

May 21, 2015
Cardno ERI 03116013L.LR12

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Mr. Grant Yang
Washington State Department of Ecology
Northwest Regional Office
3190 160th Avenue Southeast
Bellevue, Washington 98008-5452

801 Second Avenue
Suite 700
Seattle, WA 98104
USA

Phone 206 269 0104
Toll-free 877 470 4334
Fax 206 269 0098
www.Cardno.com

www.Cardnoeri.com

SUBJECT Remedial Investigation and Soil Assessment Report
Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington

Mr. Yang:

At the request of ExxonMobil Environmental Services Company (EMES), on behalf of ExxonMobil Oil Corporation, Cardno ERI has prepared the enclosed report summarizing remedial activities to date. Cardno ERI is seeking a written opinion on if the recent soil investigation has completely delineated and characterized the site; confirmation that the soil and groundwater pathways of exposure are protective of human health and the environment; and that the site qualifies for a No Further Action determination under the Model Toxic Control Act.

Please contact Mr. Michael Miller, Cardno ERI Project Manager for this site, at 206 767 2360, or Mr. Aaron Thom, EMES Project Manager for this site, at 832 624 0076, with questions.

Sincerely,



Robert Thompson
Senior Staff Scientist
Cardno ERI
Direct Line 206 575 9504
Email: robert.thompson@cardno.com



Michael J. Miller
Project Manager
Cardno ERI
Direct Line 206 767 2360
Email: michael.miller@cardno.com

ENCLOSURE

Cardno ERI's *Remedial Investigation and Soil Assessment Report*, dated May 21, 2015

cc: w/ enclosure:
Mr. John T. Margeson, Bank of America, N.A. (*electronic copy*)
Mr. Arne Swanson, Sunset Hill Memorial Park (*electronic copy*)
Ms. Joanne Bledsoe, Trust & Bel-East Partners, Inc. (*electronic copy*)
Mr. Aaron Thom, ExxonMobil Environmental Services Company (*electronic copy*)

Remedial Investigation and Soil Assessment Report

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1500 145th Place Southeast
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Prepared for
ExxonMobil Environmental Services Company

May 21, 2015

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Robert Thompson
Senior Staff Scientist
for Cardno ERI
Direct Line 206 575 9504
Email: robert.thompson@cardno.com

Don Clabaugh
Senior Engineer
for Cardno ERI
Direct Line 206 832 4619
Email: don.clabaugh@cardno.com



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1 Introduction

1.1 Site Information

Property Name: Former Mobil Station 99BLV
Property Address: 1500 145th Place Southeast
Bellevue, Washington 98007
Project Consultant: Cardno ERI
Project Consultant Contact Information: Michael Miller
801 Second Avenue, Suite 700
Seattle, Washington 98104
Office: 206 269 0104
Direct: 206 767 2360
Current Property Owner: Western Property Management

1.2 Purpose

At the request of ExxonMobil Environmental Services Company (EMES), on behalf of ExxonMobil Oil Corporation, Cardno ERI prepared this *Remedial Investigation and Soil Assessment Report* for Former Mobil Station 99BLV located at 1500 145th Place Southeast, Bellevue, King County, Washington (Property) (Plate 1). Former Mobil Station 99BLV previously operated northeast of the intersection of 145th Place Southeast and Southeast 16th Street (Plate 2).

The purpose of this report is to demonstrate that the requirements under the Washington Administrative Code (WAC) 173-340 (WAC, 2014) have been met for a No Further Action (NFA) determination based on previous environmental investigations and on WAC 173-340-720(8)(b) and WAC 173-340-740(6)(d) where soil and groundwater points of compliance are defined and indicate that soil and groundwater are protective of human health and the environment under the MTCA.

Cardno ERI recommends submitting this report to the Washington State Department of Ecology (Ecology) with a request for an NFA determination under the MTCA.

2 Site Identification and Description

2.1 Site and Property Location/Definition

The Property consists of a Quality Food Center (QFC) shopping center and other small retail stores. The Property is comprised of King County tax parcel 032405-9162 (King County, 2015). The Property parcel is shown on Plate 3. The legal description of the Property is included in Appendix A.

The MTCA site (Site) is defined by the extent of releases to soil as TPHg and BTEX and a release to groundwater as TPHg, TPHd, TPHmo, BTEX, and total and dissolved lead associated with 1500 145th Place Southeast in Bellevue, Washington. The MTCA site boundary is presented on Plate 4.

2.2 Site Discovery and Regulatory Status

In October 1991, ATEC Associates, Inc. (ATEC) performed an initial site assessment south of the former USTs (ATEC, 1991). Concentrations of hydrocarbons exceeding the MTCA Method A Cleanup Levels were detected in 2 of 5 soil borings.

Hydrocarbon releases to soil and groundwater were reported to Ecology on February 10, 1992, and the Site was listed with Ecology's leaking UST program and assigned Cleanup Site ID 8876 (Ecology, 2014a).

The MTCA Method A Cleanup Levels for soil and groundwater are used as screening levels for discussion of the investigation results. Cleanup standards are discussed in Section 9.

2.3 Neighborhood Setting

The Property is zoned for commercial use and the surrounding area is zoned for commercial and residential use. The Site is bordered by Northeast 145th Place Southeast to the west, Southeast 16th Street to the south, a QFC shopping center to the west, and a strip of retail shops to the north (Plate 5).

2.4 Physiographic Setting/Topography

The approximate elevation of the Site is 330 feet above msl and the topography of the Property slopes generally toward the southwest. The local topography is relatively flat and gradually decreases to Richards Creek to the west (Google, 2013).

The Property is currently occupied by a QFC shopping center accompanied by other small retail shops. The Site is currently a paved parking area for the adjacent retail shops.

The nearest surface water body is Larsen Lake located 0.7 miles to the northeast of the Site. Richards Creek is located 0.7 miles to the west of the Site. Phantom Lake is located 1.0 mile southeast of the Site and Lake Sammamish is located 1.9 miles to the east of the Site (Google, 2013).

There is little to no terrestrial habitat except small landscaped areas at the boundaries of parking lots in the immediate vicinity of the Site. The area is developed with commercial and residential properties dissected by high volume roads (King County, 2015).

3 Property Development and History

3.1 Past Property Uses and Facilities

Based on available records, Former Mobil Station 99BLV operated from an unknown period of time prior to decommissioning the three on-site USTs in 1972. No other additional information is available regarding former Site use. Descriptions of USTs from Ecology's UST Site / Tank Data Summary indicate that three tanks of unknown volume being permanently closed with Ecology on December 31, 1972.

3.2 Current Property Uses and Facilities

The Property is currently occupied by a QFC shopping center accompanied by other small retail shops (Plate 3). The shopping center was constructed in 1953.

3.3 Proposed or Potential Future Site Uses

There are currently no future changes planned for the Property.

3.4 Zoning

The Property is zoned for commercial use (King County, 2015).

3.5 Transportation/Roads

The Property is located northeast of the intersection of 145th Place Southeast and Southeast 16th Street. 145th Place Woutheast is a north-south trending arterial extending between Lake Hills Connector to the north and Landerholm Circle Southeast to the south; 145th Place Southeast dead-ends at both roads to the north and south, respectively. Southeast 16th Street turns into Kamber Road just west of the site. Southeast 16th Street turns into Southeast Phantom Way to the east. State highway 520 is located to the north of the site and Interstate 90 to the south. Interstate 405 travels north-south located to the west of the site.

3.6 Utilities and Water Supply

Site utilities include underground water lines and vaults, sewer lines and vaults, storm drain lines and vaults, communication vaults, and overhead electric lines and vaults (Plate 6). There are three storm drain lines that extend from the QFC parking lot to a trunk line that runs from south to north beneath 145th Place Southeast. Three water vaults are located to the west of the site and four water vaults located off-Site in the vicinity of monitoring well MW15. A sanitary sewer line extends from the southwestern corner of the Site to the center of the intersection of Southeast 16th Street and 145th Place Southeast. The line then runs beneath 145th Place Southeast to the south. Two communication vaults are located to the south of the site along Southeast 16th Street.

Drinking water for the Property is supplied by the Cascade Water Alliance (CWA). The City of Bellevue purchases water from the City of Seattle through the CWA. The water comes from the protected watersheds of the Cedar and South Fork Tolt rivers in the Cascade Mountains (Bellevue, 2014).

3.7 Potential Sources of Hydrocarbons

The potential sources of hydrocarbons include the former gasoline USTs located in the central portion of the Site, and the former fuel conveyance system including the fuel dispensers, located on the northern portion of the Site (Plate 7).

3.8 Potential Sources of Hydrocarbons on Neighboring Properties

No other potential sources of hydrocarbons are suspected on neighboring properties.

4 Environmental Investigation Summary & Interim Action Summary

A total of 27 wells have been installed at the Site:

- 14 groundwater monitoring wells on-Property (MW1 through MW9, MW11, MW13A through MW13C, and MW14);
- 3 groundwater monitoring well off-Property (MW10, MW12, and MW15);
- 3 AS wells on-Property (AS1 through AS3); and
- 7 SVE wells on-Property (SVE5 through SVE11).

A total of 8 documented investigations have been completed at the Property and are summarized in the following reports:

- ATEC. November 21, 1991. *Limited Subsurface Investigation.*
- ATEC. January 21, 1992. *Additional Subsurface Investigation.*
- ATEC. February 10, 1992. *Supplemental Subsurface Investigation.*
- Kleinfelder, Inc. (Kleinfelder). May 20, 1992. *Subsurface Exploration Draft Report.*
- Kleinfelder. November 6, 1992. *Additional Subsurface Exploration Report.*
- Kleinfelder. November 29, 1994. *Supplemental Subsurface Exploration Report.*
- Kleinfelder. January 22, 1996. *Well Abandonment, VES Well Installation and Pneumatic Fracturing Report.*
- Environmental Resolutions, Inc. (ERI). December 7, 2005. *Groundwater Monitoring/Soil Vapor Extraction Well Installation Report.*
- ERI. August 31, 2007. *Monitoring and Air Sparge Well Installation Report.*

A chronological summary of work completed at the Site during the investigations listed above can be found in Appendix B. A summary of historical soil analytical data is shown in Table 1. Well construction details are shown in Table 2. A summary of historical groundwater analytical data is shown in Table 3. All historical boring logs are included in Appendix C. All former and existing wells are shown on Plate 2.

4.1 Constituents of Potential Concern

Constituents of potential concern (COPCs) based on current and past use of the Property include the compounds listed in WAC Chapter 173-340-900 *Table 830-1 Required Testing for Petroleum Releases* (WAC, 2014). The following table lists COPCs for the Site:

Potential Source	COPCs
Historical Gasoline USTs and Distribution System	<ul style="list-style-type: none"> • TPHg • TPHd • TPHmo • BTEX • EDB • 1,2-dichloroethane (EDC) • MTBE • Total Lead • Dissolved Lead

Based on the results of environmental activities conducted at the Site, the constituents of concern for the Site in soil and groundwater requiring further evaluation are TPHg, TPHd, TPHmo, BTEX, and total and dissolved lead sourced from the Site facilities. These analytes were historically detected above the MTCA Method A Cleanup Levels in soil and/or groundwater. Additionally, EDB, EDC, and MTBE require further evaluation to characterize the Site for a gasoline-related release.

4.2 Soil

Laboratory analytical results, sample depth, and sample date for each soil sample submitted for analysis are presented in Table 1. The depths of the soil samples range from 4 to 65 feet bgs.

4.3 Surface Water

Surface water investigations have not been performed at the Site.

4.4 Groundwater

A total of 17 groundwater monitoring wells, 3 AS wells, and 7 SVE wells have been installed on- and off-Property.

Well ID(s)	Installation Date	Location
MW1	January 1992	Property
MW2 through MW5	April 1992	Property
MW6 through MW9	August 1992	Property
MW10	September 1994	Off-Property
MW11	September 1994	Property
MW12	October 1994	Off-Property
MW13A through MW13C	June 1995	Property
MW14 and SVE5 through SVE7	June 2005	Property
MW15	July 2007	Off-Property
AS1 through AS3	July 2007	Property
SVE8 through SVE11	December 2014	Property

Locations of all wells can be found on Plate 2. Groundwater sampling has been conducted at the Site since 1992. Laboratory analytical results indicate that hydrocarbon concentrations have historically exceeded the

MTCA Method A Cleanup Levels in samples collected from the following on- and off-Property wells: MW1, MW3 through MW10, MW12, MW13B, and SVE5 through SVE7. Groundwater analytical results from the most recent sampling event on June 4, 2014 are shown on Plate 8.

NAPL was historically detected in monitoring wells MW1 and MW6.

Laboratory analytical results, groundwater elevation data, and sampling date for each groundwater sample submitted for analysis is presented in Table 3.

4.5 Sediment

Sediment investigations have not been performed at the Site.

4.6 Air/Soil Vapor

In April 1992, Kleinfelder collected vapor samples during vapor extraction tests, performed on wells MW1 and MW2 (Kleinfelder, 1992a).

Soil Vapor Sample Results ($\mu\text{g/L}$) ^a					
Sample ID	TPHg	Benzene	Ethylbenzene	Toluene	Total Xylenes
MW1	45,000	170	120	790	570
MW2	61,000	590	55	860	230

a = Analyzed in accordance with EPA Methods 5030/8015/8020

4.7 Natural Resources/Wildlife

There is little to no terrestrial habitat except small landscaped areas at the boundaries of parking lots in the immediate vicinity of the Site.

4.8 Cultural History/Archeology

No information or reports of historical investigations have indicated a need for additional research of Site history or archaeology.

4.9 Interim Actions

In April 1992, Kleinfelder performed a vapor extraction test on wells MW1 and MW2. The data indicated a radius of influence of approximately 30 feet. Kleinfelder concluded that acceptable remediation results could be achieved with a blower capable of producing a vacuum between 100 and 200 inches of water at flow rates less than 100 scfm (Kleinfelder, 1992a).

In February 1994, Kleinfelder installed a vapor extraction system (VES) with vapor-phase carbon air treatment. The system began operation on March 16, 1994 and was modified to include a catalytic oxidizer (CATOX) in November 1994. The updated VES/CATOX system was operational from March 15, 1995 to November 2, 1995 when the CATOX was replaced with a regenerative blower without off-gas treatment (Kleinfelder, 1996).

In June 1995, Kleinfelder conducted pneumatic fracturing at vadose wells MW2, MW11, and MW13 to increase the formation permeability and enhance VOC extraction rates during vapor extraction. Test results indicated a decrease in vacuum of approximately 18 percent and an increase in horizontal permeability in nested wells MW13A, MW13B, and MW13C (Kleinfelder, 1996).

In June 1996, Kleinfelder modified MW6 to allow dual air-sparging and vapor extraction. An oxygen release compound was introduced in wells MW5 and MW8 in June 1996 and replaced in April 1998. The VES was shut down on March 19, 1997 after removing a total of 825 pounds of hydrocarbons (Kleinfelder, 2000).

In January 2010, ERI began installation of a dual-phase AS/SVE remediation system on the Site (Plate 9). The remediation system was operational from June 18, 2011 to June 11, 2013. During this period, 34,169 gallons of groundwater were extracted while removing 1,214 pounds of TPHg from the Site (Cardno ERI, 2014a).

5 Natural Conditions

5.1 Geology

5.1.1 Regional Geologic Setting

The surficial formations of primary hydrogeologic interest are Vashon recessional outwash deposits and Vashon till. Vashon recessional outwash has been identified as a minor aquifer in the Puget Lowland. It is composed of stratified sand and gravel and moderately- to well-sorted and well-bedded silty sand to silty clay deposited in proglacial and ice-marginal environments. Vashon till is considered a semi-confining unit composed of unsorted and unstratified glacial deposits varying widely in size. It is underlain by an advance outwash (Esperance Sand), which is a water source for shallow domestic wells in the Puget Lowland region. The primary deep aquifer in the area of the study site is the Puget Aquifer. It is composed of undifferentiated glacial and interglacial deposits and is generally more than 400 feet thick (Vacarro, 1998).

A Generalized Cross Section describing regional geologic conditions with respect to the Site is included in Plate 10.

5.1.2 Property Geologic Conditions

Soil assessments conducted by Cardno ERI and previous consultants indicate the Site is generally underlain by dry, silty sand and sand deposits to 50 feet bgs. Poorly-graded saturated sand is found from 50 feet bgs to 65 feet bgs, the maximum depth explored.

Cross section locations are shown on Plate 11. A west to east trending cross section is shown on Plate 12 and a north to south trending cross section is shown on Plate 13 depicting subsurface conditions observed at the site.

5.2 Surface Water

The Property is currently paved and occupied by a QFC shopping center with small retail shops. Catch basins located on the central portion the Site capture surface runoff from the Site. From the catch basins, stormwater flows to the west to a trunk line located beneath 145th Place Southeast. From here, the stormwater is conveyed through the system where it outfalls to private property at 14210 Southeast 8th Street (Plate 14). The 14210 Southeast 8th Street property is located in the Kelsey Creek drainage. Surface water travels overland from the 14210 Southeast 8th Street property until joining Kelsey Creek. Kelsey Creek terminates into Lake Washington via the Mercer Slough (Bellevue, 2015).

The nearest surface water body is Larsen Lake located 0.7 miles to the northeast of the Site. Richards Creek is located 0.7 miles to the west of the Site. Phantom Lake is located 1.0 mile southeast of the Site and Lake Sammamish is located 1.9 miles to the east of the Site (Google, 2013).

5.3 Groundwater

5.3.1 Regional Groundwater Conditions

Bellevue, Washington is located in the Puget-Willamette Trough lowland regional aquifer between the Cascade and Olympic Mountain ranges in Washington (Booth and Troost, 2008). Groundwater is encountered in the uppermost aquifer in Vashon Recessional deposits. Unconsolidated glacial deposits consist of particles that range from clay to boulders (Vacarro, 1998).

A Generalized Cross Section describing regional subsurface groundwater conditions with respect to the Site is included in Plate 10.

5.3.2 Site Groundwater Conditions

Groundwater observed at the Site occurs in the poorly-graded sand zone beneath the Site. The average groundwater gradient historically has been to the southwest and groundwater is typically encountered at depths ranging from approximately 50 to 60 feet bgs (Plate 15; Table 3). Perched water has been observed between 25 and 50 feet bgs.

5.4 Natural Resources and Ecological Receptors

5.4.1 Sensitive Receptor Survey Analysis

The nearest surface water body is Larsen Lake located 0.7 miles to the northeast of the Site. Richards Creek is located 0.7 miles to the west of the Site. Phantom Lake is located 1.0 mile southeast of the Site and Lake Sammamish is located 1.9 miles to the east of the Site (Google, 2013). Based on the current use of the Site, it is unlikely that groundwater or soil beneath the Site would pose a future risk to surface water. There are no potable water wells located within 300 meters of the Site (Ecology, 2014b). Other potential receptors include construction/excavation workers in the event of future site redevelopment.

6 Constituent of Concern Occurrence and Movement

6.1 Soil

Cumulative soil analytical data is shown in Table 1. Soil sample locations which exceeded the MTCA Method A Cleanup Levels, prior to the 2014 confirmation boring activities, are shown on Plate 16. Areas containing hydrocarbon concentrations above the MTCA Method A Cleanup Levels are located in vicinity of the former USTs and downgradient from the USTs to the west.

Concentrations of residual hydrocarbons have been detected above the MTCA Method A Cleanup Levels at depths ranging from 6 feet bgs (B-8-6) to 52.5 feet bgs (MW0504072D).

The lateral and vertical extent of the MTCA Site boundary has been defined. A plan view of the lateral extent of hydrocarbons in soil as the MTCA Site boundary can be found on Plate 4. Plates 12 and 13 illustrate the vertical extent of soil containing residual hydrocarbons at the Site.

6.2 Surface Water

Surface water investigations have not been performed at the Site.

6.3 Groundwater

Cumulative groundwater monitoring results are shown in Table 3. Groundwater analytical results from the most recent four quarters of groundwater sampling are shown on Plate 8.

Laboratory analytical results indicate that hydrocarbon concentrations have historically exceeded the MTCA Method A Cleanup Levels in samples collected from the following on- and off-Property wells: MW1, MW3 through MW10, MW12, MW13B, and SVE5 through SVE7. Groundwater analytical results from the most recent sampling event on June 6, 2014 indicate groundwater concentrations exceeding the MTCA Method A Cleanup Levels was observed in samples collected from monitoring well MW13B.

Off-Property there are three existing monitoring wells, MW10, MW12, and MW15. Groundwater samples collected from MW10 and MW12 have been below the MTCA Method A Cleanup Levels, since installation, with the exception of two sampling events. Results from the two events are considered anomalous and non-representative of off-Property groundwater conditions. Groundwater samples collected from off-Property well MW15 have been below the MTCA Method A Cleanup Levels since installation.

NAPL was historically detected in monitoring wells MW1 and MW6.

Based on review of historic boring logs and soil observations from the most recent confirmation soil investigation, the aquifer beneath the Site has been defined as the saturated zone encountered at approximately 50 feet bgs. Groundwater analytical results from the saturated zone indicate that concentrations of hydrocarbons are below the MTCA Method A Cleanup Levels and groundwater at the Site is protective of human health and the environment.

Recent samples collected from monitoring well MW13B have exceeded the MTCA Method A Cleanup Levels; however, these samples are not representative of groundwater conditions at the Site. Blow counts, boring refusals, and soil descriptions indicate a semi-confining layer encountered at approximately 20 to 30 feet bgs. Surface infiltration from the nearby planter encounters the semi-confining layer and creates a small mound in the vicinity of MW13B, SVE7, and SVE8. Surface water that mounds in this vicinity does not infiltrate to the saturated zone. Evidence of discontinuity between the shallow perched zone and saturated zone can be seen through the sporadic presence of water in the aforementioned wells. Additionally, boring logs in the vicinity indicate dry to moist soil conditions from 20 to 40 feet bgs, conditions not indicative of a continuous saturated aquifer above 50 feet bgs.

6.4 Sediment

Sediment investigations have not been performed at the Site.

6.5 Air/Soil Vapor

In April 1992, Kleinfelder collected vapor samples during vapor extraction tests, performed on wells MW1 and MW2 (Kleinfelder, 1992a).

Soil Vapor Sample Results (µg/L) ^a					
Sample ID	TPHg	Benzene	Ethylbenzene	Toluene	Total Xylenes
MW1	45,000	170	120	790	570
MW2	61,000	590	55	860	230

a = Analyzed in accordance with EPA Methods 5030/8015/8020

7 Confirmation Boring Investigation

In Cardno ERI's *Voluntary Cleanup Program Application and Confirmation Boring Work Plan*, dated May 13, 2014 (Work Plan), the advancement of 7 soil borings to depths ranging from 6 to 53 feet bgs on the Site was proposed (Cardno ERI, 2014b). The purpose of the work was to evaluate soil conditions where historical data indicated hydrocarbon concentrations above the MTCA Method A Cleanup Levels and in accordance with Ecology's recommendations.

A total of 31 soil samples collected from 15 boring locations during previous soil investigations exceeded the MTCA Method A Cleanup Levels (Plate 16, Table 1). Locations that required confirmation soil sampling are summarized in the Figure 1.

Figure 1: Historical Soil Locations Exceeding the MTCA Method A Cleanup Levels

Boring/Well ID	Sample ID	Sample Date	Depth (feet bgs)	Above MTCA
B1	B-1/S-3	10/25/91	15	B, T, X
	B-1/S-5	10/25/91	21	B
B4	B-4/S-4	10/25/91	19	B, X
B7	B-7-11	12/12/91	11	B
B8	B-8-11	12/12/91	11	B
B10	B-10-11	12/12/91	11	B, X
	B-10-30	12/12/91	30	B
B12	B-12-21	12/12/91	21	B
B15	B15-29	01/29/92	29	B
	B15-34	01/29/92	34	TPHg, B, T, X
	B15-39	01/29/92	39	B
B16/MW1	B16-24	01/29/92	24	TPHg
	B16-29	01/29/92	29	TPHg
	B16-34	01/29/92	34	TPHg, B
	B16-39	01/29/92	39	B
MW2	MW0204022A	04/02/92	12.5	TPHg
	MW0204022B	04/02/92	17.5	TPHg
MW5	MW0504072C	04/07/92	47.5	B
	MW0504072D	04/07/92	52.5	B
MW11	MW-11-10	09/15/94	10	TPHg, T, E, X
MW13	MW13-16-06225	06/22/95	16	TPHg, B
	MW13-Cuttings @ 17	06/22/95	17	TPHg, B, X
	MW13-20-6225	06/22/95	20	TPHg, B, T, X
	MW13-25-6225	06/22/95	25	TPHg, B, X
	MW13-30-6225	06/22/95	30	TPHg, B
	MW13-35-6225	06/22/95	35	TPHg, B, X
B19/MW14	S-20-B19	06/28/05	20	TPHg, B, T, E, X
B20/SVE6	S-15-B20	06/28/05	15	TPHg, B, T, X
	S-30-B20	06/28/05	30	TPHg, B, T, E, X
B22/SVE7	S-25-B22	06/28/05	25	TPHg, B, T, E, X
	S-30-B22	06/28/05	30	TPHg, B, T, X

Cardno ERI performed the fieldwork under the advisement of a professional geologist and in accordance with applicable regulatory guidelines, a site-specific safety plan, and Cardno ERI's Work Plan and standard field protocol (Appendix D).

7.1 Pre-Field Activities

Prior to the onset of drilling, Holocene Drilling, Inc. of Puyallup, Washington (Holocene) obtained Washington start cards from Ecology. Cardno ERI personnel visited the site to check for obstructions and to mark the proposed locations. Prior to field activities, Cardno ERI notified the Utility Notification Center (UNC) to mark public subsurface utilities and contracted Mt. View Locating Services, LLC to locate subsurface utilities in the area of the proposed borings. UNC and the property owner were notified at least 48 hours prior to the onset of field activities.

7.2 Confirmation Boring Advancement

On December 2 and December 3, 2014, Cardno ERI observed Holocene advance soil borings B27 through B34 at the Site using hand tools and air knife clearance equipment to 5 feet bgs. Following air knife clearance activities, Cardno ERI observed Holocene advance borings B27 through B34 at the Site using hollow-stem auger drilling equipment to total depths ranging from 39 to 53 feet bgs.

Soil samples were collected using a split-spoon sampler and a 300-pound hammer for geologic logging purposes and where historical soil data indicated hydrocarbons exceeded the MTCA Method A Cleanup Levels. Soil samples submitted for laboratory analysis were preserved in accordance with EPA Method 5035.

Following boring advancement and soil sampling, borings B27, B30, B32, and B33 were completed as SVE wells SVE8, SVE11, SVE9, and SVE10, respectively. SVE wells were constructed with 2-inch diameter, Schedule 40 PVC pipe. SVE wells SVE8, SVE9, SVE10, and SVE11 were screened 20 to 38 feet, 20 to 40 feet, 20 to 40 feet, and 22 to 37 feet bgs, respectively. Soil borings B28, B29, B31, and B34 were backfilled with bentonite chips from total depth to 2 feet bgs, and completed with concrete to match the surrounding surface from 2 feet bgs to grade. Descriptions of materials encountered during drilling, PID readings, and sampling intervals are provided on the boring logs (Appendix E).

7.3 Laboratory Analysis

Soil samples were submitted for analysis to TestAmerica Laboratories, Inc., state-certified laboratory, located in Nashville, Tennessee (TestAmerica), under COC protocol. The samples were analyzed for TPHg in accordance with NWTPH-Gx, TPHd and TPHmo in accordance with NWTPH-Dx, and BTEX in accordance with EPA Method 8260B. Additionally, select samples were analyzed for total lead in accordance with EPA Method 6010B and EDB, EDC, and MTBE in accordance with EPA Method 8260B. Copies of the laboratory analytical reports and COC documentation are enclosed as Appendix F. Laboratory analytical results are shown on Plate 17 and Table 1.

7.4 Waste Management

Soil, decontamination water, and purge water generated during drilling and well development activities was stored on site in DOT-approved, 55-gallon drums. Following profiling, the drums were transported by Clean Harbors Environmental Services, Inc. (Clean Harbors) for final disposal at the Clean Harbors Aragonite and the Grassy Mountain facilities located in Grantsville, Utah. A copy of the certificates of disposal is enclosed in Appendix G.

7.5 Confirmation Boring Results

Laboratory analytical results indicate 23 of 26 samples collected contained hydrocarbon concentrations below the MTCA Method A Cleanup Levels. The confirmation boring investigation confirmed that 28 of the 31 historic soil samples that exceeded the MTCA Method A Cleanup Levels are now below the MTCA

Method A Cleanup Levels and are protective of human health and the environment (Plate 18; Table 4). The remaining three soil samples that were not confirmed to be below the MTCA Method A Cleanup Levels were encountered at depths greater than 15 feet bgs, and are considered to be an incomplete pathway for soil direct contact per WAC 173-340-740(6)(d) points of compliance.

Soil samples S-30-B33, S-45-B33, and S-15-B31 were analyzed for additional analytes including EDB, EDC, and MTBE. These samples were selected based on higher concentrations of TPHg and BTEX observed during initial laboratory screening. Analytical results of the additional analytes indicate that concentrations are below the MTCA Method A Cleanup Levels and are protective of human health and the environment.

8 Conceptual Site Model

MTCA Chapter 173-340-200 defines the conceptual site model as a “conceptual understanding of a site that identifies potential or suspected sources of hazardous substances, types and concentrations of hazardous substances, potentially contaminated media, and actual and potential exposure pathways and receptors.” (WAC, 2014). Sections 3 through 6 have described in detail the sources of COPCs, how they were released, the types and extent of constituents detected at the Site, soil and groundwater containing hydrocarbons at the Site, and actual and potential receptors. This section provides a conceptual summary of the detailed information described in the previous sections. Plate 19 presents a graphical representation of the conceptual site model for the Site.

8.1 Sources of Constituents of Potential Concern

The sources of hydrocarbons on the Site are the gasoline releases to the soil of COPCs that were stored and distributed by Former Mobil Station 99BLV. These COPCs occurred via releases from USTs, dispensers, and conveyance systems.

The COPCs were released to soil; the hydrocarbons then spread by vapor transport into the vadose zone, by partitioning from soil vapor into groundwater, and by direct leaching to groundwater from saturated soils. The Site is currently paved so infiltration of rainwater that could leach COPCs from the soil or entrain soil vapors from chemicals and carry them downward to the water table is not likely to occur.

8.2 Fate and Transport

The fate and transport of the COPCs are governed by the specific properties of the constituents and the surrounding environmental conditions at the Site. Hydrocarbons released at the Site biodegrade most rapidly under aerobic conditions. Under aerobic conditions, oxygen acts as the electron acceptor, but under anaerobic conditions, naturally occurring organic matter or volatile hydrocarbons can act as the electron acceptor. The perched water-bearing zone is an oxidizing environment where naturally occurring microbes utilize hydrocarbons as a food source and proliferate until anaerobic conditions potentially occur. As a result, the transport of dissolved constituents is limited and concentrations decrease before they reach the MTCA Site boundary.

8.3 Exposure Pathways and Receptors

The Site is within a commercial area that includes public streets and commercial retail areas. The streets and parking lots are covered with asphalt or concrete and the commercial facilities include landscaped areas. There is no terrestrial habitat in the area. There is no active groundwater use in the area (Ecology, 2014b). Current exposure pathways and receptors are limited to the following:

- Incidental ingestion of surface soils;
- Inhalation of indoor air from volatilization of soil;
- Inhalation of outdoor air from volatilization of soil;
- Incidental ingestion of groundwater in an excavation;
- Inhalation of indoor air from volatilization of groundwater; and
- Inhalation of outdoor air from volatilization of groundwater.

The Site is capped with asphalt and no redevelopment is planned. Therefore, the vapor intrusion and ingestion pathways have been determined to be incomplete and have been excluded from the conceptual site model. Cleanup levels will be developed for the protection of groundwater pathway.

8.4 Potential Future Exposures Pathways and Receptors

Future land use in the area is expected to remain commercial, therefore the MTCA Method A Cleanup Levels are applicable to this Site. No significant changes in zoning are expected in the foreseeable future.

9 Cleanup Standards

Final cleanup levels are provided in Section 9.4.

9.1 Soil Cleanup Levels

The following pathways are considered for the establishment of soil cleanup levels at the Site:

- Protection of human health via direct exposure using the MTCA Method A Cleanup Levels;
- Protection of ecological receptors, an ecological evaluation is required under the MTCA;
- Protection of groundwater resources from COPCs leaching from soil; and
- Protection of indoor air from vapor intrusion from soil or groundwater containing hydrocarbon concentrations exceeding the MTCA Method A Cleanup Levels.

In developing cleanup levels, the following Site-specific information is relevant:

- The Site and the adjacent properties are currently commercially zoned;
- Soil containing residual hydrocarbons at the Site remains in the area surrounding the former USTs in the central portion of the Site.
- The uppermost groundwater observed at the Site lies within silty sand layers above sand. Depth to the first encountered groundwater is approximately 50 feet bgs.

9.2 Groundwater Cleanup Levels

The following pathways were considered for the establishment of groundwater cleanup levels at the Site:

- Protection of human health via direct exposure using the MTCA Method A Cleanup Levels.

In developing groundwater cleanup levels for the Site, the following Site-specific information is relevant:

- The uppermost groundwater observed at the Site lies within silty sand layers above sand. Depth to the first encountered groundwater is approximately 50 feet bgs.

9.3 Indoor Air Cleanup Levels

The indoor air pathway has been determined to be incomplete; the evaluation of cleanup levels was not conducted.

9.4 Final Cleanup Levels

Final cleanup levels are consistent with the MTCA Method A Cleanup Levels as shown in Sections 9.4.1 through 9.4.4.

9.4.1 TPHg

TPHg analyzed in accordance with Ecology Method NWTPH-Gx.

COPC	MTCA Cleanup Levels	
	Soil (mg/kg)	Groundwater (µg/L)
TPHg	30/100 ^a	800/1,000 ^b

a = TPHg soil cleanup level is 30 mg/kg, unless benzene is not detected in the sample, or if toluene, ethylbenzene, and total xylenes constitute less than 1% of the TPHg present in the sample. If these conditions are met, the cleanup level for TPHg may be elevated to 100 mg/kg.

b = 800 mg/L if benzene is present in groundwater; 1,000 mg/L if no detectable benzene in groundwater

9.4.2 TPHd and TPHmo

TPHd and TPHmo analyzed in accordance with Ecology Method NWTPH-Dx.

COPC	MTCA Cleanup Levels	
	Soil (mg/kg)	Groundwater (µg/L)
TPHd	2,000	500
TPHmo	2,000	500

9.4.3 VOCs

VOCs and HVOCs analyzed in accordance with EPA Method 8260B.

COPC	MTCA Cleanup Levels	
	Soil (mg/kg)	Groundwater (µg/L)
Benzene	0.03	5
Toluene	7	1,000
Ethylbenzene	6	700
Total Xylenes	9	1,000
MTBE	0.1	20
EDB	0.005	0.01
EDC	Not Applicable	5

9.5 Compliance

Points of compliance (POC), locations where the cleanup levels shall be achieved, are established for each applicable media at the Site. These media include groundwater and soil. The POCs for each medium are discussed in Sections 9.5.1 through 9.5.2.

9.5.1 Soil Points of Compliance

The POCs for soil are based on the following pathways of exposure:

- Soil direct contact – The MTCA standard POC for direct contact with soil is from the ground surface to a depth of 15 feet bgs. The recent confirmation boring investigation demonstrates that no COPCs exist within the top 15 feet of soil at the Site.
- Soil leaching COPCs to groundwater – This is a cross-media pathway that concerns all Site soil that is a potential source of COPCs to groundwater. Compliance is demonstrated through the physical isolation of soils containing residual concentrations of hydrocarbons encountered at 20 feet bgs to the saturated zone encountered at 50 feet bgs.

9.5.2 Groundwater Conditional Points of Compliance

The standard POC for groundwater under the MTCA is “throughout the site from the uppermost level of the saturated zone extending vertically to the lowest depth that could potentially be affected by the site” (WAC 173-340-720(8)(b)). The POC for groundwater, therefore, is the saturated zone encountered approximately 50 feet bgs.

10 Conclusions and Recommendations

10.1 Conclusions

Based on the information presented in this report, Cardno ERI concludes:

- A review of historical investigations beginning in 1992 indicates that the nature of the hydrocarbon release to soil and groundwater associated with Former Mobil Station 99BLV has been defined on the Site in accordance with WAC Chapter 173-340-350 (WAC, 2014).
- Groundwater analytical data from the saturated zone (aquifer) at 50 feet bgs indicates that concentrations of dissolved hydrocarbons are below the MTCA Method A Cleanup Levels. Groundwater concentrations observed in the vicinity of MW13 is restricted to mounded surface water that is not representative of true groundwater conditions at the Site. Boring logs and groundwater sampling data indicates that the mounded surface infiltration water is not hydraulically connected to the aquifer at the site. Groundwater is protective of human health and the environment under the MTCA.
- Soil concentrations historically exceeded the MTCA Method A Cleanup Levels in the vicinity of the former UST basin. The 2014 confirmation boring investigation confirms that all soil concentrations encountered from 0 to 15 feet bgs are below the MTCA Method A Cleanup Levels. Based on the points of compliance outlined in WAC 173-340-740(6)(d), soil COPCs are not present in the top 15 feet of soil. WAC 173-340-720(8)(b) compliance is demonstrated through the physical isolation of soil containing residual concentrations of hydrocarbons encountered at 20 feet bgs to the saturated zone encountered at 50 feet bgs; therefore, soil at the Site is protective of human health and the environment under the MTCA.
- During this investigation, EDB, EDC, and MTBE were analyzed for soil sample S-30-B33, which contained the highest concentrations of TPHg, toluene, ethylbenzene, and total xylenes. Concentrations of EDB, EDC, and MTBE from soil collected from S-30-B33 were detected below the MTCA Method A Cleanup Levels. Based on the compounds listed for a gasoline release in Ecology's *Table 830-1 Required Testing for Petroleum Releases* (WAC, 2014), all chemicals of potential concerns have been evaluated and are considered protective of human health and the environment under the MTCA.

10.2 Recommendations

Cardno ERI recommends submitting this report to Ecology with a request to meet with the Ecology site manager to discuss site characteristics and remedial efforts to date. The discussion will be intended to demonstrate that soil and groundwater at the site is protective of human health and the environment under the MTCA and that the site meets the conditions necessary for the receipt of an NFA determination.

11 Limitations

For any documents cited that were not generated by Cardno ERI, the data taken from those documents is used “as is” and is assumed to be accurate. Cardno ERI does not guarantee the accuracy of this data and makes no warranties for the referenced work performed nor the inferences or conclusions stated in these documents.

This report and the works performed have been undertaken in good faith, with due diligence and with the expertise, experience capability and specialized knowledge necessary to perform the Work in a good and workmanlike manner and within all accepted standards pertaining to providers of environmental services, in Washington at the time of investigation. No soil engineering or geotechnical references are implied or should be inferred. The evaluation of the geologic conditions at the site for this investigation is made from a limited number of data points. Subsurface conditions may vary away from these data points.

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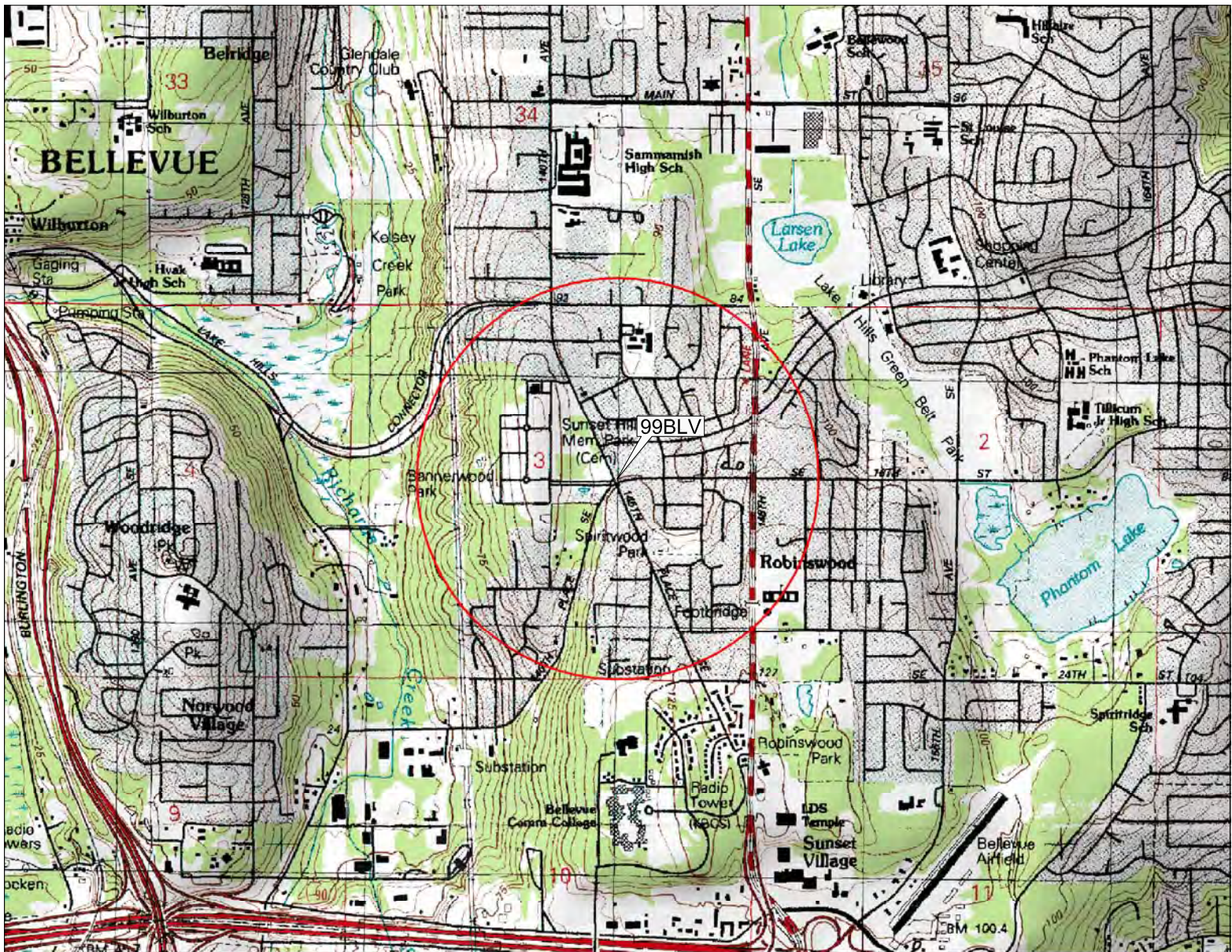
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13 Acronym List

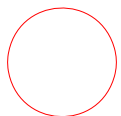
µg/L	Micrograms per liter	NAPL	Non-aqueous phase liquid
µs	Microsiemens	NEPA	National Environmental Policy Act
1,2-DCA	1,2-dichloroethane	NGVD	National Geodetic Vertical Datum
acfm	Actual cubic feet per minute	NPDES	National Pollutant Discharge Elimination System
AS	Air sparge	O&M	Operations and Maintenance
bgs	Below ground surface	ORP	Oxidation-reduction potential
BTEX	Benzene, toluene, ethylbenzene, and total xylenes	OSHA	Occupational Safety and Health Administration
CEQA	California Environmental Quality Act	OVA	Organic vapor analyzer
cfm	Cubic feet per minute	P&ID	Process & Instrumentation Diagram
COC	Chain of Custody	PAH	Polycyclic aromatic hydrocarbon
CPT	Cone Penetration (Penetrometer) Test	PCB	Polychlorinated biphenyl
DIPE	Di-isopropyl ether	PCE	Tetrachloroethene or perchloroethylene
DO	Dissolved oxygen	PID	Photo-ionization detector
DOT	Department of Transportation	PLC	Programmable logic control
DPE	Dual-phase extraction	POTW	Publicly owned treatment works
DTW	Depth to water	ppmv	Parts per million by volume
EDB	1,2-dibromoethane	PQL	Practical quantitation limit
EDC	1,2-dichloroethane	psi	Pounds per square inch
EPA	Environmental Protection Agency	PVC	Polyvinyl chloride
ESL	Environmental screening level	QA/QC	Quality assurance/quality control
ETBE	Ethyl tertiary butyl ether	RBSL	Risk-based screening levels
FID	Flame-ionization detector	RCRA	Resource Conservation and Recovery Act
fpm	Feet per minute	RL	Reporting limit
GAC	Granular activated carbon	scfm	Standard cubic feet per minute
gpd	Gallons per day	SSTL	Site-specific target level
gpm	Gallons per minute	STLC	Soluble threshold limit concentration
GWPTS	Groundwater pump and treat system	SVE	Soil vapor extraction
HVOC	Halogenated volatile organic compound	SVOC	Semivolatile organic compound
J	Estimated value between MDL and PQL (RL)	TAME	Tertiary amyl methyl ether
LEL	Lower explosive limit	TBA	Tertiary butyl alcohol
LPC	Liquid-phase carbon	TCE	Trichloroethene
LRP	Liquid-ring pump	TOC	Top of well casing elevation; datum is msl
LUFT	Leaking underground fuel tank	TOG	Total oil and grease
LUST	Leaking underground storage tank	TPHd	Total hydrocarbons as diesel
MCL	Maximum contaminant level	TPHg	Total hydrocarbons as gasoline
MDL	Method detection limit	TPHmo	Total hydrocarbons as motor oil
mg/kg	Milligrams per kilogram	TPHs	Total hydrocarbons as stoddard solvent
mg/L	Milligrams per liter	TRPH	Total recoverable hydrocarbons
mg/m ³	Milligrams per cubic meter	UCL	Upper confidence level
MPE	Multi-phase extraction	USCS	Unified Soil Classification System
MRL	Method reporting limit	USGS	United States Geologic Survey
msl	Mean sea level	UST	Underground storage tank
MTBE	Methyl tertiary butyl ether	VCP	Voluntary Cleanup Program
MTCA	Model Toxics Control Act	VOC	Volatile organic compound
NAI	Natural attenuation indicators	VPC	Vapor-phase carbon



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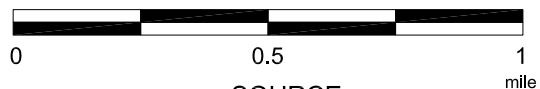
FN 0311600001

EXPLANATION



1/2-mile radius circle

APPROXIMATE SCALE

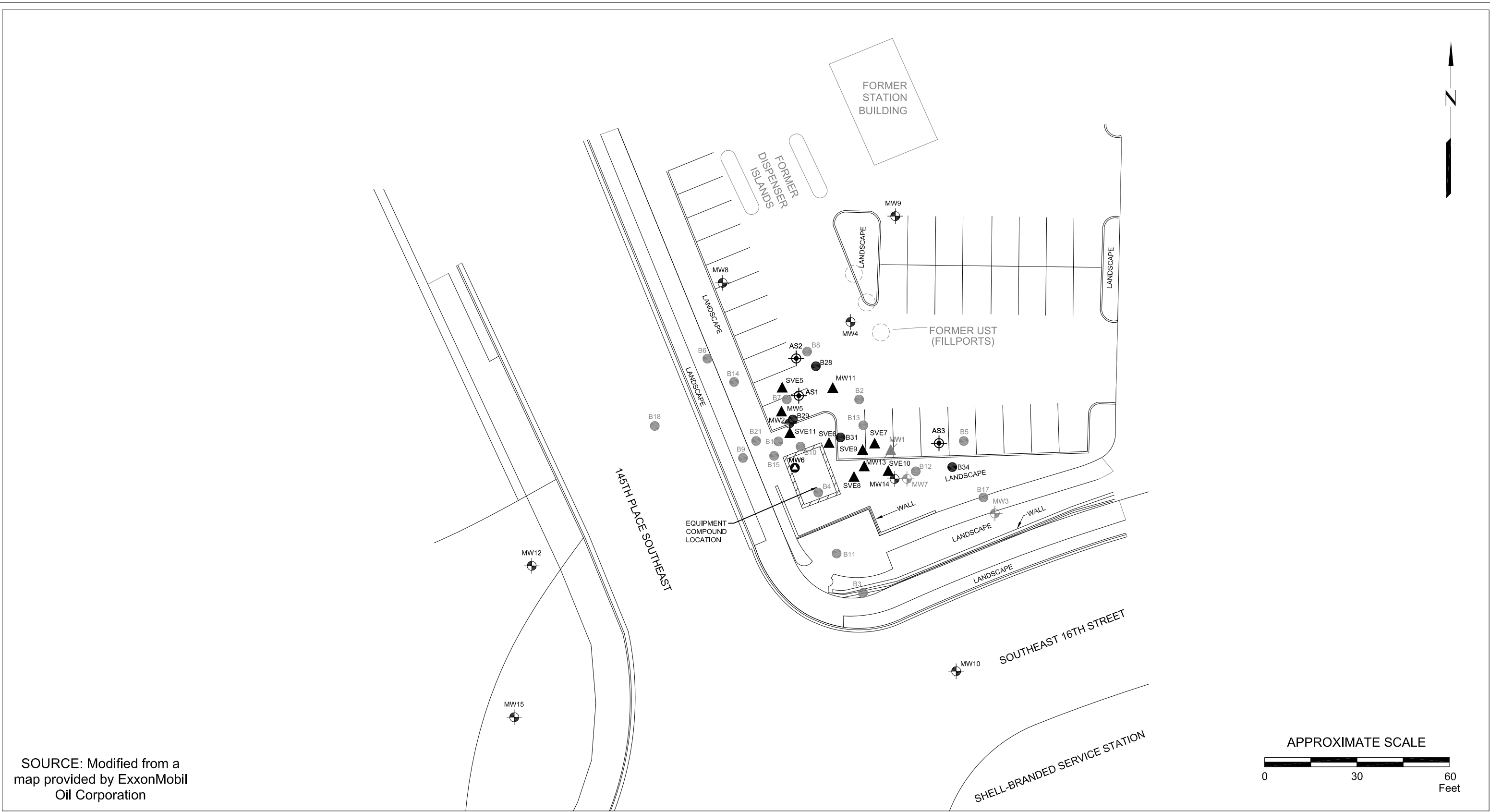


SOURCE:
Modified from a map
provided by
DeLorme 3-D TopoQuads



SITE LOCATION MAP
FORMER MOBIL STATION 99BLV
1500 145th Place Southeast
Bellevue, Washington

PROJECT NO.
031160
PLATE
1
RGH: 09/29/11



SOURCE: Modified from a map provided by ExxonMobil Oil Corporation

FN 0311600002



GENERALIZED SITE PLAN

FORMER MOBIL STATION 99BLV
1500 145th Place Southeast
Bellevue, Washington

EXPLANATION

- MW15 Groundwater Monitoring Well
- AS3 Air Sparging Well
- SVE11 Soil Vapor Extraction Well
- MW13A,B,C Vadose Zone Vapor Extraction Well Cluster

- MW7 Covered Groundwater Monitoring Well
- B34 Soil Boring
- B24 Historical Soil Boring
- MW1 Destroyed Soil Vapor Extraction Well
- MW6 Dual Phase Extraction Well

PROJECT NO.

031160

PLATE

2

EJB:02/17/15



Tax Parcel ID Number
032405-9162



SOURCE: Modified from a map provided by ExxonMobil Oil Corporation

0311600002



PROPERTY PARCEL MAP

FORMER MOBIL STATION 99BLV
1500 145th Place Southeast
Bellevue, Washington

EXPLANATION

- MW15 Groundwater Monitoring Well
- AS3 Air Sparging Well
- SVE11 Soil Vapor Extraction Well
- MW13A,B,C Vadose Zone Vapor Extraction Well Cluster

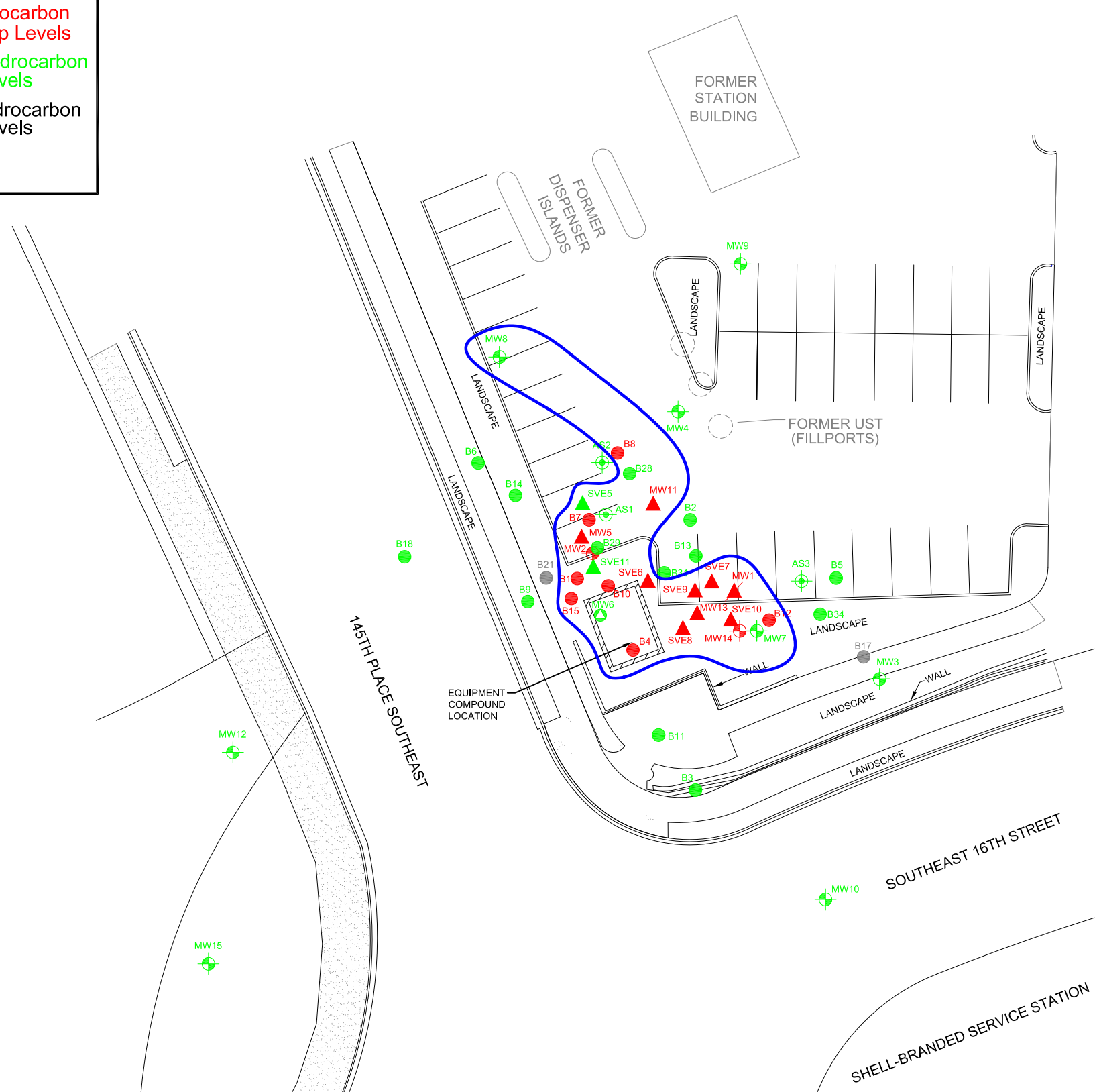
- Concrete
- MW7 Covered Groundwater Monitoring Well
- MW1 Destroyed Soil Vapor Extraction Well
- MW6 Dual Phase Extraction Well
- Parcel Boundary

PROJECT NO.
031160

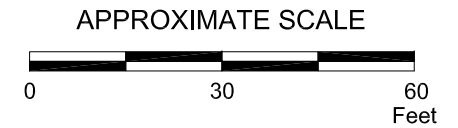
PLATE
3

RRT: 01/21/15

- Numbers or Symbols in Red Indicate Residual Hydrocarbon Concentrations Exceeding MTCA Method A Cleanup Levels
- Numbers or Symbols in Green Indicate Residual Hydrocarbon Concentrations Below MTCA Method A Cleanup Levels
- Numbers or Symbols in Black Indicate Residual Hydrocarbon Concentrations Below MTCA Method A Cleanup Levels Confirmed by Subsequent Confirmation Boring
- Numbers or Symbols in Gray Indicate No Data Available for Numbers or Symbols



SOURCE: Modified from a map provided by ExxonMobil Oil Corporation



FN 0311600002



MTCA SITE BOUNDARY MAP

FORMER MOBIL STATION 99BLV
1500 145th Place Southeast
Bellevue, Washington

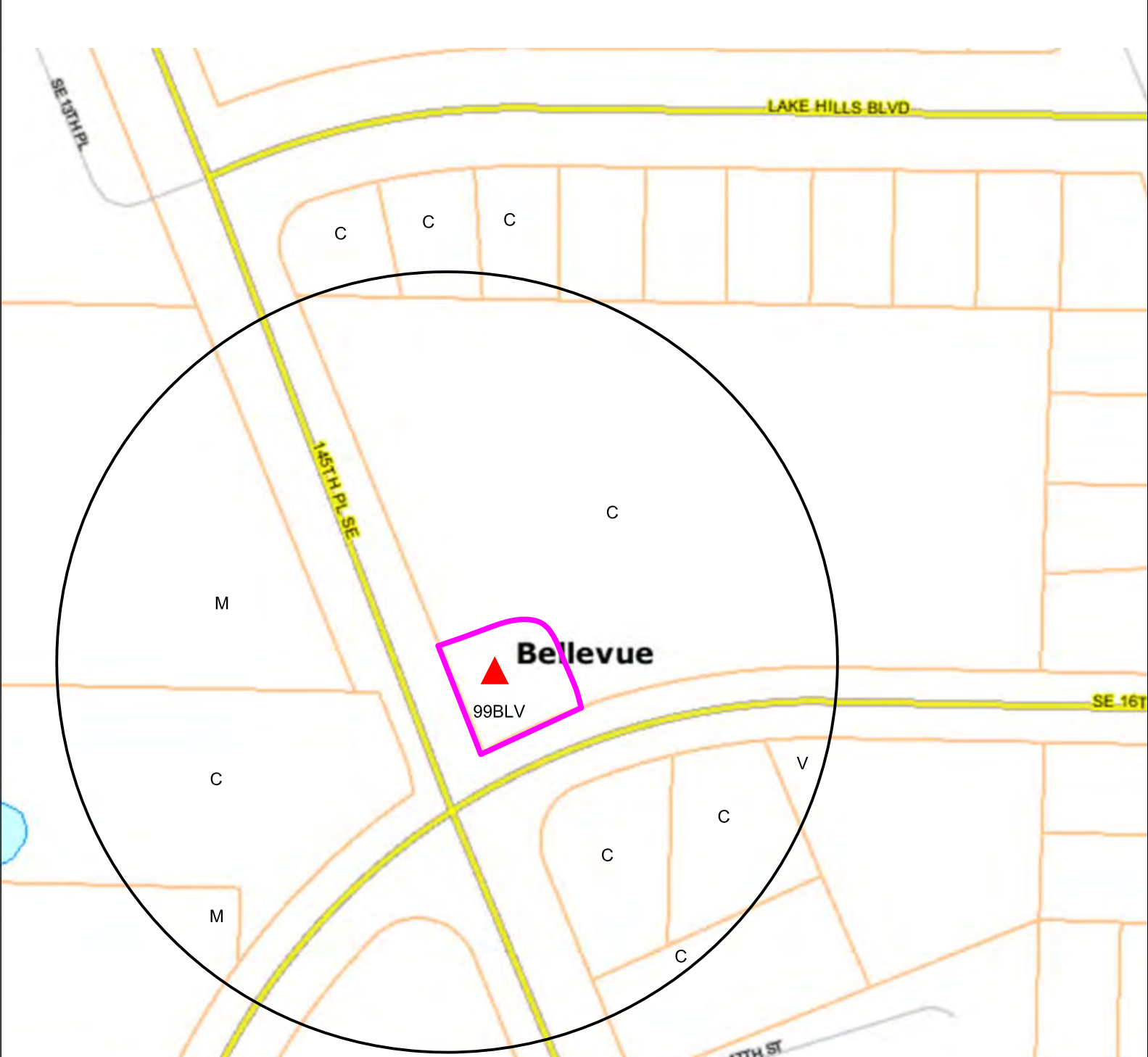
EXPLANATION

- | | | | |
|-----------|-------------------------------------------|-----|--------------------------------------|
| MW15 | Groundwater Monitoring Well | MW1 | Destroyed Soil Vapor Extraction Well |
| AS3 | Air Sparging Well | MW6 | Dual Phase Extraction Well |
| SVE11 | Soil Vapor Extraction Well | B24 | Historical Soil Boring |
| MW13A,B,C | Vadose Zone Vapor Extraction Well Cluster | — | MTCA Site Boundary |

PROJECT NO.
031160




PLATE
4

RRT: 01/21/15



FN 0311600003

EXPLANATION

-  Site
-  Site Boundary
-  100 meter radius around the site
- M Multi-Family Residence
- V Vacant
- C Commercial Building



SOURCE:
Modified from a map
provided by
King County GIS Center



**NEIGHBORHOOD ZONING AND
PARCEL MAP**

FORMER MOBIL STATION 99BLV
1500 145th Place Southeast
Bellevue, Washington

PROJECT NO.

031160

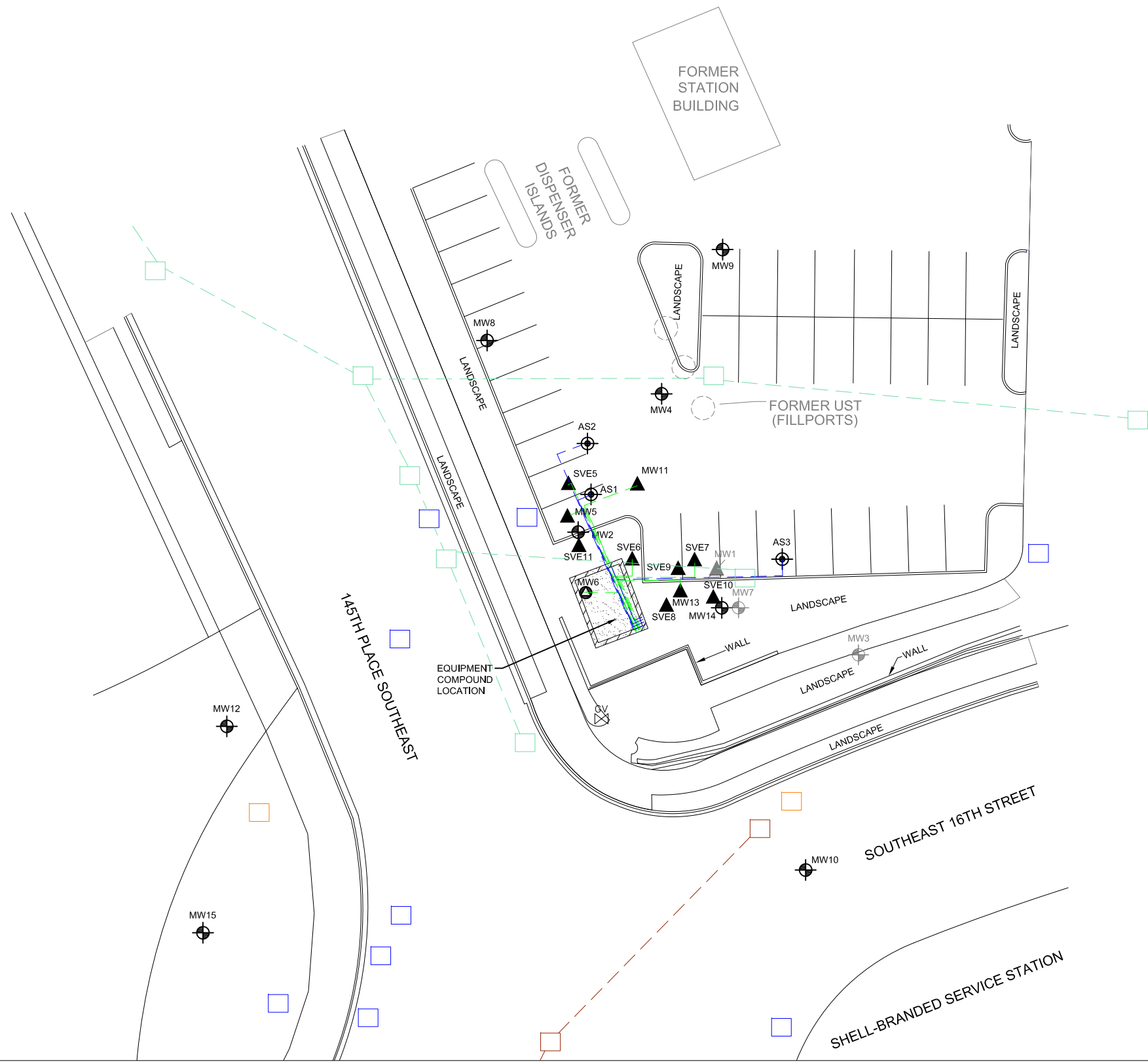
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5

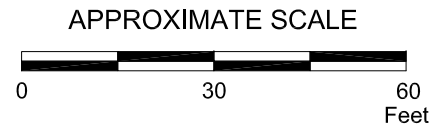
EJB: 07/23/13

UTILITY VAULTS

- Water Vault
- Sewer Vault
- Storm Drain
- Communication Vault
- Inferred Storm Drain Line
- Inferred Sewer Line



SOURCE: Modified from a map provided by ExxonMobil Oil Corporation



FN 0311600002



UTILITY LOCATIONS MAP

FORMER MOBIL STATION 99BLV
1500 145th Place Southeast
Bellevue, Washington

EXPLANATION

- | | | | |
|-----------|-------------------------------------------|--|--------------------------------------|
| MW15 | Groundwater Monitoring Well | | Concrete |
| AS3 | Air Sparging Well | | Covered Groundwater Monitoring Well |
| SVE11 | Soil Vapor Extraction Well | | Destroyed Soil Vapor Extraction Well |
| MW13A,B,C | Vadose Zone Vapor Extraction Well Cluster | | Dual Phase Extraction Well |

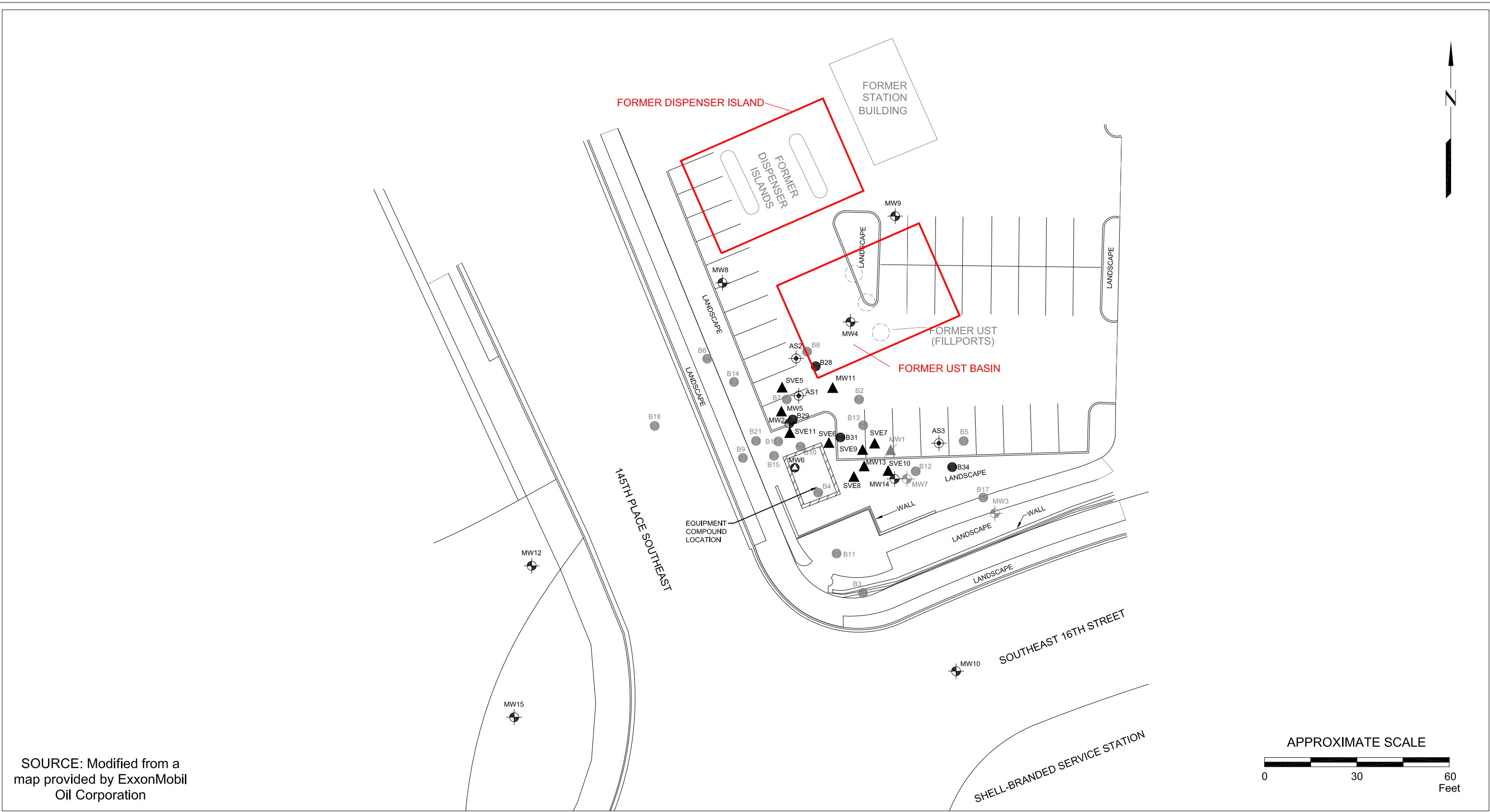
PROJECT NO.

031160

PLATE

6

RRT: 03/30/15



SOURCE: Modified from a map provided by ExxonMobil Oil Corporation

FN 0311600002



POTENTIAL HYDROCARBON SOURCES MAP

FORMER MOBIL STATION 99BLV
1500 145th Place Southeast
Bellevue, Washington

EXPLANATION	
	MW15 Groundwater Monitoring Well
	AS3 Air Sparging Well
	SVE11 Soil Vapor Extraction Well
	MW13A,B,C Vadose Zone Vapor Extraction Well Cluster
	MW7 Covered Groundwater Monitoring Well
	B34 Soil Boring
	B24 Historical Soil Boring
	MW1 Destroyed Soil Vapor Extraction Well
	MW6 Dual Phase Extraction Well

PROJECT NO.
031160

PLATE
7

RRT: 01/22/15

Laboratory Results in µg/L	
MW13B	Well ID
03/06/14	Sample Date
2,860	Total Petroleum Hydrocarbons as Gasoline
1,030	Total Petroleum Hydrocarbons as Diesel
<93.5	Total Petroleum Hydrocarbons as Motor Oil
2.60	Benzene
9.44	Toluene
28.6	Ethylbenzene
65.7	Total Xylenes
12.1	Total Lead
7.70	Dissolved Lead

-- = Not Analyzed
<1.00 = Less than the Stated Laboratory Reporting Limit

● Numbers or Well Symbols in Red Indicate Dissolved Hydrocarbon Concentrations Which Exceeded MTCA Method A Cleanup Levels
● Numbers or Well Symbols in Blue Indicate Dissolved Hydrocarbon Concentrations Below MTCA Method A Cleanup Levels
● No Data Available for Numbers or Well Symbols in Black

g = Insufficient Sample Volume
Specific Well Sampling Dates Selected Based on Four Consecutive Quarters Below the MTCA Method A Cleanup Levels or Quarters of Analytical Data Available

MW8				
12/29/11	10/30/13	03/06/14	06/04/14	
<100	<100	<100	<100	
<96.2	<93.5	<93.5	<97.1	
<240	<93.5	<93.5	<97.1	
<1.00	<1.00	<1.00	<1.00	
<1.00	<1.00	<1.00	<1.00	
<1.00	<1.00	<1.00	<1.00	
<3.00	<2.00	<3.00	<2.00	
13.7	12.2	91.0	<5.00	
<5.00	<5.00	<5.00	<5.00	

MW9				
12/29/11	10/30/13	03/06/14	06/04/14	
<100	<100	<100	<100	
<94.3	<93.5	<93.5	<98.0	
<236	<93.5	<93.5	<98.0	
<1.00	<1.00	<1.00	<1.00	
<1.00	<1.00	<1.00	<1.00	
<1.00	<1.00	<1.00	<1.00	
<3.00	<2.00	<3.00	<2.00	
10.7	<5.00	9.60	<5.00	
<50.0	<5.00	<5.00	<5.00	

MW4				
12/29/11	10/30/13	03/06/14	06/04/14	
<100	<100	<100	<100	
<96.2	<93.5	<93.5	<94.3	
<240	<93.5	<93.5	<94.3	
<1.00	<1.00	<1.00	<1.00	
<1.00	<1.00	<1.00	<1.00	
<1.00	<1.00	<1.00	<1.00	
<3.00	<2.00	<3.00	<2.00	
38.5	11.0	10.2	<5.00	
<5.00	<5.00	7.80	<5.00	

MW5				
06/17/13	10/30/13	03/06/14	06/04/14	
<100	<100	<100	<100	
129	<93.5	<94.3	<93.9	
<94.3	<93.5	<94.3	<93.9	
<1.00	<1.00	<1.00	<1.00	
<1.00	<1.00	<1.00	<1.00	
<1.00	<1.00	<1.00	<1.00	
<3.00	<2.00	<3.00	<2.00	
11.5	16.1	12.5	26.1	
<5.00	<5.00	8.40	5.40	

MW6				
06/17/13	10/30/13	03/06/14	06/04/14	
<100	<100	<100	<100	
<94.3	<93.5	<93.5	<93.9	
<94.3	<93.5	<93.5	<93.9	
<1.00	<1.00	<1.00	<1.00	
<1.00	<1.00	<1.00	<1.00	
<1.00	<1.00	<1.00	<1.00	
<3.00	<2.00	<3.00	<2.00	
6.20	236	6.80	<5.00	
<5.00	<5.00	<5.00	<5.00	

MW12				
05/25/11	09/01/11	12/29/11	10/30/13	
<100	<100	<100	<100	
<94.3	<98.0	<94.3	<93.5	
<94.3	<245	<236	<93.5	
<1.00	<1.00	<1.00	<1.00	
<1.00	<1.00	<1.00	<1.00	
<1.00	<1.00	<1.00	<1.00	
<3.00	<3.00	<3.00	<2.00	
<5.00	<5.00	<5.00	<5.00	
<5.00	<5.00	<5.00	<5.00	

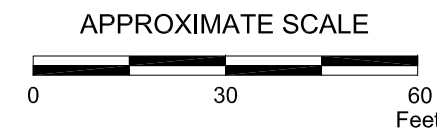
MW15				
05/25/11	09/01/11	12/29/11	10/30/13	
<100	<100	<100	<100	
<105	<99.0	<111	<93.5	
<105	<248	<278	<93.5	
<1.00	<1.00	<1.00	<1.00	
<1.00	<1.00	<1.00	<1.00	
<1.00	<1.00	<1.00	<1.00	
<3.00	<3.00	<3.00	<2.00	
<5.00	13.1	85.5	5.50	
<5.00	<5.00	<5.00	<5.00	

MW14				
12/29/11	10/30/13	03/06/14	06/04/14	
<100	<100	<100	<100	
<97.1	<93.5	<94.3	<93.9	
<243	<93.5	<94.3	<93.9	
<1.00	<1.00	<1.00	<1.00	
<1.00	<1.00	<1.00	<1.00	
<1.00	<1.00	<1.00	<1.00	
<3.00	<2.00	<3.00	<2.00	
18.7	6.90	18.7	<5.00	
<5.00	<5.00	<5.00	<5.00	

MW13C	
03/06/14	
<100	
<94.3	
<94.3	
<1.00	
<1.00	
<3.00	
<50.0	
<5.00	

MW13B			
05/25/11	09/01/11	03/06/14	
8,550	-g	2,860	
557	-g	1,030	
<111	-g	<93.5	
3.58	<1.00	2.60	
9.06	6.94	9.44	
20.7	<1.00	28.6	
60.1	541	65.7	
34.3	-g	12.1	
<5.00	-g	7.70	

SOURCE: Modified from a map provided by ExxonMobil Oil Corporation



FN 0311600002



GROUNDWATER SAMPLE ANALYSES MAP

FORMER MOBIL STATION 99BLV
1500 145th Place Southeast
Bellevue, Washington

EXPLANATION

- MW15 Groundwater Monitoring Well
- NS Not Sampled
- AS3 Air Sparging Well
- SVE7 Soil Vapor Extraction Well
- MW1 Destroyed Soil Vapor Extraction Well
- MW6 Dual Phase Extraction Well

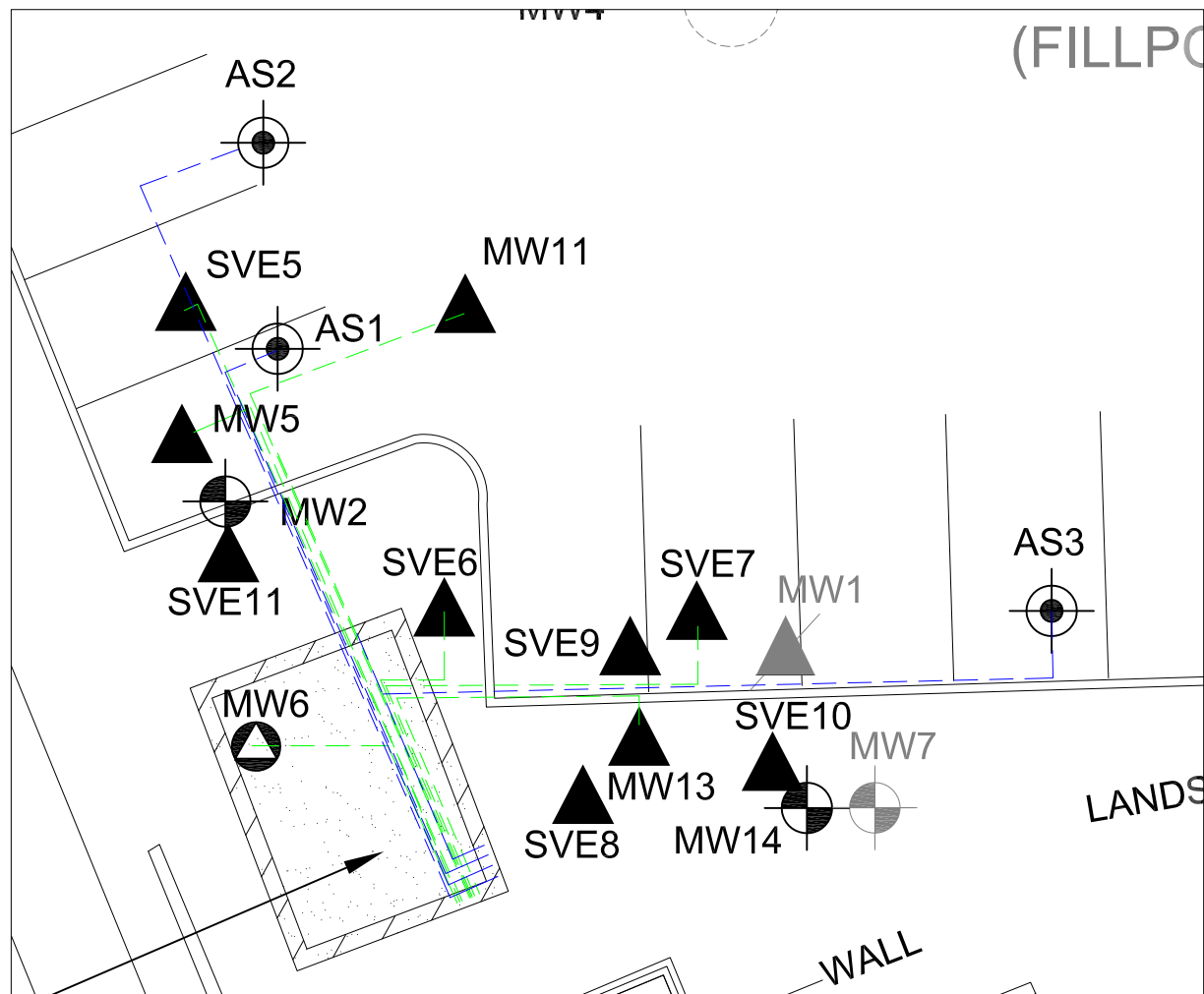
PROJECT NO.

031160

PLATE

8

RRT: 12/20/13



INSET MAP



SOURCE: Modified from a map provided by ExxonMobil Oil Corporation

FN 0311600002



REMEDIATION SYSTEM MAP

FORMER MOBIL STATION 99BLV
1500 145th Place Southeast
Bellevue, Washington

EXPLANATION

- MW15 Groundwater Monitoring Well
- AS3 Air Sparging Well
- SVE11 Soil Vapor Extraction Well
- MW13A,B,C Vadose Zone Vapor Extraction Well Cluster
- MW7 Covered Groundwater Monitoring Well
- MW1 Destroyed Soil Vapor Extraction Well
- MW6 Dual Phase Extraction Well

PROJECT NO.

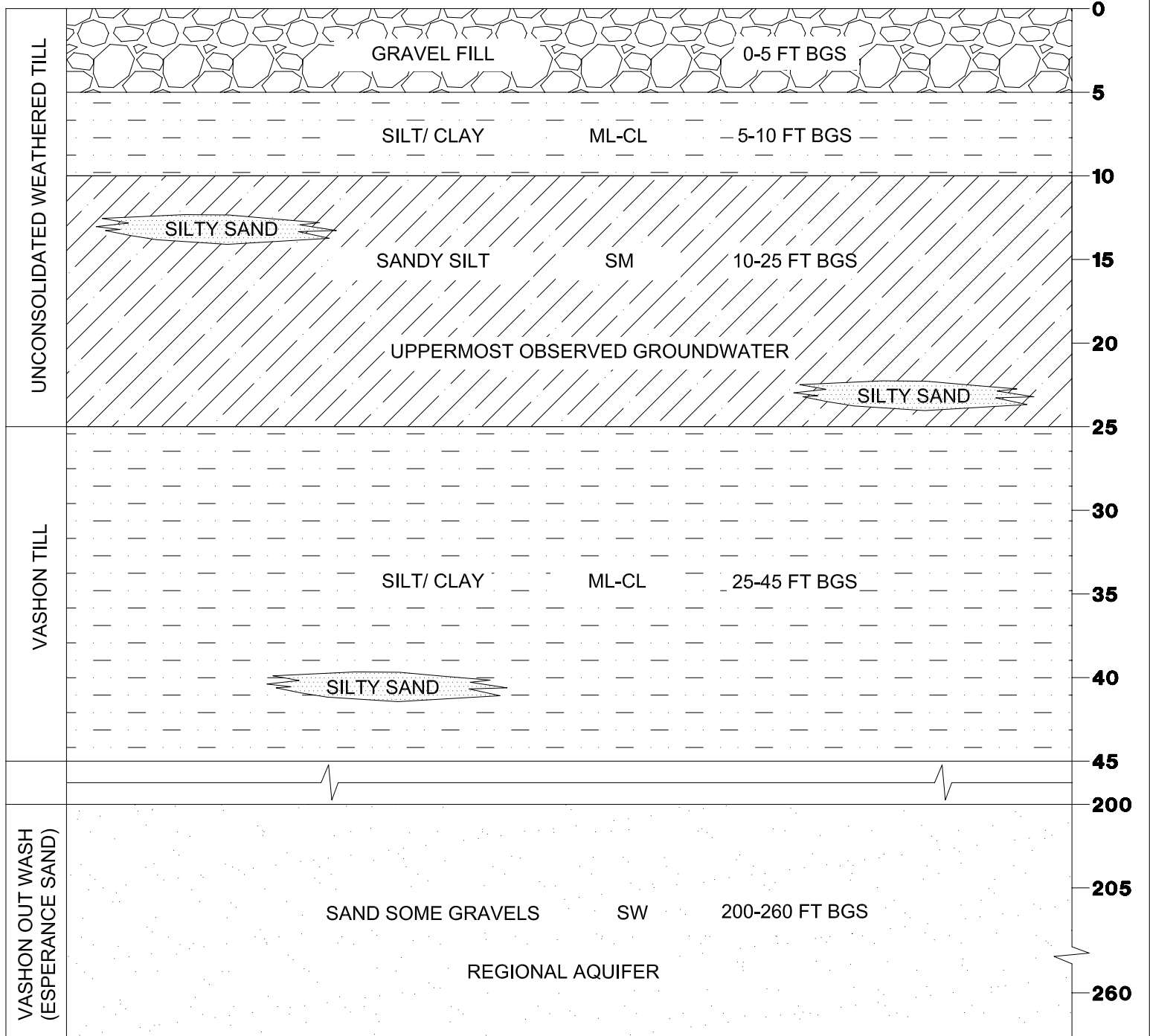
031160

PLATE

9





RRT: 03/31/14

DEPTH BELOW
GROUND SURFACE



FN 0311600004

EXPLANATION

-  GRAVEL (Fill)
-  SAND (SW)
-  SILT/CLAY (ML/CL)
-  SANDY SILT
-  SILTY SAND

FT BGS = FEET BELOW GROUND SURFACE



**GENERALIZED GEOLOGIC
CROSS SECTION**
FORMER MOBIL STATION 99BLV
1500 145th Place Southeast
Bellevue, Washington

PROJECT NO.

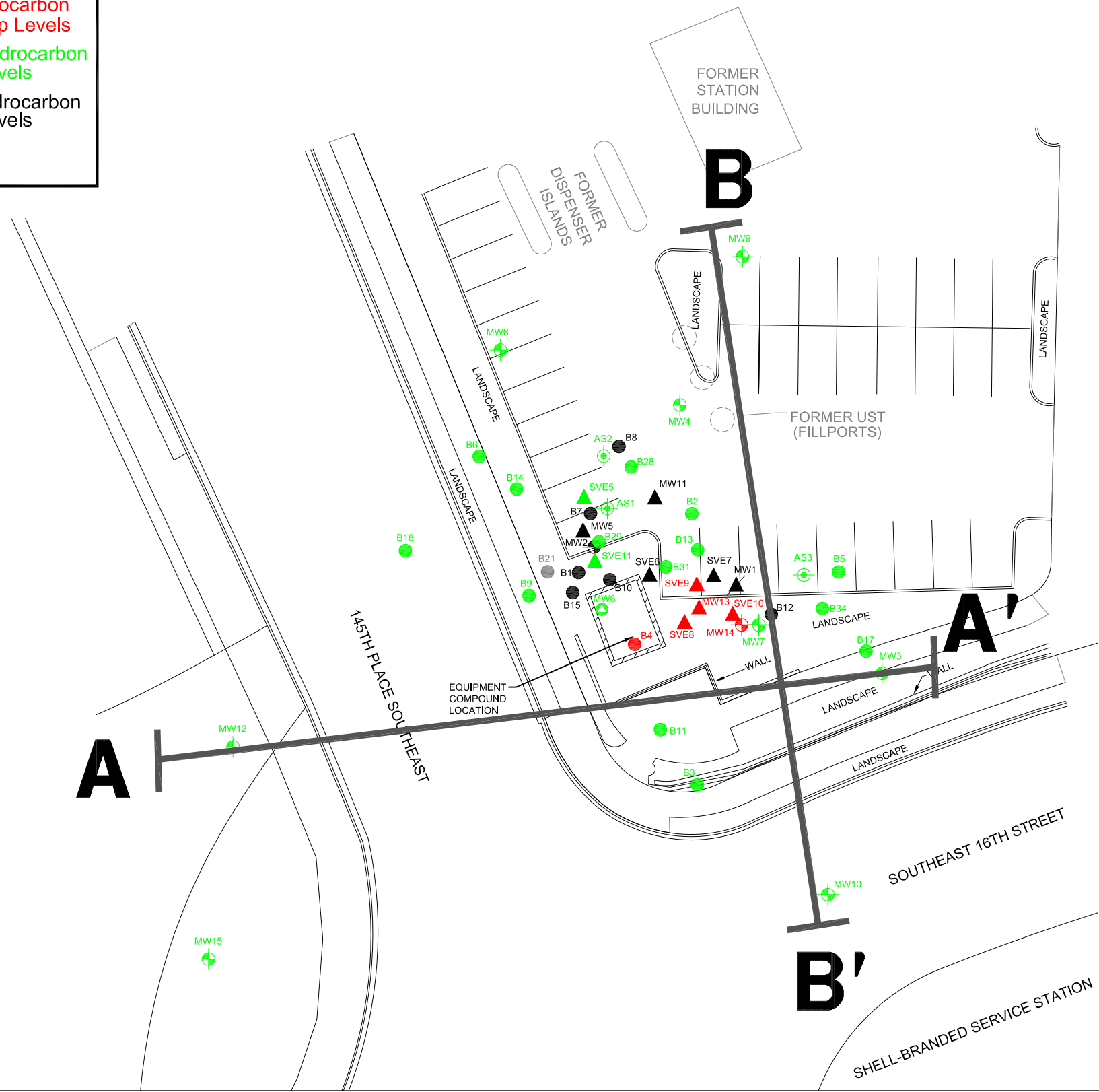
031160

PLATE

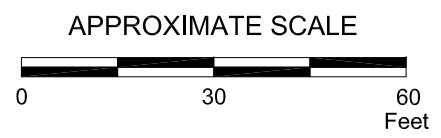
10

RRT: 01/05/15

- Numbers or Symbols in Red Indicate Residual Hydrocarbon Concentrations Exceeding MTCA Method A Cleanup Levels
- Numbers or Symbols in Green Indicate Residual Hydrocarbon Concentrations Below MTCA Method A Cleanup Levels
- Numbers or Symbols in Black Indicate Residual Hydrocarbon Concentrations Below MTCA Method A Cleanup Levels Confirmed by Subsequent Confirmation Boring
- No Data Available for Numbers or Symbols in Gray



SOURCE: Modified from a map provided by ExxonMobil Oil Corporation



CROSS SECTION TRAVERSE MAP

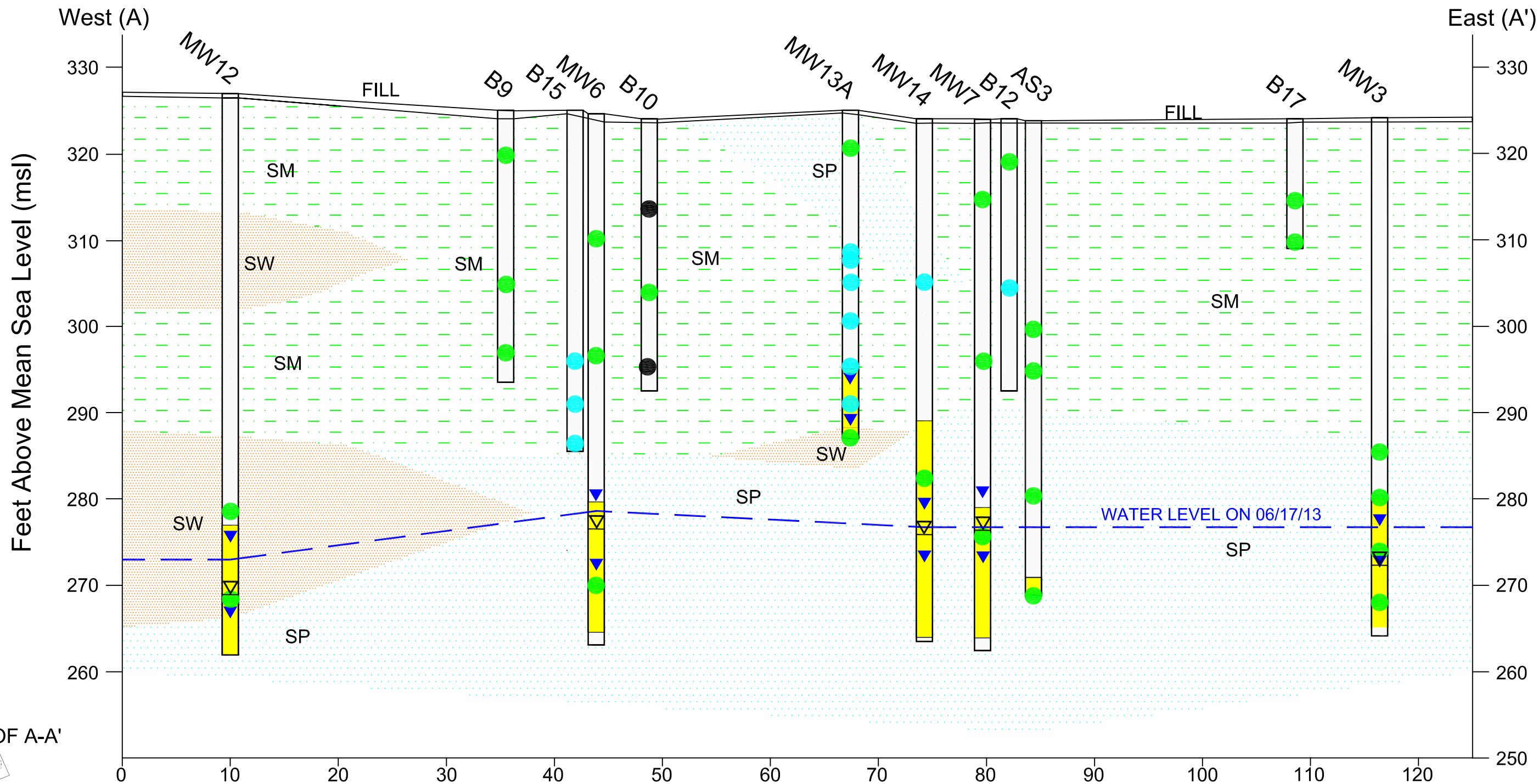
FORMER MOBIL STATION 99BLV
1500 145th Place Southeast
Bellevue, Washington

EXPLANATION	
MW15	Groundwater Monitoring Well
AS3	Air Sparging Well
SVE11	Soil Vapor Extraction Well
MW13A,B,C	Vadose Zone Vapor Extraction Well Cluster
MW1	Destroyed Soil Vapor Extraction Well
MW6	Dual Phase Extraction Well
24	Historical Soil Boring

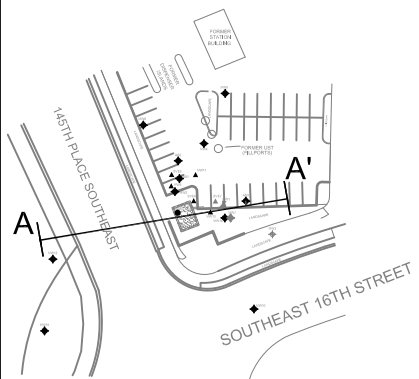
PROJECT NO.
031160

PLATE
11

RRT: 01/22/15



LOCATION OF A-A'



- SP SAND, Poorly Graded
- SW SAND, Well Graded
- SM SILTY SAND
- ▼ Historic High/Low Groundwater Level
- ▽ Water Encountered During Drilling
- MW12, B17, & MW3 Projected onto Cross Section
- MW13A was dry on 06/17/13



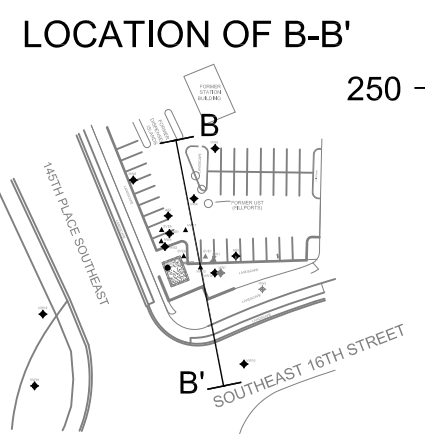
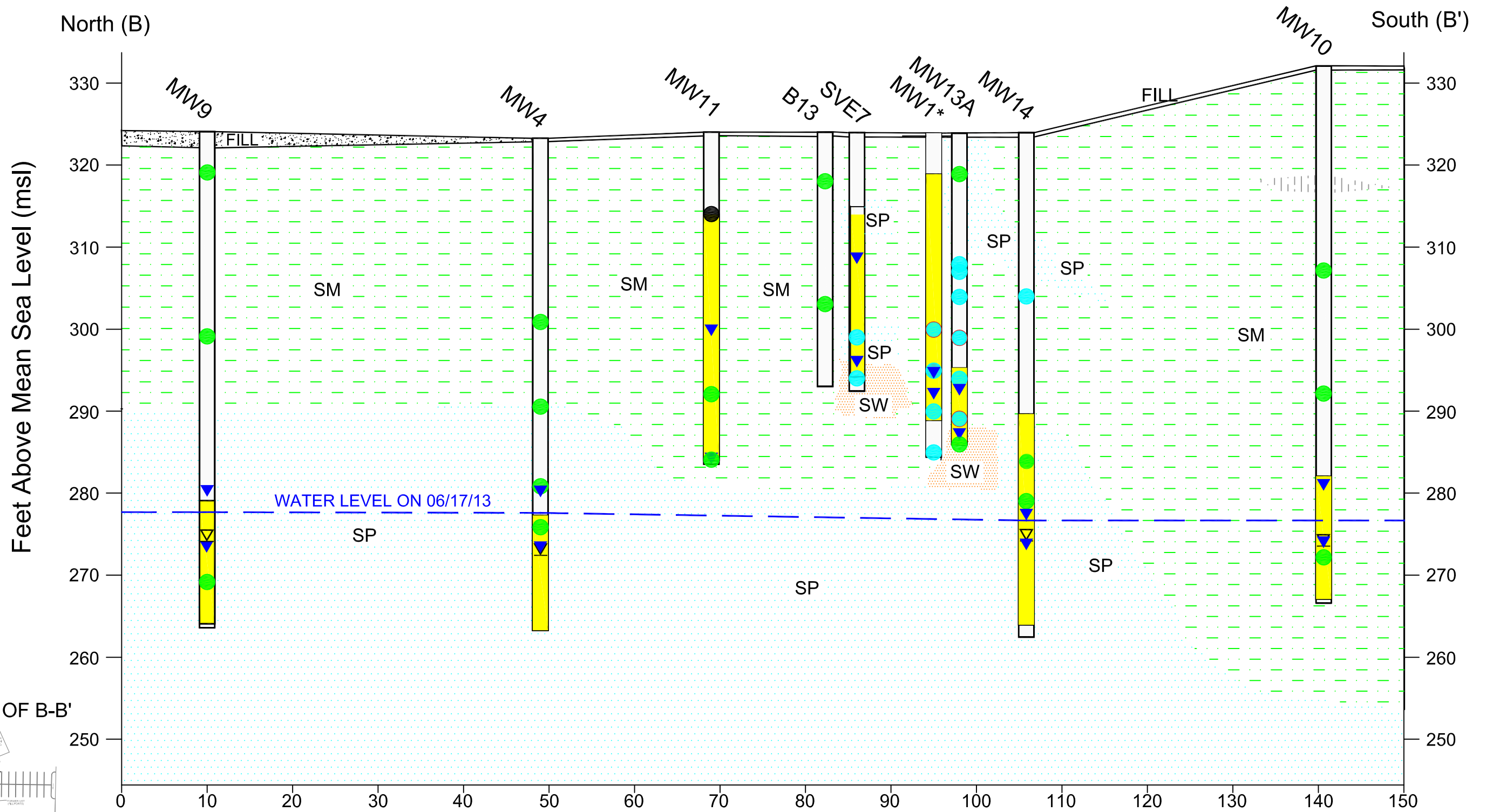
CROSS SECTION WEST-EAST
FORMER MOBIL STATION 99BLV
 1500 145th Place Southeast
 Bellevue, Washington

- Numbers or Symbols in Green Indicate Residual Hydrocarbon Concentrations Below the MTCA Cleanup Levels
- Numbers or Symbols in Black Indicate Residual Hydrocarbon Concentrations Below MTCA Method A Cleanup Levels Confirmed by Subsequent Confirmation Boring
- Numbers or Symbols in Cyan Indicate Residual Hydrocarbon Concentrations Which Exceed the MTCA Cleanup Levels; However, are Deeper Than the Site Point of Compliance
- Well Screen Interval
- Backfill or Blank Interval

PROJECT NO.
 031160

PLATE
 12

RRT: 03/25/14



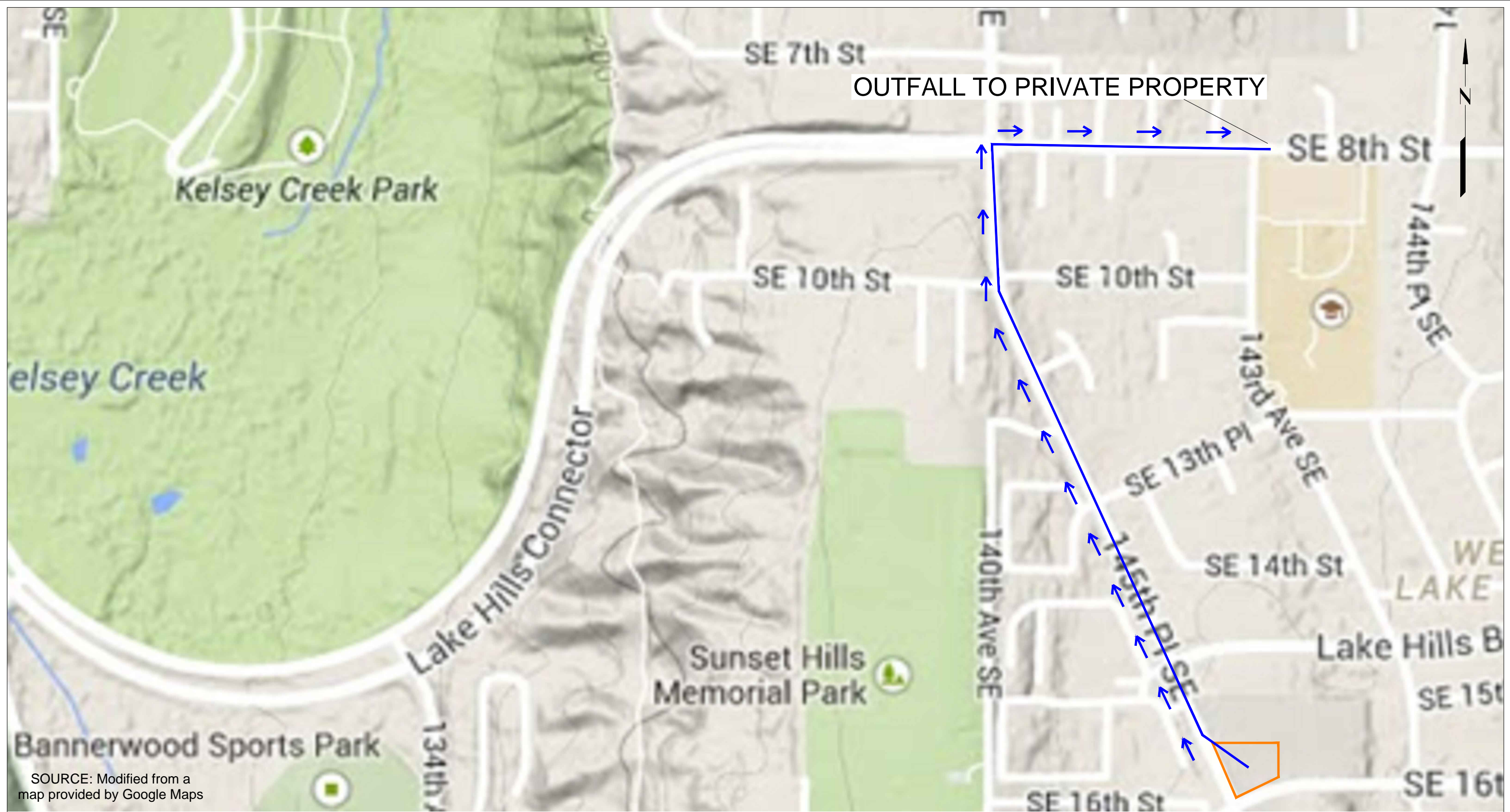
SP SAND, Poorly Graded SM SILTY SAND FILL
SW SAND, Well Graded ML SILT ▼ Historic High/Low Groundwater Level
 Water Encountered During Drilling
 MW9 & MW10 Projected onto Cross Section
 MW13A and SVE7 were dry on 06/17/13



CROSS SECTION NORTH-SOUTH
 FORMER MOBIL STATION 99BLV
 1500 145th Place Southeast
 Bellevue, Washington

● Numbers or Symbols in Green Indicate Residual Hydrocarbon Concentrations Below the MTCA Cleanup Levels
 ● Concentrations Below MTCA Method A Cleanup Levels Confirmed by Subsequent Confirmation Boring
 ● Numbers or Symbols in Cyan Indicate Residual Hydrocarbon Concentrations Which Exceed the MTCA Cleanup Levels; However, are Deeper Than the Site Point of Compliance
 Well Screen Interval
 Backfill or Blank Interval
 * = Destroyed Well

PROJECT NO.
 031160
PLATE
 13
 RRT: 03/25/14



SOURCE: Modified from a map provided by Google Maps

FN 0311600002



SURFACE WATER DRAINAGE MAP

FORMER MOBIL STATION 99BLV
1500 145th Place Southeast
Bellevue, Washington

EXPLANATION



Storm Sewer Line

Storm Water Flow Path



PROJECT NO.

031160

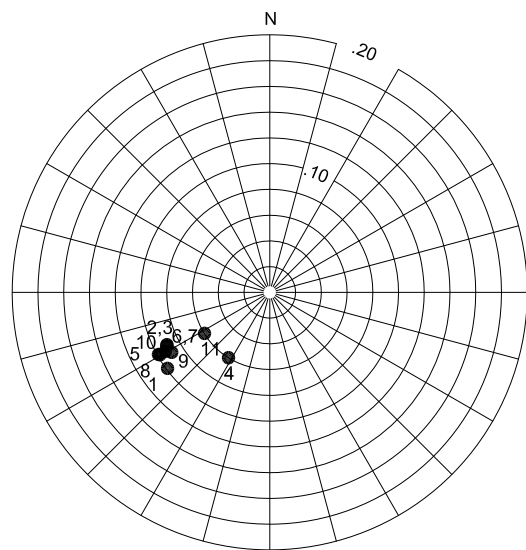
PLATE

14

RRT: 01/21/15

- Numbers or Well Symbols in Red Indicated Dissolved Hydrocarbon Concentrations Which Exceed MTCA Method A Cleanup Levels
- Numbers or Well Symbols in Blue Indicated Dissolved Hydrocarbon Concentrations Below MTCA Method A Cleanup Levels
- No Data Available for Numbers or Well Symbols in Black

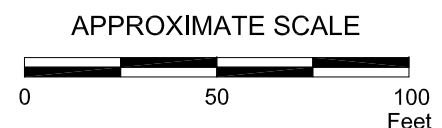
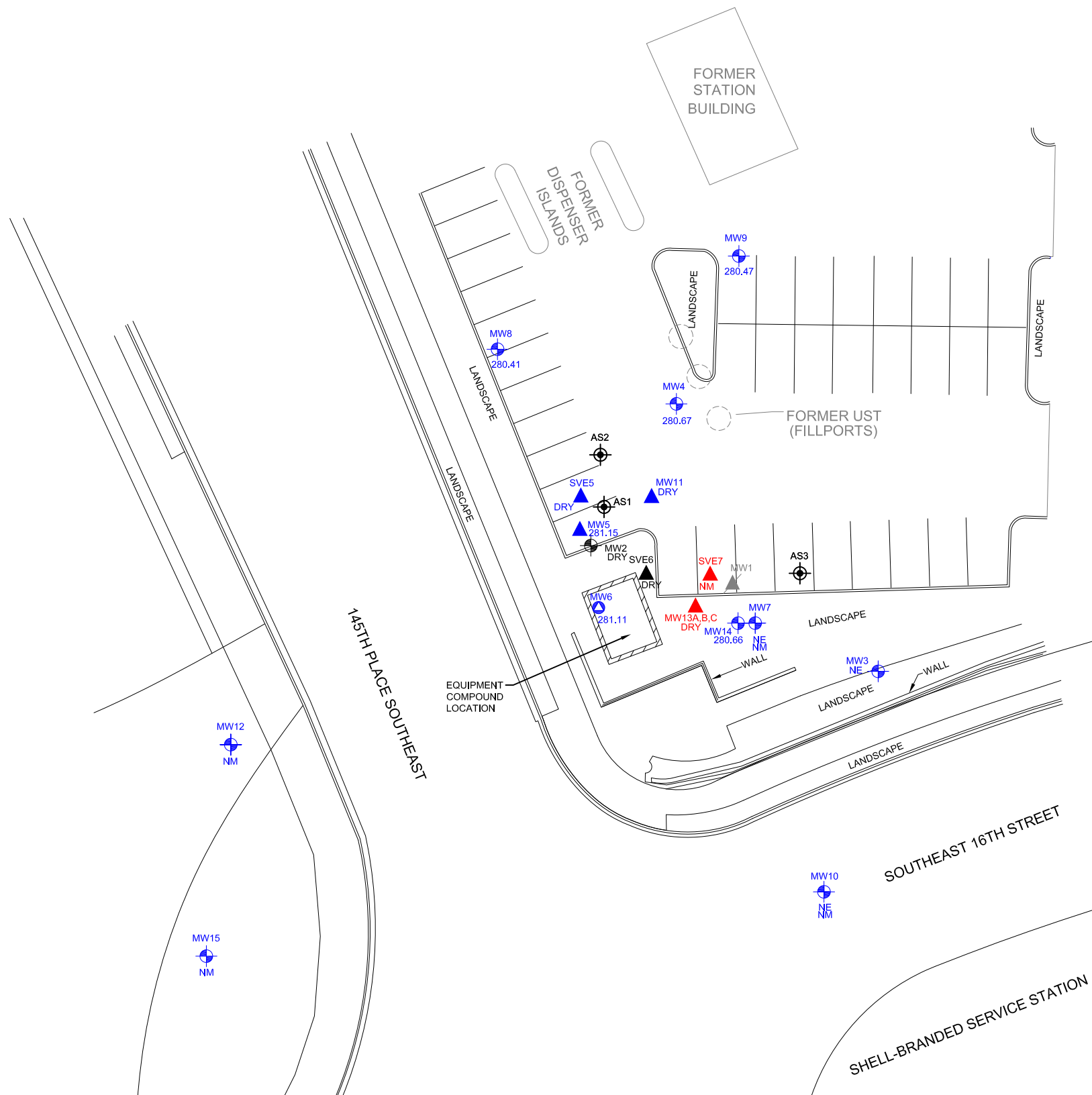
Groundwater Rose Diagram for MW6



Direction of hydraulic gradient at MW6 for dates shown

1. 11/03/08
2. 03/03/09
3. 05/21/09
4. 08/05/09
5. 11/23/09
6. 03/22/10
7. 06/16/10
8. 09/02/10
9. 10/20/10
10. 01/31/11
11. 05/25/11

SOURCE: Modified from a map provided by ExxonMobil Oil Corporation



FN 0311600002



GROUNDWATER ELEVATION MAP - 06/04/14

FORMER MOBIL STATION 99BLV
1500 145th Place Southeast
Bellevue, Washington

EXPLANATION

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> MW14
 Groundwater Monitoring Well
Groundwater Elevation NE
NM
Not Established
Not Monitored AS3
 Air Sparging Well | <ul style="list-style-type: none"> SVE7
 Soil Vapor Extraction Well MW1
 Destroyed Soil Vapor Extraction Well MW6
 Dual Phase Extraction Well |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

PROJECT NO.
031160

PLATE
15

RRT: 12/20/13

- Numbers or Symbols in Red Indicate Residual Hydrocarbon Concentrations Exceeding MTCA Method A Cleanup Levels
- Numbers or Symbols in Green Indicate Residual Hydrocarbon Concentrations Below MTCA Method A Cleanup Levels
- No Data Available for Numbers or Symbols in Gray

Boring/ Well ID	Sample ID	Sample Date	Depth	Above MTCA
			(ft bgs)	
B1	B-1/S-3	10/25/91	15	B, T, X
	B-1/S-5	10/25/91	21	B
B4	B-4/S-4	10/25/91	19	B, X
B7	B-7-11	12/12/91	11	B
B8	B-8-11	12/12/91	11	B
B10	B-10-11	12/12/91	11	B, X
	B-10-30	12/12/91	30	B
B12	B-12-21	12/12/91	21	B
B15	B15-29	01/29/92	29	B
	B15-34	01/29/92	34	TPHg, B, T, X
	B15-39	01/29/92	39	B
MW1	B16-24	01/29/92	24	TPHg
	B16-29	01/29/92	29	TPHg
	B16-34	01/29/92	34	TPHg, B
	B16-39	01/29/92	39	B
MW2	MW0204022A	04/02/92	12	TPHg
	MW0204022B	04/02/92	17	TPHg
MW5	MW0504072C	04/07/92	47	B
	MW0504072D	04/07/92	52	B
MW11	MW-11-10	09/15/94	10	TPHg, T, E, X
MW13	MW13-16-06225	06/22/95	16	TPHg, B
	MW13-Cuttings @ 17	06/22/95	17	TPHg, B, X
	MW13-20-6225	06/22/95	20	TPHg, B, T, X
	MW13-25-6225	06/22/95	25	TPHg, B, X
	MW13-30-6225	06/22/95	30	TPHg, B
MW14	S-20-B19	06/28/05	20	TPHg, B, T, E, X
	S-15-B20	06/28/05	15	TPHg, B, T, X
SVE6	S-30-B20	06/28/05	30	TPHg, B, T, E, X
	S-25-B22	06/28/05	25	TPHg, B, T, E, X
SVE7	S-30-B22	06/28/05	30	TPHg, B, T, X

SOURCE: Modified from a map provided by ExxonMobil Oil Corporation

FN 0311600002



**CUMULATIVE SOIL SAMPLE MAP
(PRE-2014 CONFIRMATION SAMPLING)**
FORMER MOBIL STATION 99BLV
1500 145th Place Southeast
Bellevue, Washington

- EXPLANATION**
- MW15: Groundwater Monitoring Well
 - AS3: Air Sparging Well
 - SVE7: Soil Vapor Extraction Well
 - MW13A,B,C: Vadose Zone Vapor Extraction Well Cluster
 - MW1: Destroyed Soil Vapor Extraction Well
 - MW6: Dual Phase Extraction Well
 - B24: Historical Soil Boring

PROJECT NO.
031160

PLATE
16

RRT: 02/25/14

Laboratory Results in mg/kg

B33/SVE10	Boring ID
12/05/14	Sample Date
S-30-B33	Sample Name
30	Sample Depth
576	Total Petroleum Hydrocarbons as Gasoline
--	Total Petroleum Hydrocarbons as Diesel
--	Total Petroleum Hydrocarbons as Oil
0.0124	Benzene
13.9	Toluene
11.1	Ethylbenzene
90.1	Total Xylenes
2.56	Total Lead

-- = Not Analyzed or Sampled
 <1.00 = Less than the Stated Laboratory Reporting Limit

● Numbers or Symbols in Red Indicate Residual Hydrocarbon Concentrations Which Exceed the MTCA Cleanup Levels
 ● Numbers or Symbols in Green Indicate Residual Hydrocarbon Concentrations Below the MTCA Cleanup Levels

B28
12/02/14
S-10-B28
10
<5.34
--
--
<0.00177
0.00219
<0.00177
<0.00265
3.70

B32/SVE9		
12/05/14	12/05/14	12/05/14
S-15-B31	S-25-B31	S-30-B31
20	35	50
462	15.0	<6.73
--	--	--
--	--	--
0.0156	0.00202	0.00315
1.12	0.00855	<0.00175
3.40	0.0146	<0.00175
41.8	0.144	0.00360
3.46	--	--

B33/SVE10	
12/05/14	12/05/14
S-30-B33	S-45-B30
30	45
576	<6.00
--	--
0.0124	<0.00185
13.9	0.00666
11.1	<0.00185
90.1	0.00967
2.56	--

B34		
12/08/14	12/08/14	12/08/14
S-20-B34	S-30-B34	S-40-B34
20	30	40
<4.78	<4.48	<4.66
--	--	--
<0.00193	<0.00166	<0.00157
<0.00193	<0.00166	<0.00157
<0.00193	<0.00166	<0.00157
<0.00290	<0.00249	<0.00236
--	3.16	--

B27/SVE8			
12/03/14	12/03/14	12/03/14	12/03/14
S-11-B27	S-35-B27	S-45-B27	S-50-B27
11	35	45	50
<4.91	596	<5.05	10.5
--	--	--	--
<0.00173	0.0149	0.0106	0.00530
0.00458	2.88	0.291	0.00921
<0.00173	1.49	0.160	0.0656
0.0082	10.6	1.86	0.0167
--	3.29	--	--

B29			
12/02/14	12/02/14	12/02/14	12/02/14
S-12-B29	S-17-B29	S-47-B29	S-53-B29
12	17	47	53
5.03	<4.76	<5.86	<5.93
--	8.28	<4.33	--
--	5.95	<4.33	--
<0.00153	<0.00171	<0.00155	<0.00160
0.00259	0.00202	0.00326	0.00269
<0.00153	<0.00171	<0.00155	<0.00160
<0.00230	<0.00256	0.00245	<0.00240
5.31	--	--	--

B30/SVE11					
12/03/14	12/03/14	12/03/14	12/03/14	12/03/14	12/03/14
S-11-B30	S-15-B30	S-21-B30	S-29-B30	S-34-B30	S-39-B30
11	15	21	29	34	39
<4.67	<4.92	<4.12	<6.38	<5.53	<4.88
--	--	--	--	--	--
<0.00173	<0.00184	<0.00150	<0.00154	<0.00174	<0.00173
<0.00173	0.00227	0.00389	0.00230	0.00261	0.00261
<0.00173	<0.00184	<0.00150	0.00239	0.00322	<0.00173
<0.00259	<0.00275	0.00417	0.00429	0.00953	<0.00259
--	--	--	3.15	--	--

B31		
12/05/14	12/05/14	12/05/14
S-15-B31	S-25-B31	S-30-B31
15	25	30
<4.88	<4.44	<4.78
--	--	--
<0.00154	<0.00244	<0.00189
0.0145	0.0181	0.00938
0.00566	0.00390	0.00415
0.0379	0.03220	0.0156
--	3.51	--

SOURCE: Modified from a map provided by ExxonMobil Oil Corporation

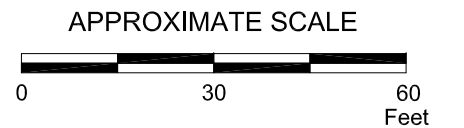
FN 0311600002



SOIL SAMPLE ANALYSES
MAP - 12/02 - 12/05 and 12/08/14
 FORMER MOBIL STATION 99BLV
 1500 145th Place Southeast
 Bellevue, Washington

EXPLANATION

- MW15 Groundwater Monitoring Well
- AS3 Air Sparging Well
- SVE11 Soil Vapor Extraction Well
- MW13A,B,C Vadose Zone Vapor Extraction Well Cluster
- MW7 Covered Groundwater Monitoring Well
- B34 Soil Boring
- B24 Historical Soil Boring
- MW1 Destroyed Soil Vapor Extraction Well
- MW6 Dual Phase Extraction Well



PROJECT NO.

031160

PLATE

17

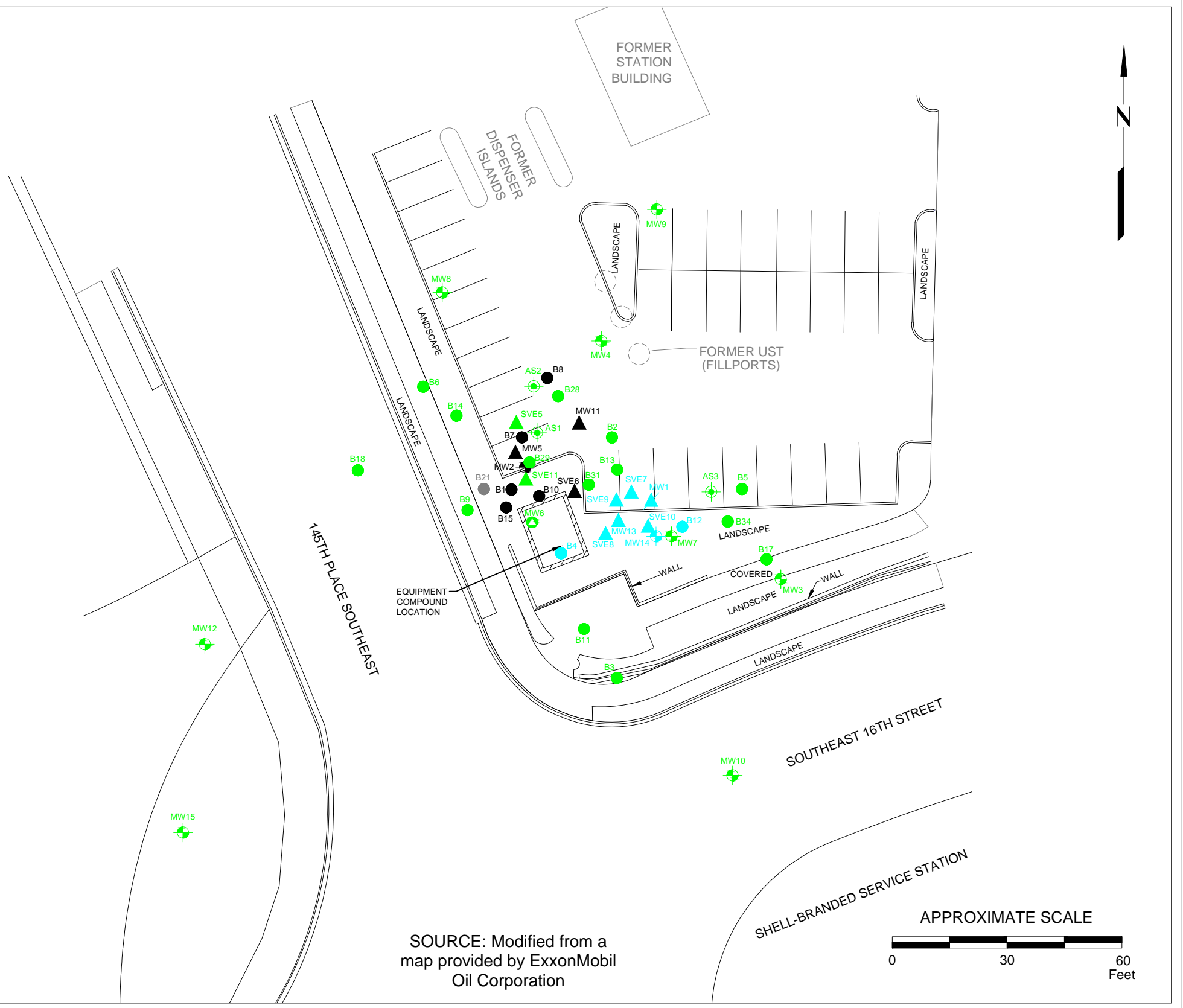
RRT: 03/30/15

- Numbers or Symbols in Red Indicate Residual Hydrocarbon Concentrations Exceeding MTCA Method A Cleanup Levels
- Numbers or Symbols in Green Indicate Residual Hydrocarbon Concentrations Below MTCA Method A Cleanup Levels
- Numbers or Symbols in Black Indicate Residual Hydrocarbon Concentrations Below MTCA Method A Cleanup Levels Confirmed by Subsequent Confirmation Boring
- Numbers or Symbols in Cyan Indicate Residual Hydrocarbon Concentrations Exceeding MTCA Method A Cleanup Levels; However, Samples are Deeper Than the Site Points of Compliance
- No Data Available for Numbers or Symbols in Gray

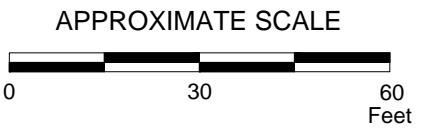
Historical Soil Samples Results Which Exceeded MTCA Cleanup Levels and Subsequent Confirmation Sampling

Boring/Well ID	Sample ID	Sample Date	Depth	Above MTCA	Confirmed By	Confirmation Result - samples collected 12/2014
			(feet bgs)			
B1	B-1/S-3	10/25/91	15	B, T, X	B30/SVE11 at 15'	<MTCA
	B-1/S-5	10/25/91	21	B	B30/SVE11 at 21'	<MTCA
B4	B-4/S-4	10/25/91	19	B, X	Point of Compliance Evaluation ^a	
B7	B-7-11	12/12/91	11	B	B29 at 12'	<MTCA
B8	B-8-11	12/12/91	11	B	B28 at 10'	<MTCA
B10	B-10-11	12/12/91	11	B, X	B30/SVE11 at 11'	<MTCA
	B-10-30	12/12/91	30	B	B30/SVE11 at 29'	<MTCA
B12	B-12-21	12/12/91	21	B	Point of Compliance Evaluation ^a	
B15	B15-29	01/29/92	29	B	B30/SVE11 at 29'	<MTCA
	B15-34	01/29/92	34	TPHg, B, T, X	B30/SVE11 at 34'	<MTCA
	B15-39	01/29/92	39	B	B30/SVE11 at 39'	<MTCA
MW1	B16-24	01/29/92	24	TPHg	Point of Compliance Evaluation ^a	
	B16-29	01/29/92	29	TPHg	Point of Compliance Evaluation ^a	
	B16-34	01/29/92	34	TPHg, B	Point of Compliance Evaluation ^a	
MW2	B16-39	01/29/92	39	B	Point of Compliance Evaluation ^a	
	MW0204022A	04/02/92	12	TPHg	B29 at 12'	<MTCA
	MW0204022B	04/02/92	17	TPHg	B29 at 17'	<MTCA
MW5	MW0504072C	04/07/92	47	B	B29 at 47'	<MTCA
	MW0504072D	04/07/92	52	B	B29 at 53'	<MTCA
MW11	MW-11-10	09/15/94	10	TPHg, T, E, X	B28 at 10'	<MTCA
	MW13-16-06225	06/22/95	16	TPHg, B	Point of Compliance Evaluation ^a	
MW13	MW13-Cuttings @ 17	06/22/95	17	TPHg, B, X	Point of Compliance Evaluation ^a	
	MW13-20-6225	06/22/95	20	TPHg, B, T, X	Point of Compliance Evaluation ^a	
	MW13-25-6225	06/22/95	25	TPHg, B, X	Point of Compliance Evaluation ^a	
	MW13-30-6225	06/22/95	30	TPHg, B	Point of Compliance Evaluation ^a	
	MW13-35-6225	06/22/95	35	TPHg, B, X	Point of Compliance Evaluation ^a	
MW14	S-20-B19	06/28/05	20	TPHg, B, T, E, X	Point of Compliance Evaluation ^a	
SVE6	S-15-B20	06/28/05	15	TPHg, B, T, X	B31 at 15'	<MTCA
	S-30-B20	06/28/05	30	TPHg, B, T, E, X	B31 at 30'	<MTCA
SVE7	S-25-B22	06/28/05	25	TPHg, B, T, E, X	Point of Compliance Evaluation ^a	
	S-30-B22	06/28/05	30	TPHg, B, T, X	Point of Compliance Evaluation ^a	

EXPLANATION:
 feet bgs = feet below ground surface
 mg/kg = milligram per kilogram
 TPHg = Total Petroleum Hydrocarbons as Gasoline in accordance with Ecology Method NWTPH-Gx, WTPH-G, EPA TPH, EPA HClD, or 3550/8015 modified, see laboratory reports for details
 ' = Foot
 MTCA = MTCA Method A Cleanup Levels
 < = Less than the stated laboratory reporting limit
 B = Benzene; T = Toluene; E = Ethylbenzene; X = Total Xylenes
 BTEX = Aromatic compounds in accordance with EPA Method 8021B, 8260B, or 8020, see laboratory report for details
 a = Based on the points of compliance outlined in WAC 173-340-740(6)(d), soil COPCs are not present in the top 15 feet of soil. WAC 173-340-720(8)(b) compliance is demonstrated through the physical isolation of soil containing residual concentrations of hydrocarbons encountered at 20 feet bgs to the saturated zone encountered at 50 feet bgs



SOURCE: Modified from a map provided by ExxonMobil Oil Corporation



CONFIRMATION SOIL SAMPLE MAP

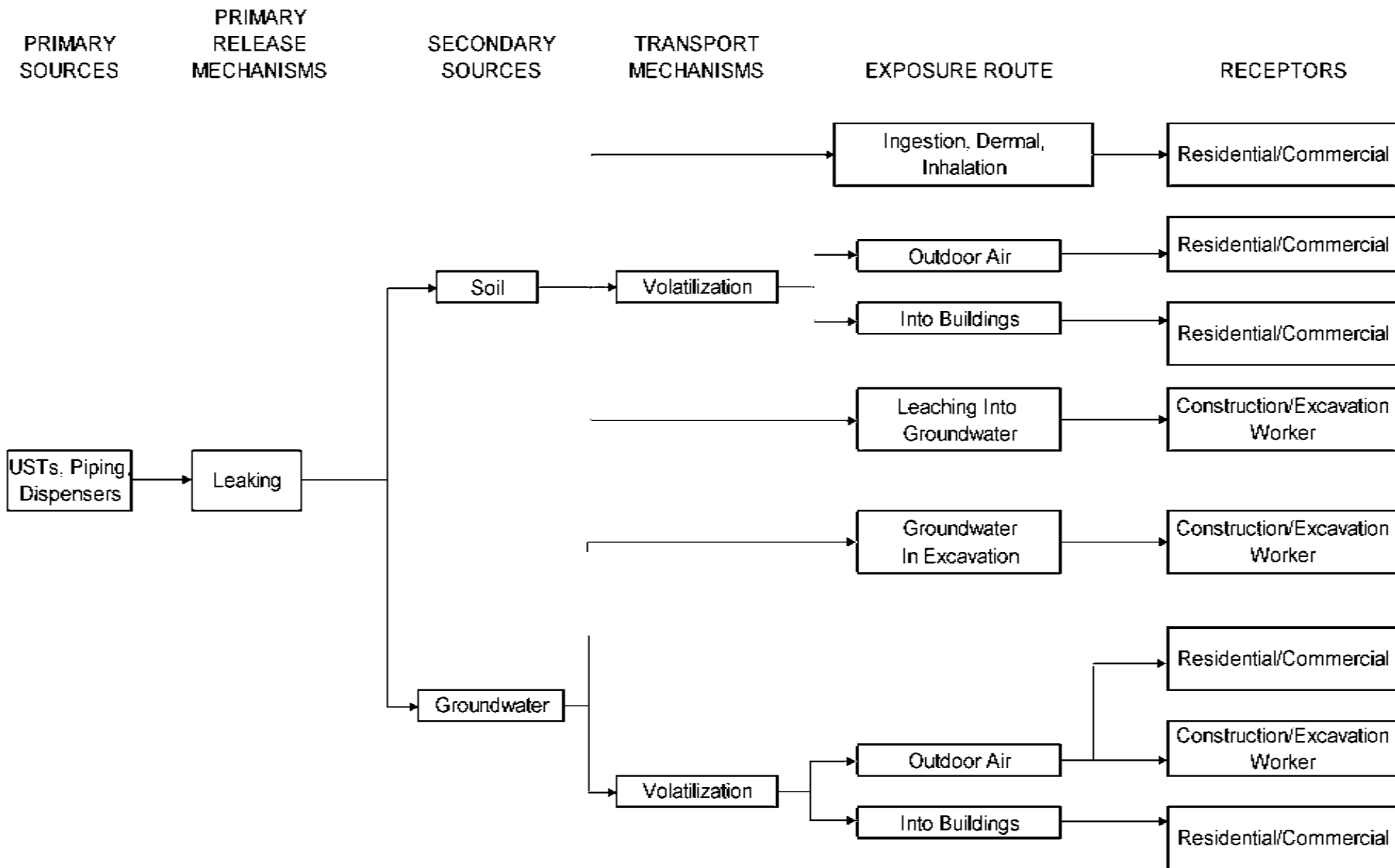
FORMER MOBIL STATION 99BLV
 1500 145th Place Southeast
 Bellevue, Washington

- EXPLANATION**
- MW15 Groundwater Monitoring Well
 - AS3 Air Sparging Well
 - SVE11 Soil Vapor Extraction Well
 - MW13A,B,C Vadose Zone Vapor Extraction Well Cluster
 - B34 Soil Boring
 - MW1 Destroyed Soil Vapor Extraction Well
 - MW6 Dual Phase Extraction Well

PROJECT NO.
031160

PLATE
18

RRT: 03/30/15



FN 0311600005



CONCEPTUAL SITE MODEL

FORMER MOBIL STATION 99BLV
 1500 145th Place Southeast
 Bellevue, Washington

PROJECT NO.

031160

PLATE

19

RRT: 01/22/15

TABLE 1
CUMULATIVE SOIL ANALYTICAL RESULTS

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington

Page 1 of 5

Sample Name	Well ID	Sample Date	Sample Depth (feet bgs)	TPHg-HCID (mg/kg)	TPHg (mg/kg)	TPHd-HCID (mg/kg)	TPHd (mg/kg)	TPHmo-HCID (mg/kg)	TPHmo (mg/kg)	TRPH (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	EDB (mg/kg)	EDC (mg/kg)	MTBE (mg/kg)	Total Lead (mg/kg)	
ATEC Associates, Inc. (ATEC) - Limited Subsurface Investigation - November 21, 1991:																			
B-1/S-3	NA	10/25/91	15	--	--	--	--	--	--	2,400	0.067	7.400	5.200	52	--	--	--	--	
B-1/S-5	NA	10/25/91	21	--	--	--	--	--	--	80	0.057	<0.005	0.073	0.560	--	--	--	--	
B-2/S-2	NA	10/25/91	9	--	--	--	--	--	--	<2.0	<0.005	<0.005	<0.005	<0.005	--	--	--	--	
B-2/S-3	NA	10/25/91	13	--	--	--	--	--	--	<2.0	<0.005	<0.005	<0.005	<0.005	--	--	--	--	
B-3/S-1	NA	10/25/91	4	--	--	--	--	--	--	<2.0	<0.005	<0.005	<0.005	0.0068	--	--	--	--	
B-3/S-2	NA	10/25/91	9	--	--	--	--	--	--	<2.0	<0.005	<0.005	<0.005	<0.005	--	--	--	--	
B-4/S-2	NA	10/25/91	9	--	--	--	--	--	--	<2.0	<0.005	<0.005	<0.005	<0.005	--	--	--	--	
B-4/S-4	NA	10/25/91	19	--	--	--	--	--	--	360	0.130	0.540	1.400	10	--	--	--	--	
B-4/S-5	NA	10/25/91	10	--	--	--	--	--	--	<2.0	<0.005	<0.005	<0.005	<0.005	--	--	--	--	
B-5/S-2	NA	10/25/91	9	--	--	--	--	--	--	<2.0	<0.005	<0.005	<0.005	<0.005	--	--	--	--	
B-5/S-3	NA	10/25/91	13	--	--	--	--	--	--	<2.0	<0.005	<0.005	<0.005	<0.005	--	--	--	--	
ATEC Associates, Inc. (ATEC) - Additional Subsurface Investigation - January 21, 1992:																			
B-6-8	NA	12/12/91	8	--	--	--	--	--	--	<2.0	<0.005	<0.005	<0.005	<0.005	--	--	--	--	
B-6-17	NA	12/12/91	17	--	--	--	--	--	--	<2.0	<0.005	<0.005	<0.005	<0.005	--	--	--	--	
B-6-23	NA	12/12/91	23	--	--	--	--	--	--	<2.0	<0.005	<0.005	<0.005	<0.005	--	--	--	--	
B-6-30	NA	12/12/91	30	--	--	--	--	--	--	<2.0	<0.005	<0.005	<0.005	0.050	--	--	--	--	
B-7-6	NA	12/12/91	6	--	--	--	--	--	--	<2.0	<0.005	<0.005	<0.005	<0.005	--	--	--	--	
B-7-11	NA	12/12/91	11	--	--	--	--	--	--	74	0.280	0.930	1.400	1.700	--	--	--	--	
B-7-20	NA	12/12/91	20	--	--	--	--	--	--	3.8	<0.005	<0.005	<0.005	0.083	--	--	--	--	
B-7-30	NA	12/12/91	30	--	--	--	--	--	--	4.9	--	--	--	--	--	--	--	--	
B-8-6	NA	12/12/91	6	--	--	--	--	--	--	45	<0.005	<0.005	<0.005	0.054	--	--	--	--	
B-8-11	NA	12/12/91	11	--	--	--	--	--	--	580	0.110	1.100	2.500	1.300	--	--	--	--	
B-8-21	NA	12/12/91	21	--	--	--	--	--	--	<2.0	<0.005	<0.005	<0.005	<0.005	--	--	--	--	
B-8-30	NA	12/12/91	30	--	--	--	--	--	--	<2.0	<0.005	<0.005	<0.005	13.000	--	--	--	--	
B-8-31	NA	12/12/91	31	--	--	--	--	--	--	<2.0	<0.005	<0.005	<0.005	<0.005	--	--	--	--	
B-9-6	NA	12/12/91	6	--	--	--	--	--	--	<2.0	<0.005	<0.005	<0.005	<0.005	--	--	--	--	
B-9-21	NA	12/12/91	21	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--	--	
B-9-31	NA	12/12/91	31	--	--	--	--	--	--	<2.0	<0.005	<0.005	<0.005	<0.005	--	--	--	--	
B-10-6	NA	12/12/91	6	--	--	--	--	--	--	43	--	--	--	--	--	--	--	--	
B-10-11	NA	12/12/91	11	--	--	--	--	--	--	480	1.900	0.780	2.200	15.00	--	--	--	--	
B-10-20	NA	12/12/91	20	--	--	--	--	--	--	58	0.020	0.066	0.068	0.550	--	--	--	--	
B-10-30	NA	12/12/91	30	--	--	--	--	--	--	300	0.085	2.300	1.400	7.500	--	--	--	--	
B-11-6	NA	12/12/91	6	--	--	--	--	--	--	4.9	--	--	--	--	--	--	--	--	
B-11-11	NA	12/12/91	11	--	--	--	--	--	--	<2.0	<0.005	<0.005	<0.005	<0.005	--	--	--	--	
B-11-20	NA	12/12/91	20	--	--	--	--	--	--	<2.0	--	--	--	--	--	--	--	--	
B-11-30	NA	12/12/91	30	--	--	--	--	--	--	<2.0	<0.005	<0.005	<0.005	0.0067	--	--	--	--	
B-12-6	NA	12/12/91	6	--	--	--	--	--	--	630	<0.005	<0.005	0.670	2.900	--	--	--	--	
B-12-11	NA	12/12/91	11	--	--	--	--	--	--	110	--	--	--	--	--	--	--	--	
B-12-21	NA	12/12/91	21	--	--	--	--	--	--	410	0.920	1.200	2.100	1.300	--	--	--	--	
B-12-31	NA	12/12/91	31	--	--	--	--	--	--	280	--	--	--	--	--	--	--	--	
B-13-6	NA	12/12/91	6	--	--	--	--	--	--	66	0.017	0.055	0.550	3.700	--	--	--	--	
MTCA Method A Cleanup Levels				NA	30/100 ^a	NA	2,000	NA	2,000	NA	0.03	7	6	9	0.005	NA	0.1	250	

Continued on page 2

031160.Soil

Table 1

**TABLE 1
CUMULATIVE SOIL ANALYTICAL RESULTS**

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington

Page 2 of 5

Sample Name	Well ID	Sample Date	Sample Depth (feet bgs)	TPHg-HCID (mg/kg)	TPHg (mg/kg)	TPHd-HCID (mg/kg)	TPHd (mg/kg)	TPHmo-HCID (mg/kg)	TPHmo (mg/kg)	TRPH (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	EDB (mg/kg)	EDC (mg/kg)	MTBE (mg/kg)	Total Lead (mg/kg)
ATEC Associates, Inc. (ATEC) - Additional Subsurface Investigation - January 21, 1992 (continued):																		
B-13-11	NA	12/12/91	11	--	--	--	--	--	--	170	--	--	--	--	--	--	--	--
B-13-21	NA	12/12/91	21	--	--	--	--	--	--	130	<0.025	<0.025	0.400	3.900	--	--	--	--
B-13-31	NA	12/12/91	31	--	--	--	--	--	--	<10	--	--	--	--	--	--	--	--
ATEC Associates, Inc. (ATEC) - Supplemental Subsurface Investigation - February 10, 1992:																		
B14-29	NA	01/29/92	29	--	<10	--	<10	--	<10	--	<0.05	<0.05	<0.05	0.08	--	--	--	--
B14-34	NA	01/29/92	34	--	<10	--	<10	--	<10	--	<0.05	<0.05	<0.05	<0.05	--	--	--	--
B14-39	NA	01/29/92	39	--	<10	--	<10	--	<10	--	<0.05	<0.05	<0.05	<0.05	--	--	--	--
B15-29	NA	01/29/92	29	--	<10	--	<10	--	<10	--	0.19	0.16	<0.05	0.15	--	--	--	--
B15-34	NA	01/29/92	34	--	1,040	--	<10	--	522	--	11.8	43.9	--	89.8	--	--	--	--
B15-34DUP	NA	01/29/92	34	--	920	--	<10	--	486	--	--	--	--	--	--	--	--	--
B15-39	NA	01/29/92	39	--	<10	--	<10	--	<10	--	0.19	0.22	<0.05	0.22	--	--	--	--
B16-24	MW1	01/29/92	24	--	465	--	<10	--	--	--	--	--	--	--	--	--	--	--
B16-29	MW1	01/29/92	29	--	134	--	<10	--	--	--	--	--	--	--	--	--	--	--
B16-34	MW1	01/29/92	34	--	62	--	<10	--	--	--	1.02	2.47	1.09	6.59	--	--	--	--
B16-39	MW1	01/29/92	39	--	<10	--	<10	--	<10	--	0.2	0.23	<0.05	0.25	--	--	--	--
B17-10	NA	01/29/92	10	--	<10	--	<10	--	--	--	<0.05	<0.05	<0.05	<0.05	--	--	--	--
B17-15	NA	01/29/92	15	--	<10	--	<10	--	--	--	<0.05	<0.05	<0.05	<0.05	--	--	--	--
Kleinfelder, Inc. (Kleinfelder) - Subsurface Exploration - May 20, 1992:																		
MW0204022A	MW2	04/02/92	12.5	DET	120	<50	--	<100	--	--	<0.050	<0.10	0.52	5.0	--	--	--	<7.5
MW0204022B	MW2	04/02/92	17.5	DET	31	<50	--	<100	--	--	<0.050	<0.10	0.1	1.1	--	--	--	<7.5
MW0204022C	MW2	04/02/92	22.5	<20	--	<50	--	<100	--	--	<0.050	<0.10	<0.10	<0.10	--	--	--	--
MW0204022D	MW2	04/02/92	27.5	<20	--	<50	--	<100	--	--	<0.050	<0.10	<0.10	<0.10	--	--	--	--
MW0204022E	MW2	04/02/92	32.5	<20	--	<50	--	<100	--	--	<0.050	<0.10	<0.10	<0.10	--	--	--	--
MW0204022F	MW2	04/02/92	37.5	<20	--	<50	--	<100	--	--	<0.050	<0.10	<0.10	<0.10	--	--	--	--
MW0304032F	MW3	04/02/92	37.5	<20	--	<50	--	<100	--	--	<0.050	<0.10	<0.10	<0.10	--	--	--	--
MW0304032G	MW3	04/02/92	41.5	<20	--	<50	--	<100	--	--	<0.050	<0.10	<0.10	<0.10	--	--	--	--
MW0304032H	MW3	04/02/92	47.5	<20	--	<50	--	<100	--	--	<0.050	<0.10	<0.10	<0.10	--	--	--	--
MW0304032I	MW3	04/02/92	52.5	<20	--	<50	--	<100	--	--	<0.050	<0.10	<0.10	<0.10	--	--	--	--
MW0404062C	MW4	04/06/92	22.5	<20	--	<50	--	<100	--	--	<0.050	<0.10	<0.10	<0.10	--	--	--	--
MW0404062E	MW4	04/06/92	32.5	<20	--	<50	--	<100	--	--	<0.050	<0.10	<0.10	<0.10	--	--	--	--
MW0404062F	MW4	04/06/92	42.5	<20	--	<50	--	<100	--	--	<0.050	<0.10	<0.10	<0.10	--	--	--	--
MW0404062G	MW4	04/06/92	47.5	<20	--	<50	--	<100	--	--	<0.050	<0.10	<0.10	<0.10	--	--	--	--
MW0504072A	MW5	04/07/92	37.5	<20	--	<50	--	<100	--	--	<0.050	<0.10	<0.10	<0.10	--	--	--	--
MW0504072B	MW5	04/07/92	41.5	<20	--	<50	--	<100	--	--	<0.050	<0.10	<0.10	<0.10	--	--	--	--
MW0504072Z ^b	MW5	04/07/92	41.5	<20	--	<50	--	<100	--	--	<0.050	<0.10	<0.10	<0.10	--	--	--	--
MW0504072C	MW5	04/07/92	47.5	DET	1.4	<50	--	<100	--	--	0.12	0.27	0.10	0.18	--	--	--	--
MW0504072D	MW5	04/07/92	52.5	--	--	<50	--	<100	--	--	0.097	0.27	0.10	0.19	--	--	--	--
Kleinfelder Inc. (Kleinfelder) - Additional Subsurface Exploration - November 6, 1992:																		
MW0608032C	MW6	08/03/92	15	<20	--	<50	--	<100	--	--	<0.050	<0.050	<0.050	<.10	--	--	--	--
MW0608032F	MW6	08/03/92	30	<20	--	<50	--	<100	--	--	<0.050	<0.050	<0.050	<.10	--	--	--	--
MTCA Method A Cleanup Levels				NA	30/100 ^a	NA	2,000	NA	2,000	NA	0.03	7	6	9	0.005	NA	0.1	250

Continued on page 3

**TABLE 1
CUMULATIVE SOIL ANALYTICAL RESULTS**

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington

Page 3 of 5

Sample Name	Well ID	Sample Date	Sample Depth (feet bgs)	TPHg-HCID (mg/kg)	TPHg (mg/kg)	TPHd-HCID (mg/kg)	TPHd (mg/kg)	TPHmo-HCID (mg/kg)	TPHmo (mg/kg)	TRPH (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	EDB (mg/kg)	EDC (mg/kg)	MTBE (mg/kg)	Total Lead (mg/kg)
Kleinfelder Inc. (Kleinfelder) - Additional Subsurface Exploration - November 6, 1992 (continued):																		
MW0508032L	MW6	08/03/92	60	<20	--	<50	--	<100	--	--	<0.050	<0.050	<0.050	<.10	--	--	--	--
MW0608032M ^b	MW6	08/03/92	60	<20	--	<50	--	<100	--	--	<0.050	0.060	<0.050	<.10	--	--	--	--
MW0708032B	MW7	08/03/92	10	<20	--	<50	--	<100	--	--	<0.050	<0.050	<0.050	<.10	--	--	--	--
MW0708032F	MW7	08/03/92	30	<20	--	<50	--	<100	--	--	<0.050	0.055	<0.050	0.21	--	--	--	--
MW0708032J	MW7	08/03/92	50	<20	--	<50	--	<100	--	--	<0.050	<0.050	<0.050	<.10	--	--	--	--
MW0808042C	MW8	08/04/92	14	<20	--	<50	--	<100	--	--	<0.050	0.071	0.081	0.42	--	--	--	--
MW0808042C	MW8	08/04/92	29	<20	--	<50	--	<100	--	--	<0.050	<0.050	<0.050	<.10	--	--	--	--
MW0908042A	MW9	08/04/92	5	<20	--	<50	--	<100	--	--	<0.050	<0.050	<0.050	<.10	--	--	--	--
MW0908042E	MW9	08/04/92	25	<20	--	<50	--	<100	--	--	<0.050	<0.050	<0.050	<.10	--	--	--	--
MW0908042K	MW9	08/04/92	55	<20	--	<50	--	<100	--	--	<0.050	<0.050	<0.050	<.10	--	--	--	--
Kleinfelder Inc. (Kleinfelder) - Supplemental Subsurface Exploration - November 29, 1994:																		
MW-10-25	MW10	09/15/94	25	--	<1.0	--	--	--	--	--	<0.050	<0.050	<0.050	<0.10	--	--	--	--
MW-10-40	MW10	09/15/94	40	--	<1.0	--	--	--	--	--	<0.050	<0.050	<0.050	<0.10	--	--	--	--
MW-10-60	MW10	09/15/94	60	--	<1.0	--	--	--	--	--	<0.050	<0.050	<0.050	<0.10	--	--	--	--
MW-11-10	MW11	09/15/94	10	--	1,200	--	--	--	--	--	<0.40	29	22	150	--	--	--	--
MW-11-32	MW11	09/15/94	32	--	<1.0	--	--	--	--	--	<0.050	<0.050	<0.050	<0.10	--	--	--	--
MW-11-40	MW11	09/15/94	40	--	<1.0	--	--	--	--	--	<0.050	<0.050	<0.050	<0.10	--	--	--	--
MW-12-50	MW12	10/14/94	50	--	<1.0	--	--	--	--	--	<0.050	<0.050	<0.050	<0.10	--	--	--	--
MW-12-60	MW12	10/14/94	60	--	<1.0	--	--	--	--	--	<0.050	<0.050	<0.050	<0.10	--	--	--	--
B-18-25	NA	09/16/94	25	--	<1.0	--	--	--	--	--	<0.050	<0.050	<0.050	<0.10	--	--	--	--
B-18-40	NA	09/16/94	40	--	<1.0	--	--	--	--	--	<0.050	<0.050	<0.050	<0.10	--	--	--	--
B-18-52	NA	09/16/94	52	--	2.6	--	--	--	--	--	<0.050	<0.050	<0.050	<0.10	--	--	--	--
Kleinfelder Inc. (Kleinfelder) - Well Abandonment, VES Well Installation and Pneumatic Fracturing Report - January 22, 1996:																		
MW13-5-06225	MW13	06/22/95	5	--	<2.0	--	--	--	--	--	<0.013	<0.013	<0.013	0.016	--	--	--	--
MW13-16-06225	MW13	06/22/95	16	--	120	--	--	--	--	--	0.360	<0.050	0.140	1.80	--	--	--	--
MW13-Cuttings @17	MW13	06/22/95	17	--	54	--	--	--	--	--	0.260	0.097	0.560	9.9	--	--	--	--
MW13-20-6225	MW13	06/22/95	20	--	560	--	--	--	--	--	1.20	9.10	5.70	50.0	--	--	--	--
MW13-25-6225	MW13	06/22/95	25	--	500	--	--	--	--	--	1.20	3.30	4.50	32.0	--	--	--	--
MW13-30-6225	MW13	06/22/95	30	--	58	--	--	--	--	--	0.130	0.280	0.470	3.30	--	--	--	--
MW13-35-6225	MW13	06/22/95	35	--	310	--	--	--	--	--	0.220	1.000	2.400	17.0	--	--	--	--
MW13-38-6225	MW13	06/22/95	38	--	<2.0	--	--	--	--	--	<0.013	0.026	<0.013	0.034	--	--	--	--
Environmental Resolutions, Inc. (ERI) - Groundwater Monitoring/Soil Vapor Extraction Well Installation Report - December 6, 2005:																		
S-15-B18	SVE5	06/28/05	15	--	55.9	--	<4.18	--	<4.18	--	<0.0235	<0.235	<0.235	0.469	--	--	--	--
S-20-B18	SVE5	06/28/05	20	--	<52.6	--	<4.26	--	<4.26	--	<0.0316	<0.316	<0.316	0.778	--	--	--	--
S-20-B19	MW14	06/29/05	20	--	1,660	--	4.81	--	<4.38	--	12.4	61.2	18.1	144	--	--	--	4.02
S-45-B19	MW14	06/29/05	45	--	<57.3	--	<4.58	--	<4.58	--	<0.0306	<0.306	<0.306	<0.306	--	--	--	--
S-15-B20	SVE6	06/28/05	15	--	595	--	<4.27	--	<4.27	--	3.86	7.44	5.17	62.6	--	--	--	3.80
S-30-B20	SVE6	06/28/05	30	--	1,400	--	<4.37	--	<4.37	--	14.5	58.6	16.6	101	--	--	--	--
S-40-B20	SVE6	06/28/05	40	--	<55.4	--	<4.40	--	<4.40	--	<0.0248	<0.248	<0.248	<0.248	--	--	--	--
MTCA Method A Cleanup Levels				NA	30/100 ^a	NA	2,000	NA	2,000	NA	0.03	7	6	9	0.005	NA	0.1	250

Continued on page 4

031160.Soil

Table 1

**TABLE 1
CUMULATIVE SOIL ANALYTICAL RESULTS**

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue , Washington

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Sample Name	Well ID	Sample Date	Sample Depth (feet bgs)	TPHg-HCID (mg/kg)	TPHg (mg/kg)	TPHd-HCID (mg/kg)	TPHd (mg/kg)	TPHmo-HCID (mg/kg)	TPHmo (mg/kg)	TRPH (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	EDB (mg/kg)	EDC (mg/kg)	MTBE (mg/kg)	Total Lead (mg/kg)
Environmental Resolutions, Inc. (ERI) - Groundwater Monitoring/Soil Vapor Extraction Well Installation Report - December 6, 2005 (continued):																		
S-25-B22	SVE7	06/28/05	25	--	782	--	<4.26	--	<4.26	--	6.59	33.2	10.3	62.0	--	--	--	--
S-30-B22	SVE7	06/28/05	30	--	339	--	<4.25	--	<4.25	--	3.94	12.8	4.18	25.8	--	--	--	--
Environmental Resolutions, Inc. (ERI) - Monitoring and Air Sparge Well Installation Report - August 31, 2007:																		
B23-25'	MW15	07/12/07	25	--	<4.79	--	<4.06	--	<3.99	--	<0.0282	<0.0938	<0.0938	<0.235	--	--	--	1.72
B23-50'	MW15	07/12/07	50	--	<4.64	--	<3.99	--	<3.99	--	<0.0268	<0.0892	<0.0892	<0.223	--	--	--	--
B23-65'	MW15	07/12/07	65	--	<5.60	--	<4.58	--	<4.58	--	<0.0311	<0.104	<0.104	<0.259	--	--	--	--
B24-20'	AS1	07/18/07	20	--	<5.17	--	<4.19	--	<4.19	--	<0.0293	0.220	0.152	0.859	--	--	--	--
B24-35'	AS1	07/18/07	35	--	<4.75	--	<4.25	--	<4.25	--	<0.0273	<0.0911	<0.0911	<0.228	--	--	--	--
B24-45'	AS1	07/18/07	45	--	<5.40	--	<4.33	--	<4.33	--	<0.0312	<0.104	<0.104	<0.260	--	--	--	--
B24-57'	AS1	07/18/07	57	--	<5.74	--	<4.79	--	<4.79	--	<0.0328	<0.109	<0.109	<0.273	--	--	--	--
B25-25'	AS2	07/18/07	25	--	<4.97	--	<4.25	--	<4.25	--	<0.0286	<0.0953	<0.0952	<0.238	--	--	--	--
B25-45'	AS2	07/18/07	45	--	<4.93	--	<4.30	--	<4.30	--	<0.0293	<0.0977	<0.0977	<0.244	--	--	--	--
B25-57'	AS2	07/18/07	57	--	<5.77	--	<4.77	--	<4.77	--	<0.0341	<0.114	<0.114	<0.284	--	--	--	--
B26-25'	AS3	07/12/07	25	--	<4.57	--	<4.17	--	<4.17	--	<0.0269	<0.0898	<0.0898	<0.224	--	--	--	1.99
B26-30'	AS3	07/12/07	30	--	<5.31	--	<4.14	--	<4.14	--	<0.0303	<0.101	<0.101	<0.253	--	--	--	--
B26-45'	AS3	07/12/07	45	--	<5.73	--	4.53	--	<4.49	--	<0.0386	<0.129	<0.129	<0.321	--	--	--	--
B26-57'	AS3	07/12/07	57	--	<5.54	--	<4.60	--	<4.60	--	<0.0335	<0.112	<0.112	<0.279	--	--	--	--
Cardno ERI - Remedial Investigation and Soil Assessment Report - May 21, 2015:																		
S-11-B27	SVE8	12/03/14	11	--	<4.91	--	--	--	--	--	<0.00173	0.00458	<0.00173	0.0082	--	--	--	--
S-35-B27	SVE8	12/03/14	35	--	596	--	--	--	--	--	0.0149	2.88	1.49	10.6	--	--	--	3.29
S-45-B27	SVE8	12/03/14	45	--	<5.05	--	--	--	--	--	0.0106	0.291	0.160	1.86	--	--	--	--
S-50-B27	SVE8	12/03/14	50	--	10.5	--	--	--	--	--	0.00530	0.00921	0.0656	0.0167	--	--	--	--
S-10-B28	NA	12/02/14	10	--	<5.34	--	--	--	--	--	<0.00177	0.00219	<0.00177	<0.00265	--	--	--	3.70
S-12-B29	NA	12/02/14	12	--	5.03	--	--	--	--	--	<0.00153	0.00259	<0.00153	<0.00230	--	--	--	5.31
S-17-B29	NA	12/02/14	17	--	<4.76	--	8.28	--	5.95	--	<0.00171	0.00202	<0.00171	<0.00256	--	--	--	--
S-47-B29	NA	12/02/14	47	--	<5.86	--	<4.33	--	<4.33	--	<0.00155	0.00326	<0.00155	0.0025	--	--	--	--
S-53-B29	NA	12/02/14	53	--	<5.93	--	--	--	--	--	<0.00160	0.00269	<0.00160	<0.00240	--	--	--	--
S-11-B30	SVE11	12/03/14	11	--	<4.67	--	--	--	--	--	<0.00173	<0.00173	<0.00173	<0.00259	--	--	--	--
S-15-B30	SVE11	12/03/14	15	--	<4.92	--	--	--	--	--	<0.00184	0.00227	<0.00184	<0.00275	--	--	--	--
S-21-B30	SVE11	12/03/14	21	--	<4.12	--	--	--	--	--	<0.00150	0.00389	<0.00150	0.00417	--	--	--	--
S-29-B30	SVE11	12/03/14	29	--	<6.38	--	--	--	--	--	<0.00154	0.00230	0.00239	0.00429	--	--	--	3.15
S-34-B30	SVE11	12/03/14	34	--	<5.53	--	--	--	--	--	<0.00174	0.00261	0.00322	0.00953	--	--	--	--
S-39-B30	SVE11	12/03/14	39	--	<4.88	--	--	--	--	--	<0.00173	0.00261	<0.00173	<0.00259	--	--	--	--
S-15-B31	NA	12/05/14	15	--	<4.88	--	--	--	--	--	<0.00154	0.0145	0.00566	0.0379	<0.00154	<0.00154	<0.00154	--
S-25-B31	NA	12/05/14	25	--	<4.44	--	--	--	--	--	<0.00244	0.0181	0.00390	0.03220	--	--	--	3.51
S-30-B31	NA	12/05/14	30	--	<4.78	--	--	--	--	--	<0.00189	0.00938	0.00415	0.0156	--	--	--	--
S-20-B32	SVE9	12/04/14	20	--	462	--	--	--	--	--	0.0156	1.12	3.40	41.8	--	--	--	3.46
MTCA Method A Cleanup Levels				NA	30/100 ^a	NA	2,000	NA	2,000	NA	0.03	7	6	9	0.005	--	0.1	250

Continued on page 5

**TABLE 1
CUMULATIVE SOIL ANALYTICAL RESULTS**

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue , Washington

Page 5 of 5

Sample Name	Well ID	Sample Date	Sample Depth (feet bgs)	TPHg-HCID (mg/kg)	TPHg (mg/kg)	TPHd-HCID (mg/kg)	TPHd (mg/kg)	TPHmo-HCID (mg/kg)	TPHmo (mg/kg)	TRPH (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	EDB (mg/kg)	EDC (mg/kg)	MTBE (mg/kg)	Total Lead (mg/kg)
Cardno ERI - Remedial Investigation and Soil Assessment Report - May 21, 2015 (continued):																		
S-35-B32	SVE9	12/05/14	35	--	15.0	--	--	--	--	--	0.00202	0.00855	0.0146	0.144	--	--	--	--
S-50-B32	SVE9	12/05/14	50	--	<6.73	--	--	--	--	--	0.00315	<0.00175	<0.00175	0.00360	--	--	--	--
S-30-B33	SVE10	12/05/14	30	--	576	--	--	--	--	--	0.0124	13.9	11.1	90.1	0.00291	0.00298	<0.00255	2.56
S-45-B33	SVE10	12/05/14	45	--	<6.00	--	--	--	--	--	<0.00185	0.006655	<0.00185	0.00967	--	--	--	--
S-20-B34	NA	12/08/14	20	--	<4.78	--	--	--	--	--	<0.00193	<0.00193	<0.00193	<0.00290	--	--	--	--
S-30-B34	NA	12/08/14	30	--	<4.48	--	--	--	--	--	<0.00166	<0.00166	<0.00166	<0.00249	--	--	--	3.16
S-40-B34	NA	12/08/14	40	--	<4.66	--	--	--	--	--	<0.00157	<0.00157	<0.00157	<0.00236	--	--	--	--
MTCA Method A Cleanup Levels				NA	30/100 ^a	NA	2,000	NA	2,000		0.03	7	6	9	0.005	NA	0.1	250

EXPLANATION:

feet bgs = feet below ground surface

mg/kg = milligram per kilogram

TPHg = Total Petroleum Hydrocarbons as Gasoline in accordance with Ecology Method NWTPH-Gx, WTPH-G, EPA TPH, EPA HCID, or 3550/8015 modified, see laboratory reports for details

TPHd and TPHmo = Total Petroleum Hydrocarbons as Diesel and as Oil, respectively, in accordance with Ecology Method WTPH-D, WTPH-418.1, EPA TPH, EPA HCID, or NWTPH-Dx, see laboratory reports for details

TRPH = Total Recoverable Petroleum Hydrocarbons in accordance with EPA Method 8015

DET = Detected above laboratory method reporting limit

NA = Not applicable

-- = Not analyzed or sampled

< = Less than the stated laboratory reporting limit

B = Benzene; T = Toluene; E = Ethylbenzene; X = Total Xylenes

BTEX, EDB, EDC, and MTBE = Aromatic compounds in accordance with EPA Method 8021B, 8260B, or 8020, see laboratory report for details

Total Pb = Total Lead in accordance with Ecology Method 6010B or 6010C, see laboratory report for details

EDB = Ethylene dibromide

EDC = 1,2 Dichloroethane

MTBE = Methyl tert-butyl ether

Shaded values equal or exceed MTCA Method A Cleanup Levels

a = TPHg soil cleanup level is 30 mg/kg unless benzene is not detected in the sample, or if toluene, ethylbenzene, and total xylenes constitute less than 1% of the TPHg present in the samples. If these conditions are met, the cleanup level for TPHg may be elevated to 100 mg/kg.

b = Blind duplicate

TABLE 2
GROUNDWATER MONITORING AND SAMPLING SCHEDULE AND WELL CONSTRUCTION DETAILS
Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington
Page 1 of 2

Well ID	Well Activity	Frequency of Gauging	Frequency of Sampling	Date of Installation	Wellhead Elevation (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Casing/Borehole Diameter (inches)	Slot Size (inches)
MW2	NS	NM	NS	April 2, 1992	328.06	20-40	40	4/--	0.010
MW3	NS	NM	NS	April 2, 1992	NE	44-59	60	4/--	0.010
MW4	NS	NM	NS	April 6, 1992	327.00	46-60	60	4/--	0.010
MW5	NS	NM	NS	April 7, 1992	327.70	45-60	60	4/--	0.010
MW6	NS	NM	NS	August 3, 1992	328.00	45-60	60	4/10	0.020
MW7	NS	NM	NS	August 3, 1992	NE	45-60	60	4/10	0.020
MW8	NS	NM	NS	August 4, 1992	328.07	45-60	60	4/10	0.020
MW9	NS	NM	NS	August 4, 1992	327.78	45-60	60	4/10	0.020
MW10	NS	NM	NS	September 15, 1994	NE	50-65	65.5	4/12	0.020
MW11	NS	NM	NS	September 15, 1994	327.41	10-40	40	4/12	0.020
MW12	NS	NM	NS	October 14, 1994	330.05	50-65	65.5	4/12	0.020
MW13A	NS	NM	NS	June 23, 1995	327.43	30-38	38	2/10	0.020
MW13B	NS	NM	NS	June 23, 1995	327.45	19-26	26	2/10	0.020
MW13C	NS	NM	NS	June 23, 1995	327.48	5-15	15	2/10	0.020
MW14	NS	NM	NS	June 26, 2005	328.66	35-60	60.5	2/8	0.010
MW15	NS	NM	NS	July 12, 2007	331.33	45-65	65	2/8	0.010
SVE5	NS	NM	NS	June 28, 2005	327.79	10-20	20	2/8	0.010
SVE6	NS	NM	NS	June 28, 2005	327.90	10-40	40	2/8	0.010
SVE7	NS	NM	NS	June 28, 2005	327.46	10-30	31	2/8	0.010
SVE8	NS	NM	NS	December 3, 2014	NE	20-38	38	2/8	0.020
SVE9	NS	NM	NS	December 5, 2014	NE	20-40	40	2/8	0.020
SVE10	NS	NM	NS	December 5, 2014	NE	20-40	40	2/8	0.020
SVE11	NS	NM	NS	December 3, 2014	NE	22-37	37	2/8	0.020

TABLE 2
GROUNDWATER MONITORING AND SAMPLING SCHEDULE AND WELL CONSTRUCTION DETAILS

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington
Page 2 of 2

Well ID	Well Activity	Frequency of Gauging	Frequency of Sampling	Date of Installation	Wellhead Elevation (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Casing/Borehole Diameter (inches)	Slot Size (inches)
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EXPLANATION:

feet bgs = feet below ground surface

NS = not sampled

NM = not measured

-- = Not Available

NE = Not Established

Wellhead elevations were resurveyed on 02/22/11 by Cardno WRG using NAVD 88

**TABLE 3
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington

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Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL (feet)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Diss Pb (µg/L)		
Screened Interval 5-38 ft bgs \ Total Depth 38 ft bgs																
MW1	04/02/92	323.88	30.00	0.24	294.07	NAPL Present										
MW1	04/03/92	323.88	30.00	0.00	293.88	--	--	--	--	--	--	--	--	--		
MW1	04/09/92	323.88	32.55	0.00	291.33	--	--	--	--	--	--	--	--	--		
MW1	08/10/92	323.88	NM	--	--	--	--	--	--	--	--	--	--	--		
MW1	03/07/94	323.88	NM	--	--	--	--	--	--	--	--	--	--	--		
MW1	10/19/94	323.88	NM	--	--	--	--	--	--	--	--	--	--	--		
Destroyed																
Screened Interval 20-40 ft bgs \ Total Depth 40 ft bgs																
MW2	04/09/92	324.12	NM	--	--	--	--	--	--	--	--	--	--	--		
MW2	08/10/92	324.12	NM	--	--	--	--	--	--	--	--	--	--	--		
MW2	03/07/94	324.12	NM	--	--	--	--	--	--	--	--	--	--	--		
MW2	10/19/94	324.12	NM	--	--	--	--	--	--	--	--	--	--	--		
MW2	06/21/95	324.12	NM	--	--	--	--	--	--	--	--	--	--	--		
MW2	12/16/95	324.12	31.82	0.00	292.30	--	--	--	--	--	--	--	--	--		
MW2	03/15/96	324.12	28.00	0.00	296.12	--	--	--	--	--	--	--	--	--		
MW2	06/19/96	324.12	35.33	0.00	288.79	--	--	--	--	--	--	--	--	--		
MW2	12/23/96	324.12	31.85	0.00	292.27	--	--	--	--	--	--	--	--	--		
MW2	03/03/97	324.12	32.09	0.00	292.03	--	--	--	--	--	--	--	--	--		
MW2	06/23/97	324.12	NM	--	--	--	--	--	--	--	--	--	--	--		
MW2	09/23/97	324.12	NM	--	--	--	--	--	--	--	--	--	--	--		
MW2	12/22/97	324.12	NM	--	--	--	--	--	--	--	--	--	--	--		
MW2	03/17/98	324.12	40.90	0.00	283.22	--	--	--	--	--	--	--	--	--		
MW2	04/21/98	324.12	NM	--	--	--	--	--	--	--	--	--	--	--		
MW2	05/20/98	324.12	39.85	0.00	284.27	--	--	--	--	--	--	--	--	--		
MW2	06/25/98	324.12	NM	--	--	--	--	--	--	--	--	--	--	--		
MW2	09/14/98	324.12	NM	--	--	--	--	--	--	--	--	--	--	--		
MW2	12/22/98	324.12	NM	--	--	--	--	--	--	--	--	--	--	--		
MW2	03/09/99	324.12	NM	--	--	--	--	--	--	--	--	--	--	--		
MW2	05/27/99	324.12	NM	--	--	--	--	--	--	--	--	--	--	--		
MW2	09/07/99	324.12	NM	--	--	--	--	--	--	--	--	--	--	--		
MW2	11/19/99	324.12	NM	--	--	--	--	--	--	--	--	--	--	--		
MW2	06/22/00	324.12	NM	--	--	--	--	--	--	--	--	--	--	--		
MW2	10/30/01	324.12	Inaccessible	--	--	--	--	--	--	--	--	--	--	--		
MW2	04/29/02	324.12	39.95	0.00	284.17	--	--	--	--	--	--	--	--	--		
MW2	02/19/03	324.12	Inaccessible	--	--	--	--	--	--	--	--	--	--	--		

MTCA Method A Cleanup Levels

800/1,000^a 500 500 5 1,000 700 1,000 15 15

**TABLE 3
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington

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Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL (feet)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Diss Pb (µg/L)
MW2	02/29/04 c	324.12	DRY	--	--	--	--	--	--	--	--	--	--	--
MW2	10/12/04 c	324.12	DRY	--	--	--	--	--	--	--	--	--	--	--
MW2	01/28/05 c	324.12	39.91	0.00	284.21	--	--	--	--	--	--	--	--	--
MW2	07/08/05 c	324.12	DRY	--	--	--	--	--	--	--	--	--	--	--
MW2	01/25/06 c	324.12	38.92	0.00	285.20	--	--	--	--	--	--	--	--	--
MW2	07/27/06 c	324.12	DRY	--	--	--	--	--	--	--	--	--	--	--
MW2	03/29/07 c	324.12	DRY	--	--	--	--	--	--	--	--	--	--	--
MW2	06/20/07 c	324.12	NM	--	--	--	--	--	--	--	--	--	--	--
MW2	09/13/07 c	324.12	NM	--	--	--	--	--	--	--	--	--	--	--
MW2	11/30/07	324.12	39.95	0.00	284.17	--	--	--	--	--	--	--	--	--
MW2	02/28/08	324.12	DRY	--	--	--	--	--	--	--	--	--	--	--
MW2	06/20/08	324.12	NM	--	--	--	--	--	--	--	--	--	--	--
MW2	09/03/08	324.12	DRY	--	--	--	--	--	--	--	--	--	--	--
MW2	11/03/08	324.12	DRY	--	--	--	--	--	--	--	--	--	--	--
MW2	03/03/09	324.12	DRY	--	--	--	--	--	--	--	--	--	--	--
MW2	05/21/09	324.12	DRY	--	--	--	--	--	--	--	--	--	--	--
MW2	08/05/09	324.12	DRY	--	--	--	--	--	--	--	--	--	--	--
MW2	11/23/09	324.12	DRY	--	--	--	--	--	--	--	--	--	--	--
MW2	03/22/10	324.12	DRY	--	--	--	--	--	--	--	--	--	--	--
MW2	06/16/10	324.12	DRY	--	--	--	--	--	--	--	--	--	--	--
MW2	09/02/10	324.12	DRY	--	--	--	--	--	--	--	--	--	--	--
MW2	10/20/10	324.12	DRY	--	--	--	--	--	--	--	--	--	--	--
MW2	01/31/11	324.12	DRY	--	--	--	--	--	--	--	--	--	--	--
MW2	05/25/11 f	328.06	DRY	--	--	--	--	--	--	--	--	--	--	--
MW2	09/01/11	328.06	DRY	--	--	--	--	--	--	--	--	--	--	--
MW2	12/29/11	328.06	DRY	--	--	--	--	--	--	--	--	--	--	--
MW2	06/14/12	328.06	NM	--	--	--	--	--	--	--	--	--	--	--
MW2	03/19/13	328.06	NM	--	--	--	--	--	--	--	--	--	--	--
MW2	06/17/13	328.06	DRY	--	--	--	--	--	--	--	--	--	--	--
MW2	10/30/13	328.06	DRY	--	--	--	--	--	--	--	--	--	--	--
MW2	03/06/14	328.06	39.94	0.00	288.12	--	--	--	--	--	--	--	--	--
MW2	06/04/14	328.06	DRY	--	--	--	--	--	--	--	--	--	--	--
Screened Interval 44-59 ft bgs \ Total Depth 60 ft bgs														
MW3	04/09/92	324.14	48.48	0.00	275.66	670	--	--	23	9.8	0.98	4.9	22	--
MW3	08/10/92	324.14	48.96	0.00	275.18	<50	--	--	4.5	1.1	<0.5	<1.0	--	--
MW3	03/07/94	324.14	51.19	0.00	272.95	<50	--	--	<0.5	<0.5	<0.5	<1.0	--	--
MTCA Method A Cleanup Levels						800/1,000 ^a	500	500	5	1,000	700	1,000	15	15

**TABLE 3
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington

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Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL (feet)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Diss Pb (µg/L)
MW3	10/19/94	324.14	51.48	0.00	272.66	<50	--	--	<0.5	<0.5	<0.5	<1.0	--	--
MW3	06/21/95	324.14	50.22	0.00	273.92	<50	--	--	<0.5	<0.5	<0.5	<1.0	--	--
MW3	12/16/95	324.14	50.52	0.00	273.62	--	--	--	--	--	--	--	--	--
MW3	03/15/96	324.14	48.71	0.00	275.43	--	--	--	--	--	--	--	--	--
MW3	06/19/96	324.14	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	10/03/96	324.14	47.36	0.00	276.78	--	--	--	--	--	--	--	--	--
MW3	12/23/96	324.14	47.53	0.00	276.61	--	--	--	--	--	--	--	--	--
MW3	03/03/97	324.14	45.76	0.00	278.38	--	--	--	--	--	--	--	--	--
MW3	06/23/97	324.14	NM	--	--	--	--	--	--	--	--	--	--	--
MW3	09/23/97	324.14	NM	--	--	--	--	--	--	--	--	--	--	--
MW3	12/22/97	324.14	45.13	0.00	279.01	61.2	--	--	16.3	3.39	0.652	3.44	<2.0	--
MW3	03/17/98	324.14	45.55	0.00	278.59	<50	--	--	<0.2	<0.2	<0.2	<0.6	<39	--
MW3	04/21/98	324.14	44.44	0.00	279.70	--	--	--	--	--	--	--	--	--
MW3	05/20/98	324.14	44.80	0.00	279.34	--	--	--	--	--	--	--	--	--
MW3	06/25/98	324.14	47.02	0.00	277.12	<50	--	--	<0.2	<0.2	<0.2	<0.6	<3.4	--
MW3	09/14/98	324.14	NM	--	--	--	--	--	--	--	--	--	--	--
MW3	12/22/98	324.14	NM	--	--	--	--	--	--	--	--	--	--	--
MW3	03/09/99	324.14	NM	--	--	--	--	--	--	--	--	--	--	--
MW3	05/27/99	324.14	NM	--	--	--	--	--	--	--	--	--	--	--
MW3	09/07/99	324.14	NM	--	--	--	--	--	--	--	--	--	--	--
MW3	11/19/99	324.14	46.21	0.00	277.93	--	--	--	--	--	--	--	--	--
MW3	06/22/00	324.14	46.47	0.00	277.67	--	--	--	--	--	--	--	--	--
MW3	10/30/01	324.14	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	04/29/02	324.14	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	02/19/03	324.14	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	02/29/04	324.14	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	10/12/04	324.14	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	01/28/05	324.14	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	07/08/05	324.14	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	01/25/06	324.14	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	07/27/06	324.14	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	03/29/07	324.14	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	06/20/07	324.14	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	09/13/07	324.14	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	11/30/07	324.14	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	02/28/08	324.14	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	06/20/08	324.14	Inaccessible	--	--	--	--	--	--	--	--	--	--	--

MTCA Method A Cleanup Levels

800/1,000^a 500 500 5 1,000 700 1,000 15 15

**TABLE 3
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington

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Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL (feet)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Diss Pb (µg/L)
MW3	09/03/08	324.14	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	11/03/08	324.14	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	03/03/09	324.14	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	05/21/09	324.14	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	08/05/09	324.14	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	11/23/09	324.14	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	03/22/10	324.14	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	06/16/10	324.14	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	09/02/10	324.14	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	10/20/10	324.14	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	01/31/11	324.14	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	05/25/11	NE	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	09/01/11	NE	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	12/29/11	NE	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	06/14/12	NE	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	03/19/13	NE	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	06/17/13	NE	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	10/30/13	NE	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	03/06/14 h	NE	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW3	06/04/14	NE	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
Screened Interval 46-60 ft bgs \ Total Depth 60 ft bgs														
MW4	04/09/92	323.28	47.68	0.00	275.60	1,300	--	--	21	10	1.5	8.1	6.8	--
MW4	08/10/92	323.28	48.14	0.00	275.14	59	--	--	4.6	<0.5	<0.5	<1.0	--	--
MW4	03/08/94	323.28	50.30	0.00	272.98	<50	--	--	1.3	<0.5	<0.5	<1.0	--	--
MW4	10/19/94	323.28	50.66	0.00	272.62	<50	--	--	1.7	2.5	<0.5	2.4	--	--
MW4	06/21/95	323.28	49.40	0.00	273.88	<50	--	--	<0.5	<0.5	<0.5	<1.0	--	--
MW4	09/20/95	323.28	49.41	0.00	273.87	<50	--	--	<0.5	<0.5	<0.5	<1.0	--	--
MW4	12/16/95	323.28	49.80	0.00	273.48	<50	--	--	1.2	6.4	0.94	6.7	--	--
MW4	03/14/96	323.28	48.06	0.00	275.22	<50	--	--	<0.5	<0.5	<0.5	<1.0	--	--
MW4	06/19/96	323.28	46.39	0.00	276.89	<50	--	--	<0.5	<0.5	<0.5	<1.0	--	--
MW4	10/03/96	323.28	46.67	0.00	276.61	<50	--	--	<0.5	<0.5	<0.5	<1.0	--	--
MW4	12/23/96	323.28	47.12	0.00	276.16	<50	--	--	<0.5	<0.5	<0.5	<1.0	--	--
MW4	03/03/97	323.28	45.28	0.00	278.00	--	--	--	--	--	--	--	--	--
MW4	06/23/97	323.28	NM	--	--	--	--	--	--	--	--	--	--	--
MW4	09/23/97	323.28	NM	--	--	--	--	--	--	--	--	--	--	--
MW4	12/22/97	323.28	44.92	0.00	278.36	<50	--	--	11.7	2.84	0.531	3.41	<2.0	--
MTCA Method A Cleanup Levels						800/1,000 ^a	500	500	5	1,000	700	1,000	15	15

**TABLE 3
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington
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Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL (feet)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Diss Pb (µg/L)
MW4	03/17/98	323.28	44.95	0.00	278.33	<50	--	--	<0.2	<0.2	<0.2	<0.6	<39	--
MW4	04/21/98	323.28	43.85	0.00	279.43	--	--	--	--	--	--	--	--	--
MW4	05/20/98	323.28	43.85	0.00	279.43	--	--	--	--	--	--	--	--	--
MW4	06/25/98	323.28	44.32	0.00	278.96	<50	--	--	<0.2	<0.2	<0.2	<0.6	<3.4	--
MW4	09/14/98	323.28	46.27	0.00	277.01	--	--	--	--	--	--	--	--	--
MW4	12/22/98	323.28	45.81	0.00	277.47	--	--	--	--	--	--	--	--	--
MW4	03/09/99	323.28	45.55	0.00	277.73	<48	--	--	<0.2	<0.2	<0.2	<0.6	<6.5	--
MW4	05/27/99	323.28	44.27	0.00	279.01	--	--	--	--	--	--	--	--	--
MW4	09/07/99	323.28	44.61	0.00	278.67	--	--	--	--	--	--	--	--	--
MW4	11/19/99	323.28	45.67	0.00	277.61	--	--	--	--	--	--	--	--	--
MW4	06/22/00	323.28	45.55	0.00	277.73	--	--	--	--	--	--	--	--	--
MW4	10/30/01	323.28	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW4	04/29/02	323.28	47.63	0.00	275.65	<100	--	--	2.5	2.7	<1.0	4.2	--	--
MW4	02/19/03	323.28	48.77	0.00	274.51	<100	--	--	<1.0	<1.0	<1.0	<1.0	--	--
MW4	02/29/04	323.28	48.78	0.00	274.50	<100	--	--	<1.00	<1.0	<1.0	<1.0	--	--
MW4	10/12/04	323.28	48.86	0.00	274.42	<100	--	--	<1.00	<1.0	<1.0	<1.0	--	--
MW4	01/28/05	323.28	49.18	0.00	274.10	<100	--	--	<1.00	<1.0	<1.0	<1.0	--	--
MW4	07/08/05	323.28	48.79	0.00	274.49	<100	--	--	<1.00	1.7	<1.0	8.2	--	--
MW4	01/25/06	323.28	50.38	0.00	272.90	<100	--	--	<1.00	<1.00	<1.00	<3.00	--	--
MW4	07/27/06	323.28	47.76	0.00	275.52	<100	--	--	<1.00	<1.00	<1.00	<3.00	--	--
MW4	03/29/07	323.28	47.26	0.00	276.02	<100	<111	115	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW4	06/20/07	323.28	46.74	0.00	276.54	<100	<100	142	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW4	09/13/07	323.28	47.38	0.00	275.90	<250	<100	<100	<1.00	1.61	<1.00	<3.00	5.67	<5.00
MW4	11/30/07	323.28	47.96	0.00	275.32	<250	<99.0	<99.0	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW4	02/28/08	323.28	48.22	0.00	275.06	<100	<98.0	131	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW4	06/20/08	323.28	47.91	0.00	275.37	<100	<105	<105	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW4	09/03/08	323.28	48.39	0.00	274.89	--	--	--	--	--	--	--	--	--
MW4	11/03/08	323.28	48.35	0.00	274.93	--	--	--	--	--	--	--	--	--
MW4	03/03/09	323.28	48.59	0.00	274.69	--	--	--	--	--	--	--	--	--
MW4	05/21/09	323.28	48.24	0.00	275.04	--	--	--	--	--	--	--	--	--
MW4	08/05/09	323.28	48.56	0.00	274.72	--	--	--	--	--	--	--	--	--
MW4	11/23/09	323.28	49.35	0.00	273.93	--	--	--	--	--	--	--	--	--
MW4	03/22/10	323.28	48.77	0.00	274.51	--	--	--	--	--	--	--	--	--
MW4	06/16/10	323.28	47.72	0.00	275.56	<100	<95.2	<95.2	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW4	09/02/10	323.28	47.59	0.00	275.69	<100	<95.2	<95.2	<1.00	<1.00	<1.00	<3.00	5.90	<5.00
MW4	10/20/10	323.28	49.79	0.00	273.49	<100	<106	<106	<1.00	<1.00	<1.00	<3.00	20.3	<5.00
MW4	01/31/11	323.28	47.72	0.00	275.56	<100	<100	<100	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00

MTCA Method A Cleanup Levels

800/1,000^a 500 500 5 1,000 700 1,000 15 15

**TABLE 3
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington
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Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL (feet)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Diss Pb (µg/L)
MW4	05/25/11 f	327.00	46.77	0.00	280.23	<100	<95.2	<95.2	<1.00	<1.00	<1.00	<3.00	9.10	<5.00
MW4	09/01/11	327.00	46.41	0.00	280.59	<100	<95.2	<238	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW4	12/29/11	327.00	47.58	0.00	279.42	<100	<96.2	<240	<1.00	<1.00	<1.00	<3.00	38.5	<5.00
MW4	06/14/12	327.00	NM	--	--	--	--	--	--	--	--	--	--	--
MW4	03/19/13	327.00	46.16	0.00	280.84	--	--	--	--	--	--	--	--	--
MW4	06/17/13	327.00	45.75	0.00	281.25	--	--	--	--	--	--	--	--	--
MW4	10/30/13	327.00	46.92	0.00	280.08	<100	<93.5	<93.5	<1.00	<1.00	<1.00	<2.00	11.0	<5.00
MW4	03/06/14	327.00	47.66	0.00	279.34	<100	<93.5	<93.5	<1.00	<1.00	<1.00	<3.00	10.2	7.80
MW4	06/04/14	327.00	46.33	0.00	280.67	<100	<94.3	<94.3	<1.00	<1.00	<1.00	<2.00	<5.00	<5.00
Screened Interval 45-60 ft bgs \ Total Depth 60 ft bgs														
MW5	04/09/92	324.37	48.55	0.00	275.82	110,000	--	--	13,000	25,000	2,300	13,000	220	--
MW5	08/10/92	324.37	49.24	0.00	275.13	72,000	--	--	9,600	15,000	1,300	8,600	--	--
MW5	03/08/94	324.37	51.45	0.00	272.92	74,000	--	--	11,000	13,000	1,400	10,000	--	--
MW5	10/19/94	324.37	51.79	0.00	272.58	30,000	--	--	4,800	640	3,600	5,700	--	--
MW5	06/21/95	324.37	50.03	0.00	274.34	4,100	--	--	180	19	13	500	--	--
MW5	09/20/95	324.37	49.75	0.00	274.62	380	--	--	13	2.5	1.7	32	--	--
MW5	12/16/95	324.37	49.30	0.00	275.07	910	--	--	12	2.8	7.7	82	--	--
MW5	03/14/96	324.37	47.87	0.00	276.50	9,700	--	--	34	19	17	370	--	--
MW5	03/14/96 b	324.37	--	--	--	8,100	--	--	27	17	13	310	--	--
MW5	06/19/96	324.37	47.28	0.00	277.09	634	--	--	1.63	<0.5	<0.5	4.37	--	--
MW5	10/04/96	324.37	46.94	0.00	277.43	2,600	--	--	11.4	1.15	2.69	26.9	--	--
MW5	10/04/96 b	324.37	--	--	--	1,560	--	--	7.88	0.84	1.76	17.1	--	--
MW5	12/23/96	324.37	47.02	0.00	277.35	<50	--	--	0.511	<0.5	<0.5	<1.0	--	--
MW5	03/03/97	324.37	44.83	0.00	279.54	101	--	--	3.21	<0.5	0.746	<1.0	--	--
MW5	03/03/97 b	324.37	--	--	--	63.6	--	--	2.19	<0.5	<0.5	<1.0	--	--
MW5	06/23/97	324.37	43.54	0.00	280.83	466	--	--	167	1.07	<1.0	<2	307	--
MW5	07/23/97	324.37	43.22	0.00	281.15	171	--	--	8.73	<0.5	<0.5	<0.1	--	--
MW5	09/23/97	324.37	43.38	0.00	280.99	<1,000	--	--	1,020	<10	<10	88.5	--	--
MW5	12/22/97	324.37	44.75	0.00	279.62	1,720	--	--	1,670	15.4	10.9	227	325	--
MW5	03/17/98	324.37	45.30	0.00	279.07	330	--	--	400	1	1	1.3	120	--
MW5	04/21/98	324.37	44.28	0.00	280.09	--	--	--	--	--	--	--	--	--
MW5	05/20/98	324.37	44.37	0.00	280.00	--	--	--	--	--	--	--	--	--
MW5	06/25/98	324.37	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW5	09/22/98	324.37	46.40	0.00	277.97	830	--	--	1,000	8	32	28	108	--
MW5	12/22/98	324.37	45.83	0.00	278.54	130	--	--	44	4	1	1.6	--	--
MW5	03/09/99	324.37	45.27	0.00	279.10	120	--	--	10	0.9	4	0.8	129	--
MTCA Method A Cleanup Levels						800/1,000 ^a	500	500	5	1,000	700	1,000	15	15

TABLE 3
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS
Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington
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Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL (feet)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Diss Pb (µg/L)
MW5	05/27/99	324.37	44.78	0.00	279.59	54	--	--	12	1	<0.2	<0.2	133	--
MW5	09/07/99	324.37	45.14	0.00	279.23	55	--	--	120	3	0.5	1.4	57	--
MW5	11/19/99	324.37	45.72	0.00	278.65	1,400	--	--	1,000	170	110	60	53	--
MW5	05/16/00	324.37	46.60	0.00	277.77	730	--	--	380	14	70	30	67	--
MW5	10/30/01	324.37	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW5	04/29/02	324.37	48.99	0.00	275.38	<100	--	--	<1.0	<1.0	<1.0	<1.0	--	--
MW5	02/19/03	324.37	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW5	02/29/04 c	324.37	NM	--	--	--	--	--	--	--	--	--	--	--
MW5	10/12/04 c	324.37	NM	--	--	--	--	--	--	--	--	--	--	--
MW5	01/28/05 c	324.37	58.81	0.00	265.56	<100	--	--	1.80	<1.0	<1.0	<1.0	--	--
MW5	01/25/06 c	324.37	49.72	0.00	274.65	<100	--	--	1.04	<1.00	<1.00	<3.00	--	--
MW5	07/27/06 c	324.37	48.28	0.00	276.09	<100	--	--	<1.00	<1.00	<1.00	<3.00	--	--
MW5	03/29/07 c	324.37	47.80	0.00	276.57	<100	<97.1	<97.1	<1.00	<1.00	<1.00	<3.00	17.1	14.5
MW5	06/20/07 c	324.37	47.35	0.00	277.02	<100	<96.2	158	<1.00	<1.00	<1.00	<3.00	14.1	8.62
MW5	09/13/07 c	324.37	47.93	0.00	276.44	<250	<96.2	<96.2	<1.00	<1.00	<1.00	<3.00	14.5	10.0
MW5	11/30/07	324.37	48.54	0.00	275.83	<250	<94.3	<94.3	2.08	2.99	<1.00	<3.00	25.8	10.0
MW5	02/28/08	324.37	48.82	0.00	275.55	<100	110	104	<1.00	<1.00	<1.00	<3.00	9.90	8.40
MW5	06/20/08	324.37	48.68	0.00	275.69	<100	141	<100	<1.00	<1.00	<1.00	<3.00	13.5	<5.00
MW5	09/03/08	324.37	48.08	0.00	276.29	319	233	117	81.0	<1.00	2.88	10.8	9.80	11.6
MW5	11/03/08	324.37	48.43	0.00	275.94	305	336	101	56.8	<1.00	<1.00	<3.00	12.4	9.46
MW5	03/03/09	324.37	48.99	0.00	275.38	150	113	<95.2	1.80	<1.00	<1.00	<3.00	13.6	11.1
MW5	05/21/09	324.37	48.72	0.00	275.65	<100	<100	<100	<1.00	<1.00	<1.00	<3.00	81.7	<5.00
MW5	08/05/09	324.37	48.77	0.00	275.60	--	--	--	--	--	--	--	--	--
MW5	11/23/09	324.37	49.88	0.00	274.49	<100	115	<100	5.27	<1.00	<1.00	<3.00	12.8	9.10
MW5	03/22/10 d	324.00	48.96	0.00	275.04	<100	<103	<103	<1.00	<1.00	<1.00	<3.00	9.10	6.50
MW5	06/16/10	324.00	48.19	0.00	275.81	<100	<108	<108	<1.00	<1.00	<1.00	<3.00	7.30	<5.00
MW5	09/02/10	324.00	47.94	0.00	276.06	<100	124	<118	<1.00	<1.00	<1.00	<3.00	22.5	<5.00
MW5	10/20/10	324.00	48.17	0.00	275.83	<100	112	<103	<1.00	<1.00	<1.00	<3.00	28.6	<5.00
MW5	01/31/11	324.00	48.02	0.00	275.98	<100	<111	<111	<1.00	<1.00	<1.00	<3.00	7.40	<5.00
MW5	05/25/11 f	327.70	47.23	0.00	280.47	<100	<103	<103	<1.00	<1.00	<1.00	<3.00	8.40	<5.00
MW5	09/01/11	327.70	46.07	0.00	281.63	<100	<94.3	<236	<1.00	<1.00	<1.00	<3.00	166	<5.00
MW5	12/29/11	327.70	47.09	0.00	280.61	<100	<95.2	376	<1.00	<1.00	<1.00	<3.00	128	<5.00
MW5	06/14/12	327.70	NM	--	--	--	--	--	--	--	--	--	--	--
MW5	03/19/13	327.70	45.61	0.00	282.09	<100	110	<95.2	<1.00	<1.00	<1.00	<3.00	23.2	<5.00
MW5	06/17/13	327.70	45.78	0.00	281.92	<100	129	<94.3	<1.00	<1.00	<1.00	<3.00	11.5	<5.00
MW5	10/30/13	327.70	47.16	0.00	280.54	<100	<93.5	<93.5	<1.00	<1.00	<1.00	<2.00	16.1	<5.00
MW5	03/06/14	327.70	48.05	0.00	279.65	<100	<94.3	<94.3	<1.00	<1.00	<1.00	<3.00	12.5	8.40

MTCA Method A Cleanup Levels

800/1,000^a 500 500 5 1,000 700 1,000 15 15

**TABLE 3
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington
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Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL (feet)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Diss Pb (µg/L)		
MW5	06/04/14	327.70	46.55	0.00	281.15	<100	<93.9	<93.9	<1.00	<1.00	<1.00	<2.00	26.1	5.40		
Screened Interval 45-60 ft bgs \ Total Depth 60 ft bgs																
MW6	08/10/92	324.59	49.53	0.00	275.06	99,000	--	--	7,900	20,000	1,600	12,000	--	--		
MW6	03/07/94	324.59	51.06	2.47	275.51	NAPL Present									--	--
MW6	10/19/94	324.59	52.04	0.10	272.63	NAPL Present									--	--
MW6	06/21/95	324.59	50.78	0.02	273.83	NAPL Present									--	--
MW6	09/20/95	324.59	50.70	0.00	273.89	74,000	--	--	3,400	9,400	1,400	9,800	--	--		
MW6	12/15/95	324.59	51.11	0.00	273.48	84,000	--	--	3,300	13,000	1,500	10,000	--	--		
MW6	03/15/96	324.59	49.41	0.00	275.18	56,000	--	--	1,100	5,400	1,000	7,400	--	--		
MW6	06/19/96	324.59	48.69	0.00	275.90	13,100	--	--	304	1,070	180	1,590	--	--		
MW6	10/04/96	324.59	48.07	0.00	276.52	6,170	--	--	230	509	108	962	--	--		
MW6	12/23/96	324.59	48.50	0.00	276.09	4,160	--	--	147	451	33.7	516	--	--		
MW6	03/03/97	324.59	45.64	0.00	278.95	1,900	--	--	64.3	222	42.3	284	--	--		
MW6	06/23/97	324.59	44.28	0.00	280.31	150	--	--	18.5	<0.5	<0.5	<1.0	59.5	--		
MW6	09/23/97	324.59	44.18	0.00	280.41	53.8	--	--	0.6	<0.5	<0.5	<1.0	--	--		
MW6	12/22/97	324.59	45.43	0.00	279.16	474	--	--	35.9	18	18.9	29.8	34.5	--		
MW6	03/17/98	324.59	47.05	0.00	277.54	2,700	--	--	110	230	94	240	44	--		
MW6	04/21/98	324.59	45.60	0.00	278.99	--	--	--	--	--	--	--	--	--		
MW6	05/20/98	324.59	45.80	0.00	278.79	--	--	--	--	--	--	--	--	--		
MW6	06/25/98	324.59	45.62	0.00	278.97	4,200	--	--	160	560	150	480	24.4	--		
MW6	09/22/98	324.59	48.00	0.00	276.59	31	--	--	790	3,700	790	3,600	56	--		
MW6	12/22/98	324.59	47.40	0.00	277.19	3,700	--	--	47	210	110	330	--	--		
MW6	03/09/99	324.59	46.80	0.00	277.79	1,900	--	--	33	160	73	200	15	--		
MW6	05/27/99	324.59	46.45	0.00	278.14	570	--	--	10	28	28	57	21	--		
MW6	09/07/99	324.59	46.82	0.00	277.77	1,800	--	--	31	130	99	200	11	--		
MW6	11/19/99	324.59	47.90	0.00	276.69	1,400	--	--	28	180	66	180	18	--		
MW6	05/16/00	324.59	48.12	0.00	276.47	2,200	--	--	35	170	120	290	37.8	--		
MW6	10/30/01	324.59	Inaccessible	--	--	--	--	--	--	--	--	--	--	--		
MW6	04/29/02	324.59	DRY	--	--	--	--	--	--	--	--	--	--	--		
MW6	02/19/03	324.59	50.16	0.00	274.43	10,900	--	--	380	222	606	1,800	--	--		
MW6	02/29/04	324.59	50.01	0.00	274.58	1,360	--	--	29.6	7.1	22.8	105	--	--		
MW6	10/12/04	324.59	50.09	0.00	274.50	1,190	--	--	40.3	4.1	50.8	45.9	--	--		
MW6	01/28/05	324.59	50.79	0.00	273.80	4,190	--	--	224	22.5	234	252	--	--		
MW6	07/08/05	324.59	50.45	0.00	274.14	2,160	--	--	58.2	9.0	55.9	295	--	--		
MW6	01/25/06	324.59	50.85	0.00	273.74	10,100	--	--	261	127	355	1,270	--	--		
MW6	07/27/06	324.59	49.40	0.00	275.19	1,010	--	--	27.5	2.71	66.9	32.5	--	--		

MTCA Method A Cleanup Levels

800/1,000^a 500 500 5 1,000 700 1,000 15 15

**TABLE 3
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington
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Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL (feet)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Diss Pb (µg/L)
MW6	03/29/07	324.59	48.57	0.00	276.02	1,680	285	<105	27.6	3.98	94.2	243	11.4	13.0
MW6	06/20/07	324.59	48.09	0.00	276.50	1,580	216	<111	24.0	15.5	86.6	187	21.4	16.1
MW6	09/13/07	324.59	48.68	0.00	275.91	<250	<98.0	<98.0	4.89	<1.00	10.4	21.6	<5.00	<5.00
MW6	11/30/07	324.59	DRY	--	--	--	--	--	--	--	--	--	--	--
MW6	06/20/08	324.59	49.36	0.00	275.23	2,520	413	102	38.5	11.2	98.5	250	9.58	<5.00
MW6	09/03/08	324.59	49.88	0.00	274.71	6,320	702	108	86.2	109	458	1,290	<5.00	<5.00
MW6	11/03/08	324.59	49.88	0.00	274.71	5,510	503	<111	43.1	121	361	1,060	9.36	<5.00
MW6	03/03/09	324.59	49.88	0.00	274.71	6,820	586	<111	44.0	35.9	333	981	<5.00	<5.00
MW6	05/21/09	324.59	49.63	0.00	274.96	4,200	976	<100	28.3	11.8	160	299	11.3	<5.00
MW6	08/05/09	324.59	49.98	0.00	274.61	4,900	605	<99.0	50.4	25.9	431	1,350	6.80	<5.00
MW6	11/23/09	324.59	50.71	0.00	273.88	24,500	868	<100	59.0	38.9	386	1,600	11.1	9.40
MW6	03/22/10 d	324.11	49.40	0.00	274.71	3,900	712	335	18.5	17.3	142	486	9.50	<5.00
MW6	06/16/10	324.11	48.76	0.00	275.35	269	<100	<100	<1.00	<1.00	4.53	12.3	<5.00	<5.00
MW6	09/02/10	324.11	48.42	0.00	275.69	2,080	788	<98.0	21.9	6.53	77.3	207	17.1	7.00
MW6	10/20/10	324.11	48.63	0.00	275.48	1,980	236	<101	10.3	5.89	43.2	112	12.3	<5.00
MW6	01/31/11	324.11	48.72	0.00	275.39	103	<111	<111	<1.00	<1.00	4.09	10.9	<5.00	<5.00
MW6	05/25/11 f	328.00	47.76	0.00	280.24	<100	<95.2	<95.2	<1.00	<1.00	1.30	<3.00	7.20	<5.00
MW6	09/01/11	328.00	47.11	0.00	280.89	507	161	<245	<1.00	<1.00	3.06	<3.00	124	<5.00
MW6	12/29/11	328.00	48.89	0.00	279.11	--	--	--	--	--	--	--	--	--
MW6	06/14/12	328.00	NM	--	--	--	--	--	--	--	--	--	--	--
MW6	03/19/13	328.00	45.95	0.00	282.05	--	--	--	--	--	--	--	--	--
MW6	06/17/13	328.00	46.07	0.00	281.93	<100	<94.3	<94.3	<1.00	<1.00	<1.00	<3.00	6.20	<5.00
MW6	10/30/13	328.00	47.51	0.00	280.49	<100	<93.5	<93.5	<1.00	<1.00	<1.00	<2.00	236	<5.00
MW6	03/06/14	328.00	48.37	0.00	279.63	<100	<93.5	<93.5	<1.00	<1.00	<1.00	<3.00	6.80	<5.00
MW6	06/04/14	328.00	46.89	0.00	281.11	<100	<93.9	<93.9	<1.00	<1.00	<1.00	<2.00	<5.00	<5.00
Screened Interval 45-60 ft bgs \ Total Depth 60 ft bgs														
MW7	08/10/92	323.94	48.83	0.00	275.11	3,400	--	--	2,300	96	100	700	--	--
MW7	03/07/94	323.94	51.06	0.00	272.88	<50	--	--	72	1.8	<0.5	2.9	--	--
MW7	10/19/94	323.94	51.50	0.00	272.44	<50	--	--	3.1	<0.5	<0.5	<1.0	--	--
MW7	06/21/95	323.94	50.06	0.00	273.88	<50	--	--	9.2	<0.5	<0.5	<1.0	--	--
MW7	09/20/95	323.94	50.05	0.00	273.89	<50	--	--	11	<0.5	<0.5	<1.0	--	--
MW7	12/16/95	323.94	50.38	0.00	273.56	<50	--	--	4	<0.5	<0.5	<1.0	--	--
MW7	03/14/96	323.94	48.61	0.00	275.33	100	--	--	10	0.52	<0.5	<1.0	--	--
MW7	06/19/96	323.94	47.03	0.00	276.91	<50	--	--	5.35	<0.5	<0.5	<1.0	--	--
MW7	10/04/96	323.94	47.20	0.00	276.74	<50	--	--	2.42	<0.5	<0.5	<1.0	--	--
MW7	12/23/96	323.94	47.68	0.00	276.26	<50	--	--	2.65	<0.5	<0.5	<1.0	--	--
MTCA Method A Cleanup Levels						800/1,000 ^a	500	500	5	1,000	700	1,000	15	15

**TABLE 3
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington
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Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL (feet)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Diss Pb (µg/L)
MW7	03/03/97	323.94	45.85	0.00	278.09	<50	--	--	1.73	0.575	<0.5	1.03	--	--
MW7	06/23/97	323.94	43.71	0.00	280.23	<80	--	--	30.5	<0.5	<0.5	<1.0	17.9	--
MW7	09/23/97	323.94	43.61	0.00	280.33	53.5	--	--	108	<0.5	<0.5	<1.0	--	--
MW7	12/22/97	323.94	46.29	0.00	277.65	63.3	--	--	31.6	3.81	0.748	5.13	10.5	--
MW7	03/17/98	323.94	45.55	0.00	278.39	<50	--	--	52	0.4	1	<0.6	<39	--
MW7	04/21/98	323.94	44.41	0.00	279.53	--	--	--	--	--	--	--	--	--
MW7	05/20/98	323.94	44.47	0.00	279.47	--	--	--	--	--	--	--	--	--
MW7	06/25/98	323.94	45.03	0.00	278.91	110	--	--	120	9	6	8	6.5	--
MW7	09/22/98	323.94	46.26	0.00	277.68	55	--	--	19	2	0.5	2.7	15	--
MW7	12/22/98	323.94	46.19	0.00	277.75	<48	--	--	1	0.4	<0.2	<0.6	--	--
MW7	03/09/99	323.94	46.12	0.00	277.82	<48	--	--	3	0.4	<0.2	<0.6	<6.5	--
MW7	05/27/99	323.94	44.87	0.00	279.07	<48	--	--	28	0.2	0.2	<0.6	<6.5	--
MW7	09/07/99	323.94	45.05	0.00	278.89	<48	--	--	3	0.8	<0.2	0.6	<6.5	--
MW7	11/19/99	323.94	46.26	0.00	277.68	<48	--	--	4	1.9	0.58	1.5	14	--
MW7	05/16/00	323.94	45.95	0.00	277.99	<48	--	--	0.69	0.35	<0.2	<0.6	32.4	--
MW7	10/30/01	323.94	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW7	04/29/02	323.94	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW7	02/19/03	323.94	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW7	02/29/04	323.94	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW7	10/12/04	323.94	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW7	01/28/05	323.94	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW7	07/08/05	323.94	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW7	01/25/06	323.94	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW7	07/27/06	323.94	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW7	03/29/07	323.94	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW7	06/20/07	323.94	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW7	09/13/07	323.94	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW7	11/30/07	323.94	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW7	02/28/08	323.94	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW7	06/20/08	323.94	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW7	09/03/08	323.94	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW7	11/03/08	323.94	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW7	03/03/09	323.94	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW7	05/21/09	323.94	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW7	08/05/09	323.94	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW7	08/05/09	323.94	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW7	03/22/10 d	324.70	NM	--	--	--	--	--	--	--	--	--	--	--

MTCA Method A Cleanup Levels

800/1,000^a 500 500 5 1,000 700 1,000 15 15

**TABLE 3
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington
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Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL (feet)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Diss Pb (µg/L)
MW7	06/16/10	324.70	49.18	0.00	275.52	<100	<105	<105	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW7	09/02/10	323.94	49.05	0.00	274.89	<100	<111	<111	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW7	10/20/10	323.94	49.21	0.00	274.73	<100	<96.2	<96.2	<1.00	<1.00	<1.00	<3.00	6.30	<5.00
MW7	01/31/11	323.94	50.96	0.00	272.98	<100	<100	<100	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW7	05/25/11	NE	50.08	0.00	--	<100	<114	<114	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW7	09/01/11	NE	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW7	12/29/11	NE	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW7	06/14/12	NE	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW7	03/19/13	NE	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW7	06/17/13	NE	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW7	10/30/13	NE	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW7	03/06/14 h	NE	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW7	06/04/14	NE	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
Screened Interval 45-60 ft bgs \ Total Depth 60 ft bgs														
MW8	08/10/92	324.34	49.46	0.00	274.88	370	--	--	1,300	18	14	25	--	--
MW8	03/08/94	324.34	51.69	0.00	272.65	210	--	--	540	3.8	<2.0	2.9	--	--
MW8	10/19/94	324.34	51.94	0.00	272.40	260	--	--	310	<0.5	<0.5	5.8	--	--
MW8	06/21/95	324.34	50.67	0.00	273.67	120	--	--	270	<0.5	<0.5	1.4	--	--
MW8	09/20/95	324.34	50.64	0.00	273.70	100	--	--	200	<0.5	<0.5	2.7	--	--
MW8	12/16/95	324.34	51.00	0.00	273.34	240	--	--	110	0.58	<0.5	1.9	--	--
MW8	12/16/95 b	324.34	--	--	--	260	--	--	110	0.67	<0.5	1.9	--	--
MW8	03/14/96	324.34	49.36	0.00	274.98	340	--	--	45	<0.5	<0.5	1.5	--	--
MW8	06/19/96	324.34	47.73	0.00	276.61	74.8	--	--	8.52	<0.5	<0.5	<1.0	--	--
MW8	06/19/96 b	324.34	--	--	--	--	--	--	4.46	<0.5	<0.5	<1.0	--	--
MW8	10/04/96	324.34	47.85	0.00	276.49	111	--	--	4.68	<0.5	<0.5	<1.0	--	--
MW8	12/23/96	324.34	48.41	0.00	275.93	151	--	--	4.82	<0.5	<0.5	<1.0	--	--
MW8	12/23/96 b	324.34	--	--	--	52	--	--	1.3	<0.5	<0.5	<1.0	--	--
MW8	03/03/97	324.34	46.54	0.00	277.80	<50	--	--	0.609	<0.5	<0.5	<1.0	--	--
MW8	06/23/97	324.34	NM	--	--	--	--	--	--	--	--	--	--	--
MW8	09/23/97	324.34	NM	--	--	--	--	--	--	--	--	--	--	--
MW8	12/22/97	324.34	45.64	0.00	278.70	58.5	--	--	8.88	3.28	0.689	4.23	2.13	--
MW8	03/17/98	324.34	46.30	0.00	278.04	<50	--	--	0.4	0.7	<0.2	<0.6	<39	--
MW8	04/21/98	324.34	45.20	0.00	279.14	--	--	--	--	--	--	--	--	--
MW8	05/20/98	324.34	45.20	0.00	279.14	--	--	--	--	--	--	--	--	--
MW8	06/25/98	324.34	NM	--	--	--	--	--	--	--	--	--	--	--
MW8	09/22/98	324.34	47.10	0.00	277.24	--	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Levels						800/1,000 ^a	500	500	5	1,000	700	1,000	15	15

**TABLE 3
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington
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Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL (feet)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Diss Pb (µg/L)
MW8	12/22/98	324.34	46.96	0.00	277.38	--	--	--	--	--	--	--	--	--
MW8	03/09/99	324.34	46.82	0.00	277.52	--	--	--	--	--	--	--	--	--
MW8	05/27/99	324.34	45.55	0.00	278.79	<48	--	--	<0.2	<0.2	<0.2	<0.6	<6.5	--
MW8	09/07/99	324.34	45.93	0.00	278.41	--	--	--	--	--	--	--	--	--
MW8	11/19/99	324.34	47.02	0.00	277.32	--	--	--	--	--	--	--	--	--
MW8	06/22/00	324.34	47.04	0.00	277.30	--	--	--	--	--	--	--	--	--
MW8	10/30/01	324.34	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW8	04/29/02	324.34	NM	--	--	--	--	--	--	--	--	--	--	--
MW8	02/19/03	324.34	50.09	0.00	274.25	<100	--	--	<1.0	<1.0	<1.0	<1.0	--	--
MW8	02/29/04	324.34	50.09	0.00	274.25	<100	--	--	<1.00	<1.0	<1.0	<1.0	--	--
MW8	10/12/04	324.34	50.18	0.00	274.16	<100	--	--	<1.00	<1.0	<1.0	<1.0	--	--
MW8	01/28/05	324.34	50.56	0.00	273.78	<100	--	--	<1.00	<1.0	<1.0	<1.0	--	--
MW8	07/08/05	324.34	50.12	0.00	274.22	<100	--	--	<1.00	<1.0	<1.0	<1.0	--	--
MW8	01/25/06	324.34	50.67	0.00	273.67	<100	--	--	<1.00	<1.00	1.95	<1.00	--	--
MW8	07/27/06	324.34	49.11	0.00	275.23	<100	--	--	<1.00	<1.00	<1.00	<3.00	--	--
MW8	03/29/07	324.34	48.60	0.00	275.74	<100	<105	<105	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW8	06/20/07	324.34	48.11	0.00	276.23	<100	<97.1	<97.1	<1.00	3.14	<1.00	5.47	<5.00	<5.00
MW8	09/13/07	324.34	48.70	0.00	275.64	<250	<98.0	<98.0	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW8	11/30/07	324.34	49.36	0.00	274.98	<250	<94.3	<94.3	<1.00	1.02	<1.00	<3.00	<5.00	<5.00
MW8	02/28/08	324.34	49.51	0.00	274.83	<100	103	159	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW8	06/20/08	324.34	49.31	0.00	275.03	<100	<100	<100	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW8	09/03/08	324.34	49.76	0.00	274.58	--	--	--	--	--	--	--	--	--
MW8	11/03/08	324.34	50.18	0.00	274.16	--	--	--	--	--	--	--	--	--
MW8	03/03/09	324.34	49.74	0.00	274.60	--	--	--	--	--	--	--	--	--
MW8	05/21/09	324.34	49.56	0.00	274.78	--	--	--	--	--	--	--	--	--
MW8	08/05/09	324.34	49.94	0.00	274.40	--	--	--	--	--	--	--	--	--
MW8	11/23/09	324.34	50.69	0.00	273.65	--	--	--	--	--	--	--	--	--
MW8	03/22/10 d	324.34	49.92	0.00	274.42	--	--	--	--	--	--	--	--	--
MW8	06/16/10	324.34	49.06	0.00	275.28	<100	<100	<100	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW8	09/02/10	324.34	48.92	0.00	275.42	<100	<96.2	<96.2	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW8	10/20/10	324.34	49.11	0.00	275.23	<100	122	<98.0	<1.00	<1.00	<1.00	<3.00	8.40	<5.00
MW8	01/31/11	324.34	49.07	0.00	275.27	<100	<97.1	<97.1	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW8	05/25/11 f	328.07	48.14	0.00	279.93	<100	<94.3	<94.3	<1.00	<1.00	<1.00	<3.00	8.20	<5.00
MW8	09/01/11	328.07	47.90	0.00	280.17	<100	<97.1	<243	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW8	12/29/11	328.07	49.00	0.00	279.07	<100	<96.2	<240	<1.00	<1.00	<1.00	<3.00	13.7	<5.00
MW8	06/14/12	328.07	NM	--	--	--	--	--	--	--	--	--	--	--
MW8	03/19/13	328.07	47.42	0.00	280.65	--	--	--	--	--	--	--	--	--

MTCA Method A Cleanup Levels

800/1,000^a 500 500 5 1,000 700 1,000 15 15

**TABLE 3
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington
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Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL (feet)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Diss Pb (µg/L)
MW8	06/17/13	328.07	47.08	0.00	280.99	--	--	--	--	--	--	--	--	--
MW8	10/30/13	328.07	48.31	0.00	279.76	<100	<93.5	<93.5	<1.00	<1.00	<1.00	<2.00	12.2	<5.00
MW8	03/06/14	328.07	49.00	0.00	279.07	<100	<93.5	<93.5	<1.00	<1.00	<1.00	<3.00	91.0	<5.00
MW8	06/04/14	328.07	47.66	0.00	280.41	<100	<97.1	<97.1	<1.00	<1.00	<1.00	<2.00	<5.00	<5.00
Screened Interval 45-60 ft bgs \ Total Depth 60 ft bgs														
MW9	08/10/92	324.07	48.84	0.00	275.23	<50	--	--	<0.5	<0.5	<0.5	<1.0	--	--
MW9	03/08/94	324.07	51.00	0.00	273.07	<50	--	--	<0.5	<0.5	<0.5	<1.0	--	--
MW9	10/19/94	324.07	51.44	0.00	272.63	<50	--	--	<0.5	<0.5	<0.5	<1.0	--	--
MW9	03/15/95	324.07	48.82	0.00	275.25	--	--	--	--	--	--	--	--	--
MW9	06/21/95	324.07	50.18	0.00	273.89	<50	--	--	<0.5	<0.5	<0.5	<1.0	--	--
MW9	12/16/95	324.07	50.57	0.00	273.50	--	--	--	--	--	--	--	--	--
MW9	06/19/96	324.07	47.13	0.00	276.94	--	--	--	--	--	--	--	--	--
MW9	10/04/96	324.07	47.34	0.00	276.73	--	--	--	--	--	--	--	--	--
MW9	12/23/96	324.07	47.84	0.00	276.23	--	--	--	--	--	--	--	--	--
MW9	03/03/97	324.07	46.05	0.00	278.02	--	--	--	--	--	--	--	--	--
MW9	06/23/97	324.07	NM	--	--	--	--	--	--	--	--	--	--	--
MW9	09/23/97	324.07	NM	--	--	--	--	--	--	--	--	--	--	--
MW9	12/22/97	324.07	NM	--	--	--	--	--	--	--	--	--	--	--
MW9	03/17/98	324.07	45.70	0.00	278.37	51	--	--	<0.2	<0.2	<0.2	<0.6	<39	--
MW9	04/21/98	324.07	44.59	0.00	279.48	--	--	--	--	--	--	--	--	--
MW9	05/20/98	324.07	44.60	0.00	279.47	--	--	--	--	--	--	--	--	--
MW9	06/25/98	324.07	NM	--	--	--	--	--	--	--	--	--	--	--
MW9	09/22/98	324.07	46.95	0.00	277.12	--	--	--	--	--	--	--	--	--
MW9	12/22/98	324.07	46.65	0.00	277.42	--	--	--	--	--	--	--	--	--
MW9	03/09/99	324.07	46.35	0.00	277.72	--	--	--	--	--	--	--	--	--
MW9	05/27/99	324.07	44.97	0.00	279.10	--	--	--	--	--	--	--	--	--
MW9	09/07/99	324.07	45.31	0.00	278.76	--	--	--	--	--	--	--	--	--
MW9	11/19/99	324.07	46.42	0.00	277.65	--	--	--	--	--	--	--	--	--
MW9	06/22/00	324.07	46.44	0.00	277.63	--	--	--	--	--	--	--	--	--
MW9	10/30/01	324.07	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW9	04/29/02	324.07	48.39	0.00	275.68	<100	--	--	<1.0	<1.0	<1.0	<1.0	--	--
MW9	02/19/03	324.07	49.50	0.00	274.57	<100	--	--	<1.0	<1.0	<1.0	<1.0	--	--
MW9	02/29/04	324.07	49.51	0.00	274.56	<100	--	--	<1.00	<1.0	<1.0	<1.0	--	--
MW9	10/12/04	324.07	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW9	01/28/05	324.07	49.90	0.00	274.17	<100	--	--	<1.00	<1.0	<1.0	<1.0	--	--
MW9	07/08/05	324.07	49.52	0.00	274.55	162	--	--	<1.00	5.0	3.5	28.3	--	--
MTCA Method A Cleanup Levels						800/1,000 ^a	500	500	5	1,000	700	1,000	15	15

**TABLE 3
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington
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Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL (feet)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Diss Pb (µg/L)
MW9	01/25/06	324.07	50.15	0.00	273.92	2,570	--	--	18.2	318	33.3	300	--	--
MW9	07/27/06	324.07	48.48	0.00	275.59	<100	--	--	<1.00	<1.00	<1.00	<3.00	--	--
MW9	03/29/07	324.07	47.98	0.00	276.09	<100	<100	<100	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW9	06/20/07	324.07	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW9	09/13/07	324.07	DRY	--	--	--	--	--	--	--	--	--	--	--
MW9	11/30/07	324.07	48.68	0.00	275.39	<250	169	373	<1.00	1.50	<1.00	<3.00	<5.00	<5.00
MW9	02/28/08	324.07	49.03	0.00	275.04	<100	<96.2	99.2	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW9	06/20/08	324.07	48.68	0.00	275.39	<100	<96.2	<96.2	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW9	09/03/08	324.07	49.11	0.00	274.96	<100	<100	109	<1.00	<1.00	<1.00	4.71	<5.00	<5.00
MW9	11/03/08	324.07	49.47	0.00	274.60	--	--	--	--	--	--	--	--	--
MW9	03/03/09	324.07	49.41	0.00	274.66	--	--	--	--	--	--	--	--	--
MW9	05/21/09	324.07	49.16	0.00	274.91	--	--	--	--	--	--	--	--	--
MW9	08/05/09	324.07	49.29	0.00	274.78	--	--	--	--	--	--	--	--	--
MW9	11/23/09	324.07	50.01	0.00	274.06	--	--	--	--	--	--	--	--	--
MW9	03/22/10	324.07	49.13	0.00	274.94	--	--	--	--	--	--	--	--	--
MW9	06/16/10	324.07	48.43	0.00	275.64	<100	<98.0	<98.0	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW9	09/02/10	324.07	48.29	0.00	275.78	<100	113	105	<1.00	<1.00	<1.00	<3.00	8.60	<5.00
MW9	10/20/10	324.07	48.49	0.00	275.58	<100	<100	<100	<1.00	<1.00	<1.00	<3.00	6.70	<5.00
MW9	01/31/11	324.07	48.74	0.00	275.33	<100	<97.1	<97.1	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW9	05/25/11 f	327.78	47.62	0.00	280.16	<100	<96.2	<96.2	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW9	09/01/11	327.78	46.71	0.00	281.07	<100	<95.2	<238	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW9	12/29/11	327.78	47.63	0.00	280.15	<100	<94.3	<236	<1.00	<1.00	<1.00	<3.00	10.7	<50.0
MW9	06/14/12	327.78	NM	--	--	--	--	--	--	--	--	--	--	--
MW9	03/19/13	327.78	46.87	0.00	280.91	--	--	--	--	--	--	--	--	--
MW9	06/17/13	327.78	46.47	0.00	281.31	--	--	--	--	--	--	--	--	--
MW9	10/30/13	327.78	47.65	0.00	280.13	<100	<93.5	<93.5	<1.00	<1.00	<1.00	<2.00	<5.00	<5.00
MW9	03/06/14	327.78	48.39	0.00	279.39	<100	<93.5	<93.5	<1.00	<1.00	<1.00	<3.00	9.60	<5.00
MW9	06/04/14	327.78	47.31	0.00	280.47	<100	<98.0	<98.0	<1.00	<1.00	<1.00	<2.00	<5.00	<5.00
Screened Interval 50-65 ft bgs \ Total Depth 65.5 ft bgs														
MW10	10/19/94	332.09	58.90	0.00	273.19	<50	--	--	<0.5	<0.5	<0.5	<1.0	--	--
MW10	06/21/95	332.09	57.70	0.00	274.39	<50	--	--	<0.5	<0.5	<0.5	<1.0	--	--
MW10	12/16/95	332.09	57.99	0.00	274.10	--	--	--	--	--	--	--	--	--
MW10	03/15/96	332.09	56.38	0.00	275.71	--	--	--	--	--	--	--	--	--
MW10	06/19/96	332.09	54.54	0.00	277.55	--	--	--	--	--	--	--	--	--
MW10	10/04/96	332.09	54.72	0.00	277.37	--	--	--	--	--	--	--	--	--
MW10	12/23/96	332.09	55.16	0.00	276.93	--	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Levels						800/1,000 ^a	500	500	5	1,000	700	1,000	15	15

**TABLE 3
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington
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Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL (feet)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Diss Pb (µg/L)
MW10	03/03/97	332.09	53.57	0.00	278.52	--	--	--	--	--	--	--	--	--
MW10	06/23/97	332.09	NM	--	--	--	--	--	--	--	--	--	--	--
MW10	09/23/97	332.09	NM	--	--	--	--	--	--	--	--	--	--	--
MW10	12/22/97	332.09	NM	--	--	--	--	--	--	--	--	--	--	--
MW10	03/17/98	332.09	NM	--	--	--	--	--	--	--	--	--	--	--
MW10	04/21/98	332.09	51.96	0.00	280.13	--	--	--	--	--	--	--	--	--
MW10	05/20/98	332.09	51.90	0.00	280.19	--	--	--	--	--	--	--	--	--
MW10	06/25/98	332.09	NM	--	--	--	--	--	--	--	--	--	--	--
MW10	09/22/98	332.09	NM	--	--	--	--	--	--	--	--	--	--	--
MW10	12/22/98	332.09	NM	--	--	--	--	--	--	--	--	--	--	--
MW10	03/09/99	332.09	NM	--	--	--	--	--	--	--	--	--	--	--
MW10	05/27/99	332.09	NM	--	--	--	--	--	--	--	--	--	--	--
MW10	09/07/99	332.09	NM	--	--	--	--	--	--	--	--	--	--	--
MW10	11/19/99	332.09	54.27	0.00	277.82	--	--	--	--	--	--	--	--	--
MW10	05/16/00	332.09	53.60	0.00	278.49	<48	--	--	<0.2	<0.2	<0.2	<0.6	35.3	--
MW10	10/30/01	332.09	57.54	0.00	274.55	<48	<97	<240	<0.2	<0.2	<0.2	<0.60	--	--
MW10	04/29/02	332.09	55.90	0.00	276.19	<100	--	--	2.8	3.8	1.7	8.6	--	--
MW10	02/19/03	332.09	56.97	0.00	275.12	--	--	--	--	--	--	--	--	--
MW10	02/29/04	332.09	57.12	0.00	274.97	<100	--	--	<1.00	<1.0	<1.0	<1.0	--	--
MW10	10/12/04	332.09	57.07	0.00	275.02	<100	--	--	<1.00	<1.0	<1.0	<1.0	--	--
MW10	01/28/05	332.09	57.10	0.00	274.99	<100	--	--	<1.00	<1.0	<1.0	<1.0	--	--
MW10	07/08/05	332.09	57.02	0.00	275.07	304	--	--	1.00	17.5	7.4	54.4	--	--
MW10	01/25/06	332.09	DRY	--	--	--	--	--	--	--	--	--	--	--
MW10	07/27/06	332.09	55.97	0.00	276.12	<100	--	--	<1.00	<1.00	<1.00	<3.00	--	--
MW10	03/29/07	332.09	55.48	0.00	276.61	<100	<105	193	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW10	06/20/07	332.09	54.88	0.00	277.21	<100	<125	198	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW10	09/13/07	332.09	55.54	0.00	276.55	<250	<96.2	<96.2	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW10	11/30/07	332.09	56.11	0.00	275.98	<250	<98.0	144	1.40	3.40	<1.00	5.73	<5.00	<5.00
MW10	02/28/08	332.09	56.42	0.00	275.67	<100	<96.2	97.2	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW10	06/20/08	332.09	56.16	0.00	275.93	<100	<100	172	<1.00	<1.00	<1.00	<3.00	41.8	<5.00
MW10	09/03/08	332.09	NM	--	--	--	--	--	--	--	--	--	--	--
MW10	11/03/08	332.09	NM	--	--	--	--	--	--	--	--	--	--	--
MW10	03/03/09	332.09	57.19	0.00	274.90	<100	<108	577	<1.00	<1.00	<1.00	<3.00	7.60	<5.00
MW10	05/21/09	332.09	56.89	0.00	275.20	<100	<94.3	148	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW10	08/05/09	332.09	56.84	0.00	275.25	<100	<95.2	<95.2	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW10	11/23/09	332.09	57.51	0.00	274.58	<100	<111	<111	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW10	03/22/10	332.09	56.89	0.00	275.20	<100	<95.2	<95.2	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MTCA Method A Cleanup Levels						800/1,000 ^a	500	500	5	1,000	700	1,000	15	15

**TABLE 3
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington
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Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL (feet)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Diss Pb (µg/L)
MW10	06/16/10	332.09	55.98	0.00	276.11	<100	<95.2	<95.2	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW10	09/02/10	332.09	55.79	0.00	276.30	<100	<97.1	174	<1.00	<1.00	<1.00	<3.00	7.30	<5.00
MW10	10/20/10	332.09	55.96	0.00	276.13	<100	<102	102	<1.00	<1.00	<1.00	<3.00	6.00	<5.00
MW10	01/31/11	332.09	56.00	0.00	276.09	<100	<97.1	<97.1	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW10	05/25/11	NE	53.78	0.00	--	<100	<95.2	117	<1.00	<1.00	<1.00	<3.00	10.1	<5.00
MW10	09/01/11	NE	53.97	0.00	--	<100	<95.2	<238	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW10	12/29/11	NE	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW10	06/14/12	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW10	03/19/13	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW10	06/17/13	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW10	10/30/13	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW10	03/06/14	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW10	06/04/14	NE	NM	--	--	--	--	--	--	--	--	--	--	--
Screened Interval 10-40 ft bgs \ Total Depth 40 ft bgs														
MW11	10/19/94	324.03	NM	--	--	--	--	--	--	--	--	--	--	--
MW11	06/21/95	324.03	NM	--	--	--	--	--	--	--	--	--	--	--
MW11	12/16/95	324.03	25.92	0.00	298.11	--	--	--	--	--	--	--	--	--
MW11	03/15/96	324.03	24.95	0.00	299.08	--	--	--	--	--	--	--	--	--
MW11	06/19/96	324.03	32.08	0.00	291.95	--	--	--	--	--	--	--	--	--
MW11	10/04/96	324.03	39.35	0.00	284.68	--	--	--	--	--	--	--	--	--
MW11	12/23/96	324.03	27.70	0.00	296.33	--	--	--	--	--	--	--	--	--
MW11	03/03/97	324.03	25.15	0.00	298.88	--	--	--	--	--	--	--	--	--
MW11	06/23/97	324.03	NM	--	--	--	--	--	--	--	--	--	--	--
MW11	09/23/97	324.03	NM	--	--	--	--	--	--	--	--	--	--	--
MW11	12/22/97	324.03	NM	--	--	--	--	--	--	--	--	--	--	--
MW11	03/17/98	324.03	40.65	0.00	283.38	--	--	--	--	--	--	--	--	--
MW11	04/21/98	324.03	39.65	0.00	284.38	--	--	--	--	--	--	--	--	--
MW11	05/20/98	324.03	39.68	0.00	284.35	--	--	--	--	--	--	--	--	--
MW11	06/25/98	324.03	NM	--	--	--	--	--	--	--	--	--	--	--
MW11	09/22/98	324.03	NM	--	--	--	--	--	--	--	--	--	--	--
MW11	12/22/98	324.03	NM	--	--	--	--	--	--	--	--	--	--	--
MW11	03/09/99	324.03	NM	--	--	--	--	--	--	--	--	--	--	--
MW11	05/27/99	324.03	NM	--	--	--	--	--	--	--	--	--	--	--
MW11	09/07/99	324.03	NM	--	--	--	--	--	--	--	--	--	--	--
MW11	11/19/99	324.03	NM	--	--	--	--	--	--	--	--	--	--	--
MW11	06/22/00	324.03	45.75	0.00	278.28	--	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Levels						800/1,000 ^a	500	500	5	1,000	700	1,000	15	15

**TABLE 3
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington
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Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL (feet)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Diss Pb (µg/L)
MW11	10/30/01	324.03	49.33	0.00	274.70	<48	<78	<200	<0.20	<0.20	<0.20	<0.60	--	--
MW11	04/29/02	324.03	NM	--	--	--	--	--	--	--	--	--	--	--
MW11	02/19/03	324.03	DRY	--	--	--	--	--	--	--	--	--	--	--
MW11	02/29/04	324.03	DRY	--	--	--	--	--	--	--	--	--	--	--
MW11	10/12/04	324.03	DRY	--	--	--	--	--	--	--	--	--	--	--
MW11	01/28/05	324.03	DRY	--	--	--	--	--	--	--	--	--	--	--
MW11	07/08/05	324.03	DRY	--	--	--	--	--	--	--	--	--	--	--
MW11	01/25/06	324.03	DRY	--	--	--	--	--	--	--	--	--	--	--
MW11	07/27/06	324.03	DRY	--	--	--	--	--	--	--	--	--	--	--
MW11	03/29/07	324.03	DRY	--	--	--	--	--	--	--	--	--	--	--
MW11	06/20/07	324.03	DRY	--	--	--	--	--	--	--	--	--	--	--
MW11	09/13/07	324.03	DRY	--	--	--	--	--	--	--	--	--	--	--
MW11	11/30/07	324.03	DRY	--	--	--	--	--	--	--	--	--	--	--
MW11	02/28/08	324.03	DRY	--	--	--	--	--	--	--	--	--	--	--
MW11	06/20/08	324.03	DRY	--	--	--	--	--	--	--	--	--	--	--
MW11	09/03/08	324.03	37.99	0.00	286.04	--	--	--	--	--	--	--	--	--
MW11	11/03/08	324.03	DRY	--	--	--	--	--	--	--	--	--	--	--
MW11	03/03/09	324.03	DRY	--	--	--	--	--	--	--	--	--	--	--
MW11	05/21/09	324.03	DRY	--	--	--	--	--	--	--	--	--	--	--
MW11	08/05/09	324.03	DRY	--	--	--	--	--	--	--	--	--	--	--
MW11	11/23/09	324.03	DRY	--	--	--	--	--	--	--	--	--	--	--
MW11	03/22/10	323.74	DRY	--	--	--	--	--	--	--	--	--	--	--
MW11	06/16/10	323.74	DRY	--	--	--	--	--	--	--	--	--	--	--
MW11	09/02/10	323.74	DRY	--	--	--	--	--	--	--	--	--	--	--
MW11	10/20/10	323.74	DRY	--	--	--	--	--	--	--	--	--	--	--
MW11	01/31/11	323.74	DRY	--	--	--	--	--	--	--	--	--	--	--
MW11	05/25/11 f	327.41	DRY	--	--	--	--	--	--	--	--	--	--	--
MW11	09/01/11	327.41	DRY	--	--	--	--	--	--	--	--	--	--	--
MW11	12/29/11	327.41	DRY	--	--	--	--	--	--	--	--	--	--	--
MW11	06/14/12	327.41	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW11	03/19/13	327.41	NM	--	--	--	--	--	--	--	--	--	--	--
MW11	06/17/13	327.41	DRY	--	--	--	--	--	--	--	--	--	--	--
MW11	10/30/13	327.41	DRY	--	--	--	--	--	--	--	--	--	--	--
MW11	03/06/14	327.41	DRY	--	--	--	--	--	--	--	--	--	--	--
MW11	06/04/14	327.41	DRY	--	--	--	--	--	--	--	--	--	--	--

MTCA Method A Cleanup Levels

800/1,000^a 500 500 5 1,000 700 1,000 15 15

**TABLE 3
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington
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Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL (feet)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Diss Pb (µg/L)
Screened Interval 50-65 ft bgs \ Total Depth 65.5 ft bgs														
MW12	10/19/94	326.34	60.35	0.00	265.99	<50	--	--	<0.5	<0.5	<0.5	<1.0	--	--
MW12	06/21/95	326.34	58.10	0.00	268.24	<50	--	--	<0.5	<0.5	<0.5	<1.0	--	--
MW12	09/20/95	326.34	58.24	0.00	268.10	<50	--	--	<0.5	1.3	0.58	4.0	--	--
MW12	09/20/95 b	326.34	NM	--	--	<50	--	--	<0.5	0.96	<0.5	2.8	--	--
MW12	12/15/95	326.34	58.55	0.00	267.79	<50	--	--	<0.5	4.5	1.0	7.5	--	--
MW12	03/14/96	326.34	55.38	0.00	270.96	<50	--	--	<0.5	<0.5	<0.5	1.4	--	--
MW12	06/19/96	326.34	54.07	0.00	272.27	<50	--	--	<0.5	<0.5	<0.5	<1.0	--	--
MW12	10/03/96	326.34	55.50	0.00	270.84	<50	--	--	<0.5	<0.5	<0.5	<1.0	--	--
MW12	12/24/96	326.34	55.27	0.00	271.07	<50	--	--	<0.5	<0.5	<0.5	<1.0	--	--
MW12	03/03/97	326.34	52.43	0.00	273.91	<50	--	--	<0.5	<0.5	<0.5	<1.0	--	--
MW12	06/23/97	326.34	NM	--	--	--	--	--	--	--	--	--	--	--
MW12	09/23/97	326.34	NM	--	--	--	--	--	--	--	--	--	--	--
MW12	12/22/97	326.34	54.58	0.00	271.76	<50	--	--	5.7	1.66	<0.5	1.94	<2.0	--
MW12	03/17/98	326.34	53.90	0.00	272.44	<50	--	--	<0.2	<0.2	<0.2	<0.6	<39	--
MW12	04/21/98	326.34	51.87	0.00	274.47	--	--	--	--	--	--	--	--	--
MW12	05/20/98	326.34	52.10	0.00	274.24	--	--	--	--	--	--	--	--	--
MW12	06/25/98	326.34	NM	--	--	--	--	--	--	--	--	--	--	--
MW12	09/22/98	326.34	NM	--	--	--	--	--	--	--	--	--	--	--
MW12	12/22/98	326.34	NM	--	--	--	--	--	--	--	--	--	--	--
MW12	03/09/99	326.34	NM	--	--	--	--	--	--	--	--	--	--	--
MW12	05/27/99	326.34	51.66	0.00	274.68	<48	--	--	<0.2	<0.2	<0.2	<0.6	<6.5	--
MW12	09/07/99	326.34	52.05	0.00	274.29	--	--	--	--	--	--	--	--	--
MW12	11/19/99	326.34	NM	--	--	--	--	--	--	--	--	--	--	--
MW12	05/16/00	326.34	53.63	0.00	272.71	<48	--	--	<0.2	<0.2	<0.2	<0.6	<0.78	--
MW12	10/30/01	326.34	59.51	0.00	266.83	<48	<78	<200	<0.20	<0.20	<0.20	<0.60	--	--
MW12	04/29/02	326.34	56.11	0.00	270.23	<100	--	--	<1.0	<1.0	<1.0	<1.0	--	--
MW12	02/19/03	326.34	58.33	0.00	268.01	<100	--	--	<1.0	<1.0	<1.0	<1.0	--	--
MW12	02/29/04	326.34	57.75	0.00	268.59	<100	--	--	<1.00	<1.0	<1.0	<1.0	--	--
MW12	10/12/04	326.34	59.13	0.00	267.21	<100	--	--	<1.00	<1.0	<1.0	<1.0	--	--
MW12	01/28/05	326.34	58.81	0.00	267.53	<100	--	--	<1.00	<1.0	<1.0	<1.0	--	--
MW12	07/08/05	326.34	59.51	0.00	266.83	<100	--	--	<1.00	1.3	<1.0	3.0	--	--
MW12	01/25/06	326.34	59.27	0.00	267.07	<100	--	--	<1.00	<1.00	2.08	<3.00	--	--
MW12	07/27/06	326.34	57.65	0.00	268.69	<100	--	--	<1.00	<1.00	<1.00	<3.00	--	--
MW12	03/29/07	326.34	55.96	0.00	270.38	<100	<98.0	<98.0	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW12	06/20/07	326.34	55.59	0.00	270.75	<100	<118	148	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW12	09/13/07	326.34	57.14	0.00	269.20	<250	<96.2	<96.2	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00

MTCA Method A Cleanup Levels

800/1,000^a 500 500 5 1,000 700 1,000 15 15

**TABLE 3
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington
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Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL (feet)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Diss Pb (µg/L)
MW12	11/30/07	326.34	57.81	0.00	268.53	<250	<94.3	<94.3	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW12	02/28/08	326.34	57.71	0.00	268.63	<100	<96.2	128	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW12	06/20/08	326.34	57.43	0.00	268.91	<100	145	212	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW12	09/03/08	326.34	58.23	0.00	268.11	--	--	--	--	--	--	--	--	--
MW12	11/03/08	326.34	58.42	0.00	267.92	--	--	--	--	--	--	--	--	--
MW12	03/03/09	326.34	57.94	0.00	268.40	--	--	--	--	--	--	--	--	--
MW12	05/21/09	326.34	57.63	0.00	268.71	--	--	--	--	--	--	--	--	--
MW12	08/05/09	326.34	52.14	0.00	274.20	--	--	--	--	--	--	--	--	--
MW12	11/23/09	326.34	59.26	0.00	267.08	--	--	--	--	--	--	--	--	--
MW12	03/22/10	326.34	57.74	0.00	268.60	--	--	--	--	--	--	--	--	--
MW12	06/16/10	326.34	56.81	0.00	269.53	<100	<105	<105	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW12	09/02/10	326.34	57.24	0.00	269.10	<100	107	<103	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW12	10/20/10	326.34	57.22	0.00	269.12	<100	<98.0	<98.0	<1.00	<1.00	<1.00	<3.00	8.50	<5.00
MW12	01/31/11	326.34	56.94	0.00	269.40	<100	<105	<105	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW12	05/25/11 f	330.05	54.83	0.00	275.22	<100	<94.3	<94.3	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW12	09/01/11	330.05	54.90	0.00	275.15	<100	<98.0	<245	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW12	12/29/11	330.05	56.22	0.00	273.83	<100	<94.3	<236	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW12	06/14/12	330.05	NM	--	--	--	--	--	--	--	--	--	--	--
MW12	03/19/13	330.05	53.57	0.00	276.48	--	--	--	--	--	--	--	--	--
MW12	06/17/13	330.05	54.04	0.00	276.01	--	--	--	--	--	--	--	--	--
MW12	10/30/13	330.05	54.89	0.00	275.16	<100	<93.5	<93.5	<1.00	<1.00	<1.00	<2.00	<5.00	<5.00
MW12	03/06/14	330.05	NM	--	--	--	--	--	--	--	--	--	--	--
MW12	06/04/14	330.05	NM	--	--	--	--	--	--	--	--	--	--	--
Screened Interval 30-38 ft bgs \ Total Depth 38 ft bgs														
MW13A	06/21/95	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13A	03/14/96	NE	37.35	0.00	--	--	--	--	--	--	--	--	--	--
MW13A	06/19/96	NE	33.82	0.00	--	--	--	--	--	--	--	--	--	--
MW13A	12/16/96	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13A	12/23/96	NE	37.20	0.00	--	--	--	--	--	--	--	--	--	--
MW13A	03/03/97	NE	32.05	0.00	--	--	--	--	--	--	--	--	--	--
MW13A	06/23/97	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13A	09/23/97	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13A	12/22/97	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13A	03/17/98	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13A	04/21/98	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13A	05/20/98	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Levels						800/1,000 ^a	500	500	5	1,000	700	1,000	15	15

**TABLE 3
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington
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Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL (feet)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Diss Pb (µg/L)
MW13A	06/25/98	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13A	09/22/98	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13A	12/22/98	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13A	03/09/99	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13A	05/27/99	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13A	09/07/99	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13A	11/19/99	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13A	06/22/00	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13A	10/30/01	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13A	04/29/02	NE	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW13A	02/19/03	NE	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW13A	02/29/04	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13A	10/12/04	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13A	01/28/05	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13A	07/08/05	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13A	01/25/06	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13A	07/27/06	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13A	03/29/07	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13A	06/20/07	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13A	09/13/07	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13A	11/30/07	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13A	02/28/08	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13A	06/20/08	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13A	09/03/08	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13A	11/03/08	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13A	03/03/09	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13A	05/21/09	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13A	08/05/09	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13A	11/23/09	NE	37.46	0.00	--	--	--	--	--	--	--	--	--	--
MW13A	03/22/10	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13A	06/16/10	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13A	09/02/10	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13A	10/20/10	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13A	01/31/11	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13A	05/25/11 f	327.43	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13A	09/01/11	327.43	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13A	12/29/11	327.43	DRY	--	--	--	--	--	--	--	--	--	--	--

MTCA Method A Cleanup Levels

800/1,000^a 500 500 5 1,000 700 1,000 15 15

**TABLE 3
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington
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Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL (feet)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Diss Pb (µg/L)
MW13A	06/14/12	327.43	NM	--	--	--	--	--	--	--	--	--	--	--
MW13A	03/19/13	327.43	NM	--	--	--	--	--	--	--	--	--	--	--
MW13A	06/17/13	327.43	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13A	10/30/13	327.43	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13A	03/06/14	327.43	37.10	0.00	290.33	--	--	--	--	--	--	--	--	--
MW13A	06/04/14	327.43	DRY	--	--	--	--	--	--	--	--	--	--	--
Screened Interval 19-26 ft bgs \ Total Depth 26 ft bgs														
MW13B	06/21/95	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13B	12/16/95	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13B	03/14/96	NE	23.10	0.00	--	--	--	--	--	--	--	--	--	--
MW13B	06/19/96	NE	20.65	0.00	--	--	--	--	--	--	--	--	--	--
MW13B	12/23/96	NE	22.22	0.00	--	--	--	--	--	--	--	--	--	--
MW13B	03/03/97	NE	20.15	0.00	--	--	--	--	--	--	--	--	--	--
MW13B	06/23/97	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13B	09/23/97	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13B	12/22/97	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13B	03/17/98	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13B	04/21/98	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13B	05/20/98	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13B	06/25/98	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13B	09/22/98	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13B	12/22/98	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13B	03/09/99	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13B	05/27/99	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13B	09/07/99	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13B	11/19/99	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13B	06/22/00	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13B	10/30/01	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13B	04/29/02	NE	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW13B	02/19/03	NE	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW13B	02/29/04	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13B	10/12/04	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13B	01/28/05	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13B	07/08/05	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13B	01/25/06	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13B	07/27/06	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Levels						800/1,000 ^a	500	500	5	1,000	700	1,000	15	15

**TABLE 3
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington
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Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL (feet)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Diss Pb (µg/L)
MW13B	03/29/07	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13B	06/20/07	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13B	09/13/07	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13B	11/30/07	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13B	02/28/08	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13B	06/20/08	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13B	09/03/08	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13B	11/03/08	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13B	03/03/09	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13B	05/21/09	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13B	08/05/09	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13B	11/23/09	NE	20.02	0.00	--	--	--	--	--	--	--	--	--	--
MW13B	03/22/10	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13B	06/16/10	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13B	09/02/10	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13B	10/20/10	NE	24.30	--	--	--	--	--	--	--	--	--	--	--
MW13B	01/31/11 e	NE	24.70	--	--	--	--	--	--	--	--	--	--	--
MW13B	05/25/11 f	327.45	24.06	0.00	303.39	8,550	557	<111	3.58	9.06	20.7	60.1	34.3	<5.00
MW13B	09/01/11	327.45	23.04	0.00	304.41	--g	--g	--g	<1.00	6.94	<1.00	541	--g	--g
MW13B	12/29/11	327.45	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13B	06/14/12	327.45	NM	--	--	--	--	--	--	--	--	--	--	--
MW13B	03/19/13	327.45	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13B	06/17/13	327.45	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13B	10/30/13	327.45	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13B	03/06/14	327.45	19.67	0.00	307.78	2,860	1,030	<93.5	2.60	9.44	28.6	65.7	12.1	7.70
MW13B	06/04/14	327.45	DRY	--	--	--	--	--	--	--	--	--	--	--
Screened Interval 5-15 ft bgs \ Total Depth 15 ft bgs														
MW13C	06/21/95	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13C	12/16/95	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13C	03/14/96	NE	14.50	0.00	--	--	--	--	--	--	--	--	--	--
MW13C	06/19/96	NE	9.85	0.00	--	--	--	--	--	--	--	--	--	--
MW13C	12/23/96	NE	14.45	0.00	--	--	--	--	--	--	--	--	--	--
MW13C	03/03/97	NE	8.31	0.00	--	--	--	--	--	--	--	--	--	--
MW13C	06/23/97	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13C	09/23/97	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13C	12/22/97	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Levels						800/1,000 ^a	500	500	5	1,000	700	1,000	15	15

**TABLE 3
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington
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Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL (feet)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Diss Pb (µg/L)
MW13C	03/17/98	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13C	04/21/98	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13C	05/20/98	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13C	06/25/98	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13C	09/22/98	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13C	12/22/98	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13C	03/09/99	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13C	05/27/99	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13C	09/07/99	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13C	11/19/99	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13C	06/22/00	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13C	10/30/01	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13C	04/29/02	NE	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW13C	02/19/03	NE	Inaccessible	--	--	--	--	--	--	--	--	--	--	--
MW13C	02/29/04	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13C	10/12/04	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13C	01/28/05	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13C	07/08/05	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13C	01/25/06	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13C	07/27/06	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13C	03/29/07	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13C	06/20/07	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13C	09/13/07	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13C	11/30/07	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13C	02/28/08	NE	NM	--	--	--	--	--	--	--	--	--	--	--
MW13C	06/20/08	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13C	09/03/08	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13C	11/03/08	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13C	03/03/09	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13C	05/21/09	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13C	08/05/09	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13C	11/23/09	NE	8.46	0.00	--	--	--	--	--	--	--	--	--	--
MW13C	03/22/10	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13C	06/16/10	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13C	09/02/10	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13C	10/20/10	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13C	01/31/11	NE	DRY	--	--	--	--	--	--	--	--	--	--	--

MTCA Method A Cleanup Levels

800/1,000^a 500 500 5 1,000 700 1,000 15 15

**TABLE 3
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington
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Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL (feet)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Diss Pb (µg/L)
MW13C	05/25/11 f	327.48	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13C	09/01/11	327.48	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13C	12/29/11	327.48	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13C	06/14/12	327.48	NM	--	--	--	--	--	--	--	--	--	--	--
MW13C	03/19/13	327.48	NM	--	--	--	--	--	--	--	--	--	--	--
MW13C	06/17/13	327.48	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13C	10/30/13	327.48	DRY	--	--	--	--	--	--	--	--	--	--	--
MW13C	03/06/14	327.48	4.72	0.00	322.76	<100	<94.3	<94.3	<1.00	<1.00	<1.00	<3.00	<50.0	<5.00
MW13C	06/04/14	327.48	DRY	--	--	--	--	--	--	--	--	--	--	--
Screened Interval 35-60 ft bgs \ Total Depth 60.5 ft bgs														
MW14	07/08/05	NE	50.45	0.00	--	356	--	--	1.20	18.4	5.9	52.5	--	--
MW14	01/25/06	NE	51.00	0.00	--	<100	--	--	<1.00	<1.00	2.02	<3.00	--	--
MW14	07/27/06	NE	49.42	0.00	--	<100	--	--	<1.00	<1.00	<1.00	<3.00	--	--
MW14	03/29/07	NE	48.93	0.00	--	<100	<98.0	<98.0	<1.00	<1.00	<1.00	<3.00	10.4	<5.00
MW14	06/20/07	NE	48.44	0.00	--	372	<105	111	2.81	69.6	16.3	89.4	24.3	<5.00
MW14	09/13/07	NE	49.03	0.00	--	<250	<98.0	<98.0	<1.00	1.71	<1.00	<3.00	64.4	<5.00
MW14	11/30/07	324.71	49.60	0.00	275.11	<250	<95.7	<95.7	<1.00	<1.00	<1.00	<3.00	28.0	<5.00
MW14	02/28/08	324.71	49.87	0.00	274.84	<100	<96.2	<96.2	<1.00	<1.00	<1.00	<3.00	14.5	<5.00
MW14	06/20/08	324.71	49.68	0.00	275.03	<100	192	446	<1.00	1.39	1.12	3.54	18.1	--
MW14	09/03/08	324.71	50.08	0.00	274.63	--	--	--	--	--	--	--	--	--
MW14	11/03/08	324.71	50.21	0.00	274.50	--	--	--	--	--	--	--	--	--
MW14	03/03/09	324.71	50.25	0.00	274.46	--	--	--	--	--	--	--	--	--
MW14	05/21/09	324.71	50.11	0.00	274.60	--	--	--	--	--	--	--	--	--
MW14	08/05/09	324.71	50.27	0.00	274.44	--	--	--	--	--	--	--	--	--
MW14	11/23/09	324.71	50.97	0.00	273.74	--	--	--	--	--	--	--	--	--
MW14	03/22/10	324.71	50.12	0.00	274.59	--	--	--	--	--	--	--	--	--
MW14	06/16/10	324.71	49.38	0.00	275.33	<100	<96.2	<96.2	<1.00	<1.00	<1.00	<3.00	17.6	<5.00
MW14	09/02/10	324.71	49.25	0.00	275.46	--	--	--	--	--	--	--	--	--
MW14	10/20/10	324.71	49.44	0.00	275.27	--	--	--	--	--	--	--	--	--
MW14	01/31/11	324.71	49.40	0.00	275.31	<100	<105	<105	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW14	05/25/11 f	328.66	48.16	0.00	280.50	<100	<111	<111	<1.00	<1.00	<1.00	<3.00	10.2	<5.00
MW14	09/01/11	328.66	48.73	0.00	279.93	<100	<97.1	<243	<1.00	<1.00	<1.00	<3.00	6.70	<5.00
MW14	12/29/11	328.66	49.64	0.00	279.02	<100	<97.1	<243	<1.00	<1.00	<1.00	<3.00	18.7	<5.00
MW14	06/14/12	328.66	NM	--	--	--	--	--	--	--	--	--	--	--
MW14	03/19/13	328.66	47.70	0.00	280.96	--	--	--	--	--	--	--	--	--
MW14	06/17/13	328.66	47.36	0.00	281.30	--	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Levels						800/1,000 ^a	500	500	5	1,000	700	1,000	15	15

**TABLE 3
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington
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Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL (feet)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Diss Pb (µg/L)
MW14	10/30/13	328.66	48.60	0.00	280.06	<100	<93.5	<93.5	<1.00	<1.00	<1.00	<2.00	6.90	<5.00
MW14	03/06/14	328.66	49.32	0.00	279.34	<100	<94.3	<94.3	<1.00	<1.00	<1.00	<3.00	18.7	<5.00
MW14	06/04/14	328.66	48.00	0.00	280.66	<100	<93.9	<93.9	<1.00	<1.00	<1.00	<2.00	<5.00	<5.00
Screened Interval 45-65 ft bgs \ Total Depth 65 ft bgs														
MW15	09/13/07	327.61	NM	--	--	--	--	--	--	--	--	--	--	--
MW15	11/30/07	327.61	NM	--	--	--	--	--	--	--	--	--	--	--
MW15	02/28/08	327.61	57.57	0.00	270.04	<100	<96.2	<96.2	<1.00	<1.00	<1.00	<3.00	16.9	<5.00
MW15	06/20/08	327.61	57.21	0.00	270.40	<100	<100	180	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW15	09/03/08	327.61	58.54	0.00	269.07	<100	<96.2	<96.2	<1.00	<1.00	<1.00	<3.00	47.1	<5.00
MW15	11/03/08	327.61	55.88	0.00	271.73	<100	<100	<100	<1.00	<1.00	<1.00	<3.00	16.1	<5.00
MW15	03/03/09	327.61	57.89	0.00	269.72	<100	<103	103	<1.00	<1.00	<1.00	<3.00	65.7	<5.00
MW15	05/21/09	327.61	57.47	0.00	270.14	<100	<95.2	<95.2	<1.00	<1.00	<1.00	<3.00	71.5	<5.00
MW15	08/05/09	327.61	59.09	0.00	268.52	<100	<97.1	<97.1	<1.00	<1.00	<1.00	<3.00	37.4	<5.00
MW15	11/23/09	327.61	59.38	0.00	268.23	--	--	--	--	--	--	--	--	--
MW15	03/22/10	327.61	57.36	0.00	270.25	--	--	--	--	--	--	--	--	--
MW15	06/16/10	327.61	56.62	0.00	270.99	<100	<111	393	<1.00	<1.00	<1.00	<3.00	25.9	<5.00
MW15	09/02/10	327.61	57.62	0.00	269.99	<100	<99.0	<99.0	<1.00	<1.00	<1.00	<3.00	56.2	<5.00
MW15	10/20/10	327.61	57.31	0.00	270.30	<100	<98.0	<98.0	<1.00	<1.00	<1.00	<3.00	90.2	<5.00
MW15	01/31/11	327.61	56.48	0.00	271.13	<100	<125	<125	<1.00	<1.00	<1.00	<3.00	15.1	<5.00
MW15	05/25/11 f	331.33	54.71	0.00	276.62	<100	<105	<105	<1.00	<1.00	<1.00	<3.00	<5.00	<5.00
MW15	09/01/11	331.33	55.31	0.00	276.02	<100	<99.0	<248	<1.00	<1.00	<1.00	<3.00	13.1	<5.00
MW15	12/29/11	331.33	55.88	0.00	275.45	<100	<111	<278	<1.00	<1.00	<1.00	<3.00	85.5	<5.00
MW15	06/14/12	331.33	NM	--	--	--	--	--	--	--	--	--	--	--
MW15	03/19/13	331.33	53.49	0.00	277.84	--	--	--	--	--	--	--	--	--
MW15	06/17/13	331.33	54.25	0.00	277.08	--	--	--	--	--	--	--	--	--
MW15	10/30/13	331.33	54.77	0.00	276.56	<100	<93.5	<93.5	<1.00	<1.00	<1.00	<2.00	5.50	<5.00
MW15	03/06/14	331.33	NM	--	--	--	--	--	--	--	--	--	--	--
MW15	06/04/14	331.33	NM	--	--	--	--	--	--	--	--	--	--	--
Screened Interval 10-20 ft bgs \ Total Depth 20 ft bgs														
SVE5	01/25/06	NE	17.10	0.00	--	5,940	--	--	21.7	33.1	135	483	--	--
SVE5	07/27/06	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE5	03/29/07	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE5	06/20/07	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE5	09/13/07	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Levels						800/1,000 ^a	500	500	5	1,000	700	1,000	15	15

**TABLE 3
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington
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Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL (feet)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Diss Pb (µg/L)
SVE5	11/30/07	324.23	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE5	02/28/08	324.23	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE5	06/20/08	324.23	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE5	09/03/08	324.23	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE5	11/03/08	324.23	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE5	03/03/09	324.23	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE5	05/21/09	324.23	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE5	08/05/09	324.23	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE5	11/23/09	324.23	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE5	03/22/10	324.11	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE5	06/16/10	324.11	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE5	09/02/10	324.11	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE5	10/20/10	324.11	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE5	01/31/11	324.11	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE5	05/25/11 f	327.79	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE5	09/01/11	327.79	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE5	12/29/11	327.79	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE5	06/14/12	327.79	14.49	0.00	313.30	1,520	2,340	210	<1.00	39.7	12.0	326	<5.00	<5.00
SVE5	03/19/13	327.79	17.58	0.00	310.21	<100	<93.5	<93.5	<1.00	<1.00	<1.00	<3.00	184	<5.00
SVE5	06/17/13	327.79	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE5	10/30/13	327.79	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE5	03/06/14	327.79	14.50	0.00	313.29	<100	<94.3	<94.3	<1.00	<1.00	<1.00	<3.00	27.6	<5.00
SVE5	06/04/14	327.79	DRY	--	--	--	--	--	--	--	--	--	--	--
Screened Interval 10-40 ft bgs \ Total Depth 40 ft bgs														
SVE6	01/25/06	NE	38.23	0.00	--	92,200	--	--	86.4	5,620	1,520	10,300	--	--
SVE6	07/27/06	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE6	03/29/07	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE6	06/20/07	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE6	09/13/07	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE6	11/30/07	324.30	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE6	02/28/08	324.30	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE6	06/20/08	324.30	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE6	09/03/08	324.30	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE6	11/03/08	324.30	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE6	03/03/09	324.30	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE6	05/21/09	324.30	DRY	--	--	--	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Levels						800/1,000 ^a	500	500	5	1,000	700	1,000	15	15

**TABLE 3
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington
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Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL (feet)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Diss Pb (µg/L)
SVE6	08/05/09	324.30	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE6	11/23/09	324.30	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE6	03/22/10	324.41	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE6	06/16/10	324.41	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE6	09/02/10	324.41	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE6	10/20/10	324.41	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE6	01/31/11	324.41	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE6	05/25/11 f	327.90	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE6	09/01/11	327.90	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE6	12/29/11	327.90	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE6	06/14/12	327.90	15.42	0.00	312.48	1,900	3,120	242	<1.00	45.3	14.3	400	<5.00	5.60
SVE6	03/19/13	327.90	DRY	0.00	--	--	--	--	--	--	--	--	--	--
SVE6	06/17/13	327.90	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE6	10/30/13	327.90	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE6	03/06/14	327.90	38.29	0.00	289.61	--	--	--	--	--	--	--	--	--
SVE6	06/04/14	327.90	DRY	--	--	--	--	--	--	--	--	--	--	--
Screened Interval 10-30 ft bgs \ Total Depth 31 ft bgs														
SVE7	01/25/06	NE	18.81	0.00	--	<100	--	--	<1.00	<1.00	<1.00	<3.00	--	--
SVE7	07/27/06	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE7	03/29/07	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE7	06/20/07	NE	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE7	09/13/07	NE	28.68	0.00	--	112,000	15,700	2,090	1,320	18,800	3,190	19,300	9.39	<5.00
SVE7	11/30/07	323.81	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE7	02/28/08	323.81	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE7	06/20/08	323.81	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE7	09/03/08	323.81	16.05	0.00	307.76	29,700	2,980	<490	9.24	678	956	7,200	<5.00	<5.00
SVE7	11/03/08	323.81	16.05	0.00	307.76	--	--	--	--	--	--	--	--	--
SVE7	03/03/09	323.81	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE7	05/21/09	323.81	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE7	08/05/09	323.81	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE7	11/23/09	323.81	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE7	03/22/10	323.94	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE7	06/16/10	323.94	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE7	09/02/10	323.94	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE7	10/20/10	323.94	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE7	01/31/11	323.94	DRY	--	--	--	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Levels						800/1,000 ^a	500	500	5	1,000	700	1,000	15	15

**TABLE 3
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington
Page 28 of 29

Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL (feet)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Diss Pb (µg/L)
SVE7	05/25/11 f	327.46	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE7	09/01/11	327.46	27.09	0.00	300.37	--g	--g	--g	4.78	1,000	254	4,660	--g	--g
SVE7	12/29/11	327.46	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE7	06/14/12	327.46	15.39	0.00	312.07	1,690	4,930	<100	<1.00	29.4	6.57	367	<5.00	5.00
SVE7	03/19/13	327.46	26.55	0.00	300.91	228	686	411	<1.00	<1.00	<1.00	<3.00	180	<5.00
SVE7	06/17/13	327.46	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE7	10/30/13	327.46	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE7	03/06/14	327.46	DRY	--	--	--	--	--	--	--	--	--	--	--
SVE7	06/04/14	327.46	Inaccessible	--	--	--	--	--	--	--	--	--	--	--

MTCA Method A Cleanup Levels

800/1,000^a 500 500 5 1,000 700 1,000 15 15

TABLE 3
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS
Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington
Page 29 of 29

EXPLANATION:

Data collected before 10/30/01 were taken from prior consultants

ft bgs = Feet Below Ground Surface

µg/L = Micrograms per Liter

DTW = Depth to water in feet below top of casing

NAPL = Non-aqueous Phase Liquid thickness in feet

GW Elev = Groundwater elevation relative to top of casing elevation

Groundwater elevation corrected for presence of NAPL = (top of casing elevation - depth to water) + (NAPL*0.75)

TPHg = Total Petroleum Hydrocarbons as Gasoline in accordance with Ecology Method NWTPH-Gx

TPHd and TPHmo = Total Petroleum Hydrocarbons as Diesel and Oil, respectively, in accordance with Ecology Method NWTPH-Dx

B = Benzene; T = Toluene; E = Ethylbenzene; X = Total Xylenes

BTEX = Aromatic compounds in accordance with EPA Method 8021B or 8260B

BTEX analyses prior to 04/29/98 in accordance with EPA Method 8020A and analyses prior to 07/15/96 in accordance with EPA Method 8020

Total Pb = Total lead; Diss Pb = Dissolved lead

Total and dissolved lead analyses in accordance with EPA Method 7421, 6010B, or 6010C, refer to laboratory reports

NE = Not Established; NM = Not Measured; -- = Not Analyzed or Sampled

Shaded values equal or exceed MTCA Method A Cleanup Levels

a = TPHg cleanup level for groundwater is 800 µg/L if benzene is present, or 1,000 µg/L if benzene is not present

b = Sample duplicate collected for laboratory precision review purposes

c = Data for monitoring wells MW2 and MW5 were revised in October 2007 to correct errors in well identification generated during prior monitoring events conducted between February and March 2007

d = Wells were re-surveyed by ERI on 04/23/10, following system installation

e = Groundwater monitoring well MW13B was purged dry and therefore was not sampled

f = Wellhead elevations were resurveyed on 02/22/11 by Cardno WRG using NAVD 88

g = Analysis not performed due to insufficient sample volume

h = Covered during property redevelopment, unable to locate with metal detector on 03/06/14

**TABLE 4
CONFIRMATION BORING RESULTS**

1500 145th Place Southeast

Bellevue, Washington

Page 1 of 1

Historical Soil Samples Results Which Exceeded MTCA Cleanup Levels and Subsequent Confirmation Sampling						
Boring/ Well ID	Sample ID	Sample Date	Depth	Above MTCA	Confirmed By	Confirmation Result - samples collected 12/2014
			(feet bgs)			
B1	B-1/S-3	10/25/91	15	B, T, X	B30/SVE11 at 15'	<MTCA
	B-1/S-5	10/25/91	21	B	B30/SVE11 at 21'	<MTCA
B4	B-4/S-4	10/25/91	19	B, X	Point of Compliance Evaluation ^a	
B7	B-7-11	12/12/91	11	B	B29 at 12'	<MTCA
B8	B-8-11	12/12/91	11	B	B28 at 10'	<MTCA
B10	B-10-11	12/12/91	11	B, X	B30/SVE11 at 11'	<MTCA
	B-10-30	12/12/91	30	B	B30/SVE11 at 29'	<MTCA
B12	B-12-21	12/12/91	21	B	Point of Compliance Evaluation ^a	
B15	B15-29	01/29/92	29	B	B30/SVE11 at 29'	<MTCA
	B15-34	01/29/92	34	TPHg, B, T, X	B30/SVE11 at 34'	<MTCA
	B15-39	01/29/92	39	B	B30/SVE11 at 39'	<MTCA
MW1	B16-24	01/29/92	24	TPHg	Point of Compliance Evaluation ^a	
	B16-29	01/29/92	29	TPHg	Point of Compliance Evaluation ^a	
	B16-34	01/29/92	34	TPHg, B	Point of Compliance Evaluation ^a	
	B16-39	01/29/92	39	B	Point of Compliance Evaluation ^a	
MW2	MW0204022A	04/02/92	12	TPHg	B29 at 12'	<MTCA
	MW0204022B	04/02/92	17	TPHg	B29 at 17'	<MTCA
MW5	MW0504072C	04/07/92	47	B	B29 at 47'	<MTCA
	MW0504072D	04/07/92	52	B	B29 at 53'	<MTCA
MW11	MW-11-10	09/15/94	10	TPHg, T, E, X	B28 at 10'	<MTCA
MW13	MW13-16-06225	06/22/95	16	TPHg, B	Point of Compliance Evaluation ^a	
	MW13-Cuttings @ 17	06/22/95	17	TPHg, B, X	Point of Compliance Evaluation ^a	
	MW13-20-6225	06/22/95	20	TPHg, B, T, X	Point of Compliance Evaluation ^a	
	MW13-25-6225	06/22/95	25	TPHg, B, X	Point of Compliance Evaluation ^a	
	MW13-30-6225	06/22/95	30	TPHg, B	Point of Compliance Evaluation ^a	
	MW13-35-6225	06/22/95	35	TPHg, B, X	Point of Compliance Evaluation ^a	
MW14	S-20-B19	06/28/05	20	TPHg, B, T, E, X	Point of Compliance Evaluation ^a	
SVE6	S-15-B20	06/28/05	15	TPHg, B, T, X	B31 at 15'	<MTCA
	S-30-B20	06/28/05	30	TPHg, B, T, E, X	B31 at 30'	<MTCA
SVE7	S-25-B22	06/28/05	25	TPHg, B, T, E, X	Point of Compliance Evaluation ^a	
	S-30-B22	06/28/05	30	TPHg, B, T, X	Point of Compliance Evaluation ^a	

EXPLANATION:

feet bgs = feet below ground surface

mg/kg = milligram per kilogram

TPHg = Total Petroleum Hydrocarbons as Gasoline in accordance with Ecology Method NWTPH-Gx, WTPH-G, EPA TPH, EPA HCID, or 3550/8015 modified, see laboratory reports for details

' = Foot

MTCA = MTCA Method A Cleanup Levels

< = Less than the stated laboratory reporting limit

B = Benzene; T = Toluene; E = Ethylbenzene; X = Total Xylenes

BTEX = Aromatic compounds in accordance with EPA Method 8021B, 8260B, or 8020, see laboratory report for details

a = Based on the points of compliance outlined in WAC 173-340-740(6)(d), soil COPCs are not present in the top 15 feet of soil. WAC 173-340-720(8)(b) compliance is demonstrated through the physical isolation of soil containing residual concentrations of hydrocarbons encountered at 20 feet bgs to the saturated zone encountered at 50 feet bgs.

APPENDIX A

LEGAL DESCRIPTION OF PROPERTY

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PARCEL DATA

Parcel	032405-9162	Jurisdiction	BELLEVUE
Name	BLED SOE JOANNE	Levy Code	0330
Site Address	1510 145TH PL SE 98007	Property Type	C
Geo Area	75-35	Plat Block / Building Number	
Spec Area	250-422	Plat Lot / Unit Number	
Property Name	BEL-EAST SHOPPING CTR - LINE RETAIL	Quarter-Section-Township-Range	NE-3 -24-5

Legal Description

LOT 1 BELLEVUE BLA #11-130127-LW REC #20120928900005 SD BLA DAF- POR OF S 1/2 OF SE 1/4 OF SW 1/4 OF NE 1/4 LY E OF CO RD LESS CO RD TGW POR LOT T IN PLAT OF UPPER & RENICKS BELT LINE ADD LY ELY OF 145TH PL SE & NLY OF SE 16TH ST
Plat Block:
Plat Lot:

LAND DATA

Highest & Best Use As If Vacant	RETAIL/WHOLESALE
Highest & Best Use As Improved	(unknown)
Present Use	Shopping Ctr(Nghbrhood)
Land SqFt	80,516
Acres	1.85

Percentage Unusable	0
Unbuildable	NO
Restrictive Size Shape	NO
Zoning	NB
Water	
Sewer/Septic	PUBLIC
Road Access	PUBLIC
Parking	ADEQUATE
Street Surface	

Views

Rainier	
Territorial	
Olympics	
Cascades	
Seattle Skyline	
Puget Sound	
Lake Washington	
Lake Sammamish	
Lake/River/Creek	
Other View	

Waterfront

Waterfront Location	
Waterfront Footage	0
Lot Depth Factor	0
Waterfront Bank	
Tide/Shore	
Waterfront Restricted Access	
Waterfront Access Rights	NO
Poor Quality	NO
Proximity Influence	NO

Designations

Historic Site	
Current Use	(none)
Nbr Bldg Sites	
Adjacent to Golf Fairway	NO
Adjacent to Greenbelt	NO
Other Designation	NO
Deed Restrictions	NO
Development Rights Purchased	NO
Easements	NO
Native Growth Protection Easement	NO
DNR Lease	NO

Nuisances

Topography	
Traffic Noise	
Airport Noise	
Power Lines	NO
Other Nuisances	NO

Problems

Water Problems	NO
Transportation Concurrence	NO
Other Problems	NO

Environmental

Environmental	NO
---------------	----

BUILDING

Building Number	1
Building Description	Line Retail
Number Of Buildings Aggregated	1
Predominant Use	RETAIL STORE (353)
Shape	Rect or Slight Irreg
Construction Class	MASONRY

Click the camera to see more pictures.

Picture of Building 1



Reference Links:

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- [Scanned images of surveys and other map documents](#)

Building Quality	AVERAGE
Stories	1
Building Gross Sq Ft	13,389
Building Net Sq Ft	13,045
Year Built	1959
Eff. Year	1990
Percentage Complete	100
Heating System	ELECTRIC
Sprinklers	Yes
Elevators	



Floor plan of Building 1

Section(s) Of Building Number: 1

Section Number	Section Use	Description	Stories	Height	Floor Number	Gross Sq Ft	Net Sq Ft
1	LINE RETAIL (860)		1	12		13,389	13,045

TAX ROLL HISTORY

Account	Valued Year	Tax Year	Omit Year	Levy Code	Appraised Land Value (\$)	Appraised Imps Value (\$)	Appraised Total Value (\$)	New Dollars (\$)	Taxable Land Value (\$)	Taxable Imps Value (\$)	Taxable Total Value (\$)	Tax Value Reason
032405916209	2014	2015		0330	2,012,900	1,027,900	3,040,800	0	2,012,900	1,027,900	3,040,800	
032405916209	2013	2014		0330	1,851,800	1,125,600	2,977,400	0	1,851,800	1,125,600	2,977,400	
032405916209	2012	2013		0330	1,445,000	985,300	2,430,300	0	1,445,000	985,300	2,430,300	
032405916209	2011	2012		0330	1,445,000	715,300	2,160,300	0	1,445,000	715,300	2,160,300	

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APPENDIX B

PREVIOUS INVESTIGATIONS

Summary of Previous Investigations

Former Mobil Station 99BLV
1500 145th Place Southeast
Bellevue, Washington

Site Assessment Activities

In October 1991, ATEC Associates, Inc. (ATEC) observed the advancement of soil borings B1 through B5 at Former Mobil Station 99BLV, located at 1500 145th Place Southeast, Bellevue, Washington (Site). Laboratory results indicated that 3 of 11 soil samples collected contained hydrocarbon concentrations exceeding the MTCA Method A Cleanup Levels (ATEC, 1991).

In December 1991, ATEC observed the advancement of soil borings B6 through B13. Laboratory results indicated that 5 of 32 soil samples collected contained hydrocarbon concentrations exceeding the MTCA Method A Cleanup Levels (ATEC, 1992a).

In January 1992, ATEC observed the advancement of soil borings B14 through B17. Laboratory results indicated that 7 of 13 soil samples collected contained hydrocarbon concentrations exceeding the MTCA Method A Cleanup Levels. Boring B16 was subsequently completed as vapor monitoring well MW1 (ATEC, 1992b).

In April 1992, Kleinfelder, Inc. (Kleinfelder) observed the advancement of soil borings MW2 through MW5 which were completed as groundwater monitoring wells. Laboratory results indicated that 4 of 19 soil samples collected contained hydrocarbon concentrations exceeding the MTCA Method A Cleanup Levels (Kleinfelder, 1992a).

In August 1992, Kleinfelder observed the advancement of soil borings MW6 through MW9 which were completed as groundwater monitoring wells. Laboratory results indicated that none of the soil samples collected contained hydrocarbon concentrations exceeding the MTCA Method A Cleanup Levels (Kleinfelder, 1992b).

In September and October 1994, Kleinfelder observed the advancement of soil borings B18 and MW10 through MW12, MW10 through MW12 were completed as groundwater monitoring wells. Laboratory results indicated that 1 of 11 soil samples collected contained hydrocarbon concentrations exceeding the MTCA Method A Cleanup Levels. Monitoring well MW11 was subsequently completed as vadose zone well MW11 (Kleinfelder, 1994).

In June 1995, Kleinfelder observed the advancement of soil boring MW13, which was completed as a groundwater monitoring well, and the decommissioning of monitoring well MW1. Laboratory results indicated that soil samples collected from MW13 contained hydrocarbon concentrations exceeding the MTCA Method A Cleanup Levels. Monitoring well MW13 was subsequently completed as three nested wells MW13A, MW13B, and MW13C (Kleinfelder, 1996).

In June 2005, ERI observed the advancement of soil borings B18 through B22. Laboratory results indicated that 5 of 9 soil samples collected contained hydrocarbon concentrations exceeding the MTCA Method A Cleanup Levels. Borings B18, B20, and B22 were completed as SVE wells SVE5, SVE6, and SVE7, respectively. Boring B19 was completed as groundwater monitoring well MW14. Boring B21 was abandoned due to sluffing soil conditions (ERI, 2005).

In July 2007, ERI observed the advancement of soil borings B23 through B26. Laboratory results indicated that none of the soil samples collected contained hydrocarbon concentrations exceeding the MTCA Method A Cleanup Levels. Boring B23 was completed as groundwater monitoring well MW15 and borings B24 through B26 were completed as AS wells AS1 through AS3, respectively (ERI, 2007).

In December 2014, Cardno ERI observed the advancement of soil borings B27 through B34. Laboratory results indicated that 3 of the 26 soil samples collected contained hydrocarbon concentrations exceeding the MTCA Method A Cleanup Levels. Borings B27, B30, B32 and B33 were completed as SVE wells SVE8, SVE11, SVE9, and SVE10, respectively (Cardno ERI, 2015).

Remediation Activities

In April 1992, Kleinfelder performed a vapor extraction test on wells MW1 and MW2. The data indicated a radius of influence of approximately 30 feet. Kleinfelder concluded that acceptable remediation results could be achieved with a blower capable of producing a vacuum between 100 and 200 inches of water at flow rates less than 100 scfm (Kleinfelder, 1992a).

In February 1994, Kleinfelder installed a vapor extraction system (VES) with vapor-phase carbon air treatment. The system began operation on March 16, 1994 and was modified to include a catalytic oxidizer (CATOX) in November 1994. The updated VES/CATOX system was operational from March 15, 1995 to November 2, 1995 when the CATOX was replaced with a regenerative blower without off-gas treatment (Kleinfelder, 1996).

In June 1995, Kleinfelder conducted pneumatic fracturing at vadose wells MW2, MW11, and MW13 to increase the formation permeability and enhance VOC extraction rates during vapor extraction. Test results indicated a decrease in vacuum of approximately 18 percent and an increase in horizontal permeability in nested wells MW13A, MW13B, and MW13C (Kleinfelder, 1996).

In June 1996, Kleinfelder modified MW6 to allow dual air-sparging and vapor extraction. An oxygen release compound was introduced in wells MW5 and MW8 on June 25, 1996 and replaced on April 15, 1998. The VES was shut down on March 19, 1997 removing a total of 825 pounds of hydrocarbons (Kleinfelder, 2000).

In January 2010, ERI began installation of a dual-phase AS/SVE remediation system on the subject site. The remediation system was operational from June 18, 2011 to June 11, 2013. During this period, 34,169 gallons of groundwater were extracted while removing 1,214 pounds of TPHg from the subject site (Cardno ERI, 2014).

Groundwater Monitoring Activities

A total of 17 groundwater monitoring wells, 3 AS wells, and 7 SVE wells have been installed on- and off-Site.

Locations for groundwater monitoring wells can be found on Plate 2. Groundwater sampling has been conducted at the Site since 1992. Laboratory analytical results indicate that hydrocarbon concentrations have historically exceeded the MTCA Method A Cleanup Levels in samples collected from the following on- and off-Site wells: MW1, MW3 through MW10, MW12, MW13B and SVE5 through SVE7. Groundwater analytical results from the most recent sampling event on June 4, 2014 are shown on Plate 9.

NAPL was historically detected in monitoring wells MW1 and MW6.

Acronym List

µg/L	Micrograms per liter		
µs	Microsiemens		
1,2-DCA	1,2-dichloroethane	NAPL	Non-aqueous phase liquid
acfm	Actual cubic feet per minute	NEPA	National Environmental Policy Act
AS	Air sparge	NGVD	National Geodetic Vertical Datum
bgs	Below ground surface	NPDES	National Pollutant Discharge Elimination System
BTEX	Benzene, toluene, ethylbenzene, and total xylenes	O&M	Operations and Maintenance
CEQA	California Environmental Quality Act	ORP	Oxidation-reduction potential
cfm	Cubic feet per minute	OSHA	Occupational Safety and Health Administration
COC	Chain of Custody	OVA	Organic vapor analyzer
CPT	Cone Penetration (Penetrometer) Test	P&ID	Process & Instrumentation Diagram
DIPE	Di-isopropyl ether	PAH	Polycyclic aromatic hydrocarbon
DO	Dissolved oxygen	PCB	Polychlorinated biphenyl
DOT	Department of Transportation	PCE	Tetrachloroethene or perchloroethylene
DPE	Dual-phase extraction	PID	Photo-ionization detector
DTW	Depth to water	PLC	Programmable logic control
EDB	1,2-dibromoethane	POTW	Publicly owned treatment works
EDC	1,2-dichloroethane	ppmv	Parts per million by volume
EPA	Environmental Protection Agency	PQL	Practical quantitation limit
ESL	Environmental screening level	psi	Pounds per square inch
ETBE	Ethyl tertiary butyl ether	PVC	Polyvinyl chloride
FID	Flame-ionization detector	QA/QC	Quality assurance/quality control
fpm	Feet per minute	RBSL	Risk-based screening levels
GAC	Granular activated carbon	RCRA	Resource Conservation and Recovery Act
gpd	Gallons per day	RL	Reporting limit
gpm	Gallons per minute	scfm	Standard cubic feet per minute
GWPTS	Groundwater pump and treat system	SSTL	Site-specific target level
HVOC	Halogenated volatile organic compound	STLC	Soluble threshold limit concentration
J	Estimated value between MDL and PQL (RL)	SVE	Soil vapor extraction
LEL	Lower explosive limit	SVOC	Semivolatile organic compound
LPC	Liquid-phase carbon	TAME	Tertiary amyl methyl ether
LRP	Liquid-ring pump	TBA	Tertiary butyl alcohol
LUFT	Leaking underground fuel tank	TCE	Trichloroethene
LUST	Leaking underground storage tank	TOC	Top of well casing elevation; datum is msl
MCL	Maximum contaminant level	TOG	Total oil and grease
MDL	Method detection limit	TPHd	Total hydrocarbons as diesel
mg/kg	Milligrams per kilogram	TPHg	Total hydrocarbons as gasoline
mg/L	Milligrams per liter	TPHmo	Total hydrocarbons as motor oil
mg/m ³	Milligrams per cubic meter	TPHs	Total hydrocarbons as stoddard solvent
MPE	Multi-phase extraction	TRPH	Total recoverable hydrocarbons
MRL	Method reporting limit	UCL	Upper confidence level
msl	Mean sea level	USCS	Unified Soil Classification System
MTBE	Methyl tertiary butyl ether	USGS	United States Geologic Survey
MTCA	Model Toxics Control Act	UST	Underground storage tank
NAI	Natural attenuation indicators	VCP	Voluntary Cleanup Program
		VOC	Volatile organic compound
		VPC	Vapor-phase carbon

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APPENDIX C

HISTORICAL BORINGS LOGS



LITHOLOGY

TEST DATA

Depth, feet	Graphic Log	Description	TEST DATA		
			Sample No. and Interval (2 @ 5 inches) / (Time)	Penetration Rate Recovery %	MICRO-TIP (ppm) Head space
0-4	ASPHALT 0-4 inches	CRUSHED ROCK 4-6 inches			
5	SILTY SAND (SM), light brown to light gray, glacial till, fine grained, moderately graded, with trace coarse sand and gravel, gravels subrounded up to 2 inches in diameter, dense, damp to moist.		B-1/S1 (07:40)	39-50/5' 100%	4.5
5-10	Same as above, color light gray.				
10	Strong odor in hole at 9 feet, 464 ppm from cuttings in 55-gallon drum. Same as above.		B-1/S2 (08:10)	46-50/5' 100%	502
15	Same as above, moist.		B-1/S3 (08:20) 2400	50/5' 50% 67/7400	769 Strong odor 5200 5200
20	2,200 ppm in auger, strong odor.		B-1/S4 (08:30)	50/6' 50%	385 Strong odor
25	Bottom of boring @ 21.5 feet. No groundwater encountered.		B-1/S5 (08:40) 80	50/5' 50% 57/73	440 Strong odor 560
30					

Date Started: 10/25/91
 Date Completed: 10/25/91
 Drill Foreman: P. Miller
 Geologist: S. Bream
 Approved By: M. J. Gander, R.G. #4655

Boring Method: Hollow Stem Auger
 Sampler Type: Driven Split Spoon
 Hammer Wt./Drop: 300 lb./30 in.
 Spoon Sampler OD: 2 in.
 Approximate Boring Elevation: 95 ft.

EXPLANATION

	Clay		Sample Interval
	Silt		
	Sand		
	Gravel		

LITHOLOGY AND SAMPLE DATA FOR SOIL BORING B-1

LITHOLOGY

TEST DATA

Depth, feet	Graphic Log	Description	TEST DATA		
			Sample No. and Interval (Time)	Penetration Rate (2 @ 6 inches)/% Recovery	MICRO- TIP (ppm) Head space
—		ASPHALT 0-2.5 inches CRUSHED ROCK 2.5-4.5 inches SILTY SAND (SM), medium brown to gray, glacial till, fine grained, moderately graded, with trace coarse sand and gravel, gravels subrounded up to 1.5 inches in diameter, very dense, damp to moist.	—	—	—
5		Same as above, gray, glacial till, moist, odor by bore hole.	B-2/S1 (09:10)	43-50/5* 100%	0
10		Same as above, 12 ppm from cuttings in 55-gallon drum.	B-2/S2 (09:13)	33-50/4* 80%	1.3
15		Same as above, moist.	B-2/S3 (09:25)	50/5* 50%	6.9 Strong odor
20		Bottom of boring @ 18.5 feet. No groundwater encountered.	B-2/S4 (09:30)	50/4* 50%	0.0
25					
30					

EXPLANATION

	Clay		Sample Interval
	Silt		
	Sand		
	Gravel		

Date Started: 10/25/91
Date Completed: 10/25/91
Drill Foreman: P. Miller
Geologist: S. Bream
Approved By: M. J. Gander, R.G. #4655

Boring Method: Hollow Stem Auger
Sampler Type: Driven Split Spoon
Hammer Wt./Drop: 300 lb./30 in.
Spoon Sampler OD: 2 in.
Approximate Boring Elevation: 95 ft.

LITHOLOGY AND SAMPLE DATA FOR SOIL BORING B-2



Depth, feet	Graphic Log	LITHOLOGY Description	TEST DATA		
			Sample No. and Interval (2 @ 6 inches) / (Time)	Penetration Rate Recovery %	MICRO-TIP (ppm) Head space
		Drilled into a planter, top 6 inches wood chips and soil.			
		SILTY SAND (SM), brown to medium gray, glacial till, fine grained, moderately graded, with trace coarse sand and gravel, gravels subrounded up to 1.5 inches in diameter, occasional cobbles, very dense, moist.			
5		Same as above, gray.	B-3/S1 (10:48)	50/6' 40%	1.4 No odor
					6.8
10		Same as above.	B-3/S2 (10:55)	42-50/5.5' 80%	3.2 No odor
15		Same as above.	B-3/S3 (11:00)	50/4' 30%	6.9 No odor
20		Bottom of boring @ 19 feet. No groundwater encountered.	B-3/S4 (11:07)	50/4.5' 20%	No odor not enough recovery for head space
25					
30					

Date Started: 10/25/91
 Date Completed: 10/25/91
 Drill Foreman: P. Miller
 Geologist: S. Bream
 Approved By: M. J. Gander, R.G. #4655

Boring Method: Hollow Stem Auger
 Sampler Type: Driven Split Spoon
 Hammer Wt./Drop: 300 lb./30 in.
 Spoon Sampler OD: 2 in.
 Approximate Boring Elevation: 95 ft.

EXPLANATION

	Clay		Sample Interval
	Silt		
	Sand		
	Gravel		

LITHOLOGY AND SAMPLE DATA FOR SOIL BORING B-3

LITHOLOGY

TEST DATA

Depth feet	Graphic Log	Description	TEST DATA		
			Sample No. and Interval (Time)	Penetration Rate (2 @ 6 inches)/% Recovery	MICRO- TIP (ppm) Head space
0		ASPHALT 0 - 2.5 inches			
0		CRUSHED ROCK - 2.5-5.5 inches			
0		SILTY SAND (SM), medium brown to gray, weathered glacial till, fine grained, moderately graded, with trace coarse sand and gravel, loose, slower drilling at 7 feet, damp to moist.			
5			B-4/S1 (10:50)	3-3-2	0.4
10		Same as above, moist.	B-4/S2 (11:00) B-4/S5 (11:05)	46-50/5'	0.2
15		2.36 ppm in borehole (auger).	B-4/S3 (12:05)	50/4' 30%	Not enough sample collected
20		Bottom of boring @ 19 feet. No groundwater encountered. Note: B-5/S5 is a duplicate of B-5/S2.	B-4/S4 (12:10)	50/4'	Not enough sample collected
25			B-4/S5		
30					

Handwritten notes:
130/540/1400/10,000
[Signature]

EXPLANATION

- Clay
- Silt
- Sand
- Gravel
- Sample Interval

Date Started: 10/25/91
 Date Completed: 10/25/91
 Drill Foreman: P. Miller
 Geologist: S. Bream
 Approved By: M. J. Gander, R.G. #4655

Boring Method: Hollow Stem Auger
 Sampler Type: Driven Split Spoon
 Hammer Wt./Drop: 300 lb./30 in.
 Spoon Sampler OD: 2 in.
 Approximate Boring Elevation: 95 ft.

LITHOLOGY AND SAMPLE DATA FOR SOIL BORING B-4



Depth, feet	Graphic Log	LITHOLOGY Description	TEST DATA		
			Sample No. and Interval (2 @ 6 inches)/% /Time	Penetration Rate Recovery	MICRO- TIP (ppm) Head space
0		ASPHALT 0 - 2.5 inches CRUSHED ROCK - 2.5-5.5 inches SILTY SAND (SM), medium brown to gray, weathered glacial till, fine grained, moderately graded, with trace coarse sand and gravel, gravels subrounded up to 1 inches in diameter, very dense, moist.			
5		Same as above, gray, siltier.	B-5/S1 (12:45)	33-50/5.5' 100%	1.2
10		Same as above.	B-5/S2 (12:50)	42-50/3' 80%	5.5
15			B-5/S3 (13:05)	50/5' 30%	1.3
20		Bottom of boring @ 19 feet. No groundwater encountered.	B-5/S4 (13:10)	46-50/5' 50%	0
25					
30					

EXPLANATION

	Clay		Sample Interval
	Silt		
	Sand		
	Gravel		

Date Started: 10/25/91
Date Completed: 10/25/91
Drill Foreman: P. Miller
Geologist: S. Bream
Approved By: M. J. Gander, R.G. #4655

Boring Method: Hollow Stem Auger
Sampler Type: Driven Split Spoon
Hammer Wt./Drop: 300 lb./30 in.
Spoon Sampler OD: 2 in.
Approximate Boring Elevation: 95 ft.

LITHOLOGY AND SAMPLE DATA FOR SOIL BORING B-5

Depth, feet	Graphic Log	LITHOLOGY Description	TEST DATA		
			Sample No. and Interval	Penetration Rate (2 @ 5 inches)/% Recovery	Gas tech (ppm) Head space
0		GRASS and organic material (drilled into a planter) 0-4 inches.			
5		SILTY SAND (SM), light brown to light gray, glacial fill, fine grained, poorly graded, with minor coarse sand and gravel, gravels subrounded up to 2 inches in diameter, soft to medium stiff, damp to moist.	TPH 100	BTEX 500 20000 40000 20000	
10		Same as above.	B-6-8 (08:40) L2	8-21-31 80%	12
15		Visual or olfactory evidence of contamination is not noted.			
20		Color and soil type consistent throughout boring.	B-6-17 (08:55) L2	17-50/6'	50
25		Color and soil type consistent throughout boring.	B-6-23 (09:10) L2	50/6'	50%
30		Drilled to 30 feet, bottom of boring @ 31.5 feet. No groundwater encountered.	B-6-30 (09:20) L2	31-50/6'	75
					7-1-1/50.0

EXPLANATION

- Clay
- Silt
- Sand
- Gravel
- Sample Interval

Date Started: 12/12/91
 Date Completed: 12/12/91
 Drill Foreman: B. Brun
 Geologist: M.J. Gander
 Approved By: M. J. Gander, R.G. #4655

Boring Method: Hollow Stem Auger
 Sampler Type: Driven Split Spoon
 Hammer Wt./Drop: 300 lb./30 in.
 Spoon Sampler OD: 2.5 in.
 Approximate Boring Elevation: 95 ft.

LITHOLOGY AND SAMPLE DATA FOR SOIL BORING B-6

Depth, feet	Graphic Log	LITHOLOGY Description	TEST DATA		
			Sample No. and Interval (2 @ 5 inches)/(Time)	Penetration Rate Recovery (%)	Gastech (ppm) Head space
0		ASPHALT 0-4 inches.			
5		SILTY SAND (SM), light brown to light gray, glacial fill, fine graded, poorly graded, with minor gravel, gravels subrounded up to 2 inches in diameter, soft to medium stiff, damp.			
10		Same as above.	B-7-6 (10:05) <i>22</i>	10-15-29 80%	35
15			B-7-11 (10:17) <i>74</i>	11-50/6' 80%	>500 <i>380, 930, 1400, 1700</i>
20			B-7-20 (10:30) <i>3.8</i>	50/6' 30%	<i>83</i>
25					
30		Weak hydrocarbon odor at 30 feet; gastech reading at 200 ppm. Drilled to 30 feet, bottom of boring @ 31.5 feet. No groundwater encountered.	B-7-30 (10:40) <i>4.9</i>	50/4' 20%	<i>X</i>

Date Started: 12/12/91
 Date Completed: 12/12/91
 Drill Foreman: B. Brun
 Geologist: M.J. Gander
 Approved By: M. J. Gander, R.G. #4655

Boring Method: Hollow Stem Auger
 Sampler Type: Driven Split Spoon
 Hammer Wt./Drop: 300 lb./30 in.
 Spoon Sampler OD: 2.5 in.
 Approximate Boring Elevation: 95 ft.

EXPLANATION

	Clay		Sample Interval
	Silt		
	Sand		
	Gravel		

LITHOLOGY AND SAMPLE DATA FOR SOIL BORING B-7



Depth, feet	Graphic Log	LITHOLOGY Description	TEST DATA		
			Sample No. and Interval (2 @ 5 inches) / (Time)	Penetration Rate (%)	Gastech (ppm) Head space
0		ASPHALT 0-4 inches.			
5		SILTY SAND (SM), light brown to light gray, glacial fill, fine grained, poorly graded, with minor gravel, gravels subrounded up to 2 inches in diameter, soft to medium stiff, damp.	B-8-6 (11:30) 45	17-22-46 90%	60 54
10		Same as above, lighter gray color, trace cobbles subrounded up to 3 inches in diameter. Slow drilling between 12-19 feet due to gravels and cobbles.	B-8-11 (11:45) 580	22-50/5* 60%	>500 Cuttings 55 110, 1100, 2500, 13,000
15		Same as above, strong hydrocarbon odor.			Cuttings >500
20		Moderate hydrocarbon odor.	B-8-21 (12:20) a	50/6* 50%	50 Cuttings 100
25					
30		Same as above, increase in gravels, gravels subrounded up to 2 inches, dense, moderate hydrocarbon odor. Drilled to 30 feet, bottom of boring @ 31.5 feet. No groundwater encountered.	B-8-30 (10:40) B-8-31 duplicate 22	45-50/2* 50%	75 Cuttings 120 13 X

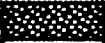
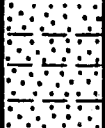
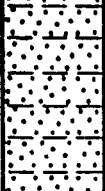
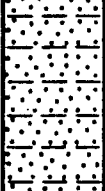
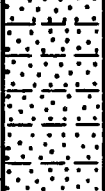
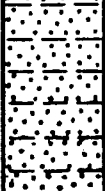
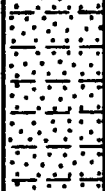
EXPLANATION

	Clay		Sample Interval
	Silt		
	Sand		
	Gravel		






Date Started: 12/12/91
Date Completed: 12/12/91
Drill Foreman: B. Brun
Geologist: M. Keenan
Approved By: M. J. Gander, R.G. #4655

Boring Method: Hollow Stem Auger
Sampler Type: Driven Split Spoon
Hammer Wt./Drop: 300 lb./30 in.
Spoon Sampler OD: 2.5 in.
Approximate Boring Elevation: 95 ft.

LITHOLOGY AND SAMPLE DATA FOR SOIL BORING B-8

Depth, feet	Graphic Log	LITHOLOGY Description	TEST DATA		
			Sample No. and Interval (2 @ 5 inches)/% (Time)	Penetration Rate Recovery	GasTech (ppm) Head space
0		GRASS and organic material (drilled into a planter) 0-12 inches.			
5		SILTY SAND (SM), light brown to light gray, glacial till, fine grained, poor to moderate grading, with minor coarse grained sand and gravel, gravels subrounded up to 1.5 inches in diameter, soft to moderate density, damp.			
5			B-9-6 (14:05)	14/17/31 100%	75 Tube 26
10		Same as above, more gray in color, minor increase in coarse grained sand and gravels, moderate density to stiff.			
10		Slow drilling between 12-15 feet due to gravels.	B-9-11 (14:20)	20-39-50/2' 100%	>60 Cuttings & Tube 25
15		Same as above, increase in gravels to approximately 10%, subrounded up to 2 inches, dense.			Cuttings 1
20			B-9-21 (14:40)	35-50/4' 60%	20 Tube 120
25		Slow drilling at 25 feet.			
30		Same as above.			
30		Drilled to 30 feet, bottom of boring @ 31.5 feet. No groundwater encountered.	B-9-31 (15:15)	50/5' 50%	Not enough sample Tube 75 Hole 0

EXPLANATION

	Clay		Sample Interval
	Silt		
	Sand		
	Gravel		

Date Started: 12/12/91
 Date Completed: 12/12/91
 Drill Foreman: B. Brun
 Geologist: M. Keenan
 Approved By: M. J. Gander, R.G. #4655

Boring Method: Hollow Stem Auger
 Sampler Type: Driven Split Spoon
 Hammer Wt./Drop: 300 lb./30 in.
 Spoon Sampler OD: 2.5 in.
 Approximate Boring Elevation: 95 ft.

LITHOLOGY AND SAMPLE DATA FOR SOIL BORING B-9



Depth, feet	Graphic Log	LITHOLOGY Description	TEST DATA		
			Sample No. and Interval (2 @ 5 inches)/(Time)	Penetration Rate Recovery	Gastech (ppm) Head space
0		ASPHALT 0-4 inches.			
5		SILTY SAND (SM), light brown to light gray, glacial fill, fine grained, poorly graded, with minor coarse grained sand and gravel, gravels subrounded up to 2 inches in diameter, soft to medium stiff.			
5		Cuttings at background on Gastech at 5 feet.			
5			B-10-6 (08:17) 4B	28-42-40 90%	85
10		Same as above, cuttings give strong hydrocarbon odor 10 to 30 feet.			
10			B-10-11 (08:30) 4B	30-50/3" 100%	>500 Tube >500
10				1900/780/2200/15000	
15					
20					
20			B-10-21 (08:50) 5B	22-50/4" 60%	>500
25					
25				20, 66, 68, 550	
30		Same as above.			
30		Drilled to 30 feet, bottom of boring @ 31.5 feet. No groundwater encountered.	B-10-31 (09:10) 3B	34-50/3" 50%	>500 Tube >500
30				85 7300, 1400, 7500	

EXPLANATION

- Clay
- Silt
- Sand
- Gravel
- Sample Interval

Date Started: 12/13/91
Date Completed: 12/13/91
Drill Foreman: S. Hauman
Geologist: M. J. Gander
Approved By: M. J. Gander, R.G. #4655

Boring Method: Hollow Stem Auger
Sampler Type: Driven Split Spoon
Hammer Wt./Drop: 300 lb./30 in.
Spoon Sampler OD: 2.5 in.
Approximate Boring Elevation: 95 ft.

LITHOLOGY AND SAMPLE DATA FOR SOIL BORING B-10

Depth, feet	Graphic Log	LITHOLOGY		TEST DATA	
		Description	Sample No. and Interval (2 @ 5 inches)/ (Time)	Penetration Rate (ppm) Recovery	Gratech (ppm) Head space
0		ORGANIC material (drilled into a planter) 0-12 inches.			
5		SILTY SAND (SM), light brown to light gray, glacial fill, fine grained, poor to moderate grading, with minor coarse grained sand and gravel, gravels subrounded up to 2 inches in diameter, soft to medium stiff, damp.			
5		Same as above, increase in light gray color, slight increase in coarse sands and gravels, gravel subrounded up to 1.5" in diameter.	B-11-6 (10:25)	7-21-29 80%	40 Tube 30
10		Same as above.	ZZ	X	
15			B-11-11 (10:25)	9-38-50/5' 70%	70 Tube 25
15			ZZ		
20		Same as above, minor cobbles subrounded up to 4" in diameter, gravels subrounded up to 1.5" in diameter.	B-11-20 (11:00)	25-33-50/3' 60%	80 Tube 15
20			ZZ	X	
25		Moderate hydrocarbon odor at 24 - 26 feet.			
30		Same as above.			
30		Drilled to 29 feet, bottom of boring @ 30.5 feet. No groundwater encountered.	B-11-30 (11:18)	17-50/3' 50%	50 Tube >500
			ZZ		6.7

EXPLANATION

	Clay		Sample Interval
	Silt		
	Sand		
	Gravel		

Date Started: 12/13/91
 Date Completed: 12/13/91
 Drill Foreman: S. Hauman
 Geologist: M. Keenan
 Approved By: M. J. Gander, R.G. #4655

Boring Method: Hollow Stem Auger
 Sampler Type: Driven Split Spoon
 Hammer Wt./Drop: 300 lb./30 in.
 Spoon Sampler OD: 2.5 in.
 Approximate Boring Elevation: 95 ft.

LITHOLOGY AND SAMPLE DATA FOR SOIL BORING B-11



Depth, feet	Graphic Log	LITHOLOGY Description	TEST DATA		
			Sample No. and Interval (2 @ 5 inches)/% (Time)	Penetration Rate Recovery	GasTech (ppm) Head space
0		ASPHALT 0-4 inches.			
5		SILTY SAND (SM), light brown to light gray, glacial fill, fine grained, poor to moderate grading, with minor coarse grained sand and gravel, gravels subrounded up to 2 inches in diameter, soft.			
5		Same as above, moderate hydrocarbon odor.	B-12-6 (12:42) 630	2-2-2 100%	200 Tube >500 -- 670, 2900
10		Same as above, increase in light gray color, slight increase in coarse sands and gravels to 19 feet at approximately 5%, gravels subrounded up to 2 inches in diameter, medium stiff to stiff, strong hydrocarbon odor noted.	B-12-11 (12:50) 110	21-50/5' 70%	>500 Cuttings & Tube >500 X
15					Cuttings >500
20		Same as above, slight decrease in coarse sands and gravels, gravels subrounded to round up to 3 inches in diameter, strong hydrocarbon odor noted.	B-12-21 (13:05) 410	26-50/4' 40%	>500 Cuttings >500 920, 1200, 2100, 13000
25					
28		Hard drilling at 28 feet due to gravel.			
30		Same as above, very strong hydrocarbon odor. Drilled to 30 feet, bottom of boring @ 31.5 feet. No groundwater encountered.	B-12-31 (13:30) 280	20-50/5' 50%	>500 Cuttings >500 X

EXPLANATION

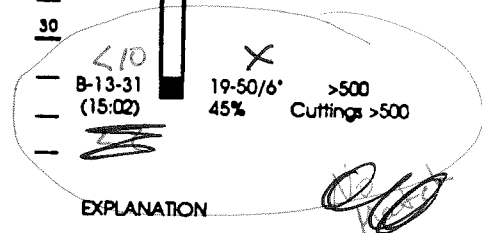
	Clay		Sample Interval
	Silt		
	Sand		
	Gravel		

Date Started: 12/13/91
Date Completed: 12/13/91
Drill Foreman: S. Hauman
Geologist: M. J. Gander
Approved By: M. J. Gander, R.G. #4655

Boring Method: Hollow Stem Auger
Sampler Type: Driven Split Spoon
Hammer Wt./Drop: 300 lb./30 in.
Spoon Sampler OD: 2.5 in.
Approximate Boring Elevation: 95 ft.

LITHOLOGY AND SAMPLE DATA FOR SOIL BORING B-12

Depth, feet	Graphic Log	LITHOLOGY Description	TEST DATA		
			Sample No. and Interval (2 @ 5 inches)/% (Time)	Penetration Rate Recovery	Gastech (ppm) Head space
0		ASPHALT 0-4 inches.			
5		SILTY SAND (SM), light brown to light gray, glacial till, fine grained, poor to moderate grading, with minor coarse grained sand and gravel, gravels subrounded up to 2 inches in diameter, soft, slow drilling at 2 feet due to wood fibers.			
5.5		Same as above, lighter gray color at 5.5 feet, strong hydrocarbon odor.	B-13-6 (14:05) <i>66</i>	11-18-22 100%	>500 Tube 450 <i>17,55,550,3700</i>
10		Same as above, slow drilling from 9 to 10 feet presumably due to gravel.	B-13-11 (14:30) <i>170</i>	16-50/6' 70%	>500 Tube >500 <i>X</i>
15		Same as above, slight increase in coarse sands and gravels, very strong hydrocarbon odor noted.			Cuttings >500
20		Same as above, slight increase in coarse sands and gravels; strong to moderate hydrocarbon odor noted.	B-13-21 (14:45) <i>130</i>	30-50/4.5' 45%	>500 Cuttings >500 <i>400 3900</i>
25					Hole >500
28		Hard drilling at 28 feet due to gravel.			
30		Same as above, very strong hydrocarbon odor.			
31.5		Drilled to 30 feet, bottom of boring @ 31.5 feet. No groundwater encountered.	<i><10</i> B-13-31 (15:02) <i>[scribble]</i>	19-50/6' 45%	>500 Cuttings >500 <i>X</i>



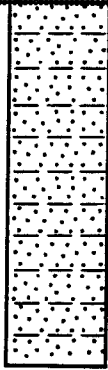
EXPLANATION

- Clay
- Silt
- Sand
- Gravel
- Sample Interval

Date Started: 12/13/91
 Date Completed: 12/13/91
 Drill Foreman: S. Hauman
 Geologist: M. J. Gander
 Approved By: M. J. Gander, R.G. #4655

Boring Method: Hollow Stem Auger
 Sampler Type: Driven Split Spoon
 Hammer Wt./Drop: 300 lb./30 in.
 Spoon Sampler OD: 2.5 in.
 Approximate Boring Elevation: 95 ft.






LITHOLOGY AND SAMPLE DATA FOR SOIL BORING B-13

Depth, feet	Graphic Log	LITHOLOGY Description	TEST DATA	
			Sample No. and Interval (2 @ 5 inches)/% (Time)	Penetration Rate Recovery Gastech (ppm)
35		SILTY SAND (SM), light brown to light gray, glacial fill, fine grained, poor to moderate grading, with minor coarse grained sand and gravel, gravels subrounded up to 2.5 inches in diameter, dense.	B-14-34 (09:44)	50/6' 30%
40		Same as above, moderately graded. Drilled to 38.0 feet, bottom of boring @ 39.5 feet. Tripped out of hole at 12:00, waited for mobile lab results. No groundwater encountered.	B-14-39 (09:55)	50/4.5' 30%
45				
50				
55				
60				

Date Started: 01/29/92
 Date Completed: 01/29/92
 Drill Foreman: P. Miller
 Geologist: M. Keenan
 Approved By: M. J. Gander, R.G. #4655

Boring Method: Hollow Stem Auger
 Sampler Type: Driven Split Spoon
 Hammer Wt./Drop: 300 lb./30 in.
 Spoon Sampler OD: 2.5 in.
 Approximate Boring Elevation: 95 ft.

EXPLANATION

	Clay		Sample Interval
	Silt		
	Sand		
	Gravel		

LITHOLOGY AND SAMPLE DATA FOR SOIL BORING B-14 (CONTINUED)



Depth, feet	Graphic Log	LITHOLOGY		TEST DATA	
		Description	Sample No. and Interval (Time)	Penetration Rate (2 @ 5 inches)/% Recovery	Gastech (ppm)
—		ASPHALT 0-6 inches, start drilling at 09:05.	—	—	3TEX
—		SILTY SAND (SM), light brown to light gray, glacial till, fine grained, poor to moderate grading, with minor coarse grained sand and gravel, gravels subangular to subrounded up to 2 inches in diameter (10%), loose, damp.	—	—	
5		Same as above, lighter gray color at 5.5 feet, strong hydrocarbon odor.	5	—	Cuttings 50
—			—	—	
—			—	—	
10			10	—	
—			—	—	
—		Same as above, strong hydrocarbon odor from 12 - 15 feet.	—	—	
15			15	—	
—			—	—	
—			—	—	
20		Same as above, increase in gravel size to 3.5 inches, moderately dense; strong to moderate hydrocarbon odor noted.	20	—	
—			—	—	
—			—	—	
25			25	—	
—			—	—	
—			—	—	
30		Same as above, strong hydrocarbon odor, dense.	30	8-14-29 (09:35)	
	Cont'd			50/4' 75%	—/—/80

Date Started: 01/29/92
 Date Completed: 01/29/92
 Drill Foreman: P. Miller
 Geologist: M. Keenan
 Approved By: M. J. Gander, R.G. #4655

Boring Method: Hollow Stem Auger
 Sampler Type: Driven Split Spoon
 Hammer Wt./Drop: 300 lb./30 in.
 Spoon Sampler OD: 2.5 in.
 Approximate Boring Elevation: 95 ft.

EXPLANATION

	Clay		Sample Interval
	Silt		
	Sand		
	Gravel		

LITHOLOGY AND SAMPLE DATA FOR SOIL BORING B-14

Depth, feet	Graphic Log	LITHOLOGY Description	TEST DATA	
			Sample No. Penetration Rate and Interval (2 @ 5 inches)/% /(Time)	Gastech (ppm) Recovery
		ASPHALT 0-4 inches.		
		SILTY SAND (SM), light brown to light gray, glacial till, fine grained, moderate grading, with minor coarse grained sand and gravel, gravels subrounded up to 1.5 inches in diameter (10%), loose, slightly damp.		
5			5	
		Same as above, lighter gray color at 8 feet, strong hydrocarbon odor.		
10			10	
		Same as above, increase in gravels and cobbles at 15 feet to 10-15%, slight hydrocarbon odor from cuttings.		
15			15	
		Hard drilling from 20 to 26 feet.		Cuttings 160
20			20	
				Cuttings 95
25			25	
30			30	

Cont'd

B-15-29
(13:15) 50/5'
50%

~~160~~ / 160 / 150

Date Started: 01/29/92
Date Completed: 01/29/92
Drill Foreman: P. Miller
Geologist: M. Keenan
Approved By: M. J. Gander, R.G. #4655

Boring Method: Hollow Stem Auger
Sampler Type: Driven Split Spoon
Hammer Wt./Drop: 300 lb./30 in.
Spoon Sampler OD: 2.5 in.
Approximate Boring Elevation: 95 ft.

EXPLANATION

- Clay
- Silt
- Sand
- Gravel
- Sample Interval

LITHOLOGY AND SAMPLE DATA FOR SOIL BORING B-15

Depth, feet	Graphic Log	LITHOLOGY		TEST DATA	
		Description	Sample No. and Interval (2 @ 5 inches)/% (Time)	Penetration Rate Recovery	Gastech (ppm)
—		SILTY SAND (SM), light brown to light gray, glacial till, fine grained, moderate grading, with minor coarse grained sand and gravel (5%), gravels subrounded up to 2.5 inches in diameter, dense.	—	—	—
35		Same as above, olive brown to gray in color.	B-15-34 (13:24)	50/6' 70%	Borehole 30
—		Hard drilling at 36 feet. Same as above, increase in coarse sand and gravels to 10%.	1040	11800/43900/-/89800	
40		Drilled to 38.0 feet, bottom of boring @ 39.5 feet. Tripped out of hole at 14:25, waited for mobile lab results. No groundwater encountered.	B-15-39 (13:36)	50/5' 60%	Cuttings 40
45			—	190/220/-/220	
50			50		
55			55		
60			60		

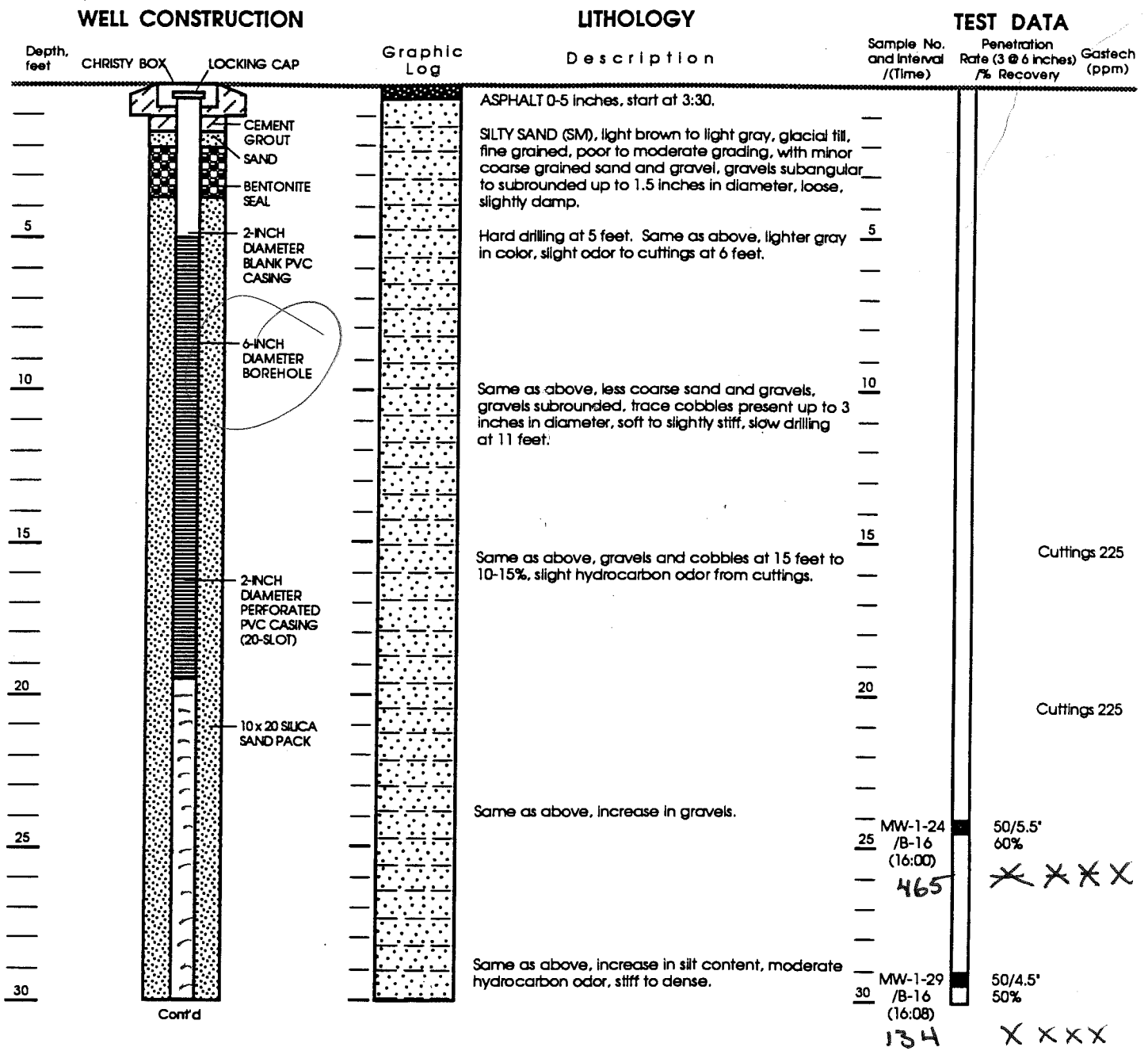
Date Started: 01/29/92
 Date Completed: 01/29/92
 Drill Foreman: P. Miller
 Geologist: M. Keenan
 Approved By: M. J. Gander, R.G. #4655

Boring Method: Hollow Stem Auger
 Sampler Type: Driven Split Spoon
 Hammer Wt./Drop: 300 lb./30 in.
 Spoon Sampler OD: 2.5 in.
 Approximate Boring Elevation: 95 ft.

EXPLANATION

	Clay		Sample Interval
	Silt		
	Sand		
	Gravel		

LITHOLOGY AND SAMPLE DATA FOR SOIL BORING B-15 (CONTINUED)



Date Started: 01/29/92
 Date Completed: 01/30/92
 Drill Foreman: P. Miller
 Geologist: M. Keenan
 Approved By: M.J. Gander, R.G. #4655

Boring Method: Hollow Stem Auger
 Sampler Type: Driven Split Spoon
 Hammer Wt./Drop: 300lb./30 in.
 Spoon Sampler OD: 2.5 in.
 Approximate Well Elevation: 95 ft.

EXPLANATION

	Clay		Sample Interval
	Silt		
	Sand		
	Gravel		

WELL CONSTRUCTION AND LITHOLOGY FOR WELL MW-1/B-16

WELL CONSTRUCTION		LITHOLOGY		TEST DATA	
Depth, feet	Graphic Log	Description	Sample No. and Interval (Time)	Penetration Rate (3 @ 6 inches) % Recovery	Gastech (ppm)
—		SILTY SAND (SM), light brown to light gray, glacial fill, fine grained, moderate grading, with minor coarse grained sand and gravel, gravels subrounded up to 2.5 inches in diameter, stiff to dense.	—	—	—
35		Same as above, olive brown to gray color, trace silt, decrease in coarse sand and gravels.	MW-1-34 /B-16 (16:15) 62	50/5' Cuttings 100 30%	1020/2470/1090 6590
40		Drilled to 38.0 feet, bottom of boring @ 39.5 feet. Tripped out of hole at 16:40, waited for mobile lab results. No groundwater encountered.	MW-1-39 B-16 (16:23)	50/6' Cuttings 100 30%	200/230/250
45		Prior to well construction, surface run-off was present in the boring from 29 to 38 feet below grade. Hole caved from 35 to 38 feet below grade.	—	—	—
50					
55					
60					

Date Started: 01/29/92
 Date Completed: 01/30/92
 Drill Foreman: P. Miller
 Geologist: M. Keenan
 Approved By: M.J. Gander, R.G. #4655

Boring Method: Hollow Stem auger
 Sampler Type: Driven Split Spoon
 Hammer Wt./Drop: 300 lb./30 in.
 Spoon Sampler OD: 2.5 in.
 Approximate Well Elevation: 95 ft.

EXPLANATION

	Clay		Sample Interval
	Silt		
	Sand		
	Gravel		

WELL CONSTRUCTION AND LITHOLOGY FOR WELL MW-1/B-16 (CONTINUED)

Depth, feet	Graphic Log	LITHOLOGY Description	TEST DATA		
			Sample No. and Interval (Time)	Penetration Rate (2 @ 5 inches)/% Recovery	Gastech (ppm)
—		ASPHALT 0-5 inches, start at 3:30.	—	—	—
5		SILTY SAND (SM), light olive green, glacial fill, fine grained, poor to moderate grading, with minor coarse grained sand and gravel, gravels subrounded up to 2 inches in diameter (10%), medium dense, damp.	5 B-17-5 (17:00)	47/6' 40%	Cuttings @ background
10		Same as above.	10 B-17-10 (17:05)	33/4.5' 50%	—
15		Drilled to 13.0 feet, bottom of boring @ 15.0 feet. No groundwater encountered.	15 B-17-15 (17:15)	50/5' 40%	Cuttings @ background
20		Note: hammer drop was 18 inches in this boring versus 30 inches for borings B-14 through B-16/MW-1.	20		
25			25		
30			30		

Date Started: 01/29/92
 Date Completed: 01/29/92
 Drill Foreman: P. Miller
 Geologist: M. Gander
 Approved By: M. J. Gander, R.G. #4655

Boring Method: Hollow Stem Auger
 Sampler Type: Driven Split Spoon
 Hammer Wt./Drop: 300 lb./18 in.
 Spoon Sampler OD: 2.5 in.
 Approximate Boring Elevation: 95 ft.

EXPLANATION

	Clay		Sample Interval
	Silt		
	Sand		
	Gravel		

LITHOLOGY AND SAMPLE DATA FOR SOIL BORING B-17

DEPTH (feet)	WELL CONSTRUCTION	WATER LEVEL	CHEMICAL ANALYSES		BLOWS/6 inches	SAMPLE		U.S.C.S. DESIGNATION	SOIL DESCRIPTION
			LABO-RATORY	PID (ppmv)		INTERVAL	NUMBER		
0									6" ASPHALTIC CONCRETE, 2" Base.
								SM	Brown SILTY SAND with GRAVEL, slightly moist, dense, no petroleum hydrocarbon odor.
10			0		50-3		B18-10		Color change to gray, very dense.
15			0		50-6		B18-15		With trace GRAVEL, color change to gray-brown.
20			0		50-2 50-3		B18-20		With thumb size GRAVEL, color change to gray.
25									

LOGGED BY: JAS
 DATE DRILLED: 9-16-94
 CASING TYPE: NA
 Comments:

WELL ELEVATION (feet): NA
 TOTAL DEPTH (feet): 58.0
 DIAMETER OF BORING: 8"

DRILLING METHOD: Hollow Stem Auger
 SCREEN SIZE: NA
 CASING SIZE: NA



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LOG OF SOIL BORING, B-18

FORMER MOBIL OIL SERVICE STATION #99-BLV
 1500 145TH PLACE S.E., BELLEVUE, WASHINGTON

Project # 60-5072-01

PLATE B-10

DEPTH (feet)	WELL CONSTRUCTION	WATER LEVEL	CHEMICAL ANALYSES		BLOWS/6 inches	SAMPLE		U.S.C.S. DESIGNATION	SOIL DESCRIPTION
			LABORATORY	PID (ppmv)		INTERVAL	NUMBER		
25				0	50-2		B18-25		SILTY SAND with GRAVEL, gray, slightly moist, very dense, no hydrocarbon odor.
30				0	50-3		B18-30		No change.
35				0	50-6		B18-35		SAND with SILT, gray, slightly moist, very dense, no hydrocarbon odor.
40					50-2 50-3		B18-40		SAND with SILT and GRAVEL, gray-brown, slightly moist, very dense, no hydrocarbon odor.
45				0	50-2 50-2		B18-45		No change.
50									

LOGGED BY: JAS

DATE DRILLED: 9-16-94

CASING TYPE: NA

Comments:

WELL ELEVATION (feet): NA

TOTAL DEPTH (feet): 58.0

DIAMETER OF BORING: 8"

DRILLING METHOD: Hollow Stem Auger

SCREEN SIZE: NA

CASING SIZE: NA



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LOG OF SOIL BORING, B-18

FORMER MOBIL OIL SERVICE STATION #99-BLV

1500 145TH PLACE S.E., BELLEVUE, WASHINGTON

Project # 60-5072-01

PLATE B-11

DEPTH (feet)	WELL CONSTRUCTION	WATER LEVEL	CHEMICAL ANALYSES		BLOWS/6 inches	INTERVAL	SAMPLE	U.S.C.S. DESIGNATION	SOIL DESCRIPTION
			LABO-RATORY	PID (ppmv)			NUMBER		
50	[Well Construction Diagram]	[Water Level Diagram]		0	60-5		B18-50	SP	SAND with GRAVEL, brown-gray, wet, dense, no hydrocarbon odor.
			0	65-6		B18-52	SW	SAND, brown and gray, wet, dense, no hydrocarbon odor	
			0	65-6		B18-53		color change to brown	
55			0	60-6		B18-55		no change	
			0	60-5		B18-57.5	no change		
60									
65									
70									
75									

LOGGED BY: JAS WELL ELEVATION (feet): NA DRILLING METHOD: Hollow Stem Auger
 DATE DRILLED: 9-16-94 TOTAL DEPTH (feet): 58.0 SCREEN SIZE: NA
 CASING TYPE: NA DIAMETER OF BORING: 8" CASING SIZE: NA
 Comments:



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LOG OF SOIL BORING, B-18

FORMER MOBIL OIL SERVICE STATION #99-BLV
 1500 145TH PLACE S.E., BELLEVUE, WASHINGTON

Project # 60-5072-01

PLATE B-12

NOTE: Logs are to be used only for the designated purposes and in context with the attached report.

Project Name	MOBIL-BELLEVUE		Boring No.
Number	60-121201		MW02
Total Depth	40 feet	Sheet 1 of 2	

LOG OF BORING

Depth (feet)	Sample Number	Sample Type	P.I.D.	Blows/6"	USCS	Description	Well Construction
0						4" Asphalt and 2" Gravel Under Base	
1					SM	Silty SAND With Gravel, Dense, Gray, Dry, (Observed Soil From Flight Auger)	
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14	A		250	50 / 3"	SM	Silty SAND With Gravel, Fine to Medium Grained, Dense, Gray, Very Noticable Odor, Dry	
15							
16							
17							
18							
19	B		778	50 / 3"	SM	Silty SAND With Gravel, Fine to Medium Grained, Dense, Gray, Gas Odor, Dry	
20							
21							

Designated Purpose(s) of Log
Soil Sample Analysis

Note: Logs are to be used only for designated purpose(s).

Logged by S. Hughes	Date: 4/2/92	Plate B-2
Drafted by M. Bussanich	Date: 5/11/92	
Supervised by Rory Galloway		

Project Name		MOBIL-BELLEVUE	Boring No. MW02
Number		60-121201	
Total Depth	40 feet	Sheet 2 of 2	

LOG OF BORING

Depth (feet)	Sample Number	Sample Type	P.I.D.	Blows/6"	USCS	Description	Well Construction
23							
24	C		-	50	SM	Silty SAND With Minor Gravel, Fine to Medium Grained, Dense, Gray, Slightly Moist	
25							
26							
27							
28							
29	D		-	50	SM	Silty SAND With Minor Gravel, Fine to Medium Grained, Dense, Gray, Slightly Moist	
30							
31						(Flight Auger Observation)	
32						Encountered Coarse Gravel to Cobbles at 30'-32'	
33							
34	E		-	50	SP	SAND With Minor Fine to Coarse Gravel, Medium to Coarse, Dense, Brown, Slightly Moist	
35							
36							
37							
38							
39	F		-	50	SP	SAND With Minor Fine Gravel, Medium Grained, Dense, Brown, Slightly Moist	
40							
41	Total Depth 40 feet, @ 18:30, 4/2/92, S. Hughes						
42							
43							

Designated Purpose(s) of Log
Soil Sample Analysis

Note: Logs are to be used only for designated purpose(s).

Logged by	S. Hughes	Date:	4/2/92	Plate B-2 Cont.
Drafted by	M. Bussanich	Date:	5/11/92	
Supervised by	Rory Galloway			

Project Name	MOBIL-BELLEVUE		Boring No. MW03
Number	60-121201		
Total Depth	60 feet	Sheet 1 of 2	

LOG OF BORING

Depth (feet)	Sample Number	Sample Type	P.I.D.	Blows/6"	USCS	Description	Well Construction
						4" Asphalt and 2" Gravel Under Base	
2					SM	Silty SAND With Gravel, Dense, Gray (Till), Slightly Moist	
4							
6							
8							
10							
12							
14	A		0	50 / 3"	SM	Silty SAND With Gravel, Dense, Brown (Till), Slightly Moist	
16							
18	B		0	50 / 3"	SM	Silty SAND With Gravel, Dense, Brown (Till), Slightly Moist	
20							
22							
24	C		0	50 / 3"	SM	Silty SAND With Gravel, Dense, Brown (Till), Moist	
26							
28	D		0	50 / 3"	SM	Silty SAND With Gravel, Dense, Brown (Till), Slightly Moist	

Designated Purpose(s) of Log
Soil Sample Analysis

Note: Logs are to be used only for designated purpose(s).

Logged by	S. Hughes	Date:	4/2/92	Plate B-3
Drafted by	M. Bussanich	Date:	5/11/92	
Supervised by	Rory Galloway			



Project Name MOBIL-BELLEVUE		Boring No. MW03
Number 60-121201		
Total Depth 60 feet	Sheet 2 of 2	

LOG OF BORING

Depth (feet)	Sample Number	Sample Type	P.I.D.	Blows/6"	USCS	Description	Well Construction
32	E	0	0	50 / 3"	SM	Silty SAND With Gravel, Dense, Brown (Till), Moist	
34							
36							
38	F	0	0	50 / 6"	SP	SAND Medium Dense, Brown, Slightly Moist	
40							
42	G	0	0	50 / 6"	SP	SAND, Fine Grained, Moderately Dense, Brown, Slightly Moist	
44							
46							
48	H	0	0	50 / 6"	SP	SAND, Fine Grained, Medium Dense, Brown, Wet	
50							
52	I	0	0	34 / 50 / 6"	SP	SAND, Fine Grained, Medium Dense, Brown, Wet	
54							
56							
58	J	0	0	7 / 33 / 50 / 4"	SP	SAND, Fine Grained, Medium Dense, Brown, Wet	

Total Depth 60 feet, @ 20:15, 4/3/92, S. Hughes

Designated Purpose(s) of Log
Soil Sample Analysis

Note: Logs are to be used only for designated purpose(s).

Logged by S. Hughes	Date: 4/2/92	Plate B-3 Cont.
Drafted by M. Bussanich	Date: 5/11/92	
Supervised by Rory Galloway		

Project Name		MOBIL-BELLEVUE	Boring No. MW04
Number		60-121201	
Total Depth	60 feet	Sheet 1 of 2	

LOG OF BORING

Depth (feet)	Sample Number	Sample Type	P.I.D.	Blows/6"	USCS	Description	Well Construction
0 - 2						4" Asphalt and 2" Gravel Under Base	
2 - 12						(Drill Cutting Observation) Silty SAND With Gravel, Dense, Gray (Till), Dry	
12	A		0	50 / 3"	SM	Silty SAND With Gravel, Dense, Gray (Till), Dry	
12 - 18						Silty SAND With Gravel, Dense, Gray (Till), Slightly Moist	
18	B		0	50 / 3"	SM	Silty SAND With Gravel, Dense, Gray (Till), Slightly Moist	
18 - 24						Silty SAND With Gravel, Dense, Gray (Till), Slightly Moist	
24	C		0	50 / 3"	SM	Silty SAND With Gravel, Dense, Gray (Till), Slightly Moist	
24 - 28						Slightly Silty SAND, Fine to Medium Grained, Dense, Gray-Brown, Slightly Moist	
28	D		0	50 / 3"	SM	Slightly Silty SAND, Fine to Medium Grained, Dense, Gray-Brown, Slightly Moist	

Designated Purpose(s) of Log
Soil Sample Analysis

Note: Logs are to be used only for designated purpose(s).

Logged by	S. Hughes	Date:	4/6/92	Plate B-4
Drafted by	M. Bussanich	Date:	5/11/92	
Supervised by	Rory Galloway			

Project Name		MOBIL-BELLEVUE	Boring No. MW04
Number		60-121201	
Total Depth	60 feet	Sheet 2 of 2	

LOG OF BORING

Depth (feet)	Sample Number	Sample Type	P.I.D.	Blows/6"	USCS	Description	Well Construction
32	E		0	50 / 3"	SP	SAND Fine to Medium Grain, Dense, Brown, Slightly Moist	
34							
36				50 / 3"	SP	No Recovery of Sample - Auger Cutting Same as Previous Sample	
38							
40							
42				50 / 4"	SP	SAND, Fine Grained, Dense, Brown, Slightly Moist	
44	F		4				
46							
48	G		7	50 / 4"	SP	SAND, Fine Grained, Medium Dense, Brown, Wet	
50							
52							
54	H		0	50 / 6"	SP	SAND, Fine Grained, Dense, Brown, Wet	
56							
58	I		-	17 / 50 / 4"	SP	SAND, Fine Grained, Dense, Brown, Wet, 2' Heave in Auger Total Depth 60 feet, @ 17:00, 4/6/92, S. Hughes	

Designated Purpose(s) of Log
Soil Sample Analysis

Logged by	S. Hughes	Date:	4/6/92	Plate B-4 Cont.
Drafted by	M. Bussanich	Date:	5/11/92	
Supervised by	Rory Galloway			

Note: Logs are to be used only for designated purpose(s).



Project Name		MOBIL-BELLEVUE	Boring No. MW05
Number		60-121201	
Total Depth	60 feet	Sheet 1 of 2	

LOG OF BORING

Depth (feet)	Sample Number	Sample Type	P.I.D.	Blows/6"	USCS	Description	Well Construction
0						4" Asphalt and 2" Gravel Under Base	
2					SM	(Drill Cutting Observation) Silty SAND With Gravel, Dense, Gray (Till), Dry	
4							
6							
8							
10							
12							
14							
16							
18							
20						Strong Gasoline Odor	
22							
24							
26							
28							

Designated Purpose(s) of Log
Soil Sample Analysis

Note: Logs are to be used only for designated purpose(s).

Logged by S. Hughes	Date: 4/7/92	Plate B-5
Drafted by M. Bussanich	Date: 5/11/92	
Supervised by Rory Galloway		

Project Name		MOBIL-BELLEVUE	Boring No. MW05
Number		60-121201	
Total Depth	60 feet	Sheet 2 of 2	

LOG OF BORING

Depth (feet)	Sample Number	Sample Type	P.I.D.	Blows/6"	USCS	Description	Well Construction
32							
34							
36							
38	A	70	50 /3"	SP	SAND, Fine Grained, Dense, Brown, Slightly Moist		
40							
42	B	105	50 /3"	SP	SAND, Fine Grained, Dense, Brown, Slightly Moist, Gas Odor		
44							
46							
48	C	47	50 /5"	SP	SAND With Occasional Pebble, Fine Grained, Dense, Brown, Moist		
50							
52							
54	D	25	50 /6"	SP	SAND, Fine Grained, Dense, Brown, Wet		
56							
58	E	8	50 /6"	SP	SAND, Fine Grained, Dense, Brown, Wet		
						Total Depth 60 feet, @ 16:45, 4/7/92, S. Hughes	

Designated Purpose(s) of Log
Soil Sample Analysis

Note: Logs are to be used only for designated purpose(s).

Logged by	S. Hughes	Date:	4/7/92	Plate B-5 Cont.
Drafted by	M. Bussanich	Date:	5/11/92	
Supervised by	Rory Galloway			

DEPTH (feet)	WELL CONSTRUCTION	CHEMICAL ANALYSES		BLOWS/FOOT	INTERVAL	SAMPLE NUMBER	U.S.C.S. DESIGNATION	SOIL DESCRIPTION
		LABORATORY	FIELD					
			PID ppmv					
0							AC	Completed as groundwater monitoring well
0	Cement and blank PVC						SM	Asphalt paved surface
5				1.1	47 50/3"	MW06080 32A		SILTY SAND, trace gravel, grayish brown, slightly moist, medium dense, no odor
10	Bentonite and blank PVC			2.3	50/3"	MW06080 32B		consistent more gravel 7' to 9', no odor
15				19.5	50/5"	MW06080 32C		as above
20				2.7	60/4"	MW06080 32D		Slight gasoline odor in sample Gasoline odor from cuttings slight harder
25				4.2	50/4"	MW06080 32E		SILTY SAND, grayish brown, trace to little gravel, trace cementation, slight gasoline odor
30				1.1	50/5"	MW06080 32F		As above, slight gasoline odor
35				10.1	50/5"	MW06080 32G		moderate hard 27 feet to 28 feet, augers grinding, no odor 28.5 feet easier, no odor
40				0.0	50/5"	MW06080 32H	SP	No odor in sample harder drilling @ 32 feet
45	Sand and slotted PVC			0.7	50/5"	MW06080 32I		As above, no odor easier @ 39.5 feet
50								SAND, trace gravel, moist, brown, no odor easier drilling

FILE #: 121202

LOGGED BY: George Freitag

DATE DRILLED: 8-3-92

SURFACE ELEVATION (feet):

TOTAL DEPTH (feet): 61.5

DIAMETER OF BORING: 10"

DRILLING METHOD: Hollow Stem Auger

SCREEN SIZE: 0.02"

CASING SIZE: 4"(ID)



KLEINFELDER

Mobil Oil Corporation
145th. Plaza SE & SE 116th. Street

LOG OF BORING

MW06

PLATE
B-2

PAGE 1 of 2

PROJECT NUMBER 60-1212-02

September, 1992

DEPTH (feet)	WELL CONSTRUCTION	CHEMICAL ANALYSES		BLOWS/FOOT	INTERVAL	SAMPLE NUMBER	U.S.C.S. DESIGNATION	SOIL DESCRIPTION
		LABORATORY	FIELD					
50			PID ppmv	4.2	50/6"	MW06080 32J		SAND, brown, trace gravel, wet, dense, moderate gasoline odor, water on sample barrel consistent drilling effort
55				0.0	50/5"	MW06080 32K	SP/SM	SAND, with silt, brown, stinger sticking, wet, no odor, slight heaving sands @ 55 feet, approximately three gallons of water added to raise stinger
60				0.0	25 29 32	MW06080 32L&M	SP	SAND, brown, wet, medium dense Boring terminated @ 61.5 feet
65								
70								
75								
80								
85								
90								
95								
100								
105								



KLEINFELDER

PROJECT NUMBER 60-1212-02

September, 1992

Mobil Oil Corporation
145th. Plaza SE & SE 116th. Street

LOG OF BORING

MW06 (CONT.)

**PLATE
B-2**

PAGE 2 of 2

DEPTH (feet)	WELL CONSTRUCTION	CHEMICAL ANALYSES		BLOWS/FOOT	INTERVAL	SAMPLE NUMBER	U.S.C.S. DESIGNATION	SOIL DESCRIPTION
		LABORATORY	FIELD					
0	Cement and blank PVC						AC	Completed as groundwater monitoring well
0							SM	Asphalt base, gravelly sand, grayish brown
5				14.4	7 15 30	MW07080 32A		SILTY SAND, gray, moist, slight gasoline odor, medium dense with gravel @ 5 feet, light brown
10	Bentonite and blank PVC			26.5	50/3"	MW07080 32B		Consistent as above, still slight gasoline odor
15				91.4	50/4"	MW07080 32C		slight gasoline odor from cuttings from 10-feet to 15-feet very consistent, as above
20				34.5	50/2"	MW07080 32D		as above, but moist
25				33.5	50/4"	MW07080 32E	SP	SAND, gray, trace gravel, partial cementation (dense), moist, moderate gasoline odor
30				205.5	50/3"	MW07080 32F		very consistent drilling no cementation in sample, no odor
35				3.1	50/5"	MW07080 32G		no odor gravelly 37-feet to 39-feet, possible cobbles
40				11.8	50/4"	MW07080 32H	SP	SAND, fine to medium, red grains, salt and pepper appearance, moist, dense, no odor
45	Sand and slotted PVC			26.5	50/6"	MW07080 32I		SAND, as above, moist to very moist, no odor
50								

FILE #: 121202
 LOGGED BY: George Freitag
 DATE DRILLED: 8-3-92

SURFACE ELEVATION (feet):
 TOTAL DEPTH (feet): 61.5
 DIAMETER OF BORING: 10"

DRILLING METHOD: Hollow Stem Auger
 SCREEN SIZE: 0.02"
 CASING SIZE: 4"(ID)



KLEINFELDER

PROJECT NUMBER 60-1212-02

September, 1992

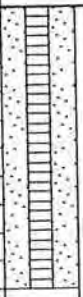
Mobil Oil Corporation
 145th. Plaza SE & SE 116th. Street

LOG OF BORING

MW07

PLATE
 B-3

PAGE 1 of 2

DEPTH (feet)	WELL CONSTRUCTION	CHEMICAL ANALYSES		BLOWS/FOOT	INTERVAL	SAMPLE NUMBER	U.S.C.S. DESIGNATION	SOIL DESCRIPTION
		LABORATORY	FIELD					
50			PID ppmv	40.6	50/5"	MW07080 32J		wet @ 50-feet, no odor
55				-	50/6"	-		very clean, "running sand, sloughed out of barrel
60				-	50/6"	-		gravel @ 59-feet, running sands with gravel, no sample
61.5								boring terminated at 61.5-feet
65								
70								
75								
80								
85								
90								
95								
100								
105								



PROJECT NUMBER 60-1212-02 September, 1992

Mobil Oil Corporation
 145th. Plaza SE & SE 116th. Street
LOG OF BORING
 MW07 (CONT.)

PLATE
B-3
 PAGE 2 of 2

DEPTH (feet)	WELL CONSTRUCTION	CHEMICAL ANALYSES		BLOWS/FOOT	INTERVAL	SAMPLE NUMBER	U.S.C.S. DESIGNATION	SOIL DESCRIPTION
		LABORATORY	FIELD					
								Completed as groundwater monitoring well
0	Cement and blank PVC						AC	4" asphalt concrete, aggregate base, light brown, moist
							FILL	
							SM	SILTY SAND, with gravel, cobble at 1.5-feet, brownish gray, dense, moist gray with slight gasoline odor at 4-feet, trace gravel
5				32	41 50/3"	MW08080 42A		moderate gasoline odor from cuttings as above, still with gasoline odor, very dense
10	Bentonite and blank PVC			66.5	50/5"	MW08080 42B		very consistent
15				101.5	50/4"	MW08080 42C		as above, still with gasoline odor
20				43.2	50/2"	MW08080 42D		more cobbles, hard rough drilling 17-feet to 19-feet cobble in shoe, poor recovery (2") disturbed cobbles at 19.5-feet, still gasoline odor
25				24.7	50/3"	MW08080 42E		easier at 23 feet poor recovery, slight gasoline odor only very consistent
30				32	50/3"	MW08080 42F		as above, no odor cobbles at 31 feet, slow drilling
35				33.9	50/4"	MW08080 42G	SP	SAND, with gravel, brown, moist, dense less gravelly at 37 feet as above, no odor
40				2.0	50/5"	MW08080 42H		as above
45	Sand and slotted PVC			17.5	50/3"	MW08080 42I		

FILE #: 121202
 LOGGED BY: George Freitag
 DATE DRILLED: 8-4-92

SURFACE ELEVATION (feet):
 TOTAL DEPTH (feet): 60.5
 DIAMETER OF BORING: 10"

DRILLING METHOD: Hollow Stem Auger
 SCREEN SIZE: 0.02"
 CASING SIZE: 4"(ID)



KLEINFELDER

PROJECT NUMBER 60-1212-02

September, 1992


Mobil Oil Corporation
 145th. Plaza SE & SE 116th. Street

LOG OF BORING

MW08

PLATE
 B-4

PAGE 1 of 2

DEPTH (feet)	WELL CONSTRUCTION	CHEMICAL ANALYSES		BLOWS/FOOT	INTERVAL	SAMPLE NUMBER	U.S.C.S. DESIGNATION	SOIL DESCRIPTION
		LABORATORY	FIELD					
50			PID ppmv	2.1	50/6"	MW08080 42J		SAND, fine to medium, trace gravel, loose, wet, no odor
55				4.0	50/6"	MW08080 42K		as above, no odor
60				8.5	50/6"	MW08080 42L		stinger stuck, some water added (approximately 8 gallons) boring terminated at 60.5-feet
65								
70								
75								
80								
85								
90								
95								
100								
105								



KLEINFELDER

PROJECT NUMBER 60-1212-02

September, 1992

Mobil Oil Corporation
145th. Plaza SE & SE 116th. Street

LOG OF BORING


MW08 (CONT.)

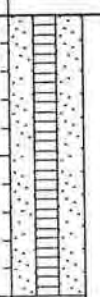
**PLATE
B-4**

PAGE 2 of 2

DEPTH (feet)	WELL CONSTRUCTION	CHEMICAL ANALYSES		SAMPLE		U.S.C.S. DESIGNATION	SOIL DESCRIPTION	
		LABORATORY	FIELD	BLOWS/FOOT	INTERVAL			NUMBER
			PID ppmv					
0	Cement and blank PVC						Completed as groundwater monitoring well	
0						AC	asphalt (4") over fill, aggregate base silty gravel, light brown, medium dense, slightly moist	
0						FILL		
0						SM	SILTY SAND, with gravels, light brown, dense, slightly moist	
5			0.0	50/5"	MW09080 42A		as above, no odor	
10	Bentonite and blank PVC		0.3	50/2"	MW09080 42B		as above, no odor no odor, grades brownish gray	
15			0.0	50/3"	MW09080 42C		cobbles @ 14-feet cobble inside auger, hammered to side	
20			0.2	50/2"	MW09080 42D		no odor cobbles @ 22 feet easier	
25			0.0	50/3"	MW09080 42E		easier @ 27-feet SILTY SAND, brown, with gravel, brown, dense, moist	
30			0.0	50/3"	MW09080 42F		cobble @ 32-feet	
35			0.2	50/3"	MW09080 42G	SP/SM	SAND, trace silt, brown, much easier @ 34-feet	
40			0.1	50/5"	MW09080 42H		trace gravel at 38-feet consistent	
45	Sand and slotted PVC		0.0	50/6"	MW09080 42I		SAND, fine to medium grained, brown, moist to wet, no odor, dense	

FILE #: 121202	SURFACE ELEVATION (feet):	DRILLING METHOD: Hollow Stem Auger
LOGGED BY: George Freitag	TOTAL DEPTH (feet): 60.5	SCREEN SIZE: 0.02"
DATE DRILLED: 8-4-92	DIAMETER OF BORING: 10"	CASING SIZE: 4"(ID)

 KLEINFELDER PROJECT NUMBER 60-1212-02	Mobil Oil Corporation 145th. Plaza SE & SE 116th. Street LOG OF BORING MW09	PLATE B-5 PAGE 1 of 2
	September, 1992	

DEPTH (feet)	WELL CONSTRUCTION	CHEMICAL ANALYSES		BLOWS/FOOT	INTERVAL	SAMPLE NUMBER	U.S.C.S. DESIGNATION	SOIL DESCRIPTION
		LABORATORY	FIELD					
50				0.0	50/4"	MW09080 42J		SAND, fine to medium, brown, wet, dense, no odor
55				0.2	50/5"	MW09080 42K		stinger stuck, water added as above, no odor
60				0.0	50/3"	MW09080 42L		as above, no odor boring terminated @ 60.5-feet
65								
70								
75								
80								
85								
90								
95								
100								
105								



KLEINFELDER

PROJECT NUMBER 60-1212-02

September, 1992

Mobil Oil Corporation
145th. Plaza SE & SE 116th. Street

LOG OF BORING

MW09 (CONT.)

PLATE

B-5

PAGE 2 of 2

DEPTH (feet)	WELL CONSTRUCTION	WATER LEVEL	CHEMICAL ANALYSES		BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	U.S.C.S. DESIGNATION	SOIL DESCRIPTION
			LABORATORY	PID (ppmv)					
0									6" ASPHALTIC CONCRETE. 2" Base.
5				0	40 45 50		MW10-5	SM/ML	Brown SILTY SAND, some rounded gravel, slightly moist, moderately dense, no hydrocarbon odor.
10				0	30 35 50		MW10-10		Color change to gray-brown Increase in density and cobble content.
15				0	50-5		MW10-15	ML/SM	SANDY SILT, gray, slightly moist, hard, no hydrocarbon odor.
20				0	45 50-6		MW10-20	SM/SP	SILTY SAND with GRAVEL, gray, slightly moist, very dense, no hydrocarbon odor.
25									

LOGGED BY: JAS

DATE DRILLED: 9-15-94

CASING TYPE: Sch. 40 PVC

Comments:

WELL ELEVATION (feet): NA

TOTAL DEPTH (feet): 65.5

DIAMETER OF BORING: 12"

DRILLING METHOD: Hollow Stem Auger

SCREEN SIZE: 0.02"

CASING SIZE: 4"



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LOG OF GROUNDWATER WELL, MW-10

FORMER MOBIL OIL SERVICE STATION #99-BLV
1500 145TH PLACE S.E., BELLEVUE, WASHINGTON

Project #

60-5072-01

PLATE B-2

DEPTH (feet)	WELL CONSTRUCTION	WATER LEVEL	CHEMICAL ANALYSES		BLOWS/6 inches	INTERVAL	SAMPLE	U.S.C.S. DESIGNATION	SOIL DESCRIPTION
			LABORATORY	PID (ppmv)			NUMBER		
25				0	50-6		MW10-25	SM/ SP	SILTY SAND with GRAVEL, gray, slightly moist, very dense, no hydrocarbon odor.
30				0	50-5		MW10-30	SM	Trace GRAVEL, very dense, no hydrocarbon odor.
35				0	75-6		MW10-35		No change.
40				0	45 50-1		MW10-40		No change.
45				0	37 50-3		MW10-45		Color change to red-gray, moist, dense, no hydrocarbon odor.
50									

LOGGED BY: JAS

DATE DRILLED: 9-15-94

CASING TYPE: Sch. 40 PVC

Comments:

WELL ELEVATION (feet): NA

TOTAL DEPTH (feet): 65.5

DIAMETER OF BORING: 12"

DRILLING METHOD: Hollow Stem Auger

SCREEN SIZE: 0.02"

CASING SIZE: 4"



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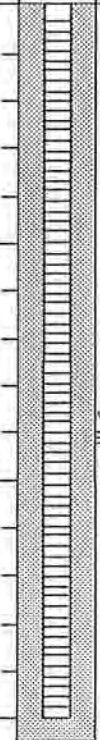

LOG OF GROUNDWATER WELL, MW-10

FORMER MOBIL OIL SERVICE STATION #99-BLV
1500 145TH PLACE S.E., BELLEVUE, WASHINGTON

Project # 60-5072-01

PLATE B-3

NOTE: Logs are to be used only for the designated purposes and in context with the attached report.

DEPTH (feet)	WELL CONSTRUCTION	WATER LEVEL	CHEMICAL ANALYSES		BLOWS/6 inches	INTERVAL	SAMPLE	U.S.C.S. DESIGNATION	SOIL DESCRIPTION
			LABO-RATORY	PID (ppmv)			NUMBER		
50			0	0	30	50-4	MW10-50	SM	SILTY SAND with trace GRAVEL, dark brown, slightly moist, very dense, no hydrocarbon odor.
55					SM			No GRAVEL, no hydrocarbon odor.	
60					0	0	37	50-5	MW10-60
65			0	0	50-3	MW10-65		Decrease in SILT content.	
70									
75									

LOGGED BY: JAS

DATE DRILLED: 9-15-94

CASING TYPE: Sch. 40 PVC

Comments:

WELL ELEVATION (feet): NA

TOTAL DEPTH (feet): 65.5

DIAMETER OF BORING: 12"

DRILLING METHOD: Hollow Stem Auger

SCREEN SIZE: 0.02"

CASING SIZE: 4"



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LOG OF GROUNDWATER WELL, MW-10

FORMER MOBIL OIL SERVICE STATION #99-BLV
1500 145TH PLACE S.E., BELLEVUE, WASHINGTON

Project #

60-5072-01

PLATE B-4

NOTE: Logs are to be used only for the designated purposes and in context with the attached report.

DEPTH (feet)	WELL CONSTRUCTION	WATER LEVEL	CHEMICAL ANALYSES		BLOWS/6 inches	INTERVAL	SAMPLE NUMBER	U.S.C.S. DESIGNATION	SOIL DESCRIPTION
			LABORATORY	PID (ppmv)					
0									2" ASPHALTIC CONCRETE, 2" Base.
							SM		Brown SILTY SAND.
5			0		35 50		MW11-5	SM	SILTY SAND with GRAVEL, gray, dry to moist, very dense, no hydrocarbon odor.
10			1500		36 50		MW11-10		Strong hydrocarbon odor.
15			NA		60-5	NR			No change.
20			1100		50-4		MW11-20		Continued hydrocarbon odor in soil cuttings. No change.
25									

LOGGED BY: JAS

DATE DRILLED: 9-15-94

CASING TYPE: Sch. 40 PVC

Comments:

WELL ELEVATION (feet): NA

TOTAL DEPTH (feet): 40.5

DIAMETER OF BORING: 12"

DRILLING METHOD: Hollow Stem Auger

SCREEN SIZE: 0.02"

CASING SIZE: 4"



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LOG OF VADOSE ZONE WELL, MW-11

FORMER MOBIL OIL SERVICE STATION #99-BLV

1500 145TH PLACE S.E., BELLEVUE, WASHINGTON

Project #

60-5072-01

PLATE B-5

DEPTH (feet)	WELL CONSTRUCTION	WATER LEVEL	CHEMICAL ANALYSES		BLOWS/6 inches	INTERVAL	SAMPLE	U.S.C.S. DESIGNATION	SOIL DESCRIPTION
			LABO-RATORY	PID (ppmv)			NUMBER		
25				NA	50-6	NR		SM	SILTY SAND with GRAVEL, gray, dry to moist, very dense.
30			NA	50-4	NR				
			NA	50-3	NR				
			0	50-3			MW11-32		No change, slight hydrocarbon odor.
35			NA	50-3	NR				
			0	50-3			MW11-36		No change, slight hydrocarbon odor.
40				120	50-6				
							MW11-40		Strong hydrocarbon odor.
50									

LOGGED BY: JAS

DATE DRILLED: 9-15-94

CASING TYPE: Sch. 40 PVC

Comments:

WELL ELEVATION (feet): NA

TOTAL DEPTH (feet): 40.5

DIAMETER OF BORING: 12"

DRILLING METHOD: Hollow Stem Auger

SCREEN SIZE: 0.02"

CASING SIZE: 4"



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LOG OF VADOSE ZONE WELL, MW-11

FORMER MOBIL OIL SERVICE STATION #99-BLV

1500 145TH PLACE S.E., BELLEVUE, WASHINGTON

Project #

60-5072-01

PLATE B-6

DEPTH (feet)	WELL CONSTRUCTION	WATER LEVEL	CHEMICAL ANALYSES		BLOWS/6 inches	SAMPLE		U.S.C.S. DESIGNATION	SOIL DESCRIPTION
			LABORATORY	PID (ppmv)		INTERVAL	NUMBER		
0									6" ASPHALTIC CONCRETE, 2" Base.
5			0				MW12-5	SM/ML	SILTY SAND, brown, slightly moist, moderately dense, no hydrocarbon odor.
10			0		100-4		MW12-10		Color change to gray-brown
15			0		100-3		MW12-15	SW	SAND with some fine GRAVEL, gray, slightly moist, very dense, no hydrocarbon odor.
20			0		100-4		MW12-20		No change.

LOGGED BY: JAS

DATE DRILLED: 10-14-94

CASING TYPE: Sch. 40 PVC

Comments:

WELL ELEVATION (feet): NA

TOTAL DEPTH (feet): 65.5

DIAMETER OF BORING: 12"

DRILLING METHOD: Hollow Stem Auger

SCREEN SIZE: 0.02"

CASING SIZE: 4"



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LOG OF GROUNDWATER WELL, MW-12

FORMER MOBIL OIL SERVICE STATION #99-BLV

1500 145TH PLACE S.E., BELLEVUE, WASHINGTON

Project #

60-5072-01

PLATE B-7

DEPTH (feet)	WELL CONSTRUCTION	WATER LEVEL	CHEMICAL ANALYSES		BLOWS/6 inches	SAMPLE		U.S.C.S. DESIGNATION	SOIL DESCRIPTION
			LABO. RATORY	PID (ppmv)		INTERVAL	NUMBER		
25				0	100-5		MW12-25	SM	SILTY SAND with fractured GRAVEL, gray-brown, slightly moist, very dense, no hydrocarbon odor.
30				0	100-5		MW12-30	SM/ ML	SILTY SAND, gray, slightly moist, very dense, no hydrocarbon odor.
35				0	100-4		MW12-35	SM	SAND with SILT, gray, slightly moist, very dense, no hydrocarbon odor.
40				0	100-2		MW12-40	SM/ ML	SILTY SAND, gray, slightly moist, very dense, no hydrocarbon odor.
45				0	100-4		MW12-45	SW	SAND with fine GRAVEL, gray and brown, slightly moist, very dense, no hydrocarbon odor.

LOGGED BY: JAS
 DATE DRILLED: 10-14-94
 CASING TYPE: Sch. 40 PVC
 Comments:

WELL ELEVATION (feet): NA
 TOTAL DEPTH (feet): 65.5
 DIAMETER OF BORING: 12"

DRILLING METHOD: Hollow Stem Auger
 SCREEN SIZE: 0.02"
 CASING SIZE: 4"



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LOG OF GROUNDWATER WELL, MW-12
 FORMER MOBIL OIL SERVICE STATION #99-BLV
 1500 145TH PLACE S.E., BELLEVUE, WASHINGTON

Project # 60-5072-01

PLATE B-8

NOTE: Logs are to be used only for the designated purposes and in context with the attached report.

DEPTH (feet)	WELL CONSTRUCTION	WATER LEVEL	CHEMICAL ANALYSES		BLOWS/6 inches	INTERVAL	SAMPLE	U.S.C.S. DESIGNATION	SOIL DESCRIPTION
			LABO-RATORY	PID (ppmv)			NUMBER		
50				0	80-6		MW12-50	SW	SAND with trace fine GRAVEL, gray-brown, slightly moist, very dense, no hydrocarbon odor.
55					60-6		MW12-55	SW	SAND, gray-brown, slightly moist, very dense, no hydrocarbon odor.
60					60-6		MW12-60	SP	Coarse SAND with GRAVEL, gray and black, wet, very dense, no hydrocarbon odor.
65					60-6		MW12-65	SW	SAND, brown, wet, dense, no hydrocarbon odor.
70									
75									

LOGGED BY: JAS

DATE DRILLED: 10-14-94

CASING TYPE: Sch. 40 PVC

Comments:

WELL ELEVATION (feet): NA

TOTAL DEPTH (feet): 65.5

DIAMETER OF BORING: 12"

DRILLING METHOD: Hollow Stem Auger

SCREEN SIZE: 0.02"

CASING SIZE: 4"



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LOG OF GROUNDWATER WELL, MW-12

FORMER MOBIL OIL SERVICE STATION #99-BLV

1500 145TH PLACE S.E., BELLEVUE, WASHINGTON

Project #

60-5072-01

PLATE B-9

DEPTH (feet)	WELL CONSTRUCTION	PID (ppmv)	BLOWS/6 inches	SAMPLE		U.S.C.S. DESIGNATION	SOIL DESCRIPTION
				INTERVAL	NUMBER		
0							2" AC
							Hand dug to 3', exposed VES conveyance line.
5		9	6 5 3		MW13-5	SP	Poorly Graded SAND, olive gray, slightly moist, loose. fine sand, trace fine gravel.
10		NA	NR		No Recovery		Rock at 10', drilled past to sample.
15		NA	65/3" 80/3"		MW13-16	SM	NR-rock in sampler. Silty SAND, light gray, dry, very dense, trace fine to coarse gravel, fine. Strong hydrocarbon odor in cuttings at 17'.
20		430	90/4"		MW13-20	SM	Silty SAND, gray, slightly moist, very dense, fine to fines, with gravel, strong hydrocarbon odor. Hard drilling at 22'.
25							

LOGGED BY: DJL

DATE DRILLED: 6/22-23/95

CASING TYPE: PVC

Comments: VES nested well of 3-2" wells.

TOTAL DEPTH (feet): 38'

DIAMETER OF BORING: 12" OD

CASING ELEVATION (feet): NA

DRILLING METHOD: Hollow Stem Auger

SCREEN SIZE: 0.020"

CASING SIZE: 2"

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5072WNP.RE

LOG OF MONITORING WELL, MW13

MOBIL OIL BELLEVUE #99-BLV

1500 S.E. 145th PLACE

BELLEVUE, WASHINGTON

Project #

60-5072-01

PLATE D-2a

NOTE: Logs are to be used only for the designated purposes and in context with the attached report.

DEPTH (feet)	WELL CONSTRUCTION	PID (ppmv)	BLOWS/6 inches	SAMPLE		U.S.C.S. DESIGNATION	SOIL DESCRIPTION
				INTERVAL	NUMBER		
25		730	120/2"		MW13-25	SM	Silty SAND, gray, slightly moist, very dense, fine grained, trace gravel, hydrocarbon odor. Very hard drilling at 28'.
30		415	120/3"		MW13-30	SM	Silty SAND, gray brown, moist, very dense, trace gravel. Refusal at 30' with CME-55 Total depth of 30' on 6/22/95 Continued on 6/23/95 with CME-75
35		620	130/6"		MW13-35	SM	Silty SAND, olive gray, moist, very dense, trace gravel, hydrocarbon odor, fine sand.
40		75	150/6"		MW13-38	SW	WG SAND, salt and pepper appearance, moist, very dense, trace gravel, hydrocarbon odor, medium to fine soil. Groundwater not encountered.
45							
50							

LOGGED BY: **DJL** TOTAL DEPTH (feet): **38'** DRILLING METHOD: **Hollow Stem Auger**
 DATE DRILLED: **6/22-23/95** DIAMETER OF BORING: **12" OD** SCREEN SIZE: **0.020"**
 CASING TYPE: **PVC** CASING ELEVATION (feet): **NA** CASING SIZE: **2"**
 Comments: VES nested well of 3-2" wells.



LOG OF MONITORING WELL, MW13
MOBIL OIL BELLEVUE #99-BLV
1500 S.E. 145th PLACE
BELLEVUE, WASHINGTON

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5072WN.PRE

Project # 60-5065-01

PLATE D-2b

NOTE: Logs are to be used only for the designated purposes and in context with the attached report.



BORING LOG B18/SVE5

(Page 1 of 1)

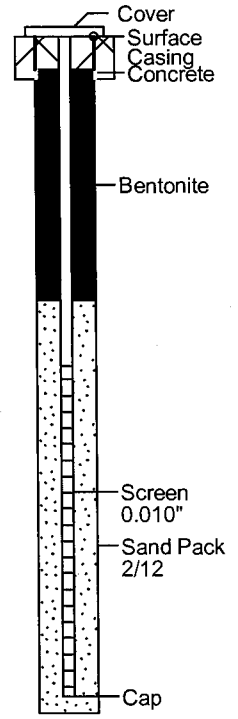
Date Drilled: : 06/28/05
 Drilling Co.: : Cascade Drilling, Inc.
 Drilling Method: : Hollow stem auger
 Sampling Method: : 300lb Split spoon
 Borehole Diameter: : 8"
 Casing Diameter: : 2"
 Location N-S :
 Location E-W :
 Total Depth: : 20'
 First GW Depth: :

Project No.: : 31160
 Site: : Former Mobil Station 99-BLV, Bellevue, WA
 Logged By: : Amanda R. Balzer
 Reviewed By: : John K. Meyer, R.G., L.HG.
 Signature: : _____

Depth (ft)	Blow Count	OVM/IPID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels
						<input type="checkbox"/> No Recovery <input type="checkbox"/> Sampled Interval <input checked="" type="checkbox"/> Described Sample <input type="checkbox"/> Preserved Sample	<input checked="" type="checkbox"/> After Completion <input type="checkbox"/> During Drilling 06/28/05

Well: SVE5
 Elev.: _____

Depth (ft)	Blow Count	OVM/IPID (ppmv)	Sample	Column	USCS	DESCRIPTION
0						Cleared by air knife to 8 feet by Cascade
5					SM	
10	17 50/ 6	0.0	<input checked="" type="checkbox"/>			SILTY-SAND: Light brown, damp, very fine- to medium-grained, with subrounded cobbles
15	27 50/ 6	90.5	<input checked="" type="checkbox"/>		SW	SAND: Very fine- to medium-grained, gray, damp, with silt, with fine-grained, subrounded gravel
20	65/ 6	45.0	<input checked="" type="checkbox"/>			SAND: Very fine- to coarse-grained, gray, damp, with silt, with fine-grained, subrounded gravel
25						
30						
35						
40						





BORING LOG B19/MW14

(Page 1 of 2)

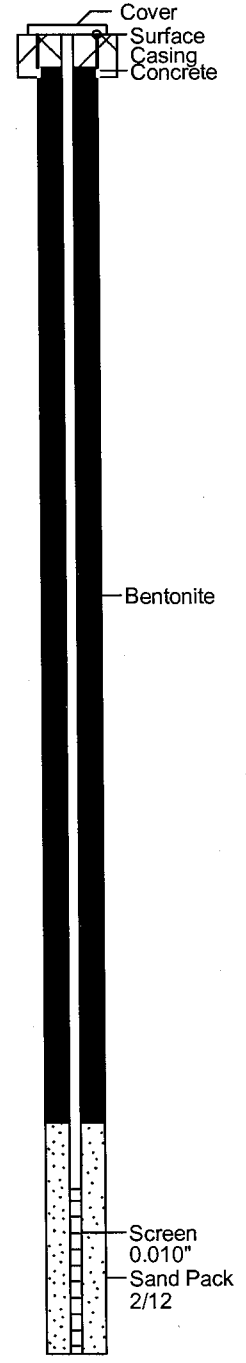
Date Drilled: : 06/29/05
 Drilling Co.: : Cascade Drilling, Inc.
 Drilling Method: : Hollow stem auger
 Sampling Method: : 300lb Split spoon
 Borehole Diameter: : 8"
 Casing Diameter: : 2"
 Location N-S :
 Location E-W :
 Total Depth: : 60.5'
 First GW Depth: : 50'

Project No.: : 31160
 Site: : Former Mobil Station 99-BLV, Bellevue, WA
 Logged By: : Amanda R. Balzer
 Reviewed By: : John K. Meyer, R.G., L.HG.
 Signature: : _____

Depth (ft)	Blow Count	OVM/PIID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels
						<input type="checkbox"/> No Recovery <input type="checkbox"/> Sampled Interval <input type="checkbox"/> Described Sample <input type="checkbox"/> Preserved Sample	<input type="checkbox"/> After Completion <input type="checkbox"/> During Drilling 06/28/05

Well: MW14
 Elev.: _____

DESCRIPTION						
0						Cleared by air knife to 5 feet by Cascade
5				SM		
10	50/6	0.0	<input type="checkbox"/>			SILTY-SAND: Very fine- to fine-grained, light brown, damp to moist, with fine- to coarse-grained, subrounded gravel
15	50/6	303	<input type="checkbox"/>	SP		SAND: Very fine- to fine-grained, gray, damp, with silt, with fine-grained, subrounded gravel
20	60/6	2000+	<input type="checkbox"/>	SW		SANDY-SILT: Gray to light brown, damp, very fine-grained, with fine-grained, subangular gravel
25	65/6	1493	<input type="checkbox"/>			SILTY-SAND: Very fine- to fine-grained, light brown, damp, with fine- to coarse-grained, subrounded gravel
30	75/6	108	<input type="checkbox"/>	SP		SAND: Very fine- to fine-grained, light brown, damp to moist, with silt, with fine-grained, subrounded gravel
35	60/6	176	<input type="checkbox"/>			SAND: Very fine- to fine-grained, light brown, damp to moist, with silt, with fine-grained, subrounded gravel
40						



08-22-2005 F:\31160-98BLV Bellevue\31160B19MW14_06_29_05.bor



BORING LOG B19/MW14

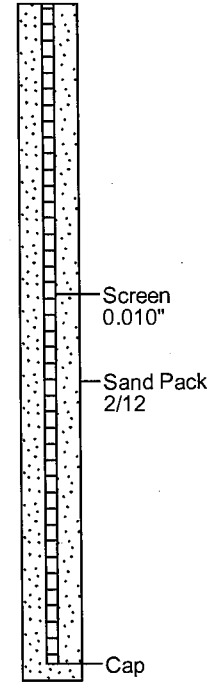
(Page 2 of 2)

Date Drilled: : 06/29/05
 Drilling Co.: : Cascade Drilling, Inc.
 Drilling Method: : Hollow stem auger
 Sampling Method: : 300lb Split spoon
 Borehole Diameter: : 8"
 Casing Diameter: : 2"
 Location N-S :
 Location E-W :
 Total Depth: : 60.5'
 First GW Depth: : 50'

Project No.: : 31160
 Site: : Former Mobil Station 99-BLV, Bellevue, WA
 Logged By: : Amanda R. Balzer
 Reviewed By: : John K. Meyer, R.G., L.H.G.
 Signature: : _____

Depth (ft)	Blow Count	OVM/IPID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	DESCRIPTION
						<input type="checkbox"/> No Recovery <input type="checkbox"/> Sampled Interval <input checked="" type="checkbox"/> Described Sample <input checked="" type="checkbox"/> Preserved Sample	<input checked="" type="checkbox"/> After Completion <input type="checkbox"/> During Drilling 06/28/05	
40	50/6	129	<input checked="" type="checkbox"/>					SAND: Fine-grained, gray, damp to moist, clean with few fines
45	50/6	25.7	<input checked="" type="checkbox"/>					SAND: Very fine-grained, medium brown, moist, clean with few fines
50	30 50/6	0.0	<input checked="" type="checkbox"/>		SP			SAND: Very fine-grained, medium brown, wet, clean with few fines
55	50/6	0.0	<input checked="" type="checkbox"/>					SAND: Very fine-grained, medium brown, wet to saturated, clean with few fines
60	50/6	0.0	<input checked="" type="checkbox"/>					SAND: Very fine-grained, medium brown, wet to saturated, clean with few fines
65								
70								
75								
80								

Well: MW14
 Elev.: _____





BORING LOG B20/SVE6

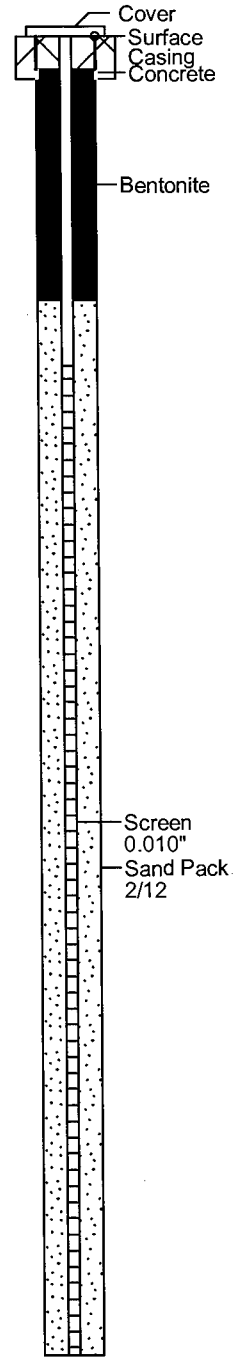
(Page 1 of 1)

Date Drilled: : 06/28/05
 Drilling Co.: : Cascade Drilling, Inc.
 Drilling Method: : Hollow stem auger
 Sampling Method: : 300lb Split spoon
 Borehole Diameter: : 8"
 Casing Diameter: : 2"
 Location N-S :
 Location E-W :
 Total Depth: : 40'
 First GW Depth: :

Project No.: : 31160
 Site: : Former Mobil Station 99-BLV, Bellevue, WA
 Logged By: : Amanda R. Balzer
 Reviewed By: : John K. Meyer, R.G., L.HG.
 Signature: :

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	DESCRIPTION
						<input checked="" type="checkbox"/> No Recovery <input type="checkbox"/> Sampled Interval <input checked="" type="checkbox"/> Described Sample <input checked="" type="checkbox"/> Preserved Sample	<input type="checkbox"/> After Completion <input checked="" type="checkbox"/> During Drilling 06/28/05	
0								Cleared by air knife to 5 feet by Cascade
5	22/2	8.5	<input checked="" type="checkbox"/>		SP			SAND: Very fine- to fine-grained, light brown, moist to slightly wet, with silt, with fine-grained, subrounded gravel
10	6/25 37	0.0	<input checked="" type="checkbox"/>		SM			SILTY-SAND: Very fine- to fine-grained, light brown, damp, with subrounded, fine-grained gravel
15	50/6	2000	<input checked="" type="checkbox"/>		SP			SAND: Very fine- to fine-grained, gray, damp, with silt
20	60/6	985	<input checked="" type="checkbox"/>		SW			SAND: Very fine- to coarse-grained, gray, damp to dry, with fine-grained, subangular gravel, with silt, with cobbles
25	72/6	136	<input checked="" type="checkbox"/>					SAND: Very fine- to fine-grained, gray to light brown, damp, with silt, with cobbles, strong hydrocarbon like odor
30	63/6	1400	<input checked="" type="checkbox"/>		SP			SAND: Very fine- to fine-grained, gray to light brown with orange discoloration, damp, with silt
35	50/6	5	<input checked="" type="checkbox"/>					SAND: Fine- to medium-grained, gray, damp to moist, with cobbles
40	90/6	0.0	<input checked="" type="checkbox"/>					SAND: Very fine- to medium-grained, gray, moist, with silt

Well: SVE6
 Elev.:



06-22-2005 F:\31160-99BLV Bellevue\31160B20SVE6.06.28.05.bor

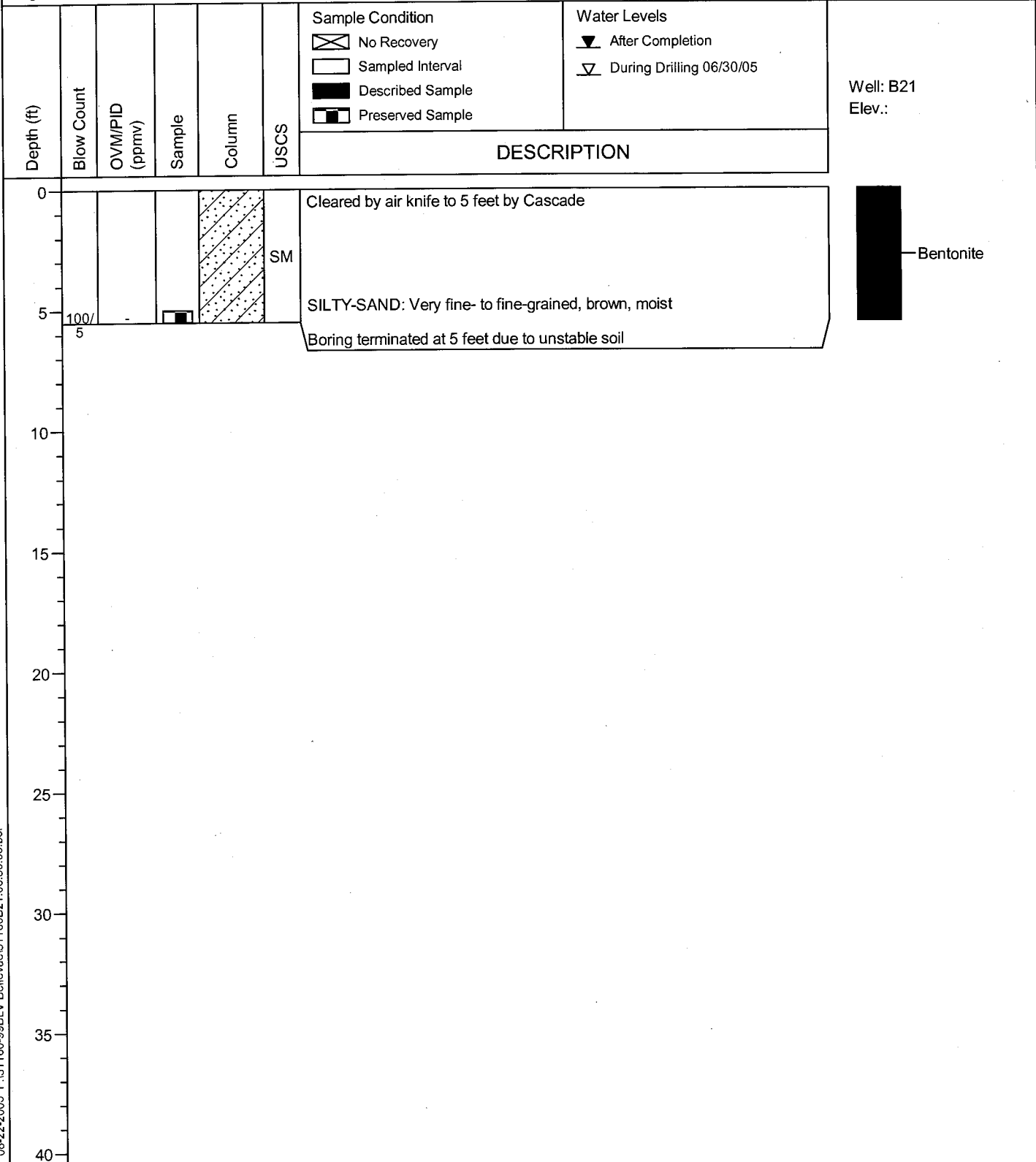


BORING LOG B21

(Page 1 of 1)

Date Drilled: : 06/30/05
 Drilling Co.: : Cascade Drilling, Inc.
 Drilling Method: : Hollow stem auger
 Sampling Method: : 140lb Split spoon
 Borehole Diameter: : 8"
 Casing Diameter: :
 Location N-S :
 Location E-W :
 Total Depth: : 5.5'
 First GW Depth: :

Project No.: : 31160
 Site: : Former Mobil Station 99-BLV, Bellevue, WA
 Logged By: : Amanda R. Balzer
 Reviewed By: : John K. Meyer, R.G., L.HG.
 Signature: :





BORING LOG B22/SVE7

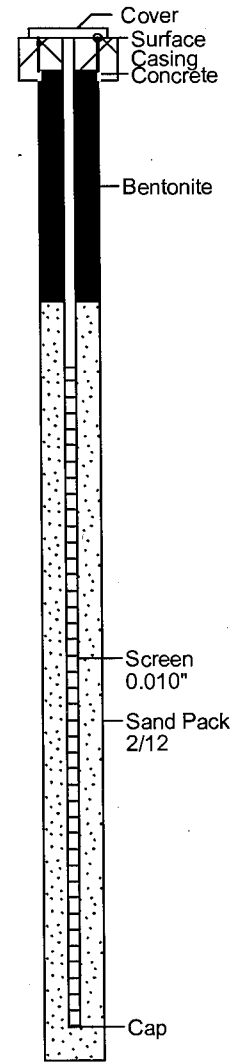
(Page 1 of 1)

Date Drilled: : 06/28/05
 Drilling Co.: : Cascade Drilling, Inc.
 Drilling Method: : Hollow stem auger
 Sampling Method: : 300lb Split spoon
 Borehole Diameter: : 8"
 Casing Diameter: : 2"
 Location N-S :
 Location E-W :
 Total Depth: : 31'
 First GW Depth: :

Project No.: : 31160
 Site: : Former Mobil Station 99-BLV, Bellevue, WA
 Logged By: : Amanda R. Balzer
 Reviewed By: : John K. Meyer, R.G., L.HG.
 Signature: :















Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels
						☒ No Recovery □ Sampled Interval ■ Described Sample ▣ Preserved Sample	▼ After Completion ▽ During Drilling 06/28/05
DESCRIPTION							
0							
0 - 5					SM		
5	2 2	0.0	■				
5 - 10					SP		
10	4 12 40	0.0	■				
10 - 15					SM		
15	64/ 6	0.0	■				
15 - 20					SM		
20	100/ 6	21	■				
20 - 25					SP		
25	50/ 6	200	■				
25 - 30					SW		
30	50/ 6	16.5	■				
30 - 40							

Well: SVE7
 Elev.:

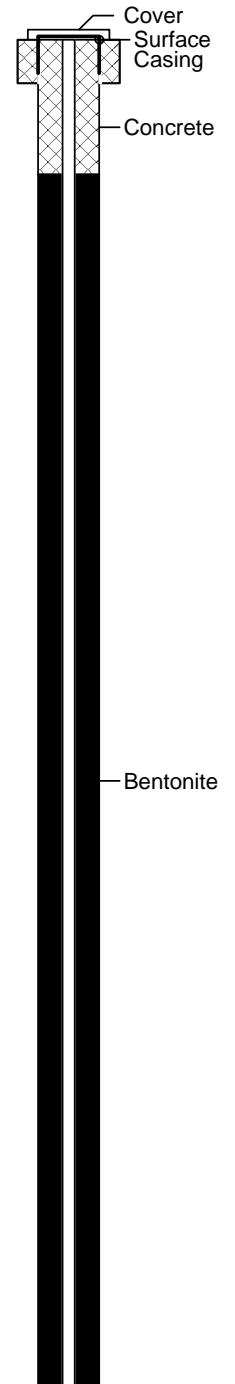


Date Drilled: : 07/12/07
 Drilling Co.: : Cascade Drilling, Inc.
 Drilling Method: : Hollow Stem Auger
 Sampling Method: : 300lb Split Spoon
 Borehole Diameter: : 8"
 Casing Diameter: : 2"
 Location N-S :
 Location E-W :
 Total Depth: : 65'
 First GW Depth: : 54'

Project No.: : 31160
 Site: : Former Mobil Station 99-BLV, Bellevue, WA
 Logged By: : Ryan Pozzuto
 Reviewed By: : John K. Meyer, R.G., L.H.G.
 Signature: : _____

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	DESCRIPTION
						 No Recovery  Sampled Interval  Described Sample  Preserved Sample	 After Completion  During Drilling - 07/12/07	
0								Cleared by air knife to 8 feet by Cascade on 07/11/07
5	NA	0.0			SW			SAND: Well graded, very fine- to medium-grained, medium brown, dry to damp, trace gravel, trace silt, no clay (sampled with hand auger)
10	40 50/6	0.0			SW			SAND: Well graded, very fine- to medium-grained, medium brown, dry to damp, with silt, trace gravel, no clay
15	70/6	0.0			SM			Silty SAND: Very fine- to medium-grained, medium brown, dry to damp, with gravel, no clay
20	60/6	0.0			SW			SAND: Well graded, very fine- to coarse-grained sand, medium brown, damp, with gravel, with silt, no clay
25	60/6	0.0			SM			Silty SAND: Very fine- to medium-grained, medium brown, damp, trace gravel, no clay
30	60/6	0.0			SM			Silty SAND: Very fine- to fine-grained, medium brown, damp, with gravel, no clay
35	75/6	0.0			SM			Silty SAND: Very fine- to medium-grained, medium brown, damp to moist, with gravel, no clay
40	85/6	0.0			SW/SP			SAND: Well graded, very fine- to coarse-grained, medium brown, moist, with gravel, trace silt, no clay

Well: MW15
 Elev.:





BORING LOG B24 / AS1

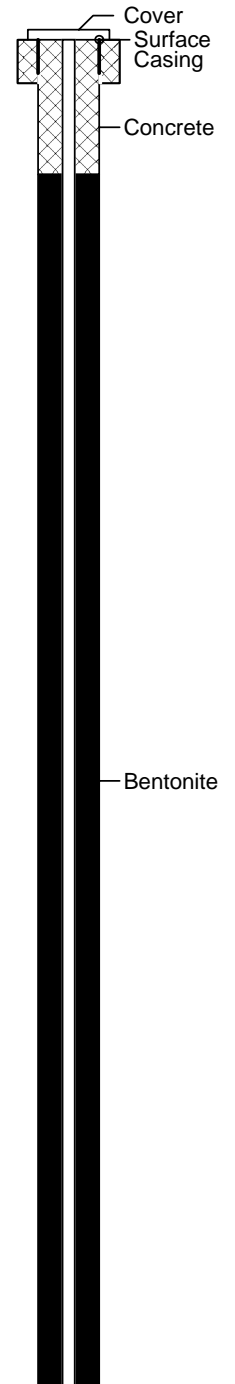
(Page 1 of 2)

Date Drilled: : 07/18/07
 Drilling Co.: : Cascade Drilling, Inc.
 Drilling Method: : Hollow Stem Auger
 Sampling Method: : 300lb Split Spoon
 Borehole Diameter: : 8"
 Casing Diameter: : 1"
 Location N-S :
 Location E-W :
 Total Depth: : 57'
 First GW Depth: : 48'

Project No.: : 31160
 Site: : Former Mobil Station 99-BLV, Bellevue, WA
 Logged By: : Ryan Pozzuto
 Reviewed By: : John K. Meyer, R.G., L.H.G.
 Signature: : _____

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	DESCRIPTION
						<input type="checkbox"/> No Recovery <input type="checkbox"/> Sampled Interval <input type="checkbox"/> Described Sample <input checked="" type="checkbox"/> Preserved Sample	<input type="checkbox"/> After Completion <input type="checkbox"/> During Drilling - 07/18/07	
0								Cleared by air knife to 8 feet by Cascade on 07/11/07
5	NA	0.0	<input checked="" type="checkbox"/>					SAND: Well graded, very fine- to medium-grained, medium to light brown, dry, with gravel, with silt, no clay (sampled with hand auger)
10	50/5	120	<input checked="" type="checkbox"/>					SAND: Well graded, very fine- to medium-grained, medium brown, dry to damp, with gravel, with silt, no clay
15	50/6	175	<input checked="" type="checkbox"/>					SAND: Well graded, very fine- to medium-grained, medium brown, dry to damp, with gravel, with silt, no clay
20	50/6	150	<input checked="" type="checkbox"/>					SAND: Well graded, very fine- to medium-grained, medium brown, damp, with gravel, with silt, no clay
25	50/6	55	<input checked="" type="checkbox"/>		SW			SAND: Well graded, very fine- to coarse-grained, gray, damp to moist, with gravel, with silt, no clay
30	50/5	20	<input checked="" type="checkbox"/>					SAND: Well graded, very fine- to medium-grained, medium brown, moist, with gravel, with silt, no clay
35	50/6	5	<input checked="" type="checkbox"/>					SAND: Well graded, very fine- to medium-grained, brown to gray, moist, with gravel, with silt, no clay
40	50/6	1.2	<input checked="" type="checkbox"/>					SAND: Well graded, very fine- to coarse-grained, brown to gray, moist to wet, with gravel, with silt, no clay

Well: AS1
 Elev.:





BORING LOG B24 / AS1

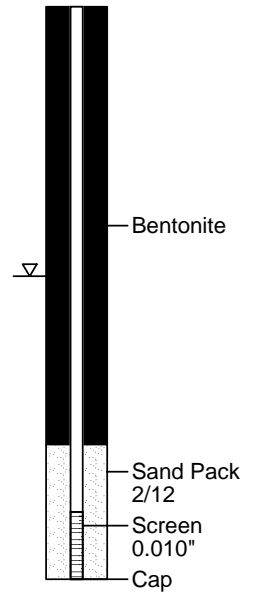
(Page 2 of 2)

Date Drilled: : 07/18/07
 Drilling Co.: : Cascade Drilling, Inc.
 Drilling Method: : Hollow Stem Auger
 Sampling Method: : 300lb Split Spoon
 Borehole Diameter: : 8"
 Casing Diameter: : 1"
 Location N-S :
 Location E-W :
 Total Depth: : 57'
 First GW Depth: : 48'

Project No.: : 31160
 Site: : Former Mobil Station 99-BLV, Bellevue, WA
 Logged By: : Ryan Pozzuto
 Reviewed By: : John K. Meyer, R.G., L.H.G.
 Signature: : _____

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	DESCRIPTION
						<input type="checkbox"/> No Recovery <input type="checkbox"/> Sampled Interval <input type="checkbox"/> Described Sample <input type="checkbox"/> Preserved Sample	<input type="checkbox"/> After Completion <input type="checkbox"/> During Drilling - 07/18/07	
40								
45	50/6	0.0	<input checked="" type="checkbox"/>					SAND: Well graded, very fine- to coarse-grained, light brown to gray, wet, trace gravel, with sit, no clay
50	50/6	0.0	<input checked="" type="checkbox"/>		SW			SAND: Well graded, very fine- to mediumgrained, medium brown, saturated, trace silt, no gravel, no clay
55	50/6	0.0	<input checked="" type="checkbox"/>					SAND: Well graded, very fine- to medium-grained, medium brown, saturated, trace silt, no gravel, no clay
60								
65								
70								
75								
80								

Well: AS1
 Elev.: _____





BORING LOG B25 / AS2

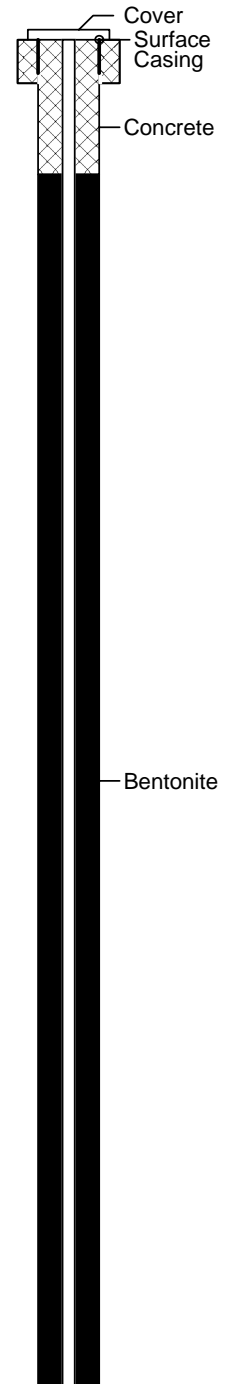
(Page 1 of 2)

Date Drilled: : 07/18/07
 Drilling Co.: : Cascade Drilling, Inc.
 Drilling Method: : Hollow Stem Auger
 Sampling Method: : 300lb Split Spoon
 Borehole Diameter: : 8"
 Casing Diameter: : 1"
 Location N-S :
 Location E-W :
 Total Depth: : 57'
 First GW Depth: : 48'

Project No.: : 31160
 Site: : Former Mobil Station 99-BLV, Bellevue, WA
 Logged By: : Ryan Pozzuto
 Reviewed By: : John K. Meyer, R.G., L.H.G.
 Signature: : _____

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	DESCRIPTION
						<input type="checkbox"/> No Recovery <input type="checkbox"/> Sampled Interval <input type="checkbox"/> Described Sample <input type="checkbox"/> Preserved Sample	<input type="checkbox"/> After Completion <input type="checkbox"/> During Drilling - 07/18/07	
0								Cleared by air knife to 8 feet by Cascade on 07/11/07
5	NA	0.0						SAND: Poorly graded, very fine- to fine-grained, medium brown, dry to damp, with gravel, with silt, no clay (sampled with hand auger)
10	50/6	0.0			SP			SAND: Poorly graded, very fine- to fine-grained, medium brown, dry to damp, with gravel, with silt, no clay
15	50/6	75			SM			Silty SAND: Very fine- to fine-grained, gray, damp, with gravel, no clay
20	50/6	5			SW			SAND: Well graded, very fine- to medium-grained, medium brown to gray, damp, with gravel, with silt, no clay
25	50/6	0.0						SAND: Well graded, very fine- to medium-grained, medium brown to gray, damp, with gravel, with silt, no clay
30	50/6	0.0						Silty SAND: Very fine- to medium-grained, medium brown, damp to moist, with gravel, no clay
35	50/6	0.0			SM			Silty SAND: Very fine- to medium-grained, medium brown, moist, with gravel, no clay
40	50/6	0.0						Silty SAND: Very fine- to medium-grained, medium brown, moist, with gravel, no clay

Well: AS2
 Elev.: _____





BORING LOG B25 / AS2

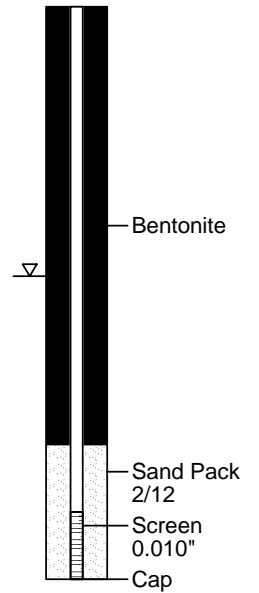
(Page 2 of 2)

Date Drilled: : 07/18/07
 Drilling Co.: : Cascade Drilling, Inc.
 Drilling Method: : Hollow Stem Auger
 Sampling Method: : 300lb Split Spoon
 Borehole Diameter: : 8"
 Casing Diameter: : 1"
 Location N-S :
 Location E-W :
 Total Depth: : 57'
 First GW Depth: : 48'

Project No.: : 31160
 Site: : Former Mobil Station 99-BLV, Bellevue, WA
 Logged By: : Ryan Pozzuto
 Reviewed By: : John K. Meyer, R.G., L.H.G.
 Signature: : _____

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	DESCRIPTION
						<input type="checkbox"/> No Recovery <input type="checkbox"/> Sampled Interval <input type="checkbox"/> Described Sample <input type="checkbox"/> Preserved Sample	<input type="checkbox"/> After Completion <input type="checkbox"/> During Drilling - 07/18/07	
40					SM			
45	50/6	0.0	<input checked="" type="checkbox"/>					SAND: Well graded, very fine- to coarse-grained, medium brown, wet, with gravel, with silt, no clay
50	50/6	0.0	<input checked="" type="checkbox"/>		SW			SAND: Well graded, very fine- to medium-grained, medium to dark brown to gray, saturated, trace silt, no gravel, no clay
55	50/6	0.0	<input checked="" type="checkbox"/>					SAND: Well graded, very fine- to medium-grained, medium to dark brown to gray, saturated, trace silt, no gravel, no clay
60								
65								
70								
75								
80								

Well: AS2
 Elev.: _____





BORING LOG B26 / AS3

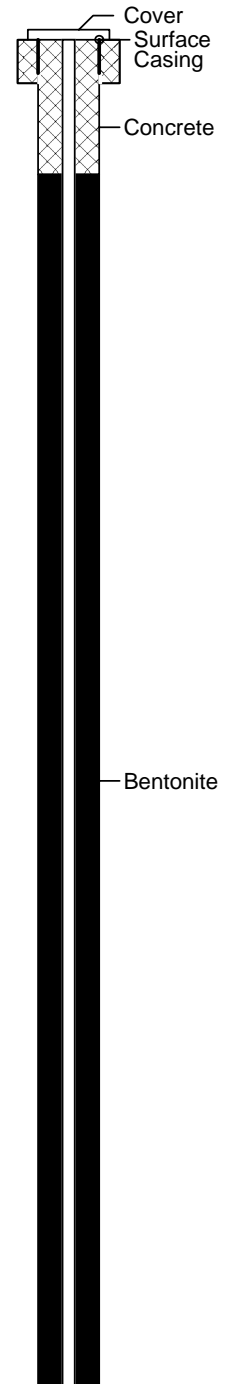
(Page 1 of 2)

Date Drilled: : 07/12/07
 Drilling Co.: : Cascade Drilling, Inc.
 Drilling Method: : Hollow Stem Auger
 Sampling Method: : 300lb Split Spoon
 Borehole Diameter: : 8"
 Casing Diameter: : 1"
 Location N-S :
 Location E-W :
 Total Depth: : 57'
 First GW Depth: : 48.5'

Project No.: : 31160
 Site: : Former Mobil Station 99-BLV, Bellevue, WA
 Logged By: : Ryan Pozzuto
 Reviewed By: : John K. Meyer, R.G., L.H.G.
 Signature: : _____

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	DESCRIPTION	Sample Condition		Water Levels	
							No Recovery	Sampled Interval	Described Sample	Preserved Sample
0						Cleared by air knife to 8 feet by Cascade on 07/11/07				
5	NA	0.0			SM	Silty SAND: Very fine- to medium-grained, medium brown, dry to damp, with gravel, no clay (sampled with hand auger)				
10	100/6	0.0			SM	Silty SAND: Very fine- to medium-grained, medium brown, dry to damp, with gravel, no clay				
15	60/3	0.0			SW	SAND: Well graded, very fine- to medium-grained, medium brown, damp, with gravel, with silt, no clay				
20	50/6	0.0			SM	Silty SAND: Very fine- to medium-grained sand, medium brown, damp, with gravel, no clay				
25	50/4	0.0			SW	SAND: Well graded, very fine- to medium-grained, medium brown, wet, with gravel, with silt, no clay				
30	50/3	0.0			SW/SP	SAND: Well graded, very fine- to medium-grained, medium brown, wet, with gravel, with silt, no clay				
35	50/5	0.0			SW/SP	SAND: Well graded, very fine- to coarse-grained, medium brown, wet, with gravel, with silt, no clay				
40	50/6	0.0			SW/SP	SAND: Well graded, very fine- to medium-grained, medium brown, wet, with gravel, trace silt, no clay				

Well: AS3
 Elev.:





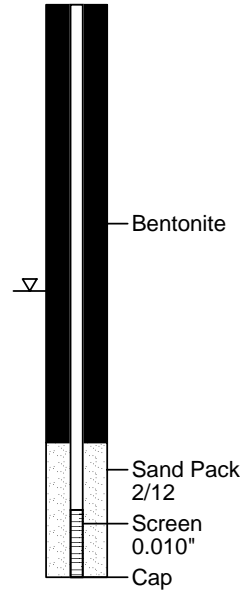
BORING LOG B26 / AS3

(Page 2 of 2)

Date Drilled: : 07/12/07
 Drilling Co.: : Cascade Drilling, Inc.
 Drilling Method: : Hollow Stem Auger
 Sampling Method: : 300lb Split Spoon
 Borehole Diameter: : 8"
 Casing Diameter: : 1"
 Location N-S :
 Location E-W :
 Total Depth: : 57'
 First GW Depth: : 48.5'

Project No.: : 31160
 Site: : Former Mobil Station 99-BLV, Bellevue, WA
 Logged By: : Ryan Pozzuto
 Reviewed By: : John K. Meyer, R.G., L.H.G.
 Signature: : _____

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	Well: AS3 Elev.:
						<input type="checkbox"/> No Recovery <input type="checkbox"/> Sampled Interval <input type="checkbox"/> Described Sample <input checked="" type="checkbox"/> Preserved Sample	<input checked="" type="checkbox"/> After Completion <input type="checkbox"/> During Drilling - 07/12/07	
DESCRIPTION								
40								
45	50/6	0.0	<input checked="" type="checkbox"/>					
						SAND: Poorly graded, very fine- to fine-grained, medium brown, wet, trace silt, no gravel, no clay		
50	50/6	0.0	<input checked="" type="checkbox"/>		SW/SP			
						SAND: Poorly graded, very fine-grained, medium brown, saturated, with silt, no gravel, no clay		
55	50/6	0.0	<input checked="" type="checkbox"/>					
						SAND: Well graded, very fine- to coarse-grained, medium brown, saturated, trace silt, no gravel, no clay		
60								
65								
70								
75								
80								



APPENDIX D
FIELD PROTOCOL

Cardno ERI Soil Boring and Well Installation Field Protocol

Preliminary Activities

Prior to the onset of field activities at the site, Cardno ERI obtains the appropriate permit(s) from the governing agency(s). Advance notification is made as required by the agency(s) prior to the start of work. Cardno ERI marks the borehole locations and contacts the local one call utility locating service at least 48 hours prior to the start of work to mark buried utilities. Borehole locations may also be checked for buried utilities by a private geophysical surveyor. Prior to drilling, the borehole location is cleared in accordance with the client's procedures. Fieldwork is conducted under the advisement of a registered professional geologist and in accordance with an updated site-specific safety plan prepared for the project, which is available at the job site during field activities.

Drilling and Soil Sampling Procedures

Cardno ERI contracts a licensed driller to advance the boring and collect soil samples. The specific drilling method (e.g., hollow-stem auger, direct push method, or sonic drilling), sampling method [e.g., core barrel or California-modified split spoon sampler (CMSSS)] and sampling depths are documented on the boring log and may be specified in a work plan. Soil samples are typically collected at the capillary fringe and at 5-foot intervals to the total depth of the boring. To determine the depth of the capillary fringe prior to drilling, the static groundwater level is measured with a water level indicator in the closest monitoring well to the boring location, if available.

The borehole is advanced to just above the desired sampling depth. For CMSSSs, the sampler is placed inside the auger and driven to a depth of 18 inches past the bit of the auger. The sampler is driven into the soil with a standard 140-pound hammer repeatedly dropped from a height of 30 inches onto the sampler. The number of blows required to drive the sampler each 6-inch increment is recorded on the boring log. For core samplers (e.g., direct push), the core is driven 18 inches using the rig apparatus.

Soil samples are preserved in the metal or plastic sleeve used with the CMSSS or core sampler, in glass jars or other manner required by the local regulatory agency (e.g., Environmental Protection Agency Method 5035). Sleeves are removed from the sample barrel, and the lowermost sample sleeve is immediately sealed with Teflon™ tape, capped and labeled. Samples are placed in a cooler chilled to 4° Celsius and transported to a state-certified laboratory. The samples are transferred under chain-of-custody (COC) protocol.

Field Screening Procedures

Cardno ERI places the soil from the middle of the sampling interval into a plastic re-sealable bag. The bag is placed away from direct sunlight for approximately 20 minutes, after which the tip of a photo-ionization detector (PID) or similar device is inserted through the plastic bag to measure organic vapor concentrations in the headspace. The PID measurement is recorded on the boring log. At a minimum, the PID or other device is calibrated on a daily basis in accordance with manufacturer's specifications using a hexane or isobutylene standard. The calibration gas and concentration are recorded on a calibration log. Instruments such as the PID are useful for evaluating relative concentrations of volatilized hydrocarbons, but they do not measure the concentration of petroleum hydrocarbons in the soil matrix with the same precision as laboratory analysis. Cardno ERI trained personnel describe the soil in the bag according to the Unified Soil Classification System and record the description on the boring log, which is included in the final report.

Air Monitoring Procedures

Cardno ERI performs a field evaluation for volatile hydrocarbon concentrations in the breathing zone using a calibrated PID or lower explosive level meter.

Groundwater Sampling

A groundwater sample, if desired, is collected from the boring by using Hydropunch™ sampling technology or installing a well in the borehole. In the case of using Hydropunch™ technology, after collecting the capillary fringe soil sample, the boring is advanced to the top of the soil/groundwater interface and a sampling probe is pushed to approximately 2 feet below the top of the static water level. The probe is opened by partially withdrawing it and thereby exposing the screen. A new or decontaminated bailer is used to collect a water sample from the probe. The water sample is then emptied into laboratory-supplied containers constructed of the correct material and with the correct volume and preservative to comply with the proposed laboratory test. The container is slowly filled with the retrieved water sample until no headspace remains and then promptly sealed with a Teflon-lined cap, checked for the presence of bubbles, labeled, entered onto a COC record and placed in chilled storage at 4° Celsius. Laboratory-supplied trip blanks accompany the water samples as a quality assurance/quality control procedure. Equipment blanks may be collected as required. The samples are kept in chilled storage and transported under COC protocol to a client-approved, state-certified laboratory for analysis.

Backfilling of Soil Boring

If a well is not installed, the boring is backfilled from total depth to approximately 5 feet below ground surface (bgs) with either neat cement or bentonite grout using a tremie pipe. The boring is backfilled from 5 feet bgs to approximately 1 foot bgs with hydrated bentonite chips. The borehole is completed from 1 foot bgs to surface grade with material that best matches existing surface conditions and meets local agency requirements. Site-specific backfilling details are shown on the respective boring log.

Well Construction

A well (if constructed) is completed using materials documented on the boring log or specified in a work plan. The well is constructed with slotted casing across the desired groundwater sampling depth(s) and completed with blank casing to within 6 inches of surface grade. No further construction is conducted on temporary wells. For permanent wells, the annular space of the well is backfilled with Monterey sand from the total depth to approximately 2 feet above the top of the screened casing. A hydrated granular bentonite seal is placed on top of the sand filter pack. Grout may be placed on top of the bentonite seal to the desired depth using a tremie pipe. The well may be completed to surface grade with a 1-foot thick concrete pad. A traffic-rated well vault and locking cap for the well casing may be installed to protect against surface-water infiltration and unauthorized entry. Site-specific well construction details including type of well, well depth, casing diameter, slot size, length of screen interval and sand size are documented on the boring log or specified in the work plan.

Well Development and Sampling

If a permanent groundwater monitoring well is installed, the grout is allowed to cure a minimum of 48 hours before development. Cardno ERI personnel or a contracted driller use a submersible pump or surge block to develop the newly installed well. Prior to development, the pump is decontaminated by allowing it to run and re-circulate while immersed in a non-phosphate solution followed by successive immersions in potable water and de-ionized water baths. The well is developed until sufficient well casing volumes are removed so that turbidity is within allowable limits and pH, conductivity and temperature levels stabilize in the purge water. The volume of groundwater extracted is recorded on a log.

Following development, groundwater within the well is allowed to recharge until at least 80% of the drawdown is recovered. A new or decontaminated bailer is slowly lowered past the air/water interface in the well, and a water sample is collected and checked for the presence of non-aqueous phase liquid, sheen or emulsions. The water sample is then emptied into laboratory-supplied containers as discussed above.

Surveying

If required, wells are surveyed by a licensed land surveyor relative to an established benchmark of known elevation above mean sea level to an accuracy of +/- 0.01 foot. The casing is notched or marked on one side to identify a consistent surveying and measuring point.

Decontamination Procedures

Cardno ERI or the contracted driller decontaminates soil and water sampling equipment between each sampling event with a non-phosphate solution, followed by a minimum of two tap water rinses. De-ionized water may be used for the final rinse. Downhole drilling equipment is steam-cleaned prior to drilling the borehole and at completion of the borehole.

Waste Treatment and Soil Disposal

Soil cuttings generated from the drilling or sampling are stored on site in labeled, Department of Transportation-approved, 55-gallon drums or other appropriate storage container. The soil is removed from the site and transported under manifest to a client- and regulatory-approved facility for recycling or disposal. Decontamination fluids and purge water from well development and sampling activities, if conducted, are stored on site in labeled, regulatory-approved storage containers. Fluids are subsequently transported under manifest to a client- and regulatory-approved facility for disposal or treated with a permitted mobile or fixed-base carbon treatment system.

**Cardno ERI
Groundwater Sampling Field Protocol**

The static water level and non-aqueous phase liquid (NAPL) level, if present, in each groundwater monitoring well that contained water and/or NAPL are measured with an interface probe accurate to the nearest 0.01 foot. To calculate groundwater elevations and evaluate groundwater gradient, depth to water (DTW) levels are subtracted from wellhead elevations.

Water samples collected for subjective evaluation are collected by gently lowering approximately half the length of a clean bailer past the air-water interface (if possible) and collecting a sample from near the surface of the water in the well. The samples are checked for measurable NAPL or sheen.

Before water samples are collected from the groundwater monitoring wells, the wells are purged three well casing volumes or until the well is purged dry, whichever occurs first. The quantity of water purged from each well is calculated as follows:

one well casing volume = $\pi r^2 h (7.48)$ where:

π	=	ratio of the circumference of a circle to its diameter, ~3.14159
r	=	radius of the well casing in feet
h	=	column of water in the well in feet (depth to bottom - depth to water)
7.48	=	conversion constant from cubic feet to gallons

gallons of water purged/gallons in one well casing volume = well casing volumes removed

After purging, each well is allowed to recharge to at least 80% of the initial water level or for 30 minutes, whichever occurs first. Water samples are collected with a new, disposable bailer, and are carefully poured into 40-milliliter (ml) glass vials, which are filled so as to produce a positive meniscus. Each vial is preserved with hydrochloric acid, sealed with a cap containing a Teflon[®] septum, and subsequently examined for air bubbles to avoid headspace, which would allow volatilization to occur. Additional samples may be collected in other sampling containers. The samples are promptly transported in iced storage in a thermally insulated ice chest, accompanied by chain of custody documentation, to a state-certified laboratory.

APPENDIX E

2014 CONFIRMATION BORING LOGS



BORING LOG B27/SVE8

(Page 1 of 1)

Date Drilled: : 12/03/14
 Drilling Co.: : Holocene Drilling, Inc.
 Drilling Method: : Water Vac; Hollow-Stem Auger
 Sampling Method: : Spilt Spoon
 Borehole Diameter: : 7"
 Latitude: : N/A
 Longitude: : N/A
 Casing Diameter: : 2"
 Total Boring Depth: : 50' bgs
 First GW Depth: : 50' bgs

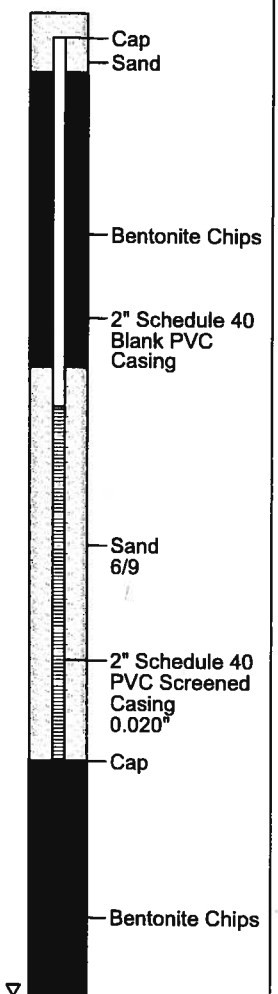
Project No.: : 031160
 Site: : Former Mobil Station 99BLV, 1500 145th Pl. SE, Bellevue, WA
 Logged By: : Robert Thompson
 Reviewed By: : Don Clabaugh, P.E. 30454
 Signature: : *[Signature]*

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels
						<input type="checkbox"/> No Recovery <input type="checkbox"/> Sampled Interval <input type="checkbox"/> Described Sample <input type="checkbox"/> Preserved Sample	<input type="checkbox"/> After Completion <input type="checkbox"/> During Drilling

Well: SVE8
 Elevation: NE

DESCRIPTION (%clay/silt/sand/gravel)

0						Beauty Bark 4" thick; Borehole was cleared on 12/03/14 to 5' bgs using water knife and hand tools.
5						No sample
10	50/6					Silty SAND with Clay: fine-grained, brown, moist, well graded (10/15/65/10)
15				SM		
20	17 50/6	792				SAND: fine- to coarse-grained, gray-brown, dry, well graded (0/5/80/15)
25	32 50/2	845				
30	50/0					No recovery
35	50/ 4.5	1,374		SW		
40	50/4	746				
45	50/ 5.5	47.8				
50	18 31 39	13.2		SP		SAND: coarse-grained, gray, saturated, poorly graded (0/5/95/0)



Note: SVE8 will be completed with a well monument anchored in concrete if the need for SVE activities is required.

Backfill Materials:
 16 50-lb. bags of Sand
 12 50-lb. bags of Bentonite Chips

The descriptive information for classification symbol and name of soil is based on ASTM D2488 Standard Practice for Description and Identification of Soils (Visual-Manual Procedure).

65



BORING LOG B28

(Page 1 of 1)

Date Drilled: : 12/03/14
 Drilling Co.: : Holocene Drilling, Inc.
 Drilling Method: : Air Vac; Hollow-Stem Auger
 Sampling Method: : Split Spoon
 Borehole Diameter: : 7"
 Latitude: : N/A
 Longitude: : N/A
 Casing Diameter: : N/A
 Total Boring Depth: : 39' bgs
 First GW Depth: : N/A

Project No.: : 031160
 Site: : Former Mobil Station 99BLV, 1500 145th Pl. SE, Bellevue, WA
 Logged By: : Robert Thompson
 Reviewed By: : Don Claugh, P.E. 36034
 Signature: : *[Handwritten Signature]*

Depth (ft)	Blow Count	OVM/PIID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	Well: B28 Elevation:
						<input checked="" type="checkbox"/> No Recovery <input type="checkbox"/> Sampled Interval <input checked="" type="checkbox"/> Described Sample <input checked="" type="checkbox"/> Preserved Sample	<input checked="" type="checkbox"/> After Completion <input type="checkbox"/> During Drilling	
DESCRIPTION (%clay/silt/sand/gravel)								
0						Asphalt 4" thick; Borehole was cleared on 12/03/14 to 5' bgs using air knife and hand tools.		
5						No sample		
10	50/5	0.0				SAND: fine- to coarse-grained, medium brown, moist, well graded (0/5/90/5)		
15								
20								
25	50/6	0.2			SW	SAND: very fine, trace coarse, light gray-brown, dry, poorly graded (0/5/85/10)		
30	50/5.5	0.3						
35	44/50/4	0.3				(0/5/90/5)		
40	50/3.5	0.2						
45						Backfill Materials: 3 50-lb. bags of Concrete 15 50-lb. bags of Bentonite Chips		
50						The descriptive information for classification symbol and name of soil is based on ASTM D2488 Standard Practice for Description and Identification of Soils (Visual-Manual Procedure).		
55								
60								
65								

05-27-2015 \\ustuknas01\data-tuk\EXXONMOBIL\PROJECTS\031160 (99BLV) Bellevue\BORING LOGS\2014\31160.B28.141203.bor

For this demonstration version, the number of contacts, samples, and general parameter data points are limited to 5, 5, and 10. The full version does not limit the data this way.



BORING LOG B29

(Page 1 of 1)

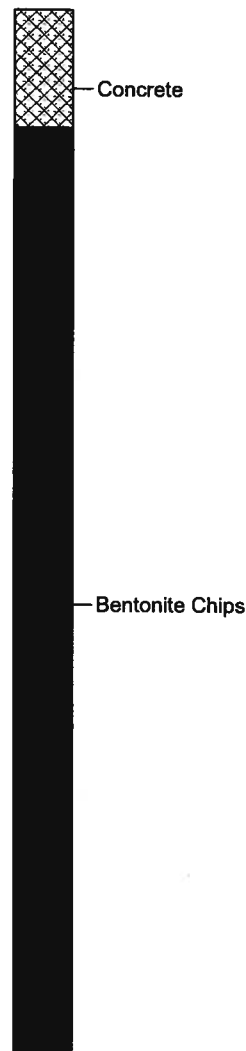
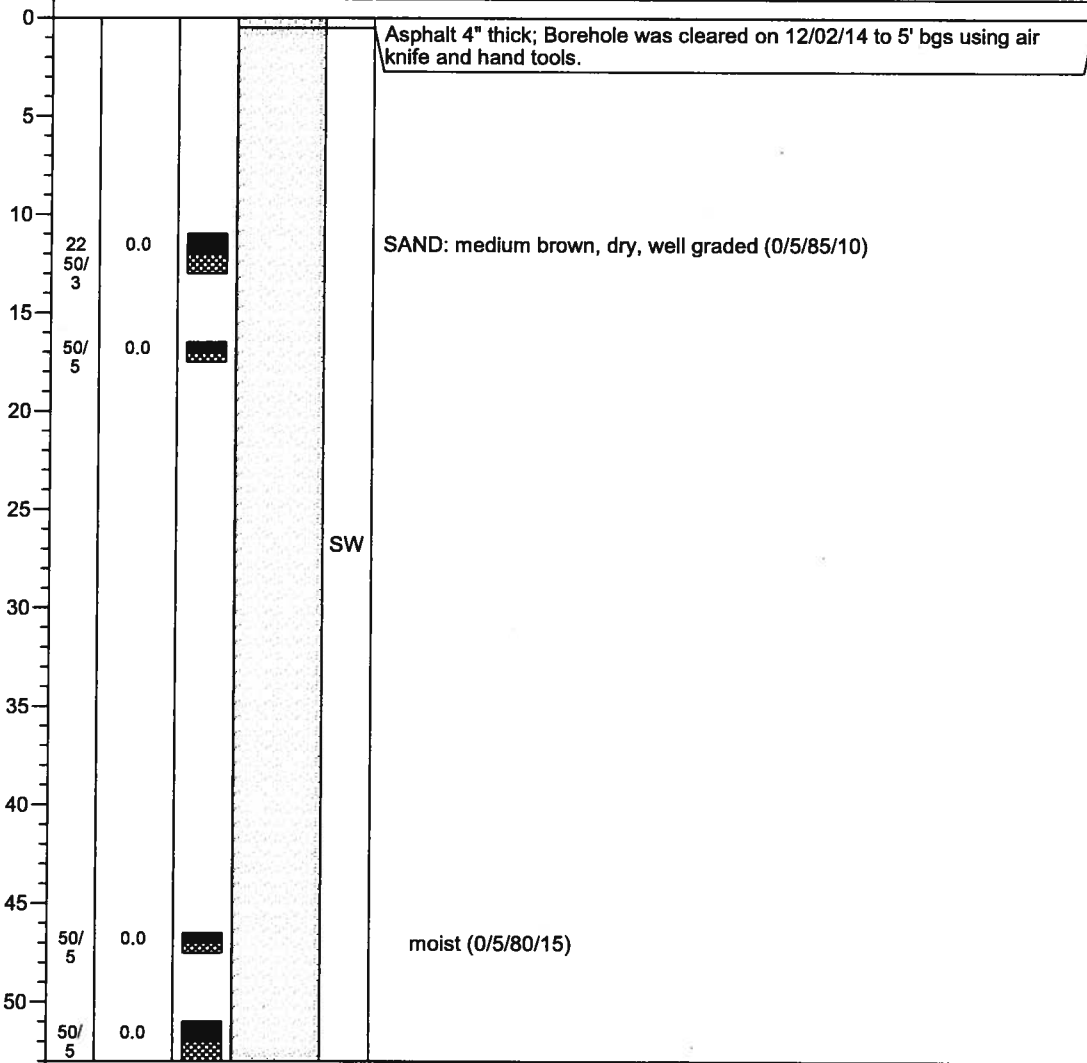
Date Drilled: : 12/02/14
 Drilling Co.: : Holocene Drilling, Inc.
 Drilling Method: : Air Vac; Hollow-Stem Auger
 Sampling Method: : Spilt Spoon
 Borehole Diameter: : 7"
 Latitude: : N/A
 Longitude: : N/A
 Casing Diameter: : N/A
 Total Boring Depth: : 53' bgs
 First GW Depth: : N/A

Project No.: : 031160
 Site: : Former Mobil Station 99BLV, 1500 145th Pl. SE, Bellevue, WA
 Logged By: : Robert Thompson
 Reviewed By: : Don Clabaugh, P.E. 20454
 Signature:

Boring: B29

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels
						<input type="checkbox"/> No Recovery <input type="checkbox"/> Sampled Interval <input type="checkbox"/> Described Sample <input type="checkbox"/> Preserved Sample	<input type="checkbox"/> After Completion <input type="checkbox"/> During Drilling

DESCRIPTION (%clay/silt/sand/gravel)



Backfill Materials:
 3 50-lb. bags of concrete
 15 50-lb. bags of Bentonite chips

The descriptive information for classification symbol and name of soil is based on ASTM D2488 Standard Practice for Description and Identification of Soils (Visual-Manual Procedure).

04-02-2015 \\Ustuknas01\data-tuk\EXXONMOBIL\EXXONMOBIL PROJECTS\031160 (99BLV) Bellevue\BORING LOGS\2014\31160_B29_12.02.14.bor

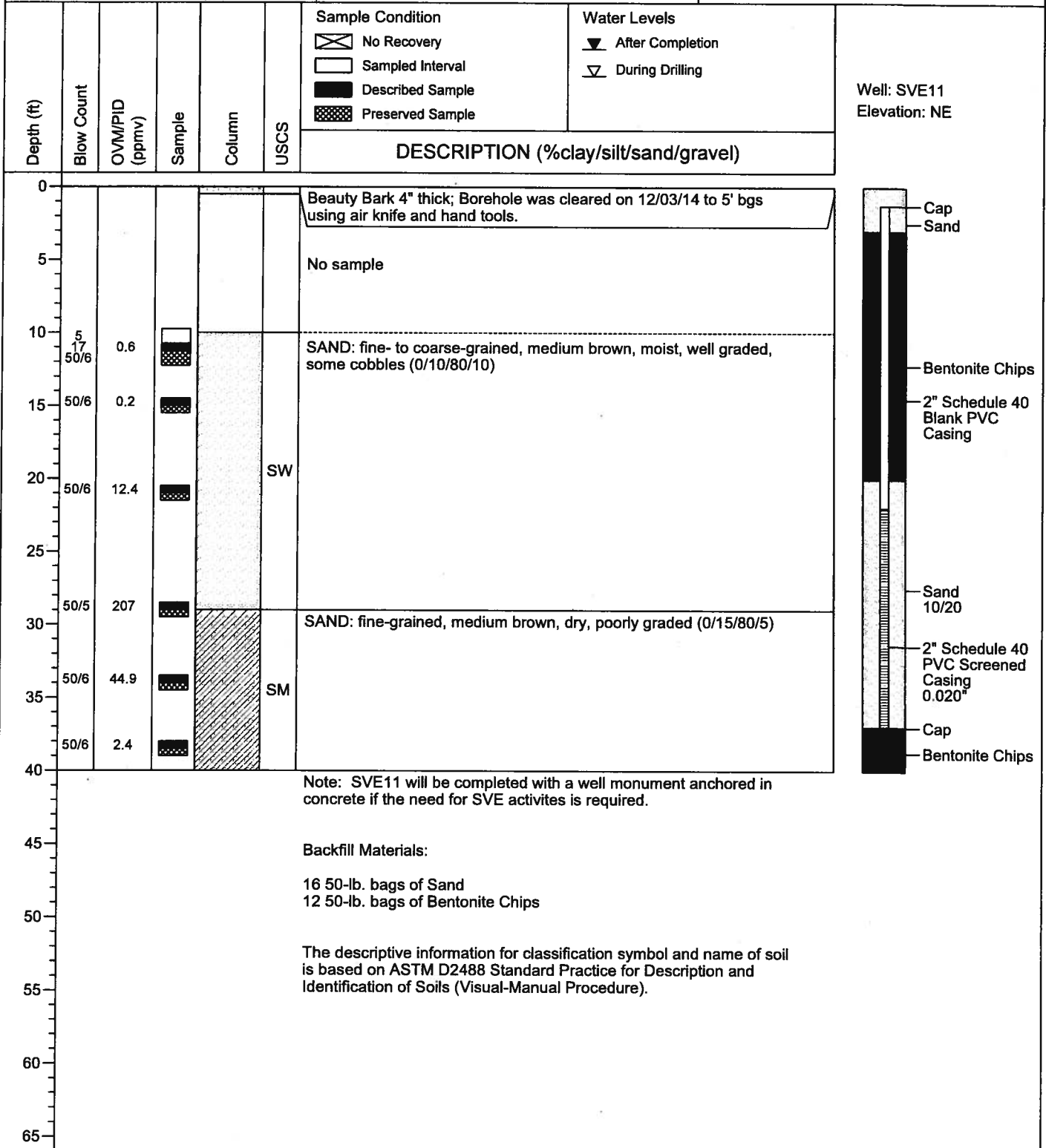


BORING LOG B30/SVE11

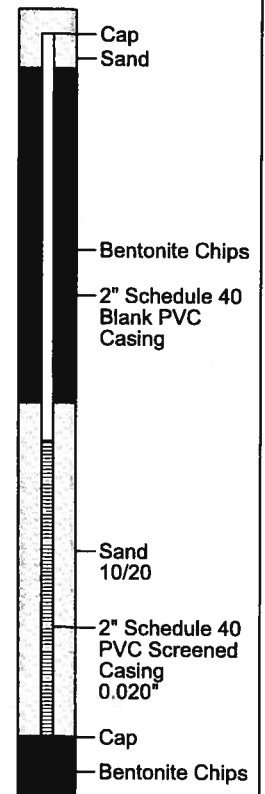
(Page 1 of 1)

Date Drilled: : 12/03/14
 Drilling Co.: : Holocene Drilling, Inc.
 Drilling Method: : Air Vac; Hollow-Stem Auger
 Sampling Method: : Spill Spoon
 Borehole Diameter: : 7"
 Latitude: : N/A
 Longitude: : N/A
 Casing Diameter: : 2"
 Total Boring Depth: : 40' bgs
 First GW Depth: : N/A

Project No.: : 031160
 Site: : Former Mobil Station 99BLV, 1500 145th Pl. SE, Bellevue, WA
 Logged By: : Robert Thompson
 Reviewed By: : Don Clabaugh, P.E. 30454
 Signature: : *[Signature]*



Well: SVE11
Elevation: NE





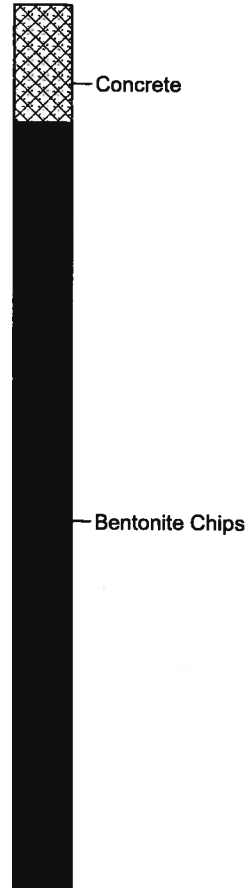
BORING LOG B31

(Page 1 of 1)

Date Drilled: : 12/03 & 12/05/14
 Drilling Co.: : Holocene Drilling, Inc.
 Drilling Method: : Water Vac; Hollow-Stem Auger
 Sampling Method: : Spilt Spoon
 Borehole Diameter: : 7"
 Latitude: : N/A
 Longitude: : N/A
 Casing Diameter: : N/A
 Total Boring Depth: : 45' bgs
 First GW Depth: : N/A

Project No.: : 031160
 Site: : Former Mobil Station 99BLV, 1500 145th Pl. SE, Bellevue, WA
 Logged By: : Robert Thompson
 Reviewed By: : Don Clabaugh, P.E. 30454
 Signature: : *[Signature]*

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	Boring: B31
						<input type="checkbox"/> No Recovery <input type="checkbox"/> Sampled Interval <input type="checkbox"/> Described Sample <input type="checkbox"/> Preserved Sample	<input type="checkbox"/> After Completion <input type="checkbox"/> During Drilling	
DESCRIPTION (%clay/silt/sand/gravel)								
0						Asphalt 4" thick; Borehole was cleared on 12/03/14 to 5' bgs using water knife and hand tools.		
5						No sample		
15	50/6	3.1				SAND: fine-grained, gray, damp, poorly graded (0/10/85/5)		
20	50/5	12.3						
25	50/5	19.2						
30	50/6	12.5			SP			
35	50/4	5.4						
40	50/5	8.6						
45	31 50/6	2.0						



Backfill Materials:
 3 50-lb. bags of Concrete
 15 50-lb. bags of Bentonite Chips

The descriptive information for classification symbol and name of soil is based on ASTM D2488 Standard Practice for Description and Identification of Soils (Visual-Manual Procedure).

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BORING LOG B32/SVE9

(Page 1 of 1)

Date Drilled: : 12/03 - 12/05/14
 Drilling Co.: : Holocene Drilling, Inc.
 Drilling Method: : Water Vac; Hollow-Stem Auger
 Sampling Method: : Spilt Spoon
 Borehole Diameter: : 7"
 Latitude: : N/A
 Longitude: : N/A
 Casing Diameter: : 2"
 Total Boring Depth: : 50' bgs
 First GW Depth: : 50' bgs

Project No.: : 031160
 Site: : Former Mobil Station 99BLV, 1500 145th Pl. SE, Bellevue, WA
 Logged By: : Robert Thompson
 Reviewed By: : Don Clabaugh, P.E. 30454
 Signature: : *[Signature]*

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	Well: SVE9 Elevation: NE
						<input type="checkbox"/> No Recovery <input type="checkbox"/> Sampled Interval <input type="checkbox"/> Described Sample <input type="checkbox"/> Preserved Sample	<input type="checkbox"/> After Completion <input type="checkbox"/> During Drilling	
DESCRIPTION (%clay/silt/sand/gravel)								
0						Asphalt 4" thick; Borehole was cleared on 12/03/14 to 5' bgs using water knife and hand tools.		
5						No sample		
15	50/5	32.7			SM	SAND: fine grained, gray, damp, poorly graded (0/10/85/5)		
20	50/4.5	1,475			SM			
25	50/4	1,423			SM			
30	50/3	712			SM			
35	50/6	75			SW	SAND with Gravel: fine-grained sand, gray, damp, well graded (0/10/75/15)		
40	50/6	209			SW	moist		
45	23 33 44	40.9			SM	SAND: coarse-grained, gray, moist, poorly graded (0/5/95/0)		
50	20 30 47	0.7			SM	saturated		
<p>Note: SVE9 will be completed with a well monument anchored in concrete if the need for SVE activities is required.</p> <p>Backfill Materials:</p> <p>1 50-lb. bag of Asphalt Cold Patch 16 50-lb. bags of Sand 12 50-lb. bags of Bentonite Chips</p> <p>The descriptive information for classification symbol and name of soil is based on ASTM D2488 Standard Practice for Description and Identification of Soils (Visual-Manual Procedure).</p>								



BORING LOG B33/SVE10

(Page 1 of 1)

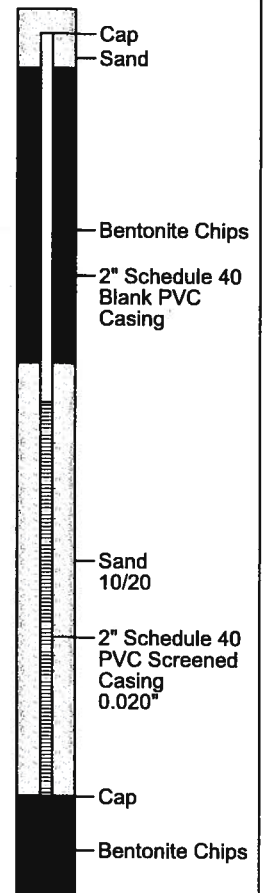
Date Drilled: : 12/03 & 12/05/14
 Drilling Co.: : Holocene Drilling, Inc.
 Drilling Method: : Water Vac; Hollow-Stem Auger
 Sampling Method: : Spilt Spoon
 Borehole Diameter: : 7"
 Latitude: : N/A
 Longitude: : N/A
 Casing Diameter: : 2"
 Total Boring Depth: : 45' bgs
 First GW Depth: : N/A

Project No.: : 031160
 Site: : Former Mobil Station 99BLV, 1500 145th Pl. SE, Bellevue, WA
 Logged By: : Robert Thompson
 Reviewed By: : Don Clabaugh, P.E. 30454
 Signature: : *[Signature]*

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels
						<input type="checkbox"/> No Recovery <input type="checkbox"/> Sampled Interval <input type="checkbox"/> Described Sample <input type="checkbox"/> Preserved Sample	<input type="checkbox"/> After Completion <input type="checkbox"/> During Drilling

Well: SVE10
 Elevation: NE

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	DESCRIPTION (%clay/silt/sand/gravel)
0						Beauty Bark 4" thick; Borehole was cleared on 12/03/14 to 5' bgs using water knife and hand tools.
5						No sample
20	39 50/3	887				SAND: fine-grained, gray, damp, well graded, trace coarse-grained sand, silt and trace gravel (0/10/85/5)
25	50/4	1,342				
30	50/ 5.5	1,538			SM	
35	50/6	161				
40	50/5	40				
45	23 45 40	11.9			SW	SAND: fine- to coarse-grained, medium brown, moist, poorly graded (0/5/95/0)



Note: SVE10 will be completed with a well monument anchored in concrete if the need for SVE activities is required.

Backfill Materials:

- 16 50-lb. bags of Sand
- 12 50-lb. bags of Bentonite Chips

The descriptive information for classification symbol and name of soil is based on ASTM D2488 Standard Practice for Description and Identification of Soils (Visual-Manual Procedure).



BORING LOG B34

(Page 1 of 1)

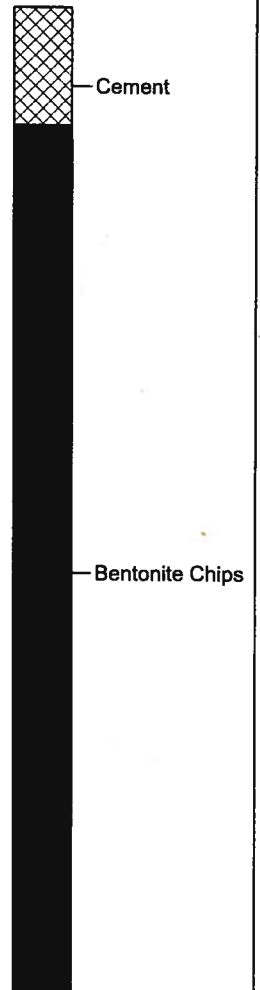
Date Drilled: : 12/05 & 12/08/14
 Drilling Co.: : Holocene Drilling, Inc.
 Drilling Method: : Water Vac; Hollow-Stem Auger
 Sampling Method: : Split Spoon
 Borehole Diameter: : 7"
 Latitude: : N/A
 Longitude: : N/A
 Casing Diameter: : N/A
 Total Boring Depth: : 50' bgs
 First GW Depth: : 50' bgs

Project No.: : 031160
 Site: : Former Mobil Station 99BLV, 1500 145th Pl. SE, Bellevue, WA
 Logged By: : Robert Thompson
 Reviewed By: : Don Ojabaugh, P.E. 30454
 Signature: : *[Signature]*

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	Boring: B34
						<input type="checkbox"/> No Recovery <input type="checkbox"/> Sampled Interval <input type="checkbox"/> Described Sample <input type="checkbox"/> Preserved Sample	<input type="checkbox"/> After Completion <input type="checkbox"/> During Drilling	

DESCRIPTION (%clay/silt/sand/gravel)

0						Beauty Bark 4" thick; Borehole was cleared on 12/05/14 to 5' bgs using water knife and hand tools.	
10	11 40 50	9.6			SW	SAND with Gravel: fine- to coarse-grained, olive, damp, well graded (0/10/75/15)	
15	4 50/3	5.2					
20	10 50/4	4.3					
25	50/6	3.8			SM	SAND: fine-grained, olive, damp, poorly graded (0/10/90/0)	
30	50/ 5.5	8.3				SAND: fine- to coarse-grained, olive, damp, well graded (0/10/80/10)	
35	50/ 2.5	5.9			SW		
40	31 50/5	0.5					
45	17 31 39	0.1			SM	SAND: fine-grained, medium brown, damp, poorly graded (0/0/100/0)	
50	21 33 40	0.3				Same as above - wet	



Backfill Materials:

16 50-lb. bags of Sand
 12 50-lb. bags of Bentonite chips

The descriptive information for classification symbol and name of soil is based on ASTM D2488 Standard Practice for Description and Identification of Soils (Visual-Manual Procedure).

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APPENDIX F
LABORATORY ANALYTICAL REPORTS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-67549-1

TestAmerica Sample Delivery Group: 031160CX
Client Project/Site: 99BLV

For:

Cardno ERI
801 Second Ave
Suite 700
Seattle, Washington 98104

Attn: Mr. Justin Foslien



Authorized for release by:
12/22/2014 1:25:04 PM

Leah Klingensmith, Senior Project Manager
(615)301-5038
leah.klingensmith@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67549-1
SDG: 031160CX

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-67549-1	S-17-B29	Solid	12/02/14 11:40	12/03/14 09:20

1

2

3

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Case Narrative

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67549-1
SDG: 031160CX

Job ID: 490-67549-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-67549-1

Comments

Partial Final

Receipt

The sample was received on 12/3/2014 9:20 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.8° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA

Method(s) NWTPH-Dx: The following sample(s) contained an unidentified mixture of hydrocarbons: (490-67549-1 DU), S-17-B29 (490-67549-1). No match was identified in the laboratory's reference library.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Job ID: 490-67549-2

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-67549-2

Comments

Complete Final
Supersedes report dated 12-4-14

Receipt

The sample was received on 12/3/2014 9:20 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.8° C.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67549-1
SDG: 031160CX

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67549-1
SDG: 031160CX

Client Sample ID: S-17-B29

Lab Sample ID: 490-67549-1

Date Collected: 12/02/14 11:40

Matrix: Solid

Date Received: 12/03/14 09:20

Percent Solids: 89.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00171		mg/Kg	☼	12/03/14 12:38	12/03/14 17:06	1
Toluene	0.00202		0.00171		mg/Kg	☼	12/03/14 12:38	12/03/14 17:06	1
Ethylbenzene	ND		0.00171		mg/Kg	☼	12/03/14 12:38	12/03/14 17:06	1
Xylenes, Total	ND		0.00256		mg/Kg	☼	12/03/14 12:38	12/03/14 17:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	12/03/14 12:38	12/03/14 17:06	1
1,2-Dichloroethane-d4 (Surr)	109		70 - 130	12/03/14 12:38	12/03/14 17:06	1
Toluene-d8 (Surr)	101		70 - 130	12/03/14 12:38	12/03/14 17:06	1
Dibromofluoromethane (Surr)	107		70 - 130	12/03/14 12:38	12/03/14 17:06	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		4.76		mg/Kg	☼	12/03/14 12:14	12/03/14 13:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	87		50 - 150	12/03/14 12:14	12/03/14 13:56	1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	8.28		4.40		mg/Kg	☼	12/03/14 13:14	12/04/14 05:15	1
C24-C40	5.95		4.40		mg/Kg	☼	12/03/14 13:14	12/04/14 05:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	92		50 - 150	12/03/14 13:14	12/04/14 05:15	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	2.21		1.10		mg/Kg	☼	12/17/14 15:06	12/19/14 10:56	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%	-		12/03/14 11:45	1

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67549-1
SDG: 031160CX

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: 490-67549-1 MS

Matrix: Solid

Analysis Batch: 210932

Client Sample ID: S-17-B29

Prep Type: Total/NA

Prep Batch: 210927

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier	Added	Result	Qualifier				
Benzene	ND		0.0518	0.05840		mg/Kg	☼	113	31 - 143
Toluene	0.00202		0.0518	0.05540		mg/Kg	☼	103	30 - 155
Ethylbenzene	ND		0.0518	0.04865		mg/Kg	☼	94	23 - 161
Xylenes, Total	ND		0.104	0.09600		mg/Kg	☼	93	25 - 162

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	92		70 - 130
1,2-Dichloroethane-d4 (Surr)	107		70 - 130
Toluene-d8 (Surr)	101		70 - 130
Dibromofluoromethane (Surr)	108		70 - 130

Lab Sample ID: 490-67549-1 MSD

Matrix: Solid

Analysis Batch: 210932

Client Sample ID: S-17-B29

Prep Type: Total/NA

Prep Batch: 210927

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec. Limits	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier					RPD	Limit
Benzene	ND		0.0468	0.04367		mg/Kg	☼	93	31 - 143	29	50
Toluene	0.00202		0.0468	0.04392		mg/Kg	☼	89	30 - 155	23	50
Ethylbenzene	ND		0.0468	0.04091		mg/Kg	☼	87	23 - 161	17	50
Xylenes, Total	ND		0.0936	0.07937		mg/Kg	☼	85	25 - 162	19	50

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	96		70 - 130
1,2-Dichloroethane-d4 (Surr)	104		70 - 130
Toluene-d8 (Surr)	102		70 - 130
Dibromofluoromethane (Surr)	106		70 - 130

Lab Sample ID: MB 490-210932/9

Matrix: Solid

Analysis Batch: 210932

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	ND		0.00200		mg/Kg			12/03/14 16:39	1
Toluene	ND		0.00200		mg/Kg			12/03/14 16:39	1
Ethylbenzene	ND		0.00200		mg/Kg			12/03/14 16:39	1
Xylenes, Total	ND		0.00300		mg/Kg			12/03/14 16:39	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	97		70 - 130		12/03/14 16:39	1
1,2-Dichloroethane-d4 (Surr)	106		70 - 130		12/03/14 16:39	1
Toluene-d8 (Surr)	103		70 - 130		12/03/14 16:39	1
Dibromofluoromethane (Surr)	104		70 - 130		12/03/14 16:39	1

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67549-1
SDG: 031160CX

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-210932/5

Matrix: Solid

Analysis Batch: 210932

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.05685		mg/Kg		114	75 - 127
Toluene	0.0500	0.05781		mg/Kg		116	80 - 132
Ethylbenzene	0.0500	0.05571		mg/Kg		111	80 - 134
Xylenes, Total	0.100	0.1116		mg/Kg		112	80 - 137

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		70 - 130
1,2-Dichloroethane-d4 (Surr)	105		70 - 130
Toluene-d8 (Surr)	105		70 - 130
Dibromofluoromethane (Surr)	103		70 - 130

Lab Sample ID: LCSD 490-210932/6

Matrix: Solid

Analysis Batch: 210932

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.05855		mg/Kg		117	75 - 127	3	50
Toluene	0.0500	0.05762		mg/Kg		115	80 - 132	0	50
Ethylbenzene	0.0500	0.05732		mg/Kg		115	80 - 134	3	50
Xylenes, Total	0.100	0.1120		mg/Kg		112	80 - 137	0	50

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		70 - 130
1,2-Dichloroethane-d4 (Surr)	106		70 - 130
Toluene-d8 (Surr)	107		70 - 130
Dibromofluoromethane (Surr)	109		70 - 130

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: 490-67549-1 DU

Matrix: Solid

Analysis Batch: 211075

Client Sample ID: S-17-B29

Prep Type: Total/NA

Prep Batch: 210980

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
C6-C12	ND		ND		mg/Kg	*	NC	10

Surrogate	DU %Recovery	DU Qualifier	Limits
a,a,a-Trifluorotoluene	113		50 - 150

Lab Sample ID: MB 490-211075/5

Matrix: Solid

Analysis Batch: 211075

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		5.00		mg/Kg			12/03/14 13:23	1

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67549-1
SDG: 031160CX

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: MB 490-211075/5
Matrix: Solid
Analysis Batch: 211075

Client Sample ID: Method Blank
Prep Type: Total/NA

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
a,a,a-Trifluorotoluene	114		50 - 150		12/03/14 13:23	1

Lab Sample ID: MB 490-211075/8
Matrix: Solid
Analysis Batch: 211075

Client Sample ID: Method Blank
Prep Type: Total/NA

<i>Analyte</i>	<i>Result</i>	<i>Qualifier</i>	<i>RL</i>	<i>MDL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
C6-C12	ND		5.00		mg/Kg			12/03/14 15:52	1

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
a,a,a-Trifluorotoluene	90		50 - 150		12/03/14 15:52	1

Lab Sample ID: LCS 490-211075/25
Matrix: Solid
Analysis Batch: 211075

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

<i>Analyte</i>	<i>Spike Added</i>	<i>LCS Result</i>	<i>LCS Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec. Limits</i>
C6-C12	10.0	8.257		mg/Kg		83	70 - 130

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
a,a,a-Trifluorotoluene	97		50 - 150

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Lab Sample ID: MB 490-211011/1-A
Matrix: Solid
Analysis Batch: 211094

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 211011

<i>Analyte</i>	<i>Result</i>	<i>Qualifier</i>	<i>RL</i>	<i>MDL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
C10-C24	ND		4.00		mg/Kg		12/03/14 13:14	12/04/14 04:40	1
C24-C40	ND		4.00		mg/Kg		12/03/14 13:14	12/04/14 04:40	1

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
o-Terphenyl	85		50 - 150	12/03/14 13:14	12/04/14 04:40	1

Lab Sample ID: LCS 490-211011/2-A
Matrix: Solid
Analysis Batch: 211094

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211011

<i>Analyte</i>	<i>Spike Added</i>	<i>LCS Result</i>	<i>LCS Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec. Limits</i>
C10-C24	40.0	39.26		mg/Kg		98	55 - 129

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
o-Terphenyl	100		50 - 150

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67549-1
SDG: 031160CX

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup (Continued)

Lab Sample ID: 490-67549-1 MS
Matrix: Solid
Analysis Batch: 211094

Client Sample ID: S-17-B29
Prep Type: Total/NA
Prep Batch: 211011

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier					
C10-C24	8.28		44.0	42.36		mg/Kg	☼	77	10 - 153	
Surrogate	%Recovery	MS Qualifier	Limits							
<i>o</i> -Terphenyl	88		50 - 150							

Lab Sample ID: 490-67549-1 MSD
Matrix: Solid
Analysis Batch: 211094

Client Sample ID: S-17-B29
Prep Type: Total/NA
Prep Batch: 211011

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier						Limit	
C10-C24	8.28		44.8	42.80		mg/Kg	☼	77	10 - 153	1	50	
Surrogate	%Recovery	MSD Qualifier	Limits									
<i>o</i> -Terphenyl	99		50 - 150									

Lab Sample ID: 490-67549-1 DU
Matrix: Solid
Analysis Batch: 211094

Client Sample ID: S-17-B29
Prep Type: Total/NA
Prep Batch: 211011

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier		Result				
C10-C24	8.28		9.494		mg/Kg	☼	14	50
C24-C40	5.95		6.459		mg/Kg	☼	8	50
Surrogate	%Recovery	DU Qualifier	Limits					
<i>o</i> -Terphenyl	86		50 - 150					

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 490-214802/1-A
Matrix: Solid
Analysis Batch: 215599

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 214802

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Lead	ND		0.973		mg/Kg		12/17/14 15:06	12/19/14 10:44	1

Lab Sample ID: LCS 490-214802/2-A
Matrix: Solid
Analysis Batch: 215599

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 214802

Analyte	Spike	Added	LCS	LCS	Unit	D	%Rec	%Rec.	Limits
			Result	Qualifier					
Lead	19.7	20.02			mg/Kg		102	80 - 120	

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67549-1
SDG: 031160CX

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSD 490-214802/3-A
Matrix: Solid
Analysis Batch: 215599

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 214802

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	19.7	20.12		mg/Kg		102	80 - 120	0	20

Lab Sample ID: 490-67549-1 MS
Matrix: Solid
Analysis Batch: 215599

Client Sample ID: S-17-B29
Prep Type: Total/NA
Prep Batch: 214802

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	2.21		22.4	24.43		mg/Kg	✱	99	75 - 125

Lab Sample ID: 490-67549-1 MSD
Matrix: Solid
Analysis Batch: 215599

Client Sample ID: S-17-B29
Prep Type: Total/NA
Prep Batch: 214802

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	2.21		21.4	24.69		mg/Kg	✱	105	75 - 125	1	20

Method: Moisture - Percent Moisture

Lab Sample ID: 490-67549-1 DU
Matrix: Solid
Analysis Batch: 210973

Client Sample ID: S-17-B29
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	89		89		%		0.2	20

QC Association Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67549-1
SDG: 031160CX

GC/MS VOA

Prep Batch: 210927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-67549-1 MS	S-17-B29	Total/NA	Solid	5035	
490-67549-1 MSD	S-17-B29	Total/NA	Solid	5035	

Analysis Batch: 210932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-67549-1	S-17-B29	Total/NA	Solid	8260B	210989
490-67549-1 MS	S-17-B29	Total/NA	Solid	8260B	210927
490-67549-1 MSD	S-17-B29	Total/NA	Solid	8260B	210927
LCS 490-210932/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 490-210932/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-210932/9	Method Blank	Total/NA	Solid	8260B	

Prep Batch: 210989

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-67549-1	S-17-B29	Total/NA	Solid	5035	

GC VOA

Prep Batch: 210980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-67549-1	S-17-B29	Total/NA	Solid	5035	
490-67549-1 DU	S-17-B29	Total/NA	Solid	5035	

Analysis Batch: 211075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-67549-1	S-17-B29	Total/NA	Solid	NWTPH-Gx	210980
490-67549-1 DU	S-17-B29	Total/NA	Solid	NWTPH-Gx	210980
LCS 490-211075/25	Lab Control Sample	Total/NA	Solid	NWTPH-Gx	
MB 490-211075/5	Method Blank	Total/NA	Solid	NWTPH-Gx	
MB 490-211075/8	Method Blank	Total/NA	Solid	NWTPH-Gx	

GC Semi VOA

Prep Batch: 211011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-67549-1	S-17-B29	Total/NA	Solid	3550B	
490-67549-1 DU	S-17-B29	Total/NA	Solid	3550B	
490-67549-1 MS	S-17-B29	Total/NA	Solid	3550B	
490-67549-1 MSD	S-17-B29	Total/NA	Solid	3550B	
LCS 490-211011/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 490-211011/1-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 211094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-67549-1	S-17-B29	Total/NA	Solid	NWTPH-Dx	211011
490-67549-1 DU	S-17-B29	Total/NA	Solid	NWTPH-Dx	211011
490-67549-1 MS	S-17-B29	Total/NA	Solid	NWTPH-Dx	211011
490-67549-1 MSD	S-17-B29	Total/NA	Solid	NWTPH-Dx	211011
LCS 490-211011/2-A	Lab Control Sample	Total/NA	Solid	NWTPH-Dx	211011
MB 490-211011/1-A	Method Blank	Total/NA	Solid	NWTPH-Dx	211011

TestAmerica Nashville

QC Association Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67549-1
SDG: 031160CX

Metals

Prep Batch: 214802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-67549-1	S-17-B29	Total/NA	Solid	3051A	
490-67549-1 MS	S-17-B29	Total/NA	Solid	3051A	
490-67549-1 MSD	S-17-B29	Total/NA	Solid	3051A	
LCS 490-214802/2-A	Lab Control Sample	Total/NA	Solid	3051A	
LCSD 490-214802/3-A	Lab Control Sample Dup	Total/NA	Solid	3051A	
MB 490-214802/1-A	Method Blank	Total/NA	Solid	3051A	

Analysis Batch: 215599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-67549-1	S-17-B29	Total/NA	Solid	6010C	214802
490-67549-1 MS	S-17-B29	Total/NA	Solid	6010C	214802
490-67549-1 MSD	S-17-B29	Total/NA	Solid	6010C	214802
LCS 490-214802/2-A	Lab Control Sample	Total/NA	Solid	6010C	214802
LCSD 490-214802/3-A	Lab Control Sample Dup	Total/NA	Solid	6010C	214802
MB 490-214802/1-A	Method Blank	Total/NA	Solid	6010C	214802

General Chemistry

Analysis Batch: 210973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-67549-1	S-17-B29	Total/NA	Solid	Moisture	
490-67549-1 DU	S-17-B29	Total/NA	Solid	Moisture	
490-67549-1 MS	S-17-B29	Total/NA	Solid	Moisture	
490-67549-1 MSD	S-17-B29	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67549-1
SDG: 031160CX

Client Sample ID: S-17-B29

Lab Sample ID: 490-67549-1

Date Collected: 12/02/14 11:40

Matrix: Solid

Date Received: 12/03/14 09:20

Percent Solids: 89.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.55 g	5.0 mL	210989	12/03/14 12:38	JLP	TAL NSH
Total/NA	Analysis	8260B		1	6.55 g	5.0 mL	210932	12/03/14 17:06	JMG	TAL NSH
Total/NA	Prep	5035			6.73 g	5.0 mL	210980	12/03/14 12:14	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	6.73 g	5.0 mL	211075	12/03/14 13:56	AMC	TAL NSH
Total/NA	Prep	3550B			25.47 g	1.00 mL	211011	12/03/14 13:14	LOJ	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	25.47 g	1.00 mL	211094	12/04/14 05:15	JDJ	TAL NSH
Total/NA	Prep	3051A			0.511 g	100 mL	214802	12/17/14 15:06	NJB	TAL NSH
Total/NA	Analysis	6010C		1	0.511 g	100 mL	215599	12/19/14 10:56	HJM	TAL NSH
Total/NA	Analysis	Moisture		1			210973	12/03/14 11:45	RRS	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177



Method Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67549-1
SDG: 031160CX

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	TAL NSH
NWTPH-Dx	Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup	NWTPH	TAL NSH
6010C	Metals (ICP)	SW846	TAL NSH
Moisture	Percent Moisture	EPA	TAL NSH

Protocol References:

EPA = US Environmental Protection Agency

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177



Certification Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67549-1
SDG: 031160CX

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Oregon	NELAP	10	TN200001	04-29-15

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte	
Moisture		Solid	Percent Solids	
Washington	State Program	10	C789	07-19-15

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Solids





COOLER RECEIPT FORM

Cooler Received/Opened On : 12/3/2014 @ 0920

1. Tracking # 2575 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun: 97310166

2. Temperature of rep. sample or temp blank when opened: 1.8 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 Front / 1 Back

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) [Signature]

7. Were custody seals on containers: YES NO and Intact YES NO NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA 12-3-14

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA Soil

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (initial) [Signature]

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) [Signature]

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) [Signature]

I certify that I attached a label with the unique LIMS number to each container (initial) [Signature]

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...# _____



Loc: 490
67549



Nashville Division
2960 Foster Creighton
Nashville, TN 37204

Phone: 615-726-0177
Toll Free: 800-765-0980
Fax: 615-726-3404



Tel: 632 3676 8332 (938)

Consultant Name: Cardno ERI
Consultant Address: 801 Second Avenue, Suite 700
Seattle, WA 98104
ExxonMobil Project Mgr: Aaron Thom
Major Project (AFE #):
Project Name: 031160CX
ExxonMobil Site #: 99BLV
Major Project (AFE #):
Consultant Project Mgr: Michael Miller
Site Address: 1500 145th Place Southeast
Bellevue, WA 98007
Site City, State, Zip:
Fax No.: 206 269 0098
Sampler Name (Print): Robert Thompson
Sampler Signature: *[Signature]*
Oversight Agency: Washington Department of Ecology

Sample ID	Field Point Name	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Methanol	Sodium Bisulfate	HCl (Blue Label)	NaOH (Orange Label)	H ₂ SO ₄ Plastic (Yellow Label)	H ₂ SO ₄ Glass (Yellow Label)	HNO ₃ (Red Label)	Ice	Other	None (Black Label)	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Air	Matrix		Other (specify):	BTEX by 8260B	TPH by NWTPH-GX	Total Pb by 6010B	X TRP/THP by NWTPH-GX	Analyze For:	RUSH TAT (Pre-Schedule)	5-day TAT	Standard 10-day TAT	Due Date of Report													
																								Preservative	Matrix																							
S-17-B29	B29	12/02/14	11:40	5	X			2	2								1					X																										

Comments/Special Instructions:
Please include silica gel cleanup.
No RUSH on lead analysis.

Relinquished by: *[Signature]*
Date: 12/2/14
Time: 1700

Received by: *[Signature]*
Date: 12-3-14
Time: 0700

Relinquished by (Lab personnel): *[Signature]*
Date: *[Blank]*
Time: *[Blank]*

Laboratory Comments:
Temperature Upon Receipt: 1.8 °C
Sample Containers Intact? Y
VOCs Free of Headspace? Y
QC Deliverables (please circle one)
Level 2
Level 3
Level 4

Site Specific - if yes, please attach pre-schedule w/ TestAmerica Project Manager or attach specific instructions



Login Sample Receipt Checklist

Client: Cardno ERI

Job Number: 490-67549-2

SDG Number: 031160CX

Login Number: 67549

List Number: 1

Creator: Huckaba, Jimmy

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-67998-1
TestAmerica Sample Delivery Group: 31160
Client Project/Site: 99BLV

For:
Cardno ERI
801 Second Ave
Suite 700
Seattle, Washington 98104

Attn: Michael Miller



Authorized for release by:
12/23/2014 5:02:02 PM

Leah Klingensmith, Senior Project Manager
(615)301-5038
leah.klingensmith@testamericainc.com

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www.testamericainc.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67998-1
SDG: 31160

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-67998-1	S-10-B28	Soil	12/02/14 14:55	12/06/14 08:30
490-67998-2	S-12-B29	Soil	12/02/14 11:20	12/06/14 08:30
490-67998-3	S-47-B29	Soil	12/02/14 12:25	12/06/14 08:30
490-67998-4	S-53-B29	Soil	12/02/14 12:45	12/06/14 08:30

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Case Narrative

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67998-1
SDG: 31160

Job ID: 490-67998-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative 490-67998-1

Comments

No additional comments.

Receipt

The samples were received on 12/6/2014 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.0° C.

GC/MS VOA

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 212767 recovered outside control limits for the multiple analytes. These analytes were biased high in the LCS and were not detected, or not being reported in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA

Method(s) NWTPH-Gx: Surrogate recovery was outside acceptance limits for the following matrix spike (MS) sample: (180-39516-8 MS). The parent sample's surrogate recovery was within limits. The MS sample has been qualified and reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67998-1
SDG: 31160

Qualifiers

GC VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
F1	MS and/or MSD Recovery exceeds the control limits
F2	MS/MSD RPD exceeds control limits

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67998-1
SDG: 31160

Client Sample ID: S-10-B28

Lab Sample ID: 490-67998-1

Date Collected: 12/02/14 14:55

Matrix: Soil

Date Received: 12/06/14 08:30

Percent Solids: 91.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00177		mg/Kg	☼	12/07/14 05:17	12/10/14 18:23	1
Toluene	0.00219		0.00177		mg/Kg	☼	12/07/14 05:17	12/10/14 18:23	1
Ethylbenzene	ND		0.00177		mg/Kg	☼	12/07/14 05:17	12/10/14 18:23	1
Xylenes, Total	ND		0.00265		mg/Kg	☼	12/07/14 05:17	12/10/14 18:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	12/07/14 05:17	12/10/14 18:23	1
1,2-Dichloroethane-d4 (Surr)	107		70 - 130	12/07/14 05:17	12/10/14 18:23	1
Toluene-d8 (Surr)	104		70 - 130	12/07/14 05:17	12/10/14 18:23	1
Dibromofluoromethane (Surr)	96		70 - 130	12/07/14 05:17	12/10/14 18:23	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		5.34		mg/Kg	☼	12/07/14 05:04	12/08/14 19:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	94		50 - 150	12/07/14 05:04	12/08/14 19:55	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3.70		1.06		mg/Kg	☼	12/19/14 13:04	12/22/14 21:41	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91		0.10		%			12/08/14 11:54	1

Client Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67998-1
SDG: 31160

Client Sample ID: S-12-B29

Lab Sample ID: 490-67998-2

Date Collected: 12/02/14 11:20

Matrix: Soil

Date Received: 12/06/14 08:30

Percent Solids: 88.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00153		mg/Kg	☼	12/07/14 05:17	12/10/14 17:53	1
Toluene	0.00259		0.00153		mg/Kg	☼	12/07/14 05:17	12/10/14 17:53	1
Ethylbenzene	ND		0.00153		mg/Kg	☼	12/07/14 05:17	12/10/14 17:53	1
Xylenes, Total	ND		0.00230		mg/Kg	☼	12/07/14 05:17	12/10/14 17:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	12/07/14 05:17	12/10/14 17:53	1
1,2-Dichloroethane-d4 (Surr)	111		70 - 130	12/07/14 05:17	12/10/14 17:53	1
Toluene-d8 (Surr)	106		70 - 130	12/07/14 05:17	12/10/14 17:53	1
Dibromofluoromethane (Surr)	100		70 - 130	12/07/14 05:17	12/10/14 17:53	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	5.03		5.00		mg/Kg	☼	12/07/14 05:04	12/08/14 20:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	92		50 - 150	12/07/14 05:04	12/08/14 20:53	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.31		1.08		mg/Kg	☼	12/19/14 13:04	12/22/14 21:46	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88		0.10		%			12/08/14 11:54	1

Client Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67998-1
SDG: 31160

Client Sample ID: S-47-B29

Lab Sample ID: 490-67998-3

Date Collected: 12/02/14 12:25

Matrix: Soil

Date Received: 12/06/14 08:30

Percent Solids: 91.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00155		mg/Kg	☼	12/07/14 05:17	12/10/14 17:23	1
Toluene	0.00326		0.00155		mg/Kg	☼	12/07/14 05:17	12/10/14 17:23	1
Ethylbenzene	ND		0.00155		mg/Kg	☼	12/07/14 05:17	12/10/14 17:23	1
Xylenes, Total	0.00245		0.00232		mg/Kg	☼	12/07/14 05:17	12/10/14 17:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	12/07/14 05:17	12/10/14 17:23	1
1,2-Dichloroethane-d4 (Surr)	110		70 - 130	12/07/14 05:17	12/10/14 17:23	1
Toluene-d8 (Surr)	106		70 - 130	12/07/14 05:17	12/10/14 17:23	1
Dibromofluoromethane (Surr)	98		70 - 130	12/07/14 05:17	12/10/14 17:23	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		5.86		mg/Kg	☼	12/07/14 05:04	12/08/14 21:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	91		50 - 150	12/07/14 05:04	12/08/14 21:23	1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		4.33		mg/Kg	☼	12/08/14 09:52	12/08/14 19:27	1
C24-C40	ND		4.33		mg/Kg	☼	12/08/14 09:52	12/08/14 19:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	82		50 - 150	12/08/14 09:52	12/08/14 19:27	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91		0.10		%			12/08/14 11:54	1

Client Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67998-1
SDG: 31160

Client Sample ID: S-53-B29

Lab Sample ID: 490-67998-4

Date Collected: 12/02/14 12:45

Matrix: Soil

Date Received: 12/06/14 08:30

Percent Solids: 91.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00160		mg/Kg	☼	12/07/14 05:17	12/10/14 16:53	1
Toluene	0.00269		0.00160		mg/Kg	☼	12/07/14 05:17	12/10/14 16:53	1
Ethylbenzene	ND		0.00160		mg/Kg	☼	12/07/14 05:17	12/10/14 16:53	1
Xylenes, Total	ND		0.00240		mg/Kg	☼	12/07/14 05:17	12/10/14 16:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	12/07/14 05:17	12/10/14 16:53	1
1,2-Dichloroethane-d4 (Surr)	108		70 - 130	12/07/14 05:17	12/10/14 16:53	1
Toluene-d8 (Surr)	106		70 - 130	12/07/14 05:17	12/10/14 16:53	1
Dibromofluoromethane (Surr)	98		70 - 130	12/07/14 05:17	12/10/14 16:53	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		5.93		mg/Kg	☼	12/07/14 05:04	12/08/14 21:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	90		50 - 150	12/07/14 05:04	12/08/14 21:52	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10		%			12/08/14 11:54	1

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67998-1
SDG: 31160

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: 490-67998-1 MS

Matrix: Soil

Analysis Batch: 212767

Client Sample ID: S-10-B28

Prep Type: Total/NA

Prep Batch: 212057

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Benzene	ND		0.0535	0.05437		mg/Kg	☼	102	31 - 143
Toluene	0.00219		0.0535	0.06107		mg/Kg	☼	110	30 - 155
Ethylbenzene	ND		0.0535	0.05068		mg/Kg	☼	95	23 - 161
Xylenes, Total	ND		0.107	0.09562		mg/Kg	☼	89	25 - 162

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	95		70 - 130
1,2-Dichloroethane-d4 (Surr)	109		70 - 130
Toluene-d8 (Surr)	106		70 - 130
Dibromofluoromethane (Surr)	97		70 - 130

Lab Sample ID: 490-67998-1 MSD

Matrix: Soil

Analysis Batch: 212767

Client Sample ID: S-10-B28

Prep Type: Total/NA

Prep Batch: 212057

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier					Limit	
Benzene	ND		0.0521	0.05793		mg/Kg	☼	111	31 - 143	6	50
Toluene	0.00219		0.0521	0.06468		mg/Kg	☼	120	30 - 155	6	50
Ethylbenzene	ND		0.0521	0.05513		mg/Kg	☼	106	23 - 161	8	50
Xylenes, Total	ND		0.104	0.1049		mg/Kg	☼	101	25 - 162	9	50

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	95		70 - 130
1,2-Dichloroethane-d4 (Surr)	102		70 - 130
Toluene-d8 (Surr)	105		70 - 130
Dibromofluoromethane (Surr)	98		70 - 130

Lab Sample ID: MB 490-212767/6

Matrix: Solid

Analysis Batch: 212767

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	ND		0.100		mg/Kg			12/10/14 12:48	1
Toluene	ND		0.100		mg/Kg			12/10/14 12:48	1
Ethylbenzene	ND		0.100		mg/Kg			12/10/14 12:48	1
Xylenes, Total	ND		0.150		mg/Kg			12/10/14 12:48	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	99		70 - 130		12/10/14 12:48	1
1,2-Dichloroethane-d4 (Surr)	109		70 - 130		12/10/14 12:48	1
Toluene-d8 (Surr)	105		70 - 130		12/10/14 12:48	1
Dibromofluoromethane (Surr)	99		70 - 130		12/10/14 12:48	1

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67998-1
SDG: 31160

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-212767/7

Matrix: Solid

Analysis Batch: 212767

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200		mg/Kg			12/10/14 13:18	1
Toluene	ND		0.00200		mg/Kg			12/10/14 13:18	1
Ethylbenzene	ND		0.00200		mg/Kg			12/10/14 13:18	1
Xylenes, Total	ND		0.00300		mg/Kg			12/10/14 13:18	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130		12/10/14 13:18	1
1,2-Dichloroethane-d4 (Surr)	115		70 - 130		12/10/14 13:18	1
Toluene-d8 (Surr)	106		70 - 130		12/10/14 13:18	1
Dibromofluoromethane (Surr)	101		70 - 130		12/10/14 13:18	1

Lab Sample ID: LCS 490-212767/3

Matrix: Solid

Analysis Batch: 212767

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.05227		mg/Kg		105	75 - 127
Toluene	0.0500	0.05905		mg/Kg		118	80 - 132
Ethylbenzene	0.0500	0.05602		mg/Kg		112	80 - 134
Xylenes, Total	0.100	0.1098		mg/Kg		110	80 - 137

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,2-Dichloroethane-d4 (Surr)	105		70 - 130
Toluene-d8 (Surr)	103		70 - 130
Dibromofluoromethane (Surr)	97		70 - 130

Lab Sample ID: LCSD 490-212767/4

Matrix: Solid

Analysis Batch: 212767

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.0500	0.05067		mg/Kg		101	75 - 127	3	50
Toluene	0.0500	0.05668		mg/Kg		113	80 - 132	4	50
Ethylbenzene	0.0500	0.05373		mg/Kg		107	80 - 134	4	50
Xylenes, Total	0.100	0.1029		mg/Kg		103	80 - 137	6	50

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,2-Dichloroethane-d4 (Surr)	113		70 - 130
Toluene-d8 (Surr)	102		70 - 130
Dibromofluoromethane (Surr)	96		70 - 130

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67998-1
SDG: 31160

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: 180-39516-G-8-A MS

Matrix: Solid

Analysis Batch: 212103

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 212030

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	
C6-C12	ND		81.0	187.0	F1	mg/Kg	☼	231	69 - 130	
Surrogate	%Recovery	MS Qualifier	Limits							
a,a,a-Trifluorotoluene	157	X	50 - 150							

Lab Sample ID: 180-39516-G-8-A MSD

Matrix: Solid

Analysis Batch: 212103

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 212030

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	Limit
C6-C12	ND		81.0	102.2	F2	mg/Kg	☼	126	69 - 130		59	10
Surrogate	%Recovery	MSD Qualifier	Limits									
a,a,a-Trifluorotoluene	131		50 - 150									

Lab Sample ID: 490-67998-1 DU

Matrix: Soil

Analysis Batch: 212103

Client Sample ID: S-10-B28

Prep Type: Total/NA

Prep Batch: 212055

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
C6-C12	ND		ND		mg/Kg	☼	NC	10
Surrogate	%Recovery	DU Qualifier	Limits					
a,a,a-Trifluorotoluene	94		50 - 150					

Lab Sample ID: MB 490-212103/8

Matrix: Solid

Analysis Batch: 212103

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		5.00		mg/Kg			12/08/14 12:35	1
Surrogate	%Recovery	MB Qualifier	Limits						
a,a,a-Trifluorotoluene	88		50 - 150						

Lab Sample ID: LCS 490-212103/6

Matrix: Solid

Analysis Batch: 212103

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
C6-C12	1.00	0.9377		mg/Kg		94	70 - 130	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
a,a,a-Trifluorotoluene	120		50 - 150					

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67998-1
SDG: 31160

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Lab Sample ID: MB 490-212133/1-A
Matrix: Solid
Analysis Batch: 212279

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 212133

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		4.00		mg/Kg		12/08/14 09:52	12/08/14 18:51	1
C24-C40	ND		4.00		mg/Kg		12/08/14 09:52	12/08/14 18:51	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	76		50 - 150				12/08/14 09:52	12/08/14 18:51	1

Lab Sample ID: LCS 490-212133/2-A
Matrix: Solid
Analysis Batch: 212279

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 212133

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
C10-C24	40.0	30.82		mg/Kg		77	55 - 129
Surrogate	%Recovery	LCS Qualifier	Limits				
<i>o</i> -Terphenyl	84		50 - 150				

Lab Sample ID: 490-67998-3 MS
Matrix: Soil
Analysis Batch: 212279

Client Sample ID: S-47-B29
Prep Type: Total/NA
Prep Batch: 212133

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
C10-C24	ND		43.1	34.95		mg/Kg	✱	72	10 - 153
Surrogate	%Recovery	MS Qualifier	Limits						
<i>o</i> -Terphenyl	78		50 - 150						

Lab Sample ID: 490-67998-3 MSD
Matrix: Soil
Analysis Batch: 212279

Client Sample ID: S-47-B29
Prep Type: Total/NA
Prep Batch: 212133

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
C10-C24	ND		42.5	32.48		mg/Kg	✱	67	10 - 153	7	50
Surrogate	%Recovery	MSD Qualifier	Limits								
<i>o</i> -Terphenyl	80		50 - 150								

Lab Sample ID: 490-67998-3 DU
Matrix: Soil
Analysis Batch: 212279

Client Sample ID: S-47-B29
Prep Type: Total/NA
Prep Batch: 212133

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
C10-C24	ND		ND		mg/Kg	✱	12	50
C24-C40	ND		ND		mg/Kg	✱	10	50
Surrogate	%Recovery	DU Qualifier	Limits					
<i>o</i> -Terphenyl	73		50 - 150					

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67998-1
SDG: 31160

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 490-215479/1-A
Matrix: Solid
Analysis Batch: 216293

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 215479

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.00		mg/Kg		12/19/14 13:04	12/22/14 20:51	1

Lab Sample ID: LCS 490-215479/2-A
Matrix: Solid
Analysis Batch: 216293

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 215479

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	20.2	20.75		mg/Kg		103	80 - 120

Lab Sample ID: 490-68412-A-57-D MS
Matrix: Solid
Analysis Batch: 216293

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 215479

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	14.1		23.2	29.08	F1	mg/Kg	☼	65	75 - 125

Lab Sample ID: 490-68412-A-57-E MSD
Matrix: Solid
Analysis Batch: 216293

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 215479

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	14.1		23.4	31.23	F1	mg/Kg	☼	73	75 - 125	7	20

Method: Moisture - Percent Moisture

Lab Sample ID: 490-67998-1 DU
Matrix: Soil
Analysis Batch: 212230

Client Sample ID: S-10-B28
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	91		91		%		0.04	20

QC Association Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67998-1
SDG: 31160

GC/MS VOA

Prep Batch: 212056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-67998-1	S-10-B28	Total/NA	Soil	5035	
490-67998-2	S-12-B29	Total/NA	Soil	5035	
490-67998-3	S-47-B29	Total/NA	Soil	5035	
490-67998-4	S-53-B29	Total/NA	Soil	5035	

Prep Batch: 212057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-67998-1 MS	S-10-B28	Total/NA	Soil	5035	
490-67998-1 MSD	S-10-B28	Total/NA	Soil	5035	

Analysis Batch: 212767

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-67998-1	S-10-B28	Total/NA	Soil	8260B	212056
490-67998-1 MS	S-10-B28	Total/NA	Soil	8260B	212057
490-67998-1 MSD	S-10-B28	Total/NA	Soil	8260B	212057
490-67998-2	S-12-B29	Total/NA	Soil	8260B	212056
490-67998-3	S-47-B29	Total/NA	Soil	8260B	212056
490-67998-4	S-53-B29	Total/NA	Soil	8260B	212056
LCS 490-212767/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-212767/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-212767/6	Method Blank	Total/NA	Solid	8260B	
MB 490-212767/7	Method Blank	Total/NA	Solid	8260B	

GC VOA

Prep Batch: 212030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-39516-G-8-A MS	Matrix Spike	Total/NA	Solid	5030B	
180-39516-G-8-A MSD	Matrix Spike Duplicate	Total/NA	Solid	5030B	

Prep Batch: 212055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-67998-1	S-10-B28	Total/NA	Soil	5035	
490-67998-1 DU	S-10-B28	Total/NA	Soil	5035	
490-67998-2	S-12-B29	Total/NA	Soil	5035	
490-67998-3	S-47-B29	Total/NA	Soil	5035	
490-67998-4	S-53-B29	Total/NA	Soil	5035	

Analysis Batch: 212103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-39516-G-8-A MS	Matrix Spike	Total/NA	Solid	NWTPH-Gx	212030
180-39516-G-8-A MSD	Matrix Spike Duplicate	Total/NA	Solid	NWTPH-Gx	212030
490-67998-1	S-10-B28	Total/NA	Soil	NWTPH-Gx	212055
490-67998-1 DU	S-10-B28	Total/NA	Soil	NWTPH-Gx	212055
490-67998-2	S-12-B29	Total/NA	Soil	NWTPH-Gx	212055
490-67998-3	S-47-B29	Total/NA	Soil	NWTPH-Gx	212055
490-67998-4	S-53-B29	Total/NA	Soil	NWTPH-Gx	212055
LCS 490-212103/6	Lab Control Sample	Total/NA	Solid	NWTPH-Gx	
MB 490-212103/8	Method Blank	Total/NA	Solid	NWTPH-Gx	

TestAmerica Nashville

QC Association Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67998-1
SDG: 31160

GC Semi VOA

Prep Batch: 212133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-67998-3	S-47-B29	Total/NA	Soil	3550B	
490-67998-3 DU	S-47-B29	Total/NA	Soil	3550B	
490-67998-3 MS	S-47-B29	Total/NA	Soil	3550B	
490-67998-3 MSD	S-47-B29	Total/NA	Soil	3550B	
LCS 490-212133/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 490-212133/1-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 212279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-67998-3	S-47-B29	Total/NA	Soil	NWTPH-Dx	212133
490-67998-3 DU	S-47-B29	Total/NA	Soil	NWTPH-Dx	212133
490-67998-3 MS	S-47-B29	Total/NA	Soil	NWTPH-Dx	212133
490-67998-3 MSD	S-47-B29	Total/NA	Soil	NWTPH-Dx	212133
LCS 490-212133/2-A	Lab Control Sample	Total/NA	Solid	NWTPH-Dx	212133
MB 490-212133/1-A	Method Blank	Total/NA	Solid	NWTPH-Dx	212133

Metals

Prep Batch: 215479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-67998-1	S-10-B28	Total/NA	Soil	3051A	
490-67998-2	S-12-B29	Total/NA	Soil	3051A	
490-68412-A-57-D MS	Matrix Spike	Total/NA	Solid	3051A	
490-68412-A-57-E MSD	Matrix Spike Duplicate	Total/NA	Solid	3051A	
LCS 490-215479/2-A	Lab Control Sample	Total/NA	Solid	3051A	
MB 490-215479/1-A	Method Blank	Total/NA	Solid	3051A	

Analysis Batch: 216293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-67998-1	S-10-B28	Total/NA	Soil	6010C	215479
490-67998-2	S-12-B29	Total/NA	Soil	6010C	215479
490-68412-A-57-D MS	Matrix Spike	Total/NA	Solid	6010C	215479
490-68412-A-57-E MSD	Matrix Spike Duplicate	Total/NA	Solid	6010C	215479
LCS 490-215479/2-A	Lab Control Sample	Total/NA	Solid	6010C	215479
MB 490-215479/1-A	Method Blank	Total/NA	Solid	6010C	215479

General Chemistry

Analysis Batch: 212230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-67998-1	S-10-B28	Total/NA	Soil	Moisture	
490-67998-1 DU	S-10-B28	Total/NA	Soil	Moisture	
490-67998-1 MS	S-10-B28	Total/NA	Soil	Moisture	
490-67998-1 MSD	S-10-B28	Total/NA	Soil	Moisture	
490-67998-2	S-12-B29	Total/NA	Soil	Moisture	
490-67998-3	S-47-B29	Total/NA	Soil	Moisture	
490-67998-4	S-53-B29	Total/NA	Soil	Moisture	

Lab Chronicle

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67998-1
SDG: 31160

Client Sample ID: S-10-B28

Date Collected: 12/02/14 14:55

Date Received: 12/06/14 08:30

Lab Sample ID: 490-67998-1

Matrix: Soil
Percent Solids: 91.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.2 g	5.0 mL	212056	12/07/14 05:17	JLP	TAL NSH
Total/NA	Analysis	8260B		1	6.2 g	5.0 mL	212767	12/10/14 18:23	KKK	TAL NSH
Total/NA	Prep	5035			5.64 g	5.0 mL	212055	12/07/14 05:04	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5.64 g	5.0 mL	212103	12/08/14 19:55	AMC	TAL NSH
Total/NA	Prep	3051A			0.518 g	100 mL	215479	12/19/14 13:04	NJB	TAL NSH
Total/NA	Analysis	6010C		1	0.518 g	100 mL	216293	12/22/14 21:41	HJM	TAL NSH
Total/NA	Analysis	Moisture		1			212230	12/08/14 11:54	RRS	TAL NSH

Client Sample ID: S-12-B29

Date Collected: 12/02/14 11:20

Date Received: 12/06/14 08:30

Lab Sample ID: 490-67998-2

Matrix: Soil
Percent Solids: 88.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.39 g	5.0 mL	212056	12/07/14 05:17	JLP	TAL NSH
Total/NA	Analysis	8260B		1	7.39 g	5.0 mL	212767	12/10/14 17:53	KKK	TAL NSH
Total/NA	Prep	5035			6.55 g	5.0 mL	212055	12/07/14 05:04	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	6.55 g	5.0 mL	212103	12/08/14 20:53	AMC	TAL NSH
Total/NA	Prep	3051A			0.523 g	100 mL	215479	12/19/14 13:04	NJB	TAL NSH
Total/NA	Analysis	6010C		1	0.523 g	100 mL	216293	12/22/14 21:46	HJM	TAL NSH
Total/NA	Analysis	Moisture		1			212230	12/08/14 11:54	RRS	TAL NSH

Client Sample ID: S-47-B29

Date Collected: 12/02/14 12:25

Date Received: 12/06/14 08:30

Lab Sample ID: 490-67998-3

Matrix: Soil
Percent Solids: 91.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.09 g	5.0 mL	212056	12/07/14 05:17	JLP	TAL NSH
Total/NA	Analysis	8260B		1	7.09 g	5.0 mL	212767	12/10/14 17:23	KKK	TAL NSH
Total/NA	Prep	5035			5.09 g	5.0 mL	212055	12/07/14 05:04	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5.09 g	5.0 mL	212103	12/08/14 21:23	AMC	TAL NSH
Total/NA	Prep	3550B			25.31 g	1.00 mL	212133	12/08/14 09:52	LDC	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	25.31 g	1.00 mL	212279	12/08/14 19:27	JPS	TAL NSH
Total/NA	Analysis	Moisture		1			212230	12/08/14 11:54	RRS	TAL NSH

Client Sample ID: S-53-B29

Date Collected: 12/02/14 12:45

Date Received: 12/06/14 08:30

Lab Sample ID: 490-67998-4

Matrix: Soil
Percent Solids: 91.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.82 g	5.0 mL	212056	12/07/14 05:17	JLP	TAL NSH
Total/NA	Analysis	8260B		1	6.82 g	5.0 mL	212767	12/10/14 16:53	KKK	TAL NSH
Total/NA	Prep	5035			4.97 g	5.0 mL	212055	12/07/14 05:04	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	4.97 g	5.0 mL	212103	12/08/14 21:52	AMC	TAL NSH

TestAmerica Nashville

Lab Chronicle

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67998-1
SDG: 31160

Client Sample ID: S-53-B29

Lab Sample ID: 490-67998-4

Date Collected: 12/02/14 12:45

Matrix: Soil

Date Received: 12/06/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			212230	12/08/14 11:54	RRS	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

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Method Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67998-1
SDG: 31160

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	TAL NSH
NWTPH-Dx	Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup	NWTPH	TAL NSH
6010C	Metals (ICP)	SW846	TAL NSH
Moisture	Percent Moisture	EPA	TAL NSH

Protocol References:

EPA = US Environmental Protection Agency

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177



Certification Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-67998-1
SDG: 31160

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Oregon	NELAP	10	TN200001	04-29-15

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte	
Moisture		Soil	Percent Solids	
Washington	State Program	10	C789	07-19-15

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Soil	Percent Solids





COOLER RECEIPT FORM

Cooler Received/Opened On 12/6/2014 @ 0830

1. Tracking # 2965 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID Raynger

2. Temperature of rep. sample or temp blank when opened: 20 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler?

If yes, how many and where: 2 front

5. Were the seals intact, signed, and dated correctly?

6. Were custody papers inside cooler?

I certify that I opened the cooler and answered questions 1-6 (initial) [Signature]

7. Were custody seals on containers: YES NO and intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA Soil

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # CG

I certify that I unloaded the cooler and answered questions 7-14 (initial) [Signature]

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used? YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) [Signature]

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) [Signature]

I certify that I attached a label with the unique LIMS number to each container (initial) [Signature]

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#

Nashville Division
 2960 Foster Creighton
 Nashville, TN 37204

Phone: 615-726-0177
 Toll Free: 800-765-0980
 Fax: 615-726-3404



Consultant Name: Cardno ERI Account #: 10313 PO#: CTC
 Consultant Address: 801 Second Avenue Suite 700
 Consultant City/State/Zip: Seattle, WA 98104 Invoice To: Michael Miller
 ExxonMobil Project Mgr: Aaron Thom Report To: Michael Miller
 Consultant Project Mgr: Michael Miller :t#/Activity #: 31160
 Consultant Telephone Number: 206 269 0104 Site Address: 1500 145th Place Southeast
 Sampler Name (Print): Robert Thompson, Nicholas Gerkin Site City, State, Zip: Bellevue, Washington 98007
 Sampler Signature: [Signature] Oversight Agency: Washington Department of Ecology

Sample ID	Field Point Name/Location ID	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Matrix											RUSH TAT (Pre-Schedule)	5-day TAT	Standard 10-day TAT	Due Date of Report						
								Preservative				Other (specify):			Analyze For:													
								HCl	NaOH	H ₂ O ₂ Plastic	H ₂ SO ₄ Glass	HNO ₃	Ice	Other	None	Groundwater	Drinking Water	Sludge	Soil	Air	BTEX by 826B	TPH by NWTPH-Gx	TPH by NWTPH-DX	TPH by NWTPH-DX	Total Pb by 6010B			
S-10-B28	B28	12/02/14	14:55	5	X		2	2				1					X			X				X				10
S-12-B29	B29	12/02/14	11:20	5	X		2	2				1					X			X				X				10
S-47-B29	B29	12/02/14	12:25	5	X		2	2				1					X			X				X				10
S-53-B29	B29	12/02/14	12:45	5	X		2	2				1					X			X				X				10

Comments/Special Instructions:
 Please include silica gel cleanup

Relinquished by:
 Nicholas A. Gerkin

Relinquished by:
 [Signature]

Received by (Lab personnel):
 [Signature]

Date: 12/05/14
Time: 16:00

Date: 12-6-14
Time: 0830

Laboratory Comments:
 Temperature Upon Receipt: 2.0
 Sample Containers Inta Y N
 VOA Vials Free of Heat Y N
 QC Deliverables (please circle one)
 Level 2 N
 Level 3 N
 Level 4 N

Site Specific - If yes, please attach pre-schedule w/ TestAmerica Project Manager or attach specific instructions



Login Sample Receipt Checklist

Client: Cardno ERI

Job Number: 490-67998-1

SDG Number: 31160

Login Number: 67998

List Number: 1

Creator: Huckaba, Jimmy

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-68228-1
TestAmerica Sample Delivery Group: 31160
Client Project/Site: 99BLV

For:
Cardno ERI
801 Second Ave
Suite 700
Seattle, Washington 98104

Attn: Michael Miller



Authorized for release by:
12/23/2014 4:50:56 PM

Leah Klingensmith, Senior Project Manager
(615)301-5038
leah.klingensmith@testamericainc.com

LINKS

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results through
TotalAccess

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68228-1
SDG: 31160

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-68228-1	S-11-B27	Solid	12/03/14 13:45	12/09/14 08:30
490-68228-4	S-35-B27	Solid	12/03/14 14:55	12/09/14 08:30
490-68228-6	S-45-B27	Solid	12/03/14 15:20	12/09/14 08:30
490-68228-7	S-50-B27	Solid	12/03/14 15:35	12/09/14 08:30

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Case Narrative

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68228-1
SDG: 31160

Job ID: 490-68228-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative 490-68228-1

Comments

No additional comments.

Receipt

The samples were received on 12/9/2014 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 2.0° C, 2.5° C, 2.7° C and 3.4° C.

GC/MS VOA

Method(s) 8260B: Surrogate recovery for the following sample(s) was outside control limits: S-35-B27 (490-68228-4), S-45-B27 (490-68228-6). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for batch 214082 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected.

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with batch 214084

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA

Method(s) NWTPH-Gx: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for batch 214114 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated sample / sample duplicate (DU) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68228-1
SDG: 31160

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
X	Surrogate is outside control limits

GC VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68228-1
SDG: 31160

Client Sample ID: S-11-B27

Lab Sample ID: 490-68228-1

Date Collected: 12/03/14 13:45

Matrix: Solid

Date Received: 12/09/14 08:30

Percent Solids: 89.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00173		mg/Kg	☼	12/10/14 12:40	12/12/14 04:48	1
Toluene	0.00458		0.00173		mg/Kg	☼	12/10/14 12:40	12/12/14 04:48	1
Ethylbenzene	ND		0.00173		mg/Kg	☼	12/10/14 12:40	12/12/14 04:48	1
Xylenes, Total	0.00824		0.00260		mg/Kg	☼	12/10/14 12:40	12/12/14 04:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	12/10/14 12:40	12/12/14 04:48	1
1,2-Dichloroethane-d4 (Surr)	99		70 - 130	12/10/14 12:40	12/12/14 04:48	1
Toluene-d8 (Surr)	101		70 - 130	12/10/14 12:40	12/12/14 04:48	1
Dibromofluoromethane (Surr)	97		70 - 130	12/10/14 12:40	12/12/14 04:48	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		4.91		mg/Kg	☼	12/10/14 12:29	12/16/14 09:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	81		50 - 150	12/10/14 12:29	12/16/14 09:15	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			12/10/14 11:27	1

Client Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68228-1
SDG: 31160

Client Sample ID: S-35-B27

Lab Sample ID: 490-68228-4

Date Collected: 12/03/14 14:55

Matrix: Solid

Date Received: 12/09/14 08:30

Percent Solids: 94.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0149		0.00160		mg/Kg	☼	12/10/14 12:40	12/12/14 05:19	1
Toluene	2.88		0.170		mg/Kg	☼	12/10/14 12:29	12/15/14 16:21	2
Ethylbenzene	1.49		0.170		mg/Kg	☼	12/10/14 12:29	12/15/14 16:21	2
Xylenes, Total	10.6		0.255		mg/Kg	☼	12/10/14 12:29	12/15/14 16:21	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	12/10/14 12:40	12/12/14 05:19	1
4-Bromofluorobenzene (Surr)	96		70 - 130	12/10/14 12:29	12/15/14 16:21	2
1,2-Dichloroethane-d4 (Surr)	247	X	70 - 130	12/10/14 12:40	12/12/14 05:19	1
1,2-Dichloroethane-d4 (Surr)	87		70 - 130	12/10/14 12:29	12/15/14 16:21	2
Toluene-d8 (Surr)	103		70 - 130	12/10/14 12:40	12/12/14 05:19	1
Toluene-d8 (Surr)	89		70 - 130	12/10/14 12:29	12/15/14 16:21	2
Dibromofluoromethane (Surr)	112		70 - 130	12/10/14 12:40	12/12/14 05:19	1
Dibromofluoromethane (Surr)	83		70 - 130	12/10/14 12:29	12/15/14 16:21	2

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	596		56.0		mg/Kg	☼	12/10/14 12:29	12/15/14 22:57	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	91		50 - 150	12/10/14 12:29	12/15/14 22:57	10

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3.29		1.03		mg/Kg	☼	12/19/14 13:04	12/22/14 22:06	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	94		0.10		%			12/10/14 11:27	1

Client Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68228-1
SDG: 31160

Client Sample ID: S-45-B27

Lab Sample ID: 490-68228-6

Date Collected: 12/03/14 15:20

Matrix: Solid

Date Received: 12/09/14 08:30

Percent Solids: 89.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0106		0.00174		mg/Kg	☼	12/10/14 12:40	12/12/14 05:51	1
Toluene	0.291		0.104		mg/Kg	☼	12/10/14 12:29	12/15/14 16:51	1
Ethylbenzene	0.160		0.00174		mg/Kg	☼	12/10/14 12:40	12/12/14 05:51	1
Xylenes, Total	1.86		0.156		mg/Kg	☼	12/10/14 12:29	12/15/14 16:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	12/10/14 12:40	12/12/14 05:51	1
4-Bromofluorobenzene (Surr)	96		70 - 130	12/10/14 12:29	12/15/14 16:51	1
1,2-Dichloroethane-d4 (Surr)	161	X	70 - 130	12/10/14 12:40	12/12/14 05:51	1
1,2-Dichloroethane-d4 (Surr)	92		70 - 130	12/10/14 12:29	12/15/14 16:51	1
Toluene-d8 (Surr)	101		70 - 130	12/10/14 12:40	12/12/14 05:51	1
Toluene-d8 (Surr)	87		70 - 130	12/10/14 12:29	12/15/14 16:51	1
Dibromofluoromethane (Surr)	112		70 - 130	12/10/14 12:40	12/12/14 05:51	1
Dibromofluoromethane (Surr)	85		70 - 130	12/10/14 12:29	12/15/14 16:51	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		5.05		mg/Kg	☼	12/10/14 12:29	12/16/14 11:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	77		50 - 150	12/10/14 12:29	12/16/14 11:00	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90		0.10		%			12/10/14 11:27	1

Client Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68228-1
SDG: 31160

Client Sample ID: S-50-B27

Lab Sample ID: 490-68228-7

Date Collected: 12/03/14 15:35

Matrix: Solid

Date Received: 12/09/14 08:30

Percent Solids: 82.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00530		0.00202		mg/Kg	☼	12/10/14 12:40	12/15/14 18:46	1
Toluene	0.00921		0.00202		mg/Kg	☼	12/10/14 12:40	12/15/14 18:46	1
Ethylbenzene	0.0656		0.00202		mg/Kg	☼	12/10/14 12:40	12/15/14 18:46	1
Xylenes, Total	0.0167		0.00303		mg/Kg	☼	12/10/14 12:40	12/15/14 18:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	12/10/14 12:40	12/15/14 18:46	1
1,2-Dichloroethane-d4 (Surr)	108		70 - 130	12/10/14 12:40	12/15/14 18:46	1
Toluene-d8 (Surr)	100		70 - 130	12/10/14 12:40	12/15/14 18:46	1
Dibromofluoromethane (Surr)	98		70 - 130	12/10/14 12:40	12/15/14 18:46	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	10.5		6.01		mg/Kg	☼	12/10/14 12:29	12/16/14 11:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	85		50 - 150	12/10/14 12:29	12/16/14 11:41	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	82		0.10		%			12/10/14 11:27	1

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68228-1
SDG: 31160

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: 490-68088-B-16-E MS

Matrix: Solid

Analysis Batch: 214082

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 212573

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier					
Benzene	0.00400		0.0949	0.08523		mg/Kg		86		31 - 143
Toluene	ND		0.0949	0.08533		mg/Kg		88		30 - 155
Ethylbenzene	ND		0.0949	0.08591		mg/Kg		90		23 - 161
Xylenes, Total	0.00784		0.190	0.1578		mg/Kg		79		25 - 162

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	113		70 - 130
1,2-Dichloroethane-d4 (Surr)	102		70 - 130
Toluene-d8 (Surr)	99		70 - 130
Dibromofluoromethane (Surr)	96		70 - 130

Lab Sample ID: 490-68088-B-16-F MSD

Matrix: Solid

Analysis Batch: 214082

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 212573

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier						Limit	
Benzene	0.00400		0.0463	0.06188		mg/Kg		125		31 - 143	32	50
Toluene	ND		0.0463	0.05349		mg/Kg		111		30 - 155	46	50
Ethylbenzene	ND		0.0463	0.04427	F2	mg/Kg		94		23 - 161	64	50
Xylenes, Total	0.00784		0.0926	0.07775	F2	mg/Kg		76		25 - 162	68	50

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	113		70 - 130
1,2-Dichloroethane-d4 (Surr)	101		70 - 130
Toluene-d8 (Surr)	103		70 - 130
Dibromofluoromethane (Surr)	96		70 - 130

Lab Sample ID: 490-68229-E-3-A MS

Matrix: Solid

Analysis Batch: 213381

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 212929

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier					
Benzene	ND		0.0496	0.04953		mg/Kg	☼	97		31 - 143
Toluene	0.0181		0.0496	0.06353		mg/Kg	☼	92		30 - 155
Ethylbenzene	0.00390		0.0496	0.05880		mg/Kg	☼	111		23 - 161
Xylenes, Total	0.0322		0.0992	0.1209		mg/Kg	☼	89		25 - 162

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	104		70 - 130
1,2-Dichloroethane-d4 (Surr)	95		70 - 130
Toluene-d8 (Surr)	102		70 - 130
Dibromofluoromethane (Surr)	95		70 - 130

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68228-1
SDG: 31160

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-68229-E-3-B MSD

Matrix: Solid

Analysis Batch: 213381

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 212929

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.		RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD		
Benzene	ND		0.0478	0.04873		mg/Kg	☼	99	31 - 143	2	50	
Toluene	0.0181		0.0478	0.05974		mg/Kg	☼	87	30 - 155	6	50	
Ethylbenzene	0.00390		0.0478	0.05581		mg/Kg	☼	109	23 - 161	5	50	
Xylenes, Total	0.0322		0.0957	0.1119		mg/Kg	☼	83	25 - 162	8	50	

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	104		70 - 130
1,2-Dichloroethane-d4 (Surr)	98		70 - 130
Toluene-d8 (Surr)	99		70 - 130
Dibromofluoromethane (Surr)	97		70 - 130

Lab Sample ID: MB 490-213381/8

Matrix: Solid

Analysis Batch: 213381

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	ND		0.00200		mg/Kg			12/12/14 02:44	1
Toluene	ND		0.00200		mg/Kg			12/12/14 02:44	1
Ethylbenzene	ND		0.00200		mg/Kg			12/12/14 02:44	1
Xylenes, Total	ND		0.00300		mg/Kg			12/12/14 02:44	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	105		70 - 130		12/12/14 02:44	1
1,2-Dichloroethane-d4 (Surr)	98		70 - 130		12/12/14 02:44	1
Toluene-d8 (Surr)	101		70 - 130		12/12/14 02:44	1
Dibromofluoromethane (Surr)	97		70 - 130		12/12/14 02:44	1

Lab Sample ID: LCS 490-213381/4

Matrix: Solid

Analysis Batch: 213381

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
		Added	Result				
Benzene	0.0500	0.04616		mg/Kg		92	75 - 127
Toluene	0.0500	0.05121		mg/Kg		102	80 - 132
Ethylbenzene	0.0500	0.05363		mg/Kg		107	80 - 134
Xylenes, Total	0.100	0.1017		mg/Kg		102	80 - 137

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	107		70 - 130
1,2-Dichloroethane-d4 (Surr)	98		70 - 130
Toluene-d8 (Surr)	99		70 - 130
Dibromofluoromethane (Surr)	95		70 - 130

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68228-1
SDG: 31160

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-213381/5

Matrix: Solid

Analysis Batch: 213381

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.04746		mg/Kg		95	75 - 127	3	50
Toluene	0.0500	0.05293		mg/Kg		106	80 - 132	3	50
Ethylbenzene	0.0500	0.05590		mg/Kg		112	80 - 134	4	50
Xylenes, Total	0.100	0.1067		mg/Kg		107	80 - 137	5	50

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,2-Dichloroethane-d4 (Surr)	96		70 - 130
Toluene-d8 (Surr)	99		70 - 130
Dibromofluoromethane (Surr)	95		70 - 130

Lab Sample ID: MB 490-214082/8

Matrix: Solid

Analysis Batch: 214082

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200		mg/Kg			12/15/14 13:36	1
Toluene	ND		0.00200		mg/Kg			12/15/14 13:36	1
Ethylbenzene	ND		0.00200		mg/Kg			12/15/14 13:36	1
Xylenes, Total	ND		0.00300		mg/Kg			12/15/14 13:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130		12/15/14 13:36	1
1,2-Dichloroethane-d4 (Surr)	105		70 - 130		12/15/14 13:36	1
Toluene-d8 (Surr)	100		70 - 130		12/15/14 13:36	1
Dibromofluoromethane (Surr)	101		70 - 130		12/15/14 13:36	1

Lab Sample ID: LCS 490-214082/4

Matrix: Solid

Analysis Batch: 214082

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.04251		mg/Kg		85	75 - 127
Toluene	0.0500	0.04218		mg/Kg		84	80 - 132
Ethylbenzene	0.0500	0.04441		mg/Kg		89	80 - 134
Xylenes, Total	0.100	0.08307		mg/Kg		83	80 - 137

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,2-Dichloroethane-d4 (Surr)	103		70 - 130
Toluene-d8 (Surr)	96		70 - 130
Dibromofluoromethane (Surr)	98		70 - 130

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68228-1
SDG: 31160

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-214084/6

Matrix: Solid

Analysis Batch: 214084

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100		mg/Kg			12/15/14 12:20	1
Toluene	ND		0.100		mg/Kg			12/15/14 12:20	1
Ethylbenzene	ND		0.100		mg/Kg			12/15/14 12:20	1
Xylenes, Total	ND		0.150		mg/Kg			12/15/14 12:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130		12/15/14 12:20	1
1,2-Dichloroethane-d4 (Surr)	97		70 - 130		12/15/14 12:20	1
Toluene-d8 (Surr)	92		70 - 130		12/15/14 12:20	1
Dibromofluoromethane (Surr)	98		70 - 130		12/15/14 12:20	1

Lab Sample ID: LCS 490-214084/3

Matrix: Solid

Analysis Batch: 214084

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	2.50	2.344		mg/Kg		94	75 - 127
Toluene	2.50	2.294		mg/Kg		92	80 - 132
Ethylbenzene	2.50	2.520		mg/Kg		101	80 - 134
Xylenes, Total	5.00	4.766		mg/Kg		95	80 - 137

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		70 - 130
1,2-Dichloroethane-d4 (Surr)	113		70 - 130
Toluene-d8 (Surr)	88		70 - 130
Dibromofluoromethane (Surr)	97		70 - 130

Lab Sample ID: LCSD 490-214084/4

Matrix: Solid

Analysis Batch: 214084

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	2.50	2.602		mg/Kg		104	75 - 127	10	50
Toluene	2.50	2.555		mg/Kg		102	80 - 132	11	50
Ethylbenzene	2.50	2.857		mg/Kg		114	80 - 134	13	50
Xylenes, Total	5.00	5.432		mg/Kg		109	80 - 137	13	50

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	91		70 - 130
1,2-Dichloroethane-d4 (Surr)	108		70 - 130
Toluene-d8 (Surr)	86		70 - 130
Dibromofluoromethane (Surr)	98		70 - 130

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68228-1
SDG: 31160

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: 490-68228-B-1-B MS

Matrix: Solid

Analysis Batch: 214114

Client Sample ID: 490-68228-B-1-B MS

Prep Type: Total/NA

Prep Batch: 212935

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
C6-C12	ND		4910	5065		mg/Kg	☼	103	69 - 130
Surrogate	%Recovery	MS Qualifier	Limits						
a,a,a-Trifluorotoluene	107		50 - 150						

Lab Sample ID: 490-68228-B-1-C MSD

Matrix: Solid

Analysis Batch: 214114

Client Sample ID: 490-68228-B-1-C MSD

Prep Type: Total/NA

Prep Batch: 212935

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C12	ND		4910	4370	F2	mg/Kg	☼	89	69 - 130	15	10
Surrogate	%Recovery	MSD Qualifier	Limits								
a,a,a-Trifluorotoluene	100		50 - 150								

Lab Sample ID: 490-68228-1 DU

Matrix: Solid

Analysis Batch: 214114

Client Sample ID: S-11-B27

Prep Type: Total/NA

Prep Batch: 212935

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
C6-C12	ND		ND		mg/Kg	☼	NC	10
Surrogate	%Recovery	DU Qualifier	Limits					
a,a,a-Trifluorotoluene	82		50 - 150					

Lab Sample ID: MB 490-214114/11

Matrix: Solid

Analysis Batch: 214114

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		5.00		mg/Kg			12/15/14 15:13	1
Surrogate	%Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac			
a,a,a-Trifluorotoluene	86		50 - 150		12/15/14 15:13	1			

Lab Sample ID: MB 490-214114/35

Matrix: Solid

Analysis Batch: 214114

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		5.00		mg/Kg			12/16/14 08:02	1
Surrogate	%Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac			
a,a,a-Trifluorotoluene	87		50 - 150		12/16/14 08:02	1			

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68228-1
SDG: 31160

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCS 490-214114/10
Matrix: Solid
Analysis Batch: 214114

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C6-C12	10.0	9.351		mg/Kg		94	70 - 130
Surrogate		LCS %Recovery	LCS Qualifier				Limits
a,a,a-Trifluorotoluene		103					50 - 150

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 490-215479/1-A
Matrix: Solid
Analysis Batch: 216293

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 215479

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.00		mg/Kg		12/19/14 13:04	12/22/14 20:51	1

Lab Sample ID: LCS 490-215479/2-A
Matrix: Solid
Analysis Batch: 216293

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 215479

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	20.2	20.75		mg/Kg		103	80 - 120

Lab Sample ID: 490-68412-A-57-D MS
Matrix: Solid
Analysis Batch: 216293

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 215479

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	14.1		23.2	29.08	F1	mg/Kg	✱	65	75 - 125

Lab Sample ID: 490-68412-A-57-E MSD
Matrix: Solid
Analysis Batch: 216293

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 215479

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	14.1		23.4	31.23	F1	mg/Kg	✱	73	75 - 125	7	20

Method: Moisture - Percent Moisture

Lab Sample ID: 490-68181-A-1 DU
Matrix: Solid
Analysis Batch: 212903

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	89		89		%		0.3	20

QC Association Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68228-1
SDG: 31160

GC/MS VOA

Prep Batch: 212573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68088-B-16-E MS	Matrix Spike	Total/NA	Solid	5030B	
490-68088-B-16-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5030B	

Prep Batch: 212929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68229-E-3-A MS	Matrix Spike	Total/NA	Solid	5035	
490-68229-E-3-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 212935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68228-4	S-35-B27	Total/NA	Solid	5035	
490-68228-6	S-45-B27	Total/NA	Solid	5035	

Prep Batch: 212938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68228-1	S-11-B27	Total/NA	Solid	5035	
490-68228-4	S-35-B27	Total/NA	Solid	5035	
490-68228-6	S-45-B27	Total/NA	Solid	5035	
490-68228-7	S-50-B27	Total/NA	Solid	5035	

Analysis Batch: 213381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68228-1	S-11-B27	Total/NA	Solid	8260B	212938
490-68228-4	S-35-B27	Total/NA	Solid	8260B	212938
490-68228-6	S-45-B27	Total/NA	Solid	8260B	212938
490-68229-E-3-A MS	Matrix Spike	Total/NA	Solid	8260B	212929
490-68229-E-3-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	212929
LCS 490-213381/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-213381/5	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-213381/8	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 214082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68088-B-16-E MS	Matrix Spike	Total/NA	Solid	8260B	212573
490-68088-B-16-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	212573
490-68228-7	S-50-B27	Total/NA	Solid	8260B	212938
LCS 490-214082/4	Lab Control Sample	Total/NA	Solid	8260B	
MB 490-214082/8	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 214084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68228-4	S-35-B27	Total/NA	Solid	8260B	212935
490-68228-6	S-45-B27	Total/NA	Solid	8260B	212935
LCS 490-214084/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-214084/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-214084/6	Method Blank	Total/NA	Solid	8260B	

QC Association Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68228-1
SDG: 31160

GC VOA

Prep Batch: 212935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68228-1	S-11-B27	Total/NA	Solid	5035	
490-68228-1 DU	S-11-B27	Total/NA	Solid	5035	
490-68228-4	S-35-B27	Total/NA	Solid	5035	
490-68228-6	S-45-B27	Total/NA	Solid	5035	
490-68228-7	S-50-B27	Total/NA	Solid	5035	
490-68228-B-1-B MS	490-68228-B-1-B MS	Total/NA	Solid	5035	
490-68228-B-1-C MSD	490-68228-B-1-C MSD	Total/NA	Solid	5035	

Analysis Batch: 214114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68228-1	S-11-B27	Total/NA	Solid	NWTPH-Gx	212935
490-68228-1 DU	S-11-B27	Total/NA	Solid	NWTPH-Gx	212935
490-68228-4	S-35-B27	Total/NA	Solid	NWTPH-Gx	212935
490-68228-6	S-45-B27	Total/NA	Solid	NWTPH-Gx	212935
490-68228-7	S-50-B27	Total/NA	Solid	NWTPH-Gx	212935
490-68228-B-1-B MS	490-68228-B-1-B MS	Total/NA	Solid	NWTPH-Gx	212935
490-68228-B-1-C MSD	490-68228-B-1-C MSD	Total/NA	Solid	NWTPH-Gx	212935
LCS 490-214114/10	Lab Control Sample	Total/NA	Solid	NWTPH-Gx	
MB 490-214114/11	Method Blank	Total/NA	Solid	NWTPH-Gx	
MB 490-214114/35	Method Blank	Total/NA	Solid	NWTPH-Gx	

Metals

Prep Batch: 215479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68228-4	S-35-B27	Total/NA	Solid	3051A	
490-68412-A-57-D MS	Matrix Spike	Total/NA	Solid	3051A	
490-68412-A-57-E MSD	Matrix Spike Duplicate	Total/NA	Solid	3051A	
LCS 490-215479/2-A	Lab Control Sample	Total/NA	Solid	3051A	
MB 490-215479/1-A	Method Blank	Total/NA	Solid	3051A	

Analysis Batch: 216293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68228-4	S-35-B27	Total/NA	Solid	6010C	215479
490-68412-A-57-D MS	Matrix Spike	Total/NA	Solid	6010C	215479
490-68412-A-57-E MSD	Matrix Spike Duplicate	Total/NA	Solid	6010C	215479
LCS 490-215479/2-A	Lab Control Sample	Total/NA	Solid	6010C	215479
MB 490-215479/1-A	Method Blank	Total/NA	Solid	6010C	215479

General Chemistry

Analysis Batch: 212903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68181-A-1 DU	Duplicate	Total/NA	Solid	Moisture	
490-68228-1	S-11-B27	Total/NA	Solid	Moisture	
490-68228-1 MS	S-11-B27	Total/NA	Solid	Moisture	
490-68228-1 MSD	S-11-B27	Total/NA	Solid	Moisture	
490-68228-4	S-35-B27	Total/NA	Solid	Moisture	
490-68228-6	S-45-B27	Total/NA	Solid	Moisture	
490-68228-7	S-50-B27	Total/NA	Solid	Moisture	

TestAmerica Nashville

Lab Chronicle

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68228-1
SDG: 31160

Client Sample ID: S-11-B27

Date Collected: 12/03/14 13:45

Date Received: 12/09/14 08:30

Lab Sample ID: 490-68228-1

Matrix: Solid
Percent Solids: 89.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.47 g	5.0 mL	212938	12/10/14 12:40	JLP	TAL NSH
Total/NA	Analysis	8260B		1	6.47 g	5.0 mL	213381	12/12/14 04:48	KKK	TAL NSH
Total/NA	Prep	5035			6.52 g	5.0 mL	212935	12/10/14 12:29	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	6.52 g	5.0 mL	214114	12/16/14 09:15	AMC	TAL NSH
Total/NA	Analysis	Moisture		1			212903	12/10/14 11:27	RRS	TAL NSH

Client Sample ID: S-35-B27

Date Collected: 12/03/14 14:55

Date Received: 12/09/14 08:30

Lab Sample ID: 490-68228-4

Matrix: Solid
Percent Solids: 94.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.66 g	5.0 mL	212938	12/10/14 12:40	JLP	TAL NSH
Total/NA	Analysis	8260B		1	6.66 g	5.0 mL	213381	12/12/14 05:19	KKK	TAL NSH
Total/NA	Prep	5035			6.77 g	5.0 mL	212935	12/10/14 12:29	JLP	TAL NSH
Total/NA	Analysis	8260B		2	6.77 g	5.0 mL	214084	12/15/14 16:21	KKK	TAL NSH
Total/NA	Prep	5035			5.04 g	5.0 mL	212935	12/10/14 12:29	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		10	5.04 g	5.0 mL	214114	12/15/14 22:57	AMC	TAL NSH
Total/NA	Prep	3051A			0.518 g	100 mL	215479	12/19/14 13:04	NJB	TAL NSH
Total/NA	Analysis	6010C		1	0.518 g	100 mL	216293	12/22/14 22:06	HJM	TAL NSH
Total/NA	Analysis	Moisture		1			212903	12/10/14 11:27	RRS	TAL NSH

Client Sample ID: S-45-B27

Date Collected: 12/03/14 15:20

Date Received: 12/09/14 08:30

Lab Sample ID: 490-68228-6

Matrix: Solid
Percent Solids: 89.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.41 g	5.0 mL	212938	12/10/14 12:40	JLP	TAL NSH
Total/NA	Analysis	8260B		1	6.41 g	5.0 mL	213381	12/12/14 05:51	KKK	TAL NSH
Total/NA	Prep	5035			6.06 g	5.0 mL	212935	12/10/14 12:29	JLP	TAL NSH
Total/NA	Analysis	8260B		1	6.06 g	5.0 mL	214084	12/15/14 16:51	KKK	TAL NSH
Total/NA	Prep	5035			6.24 g	5.0 mL	212935	12/10/14 12:29	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	6.24 g	5.0 mL	214114	12/16/14 11:00	AMC	TAL NSH
Total/NA	Analysis	Moisture		1			212903	12/10/14 11:27	RRS	TAL NSH

Client Sample ID: S-50-B27

Date Collected: 12/03/14 15:35

Date Received: 12/09/14 08:30

Lab Sample ID: 490-68228-7

Matrix: Solid
Percent Solids: 82.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.01 g	5.0 mL	212938	12/10/14 12:40	JLP	TAL NSH
Total/NA	Analysis	8260B		1	6.01 g	5.0 mL	214082	12/15/14 18:46	KKK	TAL NSH
Total/NA	Prep	5035			6.13 g	5.0 mL	212935	12/10/14 12:29	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	6.13 g	5.0 mL	214114	12/16/14 11:41	AMC	TAL NSH

TestAmerica Nashville

Lab Chronicle

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68228-1
SDG: 31160

Client Sample ID: S-50-B27

Lab Sample ID: 490-68228-7

Date Collected: 12/03/14 15:35

Matrix: Solid

Date Received: 12/09/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			212903	12/10/14 11:27	RRS	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

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Method Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68228-1
SDG: 31160

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	TAL NSH
6010C	Metals (ICP)	SW846	TAL NSH
Moisture	Percent Moisture	EPA	TAL NSH

Protocol References:

EPA = US Environmental Protection Agency

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177



Certification Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68228-1
SDG: 31160

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Oregon	NELAP	10	TN200001	04-29-15

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte	
Moisture		Solid	Percent Solids	
Washington	State Program	10	C789	07-19-15

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Solids





COOLER RECEIPT FORM

490-68228 Chain of Custody

Cooler Received/Opened On 12/9/2014 @ 8:30

1. Tracking # 4081 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 17610176

2. Temperature of rep. sample or temp blank when opened: 2.5 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 2 Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) AJH

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA 20%

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 1

I certify that I unloaded the cooler and answered questions 7-14 (initial) AJH

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) AJH

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) AJH

I certify that I attached a label with the unique LIMS number to each container (initial) AJH

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#

COOLER RECEIPT FORM

Cooler Received/Opened On 12/9/2014@ 0830

1. Tracking # 4060 (last 4 digits, FedEx)
- Courier: FedEx IR Gun ID 12080142
2. Temperature of rep. sample or temp blank when opened: 3.4 Degrees Celsius
3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA
4. Were custody seals on outside of cooler? YES...NO...NA
If yes, how many and where: one front
5. Were the seals intact, signed, and dated correctly? YES...NO...NA
6. Were custody papers inside cooler? YES...NO...NA
I certify that I opened the cooler and answered questions 1-6 (initial) DA
7. Were custody seals on containers: YES NO and Intact YES...NO... NA
Were these signed and dated correctly? YES...NO... NA
8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None
9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None
10. Did all containers arrive in good condition (unbroken)? YES...NO... NA
11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO... NA
12. Did all container labels and tags agree with custody papers? YES...NO... NA
- 13a. Were VOA vials received? YES... NO... NA
b. Was there any observable headspace present in any VOA vial? YES...NO... NA
14. Was there a Trip Blank in this cooler? YES... NO... NA If multiple coolers, sequence # _____
I certify that I unloaded the cooler and answered questions 7-14 (initial) CR
- 15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO... NA
b. Did the bottle labels indicate that the correct preservatives were used YES...NO... NA
16. Was residual chlorine present? YES...NO... NA
I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) CA
17. Were custody papers properly filled out (ink, signed, etc)? YES...NO... NA
18. Did you sign the custody papers in the appropriate place? YES...NO... NA
19. Were correct containers used for the analysis requested? YES...NO... NA
20. Was sufficient amount of sample sent in each container? YES...NO... NA
I certify that I entered this project into LIMS and answered questions 17-20 (initial) CA
I certify that I attached a label with the unique LIMS number to each container (initial) CA
21. Were there Non-Conformance issues at login? YES... NO... Was a NCM generated? YES... NO...# _____

COOLER RECEIPT FORM

TAW 6777B

Cooler Received/Opened On 12/9/2014 @ 8:30

1. Tracking # 4070 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 17610176

2. Temperature of rep. sample or temp blank when opened: 2.0 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO... NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) AON

7. Were custody seals on containers: YES NO and Intact YES...NO... NA

Were these signed and dated correctly? YES...NO... NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO... NA soil

14. Was there a Trip Blank in this cooler? YES... NO...NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (initial) Ch

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO... NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO... NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) Ch

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) Ch

I certify that I attached a label with the unique LIMS number to each container (initial) Ch

21. Were there Non-Conformance issues at login? YES... NO Was a NCM generated? YES... NO...# _____

COOLER RECEIPT FORM

TAN
682278

Cooler Received/Opened On 12/9/2014 @ 0830

1. Tracking # 4092 (last 4 digits, FedEx)

Courier: Fed Ex IR Gun ID 17960358

2. Temperature of rep. sample or temp blank when opened: 2.7 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) EJA

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 1

I certify that I unloaded the cooler and answered questions 7-14 (initial) JA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) JA

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) JA

I certify that I attached a label with the unique LIMS number to each container (initial) JA

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...# 0

cooler 3/4



Nashville Division
2960 Foster Creighton
Nashville, TN 37204

Phone: 615-726-0177
Toll Free: 800-765-0980
Fax: 615-726-3404



Loc: 490

Consultant Name: Cardno ERI
 Consultant Address: 801 Second Avenue Suite 700
 Consultant City/State/Zip: Seattle, WA 98104
 ExxonMobil Project Mgr: Aaron Thom
 Consultant Project Mgr: Michael Miller
 Consultant Telephone Number: 206 269 0104
 Sampler Name (Print): Robert Thompson, Nicholas Gerkin
 Sampler Signature: *[Signature]*

Account #: 10313
 Invoice To: Michael Miller
 Report To: Michael Miller
 ct #/Activity #: 31160
 ExxonMobil Site #: 99BLV
 Site Address: 1500 145th Place Southeast
 Site City, State, Zip: Bellevue, Washington 98007
 Oversight Agency: Washington Department of Ecology

Sample ID	Field Point Name/Location ID	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative										Matrix										Analyze For:	RUSH TAT (Pre-Schedule)	5-day TAT	Standard 10-day TAT	Due Date of Report				
								Methanol	Sodium Bisulfate	HCl	NaOH	H ₂ SO ₄ Plastic	H ₂ SO ₄ Glass	HNO ₃	Ice	Other	None	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Air	Other (specify):	BTEX by 8260B	TPHg by NWTPH-Gx	TPHd by NWTPH-Dx						TPHm by NWTPH-D	Total Pb by 6010B		
S-11-B27	B27	12/03/14	13:45	5	X			2	2																											
S-19-B27	B27	12/03/14	14:00	5	X			2	2																											
S-24-B27	B27	12/03/14	14:20	5	X			2	2																											
S-35-B27	B27	12/03/14	14:55	5	X			2	2																											
S-40-B27	B27	12/03/14	15:05	5	X			2	2																											
S-45-B27	B27	12/03/14	15:20	5	X			2	2																											
S-50-B27	B27	12/03/14	15:35	5	X			2	2																											

Comments/Special Instructions:
 Please include silica gel cleanup. Potential VOCs present other than BTEX from a new release.

Relinquished by: Nicholas A. Gerkin
 Date: 12/08/14
 Time: 17:00

Relinquished by: *[Signature]*
 Date: 12-9-14
 Time: 0830

Laboratory Comments:
 Temperature Upon Receipt: 2-5
 Sample Containers Inta Y: N
 VOA Vials Free of Heat Y: N
 QC Deliverables (please circle one):
 Level 2
 Level 3
 Level 4



Login Sample Receipt Checklist

Client: Cardno ERI

Job Number: 490-68228-1

SDG Number: 31160

Login Number: 68228

List Number: 1

Creator: Huckaba, Jimmy

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-68273-1
TestAmerica Sample Delivery Group: 31160
Client Project/Site: 99BLV

For:
Cardno ERI
801 Second Ave
Suite 700
Seattle, Washington 98104

Attn: Michael Miller



Authorized for release by:
12/23/2014 4:57:27 PM

Leah Klingensmith, Senior Project Manager
(615)301-5038
leah.klingensmith@testamericainc.com

LINKS

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results through
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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68273-1
SDG: 31160

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-68273-1	S-11-B30	Soil	12/03/14 09:00	12/09/14 08:30
490-68273-2	S-15-B30	Soil	12/03/14 09:10	12/09/14 08:30
490-68273-3	S-21-B30	Soil	12/03/14 09:25	12/09/14 08:30
490-68273-4	S-29-B30	Soil	12/03/14 09:55	12/09/14 08:30
490-68273-5	S-34-B30	Soil	12/03/14 10:05	12/09/14 08:30
490-68273-6	S-39-B30	Soil	12/03/14 10:25	12/09/14 08:30

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Case Narrative

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68273-1
SDG: 31160

Job ID: 490-68273-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-68273-1

Comments

No additional comments.

Receipt

The samples were received on 12/9/2014 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 2.0° C, 2.5° C, 2.7° C and 3.4° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC VOA

Method(s) NWTPH-Gx: The matrix spike / matrix spike duplicate (MS/MSD) precision for batch 214036 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated duplicate (DU) for NWTPH method sample precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68273-1
SDG: 31160

Qualifiers

GC VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68273-1
SDG: 31160

Client Sample ID: S-11-B30

Lab Sample ID: 490-68273-1

Date Collected: 12/03/14 09:00

Matrix: Soil

Date Received: 12/09/14 08:30

Percent Solids: 89.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00173		mg/Kg	☼	12/10/14 15:17	12/11/14 21:21	1
Toluene	ND		0.00173		mg/Kg	☼	12/10/14 15:17	12/11/14 21:21	1
Ethylbenzene	ND		0.00173		mg/Kg	☼	12/10/14 15:17	12/11/14 21:21	1
Xylenes, Total	ND		0.00259		mg/Kg	☼	12/10/14 15:17	12/11/14 21:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130	12/10/14 15:17	12/11/14 21:21	1
1,2-Dichloroethane-d4 (Surr)	117		70 - 130	12/10/14 15:17	12/11/14 21:21	1
Toluene-d8 (Surr)	94		70 - 130	12/10/14 15:17	12/11/14 21:21	1
Dibromofluoromethane (Surr)	107		70 - 130	12/10/14 15:17	12/11/14 21:21	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		4.67		mg/Kg	☼	12/10/14 15:15	12/14/14 22:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	75		50 - 150	12/10/14 15:15	12/14/14 22:58	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			12/10/14 15:42	1

Client Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68273-1
SDG: 31160

Client Sample ID: S-15-B30

Lab Sample ID: 490-68273-2

Date Collected: 12/03/14 09:10

Matrix: Soil

Date Received: 12/09/14 08:30

Percent Solids: 92.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00184		mg/Kg	☼	12/10/14 15:17	12/11/14 21:51	1
Toluene	0.00227		0.00184		mg/Kg	☼	12/10/14 15:17	12/11/14 21:51	1
Ethylbenzene	ND		0.00184		mg/Kg	☼	12/10/14 15:17	12/11/14 21:51	1
Xylenes, Total	ND		0.00275		mg/Kg	☼	12/10/14 15:17	12/11/14 21:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130	12/10/14 15:17	12/11/14 21:51	1
1,2-Dichloroethane-d4 (Surr)	112		70 - 130	12/10/14 15:17	12/11/14 21:51	1
Toluene-d8 (Surr)	92		70 - 130	12/10/14 15:17	12/11/14 21:51	1
Dibromofluoromethane (Surr)	106		70 - 130	12/10/14 15:17	12/11/14 21:51	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		4.92		mg/Kg	☼	12/10/14 15:15	12/15/14 01:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	73		50 - 150	12/10/14 15:15	12/15/14 01:43	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10		%			12/10/14 15:42	1

Client Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68273-1
SDG: 31160

Client Sample ID: S-21-B30

Lab Sample ID: 490-68273-3

Date Collected: 12/03/14 09:25

Matrix: Soil

Date Received: 12/09/14 08:30

Percent Solids: 94.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00150		mg/Kg	☼	12/10/14 15:17	12/11/14 22:21	1
Toluene	0.00389		0.00150		mg/Kg	☼	12/10/14 15:17	12/11/14 22:21	1
Ethylbenzene	ND		0.00150		mg/Kg	☼	12/10/14 15:17	12/11/14 22:21	1
Xylenes, Total	0.00417		0.00225		mg/Kg	☼	12/10/14 15:17	12/11/14 22:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130	12/10/14 15:17	12/11/14 22:21	1
1,2-Dichloroethane-d4 (Surr)	110		70 - 130	12/10/14 15:17	12/11/14 22:21	1
Toluene-d8 (Surr)	91		70 - 130	12/10/14 15:17	12/11/14 22:21	1
Dibromofluoromethane (Surr)	103		70 - 130	12/10/14 15:17	12/11/14 22:21	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		4.12		mg/Kg	☼	12/10/14 15:15	12/14/14 23:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	77		50 - 150	12/10/14 15:15	12/14/14 23:39	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	94		0.10		%			12/10/14 15:42	1

Client Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68273-1
SDG: 31160

Client Sample ID: S-29-B30

Lab Sample ID: 490-68273-4

Date Collected: 12/03/14 09:55

Matrix: Soil

Date Received: 12/09/14 08:30

Percent Solids: 91.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00154		mg/Kg	☼	12/10/14 15:17	12/11/14 22:50	1
Toluene	0.00230		0.00154		mg/Kg	☼	12/10/14 15:17	12/11/14 22:50	1
Ethylbenzene	0.00239		0.00154		mg/Kg	☼	12/10/14 15:17	12/11/14 22:50	1
Xylenes, Total	0.00429		0.00230		mg/Kg	☼	12/10/14 15:17	12/11/14 22:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	12/10/14 15:17	12/11/14 22:50	1
1,2-Dichloroethane-d4 (Surr)	110		70 - 130	12/10/14 15:17	12/11/14 22:50	1
Toluene-d8 (Surr)	92		70 - 130	12/10/14 15:17	12/11/14 22:50	1
Dibromofluoromethane (Surr)	103		70 - 130	12/10/14 15:17	12/11/14 22:50	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		6.38		mg/Kg	☼	12/10/14 15:15	12/15/14 02:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	76		50 - 150	12/10/14 15:15	12/15/14 02:24	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3.15		1.08		mg/Kg	☼	12/19/14 13:04	12/22/14 22:14	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10		%			12/10/14 15:42	1

Client Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68273-1
SDG: 31160

Client Sample ID: S-34-B30

Lab Sample ID: 490-68273-5

Date Collected: 12/03/14 10:05

Matrix: Soil

Date Received: 12/09/14 08:30

Percent Solids: 91.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00174		mg/Kg	☼	12/10/14 15:17	12/11/14 23:20	1
Toluene	0.00261		0.00174		mg/Kg	☼	12/10/14 15:17	12/11/14 23:20	1
Ethylbenzene	0.00322		0.00174		mg/Kg	☼	12/10/14 15:17	12/11/14 23:20	1
Xylenes, Total	0.00953		0.00261		mg/Kg	☼	12/10/14 15:17	12/11/14 23:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130	12/10/14 15:17	12/11/14 23:20	1
1,2-Dichloroethane-d4 (Surr)	104		70 - 130	12/10/14 15:17	12/11/14 23:20	1
Toluene-d8 (Surr)	92		70 - 130	12/10/14 15:17	12/11/14 23:20	1
Dibromofluoromethane (Surr)	97		70 - 130	12/10/14 15:17	12/11/14 23:20	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		5.53		mg/Kg	☼	12/10/14 15:15	12/15/14 01:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	78		50 - 150	12/10/14 15:15	12/15/14 01:02	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10		%			12/10/14 15:42	1

Client Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68273-1
SDG: 31160

Client Sample ID: S-39-B30

Lab Sample ID: 490-68273-6

Date Collected: 12/03/14 10:25

Matrix: Soil

Date Received: 12/09/14 08:30

Percent Solids: 88.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00173		mg/Kg	☼	12/10/14 15:17	12/11/14 23:50	1
Toluene	0.00261		0.00173		mg/Kg	☼	12/10/14 15:17	12/11/14 23:50	1
Ethylbenzene	ND		0.00173		mg/Kg	☼	12/10/14 15:17	12/11/14 23:50	1
Xylenes, Total	ND		0.00259		mg/Kg	☼	12/10/14 15:17	12/11/14 23:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130	12/10/14 15:17	12/11/14 23:50	1
1,2-Dichloroethane-d4 (Surr)	110		70 - 130	12/10/14 15:17	12/11/14 23:50	1
Toluene-d8 (Surr)	93		70 - 130	12/10/14 15:17	12/11/14 23:50	1
Dibromofluoromethane (Surr)	107		70 - 130	12/10/14 15:17	12/11/14 23:50	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		4.88		mg/Kg	☼	12/10/14 15:16	12/15/14 00:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	78		50 - 150	12/10/14 15:16	12/15/14 00:21	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			12/10/14 15:42	1

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68273-1
SDG: 31160

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-213180/11

Matrix: Solid

Analysis Batch: 213180

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200		mg/Kg			12/11/14 16:20	1
Toluene	ND		0.00200		mg/Kg			12/11/14 16:20	1
Ethylbenzene	ND		0.00200		mg/Kg			12/11/14 16:20	1
Xylenes, Total	ND		0.00300		mg/Kg			12/11/14 16:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130		12/11/14 16:20	1
1,2-Dichloroethane-d4 (Surr)	111		70 - 130		12/11/14 16:20	1
Toluene-d8 (Surr)	91		70 - 130		12/11/14 16:20	1
Dibromofluoromethane (Surr)	103		70 - 130		12/11/14 16:20	1

Lab Sample ID: LCS 490-213180/7

Matrix: Solid

Analysis Batch: 213180

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.04863		mg/Kg		97	75 - 127
Toluene	0.0500	0.04796		mg/Kg		96	80 - 132
Ethylbenzene	0.0500	0.05191		mg/Kg		104	80 - 134
Xylenes, Total	0.100	0.09781		mg/Kg		98	80 - 137

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		70 - 130
1,2-Dichloroethane-d4 (Surr)	105		70 - 130
Toluene-d8 (Surr)	88		70 - 130
Dibromofluoromethane (Surr)	99		70 - 130

Lab Sample ID: LCSD 490-213180/8

Matrix: Solid

Analysis Batch: 213180

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.0500	0.04982		mg/Kg		100	75 - 127	2	50
Toluene	0.0500	0.04868		mg/Kg		97	80 - 132	1	50
Ethylbenzene	0.0500	0.05309		mg/Kg		106	80 - 134	2	50
Xylenes, Total	0.100	0.1017		mg/Kg		102	80 - 137	4	50

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	91		70 - 130
1,2-Dichloroethane-d4 (Surr)	112		70 - 130
Toluene-d8 (Surr)	88		70 - 130
Dibromofluoromethane (Surr)	100		70 - 130

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68273-1
SDG: 31160

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-68266-D-7-D MS

Matrix: Solid

Analysis Batch: 213180

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 213198

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier	Added	Result	Qualifier				
Benzene	ND		0.0567	0.04398		mg/Kg	☼	78	31 - 143
Toluene	ND		0.0567	0.04258		mg/Kg	☼	75	30 - 155
Ethylbenzene	ND		0.0567	0.04176		mg/Kg	☼	74	23 - 161
Xylenes, Total	ND		0.113	0.07745		mg/Kg	☼	68	25 - 162

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	88		70 - 130
1,2-Dichloroethane-d4 (Surr)	108		70 - 130
Toluene-d8 (Surr)	90		70 - 130
Dibromofluoromethane (Surr)	101		70 - 130

Lab Sample ID: 490-68266-D-7-E MSD

Matrix: Solid

Analysis Batch: 213180

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 213198

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec. Limits	RPD	
	Result	Qualifier	Added	Result	Qualifier					RPD	Limit
Benzene	ND		0.0559	0.04191		mg/Kg	☼	75	31 - 143	5	50
Toluene	ND		0.0559	0.04050		mg/Kg	☼	72	30 - 155	5	50
Ethylbenzene	ND		0.0559	0.04124		mg/Kg	☼	74	23 - 161	1	50
Xylenes, Total	ND		0.112	0.07647		mg/Kg	☼	68	25 - 162	1	50

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	89		70 - 130
1,2-Dichloroethane-d4 (Surr)	108		70 - 130
Toluene-d8 (Surr)	90		70 - 130
Dibromofluoromethane (Surr)	102		70 - 130

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: 490-68229-B-1-B MS

Matrix: Solid

Analysis Batch: 214036

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 212935

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier	Added	Result	Qualifier				
C6-C12	ND		488	404.1		mg/Kg	☼	83	69 - 130

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
a,a,a-Trifluorotoluene	85		50 - 150

Lab Sample ID: 490-68229-B-1-C MSD

Matrix: Solid

Analysis Batch: 214036

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 212935

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec. Limits	RPD	
	Result	Qualifier	Added	Result	Qualifier					RPD	Limit
C6-C12	ND		488	470.0	F2	mg/Kg	☼	96	69 - 130	15	10

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68273-1
SDG: 31160

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: 490-68229-B-1-C MSD
Matrix: Solid
Analysis Batch: 214036

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 212935

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene	89		50 - 150

Lab Sample ID: 490-68229-B-1-A DU
Matrix: Solid
Analysis Batch: 214036

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 212935

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
C6-C12	ND		ND		mg/Kg	☼	NC	10

Surrogate	DU %Recovery	DU Qualifier	Limits
a,a,a-Trifluorotoluene	77		50 - 150

Lab Sample ID: MB 490-214036/7
Matrix: Solid
Analysis Batch: 214036

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		5.00		mg/Kg			12/14/14 12:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	76		50 - 150		12/14/14 12:37	1

Lab Sample ID: LCS 490-214036/5
Matrix: Solid
Analysis Batch: 214036

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C6-C12	10.0	11.15		mg/Kg		111	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	92		50 - 150

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 490-215479/1-A
Matrix: Solid
Analysis Batch: 216293

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 215479

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.00		mg/Kg		12/19/14 13:04	12/22/14 20:51	1

Lab Sample ID: LCS 490-215479/2-A
Matrix: Solid
Analysis Batch: 216293

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 215479

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	20.2	20.75		mg/Kg		103	80 - 120

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68273-1
SDG: 31160

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 490-68412-A-57-D MS
Matrix: Solid
Analysis Batch: 216293

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 215479

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	14.1		23.2	29.08	F1	mg/Kg	✱	65	75 - 125

Lab Sample ID: 490-68412-A-57-E MSD
Matrix: Solid
Analysis Batch: 216293

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 215479

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	14.1		23.4	31.23	F1	mg/Kg	✱	73	75 - 125	7	20

Method: Moisture - Percent Moisture

Lab Sample ID: 490-68273-1 DU
Matrix: Soil
Analysis Batch: 213027

Client Sample ID: S-11-B30
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	89		88		%		0.9	20

QC Association Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68273-1
SDG: 31160

GC/MS VOA

Prep Batch: 213016

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68273-1	S-11-B30	Total/NA	Soil	5035	
490-68273-2	S-15-B30	Total/NA	Soil	5035	
490-68273-3	S-21-B30	Total/NA	Soil	5035	
490-68273-4	S-29-B30	Total/NA	Soil	5035	
490-68273-5	S-34-B30	Total/NA	Soil	5035	
490-68273-6	S-39-B30	Total/NA	Soil	5035	

Analysis Batch: 213180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68266-D-7-D MS	Matrix Spike	Total/NA	Solid	8260B	213198
490-68266-D-7-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	213198
490-68273-1	S-11-B30	Total/NA	Soil	8260B	213016
490-68273-2	S-15-B30	Total/NA	Soil	8260B	213016
490-68273-3	S-21-B30	Total/NA	Soil	8260B	213016
490-68273-4	S-29-B30	Total/NA	Soil	8260B	213016
490-68273-5	S-34-B30	Total/NA	Soil	8260B	213016
490-68273-6	S-39-B30	Total/NA	Soil	8260B	213016
LCS 490-213180/7	Lab Control Sample	Total/NA	Solid	8260B	
LCS 490-213180/8	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-213180/11	Method Blank	Total/NA	Solid	8260B	

Prep Batch: 213198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68266-D-7-D MS	Matrix Spike	Total/NA	Solid	5030B	
490-68266-D-7-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5030B	

GC VOA

Prep Batch: 212935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68229-B-1-A DU	Duplicate	Total/NA	Solid	5035	
490-68229-B-1-B MS	Matrix Spike	Total/NA	Solid	5035	
490-68229-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 213015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68273-1	S-11-B30	Total/NA	Soil	5035	
490-68273-2	S-15-B30	Total/NA	Soil	5035	
490-68273-3	S-21-B30	Total/NA	Soil	5035	
490-68273-4	S-29-B30	Total/NA	Soil	5035	
490-68273-5	S-34-B30	Total/NA	Soil	5035	
490-68273-6	S-39-B30	Total/NA	Soil	5035	

Analysis Batch: 214036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68229-B-1-A DU	Duplicate	Total/NA	Solid	NWTPH-Gx	212935
490-68229-B-1-B MS	Matrix Spike	Total/NA	Solid	NWTPH-Gx	212935
490-68229-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	NWTPH-Gx	212935
490-68273-1	S-11-B30	Total/NA	Soil	NWTPH-Gx	213015
490-68273-2	S-15-B30	Total/NA	Soil	NWTPH-Gx	213015

TestAmerica Nashville

QC Association Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68273-1
SDG: 31160

GC VOA (Continued)

Analysis Batch: 214036 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68273-3	S-21-B30	Total/NA	Soil	NWTPH-Gx	213015
490-68273-4	S-29-B30	Total/NA	Soil	NWTPH-Gx	213015
490-68273-5	S-34-B30	Total/NA	Soil	NWTPH-Gx	213015
490-68273-6	S-39-B30	Total/NA	Soil	NWTPH-Gx	213015
LCS 490-214036/5	Lab Control Sample	Total/NA	Solid	NWTPH-Gx	
MB 490-214036/7	Method Blank	Total/NA	Solid	NWTPH-Gx	

Metals

Prep Batch: 215479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68273-4	S-29-B30	Total/NA	Soil	3051A	
490-68412-A-57-D MS	Matrix Spike	Total/NA	Solid	3051A	
490-68412-A-57-E MSD	Matrix Spike Duplicate	Total/NA	Solid	3051A	
LCS 490-215479/2-A	Lab Control Sample	Total/NA	Solid	3051A	
MB 490-215479/1-A	Method Blank	Total/NA	Solid	3051A	

Analysis Batch: 216293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68273-4	S-29-B30	Total/NA	Soil	6010C	215479
490-68412-A-57-D MS	Matrix Spike	Total/NA	Solid	6010C	215479
490-68412-A-57-E MSD	Matrix Spike Duplicate	Total/NA	Solid	6010C	215479
LCS 490-215479/2-A	Lab Control Sample	Total/NA	Solid	6010C	215479
MB 490-215479/1-A	Method Blank	Total/NA	Solid	6010C	215479

General Chemistry

Analysis Batch: 213027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68273-1	S-11-B30	Total/NA	Soil	Moisture	
490-68273-1 DU	S-11-B30	Total/NA	Soil	Moisture	
490-68273-1 MS	S-11-B30	Total/NA	Soil	Moisture	
490-68273-1 MSD	S-11-B30	Total/NA	Soil	Moisture	
490-68273-2	S-15-B30	Total/NA	Soil	Moisture	
490-68273-3	S-21-B30	Total/NA	Soil	Moisture	
490-68273-4	S-29-B30	Total/NA	Soil	Moisture	
490-68273-5	S-34-B30	Total/NA	Soil	Moisture	
490-68273-6	S-39-B30	Total/NA	Soil	Moisture	

Lab Chronicle

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68273-1
SDG: 31160

Client Sample ID: S-11-B30

Date Collected: 12/03/14 09:00

Date Received: 12/09/14 08:30

Lab Sample ID: 490-68273-1

Matrix: Soil
Percent Solids: 89.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.49 g	5.0 mL	213016	12/10/14 15:17	JLP	TAL NSH
Total/NA	Analysis	8260B		1	6.49 g	5.0 mL	213180	12/11/14 21:21	KKK	TAL NSH
Total/NA	Prep	5035			6.9 g	5.0 mL	213015	12/10/14 15:15	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	6.9 g	5.0 mL	214036	12/14/14 22:58	AMC	TAL NSH
Total/NA	Analysis	Moisture		1			213027	12/10/14 15:42	RRS	TAL NSH

Client Sample ID: S-15-B30

Date Collected: 12/03/14 09:10

Date Received: 12/09/14 08:30

Lab Sample ID: 490-68273-2

Matrix: Soil
Percent Solids: 92.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.89 g	5.0 mL	213016	12/10/14 15:17	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5.89 g	5.0 mL	213180	12/11/14 21:51	KKK	TAL NSH
Total/NA	Prep	5035			5.99 g	5.0 mL	213015	12/10/14 15:15	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5.99 g	5.0 mL	214036	12/15/14 01:43	AMC	TAL NSH
Total/NA	Analysis	Moisture		1			213027	12/10/14 15:42	RRS	TAL NSH

Client Sample ID: S-21-B30

Date Collected: 12/03/14 09:25

Date Received: 12/09/14 08:30

Lab Sample ID: 490-68273-3

Matrix: Soil
Percent Solids: 94.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.09 g	5.0 mL	213016	12/10/14 15:17	JLP	TAL NSH
Total/NA	Analysis	8260B		1	7.09 g	5.0 mL	213180	12/11/14 22:21	KKK	TAL NSH
Total/NA	Prep	5035			7 g	5.0 mL	213015	12/10/14 15:15	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	7 g	5.0 mL	214036	12/14/14 23:39	AMC	TAL NSH
Total/NA	Analysis	Moisture		1			213027	12/10/14 15:42	RRS	TAL NSH

Client Sample ID: S-29-B30

Date Collected: 12/03/14 09:55

Date Received: 12/09/14 08:30

Lab Sample ID: 490-68273-4

Matrix: Soil
Percent Solids: 91.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.1 g	5.0 mL	213016	12/10/14 15:17	JLP	TAL NSH
Total/NA	Analysis	8260B		1	7.1 g	5.0 mL	213180	12/11/14 22:50	KKK	TAL NSH
Total/NA	Prep	5035			4.6 g	5.0 mL	213015	12/10/14 15:15	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	4.6 g	5.0 mL	214036	12/15/14 02:24	AMC	TAL NSH
Total/NA	Prep	3051A			0.505 g	100 mL	215479	12/19/14 13:04	NJB	TAL NSH
Total/NA	Analysis	6010C		1	0.505 g	100 mL	216293	12/22/14 22:14	HJM	TAL NSH
Total/NA	Analysis	Moisture		1			213027	12/10/14 15:42	RRS	TAL NSH

Lab Chronicle

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68273-1
SDG: 31160

Client Sample ID: S-34-B30

Lab Sample ID: 490-68273-5

Date Collected: 12/03/14 10:05

Matrix: Soil

Date Received: 12/09/14 08:30

Percent Solids: 91.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.28 g	5.0 mL	213016	12/10/14 15:17	JLP	TAL NSH
Total/NA	Analysis	8260B		1	6.28 g	5.0 mL	213180	12/11/14 23:20	KKK	TAL NSH
Total/NA	Prep	5035			5.37 g	5.0 mL	213015	12/10/14 15:15	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5.37 g	5.0 mL	214036	12/15/14 01:02	AMC	TAL NSH
Total/NA	Analysis	Moisture		1			213027	12/10/14 15:42	RRS	TAL NSH

Client Sample ID: S-39-B30

Lab Sample ID: 490-68273-6

Date Collected: 12/03/14 10:25

Matrix: Soil

Date Received: 12/09/14 08:30

Percent Solids: 88.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.52 g	5.0 mL	213016	12/10/14 15:17	JLP	TAL NSH
Total/NA	Analysis	8260B		1	6.52 g	5.0 mL	213180	12/11/14 23:50	KKK	TAL NSH
Total/NA	Prep	5035			6.63 g	5.0 mL	213015	12/10/14 15:16	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	6.63 g	5.0 mL	214036	12/15/14 00:21	AMC	TAL NSH
Total/NA	Analysis	Moisture		1			213027	12/10/14 15:42	RRS	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68273-1
SDG: 31160

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	TAL NSH
6010C	Metals (ICP)	SW846	TAL NSH
Moisture	Percent Moisture	EPA	TAL NSH

Protocol References:

EPA = US Environmental Protection Agency

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177



Certification Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68273-1
SDG: 31160

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Oregon	NELAP	10	TN200001	04-29-15

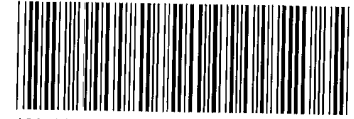
The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte	
Moisture		Soil	Percent Solids	
Washington	State Program	10	C789	07-19-15

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Soil	Percent Solids





Cooler Received/Opened On 12/9/2014 @ 8:30

1. Tracking # 4081 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 17610176

2. Temperature of rep. sample or temp blank when opened: 2.5 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO... NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 2 Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) AJH

7. Were custody seals on containers: YES NO and Intact YES...NO... NA

Were these signed and dated correctly? YES...NO... NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO... NA 20%

14. Was there a Trip Blank in this cooler? YES... NO...NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (initial) A

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO.. NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO.. NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) A

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) A

I certify that I attached a label with the unique LIMS number to each container (initial) A

21. Were there Non-Conformance issues at login? YES... NO Was a NCM generated? YES.. NO...# _____

COOLER RECEIPT FORM

Cooler Received/Opened On 12/9/2014@ 0830

1. Tracking # 4060 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 12080142

2. Temperature of rep. sample or temp blank when opened: 3.4 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: one front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) DA

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES..NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES..NO...NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (initial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) DA

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) DA

I certify that I attached a label with the unique LIMS number to each container (initial) DA

21. Were there Non-Conformance issues at login? YES..NO Was a NCM generated? YES..NO...# _____

COOLER RECEIPT FORM

CAN 68273

Cooler Received/Opened On 12/9/2014 @ 0830

1. Tracking # 4092 (last 4 digits, FedEx)

Courier: Fed Ex IR Gun ID 17960358

2. Temperature of rep. sample or temp blank when opened: 2.7 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) EA

7. Were custody seals on containers: YES NO and intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 1

I certify that I unloaded the cooler and answered questions 7-14 (initial) EA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) EA

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) EA

I certify that I attached a label with the unique LIMS number to each container (initial) EA

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...# 1

COOLER RECEIPT FORM

CAN 68273

Cooler Received/Opened On 12/9/2014 @ 8:30

1. Tracking # 4070 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 17610176

2. Temperature of rep. sample or temp blank when opened: 2.0 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) AON

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA soil

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (initial) A

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) A

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) Jh

I certify that I attached a label with the unique LIMS number to each container (initial) Jh

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...# _____

Consultant Name: Cardno ERI Account #: 10313 PO#: CTC
 Consultant Address: 801 Second Avenue Suite 700 Invoice To: Michael Miller
 Consultant City/State/Zip: Seattle, WA 98104 Report To: Michael Miller
 ExxonMobil Project Mgr: Aaron Thom ct #/Activity #: 31160
 Consultant Project Mgr: Michael Miller ExxonMobil Site #: 99BLV
 Consultant Telephone Number: 206 269 0104 Fax No.: (206) 269-0098 Site Address: 1500 145th Place Southeast
 Sampler Name (Print): Robert Thompson/Nicholas Gerkin Site City, State, Zip: Bellevue, Washington 98007
 Sampler Signature: [Signature] Oversight Agency: Washington Department of Ecology

Sample ID	Field Point Name/ Location ID	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Methanol	Sodium Bisulfate	HCl	NaOH	H ₂ SO ₄ Plastic	H ₂ SO ₄ Glass	HNO ₃	Ice	Other	None	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Air	Other (specify):	Analyze For:					Due Date of Report	
																									BTEX by 8260B	TPHg by NWTPH-Gx	TPHd by NWTPH-Dx	TPHm by NWTPH-D	Total Pb by 6010B		RUSH TAT (Pre-Schedule)
S-11-B30	B30	12/03/14	09:00	5	X			2	2								1								X	X					10
S-15-B30	B30	12/03/14	09:10	5	X			2	2								1								X	X					10
S-21-B30	B30	12/03/14	09:25	5	X			2	2								1								X	X					10
S-29-B30	B30	12/03/14	09:55	5	X			2	2								1								X	X					10
S-34-B30	B30	12/03/14	10:05	5	X			2	2								1								X	X					10
S-39-B30	B30	12/03/14	10:25	5	X			2	2								1								X	X					10

Comments/Special Instructions:
 Please include silica gel cleanup Potential VOCs present other than BTEX from a new release.

Relinquished by: Nicholas A. Gerkin Date: 12/08/14 Time: 17:00 Received by: [Signature] Date: 12/9/14 Time: 0830

Relinquished by: _____ Date: _____ Time: _____ Received by (Lab personnel): _____ Date: _____ Time: _____

Laboratory Comments:
 Temperature Upon Receipt: 25, 34, 27, 20
 Sample Containers Inta Y N
 VOA Vials Free of Heat Y N
 QC Deliverables (please circle one)
 Level 2
 Level 3
 Level 4

Site Specific - if yes, please attach pre-schedule w/ TestAmerica Project Manager or attach specific instructions



Login Sample Receipt Checklist

Client: Cardno ERI

Job Number: 490-68273-1

SDG Number: 31160

Login Number: 68273

List Number: 1

Creator: Huckaba, Jimmy

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

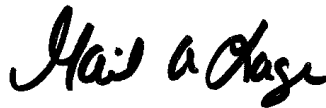
ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-68226-1
TestAmerica Sample Delivery Group: 31160
Client Project/Site: 99BLV
Revision: 1

For:
Cardno ERI
801 Second Ave
Suite 700
Seattle, Washington 98104

Attn: Michael Miller



Authorized for release by:
4/1/2015 12:47:12 PM
Gail Lage, Senior Project Manager
(615)301-5741
gail.lage@testamericainc.com

Designee for
Leah Klingensmith, Senior Project Manager
(615)301-5038
leah.klingensmith@testamericainc.com

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Results relate only to the items tested and the sample(s) as received by the laboratory.



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Sample Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68226-1
SDG: 31160

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-68226-3	S-30-B33	Soil	12/05/14 10:30	12/09/14 08:30
490-68226-6	S-45-B33	Soil	12/05/14 11:10	12/09/14 08:30

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Case Narrative

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68226-1
SDG: 31160

Job ID: 490-68226-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative 490-68226-1

Revised Report

This report was revised to add EDB, EDC, and MTBE to sample S-30-B33 at the client's request. This replaces the previous final report.

Receipt

The samples were received on 12/9/2014 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.0° C and 2.7° C.

GC/MS VOA

Method(s) 8260B: Surrogate recovery for the following sample(s) was outside control limits: S-30-B33 (490-68226-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for batch 214082 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected.

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with batch 214084

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA

Method(s) NWTPH-Gx: The matrix spike / matrix spike duplicate (MS/MSD) precision for batch 214036 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated duplicate (DU) for NWTPH method sample precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68226-1
SDG: 31160

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
X	Surrogate is outside control limits

GC VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68226-1
SDG: 31160

Client Sample ID: S-30-B33

Lab Sample ID: 490-68226-3

Date Collected: 12/05/14 10:30

Matrix: Soil

Date Received: 12/09/14 08:30

Percent Solids: 92.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0124		0.00255		mg/Kg	☼	12/10/14 09:26	12/12/14 08:29	1
Toluene	13.9		0.135		mg/Kg	☼	12/10/14 09:10	12/15/14 17:21	1
Ethylbenzene	11.1		0.135		mg/Kg	☼	12/10/14 09:10	12/15/14 17:21	1
Xylenes, Total	90.1		4.06		mg/Kg	☼	12/10/14 09:10	12/15/14 17:51	20
1,2-Dichloroethane	0.00298		0.00255		mg/Kg	☼	12/10/14 09:26	12/12/14 08:29	1
Methyl tert-butyl ether	ND		0.00255		mg/Kg	☼	12/10/14 09:26	12/12/14 08:29	1
1,2-Dibromoethane (EDB)	0.00291		0.00255		mg/Kg	☼	12/10/14 09:26	12/12/14 08:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130	12/10/14 09:26	12/12/14 08:29	1
4-Bromofluorobenzene (Surr)	97		70 - 130	12/10/14 09:10	12/15/14 17:21	1
4-Bromofluorobenzene (Surr)	96		70 - 130	12/10/14 09:10	12/15/14 17:51	20
1,2-Dichloroethane-d4 (Surr)	196	X	70 - 130	12/10/14 09:26	12/12/14 08:29	1
1,2-Dichloroethane-d4 (Surr)	95		70 - 130	12/10/14 09:10	12/15/14 17:21	1
1,2-Dichloroethane-d4 (Surr)	93		70 - 130	12/10/14 09:10	12/15/14 17:51	20
Toluene-d8 (Surr)	102		70 - 130	12/10/14 09:26	12/12/14 08:29	1
Toluene-d8 (Surr)	88		70 - 130	12/10/14 09:10	12/15/14 17:21	1
Toluene-d8 (Surr)	90		70 - 130	12/10/14 09:10	12/15/14 17:51	20
Dibromofluoromethane (Surr)	68	X	70 - 130	12/10/14 09:26	12/12/14 08:29	1
Dibromofluoromethane (Surr)	83		70 - 130	12/10/14 09:10	12/15/14 17:21	1
Dibromofluoromethane (Surr)	87		70 - 130	12/10/14 09:10	12/15/14 17:51	20

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	576		5.55		mg/Kg	☼	12/10/14 09:10	12/14/14 21:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	68		50 - 150	12/10/14 09:10	12/14/14 21:35	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	2.56		1.04		mg/Kg	☼	12/19/14 13:04	12/22/14 21:58	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10		%	-		12/10/14 09:34	1

Client Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68226-1
SDG: 31160

Client Sample ID: S-45-B33

Lab Sample ID: 490-68226-6

Date Collected: 12/05/14 11:10

Matrix: Soil

Date Received: 12/09/14 08:30

Percent Solids: 91.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00185		mg/Kg	☼	12/10/14 09:26	12/15/14 19:17	1
Toluene	0.00665		0.00185		mg/Kg	☼	12/10/14 09:26	12/15/14 19:17	1
Ethylbenzene	ND		0.00185		mg/Kg	☼	12/10/14 09:26	12/15/14 19:17	1
Xylenes, Total	0.00967		0.00277		mg/Kg	☼	12/10/14 09:26	12/15/14 19:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	12/10/14 09:26	12/12/14 09:00	1
4-Bromofluorobenzene (Surr)	111		70 - 130	12/10/14 09:26	12/15/14 19:17	1
1,2-Dichloroethane-d4 (Surr)	99		70 - 130	12/10/14 09:26	12/12/14 09:00	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 130	12/10/14 09:26	12/15/14 19:17	1
Toluene-d8 (Surr)	98		70 - 130	12/10/14 09:26	12/12/14 09:00	1
Toluene-d8 (Surr)	98		70 - 130	12/10/14 09:26	12/15/14 19:17	1
Dibromofluoromethane (Surr)	98		70 - 130	12/10/14 09:26	12/12/14 09:00	1
Dibromofluoromethane (Surr)	96		70 - 130	12/10/14 09:26	12/15/14 19:17	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		6.00		mg/Kg	☼	12/10/14 09:10	12/14/14 22:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	75		50 - 150	12/10/14 09:10	12/14/14 22:17	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10		%			12/10/14 09:34	1

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68226-1
SDG: 31160

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: 490-68088-B-16-E MS

Matrix: Solid

Analysis Batch: 214082

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 212573

Analyte	Sample	Sample Qualifier	Spike Added	MS	MS Qualifier	Unit	D	%Rec	%Rec. Limits
	Result			Result					
Benzene	0.00400		0.0949	0.08523		mg/Kg		86	31 - 143
Toluene	ND		0.0949	0.08533		mg/Kg		88	30 - 155
Ethylbenzene	ND		0.0949	0.08591		mg/Kg		90	23 - 161
Xylenes, Total	0.00784		0.190	0.1578		mg/Kg		79	25 - 162

Surrogate	MS	MS Qualifier	Limits
	%Recovery		
4-Bromofluorobenzene (Surr)	113		70 - 130
1,2-Dichloroethane-d4 (Surr)	102		70 - 130
Toluene-d8 (Surr)	99		70 - 130
Dibromofluoromethane (Surr)	96		70 - 130

Lab Sample ID: 490-68088-B-16-F MSD

Matrix: Solid

Analysis Batch: 214082

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 212573

Analyte	Sample	Sample Qualifier	Spike Added	MSD	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
	Result			Result						RPD	
Benzene	0.00400		0.0463	0.06188		mg/Kg		125	31 - 143	32	50
Toluene	ND		0.0463	0.05349		mg/Kg		111	30 - 155	46	50
Ethylbenzene	ND		0.0463	0.04427	F2	mg/Kg		94	23 - 161	64	50
Xylenes, Total	0.00784		0.0926	0.07775	F2	mg/Kg		76	25 - 162	68	50

Surrogate	MSD	MSD Qualifier	Limits
	%Recovery		
4-Bromofluorobenzene (Surr)	113		70 - 130
1,2-Dichloroethane-d4 (Surr)	101		70 - 130
Toluene-d8 (Surr)	103		70 - 130
Dibromofluoromethane (Surr)	96		70 - 130

Lab Sample ID: 490-68229-E-3-A MS

Matrix: Solid

Analysis Batch: 213381

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 212929

Analyte	Sample	Sample Qualifier	Spike Added	MS	MS Qualifier	Unit	D	%Rec	%Rec. Limits
	Result			Result					
Benzene	ND		0.0496	0.04953		mg/Kg	☼	97	31 - 143
Toluene	0.0181		0.0496	0.06353		mg/Kg	☼	92	30 - 155
Ethylbenzene	0.00390		0.0496	0.05880		mg/Kg	☼	111	23 - 161
Xylenes, Total	0.0322		0.0992	0.1209		mg/Kg	☼	89	25 - 162
1,2-Dichloroethane	ND		0.0496	0.04525		mg/Kg	☼	91	28 - 138
Methyl tert-butyl ether	ND		0.0496	0.04620		mg/Kg	☼	93	28 - 141
1,2-Dibromoethane (EDB)	ND		0.0496	0.04529		mg/Kg	☼	91	18 - 156

Surrogate	MS	MS Qualifier	Limits
	%Recovery		
4-Bromofluorobenzene (Surr)	104		70 - 130
1,2-Dichloroethane-d4 (Surr)	95		70 - 130
Toluene-d8 (Surr)	102		70 - 130
Dibromofluoromethane (Surr)	95		70 - 130

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68226-1
SDG: 31160

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-68229-E-3-B MSD

Matrix: Solid

Analysis Batch: 213381

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 212929

Analyte	Sample	Sample Qualifier	Spike Added	MSD	MSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
	Result			Result					Limits	RPD		
Benzene	ND		0.0478	0.04873		mg/Kg	☼	99	31 - 143	2	50	
Toluene	0.0181		0.0478	0.05974		mg/Kg	☼	87	30 - 155	6	50	
Ethylbenzene	0.00390		0.0478	0.05581		mg/Kg	☼	109	23 - 161	5	50	
Xylenes, Total	0.0322		0.0957	0.1119		mg/Kg	☼	83	25 - 162	8	50	
1,2-Dichloroethane	ND		0.0478	0.04552		mg/Kg	☼	95	28 - 138	1	50	
Methyl tert-butyl ether	ND		0.0478	0.04607		mg/Kg	☼	96	28 - 141	0	50	
1,2-Dibromoethane (EDB)	ND		0.0478	0.04410		mg/Kg	☼	92	18 - 156	3	50	

Surrogate	MSD	MSD Qualifier	Limits
	%Recovery		
4-Bromofluorobenzene (Surr)	104		70 - 130
1,2-Dichloroethane-d4 (Surr)	98		70 - 130
Toluene-d8 (Surr)	99		70 - 130
Dibromofluoromethane (Surr)	97		70 - 130

Lab Sample ID: MB 490-213381/8

Matrix: Solid

Analysis Batch: 213381

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result								
Benzene	ND		0.00200		mg/Kg			12/12/14 02:44	1
Toluene	ND		0.00200		mg/Kg			12/12/14 02:44	1
Ethylbenzene	ND		0.00200		mg/Kg			12/12/14 02:44	1
Xylenes, Total	ND		0.00300		mg/Kg			12/12/14 02:44	1
1,2-Dichloroethane	ND		0.00200		mg/Kg			12/12/14 02:44	1
Methyl tert-butyl ether	ND		0.00200		mg/Kg			12/12/14 02:44	1
1,2-Dibromoethane (EDB)	ND		0.00200		mg/Kg			12/12/14 02:44	1

Surrogate	MB	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
	%Recovery					
4-Bromofluorobenzene (Surr)	105		70 - 130		12/12/14 02:44	1
1,2-Dichloroethane-d4 (Surr)	98		70 - 130		12/12/14 02:44	1
Toluene-d8 (Surr)	101		70 - 130		12/12/14 02:44	1
Dibromofluoromethane (Surr)	97		70 - 130		12/12/14 02:44	1

Lab Sample ID: LCS 490-213381/4

Matrix: Solid

Analysis Batch: 213381

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS Qualifier	Unit	D	%Rec	%Rec.	
		Result					Limits	RPD
Benzene	0.0500	0.04616		mg/Kg		92	75 - 127	
Toluene	0.0500	0.05121		mg/Kg		102	80 - 132	
Ethylbenzene	0.0500	0.05363		mg/Kg		107	80 - 134	
Xylenes, Total	0.100	0.1017		mg/Kg		102	80 - 137	
1,2-Dichloroethane	0.0500	0.04381		mg/Kg		88	65 - 134	
Methyl tert-butyl ether	0.0500	0.04708		mg/Kg		94	70 - 136	
1,2-Dibromoethane (EDB)	0.0500	0.04416		mg/Kg		88	80 - 135	

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68226-1
SDG: 31160

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-213381/4
Matrix: Solid
Analysis Batch: 213381

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	107		70 - 130
1,2-Dichloroethane-d4 (Surr)	98		70 - 130
Toluene-d8 (Surr)	99		70 - 130
Dibromofluoromethane (Surr)	95		70 - 130

Lab Sample ID: LCSD 490-213381/5
Matrix: Solid
Analysis Batch: 213381

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	
							RPD	Limit		
Benzene	0.0500	0.04746		mg/Kg		95	75 - 127	3	50	
Toluene	0.0500	0.05293		mg/Kg		106	80 - 132	3	50	
Ethylbenzene	0.0500	0.05590		mg/Kg		112	80 - 134	4	50	
Xylenes, Total	0.100	0.1067		mg/Kg		107	80 - 137	5	50	
1,2-Dichloroethane	0.0500	0.04652		mg/Kg		93	65 - 134	6	50	
Methyl tert-butyl ether	0.0500	0.04957		mg/Kg		99	70 - 136	5	50	
1,2-Dibromoethane (EDB)	0.0500	0.04687		mg/Kg		94	80 - 135	6	50	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	100		70 - 130
1,2-Dichloroethane-d4 (Surr)	96		70 - 130
Toluene-d8 (Surr)	99		70 - 130
Dibromofluoromethane (Surr)	95		70 - 130

Lab Sample ID: MB 490-214082/8
Matrix: Solid
Analysis Batch: 214082

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	ND		0.00200		mg/Kg		12/15/14 13:36	1	
Toluene	ND		0.00200		mg/Kg		12/15/14 13:36	1	
Ethylbenzene	ND		0.00200		mg/Kg		12/15/14 13:36	1	
Xylenes, Total	ND		0.00300		mg/Kg		12/15/14 13:36	1	

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	116		70 - 130	12/15/14 13:36	1	
1,2-Dichloroethane-d4 (Surr)	105		70 - 130	12/15/14 13:36	1	
Toluene-d8 (Surr)	100		70 - 130	12/15/14 13:36	1	
Dibromofluoromethane (Surr)	101		70 - 130	12/15/14 13:36	1	

Lab Sample ID: LCS 490-214082/4
Matrix: Solid
Analysis Batch: 214082

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
							RPD	Limit
Benzene	0.0500	0.04251		mg/Kg		85	75 - 127	
Toluene	0.0500	0.04218		mg/Kg		84	80 - 132	

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68226-1
SDG: 31160

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-214082/4

Matrix: Solid

Analysis Batch: 214082

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	0.0500	0.04441		mg/Kg		89	80 - 134
Xylenes, Total	0.100	0.08307		mg/Kg		83	80 - 137

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,2-Dichloroethane-d4 (Surr)	103		70 - 130
Toluene-d8 (Surr)	96		70 - 130
Dibromofluoromethane (Surr)	98		70 - 130

Lab Sample ID: MB 490-214084/6

Matrix: Solid

Analysis Batch: 214084

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100		mg/Kg			12/15/14 12:20	1
Toluene	ND		0.100		mg/Kg			12/15/14 12:20	1
Ethylbenzene	ND		0.100		mg/Kg			12/15/14 12:20	1
Xylenes, Total	ND		0.150		mg/Kg			12/15/14 12:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130		12/15/14 12:20	1
1,2-Dichloroethane-d4 (Surr)	97		70 - 130		12/15/14 12:20	1
Toluene-d8 (Surr)	92		70 - 130		12/15/14 12:20	1
Dibromofluoromethane (Surr)	98		70 - 130		12/15/14 12:20	1

Lab Sample ID: LCS 490-214084/3

Matrix: Solid

Analysis Batch: 214084

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	2.50	2.344		mg/Kg		94	75 - 127
Toluene	2.50	2.294		mg/Kg		92	80 - 132
Ethylbenzene	2.50	2.520		mg/Kg		101	80 - 134
Xylenes, Total	5.00	4.766		mg/Kg		95	80 - 137

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		70 - 130
1,2-Dichloroethane-d4 (Surr)	113		70 - 130
Toluene-d8 (Surr)	88		70 - 130
Dibromofluoromethane (Surr)	97		70 - 130

Lab Sample ID: LCSD 490-214084/4

Matrix: Solid

Analysis Batch: 214084

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	2.50	2.602		mg/Kg		104	75 - 127	10	50

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68226-1
SDG: 31160

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-214084/4
Matrix: Solid
Analysis Batch: 214084

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	
							RPD	Limit		
Toluene	2.50	2.555		mg/Kg		102	80 - 132	11	50	
Ethylbenzene	2.50	2.857		mg/Kg		114	80 - 134	13	50	
Xylenes, Total	5.00	5.432		mg/Kg		109	80 - 137	13	50	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	91		70 - 130
1,2-Dichloroethane-d4 (Surr)	108		70 - 130
Toluene-d8 (Surr)	86		70 - 130
Dibromofluoromethane (Surr)	98		70 - 130

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: 490-68229-B-1-B MS
Matrix: Solid
Analysis Batch: 214036

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 212935

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	
									RPD	Limit
C6-C12	ND		488	404.1		mg/Kg	☼	83	69 - 130	

Surrogate	MS		Limits
	%Recovery	Qualifier	
a,a,a-Trifluorotoluene	85		50 - 150

Lab Sample ID: 490-68229-B-1-C MSD
Matrix: Solid
Analysis Batch: 214036

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 212935

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	
									RPD	Limit
C6-C12	ND		488	470.0	F2	mg/Kg	☼	96	69 - 130	15

Surrogate	MSD		Limits
	%Recovery	Qualifier	
a,a,a-Trifluorotoluene	89		50 - 150

Lab Sample ID: 490-68229-B-1-A DU
Matrix: Solid
Analysis Batch: 214036

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 212935

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit	
								NC	Limit
C6-C12	ND		ND		mg/Kg	☼	NC	10	

Surrogate	DU		Limits
	%Recovery	Qualifier	
a,a,a-Trifluorotoluene	77		50 - 150

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68226-1
SDG: 31160

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: MB 490-214036/7
Matrix: Solid
Analysis Batch: 214036

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		5.00		mg/Kg			12/14/14 12:37	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	76		50 - 150					12/14/14 12:37	1

Lab Sample ID: LCS 490-214036/5
Matrix: Solid
Analysis Batch: 214036

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C6-C12	10.0	11.15		mg/Kg		111	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
a,a,a-Trifluorotoluene	92		50 - 150				

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 490-215479/1-A
Matrix: Solid
Analysis Batch: 216293

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 215479

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.00		mg/Kg		12/19/14 13:04	12/22/14 20:51	1

Lab Sample ID: LCS 490-215479/2-A
Matrix: Solid
Analysis Batch: 216293

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 215479

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	20.2	20.75		mg/Kg		103	80 - 120

Lab Sample ID: 490-68412-A-57-D MS
Matrix: Solid
Analysis Batch: 216293

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 215479

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	14.1		23.2	29.08	F1	mg/Kg	☼	65	75 - 125

Lab Sample ID: 490-68412-A-57-E MSD
Matrix: Solid
Analysis Batch: 216293

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 215479

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	14.1		23.4	31.23	F1	mg/Kg	☼	73	75 - 125	7	20

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68226-1
SDG: 31160

Method: Moisture - Percent Moisture

Lab Sample ID: 490-68227-E-2 DU
Matrix: Solid
Analysis Batch: 212781

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	93		92		%		0.1	20

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

QC Association Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68226-1
SDG: 31160

GC/MS VOA

Prep Batch: 212573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68088-B-16-E MS	Matrix Spike	Total/NA	Solid	5030B	
490-68088-B-16-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5030B	

Prep Batch: 212758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68226-3	S-30-B33	Total/NA	Soil	5035	

Prep Batch: 212776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68226-3	S-30-B33	Total/NA	Soil	5035	
490-68226-6	S-45-B33	Total/NA	Soil	5035	
490-68226-6	S-45-B33	Total/NA	Soil	5035	

Prep Batch: 212929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68229-E-3-A MS	Matrix Spike	Total/NA	Solid	5035	
490-68229-E-3-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 213381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68226-3	S-30-B33	Total/NA	Soil	8260B	212776
490-68226-6	S-45-B33	Total/NA	Soil	8260B	212776
490-68229-E-3-A MS	Matrix Spike	Total/NA	Solid	8260B	212929
490-68229-E-3-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	212929
LCS 490-213381/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-213381/5	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-213381/8	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 214082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68088-B-16-E MS	Matrix Spike	Total/NA	Solid	8260B	212573
490-68088-B-16-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	212573
490-68226-6	S-45-B33	Total/NA	Soil	8260B	212776
LCS 490-214082/4	Lab Control Sample	Total/NA	Solid	8260B	
MB 490-214082/8	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 214084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68226-3	S-30-B33	Total/NA	Soil	8260B	212758
490-68226-3	S-30-B33	Total/NA	Soil	8260B	212758
LCS 490-214084/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-214084/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-214084/6	Method Blank	Total/NA	Solid	8260B	

GC VOA

Prep Batch: 212758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68226-3	S-30-B33	Total/NA	Soil	5035	
490-68226-6	S-45-B33	Total/NA	Soil	5035	

TestAmerica Nashville

QC Association Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68226-1
SDG: 31160

GC VOA (Continued)

Prep Batch: 212935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68229-B-1-A DU	Duplicate	Total/NA	Solid	5035	
490-68229-B-1-B MS	Matrix Spike	Total/NA	Solid	5035	
490-68229-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 214036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68226-3	S-30-B33	Total/NA	Soil	NWTPH-Gx	212758
490-68226-6	S-45-B33	Total/NA	Soil	NWTPH-Gx	212758
490-68229-B-1-A DU	Duplicate	Total/NA	Solid	NWTPH-Gx	212935
490-68229-B-1-B MS	Matrix Spike	Total/NA	Solid	NWTPH-Gx	212935
490-68229-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	NWTPH-Gx	212935
LCS 490-214036/5	Lab Control Sample	Total/NA	Solid	NWTPH-Gx	
MB 490-214036/7	Method Blank	Total/NA	Solid	NWTPH-Gx	

Metals

Prep Batch: 215479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68226-3	S-30-B33	Total/NA	Soil	3051A	
490-68412-A-57-D MS	Matrix Spike	Total/NA	Solid	3051A	
490-68412-A-57-E MSD	Matrix Spike Duplicate	Total/NA	Solid	3051A	
LCS 490-215479/2-A	Lab Control Sample	Total/NA	Solid	3051A	
MB 490-215479/1-A	Method Blank	Total/NA	Solid	3051A	

Analysis Batch: 216293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68226-3	S-30-B33	Total/NA	Soil	6010C	215479
490-68412-A-57-D MS	Matrix Spike	Total/NA	Solid	6010C	215479
490-68412-A-57-E MSD	Matrix Spike Duplicate	Total/NA	Solid	6010C	215479
LCS 490-215479/2-A	Lab Control Sample	Total/NA	Solid	6010C	215479
MB 490-215479/1-A	Method Blank	Total/NA	Solid	6010C	215479

General Chemistry

Analysis Batch: 212781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68226-3	S-30-B33	Total/NA	Soil	Moisture	
490-68226-3 MS	S-30-B33	Total/NA	Soil	Moisture	
490-68226-3 MSD	S-30-B33	Total/NA	Soil	Moisture	
490-68226-6	S-45-B33	Total/NA	Soil	Moisture	
490-68227-E-2 DU	Duplicate	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68226-1
SDG: 31160

Client Sample ID: S-30-B33

Lab Sample ID: 490-68226-3

Date Collected: 12/05/14 10:30

Matrix: Soil

Date Received: 12/09/14 08:30

Percent Solids: 92.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.26 g	5.0 mL	212776	12/10/14 09:26	JLP	TAL NSH
Total/NA	Analysis	8260B		1	4.26 g	5.0 mL	213381	12/12/14 08:29	KKK	TAL NSH
Total/NA	Prep	5035			4.29 g	5.0 mL	212758	12/10/14 09:10	JLP	TAL NSH
Total/NA	Analysis	8260B		1	4.29 g	5.0 mL	214084	12/15/14 17:21	KKK	TAL NSH
Total/NA	Prep	5035			4.29 g	5.0 mL	212758	12/10/14 09:10	JLP	TAL NSH
Total/NA	Analysis	8260B		20	4.29 g	5.0 mL	214084	12/15/14 17:51	KKK	TAL NSH
Total/NA	Prep	5035			5.32 g	5.0 mL	212758	12/10/14 09:10	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5.32 g	5.0 mL	214036	12/14/14 21:35	AMC	TAL NSH
Total/NA	Prep	3051A			0.523 g	100 mL	215479	12/19/14 13:04	NJB	TAL NSH
Total/NA	Analysis	6010C		1	0.523 g	100 mL	216293	12/22/14 21:58	HJM	TAL NSH
Total/NA	Analysis	Moisture		1			212781	12/10/14 09:34	RRS	TAL NSH

Client Sample ID: S-45-B33

Lab Sample ID: 490-68226-6

Date Collected: 12/05/14 11:10

Matrix: Soil

Date Received: 12/09/14 08:30

Percent Solids: 91.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.61 g	5.0 mL	212776	12/10/14 09:26	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5.61 g	5.0 mL	213381	12/12/14 09:00	KKK	TAL NSH
Total/NA	Prep	5035			5.9 g	5.0 mL	212776	12/10/14 09:26	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5.9 g	5.0 mL	214082	12/15/14 19:17	KKK	TAL NSH
Total/NA	Prep	5035			4.92 g	5.0 mL	212758	12/10/14 09:10	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	4.92 g	5.0 mL	214036	12/14/14 22:17	AMC	TAL NSH
Total/NA	Analysis	Moisture		1			212781	12/10/14 09:34	RRS	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68226-1
SDG: 31160

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	TAL NSH
6010C	Metals (ICP)	SW846	TAL NSH
Moisture	Percent Moisture	EPA	TAL NSH

Protocol References:

EPA = US Environmental Protection Agency

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177



Certification Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68226-1
SDG: 31160

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Oregon	NELAP	10	TN200001	04-27-16

The following analytes are included in this report, but certification is not offered by the governing authority:

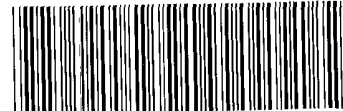
Analysis Method	Prep Method	Matrix	Analyte	
Moisture		Soil	Percent Solids	
Washington	State Program	10	C789	07-19-15

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Soil	Percent Solids



COOLER RECEIPT FORM



490-68226 Chain of Custody

Cooler Received/Opened On 12/9/2014 @ 8:30

1. Tracking # 4070 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 17610176

2. Temperature of rep. sample or temp blank when opened: 2.0 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) AOH

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA 50%

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (initial) CT

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used? YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) CT

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) CT

I certify that I attached a label with the unique LIMS number to each container (initial) CT

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...# _____

COOLER RECEIPT FORM

Cooler Received/Opened On 12/9/2014 @ 0830

1. Tracking # 4092 (last 4 digits, FedEx)

Courier: Fed Ex IR Gun ID 17960358

2. Temperature of rep. sample or temp blank when opened: 2.7 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO... NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) EA

7. Were custody seals on containers: YES NO and intact YES...NO... NA

Were these signed and dated correctly? YES...NO... NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES... NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO... NA

14. Was there a Trip Blank in this cooler? YES... NO...NA If multiple coolers, sequence # 1

I certify that I unloaded the cooler and answered questions 7-14 (initial) A

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO... NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO... NA

16. Was residual chlorine present? YES...NO... NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) A

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) G

I certify that I attached a label with the unique LIMS number to each container (initial) G

21. Were there Non-Conformance issues at login? YES... NO Was a NCM generated? YES... NO...# 1

Consultant Name: Cardno ERI Account #: 10313 PO#: CTC Loc: 490
 Consultant Address: 801 Second Avenue Suite 700
 Consultant City/State/Zip: Seattle, WA 98104 Invoice To: Michael Miller **68226**
 ExxonMobil Project Mgr: Aaron Thom Report To: Michael Miller
 Consultant Project Mgr: Michael Miller ct #/Activity #: 31160
 Consultant Telephone Number: 206 269 0104 ExxonMobil Site #: 99BLV
 Sampler Name (Print): Robert Thompson, Nicholas Gerkin Site Address: 1500 145th Place Southeast
 Sampler Signature: [Signature] Site City, State, Zip: Bellevue, Washington 98007
 Oversight Agency: Washington Department of Ecology

Sample ID	Field Point Name/ Location ID	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative										Matrix										Analyze For	RUSH TAT (Pre-Schedule)	5-day TAT	Standard 10-day TAT	Due Date of Report	
								Methanol	Sodium Bisulfate	HCl	NaOH	H ₂ SO ₄ Plastic	H ₂ SO ₄ Glass	HNO ₃	Ice	Other	None	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Air	Other (specify):	BTEX by 8260B	TPHg by NWTPH-GX	TPHm by NWTPH-DX						Total Pb by 6010B
S-20-B33	B33	12/05/14	10:00	5	X																												
S-25-B33	B33	12/05/14	10:10	5	X																												
S-30-B33	B33	12/05/14	10:30	5	X																												
S-35-B33	B33	12/05/14	10:45	5	X																												
S-40-B33	B33	12/05/14	10:55	5	X																												
S-45-B33	B33	12/05/14	11:10	5	X																												

Comments/Special Instructions:
 Please include silica gel cleanup Potential VOCs present other than BTEX from a new release.
 Relinquished by: Nicholas A. Gerkin Date: 12/08/14 Time: 17:00
 Relinquished by: [Signature] Date: 12-9-14 Time: 0830

Laboratory Comments:
 Temperature Upon Receipt: 20.0
 Sample Containers Inta Y: N
 VOA Vials Free of Heat Y: N
 QC Deliverables (please circle one):
 Level 2: 12-1-14
 Level 3:
 Level 4:
 Site Specific - if yes, please attach pre-schedule w/ TestAmerica Project Manager or attach specific instructions

Login Sample Receipt Checklist

Client: Cardno ERI

Job Number: 490-68226-1

SDG Number: 31160

Login Number: 68226

List Number: 1

Creator: Huckaba, Jimmy

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-68227-1
TestAmerica Sample Delivery Group: 31160
Client Project/Site: 99BLV

For:
Cardno ERI
801 Second Ave
Suite 700
Seattle, Washington 98104

Attn: Michael Miller



Authorized for release by:
12/23/2014 4:48:09 PM

Leah Klingensmith, Senior Project Manager
(615)301-5038
leah.klingensmith@testamericainc.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68227-1
SDG: 31160

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-68227-2	S-20-B32	Solid	12/04/14 10:50	12/09/14 08:30
490-68227-5	S-35-B32	Solid	12/05/14 08:10	12/09/14 08:30
490-68227-8	S-50-B32	Solid	12/05/14 09:00	12/09/14 08:30

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Case Narrative

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68227-1
SDG: 31160

Job ID: 490-68227-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative 490-68227-1

Receipt

The samples were received on 12/9/2014 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.0° C and 2.7° C.

Except:

The container label for the following sample(s) did not match the information listed on the Chain-of-Custody (COC): S-30-B32 (490-68227-4). The container labels list S-30-B33, while the COC lists S-30-32. (Sample date and time matched.)

GC/MS VOA

Method(s) 8260B: Surrogate recovery for the following sample(s) was outside control limits: S-20-B32 (490-68227-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for batch 214082 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected.

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with batch 214084

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA

Method(s) NWTPH-Gx: The matrix spike / matrix spike duplicate (MS/MSD) precision for batch 214036 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated duplicate (DU) for NWTPH method sample precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68227-1
SDG: 31160

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
X	Surrogate is outside control limits

GC VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68227-1
SDG: 31160

Client Sample ID: S-20-B32

Lab Sample ID: 490-68227-2

Date Collected: 12/04/14 10:50

Matrix: Solid

Date Received: 12/09/14 08:30

Percent Solids: 92.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0156		0.00226		mg/Kg	☼	12/10/14 09:26	12/15/14 20:19	1
Toluene	1.12		0.0976		mg/Kg	☼	12/10/14 09:10	12/15/14 15:51	1
Ethylbenzene	3.40		0.0976		mg/Kg	☼	12/10/14 09:10	12/15/14 15:51	1
Xylenes, Total	41.8		2.93		mg/Kg	☼	12/10/14 09:10	12/16/14 20:26	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	12/10/14 09:10	12/15/14 15:51	1
4-Bromofluorobenzene (Surr)	131	X	70 - 130	12/10/14 09:26	12/15/14 20:19	1
4-Bromofluorobenzene (Surr)	116		70 - 130	12/10/14 09:10	12/16/14 20:26	20
1,2-Dichloroethane-d4 (Surr)	84		70 - 130	12/10/14 09:10	12/15/14 15:51	1
1,2-Dichloroethane-d4 (Surr)	256	X	70 - 130	12/10/14 09:26	12/15/14 20:19	1
1,2-Dichloroethane-d4 (Surr)	112		70 - 130	12/10/14 09:10	12/16/14 20:26	20
Toluene-d8 (Surr)	87		70 - 130	12/10/14 09:10	12/15/14 15:51	1
Toluene-d8 (Surr)	99		70 - 130	12/10/14 09:26	12/15/14 20:19	1
Toluene-d8 (Surr)	104		70 - 130	12/10/14 09:10	12/16/14 20:26	20
Dibromofluoromethane (Surr)	81		70 - 130	12/10/14 09:10	12/15/14 15:51	1
Dibromofluoromethane (Surr)	86		70 - 130	12/10/14 09:26	12/15/14 20:19	1
Dibromofluoromethane (Surr)	103		70 - 130	12/10/14 09:10	12/16/14 20:26	20

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	462		4.82		mg/Kg	☼	12/10/14 09:10	12/14/14 17:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	69		50 - 150	12/10/14 09:10	12/14/14 17:27	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3.46		1.05		mg/Kg	☼	12/19/14 13:04	12/22/14 22:02	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	93		0.10		%			12/10/14 09:34	1

Client Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68227-1
SDG: 31160

Client Sample ID: S-35-B32

Lab Sample ID: 490-68227-5

Date Collected: 12/05/14 08:10

Matrix: Solid

Date Received: 12/09/14 08:30

Percent Solids: 89.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00202		0.00153		mg/Kg	☼	12/10/14 09:26	12/12/14 07:26	1
Toluene	0.00855		0.00153		mg/Kg	☼	12/10/14 09:26	12/12/14 07:26	1
Ethylbenzene	0.0146		0.00153		mg/Kg	☼	12/10/14 09:26	12/12/14 07:26	1
Xylenes, Total	0.144		0.00230		mg/Kg	☼	12/10/14 09:26	12/12/14 07:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	12/10/14 09:26	12/12/14 07:26	1
1,2-Dichloroethane-d4 (Surr)	115		70 - 130	12/10/14 09:26	12/12/14 07:26	1
Toluene-d8 (Surr)	99		70 - 130	12/10/14 09:26	12/12/14 07:26	1
Dibromofluoromethane (Surr)	93		70 - 130	12/10/14 09:26	12/12/14 07:26	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	15.0		5.13		mg/Kg	☼	12/10/14 09:10	12/14/14 18:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	71		50 - 150	12/10/14 09:10	12/14/14 18:09	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90		0.10		%			12/10/14 09:34	1

Client Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68227-1
SDG: 31160

Client Sample ID: S-50-B32

Lab Sample ID: 490-68227-8

Date Collected: 12/05/14 09:00

Matrix: Solid

Date Received: 12/09/14 08:30

Percent Solids: 82.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00315		0.00175		mg/Kg	☼	12/10/14 09:26	12/15/14 19:48	1
Toluene	ND		0.00175		mg/Kg	☼	12/10/14 09:26	12/15/14 19:48	1
Ethylbenzene	ND		0.00175		mg/Kg	☼	12/10/14 09:26	12/15/14 19:48	1
Xylenes, Total	0.00360		0.00263		mg/Kg	☼	12/10/14 09:26	12/15/14 19:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	12/10/14 09:26	12/15/14 19:48	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 130	12/10/14 09:26	12/15/14 19:48	1
Toluene-d8 (Surr)	97		70 - 130	12/10/14 09:26	12/15/14 19:48	1
Dibromofluoromethane (Surr)	97		70 - 130	12/10/14 09:26	12/15/14 19:48	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		6.73		mg/Kg	☼	12/10/14 09:10	12/14/14 18:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	73		50 - 150	12/10/14 09:10	12/14/14 18:50	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83		0.10		%			12/10/14 09:34	1

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68227-1
SDG: 31160

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: 490-68088-B-16-E MS

Matrix: Solid
Analysis Batch: 214082

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 212573

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier					
Benzene	0.00400		0.0949	0.08523		mg/Kg		86		31 - 143
Toluene	ND		0.0949	0.08533		mg/Kg		88		30 - 155
Ethylbenzene	ND		0.0949	0.08591		mg/Kg		90		23 - 161
Xylenes, Total	0.00784		0.190	0.1578		mg/Kg		79		25 - 162

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	113		70 - 130
1,2-Dichloroethane-d4 (Surr)	102		70 - 130
Toluene-d8 (Surr)	99		70 - 130
Dibromofluoromethane (Surr)	96		70 - 130

Lab Sample ID: 490-68088-B-16-F MSD

Matrix: Solid
Analysis Batch: 214082

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 212573

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier						RPD	Limit
Benzene	0.00400		0.0463	0.06188		mg/Kg		125		31 - 143	32	50
Toluene	ND		0.0463	0.05349		mg/Kg		111		30 - 155	46	50
Ethylbenzene	ND		0.0463	0.04427	F2	mg/Kg		94		23 - 161	64	50
Xylenes, Total	0.00784		0.0926	0.07775	F2	mg/Kg		76		25 - 162	68	50

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	113		70 - 130
1,2-Dichloroethane-d4 (Surr)	101		70 - 130
Toluene-d8 (Surr)	103		70 - 130
Dibromofluoromethane (Surr)	96		70 - 130

Lab Sample ID: 490-68229-E-3-A MS

Matrix: Solid
Analysis Batch: 213381

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 212929

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier					
Benzene	ND		0.0496	0.04953		mg/Kg	☼	97		31 - 143
Toluene	0.0181		0.0496	0.06353		mg/Kg	☼	92		30 - 155
Ethylbenzene	0.00390		0.0496	0.05880		mg/Kg	☼	111		23 - 161
Xylenes, Total	0.0322		0.0992	0.1209		mg/Kg	☼	89		25 - 162

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	104		70 - 130
1,2-Dichloroethane-d4 (Surr)	95		70 - 130
Toluene-d8 (Surr)	102		70 - 130
Dibromofluoromethane (Surr)	95		70 - 130

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68227-1
SDG: 31160

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-68229-E-3-B MSD

Matrix: Solid

Analysis Batch: 213381

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 212929

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.		RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD		
Benzene	ND		0.0478	0.04873		mg/Kg	☼	99	31 - 143	2	50	
Toluene	0.0181		0.0478	0.05974		mg/Kg	☼	87	30 - 155	6	50	
Ethylbenzene	0.00390		0.0478	0.05581		mg/Kg	☼	109	23 - 161	5	50	
Xylenes, Total	0.0322		0.0957	0.1119		mg/Kg	☼	83	25 - 162	8	50	

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	104		70 - 130
1,2-Dichloroethane-d4 (Surr)	98		70 - 130
Toluene-d8 (Surr)	99		70 - 130
Dibromofluoromethane (Surr)	97		70 - 130

Lab Sample ID: MB 490-213381/8

Matrix: Solid

Analysis Batch: 213381

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	ND		0.00200		mg/Kg			12/12/14 02:44	1
Toluene	ND		0.00200		mg/Kg			12/12/14 02:44	1
Ethylbenzene	ND		0.00200		mg/Kg			12/12/14 02:44	1
Xylenes, Total	ND		0.00300		mg/Kg			12/12/14 02:44	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	105		70 - 130		12/12/14 02:44	1
1,2-Dichloroethane-d4 (Surr)	98		70 - 130		12/12/14 02:44	1
Toluene-d8 (Surr)	101		70 - 130		12/12/14 02:44	1
Dibromofluoromethane (Surr)	97		70 - 130		12/12/14 02:44	1

Lab Sample ID: LCS 490-213381/4

Matrix: Solid

Analysis Batch: 213381

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	
		Added	Result				Qualifier	Limits
Benzene	0.0500	0.04616		mg/Kg		92	75 - 127	
Toluene	0.0500	0.05121		mg/Kg		102	80 - 132	
Ethylbenzene	0.0500	0.05363		mg/Kg		107	80 - 134	
Xylenes, Total	0.100	0.1017		mg/Kg		102	80 - 137	

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	107		70 - 130
1,2-Dichloroethane-d4 (Surr)	98		70 - 130
Toluene-d8 (Surr)	99		70 - 130
Dibromofluoromethane (Surr)	95		70 - 130

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68227-1
SDG: 31160

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-213381/5

Matrix: Solid

Analysis Batch: 213381

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD		Unit	D	%Rec	%Rec. Limits	RPD	Limit
		Result	Qualifier						
Benzene	0.0500	0.04746		mg/Kg		95	75 - 127	3	50
Toluene	0.0500	0.05293		mg/Kg		106	80 - 132	3	50
Ethylbenzene	0.0500	0.05590		mg/Kg		112	80 - 134	4	50
Xylenes, Total	0.100	0.1067		mg/Kg		107	80 - 137	5	50

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	100		70 - 130
1,2-Dichloroethane-d4 (Surr)	96		70 - 130
Toluene-d8 (Surr)	99		70 - 130
Dibromofluoromethane (Surr)	95		70 - 130

Lab Sample ID: 490-68461-A-1-D MS

Matrix: Solid

Analysis Batch: 214403

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 213635

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	%Rec. Limits	RPD	Limit
				Result	Qualifier						
Benzene	ND		0.0467	0.04059		mg/Kg		87	31 - 143		
Toluene	ND		0.0467	0.04287		mg/Kg		92	30 - 155		
Ethylbenzene	ND		0.0467	0.04495		mg/Kg		96	23 - 161		
Xylenes, Total	ND		0.0935	0.08070		mg/Kg		86	25 - 162		

Surrogate	MS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	125		70 - 130
1,2-Dichloroethane-d4 (Surr)	104		70 - 130
Toluene-d8 (Surr)	104		70 - 130
Dibromofluoromethane (Surr)	95		70 - 130

Lab Sample ID: 490-68461-A-1-E MSD

Matrix: Solid

Analysis Batch: 214403

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 213635

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec. Limits	RPD	Limit
				Result	Qualifier						
Benzene	ND		0.0447	0.03731		mg/Kg		83	31 - 143	8	50
Toluene	ND		0.0447	0.03960		mg/Kg		89	30 - 155	8	50
Ethylbenzene	ND		0.0447	0.04261		mg/Kg		95	23 - 161	5	50
Xylenes, Total	ND		0.0894	0.07794		mg/Kg		87	25 - 162	3	50

Surrogate	MSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	121		70 - 130
1,2-Dichloroethane-d4 (Surr)	104		70 - 130
Toluene-d8 (Surr)	104		70 - 130
Dibromofluoromethane (Surr)	96		70 - 130

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68227-1
SDG: 31160

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-214082/8

Matrix: Solid

Analysis Batch: 214082

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200		mg/Kg			12/15/14 13:36	1
Toluene	ND		0.00200		mg/Kg			12/15/14 13:36	1
Ethylbenzene	ND		0.00200		mg/Kg			12/15/14 13:36	1
Xylenes, Total	ND		0.00300		mg/Kg			12/15/14 13:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130		12/15/14 13:36	1
1,2-Dichloroethane-d4 (Surr)	105		70 - 130		12/15/14 13:36	1
Toluene-d8 (Surr)	100		70 - 130		12/15/14 13:36	1
Dibromofluoromethane (Surr)	101		70 - 130		12/15/14 13:36	1

Lab Sample ID: LCS 490-214082/4

Matrix: Solid

Analysis Batch: 214082

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.04251		mg/Kg		85	75 - 127
Toluene	0.0500	0.04218		mg/Kg		84	80 - 132
Ethylbenzene	0.0500	0.04441		mg/Kg		89	80 - 134
Xylenes, Total	0.100	0.08307		mg/Kg		83	80 - 137

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,2-Dichloroethane-d4 (Surr)	103		70 - 130
Toluene-d8 (Surr)	96		70 - 130
Dibromofluoromethane (Surr)	98		70 - 130

Lab Sample ID: MB 490-214084/6

Matrix: Solid

Analysis Batch: 214084

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100		mg/Kg			12/15/14 12:20	1
Toluene	ND		0.100		mg/Kg			12/15/14 12:20	1
Ethylbenzene	ND		0.100		mg/Kg			12/15/14 12:20	1
Xylenes, Total	ND		0.150		mg/Kg			12/15/14 12:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130		12/15/14 12:20	1
1,2-Dichloroethane-d4 (Surr)	97		70 - 130		12/15/14 12:20	1
Toluene-d8 (Surr)	92		70 - 130		12/15/14 12:20	1
Dibromofluoromethane (Surr)	98		70 - 130		12/15/14 12:20	1

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68227-1
SDG: 31160

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-214084/3

Matrix: Solid

Analysis Batch: 214084

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	2.50	2.344		mg/Kg		94	75 - 127
Toluene	2.50	2.294		mg/Kg		92	80 - 132
Ethylbenzene	2.50	2.520		mg/Kg		101	80 - 134
Xylenes, Total	5.00	4.766		mg/Kg		95	80 - 137

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		70 - 130
1,2-Dichloroethane-d4 (Surr)	113		70 - 130
Toluene-d8 (Surr)	88		70 - 130
Dibromofluoromethane (Surr)	97		70 - 130

Lab Sample ID: LCSD 490-214084/4

Matrix: Solid

Analysis Batch: 214084

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	2.50	2.602		mg/Kg		104	75 - 127	10	50
Toluene	2.50	2.555		mg/Kg		102	80 - 132	11	50
Ethylbenzene	2.50	2.857		mg/Kg		114	80 - 134	13	50
Xylenes, Total	5.00	5.432		mg/Kg		109	80 - 137	13	50

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	91		70 - 130
1,2-Dichloroethane-d4 (Surr)	108		70 - 130
Toluene-d8 (Surr)	86		70 - 130
Dibromofluoromethane (Surr)	98		70 - 130

Lab Sample ID: MB 490-214403/11

Matrix: Solid

Analysis Batch: 214403

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100		mg/Kg			12/16/14 18:21	1
Toluene	ND		0.100		mg/Kg			12/16/14 18:21	1
Ethylbenzene	ND		0.100		mg/Kg			12/16/14 18:21	1
Xylenes, Total	ND		0.150		mg/Kg			12/16/14 18:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130		12/16/14 18:21	1
1,2-Dichloroethane-d4 (Surr)	106		70 - 130		12/16/14 18:21	1
Toluene-d8 (Surr)	105		70 - 130		12/16/14 18:21	1
Dibromofluoromethane (Surr)	101		70 - 130		12/16/14 18:21	1

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68227-1
SDG: 31160

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-214403/12

Matrix: Solid

Analysis Batch: 214403

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200		mg/Kg			12/16/14 18:52	1
Toluene	ND		0.00200		mg/Kg			12/16/14 18:52	1
Ethylbenzene	ND		0.00200		mg/Kg			12/16/14 18:52	1
Xylenes, Total	ND		0.00300		mg/Kg			12/16/14 18:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130		12/16/14 18:52	1
1,2-Dichloroethane-d4 (Surr)	110		70 - 130		12/16/14 18:52	1
Toluene-d8 (Surr)	105		70 - 130		12/16/14 18:52	1
Dibromofluoromethane (Surr)	104		70 - 130		12/16/14 18:52	1

Lab Sample ID: LCS 490-214403/9

Matrix: Solid

Analysis Batch: 214403

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.05216		mg/Kg		104	75 - 127
Toluene	0.0500	0.05087		mg/Kg		102	80 - 132
Ethylbenzene	0.0500	0.05251		mg/Kg		105	80 - 134
Xylenes, Total	0.100	0.09705		mg/Kg		97	80 - 137

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	121		70 - 130
1,2-Dichloroethane-d4 (Surr)	118		70 - 130
Toluene-d8 (Surr)	104		70 - 130
Dibromofluoromethane (Surr)	101		70 - 130

Lab Sample ID: LCSD 490-214403/10

Matrix: Solid

Analysis Batch: 214403

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.0500	0.05418		mg/Kg		108	75 - 127	4	50
Toluene	0.0500	0.05342		mg/Kg		107	80 - 132	5	50
Ethylbenzene	0.0500	0.05609		mg/Kg		112	80 - 134	7	50
Xylenes, Total	0.100	0.1025		mg/Kg		103	80 - 137	5	50

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,2-Dichloroethane-d4 (Surr)	116		70 - 130
Toluene-d8 (Surr)	103		70 - 130
Dibromofluoromethane (Surr)	100		70 - 130

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68227-1
SDG: 31160

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: 490-68229-B-1-B MS

Matrix: Solid
Analysis Batch: 214036

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 212935

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
C6-C12	ND		488	404.1		mg/Kg	☼	83	69 - 130		
Surrogate	%Recovery	MS Qualifier	Limits								
a,a,a-Trifluorotoluene	85		50 - 150								

Lab Sample ID: 490-68229-B-1-C MSD

Matrix: Solid
Analysis Batch: 214036

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 212935

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	Limit
C6-C12	ND		488	470.0	F2	mg/Kg	☼	96	69 - 130		15	10
Surrogate	%Recovery	MSD Qualifier	Limits									
a,a,a-Trifluorotoluene	89		50 - 150									

Lab Sample ID: 490-68229-B-1-A DU

Matrix: Solid
Analysis Batch: 214036

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 212935

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
C6-C12	ND		ND		mg/Kg	☼	NC	10
Surrogate	%Recovery	DU Qualifier	Limits					
a,a,a-Trifluorotoluene	77		50 - 150					

Lab Sample ID: MB 490-214036/7

Matrix: Solid
Analysis Batch: 214036

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		5.00		mg/Kg			12/14/14 12:37	1
Surrogate	%Recovery	MB Qualifier	Limits						
a,a,a-Trifluorotoluene	76		50 - 150						

Lab Sample ID: LCS 490-214036/5

Matrix: Solid
Analysis Batch: 214036

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C6-C12	10.0	11.15		mg/Kg		111	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
a,a,a-Trifluorotoluene	92		50 - 150						

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68227-1
SDG: 31160

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 490-215479/1-A
Matrix: Solid
Analysis Batch: 216293

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 215479

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.00		mg/Kg		12/19/14 13:04	12/22/14 20:51	1

Lab Sample ID: LCS 490-215479/2-A
Matrix: Solid
Analysis Batch: 216293

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 215479

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	20.2	20.75		mg/Kg		103	80 - 120

Lab Sample ID: 490-68412-A-57-D MS
Matrix: Solid
Analysis Batch: 216293

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 215479

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	14.1		23.2	29.08	F1	mg/Kg	☼	65	75 - 125

Lab Sample ID: 490-68412-A-57-E MSD
Matrix: Solid
Analysis Batch: 216293

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 215479

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	14.1		23.4	31.23	F1	mg/Kg	☼	73	75 - 125	7	20

Method: Moisture - Percent Moisture

Lab Sample ID: 490-68227-2 DU
Matrix: Solid
Analysis Batch: 212781

Client Sample ID: S-20-B32
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	93		92		%		0.1	20

QC Association Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68227-1
SDG: 31160

GC/MS VOA

Prep Batch: 212573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68088-B-16-E MS	Matrix Spike	Total/NA	Solid	5030B	
490-68088-B-16-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5030B	

Prep Batch: 212758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68227-2	S-20-B32	Total/NA	Solid	5035	

Prep Batch: 212776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68227-2	S-20-B32	Total/NA	Solid	5035	
490-68227-5	S-35-B32	Total/NA	Solid	5035	
490-68227-8	S-50-B32	Total/NA	Solid	5035	

Prep Batch: 212929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68229-E-3-A MS	Matrix Spike	Total/NA	Solid	5035	
490-68229-E-3-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 213381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68227-5	S-35-B32	Total/NA	Solid	8260B	212776
490-68229-E-3-A MS	Matrix Spike	Total/NA	Solid	8260B	212929
490-68229-E-3-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	212929
LCS 490-213381/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-213381/5	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-213381/8	Method Blank	Total/NA	Solid	8260B	

Prep Batch: 213635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68461-A-1-D MS	Matrix Spike	Total/NA	Solid	5030B	
490-68461-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5030B	

Analysis Batch: 214082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68088-B-16-E MS	Matrix Spike	Total/NA	Solid	8260B	212573
490-68088-B-16-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	212573
490-68227-2	S-20-B32	Total/NA	Solid	8260B	212776
490-68227-8	S-50-B32	Total/NA	Solid	8260B	212776
LCS 490-214082/4	Lab Control Sample	Total/NA	Solid	8260B	
MB 490-214082/8	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 214084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68227-2	S-20-B32	Total/NA	Solid	8260B	212758
LCS 490-214084/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-214084/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-214084/6	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 214403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68227-2	S-20-B32	Total/NA	Solid	8260B	212758

TestAmerica Nashville

QC Association Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68227-1
SDG: 31160

GC/MS VOA (Continued)

Analysis Batch: 214403 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68461-A-1-D MS	Matrix Spike	Total/NA	Solid	8260B	213635
490-68461-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	213635
LCS 490-214403/9	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-214403/10	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-214403/11	Method Blank	Total/NA	Solid	8260B	
MB 490-214403/12	Method Blank	Total/NA	Solid	8260B	

GC VOA

Prep Batch: 212758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68227-2	S-20-B32	Total/NA	Solid	5035	
490-68227-5	S-35-B32	Total/NA	Solid	5035	
490-68227-8	S-50-B32	Total/NA	Solid	5035	

Prep Batch: 212935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68229-B-1-A DU	Duplicate	Total/NA	Solid	5035	
490-68229-B-1-B MS	Matrix Spike	Total/NA	Solid	5035	
490-68229-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 214036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68227-2	S-20-B32	Total/NA	Solid	NWTPH-Gx	212758
490-68227-5	S-35-B32	Total/NA	Solid	NWTPH-Gx	212758
490-68227-8	S-50-B32	Total/NA	Solid	NWTPH-Gx	212758
490-68229-B-1-A DU	Duplicate	Total/NA	Solid	NWTPH-Gx	212935
490-68229-B-1-B MS	Matrix Spike	Total/NA	Solid	NWTPH-Gx	212935
490-68229-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	NWTPH-Gx	212935
LCS 490-214036/5	Lab Control Sample	Total/NA	Solid	NWTPH-Gx	
MB 490-214036/7	Method Blank	Total/NA	Solid	NWTPH-Gx	

Metals

Prep Batch: 215479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68227-2	S-20-B32	Total/NA	Solid	3051A	
490-68412-A-57-D MS	Matrix Spike	Total/NA	Solid	3051A	
490-68412-A-57-E MSD	Matrix Spike Duplicate	Total/NA	Solid	3051A	
LCS 490-215479/2-A	Lab Control Sample	Total/NA	Solid	3051A	
MB 490-215479/1-A	Method Blank	Total/NA	Solid	3051A	

Analysis Batch: 216293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68227-2	S-20-B32	Total/NA	Solid	6010C	215479
490-68412-A-57-D MS	Matrix Spike	Total/NA	Solid	6010C	215479
490-68412-A-57-E MSD	Matrix Spike Duplicate	Total/NA	Solid	6010C	215479
LCS 490-215479/2-A	Lab Control Sample	Total/NA	Solid	6010C	215479
MB 490-215479/1-A	Method Blank	Total/NA	Solid	6010C	215479

TestAmerica Nashville

QC Association Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68227-1
SDG: 31160

General Chemistry

Analysis Batch: 212781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68227-2	S-20-B32	Total/NA	Solid	Moisture	
490-68227-2 DU	S-20-B32	Total/NA	Solid	Moisture	
490-68227-2 MS	S-20-B32	Total/NA	Solid	Moisture	
490-68227-2 MSD	S-20-B32	Total/NA	Solid	Moisture	
490-68227-5	S-35-B32	Total/NA	Solid	Moisture	
490-68227-8	S-50-B32	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68227-1
SDG: 31160

Client Sample ID: S-20-B32

Date Collected: 12/04/14 10:50

Date Received: 12/09/14 08:30

Lab Sample ID: 490-68227-2

Matrix: Solid

Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.78 g	5.0 mL	212776	12/10/14 09:26	JLP	TAL NSH
Total/NA	Analysis	8260B		1	4.78 g	5.0 mL	214082	12/15/14 20:19	KKK	TAL NSH
Total/NA	Prep	5035			6.02 g	5.0 mL	212758	12/10/14 09:10	JLP	TAL NSH
Total/NA	Analysis	8260B		20	6.02 g	5.0 mL	214403	12/16/14 20:26	SLM	TAL NSH
Total/NA	Prep	5035			6.02 g	5.0 mL	212758	12/10/14 09:10	JLP	TAL NSH
Total/NA	Analysis	8260B		1	6.02 g	5.0 mL	214084	12/15/14 15:51	KKK	TAL NSH
Total/NA	Prep	5035			6.1 g	5.0 mL	212758	12/10/14 09:10	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	6.1 g	5.0 mL	214036	12/14/14 17:27	AMC	TAL NSH
Total/NA	Prep	3051A			0.512 g	100 mL	215479	12/19/14 13:04	NJB	TAL NSH
Total/NA	Analysis	6010C		1	0.512 g	100 mL	216293	12/22/14 22:02	HJM	TAL NSH
Total/NA	Analysis	Moisture		1			212781	12/10/14 09:34	RRS	TAL NSH

Client Sample ID: S-35-B32

Date Collected: 12/05/14 08:10

Date Received: 12/09/14 08:30

Lab Sample ID: 490-68227-5

Matrix: Solid

Percent Solids: 89.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.29 g	5.0 mL	212776	12/10/14 09:26	JLP	TAL NSH
Total/NA	Analysis	8260B		1	7.29 g	5.0 mL	213381	12/12/14 07:26	KKK	TAL NSH
Total/NA	Prep	5035			6.14 g	5.0 mL	212758	12/10/14 09:10	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	6.14 g	5.0 mL	214036	12/14/14 18:09	AMC	TAL NSH
Total/NA	Analysis	Moisture		1			212781	12/10/14 09:34	RRS	TAL NSH

Client Sample ID: S-50-B32

Date Collected: 12/05/14 09:00

Date Received: 12/09/14 08:30

Lab Sample ID: 490-68227-8

Matrix: Solid

Percent Solids: 82.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.88 g	5.0 mL	212776	12/10/14 09:26	JLP	TAL NSH
Total/NA	Analysis	8260B		1	6.88 g	5.0 mL	214082	12/15/14 19:48	KKK	TAL NSH
Total/NA	Prep	5035			5.29 g	5.0 mL	212758	12/10/14 09:10	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5.29 g	5.0 mL	214036	12/14/14 18:50	AMC	TAL NSH
Total/NA	Analysis	Moisture		1			212781	12/10/14 09:34	RRS	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68227-1
SDG: 31160

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	TAL NSH
6010C	Metals (ICP)	SW846	TAL NSH
Moisture	Percent Moisture	EPA	TAL NSH

Protocol References:

EPA = US Environmental Protection Agency

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177



Certification Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68227-1
SDG: 31160

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Oregon	NELAP	10	TN200001	04-29-15

The following analytes are included in this report, but certification is not offered by the governing authority:

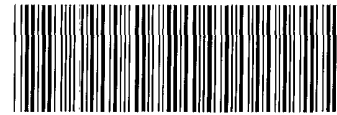
Analysis Method	Prep Method	Matrix	Analyte	
Moisture		Solid	Percent Solids	
Washington	State Program	10	C789	07-19-15

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Solids



COOLER RECEIPT FORM



490-68227 Chain of Custody

Cooler Received/Opened On 12/9/2014 @ 0830

1. Tracking # 4092 (last 4 digits, FedEx)

Courier: Fed Ex IR Gun ID 17960358

2. Temperature of rep. sample or temp blank when opened: 20 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) EJA

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (initial) CE

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) CE

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) CE

I certify that I attached a label with the unique LIMS number to each container (initial) CE

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...# _____

1 VOA was
labeled
S-30-B33
Sodium
Sampled with
0800 on
12-5-14

COOLER RECEIPT FORM

Cooler Received/Opened On 12/9/2014 @ 8:30

1. Tracking # 4070 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 17610176

2. Temperature of rep. sample or temp blank when opened: 2.0 Degrees Celsius

3. If item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) AON

7. Were custody seals on containers: YES NO and intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? CA 12/9/14 YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA 50%

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 1

I certify that I unloaded the cooler and answered questions 7-14 (initial) Ch

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used? YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) Ch

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) Ch

I certify that I attached a label with the unique LIMS number to each container (initial) Ch

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...# 1



Nashville Division
2960 Foster Creighton
Nashville, TN 37204

Phone: 615-726-0177
Toll Free: 800-765-0980
Fax: 615-726-3404

Loc: 490
68227



Consultant Name: Cardno ERI Account #: 10313 PO#: CTC
 Consultant Address: 801 Second Avenue Suite 700 Invoice To: Michael Miller
 Consultant City/State/Zip: Seattle, WA 98104 Report To: Michael Miller
 ExxonMobil Project Mgr: Aaron Thorn ct #/Activity #: 31160
 Consultant Project Mgr: Michael Miller ExxonMobil Site #: 99BLV
 Consultant Telephone Number: 206 269 0104 Fax No.: (206) 269-0098 Site Address: 1500 145th Place Southeast
 Sampler Name (Print): Robert Thompson, Nicholas Gerkin Site City, State, Zip: Bellevue, Washington 98007
 Sampler Signature:

Oversight Agency: Washington Department of Ecology

Sample ID	Field Point Name/Location ID	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filled	Preservative										Matrix					Analyze For:	RUSH TAT (Pre-Schedule)	5-day TAT	Standard 10-day TAT	Due Date of Report										
								Methanol	Sodium Bisulfate	HCl	NaOH	H ₂ SO ₄ Plastic	H ₂ SO ₄ Glass	HNO ₃	Ice	Other	None	Groundwater	Wastewater	Drinking Water	Sludge	Soil						Air	Other (specify):	BTEX by 8260B	TPHg by NWTPH-GX	TPHm by NWTPH-DX	TPHd by NWTPH-DX	Total Pb by 6010B			
S-17-B32	B32	12/04/14	10:40	5	X																																
S-20-B32	B32	12/04/14	10:50	5	X																																
S-25-B32	B32	12/04/14	11:00	5	X																																
S-30-B32	B32	12/05/14	08:00	5	X																																
S-35-B32	B32	12/05/14	08:10	5	X																																
S-40-B32	B32	12/05/14	08:30	5	X																																
S-45-B32	B32	12/05/14	08:45	5	X																																
S-50-B32	B32	12/05/14	09:00	5	X																																

Comments/Special Instructions:

Please include silica gel cleanup Potential VOCs present other than BTEX from a new release.

Laboratory Comments:

Temperature Upon Receipt: 27.0
Sample Containers Inta Y N
VOA Vials Free of Heat Y N
QC Deliverables (please circle one)
Level 2
Level 3
Level 4

Relinquished by: Nicholas A. Gerkin Date: 12/08/14 Time: 17:00
 Relinquished by: Date: 12-9-14 Time: 0830
 Received by (Lab personnel):

Site Specific - if yes, please attach pre-schedule w/ TestAmerica Project Manager or attach specific instructions



Login Sample Receipt Checklist

Client: Cardno ERI

Job Number: 490-68227-1

SDG Number: 31160

Login Number: 68227

List Number: 1

Creator: Huckaba, Jimmy

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

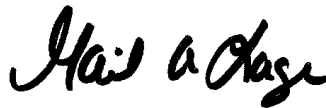
ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-68229-1
TestAmerica Sample Delivery Group: 31160
Client Project/Site: 99BLV
Revision: 1

For:
Cardno ERI
801 Second Ave
Suite 700
Seattle, Washington 98104

Attn: Michael Miller



Authorized for release by:
4/1/2015 1:07:03 PM
Gail Lage, Senior Project Manager
(615)301-5741
gail.lage@testamericainc.com

Designee for
Leah Klingensmith, Senior Project Manager
(615)301-5038
leah.klingensmith@testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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www.testamericainc.com

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Sample Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68229-1
SDG: 31160

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-68229-1	S-15-B31	Soil	12/05/14 13:35	12/09/14 08:30
490-68229-3	S-25-B31	Soil	12/05/14 14:00	12/09/14 08:30
490-68229-4	S-30-B31	Soil	12/05/14 14:10	12/09/14 08:30

1

2

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Case Narrative

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68229-1
SDG: 31160

Job ID: 490-68229-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative 490-68229-1

Revised Report

This report was revised to add EDB, EDC, and MTBE to sample S-15-B31 at the client's request. This replaces the previous final report.

Receipt

The samples were received on 12/9/2014 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 2.0° C, 2.5° C, 2.7° C and 3.4° C.

Except:

The container label for the following sample(s) did not match the information listed on the Chain-of-Custody (COC): S-40-B31 (490-68229-6). The container labels list S-45-B31, while the COC lists S-40-B31. (Sample date and time match.)

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC VOA

Method(s) NWTPH-Gx: The matrix spike / matrix spike duplicate (MS/MSD) precision for batch 214036 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated duplicate (DU) for NWTPH method sample precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68229-1
SDG: 31160

Qualifiers

GC VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68229-1
SDG: 31160

Client Sample ID: S-15-B31

Lab Sample ID: 490-68229-1

Date Collected: 12/05/14 13:35

Matrix: Soil

Date Received: 12/09/14 08:30

Percent Solids: 91.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00154		mg/Kg	☼	12/10/14 12:40	12/12/14 03:15	1
Toluene	0.0145		0.00154		mg/Kg	☼	12/10/14 12:40	12/12/14 03:15	1
Ethylbenzene	0.00566		0.00154		mg/Kg	☼	12/10/14 12:40	12/12/14 03:15	1
Xylenes, Total	0.0379		0.00231		mg/Kg	☼	12/10/14 12:40	12/12/14 03:15	1
1,2-Dichloroethane	ND		0.00154		mg/Kg	☼	12/10/14 12:40	12/12/14 03:15	1
Methyl tert-butyl ether	ND		0.00154		mg/Kg	☼	12/10/14 12:40	12/12/14 03:15	1
1,2-Dibromoethane (EDB)	ND		0.00154		mg/Kg	☼	12/10/14 12:40	12/12/14 03:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	12/10/14 12:40	12/12/14 03:15	1
1,2-Dichloroethane-d4 (Surr)	98		70 - 130	12/10/14 12:40	12/12/14 03:15	1
Toluene-d8 (Surr)	101		70 - 130	12/10/14 12:40	12/12/14 03:15	1
Dibromofluoromethane (Surr)	97		70 - 130	12/10/14 12:40	12/12/14 03:15	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		4.88		mg/Kg	☼	12/10/14 12:29	12/14/14 13:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	74		50 - 150	12/10/14 12:29	12/14/14 13:19	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10		%			12/10/14 11:27	1

Client Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68229-1
SDG: 31160

Client Sample ID: S-25-B31

Lab Sample ID: 490-68229-3

Date Collected: 12/05/14 14:00

Matrix: Soil

Date Received: 12/09/14 08:30

Percent Solids: 93.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00244		mg/Kg	☼	12/10/14 12:40	12/12/14 03:46	1
Toluene	0.0181		0.00244		mg/Kg	☼	12/10/14 12:40	12/12/14 03:46	1
Ethylbenzene	0.00390		0.00244		mg/Kg	☼	12/10/14 12:40	12/12/14 03:46	1
Xylenes, Total	0.0322		0.00366		mg/Kg	☼	12/10/14 12:40	12/12/14 03:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	12/10/14 12:40	12/12/14 03:46	1
1,2-Dichloroethane-d4 (Surr)	102		70 - 130	12/10/14 12:40	12/12/14 03:46	1
Toluene-d8 (Surr)	102		70 - 130	12/10/14 12:40	12/12/14 03:46	1
Dibromofluoromethane (Surr)	97		70 - 130	12/10/14 12:40	12/12/14 03:46	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		4.44		mg/Kg	☼	12/10/14 12:29	12/14/14 16:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	75		50 - 150	12/10/14 12:29	12/14/14 16:04	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3.51		1.06		mg/Kg	☼	12/19/14 13:04	12/22/14 22:10	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	93		0.10		%			12/10/14 11:27	1

Client Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68229-1
SDG: 31160

Client Sample ID: S-30-B31

Lab Sample ID: 490-68229-4

Date Collected: 12/05/14 14:10

Matrix: Soil

Date Received: 12/09/14 08:30

Percent Solids: 90.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00189		mg/Kg	☼	12/10/14 12:40	12/12/14 04:18	1
Toluene	0.00938		0.00189		mg/Kg	☼	12/10/14 12:40	12/12/14 04:18	1
Ethylbenzene	0.00415		0.00189		mg/Kg	☼	12/10/14 12:40	12/12/14 04:18	1
Xylenes, Total	0.0156		0.00284		mg/Kg	☼	12/10/14 12:40	12/12/14 04:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	12/10/14 12:40	12/12/14 04:18	1
1,2-Dichloroethane-d4 (Surr)	98		70 - 130	12/10/14 12:40	12/12/14 04:18	1
Toluene-d8 (Surr)	96		70 - 130	12/10/14 12:40	12/12/14 04:18	1
Dibromofluoromethane (Surr)	98		70 - 130	12/10/14 12:40	12/12/14 04:18	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		4.78		mg/Kg	☼	12/10/14 12:29	12/14/14 16:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	79		50 - 150	12/10/14 12:29	12/14/14 16:46	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90		0.10		%			12/10/14 11:32	1

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68229-1
SDG: 31160

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: 490-68229-3 MS

Matrix: Soil

Analysis Batch: 213381

Client Sample ID: S-25-B31

Prep Type: Total/NA

Prep Batch: 212929

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier		Result	Qualifier					
Benzene	ND		0.0496	0.04953		mg/Kg	☼	97		31 - 143
Toluene	0.0181		0.0496	0.06353		mg/Kg	☼	92		30 - 155
Ethylbenzene	0.00390		0.0496	0.05880		mg/Kg	☼	111		23 - 161
Xylenes, Total	0.0322		0.0992	0.1209		mg/Kg	☼	89		25 - 162
1,2-Dichloroethane	ND		0.0496	0.04525		mg/Kg	☼	91		28 - 138
Methyl tert-butyl ether	ND		0.0496	0.04620		mg/Kg	☼	93		28 - 141
1,2-Dibromoethane (EDB)	ND		0.0496	0.04529		mg/Kg	☼	91		18 - 156

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	104		70 - 130
1,2-Dichloroethane-d4 (Surr)	95		70 - 130
Toluene-d8 (Surr)	102		70 - 130
Dibromofluoromethane (Surr)	95		70 - 130

Lab Sample ID: 490-68229-3 MSD

Matrix: Soil

Analysis Batch: 213381

Client Sample ID: S-25-B31

Prep Type: Total/NA

Prep Batch: 212929

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	RPD
	Result	Qualifier		Result	Qualifier						RPD	Limit
Benzene	ND		0.0478	0.04873		mg/Kg	☼	99		31 - 143	2	50
Toluene	0.0181		0.0478	0.05974		mg/Kg	☼	87		30 - 155	6	50
Ethylbenzene	0.00390		0.0478	0.05581		mg/Kg	☼	109		23 - 161	5	50
Xylenes, Total	0.0322		0.0957	0.1119		mg/Kg	☼	83		25 - 162	8	50
1,2-Dichloroethane	ND		0.0478	0.04552		mg/Kg	☼	95		28 - 138	1	50
Methyl tert-butyl ether	ND		0.0478	0.04607		mg/Kg	☼	96		28 - 141	0	50
1,2-Dibromoethane (EDB)	ND		0.0478	0.04410		mg/Kg	☼	92		18 - 156	3	50

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	104		70 - 130
1,2-Dichloroethane-d4 (Surr)	98		70 - 130
Toluene-d8 (Surr)	99		70 - 130
Dibromofluoromethane (Surr)	97		70 - 130

Lab Sample ID: MB 490-213381/8

Matrix: Solid

Analysis Batch: 213381

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	ND		0.00200		mg/Kg			12/12/14 02:44	1
Toluene	ND		0.00200		mg/Kg			12/12/14 02:44	1
Ethylbenzene	ND		0.00200		mg/Kg			12/12/14 02:44	1
Xylenes, Total	ND		0.00300		mg/Kg			12/12/14 02:44	1
1,2-Dichloroethane	ND		0.00200		mg/Kg			12/12/14 02:44	1
Methyl tert-butyl ether	ND		0.00200		mg/Kg			12/12/14 02:44	1
1,2-Dibromoethane (EDB)	ND		0.00200		mg/Kg			12/12/14 02:44	1

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68229-1
SDG: 31160

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-213381/8
Matrix: Solid
Analysis Batch: 213381

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	105		70 - 130		12/12/14 02:44	1
1,2-Dichloroethane-d4 (Surr)	98		70 - 130		12/12/14 02:44	1
Toluene-d8 (Surr)	101		70 - 130		12/12/14 02:44	1
Dibromofluoromethane (Surr)	97		70 - 130		12/12/14 02:44	1

Lab Sample ID: LCS 490-213381/4
Matrix: Solid
Analysis Batch: 213381

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
Benzene	0.0500	0.04616		mg/Kg		92	75 - 127	
Toluene	0.0500	0.05121		mg/Kg		102	80 - 132	
Ethylbenzene	0.0500	0.05363		mg/Kg		107	80 - 134	
Xylenes, Total	0.100	0.1017		mg/Kg		102	80 - 137	
1,2-Dichloroethane	0.0500	0.04381		mg/Kg		88	65 - 134	
Methyl tert-butyl ether	0.0500	0.04708		mg/Kg		94	70 - 136	
1,2-Dibromoethane (EDB)	0.0500	0.04416		mg/Kg		88	80 - 135	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	107		70 - 130
1,2-Dichloroethane-d4 (Surr)	98		70 - 130
Toluene-d8 (Surr)	99		70 - 130
Dibromofluoromethane (Surr)	95		70 - 130

Lab Sample ID: LCSD 490-213381/5
Matrix: Solid
Analysis Batch: 213381

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	Limit
Benzene	0.0500	0.04746		mg/Kg		95	75 - 127	3	50	
Toluene	0.0500	0.05293		mg/Kg		106	80 - 132	3	50	
Ethylbenzene	0.0500	0.05590		mg/Kg		112	80 - 134	4	50	
Xylenes, Total	0.100	0.1067		mg/Kg		107	80 - 137	5	50	
1,2-Dichloroethane	0.0500	0.04652		mg/Kg		93	65 - 134	6	50	
Methyl tert-butyl ether	0.0500	0.04957		mg/Kg		99	70 - 136	5	50	
1,2-Dibromoethane (EDB)	0.0500	0.04687		mg/Kg		94	80 - 135	6	50	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	100		70 - 130
1,2-Dichloroethane-d4 (Surr)	96		70 - 130
Toluene-d8 (Surr)	99		70 - 130
Dibromofluoromethane (Surr)	95		70 - 130

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68229-1
SDG: 31160

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: 490-68229-1 MS

Matrix: Soil

Analysis Batch: 214036

Client Sample ID: S-15-B31

Prep Type: Total/NA

Prep Batch: 212935

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
C6-C12	ND		488	404.1		mg/Kg	☼	83	69 - 130		
Surrogate	%Recovery	MS Qualifier	Limits								
a,a,a-Trifluorotoluene	85		50 - 150								

Lab Sample ID: 490-68229-1 MSD

Matrix: Soil

Analysis Batch: 214036

Client Sample ID: S-15-B31

Prep Type: Total/NA

Prep Batch: 212935

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	Limit
C6-C12	ND		488	470.0	F2	mg/Kg	☼	96	69 - 130		15	10
Surrogate	%Recovery	MSD Qualifier	Limits									
a,a,a-Trifluorotoluene	89		50 - 150									

Lab Sample ID: 490-68229-1 DU

Matrix: Soil

Analysis Batch: 214036

Client Sample ID: S-15-B31

Prep Type: Total/NA

Prep Batch: 212935

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
C6-C12	ND		ND		mg/Kg	☼	NC	10
Surrogate	%Recovery	DU Qualifier	Limits					
a,a,a-Trifluorotoluene	77		50 - 150					

Lab Sample ID: MB 490-214036/7

Matrix: Solid

Analysis Batch: 214036

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		5.00		mg/Kg			12/14/14 12:37	1
Surrogate	%Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac			
a,a,a-Trifluorotoluene	76		50 - 150		12/14/14 12:37	1			

Lab Sample ID: LCS 490-214036/5

Matrix: Solid

Analysis Batch: 214036

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C6-C12	10.0	11.15		mg/Kg		111	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
a,a,a-Trifluorotoluene	92		50 - 150						

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68229-1
SDG: 31160

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 490-215479/1-A
Matrix: Solid
Analysis Batch: 216293

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 215479

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.00		mg/Kg		12/19/14 13:04	12/22/14 20:51	1

Lab Sample ID: LCS 490-215479/2-A
Matrix: Solid
Analysis Batch: 216293

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 215479

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	20.2	20.75		mg/Kg		103	80 - 120

Lab Sample ID: 490-68412-A-57-D MS
Matrix: Solid
Analysis Batch: 216293

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 215479

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	14.1		23.2	29.08	F1	mg/Kg	☼	65	75 - 125

Lab Sample ID: 490-68412-A-57-E MSD
Matrix: Solid
Analysis Batch: 216293

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 215479

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	14.1		23.4	31.23	F1	mg/Kg	☼	73	75 - 125	7	20

Method: Moisture - Percent Moisture

Lab Sample ID: 490-68181-A-1 DU
Matrix: Solid
Analysis Batch: 212903

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	89		89		%		0.3	20

QC Association Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68229-1
SDG: 31160

GC/MS VOA

Prep Batch: 212929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68229-3 MS	S-25-B31	Total/NA	Soil	5035	
490-68229-3 MSD	S-25-B31	Total/NA	Soil	5035	

Prep Batch: 212938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68229-1	S-15-B31	Total/NA	Soil	5035	
490-68229-3	S-25-B31	Total/NA	Soil	5035	
490-68229-4	S-30-B31	Total/NA	Soil	5035	

Analysis Batch: 213381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68229-1	S-15-B31	Total/NA	Soil	8260B	212938
490-68229-3	S-25-B31	Total/NA	Soil	8260B	212938
490-68229-3 MS	S-25-B31	Total/NA	Soil	8260B	212929
490-68229-3 MSD	S-25-B31	Total/NA	Soil	8260B	212929
490-68229-4	S-30-B31	Total/NA	Soil	8260B	212938
LCS 490-213381/4	Lab Control Sample	Total/NA	Solid	8260B	
LCS 490-213381/5	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-213381/8	Method Blank	Total/NA	Solid	8260B	

GC VOA

Prep Batch: 212935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68229-1	S-15-B31	Total/NA	Soil	5035	
490-68229-1 DU	S-15-B31	Total/NA	Soil	5035	
490-68229-1 MS	S-15-B31	Total/NA	Soil	5035	
490-68229-1 MSD	S-15-B31	Total/NA	Soil	5035	
490-68229-3	S-25-B31	Total/NA	Soil	5035	
490-68229-4	S-30-B31	Total/NA	Soil	5035	

Analysis Batch: 214036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68229-1	S-15-B31	Total/NA	Soil	NWTPH-Gx	212935
490-68229-1 DU	S-15-B31	Total/NA	Soil	NWTPH-Gx	212935
490-68229-1 MS	S-15-B31	Total/NA	Soil	NWTPH-Gx	212935
490-68229-1 MSD	S-15-B31	Total/NA	Soil	NWTPH-Gx	212935
490-68229-3	S-25-B31	Total/NA	Soil	NWTPH-Gx	212935
490-68229-4	S-30-B31	Total/NA	Soil	NWTPH-Gx	212935
LCS 490-214036/5	Lab Control Sample	Total/NA	Solid	NWTPH-Gx	
MB 490-214036/7	Method Blank	Total/NA	Solid	NWTPH-Gx	

Metals

Prep Batch: 215479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68229-3	S-25-B31	Total/NA	Soil	3051A	
490-68412-A-57-D MS	Matrix Spike	Total/NA	Solid	3051A	
490-68412-A-57-E MSD	Matrix Spike Duplicate	Total/NA	Solid	3051A	
LCS 490-215479/2-A	Lab Control Sample	Total/NA	Solid	3051A	

TestAmerica Nashville

QC Association Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68229-1
SDG: 31160

Metals (Continued)

Prep Batch: 215479 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-215479/1-A	Method Blank	Total/NA	Solid	3051A	

Analysis Batch: 216293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68229-3	S-25-B31	Total/NA	Soil	6010C	215479
490-68412-A-57-D MS	Matrix Spike	Total/NA	Solid	6010C	215479
490-68412-A-57-E MSD	Matrix Spike Duplicate	Total/NA	Solid	6010C	215479
LCS 490-215479/2-A	Lab Control Sample	Total/NA	Solid	6010C	215479
MB 490-215479/1-A	Method Blank	Total/NA	Solid	6010C	215479

General Chemistry

Analysis Batch: 212903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68181-A-1 DU	Duplicate	Total/NA	Solid	Moisture	
490-68229-1	S-15-B31	Total/NA	Soil	Moisture	
490-68229-1 MS	S-15-B31	Total/NA	Soil	Moisture	
490-68229-1 MSD	S-15-B31	Total/NA	Soil	Moisture	
490-68229-3	S-25-B31	Total/NA	Soil	Moisture	
490-68229-4	S-30-B31	Total/NA	Soil	Moisture	

Lab Chronicle

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68229-1
SDG: 31160

Client Sample ID: S-15-B31

Date Collected: 12/05/14 13:35

Date Received: 12/09/14 08:30

Lab Sample ID: 490-68229-1

Matrix: Soil
Percent Solids: 91.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.06 g	5.0 mL	212938	12/10/14 12:40	JLP	TAL NSH
Total/NA	Analysis	8260B		1	7.06 g	5.0 mL	213381	12/12/14 03:15	KKK	TAL NSH
Total/NA	Prep	5035			6.12 g	5.0 mL	212935	12/10/14 12:29	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	6.12 g	5.0 mL	214036	12/14/14 13:19	AMC	TAL NSH
Total/NA	Analysis	Moisture		1			212903	12/10/14 11:27	RRS	TAL NSH

Client Sample ID: S-25-B31

Date Collected: 12/05/14 14:00

Date Received: 12/09/14 08:30

Lab Sample ID: 490-68229-3

Matrix: Soil
Percent Solids: 93.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.39 g	5.0 mL	212938	12/10/14 12:40	JLP	TAL NSH
Total/NA	Analysis	8260B		1	4.39 g	5.0 mL	213381	12/12/14 03:46	KKK	TAL NSH
Total/NA	Prep	5035			6.56 g	5.0 mL	212935	12/10/14 12:29	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	6.56 g	5.0 mL	214036	12/14/14 16:04	AMC	TAL NSH
Total/NA	Prep	3051A			0.504 g	100 mL	215479	12/19/14 13:04	NJB	TAL NSH
Total/NA	Analysis	6010C		1	0.504 g	100 mL	216293	12/22/14 22:10	HJM	TAL NSH
Total/NA	Analysis	Moisture		1			212903	12/10/14 11:27	RRS	TAL NSH

Client Sample ID: S-30-B31

Date Collected: 12/05/14 14:10

Date Received: 12/09/14 08:30

Lab Sample ID: 490-68229-4

Matrix: Soil
Percent Solids: 90.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.86 g	5.0 mL	212938	12/10/14 12:40	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5.86 g	5.0 mL	213381	12/12/14 04:18	KKK	TAL NSH
Total/NA	Prep	5035			6.54 g	5.0 mL	212935	12/10/14 12:29	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	6.54 g	5.0 mL	214036	12/14/14 16:46	AMC	TAL NSH
Total/NA	Analysis	Moisture		1			212903	12/10/14 11:32	RRS	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68229-1
SDG: 31160

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	TAL NSH
6010C	Metals (ICP)	SW846	TAL NSH
Moisture	Percent Moisture	EPA	TAL NSH

Protocol References:

EPA = US Environmental Protection Agency

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177



Certification Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68229-1
SDG: 31160

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Oregon	NELAP	10	TN200001	04-27-16

The following analytes are included in this report, but certification is not offered by the governing authority:

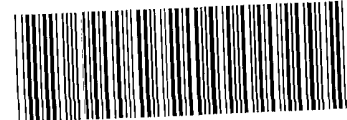
Analysis Method	Prep Method	Matrix	Analyte	
Moisture		Soil	Percent Solids	
Washington	State Program	10	C789	07-19-15

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Soil	Percent Solids



COOLER RECEIPT FORM



490-68229 Chain of Custody

Cooler Received/Opened On 12/9/2014 @ 8:30

1. Tracking # 4081 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 17610176

2. Temperature of rep. sample or temp blank when opened: 2.5 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 2 Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) AJH

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NA...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA 200

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (initial) AJH

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) AJH

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) AJH

I certify that I attached a label with the unique LIMS number to each container (initial) AJH

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...# _____

1 VOA labeled
S-45-B31
with sample
date and
time of
12-5-14/1440.

We received only
3 VOAs labeled
S-40-B31 and
this date and
time matched.

Received 4 VOAs
labeled
S-45-B31
with the correct
date and time.

COOLER RECEIPT FORM

Cooler Received/Opened On 12/9/2014 @ 0830

1. Tracking # 4092 (last 4 digits, FedEx)
- Courier: Fed Ex IR Gun ID 17960358
2. Temperature of rep. sample or temp blank when opened: 2.7 Degrees Celsius
3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA
4. Were custody seals on outside of cooler? YES...NO...NA
 If yes, how many and where: 1 front
5. Were the seals intact, signed, and dated correctly? YES...NO...NA
6. Were custody papers inside cooler? YES...NO...NA
- I certify that I opened the cooler and answered questions 1-6 (initial) EA
7. Were custody seals on containers: YES NO and Intact YES...NO...NA
 Were these signed and dated correctly? YES...NO...NA
8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None
9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None
10. Did all containers arrive in good condition (unbroken)? YES...NO...NA
11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA
12. Did all container labels and tags agree with custody papers? YES...NO...NA
- 13a. Were VOA vials received? YES...NO...NA
 b. Was there any observable headspace present in any VOA vial? YES...NO...NA
14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 1
- I certify that I unloaded the cooler and answered questions 7-14 (initial) EA
- 15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA
 b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA
16. Was residual chlorine present? YES...NO...NA
- I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) EA
17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA
18. Did you sign the custody papers in the appropriate place? YES...NO...NA
19. Were correct containers used for the analysis requested? YES...NO...NA
20. Was sufficient amount of sample sent in each container? YES...NO...NA
- I certify that I entered this project into LIMS and answered questions 17-20 (initial) EA
- I certify that I attached a label with the unique LIMS number to each container (initial) EA
21. Were there Non-Conformance issues at login? YES...NO...# Was a NCM generated? YES...NO...#

COOLER RECEIPT FORM

TAN 68229

Cooler Received/Opened On 12/9/2014 @ 8:30

1. Tracking # 4070 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 17610176

2. Temperature of rep. sample or temp blank when opened: 2.0 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) AOH

7. Were custody seals on containers: YES NO and intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA soil

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (initial) AO

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) AO

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) AO

I certify that I attached a label with the unique LIMS number to each container (initial) AO

21. Were there Non-Conformance issues at login? YES...NO...# Was an NCM generated? YES...NO...#

COOLER RECEIPT FORM

TAN 68229

Cooler Received/Opened On 12/9/2014@ 0830

1. Tracking # 4060 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 12080142

2. Temperature of rep. sample or temp blank when opened: 3.4 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: one front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) DA

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: CP Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (initial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) DA

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) DA

I certify that I attached a label with the unique LIMS number to each container (initial) DA

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...# _____

Login Sample Receipt Checklist

Client: Cardno ERI

Job Number: 490-68229-1

SDG Number: 31160

Login Number: 68229

List Number: 1

Creator: Huckaba, Jimmy

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-68289-1
TestAmerica Sample Delivery Group: 31160
Client Project/Site: 99BLV

For:
Cardno ERI
801 Second Ave
Suite 700
Seattle, Washington 98104

Attn: Michael Miller



Authorized for release by:
12/23/2014 4:59:36 PM

Leah Klingensmith, Senior Project Manager
(615)301-5038
leah.klingensmith@testamericainc.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68289-1
SDG: 31160

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-68289-3	S-20-B34	Soil	12/08/14 10:00	12/09/14 08:30
490-68289-5	S-30-B34	Soil	12/08/14 10:30	12/09/14 08:30
490-68289-7	S-40-B34	Solid	12/08/14 11:00	12/09/14 08:30

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Case Narrative

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68289-1
SDG: 31160

Job ID: 490-68289-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative 490-68289-1

Comments

No additional comments.

Receipt

The samples were received on 12/9/2014 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 2.0° C, 2.5° C, 2.7° C and 3.4° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC VOA

Method(s) NWTPH-Gx: The matrix spike / matrix spike duplicate (MS/MSD) precision for batch 214036 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated duplicate (DU) for NWTPH method sample precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68289-1
SDG: 31160

Qualifiers

GC VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68289-1
SDG: 31160

Client Sample ID: S-20-B34

Lab Sample ID: 490-68289-3

Date Collected: 12/08/14 10:00

Matrix: Soil

Date Received: 12/09/14 08:30

Percent Solids: 92.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00193		mg/Kg	☼	12/10/14 15:17	12/12/14 10:25	1
Toluene	ND		0.00193		mg/Kg	☼	12/10/14 15:17	12/12/14 10:25	1
Ethylbenzene	ND		0.00193		mg/Kg	☼	12/10/14 15:17	12/12/14 10:25	1
Xylenes, Total	ND		0.00290		mg/Kg	☼	12/10/14 15:17	12/12/14 10:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	12/10/14 15:17	12/12/14 10:25	1
1,2-Dichloroethane-d4 (Surr)	109		70 - 130	12/10/14 15:17	12/12/14 10:25	1
Toluene-d8 (Surr)	99		70 - 130	12/10/14 15:17	12/12/14 10:25	1
Dibromofluoromethane (Surr)	106		70 - 130	12/10/14 15:17	12/12/14 10:25	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		4.78		mg/Kg	☼	12/10/14 15:25	12/14/14 19:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	76		50 - 150	12/10/14 15:25	12/14/14 19:31	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	93		0.10		%			12/10/14 15:42	1

Client Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68289-1
SDG: 31160

Client Sample ID: S-30-B34

Lab Sample ID: 490-68289-5

Date Collected: 12/08/14 10:30

Matrix: Soil

Date Received: 12/09/14 08:30

Percent Solids: 93.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00166		mg/Kg	☼	12/10/14 15:30	12/12/14 10:52	1
Toluene	ND		0.00166		mg/Kg	☼	12/10/14 15:30	12/12/14 10:52	1
Ethylbenzene	ND		0.00166		mg/Kg	☼	12/10/14 15:30	12/12/14 10:52	1
Xylenes, Total	ND		0.00249		mg/Kg	☼	12/10/14 15:30	12/12/14 10:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	12/10/14 15:30	12/12/14 10:52	1
1,2-Dichloroethane-d4 (Surr)	109		70 - 130	12/10/14 15:30	12/12/14 10:52	1
Toluene-d8 (Surr)	99		70 - 130	12/10/14 15:30	12/12/14 10:52	1
Dibromofluoromethane (Surr)	107		70 - 130	12/10/14 15:30	12/12/14 10:52	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		4.48		mg/Kg	☼	12/10/14 15:25	12/14/14 20:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	75		50 - 150	12/10/14 15:25	12/14/14 20:13	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3.16		1.06		mg/Kg	☼	12/19/14 13:04	12/22/14 22:19	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	93		0.10		%			12/10/14 15:42	1

Client Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68289-1
SDG: 31160

Client Sample ID: S-40-B34

Lab Sample ID: 490-68289-7

Date Collected: 12/08/14 11:00

Matrix: Solid

Date Received: 12/09/14 08:30

Percent Solids: 94.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00157		mg/Kg	☼	12/10/14 15:30	12/12/14 11:19	1
Toluene	ND		0.00157		mg/Kg	☼	12/10/14 15:30	12/12/14 11:19	1
Ethylbenzene	ND		0.00157		mg/Kg	☼	12/10/14 15:30	12/12/14 11:19	1
Xylenes, Total	ND		0.00236		mg/Kg	☼	12/10/14 15:30	12/12/14 11:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	12/10/14 15:30	12/12/14 11:19	1
1,2-Dichloroethane-d4 (Surr)	108		70 - 130	12/10/14 15:30	12/12/14 11:19	1
Toluene-d8 (Surr)	95		70 - 130	12/10/14 15:30	12/12/14 11:19	1
Dibromofluoromethane (Surr)	104		70 - 130	12/10/14 15:30	12/12/14 11:19	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		4.66		mg/Kg	☼	12/10/14 15:25	12/14/14 20:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	78		50 - 150	12/10/14 15:25	12/14/14 20:54	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	94		0.10		%			12/10/14 15:42	1

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68289-1
SDG: 31160

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: 490-68253-D-23-D MS

Matrix: Solid

Analysis Batch: 213329

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 213198

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier					
Benzene	ND		0.0548	0.04974		mg/Kg	☼	91		31 - 143
Toluene	ND		0.0548	0.04386		mg/Kg	☼	80		30 - 155
Ethylbenzene	ND		0.0548	0.04667		mg/Kg	☼	85		23 - 161
Xylenes, Total	ND		0.110	0.09062		mg/Kg	☼	83		25 - 162

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	105		70 - 130
1,2-Dichloroethane-d4 (Surr)	104		70 - 130
Toluene-d8 (Surr)	91		70 - 130
Dibromofluoromethane (Surr)	99		70 - 130

Lab Sample ID: 490-68253-D-23-E MSD

Matrix: Solid

Analysis Batch: 213329

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 213198

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier						RPD	Limit
Benzene	ND		0.0555	0.04858		mg/Kg	☼	88		31 - 143	2	50
Toluene	ND		0.0555	0.04274		mg/Kg	☼	77		30 - 155	3	50
Ethylbenzene	ND		0.0555	0.03917		mg/Kg	☼	71		23 - 161	17	50
Xylenes, Total	ND		0.111	0.07666		mg/Kg	☼	69		25 - 162	17	50

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	105		70 - 130
1,2-Dichloroethane-d4 (Surr)	107		70 - 130
Toluene-d8 (Surr)	99		70 - 130
Dibromofluoromethane (Surr)	102		70 - 130

Lab Sample ID: MB 490-213329/6

Matrix: Solid

Analysis Batch: 213329

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	ND		0.00200		mg/Kg			12/12/14 05:55	1
Toluene	ND		0.00200		mg/Kg			12/12/14 05:55	1
Ethylbenzene	ND		0.00200		mg/Kg			12/12/14 05:55	1
Xylenes, Total	ND		0.00300		mg/Kg			12/12/14 05:55	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	103		70 - 130		12/12/14 05:55	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 130		12/12/14 05:55	1
Toluene-d8 (Surr)	100		70 - 130		12/12/14 05:55	1
Dibromofluoromethane (Surr)	103		70 - 130		12/12/14 05:55	1

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68289-1
SDG: 31160

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-213329/3

Matrix: Solid

Analysis Batch: 213329

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.05148		mg/Kg		103	75 - 127
Toluene	0.0500	0.05070		mg/Kg		101	80 - 132
Ethylbenzene	0.0500	0.05020		mg/Kg		100	80 - 134
Xylenes, Total	0.100	0.1008		mg/Kg		101	80 - 137

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,2-Dichloroethane-d4 (Surr)	103		70 - 130
Toluene-d8 (Surr)	99		70 - 130
Dibromofluoromethane (Surr)	102		70 - 130

Lab Sample ID: LCSD 490-213329/4

Matrix: Solid

Analysis Batch: 213329

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.05119		mg/Kg		102	75 - 127	1	50
Toluene	0.0500	0.04984		mg/Kg		100	80 - 132	2	50
Ethylbenzene	0.0500	0.05116		mg/Kg		102	80 - 134	2	50
Xylenes, Total	0.100	0.1021		mg/Kg		102	80 - 137	1	50

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,2-Dichloroethane-d4 (Surr)	102		70 - 130
Toluene-d8 (Surr)	98		70 - 130
Dibromofluoromethane (Surr)	104		70 - 130

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: 490-68229-B-1-B MS

Matrix: Solid

Analysis Batch: 214036

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 212935

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
C6-C12	ND		488	404.1		mg/Kg	✖	83	69 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene	85		50 - 150

Lab Sample ID: 490-68229-B-1-C MSD

Matrix: Solid

Analysis Batch: 214036

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 212935

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C12	ND		488	470.0	F2	mg/Kg	✖	96	69 - 130	15	10

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68289-1
SDG: 31160

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: 490-68229-B-1-C MSD
Matrix: Solid
Analysis Batch: 214036

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 212935

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene	89		50 - 150

Lab Sample ID: 490-68229-B-1-A DU
Matrix: Solid
Analysis Batch: 214036

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 212935

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
C6-C12	ND		ND		mg/Kg	☼	NC	10

Surrogate	DU %Recovery	DU Qualifier	Limits
a,a,a-Trifluorotoluene	77		50 - 150

Lab Sample ID: MB 490-214036/7
Matrix: Solid
Analysis Batch: 214036

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		5.00		mg/Kg			12/14/14 12:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	76		50 - 150		12/14/14 12:37	1

Lab Sample ID: LCS 490-214036/5
Matrix: Solid
Analysis Batch: 214036

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C6-C12	10.0	11.15		mg/Kg		111	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	92		50 - 150

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 490-215479/1-A
Matrix: Solid
Analysis Batch: 216293

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 215479

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.00		mg/Kg		12/19/14 13:04	12/22/14 20:51	1

Lab Sample ID: LCS 490-215479/2-A
Matrix: Solid
Analysis Batch: 216293

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 215479

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	20.2	20.75		mg/Kg		103	80 - 120

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68289-1
SDG: 31160

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 490-68412-A-57-D MS
Matrix: Solid
Analysis Batch: 216293

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 215479

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	14.1		23.2	29.08	F1	mg/Kg	✱	65	75 - 125

Lab Sample ID: 490-68412-A-57-E MSD
Matrix: Solid
Analysis Batch: 216293

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 215479

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	14.1		23.4	31.23	F1	mg/Kg	✱	73	75 - 125	7	20

Method: Moisture - Percent Moisture

Lab Sample ID: 490-68273-E-1 DU
Matrix: Solid
Analysis Batch: 213027

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	89		88		%		0.9	20

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

QC Association Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68289-1
SDG: 31160

GC/MS VOA

Prep Batch: 213016

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68289-3	S-20-B34	Total/NA	Soil	5035	
490-68289-5	S-30-B34	Total/NA	Soil	5035	
490-68289-7	S-40-B34	Total/NA	Solid	5035	

Prep Batch: 213198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68253-D-23-D MS	Matrix Spike	Total/NA	Solid	5030B	
490-68253-D-23-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5030B	

Analysis Batch: 213329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68253-D-23-D MS	Matrix Spike	Total/NA	Solid	8260B	213198
490-68253-D-23-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	213198
490-68289-3	S-20-B34	Total/NA	Soil	8260B	213016
490-68289-5	S-30-B34	Total/NA	Soil	8260B	213016
490-68289-7	S-40-B34	Total/NA	Solid	8260B	213016
LCS 490-213329/3	Lab Control Sample	Total/NA	Solid	8260B	
LCS 490-213329/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-213329/6	Method Blank	Total/NA	Solid	8260B	

GC VOA

Prep Batch: 212935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68229-B-1-A DU	Duplicate	Total/NA	Solid	5035	
490-68229-B-1-B MS	Matrix Spike	Total/NA	Solid	5035	
490-68229-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 213015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68289-3	S-20-B34	Total/NA	Soil	5035	
490-68289-5	S-30-B34	Total/NA	Soil	5035	
490-68289-7	S-40-B34	Total/NA	Solid	5035	

Analysis Batch: 214036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68229-B-1-A DU	Duplicate	Total/NA	Solid	NWTPH-Gx	212935
490-68229-B-1-B MS	Matrix Spike	Total/NA	Solid	NWTPH-Gx	212935
490-68229-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	NWTPH-Gx	212935
490-68289-3	S-20-B34	Total/NA	Soil	NWTPH-Gx	213015
490-68289-5	S-30-B34	Total/NA	Soil	NWTPH-Gx	213015
490-68289-7	S-40-B34	Total/NA	Solid	NWTPH-Gx	213015
LCS 490-214036/5	Lab Control Sample	Total/NA	Solid	NWTPH-Gx	
MB 490-214036/7	Method Blank	Total/NA	Solid	NWTPH-Gx	

Metals

Prep Batch: 215479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68289-5	S-30-B34	Total/NA	Soil	3051A	

TestAmerica Nashville

QC Association Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68289-1
SDG: 31160

Metals (Continued)

Prep Batch: 215479 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68412-A-57-D MS	Matrix Spike	Total/NA	Solid	3051A	
490-68412-A-57-E MSD	Matrix Spike Duplicate	Total/NA	Solid	3051A	
LCS 490-215479/2-A	Lab Control Sample	Total/NA	Solid	3051A	
MB 490-215479/1-A	Method Blank	Total/NA	Solid	3051A	

Analysis Batch: 216293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68289-5	S-30-B34	Total/NA	Soil	6010C	215479
490-68412-A-57-D MS	Matrix Spike	Total/NA	Solid	6010C	215479
490-68412-A-57-E MSD	Matrix Spike Duplicate	Total/NA	Solid	6010C	215479
LCS 490-215479/2-A	Lab Control Sample	Total/NA	Solid	6010C	215479
MB 490-215479/1-A	Method Blank	Total/NA	Solid	6010C	215479

General Chemistry

Analysis Batch: 213027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-68273-E-1 DU	Duplicate	Total/NA	Solid	Moisture	
490-68289-3	S-20-B34	Total/NA	Soil	Moisture	
490-68289-3 MS	S-20-B34	Total/NA	Soil	Moisture	
490-68289-3 MSD	S-20-B34	Total/NA	Soil	Moisture	
490-68289-5	S-30-B34	Total/NA	Soil	Moisture	
490-68289-7	S-40-B34	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68289-1
SDG: 31160

Client Sample ID: S-20-B34

Date Collected: 12/08/14 10:00

Date Received: 12/09/14 08:30

Lab Sample ID: 490-68289-3

Matrix: Soil
Percent Solids: 92.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.6 g	5.0 mL	213016	12/10/14 15:17	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5.6 g	5.0 mL	213329	12/12/14 10:25	SLM	TAL NSH
Total/NA	Prep	5035			6.18 g	5.0 mL	213015	12/10/14 15:25	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	6.18 g	5.0 mL	214036	12/14/14 19:31	AMC	TAL NSH
Total/NA	Analysis	Moisture		1			213027	12/10/14 15:42	RRS	TAL NSH

Client Sample ID: S-30-B34

Date Collected: 12/08/14 10:30

Date Received: 12/09/14 08:30

Lab Sample ID: 490-68289-5

Matrix: Soil
Percent Solids: 93.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.49 g	5.0 mL	213016	12/10/14 15:30	JLP	TAL NSH
Total/NA	Analysis	8260B		1	6.49 g	5.0 mL	213329	12/12/14 10:52	SLM	TAL NSH
Total/NA	Prep	5035			6.55 g	5.0 mL	213015	12/10/14 15:25	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	6.55 g	5.0 mL	214036	12/14/14 20:13	AMC	TAL NSH
Total/NA	Prep	3051A			0.507 g	100 mL	215479	12/19/14 13:04	NJB	TAL NSH
Total/NA	Analysis	6010C		1	0.507 g	100 mL	216293	12/22/14 22:19	HJM	TAL NSH
Total/NA	Analysis	Moisture		1			213027	12/10/14 15:42	RRS	TAL NSH

Client Sample ID: S-40-B34

Date Collected: 12/08/14 11:00

Date Received: 12/09/14 08:30

Lab Sample ID: 490-68289-7

Matrix: Solid
Percent Solids: 94.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.76 g	5.0 mL	213016	12/10/14 15:30	JLP	TAL NSH
Total/NA	Analysis	8260B		1	6.76 g	5.0 mL	213329	12/12/14 11:19	SLM	TAL NSH
Total/NA	Prep	5035			6.13 g	5.0 mL	213015	12/10/14 15:25	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	6.13 g	5.0 mL	214036	12/14/14 20:54	AMC	TAL NSH
Total/NA	Analysis	Moisture		1			213027	12/10/14 15:42	RRS	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68289-1
SDG: 31160

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	TAL NSH
6010C	Metals (ICP)	SW846	TAL NSH
Moisture	Percent Moisture	EPA	TAL NSH

Protocol References:

EPA = US Environmental Protection Agency

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177



Certification Summary

Client: Cardno ERI
Project/Site: 99BLV

TestAmerica Job ID: 490-68289-1
SDG: 31160

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Oregon	NELAP	10	TN200001	04-29-15

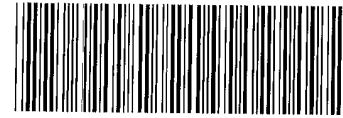
The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte	
Moisture		Soil	Percent Solids	
Moisture		Solid	Percent Solids	
Washington	State Program	10	C789	07-19-15

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Soil	Percent Solids
Moisture		Solid	Percent Solids





Cooler Received/Opened On 12/9/2014 @ 0830

1. Tracking # 4092 (last 4 digits, FedEx)

Courier: Fed Ex IR Gun ID 17960358

2. Temperature of rep. sample or temp blank when opened: 2.7 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO... NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) EA

7. Were custody seals on containers: YES NO and Intact YES...NO... NA

Were these signed and dated correctly? YES...NO... NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES... NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO... NA

14. Was there a Trip Blank in this cooler? YES... NO...NA If multiple coolers, sequence # 1

I certify that I unloaded the cooler and answered questions 7-14 (initial) EA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO... NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO... NA

16. Was residual chlorine present? YES...NO... NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) EA

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) EA

I certify that I attached a label with the unique LIMS number to each container (initial) EA

21. Were there Non-Conformance issues at login? YES... NO Was a NCM generated? YES... NO...# 0

COOLER RECEIPT FORM

TAN 68289

Cooler Received/Opened On 12/9/2014 @ 8:30

1. Tracking # 4070 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 17610176

2. Temperature of rep. sample or temp blank when opened: 2.0 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO... NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) AON

7. Were custody seals on containers: YES NO and intact YES...NO... NA

Were these signed and dated correctly? YES...NO... NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO... NA soil

14. Was there a Trip Blank in this cooler? YES... NO...NA If multiple coolers, sequence # can

I certify that I unloaded the cooler and answered questions 7-14 (initial) can

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO... NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO... NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) of

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) of

I certify that I attached a label with the unique LIMS number to each container (initial) of

21. Were there Non-Conformance issues at login? YES... NO Was a NCM generated? YES... NO...#

COOLER RECEIPT FORM

JAN 6 8 28 89

Cooler Received/Opened On 12/9/2014@ 0830

1. Tracking # 4060 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 12080142

2. Temperature of rep. sample or temp blank when opened: 3.4 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: one front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) DA

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (initial) CA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) CA

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) CA

I certify that I attached a label with the unique LIMS number to each container (initial) CA

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...# _____

COOLER RECEIPT FORM

TAN 68289

Cooler Received/Opened On 12/9/2014 @ 8:30

1. Tracking # 4081 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 17610176

2. Temperature of rep. sample or temp blank when opened: 2.5 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 2 Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) AJH

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA 50%

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (initial) [Signature]

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) ch

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA


19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) g

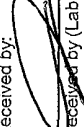
I certify that I attached a label with the unique LIMS number to each container (initial) ch

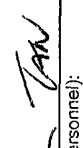
21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...# _____

Consultant Name: Cardno ERI Account #: 10313 PO#: CTC
 Consultant Address: 801 Second Avenue Suite 700 Invoice To: Michael Miller
 Consultant City/State/Zip: Seattle, WA 98104 Report To: Michael Miller
 ExxonMobil Project Mgr: Aaron Thom ct #/Activity #: 31160
 Consultant Project Mgr: Michael Miller ExxonMobil Site #: 99BLV
 Consultant Telephone Number: 206 269 0104 Fax No.: (206) 269-0098 Site Address: 1500 145th Place Southeast
 Sampler Name (Print): Robert Thompson, Nicholas Gerkin Site City, State, Zip: Bellevue, Washington 98007
 Sampler Signature:  Oversight Agency: Washington Department of Ecology

Sample ID	Field Point Name/ Location ID	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Methanol	Preservative											Matrix										Analyze For:	Due Date of Report					
									NaOH	H ₂ SO ₄ Plastic	H ₂ SO ₄ Glass	HNO ₃	Other	Ice	Other	None	Groundwater	Wastewater	Drinking Water	Sludge	Air	Other (specify):	BTEX by 8260B	TPHg by NWTPh-Gx	TPHd by NWTPh-Dx	TPHmo by NWTPh-Dx	Total Pb by 6010B	RUSH TAT (Pre-Schedule)	5-day TAT			Standard 10-day TAT				
S-10-B34	B34	12/08/14	09:40	5	X			2	2	2	2											1														
S-15-B34	B34	12/08/14	09:50	5	X			2	2	2	2											1														
S-20-B34	B34	12/08/14	10:00	5	X			2	2	2	2											1														
S-25-B34	B34	12/08/14	10:15	5	X			2	2	2	2											1														
S-30-B34	B34	12/08/14	10:30	5	X			2	2	2	2											1														
S-35-B34	B34	12/08/14	10:45	5	X			2	2	2	2											1														
S-40-B34	B34	12/08/14	11:00	5	X			2	2	2	2											1														
S-45-B34	B34	12/08/14	11:15	5	X			2	2	2	2											1														
S-50-B34	B34	12/08/14	11:30	5	X			2	2	2	2											1														

Comments/Special Instructions:
 Please include silica gel cleanup. Potential VOCs present other than BTEX from a new release.

Relinquished by:	Nicholas A. Gerkin	Date:	12/08/14	Time:	17:00
Relinquished by:		Date:	12-9-14	Time:	0830

Received by:		Date:	12-9-14	Time:	0830
--------------	--------------------------------------------------------------------------------------	-------	---------	-------	------

QC Deliverables (please circle one)
 Level 2
 Level 3
 Level 4

Temperature Upon Receipt: 20.3
 Sample Containers Inta Y N
 VOA Vials Free of Heat Y N

Laboratory Comments:
 20, 31, 2.5

Site Specific - if yes, please attach pre-schedule w/ TestAmerica Project Manager or attach specific instructions

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Login Sample Receipt Checklist

Client: Cardno ERI

Job Number: 490-68289-1

SDG Number: 31160

Login Number: 68289

List Number: 1

Creator: Huckaba, Jimmy

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



APPENDIX G

WASTE DOCUMENTATION



Certificate of Disposal / Treatment - Storage and Transfer

Run Date: 5/12/2015

Manifested To Site: Aragonite, UT Facility
11600 North Aptus Road
Grantsville, UT 84029

EPA ID/Prov ID: UTD981552177

Manifest No.	Generation Date	Received Date
NONHAZ34512	1/6/2015	1/19/2015

The above described waste, received at the Clean Harbors facility listed above pursuant to the manifest(s) listed above, has/will be treated and/or disposed of by Clean Harbors, or another licensed facility approved by Clean Harbors, in accordance with applicable federal, state and provincial laws and regulations. Any waste received by Clean Harbors and subsequently shipped to another licensed facility has been or shall be identified as being generated by Clean Harbors in accordance with 40CFR 264.71(c).

For waste imported/exported to/from Canada the waste has/will be disposed or recycled according to the Canadian export and import of hazardous waste or hazardous recyclable material regulation as published in the Canadian Gazette Part II, vol 139, No 11, SOR/2005-149 May 17, 2005

Under civil and criminal penalties of law for the making of submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

Signed: *Paul A. Melto*

Date: 5/12/2015

Title: Director Facility Applications



Certificate of Disposal / Treatment - Storage and Transfer

Run Date: 5/12/2015

Manifested To Site: Grassy Mountain, UT Facility
3 Miles East 7 Miles North of Knolls Exit 41 off I-80
Grantsville, UT 84029

EPA ID/Prov ID: UTD991301748

Manifest No.	Generation Date	Received Date
NH34513	1/6/2015	1/19/2015

The above described waste, received at the Clean Harbors facility listed above pursuant to the manifest(s) listed above, has/will be treated and/or disposed of by Clean Harbors, or another licensed facility approved by Clean Harbors, in accordance with applicable federal, state and provincial laws and regulations. Any waste received by Clean Harbors and subsequently shipped to another licensed facility has been or shall be identified as being generated by Clean Harbors in accordance with 40CFR 264.71(c).

For waste imported/exported to/from Canada the waste has/will be disposed or recycled according to the Canadian export and import of hazardous waste or hazardous recyclable material regulation as published in the Canadian Gazette Part II, vol 139, No 11, SOR/2005-149 May 17, 2005

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Signed: Paul A. Melto

Date: 5/12/2015

Title: Director Facility Applications