beneath the site. The DOE typically requires four consecutive quarters of compliance monitoring to evaluate a site for regulatory closure.

Groundwater monitoring will be conducted a select wells (up to 16 wells) and will consist of standard water chemistry parameters along with additional field redox parameters. Groundwater samples will also be collected and analyzed for COCs. Wells MW-01, MW-02, MW-04, MW-05, MW-06, MW-07, MW-13, MW-17, MW-20, MW-23, MW-25, MW-27, and MW-30 through MW-33 are proposed to be gauged and sampled as part of the quarterly groundwater monitoring program and will provide sufficient coverage of the site (see Figure 2). Note that the wells selected to be monitored may be adjusted as additional data is available and in consultation with the DOE to meet closure requirements.

5.1.3 Task 3– Confirmation Soil Borings

In review of historical site characterization reports, several "data gaps" were noted that require additional assessment to meet DOE closure requirements. Specifically, confirmation soil sample results from the former tank cavity and pump islands are absent. In addition, based on historical site assessment data, soil samples were not collected from borings installed offsite near the former baseball field (Richland Community Center property), where fuel hydrocarbons were identified is soil based on field PID readings. Based on a review of site boring logs, these soils appear to be within the saturated zone and are likely reflective of groundwater conditions. However, the DOE may require confirmation soil sampling be conducted to evaluate subsurface conditions in this area.

Up to seven (7), 40-foot confirmation soil borings will be advanced in the areas containing the highest TPH concentrations based on historical soil analytical/PID results. Confirmation soil sample results will be used to determine if residual hydrocarbon concentrations in soil are below cleanup levels. Figure 5 shows the locations of the proposed confirmation soil borings.

5.1.4 Task 4 – Site Closure

Site closure is anticipated once it is demonstrated that hydrocarbon-affected soil and groundwater have been successfully remediated. The MTCA Method A Cleanup Levels for soil and groundwater will be applied when evaluating the site for closure. If warranted, a Site Closure Report will be prepared and submitted to DOE under the voluntary cleanup program to obtain regulatory concurrence for site closure with a no further action determination.

5.1.5 Task 5 – Well Abandonment

Upon receiving regulatory site closure, each site monitoring and/or remediation well will be destroyed in accordance with local and state well abandonment requirements. There are approximately 40 wells consisting of groundwater monitoring, air sparging, vapor extraction, plume eater and recovery wells that will require destruction in accordance with DOE standards.

5.1.6 Task 6– Project management

This activity includes time associated with project scoping; managing labor, equipment and material resources; procurement and scheduling of subcontractors; progress reporting; and meeting with regulatory officials to discuss project objectives and actions. This task will span the duration of the project.

6.0 ESTIMATED CLEANUP COSTS AND SCHEDULE

The total estimated cost to implement the SCP is $120,040. A general breakdown of the estimated costs for each task is included in Appendix A. The estimated costs are based on bid quotes and engineering estimates. Engineering estimates are based on site remediation and regulatory site closure experience and represent a site cleanup scenario that is considered technically sound and cost-effective.

Site closure is estimated to be achieved within 15 months of implementing the SCP. A timeline for the completion of specified tasks is presented in Appendix B. The estimated cleanup costs and closure schedule are approximate and based on available site information. As additional site information is acquired, the cost and timeline toward achieving regulatory closure will be adjusted accordingly.

7.0 CLOSURE

Environ Strategy is pleased to be of service to Pacific Convenience & Fuels, LLC. If there are questions regarding this document or if additional site information is required, please contact the undersigned at (949) 486-0884.

Respectfully submitted,

Dave Dirkin, L.G.
Project Manager

Jinghui Niu, P.E.
Principle Engineer

8.0 REFERENCES

AGRA Earth and Environmental, Inc. (AGRA), 1995, *Subsurface Petroleum Hydrocarbon Assessment and Remedial Investigation,* dated June 19, 1995.

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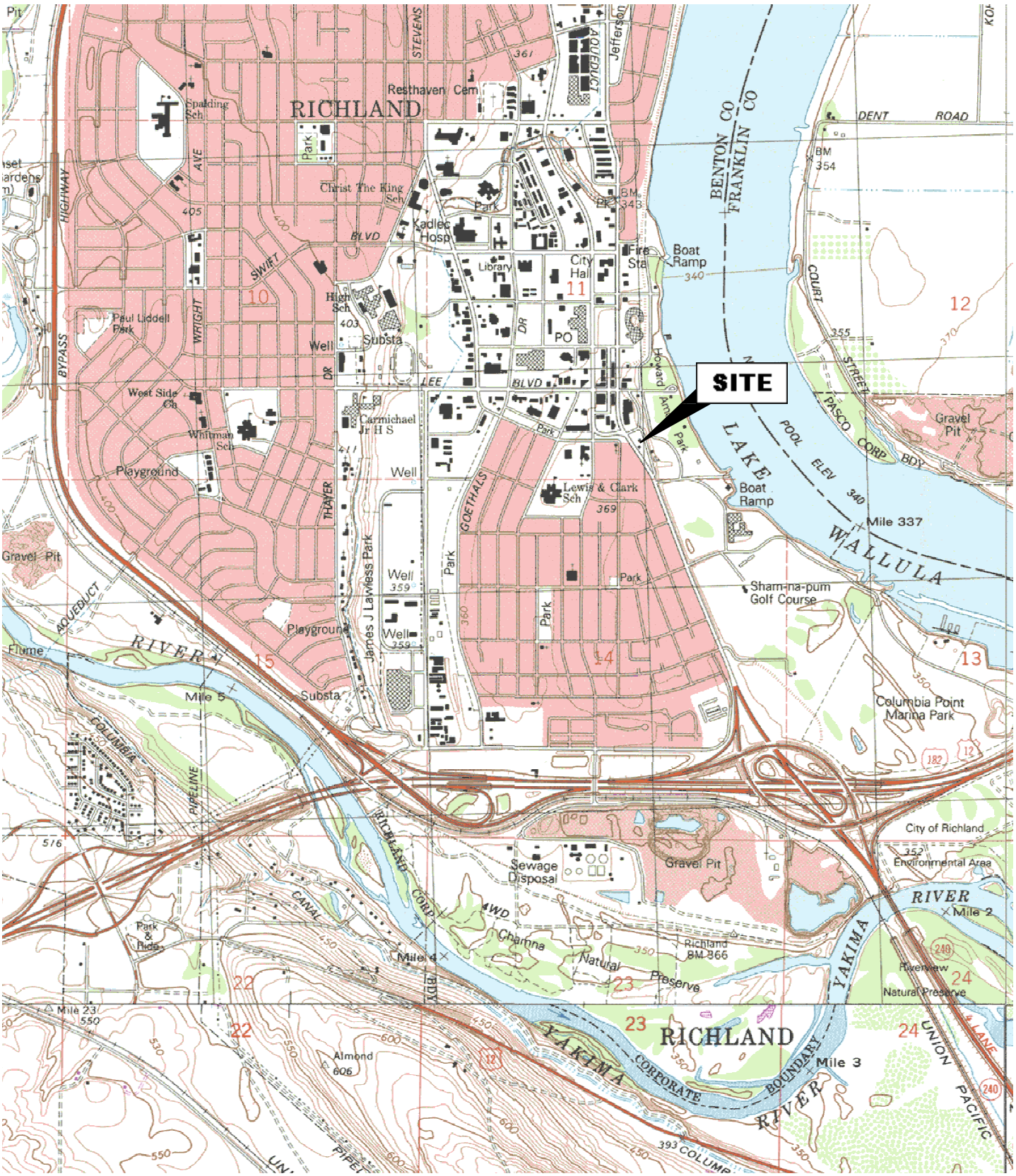
FIGURES



Map Information: Maptech Terrain Navigator, Std. Ed. Mt. Rainier/Moses Lake/Pasco (WA) 46°16'21"N 119°16'21"W	N 0 2000 APPROX. SCALE: 1" = 2000'	FIGURE 1 SITE LOCATION MAP Pacific Convenience & Fuels Site #01-056 500 George Washington Way Richland, Washington	DATE 06/09/10 PROJECT NO. 611 FILE NO. 611F1-SLM

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Irvine, California 92618

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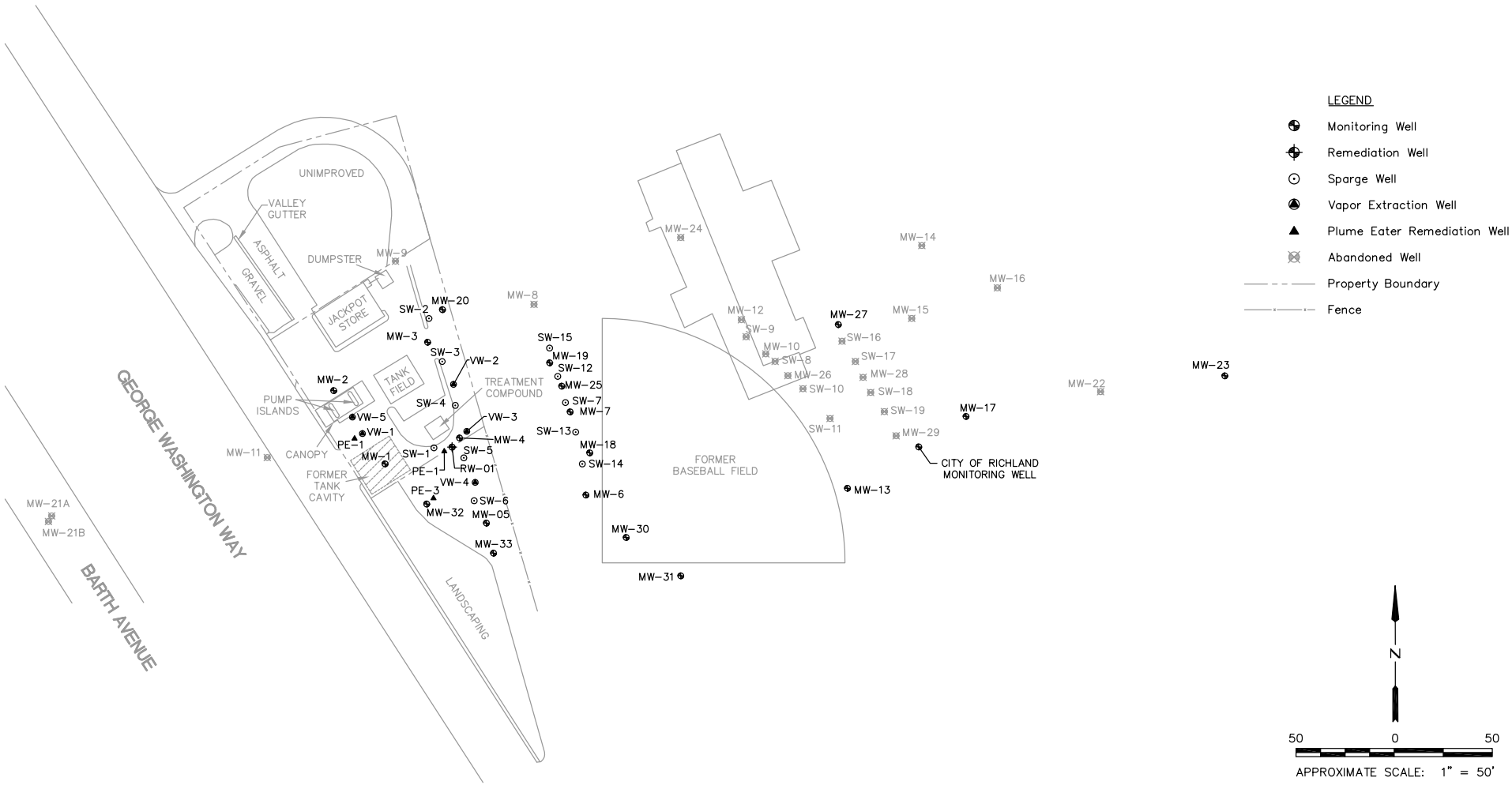
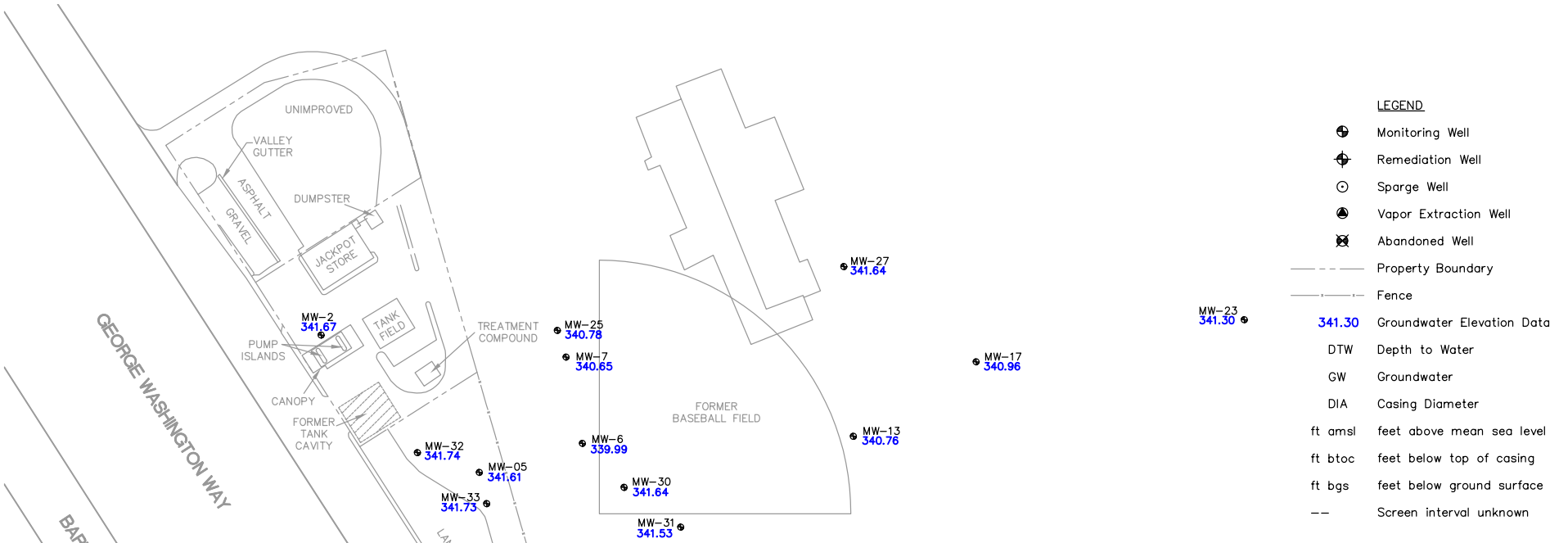


environ strategy consultants, inc. One Technology, Suite B-123 Irvine, California 92618	FIGURE 2 SITE PLAN Pacific Convenience & Fuels Site #01-056 500 George Washington Way Richland, Washington	DATE 08/23/10 PROJECT NO. 611 FILE NO. 611F2-SP

X:\01_Projects\01_Site Assessment Remediation\Pacific Convenience & Fuels\01-056 - George Washington Way, Richland WA (#611)\Reports\Groundwater Monitoring\3Q10\DWGs\611F2-SP.dwg



LEGEND

- Monitoring Well
- Remediation Well
- Sparge Well
- Vapor Extraction Well
- Abandoned Well
- Property Boundary
- Fence
- 341.30 Groundwater Elevation Data
- DTW Depth to Water
- GW Groundwater
- DIA Casing Diameter
- ft amsl feet above mean sea level
- ft btoc feet below top of casing
- ft bgs feet below ground surface
- -- Screen interval unknown

WELL ID	WELL STATUS	SAMPLE DATE	WELL ELEVATION			WELL	
			CASING (ft amsl)	DTW (ft btoc)	GW (ft amsl)	DIA (inches)	SCREEN (ft bgs)
MW-02	Active	7/13/10	373.81	32.14	341.67	4	--
MW-05	Active	7/13/10	373.03	31.42	341.61	2	--
MW-06	Active	7/13/10	354.52	14.53	339.99	2	4-19
MW-07	Active	7/13/10	355.83	15.18	340.65	2	4-20
MW-13	Active	7/12/10	353.67	12.91	340.76	2	4-19
MW-17	Active	7/12/10	354.28	13.32	340.96	2	2-22
MW-23	Active	7/12/10	352.01	10.71	341.30	2	4-24
MW-25	Active	7/13/10	355.96	15.18	340.78	2	5-25
MW-27	Active	7/12/10	354.62	12.98	341.64	2	7-22
MW-30	Active	7/13/10	355.43	13.79	341.64	2	10-25
MW-31	Active	7/13/10	355.03	13.50	341.53	2	10-25
MW-32	Active	7/13/10	374.06	32.32	341.74	2	25-45
MW-33	Active	7/13/10	373.95	32.22	341.73	2	25-45

N

50 0 50

APPROXIMATE SCALE: 1" = 50'

* NOTE: DUE TO THE EXTREMELY FLAT GROUNDWATER GRADIENT, GROUNDWATER CONTOURS WERE NOT DRAWN.

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FIGURE 3

GROUNDWATER ELEVATIONS
July 12, 2010

Pacific Convenience & Fuels Site #01-056
500 George Washington Way
Richland, Washington

DATE 08/23/10

PROJECT NO. 611

FILE NO. 611F3-GCM

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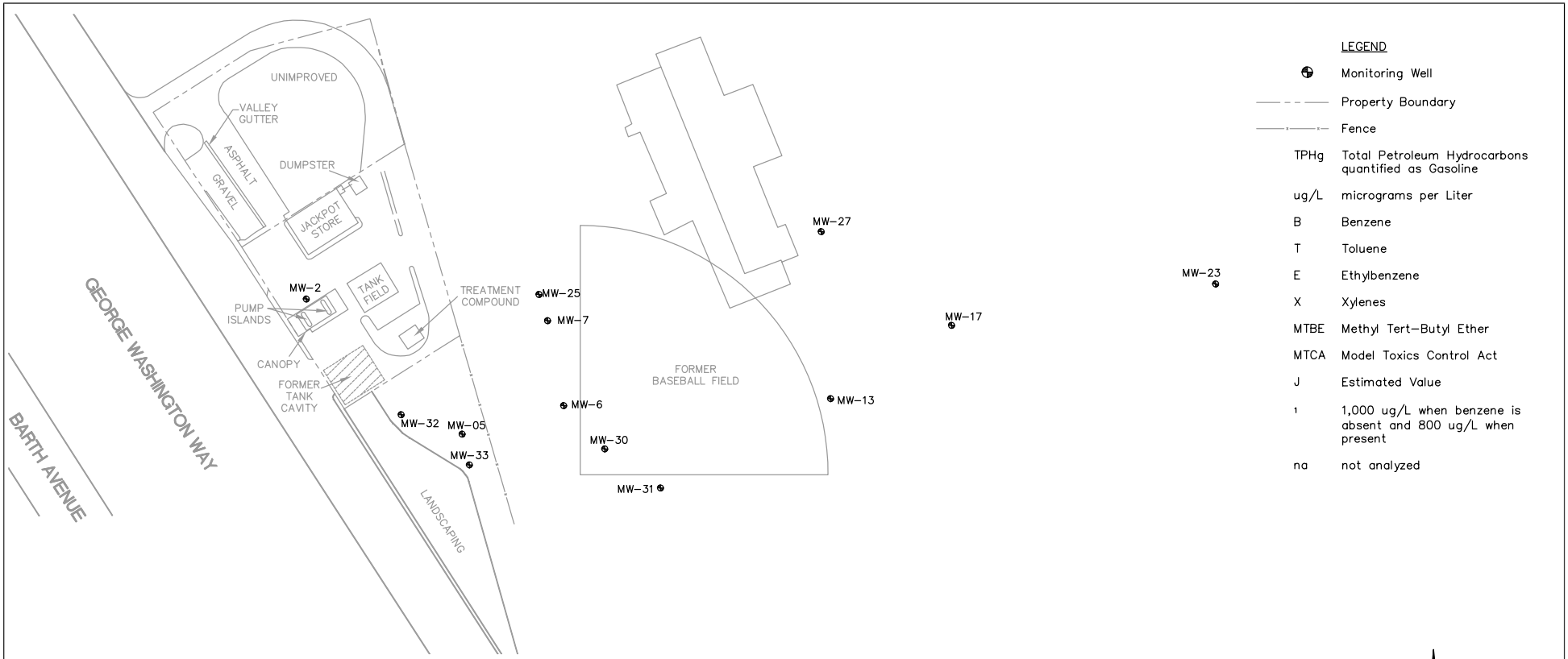

WELL ID	WELL STATUS	SAMPLE DATE	ANALYTICAL PARAMETERS						
			TPH-Gx (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	Lead (µg/L)
MW-02	Active	7/13/10	<50	<0.5	<0.5	<0.5	<0.5	<0.5	12.5
MW-05	Active	7/13/10	67.8	<0.5	<0.5	<0.5	<0.5	<0.5	**22**
MW-06	Active	7/13/10	377	<0.5	<0.5	0.52 J	<0.5	<0.5	na
MW-07	Active	7/13/10	<50	<0.5	<0.5	<0.5	<0.5	<0.5	14.2
MW-13	Active	7/12/10	<50	<0.5	<0.5	<0.5	<0.5	<0.5	na
MW-17	Active	7/12/10	<50	<0.5	<0.5	<0.5	<0.5	<0.5	na
MW-23	Active	7/12/10	<50	<0.5	<0.5	<0.5	<0.5	<0.5	na
MW-25	Active	7/13/10	<50	<0.5	<0.5	<0.5	<0.5	<0.5	na
MW-27	Active	7/12/10	<50	<0.5	<0.5	<0.5	<0.5	<0.5	na
MW-30	Active	7/13/10	<50	<0.5	<0.5	<0.5	<0.5	<0.5	na
MW-31	Active	7/13/10	<50	<0.5	<0.5	<0.5	<0.5	<0.5	na
MW-32	Active	7/13/10	52.2	0.65 J	<0.5	0.61 J	<0.5	<0.5	13.4
MW-33	Active	7/13/10	57.6	<0.5	<0.5	<0.5	<0.5	<0.5	9.28
MTCA Cleanup Goals			1,000/800[1]	5	1,000	700	1,000	20	15

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Irvine, California 92618

FIGURE 4

GROUNDWATER ANALYTICAL MAP
July 12 & 13, 2010

Pacific Convenience & Fuels Site #01-056
500 George Washington Way
Richland, Washington

DATE 08/23/10

PROJECT NO. 611

FILE NO. 611F4-GAM

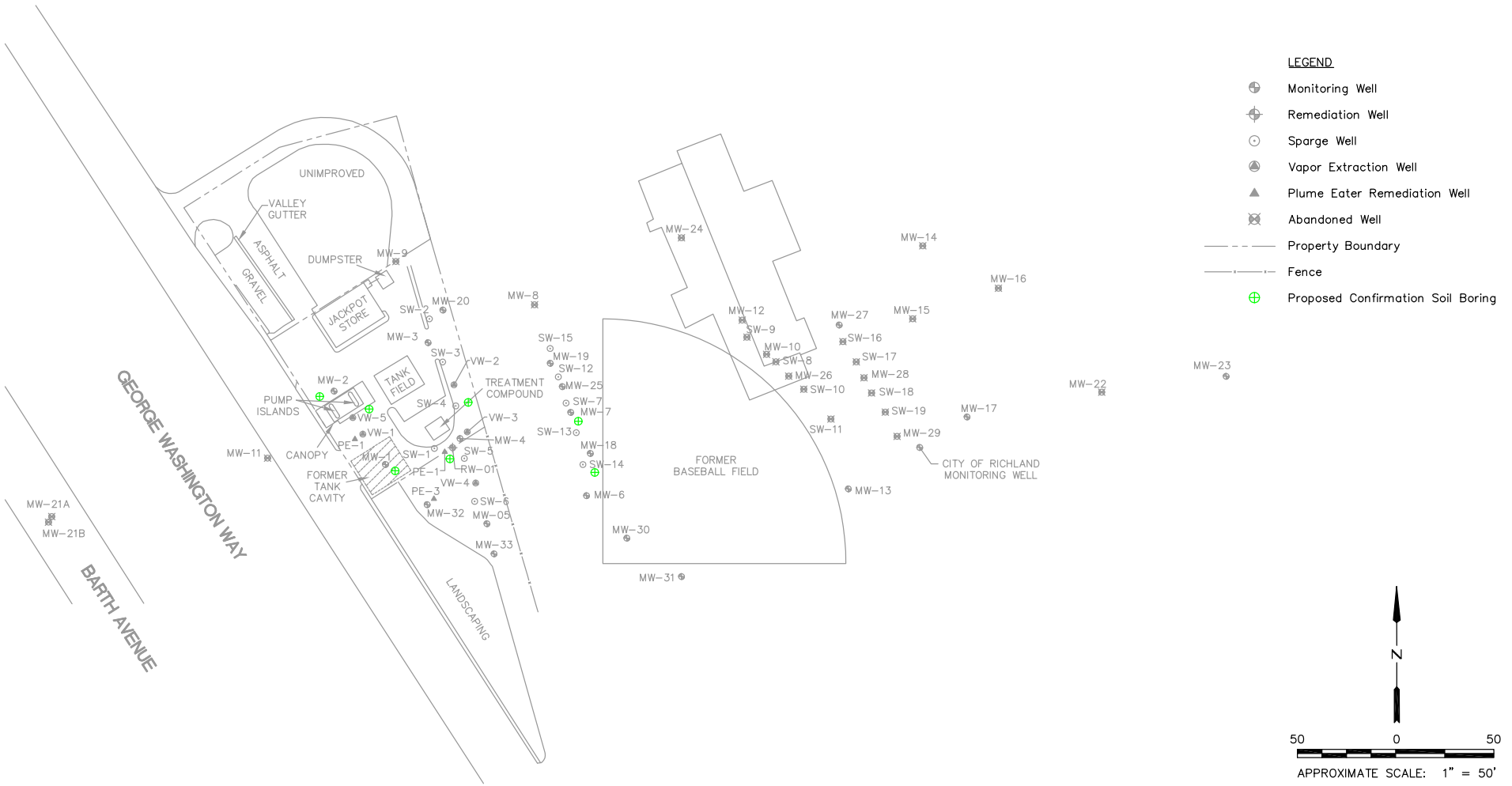

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FIGURE 5

PROPOSED CONFIRMATION SOIL BORING LOCATIONS

Pacific Convenience & Fuels Site #01-056
500 George Washington Way
Richland, Washington

DATE 1/21/11

PROJECT NO. 611

FILE NO. 611F5-PCSB

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TABLES

Table 1
Summary of Groundwater Monitoring Data - July 12 - 13, 2010
Pacific Convenience and Fuels Site 01-056
Richland, Washington

WELL ID	WELL STATUS	SAMPLE DATE	ANALYTICAL PARAMETERS									WATER QUALITY PARAMETERS							MONITORING PARAMETERS				WELL ELEVATION			WELL	
			TPH-Gx (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	EDB (µg/L)	EDC (µg/L)	Lead (µg/L) *	Dissolved Oxygen (mg/L)	ORP (mV)	Conductivity (µs/cm)	pH	Temp (°C)	Turbidity (NTU)	Ferrous Iron (mg/L)	DTP (ft btoc)	DTW (ft btoc)	DTB (ft btoc)	PT (feet)	CASING (ft amsl)	GW (ft amsl)	DTW Δ (ft amsl)	DIA (inches)	SCREEN (ft bgs)
MW-02	Active	7/13/10	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	12.5	0.57	11.9	996	7.49	19.74	7	0.8	na	32.14	44.70	na	373.81	341.67	-0.49	4	--
MW-05	Active	7/13/10	67.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**22**	0.80	-98.5	1,106	8.08	20.27	71	1.0	na	31.42	42.40	na	373.03	341.61	-0.52	2	--
MW-06(3)	Active	7/13/10	377	<0.5	<0.5	0.52 J	<0.5	<0.5	<0.5	<0.5	--	1.49	43.6	994	7.70	16.57	7	0.0	na	14.53	19.00	na	354.52	339.99	-0.56	2	4-19
MW-07	Active	7/13/10	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	14.2	0.89	-92.1	1,030	7.82	17.70	3	0.8	na	15.18	19.02	na	355.83	340.65	-0.55	2	4-20
MW-13	Active	7/12/10	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	2.80	45.0	906	7.77	16.60	38	0.8	na	12.91	21.14	na	353.67	340.76	-0.64	2	4-19
MW-17	Active	7/12/10	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	1.44	76.7	809	7.36	17.58	55	1.0	na	13.32	18.90	na	354.28	340.96	1.16	2	2-22
MW-23	Active	7/12/10	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	2.12	95.8	850	7.31	18.80	28	1.2	na	10.71	23.73	na	352.01	341.30	-1.11	2	4-24
MW-25	Active	7/13/10	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	1.27	3.1	1037	7.62	17.91	5	0.0	na	15.18	25.10	na	355.96	340.78	-0.59	2	5-25
MW-27	Active	7/12/10	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	1.49	117.3	909	7.22	16.66	24	0.0	na	12.98	21.50	na	354.62	341.64	-1.12	2	7-22
MW-30	Active	7/13/10	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	1.07	59.4	784	7.81	17.32	8	0.6	na	13.79	24.06	na	355.43	341.64	-0.52	2	10-25
MW-31	Active	7/13/10	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	2.45	50.2	1116	7.90	17.04	11	0.0	na	13.50	24.00	na	355.03	341.53	-0.59	2	10-25
MW-32	Active	7/13/10	52.2	0.65 J	<0.5	0.61 J	<0.5	<0.5	<0.5	<0.5	13.4	0.65	-113.8	1272	7.88	20.25	10	0.6	na	32.32	44.60	na	374.06	341.74	-0.56	2	25-45
MW-33	Active	7/13/10	57.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	9.28	0.50	-35.3	1025	7.92	19.54	6	0.8	na	32.22	44.70	na	373.95	341.73	-0.48	2	25-45
MTCA Method A Cleanup Goals(1)			1,000/800(2)	5	1,000	700	1,000	20	0.01	5	15	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na

Notes:

Results in **BOLD** indicate detections that exceed MTCA Method A cleanup levels for groundwater
* Select samples were further analyzed for dissolved lead by EPA Method 7420
(1): MTCA Method A Table 720-1 for groundwater, WAC 173-340-900 Tables
(2): 1,000 µg/L when benzene is absent and 800 µg/L when present
(3): MW-6 was analyzed for the full-scan VOCs. See laboratory report in Appendix C for other VOCs detected.
--: not analyzed / not measured / unknown
<: less than the laboratory reporting limit
°C: degree celsius
µg/L: micrograms per Liter
µs/cu: microsiemen per centimeter
Active: groundwater well currently used for monitoring
amsl: above mean sea level
bgs: below ground surface
BTEX: benzene, toluene, ethylbenzene, and total xylenes
btoc: below top of casing
DIA: casing diameter
DTB: depth to bottom
DTP: depth to product
DTW: depth to water
EDB: 1,2-dibromoethane
EDC: 1,2-dichloroethane
ft: feet
GW: groundwater
J: value detected between method detection limit and reporting limit. See attached laboratory report for reporting limits.
mg/L: milligrams per Liter
MTBE: methyl tert-butyl ether
MTCA: Model Toxics Control Act
mV: millivolts
na: not applicable
NTU: Nephelometric turbidity unit
ORP: oxygen reduction potential
PT: product thickness
TPH-Gx: total gasoline-range petroleum hydrocarbons, analyzed by Northwest Method NWTPH-Gx

Table 2
Summary of Historical Groundwater Monitoring Data
Pacific Convenience and Fuels Site 01-056
Richland, Washington

WELL ID	WELL STATUS	SAMPLE DATE	WELL ELEVATION				ANALYTICAL PARAMETERS									
			Casing (ft amsl)	DTW (ft btoc)	GW (ft amsl)	DTW Δ (ft amsl)	TPH-Gx (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	EDB (µg/L)	EDC (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MW-01	Active	08/01/05	372.77	31.51	341.26	--	**1,020**	3.33	<0.500	7.66	4.19	<5.00	<0.500	<0.500	**21.5**	--
	Active	10/03/05	372.77	--	--	--	--	--	--	--	--	--	--	--	1.15	1.11
	Active	06/14/06	372.77	30.82	341.95	--	167	<0.500	<0.500	<0.500	<1.00	--	--	--	1.54	<1.00
	Active	08/16/06	372.77	30.84	341.93	-0.02	557	2.66	<0.500	0.797	2.00	--	--	--	5.36	<1.00
	Active	11/13/06	372.77	31.19	341.58	-0.35	240	<1	3	<1	<3	--	--	--	<1	<1
	Active	02/24/07	372.77	32.11	340.66	-0.92	**1,000**	3	28	4	8	--	--	--	4.30	<1
	Active	06/14/07	372.77	30.52	342.25	1.59	550	4	19	2	4	--	--	--	3.53	<1
	Active	09/11/07	372.77	30.32	342.45	0.20	860	<1	23	3	4	--	--	--	--	--
	Active	12/18/07	372.77	32.21	340.56	-1.89	760	<1	27	4	6	--	--	--	--	--
	Active	03/26/08	372.77	32.52	340.25	-0.31	<100	<1	<1	<1	<3	--	--	--	--	--
	Active	06/16/08	372.77	30.8	341.97	1.72	510	<1	18	2	4	--	--	--	<1	--
	Active	07/12/10	372.77	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-02	Active	08/02/05	373.81	32.32	341.49	--	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	<0.500	<0.500	3.17	--
	Active	11/09/05	373.81	32.56	341.25	-0.24	<50.0	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	3.90	--
	Active	02/16/06	373.81	32.94	340.87	-0.38	<50.0	<0.500	<0.500	<0.500	<3.00	--	--	--	<1.00	<1.00
	Active	04/14/06	373.81	31.67	342.14	1.27	161	0.518	<0.500	<0.500	<1.00	--	--	--	<1.00	--
	Active	08/16/06	373.81	31.38	342.43	0.29	63.4	<0.500	<0.500	<0.500	<1.00	--	--	--	2.58	--
	Active	11/01/06	373.81	32.01	341.80	-0.63	<100	<1	<1	<1	<3	--	--	--	1.58	--
	Active	02/24/07	373.81	32.95	340.86	-0.94	<100	<1	<1	<1	<3	--	--	--	3.18	--
	Active	06/14/07	373.81	31.41	342.40	1.54	<100	<1	<1	<1	<3	--	--	--	1.66	--
	Active	09/11/07	373.81	31.27	342.54	0.14	950	<1	30	12	9	--	--	--	--	--
	Active	12/18/07	373.81	33.04	340.77	-1.77	<100	<1	<1	<1	<3	--	--	--	--	--
	Active	03/26/08	373.81	33.35	340.46	-0.31	<100	<1	<1	<1	<3	--	--	--	--	--
	Active	06/16/08	373.81	31.65	342.16	1.70	--	--	--	--	--	--	--	--	--	--
	Active	07/13/10	373.81	32.14	341.67	-0.49	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	12.5
MW-03	Active	08/03/05	372.68	31.41	341.27	--	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	<0.500	<0.500	**15.3**	--
	Active	10/03/05	372.68	--	--	--	--	--	--	--	--	--	--	--	5.96	<1.00
	Active	08/16/06	372.68	30.58	342.10	--	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	**19.6**	<1.00
	Active	02/22/07	372.68	31.81	340.87	-1.23	--	--	--	--	--	--	--	--	--	--
	Active	06/11/07	372.68	30.30	342.38	1.51	--	--	--	--	--	--	--	--	--	--

Table 2
Summary of Historical Groundwater Monitoring Data
Pacific Convenience and Fuels Site 01-056
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WELL ID	WELL STATUS	SAMPLE DATE	WELL ELEVATION				ANALYTICAL PARAMETERS									
			Casing (ft amsl)	DTW (ft btoc)	GW (ft amsl)	DTW Δ (ft amsl)	TPH-Gx (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	EDB (µg/L)	EDC (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MW-03 con't	Active	09/11/07	372.68	30.24	342.44	0.06	<100	<1	<1	<1	<3	--	--	--	4.05	--
	Active	12/18/07	372.68	31.93	340.75	-1.69	--	--	--	--	--	--	--	--	--	--
	Active	03/27/08	372.68	32.22	340.46	-0.29	--	--	--	--	--	--	--	--	--	--
	Active	06/16/08	372.68	30.46	342.22	1.76	--	--	--	--	--	--	--	--	--	--
	Active	07/12/10	372.68	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-04	Active	08/02/05	372.92	31.52	341.40	--	**1,040**	**8.11**	<0.500	4.3	1.93	<5.00	<0.500	<0.500	<1.00	--
	Active	06/14/06	372.92	30.83	342.09	0.69	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	<1.00	--
	Active	08/17/06	372.92	30.86	342.06	-0.03	512	**11.4**	1.61	2.15	2.63	--	--	--	1.95	--
	Active	11/01/06	372.92	31.20	341.72	-0.34	**1,500**	<1	15	6	8	--	--	--	<1	--
	Active	02/25/07	372.92	32.12	340.80	-0.92	**1,200**	3	34	5	8	--	--	--	2.14	--
	Active	06/14/07	372.92	30.56	342.36	1.56	490	**5**	14	1	4	--	--	--	1.60	--
	Active	09/10/07	372.92	30.41	342.51	0.15	290	<1	7	<1	<3	--	--	--	--	--
	Active	12/18/07	372.92	32.22	340.70	-1.81	<100	<1	<1	<1	<3	--	--	--	--	--
	Active	03/27/08	372.92	32.52	340.40	-0.30	330	<1	8	<1	<3	--	--	--	--	--
	Active	06/16/08	372.92	30.81	342.11	1.71	360	1	15	2	<3	--	--	--	--	--
	Active	07/12/10	372.92	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-05	Active	08/02/05	373.03	31.60	341.43	--	196	1.89	<0.500	<0.500	1.03	<5.00	<0.500	<0.500	**66.3**	--
	Active	10/03/05	373.03	--	--	--	--	--	--	--	--	--	--	--	--	<1.00
	Active	11/09/05	373.03	31.81	341.22	--	942	<1.00	<1.00	3.59	<3.00	<5.00	<1.00	<1.00	1.31	<1.00
	Active	02/16/06	373.03	32.21	340.82	-0.40	79.6	<0.500	<0.500	<0.500	<3.00	--	--	--	3.15	<1.00
	Active	06/14/06	373.03	30.89	342.14	1.32	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	<1.00	<1.00
	Active	08/17/06	373.03	30.93	342.10	-0.04	69.5	<0.500	<0.500	<0.500	<1.00	--	--	--	1.99	<1.00
	Active	11/01/06	373.03	31.27	341.76	-0.34	820	<1	6	8	<3	--	--	--	1.45	<1
	Active	02/25/07	373.03	32.21	340.82	-0.94	310	1	10	1	<3	--	--	--	3.3	<1
	Active	06/14/07	373.03	30.58	342.45	1.63	140	<1	4	<1	<3	--	--	--	1.38	<1
	Active	09/10/07	373.03	30.38	342.65	0.20	<100	<1	<1	<1	<3	--	--	--	--	--
	Active	12/18/07	373.03	32.31	340.72	-1.93	260	<1	<1	1	<3	--	--	--	--	--
	Active	03/27/08	373.03	32.63	340.40	-0.32	660	<1	8	6	<3	--	--	--	--	--
	Active	06/16/08	373.03	30.90	342.13	1.73	630	2	17	12	<3	--	--	--	--	--
	Active	07/13/10	373.03	31.42	341.61	-0.52	67.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	**22**

Table 2
Summary of Historical Groundwater Monitoring Data
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WELL ID	WELL STATUS	SAMPLE DATE	WELL ELEVATION				ANALYTICAL PARAMETERS									
			Casing (ft amsl)	DTW (ft btoc)	GW (ft amsl)	DTW Δ (ft amsl)	TPH-Gx (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	EDB (µg/L)	EDC (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MW-06	Active	08/04/05	354.52	14.65	339.87	--	516	1.08	<0.500	2.99	<1.00	<5.00	<0.500	<1.00	--	--
	Active	11/10/05	354.52	14.94	339.58	-0.29	358	<1.00	<1.00	4.79	<3.00	<5.00	<1.00	<1.00	--	--
	Active	02/15/06	354.52	15.31	339.21	-0.37	451	<0.500	<0.500	2.17	<3.00	--	--	<1.00	--	--
	Active	06/15/06	354.52	13.97	340.55	1.34	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	<1.00	--	--
	Active	08/17/06	354.52	14.03	340.49	-0.06	<80.0	1.02	<0.500	<0.500	<1.00	--	--	<1.00	--	--
	Active	10/31/06	354.52	14.37	340.15	-0.34	130	<1	2	<1	<3	--	--	<1	--	--
	Active	02/25/07	354.52	15.31	339.21	-0.94	780	1	16	4	5	--	--	1.51	--	--
	Active	06/15/07	354.52	13.70	340.82	1.61	<100	<1	<1	<1	<3	--	--	--	--	--
	Active	09/11/07	354.52	13.52	341.00	0.18	<100	<1	<1	<1	<3	--	--	--	--	--
	Active	12/18/07	354.52	15.42	339.10	-1.90	320	<1	<1	2	<3	--	--	--	--	--
	Active	03/27/08	354.52	15.72	338.80	-0.30	520	<1	10	3	<3	--	--	--	--	--
	Active	06/16/08	354.52	13.97	340.55	1.75	<100	<1	<1	<1	<3	--	--	--	--	--
	Active	07/13/10	354.52	14.53	339.99	-0.56	377	<0.5	<0.5	0.52 J	<0.5	<0.5	<0.5	<0.5	--	--
MW-07	Active	08/04/05	355.83	15.39	340.44	--	249	0.653	<0.500	0.642	<1.00	<5.00	<0.500	<0.500	10.8	--
	Active	11/10/05	355.83	15.61	340.22	-0.22	**1,450**	<1.00	<1.00	7.90	<3.00	<5.00	<1.00	<1.00	1.91	--
	Active	02/17/06	355.83	15.95	339.88	-0.34	776	<0.500	<0.500	0.980	<3.00	--	--	--	<1.00	<1.00
	Active	06/15/06	355.83	14.67	341.16	1.28	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	<1.00	--
	Active	08/18/06	355.83	14.71	341.12	-0.04	**884**	**12.6**	2.19	23.3	4.91	--	--	--	**16.3**	--
	Active	10/31/60	355.83	15.05	340.78	-0.34	430	<1	2	2	<3	--	--	--	1.52	<1
	Active	02/25/07	355.83	15.96	339.87	-0.91	530	<1	12	2	<3	--	--	--	<1	--
	Active	06/15/07	355.83	14.42	341.41	1.54	<100	<1	<1	<1	<3	--	--	--	<1	--
	Active	09/11/07	355.83	14.37	341.46	0.05	**7,300**	4	38	84	34	--	--	--	3.46	--
	Active	12/18/07	355.83	16.06	339.77	-1.69	**1,400**	<1	40	9	8	--	--	--	--	--
	Active	03/27/07	355.83	16.37	339.46	-0.31	590	<1	10	3	<3	--	--	--	--	--
	Active	06/16/08	355.83	14.63	341.20	1.74	170	<1	3	1	<3	--	--	--	--	--
	Active	07/13/10	355.83	15.18	340.65	-0.55	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	14.2
MW-8	Active	08/03/05	356.53	15.61	340.92	--	<50.0	<0.500	0.725	<0.500	<1.00	<5.00	<0.500	<0.500	<1.00	--
		11/09/05	356.53	15.81	340.72	-0.20	<50.0	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	<1.00	--
	Active	02/17/06	356.53	16.15	340.38	-0.34	<50.0	<0.500	<0.500	<0.500	<3.00	--	--	--	<1.00	--
	Abandoned[†]		--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 2
Summary of Historical Groundwater Monitoring Data
Pacific Convenience and Fuels Site 01-056
Richland, Washington

WELL ID	WELL STATUS	SAMPLE DATE	WELL ELEVATION				ANALYTICAL PARAMETERS									
			Casing (ft amsl)	DTW (ft btoc)	GW (ft amsl)	DTW Δ (ft amsl)	TPH-Gx (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	EDB (µg/L)	EDC (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MW-9	Active	08/02/05	373.98	32.13	341.85	--	<50.0	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<1.00	--
	Abandoned†		--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-10	Active	10/11/00	353.63	8.82	344.81	--	644	<4.30	<0.550	16.4	<2.47	--	--	--	--	--
	Abandoned††		--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-11	Active	08/01/05	372.97	31.52	341.45	--	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	<0.500	<0.500	28.9	--
		10/03/05	372.97	--	--	--	--	--	--	--	--	--	--	--	<1.00	<1.00
		02/06/06	372.97	32.15	340.82	--	<50.0	<0.500	<0.500	<0.500	<3.00	--	--	--	1.70	--
	Abandoned†		--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-12	Active	10/11/00	354.14	9.25	344.89	--	229	<3.50	<0.768	9.46	<2.47	--	--	--	--	--
	Abandoned††		--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	Active	08/04/05	353.67	13.15	340.52	--	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	<0.500	<0.500	<1.00	--
	Active	11/09/05	353.67	13.35	340.32	-0.20	<50.0	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	<1.00	--
	Active	02/17/06	353.67	13.71	339.96	-0.36	<50.0	<0.500	<0.500	<0.500	<3.00	--	--	--	<1.00	--
	Active	08/17/06	353.67	12.46	341.21	1.25	<80.0	<0.500	<0.500	<0.500	<1.00	--	--	--	<1.00	--
	Active	02/22/07	353.67	13.69	339.98	-1.23	--	--	--	--	--	--	--	--	--	--
	Active	06/11/07	353.67	12.14	341.53	1.55	--	--	--	--	--	--	--	--	--	--
	Active	09/11/07	353.67	12.23	341.44	-0.09	<100	<1	<1	<1	--	--	--	--	--	--
	Active	12/18/07	353.67	13.89	339.78	-1.66	--	--	--	--	--	--	--	--	--	--
	Active	03/27/08	353.67	14.08	339.59	-0.19	--	--	--	--	--	--	--	--	--	--
	Active	06/16/08	353.67	12.27	341.40	1.81	--	--	--	--	--	--	--	--	--	--
	Active	07/12/10	353.67	12.91	340.76	-0.64	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--
MW-14	Active	08/05/05	354.84	13.68	341.16	--	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	<0.500	<0.500	<1.00	--
	Abandoned†		--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	Active	01/18/05	355.12	14.41	340.71	--	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--
		08/05/05	355.12	14.04	341.08	0.37	--	--	--	--	--	--	--	--	--	--
		02/15/06	355.12	Dry	--	--	--	--	--	--	--	--	--	--	--	--
	Abandoned†		--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-16	Active	08/05/05	355.28	14.24	341.04	--	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	<0.500	<0.500	<1.00	--
	Abandoned†		--	--	--	--	--	--	--	--	--	--	--	--	--	--

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Pacific Convenience and Fuels Site 01-056
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WELL ID	WELL STATUS	SAMPLE DATE	WELL ELEVATION				ANALYTICAL PARAMETERS									
			Casing (ft amsl)	DTW (ft btoc)	GW (ft amsl)	DTW Δ (ft amsl)	TPH-Gx (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	EDB (µg/L)	EDC (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MW-17	Active	08/05/05	354.28	13.84	340.44	--	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	<0.500	<0.500	<1.00	--
	Active	11/09/05	354.28	13.93	340.35	-0.09	<50.0	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	<1.00	--
	Active	02/17/06	354.28	14.20	340.08	-0.27	<50.0	<0.500	<0.500	<0.500	<3.00	--	--	--	<1.00	--
	Active	08/17/06	354.28	13.03	341.25	1.17	<80.0	<0.500	<0.500	<0.500	<1.00	--	--	--	<1.00	--
	Active	02/22/07	354.28	14.13	340.15	-1.10	--	--	--	--	--	--	--	--	--	--
	Active	06/11/07	354.28	12.67	341.61	1.46	--	--	--	--	--	--	--	--	--	--
	Active	09/11/07	354.28	13.15	341.13	-0.48	<100	<1	<1	<1	<3	--	--	--	--	--
	Active	12/18/07	354.28	14.42	339.86	-1.27	--	--	--	--	--	--	--	--	--	--
	Active	03/27/08	354.28	14.48	339.80	-0.06	--	--	--	--	--	--	--	--	--	--
	Active	07/12/10	354.28	13.32	340.96	1.16	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--
MW-18	Active	08/04/05	354.51	14.71	339.80	--	756	2.57	0.747	19.1	2.89	<5.00	<0.500	<0.500	2.17	--
	Active	06/15/06	354.51	13.99	340.52	0.72	794	<0.500	<0.500	1.76	1.63	--	--	--	1.77	--
	Active	08/18/06	354.51	14.03	340.48	-0.04	410	**6.36**	0.865	14.2	3.82	--	--	--	7.28	--
	Active	10/31/06	354.51	14.39	340.12	-0.36	**1,900**	<1	15	20	10	--	--	--	2.54	--
	Active	02/25/07	354.51	15.29	339.22	-0.90	<100	<1	<1	<1	<3	--	--	--	<1	--
	Active	06/15/07	354.51	13.74	340.77	1.55	460	3	5	3	9	--	--	--	4.91	--
	Active	09/10/07	354.51	13.63	340.88	0.11	450	<1	6	11	13	--	--	--	--	--
	Active	12/18/07	354.51	15.41	339.10	-1.78	130	<1	<1	<1	<3	--	--	--	--	--
	Active	03/27/08	354.51	15.70	338.81	-0.29	<100	<1	<1	<1	<3	--	--	--	--	--
	Active	06/16/08	354.51	13.97	340.54	1.73	<100	<1	<1	<1	<3	--	--	--	--	--
MW-19	Active	08/04/05	356.17	15.66	340.51	--	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	<0.500	<0.500	<1.00	--
	Active	08/18/06	356.17	14.94	341.23	0.72	<80.0	<0.500	<0.500	<0.500	<1.00	--	--	--	10.8	--
	Active	02/22/07	356.17	16.18	339.99	-1.24	--	--	--	--	--	--	--	--	--	--
	Active	06/11/07	356.17	14.67	341.50	1.51	--	--	--	--	--	--	--	--	--	--
	Active	09/10/07	356.17	Inaccessible	--	--	--	--	--	--	--	--	--	--	--	--
	Active	12/18/07	356.17	16.30	339.87	--	--	--	--	--	--	--	--	--	--	--
	Active	03/27/08	356.17	16.60	339.57	-0.30	--	--	--	--	--	--	--	--	--	--
	Active	06/16/08	356.17	14.85	341.32	1.75	--	--	--	--	--	--	--	--	--	--
MW-20	Active	08/02/05	374.30	32.78	341.52	--	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	<0.500	<0.500	9.65	--
	Active	08/17/06	374.30	32.13	342.17	0.65	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	10.4	--

Table 2
Summary of Historical Groundwater Monitoring Data
Pacific Convenience and Fuels Site 01-056
Richland, Washington

WELL ID	WELL STATUS	SAMPLE DATE	WELL ELEVATION				ANALYTICAL PARAMETERS									
			Casing (ft amsl)	DTW (ft btoc)	GW (ft amsl)	DTW Δ (ft amsl)	TPH-Gx (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	EDB (µg/L)	EDC (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MW-20	Active	02/22/07	374.30	33.34	340.96	-1.21	--	--	--	--	--	--	--	--	--	--
con't	Active	06/11/07	374.30	31.87	342.43	1.47	--	--	--	--	--	--	--	--	--	--
	Active	09/11/07	374.30	31.89	342.41	-0.02	<100	<1	<1	<1	--	--	--	--	3.84	--
	Active	12/18/07	374.30	33.48	340.82	-1.59	--	--	--	--	--	--	--	--	--	--
	Active	03/27/08	374.30	33.74	340.56	-0.26	--	--	--	--	--	--	--	--	--	--
	Active	06/16/08	374.30	32.02	342.28	1.72	--	--	--	--	--	--	--	--	--	--
MW-21A	Active	08/03/05	371.74	30.30	341.44	--	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	<0.500	<0.500	<1.00	--
		02/15/06	371.74	30.90	340.84	-0.60	--	--	--	--	--	--	--	--	--	--
	Abandoned[†]		--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-21B	Active	04/08/05	371.72	30.99	340.73	--	<100	<0.500	<2.00	<1.00	<1.50	--	--	--	--	--
	Active	08/02/05	371.72	--	--	--	--	--	--	--	--	--	--	--	--	--
	Active	11/08/05	371.72	--	--	--	--	--	--	--	--	--	--	--	--	--
	Active	02/15/06	371.72	Dry	--	--	--	--	--	--	--	--	--	--	--	--
	Abandoned[†]		--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-22	Active	08/05/05	354.98	14.03	340.95	--	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	<0.500	<0.500	<1.00	--
	Active	11/08/05	354.98	14.12	340.86	-0.09	<50.0	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	<1.00	--
	Active	02/17/06	354.98	14.38	340.60	-0.26	<50.0	<0.500	<0.500	<0.500	<3.00	--	--	--	<1.00	--
	Abandoned[†]		--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-23	Active	08/05/05	352.01	11.37	340.64	--	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	<0.500	<0.500	<1.00	--
	Active	11/10/05	352.01	11.52	340.49	-0.15	<50.0	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	<1.00	--
	Active	02/17/06	352.01	11.66	340.35	-0.14	<50.0	<0.500	<0.500	<0.500	<3.00	--	--	--	<1.00	--
	Active	08/17/06	352.01	10.48	341.53	1.18	<80.0	<0.500	<0.500	<0.500	<1.00	--	--	--	<1.00	--
	Active	02/22/07	352.01	11.49	340.52	-1.01	--	--	--	--	--	--	--	--	--	--
	Active	06/11/07	352.01	10.13	341.88	1.36	--	--	--	--	--	--	--	--	--	--
	Active	09/11/07	352.01	11.11	340.90	-0.98	<100	<1	<1	<1	<3	--	--	--	--	--
	Active	12/18/07	352.01	12.11	339.90	-1.00	--	--	--	--	--	--	--	--	--	--
	Active	03/27/08	352.01	11.82	340.19	0.29	--	--	--	--	--	--	--	--	--	--
	Active	06/16/08	352.01	9.60	342.41	2.22	--	--	--	--	--	--	--	--	--	--
	Active	07/12/10	352.01	10.71	341.3	-1.11	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--

Table 2
Summary of Historical Groundwater Monitoring Data
Pacific Convenience and Fuels Site 01-056
Richland, Washington

WELL ID	WELL STATUS	SAMPLE DATE	WELL ELEVATION				ANALYTICAL PARAMETERS									
			Casing (ft amsl)	DTW (ft btoc)	GW (ft amsl)	DTW Δ (ft amsl)	TPH-Gx (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	EDB (µg/L)	EDC (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MW-24	Active	10/11/00	354.67	9.74	344.93	--	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--
	Abandoned[††]		--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-25	Active	08/04/05	355.96	15.39	340.57	--	**869**	3.01	<0.500	1.78	2.42	<5.00	<0.500	<0.500	1.51	--
	Active	11/10/05	355.96	15.58	340.38	-0.19	474	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	<1.00	--
	Active	06/15/06	355.96	15.91	340.05	-0.33	246	<0.500	<0.500	1.15	<3.00	--	--	--	<1.00	--
	Active	02/17/06	355.96	14.64	341.32	1.27	212	<0.500	<0.500	<0.500	<1.00	--	--	--	<1.00	--
	Active	06/15/06	355.96	14.68	341.28	-0.04	126	1.35	<0.500	<0.500	<1.00	--	--	--	7.15	--
	Active	08/18/06	355.96	15.03	340.93	-0.35	200	<1	3	<1	<3	--	--	--	<1	--
	Active	10/31/06	355.96	15.63	340.63	-0.30	120	<1	4	<1	<3	--	--	--	1.07	--
	Active	02/25/07	355.96	15.93	340.53	-0.10	100	<1	3	<1	<3	--	--	--	1.15	--
	Active	06/15/07	355.96	Inaccessible	--	--	--	--	--	--	--	--	--	--	--	--
	Active	09/11/07	355.96	14.36	341.60	--	**800**	1	25	11	7	--	--	--	--	--
	Active	12/18/07	355.96	16.05	339.91	-1.69	<100	<1	<1	<1	<3	--	--	--	--	--
	Active	03/27/08	355.96	16.37	339.59	-0.32	<100	<1	2	<1	<3	--	--	--	--	--
	Active	06/16/08	355.96	14.59	341.37	1.78	<100	<1	<1	<1	<3	--	--	--	--	--
	Active	07/13/10	355.96	15.18	340.78	-0.59	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--
MW-26	Active	10/11/00	353.72	8.90	344.82	--	3,410	<2.50	<3.29	90.9	58.8	--	--	--	--	--
	Abandoned[††]		--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-27	Active	08/04/05	354.62	13.40	341.22	--	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	<0.500	<0.500	<1.00	--
	Active	11/10/05	354.62	13.47	341.15	-0.07	<50.0	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	<1.00	--
	Active	02/17/06	354.62	13.77	340.85	-0.30	<50.0	<0.500	<0.500	<0.500	<3.00	--	--	--	<1.00	--
	Active	06/11/06	354.62	12.58	342.04	1.19	<80.0	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--
	Active	02/22/07	354.62	13.77	340.85	-1.19	--	--	--	--	--	--	--	--	--	--
	Active	06/11/07	354.62	12.30	342.32	1.47	--	--	--	--	--	--	--	--	--	--
	Active	09/11/07	354.62	12.50	342.12	-0.20	210	<1	7	<1	<3	--	--	--	--	--
	Active	12/18/07	354.62	13.95	340.67	-1.45	--	--	--	--	--	--	--	--	--	--
	Active	03/27/07	354.62	14.14	340.68	0.01	--	--	--	--	--	--	--	--	--	--
	Active	06/16/08	354.62	12.36	342.76	2.08	--	--	--	--	--	--	--	--	--	--
	Active	07/12/10	354.62	12.98	341.64	-1.12	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--

Table 2
Summary of Historical Groundwater Monitoring Data
Pacific Convenience and Fuels Site 01-056
Richland, Washington

WELL ID	WELL STATUS	SAMPLE DATE	WELL ELEVATION				ANALYTICAL PARAMETERS									
			Casing (ft amsl)	DTW (ft btoc)	GW (ft amsl)	DTW Δ (ft amsl)	TPH-Gx (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	EDB (µg/L)	EDC (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MW-28	Active	08/05/05	355.93	14.78	341.15	--	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	<0.500	<0.500	<1.00	--
	Active	11/10/05	355.93	14.85	341.08	-0.07	<50.0	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	<1.00	--
	Active	02/17/06	355.93	15.16	340.77	-0.31	<50.0	<0.500	<0.500	<0.500	<3.00	--	--	--	<1.00	--
	Abandoned[†]		--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-29	Active	08/02/05	354.89	13.51	341.38	--	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	<0.500	<0.500	<1.00	--
	Active	11/10/05	354.89	13.89	341.00	-0.38	<50.0	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	<1.00	--
	Active	02/17/06	354.89	14.17	340.72	-0.28	<50.0	<0.500	<0.500	<0.500	<3.00	--	--	--	<1.00	--
	Abandoned[†]		--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-30	Active	08/04/05	355.43	14.00	341.43	--	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	<0.500	<0.500	<1.00	--
	Active	11/10/05	355.43	14.24	341.19	-0.24	184	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	<1.00	--
	Active	02/17/06	355.43	14.62	340.81	-0.38	124	<0.500	<0.500	<0.500	<3.00	--	--	--	<1.00	--
	Active	06/15/06	355.43	13.23	342.20	1.39	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	<1.00	--
	Active	08/17/06	355.43	13.31	342.12	-0.08	<80.0	<0.500	<0.500	<0.500	<1.00	--	--	--	<1.00	--
	Active	10/31/06	355.43	13.69	341.74	-0.38	<100	<1	<1	<1	<3	--	--	--	<1	--
	Active	02/25/07	355.43	14.62	340.81	-0.93	150	<1	6	1	<3	--	--	--	<1	--
	Active	06/15/07	355.43	12.99	342.44	1.63	<100	<1	<1	<1	<3	--	--	--	<1	--
	Active	09/11/07	355.43	12.82	342.61	0.17	<100	<1	<1	<1	<3	--	--	--	--	--
	Active	12/18/07	355.43	14.74	340.69	-1.92	<100	<1	<1	<1	<3	--	--	--	--	--
	Active	03/27/08	355.43	15.03	340.40	-0.29	<100	<1	1	<1	<3	--	--	--	--	--
	Active	06/16/08	355.43	13.27	342.16	1.76	<100	<1	1	<1	<3	--	--	--	--	--
	Active	07/13/10	355.43	13.79	341.64	-0.52	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--
MW-31	Active	08/05/05	355.03	13.76	341.27	--	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	<0.500	<0.500	<1.00	--
	Active	11/10/05	355.03	13.84	341.19	-0.08	<50.0	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	--
	Active	02/17/06	355.03	14.25	340.78	-0.41	<50.0	<0.500	<0.500	<0.500	<3.00	--	--	--	<1.00	--
	Active	06/15/06	355.03	12.87	342.16	1.38	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	<1.00	--
	Active	08/18/06	355.03	12.96	342.07	-0.09	<80.0	<0.500	<0.500	<0.500	<1.00	--	--	--	<1.00	--
	Active	10/31/06	355.03	13.31	341.72	-0.35	--	--	--	--	--	--	--	--	--	--
	Active	02/25/07	355.03	14.26	340.77	-0.95	110	<1	4	<1	<3	--	--	--	<1	--
	Active	06/15/07	355.03	Inaccessible	--	--	--	--	--	--	--	--	--	--	--	--
	Active	09/11/07	355.03	12.42	342.61	--	<100	<1	<1	<1	<3					--

Table 2
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Pacific Convenience and Fuels Site 01-056
Richland, Washington

WELL ID	WELL STATUS	SAMPLE DATE	WELL ELEVATION				ANALYTICAL PARAMETERS									
			Casing (ft amsl)	DTW (ft btoc)	GW (ft amsl)	DTW Δ (ft amsl)	TPH-Gx (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	EDB (µg/L)	EDC (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MW-31	Active	12/18/07	355.03	Inaccessible	--	--	--	--	--	--	--	--	--	--	--	--
con't	Active	03/27/08	355.03	14.66	340.37	--	<100	<1	<1	<1	<3	--	--	--	--	--
	Active	06/16/08	355.03	12.91	342.12	1.75	<100	<1	<1	<1	<3	--	--	--	--	--
	Active	07/13/10	355.03	13.5	341.53	-0.59	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--
MW-32	Active	08/02/05	374.06	31.55	342.51	--	**2,640**	3.75	1.3	5.01	4.64	<5.00	<0.500	<0.500	**42**	--
	Active	10/03/05	374.06	--	--	--	--	--	--	--	--	--	--	--	<1.00	<1.00
	Active	11/09/05	374.06	32.76	341.30	--	**4,360**	<1.00	<1.00	4.16	<3.00	<5.00	<1.00	<1.00	1.07	<1.00
	Active	02/16/06	374.06	33.16	340.90	-0.40	**4,630**	<0.500	0.730	3.96	<3.00	--	--	--	<1.00	<1.00
	Active	06/14/06	374.06	31.85	342.21	1.31	**4,180**	<0.500	1.81	5.24	2.66	--	--	--	<1.00	<1.00
	Active	08/16/06	374.06	31.87	342.19	-0.02	**1,400**	3.44	<0.500	1.00	2.55	--	--	--	3.15	<1.00
	Active	11/01/06	374.06	32.23	341.83	-0.36	**1,200**	<1	16	3	7	--	--	--	1.08	<1
	Active	02/25/07	374.06	33.16	340.90	-0.93	**870**	1	15	3	8	--	--	--	1.74	<1
	Active	06/14/07	374.06	31.53	342.53	1.63	520	4	16	2	4	--	--	--	5.97	<1
	Active	09/11/07	374.06	31.33	342.73	0.20	**4,300**	<1	52	14	9	--	--	--	--	--
	Active	12/18/07	374.06	33.28	340.78	-1.95	**3,600**	<1	54	12	9	--	--	--	--	--
	Active	03/27/08	374.06	33.59	340.47	-0.31	**1,700**	<1	20	3	<3	--	--	--	--	--
	Active	06/16/08	374.06	31.86	342.30	1.83	**1,300**	<1	27	3	5	--	--	--	--	--
	Active	07/13/10	374.06	32.32	341.74	-0.56	52.2	0.65 J	<0.5	0.61 J	<0.5	<0.5	<0.5	<0.5	--	13.4
MW-33	Active	08/02/05	373.95	32.45	341.50	--	114	<0.500	<0.500	<0.500	<1.00	<5.00	<0.500	<0.500	**105**	--
	Active	10/03/05	373.95	--	--	--	--	--	--	--	--	--	--	--	--	--
	Active	11/09/05	373.95	31.66	342.29	--	142	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	2.72	<1.00
	Active	02/16/06	373.95	33.06	340.89	-1.40	371	<0.500	<0.500	3.01	<3.00	--	--	--	1.84	<1.00
	Active	06/14/06	373.95	31.73	342.22	1.33	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	3.71	<1.00
	Active	08/16/06	373.95	31.77	342.18	-0.04	346	1.46	<0.500	<0.500	<1.00	--	--	--	6.75	<1.00
	Active	11/01/06	373.95	32.12	341.83	-0.35	<100	<1	<1	<1	<3	--	--	--	2.20	<1
	Active	02/25/07	373.95	33.06	340.89	-0.94	640	2	20	5	4	--	--	--	3.17	<1
	Active	06/14/07	373.95	31.42	342.53	1.64	240	<1	9	<1	<3	--	--	--	--	--
	Active	09/10/07	373.95	31.21	342.74	0.21	<100	<1	<1	<1	<3	--	--	--	--	--
	Active	12/18/07	373.95	33.17	340.78	-1.96	890	<1	<1	10	7	--	--	--	--	--
	Active	03/27/08	373.95	33.49	340.46	-0.32	810	<1	15	7	<3	--	--	--	--	--

Table 2
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WELL ID	WELL STATUS	SAMPLE DATE	WELL ELEVATION				ANALYTICAL PARAMETERS									
			Casing (ft amsl)	DTW (ft btoc)	GW (ft amsl)	DTW Δ (ft amsl)	TPH-Gx (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	EDB (µg/L)	EDC (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MW-33	Active	06/16/08	373.95	31.74	342.21	1.75	490	2	15	2	<3	--	--	--	--	--
con't	Active	07/13/10	373.95	32.22	341.73	-0.48	57.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	9.28
VW-01	Active	08/03/05	372.67	Dry	--	--	--	--	--	--	--	--	--	--	--	--
	Active	11/09/05	372.67	Dry	--	--	--	--	--	--	--	--	--	--	--	--
	Active	08/16/06	372.67	Dry	--	--	--	--	--	--	--	--	--	--	--	--
	Active	02/22/07	372.67	Dry	--	--	--	--	--	--	--	--	--	--	--	--
	Active	06/11/07	372.67	Dry	--	--	--	--	--	--	--	--	--	--	--	--
	Active	09/11/07	372.67	Dry	--	--	--	--	--	--	--	--	--	--	--	--
	Active	12/18/07	372.67	Dry	--	--	--	--	--	--	--	--	--	--	--	--
	Active	03/27/08	372.67	Dry	--	--	--	--	--	--	--	--	--	--	--	--
	Active	06/16/08	372.67	Dry	--	--	--	--	--	--	--	--	--	--	--	--
VW-02	Active	08/03/05	373.76	32.29	341.47	--	189	0.52	<0.500	<0.500	<1.00	<5.00	<0.500	<0.500	**52.8**	--
	Active	10/03/05	373.76	--	--	--	--	--	--	--	--	--	--	--	2	<1.00
	Active	06/14/06	373.76	31.61	342.15	--	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	<1.00	<1.00
	Active	08/16/06	373.76	31.62	342.14	-0.01	422	1.97	<0.500	<0.500	<1.00	--	--	--	**17.8**	<1.00
	Active	02/24/07	373.76	32.88	340.88	-1.26	<100	<1	<1	<1	<3	--	--	--	5.81	--
	Active	06/14/07	373.76	31.36	342.40	1.52	140	<1	4	<1	<3	--	--	--	8.23	--
	Active	09/11/07	373.76	31.27	342.49	0.09	**1,300**	1	33	4	6	--	--	--	**42.1**	--
	Active	12/18/07	373.76	33.00	340.76	-1.73	<100	<1	<1	<1	<3	--	--	--	<1	--
	Active	03/27/08	373.76	33.30	340.46	-0.30	<100	<1	<1	<1	<3	--	--	--	<1	--
	Active	06/16/08	373.76	31.55	342.21	1.75	<100	<1	<1	<1	<3	--	--	--	<1	--
VW-03	Active	08/03/05	373.34	31.90	341.44	--	**1,670**	**6.67**	<0.500	4.15	2.93	<5.00	<0.500	<0.500	--	--
	Active	10/03/05	373.34	--	--	--	--	--	--	--	--	--	--	--	<1.00	<1.00
	Active	06/14/06	373.34	31.16	342.18	--	**2,840**	<0.500	1.72	6.22	1.30	--	--	--	1.04	<1.00
	Active	08/16/06	373.34	31.22	342.12	-0.06	**1,320**	**6.45**	<0.500	3.15	2.36	--	--	--	**23.7**	<1.00
	Active	10/31/06	373.34	31.58	341.76	-0.36	**1,100**	<1	14	4	6	--	--	--	12.2	<1
	Active	02/24/07	373.34	32.50	340.84	-0.92	**1,700**	4	37	8	10	--	--	--	**16.3**	<1
	Active	06/14/07	373.34	30.95	342.39	1.55	830	<1	15	2	4	--	--	--	**15.0**	<1
	Active	09/10/07	373.34	30.81	342.53	0.14	**2,200**	<1	38	8	7	--	--	--	**19.2**	--
	Active	12/18/07	373.34	32.60	340.74	-1.79	690	<1	28	4	<3	--	--	--	<1	--

Table 2
Summary of Historical Groundwater Monitoring Data
Pacific Convenience and Fuels Site 01-056
Richland, Washington

WELL ID	WELL STATUS	SAMPLE DATE	WELL ELEVATION				ANALYTICAL PARAMETERS									
			Casing (ft amsl)	DTW (ft btoc)	GW (ft amsl)	DTW Δ (ft amsl)	TPH-Gx (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	EDB (µg/L)	EDC (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
VW-03	Active	03/27/08	373.34	32.93	340.41	-0.33	630	<1	14	1	<3	--	--	--	<1	--
con't	Active	06/16/08	373.34	31.40	341.94	1.53	380	<1	15	1.6	<3	--	--	--	<1	--
VW-04	Active	08/03/05	373.71	32.26	341.45	--	**4,290**	2.68	<0.500	26.5	61.2	<5.00	<0.500	<0.500	**17.1**	--
	Active	10/03/05	373.71	--	--	--	--	--	--	--	--	--	--	--	<1.00	<1.00
	Active	06/14/06	373.71	31.55	342.16	--	**7,670**	<2.50	<2.50	49.1	72.1	--	--	--	<1.00	<1.00
	Active	08/16/06	373.71	31.59	342.12	-0.04	**1,960**	2.82	<0.500	11.7	10.6	--	--	--	7.64	<1.00
	Active	10/31/06	373.71	31.93	341.78	-0.34	**4,500**	<5	12	40	48	--	--	--	<1	<1
	Active	02/24/07	373.71	32.86	340.85	-0.93	**5,700**	**7**	22	34	63	--	--	--	6.38	<1
	Active	06/14/07	373.71	31.27	342.44	1.59	**2,800**	**16**	18	24	27	--	--	--	4.73	<1
	Active	09/10/07	373.71	31.08	342.63	0.19	**3,800**	<1	25	36	61	--	--	--	--	--
	Active	12/18/07	373.71	32.96	340.75	-1.88	**5,000**	<1	<1	32	57	--	--	--	--	--
	Active	03/27/08	373.71	33.30	340.41	-0.34	**3,200**	<1	17	27	18	--	--	--	--	--
	Active	06/16/08	373.71	31.54	342.17	1.76	**1,900**	<1	28	34	15	--	--	--	--	--
VW-05	Active	08/03/05	373.21	31.74	341.47	--	**3,510**	0.759	<0.500	5.24	7.29	<5.00	<0.500	<0.500	**84.6**	--
	Active	10/03/05	373.21	--	--	--	--	--	--	--	--	--	--	--	**27**	3.85
	Active	06/14/06	373.21	31.07	342.14	--	**1,640**	<0.500	<0.500	0.816	1.86	--	--	--	9.40	4.44
	Active	08/16/06	373.21	31.07	342.14	0.00	**988**	0.644	<0.500	1.07	2.36	--	--	--	**35.9**	<1.00
	Active	10/31/06	373.21	31.42	341.79	-0.35	720	<1	4	2	<3	--	--	--	2.99	<1
	Active	02/24/07	373.21	32.36	340.85	-0.94	800	<1	8	3	5	--	--	--	**33.4**	<1
	Active	06/14/07	373.21	30.81	342.40	1.55	320	1	10	3	<3	--	--	--	12.4	<1
	Active	09/10/07	373.21	30.65	342.56	0.16	690	<1	16	3	5	--	--	--	**39.0**	--
	Active	12/18/07	373.21	32.45	340.76	-1.8	350	<1	<1	2	3	--	--	--	<1	--
	Active	03/27/08	373.21	32.78	340.43	-0.33	110	<1	3	<1	<3	--	--	--	<1	--
	Active	06/16/08	373.21	31.07	342.14	1.71	--	--	--	--	--	--	--	--	--	--
SW-01	Active	08/01/05	373.67	32.17	341.50	--	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	<0.500	<0.500	**103**	--
	Active	10/03/05	373.67	--	--	--	--	--	--	--	--	--	--	--	**16.1**	<1.00
	Active	08/17/06	373.67	31.50	342.17	--	<80.0	<0.500	<0.500	<0.500	<1.00	--	--	--	**15.7**	--
	Active	02/22/07	373.67	32.77	340.90	-1.27	--	--	--	--	--	--	--	--	--	--
	Active	06/11/07	373.67	31.20	342.47	1.57	--	--	--	--	--	--	--	--	--	--
	Active	09/10/07	373.67	31.02	342.65	0.18	<100	<1	<1	<1	<3	--	--	--	4.97	--

Table 2
Summary of Historical Groundwater Monitoring Data
Pacific Convenience and Fuels Site 01-056
Richland, Washington

WELL ID	WELL STATUS	SAMPLE DATE	WELL ELEVATION				ANALYTICAL PARAMETERS									
			Casing (ft amsl)	DTW (ft btoc)	GW (ft amsl)	DTW Δ (ft amsl)	TPH-Gx (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	EDB (µg/L)	EDC (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
SW-01	Active	12/18/07	373.67	30.84	342.83	0.18	--	--	--	--	--	--	--	--	--	--
con't	Active	03/27/08	373.67	31.19	342.48	-0.35	--	--	--	--	--	--	--	--	--	--
	Active	06/16/08	373.67	30.99	342.68	0.20	--	--	--	--	--	--	--	--	--	--
SW-02	Active	08/02/05	374.25	32.28	341.97	--	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	<0.500	<0.500	3.20	--
	Active	08/17/06	374.25	31.63	342.62	0.65	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	6.71	--
	Active	02/22/07	374.25	32.89	341.36	-1.26	--	--	--	--	--	--	--	--	--	--
	Active	06/11/07	374.25	31.39	342.86	1.5	--	--	--	--	--	--	--	--	--	--
	Active	09/11/07	374.25	31.36	342.89	0.03	--	--	--	--	--	--	--	--	--	--
	Active	12/18/07	374.25	33.00	341.25	-1.64	--	--	--	--	--	--	--	--	--	--
	Active	03/27/08	374.25	33.30	340.95	-0.30	--	--	--	--	--	--	--	--	--	--
	Active	06/16/08	374.25	31.54	342.71	1.76	--	--	--	--	--	--	--	--	--	--
SW-03	Active	08/02/05	374.20	32.25	341.95	--	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	<0.500	<0.500	3.94	--
	Active	08/16/06	374.20	31.61	342.59	0.64	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	3.84	--
	Active	02/22/07	374.20	32.85	341.35	-1.24	--	--	--	--	--	--	--	--	--	--
	Active	06/11/07	374.20	31.34	342.86	1.51	--	--	--	--	--	--	--	--	--	--
	Active	09/11/07	374.20	31.27	342.93	0.07	<100	<1	<1	<1	<3	--	--	--	--	--
	Active	12/18/07	374.20	32.99	341.21	-1.72	--	--	--	--	--	--	--	--	--	--
	Active	03/27/08	374.20	33.26	340.94	-0.27	--	--	--	--	--	--	--	--	--	--
	Active	06/16/08	374.20	31.52	342.68	1.74	--	--	--	--	--	--	--	--	--	--
SW-04	Active	08/02/05	373.91	32.00	341.91	--	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--
	Active	08/16/06	373.91	31.34	342.57	0.66	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	<0.500	<0.500	<1.00	--
	Active	02/22/07	373.91	32.61	341.30	-1.27	--	--	--	--	--	--	--	--	<1.00	--
	Active	06/11/07	373.91	31.06	342.85	1.55	--	--	--	--	--	--	--	--	--	--
	Active	09/10/07	373.91	30.94	342.97	0.12	<100	<1	<1	<1	<3	--	--	--	--	--
	Active	12/18/07	373.91	32.76	341.15	-1.82	--	--	--	--	--	--	--	--	--	--
	Active	03/27/08	373.91	33.30	340.61	-0.54	--	--	--	--	--	--	--	--	--	--
	Active	06/16/08	373.91	31.26	342.65	2.04	--	--	--	--	--	--	--	--	--	--
SW-05	Active	08/02/05	373.80	31.92	341.88	--	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	<0.500	<0.500	2.25	--
	Active	08/17/06	373.80	31.27	342.53	0.65	<80.0	<0.500	<0.500	<0.500	<1.00	--	--	--	1.32	--
	Active	02/22/07	373.80	32.54	341.26	-1.27	--	--	--	--	--	--	--	--	--	--

Table 2
Summary of Historical Groundwater Monitoring Data
Pacific Convenience and Fuels Site 01-056
Richland, Washington

WELL ID	WELL STATUS	SAMPLE DATE	WELL ELEVATION				ANALYTICAL PARAMETERS									
			Casing (ft amsl)	DTW (ft btoc)	GW (ft amsl)	DTW Δ (ft amsl)	TPH-Gx (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	EDB (µg/L)	EDC (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
SW-05	Active	06/11/07	373.80	30.97	342.83	1.57	--	--	--	--	--	--	--	--	--	--
con't	Active	09/10/07	373.80	30.80	343.00	0.17	<100.0	<1	<1	<1	<3	--	--	--	--	--
	Active	12/18/07	373.80	32.66	341.14	-1.86	--	--	--	--	--	--	--	--	--	--
	Active	03/27/08	373.80	32.96	340.84	-0.30	--	--	--	--	--	--	--	--	--	--
	Active	06/16/08	373.80	31.21	342.59	1.75	--	--	--	--	--	--	--	--	--	--
SW-06	Active	08/02/05	373.42	31.79	341.63	--	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	<0.500	<0.500	**20.1**	--
	Active	10/03/05	373.42	--	--	--	--	--	--	--	--	--	--	--	3.96	<1.00
	Active	08/16/06	373.42	31.13	342.29	--	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	**30.2**	<1.00
	Active	02/22/07	373.42	32.41	341.01	-1.28	--	--	--	--	--	--	--	--	--	--
	Active	06/11/07	373.42	30.80	342.62	1.61	--	--	--	--	--	--	--	--	--	--
	Active	09/10/07	373.42	30.59	342.83	0.21	<100	<1	<1	<1	<3	--	--	--	2.12	--
	Active	12/18/07	373.42	32.53	340.89	-1.94	--	--	--	--	--	--	--	--	--	--
	Active	03/27/08	373.42	32.82	340.60	-0.29	--	--	--	--	--	--	--	--	--	--
	Active	06/16/08	373.42	31.08	342.34	1.74	--	--	--	--	--	--	--	--	--	--
SW-07	Active	08/03/05	356.65	15.25	341.40	--	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	<0.500	<0.500	1.46	--
	Active	08/18/06	356.65	14.56	342.09	0.69	<50.0	<0.500	<0.500	<0.500	<1.00				**17.1**	<1.00
	Active	02/22/07	356.65	15.81	340.84	-1.25	--	--	--	--	--	--	--	--	--	--
	Active	06/15/07	356.65	Inaccessible	--	--	--	--	--	--	--	--	--	--	--	--
	Active	09/11/07	356.65	14.21	342.44	--	<100	<1	<1	<1	<3	--	--	--	2.48	--
	Active	12/18/07	356.65	15.92	340.73	-1.71	--	--	--	--	--	--	--	--	--	--
	Active	03/27/08	356.65	16.22	340.43	-0.30	--	--	--	--	--	--	--	--	--	--
	Active	06/16/08	356.65	14.47	342.18	1.75	--	--	--	--	--	--	--	--	--	--
SW-08	Active	07/13/00	353.43	8.79	344.64	--	<50.0	<1.00	<1.00	<1.00	<3.00	--	--	--	--	--
	Abandoned††		--	--	--	--	--	--	--	--	--	--	--	--	--	--
SW-09	Active	07/13/00	353.65		353.65	--	67.1	<1.00	<1.00	9.01	3.29	--	--	--	--	--
	Abandoned††		--	--	--	--	--	--	--	--	--	--	--	--	--	--
SW-10	Active	07/13/00	353.67	9.05	344.62	--	<50.0	<1.00	<1.00	<1.00	<3.00	--	--	--	--	--
	Abandoned††		--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 2
Summary of Historical Groundwater Monitoring Data
Pacific Convenience and Fuels Site 01-056
Richland, Washington

WELL ID	WELL STATUS	SAMPLE DATE	WELL ELEVATION				ANALYTICAL PARAMETERS									
			Casing (ft amsl)	DTW (ft btoc)	GW (ft amsl)	DTW Δ (ft amsl)	TPH-Gx (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	EDB (µg/L)	EDC (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
SW-11	Active	08/04/05	356.86	14.02	342.84	--	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	<0.500	--	--	--
	Abandoned[†]		--	--	--	--	--	--	--	--	--	--	--	--	--	--
SW-12	Active	08/03/05	356.86	14.44	342.42	--	140	1.4	0.792	<0.500	<1.00	<5.00	<0.500	<0.500	3.1	--
	Active	06/15/06	356.86	14.72	342.14	-0.28	65.5	<0.500	<0.500	<0.500	<1.00	--	--	--	5.04	--
	Active	08/18/06	356.86	14.76	342.10	-0.04	<80.0	<0.500	<0.500	<0.500	<1.00	--	--	--	**37.2**	--
	Active	10/31/06	356.86	15.11	341.75	-0.35	<100	<1	<1	<1	<3	--	--	--	1.53	--
	Active	02/25/07	356.86	16.00	343.59	1.84	<100	<1	<1	<1	<3	--	--	--	4.85	--
	Active	06/11/07	356.86	14.49	342.37	-1.22	--	--	--	--	--	--	--	--	--	--
	Active	09/11/07	356.86	14.24	342.62	0.25	330	1	11	2	3	--	--	--	4.81	--
	Active	12/18/07	356.86	16.14	340.72	-1.9	<100	<1	<1	<1	<3	--	--	--	1.39	--
	Active	03/27/08	356.86	16.41	340.45	-0.27	<100	<1	<1	<1	<3	--	--	--	<1	--
	Active	06/16/08	356.86	14.68	342.18	1.73	<100	<1	<1	<1	<3	--	--	--	<1	--
SW-13	Active	08/03/05	356.47	15.05	341.42	--	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	<0.500	<0.500	3.17	--
	Active	06/15/06	356.47	14.33	342.14	0.72	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	1.52	--
	Active	08/18/06	356.47	14.37	342.10	-0.04	<80.0	<0.500	<0.500	<0.500	<1.00	--	--	--	**110**	--
	Active	10/31/06	356.47	14.72	341.75	-0.35	<100	<1	<1	<1	<3	--	--	--	**21.9**	--
	Active	02/25/07	356.47	15.63	340.84	-0.91	<100	<1	<1	<1	<3	--	--	--	2.60	--
	Active	06/11/07	356.47	14.49	341.98	1.14	--	--	--	--	--	--	--	--	--	--
	Active	09/11/07	356.47	14.02	342.45	0.47	<100	<1	<1	<1	<3	--	--	--	1.45	--
	Active	12/18/07	356.47	15.74	340.73	-1.72	<100	<1	<1	<1	<3	--	--	--	1.94	--
	Active	03/27/08	356.47	16.04	340.43	-0.30	<100	<1	<1	<1	<3	--	--	--	<1	--
	Active	06/16/08	356.47	14.29	342.18	1.75	<100	<1	<1	<1	<3	--	--	--	2.50	--
SW-14	Active	08/04/05	356.24	14.83	341.41	--	726	2.83	0.705	28.6	1.89	<5.00	<0.500	<0.500	**17.8**	--
	Active	10/03/05	356.24	--	--	--	--	--	--	--	--	--	--	--	**483**	2.51
	Active	06/15/06	356.24	14.11	342.13	--	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	4.91	<1.00
	Active	08/17/06	356.24	14.15	342.09	-0.04	222	2.32	1.23	8.16	2.90	--	--	--	1.53	<1.00
	Active	10/31/06	356.24	--	--	--	150	<1	<1	<1	<3	--	--	--	1.21	<1
	Active	02/25/07	356.24	15.43	340.81	--	<100	<1	1	<1	<3	--	--	--	**21.5**	<1
	Active	06/15/07	356.24	14.53	341.71	0.90	<100	<1	<1	<1	<3	--	--	--	6.83	<1
	Active	09/11/07	356.24	13.75	342.49	0.78	830	<1	36	3	6.1	--	--	--	6.13	--

Table 2
Summary of Historical Groundwater Monitoring Data
Pacific Convenience and Fuels Site 01-056
Richland, Washington

WELL ID	WELL STATUS	SAMPLE DATE	WELL ELEVATION				ANALYTICAL PARAMETERS									
			Casing (ft amsl)	DTW (ft btoc)	GW (ft amsl)	DTW Δ (ft amsl)	TPH-Gx (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	EDB (µg/L)	EDC (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
SW-14	Active	12/18/07	356.24	15.53	340.71	-1.78	330	<1	<1	2	4	--	--	--	3.95	--
con't	Active	03/27/08	356.24	15.83	340.41	-0.30	<100	<1	<1	<1	<3	--	--	--	3.76	--
	Active	06/16/08	356.24	14.08	342.16	1.75	<100	<1	<1	<1	<3	--	--	--	**50.9**	--
SW-15	Active	08/03/05	356.89	15.47	341.42	--	<50.0	<0.500	0.553	<0.500	<1.00	<5.00	<0.500	<0.500	2.35	--
	Active	08/13/06	356.89	14.81	342.08	0.66	<80.0	<0.500	<0.500	<0.500	<1.00	--	--	--	<1.00	--
	Active	02/22/07	356.89	16.06	340.83	-1.25	--	--	--	--	--	--	--	--	--	--
	Active	06/11/07	356.89	14.53	342.36	1.53	--	--	--	--	--	--	--	--	--	--
	Active	09/11/07	356.89	14.52	342.37	0.01	<100	<1	2	<1	<3	--	--	--	--	--
	Active	12/18/07	356.89	16.21	340.68	-1.69	--	--	--	--	--	--	--	--	--	--
	Active	03/27/08	356.89	15.43	341.46	0.78	--	--	--	--	--	--	--	--	--	--
	Active	06/16/08	356.89	14.70	342.19	0.73	<100	<1	<1	<1	<3	--	--	--	--	--
SW-16	Active	08/05/05	355.02	13.81	341.21	--	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	<0.500	<0.500	<1.00	--
	Abandoned†		--	--	--	--	--	--	--	--	--	--	--	--	--	--
SW-17	Active	08/05/05	355.84	14.67	341.17	--	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	<0.500	<0.500	1.55	--
	Abandoned†		--	--	--	--	--	--	--	--	--	--	--	--	--	--
SW-18	Active	08/05/05	355.89	14.73	341.16	--	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	<0.500	<0.500	1.22	--
	Abandoned†		--	--	--	--	--	--	--	--	--	--	--	--	--	--
SW-19	Active	08/05/05	356.19	14.04	342.15	--	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	<0.500	<0.500	<1.00	--
	Abandoned†		--	--	--	--	--	--	--	--	--	--	--	--	--	--
RW-01	Active	08/01/05	373.18	--	--	--	--	--	--	--	--	--	--	--	<1.00	<1.00
	Active	10/03/05	373.18	31.00	342.18	--	**1,420**	<0.500	0.669	6.70	1.04	--	--	--	1.60	1.09
	Active	06/14/06	373.18	31.02	341.28	-0.90	425	<0.500	<0.500	<0.500	1.25	--	--	--	5.16	<1.00
	Active	08/16/06	373.18	31.03	342.15	0.87	596	3.03	6	<1	3	--	--	--	2.07	<1
	Active	10/31/06	373.18	31.36	341.82	-0.33	320	<1	11	2	3	--	--	--	4.17	<1
	Active	02/24/07	373.18	32.29	340.89	-0.93	440	<1	3	<1	<3	--	--	--	8.04	<1
	Active	06/14/07	373.18	30.72	342.46	1.57	<100	<1	22	2	<3	--	--	--	1.78	--
	Active	09/10/07	373.18	30.55	342.63	0.17	630	<1	13	2	4	--	--	--	--	--
	Active	12/17/07	373.18	32.39	340.79	-1.84	310	<1	9	2	<3	--	--	--	--	--
	Active	03/27/08	373.18	32.72	340.46	-0.33	320	<1	16	<1	<3	--	--	--	--	--
	Active	06/16/08	373.18	30.99	342.19	1.73	510	<1	15	2	4	--	--	--	--	--

Table 2
Summary of Historical Groundwater Monitoring Data
Pacific Convenience and Fuels Site 01-056
Richland, Washington

WELL ID	WELL STATUS	SAMPLE DATE	WELL ELEVATION				ANALYTICAL PARAMETERS									
			Casing (ft amsl)	DTW (ft btoc)	GW (ft amsl)	DTW Δ (ft amsl)	TPH-Gx (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	EDB (µg/L)	EDC (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
PE-01	Active	09/11/07	--	30.15	--	--	**1,400**	<1	38	24	9	--	--	--	--	--
	Active	12/17/07	--	33.02	--	--	<100	<1	1	<1	<3	--	--	--	--	--
	Active	03/26/08	--	33.34	--	--	170	<1	4	<1	<3	--	--	--	--	--
	Active	06/16/08	--	31.62	--	--	320	<1	12	<1	4	--	--	--	--	--
PE-02	Active	09/11/07	--	30.91	--	--	**1,900**	<1	26	4	8	--	--	--	--	--
	Active	12/17/07	--	32.93	--	--	150	<1	4	<1	<3	--	--	--	--	--
	Active	03/27/08	--	33.24	--	--	230	<1	5	<1	<3	--	--	--	--	--
	Active	06/16/08	--	31.31	--	--	**1,500**	<1	7	<1	5	--	--	--	--	--
PE-03	Active	09/11/07	--	30.85	--	--	**2,300**	<1	13	5	<3	--	--	--	--	--
	Active	12/17/07	--	32.77	--	--	210	<1	<1	<1	<3	--	--	--	--	--
	Active	03/26/08	--	33.08	--	--	<100	<1	2	<1	<3	--	--	--	--	--
	Active	06/16/08	--	31.36	--	--	160	<1	5	<1	<3	--	--	--	--	--
MTCA Method A Cleanup Goals[1]							1,000/800[2]	5	1,000	700	1,000	15	0.01	5	15	15

Notes:
Results in **BOLD** indicate detections that exceed MTCA Method A cleanup levels for groundwater
* Select samples were further analyzed for lead by EPA Method 7420
†: well abandoned in June 2006
††: well abandoned on October 11, 2000
(1): MTCA Method A Table 720-1 for groundwater, WAC 173-340-900 Tables
(2): 1,000 µg/L when benzene is absent and 800 µg/L when present
--: not analyzed / not measured / not sampled / unknown
<: less than the laboratory reporting limit
°C: degree celsius
µg/L: micrograms per Liter
µs/cu: microsiemen per centimeter
Active: groundwater well currently used for monitoring
amsl: above mean sea level
bgs: below ground surface
BTEX: benzene, toluene, ethylbenzene, and total xylenes
btoc: below top of casing
DIA: casing diameter
DTB: depth to bottom
DTP: depth to product
DTW: depth to water
EDB: 1,2-dibromoethane
EDC: 1,2-dichloroethane
ft: feet
GW: groundwater
J: value detected between method detection and reporting limits.
See attached laboratory report for reporting limits.
mg/L: milligrams per Liter
MTBE: methyl tert-butyl ether
MTCA: Model Toxics Control Act
mV: millivolts
NTU: Nephelometric turbidity unit
ORP: oxygen reduction potential
PT: product thickness
TPH-Gx: total gasoline-range petroleum hydrocarbons, analyzed by Northwest Method NWTPH-Gx

TABLE 3
SOIL SAMPLE ANALYTICAL RESULTS
Site 01-056
Richland, Washington
1 of 1

Soil Boring ID	Sample Number	Sample Date	Sample Depth (ft bgs)	TPH-Dx (mg/kg) WTPH-D	TPH-Gx (mg/kg) WTPH-G	B (mg/kg) EPA Method 8020	T (mg/kg) EPA Method 8020	E (mg/kg) EPA Method 8020	X (mg/kg) EPA Method 8020
MW-6	MW-6 S-2	3/21/95	9.2-10.7	<17.0	<3.0	<0.3	<0.3	<0.3	<0.3
MW-7	MW-7 S-2	3/20/95	8.0-9.0	<15.0	<3.0	<0.3	<0.3	<0.3	<0.3
	MW-7 S-3C	3/20/95	15.0-16.0	<16.0	<3.0	<0.3	<0.3	<0.3	<0.3
MW-8	MW-8 S-2	3/21/95	9.0-10.4	<16.0	<3.0	<0.3	<0.3	<0.3	<0.3
MW-9	MW-9 S-1	3/22/95	9.0-10.5	<16.0	<3.0	<0.3	<0.3	<0.3	<0.3
	MW-9 S-3	3/22/95	27.0-28.5	<16.0	<3.0	<0.3	<0.3	<0.3	<0.3
MW-10	MW-10 S-1	3/21/95	4.5-6.0	<18.0	<4.0	<0.4	<0.4	<0.4	<0.4
	MW-10 S-2	3/21/95	10.0-12.0	<18.0	<4.0	<0.4	<0.4	<0.4	<0.4
	MW-10 S-3	3/21/95	14.5-16.0	<16.0	<3.0	<0.3	<0.3	<0.3	<0.3
MW-11	MW-11 S-2	3/22/95	19.0-20.0	<15.0	<3.0	<0.3	<0.3	<0.3	<0.3
	MW-11 S-4	3/22/95	27.5-28.5	<16.0	<3.0	<0.3	<0.3	<0.3	<0.3
RW-1	MW-12 S-2	3/23/95	33.0-34.5	**220**	**2,900**	<22.0	<22.0	**27**	**110**
MTCA Method A Cleanup Levels (1)				2,000	100/30(2)	0.03	7	6	9

Notes:

Bold where results exceed cleanup levels

(1): MTCA Method A Table 740-1 for unrestricted land use, WAC 173-340-900 Tables

(2): 100 mg/kg when benzene is absent and 30 mg/kg when benzene is present

BTEX: benzene, toluene, ethylbenzene, total xylenes analyzed by EPA Method 8020

DUP: duplicate sample

ft bgs: feet below ground surface

mg/kg: milligrams per kilogram

MTBE: methyl tert-butyl ether

ppm: parts per million

TPH-Dx: total petroleum hydrocarbons quantified as diesel, Ecology Method WTPH-D

TPH-Gx: total petroleum hydrocarbons quantified as gasoline, Ecology Method WTPH-G

APPENDIX A

Site 01-056, Richland:
Estimated Project Costs

Site 01-056, Richland:
Estimated Project Completion Costs
January 21, 2011

Task			Costs	
1	**Permitting, Access Agreements and H&S**			
	Permittting	$	500.00	
	Access Agreements		500.00	
	Health and Safety Plan		500.00	
	Subtotal	**$**	**1,500.00**	
1	**Groundwater Monitoring**			
	2011 to 2012 (4 Qtrs)		4	number of events
	Number of wells		16	select wells
	Lab Analytical Cost	$	2,080	per event (TPH and BTEX)
	Field Labor and Materials		1,650.00	per month
	Waste Disposal		300.00	per event
	Reporting		2,200.00	per event
	Total per event		6,230.00	per event
	Subtotal	**$**	**24,920.00**	
2	**Confirmation Soil Borings**			
	Drill 7 Confirmation Soil Borings to 40 feet			
	Drilling (Air Rotary)		32,765.00	
	Lab (42 samples)		5,460.00	(TPH and BTEX)
	Labor and Material		4,135.00	
	Waste Management		2,300.00	
	Reporting		2,000.00	
	Subtotal	**$**	**46,660.00**	
3	**Site Closure**			
	VCP Application	$	1,050.00	
	Closure Report		1,600.00	
	DEQ Meetings & Correspondecne		250.00	
	Subtotal	**$**	**2,900.00**	
4	**Well Abandonment**			
	Destroy fourty (40) GWM/AS/VE/PE Wells			
	Permitting	$	700.00	
	Drilling		30,600.00	
	Labor and Material		5,960.00	
	Waste Management		3,500.00	
	Reporting		1,500.00	
	Subtotal	**$**	**41,560.00**	
5	**Project Management**			
	Per quarter (5 qtrs total)	$	500.00	
	Subtotal		**2,500.00**	
	TOTAL	**$**	**120,040.00**	

Site 01-056, Richland:
Estimated Project Completion Costs
January 21, 2011

Projected Cash Flow

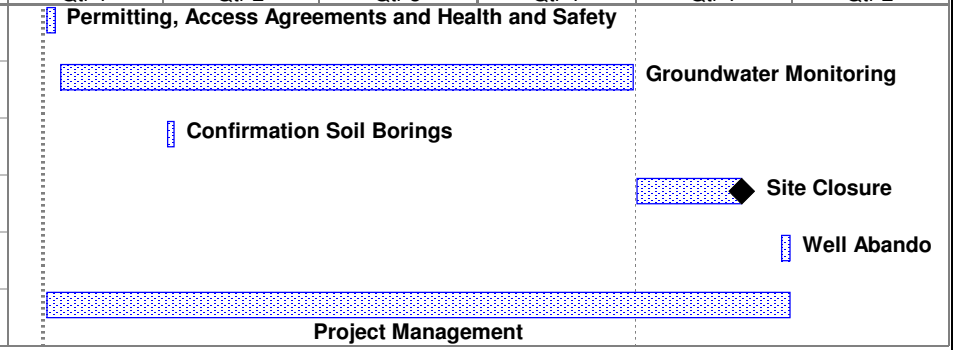
Year		2011		2012
Permitting, Access Agreements and H&S	$	1,500.00		
Groundwater Monitoring		24,920.00	$	-
Confirmation Soil Borings		46,660.00		-
Site Closure		-		2,900.00
Well Abandonment		-		41,560.00
Project Management		2,000.00		500.00
Annual Totals:	**$**	**75,080.00**	**$**	**44,960.00**
TOTAL	**$**	**120,040.00**		

APPENDIX B

Site 01-056, Richland:
Estimated Project Schedule

Site 01-056, Richland
Estimated Project Completion Schedule

ID	Task Name	Duration	Start	Finish
1	Permitting, Access Agreements and Health and Safety	5 days	Mon 1/24/11	Fri 1/28/11
2	Groundwater Monitoring	239 days	Tue 2/1/11	Fri 12/30/11
3	Confirmation Soil Borings	4 days	Mon 4/4/11	Thu 4/7/11
4	Site Closure	45 days	Mon 1/2/12	Fri 3/2/12
5	Well Abandonment	5 days	Mon 3/26/12	Fri 3/30/12
6	Project Management	310 days	Mon 1/24/11	Fri 3/30/12



Site 01-056
500 George Washington Way
Richland, WA

Task
Split
Progress
Milestone
Summary
Project Summary
External Tasks
External Milestone
Deadline

Site 01-056, Richland
Estimated Project Completion Schedule

1 Permitting, Access Agreements and Health and Safety

Prior to implementing field activities, permits and access agreements necessary to implement the groundwater monitoring and installation of the confirmation borings will be secured. Additionally, a site-specific Health and Safety Plan will be prepared for the proposed scope of work.

2 Groundwater Monitoring

Groundwater monitoring will be conducted on a quarterly basis for four (4) consecutive quarters to evaluate groundwater quality beneath the site. The DOE typically requires four consecutive quarters of compliance monitoring to evaluate a site for regulatory closure.

Groundwater monitoring will be conducted a select wells (up to 16 wells) and will consist of standard water chemistry parameters along with additional field redox parameters. Groundwater samples will also be collected and analyzed for COCs. Wells MW-01, MW-02, MW-04, MW-05, MW-06, MW-07, MW-13, MW-17, MW-20, MW-23, MW-25, MW-27, and MW-30 through MW-33 are proposed to be gauged and sampled as part of the quarterly groundwater monitoring program and will provide sufficient coverage of the site (see Figure 2). Note that the wells selected to be monitored may be adjusted as additional data is available and in consultation with the DOE to meet closure requirements.

3 Confirmation Soil Borings

In review of historical site characterization reports, several "data gaps" were noted that require additional assessment to meet DOE closure requirements. Specifically, confirmation soil sample results from the former tank cavity and pump islands are absent. In addition, based on historical site assessment data, soil samples were not collected from borings installed offsite near the former baseball field (Richland Community Center property), where fuel hydrocarbons were identified is soil based on field PID readings. Based on a review of site boring logs, these soils appear to be within the saturated zone and are likely reflective of groundwater conditions. However, the DOE may require confirmation soil sampling be conducted to evaluate subsurface conditions in this area.

Up to seven (7), 40-foot confirmation soil borings will be advanced in the areas containing the highest TPH concentrations based on historical soil analytical/PID results. Confirmation soil sample results will be used to determine if residual hydrocarbon concentrations in soil are below cleanup levels. Figure 5 shows the locations of the proposed confirmation soil borings.

4 Site Closure

Site closure is anticipated once it is demonstrated that hydrocarbon-affected soil and groundwater have been successfully remediated. The MTCA Method A Cleanup Levels for soil and groundwater will be applied when evaluating the site for closure. If warranted, a Site Closure Report will be prepared and submitted to MTCA under the voluntary cleanup program to obtain regulatory concurrence for site closure with a no further action determination.

5 Well Abandonment

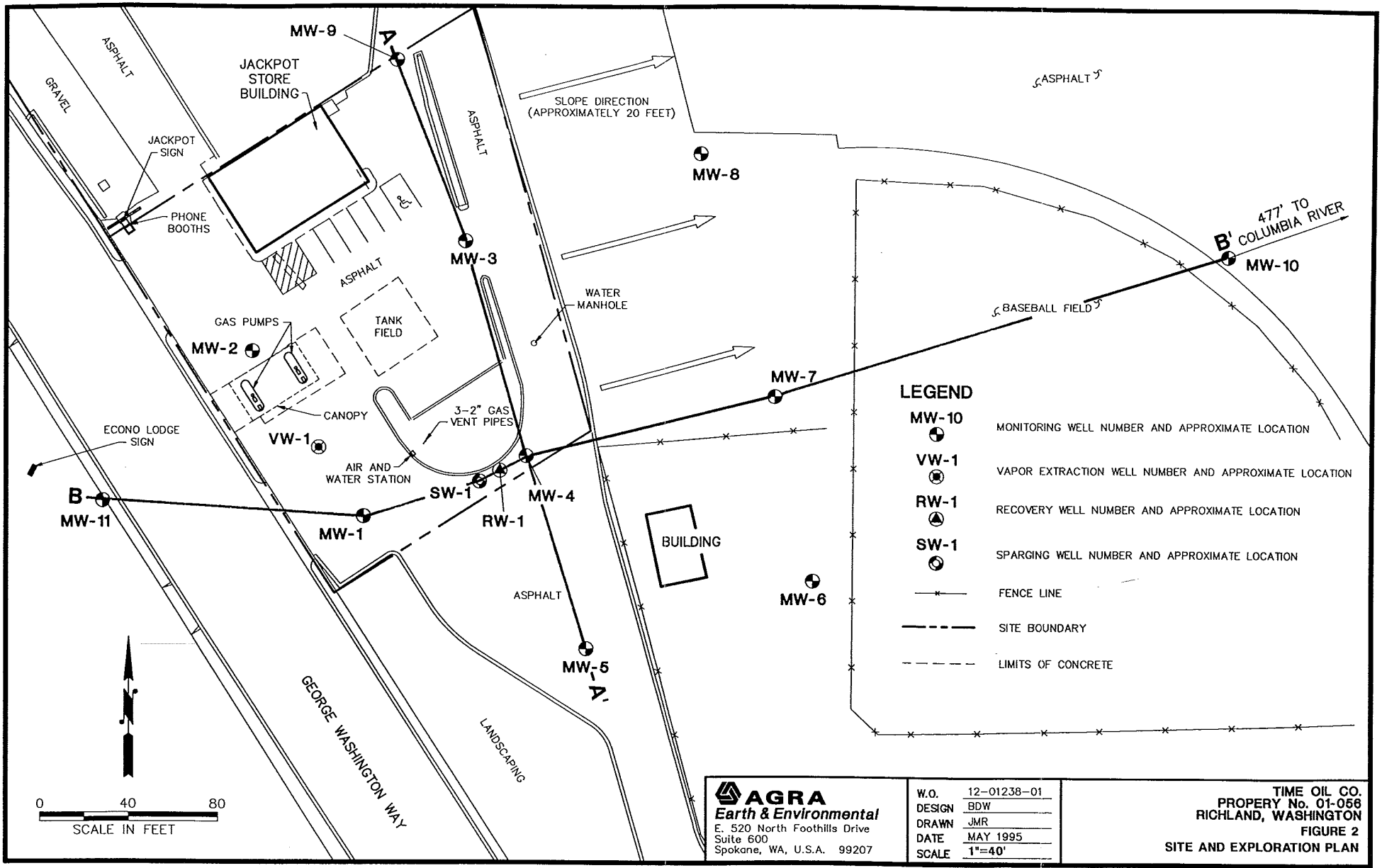
Upon receiving regulatory site closure, each site monitoring and/or remediation well will be destroyed in accordance with local and state well abandonment requirements. There are approximately 40 wells consisting of groundwater monitoring, air sparging, vapor extraction, plume eater, and recovery wells that will require destruction in accordance with DOE standards.

6 Project Management

This activity includes time associated with project scoping; managing labor, equipment and material resources; procurement and scheduling of subcontractors; progress reporting; and preparing and meeting with regulatory officials to discuss project objectives and actions. This task will span the duration of the project.

APPENDIX C

AGRA Site Plan, Geologic Cross-Sections and Summary of Soil Sampling Results

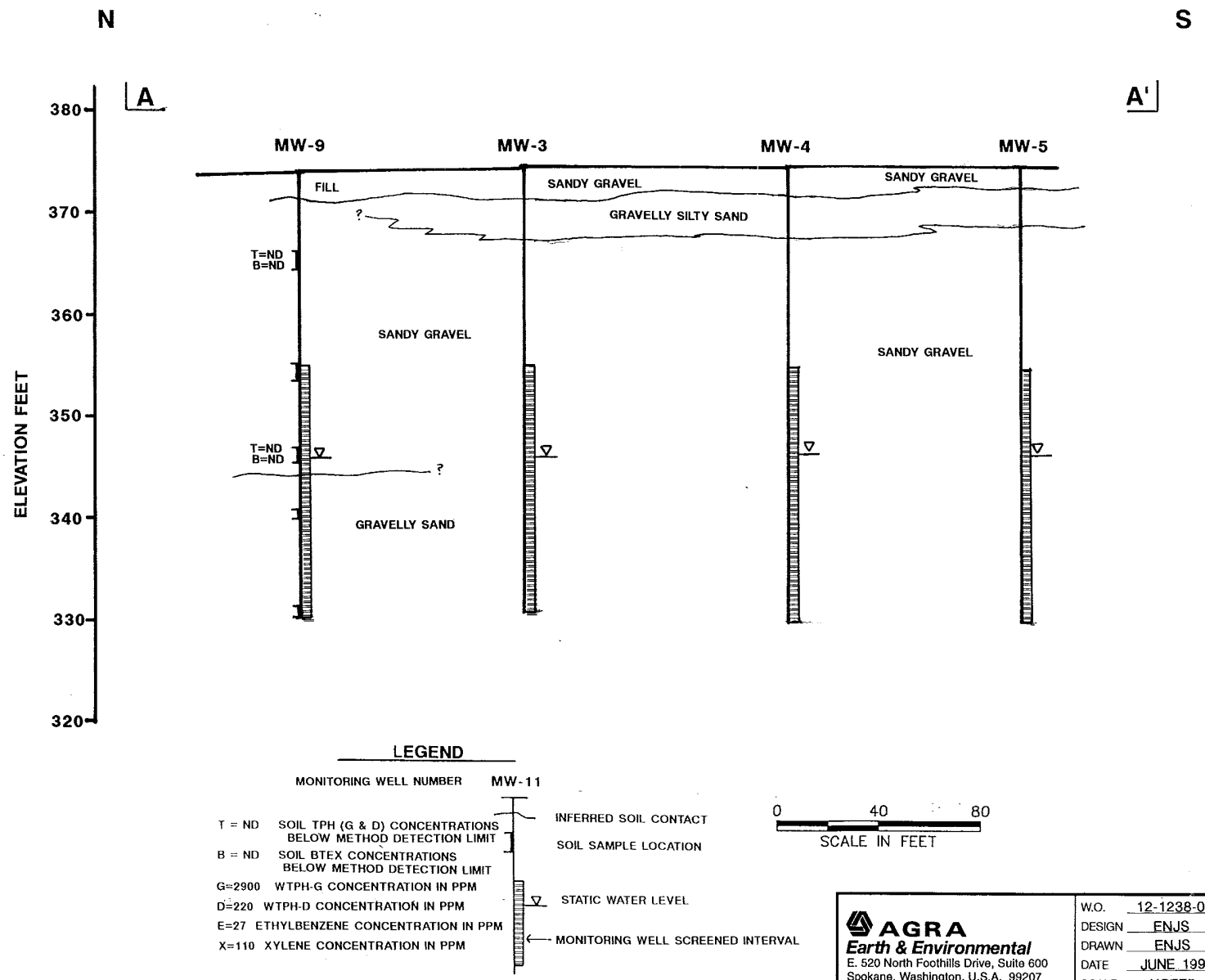


AGRA
Earth & Environmental
E. 520 North Foothills Drive
Suite 600
Spokane, WA, U.S.A. 99207

W.O.	12-01238-01
DESIGN	BDW
DRAWN	JMR
DATE	MAY 1995
SCALE	1"=40'

TIME OIL CO.
PROPERY No. 01-056
RICHLAND, WASHINGTON
FIGURE 2
SITE AND EXPLORATION PLAN

AGRA EARTH & ENVIRONMENTAL, INC. DRAWING NO. \12\01238-01\VICNITY.DWG



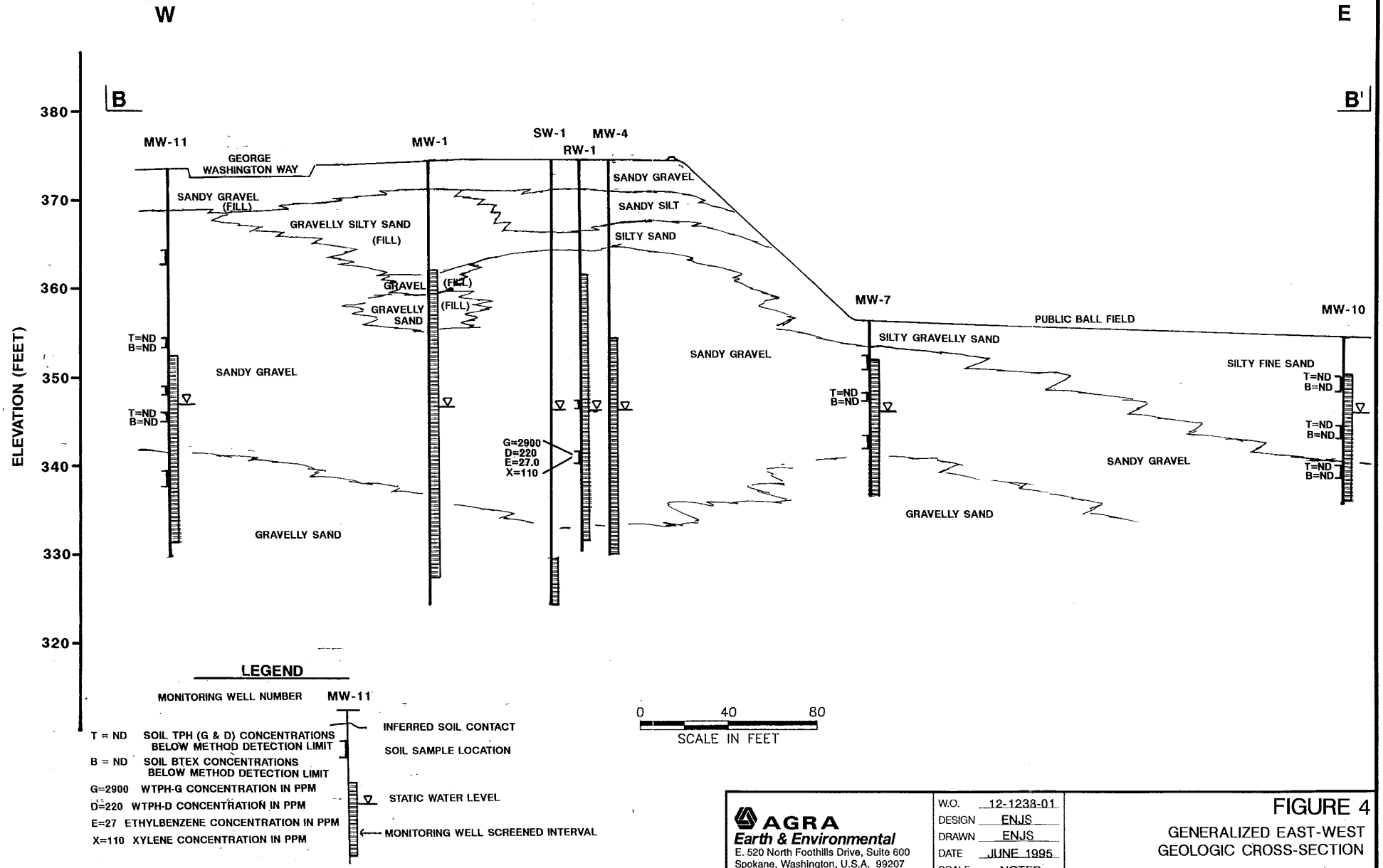
AGRA Earth & Environmental
Earth & Environmental
E. 520 North Foothills Drive, Suite 600
Spokane, Washington, U.S.A. 99207

W.O.	12-1238-01
DESIGN	ENJS
DRAWN	ENJS
DATE	JUNE 1995
SCALE	NOTED

FIGURE 3

GENERALIZED NORTH-SOUTH GEOLOGIC CROSS-SECTION

AGRA Earth & Environmental, Inc.



AGRA Earth & Environmental, Inc.

AGRA
Earth & Environmental
E. 520 North Foothills Drive, Suite 600
Spokane, Washington, U.S.A. 99207

W.O.	12-1238-01
DESIGN	ENJS
DRAWN	ENJS
DATE	JUNE 1995
SCALE	NOTED

FIGURE 4

GENERALIZED EAST-WEST GEOLOGIC CROSS-SECTION

TABLE 5 - SUMMARY OF SOIL SAMPLING RESULTS
RICHLAND JACKPOT (PROPERTY 01-056)
500 GEORGE WASHINGTON WAY, RICHLAND, WASHINGTON

SAMPLE NUMBER	DATE SAMPLED	SAMPLE DEPTH (ft)	GRPH (mg/kg)	DRPH (mg/kg)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYLBENZENE (mg/kg)	XYLENES (mg/kg)
MW-6 S-2	21 Mar 95	9.2-10.7	<3.0	<17.0	<0.3	<0.3	<0.3	<0.3
MW-7 S-2	20 Mar 95	8.0-9.0	<3.0	<15.0	<0.3	<0.3	<0.3	<0.3
MW-7 S-3C	20 Mar 95	15.0-16.0	<3.0	<16.0	<0.3	<0.3	<0.3	<0.3
MW-8 S-2	21 Mar 95	9.0-10.4	<3.0	<16.0	<0.3	<0.3	<0.3	<0.3
MW-9 S-1	22 Mar 95	9.0-10.5	<3.0	<16.0	<0.3	<0.3	<0.3	<0.3
MW-9 S-3	22 Mar 95	27.0-28.5	<3.0	<16.0	<0.3	<0.3	<0.3	<0.3
MW-10 S-1	21 Mar 95	4.5-6.0	<4.0	<18.0	<0.4	<0.4	<0.4	<0.4
MW-10 S-2	21 Mar 95	10.0-12.0	<4.0	<18.0	<0.4	<0.4	<0.4	<0.4
MW-10 S-3	21 Mar 95	14.5-16.0	<3.0	<16.0	<0.3	<0.3	<0.3	<0.3
MW-11 S-2	22 Mar 95	19.0-20.0	<3.0	<15.0	<0.3	<0.3	<0.3	<0.3
MW-11 S-4	22 Mar 95	27.5-28.5	<3.0	<16.0	<0.3	<0.3	<0.3	<0.3
RW-1 S-2	23 Mar 95	33.0-34.5	2900	220	<22.0	<22.0	27.0	110.0
Soil Cleanup Criteria			100.0	200.0	0.5	40.0	20.0	20.0

GRPH Gasoline range petroleum hydrocarbons, as analyzed by Ecology Method WTPH-G.
DRPH Diesel range petroleum hydrocarbons, as analyzed by Ecology Method WTPH-D.
BTEX Benzene, toluene, ethylbenzene, and total xylenes as analyzed by EPA Method 8020.
mg/kg Milligrams per kilogram, or parts per million (ppm).
Indicates sample result equals or exceeds soil cleanup criteria.
Soil cleanup criteria are levels promulgated in WAC 173-340-740 (MTCA).

AGRA
Earth & Environmental Group