

**Chevron Environmental  
Management Company**

**Semi-Annual Groundwater  
Monitoring Report 2014**

Former Chevron Bulk Plant No. 100-1327  
Facilities North / King County (Metro)  
Seattle, Washington

November 7, 2014

**Semi-Annual Groundwater  
Monitoring Report 2014**

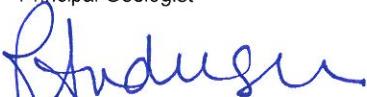
Former Chevron Bulk Plant  
No. 100-1327  
Facilities North / King County  
(Metro)  
Seattle, Washington



Samuel Miles  
Staff Environmental Scientist



Scott Zorn  
Principal Geologist



Rebecca Andresen, L.G.  
Technical Expert



Rebecca K. Andresen

Prepared for:  
Chevron Environmental Management  
Company

Prepared by:  
ARCADIS  
1100 Olive Way  
Suite 800  
Seattle  
Washington 98101  
Tel 206.325.5254  
Fax 206.325.8218

Our Ref.:  
B0045799

Date:  
November 7, 2014

*This document is intended only for the use of the individual or entity for which it was prepared and may contain information that is privileged, confidential and exempt from disclosure under applicable law. Any dissemination, distribution or copying of this document is strictly prohibited.*

## Table of Contents

<b>1.</b>	<b>Introduction</b>	<b>1</b>
1.1	North Yard	1
1.1.1	Touchstone PPCD	1
1.2	South Yard	2
1.3	Public Right of Way between North and South Yard	2
<b>2.</b>	<b>Groundwater Monitoring Methodology</b>	<b>2</b>
2.1	Groundwater Gauging Methods	2
2.2	LNAPL Recovery Methods	3
2.3	Groundwater Sampling Methods	3
<b>3.</b>	<b>Groundwater Monitoring Results</b>	<b>4</b>
3.1	Groundwater Gauging Results	4
3.2	LNAPL Monitoring and Recovery Results	5
3.3	Groundwater Analytical Results	6
<b>4.</b>	<b>Conclusions</b>	<b>7</b>
<b>5.</b>	<b>References</b>	<b>8</b>

### Tables

- Table 1     Groundwater Elevation and Light Non Aqueous Phase Liquid Monitoring and Removal Data  
Table 2     Groundwater Analytical Results

### Figures

- Figure 1     Site Plan  
Figure 2     Potentiometric Map with Analytical Results – June 10 and 11, 2014  
Figure 3     cPAH Analytical Results – June 10 and 11, 2014

## **Table of Contents**

### **Appendices**

- A      Field Notes
- B      Hydraulic Gradient Three Point Solution Worksheet
- C      Laboratory Analytical Reports

## 1. Introduction

On behalf of Chevron Environmental Management Company (Chevron) and King County Department of Transit (KCDT) Metro Transit (Metro), ARCADIS US, Inc. (ARCADIS), has prepared this report to document the first semi-annual 2014 groundwater sampling events for former Chevron Bulk Plant No. 100-1327 (the site). The site is located at 1602 North Northlake Way along the north shore of Lake Union in a mixed-use residential and commercial neighborhood. This property is divided into two operable areas: the North Yard located on the north side of North Northlake Way and the South Yard located adjacent to the north shore of Lake Union and south of North Northlake Way (Figure 1). This report summarizes the groundwater gauging and sampling events conducted by ARCADIS in the first half of 2014.

### 1.1 North Yard

The portion of the site that is located between North 34<sup>th</sup> Street (to the north) and North Northlake Place (to the south), and between Woodlawn Avenue North (to the west) and Densmore Avenue North (to the East) is the North Yard. Touchstone NLU LLC Corporation (Touchstone) purchased this property in 2009 and is currently redeveloping the property.

#### 1.1.1 Touchstone PPCD

Touchstone is remediating the North Yard portion of the site as part of its redevelopment, called NorthEdge. In 2007, Touchstone entered into a Prospective Purchaser Consent Decree (PPCD) with the State of Washington, Department of Ecology (Ecology) that requires Touchstone to remediate the North Yard to Model Toxics Control Act (MTCA) Method A soil cleanup levels for unrestricted use. According to the terms of PPCD, Touchstone is required to excavate and remove petroleum contaminated soil with the Touchstone property line for treatment and/or offsite disposal. Soil outside the Touchstone property line and groundwater are part of the Metro Lake Union/former Chevron Bulk Terminal Site Consent Decree.

### 1.2 South Yard

The South Yard is bounded by Lake Union on the southeast, private property on the northwest, North Northlake Place on the northeast, and a property occupied by the Seattle Harbor Patrol on the southeast.

### 1.3 Public Right of Way between North and South Yard

The onsite area between the North Yard and South Yard is referred to as the public right of way (ROW) in this report. This area is shown on **Figure 1**.

## 2. Groundwater Monitoring Methodology

Groundwater monitoring has been conducted intermittently (one, two or more times per year) since 1999 and quarterly in 2012 and 2013. Ecology has approved semi-annual compliance monitoring for 2014 and beyond.

During this reporting period, groundwater samples were collected at accessible site network monitoring wells by subcontractor Blaine Tech Services, Inc. (Blaine Tech), with direction from ARCADIS, on June 10 and 11, 2014. The June compliance sampling event also represents a baseline prior to the Touchstone NorthEdge development activities. Blaine Tech also conducted gauging activities on March 27, 2014 (First Quarter) and June 10, 2014 (Second Quarter). ARCADIS conducted additional gauging activities on July 22, 2014 at the request of Ecology. The purpose of the July 22, 2014 gauging event was to evaluate groundwater elevations in the area of newly replaced groundwater monitoring well MW-9R and newly installed monitoring wells MW-29, MW-30 and EW-1. Monitoring well installation activities are described in a report currently being drafted under separate cover.

### 2.1 Groundwater Gauging Methods

Depth to water was measured using a static oil/water level indicator from the top of the monitoring well casing and recorded on field data sheets. The oil/water level indicators were decontaminated with an Alconox® and water scrub and rinsed between each measurement to prevent cross contamination. Additionally, the wells were gauged in order from lowest historical concentrations of petroleum constituents to highest in order to prevent cross contamination. Non-disposable groundwater gauging equipment was decontaminated prior to and after each use with a detergent solution and rinsed in potable water. Field notes taken during gauging activities are included in **Appendix A**.

## **2.2 LNAPL Recovery Methods**

Manual removal of LNAPL has been completed at the site quarterly from 1997 to 2007, periodically from 2007 to 2013 and quarterly in 2014. LNAPL removal is conducted periodically based on field LNAPL observations collected during depth to water measurements. In general, LNAPL removal is conducted if measurable LNAPL (more than approximately 0.01 ft) is detected in a monitoring well during the current quarterly gauging event. LNAPL removal from monitoring wells is performed using manual bailing methods. Removed LNAPL is stored onsite in properly labeled sealed drums for disposal. Field notes taken during LNAPL removal activities are included in

**Appendix A.**

## **2.3 Groundwater Sampling Methods**

In total, 16 monitoring wells were sampled from the site monitoring well network during this reporting period. The specific site network monitoring wells sampled during this reporting period include the following: MW-4, MW-7, MW-8A, MW-11, MW-14, MW-15, MW-19, MW-20, MW-21, MW-22, MW-24, MW-25, MW-26, AGI-2, MLU-1, and MLU-3. MW-9 was scheduled to be sampled during this event but was not due to the presence of LNAPL. Field notes taken during the groundwater sampling activities are included in

**Appendix A.**

Sampling was conducted in accordance with low flow purge methodology, using a peristaltic pump and disposable tubing. Flow rates used during sampling ranged from approximately 200 to 500 milliliters per minute (mL/min) thereby minimizing water level drawdown in the well. During low flow purging, water quality parameters including pH, specific conductivity and temperature were monitored using a yellow springs instruments (YSI) 556 multi-parameter meter with a flow-through measurement cell. Groundwater was considered stabilized when pH readings remained within 0.1 unit, and specific conductivity and temperature readings remained within 3%. The flow-through measurement cell was then disconnected from the disposable tubing and sample containers were filled directly from the tubing.

After the samples were collected in appropriate laboratory bottles they were labeled, stored in a cooler packed with ice, and submitted under proper chain-of-custody procedures to Lancaster Laboratories (Lancaster) in Lancaster, Pennsylvania. Groundwater samples were submitted to the analytical laboratory for the following analyses for site specific compounds of concern (COCs):

- Benzene, toluene, ethylbenzene and naphthalene by EPA method 8021B
- carcinogenic polycyclic aromatic hydrocarbons (cPAHs) (including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene and indeno(1,2,3-cd)pyrene) by EPA 8270C SIM
- Dissolved lead and arsenic by EPA method 6020

During the June 2014 monitoring event cPAHs, lead and arsenic samples were field filtered with a disposable 0.45 micron filter. A duplicate groundwater sample (DUP) was collected from MW-8A during the sampling event and submitted blind to the laboratory for the above analyses.

### **3. Groundwater Monitoring Results**

#### **3.1 Groundwater Gauging Results**

Groundwater monitoring wells were gauged at the site on March 27, June 10 and July 22 in 2014. Groundwater elevations were adjusted for LNAPL solubility if present within a monitoring well. A solubility of 0.8 was used to adjust groundwater elevation for LNAPL if observed within onsite monitoring wells during the respective gauging events.

On March 27, 2014, groundwater monitoring wells MW-3, MW-4, MW-7, MW-8A, MW-9, MW-10, MW-11, MW-19, MW-20, MW-21, MW-24, MW-25, MW-26, MW-27, MLU-1, MLU-3, SMPN-1, SMPN-2, SMPN-3 and AGI-2 were gauged to determine groundwater elevations by Blaine Tech. Groundwater monitoring wells MW-14, MW-15 and MW-22 were unable to be located during the gauging event. Depth to groundwater ranged between 7.10 feet below top of casing (btoc) in monitoring well MW-27 to 23.06 feet btoc in monitoring well MW-24. Groundwater elevations ranged from 18.10 feet above mean sea level (msl) to 46.71 feet above msl in monitoring wells MW-8A and MW-24, respectively.

On June 10, 2014, groundwater monitoring wells MW-3, MW-4, MW-7, MW-8A, MW-9, MW-10, MW-11, MW-12, MW-14, MW-15, MW-19, MW-20, MW-21, MW-22, MW-24, MW-25, MW-26, MW-27, MLU-1, MLU-3, SMPN-1, SMPN-2, SMPN-3 and AGI-2 were gauged to determine groundwater elevations by Blaine Tech. Depth to groundwater ranged between 3.74 feet btoc in monitoring well SMPN-2 to 22.85 feet btoc in monitoring well MW-24. Groundwater elevations ranged from 18.82 feet above msl to 46.92 feet above msl in monitoring wells MW-8A and MW-24, respectively.

On July 22, 2014, groundwater monitoring wells MW-3, MW-9R, MW-10, MW-11, MW-12, MW-19, MW-20, MW-21, MW-22, MW-27, MW-28, MW-29, MW-30 and EW-1 were gauged to determine groundwater elevations by ARCADIS. Depth to groundwater ranged between 7.24 feet below top of casing btoc in monitoring well MW-28 to 14.34 feet btoc in monitoring well MW-22. Groundwater elevations ranged from 18.14 feet above msl to 25.89 feet above msl in monitoring wells MW-19/MW-20 and MW-28, respectively.

Groundwater elevation data at the site during the June 10, 2014, event indicate groundwater flow direction is toward the southwest. The groundwater flow direction has historically been to the southwest.

The horizontal hydraulic gradient for the North Yard was calculated to be 0.025 feet per foot (ft/ft) based on the groundwater elevations calculated at monitoring wells MW-9, MW-11 and MW-27 with a flow direction to the southwest. The horizontal hydraulic gradient for the South Yard was calculated to be 0.00029 ft/ft based on the groundwater elevations calculated at monitoring wells MLU-1, MW-15 and MW-26 with a flow direction to the southwest. A potentiometric groundwater elevation figure for June 10, 2014 monitoring well gauging data is included on **Figure 2**. Hydraulic Gradient Three Point Solution Worksheet is included as **Appendix B**.

### 3.2 LNAPL Monitoring and Recovery Results

During the March 27, 2014 monitoring event, measureable LNAPL was detected within monitoring wells MW-9 and MW-27 with a thickness of 0.17 foot and 0.02 foot respectively. The LNAPL was not removed from the wells during this event. Absorbent socks were removed and replaced from groundwater monitoring wells MW-9, MW-10, MW-27, SMPN-1 and SMPN-2.

During the June 10, 2014 monitoring event, measureable LNAPL was detected within monitoring wells MW-3, MW-9 and MW-12 at thicknesses of 4.91 feet, 0.03 foot and 0.06 foot respectfully. Sheen was observed in the water at monitoring well MW-27. LNAPL was recovered from groundwater monitoring wells MW-3, MW-9 and MW-12 with total estimated quantities of 5.00, 0.05 and 0.05 gallons, respectively. Absorbent socks were removed and replaced from groundwater monitoring wells MW-3, MW-9, MW-10, MW-12, MW-27, SMPN-1, SMPN-2, and SMPN-3.

During the July 22, 2014 monitoring event, measureable LNAPL was detected within monitoring wells MW-3, MW-12 and MW-27 at thicknesses of 0.69 foot, 0.04 foot and

0.005 foot, respectively. The LNAPL was not removed from the well during this event. Absorbent socks were not removed from groundwater monitoring wells during this event.

The total recovered quantity of LNAPL during this reporting period is estimated at 5.10 gallons LNAPL-water mixture removed. Measureable LNAPL thicknesses and recovered quantities are summarized in **Table 1**.

### 3.3 Groundwater Analytical Results

Groundwater cleanup levels at the site were based on MTCA Method B surface water cleanup levels (CULs) established in the Ecology approved cleanup action plan (CAP) (Foster Wheeler, 1998). The MTCA Method B surface water CULs for specific COCs at the site include:

Constituents of Concern	Groundwater CUL	Units
Benzene	43	µg/L
Toluene	48,500	µg/L
Ethylbenzene	6,910	µg/L
Naphthalene	9,880	µg/L
Benzo(a)anthracene	0.0296	µg/L
Benzo(a)pyrene	0.0296	µg/L
Benzo(b)fluoranthene	0.0296	µg/L
Benzo(k)fluoranthene	0.0296	µg/L
Chrysene	0.0296	µg/L
Dibenz(a,h)anthracene	0.0296	µg/L
Indeno(1,2,3-cd)pyrene	0.0296	µg/L
Arsenic	0.0982	µg/L
Lead	5	µg/L

During the semi-annual sampling event conducted on June 10 and 11, 2014, groundwater was sampled for benzene, toluene, ethylbenzene, naphthalene and filtered cPAHs, arsenic and lead, from monitoring wells MW-4, MW-7, MW-8A, MW-11, MW-14, MW-15, MW-19, MW-20, MW-21, MW-22, MW-24, MW-25, MW-26, AGI-2, MLU-1, and MLU-3. Dissolved arsenic was detected above the MTCA Method B surface water CUL of 0.0982 µg/L in groundwater samples from monitoring wells MW-7, MW-11, MW-15, MW-20, MW-21, MW-22, MW-25 and AGI-2 at concentrations

ranging from 0.96 µg/L (MW-25) to 13.6 µg/L (MW-21). The laboratory detection limit (DL) for dissolved arsenic exceeded the MTCA Method B surface water CUL in samples collected from wells MW-4, MW-8A, MW-14, MW-19, MW-24, MLU-1 and MLU-3. Chrysene was detected at a concentration greater than the MTCA Method B surface water CUL of 0.029 µg/L in MW-11 at 0.033 µg/L and benzene was detected at a concentration greater than the MTCA Method B surface water CUL of 43 µg/L in MW-22 at 780 µg/L, however both MW-11 and MW-22 are not point of compliance (POC) wells for either the North Yard or South Yard. No other COCs were detected at concentrations greater than the respective CULs. Laboratory data from point of compliance wells will be reported in the Ecology EIM database. Consecutive sampling events under the MTCA Method B surface water CUL in POC wells are presented in **Table 3**. The laboratory analytical report is included in **Appendix C** and the laboratory analytical results are presented on **Figure 2** and **Figure 3** and in **Table 2**.

#### 4. Conclusions

There were no exceedances of toluene, ethylbenzene, xylenes, naphthalene, dissolved cPAHs (with the exception of chrysene) and dissolved lead in samples from the June 2014 sampling event, however there were multiple dissolved arsenic exceedances, one benzene exceedance from well MW-22 and one chrysene exceedance from well MW-11. MW-11 and MW-22 have had concentrations at or near CUL concentrations during previous sampling events. Concentrations of the COCs in the groundwater samples collected during the 2014 event are generally consistent with historical data, and the only COC detected in POC wells above the Site specific CULs was arsenic. Analytical results are summarized in **Table 2**, **Figure 2** and **Figure 3**.

Since 2010, POC wells for the upper yard have had seven consecutive sampling events without hydrocarbon and cPAHs exceedances except for MW-10, which has not been sampled since 2010. POC wells in the lower yard have had three to eight consecutive clean sampling events except for MLU-3, which has only been sampled once since 2010 but had no exceedances. Consecutive sampling events under the MTCA Method B surface water CUL in POC wells are presented in **Table 3**.

During the March 27, 2014 monitoring event, measureable LNAPL was detected within monitoring wells MW-9 and MW-27 with a thickness of 0.17 foot and 0.02 foot respectively. During the June 10, 2014 monitoring event, measureable LNAPL was detected within monitoring wells MW-3, MW-9 and MW-12 at thicknesses of 4.91 feet, 0.03 foot and 0.06 foot respectfully.

The groundwater elevation data collected during the June 2014 monitoring event indicates groundwater flow direction and horizontal hydraulic gradient to be generally consistent with historical data.

The second semi-annual 2014 groundwater sampling event is scheduled to be conducted by ARCADIS in the fourth quarter of 2014.

## **5. References**

Foster Wheeler Environmental Corporation. 1998. *Draft Cleanup Action Plan Former Chevron Bulk Plant 100-1327 Facilities North/King County Metro Transit Lake Union Site*. November, 24.

**Tables**

**Table 1**  
**Groundwater Elevation and Light Non Aqueous Phase Liquid Monitoring and Removal Data**  
Former Chevron Bulk Plant #1001327  
1602 North Northlake Place  
Seattle, Washington

Well Number <sup>1</sup> (Well Casing Elevation)	Date Measured	Depth to Groundwater <sup>2</sup> (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation <sup>3</sup> (feet)
MW-3 (104.07)	08/11/99	--	--	--	--	No	--
	10/22/99	--	--	--	--	No	--
	05/24/01	10.25	9.99	0.26	--	No	94.03
	06/27/01	--	--	--	--	No	--
	03/18/02	9.28	8.59	0.69	--	No	95.34
	12/31/02	--	--	--	--	No	--
	03/26/03	7.02	--	0.00	--	No	97.05
	06/26/03	11.49	10.49	1.00	2.75	No	93.38
	07/21/03	--	--	--	2.50	No	--
	08/28/03	--	--	--	3.00	No	--
	10/16/03	13.89	11.55	2.34	1.75	No	92.05
	11/21/03	--	--	--	3.50	No	--
	12/17/03	11.02	10.27	0.75	2.00	No	93.65
	01/29/04	10.59	9.82	0.77	1.75	No	94.10
	02/18/04	10.32	9.77	0.55	0.75	No	94.19
	03/30/04	9.93	9.28	0.65	0.75	No	94.66
	09/22/04	11.35	10.61	0.74	1.50	No	93.31
	03/15/05	12.98	10.82	2.16	3.00	No	92.82
	9/28/05*	11.25	--	<3.0	3.50	No	--
	03/29/06	12.40	8.76	3.64	6.50	No	94.58
	03/21/07	10.67	9.13	1.54	2.00	No	94.63
	03/25/08	10.38	9.73	0.65	1.00	No	94.21
	09/08-09/08	11.02	10.55	0.47	1.50	Yes	93.43
	12/11/08	12.10	10.79	1.31	2.50	Yes	93.02
	03/30-31/09	9.70	--	0.00	0.00	Yes	94.37
	06/15/09	10.97	9.79	1.18	2.50 <sup>4</sup>	Yes	94.04
	09/10-11/09	12.21	10.94	1.27	1.66 <sup>4</sup>	Yes	92.88
	02/23/10	11.25	8.75	2.50	1.75 <sup>4</sup>	Yes	94.82
	03/15/10	11.25	8.60	2.65	2.50 <sup>6</sup>	Yes	94.94
	03/23/12	12.00	11.90	0.10	0.50	Yes	92.15
	06/01/12	--	--	--	--	Yes	--
	04/22/13	--	--	--	--	Yes	--
	06/26/13	--	--	--	--	Yes	--
	09/18/13	--	--	--	--	Yes	--
	10/14/13	--	--	--	--	Yes	--
	03/27/14	22.78	--	0.00	--	Yes	81.29
	06/10/14	11.88	6.97	4.91	5.00	Yes	96.12
	07/22/14	10.52	9.83	0.69	--	Yes	94.10
MW-4	08/10/99	--	--	--	--	--	--
	10/20/99	--	--	--	--	--	--
	07/26/01	15.46	--	0.00	--	--	--
	10/11/02	--	--	--	--	--	--
	12/31/02	16.88	--	0.00	--	--	--
	02/27/03	16.22	--	0.00	--	--	--
	03/26/03	15.38	--	0.00	--	--	--

**Table 1**  
**Groundwater Elevation and Light Non Aqueous Phase Liquid Monitoring and Removal Data**  
Former Chevron Bulk Plant #1001327  
1602 North Northlake Place  
Seattle, Washington

Well Number <sup>1</sup> (Well Casing Elevation)	Date Measured	Depth to Groundwater <sup>2</sup> (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation <sup>3</sup> (feet)
MW-4 (continued)  (33.92)	04/28/03	15.12	--	0.00	--	--	--
	05/30/03	15.02	--	0.00	--	--	--
	06/25/03	15.39	--	0.00	--	--	--
	09/16/03	16.76	--	0.00	--	--	--
	12/15/03	16.80	--	0.00	--	--	--
	03/25/04	15.85	--	0.00	--	--	--
	09/22/04	15.94	--	0.00	--	--	--
	03/14/05	16.26	--	0.00	--	--	--
	03/29/06	15.71	--	0.00	--	--	--
	03/21/07	15.77	--	0.00	--	--	--
	03/25/08	15.78	--	0.00	--	--	--
	09/08-09/08	15.91	--	0.00	--	--	--
	12/11/08	--	--	--	--	--	--
	03/30-31/09	15.54	--	0.00	--	--	--
	09/10-11/09	16.39	--	0.00	--	--	--
	03/15/10	12.67	--	0.00	--	--	--
	09/15/10	16.25	--	0.00	--	--	--
	03/14/11	15.55	--	0.00	--	--	--
	09/25/11	16.55	--	0.00	--	--	17.37
	10/10/11	16.20	--	0.00	--	--	17.72
	06/21/12	14.49	--	0.00	--	--	19.43
	09/20/12	16.60	--	0.00	--	--	17.32
	09/21/12	16.59	--	0.00	--	--	17.33
	12/26/12	16.62	--	0.00	--	--	17.30
	04/22/13	15.18	--	0.00	--	--	18.74
	06/26/13	15.15	--	0.00	--	--	18.77
	09/18/13	15.98	--	0.00	--	--	17.94
	10/14/13	16.26	--	0.00	--	--	17.66
	<b>03/27/14</b>	<b>15.69</b>	--	<b>0.00</b>	--	--	<b>18.23</b>
	06/10/14	15.05	--	0.00	--	--	18.87
MW-7 (98.39)	08/10/99	--	--	--	--	--	--
	10/20/99	--	--	--	--	--	--
	07/26/01	12.61	--	0.00	--	--	85.78
	04/03/02	13.03	--	0.00	--	--	85.36
	07/02/02	12.13	--	0.00	--	--	86.26
	09/03/02	13.76	--	0.00	--	--	84.63
	10/11/02	14.87	--	0.00	--	--	83.52
	03/26/03	13.12	--	0.00	--	--	85.27
	04/28/03	12.33	--	0.00	--	--	86.06
	05/30/03	11.76	--	0.00	--	--	86.63
	06/25/03	13.14	--	0.00	--	--	85.25
	09/16/03	13.93	--	0.00	--	--	84.46
	12/15/03	13.96	--	0.00	--	--	84.43
	03/21/07	--	--	--	--	--	--
	03/25/08	--	--	--	--	--	--

**Table 1**  
**Groundwater Elevation and Light Non Aqueous Phase Liquid Monitoring and Removal Data**  
Former Chevron Bulk Plant #1001327  
1602 North Northlake Place  
Seattle, Washington

Well Number <sup>1</sup> (Well Casing Elevation)	Date Measured	Depth to Groundwater <sup>2</sup> (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation <sup>3</sup> (feet)
MW-7 (continued)  (31.13)	09/08/09/08	--	--	--	--	--	--
	12/11/08	--	--	--	--	--	--
	03/30-31/09	--	--	--	--	--	--
	09/10-11/09	--	--	--	--	--	--
	03/15/10/11	13.07	--	0.00	--	--	85.32
	09/15/10	13.40	--	0.00	--	--	84.99
	03/14/11	12.85	--	0.00	--	--	85.54
	06/21/12	12.19	--	0.00	--	--	18.94
	09/20/12	13.74	--	0.00	--	--	17.39
	12/26/12	15.67	--	0.00	--	--	15.46
	04/22/13	12.40	--	0.00	--	--	18.73
	06/26/13	12.30	--	0.00	--	--	18.83
	09/18/13	13.15	--	0.00	--	--	17.98
	10/14/13	13.37	--	0.00	--	--	17.76
	03/27/14	12.82	--	0.00	--	--	18.31
	06/10/14	12.21	--	0.00	--	--	18.92
MW-8 (97.87)	08/09/99	--	--	--	--	--	--
	10/20/99	13.06	--	0.00	--	--	84.81
	01/06/00	--	--	--	--	--	--
	04/12/00	12.57	--	0.00	--	--	85.30
	06/27/00	12.61	--	0.00	--	--	85.26
	09/28/00	12.88	--	0.00	--	--	84.99
	01/15/01	13.70	--	0.00	--	--	84.17
	06/21/01	11.77	--	0.00	--	--	86.10
	07/26/01	12.18	--	0.00	--	--	85.69
	03/19/02	12.84	--	0.00	--	--	85.03
	04/03/02	12.48	--	0.00	--	--	85.39
	05/07/02	11.86	--	0.00	--	--	86.01
	06/06/02	12.39	--	0.00	--	--	85.48
	07/02/02	11.79	--	0.00	--	--	86.08
	09/03/02	13.24	--	0.00	--	--	84.63
	10/11/02	14.04	--	0.00	--	--	83.83
	12/31/02	13.69	--	0.00	--	--	84.18
	03/26/03	12.23	--	0.00	--	--	85.64
	04/28/03	12.87	--	0.00	--	--	85.00
	05/30/03	11.80	--	0.00	--	--	86.07
	06/25/03	12.20	--	0.00	--	--	85.67
	09/15/03	13.45	--	0.00	--	--	84.42
MW-8A (97.60)	12/15/03	13.32	--	0.00	--	--	84.28
	03/25/04	12.24	--	0.00	--	--	85.36
	09/23/04	12.30	--	0.00	--	--	85.30
	03/14/05	12.68	--	0.00	--	--	84.92
	03/29/06	12.14	--	0.00	--	--	85.46
	03/21/07	12.21	--	0.00	--	--	85.39
	03/25/08	12.13	--	0.00	--	--	85.47

**Table 1**  
**Groundwater Elevation and Light Non Aqueous Phase Liquid Monitoring and Removal Data**  
Former Chevron Bulk Plant #1001327  
1602 North Northlake Place  
Seattle, Washington

Well Number <sup>1</sup> (Well Casing Elevation)	Date Measured	Depth to Groundwater <sup>2</sup> (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation <sup>3</sup> (feet)
MW-8A (continued)  (30.31)	09/08-09/08	12.32	--	0.00	--	--	85.28
	12/11/08	--	--	--	--	--	--
	03/30-31/09	12.04	--	0.00	--	--	85.56
	09/10-11/09	12.80	--	0.00	--	--	84.80
	03/15/10	12.23	--	0.00	--	--	85.37
	09/15/10	12.66	--	0.00	--	--	84.94
	03/14/11	12.19	--	0.00	--	--	85.41
	11/16/11	13.14	--	0.00	--	--	17.17
	06/21/12	11.45	--	0.00	--	--	18.86
	09/20/12	12.97	--	0.00	--	--	17.34
	09/21/12	12.97	--	0.00	--	--	17.34
	12/26/12	13.07	--	0.00	--	--	17.24
	04/23/13	11.70	--	0.00	--	--	18.61
	06/26/13	11.50	--	0.00	--	--	18.81
	09/18/13	12.37	--	0.00	--	--	17.94
	10/14/13	12.65	--	0.00	--	--	17.66
	<b>03/27/14</b>	<b>12.21</b>	--	<b>0.00</b>	--	--	<b>18.10</b>
	<b>06/10/14</b>	<b>11.49</b>	--	<b>0.00</b>	--	--	<b>18.82</b>
MW-9 (103.67)	08/11/99	--	--	--	--	No	--
	10/21/99	--	--	--	--	No	--
	05/24/01	14.07	14.02	0.05	--	No	89.64
	06/21/01	13.78	13.74	0.04	--	No	89.92
	06/27/01	13.79	--	0.00	--	No	89.88
	03/18/02	13.51	12.82	0.69	--	No	90.71
	10/16/02	--	--	0.54	--	No	--
	11/11/02	--	--	0.90	--	No	--
	12/31/02	--	--	0.91	--	No	--
	02/27/03	--	--	0.02	--	No	--
	03/26/03	--	--	0.09	--	No	--
	04/28/03	13.25	13.18	0.07	--	No	90.48
	05/30/03	13.52	13.43	0.09	--	No	90.22
	06/26/03	13.90	13.86	0.04	0.10	No	89.80
	07/21/03	--	--	0.21	2.00	No	--
	08/28/03	--	--	0.23	0.75	No	--
	10/16/03	15.98	15.41	0.57	2.00	No	88.15
	11/21/03	--	--	0.01	0.25	No	--
	12/17/03	--	--	0.00	0.00	No	--
	01/29/04	14.16	14.13	0.03	0.10	No	89.53
	02/18/04	11.11	10.94	0.17	0.25	No	92.70
	03/25/04	13.66	--	0.00	--	No	90.01
	03/30/04	13.80	13.69	0.11	0.25	No	89.96
	09/22/04	9.52	9.49	0.03	0.25	No	94.17
	03/15/05	14.81	14.52	0.29	0.25	No	89.09
	09/28/05	15.31	15.06	0.25	<0.01	No	88.56
	03/29/06	13.26	13.00	0.26	<0.5	No	90.62

**Table 1**  
**Groundwater Elevation and Light Non Aqueous Phase Liquid Monitoring and Removal Data**  
Former Chevron Bulk Plant #1001327  
1602 North Northlake Place  
Seattle, Washington

Well Number <sup>1</sup> (Well Casing Elevation)	Date Measured	Depth to Groundwater <sup>2</sup> (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation <sup>3</sup> (feet)
MW-9 (continued)  (36.46)	03/21/07	13.73	13.41	0.32	0.19	No	90.20
	03/25/08	13.93	--	0.00	<0.25	No	89.74
	09/08-09/08	14.23	14.22	0.01	0.00	Yes	89.45
	12/11/08	15.16	15.11	0.05	0.02	Yes	88.55
	03/30-31/09	14.06	--	0.00	--	Yes	89.61
	06/15/09	13.32	--	0.00	--	Yes	90.35
	09/10-11/09	14.80	--	0.00	--	Yes	88.87
	02/23/10	13.10	12.80	0.30	0.21 <sup>4</sup>	Yes	90.81
	03/15/10	13.33	13.10	0.23	0.18 <sup>4</sup>	Yes	90.52
	09/15/10 <sup>1</sup>	15.05	14.50	0.55	0.20 <sup>4</sup>	Yes	89.06
	12/04/10 <sup>1</sup>	14.50	14.37	0.13	0.20 <sup>4</sup>	Yes	89.27
	3/14/2011 <sup>1</sup>	12.71	--	0.00	--	Yes	90.96
	9/24/2011 <sup>1</sup>	14.62	--	0.00	--	Yes	21.84
	12/08/2011 <sup>1</sup>	12.87	--	0.00	--	Yes	23.59
	03/23/12	10.55	10.35	0.20	0.50	Yes	26.07
	06/01/12	11.75	11.55	0.20	1.00	Yes	24.87
	09/20/12	14.47	13.95	0.52	--	Yes	22.41
	12/26/12	11.60	10.60	1.00	--	Yes	25.66
	04/22/13	11.07	10.40	0.67	--	Yes	25.93
	06/26/13	12.45	12.30	0.15	--	Yes	24.13
	09/18/13	14.51	14.20	0.31	--	Yes	22.20
	10/14/13	14.10	13.99	0.11	--	Yes	22.45
	03/27/14	11.93	11.76	0.17	--	Yes	24.67
	06/10/14	12.22	12.19	0.03	0.05	Yes	24.26
	07/22/14	13.31	--	0.00	--	Yes	--
MW-10 (100.30)	08/11/99	--	--	--	--	No	--
	10/21/99	--	--	--	--	No	--
	04/12/00	7.34	--	0.00	--	No	92.96
	06/27/00	8.95	--	0.00	--	No	91.35
	09/28/00	10.08	--	0.00	--	No	90.22
	01/15/01	10.16	--	0.00	--	No	90.14
	05/24/01	9.14	--	0.00	--	No	91.16
	06/21/01	7.97	--	0.00	--	No	92.33
	06/27/01	9.07	--	0.00	--	No	91.23
	03/18/02	7.09	--	0.00	--	No	93.21
	07/02/02	8.37	--	0.00	--	No	91.93
	09/28/02	10.08	--	0.00	--	No	90.22
	12/31/02	--	--	0.96	--	No	--
	02/27/03	--	--	0.17	--	No	--
	03/26/03	--	--	0.04	--	No	--
	04/28/03	8.80	--	0.00	--	No	91.50
	05/30/03	8.76	--	0.00	--	No	91.54
	06/26/03	8.99	8.69	0.30	6.00	No	91.55
	07/21/03	--	--	0.06	1.00	No	--
	08/28/03	--	--	0.14	6.00	No	--

**Table 1**  
**Groundwater Elevation and Light Non Aqueous Phase Liquid Monitoring and Removal Data**  
Former Chevron Bulk Plant #1001327  
1602 North Northlake Place  
Seattle, Washington

Well Number <sup>1</sup> (Well Casing Elevation)	Date Measured	Depth to Groundwater <sup>2</sup> (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation <sup>3</sup> (feet)
MW-10 (continued)	10/16/03	11.56	10.54	1.02	18.50	No	89.56
	11/21/03	--	--	1.33	7.00	No	--
	12/17/03	--	--	0.15	0.75	No	--
	01/29/04	8.61	8.61	0.00	--	No	91.69
	02/18/04	8.72	8.58	0.14	0.25	No	91.69
	03/30/04	8.47	8.41	0.06	0.25	No	91.88
	09/22/04	9.64	9.56	0.08	0.50	No	90.72
	03/15/05	10.20	9.83	0.37	0.25	No	90.40
	10/04/05	11.20	10.39	0.81	1.75	No	89.75
	03/29/06	8.35	7.63	0.72	2.00	No	92.53
	03/21/07	7.95	7.49	0.46	0.44	No	92.72
	03/25/08	8.68	8.68	0.00	0.00	No	91.62
	09/08-09/08	9.39	9.34	0.05	0.20	Yes	90.95
	12/11/08	9.90	9.59	0.31	1.00	Yes	90.65
	03/30-31/09	8.44	8.20	0.24	1.11 <sup>4</sup>	Yes	92.05
	06/15/09	8.31	8.10	0.21	0.34 <sup>4</sup>	Yes	92.16
	09/10-11/09	10.14	10.12	0.02	0.00	Yes	90.18
	02/23/10	7.14	7.13	0.01	0.00	Yes	93.17
	03/15/10	7.24	--	0.00	--	Yes	93.06
	09/15/10	9.48	Sheen	Sheen	--	Yes	90.82
	12/04/10	--	--	--	--	Yes	--
	<b>03/27/14</b>	<b>8.28</b>	--	<b>0.00</b>	--	<b>Yes</b>	<b>24.81</b>
	<b>06/10/14</b>	<b>7.42</b>	--	<b>0.00</b>	--	<b>Yes</b>	<b>25.67</b>
	<b>07/22/14</b>	<b>8.81</b>	--	<b>0.00</b>	--	<b>Yes</b>	<b>24.28</b>
MW-11 (100.59)	08/11/99	--	--	--	--	--	--
	10/22/99	--	--	--	--	--	--
	06/21/01	11.30	--	0.00	--	--	89.29
	03/18/02	10.96	--	0.00	--	--	89.63
	09/16/03	13.03	--	0.00	--	--	87.56
	12/15/03	13.92	--	0.00	--	--	86.67
	03/25/04	11.17	--	0.00	--	--	89.42
	09/22/04	12.05	--	0.00	--	--	88.54
	03/14/05	11.90	--	0.00	--	--	88.69
	03/29/06	10.32	--	0.00	--	--	90.27
	03/21/07	8.36	--	0.00	--	--	92.23
	03/25/08	9.38	--	0.00	--	--	91.21
	09/08-09/08	10.35	--	0.00	--	--	90.24
	12/11/08	10.63	--	0.00	--	--	89.96
	03/30-31/09	9.60	--	0.00	--	--	90.99
	06/15/09	--	--	--	--	--	--
	09/10-11/09	8.07	--	0.00	--	--	92.54
	02/23/10	8.60	--	0.00	--	--	92.01
	03/15/10	8.75	--	0.00	--	--	91.86
	09/15/10	10.27	--	0.00	--	--	90.34
	12/04/10	10.37	--	0.00	--	--	90.24

**Table 1**  
**Groundwater Elevation and Light Non Aqueous Phase Liquid Monitoring and Removal Data**  
Former Chevron Bulk Plant #1001327  
1602 North Northlake Place  
Seattle, Washington

Well Number <sup>1</sup> (Well Casing Elevation)	Date Measured	Depth to Groundwater <sup>2</sup> (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation <sup>3</sup> (feet)
MW-11 (continued) (33.29)	03/14/11	9.33	--	0.00	--	--	91.28
	10/14/13	11.04	--	0.00	--	--	22.25
	<b>03/27/14</b>	<b>9.38</b>	--	<b>0.00</b>	--	--	<b>23.91</b>
	<b>06/10/14</b>	<b>9.53</b>	--	<b>0.00</b>	--	--	<b>23.76</b>
	<b>07/22/14</b>	<b>10.60</b>	--	<b>0.00</b>	--	--	<b>22.69</b>
MW-12 (100.11)  (32.89)	08/11/99	--	--	--	--	No	--
	10/21/99	--	--	--	--	No	--
	05/24/01	8.30	--	0.00	--	No	91.81
	06/21/01	--	--	--	--	No	
	06/27/01	9.01	9.00	0.01	--	No	91.11
	03/18/02	7.91	7.87	0.04	--	No	92.23
	12/31/02	--	--	0.02	--	No	--
	04/28/03	7.36	7.27	0.09	--	No	92.82
	05/30/03	7.42	7.37	0.05	--	No	92.73
	06/26/03	8.32	Sheen	Sheen	0.10	No	91.79
	07/21/03	--	--	0.01	0.50	No	--
	08/28/03	--	--	0.03	0.75	No	--
	10/16/03	9.48	9.36	0.12	0.75	No	90.73
	11/21/03	--	--	--	--	No	--
	12/17/03	--	--	--	--	No	--
	01/29/04	8.44	8.44	0.00	0.00	No	91.67
	02/18/04	7.54	7.54	0.00	0.00	No	92.57
	03/25/04	7.54	--	0.00	--	No	92.57
	03/30/04	7.84	7.84	0.00	0.00	No	92.27
	09/22/04	8.69	8.65	0.04	0.25	No	91.45
	03/15/05	8.79	8.78	0.01	0.00	No	91.33
	10/04/05	13.67	13.65	0.02	<0.01	No	86.46
	03/29/06	7.51	7.51	0.00	0.00	No	92.60
	03/21/07	7.32	7.32	0.00	0.00	No	92.79
	03/25/08	8.09	--	0.00	--	No	92.02
	09/08-09/08	8.65	--	0.00	--	No	91.46
	12/11/08	8.62	8.61	0.01	0.00	Yes	91.50
	03/30-31/09	7.54	7.53	0.01	0.00	Yes	92.58
	06/15/09	7.92	--	0.00	--	Yes	92.19
	09/10-11/09	9.23	9.22	0.01	0.00	Yes	90.89
	02/23/10	6.90	--	0.00	--	Yes	93.21
	03/15/10	7.23	--	0.00	--	Yes	92.88
	09/15/10	8.62	Sheen	Sheen	--	Yes	91.49
	12/04/10	--	--	--	--	Yes	--
	<b>06/10/14</b>	<b>7.68</b>	<b>7.62</b>	<b>0.06</b>	<b>0.05</b>	<b>Yes</b>	<b>25.26</b>
	<b>07/22/14</b>	<b>8.48</b>	<b>8.44</b>	<b>0.04</b>	--	<b>Yes</b>	<b>24.44</b>
MW-14 (98.87)	07/26/01	13.05	--	0.00	--	--	85.82
	03/29/06	13.32	--	0.00	--	--	85.55
	03/21/07	13.33	--	0.00	--	--	85.54
	03/25/08	13.38	--	0.00	--	--	85.49

**Table 1**  
**Groundwater Elevation and Light Non Aqueous Phase Liquid Monitoring and Removal Data**  
Former Chevron Bulk Plant #1001327  
1602 North Northlake Place  
Seattle, Washington

Well Number <sup>1</sup> (Well Casing Elevation)	Date Measured	Depth to Groundwater <sup>2</sup> (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation <sup>3</sup> (feet)
MW-14 (continued)  (31.61)	09/08-09/08	13.50	--	0.00	--	--	85.37
	12/11/08	--	--	--	--	--	--
	03/30-31/09	13.10	--	0.00	--	--	85.77
	09/10-11/09	14.00	--	0.00	--	--	84.87
	03/15/10	13.49	--	0.00	--	--	85.38
	09/15/10	--	--	--	--	--	--
	<b>03/27/14</b>	--	--	--	--	--	--
	<b>06/10/14</b>	<b>12.61</b>	--	<b>0.00</b>	--	--	<b>19.00</b>
MW-15 (98.83)  (31.60)	08/10/99	--	--	--	--	--	--
	10/20/99	13.96	--	0.00	--	--	84.87
	07/26/01	13.04	--	0.00	--	--	85.79
	03/18/02	13.62	--	0.00	--	--	85.21
	06/26/03	13.05	--	0.00	--	--	85.78
	09/16/03	14.35	--	0.00	--	--	84.48
	03/29/06	13.00	--	0.00	--	--	85.83
	03/21/07	13.33	--	0.00	--	--	85.50
	03/25/08	13.36	--	0.00	--	--	85.47
	09/08-09/08	13.46	--	0.00	--	--	85.37
	12/11/08	--	--	--	--	--	--
	03/30-31/09	13.12	--	0.00	--	--	85.71
	09/10-11/09	13.97	--	0.00	--	--	84.86
	03/15/10	15.50	--	0.00	--	--	83.33
	09/15/10	15.87	--	0.00	--	--	82.96
	03/14/11	14.99	--	0.00	--	--	83.84
	<b>03/27/14</b>	--	--	--	--	--	--
	<b>06/10/14</b>	<b>12.66</b>	--	<b>0.00</b>	--	--	<b>18.94</b>
MW-16	03/21/07	14.49	--	0.00	--	--	--
	03/25/08	15.25	--	0.00	--	--	--
	09/08-09/08	18.51	--	0.00	--	--	--
	12/11/08	--	--	--	--	--	--
	03/30-31/09	16.11	--	0.00	--	--	--
MW-19 (98.10)	08/11/99	--	--	--	--	--	--
	10/20/99	--	--	--	--	--	--
	06/21/01	11.99	--	0.00	--	--	86.11
	06/26/03	12.02	--	0.00	--	--	86.08
	09/16/03	13.67	--	0.00	--	--	84.43
	12/15/03	13.60	--	0.00	--	--	84.50
	03/26/04	12.74	--	0.00	--	--	85.36
	09/23/04	12.82	--	0.00	--	--	85.28
	03/14/05	13.16	--	0.00	--	--	84.94
	03/29/06	12.63	--	0.00	--	--	85.47
	03/21/07	12.71	--	0.00	--	--	85.39
	03/25/08	12.70	--	0.00	--	--	85.40
	09/08-09/08	12.81	--	0.00	--	--	85.29
	12/11/08	--	--	--	--	--	--

**Table 1**  
**Groundwater Elevation and Light Non Aqueous Phase Liquid Monitoring and Removal Data**  
Former Chevron Bulk Plant #1001327  
1602 North Northlake Place  
Seattle, Washington

Well Number <sup>1</sup> (Well Casing Elevation)	Date Measured	Depth to Groundwater <sup>2</sup> (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation <sup>3</sup> (feet)
MW-19 (continued)  (30.87)	03/30-31/09	12.57	--	0.00	--	--	85.53
	09/10-11/09	13.30	--	0.00	--	--	84.80
	03/15/10	12.85	--	0.00	--	--	85.25
	09/15/10	13.18	--	0.00	--	--	84.92
	11/16/11	13.62	--	0.00	--	--	17.25
	06/21/12	11.93	--	0.00	--	--	18.94
	09/20/12	13.50	--	0.00	--	--	17.37
	12/26/12	13.55	--	0.00	--	--	17.32
	04/24/13	12.18	--	0.00	--	--	18.69
	06/26/13	12.08	--	0.00	--	--	18.79
	09/18/13	12.91	--	0.00	--	--	17.96
	10/14/13	13.10	--	0.00	--	--	17.77
	<b>03/27/14</b>	<b>12.63</b>	--	<b>0.00</b>	--	--	<b>18.24</b>
	<b>06/10/14</b>	<b>11.95</b>	--	<b>0.00</b>	--	--	<b>18.92</b>
	<b>07/22/14</b>	<b>12.73</b>	--	<b>0.00</b>	--	--	<b>18.14</b>
MW-20 (98.74)  (31.49)	08/11/99	--	--	--	--	--	--
	10/20/99	13.99	--	0.00	--	--	84.75
	09/28/00	13.41	--	0.00	--	--	85.33
	06/21/01	12.61	--	0.00	--	--	86.13
	03/19/02	13.69	--	0.00	--	--	85.05
	06/26/03	12.92	--	0.00	--	--	85.82
	09/16/03	14.29	--	0.00	--	--	84.45
	12/15/03	14.34	--	0.00	--	--	84.40
	03/26/04	13.36	--	0.00	--	--	85.38
	03/14/05	13.80	--	0.00	--	--	84.94
	03/29/06	13.26	--	0.00	--	--	85.48
	03/21/07	13.33	--	0.00	--	--	85.41
	03/25/08	13.33	--	0.00	--	--	85.41
	09/08-09/08	13.42	--	0.00	--	--	85.32
	12/11/08	--	--	--	--	--	--
	03/30-31/09	--	--	--	--	--	--
	09/10-11/09	13.92	--	0.00	--	--	84.82
	03/15/10	13.46	--	0.00	--	--	85.28
	09/15/10	13.79	--	0.00	--	--	84.95
	11/16/11	14.22	--	0.00	--	--	17.27
	06/21/12	12.53	--	0.00	--	--	18.96
	09/20/12	14.11	--	0.00	--	--	17.38
	12/26/12	14.20	--	0.00	--	--	17.29
	04/23/13	12.80	--	0.00	--	--	18.69
	06/26/13	12.70	--	0.00	--	--	18.79
	09/18/13	13.52	--	0.00	--	--	17.97
	10/14/13	13.72	--	0.00	--	--	17.77
	<b>03/27/14</b>	<b>13.24</b>	--	<b>0.00</b>	--	--	<b>18.25</b>
	<b>06/10/14</b>	<b>12.51</b>	--	<b>0.00</b>	--	--	<b>18.98</b>
	<b>07/22/14</b>	<b>13.35</b>	--	<b>0.00</b>	--	--	<b>18.14</b>

**Table 1**  
**Groundwater Elevation and Light Non Aqueous Phase Liquid Monitoring and Removal Data**  
Former Chevron Bulk Plant #1001327  
1602 North Northlake Place  
Seattle, Washington

Well Number <sup>1</sup> (Well Casing Elevation)	Date Measured	Depth to Groundwater <sup>2</sup> (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation <sup>3</sup> (feet)
MW-21 (98.52)	08/10/99	--	--	--	--	--	--
	10/19/99	--	--	--	--	--	--
	06/21/01	12.31	--	0.00	--	--	86.21
	03/18/02	13.36	--	0.00	--	--	85.16
	06/26/03	12.66	--	0.00	--	--	85.86
	09/16/03	13.98	--	0.00	--	--	84.54
	12/15/03	14.05	--	0.00	--	--	84.47
	03/26/04	13.08	--	0.00	--	--	85.44
	09/23/04	13.19	--	0.00	--	--	85.33
	03/14/05	13.51	--	0.00	--	--	85.01
	03/29/06	12.98	--	0.00	--	--	85.54
	03/21/07	13.00	--	0.00	--	--	85.52
	03/25/08	13.02	--	0.00	--	--	85.50
	09/08-09/08	13.14	--	0.00	--	--	85.38
	12/11/08	--	--	--	--	--	--
	03/30-31/09	12.86	--	0.00	--	--	85.66
	09/10-11/09	13.63	--	0.00	--	--	84.89
	03/15/10	13.15	--	0.00	--	--	85.37
	09/15/10	13.51	--	0.00	--	--	85.01
	03/14/11	13.05	--	0.00	--	--	85.47
	09/24/11	13.51	--	0.00	--	--	17.75
	10/10/11	13.83	--	0.00	--	--	17.43
	06/21/12	12.24	--	0.00	--	--	19.02
	09/20/12	13.82	--	0.00	--	--	17.44
	12/26/12	13.86	--	0.00	--	--	17.40
	04/23/13	12.47	--	0.00	--	--	18.79
	06/26/13	12.39	--	0.00	--	--	18.87
	09/18/13	13.25	--	0.00	--	--	18.01
	10/14/13	--	--	--	--	--	--
	<b>03/27/14</b>	<b>12.98</b>	--	<b>0.00</b>	--	--	<b>18.28</b>
	<b>06/10/14</b>	<b>12.33</b>	--	<b>0.00</b>	--	--	<b>18.93</b>
	<b>07/22/14</b>	<b>13.05</b>	--	<b>0.00</b>	--	--	<b>18.21</b>
MW-22 (99.76)	08/10/99	--	--	--	--	--	--
	10/22/99	--	--	--	--	--	--
	01/06/00	--	--	--	--	--	--
	01/15/01	--	--	--	--	--	--
	06/21/01	13.53	--	0.00	--	--	86.23
	03/18/02	14.41	--	0.00	--	--	85.35
	07/02/02	13.56	--	0.00	--	--	86.20
	09/03/02	14.95	--	0.00	--	--	84.81
	12/31/02	15.22	--	0.00	--	--	84.54
	06/25/03	13.91	--	0.00	--	--	85.85
	09/16/03	15.15	--	0.00	--	--	84.61
	12/17/03	15.03	--	0.00	--	--	84.73
	03/25/04	14.20	--	0.00	--	--	85.56

**Table 1**  
**Groundwater Elevation and Light Non Aqueous Phase Liquid Monitoring and Removal Data**  
Former Chevron Bulk Plant #1001327  
1602 North Northlake Place  
Seattle, Washington

Well Number <sup>1</sup> (Well Casing Elevation)	Date Measured	Depth to Groundwater <sup>2</sup> (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation <sup>3</sup> (feet)
MW-22 (continued)  (32.68)	09/22/04	14.28	--	0.00	--	--	85.48
	03/14/05	14.70	--	0.00	--	--	85.06
	03/29/06	14.21	--	0.00	--	--	85.55
	03/21/07	14.31	--	0.00	--	--	85.45
	03/25/08	14.35	--	0.00	--	--	85.41
	09/08-09/08	14.47	--	0.00	--	--	85.29
	12/11/08	--	--	--	--	--	--
	03/30-31/09	14.09	--	0.00	--	--	85.67
	09/10-11/09	15.02	--	0.00	--	--	84.74
	03/15/10	14.46	--	0.00	--	--	85.30
	09/15/10	14.82	--	0.00	--	--	84.94
	03/14/11	14.25	--	0.00	--	--	85.51
	<b>03/27/14</b>	--	--	--	--	--	--
	<b>06/10/14</b>	<b>13.65</b>	--	<b>0.00</b>	--	--	<b>19.03</b>
	<b>07/22/14</b>	<b>14.34</b>	--	<b>0.00</b>	--	--	<b>18.34</b>
MW-24  (69.77)	03/21/07	23.01	--	0.00	--	--	--
	03/25/08	23.35	--	0.00	--	--	--
	09/08-09/08	23.84	--	0.00	--	--	--
	12/11/08	--	--	--	--	--	--
	03/30-31/09	23.60	--	0.00	--	--	--
	09/10-11/09	24.13	--	0.00	--	--	--
	03/15/10	22.76	--	0.00	--	--	--
	09/15/10	23.71	--	0.00	--	--	--
	03/14/11	22.39	--	0.00	--	--	--
	12/26/12	22.42	--	0.00	--	--	47.35
	<b>03/27/14</b>	<b>23.06</b>	--	<b>0.00</b>	--	--	<b>46.71</b>
	<b>06/10/14</b>	<b>22.85</b>	--	<b>0.00</b>	--	--	<b>46.92</b>
MW-25 (98.17)	08/09/99	--	--	--	--	--	--
	10/19/99	14.37	--	0.00	--	--	83.80
	01/06/00	--	--	--	--	--	--
	07/27/00	12.41	--	0.00	--	--	85.76
	09/29/00	13.16	--	0.00	--	--	85.01
	09/29/00	13.16	--	0.00	--	--	85.01
	07/26/01	12.65	--	0.00	--	--	85.52
	03/19/02	13.12	--	0.00	--	--	85.05
	07/02/02	12.04	--	0.00	--	--	86.13
	09/03/02	13.61	--	0.00	--	--	84.56
	10/11/02	--	--	--	--	--	--
	12/31/02	13.97	--	0.00	--	--	84.20
	03/26/03	13.34	--	0.00	--	--	84.83
	04/28/03	12.13	--	0.00	--	--	86.04
	05/30/03	12.10	--	0.00	--	--	86.07
	06/25/03	12.49	--	0.00	--	--	85.68
	09/15/03	13.78	--	0.00	--	--	84.39
	12/15/03	13.88	--	0.00	--	--	84.29

**Table 1**  
**Groundwater Elevation and Light Non Aqueous Phase Liquid Monitoring and Removal Data**  
Former Chevron Bulk Plant #1001327  
1602 North Northlake Place  
Seattle, Washington

Well Number <sup>1</sup> (Well Casing Elevation)	Date Measured	Depth to Groundwater <sup>2</sup> (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation <sup>3</sup> (feet)
MW-25 (continued)  (30.91)	03/25/04	12.80	--	0.00	--	--	85.37
	09/22/04	12.94	--	0.00	--	--	85.23
	03/14/05	13.25	--	0.00	--	--	84.92
	03/29/06	12.72	--	0.00	--	--	85.45
	03/21/07	12.51	--	0.00	--	--	85.66
	03/25/08	12.78	--	0.00	--	--	85.39
	09/08-09/08	12.89	--	0.00	--	--	85.28
	12/11/08	--	--	--	--	--	--
	03/30-31/09	12.60	--	0.00	--	--	85.57
	09/10-11/09	13.41	--	0.00	--	--	84.76
	03/15/10	12.95	--	0.00	--	--	85.22
	09/15/10	13.25	--	0.00	--	--	84.92
	03/14/11	12.88	--	0.00	--	--	85.29
	09/25/11	13.50	--	0.00	--	--	17.41
	10/10/11	13.30	--	0.00	--	--	17.61
	06/21/12	12.01	--	0.00	--	--	18.90
	09/20/12	13.56	--	0.00	--	--	17.35
	12/26/12	13.76	--	0.00	--	--	17.15
	04/22/13	12.30	--	0.00	--	--	18.61
	06/26/13	12.26	--	0.00	--	--	18.65
	09/18/13	12.97	--	0.00	--	--	17.94
	10/14/13	13.22	--	0.00	--	--	17.69
	<b>03/27/14</b>	<b>12.72</b>	--	<b>0.00</b>	--	--	<b>18.19</b>
	<b>06/10/14</b>	<b>12.05</b>	--	<b>0.00</b>	--	--	<b>18.86</b>
MW-26 (97.87)	08/09/99	--	--	--	--	--	--
	10/19/99	--	--	--	--	--	--
	01/06/00	13.78	--	0.00	--	--	84.09
	04/12/00	12.12	--	0.00	--	--	85.75
	06/27/00	12.55	--	0.00	--	--	85.32
	07/26/01	12.15	--	0.00	--	--	85.72
	03/19/02	12.79	--	0.00	--	--	85.08
	12/31/02	13.97	--	0.00	--	--	83.90
	02/27/03	12.88	--	0.00	--	--	84.99
	03/26/03	13.12	--	0.00	--	--	84.75
	04/28/03	11.78	--	0.00	--	--	86.09
	05/30/03	11.73	--	0.00	--	--	86.14
	06/25/03	12.09	--	0.00	--	--	85.78
	09/15/03	13.49	--	0.00	--	--	84.38
	12/15/03	13.48	--	0.00	--	--	84.39
	09/22/04	12.55	--	0.00	--	--	85.32
	03/14/05	12.94	--	0.00	--	--	84.93
	03/29/06	12.37	--	0.00	--	--	85.50
	03/21/07	--	--	--	--	--	--
	03/25/08	12.46	--	0.00	--	--	85.41
	09/08-09/08	12.59	--	0.00	--	--	85.28

**Table 1**  
**Groundwater Elevation and Light Non Aqueous Phase Liquid Monitoring and Removal Data**  
Former Chevron Bulk Plant #1001327  
1602 North Northlake Place  
Seattle, Washington

Well Number <sup>1</sup> (Well Casing Elevation)	Date Measured	Depth to Groundwater <sup>2</sup> (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation <sup>3</sup> (feet)
MW-26 (continued)  (30.62)	12/11/08	--	--	--	--	--	--
	03/30-31/09	12.25	--	0.00	--	--	85.62
	09/10-11/09	13.01	--	0.00	--	--	84.86
	03/15/10	12.60	--	0.00	--	--	85.27
	09/15/10	12.94	--	0.00	--	--	84.93
	03/14/11	12.25	--	0.00	--	--	85.62
	09/24/11	13.20	--	0.00	--	--	17.42
	10/10/11	13.00	--	0.00	--	--	17.62
	06/21/12	11.68	--	0.00	--	--	18.94
	09/20/12	13.25	--	0.00	--	--	17.37
	09/21/12	13.28	--	0.00	--	--	17.34
	12/26/12	13.24	--	0.00	--	--	17.38
	04/22/13	11.90	--	0.00	--	--	18.72
	06/26/13	11.85	--	0.00	--	--	18.77
	09/18/13	12.68	--	0.00	--	--	17.94
	10/14/13	12.89	--	0.00	--	--	17.73
	<b>03/27/14</b>	<b>12.45</b>	--	<b>0.00</b>	--	--	<b>18.17</b>
	<b>06/10/14</b>	<b>11.71</b>	--	<b>0.00</b>	--	--	<b>18.91</b>
MW-27 (101.17)	09/13/99	--	--	--	--	No	--
	10/22/99	--	--	--	--	No	--
	01/06/00	--	--	--	--	No	--
	05/24/01	11.11	10.38	0.73	--	No	90.64
	06/27/01	10.07	9.29	0.78	--	No	91.72
	03/18/02	9.07	9.00	0.07	--	No	92.16
	10/16/02	--	--	0.05	--	No	--
	12/31/02	--	--	0.02	--	No	--
	06/26/03	11.08	10.83	0.25	0.25	No	90.29
	07/21/03	--	--	0.46	4.00	No	--
	08/28/03	--	--	0.21	8.00	No	--
	10/16/03	5.97	--	0.00	0.00	No	95.20
	11/21/03	--	--	--	0.00	No	--
	12/17/03	--	--	--	0.00	No	--
	01/29/04	10.23	9.71	0.52	2.00	No	91.36
	02/18/04	10.59	9.97	0.62	1.75	No	91.08
	03/30/04	10.54	9.77	0.77	3.00	No	91.25
	09/22/04	9.98	9.91	0.07	0.70	No	91.25
	03/15/05	11.76	11.21	0.55	0.50	No	89.85
	03/29/06	9.14	--	0.00	0.00	No	92.03
	03/21/07	7.91	7.90	0.01	<0.01	No	93.27
	03/25/08	10.57	--	0.00	0.00	No	90.60
	09/08-09/08	10.83	10.66	0.17	0.28	Yes	90.48
	12/11/08	11.19	11.18	0.01	0.00	Yes	89.99
	03/30-31/09	9.92	9.91	0.01	0.00	Yes	91.26
	06/15/09	9.67	9.66	0.01	0.00	Yes	91.51
	09/10-11/09	11.27	11.10	0.17	0.33 <sup>4</sup>	Yes	90.04

**Table 1**  
**Groundwater Elevation and Light Non Aqueous Phase Liquid Monitoring and Removal Data**  
Former Chevron Bulk Plant #1001327  
1602 North Northlake Place  
Seattle, Washington

Well Number <sup>1</sup> (Well Casing Elevation)	Date Measured	Depth to Groundwater <sup>2</sup> (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation <sup>3</sup> (feet)
MW-27 (continued)  (34.01)	02/23/10	9.37	--	0.00	--	Yes	91.80
	03/15/10	9.48	9.47	0.01	0.00	Yes	91.70
	3/14/2011 <sup>1</sup>	27.77	27.70	0.07	0.05 <sup>4</sup>	Yes	73.46
	11/16/11	11.27	--	0.00	--	Yes	22.74
	12/08/11	9.78	9.69	0.09	0.05 <sup>4</sup>	Yes	24.30
	03/23/12	8.18	8.15	0.03	1.00	Yes	25.85
	06/01/12	8.45	8.25	0.20	1.00	Yes	25.72
	04/22/13	7.34	7.33	0.01	0.00	Yes	26.68
	06/26/13	6.67	--	0.00	--	Yes	27.34
	09/18/13	10.76	--	0.00	--	Yes	23.25
	10/14/13	10.16	--	0.00	--	Yes	23.85
	<b>03/27/14</b>	<b>7.10</b>	<b>7.08</b>	<b>0.02</b>	--	Yes	<b>26.93</b>
	<b>06/10/14</b>	<b>9.25</b>	<b>Sheen</b>	<b>Sheen</b>	--	Yes	<b>24.76</b>
	<b>07/22/14</b>	<b>10.02</b>	<b>10.015</b>	<b>0.005</b>	--	Yes	<b>23.99</b>
MW-28 (100.35)  (33.13)	08/11/99	--	--	0.00	--	No	--
	10/21/99	--	--	0.00	--	No	--
	10/21/99	--	--	0.00	--	No	--
	01/06/00	6.93	--	0.00	--	No	93.42
	07/27/00	7.45	--	0.00	--	No	92.90
	09/29/00	8.50	--	0.00	--	No	91.85
	01/15/01	8.59	--	0.00	--	No	91.76
	06/21/01	7.66	--	0.00	--	No	92.69
	03/18/02	6.02	--	0.00	--	No	94.33
	06/26/03	7.57	--	0.00	--	No	92.78
	09/15/03	8.96	--	0.00	--	No	91.39
	12/15/03	7.56	--	0.00	--	No	92.79
	03/25/04	7.07	--	0.00	--	No	93.28
	09/22/04	8.16	--	0.00	--	No	92.19
	03/14/05	8.45	--	0.00	--	No	91.90
	03/29/06	6.64	--	0.00	--	No	93.71
	03/21/07	6.86	6.48	0.38	0.25	No	93.79
	03/25/08	7.25	7.08	0.17	0.25	No	93.24
	09/08-09/08	8.04	8.00	0.04	0.16	Yes	92.34
	12/11/08	8.15	8.14	0.01	0.00	Yes	92.21
	03/30-31/09	6.84	6.83	0.01	0.00	Yes	93.52
	06/15/09	7.21	7.20	0.01	0.00	Yes	93.15
	09/10-11/09	8.16	8.13	0.03	0.00	Yes	92.21
	02/23/10	6.39	6.38	0.01	0.00	Yes	93.97
	03/15/10	6.05	--	0.00	--	Yes	94.30
	9/15/101	7.76	7.75	0.01	--	Yes	92.60
	12/04/10	--	--	--	--	Yes	--
	03/14/11	5.30	--	0.00	--	Yes	95.05
	<b>07/22/14</b>	<b>7.24</b>	<b>--</b>	<b>0.00</b>	--	<b>No</b>	<b>25.89</b>
MW-29	<b>07/22/14</b>	<b>13.80</b>	<b>--</b>	<b>0.00</b>	--	--	--
MW-30	<b>07/22/14</b>	<b>12.37</b>	<b>--</b>	<b>0.00</b>	--	--	--

**Table 1**  
**Groundwater Elevation and Light Non Aqueous Phase Liquid Monitoring and Removal Data**  
Former Chevron Bulk Plant #1001327  
1602 North Northlake Place  
Seattle, Washington

Well Number <sup>1</sup> (Well Casing Elevation)	Date Measured	Depth to Groundwater <sup>2</sup> (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation <sup>3</sup> (feet)
AGI-2 (97.95)	08/10/99	--	--	--	--	--	--
	10/20/99	--	--	--	--	--	--
	01/15/01	13.61	--	0.00	--	--	84.34
	06/21/01	11.83	--	0.00	--	--	86.12
	07/26/01	12.19	--	0.00	--	--	85.76
	03/18/02	12.91	--	0.00	--	--	85.04
	03/18/02	12.91	--	0.00	--	--	85.04
	05/07/02	11.95	--	0.00	--	--	86.00
	06/06/02	12.51	--	0.00	--	--	85.44
	07/02/02	11.90	--	0.00	--	--	86.05
	09/03/02	13.65	--	0.00	--	--	84.30
	12/31/02	13.75	--	0.00	--	--	84.20
	03/26/03	12.62	--	0.00	--	--	85.33
	04/28/03	12.98	--	0.00	--	--	84.97
	05/30/03	12.19	--	0.00	--	--	85.76
	06/25/03	12.66	--	0.00	--	--	85.29
	09/15/03	13.51	--	0.00	--	--	84.44
	12/15/03	13.59	--	0.00	--	--	84.36
	03/26/04	12.33	--	0.00	--	--	85.62
	09/22/04	12.67	--	0.00	--	--	85.28
	03/14/05	12.99	--	0.00	--	--	84.96
	03/29/06	12.45	--	0.00	--	--	85.50
	03/21/07	12.30	--	0.00	--	--	85.65
	03/25/08	12.53	--	0.00	--	--	85.42
	09/08-09/08	12.63	--	0.00	--	--	85.32
	12/11/08	--	--	--	--	--	--
(30.86)	03/30-31/09	12.33	--	0.00	--	--	85.62
	09/10-11/09	13.11	--	0.00	--	--	84.84
	03/15/10	15.92	--	0.00	--	--	82.03
	09/15/10	12.99	--	0.00	--	--	84.96
	03/14/11	12.58	--	0.00	--	--	85.37
	06/21/12	11.69	--	0.00	--	--	18.99
	09/20/12	13.31	--	0.00	--	--	17.37
	12/26/12	13.41	--	0.00	--	--	17.27
	04/23/13	11.96	--	0.00	--	--	18.72
	06/26/13	11.90	--	0.00	--	--	18.78
	09/18/13	12.72	--	0.00	--	--	17.96
	10/14/13	12.94	--	0.00	--	--	17.74
	<b>03/27/14</b>	<b>12.41</b>	--	<b>0.00</b>	--	--	<b>18.27</b>
	<b>06/10/14</b>	<b>11.85</b>	--	<b>0.00</b>	--	--	<b>18.83</b>
MLU-1 (100.18)	08/10/99	--	--	--	--	--	--
	10/20/99	15.33	--	0.00	--	--	84.85
	01/06/00	15.75	--	0.00	--	--	84.43
	04/12/00	14.35	--	0.00	--	--	85.83
	06/27/00	14.24	--	0.00	--	--	85.94

**Table 1**  
**Groundwater Elevation and Light Non Aqueous Phase Liquid Monitoring and Removal Data**  
Former Chevron Bulk Plant #1001327  
1602 North Northlake Place  
Seattle, Washington

Well Number <sup>1</sup> (Well Casing Elevation)	Date Measured	Depth to Groundwater <sup>2</sup> (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation <sup>3</sup> (feet)
MLU-1 (continued)  (32.90)	09/29/00	15.12	--	0.00	--	--	85.06
	06/25/03	14.41	--	0.00	--	--	85.77
	09/15/03	15.72	--	0.00	--	--	84.46
	12/15/03	15.70	--	0.00	--	--	84.48
	03/25/04	14.75	--	0.00	--	--	85.43
	09/22/04	14.88	--	0.00	--	--	85.30
	03/14/05	15.21	--	0.00	--	--	84.97
	03/29/06	14.65	--	0.00	--	--	85.53
	03/21/07	14.64	--	0.00	--	--	85.54
	03/25/08	14.70	--	0.00	--	--	85.48
	09/08-09/08	--	--	--	--	--	--
	12/11/08	--	--	--	--	--	--
	03/30-31/09	--	--	--	--	--	--
	09/10-11/09	15.32	--	0.00	--	--	84.86
	03/15/10	14.82	--	0.00	--	--	85.36
	09/15/10	15.21	--	0.00	--	--	84.97
	03/14/11	14.19	--	0.00	--	--	85.99
	06/21/12	13.96	--	0.00	--	--	18.94
	09/20/12	15.51	--	0.00	--	--	17.39
	09/21/12	15.51	--	0.00	--	--	17.39
	12/26/12	15.31	--	0.00	--	--	17.59
	04/22/13	14.14	--	0.00	--	--	18.76
	06/26/13	14.05	--	0.00	--	--	18.85
	09/18/13	14.92	--	0.00	--	--	17.98
	10/14/13	15.50	--	0.00	--	--	17.40
	<b>03/27/14</b>	<b>14.61</b>	--	<b>0.00</b>	--	--	<b>18.29</b>
	<b>06/10/14</b>	<b>13.97</b>	--	<b>0.00</b>	--	--	<b>18.93</b>
MLU-3 (97.62)  (30.64)	08/20/99	--	--	--	--	--	--
	10/20/99	13.58	--	0.00	--	--	84.04
	07/26/01	12.05	--	0.00	--	--	85.57
	03/27/14	12.44	--	0.00	--	--	18.20
	<b>06/10/14</b>	<b>11.68</b>	--	<b>0.00</b>	--	--	<b>18.96</b>
EW-1	<b>07/22/14</b>	<b>12.25</b>	--	<b>0.00</b>	--	--	--
(100.99)	03/15/05	11.23	Sheen	Sheen	0.00	No	--
	10/04/05	11.96	11.72	0.24	<1/16	No	--
	03/29/06	9.84	--	0.00	0.00	No	--
	03/21/07	9.89	--	0.00	0.00	No	--
	03/25/08	10.36	--	0.00	0.00	No	--
	09/08-09/08	10.68	10.67	0.01	0.00	Yes	90.32
	12/11/08	11.30	--	0.00	0.00	Yes	89.69
	03/30-31/09	10.31	10.30	0.01	0.00	Yes	90.69
	06/15/09	9.73	9.72	0.01	0.00	Yes	91.27
	09/10-11/09	11.13	--	0.00	0.00	Yes	89.86
	02/23/10	9.86	--	0.00	0.00	Yes	91.13
	03/15/10	9.83	--	0.01	0.00	Yes	91.17

**Table 1**  
**Groundwater Elevation and Light Non Aqueous Phase Liquid Monitoring and Removal Data**  
Former Chevron Bulk Plant #1001327  
1602 North Northlake Place  
Seattle, Washington

Well Number <sup>1</sup> (Well Casing Elevation)	Date Measured	Depth to Groundwater <sup>2</sup> (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation <sup>3</sup> (feet)
SMPN-1 (continued)  (33.78)	09/15/101	11.13	11.12	0.01	--	Yes	89.87
	12/4/101	10.53	10.53	0.00	--	Yes	90.46
	11/16/11	11.27	--	0.00	--	Yes	22.51
	12/08/11	9.79	9.78	0.01	0.05 <sup>4</sup>	Yes	24.00
	03/23/12	8.27	8.25	0.02	0.50	Yes	25.53
	06/01/12	8.85	--	0.00	--	Yes	24.93
	09/20/12	11.14	10.96	0.18	--	Yes	22.78
	12/26/12	8.50	--	0.00	--	Yes	25.28
	04/22/13	8.75	--	0.00	--	Yes	25.03
	06/26/13	9.54	--	0.00	--	Yes	24.24
	09/18/13	11.29	--	0.00	--	Yes	22.49
	10/14/13	10.49	--	0.00	--	Yes	23.29
	<b>03/27/14</b>	<b>9.46</b>	--	<b>0.00</b>	--	<b>Yes</b>	<b>24.32</b>
	<b>06/10/14</b>	<b>9.23</b>	--	<b>0.00</b>	--	<b>Yes</b>	<b>24.55</b>
SPMN-2 (101.24)  (33.85)	03/15/05	11.21	11.20	0.01	0.00	No	--
	03/29/06	9.48	--	0.00	0.00	No	--
	03/21/07	9.20	9.15	0.05	<0.05	No	--
	03/25/08	10.11	--	0.00	0.00	No	--
	09/08-09/08	10.51	10.50	0.01	0.00	Yes	90.74
	12/11/08	11.06	11.05	0.01	0.00	No	90.19
	03/30-31/09	10.12	10.11	0.01	0.00	No	91.13
	06/15/09	9.51	9.50	0.01	0.00	No	91.74
	09/10-11/09	10.99	10.98	0.01	0.00	No	90.26
	02/23/10	9.23	10.98	0.00	0.00	No	92.01
	03/15/10	9.37	9.36	0.01	0.00	No	91.88
	09/15/10	11.07	10.89	0.18	--	No	90.31
	12/04/10	10.35	10.28	0.07	--	No	90.95
	03/14/11	8.93	--	0.00	--	No	92.31
	11/16/11	9.97	9.96	0.01	0.05 <sup>4</sup>	No	23.89
	12/08/11	9.61	--	0.00	--	No	24.24
	03/23/12	8.12	8.10	0.02	0.50	No	25.75
	06/01/12	8.40	8.30	0.10	1.00	No	25.53
	09/20/12	11.11	10.95	0.16	--	No	22.87
	12/26/12	8.51	--	0.00	--	No	25.34
	04/22/13	7.88	--	0.00	--	No	25.97
	06/26/13	8.70	--	0.00	--	No	25.15
	09/18/13	10.82	10.81	0.01	--	Yes	23.04
	10/14/13	10.50	--	0.00	--	Yes	23.35
	<b>03/27/14</b>	<b>9.39</b>	--	<b>0.00</b>	--	<b>Yes</b>	<b>24.46</b>
	<b>06/10/14</b>	<b>3.74</b>	--	<b>0.00</b>	--	<b>Yes</b>	<b>30.11</b>
SPMN-3  (101.02)	03/15/05	11.46	--	0.00	--	No	--
	03/29/06	9.56	--	0.00	--	No	--
	03/21/07	9.03	--	0.00	--	No	--
	03/25/08	10.30	--	0.00	--	No	--
	09/08-09/08	10.67	10.66	0.01	0.00	Yes	90.36

**Table 1**  
**Groundwater Elevation and Light Non Aqueous Phase Liquid Monitoring and Removal Data**  
Former Chevron Bulk Plant #1001327  
1602 North Northlake Place  
Seattle, Washington

Well Number <sup>1</sup> (Well Casing Elevation)	Date Measured	Depth to Groundwater <sup>2</sup> (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation <sup>3</sup> (feet)
SPMN-3 (continued)  (33.81)	12/11/08	11.26	--	0.00	--	No	89.76
	03/30-31/09	10.28	10.27	0.01	0.00	No	90.75
	06/15/09	9.59	--	0.00	--	No	91.43
	09/10-11/09	11.08	--	0.01	--	No	89.95
	02/23/10	9.44	--	0.00	--	No	91.58
	03/15/10	9.51	--	0.01	--	No	91.52
	09/15/10	11.14	--	0.00	--	No	89.88
	12/04/10	10.49	--	0.00	--	No	90.53
	03/14/11	9.12	--	0.00	--	No	91.90
	11/16/11	11.06	10.94	0.12	0.05 <sup>4</sup>	No	22.85
	12/08/11	9.73	--	0.00	--	No	24.08
	03/23/12	8.30	--	0.00	--	No	25.51
	06/01/12	8.05	--	0.00	--	No	25.76
	09/20/12	11.22	--	0.00	--	No	22.59
	12/26/12	8.89	--	0.00	--	No	24.92
	04/22/13	8.30	--	0.00	--	No	25.51
	06/26/13	9.02	--	0.00	--	No	24.79
	09/18/13	11.06	--	0.00	--	No	22.75
	10/14/13	10.52	--	0.00	--	No	23.29
	<b>03/27/14</b>	<b>8.68</b>	--	<b>0.00</b>	--	<b>No</b>	<b>25.13</b>
	06/10/14	9.39	--	0.00	--	Yes	24.42

**Notes:**

Groundwater elevation corrected for the presence of LNAPL using a specific gravity of 0.80; Correction factor: [(TOC-DTW)+(LNAPLT x 0.80)]

<sup>1</sup>Well casing elevations listed in feet above mean sea level. Approximate monitoring well locations are shown in Figure 2.

<sup>2</sup>Below top of casing.

<sup>3</sup>Elevation referenced to Horizontal Datum NAD 83/98, State Plane Coordinates Washington North Zone and Vertical Datum NAVD 88

<sup>4</sup>LNAPL + water removed

<sup>5</sup>LNAPL only removed

LNAPL = light non-aqueous phase liquid

Sheen = sheen observed in water

\* = Interface probe not recognizing LNAPL, bailer dropped in well, LNAPL thickness > 3 feet

Bolded data are for the current reporting period.

-- = not measured or not obtainable

**Table 2**  
**Groundwater Analytical Results**  
Former Chevron Bulk Plant #1001327  
1602 North Northlake Place  
Seattle, Washington

Monitoring Well <sup>1</sup>	Date Sampled	LNAPL <sup>2</sup>	VOCs (EPA Method 8020 or 8021B) (µg/L)					cPAHs (EPA Method 8270) (µg/L)						Metals (EPA Method 6020) (µg/L)			
			Benzene	Toluene	Ethylbenzene	Xylenes	Naphthalene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Indeno (1,2,3-cd) pyrene	Arsenic	Lead	
Groundwater Cleanup Level	No visible sheen		43	48,500	6,910	--	9,880	0.0296	0.0296	0.0296	0.0296	0.0296	0.0296	0.0296	0.0982	5	
MW-3	08/11/99	ND	168	4	21	--	3	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	5.34	4.39	
	10/21/99	ND	149	<3.25	<5.9	--	0.54 <sup>3</sup>	0.0044 <sup>4</sup>	0.0008 <sup>4</sup>	0.0062 <sup>4</sup>	0.0034 <sup>4</sup>	0.0028 <sup>4</sup>	0.0063 <sup>4</sup>	0.0057 <sup>4</sup>	--	--	
	10/22/99	ND	149	<2.30	<4.00	--	--	--	--	--	--	--	--	--	--	--	
MW-4	08/10/99	ND	<1.00	<1.00	<1.00	--	<1.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<1.0	<1.0	
	07/26/01	ND	<1.00	<1.00	<1.00	--	<1.00	--	--	--	--	--	--	--	--	--	
	10/11/02	ND	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--	
	12/31/02	ND	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--	
	02/27/03	ND	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--	
	03/26/03	ND	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--	
	04/28/03	ND	<0.500	0.536	<0.500	--	--	--	--	--	--	--	--	--	--	--	
	05/30/03	ND	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--	
	06/25/03	ND	<0.500	<0.500	<0.500	--	<0.100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	--	--	
	09/16/03	ND	<0.500	<0.500	<0.500	--	<1.00	0.0241	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	--	--
	12/15/03	ND	<0.500	<0.500	<0.500	--	<1.00	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<1.0	<1.0
	03/25/04	ND	<0.500	<0.500	<0.500	--	<0.119	0.0137	<0.0119	<0.0119	<0.0119	0.0131	<0.0119	<0.0119	<0.0119	<1.0	<1.0
	03/21/07	ND	0.59	<0.500	<0.500	--	<5.00	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<1.0	<1.0
	03/25/08	ND	0.5	1.2	<0.5	--	0.022	0.030	0.0250	0.031	0.014	0.028	<0.0099	0.019	<0.70	1.4	
	09/08-09/08	ND	<0.5	<0.5	<0.5	--	<1.0	0.15	0.1500	0.14	0.079	0.13	<0.011	<0.011	<0.95	<0.050	
	03/30-31/09	ND	<0.5	<0.5	<0.5	--	<1.0	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.95	<0.050	
	09/10-11/09	ND	<0.5	<0.5	<0.5	--	<1.0	0.012	0.012	0.012	0.012	0.012	<0.012	<0.012	<0.95	<0.050	
	03/15/10	ND	0.6	<0.5	<0.5	--	<1.0	0.041	0.052	0.069	0.0270	0.0480	<0.0099	0.016	<0.95	<0.050	
	09/15/10	ND	<0.5	<0.5	<0.5	--	<1.0	0.48	0.68	0.43	0.4300	0.5300	0.0650	0.43	<0.95	<0.052	
	09/25/11	ND	0.5	<0.2	<0.2	--	<1.0	<0.012	<0.012	0.012	<0.012	<0.012	<0.012	<0.012	<0.95	0.09	
	10/10/11	ND	--	--	--	--	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	--	--	
	06/21/12	ND	--	--	--	--	0.032	0.037	0.039	0.018	0.0350	<0.010	0.013	--	--	--	
	06/21/12	ND	--	--	--	--	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	--	--	
Field Filtered Sample	09/21/12	ND	<0.5	<0.5	<0.5	--	<0.030	--	--	--	--	--	--	--	--	--	
	09/26/12	ND	--	--	--	--	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	--	--	
	12/26/12	ND	<0.5	<0.5	<0.5	--	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.40	<0.034	
Field Filtered Sample	04/22/13	ND	<0.5	<0.5	<0.5	--	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.40	<0.050	
	04/22/13	ND	--	--	--	--	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.78	<0.085	
	6/11/2014 <sup>11</sup>	ND	<0.5	<0.5	<0.5	--	0.070	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.78	<0.085	
MW-7	08/10/99	ND	683	491	2,550	--	673	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	3.71	4.64	
	10/20/99	ND	172	80	177	--	--	0.0028 <sup>4</sup>	0.0038 <sup>4</sup>	0.0043 <sup>4</sup>	0.0025 <sup>4</sup>	0.0061 <sup>4</sup>	0.0079 <sup>4</sup>	--	--	--	
	07/26/01	ND	162	59	314	--	149	--	--	--	--	--	--	--	--	--	
	04/03/02	ND	58	22	346	--	96	--	--	--	--	--	--	--	--	--	
	07/02/02	ND	46.9	10	158	--	--	--	--	--	--	--	--	--	--	--	
	09/03/02	ND	42	22	153	--	--	--	--	--	--	--	--	--	--	--	
	09/03/02	ND	88.8	37	498	--	--	--	--	--	--	--	--	--	--	--	
	10/11/02	ND	41.4	16	145	--	--	--	--	--	--	--	--	--	--	--	
	03/26/03	ND	10.1	16	108	--	--	--	--	--	--	--	--	--	--	--	
	04/28/03	ND	31.5	36	664	--	--	--	--	--	--	--	--	--	--	--	
	05/30/03	ND	7.34	12	106	--	--	--	--	--	--	--	--	--	--	--	
	06/25/03	ND	16.4	27	446	--	35	<0.0100	<0.0100	<0.0100	0.900 (Q-20)	<0.0100	<0.0100	<0.0100	--	--	
	09/16/03	ND	< 50.0	79	1,190	--	583	--	--	--	--	--	--	--	--	--	
	12/15/03	ND	25.9	45	1,470	--	550	--	--	--	--	--	--	--	--	--	
	03/15/10 <sup>5</sup>	ND	27	4.9	230	--	490	0.14 <sup>6</sup>	0.12 <sup>6</sup>	0.21 <sup>6</sup>	0.16 <sup>6</sup>	0.18 <sup>6</sup>	0.013 <sup>6</sup>	0.041 <sup>2</sup>	1.5	1.1	
	09/15/10	ND	38	6.0	270	--	570	0.3000	0.5000	0.4200	0.3600	0.3800	0.0730	0.3900	2.5	1.7	
	03/14/11	ND	--	--	--	--	--	0.011	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	--	--	
	06/21/12	ND	--	--	--	--	--	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	--	--	
	06/21/12	ND	--	--	--	--	--	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	--	--	
	09/20/12	ND	46	6.9	120	--	530	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0099	--	--
	09/20/12	ND	--	--	--	--	--	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	6.1	1.6

**Table 2**  
**Groundwater Analytical Results**  
Former Chevron Bulk Plant #1001327  
1602 North Northlake Place  
Seattle, Washington

Monitoring Well <sup>1</sup>	Date Sampled	LNAPL <sup>2</sup>	VOCs (EPA Method 8020 or 8021B) (µg/L)					cPAHs (EPA Method 8270) (µg/L)						Metals (EPA Method 6020) (µg/L)		
			Benzene	Toluene	Ethylbenzene	Xylenes	Naphthalene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Indeno (1,2,3-cd) pyrene	Arsenic	Lead
Groundwater Cleanup Level	No visible sheen		43	48,500	6,910	--	9,880	0.0296	0.0296	0.0296	0.0296	0.0296	0.0296	0.0296	0.0982	5
MW-7 (continued)	12/26/12	ND	34	6.0	240	--	--	--	--	--	--	--	--	--	--	--
Field Filtered Sample	04/22/13	ND	31	4.5	82	--	340	0.019	<0.010	0.0110	<0.010	<0.010	0.012	0.016	--	--
	04/22/13	ND	--	--	--	--	--	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	5.3	0.85
	6/11/2014 <sup>11</sup>	ND	33	4	65	--	160	<0.010	<0.010	<0.010	<0.010	0.013	<0.010	<0.010	6.2	1.7
MW-8	8/9/1999	ND	186	15	39	--	9	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<1.0	1.21
	10/20/1999	ND	31.4	2.47	2.97	--	0.35 <sup>3</sup>	<0.0081	<0.0081	<0.0081	<0.0081	<0.0081	<0.00813	<0.0081	--	--
	1/6/2000	ND	710	27	304	--	--	--	--	--	--	--	--	--	--	--
	4/12/2000	ND	28.2	1.72	4.16	--	2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	--	--
	6/27/2000	ND	29.5	1.47	3.09	--	<1.00	--	--	--	--	--	--	--	<1.0	<1.0
	9/28/2000	ND	20.3	1.23	1.39	--	4	--	--	--	--	--	--	--	3.10	<1.0
	1/15/2001	ND	17.7	2.14	12.3	--	--	--	--	--	--	--	--	--	--	--
	6/21/2001	ND	197	<10.0	26.7	--	<10.0	--	--	--	--	--	--	--	--	--
	7/26/2001	ND	157	7.03	42.5	--	7	--	--	--	--	--	--	--	--	--
	7/26/2001	ND	147	7.07	42.2	--	6	--	--	--	--	--	--	--	--	--
	3/19/2002	ND	1,450	22.0	166	--	32	--	--	--	--	--	--	--	--	--
	3/19/2002	ND	1,430	21.7	169	--	30	--	--	--	--	--	--	--	--	--
	4/3/2002	ND	1,000	22.3	199	--	37	--	--	--	--	--	--	--	--	--
	4/3/2002	ND	1,030	21.9	213	--	37	--	--	--	--	--	--	--	--	--
	5/7/2002	ND	472	13.7	152	--	--	--	--	--	--	--	--	--	--	--
	6/6/2002	ND	476	14.1	80	--	--	--	--	--	--	--	--	--	--	--
	7/2/2002	ND	291	14.0	59	--	--	--	--	--	--	--	--	--	--	--
	9/3/2002	ND	284	11.3	82	--	--	--	--	--	--	--	--	--	--	--
	10/11/2002	ND	238	18.0	152	--	--	--	--	--	--	--	--	--	--	--
	12/31/2002	ND	165	16.3	261	--	--	--	--	--	--	--	--	--	--	--
	12/31/2002	ND	192	16.1	141	--	--	--	--	--	--	--	--	--	--	--
	3/26/2003	ND	767	23.2	156	--	--	--	--	--	--	--	--	--	--	--
	4/28/2003	ND	683	20.8	125	--	--	--	--	--	--	--	--	--	--	--
	5/30/2003	ND	467	15.4	75.4	--	--	--	--	--	--	--	--	--	--	--
	6/25/2003	ND	305	17.4	89.7	--	--	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	--	--
	9/15/2003	ND	159	36.1	634	--	7.94	--	--	--	--	--	--	--	--	--
MW-8A	12/15/2003	ND	14.8	2.46	37.7	--	168	--	--	--	--	--	--	--	--	--
Duplicate Sample	3/25/2004	ND	12.0	1.33	2.54	--	0.27	0.0650	0.0454	0.0299	0.0531	0.0568	0.0274	0.0419	2.49	<1.0
	9/23/2004	ND	14.8	0.76	2.00	--	0.32	<0.01	0.0220	<0.01	<0.01	0.0315	<0.01	<0.01	1.2	<1.0
	9/23/2004	ND	13.3	0.67	1.75	--	0.32	0.110	0.102	0.0980	0.120	0.104	0.0656	0.0937	1.11	<1.0
	3/14/2005	ND	8.3	1.72	4.54	--	3.61	0.0234	0.0135	0.0123	0.0209	0.0164	<0.01	0.0137	5.2	<1.0
Duplicate Sample	3/29/2006	ND	<0.500	<0.500	<0.500	--	<1.0	<0.00952	<0.00952	0.0281	<0.00952	<0.00952	<0.00952	<0.00952	<1.0	<1.0
	3/21/2007	ND	<0.500	<0.500	<0.500	--	<5.00	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<1.0
	3/25/2008	ND	<0.5	<0.5	<0.5	--	<1.0	<0.0096	<0.0096	0.010	<0.0096	<0.0096	<0.0096	<0.0096	0.92	2.0
	09/08-09/08	ND	<0.5	<0.5	<0.5	--	<1.0	0.017	0.018	0.031	<0.0099	0.028	<0.0099	0.021	1.1	<0.050
Field Filtered Sample	03/30-31/09	ND	<0.5	<0.5	<0.5	--	<1.0	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.95	<0.050
	09/10-11/09	ND	<0.5	<0.5	<0.5	--	<1.0	0.012	0.017	0.035	0.011	0.021	<0.0098	0.022	<0.95	0.059
	3/15/2010	ND	<0.5	<0.5	<0.5	--	1	0.036	0.062	0.14	0.099	0.079	0.011	0.040	<0.95	0.062
	9/15/2010	ND	<0.5	<0.5	3	--	<1.0	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	2.8	<0.052
Field Filtered Sample	11/16/2011	ND	<0.2	<0.2	<0.2	--	<1.0	0.016	0.02	0.029	0.011	0.028	<0.0095	0.02	0.99	<0.080
	6/21/2012	ND	--	--	--	--	--	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	--	--
	6/21/2012	ND	--	--	--	--	--	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	--	--
	9/20/2012	ND	--	--	--	--	--	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	--	--
Field Filtered Sample	9/21/2012	ND	<0.5	<0.5	<0.5	--	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	4.9	0.13
	12/26/2012	ND	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	--
	4/23/2013	ND	<0.5	<0.5	<0.5	--	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	--	--
	4/23/2013	ND	--	--	--	--	--	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.40	<0.047
Field Filtered Sample	6/11/2014 <sup>11</sup>	ND	<0.5	<0.5	<0.5	--	0.062	0.011	<0.010	0.012	0.011	<0.010	<0.010	<0.010	<0.78	0.59
MW-9	08/11/1999	ND	<20.0	<20.0	46.7	--	129	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	4.33	<1.0
	10/21/1999	ND	<0.800	<0.500	20.5	--	110 <sup>3</sup>	<0.0083	<0.0083	<0.0083	<0.0083	<0.0083	<0.0083 <sup>3</sup>	<0.0083	17	0.94
	06/27/2001	LNAPL	<5.00	<5.00	52.6	--	109	--	--	--	--	--	--	--	--	--
	03/25/04	LNAPL	6.71	2.56	39.5	--	168	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	12.9	<1.0

**Table 2**  
**Groundwater Analytical Results**  
Former Chevron Bulk Plant #1001327  
1602 North Northlake Place  
Seattle, Washington

Monitoring Well <sup>1</sup>	Date Sampled	LNAPL <sup>2</sup>	VOCs (EPA Method 8020 or 8021B) (µg/L)					cPAHs (EPA Method 8270) (µg/L)						Metals (EPA Method 6020) (µg/L)			
			Benzene	Toluene	Ethylbenzene	Xylenes	Naphthalene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Indeno (1,2,3-cd) pyrene	Arsenic	Lead	
Groundwater Cleanup Level	No visible sheen		43	48,500	6,910	--	9,880	0.0296	0.0296	0.0296	0.0296	0.0296	0.0296	0.0296	0.0982	5	
MW-9 (continued)	09/08/09/08	LNAPL	20	<10 <sup>7</sup>	16	--	37	<0.10 <sup>8</sup>	<0.10 <sup>8</sup>	<0.10 <sup>8</sup>	<0.10 <sup>8</sup>	<0.10 <sup>8</sup>	<0.10 <sup>8</sup>	<0.10 <sup>8</sup>	9.5	0.58	
	12/11/1908	LNAPL	<20 <sup>8</sup>	<50 <sup>8</sup>	35	62	--	--	--	--	--	--	--	--	--	--	
	03/30/31/09	ND	--	--	--	50	50	<0.0098	<0.0098	0.025	<0.0098	<0.0098	<0.0098	<0.0098	7.7	0.33	
	09/10/11/09	ND	<10 <sup>9</sup>	<10 <sup>9</sup>	16	--	36	0.15	<0.098 <sup>9</sup>	0.41	0.10	0.56	<0.098 <sup>9</sup>	<0.098 <sup>9</sup>	8.0	1.1	
MW-10	08/11/1999	ND	226	292	625	--	121	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<1.0	4.21	
	10/21/1999	ND	431	455	838	--	--	<0.008	<0.008	<0.008	<0.008	0.00333	<0.008 <sup>4</sup>	<0.008 <sup>4</sup>	--	--	
	04/12/2000	ND	662	542	749	--	105	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	--	--	
	06/27/00	ND	325	168	136	--	64.5	--	--	--	--	--	--	--	8.61	21.2	
	09/28/2000	ND	437	339	291	--	32.7	--	--	--	--	--	--	--	3.39	22	
	01/15/2001	ND	352	266	137	--	63.6	--	--	--	--	--	--	--	--	--	
	01/15/2001	ND	315	234	117	--	33.9	--	--	--	--	--	--	--	--	--	
	06/27/2001	ND	591	328	295	--	79.5	--	--	--	--	--	--	--	--	--	
	06/27/2001	ND	1,090	765	936	--	262	--	--	--	--	--	--	--	--	--	
	03/18/02	ND	1,190	1,010	976	--	130	--	--	--	--	--	--	--	--	--	
	07/02/02	ND	844	742	871	--	--	--	--	--	--	--	--	--	--	--	
	03/15/10	ND	1,200	250	980	--	110	0.10 <sup>6</sup>	0.054 <sup>6</sup>	0.046 <sup>6</sup>	0.059 <sup>6</sup>	0.18 <sup>6</sup>	<0.0099 <sup>6</sup>	<0.0099 <sup>6</sup>	3.8	10.9	
MW-11	09/15/10	Sheen	970	180	920	--	130	0.52	0.17	0.3	<0.096	1.2	<0.096	<0.096	4.9	9.3	
	08/11/99	ND	<1.00	<1.00	<1.00	--	<1.01	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	2.03	<1.0	
	10/22/99	ND	<0.500	<0.500	<0.500	--	<0.0082	<0.0081	<0.0081	<0.0081	<0.0081	<0.0081	<0.0081 <sup>3</sup>	<0.0081 <sup>3</sup>	--	--	
	06/21/01	ND	<1.00	<1.00	<1.00	--	<1.00	--	--	--	--	--	--	--	--	--	
	03/18/02	ND	1.18	2.77	2.57	--	<1.00	--	--	--	--	--	--	--	--	--	
	09/16/03	ND	<0.500	<0.500	<0.500	--	<1.00	--	--	--	--	--	--	--	--	--	
	12/15/03	ND	<0.500	<0.500	<0.500	--	2.21	0.0734	<0.0100	0.0632	0.0341	<0.0100	0.0878	0.0857	3.72	<1.0	
	03/25/04	ND	<0.500	<0.500	<0.500	--	<0.101	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	3.06	<1.0	
	03/21/07	ND	<0.500	<0.500	<0.500	--	<5.01	<0.0971	<0.0971	<0.0971	<0.0971	<0.0971	<0.0971	<0.0971	19.4	<1.0	
	03/25/08	ND	<0.5	<0.5	<0.5	--	0.060	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	19.0	1.1	
	03/25/08	ND	<0.5	<0.5	<0.5	--	0.058	0.012	<0.0096	0.010	<0.0096	0.013	<0.0096	<0.0096	16.9	1.4	
	09/08-09/08	ND	<0.5	<0.5	<0.5	--	<1.0	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	16.5	<0.050	
	03/30-31/09	ND	<0.5	<0.5	<0.5	--	<1.0	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	19.2	<0.050	
	09/10-11/09	ND	<0.5	<0.5	<0.5	--	<1.0	0.024	0.034	0.04	0.016	0.036	<0.0098	0.019	29.7	<0.050	
	03/15/10	ND	<0.5	<0.5	<0.5	--	<1.0	<0.099	0.011	0.016	0.010	0.013	<0.0099	<0.0099	13.4	<0.050	
	09/15/10	ND	<0.5	<0.5	<0.5	--	<1.0	0.013	0.017	0.018	0.012	0.02	<0.010	0.018	16.6	<0.052	
	6/11/2014 <sup>11</sup>	ND	<0.5	<0.5	<0.5	--	0.070	0.028	0.020	0.025	0.024	0.033	0.019	0.020	8.4	<0.085	
MW-12	08/11/1999	ND	1590	218	466	--	87.5	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	7.01	17.6	
	10/21/1999	ND	491	1200	230	--	6.8 <sup>6</sup>	<0.0083	<0.0083	<0.0083	<0.0083	<0.0083	<0.0083 <sup>3</sup>	<0.0083	--	--	
	03/25/04	ND	510	294	454	--	98.5	--	--	--	--	--	--	--	--	--	
	09/08-09/08	ND	530	130	230	--	65	0.017 <sup>6</sup>	0.010 <sup>6</sup>	<0.0099 <sup>6</sup>	<0.0099 <sup>6</sup>	0.030 <sup>6</sup>	<0.0099 <sup>6</sup>	<0.0099 <sup>6</sup>	6.4	1.8	
	03/30-31/09	LNAPL	750	640	270	--	170	0.014	<0.0098	0.012	<0.0098	0.028	<0.0098	<0.0098	4.8	2.8	
	09/10-11/09	LNAPL	510	140	180	--	44	0.11	<0.097 <sup>8</sup>	<0.097 <sup>8</sup>	<0.097 <sup>8</sup>	0.22	<0.097 <sup>8</sup>	<0.097 <sup>8</sup>	5.5	1.6	
	03/15/10	ND	630	260	250	--	110	0.025 <sup>6</sup>	0.015 <sup>6</sup>	0.012 <sup>6</sup>	0.018 <sup>6</sup>	0.045 <sup>6</sup>	<0.010 <sup>6</sup>	<0.010 <sup>6</sup>	4.6	3.4	
MW-14	09/15/10	Sheen	490	130	230	--	67	0.086 <sup>6</sup>	0.028 <sup>6</sup>	0.028 <sup>6</sup>	0.053 <sup>6</sup>	0.011 <sup>6</sup>	0.18 <sup>6</sup>	<0.0096 <sup>6</sup>	0.014 <sup>6</sup>	6.4	2.2
	07/26/01	ND	<1.00	<1.00	<1.00	--	<1.00	--	--	--	--	--	--	--	--	--	
MW-15	6/1/2014 <sup>11</sup>	ND	<0.5	<0.5	<0.5	--	0.049	0.011	<0.010	0.014	0.012	0.012	<0.010	0.011	<0.78	<0.085	
	08/10/99	ND	3.28	2.89	35.4	--	12.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	2.1	<1.0	
	10/20/99	ND	6.92	57.1	47.7	--	1.4 <sup>6</sup>	<0.0081	<0.0081	0.00153	<0.0081	<0.0081	<0.0081	<0.0081	--	--	
	07/26/01	ND	13.8	9.00	18.1	--	10.30	--	--	--	--	--	--	--	--	--	
	03/18/02	ND	<1.00	1.49	2.46	--	<1.01	--	--	--	--	--	--	--	--	--	
	06/26/03	ND	0.719	<0.500	0.612	--	--	--	--	--	--	--	--	--	--	--	
MW-16	09/16/03	ND	2.85	30.6	39.6	--	42.2	--	--	--	--	--	--	--	--	--	
	6/11/2014 <sup>11</sup>	ND	<3.0	0.6	2.0	--	0.29	0.020	0.015	0.027	0.025	0.024	0.019	0.022	5.6	0.40	
	03/21/07	ND	<0.500	<0.500	<0.500	--	<5.00	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<1.00	<1.00	
MW-19	08/11/99	ND	<1.00	<1.00	<1.00	--	<1.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<1.0	<1.0	
	10/20/99	ND	<0.500	<0.500	<0.500	--	<0.021	0.016	0.013	0.016	0.00743	0.015	0.00233	0.011	--	--	
	06/21/01	ND	<1.00	<1.00	<1.00	--	<1.00	--	--	--	--	--	--	--	--	--	
	06/26/03	ND	<0.500	<0.500	<0.500	--	<0.100	0.264	0.282	0.174	0.118	0.179	0.155	0.189	--	--	
	09/16/03	ND	<0.500	<0.500	<0.500	--	<1.00	0.171	0.185	0.197	0.0894	0.191	0.0977	0.147	--	--	
	12/15/03	ND	<0.500	<0.500	<0.500	--	<1.00	0.524	0.479	0.374	0.376	0.474	0.154	0.484	5.27	<1.0	

**Table 2**  
**Groundwater Analytical Results**  
Former Chevron Bulk Plant #1001327  
1602 North Northlake Place  
Seattle, Washington

Monitoring Well <sup>1</sup>	Date Sampled	LNAPL <sup>2</sup>	VOCs (EPA Method 8020 or 8021B) (µg/L)					cPAHs (EPA Method 8270) (µg/L)						Metals (EPA Method 6020) (µg/L)		
			Benzene	Toluene	Ethylbenzene	Xylenes	Naphthalene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Indeno (1,2,3-cd) pyrene	Arsenic	Lead
Groundwater Cleanup Level	No visible sheen		43	48,500	6,910	--	9,880	0.0296	0.0296	0.0296	0.0296	0.0296	0.0296	0.0296	0.0982	5
MW-19 (continued)	03/26/04	ND	<0.500	<0.500	<0.500	--	0.197	0.209	0.168	0.128	0.127	0.182	0.0433	0.107	2.86	<1.0
	03/26/04	ND	<0.500	<0.500	<0.500	--	0.112	0.170	0.0967	0.106	0.150	0.0363	0.0882	2.28	<1.0	
	09/23/04	ND	<0.500	<0.500	<0.500	--	<1.00	0.613	0.390	0.317	0.562	0.530	0.145	0.350	4.24	2.93
	03/14/05	ND	<0.500	<0.500	<0.500	--	<0.100	0.151	0.111	0.080	0.125	0.126	0.0233	0.076	1.71	<1.0
	03/14/05	ND	<0.500	<0.500	<0.500	--	<0.100	0.155	0.109	0.085	0.135	0.131	0.0265	0.085	2.19	<1.0
	03/29/06	ND	<0.500	<0.500	<0.500	--	<1.00	0.093	0.076	0.066	0.0775	0.087	0.0348	0.063	3.76	<1.0
	03/29/06	ND	<0.500	<0.500	<0.500	--	<1.00	0.042	0.030	0.041	0.0327	0.032	0.0195	0.033	3.47	<1.0
	03/21/07	ND	<0.500	<0.500	<0.500	--	<5.00	0.151	0.121	0.0874	0.139	0.153	0.0417	0.0927	<1.0	<1.0
	03/21/07	ND	<0.500	<0.500	<0.500	--	<5.00	0.154	0.131	0.0896	0.126	0.160	0.0374	0.0894	<1.0	<1.0
	03/25/08	ND	<0.5	<0.5	<0.5	--	0.026	0.046	0.039	0.049	0.021	0.042	<0.0097	0.027	1.30	12.9
	03/25/08	ND	<0.5	<0.5	<0.5	--	0.023	0.36	0.31	0.35	0.15	0.34	0.053	0.19	0.92	3.5
	09/08-09/08	ND	<0.5	<0.5	<0.5	--	<5.03	0.40	0.54	0.46	0.26	0.41	0.077	0.28	<0.95	0.62
	03/30-31/09	ND	<0.5	<0.5	<0.5	--	<1.0	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.95	0.42
	09/10-11/09	ND	<0.5	<0.5	<0.5	--	<1.0	0.071	0.084	0.099	0.037	0.081	0.012	0.041	<0.95	1.1
	03/15/10	ND	<0.5	<0.5	<0.5	--	<1.0	0.24	0.30	0.32	0.15	0.29	0.046	0.18	0.98	0.41
	09/15/10	ND	<0.5	<0.5	<0.5	--	<1.0	0.61	0.91	0.55	0.57	0.66	0.1	0.59	1.8	0.12
	11/16/11	ND	<0.2	<0.2	<0.2	--	<1.0	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.95	<0.080
	06/21/12	ND	--	--	--	--	--	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	--	--
Field Filtered Sample	06/21/12	ND	--	--	--	--	--	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	--	--
Field Filtered Sample	09/20/12	ND	<0.5	<0.5	<0.5	--	0.083	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	--	--
Field Filtered Sample	09/20/12	ND	--	--	--	--	--	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	0.41	<0.034
Field Filtered Sample	12/26/12	ND	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	--
Field Filtered Sample	04/24/13	ND	<0.5	<0.5	<0.5	--	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	--	--
Field Filtered Sample	04/24/13	ND	--	--	--	--	--	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.42	0.13
6/10/2014 <sup>11</sup>	ND	<0.5	<0.5	<0.5	--	0.051	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.78	0.16	
MW-20	08/11/99	ND	57.7	2.19	148	--	82.1	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	1.08	<1.0
	10/20/99	ND	71.8	5.69	184	--	25 <sup>3</sup>	.0012 <sup>4</sup>	.00082 <sup>4</sup>	.0016 <sup>4</sup>	.0011 <sup>4</sup>	.00088 <sup>4</sup>	<0.008 <sup>4</sup>	<0.008	--	--
	09/28/00	ND	--	--	--	--	--	--	--	--	--	--	--	3.1	<1.0	
	06/21/01	ND	1.66	<1.00	2.68	--	<1.00	--	--	--	--	--	--	--	--	--
	03/19/02	ND	<1.00	<1.00	3.48	--	1.77	--	--	--	--	--	--	--	--	--
	03/19/02	ND	<1.00	<1.00	3.3	--	2.21	--	--	--	--	--	--	--	--	--
	06/26/03	ND	26.5	2.28	61.0	--	20.9 <sup>6</sup>	0.375(I-02)	<0.0100	<0.0100	0.154(I-02)	<0.0100	<0.0100	<0.0100	--	--
	09/16/03	ND	28.9	3.04	35.7	--	12.5	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	--	--
	12/15/03	ND	<0.500	<0.500	<0.500	--	<1.00	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	4.36	<1.0
	03/26/04	ND	0.877	<0.500	0.731	--	<0.100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	2.53	<1.0
	03/21/07	ND	<0.500	<0.500	<0.500	--	<5.00	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	2.34	<1.0
	03/25/08	ND	0.5	<0.5	<0.5	--	0.019	0.012	<0.0099	0.015	<0.0099	<0.0099	<0.0099	<0.0099	3.2	0.63
	09/08-09/08	ND	7.0	1.7	1.2	--	<5.0 <sup>4</sup>	--	--	--	--	--	--	--	--	--
	09/10-11/09	ND	1.4	0.8	1.1	--	<5.0 <sup>10</sup>	0.014	0.017	0.022	<0.010	0.013	<0.010	0.016	2.4	0.053
	03/15/10	ND	<0.5	<0.5	<0.5	--	2.1	<0.010	<0.010	0.011	<0.010	<0.010	<0.010	0.011	1.3	0.10
	09/15/10	ND	1.60	1.00	1.20	--	4.5	0.011	0.018	0.014	0.011	0.012	<0.0095	0.02	5.2	<0.052
Duplicate Sample	11/16/11	ND	1.50	0.90	0.80	--	8.40	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	4.50	<0.080
Field Filtered Sample	06/21/12	ND	--	--	--	--	--	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	--	--
Field Filtered Sample	06/21/12	ND	--	--	--	--	--	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	--	--
Field Filtered Sample	09/20/12	ND	3.20	1.30	1.40	--	0.47	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	--	--
Field Filtered Sample	09/20/12	ND	--	--	--	--	--	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	11.9	<0.034
Field Filtered Sample	12/26/12	ND	<0.5	<0.5	<0.5	--	0.04	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	--	--
Field Filtered Sample	04/23/13	ND	--	--	--	--	0.099	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	1.4	<0.073
Field Filtered Sample	04/23/13	ND	--	--	--	--	0.099	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	4.1	0.14
6/10/2014 <sup>11</sup>	ND	7.2	0.9	1.4	--	0.099	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	--	--
MW-21	08/10/99	ND	12.1	1.93	<1.00	--	<1.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	13.8	<1.0
	10/19/99	ND	9.69	1.49	<0.750	--	--	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	<0.0078	--	--
	06/21/01	ND	2.46	<1.00	<1.00	--	<1.00	--	--	--	--	--	--	--	--	--
	06/21/01	ND	2.70	<1.00	<1.00	--	1.76	--	--	--	--	--	--	--	--	--
	03/18/02	ND	10.5	1.25	<1.00	--	4.09	--	--	--	--	--	--	--	--	--
	06/26/03	ND	5.82	0.687	0.850	--	1.37	0.569	<0.0100	0.646	<0.0100	<0.0100	3.06	2.35	--	--
	09/16/03	ND	5.43	0.86	<0.500	--	7.01	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	--	--

**Table 2**  
**Groundwater Analytical Results**  
Former Chevron Bulk Plant #1001327  
1602 North Northlake Place  
Seattle, Washington

Monitoring Well <sup>1</sup>	Date Sampled	LNAPL <sup>2</sup>	VOCs (EPA Method 8020 or 8021B) (µg/L)					cPAHs (EPA Method 8270) (µg/L)						Metals (EPA Method 6020) (µg/L)		
			Benzene	Toluene	Ethylbenzene	Xylenes	Naphthalene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Indeno (1,2,3-cd) pyrene	Arsenic	Lead
Groundwater Cleanup Level	No visible sheen		43	48,500	6,910	--	9,880	0.0296	0.0296	0.0296	0.0296	0.0296	0.0296	0.0296	0.0982	5
MW-21 (continued)	12/15/03	ND	4.95	0.88	<0.500	--	12.4	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	12.6	<1.0
	03/26/04	ND	5.28	0.854	<0.500	--	10.1	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	15.2	<1.0
	09/23/04	ND	5.45	0.806	<0.500	--	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	14.6	<1.0
	03/14/05	ND	4.55	0.693	<0.500	--	3.57	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	16.8	<1.0
	03/29/06	ND	4.19	0.800	<0.500	--	4.01	<0.00952	<0.00957	<0.00958	<0.00956	<0.00953	<0.00954	<0.00955	16.4	<1.0
	03/21/07	ND	4.31	0.860	<0.500	--	6.06	<0.0485	<0.0485	<0.0485	<0.0485	<0.0485	<0.0485	<0.0485	16.2	<1.0
	03/25/08	ND	4.4	0.6	<0.5	--	12	<0.010	<0.010	<0.010	<0.010	0.011	<0.010	<0.010	14.6	0.33
	09/08-09/08	ND	6.0	0.6	<0.5	--	18	0.011	0.022	0.017	0.012	0.012	<0.010	0.020	<0.95	0.058
	03/30-31/09	ND	6.0	0.8	0.6	--	15	<0.10	<0.10	<0.10	<0.10	0.018	<0.10	<0.10	11.1	<0.050
	09/10-11/09	ND	5.1	0.7	<0.5	--	<15 <sup>10</sup>	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	9.9	0.11
	03/15/10	ND	3.6	0.6	<0.5	--	<20 <sup>10</sup>	0.013	0.046	0.045	0.038	0.039	4	0.080	8.5	<0.050
	09/15/10	ND	2.50	0.50	<0.5	--	11.00	0.011	<0.0098	<0.0098	<0.0098	0.021	<0.0098	<0.0098	8.7	<0.052
	09/24/11	ND	<0.2	<0.2	<0.2	--	<1.0	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	1.60	<0.08
	10/10/11	ND	--	--	--	--	--	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	--	--
	06/21/12	ND	--	--	--	--	--	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	--	--
Field Filtered Sample	06/21/12	ND	--	--	--	--	--	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	--	--
Field Filtered Sample	09/20/12	ND	<7.0	0.7	<0.5	--	0.84	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	--	--
Field Filtered Sample	09/20/12	ND	--	--	--	--	--	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	15.5	0.052
	12/26/12	ND	2.7	0.6	0.5	--	--	--	--	--	--	--	--	--	--	--
	12/26/12	ND	2.7	0.6	0.6	--	--	--	--	--	--	--	--	--	--	--
	04/23/13	ND	11.0	0.8	0.9	--	1.3	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.047
Field Filtered Sample	04/23/13	ND	--	--	--	--	--	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	11.6	<0.047
	6/11/2014 <sup>11</sup>	ND	<6.0	0.7	0.5	--	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	13.6	<0.085
MW-22	08/10/99	ND	1,140	44.9	93.5	--	7.56	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	1.66	<1.0
	10/22/99	ND	1,680	109	191	--	--	0.0017 <sup>4</sup>	0.0013 <sup>4</sup>	0.0024 <sup>4</sup>	0.0012 <sup>4</sup>	0.002 <sup>4</sup>	<0.0079 <sup>4</sup>	0.0015 <sup>4</sup>	--	--
	01/06/00	ND	1,410	46.8	105	--	--	--	--	--	--	--	--	--	--	--
	01/15/01	ND	2,040	161	254	--	19.2	--	--	--	--	--	--	--	--	--
	06/21/01	ND	1,710	64.8	144	--	<50.0	--	--	--	--	--	--	--	--	--
	03/18/02	ND	1,920	85.5	242	--	21.3	--	--	--	--	--	--	--	--	--
	07/02/02	ND	2,000	84.9	288	--	--	--	--	--	--	--	--	--	--	--
	09/03/02	ND	2,020	66.8	312	--	--	--	--	--	--	--	--	--	--	--
	12/31/02	ND	2,360	159	385	--	--	--	--	--	--	--	--	--	--	--
	06/25/03	ND	1,950	84.4	273	--	--	--	--	--	--	--	--	--	--	--
	09/16/03	ND	2,590	189	425	--	<50.0	--	--	--	--	--	--	--	--	--
	12/17/03	ND	1,250	52.9	188	--	15.8	--	--	--	--	--	--	--	--	--
	12/17/03	ND	1,920	59	207	--	18.5	--	--	--	--	--	--	--	--	--
	03/25/04	ND	1,630	35.4	208	--	14.9	--	--	--	--	--	--	--	--	--
	03/21/07	ND	840	54.5	117	--	20.8	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	4.15	<1.0
	03/25/08	ND	730	31	90	--	5.5	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	3.5	0.12
	09/08-09/08	ND	880	46	130	--	14	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	6.4	<0.050
	03/30-31/09	ND	830	37	98	--	7.3	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	3.6	<0.050
	09/10-11/09	ND	1,100	42	130	--	10	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	3.9	0.45
	03/15/10	ND	720	25	70	--	5.0	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	4.8	<0.050
	09/15/10	ND	820	50	100	--	6.9	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	5.7	<0.052
	6/11/2014 <sup>11</sup>	ND	780	45	67	--	1.3	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	2.5	<0.085
MW-24	03/21/07	ND	<0.500	<0.500	<0.500	--	<5.00	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<1.00	<1.00
	6/10/2014 <sup>11</sup>	ND	<0.5	<0.5	<0.5	--	0.060	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.78	<0.085
MW-25	08/09/99	ND	<1.00	<1.00	<1.00	--	<1.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	1.42	3.71
	10/19/99	ND	<0.500	<0.500	<0.500	--	<0.023	<0.0079	<0.0079	<0.0079	<0.0079	<0.0079	<0.0079	<0.0079	--	--
	01/06/00	ND	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--
	07/27/00	ND	<1.00	<1.00	<1.00	--	<1.00	--	--	--	--	--	--	--	--	--
	07/26/01	ND	<1.00	<1.00	<1.00	--	<1.00	--	--	--	--	--	--	--	--	--
	03/19/02	ND	2.06	<1.00	<1.00	--	<1.00	--	--	--	--	--	--	--	--	--
	07/02/02	ND	28.4	11.5	2.85	--	--	--	--	--	--	--	--	--	--	--
	09/03/02	ND	68.0	0.810	<0.500	--	--	--	--	--	--	--	--	--	--	--
	10/11/02	ND	61	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--
	12/31/02	ND	0.557	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--

**Table 2**  
**Groundwater Analytical Results**  
Former Chevron Bulk Plant #1001327  
1602 North Northlake Place  
Seattle, Washington

Monitoring Well <sup>1</sup>	Date Sampled	LNAPL <sup>2</sup>	VOCs (EPA Method 8020 or 8021B) (µg/L)					cPAHs (EPA Method 8270) (µg/L)						Metals (EPA Method 6020) (µg/L)		
			Benzene	Toluene	Ethylbenzene	Xylenes	Naphthalene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Indeno (1,2,3-cd) pyrene	Arsenic	Lead
<b>Groundwater Cleanup Level</b>		No visible sheen	43	48,500	6,910	--	9,880	0.0296	0.0296	0.0296	0.0296	0.0296	0.0296	0.0296	0.0982	5
MW-25 (continued)	03/26/03	ND	3.20	0.617	<0.500	--	--	--	--	--	--	--	--	--	--	--
	04/28/03	ND	15.5	1.64	1.56	--	--	--	--	--	--	--	--	--	--	--
	05/30/03	ND	21.8	0.872	2.69	--	--	--	--	--	--	--	--	--	--	--
	06/25/03	ND	9.06	0.545	1.33	--	<0.100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	--	--
	09/15/03	ND	<0.500	<0.500	<0.500	--	<1.00	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	--	--
	12/15/03	ND	<0.500	<0.500	<0.500	--	1.76	0.064	0.0628	<0.0100	<0.0100	0.0448	<0.0100	0.0608	17.6	<1.0
	03/25/04	ND	<0.500	<0.500	<0.500	--	<0.100	0.0142	<0.0100	<0.0100	0.0117	0.0151	<0.0100	<0.0100	10.1	<1.0
	09/22/04	ND	<0.500	<0.500	<0.500	--	<0.100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	3.97	<1.0
	03/14/05	ND	<0.500	<0.500	<0.500	--	<0.100	0.014	0.012	0.013	0.0192	0.015	<0.0100	0.010	12.3	<1.0
	03/29/06	ND	<0.500	<0.500	<0.500	--	<1.00	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	9.81	<1.0
	03/21/07	ND	<0.500	<0.500	<0.500	--	<5.00	0.0133	0.0111	<0.0100	<0.0100	0.0113	<0.0100	<0.0100	7.23	<1.0
	03/25/08	ND	<0.5	<0.5	<0.5	--	0.013	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	6.0	0.15
	09/08-09/08	ND	<0.5	<0.5	<0.5	--	<1.0	<0.010	<0.010	<0.010	<0.010	0.019	<0.010	<0.010	<0.95	<0.050
	03/30-31/09	ND	<0.5	<0.5	<0.5	--	<1.0	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.95	<0.050
	09/10-11/09	ND	<0.5	<0.5	<0.5	--	<1.0	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.95	<0.050
	03/15/10	ND	<0.5	<0.5	<0.5	--	1.6	0.021	0.022	0.025	0.011	0.025	<0.0096	0.013	<0.95	0.21
	09/15/10	ND	<0.5	<0.5	<0.5	--	<1.0	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.95	<0.052
	09/25/11	ND	<0.2	<0.2	<0.2	--	<1.0	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	1.60	<0.08
	10/10/11	ND	--	--	--	--	--	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	--	--
	06/21/12	ND	--	--	--	--	--	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	--	--
Field Filtered Sample	06/21/12	ND	--	--	--	--	--	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	--	--
Field Filtered Sample	09/20/12	ND	<0.5	<0.5	<0.5	--	0.054	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	--	--
Field Filtered Sample	12/26/12	ND	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	--
Field Filtered Sample	04/22/13	ND	<0.5	<0.5	<0.5	--	<0.031	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.034
Field Filtered Sample	04/22/13	ND	--	--	--	--	<0.047	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.90	<0.073
	6/10/2014 <sup>11</sup>	ND	<0.5	<0.5	<0.5	--	--	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.96	<0.085
MW-26	08/09/99	ND	<1.00	<1.00	<1.00	--	<1.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<1.0	<1.0
	10/19/99	ND	<0.500	<0.500	<0.500	--	<0.0099	0.042 <sup>4</sup>	0.039 <sup>4</sup>	0.051 <sup>4</sup>	0.0027 <sup>4</sup>	0.0044 <sup>4</sup>	<0.0081 <sup>4</sup>	0.0033 <sup>4</sup>	--	--
	01/06/00	ND	0.621	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--
	04/12/00	ND	<1.00	<1.00	<1.00	--	<1.00	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	--	--
	06/27/00	ND	<1.00	<1.00	<1.00	--	<1.00	--	--	--	--	--	--	--	--	--
	07/26/01	ND	<1.00	<1.00	<1.00	--	<1.00	--	--	--	--	--	--	--	--	--
	03/19/02	ND	<1.00	<1.00	<1.00	--	<1.00	--	--	--	--	--	--	--	--	--
	12/31/02	ND	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--
	02/27/03	ND	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--
	03/26/03	ND	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--
	04/28/03	ND	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--
	05/30/03	ND	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--
	06/25/03	ND	<0.500	<0.500	<0.500	--	<0.100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	--	--
	09/15/03	ND	<0.500	<0.500	<0.500	--	<1.00	--	--	--	--	--	--	--	--	--
	12/15/03	ND	<0.500	<0.500	<0.500	--	<1.00	--	--	--	--	--	--	--	--	--
	09/22/04	ND	<0.500	<0.500	<0.500	--	<0.100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	1.05	<1.0
	03/14/05	ND	<0.500	<0.500	<0.500	--	<0.100	0.024	0.014	0.015	0.0239	0.019	<0.0100	<0.0100	1.26	<1.0
	03/29/06	ND	<0.500	<0.500	<0.500	--	<1.00	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<1.0	<1.0
	03/21/07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/25/08	ND	<0.5	<0.5	<0.5	--	0.011	<0.0099	0.011	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.70	0.38
	09/08-09/08	ND	<0.5	<0.5	<0.5	--	<1.0	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.95	<0.050
	12/11/08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/30-31/09	ND	<0.5	<0.5	<0.5	--	<1.0	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.95	<0.050
	09/10-11/09	ND	<0.5	<0.5	<0.5	--	<1.0	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.95	<0.050
	03/15/10	ND	<0.5	<0.5	<0.5	--	1.2	<0.0096	<0.0096	0.043 <sup>4</sup>	<0.0096 <sup>4</sup>	<0.0096	<0.0096	<0.0096	<0.95	<0.050
	09/15/10	ND	<0.5	<0.5	<0.5	--	<1.0	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.95	<0.052
	09/25/11	ND	<0.2	<0.2	<0.2	--	<1.0	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.95	<0.08
	10/10/11	ND	--	--	--	--	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	--	--
	06/21/12	ND	--	--	--	--	--	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	--	--
Field Filtered Sample	06/21/12	ND	--	--	--	--	--	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	--	--

**Table 2**  
**Groundwater Analytical Results**  
Former Chevron Bulk Plant #1001327  
1602 North Northlake Place  
Seattle, Washington

Monitoring Well <sup>1</sup>	Date Sampled	LNAPL <sup>2</sup>	VOCs (EPA Method 8020 or 8021B) (µg/L)					cPAHs (EPA Method 8270) (µg/L)						Metals (EPA Method 6020) (µg/L)		
			Benzene	Toluene	Ethylbenzene	Xylenes	Naphthalene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Indeno (1,2,3-cd) pyrene	Arsenic	Lead
Groundwater Cleanup Level		No visible sheen	43	48,500	6,910	--	9,880	0.0296	0.0296	0.0296	0.0296	0.0296	0.0296	0.0296	0.0982	5
MW-26 (continued)	09/21/12	ND	<0.5	<0.5	<0.5	--	<0.030	--	--	--	--	--	--	--	--	--
	09/21/12	ND	<0.5	<0.5	<0.5	--	<0.030	--	--	--	--	--	--	--	--	--
	09/26/12	ND	--	--	--	--	--	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	--
Duplicate Sample	09/26/12	ND	--	--	--	--	--	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	--
Field Filtered Sample	09/26/12	ND	--	--	--	--	--	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.034
Duplicate Field Filtered	09/26/12	ND	--	--	--	--	--	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.10
	12/26/12	ND	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	--
	04/22/13	ND	<0.5	<0.5	<0.5	--	<0.031	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	--
Field Filtered Sample	04/22/13	ND	--	--	--	--	--	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.073
	6/10/2014 <sup>11</sup>	ND	<0.5	<0.5	--	--	0.068	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.085	--
MW-27	09/13/99	--	10.8	<0.500	<1.00	--	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	--	--
	10/22/99	--	4.44	<0.500	<0.500	--	5.8 <sup>3</sup>	0.0041 <sup>4</sup>	0.0013 <sup>4</sup>	0.006 <sup>4</sup>	0.0033 <sup>4</sup>	0.0042 <sup>4</sup>	<0.032	<0.032	--	--
	01/06/00	--	10.5	<2.50	<2.50	--	--	--	--	--	--	--	--	--	--	--
MW-28	08/11/99	ND	1,810	1,450	884	--	238	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	9.21	6.82
	10/21/99	ND	2,890	2,700	1,350	--	180 <sup>3</sup>	<0.0082	<0.0082	<0.0082	<0.0082	<0.0082	<0.0082	<0.0082	--	--
	10/21/99	ND	2,700	2,480	1,280	--	--	<0.0081	<0.0081	<0.0081	<0.0081	<0.0081	<0.0081	<0.0081	--	--
	01/06/00	ND	1,770	2,090	1,180	--	--	--	--	--	--	--	--	--	--	--
	07/27/00	ND	1,840	2,420	702	--	356	--	--	--	--	--	--	--	--	--
	09/29/00	ND	927	902	450	--	--	--	--	--	--	--	--	--	--	--
	01/15/01	ND	1,970	2,070	635	--	98.8	--	--	--	--	--	--	--	--	--
	06/21/01	ND	1,950	3,130	1,190	--	272	--	--	--	--	--	--	--	--	--
	06/26/03	ND	1,230	615	1,290	--	--	--	--	--	--	--	--	--	--	--
	09/15/03	ND	848	175	916	--	272	--	--	--	--	--	--	--	--	--
	12/15/03	ND	881	474	1,010	--	284	--	--	--	--	--	--	--	--	--
	03/25/04	ND	712	281	854	--	288	--	--	--	--	--	--	--	--	--
MW-29	8/12/2014 <sup>11</sup>	ND	<2.0	<0.2	0.7	--	3.1	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	7.1	<0.082
MW-30	8/12/2014 <sup>11</sup>	ND	<0.2	<0.2	<0.2	--	<1.0	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.84	<0.082
Duplicate	8/12/2014 <sup>11</sup>	ND	<0.2	<0.2	<0.2	--	<1.0	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	--	--
AGI-2	08/10/99	ND	38.8	11.7	1.57	--	<1.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	10.6	1.84
	10/20/99	ND	20.3	12.1	5.14	--	0.097	0.0014 <sup>3</sup>	<0.008	0.0019 <sup>4</sup>	0.0014 <sup>4</sup>	0.0014 <sup>4</sup>	<0.008 <sup>4</sup>	0.0011 <sup>4</sup>	--	--
	01/15/01	ND	41.2	17.8	7.44	--	--	--	--	--	--	--	--	--	--	--
	06/21/01	ND	296	<10.0	<10.0	--	<10.0	--	--	--	--	--	--	--	--	--
	07/26/01	ND	397.0	14.9	16.9	--	<1.00	--	--	--	--	--	--	--	--	--
	03/18/02	ND	43.2	78.9	17.6	--	1.68	--	--	--	--	--	--	--	--	--
	03/18/02	ND	40.5	72.8	16.4	--	<2.00	--	--	--	--	--	--	--	--	--
	05/07/02	ND	6.16	2.24	2.76	--	--	--	--	--	--	--	--	--	--	--
	06/06/02	ND	4.58	1.52	2.04	--	--	--	--	--	--	--	--	--	--	--
	07/02/02	ND	3.60	2.52	2.00	--	--	--	--	--	--	--	--	--	--	--
	09/03/02	ND	3.48	2.59	3.16	--	--	--	--	--	--	--	--	--	--	--
	12/31/02	ND	1.10	1.36	1.34	--	--	--	--	--	--	--	--	--	--	--
	03/26/03	ND	40.3	481	302	--	--	--	--	--	--	--	--	--	--	--
	04/28/03	ND	27.7	351	190	--	--	--	--	--	--	--	--	--	--	--
	05/30/03	ND	19.4	358	200	--	--	--	--	--	--	--	--	--	--	--
	06/25/03	ND	3.34	1.23	7.70	--	<0.100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	--	--
	09/15/03	ND	1.01	0.832	1.40	--	<1.00	--	--	--	--	--	--	--	--	--
	12/15/03	ND	0.688	0.599	0.851	--	<1.00	--	--	--	--	--	--	--	--	--
	03/26/04	ND	2.06	1.12	1.56	--	<1.00	--	--	--	--	--	--	--	--	--
	03/21/07	ND	0.78	<0.500	0.58	--	<5.00	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	0.0094	4.68	<1.0
	09/10-11/09	ND	11	3.5	5.8	--	2.1	0.29	<0.097 <sup>8</sup>	0.18	<0.097 <sup>8</sup>	0.32	<0.097 <sup>8</sup>	<0.097 <sup>8</sup>	6.0	0.18
	03/15/10	ND	3.5	0.9	2.0	--	4.9	0.43	0.12	0.23	0.14	0.51	0.027	0.095	4.9	0.053
	09/15/10	ND	19.0	6.5	15.0	--	2.4	0.55	0.15	0.2	0.17	0.61	0.03	0.17	7.7	<0.052
Field Filtered Sample	06/21/12	ND	--	--	--	--	--	0.011	<0.010	<0.010	<0.010	0.012	<0.010	<0.010	--	--
Field Filtered Sample	06/21/12	ND	61.0	12.0	6.2	--	0.86	0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	--	--
	09/20/12	ND	--	--	--	--	--	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	12.8	0.073
	12/26/12	ND	11	3.6	1.4	--	--	--	--	--	--	--	--	--	--	--

Table 2

**Groundwater Analytical Results**  
Former Chevron Bulk Plant #1001327  
1602 North Northlake Place  
Seattle, Washington

Monitoring Well <sup>1</sup>	Date Sampled	LNAPL <sup>2</sup>	VOCs (EPA Method 8020 or 8021B) (µg/L)					cPAHs (EPA Method 8270) (µg/L)						Metals (EPA Method 6020) (µg/L)		
			Benzene	Toluene	Ethylbenzene	Xylenes	Naphthalene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Indeno (1,2,3-cd) pyrene	Arsenic	Lead
Groundwater Cleanup Level	No visible sheen		43	48,500	6,910	--	9,880	0.0296	0.0296	0.0296	0.0296	0.0296	0.0296	0.0296	0.0982	5
AGI-2 (continued)	04/23/13	ND	5.1	1.1	5.9	--	0.63	0.015	<0.010	<0.010	0.015	<0.010	<0.010	<0.010	--	--
Duplicate Field Filtered	04/23/13	ND	4.2	1.4	3.9	--	0.60	0.015	<0.010	<0.010	0.013	<0.010	<0.010	<0.010	--	--
Field Filtered Sample	04/23/13	ND	--	--	--	--	--	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	10.9	<0.073
Duplicate Field Filtered	04/23/13	ND	--	--	--	--	--	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	11.6	<0.047
6/11/2014 <sup>11</sup>	ND	9.2	2.5	7.4	--	0.35	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	10.8	<0.085
MLU-1	08/10/99	ND	<1.00	<1.00	<1.00	--	<1.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<1.0	<1.0
	10/20/99	ND	<0.500	<0.500	<0.500	--	0.023	0.0012 <sup>4</sup>	0.00091 <sup>4</sup>	0.0022 <sup>4</sup>	<0.0079	<0.0079	<0.0079	<0.0079	.0013 <sup>4</sup>	--
	01/06/00	ND	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--
	04/12/00	ND	<1.00	<1.00	<1.00	--	<1.00	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	--	--
	06/27/00	ND	<1.00	<1.00	<1.00	--	<1.00	--	--	--	--	--	--	--	--	--
	06/25/03	ND	<0.500	<0.500	<0.500	--	<0.100	0.0476	0.0264	<0.0100	0.0164	0.0285	<0.0100	0.0776	--	--
	09/15/03	ND	0.6280	<0.500	<0.500	--	<1.00	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	--	--
	12/15/03	ND	<0.500	<0.500	<0.500	--	<1.00	<0.0100	0.0653	<0.0100	<0.0100	0.051	<0.0100	<0.0100	<1.0	<1.0
	03/25/04	ND	<0.500	<0.500	<0.500	--	<0.100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<1.0	<1.0
	03/21/07	ND	<0.500	<0.500	<0.500	--	<5.00	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<1.0	<1.0
	09/10-11/09	ND	<0.5	<0.5	<0.5	--	<1.0	0.012	0.011	0.021	<0.0098	0.014	<0.0098	0.011	<0.95	<0.050
	03/15/10	ND	<0.5	<0.5	<0.5	--	1.7	<0.010	0.066 <sup>10</sup>	<0.010 <sup>10</sup>	<0.010	<0.010	<0.010	<0.010	<0.95	<0.050
	09/15/10	ND	<0.5	<0.5	<0.5	--	<1.0	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.95	<0.052
	06/21/12	ND	--	--	--	--	--	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	--	--
Field Filtered Sample	06/21/12	ND	--	--	--	--	--	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	--	--
	09/21/12	ND	<0.5	<0.5	<0.5	--	<0.031	--	--	--	--	--	--	--	--	--
	09/26/12	ND	--	--	--	--	--	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	--	--
Field Filtered Sample	09/26/12	ND	--	--	--	--	--	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.40	0.041
	12/26/12	ND	<0.5	<0.5	<0.5	--	--	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	--	--
Field Filtered Sample	04/22/13	ND	<0.5	<0.5	<0.5	--	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.40	0.097
	04/22/13	ND	<0.5	<0.5	<0.5	--	0.051	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.78	<0.085
6/11/2014 <sup>11</sup>	ND	<0.5	<0.5	<0.5	--	0.051	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.78	0.15
MLU-3	08/20/99	ND	<1.00	<1.00	<1.00	--	<1.00	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<1.0	<1.0
	10/20/99	ND	<0.500	<0.500	<0.500	--	0.057	0.0099	0.01	0.011	0.0075 <sup>4</sup>	0.013	0.0019 <sup>4</sup>	0.0075 <sup>4</sup>	--	--
	07/26/01	ND	<1.00	<1.00	<1.00	--	<1.00	--	--	--	--	--	--	--	--	--
6/11/2014 <sup>11</sup>	ND	<0.5	<0.5	<0.5	--	0.056	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.78	0.15
Quality Control Samples																
Trip Blank	08/09/99	--	<1.00	<1.00	<1.00	--	<1.00	--	--	--	--	--	--	--	--	--
	08/10/99	--	<1.00	<1.00	<1.00	--	<1.00	--	--	--	--	--	--	--	--	--
	08/11/99	--	<1.00	<1.00	<1.00	--	<1.00	--	--	--	--	--	--	--	--	--
	10/20/99	--	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--
	01/07/00	--	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--
	04/13/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/13/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/13/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/13/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/28/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/29/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/15/01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/21/01	--	<1.00	<1.00	<1.00	--	<1.00	--	--	--	--	--	--	--	--	--
	03/18/02	--	<1.00	<1.00	<1.00	--	<1.00	--	--	--	--	--	--	--	--	--
	03/19/02	--	<1.00	<1.00	<1.00	--	<1.00	--	--	--	--	--	--	--	--	--
	04/03/02	--	<1.00	<1.00	<1.00	--	<1.00	--	--	--	--	--	--	--	--	--
	09/03/02	--	<0.500	<0.500	1.09	--	--	--	--	--	--	--	--	--	--	--
	12/31/02	--	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--
	06/26/03	--	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--
	09/15/03	--	<0.500	<0.500	<0.500	--	<1.00	--	--	--	--	--	--	--	--	--
	12/15/03	--	<0.500	<0.500	<0.500	--	<1.00	--	--	--	--	--	--	--	--	--
	03/25/04	--	<0.500	<0.500	<0.500	--	<1.00	--	--	--	--	--	--	--	--	--
	09/23/04	--	<0.500	<0.500	<0.500	--	<1.00	--	--	--	--	--	--	--	--	--
	03/14/05	--	<0.500	<0.500	<0.500	--	<1.00	--	--	--	--	--	--	--	--	--

**Table 2**  
**Groundwater Analytical Results**  
Former Chevron Bulk Plant #1001327  
1602 North Northlake Place  
Seattle, Washington

Monitoring Well <sup>1</sup>	Date Sampled	LNAPL <sup>2</sup>	VOCs (EPA Method 8020 or 8021B) (µg/L)					cPAHs (EPA Method 8270) (µg/L)						Metals (EPA Method 6020) (µg/L)		
			Benzene	Toluene	Ethylbenzene	Xylenes	Naphthalene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Indeno (1,2,3-cd) pyrene	Arsenic	Lead
Groundwater Cleanup Level	No visible sheen		43	48,500	6,910	--	9,880	0.0296	0.0296	0.0296	0.0296	0.0296	0.0296	0.0296	0.0982	5
Trip Blank (continued)	03/29/06	--	<0.500	<0.500	<0.500	--	<1.00	--	--	--	--	--	--	--	--	--
	03/21/07	--	<0.500	<0.500	<0.500	--	<5.00	--	--	--	--	--	--	--	--	--
	03/25/08	--	<0.5	<0.5	<0.5	--	<1.0	--	--	--	--	--	--	--	--	--
Field Blank	08/20/99	--	<1.00	<1.00	<1.00	--	<1.00	--	--	--	--	--	--	--	--	--
	10/20/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/20/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/20/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/22/99	--	--	--	--	1.1	--	--	--	--	--	--	--	--	--	--
	10/22/99	--	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--
	10/25/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/26/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/26/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/21/01	--	<1.00	<1.00	2.49	--	1.88	--	--	--	--	--	--	--	--	--
	06/27/01	--	<1.00	<1.00	1.79	--	<1.00	--	--	--	--	--	--	--	--	--
	07/26/01	--	1.22	<1.00	4.26	--	<1.00	--	--	--	--	--	--	--	--	--
	03/19/02	--	<1.00	<1.00	<1.00	--	<1.00	--	--	--	--	--	--	--	--	--
	09/03/02	--	0.857	<0.500	3.84	--	--	--	--	--	--	--	--	--	--	--
	12/31/02	--	<0.500	<0.500	<0.500	--	--	--	--	--	--	--	--	--	--	--
	09/17/03	--	<0.500	<0.500	<0.500	--	<1.00	--	--	--	--	--	--	--	--	--
	12/17/03	--	<0.500	<0.500	<0.500	--	<1.00	--	--	--	--	--	--	--	--	--
	03/26/04	--	<0.500	<0.500	<0.500	--	<1.00	--	--	--	--	--	--	--	--	--
	09/23/04	--	<0.500	<0.500	<0.500	--	<1.00	--	--	--	--	--	--	--	--	--
	03/14/05	--	<0.500	<0.500	<0.500	--	<1.00	--	--	--	--	--	--	--	--	--
	03/29/06	--	<0.500	<0.500	<0.500	--	<1.00	--	--	--	--	--	--	--	--	--
	03/21/07	--	<0.500	<0.500	<0.500	--	<5.00	--	--	--	--	--	--	--	--	--
	03/25/08	--	<0.5	<0.5	<0.5	--	<1.0	--	--	--	--	--	--	--	--	--
	09/08-09/08	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	--	--	--	--	--
QA	03/30-31/09	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	--	--	--	--	--
	09/10-11/09	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	--	--	--	--	--
	03/15/10	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	--	--	--	--	--
	09/15/10	--	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	--	--	--	--	--
	09/24/11	--	<0.2	<0.2	<0.2	<0.6	--	--	--	--	--	--	--	--	--	--
	11/16/11	--	<0.2	<0.2	<0.2	<0.6	--	--	--	--	--	--	--	--	--	--
	06/10/14	--	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	--

**Notes:**

<sup>1</sup>Monitoring well locations are shown in Figure 2.

<sup>2</sup>LNAPL = light nonaqueous phase liquid.

<sup>3</sup>Laboratory report indicates concentration exceeds the instrument calibration range.

<sup>4</sup>Laboratory report indicates estimated value.

<sup>5</sup>Laboratory report indicates the reporting limits were raised because sample dilution was necessary to bring internal standard within QC limits.

<sup>6</sup>Laboratory report indicates the surrogate data is outside the QC limits due to irresolvable matrix problems evident in the sample chromatogram.

<sup>7</sup>Laboratory report indicates due to the presence of an interferent near its retention time, the normal reporting limit was not attained for toluene. The presence or concentration of this compound cannot be determined due to the presence of this interferent.

<sup>8</sup>Laboratory report indicates due to the sample matrix an initial dilution was necessary to perform the analysis. Therefore, the reporting limits for the GC/MS semivolatile compounds were raised.

<sup>9</sup>Laboratory report indicates due to the presence of interferences near their retention time, normal reporting limits were not attained for benzene and toluene. The presence or of these compounds cannot be determined below the reporting limits due to the presence of these interferences.

<sup>10</sup>Laboratory report indicates Benzo (b) fluoranthene and benzo (k) fluoranthene were not resolved under the sample analysis conditions. The result reported for benzo (b) fluoranthene represents the combined total of both isomers. □

<sup>11</sup>cPAHs, arsenic and lead samples were filtered in the field using a disposable 0.45 micron filter

µg/L = micrograms per liter mg/L = milligrams per liter ND = not detected

Shaded concentrations are greater than corresponding Remedial Action Levels. Bolded data are for the current reporting period.

Sheen = sheen observed in water

**Table 3**  
**Point of Compliance Consecutive Clean Sampling Events as of First Semi-Annual 2014**

Former Chevron Bulk Plant #1001327  
 1602 North Northlake Place  
 Seattle, Washington

Monitoring Well	Petroleum Constituents: Benzene, Toluene, Ethylbenzene, Naphthalenes		cPAHs		Lead	
	Current Sampling Interval	Consecutive Sampling Events in Compliance <sup>1,2</sup>	Current Sampling Interval	Consecutive Sampling Events in Compliance <sup>1,2</sup>	Current Sampling Interval	Consecutive Sampling Events in Compliance <sup>1,2</sup>
Upper Yard						
<sup>3</sup> MW-10	semi-annually	0	semi-annually	0	semi-annually	0
MW-20	semi-annually	7 <sup>4</sup>	semi-annually	7 <sup>4</sup>	semi-annually	6 <sup>4</sup>
MW-21	semi-annually	7 <sup>4</sup>	semi-annually	7	semi-annually	6 <sup>4</sup>
Lower Yard						
MW-4	semi-annually	7 <sup>4</sup>	semi-annually	4	semi-annually	6 <sup>4</sup>
MW-7	semi-annually	3	semi-annually	4	semi-annually	5 <sup>4</sup>
MW-8A	semi-annually	7 <sup>4</sup>	semi-annually	6	semi-annually	6 <sup>4</sup>
AGI-2	semi-annually	3	semi-annually	4	semi-annually	5 <sup>4</sup>
MLU-1	semi-annually	6 <sup>4</sup>	semi-annually	5	semi-annually	5 <sup>4</sup>
<sup>5</sup> MLU-3	semi-annually	1	semi-annually	1	semi-annually	1
MW-25	semi-annually	7 <sup>4</sup>	semi-annually	8 <sup>4</sup>	semi-annually	6 <sup>4</sup>
MW-26	semi-annually	7 <sup>4</sup>	semi-annually	7	semi-annually	7

**Notes:**

<sup>1</sup>"Consecutive events" are number of consecutive sampling events prior to and including the current reporting period that are in compliance with the groundwater remediation action levels. Events prior to 2010 are not counted. Refer to progress reports for results.

<sup>2</sup>consecutive clean sampling events excludes arsenic values because laboratory reporting limits are above the cleanup level.

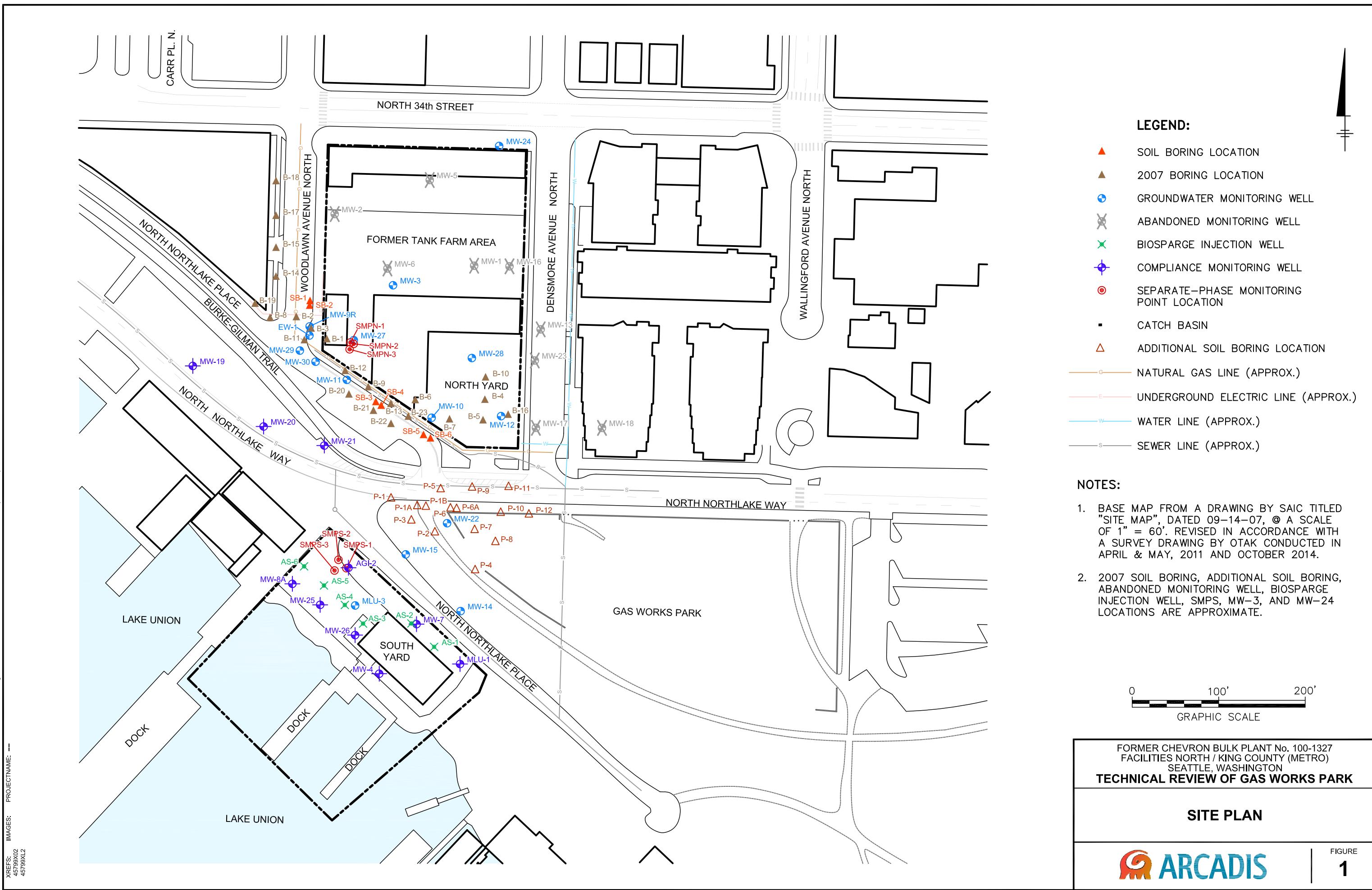
<sup>3</sup>MW-10 not sampled since 2010

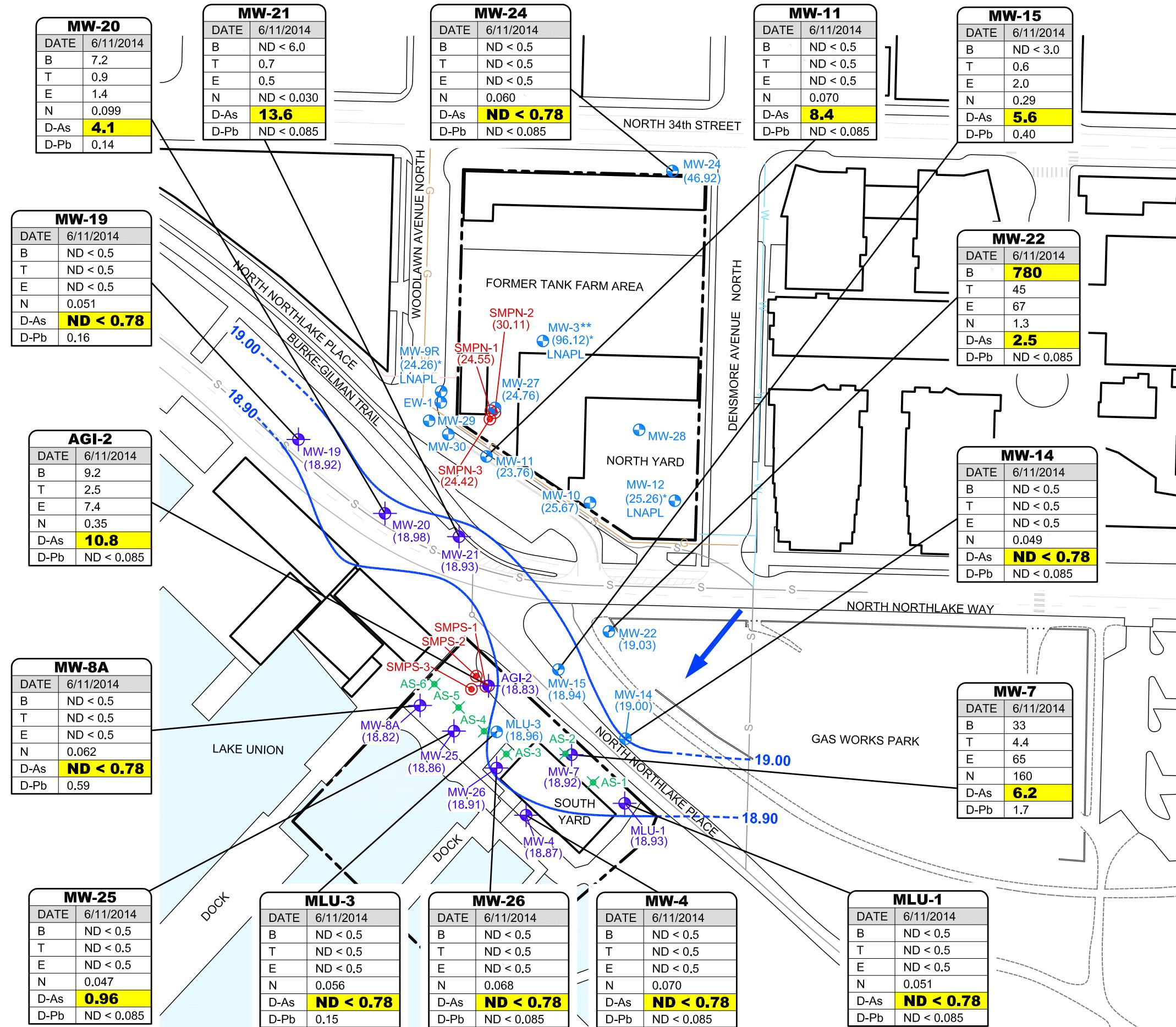
<sup>4</sup>No exceedences, but constituent not analyzed consecutively every sampling event

<sup>5</sup>MLU-3 only sampled once since 2010

cPAHs = carcinogenic polycyclic aromatic hydrocarbons

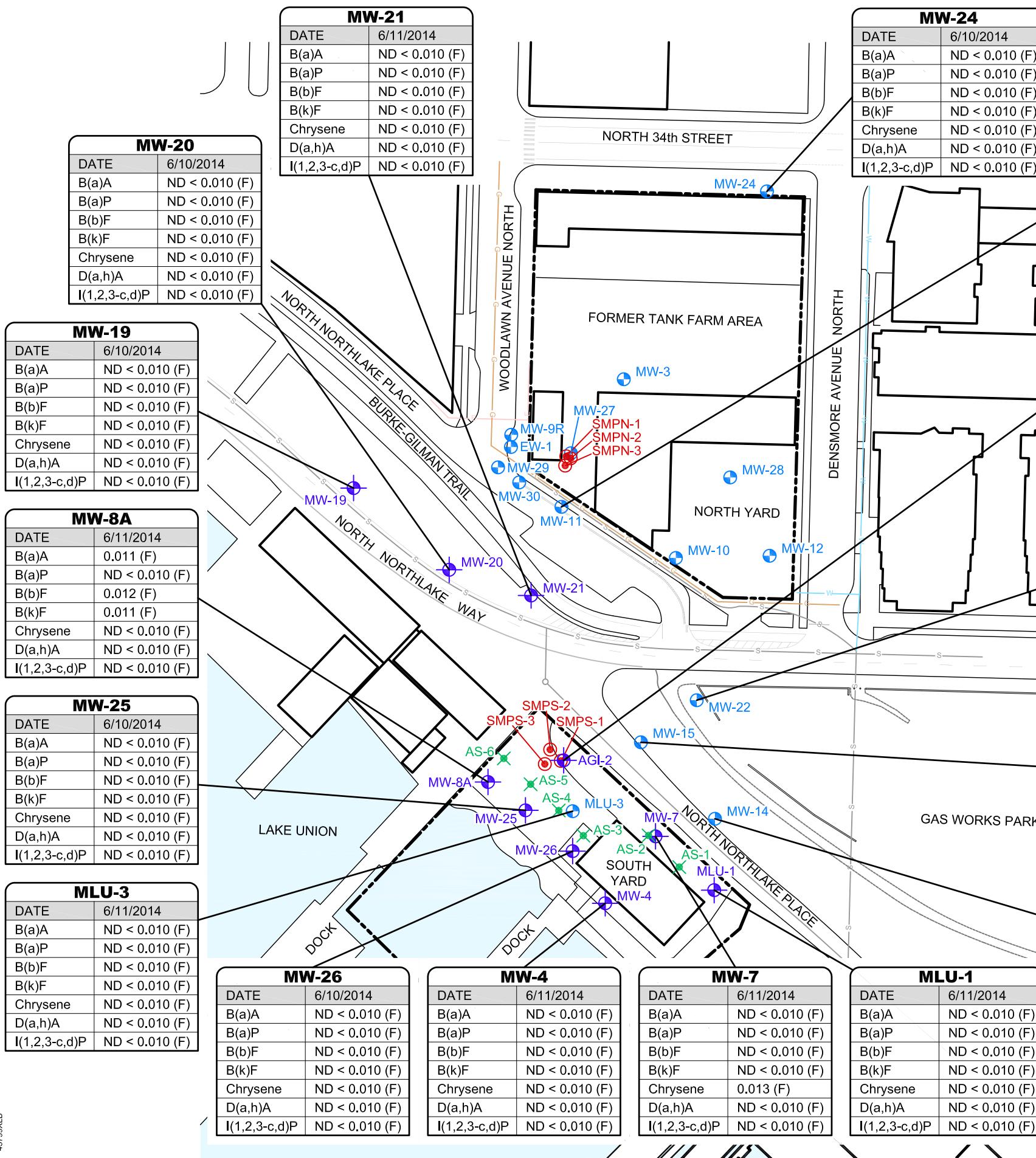
**Figures**





FORMER CHEVRON BULK PLANT No. 100-1327  
FACILITIES NORTH / KING COUNTY (METRO)  
SEATTLE, WASHINGTON  
**GROUNDWATER MONITORING REPORT**

**POTENTIOMETRIC MAP WITH  
ANALYTICAL RESULTS**  
JUNE 10 and 11, 2014



### LEGEND:

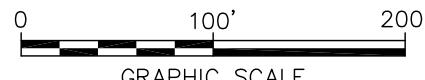
- GROUNDWATER MONITORING WELL
- ✖ BIOSPARGE INJECTION WELL
- COMPLIANCE MONITORING WELL
- SEPARATE-PHASE MONITORING POINT LOCATION
- CATCH BASIN
- ND NOT DETECTED, VALUE SHOWN IS DETECTION LIMIT
- (F) FIELD-FILTERED SAMPLE

### SAMPLE ID

DATE	Sample Collection Date
B(a)A	Benzo (a) anthracene ( $\mu$ g/L)
B(a)P	Benzo (a) pyrene ( $\mu$ g/L)
B(b)F	Benzo (b) fluoranthene ( $\mu$ g/L)
B(k)F	Benzo (k) fluoranthene ( $\mu$ g/L)
Chrysene	Chrysene ( $\mu$ g/L)
D(a,h)A	Dibenz (a,h) anthracene ( $\mu$ g/L)
I(1,2,3-c,d)P	Indeno (1,2,3-c,d) pyrene ( $\mu$ g/L)

### NOTES:

- BASE MAP FROM A DRAWING BY SAIC TITLED "SITE MAP", DATED 09-14-07, @ A SCALE OF 1" = 60'. REVISED IN ACCORDANCE WITH A SURVEY DRAWING BY OTAK CONDUCTED IN APRIL & MAY, 2011 AND OCTOBER 2014.
- BIOSPARGE INJECTION WELL, SMPS, MW-3, AND MW-24 LOCATIONS ARE APPROXIMATE.
- BOLD** = CONCENTRATION EXCEEDS THE REMEDIAL CLEANUP LEVEL.
- MTCA METHOD B SURFACE WATER CUL FOR EACH INDIVIDUAL cPAH REPORTED IS 0.0296  $\mu$ g/L.



FORMER CHEVRON BULK PLANT No. 100-1327  
FACILITIES NORTH / KING COUNTY (METRO)  
SEATTLE, WASHINGTON  
**GROUNDWATER MONITORING REPORT**

**cPAH ANALYTICAL RESULTS**  
JUNE 10 and 11, 2014

**ARCADIS**

**Appendix A**

Field Notes

## WELL GAUGING DATA

Project # 1410327-LBI Date 3/27/14 Client CHEVRON

Site 1602 N. NORTHLAKE PL, SEATTLE, WA

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
Mw-3	1051	2					22.78	45.50	✓	
Mw-4	0910	2					15.69	19.65	✓	
Mw-7	0906	2					12.82	16.33	✓	
Mw-8A	0938	2					12.21	24.71	✓	
Mw-9	1058	2	ODOR	11.76			11.93	—	✓	ABS Sock
Mw-10	1138	2	ODOR				8.28	17.88	✓	ABS Sock
Mw-11	1132	2					9.38	15.67	✓	
Mw-14	—	—	UNABLE	TO LOCATE	—	—	—	—	✓	
Mw-15	—	—	UNABLE	TO LOCATE	—	—	—	—	✓	
Mw-19	1024	2					12.63	16.41	✓	
Mw-20	1016	2					13.24	21.86	✓	
Mw-21	1010	2					12.98	20.42	✓	
Mw-22	—	—	UNABLE	TO LOCATE	—	—	—	—	✓	
Mw-24	1046	2					22.06	33.51	✓	
Mw-25	0931	4					12.72	17.63	✓	
Mw-26	0924	4					12.45	19.62	✓	
Mw-27	1103	4	ODOR	7.08	0.02		7.10	—	✓	ABS Sock

## WELL GAUGING DATA

Project # 140327-LB Date 3/27/14 Client CHEVRONSite 1602 N NORTH LAKE PL SEATTLE, WA

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or ZOC	Notes
SMPN-1	1126	2					9.46	14.60		ABS Sock
SMPN-2	1108	2					9.39	14.54		ABS Sock
SMPN-3	1115	2					8.68	14.75		
AGI-2	0928	2					12.41	22.35		
MLU-1	0900	4					14.61	22.46		
MLU-3	0944	4					12.44 14.61	20.73 22.40	↓	

# WELLHEAD INSPECTION FORM

Client: CHEVRON Site: 1602 N. NORTHLAKE PL, SEATTLE, WA Date: 3/27/14  
 Job #: 140327-LB1 Technician: L.BURES Page 1 of 2

Well ID	Well Inspected - No Corrective Action Required	Check indicates deficiency										Notes (list if cap or lock replaced, if there are access issues associated with repairs, if traffic control is required, if stand pipe damaged, or any specific details not covered by checklist)	
		Cap non-functional	Lock non-functional	Lock missing	Bolts missing (list qty)	Tabs stripped (list qty)	Tabs broken (list qty)	Annular seal incomplete	Apron damaged	Rim / Lid broken	Trip Hazard	Below Grade	
Mw-3	X												
Mw-4				X									STAND PIPE
Mw-7						3/3							
Mw-8A						3/3							
Mw-9					1/3								
Mw-10	X												
Mw-11	X												
Mw-14													X
Mw-15													Y
Mw-19					3/3								
Mw-20					2/3	1/3							
Mw-21					1/3	3/3							
Mw-22													X
Mw-24	X												
Mw-25					3/3		2						
Mw-26	X												
Mw-27	X												

NOTES: \_\_\_\_\_

## **WELLHEAD INSPECTION FORM**

Client: CHEYRON

Site: 1602 N. Northlake Pl, Seattle, WA

Date: 3/27/14

Job #: 140327-LB1

Technician: L.BURES

Page 2 of 2

**NOTES:**

Blaine Tech Services, Inc.

## Permit To Work

for Chevron EMC Sites

Client: CHEVRON

Date 3/20/14

Site Address: 1602 N. NORTHLAKE PL, SEATTLE, WA

Job Number: 140327-181 Technician(s): L. BURES

### Pre-Job Safety Review

1. JMP reviewed, site restrictions and parking/access issues addressed.

Reviewed:

### 2. Special Permit Required Task Review

Are there any conditions or tasks that would require:

	Yes	No
Confined space entry	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Working at height	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Lock-out/Tag-out	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Excavations greater than 4 feet deep	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Excavations within 3 feet of a buried active electrical line or product piping or within 10 feet of a high pressure gas line.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Use of overhead equipment within 15 feet of an overhead electrical power line or pole supporting one	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Hot work	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If "Yes" was the answer to any of the Special Permit Required Tasks above, the Project Manager will contact the client and arrange to modify the Scope of Work so that the Special Permit Required Tasks are not required to be performed by Blaine Tech Services employees.

### 3. Is a Traffic Control Permit required for today's work?

Yes	No
<input type="checkbox"/>	<input checked="" type="checkbox"/>

If so is it in the folder?

Is it current?

Do you understand the Traffic Control Plan and what equipment you will need?

### On-site Pre-Job Safety Review

- Reviewed and signed the site specific HASP.
- Route to hospital understood.
- Reviewed "Groundwater Monitoring Well Sampling General Job Safety Analysis included in the HASP.
- Exceptional circumstances today that are not covered by the HASP, JSA or JMP have been addressed and mitigated.
- Understands procedure to follow, if site circumstances change, to address new site hazards.
- There are no unexpected conditions which would make your task a Special Permit Required Task. If there is, contact your Project Manager.
- All site hazards have been communicated to all necessary onsite personnel during tailgate safety meeting.
- After lunch tailgate safety meeting refresher conducted.

If Checklist Task cannot be completed, explain:

Permit To Work Authority:

Ryan Prevoist

Name

PM

Title

3/20/14

Date

030

Time

## SCOPE OF WORK

## GROUNDWATER MONITORING FOR CUSA

SITE ADDRESS: 1602 N Northlake Place  
 CITY: Seattle  
 State: Washington

Lock/Key: 1776/1911  
 Gauge to: TOC

Required regulatory notifications/ cooperative sampling requirements: Department of Ecology

Lab: Lancaster  
 Phone: (717) 656-2300  
 Contact: Natalie Luciano

Engineer: Marlea Harmon  
 Phone #:

Site # 100-1327  
 Consultant: ARCADIS  
 Contact: Sam Miles  
 Phone: 206-853-7428 Cell  
 Fax: 206-726-4720

Well I.D.	Required Analyses	Sampling Frequency	Sampling Months	Gauging Frequency	Remedial Devices	Notes & Tasks
MW-3	NONE	NEVER	NONE	QRTLY		Check for SPH
MW-4	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	QRTLY		
MW-7	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	QRTLY		
MW-8A	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	QRTLY		Take Dup
MW-9	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	QRTLY		Check for SPH
MW-10	None	Never	None	QRTLY		
MW-11	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	Semi-Annual		
MW-14	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	Semi-Annual		
MW-15	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	Semi-Annual		
MW-19	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	QRTLY		Cone Off
MW-20	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	QRTLY		Cone Off
MW-21	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	QRTLY		Cone Off
MW-22	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	Semi-Annual		
MW-24	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	Semi-Annual		
MW-25	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	QRTLY		

## SCOPE OF WORK

## GROUNDWATER MONITORING FOR CUSA

SITE ADDRESS: 1602 N Northlake Place

Lab: Lancaster

Site # 100-1327

MW-26	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	QRTLY		
MW-27	NONE	NEVER	NONE	QRTLY		Check for SPH
SMPN-1	NONE	NEVER	NONE	QRTLY		Check for SPH
SMPN-2	NONE	NEVER	NONE	QRTLY		Check for SPH
SMPN-3	NONE	NEVER	NONE	QRTLY		Check for SPH
AGI-2	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	QRTLY		
MLU-1	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	QRTLY		
MLU-3	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	QRTLY		
DUP	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	Semi-Annual		Take on MW-8A
QA	BTE by 8021	Semi-Annual	MAY/NOV	QRTLY		

## SCOPE OF WORK

SITE ADDRESS: 1602 N Northlake Place

Lab: Lancaster

## GROUNDWATER MONITORING FOR CUSA

Site # 100-1327

### CHANGES AND SPECIAL INSTRUCTIONS:

BTE by 8021- (3) HCl VOA's (BTEX without the xylenes)

Dissolved Arsenic and Dissolved Lead (1) 250ml HNO3 Poly (**Field Filtered**)

Dissolved cPAHs and naphthalenes (8270c SIM) (2) 250 Round Amber Glass (**Field Filtered**)

cPAHs (2) 250 Round Amber Glass

**DO NOT SAMPLE WELL WITH SPH:** If a well that historically does not have SPH call in to Project manager before sampling the well.

**NAPL Recovery:** Bring Six Absorbent Socks to replace socks in wells with NAPL (MW-3, MW-9, MW-27, SMPN-1, SMPN-2, and SMPN-3)

**Waste Disposal:** Need 2 New 55 Gallon Drums for GWM and Absorbent Socks in lower yard, put non-HAZ label on them. *Over Pack on Site*

**Cone Wells off day before job takes place:** MW-19, MW-20, MW-21

### Low-Flow Purge with Peri - Pump

- These wells will be purged at a rate of 100- 500 ml/min.
- One system volume is must be purged prior to sample collection
- $617^*(\text{Tubing ID radius } 2 \times \text{Tubing Length}) = 1 \text{ system volume in mL}$
- Parameters will be taken with the YSI 556 Flow Cell.
- Collect Parameters every 3 min.
- Sample through tubing when 3 consecutive stable parameters (4- 5 parameters min.)
- Stabilization Requirements:
  - Temp= 1oC
  - PH = 0.1
  - Conductivity = 3%
  - Turbidity = 10% if >5NTU
  - DO = 0.3mg/L
  - ORP = 10 MV
- Decon thoroughly between wells. Use liquinox with steam cleaner

### **ADDITIONAL EQUIPMENT:**

Interface Probe

### **NOTIFICATIONS:**

(360-670-5884) Cell

Rory Henneck 206-726-4732 (GW Coord Contact)

1911

Center for Wooden Boats, Kyle Hunter 206-382-2628x32 for Combination to lock (4776 previously)

Touchstone Corp, Paul Klansnic 206-357-2305, Cell 425-417-5109 has the Key to SMPN well and MW-3 areas

Contact James Lemieux

206-432-8991  
206-450-5084

## WELL GAUGING DATA

Project # 140610-LBI Date 6/10/14 Client CHEVRON

Site 1602 N. NORTHLAKE PLACE, SEATTLE, WA

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TDC	Notes
Mw-3	0845	2	ODOR	6.97		556ml	11.88	—		ABS Sock 286.4
Mw-4	1053	2					15.05	19.61		0.0
Mw-7	1105	2					12.21	16.38		0.4
Mw-8A	1038	2					11.49	24.83		0.0
Mw-10	0910	2					7.412	17.83		ABS Sock 161.3
Mw-11	1007	2					9.53	15.63		0.0
Mw-14	1121	2					12.61	18.69		0.0
Mw-15	1127	2					12.66	18.91		0.0
Mw-19	1018	2					11.95	16.46		
Mw-20	1024	2					12.51	21.79		
Mw-21	1030	2					12.33	20.39		0.0
Mw-22	0945	2					13.65	20.75		0.1
Mw-24	1000	2					22.85	33.40		
Mw-25	1042	4					12.05	19.31		
Mw-26	1048	4					11.71	19.88		
Mw-27	0926	4	SHEEN				9.25	19.74		ABS Sock 2.5
SMRN-1	0923	2	ODOR				9.23	14.63	✓	ABS Sock 20.8

## WELL GAUGING DATA

Project # 14000 - LBI Date 6/10/14 Client CHEVRON

Site 1602 N. Northlake Place, Seattle, WA

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOS	Notes
SMPN-2	0919	2	ODOR				3.74	14.81		AB5 Sack 1.3
SMPN-3	0916	2	ODOR				9.89	14.77		AB5 Sack 12.2
AGT-2	1112	2	ODOR				11.85	22.31		22.1
MLG-1	1059	4					13.97	22.35	*	0.0
MLG-3	1118	4					11.68	20.62	↓	0.0
MW-9	0935	2	ODOR	12.19	0.03	200mL	12.22	—	↓	AB5 Sack 98.4
MW-12	0902	2	ODOR	7.62	0.06	200mL	7.68	—	↓	AB5 Sack 139.4

# LOW FLOW WELL MONITORING DATA SHEET

Project #:	140610-LB	Client:	CHEVRON
Sampler:	LB	Gauging Date:	6/10/14
Well I.D.:	MW-4	Well Diameter (in.) :	② 3 4 6 8
Total Well Depth (ft.):	19.61	Depth to Water (ft.):	15.05
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type: YSI 560

Purge Method: 2" Grundfos Pump      Peristaltic Pump      Bladder Pump  
 Sampling Method: Dedicated Tubing      New Tubing      Other \_\_\_\_\_  
 Start Purge Time: 0730      Flow Rate: 200 ML/MIN      Pump Depth: 17.5'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or m³)	Depth to Water (ft.)
0733	12.12	7.08	226	18	1.68	62.0	600	15.08
0736	12.08	7.01	229	17	1.65	57.8	1200	15.08
0739	12.07	7.02	230	16	1.63	56.2	1600	15.08
0742	12.06	7.03	232	15	1.62	55.1	2400	15.08
0745	12.05	7.04	233	14	1.61	54.8	3000	15.08

Did well dewater? Yes No      Amount actually evacuated: 3L

Sampling Time: 0746      Sampling Date: 6/11/14

Sample I.D.: MW-4      Laboratory: LANCASTER

Analyzed for: TPH G BTEX MTBE TPED Others SEE COC

Equipment Blank I.D.: @ Time      Duplicate I.D.:

## LOW FLOW WELL MONITORING DATA SHEET

Project #:	140610-LB1	Client:	CHEVRON
Sampler:	LB	Gauging Date:	6/10/14
Well I.D.:	MK-7	Well Diameter (in.) :	Ø 3 4 6 8
Total Well Depth (ft.) :	16.38	Depth to Water (ft.) :	12.21
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PYC	Grade	Flow Cell Type: VSE 536

Purge Method: 2" Grundfos Pump

Sampling Method: Dedicated Tubing

## Peristaltic Pump

## New Tubing

## Bladder Pump

Other

Start Purge Time: 0946

Flow Rate: 200 mL / MIN

Pump Depth: 145'

Did well dewater? Yes  No

Amount actually evacuated: 31

Sampling Time: 100z

Sampling Date: 6/11/14

Sample I.D.: MW-7

Laboratory: LANCASTER

Analyzed for:

TPH-G    BTEX    MTBE    TPH-D

Other: See coc

**Equipment Blank I.D.:**

@ Time

Duplicate I.D.:

## LOW FLOW WELL MONITORING DATA SHEET

Project #:	140610-LB	Client:	CHEVRON
Sampler:	LB	Gauging Date:	6/10/14
Well I.D.:	MW-8A	Well Diameter (in.) :	② 3 4 6 8
Total Well Depth (ft.):	24.83	Depth to Water (ft.):	11.49
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type: KSI 556

Purge Method: 2" Grundfos Pump      Peristaltic Pump      Bladder Pump  
 Sampling Method: Dedicated Tubing      New Tubing      Other \_\_\_\_\_

Start Purge Time: 0657      Flow Rate: 200 ml/min      Pump Depth: 18.5'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or μS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or ml)	Depth to Water (ft.)
0700	12.45	6.65	145	10	1.98	48.5	600	11.52
0703	12.37	6.64	147	15	1.95	46.3	1200	11.52
0706	12.35	6.62	148	14	1.93	44.2	1800	11.52
0709	12.34	6.61	149	13	1.92	43.6	2400	11.52
0712	12.33	6.62	150	12	1.91	42.1	3000	11.52

Did well dewater? Yes No      Amount actually evacuated: 3 L

Sampling Time: 0713      Sampling Date: 6/11/14

Sample I.D.: MW-8A      Laboratory: LANCASTER

Analyzed for: TPH-G BTEX MTBE TPH-D      Other: SEE COC

Equipment Blank I.D.:      @ Time      Duplicate I.D.: D6P

### LOW FLOW WELL MONITORING DATA SHEET

Project #:	<u>140G10-LB</u>	Client:	<u>CHEVRON</u>
Sampler:	<u>LB</u>	Gauging Date:	<u>6/10/14</u>
Well I.D.:	<u>MW-9</u>	Well Diameter (in.) :	<u>2</u> <u>3</u> <u>4</u> <u>6</u> <u>8</u> _____
Total Well Depth (ft.):	_____	Depth to Water (ft.):	<u>12.22</u>
Depth to Free Product:	<u>12.19</u>	Thickness of Free Product (feet):	<u>0.03</u>
Referenced to:	<u>PVC</u>	Grade:	Flow Cell Type: _____

Purge Method: 2" Grundfos Pump      Peristaltic Pump  
 Sampling Method: Dedicated Tubing      New Tubing  
 Start Purge Time: \_\_\_\_\_      Flow Rate: \_\_\_\_\_      Pump Depth: \_\_\_\_\_

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or μS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	<u>0.03' OF SPH</u>	<u>DETECTED</u>	<u>WATER</u>	<u>PROBE</u>	_____	_____
_____	_____	_____	<u>AT INTERFACE</u>	_____	_____	_____	_____	_____
_____	_____	_____	<u>APPROX 200 mL OF SPH + H<sub>2</sub>O</u>	_____	_____	_____	_____	_____
_____	_____	_____	<u>REMOVED FROM WELL</u>	_____	_____	_____	_____	_____
_____	_____	_____	<u>DRUMMED ON SITE</u>	_____	_____	_____	_____	_____
_____	_____	_____	<u>ABS Sock INSTALLED</u>	_____	_____	_____	_____	_____
_____	_____	_____	<u>No SAMPLE TAKEN</u>	_____	_____	_____	_____	_____

Did well dewater?	Yes	No	Amount actually evacuated:		
Sampling Time:	Sampling Date:				
Sample I.D.:	Laboratory:				
Analyzed for:	TPH-G	BTEX	MTBE	TPH-D	Other:
Equipment Blank I.D.:	@	Time	Duplicate I.D.:		

## LOW FLOW WELL MONITORING DATA SHEET

Project #:	140610-LB	Client:	CHEVRON
Sampler:	LB	Gauging Date:	6/6/14
Well I.D.:	MW-11	Well Diameter (in.) :	② 3 4 6 8
Total Well Depth (ft.) :	15.63	Depth to Water (ft.) :	9.53
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PWS	Grade	Flow Cell Type: VSI 556

Purge Method: 2" Grundfos Pump

## Peristaltic Pump

## Bladder Pump

Sampling Method: Dedicated Tubing

## New Tubing

Other

Start Purge Time: 1236

Flow Rate: 200 ml/min

Pump Depth: 12'

Did well dewater? Yes  No

Amount actually evacuated: 37

Sampling Time: 1252

Sampling Date: 6/11/14

Sample I.D.: MW-11

Laboratory: *Lancaster*

Analyzed for:

TPH-G BTEX MTBE TPH-D

Other ~~see~~ see Col

**Equipment Blank I.D.:**

Time

Duplicate I.D.:

### LOW FLOW WELL MONITORING DATA SHEET

Project #:	140610-LB	Client:	CHEVRON
Sampler:	LB	Gauging Date:	6/10/14
Well I.D.:	MW-14	Well Diameter (in.) :	⑦ 3 4 6 8
Total Well Depth (ft.):	18.61	Depth to Water (ft.):	12.61
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade:	Flow Cell Type: YES ESS

Purge Method: 2" Grundfos Pump      Peristaltic Pump      Bladder Pump  
 Sampling Method: Dedicated Tubing      New Tubing      Other \_\_\_\_\_

Start Purge Time: 1102      Flow Rate: 200 mL/min      Pump Depth: 16'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or m³)	Depth to Water (ft.)
1105	13.33	6.72	218	18	1.19	39.4	600	12.63
1108	13.31	6.71	220	16	1.15	30.1	1200	12.63
1111	13.29	6.76	221	15	1.14	29.6	1800	12.63
1114	13.26	6.69	222	14	1.13	28.1	2400	12.63
1117	13.27	6.68	233	13	1.12	27.6	3000	12.63

Did well dewater? Yes No Amount actually evacuated: 3L

Sampling Time: 1118 Sampling Date: 6/11/14

Sample I.D.: MW-14 Laboratory: LANCASTER

Analyzed for: TPH-G BTEX MTBE TPH-D Other: SEE COC

Equipment Blank I.D.: @ Time Duplicate I.D.:

## LOW FLOW WELL MONITORING DATA SHEET

Project #: 140G10-LB	Client: CHEVRON
Sampler: LB	Gauging Date: 6/10/14
Well I.D.: MW-15	Well Diameter (in.): 2 3 4 6 8
Total Well Depth (ft.): 18.91	Depth to Water (ft.): 12.66
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC	Grade Flow Cell Type: YES

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump  
Sampling Method: Dedicated Tubing New Tubing Other

Start Purge Time: 1131 Flow Rate: 200 mL/min Pump Depth: 16'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µScm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
1134	12.96	6.58	212	22	1.51	28.4	600	12.69
1137	12.91	6.61	210	20	1.48	25.6	1200	12.69
1140	12.93	6.63	198	18	1.47	24.1	1800	12.69
1143	12.94	6.64	197	17	1.46	23.2	2400	12.69
1146	12.95	6.65	196	16	1.45	22.6	3000	12.69

Did well dewater? Yes No Amount actually evacuated: 3L

Sampling Time: 1147 Sampling Date: 6/11/14

Sample I.D.: MW-15 Laboratory: LANCASTER

Analyzed for: TPH-G PTEX MTBE TPH-D Other SEE COC

Equipment Blank I.D.: @ Time Duplicate I.D.:

## LOW FLOW WELL MONITORING DATA SHEET

Project #:	140610-LB1	Client:	HEVRON
Sampler:	LB	Gauging Date:	6/10/14
Well I.D.:	MW-19	Well Diameter (in.) :	2 3 4 6 8
Total Well Depth (ft.):	16.46	Depth to Water (ft.):	11.95
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade:	YSI 586

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump  
 Sampling Method: Dedicated Tubing New Tubing Other  
 Start Purge Time: 1217 Flow Rate: 200 mL/min Pump Depth: 14.5

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or μS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
1220	16.51	7.05	421	18	1.93	109.8	600	11.98
1223	16.55	6.98	414	16	1.71	90.8	1200	11.99
1226	16.53	6.96	413	14	1.69	86.8	1800	11.99
1229	16.54	6.97	413	13	1.68	85.2	2400	11.99
1232	16.56	6.98	412	12	1.67	84.3	3000	11.99

Did well dewater?	Yes <input checked="" type="checkbox"/>	Amount actually evacuated:	3L
Sampling Time:	1233	Sampling Date:	6/10/14
Sample I.D.:	MW-19	Laboratory:	LANCASER
Analyzed for:	TPH-G <input checked="" type="checkbox"/> BTEX <input checked="" type="checkbox"/> MTBE <input checked="" type="checkbox"/> TPH-D <input checked="" type="checkbox"/>	Other:	SEE COC
Equipment Blank I.D.:	@ Time	Duplicate I.D.:	

**Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (408) 573-0555**

## LOW FLOW WELL MONITORING DATA SHEET

Project #:	140610-LB	Client:	CHEVRON
Sampler:	LB	Gauging Date:	6/10/14
Well I.D.:	MW-20	Well Diameter (in.) :	① 3 4 6 8
Total Well Depth (ft.) :	21.79	Depth to Water (ft.) :	12.57
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type: VSI 556

Purge Method: 2" Grundfos Pump  
Sampling Method: Dedicated Tubing

Peristaltic Pump  
New Tubing

Bladder Pump  
Other \_\_\_\_\_

Start Purge Time: 1249 Flow Rate: 200 mL/min Pump Depth: 17.5'

Start Purge Time: 1249 Flow Rate: 200 mL/min Pump Depth: 17.5'

Start Purge Time: 1249 Flow Rate: 200 mL/min Pump Depth: 17.5'

Start Purge Time: 1249 Flow Rate: 200 mL/min Pump Depth: 17.5'

Did well dewater? Yes  No  Amount actually evacuated: 34

Sampling Time: 13:05 Sampling Date: 6/10/14

Sample ID: M-22 Laboratory: Laramie

Analyzed for: TPH-G BPX MTBE TPH-D Other

Equipment Blank ID : @ Duplicate ID :

## LOW FLOW WELL MONITORING DATA SHEET

Project #: 140G10-LB1	Client: CHEVRON
Sampler: LB	Gauging Date: 6/10/14
Well I.D.: MW-21	Well Diameter (in.): ② 3 4 6 8
Total Well Depth (ft.): 20.39	Depth to Water (ft.): 12.33
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PYO	Grade
Flow Cell Type: YSE 556	

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump  
Sampling Method: Dedicated Tubing New Tubing Other \_\_\_\_\_  
Start Purge Time: 0915 Flow Rate: 200 mL/min Pump Depth: 16.5'

Did well dewater? Yes No Amount actually evacuated: 3L

Sampling Time: 6931 Sampling Date: 6/11/14

Sample I.D.: MW-21 Laboratory: LANCASTER

Analyzed for: TPH-G  MTBE TPH-D Other: See col

Equipment Blank I.D.: @ Time Duplicate I.D.:

Blaine Tech Services Inc 1680 Rogers Ave San Jose CA

### LOW FLOW WELL MONITORING DATA SHEET

Project #:	140610-LB1	Client:	CHEVRON					
Sampler:	LB	Gauging Date:	6/10/14					
Well I.D.:	MW-22	Well Diameter (in.):	2	3	4	6	8	
Total Well Depth (ft.):	20.75	Depth to Water (ft.):	13.65					
Depth to Free Product:		Thickness of Free Product (feet):						
Referenced to:	PVC	Grade	Flow Cell Type:	YSI 566				

Purge Method: 2" Grundfos Pump

Peristaltic Pump

Bladder Pump

Sampling Method: Dedicated Tubing

New Tubing

Other

Start Purge Time: 1203

Flow Rate: 200 mL/min

Pump Depth: 17.5

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or μS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or m³)	Depth to Water (ft.)
1206	18.04	6.80	1242	22	1.01	-12.0	600	13.68
1209	18.14	6.86	1230	18	0.95	-25.3	1200	13.68
1212	18.13	6.90	1227	17	0.94	-31.6	1800	13.68
1215	18.12	6.91	1225	16	0.93	-32.8	2400	13.68
1218	18.10	6.92	1224	15	0.92	-33.4	3000	13.68

Did well dewater? Yes No

Amount actually evacuated: 32

Sampling Time: 1219

Sampling Date: 6/11/14

Sample I.D.: MW-22

Laboratory: LANCASTER

Analyzed for: TPH-G BTEX MTBE TPH-D

Other SEE COC

Equipment Blank I.D.: @ Time

Duplicate I.D.:

## **LOW FLOW WELL MONITORING DATA SHEET**

Project #:	140610-2B1	Client:	CHEVRON
Sampler:	LB	Gauging Date:	6/10/14
Well I.D.:	Mw-24	Well Diameter (in.) :	② 3 4 6 8
Total Well Depth (ft.):	33.40	Depth to Water (ft.):	22.85
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PAC	Grade	Flow Cell Type: YSI 566

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump  
Sampling Method: Dedicated Tubing New Tubing Other \_\_\_\_\_  
Start Purge Time: 1142 Flow Rate: 200 ml/min Pump Depth: 28.5'

Did well dewater? Yes No Amount actually evacuated: 3L

Sampling Time: 1158 Sampling Date: 6/10/14

Sample I.D.: MW-2H Laboratory: LANCASTER

Analyzed for: TPH-G BTEX MTBE TPH-D Other: SEE CCR

Finalized for: HHS - DEIA - MAB - WWD

Equipment Blank I.D.:  Time  Duplicate I.D.:

## LOW FLOW WELL MONITORING DATA SHEET

Project #:	140610-481	Client:	CHEVRON
Sampler:	LB	Gauging Date:	6/10/14
Well I.D.:	MW-25	Well Diameter (in.) :	④ 3 ⑤ 6 8
Total Well Depth (ft.) :	19.31	Depth to Water (ft.) :	12.05
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PNG	Grade	Flow Cell Type: YES 556

Purge Method: 2" Grundfos Pump  
Sampling Method: Dedicated Tubing

~~Peristaltic Pump~~  
New Tubing

Bladder Pump  
Other \_\_\_\_\_

Start Purge Time: 1335 Flow Rate: 200 mL/min Pump Depth: 16'

Start Purge Time: 13:35 Flow Rate:

## New Tubing

Other

Start Purge Time: 1325 Flow Rate: 200 ML/HOUR Pump Depth: 16'

Did well dewater? Yes  No

Amount actually evacuated: 31

Sampling Time: 135)

Sampling Date: 6/10/14

Sample I.D.: Mw-25

Laboratory: Lancaster

Analyzed for:

TPH-C

Ot

**Equipment Blank I.D.:**

@ Time

Duplicate I.D.:

## **LOW FLOW WELL MONITORING DATA SHEET**

Project #:	140610-LB1	Client:	CHEVRON
Sampler:	LB	Gauging Date:	6/10/14
Well I.D.:	MW-2G	Well Diameter (in.) :	2    3 <input checked="" type="radio"/> 6    8
Total Well Depth (ft.) :	19.88	Depth to Water (ft.) :	11.71
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type: YSE 526

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump  
Sampling Method: Dedicated Tubing New Tubing Other \_\_\_\_\_

Start Purge Time: 16:07 Flow Rate: 200 mL / MIN Pump Depth: 16'

Start Purge Time: 1402 Flow Rate: 200 mL/MIN Pump Depth: 16'

Start Purge Time: 1402 Flow Rate: 200 mL / MIN Pump Depth: 16'

Page 1 of 1

Did well dewater? Yes No Amount actually evacuated: 3L

Amount actually evacuated: 3L

Sampling Time: 14:18 Sampling Date: 6/10/14

Sampling Date: 6/10/14

Sample I.D.: MW-2G Laboratory: LANCASTER

Laboratory: LANCASTER

Analyzed for: TPH-G BTEX MTBE TPH-D Other: see coc

Equipment Block ID : @ Duplicate ID :

Equipment Blank I.D.: Time Duplicate I.D.: **PL-17-10-10-10-10-10**

**Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (408) 573-0555**

## LOW FLOW WELL MONITORING DATA SHEET

Project #:	140610-LP4	Client:	CHEVRON
Sampler:	LB	Gauging Date:	6/10/14
Well I.D.:	A61-Z	Well Diameter (in.) :	0 3 4 6 8
Total Well Depth (ft.) :	22-31	Depth to Water (ft.) :	11.85
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type: YSE 506

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump  
Sampling Method: Dedicated Tubing New Tubing Other \_\_\_\_\_  
Start Purge Time: 0843 Flow Rate: 200 mL/min Pump Depth: 17.5

Did well dewater? Yes No Amount actually evacuated: 3L

Sampling Time: 0859 Sampling Date: 6/11/14

Sample I.D.: AGI-2 Laboratory: LANCASTER

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See coc

Equipment Blank I.D.: @ Time Duplicate I.D.:

## **LOW FLOW WELL MONITORING DATA SHEET**

Project #:	140610-LBI	Client:	CHEVRON
Sampler:	L.B.	Gauging Date:	6/10/14
Well I.D.:	MLU-1	Well Diameter (in.) :	2 3 <b>4</b> 6 8
Total Well Depth (ft.) :	22.35	Depth to Water (ft.) :	13.97
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type: YSL 556

Purge Method: 2" Grundfos Pump

## Peristaltic Pump

## Bladder Pump

Sampling Method: Dedicated Tubing

## New Tubing

Other \_\_\_\_\_

Start Purge Time: 0808 Flow Rate: 200 mL/MIN Pump Depth: 18.5'

Did well dewater? Yes  No

Amount actually evacuated: 3L

Sampling Time: 0824

Sampling Date: 6/11/14

Sample I.D.: MLU-1

Laboratory: LANCASTER

Analyzed for: TPH-G BTEX MTBE TPH-D

Other: see Col

Equipment Blank I.D.: @ Time

Duplicate I.D.:

## LOW FLOW WELL MONITORING DATA SHEET

Project #:	140610 - LBI	Client:	CHEVRON
Sampler:	LB	Gauging Date:	6/10/14
Well I.D.:	MLU-3	Well Diameter (in.) :	2    3 <u>4</u> 6    8
Total Well Depth (ft.) :	20.62	Depth to Water (ft.) :	11.68
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PNC	Grade	Flow Cell Type: YSI 556

Purge Method: 2" Grundfos Pump

## Peristaltic Pump

## Bladder Pump

Sampling Method: Dedicated Tubing

### New Tubing

Other\_

Start Purge Time: 10/7

### Flow Rat

200 mL / 141 g

Pump Depth: 16.5

Did well dewater? Yes  No

Amount actually evacuated: 34

Sampling Time: 1033

Sampling Date: 6/11/14

Sample I.D.: MLU-3

Laboratory: Lancaster

Analyzed for:

TPH-G ~~BTEX~~ MTBE TPH-D

**Other:**

See coc

**Equipment Blank I.D.:**

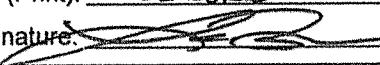
@ Time

Duplicate I.D.:

# CHAIN OF CUSTODY FORM

**Chevron Environmental Management Company ■ 6001 Bollinger Canyon Road ■ San Ramon, CA 94583-2324**

COC 1 of 2

Chevron Site Number: <u>100-1327</u> Program Designation: <u>CMP</u> Site Address (street, city, state / county): <u>1602 N Northlake Place, Seattle, WA</u> Chevron PM: <u>Marlea Harmon</u> Chevron PM Phone No.: <input type="checkbox"/> Retail and Terminal Business Unit (RTBU) Job <input type="checkbox"/> Construction/Retail Job				Chevron Consultant: <u>ARCADIS</u> Address: <u>1100 olive Way, Suite 800, Seattle WA</u> Consultant Contact: <u>Sam Miles</u> Consultant Phone No. <u>206-853-7428</u> Consultant Project No. <u>140G10-LB1</u> Sampling Company: <u>Blaine Tech Services</u> Sampled By (Print): <u>LEE BURRS</u> Sampler Signature: 				<b>ANALYSES REQUIRED</b> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <b>H</b>    <input type="checkbox"/> FIELD  <input checked="" type="checkbox"/> FILTERED         </div> <div style="text-align: center;"> <b>N</b>    <input type="checkbox"/> FIELD  <input checked="" type="checkbox"/> FILTERED         </div> <div style="text-align: center;"> <b>S</b>    <input type="checkbox"/> FIELD  <input checked="" type="checkbox"/> FILTERED         </div> </div> <div style="margin-top: 10px;"> <b>Preservation Codes</b>          H =HCl T= Thiosulfate          N =HNO<sub>3</sub> B =NaOH          S = H<sub>2</sub>SO<sub>4</sub> O = Other       </div>							
<b>Charge Code:</b> <u>NWRTB 00 SITE NUMBER-0- OML</u> <b>WBS ELEMENTS:</b> SITE ASSESSMENT: A1L REMEDIATION IMPLEMENTATION: R5L SITE MONITORING: OML OPERATION MAINTENANCE & MONITORING: M1L				<b>Lancaster Laboratories</b> <input checked="" type="checkbox"/> Lancaster, PA Lab Contact: Megan Moeller 2425 New Holland Pike, Lancaster, PA 17601 Phone No: (717)656-2300				<b>Other Lab</b> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">           _____            _____            _____            _____            _____         </div> <div style="text-align: center;">           _____            _____            _____            _____            _____         </div> <div style="text-align: center;">           _____            _____            _____            _____            _____         </div> </div> <b>Temp. Blank Check Time Temp.</b>				<b>Special Instructions</b> <div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> <input type="checkbox"/> BTE BY 6021         </div> <div style="flex: 1;"> <input type="checkbox"/> DISSOLVED NAPHTHALENE         </div> <div style="flex: 1;"> <input type="checkbox"/> DISSOLVED CPAHs (8270C SIM)         </div> <div style="flex: 1;"> <input type="checkbox"/> DISSOLVED LEAD         </div> <div style="flex: 1;"> <input type="checkbox"/> DISSOLVED ARSENIC         </div> </div> <div style="margin-top: 10px;"> <input type="checkbox"/> PAH's <input type="checkbox"/> CPAH's <input type="checkbox"/> 8270 SIM  <input type="checkbox"/> TPH-G (NWTPH-Gx)  <input type="checkbox"/> ALKALINITY 2320  <input type="checkbox"/> DISSOLVED LEAD (6020)  <input type="checkbox"/> TPH-D AND TPH-O BY (NWTPH-Dx)  <input type="checkbox"/> SULFATE 300 <input type="checkbox"/> NITRATE 300 <input type="checkbox"/> FERROUS IRON SM203500         </div>			
<b>SAMPLE ID</b>				<b>Sample Time</b>				<b># of Containers</b>				<b>Container Type</b>			
Field Point Name <b>Mw-4</b>	Matrix <b>Gw</b>	Top Depth <b>—</b>	Date (yymmdd) <b>140G11</b>	Sample Time <b>0746</b>	# of Containers <b>6</b>	Container Type <b>VIAL, AMBER, POLY</b>		<input checked="" type="checkbox"/> X	<input type="checkbox"/> X	<input type="checkbox"/> X	<input type="checkbox"/> X				
<b>Mw-7</b>	<b>Gw</b>	<b>—</b>	<b>140G11</b>	<b>1002</b>	<b>6</b>			<input type="checkbox"/> X	<input type="checkbox"/> X	<input type="checkbox"/> X	<input type="checkbox"/> X				
<b>Mw-BA</b>	<b>Gw</b>	<b>—</b>	<b>140G11</b>	<b>0713</b>	<b>6</b>			<input type="checkbox"/> X	<input type="checkbox"/> Y	<input type="checkbox"/> X	<input type="checkbox"/> X				
<b>Mw-11</b>	<b>Gw</b>	<b>—</b>	<b>140G11</b>	<b>1252</b>	<b>6</b>			<input type="checkbox"/> X	<input type="checkbox"/> Y	<input type="checkbox"/> V	<input type="checkbox"/> X				
<b>Mw-14</b>	<b>Gw</b>	<b>—</b>	<b>140G11</b>	<b>1118</b>	<b>6</b>			<input type="checkbox"/> X	<input type="checkbox"/> X	<input type="checkbox"/> X	<input type="checkbox"/> X				
<b>Mw-15</b>	<b>Gw</b>	<b>—</b>	<b>140G11</b>	<b>1147</b>	<b>6</b>			<input type="checkbox"/> X	<input type="checkbox"/> X	<input type="checkbox"/> X	<input type="checkbox"/> X				
<b>Mw-19</b>	<b>Gw</b>	<b>—</b>	<b>140G10</b>	<b>1233</b>	<b>6</b>			<input type="checkbox"/> X	<input type="checkbox"/> Y	<input type="checkbox"/> X	<input type="checkbox"/> X				
<b>Mw-20</b>	<b>Gw</b>	<b>—</b>	<b>140G10</b>	<b>1305</b>	<b>6</b>			<input type="checkbox"/> X	<input type="checkbox"/> X	<input type="checkbox"/> X	<input type="checkbox"/> X				
<b>Mw-21</b>	<b>Gw</b>	<b>—</b>	<b>140G11</b>	<b>0931</b>	<b>6</b>			<input type="checkbox"/> X	<input type="checkbox"/> X	<input type="checkbox"/> X	<input type="checkbox"/> X				
<b>Mw-22</b>	<b>Gw</b>	<b>—</b>	<b>140G11</b>	<b>1219</b>	<b>6</b>			<input type="checkbox"/> X	<input type="checkbox"/> X	<input type="checkbox"/> Y	<input type="checkbox"/> X				
Relinquished By <u>Lee Burrs</u> Company <u>Blaine Tech Services</u> Date/Time: <u>6/11/14</u>				Relinquished To <u>Blaine Tech Services</u> Company <u>Blaine Tech Services</u> Date/Time				Turnaround Time: Standard <input checked="" type="checkbox"/> 24 Hours <input type="checkbox"/> 48 hours <input type="checkbox"/> 72 Hours Other <input type="checkbox"/>							
Relinquished By <u>Lee Burrs</u> Company <u>Blaine Tech Services</u> Date/Time				Relinquished To <u>Blaine Tech Services</u> Company <u>Blaine Tech Services</u> Date/Time				Sample Integrity: (Check by lab on arrival) Intact: <input type="checkbox"/> On Ice: <input type="checkbox"/> Temp: <input type="checkbox"/>							
Relinquished By <u>Lee Burrs</u> Company <u>Blaine Tech Services</u> Date/Time				Relinquished To <u>Blaine Tech Services</u> Company <u>Blaine Tech Services</u> Date/Time				COC #							

# CHAIN OF CUSTODY FORM

**Chevron Environmental Management Company ■ 6001 Bollinger Canyon Road ■ San Ramon, CA 94583-2324**

COC 2 of 2

Chevron Site Number: <u>100-1327</u> Program Designation: <u>CMP</u> Site Address (street, city, state / county): <u>1602 N Northlake Place, Seattle, WA</u> Chevron PM: <u>Marlea Harmon</u> Chevron PM Phone No.: <input type="checkbox"/> Retail and Terminal Business Unit (RTBU) Job <input type="checkbox"/> Construction/Retail Job				Chevron Consultant: <u>ARCADIS</u> Address: <u>1100 olive Way, Suite 800, Seattle WA</u> Consultant Contact: <u>Sam Miles</u> Consultant Phone No. <u>206-853-7428</u> Consultant Project No. <u>140G10-LBI</u> Sampling Company: <u>Blaine Tech Services</u> Sampled By (Print): <u>LEE BURES</u> Sampler Signature: <u>[Signature]</u>				<b>ANALYSES REQUIRED</b> <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="flex: 1;"> <div style="display: flex; justify-content: space-between;"> <span>H</span> <span>N</span> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <span>(FIELD FILTERED)</span> <span>(FIELD FILTERED)</span> <span>(FIELD FILTERED)</span> </div> </div> <div style="flex: 1; padding-left: 10px;"> <div style="display: flex; justify-content: space-between; font-size: small;"> <span>DISSOLVED NAPHTHALENES <input checked="" type="checkbox"/></span> <span>DISSOLVED CPAHs (8270C SIM) <input checked="" type="checkbox"/></span> <span>DISSOLVED LEAD <input checked="" type="checkbox"/></span> <span>DISSOLVED ARSENIC <input checked="" type="checkbox"/></span> </div> <div style="display: flex; justify-content: space-between; font-size: small; margin-top: 10px;"> <span>PAH's <input type="checkbox"/></span> <span>CPAH's <input type="checkbox"/></span> <span>8270 SIM <input type="checkbox"/></span> </div> <div style="display: flex; justify-content: space-between; font-size: small; margin-top: 10px;"> <span>TPH-G (NWTPH-Gx) <input type="checkbox"/></span> <span>ALKALINITY 2320 <input type="checkbox"/></span> <span>DISSOLVED LEAD (6020) <input type="checkbox"/></span> </div> <div style="display: flex; justify-content: space-between; font-size: small; margin-top: 10px;"> <span>TPH-D AND TPH-O BY (NWTPH-DX) <input type="checkbox"/></span> <span>RBDM VOCs (OREGON RISK BASED DECISION MAKING LIST) <input type="checkbox"/></span> <span>SULFATE 300 <input type="checkbox"/></span> <span>NITRATE 300 <input type="checkbox"/></span> <span>FERROUS IRON SM20 3500 <input type="checkbox"/></span> </div> </div> </div>			
<b>Charge Code:</b> <u>NWRTB 00SITE NUMBER-0- OML</u> <b>WBS ELEMENTS:</b> SITE ASSESSMENT: A1L REMEDIATION IMPLEMENTATION: R5L SITE MONITORING: OML OPERATION MAINTENANCE & MONITORING: M1L				<b>Lancaster Laboratories</b> <input checked="" type="checkbox"/> Lancaster, PA Lab Contact: Megan Moeller 2425 New Holland Pike, Lancaster, PA 17601 Phone No: (717)656-2300				Other Lab <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <span> </span> <span> </span> <span> </span> <span> </span> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <span> </span> <span> </span> <span> </span> <span> </span> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <span> </span> <span> </span> <span> </span> <span> </span> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <span> </span> <span> </span> <span> </span> <span> </span> </div>			
<b>SAMPLE ID</b>				BTE BY 8021 <input type="checkbox"/> Sample Time      # of Containers      Container Type				DISSOLVED NAPHTHALENES <input checked="" type="checkbox"/> DISSOLVED CPAHs (8270C SIM) <input checked="" type="checkbox"/> DISSOLVED LEAD <input checked="" type="checkbox"/> DISSOLVED ARSENIC <input checked="" type="checkbox"/>  PAH's <input type="checkbox"/> CPAH's <input type="checkbox"/> 8270 SIM <input type="checkbox"/>  TPH-G (NWTPH-Gx) <input type="checkbox"/>  ALKALINITY 2320 <input type="checkbox"/>  DISSOLVED LEAD (6020) <input type="checkbox"/>  TPH-D AND TPH-O BY (NWTPH-DX) <input type="checkbox"/>  RBDM VOCs (OREGON RISK BASED DECISION MAKING LIST) <input type="checkbox"/>  SULFATE 300 <input type="checkbox"/> NITRATE 300 <input type="checkbox"/> FERROUS IRON SM20 3500 <input type="checkbox"/>			
Field Point Name <u>Mw-24</u>	Matrix <u>GW</u>	Top Depth <u>—</u>	Date (yyymmdd) <u>140G10</u>	Sample Time <u>1158</u>	# of Containers <u>6</u>	Container Type <u>16A AMBER POLY</u>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
<u>Mw-25</u>	<u>GW</u>	<u>—</u>	<u>140G10</u>	<u>1351</u>	<u>6</u>	<u> </u>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
<u>Mw-26</u>	<u>GW</u>	<u>—</u>	<u>140G10</u>	<u>1418</u>	<u>6</u>	<u> </u>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
<u>A6E-2</u>	<u>GW</u>	<u>—</u>	<u>140G11</u>	<u>0859</u>	<u>6</u>	<u> </u>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
<u>MILU-1</u>	<u>GW</u>	<u>—</u>	<u>140G11</u>	<u>0824</u>	<u>6</u>	<u> </u>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
<u>MILU-3</u>	<u>GW</u>	<u>—</u>	<u>140G11</u>	<u>1033</u>	<u>6</u>	<u> </u>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
<u>DUP</u>	<u>GW</u>	<u>—</u>	<u>140G11</u>	<u>—</u>	<u>6</u>	<u>↓</u>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
<u>QA</u>	<u>GW</u>	<u>—</u>	<u>140G10</u>	<u>0800</u>	<u>3</u>	<u>VAC</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Relinquished By <u>[Signature]</u> Company <u> </u> Date/Time: <u>6/11/14</u>				Relinquished To <u> </u> Company <u> </u> Date/Time <u> </u>				Turnaround Time: Standard <input checked="" type="checkbox"/> 24 Hours <input type="checkbox"/> 48 hours <input type="checkbox"/> 72 Hours <input type="checkbox"/> Other <input type="checkbox"/>			
Relinquished By <u> </u> Company <u> </u> Date/Time <u> </u>				Relinquished To <u> </u> Company <u> </u> Date/Time <u> </u>				Sample Integrity: (Check by lab on arrival) Intact: <input type="checkbox"/> On Ice: <input type="checkbox"/> Temp: <input type="checkbox"/>			
Relinquished By <u> </u> Company <u> </u> Date/Time <u> </u>				Relinquished To <u> </u> Company <u> </u> Date/Time <u> </u>				COC #			

# WELLHEAD INSPECTION FORM

Client: CHEVRON Site: 1602 N. NORTHLAKE PL, SEATTLE, WA Date: 6/10/14  
 Job #: 140610-LB1 Technician: L. BURES Page 1 of 1

Well ID	Well Inspected - No Corrective Action Required	Check indicates deficiency												Notes (list if cap or lid replaced, if there are access issues associated with repairs, if traffic control is required, if stand pipe damaged, or any specific details not covered by checklist)
		Cap non-functional	Lock non-functional	Lock missing	Bolts missing (list qty)	Tabs stripped (list qty)	Tabs broken (list qty)	Annular seal incomplete	Apron damaged	Rim / Lid broken	Trip Hazard	Below Grade	Other (explain in notes)	
MW-3	X													
MW-4				X										STAND PIPE
MW-7						3/3								
MW-8A						3/3								
MW-10	X													
MW-11	X													
MW-14	X													
MW-15	X													
MW-19						3/3								
MW-20						2/3	1/3							
MW-21						1/3	3/3							
MW-22	X													
MW-24	X													
MW-25						3/3								
MW-26	X													
MW-27	X													
SIMPAL-1						3/3								

NOTES: \_\_\_\_\_

# **WELLHEAD INSPECTION FORM**

Client: CHEVRON

Site: 1602 N. NORTHLAKE PL, SEATTLE, WA

Date: 6/10/14

Job #: 140610-2B1

Technician: L. BUREK

Page 2 of 2

## NOTES:

Blaine Tech Services, Inc.

**Permit To Work**

for Chevron EMC Sites

Client: ARCADESDate 6/10/14Site Address: 1602 N. Northlake Pl., SeattleJob Number: 140610-LBITechnician(s): L.BURES**Pre-Job Safety Review**

1. JMP reviewed, site restrictions and parking/access issues addressed.

Reviewed: **2. Special Permit Required Task Review**

Are there any conditions or tasks that would require:

	Yes	No
Confined space entry	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Working at height	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Lock-out/Tag-out	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Excavations greater than 4 feet deep	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Excavations within 3 feet of a buried active electrical line or product piping or within 10 feet of a high pressure gas line.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Use of overhead equipment within 15 feet of an overhead electrical power line or pole supporting one	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Hot work	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If "Yes" was the answer to any of the Special Permit Required Tasks above, the Project Manager will contact the client and arrange to modify the Scope of Work so that the Special Permit Required Tasks are not required to be performed by Blaine Tech Services employees.

**3. Is a Traffic Control Permit required for today's work?**Yes  No If so is it in the folder? Is it current? Do you understand the Traffic Control Plan and what equipment you will need? **On-site Pre-Job Safety Review**

- Reviewed and signed the site specific HASP.
- Route to hospital understood.
- Reviewed "Groundwater Monitoring Well Sampling General Job Safety Analysis included in the HASP."
- Exceptional circumstances today that are not covered by the HASP, JSA or JMP have been addressed and mitigated.
- Understands procedure to follow, if site circumstances change, to address new site hazards.
- There are no unexpected conditions which would make your task a Special Permit Required Task. If there is, contact your Project Manager.
- All site hazards have been communicated to all necessary onsite personnel during tailgate safety meeting.
- After lunch tailgate safety meeting refresher conducted.

If Checklist Task cannot be completed, explain:

Permit To Work Authority:

Ryan Prevoist

Name

PM

Title

3/20/14

Date

930

Time

Blaine Tech Services, Inc.

**Permit To Work**

for Chevron EMC Sites

Client: ArcadisDate 6/11/14Site Address: 1602 N. NORTHLAKE PL, SEATTLEJob Number: 140G10-LBITechnician(s): L.BURES**Pre-Job Safety Review**

1. JMP reviewed, site restrictions and parking/access issues addressed.

Reviewed: **2. Special Permit Required Task Review**

Are there any conditions or tasks that would require:

	Yes	No
Confined space entry	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Working at height	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Lock-out/Tag-out	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Excavations greater than 4 feet deep	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Excavations within 3 feet of a buried active electrical line or product piping or within 10 feet of a high pressure gas line.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Use of overhead equipment within 15 feet of an overhead electrical power line or pole supporting one	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Hot work	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If "Yes" was the answer to any of the Special Permit Required Tasks above, the Project Manager will contact the client and arrange to modify the Scope of Work so that the Special Permit Required Tasks are not required to be performed by Blaine Tech Services employees.

3. Is a Traffic Control Permit required for today's work?

Yes	No
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

If so is it in the folder?

Is it current?

Do you understand the Traffic Control Plan and what equipment you will need?

**On-site Pre-Job Safety Review**

- Reviewed and signed the site specific HASP.
- Route to hospital understood.
- Reviewed "Groundwater Monitoring Well Sampling General Job Safety Analysis included in the HASP."
- Exceptional circumstances today that are not covered by the HASP, JSA or JMP have been addressed and mitigated.
- Understands procedure to follow, if site circumstances change, to address new site hazards.
- There are no unexpected conditions which would make your task a Special Permit Required Task. If there is, contact your Project Manager.
- All site hazards have been communicated to all necessary onsite personnel during tailgate safety meeting.
- After lunch tailgate safety meeting refresher conducted.

If Checklist Task cannot be completed, explain:

Permit To Work Authority:

Ryan Prestoski  
NamePM

Title

6/20/14

Date

9:30

Time

## TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME 160Z Al. Northlaise Pl., Sagte				PROJECT NUMBER 140G 10. LB1			
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%	TEMP.	INITIALS
VSE 550	SEA #2	6/10/14 0600	pH 4.0 7.0 10.0	4.03 7.01 9.98	—	20.1	LB
			COND 3900	8908	—	19.8	LB
			ORP 237.5	228.4	237.6 ✓	19.9	LB
			DO 100%	118.4%	100.1% ✓	—	LB
VSE 550	SEA #2	6/11/14 0445	pH 4.0 7.0 10.0	4.03 7.04 10.02	—	20.3	LB
			COND 3900	3918	3901 ✓	20.2	LB
			ORP 237.5	233.4	237.5 ✓	20.3	LB
			DO 100%	93.4%	100.0% ✓	—	LB

## SCOPE OF WORK

## GROUNDWATER MONITORING FOR CUSA

SITE ADDRESS: 1602 N Northlake Place

CITY: Seattle

State: Washington

Lock/Key: 1776/1911

Gauge to: TOC

Required regulatory notifications/ cooperative sampling requirements: Department of Ecology

Lab: Lancaster

Phone:(717) 656-2300

Contact: Natalie Luciano

Site # 100-1327

Consultant: ARCADIS

Contact: Sam Miles

Phone: 206-853-7428Cell

Fax: 206-726-4720

Engineer: Marlea Harmon

Phone #:

Well I.D.	Required Analyses	Sampling Frequency	Sampling Months	Gauging Frequency	Remedial Devices	Notes & Tasks
MW-3	NONE	NEVER	NONE	QTRLY		Check for SPH
MW-4	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	QTRLY		
MW-7	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	QTRLY		
MW-8A	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	QTRLY		Take Dup
MW-9	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	QTRLY		Check for SPH
MW-10	None	Never	None	QTRLY		
MW-11	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	Semi-Annual		
MW-14	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	Semi-Annual		
MW-15	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	Semi-Annual		
MW-19	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	QTRLY		Cone Off
MW-20	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	QTRLY		Cone Off
MW-21	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	QTRLY		Cone Off
MW-22	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	Semi-Annual		
MW-24	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	Semi-Annual		
MW-25	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	QTRLY		
MW-26	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	QTRLY		

## SCOPE OF WORK

## GROUNDWATER MONITORING FOR CUSA

SITE ADDRESS: 1602 N Northlake Place		Lab: Lancaster		Site #		100-1327
MW-27	NONE	NEVER	NONE	QTRLY		Check for SPH
SMPN-1	NONE	NEVER	NONE	QTRLY		Check for SPH
SMPN-2	NONE	NEVER	NONE	QTRLY		Check for SPH
SMPN-3	NONE	NEVER	NONE	QTRLY		Check for SPH
AGI-2	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	QTRLY		
MLU-1	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	QTRLY		
MLU-3	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	QTRLY		
DUP	BTE by 8021, Dissolved naphthalenes, cPAHs by (8270c SIM), Dissolved cPAHs (8270c SIM), Dissolved Lead (6020), Dissolved Arsenic (6020)	Semi-Annual	MAY/NOV	Semi-Annual		Take on MW-8A
QA	BTE by 8021	Semi-Annual	MAY/NOV	QTRLY		

## SCOPE OF WORK

SITE ADDRESS: 1602 N Northlake Place

Lab: Lancaster

GROUNDWATER MONITORING FOR CUSA

Site # 100-1327

### **CHANGES AND SPECIAL INSTRUCTIONS:**

BTE by 8021- (3) HCl VOA's (BTEX without the xylenes)

Dissolved Arsenic and Dissolved Lead (1) 250ml HNO3 Poly (**Field Filtered**)

Dissolved cPAHs and naphthalenes (8270c SIM) (2) 250 Round Amber Glass (**Field Filtered**)

cPAHs (2) 250 Round Amber Glass

**DO NOT SAMPLE WELL WITH SPH:** If a well that historically does not have SPH call in to Project manager before sampling the well.

**NAPL Recovery:** Bring Six Absorbent Socks to replace socks in wells with NAPL (MW-3, MW-9, MW-27, SMPN-1, SMPN-2, and SMPN-3)

**Waste Disposal:** Need 2 New 55 Gallon Drums for GWM and Absorbent Socks in lower yard, put non-HAZ label on them.

**Cone Wells off day before job takes place:** MW-19, MW-20, MW-21

### **Low-Flow Purge with Peri - Pump**

- These wells will be purged at a rate of 100- 500 ml/min.
- One system volume is must be purged prior to sample collection
- $617^*(\text{Tubing ID radius } 2 \times \text{Tubing Length}) = 1 \text{ system volume in mL}$
- Parameters will be taken with the YSI 556 Flow Cell.
- Collect Parameters every 3 min.
- Sample through tubing when 3 consecutive stable parameters (4- 5 parameters min.)
- Stabilization Requirements:
  - Temp= 1oC
  - PH = 0.1
  - Conductivity = 3%
  - Turbidity = 10% if >5NTU
  - DO = 0.3mg/L
  - ORP = 10 MV
- Decon thoroughly between wells. Use liquinox with steam cleaner

### **ADDITIONAL EQUIPMENT:**

Interface Probe

### **NOTIFICATIONS:**

Rory Henneck 206-726-4732/ Cell 360-670-5884 (**GW Coord Contact**)

Center for Wooden Boats, Kyle Hunter 206-382-2628x32 for Combination to lock (1776 previously)

Touchstone Corp, Paul Klansnic 206-357-2305, Cell 425-417-5109 has the Key to SMPN well and MW-3

KC Metro Gauging Round

7/22/2014

S McGuire  
R Brancato

{Weather: low 60 with scattered showers

0900 - ARCADIS on site don PPE, calibrate PID.

0930 - Gauging Round. HQS tailgate form. Review hazards.

Time	Well	PID (ppm)	DTW (ft bbls)	DTP (ft bbls)
935	MW-30	6.2	12.37	-
940	MW-29	7.4	13.80	-
945	EW-1	1,566	12.25	-
955	MW-27	98.4	10.02	10.015 = DTP (sheen)
1010	MW-11	1.5	10.60	-
1020	MW-10	118.8	8.81	-
1025	MW-28	117.2	7.24	-
1030	MW-12	346.4	8.48	8.44 = DTP
1040	MW-22	0.5	14.34	-
1045	MW-21	1.8	13.05	-
1050	MW-20	242.5	13.35	-
1055	MW-19	1.7	12.73	-
1105	MW-3	624.8	10.52	9.83 = DTP

1115 - MW-9R is secured with allen head screws - off site to get allen key

1125	MW-9R	1,257	13.31	-
------	-------	-------	-------	---

1230 - ARCADIS off site (to WA-1835)

- ARCADIS returns to label drums (in)

- ARCADIS out 1230

Methodology: Wells were measured using a calibrated PID and an oil/water interface probe. The probe was deconned between wells.

Drum Inventory: Fourteen 55-gallon steel drums - stored in the south yard

- 10 soil drums

- 2 davon water drums

- 2 purge water drums

Ryan W Blk

7/22/2014

**Appendix B**

Hydraulic Gradient Three Point  
Solution Worksheet

# Lower Pard / South Pard

## Appendix H

### Hydraulic Gradient Three Point Solution Worksheet

Instructions to determine groundwater (GW) gradient and flow direction based on static water elevations (SWE) of 3 wells.

SITE NAME: \_\_\_\_\_

A. Record elevation difference and horizontal distances (HD) between the wells:

	Well	Topographic Elevation (ft)		Depth to Static Water (ft bgs*)		SWE (ft)	Wells		HD (ft)
MW-1S	#1	-		=	18.94	#1 to #2	=	140	
MLU-1	#2	-		=	18.93	#2 to #3	=	126	
MW-2G	#3	-		=	18.91	#3 to #1	=	110	

\* bgs = below ground surface

B. Plot the well locations on a scaled diagram

SCALE: \_\_\_\_\_ " = \_\_\_\_\_ '

SEE FIGURE

C. Perform the following calculations:

1. Calculate the position between the High Static Water Elevation (HSWE) well and the Low Static Water Elevation (LSWE) well where the SWE is the same as the Intermediate Static Water Elevation (ISWE).

$$(a) \text{ HSWE } 18.94 \text{ minus LSWE } 18.91 = (a) 0.03 \text{ (ft)}$$

$$(b) \text{ Horizontal distance between HSWE well and LSWE well } 110 \text{ divided by (a) } 0.03 \\ = (b) 3666.6 \text{ (ft/ft)}$$

$$(c) \text{ HSWE } 18.94 \text{ minus ISWE } 18.93 = (c) 0.01 \text{ (ft)}$$

$$(d) (b) 3666.6 \times (c) 0.01 = (d) 36.6 \text{ (ft)} \quad (= \text{the horizontal distance between the HSWE well and LSWE well that is equal to the ISWE.})$$

2. Measure the distance (d) from the HSWE well along the line between it and the LSWE well, and plot that position on the diagram.  
 3. Draw a straight line from the ISWE well to position (d) on the well location diagram. This represents the water level contour line along which the SWE is the same as the ISWE well.  
 4. Draw a line perpendicular to the ISWE contour line through the HSWE well location on the well location diagram. This is the ground water flow direction (high to low). The distance along this groundwater flow line from the HSWE well to the ISWE contour line is (e).

- D. Calculate the Hydraulic Gradient (HG) of the groundwater by dividing (c) by (e).

$$(c) 0.01 \text{ divided by (e) } 34 = HG 0.00029 \text{ (ft/ft)}$$

# Upper Yard / North Yard

## Appendix H

### Hydraulic Gradient Three Point Solution Worksheet

Instructions to determine groundwater (GW) gradient and flow direction based on static water elevations (SWE) of 3 wells.

SITE NAME: \_\_\_\_\_

A. Record elevation difference and horizontal distances (HD) between the wells:

Well	Topographic Elevation (ft)		Depth to Static Water (ft bgs*)		SWE (ft)	Wells		HD (ft)
MW - 9	#1	-		=	24.26	#1 to #2	=	52
MW - 27	#2	-		=	24.76	#2 to #3	=	46
MW - 11	#3	-		=	23.76	#3 to #1	=	74

\* bgs = below ground surface

B. Plot the well locations on a scaled diagram

SCALE: \_\_\_\_\_ " = \_\_\_\_\_'

See figure

C. Perform the following calculations:

1. Calculate the position between the High Static Water Elevation (HSWE) well and the Low Static Water Elevation (LSWE) well where the SWE is the same as the Intermediate Static Water Elevation (ISWE).

$$(a) \text{ HSWE } 24.76 \text{ minus LSWE } 23.76 = (a) 1.0 \text{ (ft)}$$

$$(b) \text{ Horizontal distance between HSWE well and LSWE well } 46 \text{ divided by (a) } 40 \\ = (b) 1.15 \text{ (ft/ft)}$$

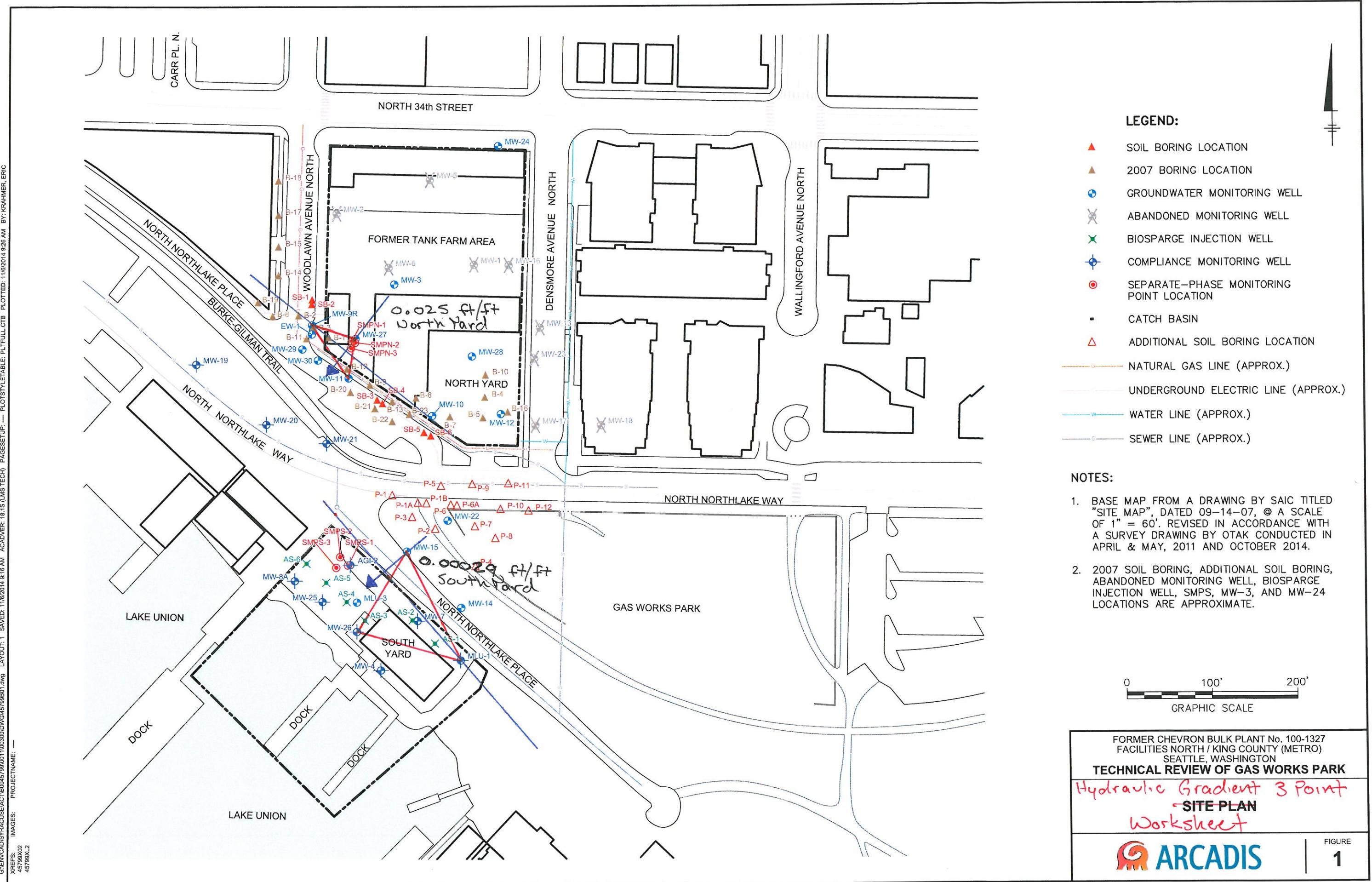
$$(c) \text{ HSWE } 24.76 \text{ minus ISWE } 24.26 = (c) 0.50 \text{ (ft)}$$

$$(d) (b) 46 \times (c) 0.5 = (d) 23 \text{ (ft)} \quad (= \text{the horizontal distance between the HSWE well and LSWE well that is equal to the ISWE}).$$

2. Measure the distance (d) from the HSWE well along the line between it and the LSWE well, and plot that position on the diagram.  
 3. Draw a straight line from the ISWE well to position (d) on the well location diagram. This represents the water level contour line along which the SWE is the same as the ISWE well.  
 4. Draw a line perpendicular to the ISWE contour line through the HSWE well location on the well location diagram. This is the ground water flow direction (high to low). The distance along this groundwater flow line from the HSWE well to the ISWE contour line is (e).

- D. Calculate the Hydraulic Gradient (HG) of the groundwater by dividing (c) by (e).

$$(c) 0.50 \text{ divided by (e) } 20 = HG 0.025 \text{ (ft/ft)}$$



**ARCADIS**

**Appendix C**

Laboratory Analytical Reports

**ANALYTICAL RESULTS**

Prepared by:

Eurofins Lancaster Laboratories Environmental  
2425 New Holland Pike  
Lancaster, PA 17601

Prepared for:

Chevron  
L4310  
6001 Bollinger Canyon Road  
San Ramon CA 94583

June 26, 2014

Project: 1001327

Submittal Date: 06/13/2014  
Group Number: 1481771  
PO Number: 0015143985  
Release Number: ROEHL  
State of Sample Origin: WA

<u>Client Sample Description</u>	<u>Lancaster Labs (LL) #</u>
MW-4 NA Groundwater	7498311
MW-4 Filtered NA Groundwater	7498312
MW-7 NA Groundwater	7498313
MW-7 Filtered NA Groundwater	7498314
MW-8A NA Groundwater	7498315
MW-8A Filtered NA Groundwater	7498316
MW-11 NA Groundwater	7498317
MW-11 Filtered NA Groundwater	7498318
MW-14 NA Groundwater	7498319
MW-14 Filtered NA Groundwater	7498320
MW-15 NA Groundwater	7498321
MW-15 Filtered NA Groundwater	7498322
MW-19 NA Groundwater	7498323
MW-19 Filtered NA Groundwater	7498324
MW-20 NA Groundwater	7498325
MW-20 Filtered NA Groundwater	7498326
MW-21 NA Groundwater	7498327
MW-21 Filtered NA Groundwater	7498328
MW-22 NA Groundwater	7498329
MW-22 Filtered NA Groundwater	7498330
MW-24 NA Groundwater	7498331
MW-24 Filtered NA Groundwater	7498332
MW-25 NA Groundwater	7498333
MW-25 Filtered NA Groundwater	7498334
MW-26 NA Groundwater	7498335
MW-26 Filtered NA Groundwater	7498336
AGI-2 NA Groundwater	7498337
AGI-2 Filtered NA Groundwater	7498338
MLU-1 NA Groundwater	7498339
MLU-1 Filtered NA Groundwater	7498340
MLU-3 NA Groundwater	7498341

MLU-3 Filtered NA Groundwater	7498342
DUP NA Groundwater	7498343
DUP Filtered NA Groundwater	7498344
QA NA Water	7498345

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC	ARCADIS U.S., Inc.	Attn: Sam Miles
COPY TO		
ELECTRONIC	Blaine Tech Services	Attn: Alex Stack
COPY TO		
ELECTRONIC	Arcadis	Attn: Alan Kahal
COPY TO		

Respectfully Submitted,



Natalie R. Luciano  
Senior Specialist

(717) 556-7258



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MW-4 NA Groundwater  
Facility# 1001327  
1602 N Northlake Place - Seattle, WA

LL Sample # WW 7498311  
LL Group # 1481771  
Account # 11964

Project Name: 1001327

Collected: 06/11/2014 07:46 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	SW-846 8021B		ug/l	ug/l	
02102	Benzene	71-43-2	N.D.	0.5	1
02102	Ethylbenzene	100-41-4	N.D.	0.5	1
02102	Toluene	108-88-3	N.D.	0.5	1

**General Sample Comments**

State of Washington Lab Certification No. C457

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02102	Method 8021 Water Master	SW-846 8021B	1	14170A53A	06/20/2014 13:30	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14170A53A	06/20/2014 13:30	Marie D Beamenderfer	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

**Sample Description:** MW-4 Filtered NA Groundwater  
Facility# 1001327  
1602 N Northlake Place - Seattle, WA

LL Sample # WW 7498312  
LL Group # 1481771  
Account # 11964

**Project Name:** 1001327

Collected: 06/11/2014 07:46 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

NPSM4

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	0.019	0.010	1
08357	2-Methylnaphthalene	91-57-6	0.026	0.010	1
08357	Naphthalene	91-20-3	0.070	0.030	1

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:

The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.

Metals Dissolved	Method	ug/l	ug/l	
06025	Arsenic	7440-38-2	N.D.	0.78
06035	Lead	7439-92-1	N.D.	0.085

#### General Sample Comments

State of Washington Lab Certification No. C457

This sample was field filtered for dissolved cPAHs, lead and arsenic.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

#### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14165WAF026	06/24/2014 03:06	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14165WAF026	06/16/2014 10:00	Anna E Stager	1
06025	Arsenic	SW-846 6020	1	141686050001A	06/18/2014 18:58	John P Hook	1
06035	Lead	SW-846 6020	1	141686050001A	06/18/2014 18:58	John P Hook	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	141686050001	06/18/2014 10:20	James L Mertz	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MW-7 NA Groundwater  
Facility# 1001327  
1602 N Northlake Place - Seattle, WA

LL Sample # WW 7498313  
LL Group # 1481771  
Account # 11964

Project Name: 1001327

Collected: 06/11/2014 10:02 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	SW-846 8021B		ug/l	ug/l	
02102	Benzene	71-43-2	33	0.5	1
02102	Ethylbenzene	100-41-4	65	0.5	1
02102	Toluene	108-88-3	4.4	0.5	1

**General Sample Comments**

State of Washington Lab Certification No. C457

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02102	Method 8021 Water Master	SW-846 8021B	1	14170A53A	06/20/2014 21:18	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	14170A53A	06/20/2014 21:18	Laura M Krieger	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

**Sample Description:** MW-7 Filtered NA Groundwater  
**Facility#** 1001327  
**1602 N Northlake Place - Seattle, WA**

**LL Sample #** WW 7498314  
**LL Group #** 1481771  
**Account #** 11964

**Project Name:** 1001327

Collected: 06/11/2014 10:02 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

NPSM7

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>					
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	0.013	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	19	0.20	20
08357	2-Methylnaphthalene	91-57-6	18	0.20	20
08357	Naphthalene	91-20-3	160	0.60	20

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:

The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.

Metals Dissolved SW-846 6020		ug/l	ug/l	
06025	Arsenic	7440-38-2	6.2	0.78
06035	Lead	7439-92-1	1.7	0.085

#### General Sample Comments

State of Washington Lab Certification No. C457

This sample was field filtered for dissolved cPAHs, lead and arsenic.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

#### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14165WAF026	06/24/2014 03:33	Catherine E Bachman	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14165WAF026	06/25/2014 08:38	Joseph M Gambler	20
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14165WAF026	06/16/2014 10:00	Anna E Stager	1
06025	Arsenic	SW-846 6020	1	141686050001A	06/18/2014 19:00	John P Hook	1
06035	Lead	SW-846 6020	1	141686050001A	06/18/2014 19:00	John P Hook	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	141686050001	06/18/2014 10:20	James L Mertz	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MW-8A NA Groundwater  
Facility# 1001327  
1602 N Northlake Place - Seattle, WA

LL Sample # WW 7498315  
LL Group # 1481771  
Account # 11964

Project Name: 1001327

Collected: 06/11/2014 07:13 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	SW-846 8021B		ug/l	ug/l	
02102	Benzene	71-43-2	N.D.	0.5	1
02102	Ethylbenzene	100-41-4	N.D.	0.5	1
02102	Toluene	108-88-3	N.D.	0.5	1

**General Sample Comments**

State of Washington Lab Certification No. C457

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02102	Method 8021 Water Master	SW-846 8021B	1	14170A53A	06/20/2014 13:58	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14170A53A	06/20/2014 13:58	Marie D Beamenderfer	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

**Sample Description:** MW-8A Filtered NA Groundwater  
Facility# 1001327  
1602 N Northlake Place - Seattle, WA

LL Sample # WW 7498316  
LL Group # 1481771  
Account # 11964

**Project Name:** 1001327

Collected: 06/11/2014 07:13 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

NPSM8

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	
08357	Benzo(a)anthracene	56-55-3	0.011	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	0.012	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	0.011	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	0.017	0.010	1
08357	2-Methylnaphthalene	91-57-6	0.024	0.010	1
08357	Naphthalene	91-20-3	0.062	0.030	1

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:

The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.

Metals Dissolved	SW-846 6020	ug/l	ug/l	
06025	Arsenic	7440-38-2	N.D.	0.78
06035	Lead	7439-92-1	0.59	0.085

#### General Sample Comments

State of Washington Lab Certification No. C457

This sample was field filtered for dissolved cPAHs, lead and arsenic.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

#### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14165WAF026	06/24/2014 04:00	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14165WAF026	06/16/2014 10:00	Anna E Stager	1
06025	Arsenic	SW-846 6020	1	141686050001A	06/18/2014 18:26	John P Hook	1
06035	Lead	SW-846 6020	1	141686050001A	06/18/2014 18:26	John P Hook	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	141686050001	06/18/2014 10:20	James L Mertz	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MW-11 NA Groundwater  
Facility# 1001327  
1602 N Northlake Place - Seattle, WA

LL Sample # WW 7498317  
LL Group # 1481771  
Account # 11964

Project Name: 1001327

Collected: 06/11/2014 12:52 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	SW-846 8021B		ug/l	ug/l	
02102	Benzene	71-43-2	N.D.	0.5	1
02102	Ethylbenzene	100-41-4	N.D.	0.5	1
02102	Toluene	108-88-3	N.D.	0.5	1

**General Sample Comments**

State of Washington Lab Certification No. C457

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02102	Method 8021 Water Master	SW-846 8021B	1	14170A53A	06/20/2014 14:25	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14170A53A	06/20/2014 14:25	Marie D Beamenderfer	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

**Sample Description:** MW-11 Filtered NA Groundwater  
Facility# 1001327  
1602 N Northlake Place - Seattle, WA

LL Sample # WW 7498318  
LL Group # 1481771  
Account # 11964

**Project Name:** 1001327

Collected: 06/11/2014 12:52 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

NPS11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	
08357	Benzo(a)anthracene	56-55-3	0.028	0.010	1
08357	Benzo(a)pyrene	50-32-8	0.020	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	0.025	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	0.024	0.010	1
08357	Chrysene	218-01-9	0.033	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	0.019	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.020	0.010	1
08357	1-Methylnaphthalene	90-12-0	0.020	0.010	1
08357	2-Methylnaphthalene	91-57-6	0.027	0.010	1
08357	Naphthalene	91-20-3	0.070	0.030	1

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:

The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.

Metals Dissolved	SW-846 6020	ug/l	ug/l	
06025	Arsenic	7440-38-2	8.4	0.78
06035	Lead	7439-92-1	N.D.	0.085

#### General Sample Comments

State of Washington Lab Certification No. C457

This sample was field filtered for dissolved cPAHs, lead and arsenic.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

#### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14165WAF026	06/25/2014 09:05	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14165WAF026	06/16/2014 10:00	Anna E Stager	1
06025	Arsenic	SW-846 6020	1	141686050001A	06/18/2014 19:05	John P Hook	1
06035	Lead	SW-846 6020	1	141686050001A	06/18/2014 19:05	John P Hook	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	141686050001	06/18/2014 10:20	James L Mertz	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

**Sample Description:** MW-14 NA Groundwater  
**Facility#** 1001327  
**1602 N Northlake Place - Seattle, WA**

**LL Sample #** WW 7498319  
**LL Group #** 1481771  
**Account #** 11964

**Project Name:** 1001327

Collected: 06/11/2014 11:18 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	SW-846 8021B		ug/l	ug/l	
02102	Benzene	71-43-2	N.D.	0.5	1
02102	Ethylbenzene	100-41-4	N.D.	0.5	1
02102	Toluene	108-88-3	N.D.	0.5	1

#### General Sample Comments

State of Washington Lab Certification No. C457

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

#### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02102	Method 8021 Water Master	SW-846 8021B	1	14170A53A	06/20/2014 14:53	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14170A53A	06/20/2014 14:53	Marie D Beamenderfer	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

**Sample Description:** MW-14 Filtered NA Groundwater  
Facility# 1001327  
1602 N Northlake Place - Seattle, WA

LL Sample # WW 7498320  
LL Group # 1481771  
Account # 11964

**Project Name:** 1001327

Collected: 06/11/2014 11:18 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

NPS14

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	
08357	Benzo(a)anthracene	56-55-3	0.011	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	0.014	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	0.012	0.010	1
08357	Chrysene	218-01-9	0.012	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.011	0.010	1
08357	1-Methylnaphthalene	90-12-0	0.014	0.010	1
08357	2-Methylnaphthalene	91-57-6	0.020	0.010	1
08357	Naphthalene	91-20-3	0.049	0.030	1

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:

The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.

Metals Dissolved	SW-846 6020	ug/l	ug/l	
06025	Arsenic	7440-38-2	N.D.	0.78
06035	Lead	7439-92-1	N.D.	0.085

#### General Sample Comments

State of Washington Lab Certification No. C457

This sample was field filtered for dissolved cPAHs, lead and arsenic.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

#### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14165WAF026	06/25/2014 09:32	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14165WAF026	06/16/2014 10:00	Anna E Stager	1
06025	Arsenic	SW-846 6020	1	141686050001A	06/18/2014 19:07	John P Hook	1
06035	Lead	SW-846 6020	1	141686050001A	06/18/2014 19:07	John P Hook	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	141686050001	06/18/2014 10:20	James L Mertz	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

**Sample Description:** MW-15 NA Groundwater  
**Facility#** 1001327  
**1602 N Northlake Place - Seattle, WA**

**LL Sample #** WW 7498321  
**LL Group #** 1481771  
**Account #** 11964

**Project Name:** 1001327

Collected: 06/11/2014 11:47 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	SW-846 8021B		ug/l	ug/l	
02102	Benzene	71-43-2	N.D.	3.0	1
02102	Ethylbenzene	100-41-4	2.0	0.5	1
02102	Toluene	108-88-3	0.6	0.5	1

Reporting limits were raised due to interference from the sample matrix.

---

**General Sample Comments**

State of Washington Lab Certification No. C457

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

---

**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02102	Method 8021 Water Master	SW-846 8021B	1	14170A53A	06/20/2014 15:48	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14170A53A	06/20/2014 15:48	Marie D Beamenderfer	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

**Sample Description:** MW-15 Filtered NA Groundwater  
Facility# 1001327  
1602 N Northlake Place - Seattle, WA

LL Sample # WW 7498322  
LL Group # 1481771  
Account # 11964

**Project Name:** 1001327

Collected: 06/11/2014 11:47 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

NPS15

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	
08357	Benzo(a)anthracene	56-55-3	0.020	0.010	1
08357	Benzo(a)pyrene	50-32-8	0.015	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	0.027	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	0.025	0.010	1
08357	Chrysene	218-01-9	0.024	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	0.019	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.022	0.010	1
08357	1-Methylnaphthalene	90-12-0	0.55	0.010	1
08357	2-Methylnaphthalene	91-57-6	0.024	0.010	1
08357	Naphthalene	91-20-3	0.29	0.030	1

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:

The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.

Metals Dissolved	SW-846 6020	ug/l	ug/l	
06025	Arsenic	7440-38-2	5.6	0.78
06035	Lead	7439-92-1	0.40	0.085

#### General Sample Comments

State of Washington Lab Certification No. C457

This sample was field filtered for dissolved cPAHs, lead and arsenic.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

#### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14165WAF026	06/25/2014 10:00	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14165WAF026	06/16/2014 10:00	Anna E Stager	1
06025	Arsenic	SW-846 6020	1	141686050001A	06/18/2014 19:09	John P Hook	1
06035	Lead	SW-846 6020	1	141686050001A	06/18/2014 19:09	John P Hook	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	141686050001	06/18/2014 10:20	James L Mertz	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MW-19 NA Groundwater  
Facility# 1001327  
1602 N Northlake Place - Seattle, WA

LL Sample # WW 7498323  
LL Group # 1481771  
Account # 11964

Project Name: 1001327

Collected: 06/10/2014 12:33 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	SW-846 8021B		ug/l	ug/l	
02102	Benzene	71-43-2	N.D.	0.5	1
02102	Ethylbenzene	100-41-4	N.D.	0.5	1
02102	Toluene	108-88-3	N.D.	0.5	1

**General Sample Comments**

State of Washington Lab Certification No. C457

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02102	Method 8021 Water Master	SW-846 8021B	1	14169A53A	06/19/2014 14:22	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14169A53A	06/19/2014 14:22	Marie D Beamenderfer	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

**Sample Description:** MW-19 Filtered NA Groundwater  
Facility# 1001327  
1602 N Northlake Place - Seattle, WA

LL Sample # WW 7498324  
LL Group # 1481771  
Account # 11964

**Project Name:** 1001327

Collected: 06/10/2014 12:33 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

NPS19

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>					
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	0.015	0.010	1
08357	2-Methylnaphthalene	91-57-6	0.021	0.010	1
08357	Naphthalene	91-20-3	0.051	0.031	1
<b>Metals Dissolved SW-846 6020</b>					
06025	Arsenic	7440-38-2	N.D.	0.78	1
06035	Lead	7439-92-1	0.16	0.085	1

#### General Sample Comments

State of Washington Lab Certification No. C457

This sample was field filtered for dissolved cPAHs, lead and arsenic.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

#### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14167WAB026	06/17/2014 08:56	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14167WAB026	06/16/2014 19:45	Nicholas W Shroyer	1
06025	Arsenic	SW-846 6020	1	141686050001A	06/18/2014 19:10	John P Hook	1
06035	Lead	SW-846 6020	1	141686050001A	06/18/2014 19:10	John P Hook	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	141686050001	06/18/2014 10:20	James L Mertz	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MW-20 NA Groundwater  
Facility# 1001327  
1602 N Northlake Place - Seattle, WA

LL Sample # WW 7498325  
LL Group # 1481771  
Account # 11964

Project Name: 1001327

Collected: 06/10/2014 13:05 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	SW-846 8021B		ug/l	ug/l	
02102	Benzene	71-43-2	7.2	0.5	1
02102	Ethylbenzene	100-41-4	1.4	0.5	1
02102	Toluene	108-88-3	0.9	0.5	1

**General Sample Comments**

State of Washington Lab Certification No. C457

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02102	Method 8021 Water Master	SW-846 8021B	1	14169A53A	06/19/2014 16:41	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14169A53A	06/19/2014 16:41	Marie D Beamenderfer	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

**Sample Description:** MW-20 Filtered NA Groundwater  
Facility# 1001327  
1602 N Northlake Place - Seattle, WA

LL Sample # WW 7498326  
LL Group # 1481771  
Account # 11964

**Project Name:** 1001327

Collected: 06/10/2014 13:05 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

NPS20

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>					
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	0.32	0.010	1
08357	2-Methylnaphthalene	91-57-6	0.19	0.010	1
08357	Naphthalene	91-20-3	0.099	0.030	1
<b>Metals Dissolved SW-846 6020</b>					
06025	Arsenic	7440-38-2	4.1	0.78	1
06035	Lead	7439-92-1	0.14	0.085	1

#### General Sample Comments

State of Washington Lab Certification No. C457

This sample was field filtered for dissolved cPAHs, lead and arsenic.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

#### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14167WAB026	06/17/2014 09:23	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14167WAB026	06/16/2014 19:45	Nicholas W Shroyer	1
06025	Arsenic	SW-846 6020	1	141686050001A	06/18/2014 19:12	John P Hook	1
06035	Lead	SW-846 6020	1	141686050001A	06/18/2014 19:12	John P Hook	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	141686050001	06/18/2014 10:20	James L Mertz	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

**Sample Description:** MW-21 NA Groundwater  
**Facility#** 1001327  
**1602 N Northlake Place - Seattle, WA**

**LL Sample #** WW 7498327  
**LL Group #** 1481771  
**Account #** 11964

**Project Name:** 1001327

Collected: 06/11/2014 09:31 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	SW-846 8021B		ug/l	ug/l	
02102	Benzene	71-43-2	N.D.	6.0	1
02102	Ethylbenzene	100-41-4	0.5	0.5	1
02102	Toluene	108-88-3	0.7	0.5	1

Reporting limits were raised due to interference from the sample matrix.

---

**General Sample Comments**

State of Washington Lab Certification No. C457

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

---

**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02102	Method 8021 Water Master	SW-846 8021B	1	14170A53A	06/20/2014 16:15	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14170A53A	06/20/2014 16:15	Marie D Beamenderfer	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

**Sample Description:** MW-21 Filtered NA Groundwater  
Facility# 1001327  
1602 N Northlake Place - Seattle, WA

LL Sample # WW 7498328  
LL Group # 1481771  
Account # 11964

**Project Name:** 1001327

Collected: 06/11/2014 09:31 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

NPS21

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>					
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	8.7	0.010	1
08357	2-Methylnaphthalene	91-57-6	1.5	0.010	1
08357	Naphthalene	91-20-3	N.D.	0.030	1
<b>Metals Dissolved SW-846 6020</b>					
06025	Arsenic	7440-38-2	13.6	0.78	1
06035	Lead	7439-92-1	N.D.	0.085	1

#### General Sample Comments

State of Washington Lab Certification No. C457

This sample was field filtered for dissolved cPAHs, lead and arsenic.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

#### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14167WAB026	06/17/2014 09:51	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14167WAB026	06/16/2014 19:45	Nicholas W Shroyer	1
06025	Arsenic	SW-846 6020	1	141686050001A	06/18/2014 19:14	John P Hook	1
06035	Lead	SW-846 6020	1	141686050001A	06/18/2014 19:14	John P Hook	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	141686050001	06/18/2014 10:20	James L Mertz	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MW-22 NA Groundwater  
Facility# 1001327  
1602 N Northlake Place - Seattle, WA

LL Sample # WW 7498329  
LL Group # 1481771  
Account # 11964

Project Name: 1001327

Collected: 06/11/2014 12:19 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	SW-846 8021B		ug/l	ug/l	
02102	Benzene	71-43-2	780	2.5	5
02102	Ethylbenzene	100-41-4	67	2.5	5
02102	Toluene	108-88-3	45	2.5	5

**General Sample Comments**

State of Washington Lab Certification No. C457

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02102	Method 8021 Water Master	SW-846 8021B	1	14171A53B	06/23/2014 10:48	Marie D Beamenderfer	5
01146	GC VOA Water Prep	SW-846 5030B	1	14171A53B	06/23/2014 10:48	Marie D Beamenderfer	5



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

**Sample Description:** MW-22 Filtered NA Groundwater  
Facility# 1001327  
1602 N Northlake Place - Seattle, WA

LL Sample # WW 7498330  
LL Group # 1481771  
Account # 11964

**Project Name:** 1001327

Collected: 06/11/2014 12:19 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

NPS22

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>					
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	0.24	0.010	1
08357	2-Methylnaphthalene	91-57-6	0.063	0.010	1
08357	Naphthalene	91-20-3	1.3	0.031	1
<b>Metals Dissolved SW-846 6020</b>					
06025	Arsenic	7440-38-2	2.5	0.78	1
06035	Lead	7439-92-1	N.D.	0.085	1

#### General Sample Comments

State of Washington Lab Certification No. C457

This sample was field filtered for dissolved cPAHs, lead and arsenic.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

#### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14167WAB026	06/17/2014 10:19	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14167WAB026	06/16/2014 19:45	Nicholas W Shroyer	1
06025	Arsenic	SW-846 6020	1	141686050001A	06/18/2014 19:16	John P Hook	1
06035	Lead	SW-846 6020	1	141686050001A	06/18/2014 19:16	John P Hook	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	141686050001	06/18/2014 10:20	James L Mertz	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MW-24 NA Groundwater  
Facility# 1001327  
1602 N Northlake Place - Seattle, WA

LL Sample # WW 7498331  
LL Group # 1481771  
Account # 11964

Project Name: 1001327

Collected: 06/10/2014 11:58 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	SW-846 8021B		ug/l	ug/l	
02102	Benzene	71-43-2	N.D.	0.5	1
02102	Ethylbenzene	100-41-4	N.D.	0.5	1
02102	Toluene	108-88-3	N.D.	0.5	1

**General Sample Comments**

State of Washington Lab Certification No. C457

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02102	Method 8021 Water Master	SW-846 8021B	1	14169A53A	06/19/2014 17:08	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14169A53A	06/19/2014 17:08	Marie D Beamenderfer	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

**Sample Description:** MW-24 Filtered NA Groundwater  
Facility# 1001327  
1602 N Northlake Place - Seattle, WA

LL Sample # WW 7498332  
LL Group # 1481771  
Account # 11964

**Project Name:** 1001327

Collected: 06/10/2014 11:58 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

NPS24

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>					
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	0.017	0.010	1
08357	2-Methylnaphthalene	91-57-6	0.022	0.010	1
08357	Naphthalene	91-20-3	0.060	0.030	1
<b>Metals Dissolved SW-846 6020</b>					
06025	Arsenic	7440-38-2	N.D.	0.78	1
06035	Lead	7439-92-1	N.D.	0.085	1

#### General Sample Comments

State of Washington Lab Certification No. C457

This sample was field filtered for dissolved cPAHs, lead and arsenic.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

#### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14167WAB026	06/17/2014 10:47	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14167WAB026	06/16/2014 19:45	Nicholas W Shroyer	1
06025	Arsenic	SW-846 6020	1	141686050002A	06/19/2014 07:00	Choon Y Tian	1
06035	Lead	SW-846 6020	1	141686050002A	06/19/2014 07:00	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	141686050002	06/18/2014 10:38	James L Mertz	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MW-25 NA Groundwater  
Facility# 1001327  
1602 N Northlake Place - Seattle, WA

LL Sample # WW 7498333  
LL Group # 1481771  
Account # 11964

Project Name: 1001327

Collected: 06/10/2014 13:51 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	SW-846 8021B		ug/l	ug/l	
02102	Benzene	71-43-2	N.D.	0.5	1
02102	Ethylbenzene	100-41-4	N.D.	0.5	1
02102	Toluene	108-88-3	N.D.	0.5	1

**General Sample Comments**

State of Washington Lab Certification No. C457

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02102	Method 8021 Water Master	SW-846 8021B	1	14169A53A	06/19/2014 17:36	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14169A53A	06/19/2014 17:36	Marie D Beamenderfer	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

**Sample Description:** MW-25 Filtered NA Groundwater  
Facility# 1001327  
1602 N Northlake Place - Seattle, WA

LL Sample # WW 7498334  
LL Group # 1481771  
Account # 11964

**Project Name:** 1001327

Collected: 06/10/2014 13:51 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

NPS25

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>					
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	0.013	0.010	1
08357	2-Methylnaphthalene	91-57-6	0.019	0.010	1
08357	Naphthalene	91-20-3	0.047	0.030	1
<b>Metals Dissolved SW-846 6020</b>					
06025	Arsenic	7440-38-2	0.96	0.78	1
06035	Lead	7439-92-1	N.D.	0.085	1

#### General Sample Comments

State of Washington Lab Certification No. C457

This sample was field filtered for dissolved cPAHs, lead and arsenic.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

#### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14167WAB026	06/17/2014 11:15	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14167WAB026	06/16/2014 19:45	Nicholas W Shroyer	1
06025	Arsenic	SW-846 6020	1	141686050002A	06/19/2014 07:01	Choon Y Tian	1
06035	Lead	SW-846 6020	1	141686050002A	06/19/2014 07:01	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	141686050002	06/18/2014 10:38	James L Mertz	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MW-26 NA Groundwater  
Facility# 1001327  
1602 N Northlake Place - Seattle, WA

LL Sample # WW 7498335  
LL Group # 1481771  
Account # 11964

Project Name: 1001327

Collected: 06/10/2014 14:18 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	SW-846 8021B		ug/l	ug/l	
02102	Benzene	71-43-2	N.D.	0.5	1
02102	Ethylbenzene	100-41-4	N.D.	0.5	1
02102	Toluene	108-88-3	N.D.	0.5	1

**General Sample Comments**

State of Washington Lab Certification No. C457

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02102	Method 8021 Water Master	SW-846 8021B	1	14169A53A	06/19/2014 18:04	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14169A53A	06/19/2014 18:04	Marie D Beamenderfer	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

**Sample Description:** MW-26 Filtered NA Groundwater  
Facility# 1001327  
1602 N Northlake Place - Seattle, WA

LL Sample # WW 7498336  
LL Group # 1481771  
Account # 11964

**Project Name:** 1001327

Collected: 06/10/2014 14:18 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

NPS26

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>					
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	0.017	0.010	1
08357	2-Methylnaphthalene	91-57-6	0.024	0.010	1
08357	Naphthalene	91-20-3	0.068	0.030	1
<b>Metals Dissolved SW-846 6020</b>					
06025	Arsenic	7440-38-2	N.D.	0.78	1
06035	Lead	7439-92-1	N.D.	0.085	1

#### General Sample Comments

State of Washington Lab Certification No. C457

This sample was field filtered for dissolved cPAHs, lead and arsenic.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

#### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14167WAB026	06/17/2014 11:43	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14167WAB026	06/16/2014 19:45	Nicholas W Shroyer	1
06025	Arsenic	SW-846 6020	1	141686050002A	06/19/2014 07:03	Choon Y Tian	1
06035	Lead	SW-846 6020	1	141686050002A	06/19/2014 07:03	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	141686050002	06/18/2014 10:38	James L Mertz	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: AGI-2 NA Groundwater  
Facility# 1001327  
1602 N Northlake Place - Seattle, WA

LL Sample # WW 7498337  
LL Group # 1481771  
Account # 11964

Project Name: 1001327

Collected: 06/11/2014 08:59 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	SW-846 8021B		ug/l	ug/l	
02102	Benzene	71-43-2	9.2	0.5	1
02102	Ethylbenzene	100-41-4	7.4	0.5	1
02102	Toluene	108-88-3	2.5	0.5	1

**General Sample Comments**

State of Washington Lab Certification No. C457

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02102	Method 8021 Water Master	SW-846 8021B	1	14170A53A	06/20/2014 16:43	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14170A53A	06/20/2014 16:43	Marie D Beamenderfer	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

**Sample Description:** AGI-2 Filtered NA Groundwater  
Facility# 1001327  
1602 N Northlake Place - Seattle, WA

LL Sample # WW 7498338  
LL Group # 1481771  
Account # 11964

**Project Name:** 1001327

Collected: 06/11/2014 08:59 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

NPSA1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>					
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	0.20	0.010	1
08357	2-Methylnaphthalene	91-57-6	0.062	0.010	1
08357	Naphthalene	91-20-3	0.35	0.030	1
<b>Metals Dissolved SW-846 6020</b>					
06025	Arsenic	7440-38-2	10.8	0.78	1
06035	Lead	7439-92-1	N.D.	0.085	1

#### General Sample Comments

State of Washington Lab Certification No. C457

This sample was field filtered for dissolved cPAHs, lead and arsenic.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

#### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14167WAB026	06/17/2014 12:10	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14167WAB026	06/16/2014 19:45	Nicholas W Shroyer	1
06025	Arsenic	SW-846 6020	1	141686050002A	06/19/2014 07:05	Choon Y Tian	1
06035	Lead	SW-846 6020	1	141686050002A	06/19/2014 07:05	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	141686050002	06/18/2014 10:38	James L Mertz	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MLU-1 NA Groundwater  
Facility# 1001327  
1602 N Northlake Place - Seattle, WA

LL Sample # WW 7498339  
LL Group # 1481771  
Account # 11964

Project Name: 1001327

Collected: 06/11/2014 08:24 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	SW-846 8021B		ug/l	ug/l	
02102	Benzene	71-43-2	N.D.	0.5	1
02102	Ethylbenzene	100-41-4	N.D.	0.5	1
02102	Toluene	108-88-3	N.D.	0.5	1

**General Sample Comments**

State of Washington Lab Certification No. C457

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02102	Method 8021 Water Master	SW-846 8021B	1	14170A53A	06/20/2014 17:10	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14170A53A	06/20/2014 17:10	Marie D Beamenderfer	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

**Sample Description:** MLU-1 Filtered NA Groundwater  
Facility# 1001327  
1602 N Northlake Place - Seattle, WA

LL Sample # WW 7498340  
LL Group # 1481771  
Account # 11964

**Project Name:** 1001327

Collected: 06/11/2014 08:24 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

NPSU1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>					
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	0.016	0.010	1
08357	2-Methylnaphthalene	91-57-6	0.022	0.010	1
08357	Naphthalene	91-20-3	0.051	0.030	1
<b>Metals Dissolved SW-846 6020</b>					
06025	Arsenic	7440-38-2	N.D.	0.78	1
06035	Lead	7439-92-1	N.D.	0.085	1

#### General Sample Comments

State of Washington Lab Certification No. C457

This sample was field filtered for dissolved cPAHs, lead and arsenic.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

#### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14167WAB026	06/17/2014 12:38	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14167WAB026	06/16/2014 19:45	Nicholas W Shroyer	1
06025	Arsenic	SW-846 6020	1	141686050002A	06/19/2014 07:07	Choon Y Tian	1
06035	Lead	SW-846 6020	1	141686050002A	06/19/2014 07:07	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	141686050002	06/18/2014 10:38	James L Mertz	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MLU-3 NA Groundwater  
Facility# 1001327  
1602 N Northlake Place - Seattle, WA

LL Sample # WW 7498341  
LL Group # 1481771  
Account # 11964

Project Name: 1001327

Collected: 06/11/2014 10:33 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	SW-846 8021B		ug/l	ug/l	
02102	Benzene	71-43-2	N.D.	0.5	1
02102	Ethylbenzene	100-41-4	N.D.	0.5	1
02102	Toluene	108-88-3	N.D.	0.5	1

**General Sample Comments**

State of Washington Lab Certification No. C457

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02102	Method 8021 Water Master	SW-846 8021B	1	14170A53A	06/20/2014 17:38	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14170A53A	06/20/2014 17:38	Marie D Beamenderfer	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

**Sample Description:** MLU-3 Filtered NA Groundwater  
Facility# 1001327  
1602 N Northlake Place - Seattle, WA

LL Sample # WW 7498342  
LL Group # 1481771  
Account # 11964

**Project Name:** 1001327

Collected: 06/11/2014 10:33 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

NPSU3

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>					
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	0.014	0.010	1
08357	2-Methylnaphthalene	91-57-6	0.021	0.010	1
08357	Naphthalene	91-20-3	0.056	0.031	1
<b>Metals Dissolved SW-846 6020</b>					
06025	Arsenic	7440-38-2	N.D.	0.78	1
06035	Lead	7439-92-1	0.15	0.085	1

#### General Sample Comments

State of Washington Lab Certification No. C457

This sample was field filtered for dissolved cPAHs, lead and arsenic.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

#### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14167WAB026	06/17/2014 13:06	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14167WAB026	06/16/2014 19:45	Nicholas W Shroyer	1
06025	Arsenic	SW-846 6020	1	141686050002A	06/19/2014 07:09	Choon Y Tian	1
06035	Lead	SW-846 6020	1	141686050002A	06/19/2014 07:09	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	141686050002	06/18/2014 10:38	James L Mertz	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

**Sample Description:** DUP NA Groundwater  
Facility# 1001327  
1602 N Northlake Place - Seattle, WA

LL Sample # WW 7498343  
LL Group # 1481771  
Account # 11964

**Project Name:** 1001327

Collected: 06/11/2014 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	SW-846 8021B		ug/l	ug/l	
02102	Benzene	71-43-2	N.D.	0.5	1
02102	Ethylbenzene	100-41-4	N.D.	0.5	1
02102	Toluene	108-88-3	N.D.	0.5	1

#### General Sample Comments

State of Washington Lab Certification No. C457

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

#### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02102	Method 8021 Water Master	SW-846 8021B	1	14170A53A	06/20/2014 18:05	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14170A53A	06/20/2014 18:05	Marie D Beamenderfer	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

**Sample Description:** DUP Filtered NA Groundwater  
Facility# 1001327  
1602 N Northlake Place - Seattle, WA

LL Sample # WW 7498344  
LL Group # 1481771  
Account # 11964

**Project Name:** 1001327

Collected: 06/11/2014 by LB

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

NPSFD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>					
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	0.012	0.010	1
08357	2-Methylnaphthalene	91-57-6	0.018	0.010	1
08357	Naphthalene	91-20-3	0.036	0.031	1
<b>Metals Dissolved SW-846 6020</b>					
06025	Arsenic	7440-38-2	N.D.	0.78	1
06035	Lead	7439-92-1	0.53	0.085	1

#### General Sample Comments

State of Washington Lab Certification No. C457

This sample was field filtered for dissolved cPAHs, lead and arsenic.

Carcinogenic PAHs have been reported for this sample

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

#### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14167WAB026	06/17/2014 13:34	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14167WAB026	06/16/2014 19:45	Nicholas W Shroyer	1
06025	Arsenic	SW-846 6020	1	141686050002A	06/19/2014 07:11	Choon Y Tian	1
06035	Lead	SW-846 6020	1	141686050002A	06/19/2014 07:11	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	141686050002	06/18/2014 10:38	James L Mertz	1



Lancaster Laboratories  
Environmental

# Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: QA NA Water  
Facility# 1001327  
1602 N Northlake Place - Seattle, WA

LL Sample # WW 7498345  
LL Group # 1481771  
Account # 11964

Project Name: 1001327

Collected: 06/10/2014 08:00

Chevron

L4310

Submitted: 06/13/2014 09:45

6001 Bollinger Canyon Road

Reported: 06/26/2014 19:20

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	SW-846 8021B		ug/l	ug/l	
02102	Benzene	71-43-2	N.D.	0.5	1
02102	Ethylbenzene	100-41-4	N.D.	0.5	1
02102	Toluene	108-88-3	N.D.	0.5	1

## General Sample Comments

State of Washington Lab Certification No. C457

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02102	Method 8021 Water Master	SW-846 8021B	1	14169A53A	06/19/2014 12:05	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14169A53A	06/19/2014 12:05	Marie D Beamenderfer	1

## Quality Control Summary

Client Name: Chevron  
Reported: 06/26/14 at 07:20 PM

Group Number: 1481771

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 14165WAF026			Sample number(s): 7498312, 7498314, 7498316, 7498318, 7498320, 7498322					
Benzo(a)anthracene	N.D.	0.010	ug/l	87		79-122		
Benzo(a)pyrene	N.D.	0.010	ug/l	79*		80-121		
Benzo(b)fluoranthene	N.D.	0.010	ug/l	86		79-136		
Benzo(k)fluoranthene	N.D.	0.010	ug/l	80*		81-131		
Chrysene	N.D.	0.010	ug/l	83*		84-118		
Dibenz(a,h)anthracene	N.D.	0.010	ug/l	46*		66-133		
Indeno(1,2,3-cd)pyrene	N.D.	0.010	ug/l	57*		68-132		
1-Methylnaphthalene	N.D.	0.010	ug/l	86		86-130		
2-Methylnaphthalene	N.D.	0.010	ug/l	82		81-131		
Naphthalene	N.D.	0.030	ug/l	89		82-122		
Batch number: 14167WAB026			Sample number(s): 7498324, 7498326, 7498328, 7498330, 7498332, 7498334, 7498336, 7498338, 7498340, 7498342, 7498344					
Benzo(a)anthracene	N.D.	0.010	ug/l	99	98	79-122	1	30
Benzo(a)pyrene	N.D.	0.010	ug/l	92	93	80-121	1	30
Benzo(b)fluoranthene	N.D.	0.010	ug/l	98	99	79-136	1	30
Benzo(k)fluoranthene	N.D.	0.010	ug/l	95	96	81-131	2	30
Chrysene	N.D.	0.010	ug/l	93	95	84-118	1	30
Dibenz(a,h)anthracene	N.D.	0.010	ug/l	66	73	66-133	11	30
Indeno(1,2,3-cd)pyrene	N.D.	0.010	ug/l	74	79	68-132	7	30
1-Methylnaphthalene	N.D.	0.010	ug/l	90	90	86-130	0	30
2-Methylnaphthalene	N.D.	0.010	ug/l	85	86	81-131	1	30
Naphthalene	N.D.	0.030	ug/l	90	91	82-122	1	30
Batch number: 14169A53A			Sample number(s): 7498323, 7498325, 7498331, 7498333, 7498335, 7498345					
Benzene	N.D.	0.2	ug/l	97		80-120		
Ethylbenzene	N.D.	0.2	ug/l	96		80-120		
Toluene	N.D.	0.2	ug/l	97		80-120		
Batch number: 14170A53A			Sample number(s): 7498311, 7498313, 7498315, 7498317, 7498319, 7498321, 7498327, 7498337, 7498339, 7498341, 7498343					
Benzene	N.D.	0.2	ug/l	96	98	80-120	2	30
Ethylbenzene	N.D.	0.2	ug/l	94	97	80-120	2	30
Toluene	N.D.	0.2	ug/l	96	98	80-120	2	30
Batch number: 14171A53B			Sample number(s): 7498329					
Benzene	N.D.	0.2	ug/l	98		80-120		
Ethylbenzene	N.D.	0.2	ug/l	97		80-120		
Toluene	N.D.	0.2	ug/l	98		80-120		
Batch number: 141686050001A			Sample number(s):					

\*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.  
(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: Chevron

Group Number: 1481771

Reported: 06/26/14 at 07:20 PM

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Arsenic	7498312, 7498314, 7498316, 7498318, 7498320, 7498322, 7498324, 7498326, 7498328, 7498330	0						
Lead	N.D.	0.78	ug/l	101		86-120		
	N.D.	0.085	ug/l	100		90-110		
Batch number: 141686050002A	Sample number(s): 7498332, 7498334, 7498336, 7498338, 7498340, 7498342, 7498344							
Arsenic	N.D.	0.78	ug/l	97		86-120		
Lead	N.D.	0.085	ug/l	98		90-110		

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 14165WAF026	Sample number(s): 7498312, 7498314, 7498316, 7498318, 7498320, 7498322 UNSPK: P497026								
Benzo(a)anthracene	101	102	37-135	1	30				
Benzo(a)pyrene	95	95	64-123	0	30				
Benzo(b)fluoranthene	102	103	41-137	2	30				
Benzo(k)fluoranthene	101	101	38-130	2	30				
Chrysene	102	105	58-117	3	30				
Dibenz(a,h)anthracene	83	85	17-134	4	30				
Indeno(1,2,3-cd)pyrene	83	85	26-130	3	30				
1-Methylnaphthalene	95	96	82-133	2	30				
2-Methylnaphthalene	90	91	73-138	2	30				
Naphthalene	100	102	58-131	3	30				
Batch number: 14169A53A	Sample number(s): 7498323, 7498325, 7498331, 7498333, 7498335, 7498345 UNSPK: P497212								
Benzene	104	103	84-126	1	30				
Ethylbenzene	103	102	80-133	1	30				
Toluene	105	104	80-133	1	30				
Batch number: 14171A53B	Sample number(s): 7498329 UNSPK: P505172								
Benzene	104	107	84-126	3	30				
Ethylbenzene	102	105	80-133	2	30				
Toluene	104	106	80-133	2	30				
Batch number: 141686050001A	Sample number(s): 7498312, 7498314, 7498316, 7498318, 7498320, 7498322, 7498324, 7498326, 7498328, 7498330 UNSPK: 7498316 BKG: 7498316								
Arsenic	108	107	75-125	1	20	N.D.	N.D.	0 (1)	20
Lead	101	100	89-120	1	20	0.59	0.56	5 (1)	20
Batch number: 141686050002A	Sample number(s): 7498332, 7498334, 7498336, 7498338, 7498340, 7498342, 7498344 UNSPK: P495786 BKG: P495786								
Arsenic	165*	158*	75-125	2	20	14.2	15.9	11	20
Lead	106	103	89-120	3	20	0.14	0.15	3 (1)	20

\*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.  
(2) The unspiked result was more than four times the spike added.

**Quality Control Summary**

Client Name: Chevron  
Reported: 06/26/14 at 07:20 PM

Group Number: 1481771

**Surrogate Quality Control**

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: PAHs in waters by SIM

Batch number: 14165WAF026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
--	------------------	--------------------	-------------------------

7498312	92	96	84
7498314	91	91	105
7498316	95	85	85
7498318	96	73	87
7498320	93	88	85
7498322	96	90	89
Blank	92	73	85
LCS	88	81	82
MS	100	102	91
MSD	99	102	91

Limits: 59-128      62-141      70-134

Analysis Name: PAHs in waters by SIM

Batch number: 14167WAB026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
--	------------------	--------------------	-------------------------

7498324	96	86	87
7498326	100	103	107
7498328	101	112	99
7498330	96	95	97
7498332	104	85	91
7498334	100	83	90
7498336	106	93	94
7498338	99	108	109
7498340	105	101	94
7498342	99	93	90
7498344	90	63	84
Blank	109	105	97
LCS	110	113	97
LCSD	104	112	95

Limits: 59-128      62-141      70-134

Analysis Name: Method 8021 Water Master

Batch number: 14169A53A

	Trifluorotoluene-P
--	--------------------

7498323	77
7498325	76
7498331	77
7498333	77
7498335	78
7498345	77
Blank	77
LCS	76
MS	76

\*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

**Quality Control Summary**

Client Name: Chevron  
Reported: 06/26/14 at 07:20 PM

Group Number: 1481771

**Surrogate Quality Control**

MSD 76

---

Limits: 51-120

Analysis Name: Method 8021 Water Master  
Batch number: 14170A53A  
Trifluorotoluene-P

---

7498311	78
7498313	98
7498315	78
7498317	78
7498319	78
7498321	80
7498327	71
7498337	78
7498339	77
7498341	77
7498343	78
Blank	78
LCS	77
LCSD	77

---

Limits: 51-120

Analysis Name: Method 8021 Water Master  
Batch number: 14171A53B  
Trifluorotoluene-P

---

7498329	83
Blank	80
LCS	75
MS	76
MSD	76

---

Limits: 51-120

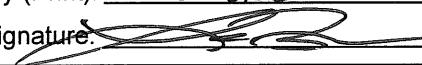
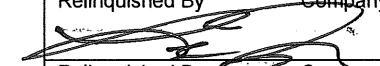
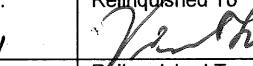
\*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.  
(2) The unspiked result was more than four times the spike added.

## CHAIN OF CUSTODY FORM

Chevron Environmental Management Company ■ 6001 Bollinger Canyon Road ■ San Ramon, CA 94583-2324

COC 1 of 2

Chevron Site Number: <u>100-1327</u> Program Designation: <u>CMP</u> Site Address (street, city, state / county): <u>1602 N Northlake Place, Seattle, WA</u> Chevron PM: <u>Marlea Harmon</u> Chevron PM Phone No.: <input type="checkbox"/> Retail and Terminal Business Unit (RTBU) Job <input type="checkbox"/> Construction/Retail Job				Chevron Consultant: <u>ARCADIS</u> Address: <u>1100 olive Way, Suite 800, Seattle WA</u> Consultant Contact: <u>Sam Miles</u> Consultant Phone No. <u>206-853-7428</u> Consultant Project No. <u>140G10-LB1</u> Sampling Company: <u>Blaine Tech Services</u> Sampled By (Print): <u>LEE BURES</u> Sampler Signature: 				<b>ANALYSES REQUIRED</b>									
												Preservation Codes  H =HCl T= Thiosulfate N =HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other <u>11964</u> <u>1481771</u> <u>7498311-45</u>					
<b>Charge Code:</b> <u>NWRTB 00SITE NUMBER-0- OML</u> <b>WBS ELEMENTS:</b> <u>SITE ASSESSMENT: A1L REMEDIATION IMPLEMENTATION: R5L</u> <u>SITE MONITORING: OML OPERATION MAINTENANCE &amp; MONITORING: M1L</u>				<b>Lancaster Laboratories</b> <input checked="" type="checkbox"/> Lancaster, PA Lab Contact: Megan Moeller 2425 New Holland Pike, Lancaster, PA 17601 Phone No: (717)656-2300	Other Lab	Temp. Blank Check Time	Temp.							Special Instructions			
<b>SAMPLE ID</b>				Sample Time	# of Containers	Container Type	BTE BY 8021	DISSOLVED NAPHTHALENE	(FIELD FILTERED)	DISSOLVED CPAHs (8270C SIM)	(FIELD FILTERED)	DISSOLVED ARSENIC	(FIELD FILTERED)	TPH-D AND TPH-O BY (NWTPH-Dx)  TPH-G (NWTPH-Gx)	ALKALINITY 2320 □  DISSOLVED LEAD (6020)	TPH-D AND TPH-O BY (NWTPH-Dx)  TPH-G (NWTPH-Gx)	RBDM VOCs (OREGON RISK BASED DECISION MAKING LIST)  SULFATE 300 □ NITRATE 300 □ FERROUS IRON SM20 3500 □
Field Point Name	Matrix	Top Depth	Date (yymmdd)														
MW-4	Gw	—	140611	0746	G	VAC, AMBER, POLY	X	X	X	X	X	X					
MW-7	Gw	—	140611	1002	G		X	X	X	X	X	X					
MW-8A	Gw	—	140611	0713	G		X	X	X	X	X	X					
MW-11	Gw	—	140611	1252	G		X	X	V	V	X	X					
MW-14	Gw	—	140611	1118	G		X	X	X	X	X	X					
MW-15	Gw	—	140611	1147	G		X	X	X	X	X	X					
MW-19	Gw	—	140610	1233	G		X	X	X	X	X	X					
MW-20	Gw	—	140610	1305	G		X	X	X	X	X	X					
MW-21	Gw	—	140611	0931	G		X	X	X	X	X	X					
MW-22	Gw	—	140611	1219	G		X	X	X	X	X	X					
Relinquished By	Company	Date/Time:		Relinquished To	Company	Date/Time:		Turnaround Time: Standard <input checked="" type="checkbox"/> 24 Hours <input type="checkbox"/> 48 hours <input type="checkbox"/> 72 Hours <input type="checkbox"/>									
		<u>6/11/14</u>			<u>LLI</u>	<u>6/12/14 16:00</u>											
Relinquished By	Company	Date/Time		Relinquished To	Company	Date/Time		Sample Integrity: (Check by lab on arrival) Intact: <input checked="" type="checkbox"/> On Ice: <input checked="" type="checkbox"/> Temp: <u>0.5 - 1.0 °C</u>									
Relinquished By	Company	Date/Time		Relinquished To	Company	Date/Time		COC #									
					<u>EEG</u>	<u>6/13/14 0945</u>											

## **CHAIN OF CUSTODY FORM**

Chevron Environmental Management Company ■ 6001 Bollinger Canyon Road ■ San Ramon, CA 94583-2324

COC 2 of 2

Chevron Site Number: <u>100-1327</u> Program Designation: <u>CMP</u> Site Address (street, city, state / county): <u>1602 N Northlake Place, Seattle, WA</u> Chevron PM: <u>Marlea Harmon</u> Chevron PM Phone No.: <input type="checkbox"/> Retail and Terminal Business Unit (RTBU) Job <input type="checkbox"/> Construction/Retail Job				Chevron Consultant: <u>ARCADIS</u> Address: <u>1100 olive Way, Suite 800, Seattle WA</u> Consultant Contact: <u>Sam Miles</u> Consultant Phone No. <u>206-853-7428</u> Consultant Project No. <u>140610-LBI</u> Sampling Company: <u>Blaine Tech Services</u> Sampled By (Print): <u>Lee Bures</u> Sampler Signature: <u>[Signature]</u>				<b>ANALYSES REQUIRED</b>							
<b>Charge Code:</b> <u>NWRTB 00SITE NUMBER-0- OML</u> <b>WBS ELEMENTS:</b> SITE ASSESSMENT: A1L REMEDIATION IMPLEMENTATION: R5L SITE MONITORING: OML OPERATION MAINTENANCE & MONITORING: M1L				<b>Lancaster Laboratories</b> <input checked="" type="checkbox"/> Lancaster, PA Lab Contact: Megan Moeller 2425 New Holland Pike, Lancaster, PA 17601 Phone No: (717)656-2300				Other Lab		Temp. Blank Check Time Temp.					
<b>SAMPLE ID</b>				Sample Time	# of Containers	Container Type	BTE BY 8021	DISSOLVED NAPHTHALENES	DISSOLVED CPAHs (8270C SIM)	DISSOLVED LEAD	DISSOLVED ARSENIC				Special Instructions
Field Point Name	Matrix	Top Depth	Date (yyymmdd)												
MW-24	GW	—	140610	1158	6	LEA. AMBER POLY	X	X	X	X					
MW-25	GW	—	140610	1351	6		X	X	X	X					
MW-26	GW	—	140610	1418	6		X	X	X	X					
AGI-2	GW	—	140611	0859	6		X	X	X	X					
MILU-1	GW	—	140611	0824	6		X	X	X	X					
MILU-3	GW	—	140611	1033	6		X	X	X	X					
DUP	GW	—	140611	—	6		X	X	X	X					
QA	GW	—	140610	0800	3	VAC	X								
Relinquished By <u>[Signature]</u> Company <u>Company</u> Date/Time: <u>6/11/14</u>				Relinquished To <u>[Signature]</u> Company <u>LLC</u> Date/Time <u>6/12/14 16:00</u>				Turnaround Time: Standard <input checked="" type="checkbox"/> 24 Hours <input type="checkbox"/> 48 hours <input type="checkbox"/> 72 Hours							
Relinquished By <u>[Signature]</u> Company Date/Time				Relinquished To <u>[Signature]</u> Company Date/Time				Sample Integrity: (Check by lab on arrival) Intact: <input checked="" type="checkbox"/> On Ice: <input checked="" type="checkbox"/> Temp: <u>0.5 - 1.0 °C</u>							
Relinquished By <u>[Signature]</u> Company Date/Time				Relinquished To <u>[Signature]</u> Company Date/Time <u>6/13/14 0945</u>				COC #							

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

<b>RL</b>	Reporting Limit	<b>BMQL</b>	Below Minimum Quantitation Level
<b>N.D.</b>	none detected	<b>MPN</b>	Most Probable Number
<b>TNTC</b>	Too Numerous To Count	<b>CP Units</b>	cobalt-chloroplatinate units
<b>IU</b>	International Units	<b>NTU</b>	nephelometric turbidity units
<b>umhos/cm</b>	micromhos/cm	<b>ng</b>	nanogram(s)
<b>C</b>	degrees Celsius	<b>F</b>	degrees Fahrenheit
<b>meq</b>	milliequivalents	<b>lb.</b>	pound(s)
<b>g</b>	gram(s)	<b>kg</b>	kilogram(s)
<b>µg</b>	microgram(s)	<b>mg</b>	milligram(s)
<b>mL</b>	milliliter(s)	<b>L</b>	liter(s)
<b>m³</b>	cubic meter(s)	<b>µL</b>	microliter(s)
		<b>pg/L</b>	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

**ppm** parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

**ppb** parts per billion

**Dry weight basis** Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

**Data Qualifiers:**

**C** – result confirmed by reanalysis.

**J** - estimated value – The result is  $\geq$  the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

**U.S. EPA CLP Data Qualifiers:**

**Organic Qualifiers**

- A** TIC is a possible aldol-condensation product
- B** Analyte was also detected in the blank
- C** Pesticide result confirmed by GC/MS
- D** Compound quantitated on a diluted sample
- E** Concentration exceeds the calibration range of the instrument
- N** Presumptive evidence of a compound (TICs only)
- P** Concentration difference between primary and confirmation columns  $>25\%$
- U** Compound was not detected
- X,Y,Z** Defined in case narrative

**Inorganic Qualifiers**

- B** Value is <CRDL, but  $\geq$ IDL
- E** Estimated due to interference
- M** Duplicate injection precision not met
- N** Spike sample not within control limits
- S** Method of standard additions (MSA) used for calculation
- U** Compound was not detected
- W** Post digestion spike out of control limits
- \* Duplicate analysis not within control limits
- + Correlation coefficient for MSA  $<0.995$

**Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.**

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as "analyze immediately" are not performed within 15 minutes.

**WARRANTY AND LIMITS OF LIABILITY** - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.