



July 7, 2009

Ms. Olivia Skance  
Chevron Environmental Management Company  
6111 Bollinger Canyon Road K2252  
San Ramon, CA 94583

**RECEIVED**

JUL 13 2009  
3 9

**DEPT OF ECOLOGY  
Toxics Cleanup Program**

**Subject: Semi-Annual Groundwater Monitoring Report April 2009  
Former Texaco Service Station / Chevron Site No. 21-1577  
631 Queen Anne Ave North  
Seattle, WA**

Dear Ms. Skance:

Science Applications International Corporation (SAIC), on behalf of Chevron Environmental Management Company (Chevron), has prepared this letter summarizing the latest groundwater monitoring and sampling results from the above referenced property in Seattle, Washington. The second quarterly 2009 groundwater monitoring and sampling event was conducted by Gettler-Ryan Inc. on April 30, 2009.

Groundwater elevation and analytical data; along with field data sheets and a laboratory analytical report are presented in the Gettler-Ryan, Inc. *Groundwater Monitoring and Sampling Report*, which is included as Attachment A.

### **FIELD ACTIVITIES**

Depth-to-groundwater measurements were collected from each of the thirty-nine monitoring wells on the Site. Each monitoring well was also checked for the presence of separate-phase hydrocarbon (SPH). SPH was not detected in any of the monitoring wells gauged during this event.

At the time of this monitoring event, groundwater elevations ranged from 104.24 feet in monitoring well VP-9 to 67.00 feet in monitoring well MW-30, based on an arbitrary benchmark elevation of 100.00 feet. The groundwater flow, at the time of the sampling event, was westerly with a gradient of 0.02 to 0.09 feet per foot (ft/ft) and had an average increase of 1.14 feet, with the exception of DPE-5 which increased 7.82 feet, since the previous groundwater monitoring event performed in November 2008.

Each monitoring well gauged was inspected for condition and security. Groundwater gauging and sampling field data sheets are included in Attachment A.

Groundwater samples were collected from 25 monitoring wells and submitted to Lancaster Laboratories for analysis of the following:

- Gasoline-range hydrocarbons by Washington State Department of Ecology (WDOE) Method NWTPH-Gx;
- Diesel and heavy oil-range hydrocarbons by WDOE Method NWTPH-Dx with silica gel cleanup;
- Benzene, toluene, ethylbenzene and total xylenes (BTEX) by United States Environmental Protection Agency (USEPA) Method 8260B.

Additional analyses were performed on 15 of these wells for monitored natural attenuation (MNA) parameters including:

- Alkalinity by SM20 2320B;
- Iron and manganese by EPA Method 6010B;
- Ferrous iron by SM 3500FeB;
- Sulfate, nitrate, and nitrite by EPA Method 300.0; and
- Sulfide by SM20 4500 S2 D.

Analytical results are presented in Tables 1 and 2 and laboratory reports are included as Attachment A.

## GROUNDWATER ANALYTICAL RESULTS

Gasoline-range hydrocarbons (TPH-G) were detected in 7 of the 25 monitoring wells sampled exceeding the Model Toxics Control Act (MTCA) Method A Cleanup Level (CUL) of 800 micrograms per liter ( $\mu\text{g/L}$ ). Concentrations of gasoline-range hydrocarbons exceeding the MTCA Method A CUL were detected in monitoring wells VP-8, MW-4, MW-6, MW-14, MW-33, DPE-6, and DPE-8 with concentrations ranging from 900  $\mu\text{g/L}$  to 6,200  $\mu\text{g/L}$  in DPE-6 and MW-14, respectively.

Diesel-range hydrocarbons (TPH-D) were detected in 10 of the 25 monitoring wells sampled above the MTCA Method A CUL of 500  $\mu\text{g/L}$ . Analytical results above the MTCA Method A CUL were detected in monitoring wells VP-5, MW-4, MW-6, MW-9, MW-14, MW-18, DPE-5, DPE-6, and DPE-8 with concentrations ranging from 690  $\mu\text{g/L}$  to 26,000  $\mu\text{g/L}$  in DPE-5 and MW-6, respectively.

Heavy oil-range hydrocarbons (TPH-O) were detected in 3 of the 25 monitoring wells sampled exceeding the MTCA Method A CUL of 500  $\mu\text{g/L}$ . Concentrations were detected in monitoring wells MW-6 (3,000  $\mu\text{g/L}$ ), DPE-6 (880  $\mu\text{g/L}$ ), and DPE-8 (590  $\mu\text{g/L}$ ).

Benzene was detected in 9 of the 25 monitoring wells sampled exceeding the respective MTCA Method A CUL of 5  $\mu\text{g/L}$ . Monitoring wells MW-4, MW-6, MW-14, MW-17, MW-21, MW-26, MW-33, MW-35, DPE-6, DPE-8, and RW-2 exceeded the MTCA Method A CUL with concentrations ranging from 2,500  $\mu\text{g/L}$  to 5  $\mu\text{g/L}$  in MW-33 and MW-17, respectively. None of the other BTEX constituents (toluene, ethylbenzene, or xylenes) analyzed during this event were present at concentrations exceeding their respective MTCA Method A CULs.

MNA parameters including alkalinity, total iron, ferrous iron, manganese, sulfate, sulfide, nitrate and nitrite were monitored during this sampling event. The results of these analyses will be used for future evaluation of the natural attenuation capacity of the local aquifer. MNA sampling results are presented in Table 2 of Attachment A.

### QUALITY ASSURANCE SAMPLES

Duplicate groundwater samples were collected from wells MW-6, MW-17, and MW-30 and submitted for all of the same analysis as the sample for which they were duplicates. The gasoline-range hydrocarbons, toluene, and total xylenes results were well correlated (i.e. difference between concentrations was within  $\pm 10$  percent) between the groundwater sample and duplicate. Benzene and ethylbenzene results were slightly greater than 10 percent between the original and duplicate for monitoring wells MW-6 and MW-17.

Three field blank samples were collected during the groundwater monitoring event. The field blank samples were collected at well MW-6 (MW-6-FB), MW-17 (MW-17-FB), and MW-30 (MW-30-FB). Field blank samples were analyzed for BTEX by EPA Method 8260B and for gasoline-range hydrocarbons by WDOE Method NWTPH-Gx. No analytes were detected above their respective laboratory detection limits in any of the field blank samples.

Trip blank samples were provided by Lancaster Laboratories and accompanied volatile organic compound (VOC) sample containers throughout the sampling. The trip blank samples were analyzed for BTEX by EPA Method 8260B and for gasoline-range hydrocarbons by WDOE Method NWTPH-Gx. No analytes were detected above their respective laboratory detection limits in any of the trip blank samples. Duplicate, field blank, and trip blank results are presented in Table 1 of Attachment A.

### CONCLUSION

The April 2009 semi-annual groundwater monitoring event performed at this site, represents the third groundwater monitoring event performed since shut-down of the DPE remediation system in April 2008. This event was also the first groundwater monitoring event performed by Gettler-Ryan Inc. since start-up of the DPE system.

The results from this event are generally consistent with the results of the two previous groundwater monitoring events performed in April and November of 2008. Benzene, TPH-G, TPH-D and TPH-O continue to be detected at concentrations above their respective MTCA Method A CULs from monitoring wells throughout the Site. However, when compared to baseline contaminant concentrations that existed prior to operation of the DPE system (November 2005), the results from the last three sampling events indicate that the system has effectively reduced benzene and TPH-G concentrations within the area of active remediation. Monitoring wells for which long established concentration trends exist, such as MW-4, MW-6, MW-14, MW-18, indicate that benzene reductions of two orders of magnitude and TPH-G reductions of an order of magnitude were achieved on the Manhattan Express, Del Roy Apartments and Monterey Apartments properties. But, as expected for a vapor extraction based remediation technology, DPE at the Site has not resulted in significant reductions in diesel and heavy-oil range hydrocarbon concentrations.

Monitoring well MW-33, located near the southwestern corner of the U-Park parking lot, contained the highest concentration of benzene detected since shut-down of the DPE system.

Contamination in this area is likely remnant dissolved phase impact resulting from groundwater migration through the contaminant source zone that existed on the Manhattan Express, Del Roy and Monterey properties. Continued declines in these dissolved hydrocarbon concentrations are expected due to cleanup of the upgradient source zone by DPE and due to the ongoing natural attenuation of the petroleum hydrocarbons present across the entire Site.

While performing this sampling event, Gettler-Ryan Inc. noted a number of well boxes with missing cover bolts and two monitoring wells (MW-12 and MW-21) with broken cover bolt flanges. SAIC will arrange to complete repairs of these well boxes prior to the next groundwater monitoring event.

The next semi-annual groundwater monitoring event is scheduled to be performed by G-R in November 2009. MNA parameters will continue to be measured and SAIC anticipates presenting a thorough analysis of this data in the next groundwater monitoring summary report.

If you have any questions regarding the content of this letter, please contact Peter Catterall at 425-482-3321 or at [catterallp@saic.com](mailto:catterallp@saic.com).

Sincerely,

*SCIENCE APPLICATIONS INTERNATIONAL CORPORATION*



Peter Catterall  
Project Manager

Enclosures:

Attachment A: Gettler-Ryan Inc. - Groundwater Monitoring and Sampling Report, Event of April 13, 14, 15, and 16, 2009, Former Chevron Texaco Service Station No. 21-1577, 631 Queen Anne Avenue North, Seattle, WA

cc: Chris Maurer, WDOE Northwest Region, Toxics Cleanup Program  
Paul McTaggard, Darco, Inc.  
Mr. Gerry Pigotti, Monterey Apartments, LLC  
Mr. Burt Hyde, Sound Environmental Strategies  
Accession #: 16102.20090616.001

**Attachment A:**  
**Gettler-Ryan Inc. – Groundwater Monitoring and Sampling Report**



# GETTLER-RYAN INC.

## TRANSMITTAL

May 29, 2009  
G-R #386765

TO: Mr. Peter H. Catterall  
SAIC  
18912 North Creek Parkway, Suite 101  
Bothell, WA 98011

FROM: Deanna L. Harding  
Project Coordinator  
Gettler-Ryan Inc.  
6747 Sierra Court, Suite J  
Dublin, California 94568

RE: Former Texaco Service Station  
631 Queen Anne Avenue North  
Seattle, Washington  
(Site #211577)

### WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
6	May 27, 2009	Groundwater Monitoring and Sampling Report Event of April 13, 14, 15, and 16, 2009

### COMMENTS:

Pursuant to your request, we are providing you with copies of the above referenced report for your use and distribution to the following:

- Ms. Olivia Skance, Chevron Environmental Management Company, 6111 Bollinger Canyon Road, Room 3636, San Ramon, CA 94583
- Mr. Chris Maurer, WDOE, Toxics Cleanup Division, P.O. Box 47775, Olympia, WA 98504-7775
- Mr. Paul McTaggard, Darco, Inc., 420 East Howell, Seattle, WA 98122
- Mr. Gerry Pigotti, Monterey Apartments, LLC, 1525 4<sup>th</sup> Avenue, Suite 500, Seattle, WA 98101
- Mr. Burt Hyde, Sound Environmental Strategies, 2400 Airport Way, Suite 200, Seattle, WA 98134

Current Site Check List included.

Enclosure

trans/211577-BH



# GETTLER - RYAN INC.

## CHEVRON - SITE CHECK LIST

Facility#: **Chevron #211577** Date: **4/13 - 4/17/09** <sup>-16/09</sup>

Address: **631 Queen Anne North**

City/St.: **Seattle, WA**

Status of Site: **Queen ANNE Neighborhood**

### DRUMS:

Please list below ALL DRUMS @ site: i.e., drum description, condition, labeling, contents, location of drum:



#	Description	Condition	Labeling	Contents	Location
	NO				
	DRUMS				

### WELLS:

Please check the condition of ALL WELLS @ site: i.e., well box condition, well plug, well lock, etc.:



Well ID	Well Box	Bolts	Well Plug	Well Lock	Other
VP-2	OK	NO BOLTS	OK	OK	
<del>VP-4</del>					
VP-4	OK	NO BOLTS	OK	OK	
VP-5		OK			
VP-7					
VP-8					
VP-9					
MW-4		NO BOLTS			
MW-6		OK			
MW-9		1 MISSING			
MW-10		OK			
MW-11		NO BOLTS			
MW-12	1 BROKEN FLANGE	MISSING			
MW-13	OK	OK			
MW-14		OK			
MW-15		NO BOLTS			
MW-16		2 MISSING			
MW-17		MISSING			
MW-18		2 MISSING			
MW-19		OK			
MW-20		1 MISSING			
MW-21	1 BROKEN FLANGE	MISSING			

Additional Comments/Observations:



# GETTLER-RYAN INC.

## CHEVRON - SITE CHECK LIST

Facility#: Chevron #211577

Date: 4/13-16/09

Address: 631 Queen Anne North

City/St.: Seattle, WA

Status of Site:

**DRUMS:** Please list below ALL DRUMS @ site: i.e., drum description, condition, labeling, contents, location of drum:



#	Description	Condition	Labeling	Contents	Location

**WELLS:** Please check the condition of ALL WELLS @ site: i.e., well box condition, well plug, well lock, etc.:



Well ID	Well Box	Bolts	Well Plug	Well Lock	Other
MW-23	OK	OK	OK	OK	
MW-24		OK			
MW-25		MISSING			
MW-26		MISSING			
MW-30		OK			
MW-31					
MW-32					
MW-33					
MW-34		MISSING			
MW-35		OK			
DPE-1					
RW-2					
DPE-3					
DPE-4					
DPE-5					
DPE-6					
DPE-7					
DPE-8					
DPE-9					
DPE-Z					

Additional Comments/Observations:





# GETTLER - RYAN INC.

May 27, 2009  
Job #386765

Ms. Olivia Skance  
Chevron Environmental Management Company  
6111 Bollinger Canyon Rd., Room 3636  
San Ramon, CA 94583

**RE: Event of April 13, 14, 15, and 16, 2009**  
Groundwater Monitoring & Sampling Report  
Former Texaco Service Station  
631 Queen Anne Avenue North  
Seattle, Washington  
(Site #211577)

Dear Ms. Skance:


This report documents the most recent groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R) at the referenced site. All fieldwork was conducted in accordance with G-R Standard Operating Procedure - Groundwater Sampling (attached).

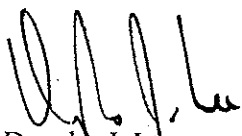
Static groundwater levels were measured and the wells were checked for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were not present in any wells. Separate Phase Hydrocarbon Thickness/Removal Data is presented in Table 1. Static water level data and groundwater elevations are presented in Table 1. A Potentiometric Map is included as Figure 1.

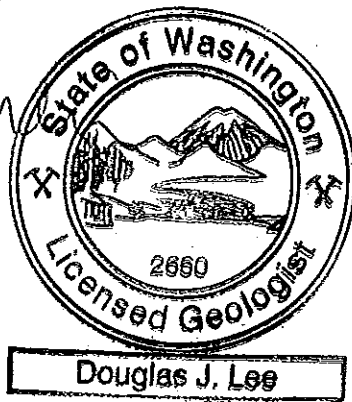
Groundwater samples were collected from the monitoring wells and submitted to a state certified laboratory for analyses. The field data sheets for this event are attached. Analytical results are presented in the table(s) listed below. The chain of custody document and laboratory analytical reports are attached. Purge water was treated by filtration through granular activated carbon and was subsequently discharged.

Please call if you have any questions or comments regarding this report. Thank you.

Sincerely,

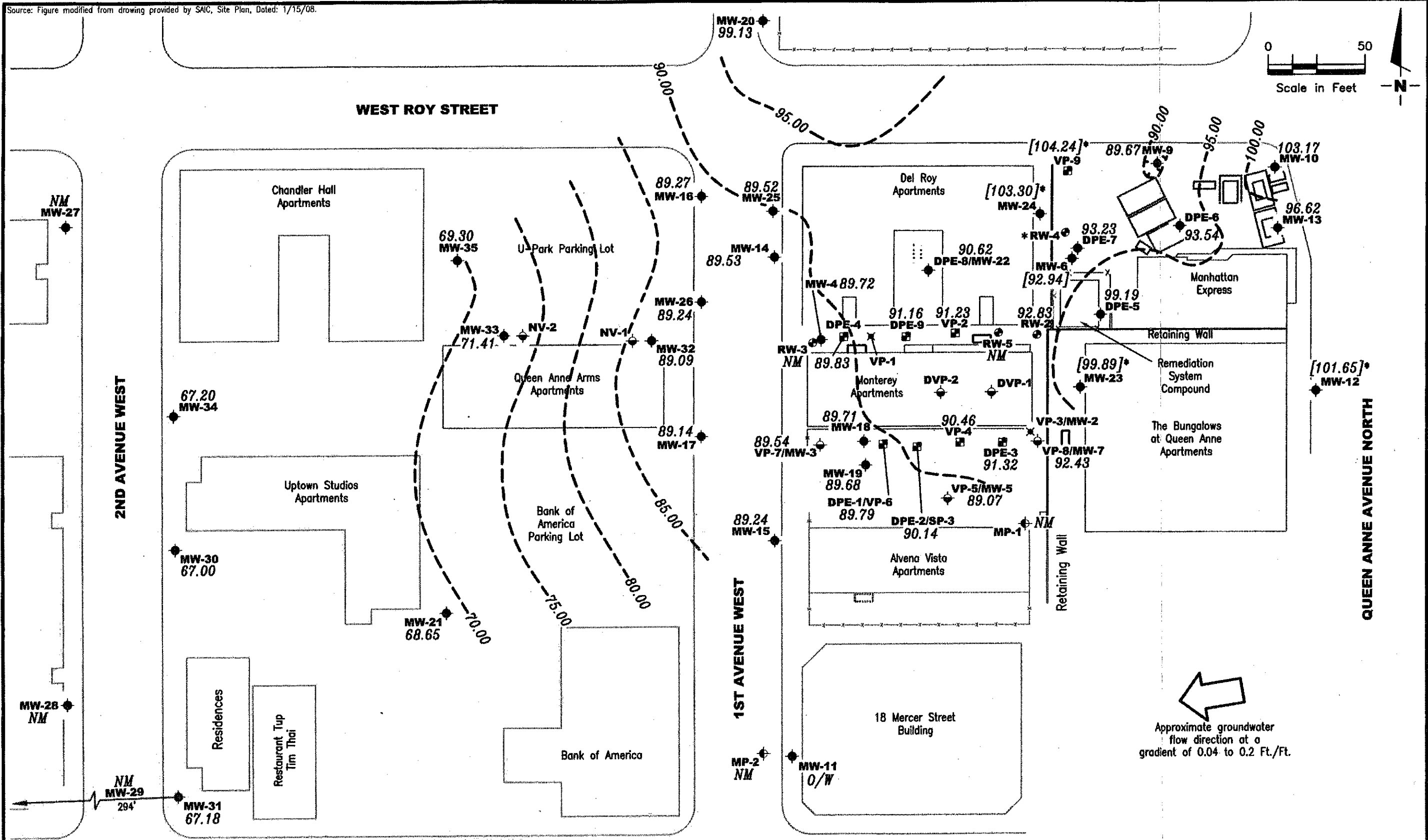
  
Deanna L. Harding  
Project Coordinator

  
Douglas J. Lee  
Senior Geologist, L.G. No. 2660



- Figure 1: Potentiometric Map
- Table 1: Groundwater Monitoring Data and Analytical Results
- Table 2: Groundwater Analytical Results
- Table 3: Separate Phase Hydrocarbon Thickness/Removal Data
- Table 4: Groundwater Analytical Results - SVOCs and PAHs
- Table 5: Groundwater Analytical Results - VOCs
- Table 6: Groundwater Analytical Results - Dissolved Metals
- Table 7: Groundwater Analytical Results - Oxygenate Compounds
- Attachments: Standard Operating Procedure - Groundwater Sampling  
Field Data Sheets  
Chain of Custody Document and Laboratory Analytical Reports

Source: Figure modified from drawing provided by SAIC, Site Plan, Dated: 1/15/08.



**EXPLANATION**

◆	Monitoring well (Former Texaco)	■	Vapor well (Former Unocal)	99.99	Groundwater elevation in feet referenced to Mean Sea Level	[99.99]*	Not used in contouring, well in perched zone	O/W	Obstruction in Well
◆	Monitoring well (Former Texaco) (Deep Zone)	●	Recovery well (Former Unocal)	- - - 99.99 - - -	Groundwater elevation contour, dashed where inferred	[99.99]	Not used in contouring	NM	Not Monitored
◆	Monitoring/vapor well (Former Unocal)	✕	Destroyed well					*	Discontinued from monitoring/sampling program

←  
Approximate groundwater flow direction at a gradient of 0.04 to 0.2 Ft./Ft.

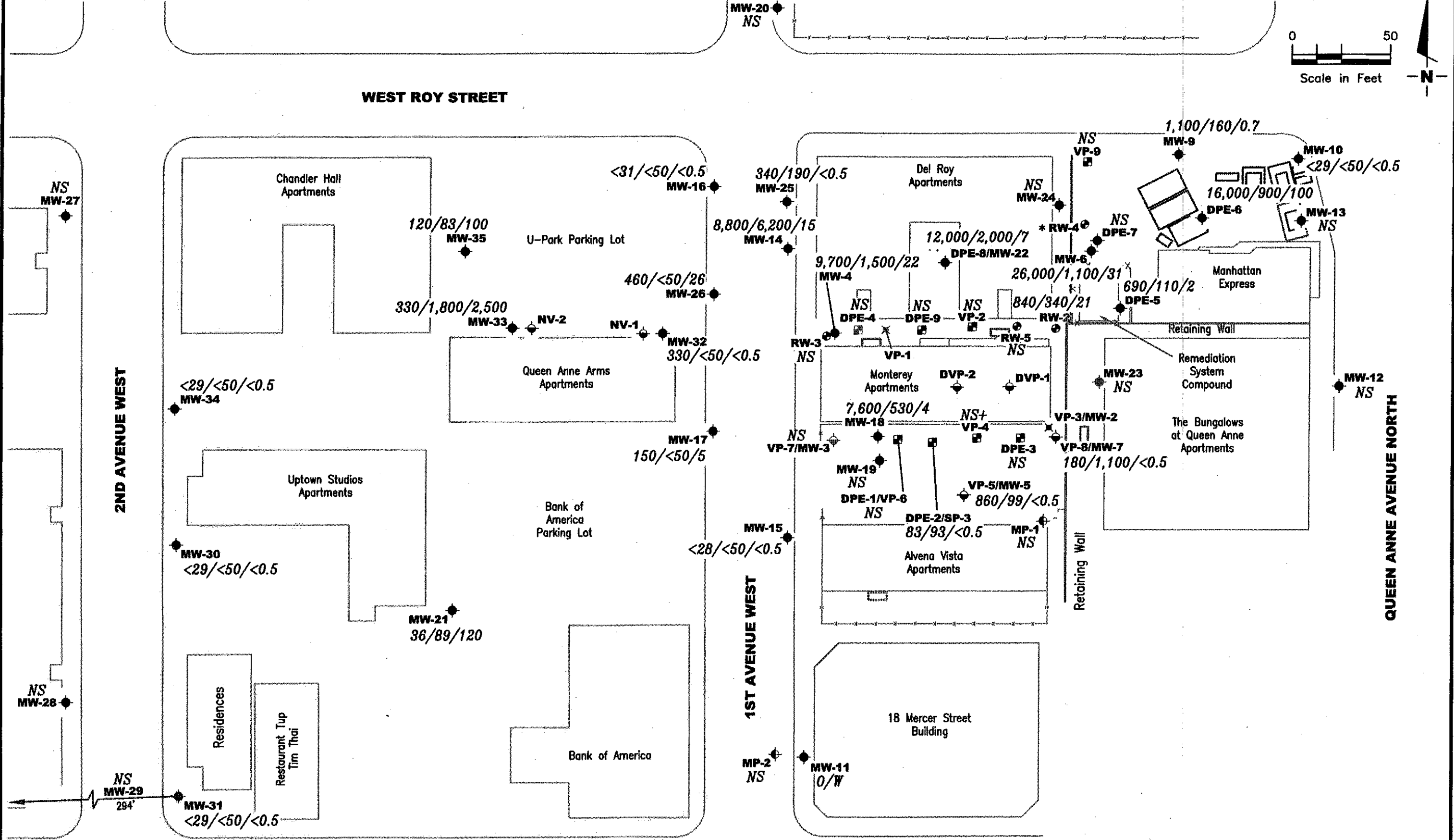
FIGURE

**POTENTIOMETRIC MAP**  
Former Texaco Service Station  
631 Queen Anne Avenue North  
Seattle, Washington (Site #211577)

**GETTLER-RYAN INC.**  
6747 Sierra Court, Suite J  
Dublin, CA 94568  
(925) 551-7555

PROJECT NUMBER: 386765  
REVIEWED BY: [Signature]  
DATE: April 13, 2009  
REVISED DATE: [Blank]

FILE NAME: P:\Environ\Texaco\211577\009-211577.dwg | Layout Tab: Pot2



**EXPLANATION**

- |   |   |   |                               |       |  |     |   |
|---|---|---|-------------------------------|-------|--|-----|---|
| ◆ | Monitoring well (Former Texaco)             | ■ | Vapor well (Former Unocal)    | A/B/C | TPH-DRO/TPH-GRO/Benzene concentrations in µg/L | NS  | Not Sampled                                   |
| ◆ | Monitoring well (Former Texaco) (Deep Zone) | ● | Recovery well (Former Unocal) | NS+   | Not Sampled due to insufficient water          | O/W | Obstruction in Well                           |
| ◆ | Monitoring/vapor well (Former Unocal)       | ✕ | Destroyed well                |       |  | *   | Discontinued from monitoring/sampling program |

**NOTE:** Benzene by EPA Method 8260

**Table 1**

Groundwater Monitoring Data and Analytical Results  
 Former Texaco Service Station (Site #211577)  
 631 Queen Anne Avenue North  
 Seattle, Washington

WELL ID/ DATE	TOC (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH- DRO (µg/L)	TPH- HRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	D. LEAD (µg/L)
<b>VP-2</b>													
12/15/99	104.72	--	--	--	--	29,900	<2,500 <sup>23</sup>	5,980	935	345	43.8	305	--
06/14/00	104.72	--	--	--	--	2,810	<1,000 <sup>23</sup>	2,030	45.9	16.2	<3.00	196	--
07/24/02	104.72	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--	--
10/17-18/02	104.72	--	13.60	0.00	91.12	NOT SAMPLED DUE TO INSUFFICIENT WATER							
01/21/03	104.72	--	13.63	0.00	91.09	NOT SAMPLED DUE TO INSUFFICIENT WATER							
04/23-24/03	104.72	--	12.15	0.00	92.57	12,100 <sup>1</sup>	<250 <sup>1</sup>	6,230	549	42.6	106	1,120	1.52 <sup>16</sup>
06/30-07/01/03	104.72	--	12.51	0.00	92.21	35,900 <sup>1</sup>	1,380 <sup>1</sup>	3,330	180	58.8	32.4	510	3.97 <sup>16</sup>
10/01-02/03	104.72	--	14.12	0.00	90.60	NOT SAMPLED DUE TO INSUFFICIENT WATER							
01/21-23/04	104.72	--	13.06	0.00	91.66	480,000 <sup>1</sup>	<56,000 <sup>1,23</sup>	1,700	69	16	<10	210	5.3 <sup>16</sup>
04/29-30/04	104.72	--	10.53	0.00	94.19	850 <sup>1</sup>	2,200 <sup>1</sup>	6,400	1,500	94	68	760	2.1 <sup>16</sup>
07/15-16/04	104.72	--	13.52	0.00	91.20	NOT SAMPLED DUE TO INSUFFICIENT WATER							
08/03/04 <sup>8</sup>	104.72	--	13.66	0.00	91.06	--	--	--	--	--	--	--	--
10/28-11/01/04	105.11	--	14.18	0.00	90.93	NOT SAMPLED DUE TO INSUFFICIENT WATER							
01/24-31/05	105.11	--	13.51	0.00	91.60	24,000 <sup>1</sup>	1,600 <sup>1</sup>	640	23	3.6	5.3	57	--
04/18-21/05	NP	--	13.20	0.00	91.91	120,000 <sup>1</sup>	8,700 <sup>1</sup>	<50	2.1	<0.5	<0.5	3.6	--
07/27-28/05	105.11	--	13.75	0.00	91.36	NOT SAMPLED							
11/08-10/05	105.11	DRY	--	--	--	--	--	--	--	--	--	--	--
02/22/06	105.11	--	12.02	0.00	93.09	--	--	--	--	--	--	--	--
04/17/06	105.11	--	DRY	0.00	--	NOT SAMPLED DUE TO INSUFFICIENT WATER							
10/17/06	105.11	--	14.66	0.00	90.45	--	--	--	--	--	--	--	--
04/17/07	105.11	--	DRY	0.00	--	NOT SAMPLED DUE TO INSUFFICIENT WATER							
12/04/07	105.11	--	14.70	0.00	90.41	--	--	--	--	--	--	--	--
04/28/08	105.11	--	14.65 <sup>23</sup>	0.00	90.46	--	--	--	--	--	--	--	--
11/03/08	105.11	--	14.76	0.00	90.35	--	--	--	--	--	--	--	--
04/13-16/09	105.11	--	13.88	0.00	91.23	--	--	--	--	--	--	--	--
<b>VP-4</b>													
06/13/00	103.35	--	--	--	--	1,850	<552 <sup>23</sup>	26,400	1,020	3,270	809	6,160	--
07/24/02	103.35	--	11.89	0.00	91.46	78,000 <sup>1</sup>	<9,700 <sup>1,23</sup>	89,000	7,300	7,500	1,900	13,000	28.0
10/17-18/02	103.35	12.75	12.78	0.03	90.59***	NOT SAMPLED DUE TO THE PRESENCE OF SPH							
01/21/03	103.35	12.61	12.71	0.10	90.72***	NOT SAMPLED DUE TO THE PRESENCE OF SPH							
04/23-24/03	103.35	11.72	11.75	0.03	91.62***	NOT SAMPLED DUE TO THE PRESENCE OF SPH							
06/30-07/01/03	103.35	12.31	12.34	0.03	91.03***	NOT SAMPLED DUE TO THE PRESENCE OF SPH							
10/01-02/03	103.35	13.26	13.29	0.03	90.08**	NOT SAMPLED DUE TO THE PRESENCE OF SPH							

**Table 1**  
 Groundwater Monitoring Data and Analytical Results  
 Former Texaco Service Station (Site #211577)  
 631 Queen Anne Avenue North  
 Seattle, Washington

WELL ID/ DATE	TOC (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH- DRO (µg/L)	TPH- HRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	D. LEAD (µg/L)	
<b>VP-4 (cont)</b>														
01/21-23/04	103.35	12.34	12.37	0.03	91.00**	NOT SAMPLED DUE TO THE PRESENCE OF SPH						--	--	--
04/29-30/04	103.35	--	12.21	0.00	91.14	28,000 <sup>1</sup>	<2,300 <sup>1,23</sup>	150	1.7	2.6	1	20	4.0 <sup>16</sup>	
07/15-16/04	103.35	--	12.62	0.00	90.73	18,600 <sup>1</sup>	789 <sup>1,2</sup>	32,200	2,230	746	212	3,710	8.90 <sup>16</sup>	
08/03/04 <sup>8</sup>	103.35	--	12.91	0.00	90.44	--	--	--	--	--	--	--	--	
10/28-11/01/04	103.35	--	12.98	0.00	90.37	330,000 <sup>1</sup>	<100,000 <sup>1,23</sup>	48,000	2,500	1,400	560	5,400	--	
01/24-31/05	103.35	--	12.38	0.00	90.97	110,000 <sup>1</sup>	<9,500 <sup>1,23</sup>	19,000	360	750	89	2,000	--	
04/18-21/05	NP	--	12.14	0.00	91.21	46,000 <sup>1</sup>	<10,000 <sup>1,23</sup>	2,800	23	30	6.8	270	--	
07/27-28/05	103.35	--	12.51	0.00	90.84	NOT SAMPLED						--	--	
11/08-10/05	103.35	--	12.91	0.00	90.44	NOT SAMPLED						--	--	
02/22/06	103.35	--	11.03	0.00	92.32	--	--	--	--	--	--	--	--	
04/17/06	103.35	--	12.12	0.00	91.23	--	--	--	--	--	--	--	--	
10/17/06	103.35	--	14.10	0.00	89.25	--	--	--	--	--	--	--	--	
04/17/07	103.35	--	DRY	0.00	--	NOT SAMPLED DUE TO INSUFFICIENT WATER						--	--	
12/04/07	103.35	--	DRY	0.00	--	NOT SAMPLED DUE TO INSUFFICIENT WATER						--	--	
04/28/08	103.35	--	DRY	0.00	--	NOT SAMPLED DUE TO INSUFFICIENT WATER						--	--	
11/03/08	103.35	--	DRY	0.00	--	NOT SAMPLED DUE TO INSUFFICIENT WATER						--	--	
04/13-16/09	103.35	--	12.89	0.00	90.46	NOT SAMPLED DUE TO INSUFFICIENT WATER						--	--	
<b>VP-5/MW-5</b>														
11/03/86	103.21	--	15.15	0.00	88.06	--	--	--	--	--	--	--	--	
09/90	102.92	--	13.49	0.00	89.43	--	--	--	--	--	--	--	--	
03/26-28/91	102.91	--	12.58	0.00	90.33	--	--	--	5,300	1,300	900	4,600	--	
07/07/93	102.91	--	12.29	0.00	90.62	--	--	--	--	--	--	--	--	
12/15/99	102.91	--	--	--	--	2,490	<500	23,400	841	191	1,480	7,720	--	
06/13/00	102.91	--	--	--	--	1,340	<1,120 <sup>23</sup>	25,600	793	155	1,380	5,690	--	
07/24/02	102.63	INACCESSIBLE - VEHICLE PARKED OVER WELL												
10/17-18/02	102.63	--	12.31	0.00	90.32	3,900 <sup>1</sup>	<500 <sup>1</sup>	15,900	318	49.3	880	1,870	2.29 <sup>15</sup>	
01/21/03	102.63	INACCESSIBLE - VEHICLE PARKED OVER WELL												
04/23-24/03	102.63	INACCESSIBLE - VEHICLE PARKED OVER WELL												
06/30-07/01/03	102.63	INACCESSIBLE - VEHICLE PARKED OVER WELL												
10/01-02/03	102.63	--	12.81	0.00	89.82	1,500 <sup>1</sup>	270 <sup>1</sup>	22,000	330	76	1,000	2,200	2.4 <sup>16</sup>	
01/21-23/04	102.63	--	11.91	0.00	90.72	1,500 <sup>1</sup>	310 <sup>1</sup>	19,000	310	100	980	1,600	1.7 <sup>16</sup>	
04/29-30/04	102.63	--	11.80	0.00	90.83	1,400 <sup>1</sup>	400 <sup>1</sup>	3,500	61	13	190	180	<0.99 <sup>16</sup>	
07/15-16/04	102.63	--	12.22	0.00	90.41	<250 <sup>1</sup>	<500 <sup>1</sup>	7,900	58.3	18.4	384	475	<1.00 <sup>16</sup>	

**Table 1**

Groundwater Monitoring Data and Analytical Results  
 Former Texaco Service Station (Site #211577)  
 631 Queen Anne Avenue North  
 Seattle, Washington

WELL ID/ DATE	TOC <sup>a</sup> (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH- DRO (µg/L)	TPH- HRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	D. LEAD (µg/L)
<b>VP-5/MW-5 (cont)</b>													
08/03/04 <sup>b</sup>	102.63	--	12.52	0.00	90.11	--	--	--	--	--	--	--	--
10/28-11/01/04	102.63	--	12.57	0.00	90.06	710 <sup>1</sup>	<200 <sup>1</sup>	19,000	98	56	860	1,600	--
01/24-31/05	LFP 102.63	--	11.96	0.00	90.67	910 <sup>1</sup>	<250 <sup>1</sup>	16,000	86	60	770	1,300	--
04/18-21/05	LFP 102.63	--	11.75	0.00	90.88	3,100 <sup>1</sup>	<250 <sup>1</sup>	12,000	39	42	710	1,200	--
07/27-28/05	102.63	--	12.05	0.00	90.58	NOT SAMPLED		--	--	--	--	--	--
11/08-10/05	102.63	--	12.42	0.00	90.21	NOT SAMPLED		--	--	--	--	--	--
02/22/06	102.63	--	10.62	0.00	92.01	--	--	--	--	--	--	--	--
04/17/06	102.63	--	11.56	0.00	91.07	--	--	--	--	--	--	--	--
10/17/06	102.63	--	14.03	0.00	88.60	--	--	--	--	--	--	--	--
04/17/07	102.63	--	DRY	0.00	--	NOT SAMPLED DUE TO INSUFFICIENT WATER		--	--	--	--	--	--
12/04/07	102.63	--	DRY	0.00	--	NOT SAMPLED DUE TO INSUFFICIENT WATER		--	--	--	--	--	--
04/28/08	102.63	--	DRY	0.00	--	NOT SAMPLED DUE TO INSUFFICIENT WATER		--	--	--	--	--	--
11/04/08	102.63	--	14.3	0.00	88.33	160	<66	110	<0.5	<0.5	<0.5	0.8	--
04/13-16/09	PER 102.63	--	13.56	0.00	89.07	860	130	99	<0.5	<0.5	0.7	2	--
<b>VP-7/MW-3</b>													
11/03/86	100.81	--	12.13	0.00	88.68	--	--	--	--	--	--	--	--
09/90	100.51	--	11.48	0.00	89.03	--	--	--	--	--	--	--	--
03/26-28/91	100.48	--	10.36	0.00	90.12	--	--	--	--	--	--	--	--
07/07/93	100.48	--	10.46	0.00	90.02	--	--	20,000	4,700	2,000	910	3,600	--
10/95	100.48	--	NM	--	--	--	--	33,000	11,700	2,330	1,070	4,130	--
01/97	100.48	--	NM	--	--	--	--	51,000	12,400	5,200	990	5,200	--
04/97	100.48	--	NM	--	--	--	--	53,000	11,100	4,800	1,400	7,600	--
07/97	100.48	--	NM	--	--	--	--	37,000	11,000	3,700	1,500	7,100	--
11/97	100.48	--	NM	--	--	--	--	34,000	15,900	3,600	1,500	6,600	--
12/14/99	100.48	--	NM	--	--	3,310	<500	73,400	16,800	9,670	1,890	10,500	--
06/14/00	100.48	--	NM	--	--	931	<1,460 <sup>23</sup>	54,400	10,000	8,230	1,380	7,470	--
07/24/02	100.40	--	9.74	0.00	90.66	5,800 <sup>1</sup>	580 <sup>1</sup>	60,000	8,200	7,000	1,500	8,300	25.0
10/17-18/02	100.40	--	10.57	0.00	89.83	5,160 <sup>1</sup>	510 <sup>1,2</sup>	71,600	11,100	5,880	1,940	10,800	2.40
01/21/03	100.40	--	10.29	0.00	90.11	714 <sup>1,4</sup>	<500 <sup>1</sup>	41,600	9,440	1,470	1,360	6,190	<1.00
04/23-24/03	100.40	INACCESSIBLE - VEHICLE PARKED OVER WELL											
06/30-07/01/03	100.40	10.08	10.11	0.03	90.31***	NOT SAMPLED DUE TO THE PRESENCE OF SPH		--	--	--	--	--	--
10/01-02/03	100.40	--	10.98	0.00	89.42	3,800 <sup>1</sup>	520 <sup>1</sup>	61,000	10,000	4,500	2,000	10,000	1.8 <sup>16</sup>
01/21-23/04	100.40	--	10.09	0.00	90.31	<250 <sup>1</sup>	<250 <sup>1</sup>	1,700	660	69	70	350	<1.2 <sup>16</sup>

**Table 1**  
 Groundwater Monitoring Data and Analytical Results  
 Former Texaco Service Station (Site #211577)  
 631 Queen Anne Avenue North  
 Seattle, Washington

WELL ID/ DATE	TOC (fL)	DTP (fL)	DTW (fL)	SPHT (fL)	GWE (mst)	TPH- DRO (ug/L)	TPH- HRO (ug/L)	TPH- GRO (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	D-LEAD (ug/L)
<b>VP-7/MW-3 (cont)</b>													
04/29-30/04	100.40	--	9.96	0.00	90.44	<800 <sup>1,23</sup>	<1,000 <sup>1,23</sup>	<50	28	1.7	1.8	6.0	<0.99 <sup>16</sup>
07/15-16/04	100.40	--	10.38	0.00	90.02	342 <sup>1</sup>	<500 <sup>1</sup>	36,800	9,900	985	1,270	2,770	<1.00 <sup>16</sup>
08/03/04 <sup>8</sup>	100.40	--	10.66	0.00	89.74	--	--	--	--	--	--	--	--
10/28-11/01/04	100.40	--	10.76	0.00	89.64	850 <sup>1</sup>	<1,000 <sup>1</sup>	100	250	<0.5	<0.5	1.6	--
01/24-31/05	LFP 100.40	--	10.13	0.00	90.27	390 <sup>1</sup>	<250 <sup>1</sup>	21,000	4,900	1,900	890	3,200	--
04/18-21/05	LFP 100.40	--	9.97	0.00	90.43	4,000 <sup>1</sup>	<580 <sup>1</sup>	26,000	5,800	760	1,300	5,100	--
07/27-28/05	100.40	--	10.28	0.00	90.12	NOT SAMPLED		--	--	--	--	--	--
11/08-10/05	100.40	--	10.57	0.00	89.83	NOT SAMPLED		--	--	--	--	--	--
02/22/06	100.40	--	9.89	0.00	90.51	--	--	--	--	--	--	--	--
04/17/06	100.40	--	9.94	0.00	90.46	--	--	--	--	--	--	--	--
10/17/06	100.40	--	12.31	0.00	88.09	--	--	--	--	--	--	--	--
04/17/07	100.40	--	DRY	0.00	--	NOT SAMPLED DUE TO INSUFFICIENT WATER		--	--	--	--	--	--
12/04/07	100.40	--	DRY	0.00	--	NOT SAMPLED DUE TO INSUFFICIENT WATER		--	--	--	--	--	--
04/28/08	100.40	--	DRY	0.00	--	NOT SAMPLED DUE TO INSUFFICIENT WATER		--	--	--	--	--	--
11/03/08	100.40	--	DRY	0.00	--	NOT SAMPLED DUE TO INSUFFICIENT WATER		--	--	--	--	--	--
<b>04/13-16/09</b>	<b>100.40</b>	<b>--</b>	<b>10.86</b>	<b>0.00</b>	<b>89.54</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>VP-8/MW-7</b>													
11/03/86	105.33	Trace	14.22	0.00	91.11	--	--	--	--	--	--	--	--
09/90	104.88	--	13.3	0.00	91.58	--	--	--	--	--	--	--	--
03/26-28/91	104.88	--	12.02	0.00	92.86	--	--	--	--	--	--	--	--
07/07/93	104.88	--	12.23	0.00	92.65	--	--	--	280	510	130	1,100	--
10/95	104.88	--	NM	--	--	--	--	7,000	220	210	61	480	--
01/97	104.88	--	NM	--	--	--	--	3,100	2.5	1.2	3	16	--
04/97	104.88	--	NM	--	--	--	--	8,000	816	824	26	594	--
07/97	104.88	--	NM	--	--	--	--	18,000	605	786	119	1,774	--
11/97	104.88	--	NM	--	--	--	--	9,100 J	96	246	52	980	--
12/15/99	104.88	--	NM	--	--	--	--	830 J	5.6	7	11	32.6	--
06/13/00	104.88	--	NM	--	--	2,780	<500	7,640	540	927	201	1,430	--
07/24/02	104.88	--	11.70	0.00	93.18	2,280	<1,100 <sup>23</sup>	233	1.10	1.81	1.95	7.99	--
10/17-18/02	104.88	--	12.78	0.00	92.10	1,800 <sup>1</sup>	420 <sup>1</sup>	1,500	9.4	9.2	34	50	11.4
01/21/03	104.88	--	12.63	0.00	92.25	1,830 <sup>1</sup>	<500 <sup>1</sup>	552	9.75	1.45	4.25	5.73	1.93
04/23-24/03	104.88	--	10.72	0.00	94.16	1,120 <sup>1</sup>	<500 <sup>1</sup>	1,910	139	291	59.1	216	8.33
06/30-07/01/03	104.88	--	12.45	0.00	92.43	800 <sup>1</sup>	<500 <sup>1</sup>	700	65.6	35.7	22.9	69.8	3.73 <sup>16</sup>
10/01-02/03	104.88	--	13.49	0.00	91.39	939 <sup>1</sup>	<500 <sup>1</sup>	379	2.68	1.57	3.70	4.69	2.06 <sup>16</sup>
						19,000 <sup>1</sup>	2,100 <sup>1</sup>	290	3.4	1.2	5.8	11	2.4 <sup>16</sup>

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
**Former Texaco Service Station (Site #211577)**  
**631 Queen Anne Avenue North**  
**Seattle, Washington**

WELL ID/ DATE	TOC (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH- DRO (µg/L)	TPH- HRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	D-LEAD (µg/L)
<b>VP-8/MW-7 (cont)</b>													
01/21-23/04	104.88	--	12.16	0.00	92.72	3,400 <sup>1</sup>	620 <sup>1</sup>	89	<0.5	<0.5	<0.5	<1.5	3.2 <sup>16</sup>
04/29-30/04	104.88	--	11.91	0.00	92.97	620 <sup>1</sup>	<250 <sup>1</sup>	460	0.6	<0.5	1.6	<3.0	<0.99 <sup>16</sup>
07/15-16/04	104.88	--	12.76	0.00	92.12	528 <sup>1</sup>	<500 <sup>1</sup>	430	0.985	<0.500	1.50	2.40	<1.00 <sup>16</sup>
08/03/04 <sup>8</sup>	104.88	--	12.94	0.00	91.94	--	--	--	--	--	--	--	--
10/28-11/01/04	104.88	--	13.09	0.00	91.79	130,000 <sup>1</sup>	<20,000 <sup>1</sup>	210	2.7	0.7	2.6	9.9	--
01/24-31/05	LFP 104.88	--	12.49	0.00	92.39	<250 <sup>1</sup>	<250 <sup>1</sup>	450	5.1	9.9	3.2	21	--
04/18-21/05	LFP 104.88	--	12.30	0.00	92.58	<250 <sup>1</sup>	<250 <sup>1</sup>	240	0.9	<0.5	6.2	4.7	--
07/27-28/05	104.88	--	12.59	0.00	92.29	NOT SAMPLED			--	--	--	--	--
11/08-10/05	104.88	--	13.12	0.00	91.76	NOT SAMPLED			--	--	--	--	--
02/22/06	104.88	--	11.05	0.00	93.83	--	--	--	--	--	--	--	--
04/17/06	104.88	--	12.40	0.00	92.48	--	--	--	--	--	--	--	--
08/08/06	104.88	--	14.00	0.00	90.88	--	--	380	<2.0	0.9	2.8	6.5	--
04/17-18/07	104.88	--	15.21	0.00	89.67	--	--	270	1.8	0.8	1.1	2.9	--
12/04/07	104.88	--	DRY	0.00	--	NOT SAMPLED DUE TO INSUFFICIENT WATER			--	--	--	--	--
04/28-29/08	104.88	--	15.23 <sup>24</sup>	0.00	89.65	<76	<95	390	<0.5	<0.5	<0.5	<0.5	--
12/11/08 <sup>26</sup>	104.88	--	13.98	0.00	90.90	71	<74	370	<0.5	<0.5	<0.5	<0.5	--
04/13-16/09	PER 104.88	--	12.45	0.00	92.43	180	<71	1,100	<0.5	<0.5	<0.5	<0.5	--
<b>VP-9</b>													
12/15/99	112.35	--	--	--	--	<250	<500	118	<0.500	<0.500	<0.500	<1.00	--
06/14/00	112.35	--	--	--	--	1,420	<1,130 <sup>23</sup>	474	4.97	<1.30	55.6	4.48	--
07/24/02	112.35	INACCESSIBLE - VEHICLE PARKED OVER WELL											
10/17-18/02	112.35	--	11.90	0.00	100.45	13,200 <sup>1</sup>	786 <sup>1,2</sup>	1,910	11.3	2.62	8.86	14.7	<1.00
01/21/03	112.35	INACCESSIBLE - VEHICLE PARKED OVER WELL											
04/23-24/03	112.35	--	8.28	0.00	104.07	<250 <sup>1</sup>	<500 <sup>1</sup>	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00 <sup>16</sup>
06/30-07/01/03	112.35	--	9.74	0.00	102.61	<250 <sup>1</sup>	<500 <sup>1</sup>	681	1.22	0.735	5.07	3.28	<1.00 <sup>16</sup>
10/01-02/03	112.35	--	11.72	0.00	100.63	5,400 <sup>1</sup>	1,300 <sup>1</sup>	1,600	5.3	1.4	2.3	<10	-- <sup>17</sup>
01/21-23/04	112.35	INACCESSIBLE - VEHICLE PARKED OVER WELL											
04/29-30/04	112.35	--	9.58	0.00	102.77	1,500 <sup>1</sup>	<1,000 <sup>1,23</sup>	750	0.8	<0.5	13	<1.5	<0.99 <sup>16</sup>
07/15-16/04	112.35	--	11.15	0.00	101.20	259 <sup>1</sup>	<500 <sup>1</sup>	1,270	1.67	0.699	2.79	5.77	<1.00 <sup>16</sup>
08/03/04 <sup>8</sup>	112.35	--	12.50	0.00	99.85	--	--	--	--	--	--	--	--
10/28-11/01/04	112.35	--	9.82	0.00	102.53	<800 <sup>1,23</sup>	<1,000 <sup>1,23</sup>	610	<0.5	<0.5	<0.5	<1.5	--
01/24-31/05	LFP 112.35	--	10.30	0.00	102.05	<250 <sup>1</sup>	<250 <sup>1</sup>	100	<0.5	<0.5	<0.5	<1.5	--
04/18-21/05	112.35	--	9.00	0.00	103.35	NOT SAMPLED			--	--	--	--	--



**Table 1**  
 Groundwater Monitoring Data and Analytical Results  
 Former Texaco Service Station (Site #211577)  
 631 Queen Anne Avenue North  
 Seattle, Washington

WELL ID/ DATE	TOC (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (mst)	TPH- DRO (µg/L)	TPH- HRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	D-LEAD (µg/L)
<b>VP-9 (cont)</b>													
07/27-28/05	112.35	--	9.77	0.00	102.58	NOT SAMPLED		--	--	--	--	--	--
11/08-10/05	112.35	--	DRY	0.00	--	--	--	--	--	--	--	--	--
02/22/06	112.35	--	9.38	0.00	102.97	--	--	--	--	--	--	--	--
04/17/06	112.35	--	9.10	0.00	103.25	--	--	--	--	--	--	--	--
04/28/08	112.35	--	7.94	0.00	104.41	--	--	--	--	--	--	--	--
11/03/08	112.35	--	DRY	0.00	--	--	--	--	--	--	--	--	--
<b>04/13-16/09</b>	<b>112.35</b>	<b>--</b>	<b>8.11</b>	<b>0.00</b>	<b>104.24</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>MW-4</b>													
11/03/86	102.38	--	13.55	0.00	88.83	--	--	--	--	--	--	--	--
09/90	102.08	--	12.87	0.00	89.21	--	--	--	--	--	--	--	--
03/26-28/91	102.08	--	11.78	0.00	90.30	--	--	--	10,000	12,000	500	9,800	--
10/95	102.08	--	--	--	--	--	--	95,000	19,600 E	12,000	2,070	10,800	--
01/97	102.08	--	--	--	--	--	--	88,000	12,900	12,400	1,400	10,600	--
04/97	102.08	--	--	--	--	--	--	100,000	14,300	14,500	1,700	11,000	--
07/97	102.08	--	--	--	--	--	--	120,000	19,600	19,700	2,100	13,100	--
11/97	102.08	--	--	--	--	--	--	89,000	17,500	16,000	1,900	12,200	--
12/15/99	102.08	--	--	--	--	3,340	<500	73,300	13,700	13,500	1,830	11,000	--
06/14/00	102.08	--	--	--	--	3,390	<1,240 <sup>23</sup>	74,400	14,400	9,440	1,840	10,800	--
07/24/02	102.07	--	11.18	0.00	90.89	10,000 <sup>1</sup>	680 <sup>1</sup>	83,000	11,000	9,900	1,800	11,000	15.5
10/17-18/02	102.07	--	11.98	0.00	90.09	9,860 <sup>1</sup>	697 <sup>1,2</sup>	110,000	14,500	11,600	2,630	15,200	10.7 <sup>15</sup>
10/17-18/02 (D)	102.07	--	--	--	--	7,100 <sup>1</sup>	<500 <sup>1</sup>	92,400	12,400	9,980	2,090	12,200	9.61
01/21/03	102.07	--	11.81	0.00	90.26	2,540 <sup>1,5</sup>	<500 <sup>1</sup>	80,000	10,700	10,100	1,920	11,700	14.5
04/23-24/03	102.07	--	11.03	0.00	91.04	1,680 <sup>1</sup>	<500 <sup>1</sup>	79,300	8,990	7,350	1,780	10,300	5.74 <sup>16</sup>
06/30-07/01/03	102.07	--	11.55	0.00	90.52	3,910 <sup>1</sup>	<500 <sup>1</sup>	108,000	12,100	11,200	2,630	15,300	7.85 <sup>16</sup>
10/01-02/03	102.07	--	12.46	0.00	89.61	3,800 <sup>1</sup>	<500 <sup>1</sup>	100,000	9,700	11,000	2,000	12,000	7.1 <sup>16</sup>
01/21-23/04	102.07	--	11.59	0.00	90.48	62,000 <sup>1</sup>	2,800 <sup>1</sup>	93,000	11,000	10,000	1,800	12,000	6.7 <sup>16</sup>
04/29-30/04	102.07	--	11.48	0.00	90.59	13,000 <sup>1</sup>	610 <sup>1</sup>	80,000	8,900	8,200	1,600	11,000	14.3 <sup>16</sup>
07/15-16/04	102.07	--	11.88	0.00	90.19	943 <sup>1</sup>	<500 <sup>1</sup>	100,000	10,300	7,600	2,090	13,300	9.06 <sup>16</sup>
08/03/04 <sup>8</sup>	102.07	--	12.09	0.00	89.98	--	--	--	--	--	--	--	--
10/28-11/01/04	102.07	--	12.26	0.00	89.81	7,500 <sup>1</sup>	<1,000 <sup>1,23</sup>	71,000	9,000	5,900	2,000	12,000	--
01/24-31/05 LFP	102.07	--	11.68	0.00	90.39	1,500 <sup>1</sup>	<250 <sup>1</sup>	56,000	8,900	5,100	1,700	9,600	--
04/18-21/05 LFP	102.07	--	11.47	0.00	90.60	3,700 <sup>1</sup>	<510 <sup>1</sup>	64,000	9,200	6,800	2,000	12,000	--
07/27-28/05	102.07	--	11.73	0.00	90.34	NOT SAMPLED		--	--	--	--	--	--
11/08-10/05	102.07	--	12.12	0.00	89.95	NOT SAMPLED		--	--	--	--	--	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
**Former Texaco Service Station (Site #211577)**  
**631 Queen Anne Avenue North**  
**Seattle, Washington**

WELL ID/ DATE	TOC (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH- DRO (µg/L)	TPH- HRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	D-LEAD (µg/L)
<b>MW-4 (cont)</b>													
02/22/06	102.07	--	10.38	0.00	91.69	--	--	--	--	--	--	--	--
04/17/06	102.07	--	11.59	0.00	90.48	--	--	--	--	--	--	--	--
08/08/06	102.07	--	13.37	0.00	88.70	--	--	23,000	1,500	870	750	4,400	--
08/19/06	102.07	13.72	13.78	0.06	88.34	--	--	--	--	--	--	--	--
10/17/06	102.07	--	13.92	0.00	88.15	--	--	--	--	--	--	--	--
04/17-18/07	102.07	--	15.65	0.00	86.42	210	<94	650	280	7.7	66	22	--
12/04/07	102.07	--	DRY	0.00	--	NOT SAMPLED DUE TO INSUFFICIENT WATER						--	--
04/28/08	101.95	--	17.21 <sup>24</sup>	0.00	84.74	NOT SAMPLED DUE TO INSUFFICIENT WATER						--	--
11/10/08	101.95	--	13.85	0.00	88.10	2,300	67	150	9	<0.5	<0.5	<0.5	--
04/13-16/09	PER 101.95	--	12.23	0.00	89.72	9,700	<340	1,500	22	0.7	0.6	4	--
<b>MW-6</b>													
11/03/86	113.71	22.03	24.29	2.26	91.23	--	--	--	--	--	--	--	--
09/90	113.38	21.14	21.95	0.81	92.08	--	--	--	--	--	--	--	--
03/26-28/91	113.38	20.55	21.22	0.67	92.70	--	--	--	25,000	29,000	2,500	19,000	--
06/25/93	113.38	--	21.00	0.00	92.38	--	--	--	--	--	--	--	--
07/07/93	113.38	20.70	22.30	1.60	92.36	--	--	--	--	--	--	--	--
10/95	113.38	--	NM	--	--	--	--	62,000	12,000 E	13,800 E	920	5,690	--
01/97	113.38	--	NM	--	--	--	--	54,000	7,290	12,400	2,340	19,800	--
07/24/02	113.32	--	19.76	0.00	93.56	29,000 <sup>1</sup>	<10,000 <sup>1,23</sup>	31,000	8,900	1,600	820	4,200	5.1
10/17-18/02	113.32	20.64	20.69	0.05	92.67***	NOT SAMPLED DUE TO THE PRESENCE OF SPH						--	--
01/21/03	113.32	21.71	21.74	0.03	91.60***	NOT SAMPLED DUE TO THE PRESENCE OF SPH						--	--
04/23-24/03	113.32	20.88	20.91	0.03	92.43***	NOT SAMPLED DUE TO THE PRESENCE OF SPH						--	--
06/30-07/01/03	113.32	21.38	21.41	0.03	91.93***	NOT SAMPLED DUE TO THE PRESENCE OF SPH						--	--
10/01-02/03	113.32	23.04	23.07	0.03	90.27**	NOT SAMPLED DUE TO THE PRESENCE OF SPH						--	--
01/21-23/04	113.32	INACCESSIBLE - JUNKED VEHICLE OVER WELL											--
04/29-30/04 <sup>12</sup>	113.32	20.20	20.22	0.02	93.12**	NOT SAMPLED DUE TO THE PRESENCE OF SPH						--	--
07/15-16/04	113.32	--	20.48	0.00	92.84	3,800 <sup>1</sup>	<500 <sup>1</sup>	46,600	9,610	3,190	758	3,060	1.69 <sup>16</sup>
08/03/04 <sup>8</sup>	113.32	--	20.65	0.00	92.67	--	--	--	--	--	--	--	--
10/28-11/01/04	113.32	--	20.93	0.00	92.39	9,200 <sup>1</sup>	<960 <sup>1,23</sup>	24,000	8,600	2,800	690	3,100	--
01/24-31/05	LFP 113.32	--	20.38	0.00	92.94	11,000 <sup>1</sup>	<480 <sup>1</sup>	5,600	220	60	110	310	--
04/18-21/05	LFP 113.32	--	20.31	0.00	93.01	7,700 <sup>1</sup>	<1,000 <sup>1,23</sup>	3,600	1,000	120	110	360	--
07/27-28/05	113.32	--	20.39	0.00	92.93	NOT SAMPLED						--	--
11/08-10/05	113.32	--	20.79	0.00	92.53	--	--	--	--	--	--	--	--
02/22/06	113.32	--	19.49	0.00	93.83	--	--	--	--	--	--	--	--

**Table 1**  
 Groundwater Monitoring Data and Analytical Results  
 Former Texaco Service Station (Site #211577)  
 631 Queen Anne Avenue North  
 Seattle, Washington

WELL ID/ DATE	TOC ( <i>ft.</i> )	DTP ( <i>ft.</i> )	DTW ( <i>ft.</i> )	SPHT ( <i>ft.</i> )	GWE ( <i>mst.</i> )	TPH- DRO ( <i>ug/L.</i> )	TPH- HRO ( <i>ug/L.</i> )	TPH- GRO ( <i>ug/L.</i> )	B ( <i>ug/L.</i> )	T ( <i>ug/L.</i> )	E ( <i>ug/L.</i> )	X ( <i>ug/L.</i> )	D. LEAD ( <i>ug/L.</i> )
<b>MW-6 (cont)</b>													
04/17/06	113.32	--	26.22	0.00	87.10	--	--	--	--	--	--	--	--
08/09/06	113.32	--	25.85	0.00	87.47	14,000	<2,300 <sup>23</sup>	15,000	1,900	1,000	590	1,700	--
10/17/06	113.32	--	27.06	0.00	86.26	--	--	--	--	--	--	--	--
04/17/07	113.32	--	27.12	0.00	86.20	--	--	--	--	--	--	--	--
12/04/07	113.32	--	DRY	0.00	--	NOT SAMPLED DUE TO INSUFFICIENT WATER						--	--
04/28-05/01/08	113.12	--	22.28	0.00	90.84	8,600	1,200	360	3	0.7	5	3	--
11/10/08	113.12	--	20.93	0.00	92.19	3,200	<660	<50	0.6	<0.5	<0.5	<0.5	--
11/10/08	(D) 113.12	--	--	0.00	--	3,200	<660	<50	0.6	<0.5	<0.5	<0.5	--
04/13-16/09	PER 113.12	--	20.18	0.00	92.94	26,000	3,000	1,100	31	0.8	<0.5	2	--
04/13-16/09	(D) 113.12	--	--	0.00	--	--	--	1,000	30	0.8	2	3	--
<b>MW-9</b>													
11/03/86	114.65	--	22.56	0.00	92.09	--	--	--	--	--	--	--	--
09/90	114.40	--	21.28	0.00	93.12	--	--	--	--	--	--	--	--
03/26-28/91	114.65	20.44	20.61	0.17	94.18	--	--	--	1,600	2,900	250	3,100	--
06/25/93	114.65	--	20.12	0.00	94.53	--	--	--	--	--	--	--	--
07/07/93	114.65	--	20.11	0.00	94.54	--	--	--	--	--	--	--	--
10/95	114.65	--	--	--	--	--	--	3,400	3,520	70 J	<200	312 J	--
01/97	114.65	--	--	--	--	--	--	4,400	2,600	53	310	285	--
04/97	114.65	--	--	--	--	--	--	9,100	2,980	173	413	674	--
07/97	114.65	--	--	--	--	--	--	2,200 J	2,680	127	460	620 J	--
11/97	114.65	--	--	--	--	--	--	5,000	2,010	80	334	400	--
12/15/99	114.65	--	--	--	--	8,510	<500	4,460	831	22.4	274	138	--
06/14/00	114.65	--	--	--	--	6,070	<500	4,740	786	26.0	274	156	--
10/17-18/02	114.27	--	20.88	0.00	93.39	43,600 <sup>1</sup>	671 <sup>1,2</sup>	6,380	493	13.0	230	107	2.66
01/21/03	114.27	INACCESSIBLE - VEHICLE PARKED OVER WELL											
04/23-24/03	114.27	--	20.04	0.00	94.23	3,680 <sup>1</sup>	<500 <sup>1</sup>	6,760	388	15.9	277	105	1.31 <sup>16</sup>
06/30-07/01/03	114.27	INACCESSIBLE - VEHICLE PARKED OVER WELL											
10/01-02/03	114.27	--	21.26	0.00	93.01	33,000 <sup>1</sup>	<5,000 <sup>1,23</sup>	3,500	110	30	100	<100	3.9 <sup>16</sup>
01/21-23/04	114.27	--	20.36	0.00	93.91	100,000 <sup>1</sup>	<5,100 <sup>1,23</sup>	2,300	7.2	2.4	45	19	5.5 <sup>16</sup>
04/29-30/04	114.27	--	20.38	0.00	93.89	92,000 <sup>1</sup>	<5,000 <sup>1,23</sup>	1,200	2.0	1.2	10	7.8	4.8 <sup>16</sup>
07/15-16/04	114.27	--	20.71	0.00	93.56	2,540 <sup>1</sup>	<500 <sup>1</sup>	9,540	3.84	10.4	25.9	31.6	2.54 <sup>16</sup>
08/03/04 <sup>8</sup>	114.27	--	20.92	0.00	93.35	--	--	--	--	--	--	--	--
10/28-11/01/04	114.27	--	21.22	0.00	93.05	3,900 <sup>1</sup>	420 <sup>1</sup>	300	1.4	0.5	1.9	<3.0	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
**Former Texaco Service Station (Site #211577)**  
**631 Queen Anne Avenue North**  
**Seattle, Washington**

WELL ID/ DATE		TOC (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH- DRO (µg/L)	TPH- HRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	D. LEAD (µg/L)
<b>MW-9 (cont)</b>														
01/24-31/05	LFP	114.27	--	20.66	0.00	93.61	140,000 <sup>1</sup>	<5,300 <sup>1,23</sup>	730	1.7	<1.0	2.7	<6.0	--
04/18-21/05	LFP	114.27	--	20.59	0.00	93.68	14,000 <sup>1</sup>	<630 <sup>1,23</sup>	480	1.4	<1.0	5.7	3.1	--
07/27-28/05		114.27	--	20.65	0.00	93.62	NOT SAMPLED		--	--	--	--	--	--
11/08-10/05		114.27	--	21.29	0.00	92.98	NOT SAMPLED		--	--	--	--	--	--
02/22/06		114.27	--	19.75	0.00	94.52	--	--	--	--	--	--	--	--
04/17/06		114.27	--	22.55	0.00	91.72	--	--	--	--	--	--	--	--
08/09/06		114.27	--	22.80	0.00	91.47	2,700	<540 <sup>23</sup>	450	66	1.9	0.8	47	--
10/17/06		114.27	--	24.12	0.00	90.15	--	--	--	--	--	--	--	--
04/17/07		114.27	--	23.37	0.00	90.90	--	--	--	--	--	--	--	--
12/04-05/07		114.27	--	23.15	0.00	91.12	2,200	280	<50	<0.5	<0.5	<0.5	<1.5	--
05/01/08		114.27	--	NOT SAMPLED, FILLED WITH MUD			--	--	--	--	--	--	--	--
11/10/08		114.27	--	21.29	0.00	92.98	2,000	97	130	0.5	<0.5	<0.5	<0.5	--
<b>04/13-16/09</b>	<b>PER</b>	<b>114.27</b>	<b>--</b>	<b>24.60</b>	<b>0.00</b>	<b>89.67</b>	<b>1,100</b>	<b>69</b>	<b>160</b>	<b>0.7</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>--</b>
<b>MW-10</b>														
11/03/86		115.75	--	14.84	0.00	100.91	--	--	--	--	--	--	--	--
09/90		115.49	--	14.75	0.00	100.74	--	--	--	--	--	--	--	--
03/26-28/91		115.75	--	13.14	0.00	102.61	--	--	--	--	--	--	--	--
03/26-28/91	(D)	115.75	--	--	--	--	--	--	--	<5	<5	<5	<5	--
06/25/93		115.75	--	13.63	0.00	102.12	--	--	--	--	--	--	--	--
07/07/93		115.75	--	13.81	0.00	101.94	--	--	380	13	<5.0	11	24	--
10/95		115.75	--	--	--	--	--	--	780	1.8	2.9	0.82 J	5.6	--
01/97		115.75	--	--	--	--	--	--	180	1.5	<1	<1	<2	--
04/97		115.75	--	--	--	--	--	--	420	5.1	1	<1	2.0 J	--
07/97		115.75	--	--	--	--	--	--	1,100	10	2.1	2.4	4.34 J	--
11/97		115.75	--	--	--	--	--	--	1,000	4.2	2	4.8	2.2 J	--
09/09/99		115.75	--	13.36	0.00	102.39	--	--	--	--	--	--	--	--
12/15/99		115.75	--	--	--	--	353	<500	618	7.02	<0.910	<0.850	<4.22	--
06/14/00		115.75	--	--	--	--	<250	<500	99.2	1.56	ND	ND	ND	--
07/24/02		115.28	--	13.14	0.00	102.14	320 <sup>1</sup>	600 <sup>1</sup>	240	2.5	<0.50	<1.0	<1.5	1.3
10/17-18/02		115.28	--	13.59	0.00	101.69	667 <sup>1</sup>	<500 <sup>1</sup>	490	3.42	<0.500	1.34	5.00	<1.00
01/21/03		115.28	--	12.46	0.00	102.82	<250 <sup>1</sup>	<500 <sup>1</sup>	416	3.44	0.550	0.519	3.24	<1.00
04/23-24/03		115.28	--	11.76	0.00	103.52	-- <sup>6</sup>	-- <sup>6</sup>	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00 <sup>16</sup>
06/30-07/01/03		115.28	--	12.91	0.00	102.37	<250 <sup>1</sup>	<500 <sup>1</sup>	255	2.01	<0.500	0.535	2.53	<1.00 <sup>16</sup>
10/01-02/03		115.28	--	13.68	0.00	101.60	<250 <sup>1</sup>	<250 <sup>1</sup>	190	2.6	<0.5	0.5	<3.0	<1.2 <sup>16</sup>

**Table 1**  
 Groundwater Monitoring Data and Analytical Results  
 Former Texaco Service Station (Site #211577)  
 631 Queen Anne Avenue North  
 Seattle, Washington

WELL ID/ DATE	TOC (fl.)	DTP (fl.)	DTW (fl.)	SPHT (fl.)	GWE (msl)	TPH- DRO (µg/L)	TPH- HRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	D-LEAD (µg/L)
<b>MW-10 (cont)</b>													
01/21-23/04	115.28	--	11.99	0.00	103.29	<250 <sup>1</sup>	<250 <sup>1</sup>	<50	<0.5	<0.5	<0.5	<1.5	<1.2 <sup>16</sup>
04/29-30/04	115.28	--	13.23	0.00	102.05	<250 <sup>1</sup>	<250 <sup>1</sup>	<50	1.5	<0.5	<0.5	<1.5	<0.99 <sup>16</sup>
07/15-16/04	115.28	--	13.44	0.00	101.84	<250 <sup>1</sup>	<500 <sup>1</sup>	362	2.75	<0.500	0.549	3.45	<1.00 <sup>16</sup>
08/03/04 <sup>8</sup>	115.28	--	13.53	0.00	101.75	--	--	--	--	--	--	--	--
10/28-11/01/04	115.28	--	13.31	0.00	101.97	<82 <sup>1</sup>	<100 <sup>1</sup>	210	4.1	<0.5	1.2	2.1	--
01/24-31/05	LFP 115.28	--	12.36	0.00	102.92	<250 <sup>1</sup>	<250 <sup>1</sup>	<50	<0.5	<0.5	<0.5	<1.5	--
04/18-21/05	115.28	--	12.70	0.00	102.58	NOT SAMPLED		--	--	--	--	--	--
07/27-28/05	115.28	--	13.39	0.00	101.89	NOT SAMPLED		--	--	--	--	--	--
11/08-10/05	115.28	--	13.11	0.00	102.17	--	--	--	--	--	--	--	--
02/22/06	115.28	--	11.84	0.00	103.44	--	--	--	--	--	--	--	--
04/17/06	115.28	--	14.66	0.00	100.62	--	--	--	--	--	--	--	--
10/17/06	115.28	--	14.68	0.00	100.60	--	--	--	--	--	--	--	--
04/17-19/07	115.28	--	13.05	0.00	102.23	<75	<94	100	1.4	<0.5	<0.5	<1.5	--
12/04-05/07	115.28	--	14.33	0.00	100.95	<78	<98	150	2.0	<2.0	0.9	<5.0	--
04/28-05/01/08	115.28	--	12.71 <sup>2</sup>	0.00	102.57	<77	<97	<50	0.8	<0.5	<0.5	<0.5	--
11/10/08	115.28	--	12.66	0.00	102.62	<30	<69	<50	0.7	<0.5	<0.5	<0.5	--
04/13-16/09	PER 115.28	--	12.11	0.00	103.17	<29	<67	<50	<0.5	<0.5	<0.5	<0.5	--
<b>MW-11</b>													
03/26-28/91	97.32	--	11.7	0.00	85.62	--	--	--	<5	<5	<5	<5	--
07/24/02	--	--	11.16	0.00	--	<250 <sup>1</sup>	<250 <sup>1</sup>	<50	<0.50	<0.50	<0.50	<1.5	<1.2
10/17-18/02	--	--	11.43	0.00	--	<250 <sup>1</sup>	<500 <sup>1</sup>	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00
01/21/03	--	--	11.29	0.00	--	<250 <sup>1</sup>	<500 <sup>1</sup>	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00
04/23-24/03	--	--	11.09	0.00	--	<250 <sup>1</sup>	<500 <sup>1</sup>	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00 <sup>16</sup>
06/30-07/01/03	--	--	11.39	0.00	--	<250 <sup>1</sup>	<500 <sup>1</sup>	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00 <sup>16</sup>
10/01-02/03	--	--	12.10	0.00	--	<250 <sup>1</sup>	<250 <sup>1</sup>	<50	<0.5	<0.5	<0.5	<1.5	<1.2 <sup>16</sup>
01/21-23/04	--	--	11.69	0.00	--	<250 <sup>1</sup>	<250 <sup>1</sup>	<50	<0.5	<0.5	<0.5	<1.5	<1.2 <sup>16</sup>
04/29-30/04	--	--	11.41	0.00	--	<250 <sup>1</sup>	<250 <sup>1</sup>	<50	<0.5	<0.5	<0.5	<1.5	<0.99 <sup>16</sup>
07/15-16/04	--	--	11.58	0.00	--	<250 <sup>1</sup>	<500 <sup>1</sup>	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00 <sup>16</sup>
08/03/04 <sup>8</sup>	97.32	--	11.65	0.00	85.67	NOT SAMPLED		--	--	--	--	--	--
10/28-11/01/04	97.32	--	11.73	0.00	85.59	<78 <sup>1</sup>	<98 <sup>1</sup>	<50	<0.5	<0.5	<0.5	<1.5	--
01/24-31/05	97.32	--	11.35	0.00	85.97	NOT SAMPLED		--	--	--	--	--	--
04/18-21/05	97.32	--	11.41	0.00	85.91	NOT SAMPLED		--	--	--	--	--	--
07/27-28/05	97.32	--	11.44	0.00	85.88	NOT SAMPLED		--	--	--	--	--	--
11/08-10/05	97.32	--	11.52	0.00	85.80	--	--	--	--	--	--	--	--

**Table 1**

Groundwater Monitoring Data and Analytical Results  
 Former Texaco Service Station (Site #211577)  
 631 Queen Anne Avenue North  
 Seattle, Washington

WELL ID/ DATE	TOC <sup>a</sup> (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH- DRO (µg/L)	TPH- HRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	D-LEAD (µg/L)
<b>MW-11 (cont)</b>													
04/17/06	97.32	--	11.29	0.00	86.03	--	--	--	--	--	--	--	--
08/08/06	97.32	--	11.26	0.00	86.06	--	--	--	--	--	--	--	--
10/17/06	97.32	--	11.39	0.00	85.93	--	--	--	--	--	--	--	--
04/17/07	97.32	--	11.29	0.00	86.03	--	--	--	--	--	--	--	--
12/04/07	97.32	NOT SAMPLED, OBSTRUCTION IN WELL AT 10.98 FEET BGS											
04/28/08	97.32	NOT SAMPLED, OBSTRUCTION IN WELL AT 11.01 FEET BGS											
11/03/08	97.32	NOT SAMPLED, OBSTRUCTION IN WELL AT 11 FEET BGS											
04/13-16/09	97.32	OBSTRUCTION IN WELL											
<b>MW-12</b>													
10/17-18/02	113.36	--	12.22	0.00	101.14	<250 <sup>1</sup>	<500 <sup>1</sup>	<50.0	0.516	0.869	<0.500	<1.00	--
01/21/03	113.36	--	11.72	0.00	101.64	<250 <sup>1</sup>	<500 <sup>1</sup>	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00
04/23-24/03	113.36	--	11.04	0.00	102.32	<250 <sup>1</sup>	<500 <sup>1</sup>	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00 <sup>16</sup>
06/30-07/01/03	113.36	--	11.32	0.00	102.04	1,690 <sup>1</sup>	<500 <sup>2</sup>	1,040	2.91	1.05	10.0	26.5	<1.00 <sup>16</sup>
10/01-02/03	113.36	--	12.12	0.00	101.24	470 <sup>1</sup>	<250 <sup>1</sup>	69	1.2	<0.5	<0.5	<1.5	<1.2 <sup>16</sup>
01/21-23/04	113.36	--	10.02	0.00	103.34	1,500 <sup>1</sup>	5,700 <sup>1</sup>	<50	<0.5	<0.5	<0.5	<1.5	<1.2 <sup>16</sup>
04/29-30/04	113.36	--	10.59	0.00	102.77	260 <sup>1</sup>	440 <sup>1</sup>	<50	<0.5	<0.5	<0.5	<1.5	<0.99 <sup>16</sup>
07/15-16/04	113.36	--	11.44	0.00	101.92	<250 <sup>1</sup>	<500 <sup>1</sup>	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00 <sup>16</sup>
08/03/04 <sup>8</sup>	113.36	--	12.55	0.00	100.81	NOT SAMPLED		--	--	--	--	--	--
10/28-11/01/04	113.36	--	12.03	0.00	101.33	<250 <sup>1</sup>	<250 <sup>1</sup>	<50	<0.5	<0.5	<0.5	<1.5	--
01/24-31/05	113.36	--	12.22	0.00	101.14	NOT SAMPLED		--	--	--	--	--	--
04/18-21/05	113.36	--	12.27	0.00	101.09	NOT SAMPLED		--	--	--	--	--	--
07/27-28/05	113.36	--	12.31	0.00	101.05	NOT SAMPLED		--	--	--	--	--	--
11/08-10/05	113.36	--	12.29	0.00	101.07	NOT SAMPLED		--	--	--	--	--	--
02/22/06	113.36	--	10.70	0.00	102.66	--	--	--	--	--	--	--	--
04/17/06	113.36	--	11.53	0.00	101.83	--	--	--	--	--	--	--	--
10/17/06	113.36	--	12.60	0.00	100.76	--	--	--	--	--	--	--	--
04/17/07	113.36	--	12.14	0.00	101.22	--	--	--	--	--	--	--	--
12/04/07	113.36	--	12.38	0.00	100.98	--	--	--	--	--	--	--	--
04/28/08	113.36	--	12.05 <sup>24</sup>	0.00	101.31	--	--	--	--	--	--	--	--
11/03/08	113.36	--	12.16	0.00	101.20	--	--	--	--	--	--	--	--
04/13-16/09	113.36	--	11.71	0.00	101.65	--	--	--	--	--	--	--	--

**Table 1**  
 Groundwater Monitoring Data and Analytical Results  
 Former Texaco Service Station (Site #211577)  
 631 Queen Anne Avenue North  
 Seattle, Washington

WELL ID/ DATE	TOC ( <i>ft.</i> )	DTP ( <i>ft.</i> )	DTW ( <i>ft.</i> )	SPHT ( <i>ft.</i> )	GWE ( <i>mst.</i> )	TPH- DRO ( <i>ug/L</i> )	TPH- HRO ( <i>ug/L</i> )	TPH- GRO ( <i>ug/L</i> )	B ( <i>ug/L</i> )	T ( <i>ug/L</i> )	E ( <i>ug/L</i> )	X ( <i>ug/L</i> )	D. LEAD ( <i>ug/L</i> )		
<b>MW-13</b>															
10/17-18/02	114.80	--	19.31/DRY	0.00	95.49	NOT SAMPLED DUE TO INSUFFICIENT WATER							--	--	--
01/21/03	114.80	--	19.01/DRY	0.00	95.79	NOT SAMPLED DUE TO INSUFFICIENT WATER							--	--	--
04/23-24/03	114.80	INACCESSIBLE - VEHICLE PARKED OVER WELL													
06/30-07/01/03	114.80	--	18.72	0.00	96.08	NOT SAMPLED DUE TO INSUFFICIENT WATER							--	--	--
10/01-02/03	114.80	--	19.32/DRY	0.00	95.48	NOT SAMPLED DUE TO INSUFFICIENT WATER							--	--	--
01/21-23/04	114.80	INACCESSIBLE - VEHICLE PARKED OVER WELL													
04/29-30/04	114.80	--	18.72	0.00	96.08	NOT SAMPLED DUE TO INSUFFICIENT WATER							--	--	--
07/15-16/04	114.80	--	19.16	0.00	95.64	NOT SAMPLED DUE TO INSUFFICIENT WATER							--	--	--
08/03/04 <sup>8</sup>	114.80	--	19.26	0.00	95.54	--	--	--	--	--	--	--	--		
10/28-11/01/04	114.80	--	19.37	0.00	95.43	NOT SAMPLED DUE TO INSUFFICIENT WATER							--	--	--
01/24-31/05	114.80	--	19.19	0.00	95.61	NOT SAMPLED DUE TO INSUFFICIENT WATER							--	--	--
04/18-21/05	114.80	--	18.97	0.00	95.83	NOT SAMPLED							--	--	--
07/27-28/05	114.80	--	19.06	0.00	95.74	NOT SAMPLED							--	--	--
11/08-10/05	114.80	--	19.40	0.00	95.40	NOT SAMPLED							--	--	--
02/22/06	114.80	--	18.03	0.00	96.77	--	--	--	--	--	--	--	--		
04/17/06	114.80	--	19.45	0.00	95.35	--	--	--	--	--	--	--	--		
10/17/06	114.80	--	19.28	0.00	95.52	--	--	--	--	--	--	--	--		
04/17/07	114.80	--	19.62	0.00	95.18	--	--	--	--	--	--	--	--		
12/04/07	114.80	--	19.53	0.00	95.27	--	--	--	--	--	--	--	--		
04/28/08	114.80	--	19.25 <sup>24</sup>	0.00	95.55	--	--	--	--	--	--	--	--		
11/03/08	114.80	--	19.08	0.00	95.72	--	--	--	--	--	--	--	--		
<b>04/13-16/09</b>	<b>114.80</b>	<b>--</b>	<b>18.18</b>	<b>0.00</b>	<b>96.62</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>		
<b>MW-14</b>															
10/17-18/02	101.64	--	--	--	--	--	--	--	--	--	--	--	--		
11/14/02	101.64	--	11.88	0.00	89.76	4,710 <sup>1</sup>	<500 <sup>1</sup>	43,100 <sup>3</sup>	9,900 <sup>3</sup>	4,930 <sup>3</sup>	1,540 <sup>3</sup>	6,020 <sup>3</sup>	1.82		
01/21/03	101.64	INACCESSIBLE - VEHICLE PARKED OVER WELL													
04/23-24/03	101.64	INACCESSIBLE - VEHICLE PARKED OVER WELL													
06/30-07/01/03	101.64	INACCESSIBLE - VEHICLE PARKED OVER WELL													
10/01-02/03	101.64	INACCESSIBLE - VEHICLE PARKED OVER WELL													
10/14/03 <sup>8,10</sup>	101.64	--	--	--	--	2,100 <sup>1</sup>	130 <sup>1</sup>	69,000	12,000	9,900	1,600	7,900	--		
01/21-23/04	101.64	INACCESSIBLE - VEHICLE PARKED OVER WELL													
04/29-30/04	101.64	--	11.12	0.00	90.52	1,500 <sup>1</sup>	<250 <sup>1</sup>	27,000	4,800	2,500	910	3,300	<0.99 <sup>16</sup>		
07/15-16/04	101.64	--	11.46	0.00	90.18	836 <sup>1,4</sup>	<500 <sup>1</sup>	61,800	10,400	5,550	1,350	5,890	<1.00 <sup>16</sup>		

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
**Former Texaco Service Station (Site #211577)**  
**631 Queen Anne Avenue North**  
**Seattle, Washington**

WELL ID/ DATE	TOC (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH- DRO (µg/L)	TPH- HRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	D. LEAD (µg/L)
<b>MW-14 (cont)</b>													
10/26-27/04 <sup>8</sup>	101.64	--	--	--	--	<800 <sup>1,23</sup>	<1,000 <sup>1,23</sup>	57,000	13,000	11,000	1,500	8,300	--
10/28-11/01/04	101.64	--	11.94	0.00	89.70	--	--	--	--	--	--	--	--
01/24-31/05	LFP 101.64	--	11.37	0.00	90.27	470 <sup>1</sup>	<250 <sup>1</sup>	24,000	4,400	2,300	760	3,300	--
04/18-21/05	LFP 101.64	--	11.19	0.00	90.45	1,500 <sup>1,19</sup>	<250 <sup>1</sup>	23,000	5,000	2,500	860	3,700	--
07/27-28/05	LFP 101.64	--	11.36	0.00	90.28	2,300 <sup>1,20</sup>	<250 <sup>1</sup>	24,000	5,000	2,200	760	3,300	--
11/08-10/05	LFP 101.64	--	11.82	0.00	89.82	2,600 <sup>1,20</sup>	<520 <sup>1</sup>	37,000	8,900	4,600	1,100	4,900	--
04/17/06	101.56	--	11.26	0.00	90.30	1,900	<100	40,000	4,400	3,300	1,300	7,200	--
08/08/06	101.56	--	13.10	0.00	88.46	6,800	<1,000 <sup>23</sup>	52,000	4,200	3,900	1,500	8,600	--
10/17/06	101.56	--	13.65	0.00	87.91	--	--	--	--	--	--	--	--
04/17/07	101.56	--	15.54	0.00	86.02	1,600	<100	11,000	920	120	590	1,300	--
12/04/07	101.56	--	17.99	0.00	83.57	3,400	<470	3,300	48	5.6	200	16	--
04/28/08	101.56	--	16.92 <sup>24</sup>	0.00	84.64	1,400	<99	1,200	61	4	140	21	--
11/04/08	101.56	--	13.66	0.00	87.90	2,900	<130	8,400	38	3	44	6	--
<b>04/13-16/09</b>	<b>PER 101.56</b>	<b>--</b>	<b>12.03</b>	<b>0.00</b>	<b>89.53</b>	<b>8,800</b>	<b>&lt;660</b>	<b>6,200</b>	<b>15</b>	<b>3</b>	<b>11</b>	<b>4</b>	<b>--</b>
<b>MW-15</b>													
10/17-18/02	99.03	--	--	--	--	--	--	--	--	--	--	--	--
11/14/02	99.03	--	9.44	0.00	89.59	780 <sup>1</sup>	<500 <sup>1</sup>	3,280	1,640	5.23	5.06	<10.0	1.04
01/21/03	99.03	--	9.29	0.00	89.74	<250 <sup>1</sup>	<500 <sup>1</sup>	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00
04/23-24/03	99.03	INACCESSIBLE - VEHICLE PARKED OVER WELL											
06/30-07/01/03	99.03	INACCESSIBLE - VEHICLE PARKED OVER WELL											
10/01-02/03	99.03	--	9.72	0.00	89.31	410 <sup>1</sup>	<250 <sup>1</sup>	810	1,700	60	48	110	<1.2 <sup>16</sup>
01/21-23/04	99.03	--	8.94	0.00	90.09	<250 <sup>1</sup>	<250 <sup>1</sup>	<50	<0.5	<0.5	<0.5	<1.5	<1.2 <sup>16</sup>
04/29-30/04	99.03	--	8.19	0.00	90.84	700 <sup>1</sup>	390 <sup>1</sup>	<50	<0.5	<0.5	<0.5	<1.5	<0.99 <sup>16</sup>
07/15-16/04	99.03	INACCESSIBLE - VEHICLE PARKED OVER WELL											
08/03/04 <sup>8</sup>	99.03	--	13.82	0.00	85.21	--	--	--	--	--	--	--	--
10/26-27/04 <sup>8</sup>	99.03	--	--	--	--	<800 <sup>1,23</sup>	<1,000 <sup>1,23</sup>	1,700	230	99	99	260	--
10/28-11/01/04	99.03	--	9.65	0.00	89.38	--	--	--	--	--	--	--	--
01/24-31/05	LFP 99.03	--	9.00	0.00	90.03	<250 <sup>1</sup>	<250 <sup>1</sup>	<50	<0.5	<0.5	<0.5	<1.5	--
04/18-21/05	LFP 99.03	--	8.98	0.00	90.05	<250 <sup>1</sup>	<250 <sup>1</sup>	<50	<0.5	<0.5	<0.5	<1.5	--
07/27-28/05	99.03	--	9.31	0.00	89.72	NOT SAMPLED		--	--	--	--	--	--
11/08-10/05	99.03	INACCESSIBLE - VEHICLE PARKED OVER WELL											
02/22/06	99.03	--	8.21	0.00	90.82	--	--	--	--	--	--	--	--
04/17/06	99.03	--	8.67	0.00	90.36	--	--	--	--	--	--	--	--
10/18/06	99.03	--	11.12	0.00	87.91	--	--	--	--	--	--	--	--



**Table 1**  
 Groundwater Monitoring Data and Analytical Results  
 Former Texaco Service Station (Site #211577)  
 631 Queen Anne Avenue North  
 Seattle, Washington

WELL ID/ DATE	TOC (fl.)	DTP (fl.)	DTW (fl.)	SPHT (fl.)	GWE (mst)	TPH- DRO (µg/L)	TPH- HRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	D-LEAD (µg/L)
<b>MW-15 (cont)</b>													
04/17/07	99.03	--	13.81	0.00	85.22	<82	<100	<50	<0.5	<0.5	<0.5	<1.5	--
12/04/07	99.03	--	16.46	0.00	82.57	<76	<95	<50	0.9	<0.5	<0.5	<1.5	--
04/28/08	99.03	--	14.68 <sup>24</sup>	0.00	84.35	--	--	--	--	--	--	--	--
12/11/08 <sup>26</sup>	99.03	--	11.35	0.00	87.68	<28	<66	<50	<0.5	<0.5	<0.5	<0.5	--
04/13-16/09	PER 99.03	--	9.79	0.00	89.24	<28	<66	<50	<0.5	<0.5	<0.5	<0.5	--
<b>MW-16</b>													
10/17-18/02	101.83	--	--	--	--	--	--	--	--	--	--	--	--
11/14/02	101.83	--	12.36	0.00	89.47	<250 <sup>1</sup>	<500 <sup>1</sup>	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00
01/21/03	101.83	--	11.88	0.00	89.95	<250 <sup>1</sup>	<500 <sup>1</sup>	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00
04/23-24/03	101.83	INACCESSIBLE - VEHICLE PARKED OVER WELL											
06/30-07/01/03	101.83	INACCESSIBLE - VEHICLE PARKED OVER WELL											
10/01-02/03	101.83	INACCESSIBLE - VEHICLE PARKED OVER WELL											
10/14/03 <sup>8,9</sup>	101.83	--	--	--	--	<160 <sup>1</sup>	<200 <sup>1</sup>	740	26	1.0	3.8	3.6	--
01/21-23/04	101.83	INACCESSIBLE - VEHICLE PARKED OVER WELL											
04/29-30/04	101.83	INACCESSIBLE - VEHICLE PARKED OVER WELL											
05/03/04 <sup>8,9</sup>	101.83	--	--	--	--	<75 <sup>1</sup>	<94 <sup>1</sup>	150	2.1	<0.5	1.7	<1.5	--
07/15-16/04	101.83	--	11.89	0.00	89.94	<250 <sup>1</sup>	<500 <sup>1</sup>	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00 <sup>16</sup>
08/03/04 <sup>8</sup>	101.83	--	12.03	0.00	89.80	--	--	--	--	--	--	--	--
10/26-27/04 <sup>8</sup>	101.83	--	--	--	--	<800 <sup>1,23</sup>	<1,000 <sup>1,23</sup>	220	9.1	1.1	5.7	2.3	--
10/28-11/01/04	101.83	--	12.42	0.00	89.41	--	--	--	--	--	--	--	--
01/24-31/05	LFP 101.83	--	11.91	0.00	89.92	<250 <sup>1</sup>	<250 <sup>1</sup>	210	8.4	1	6.0	3.2	--
04/18-21/05	LFP 101.83	--	11.69	0.00	90.14	<250 <sup>1</sup>	<250 <sup>1</sup>	<50	<0.5	<0.5	<0.5	<1.5	--
07/27-28/05	LFP 101.83	--	11.81	0.00	90.02	<250 <sup>1</sup>	<250 <sup>1</sup>	<50	<0.5	<0.5	<0.5	<1.5	--
11/08-10/05	LFP 101.83	--	12.36	0.00	89.47	<79 <sup>1</sup>	<99 <sup>1</sup>	<48	0.9	<0.5	0.7	<1.5	--
04/17/06	101.75	--	11.59	0.00	90.16	<81	100	<48	<0.5	<0.5	<0.5	<1.5	--
08/08/06	101.75	--	13.33	0.00	88.42	--	--	--	--	--	--	--	--
10/17/06	101.75	--	14.08	0.00	87.67	--	--	--	--	--	--	--	--
04/17/07	101.75	--	16.24	0.00	85.51	--	--	--	--	--	--	--	--
12/04/07	101.75	--	18.33	0.00	83.42	--	--	--	--	--	--	--	--
04/28-05/02/08	101.75	--	17.49 <sup>24</sup>	0.00	84.26	<79	<99	<50	<0.5	<0.5	<0.5	<0.5	--
11/06/08	101.75	--	14.13	0.00	87.62	<28	<66	<50	<0.5	<0.5	<0.5	<0.5	--
04/13-16/09	PER 101.75	--	12.48	0.00	89.27	<31	<72	<50	<0.5	<0.5	<0.5	<0.5	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
**Former Texaco Service Station (Site #211577)**  
**631 Queen Anne Avenue North**  
**Seattle, Washington**

WELL ID/ DATE	TOC (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH- DRO (µg/L)	TPH- HRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	D-LEAD (µg/L)
<b>MW-17</b>													
10/17-18/02	99.29	--	--	--	--	--	--	--	--	--	--	--	--
11/14/02	99.29	--	10.00	0.00	89.29	<250 <sup>1</sup>	<500 <sup>1</sup>	2,780	569	31.0	91.1	250	<1.00
01/21/03	99.29	--	9.62	0.00	89.67	<250 <sup>1</sup>	<500 <sup>1</sup>	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00
04/23-24/03	99.29	INACCESSIBLE - VEHICLE PARKED OVER WELL											
06/30-07/01/03	99.29	INACCESSIBLE - VEHICLE PARKED OVER WELL											
10/01-02/03	99.29	--	10.30	0.00	88.99	<250 <sup>1</sup>	<250 <sup>1</sup>	1,100	420	69	38	130	<1.2 <sup>16</sup>
01/21-23/04	99.29	--	9.48	0.00	89.81	<250 <sup>1</sup>	<250 <sup>1</sup>	<50	1.6	<0.5	<0.5	<1.5	<1.2 <sup>16</sup>
04/29-30/04	99.29	INACCESSIBLE - VEHICLE PARKED OVER WELL											
05/03/04 <sup>8,13</sup>	99.29	--	--	--	--	190 <sup>1</sup>	<95 <sup>1</sup>	2,300	370	20	89	100	--
07/15-16/04	99.29	--	9.81	0.00	89.48	<250 <sup>1</sup>	<500 <sup>1</sup>	1,310	171	8.98	43.1	83.5	23.7 <sup>16</sup>
08/03/04 <sup>8</sup>	99.29	--	9.90	0.00	89.39	--	--	--	--	--	--	--	--
10/28-11/01/04	99.29	--	10.11	0.00	89.18	<400 <sup>1</sup>	<500 <sup>1</sup>	5,600	1,900	280	230	700	--
01/24-31/05	PER	99.29	--	9.42	0.00	89.87	<250 <sup>1</sup>	<250 <sup>1</sup>	310	160	4.9	17	27
02/17/05 <sup>8</sup>	99.29	--	9.37	0.00	89.92	<76 <sup>1</sup>	<95 <sup>1</sup>	1,000	320	12	41	52	--
04/18-21/05	LFP	99.29	--	9.32	0.00	89.97	<250 <sup>1</sup>	750 <sup>1</sup>	<50	18	0.6	<0.5	<3.0
07/27-28/05	LFP	99.29	--	9.64	0.00	89.65	<250 <sup>1</sup>	<250 <sup>1</sup>	730	230	9.3	17	26
11/08-10/05	LFP	99.29	--	9.98	0.00	89.31	<76 <sup>1</sup>	<95 <sup>1</sup>	110	65	2.0	1.5	4.9
04/17-19/06	99.29	--	9.26	0.00	90.03	<79	<98	<48	0.7	<0.5	<0.5	<1.5	--
08/08/06	99.29	--	10.98	0.00	88.31	--	--	1,200	400	41	39	130	--
10/17/06	99.29	--	11.65	0.00	87.64	--	--	--	--	--	--	--	--
04/17/07	99.29	--	14.21	0.00	85.08	490	<100	4,500	1,100	26	300	350	--
12/04/07	99.29	--	17.02	0.00	82.27	95	<96	690	42	2.4	58	55	--
04/28-05/01/08	99.29	--	15.24 <sup>24</sup>	0.00	84.05	<82	<100	190	32	<0.5	19	0.6	--
11/06/08	99.29	--	11.73	0.00	87.56	160	<70	67	22	<0.5	<0.5	<0.5	--
11/06/08	(D)	99.29	--	--	--	150	<66	110	30	0.6	<0.5	<0.5	--
04/13-16/09	PER	99.29	--	10.15	0.00	89.14	150	<77	<50	5	<0.5	<0.5	<0.5
04/13-16/09	(D)	--	--	--	--	--	--	<50	3	<0.5	<0.5	<0.5	--
<b>MW-18</b>													
04/29-30/04	--	--	10.95	0.00	--	1,700 <sup>1</sup>	<250 <sup>1</sup>	76,000	9,200	11,000	1,400	8,400	<0.99 <sup>16</sup>
08/03/04 <sup>8</sup>	101.52	--	11.66	0.00	89.86	--	--	--	--	--	--	--	--
10/28-11/01/04	101.52	--	11.72	0.00	89.80	230 <sup>1</sup>	<97 <sup>1</sup>	42,000	4,700	5,400	860	4,300	--
01/24-31/05	LFP	101.52	--	11.10	0.00	90.42	270 <sup>1</sup>	<250 <sup>1</sup>	24,000	2,800	3,400	600	3,100
04/18-21/05	LFP	101.52	--	10.91	0.00	90.61	1,500 <sup>1</sup>	<250 <sup>1</sup>	20,000	2,500	3,200	540	2,900
07/27-28/05	101.52	--	11.22	0.00	90.30	NOT SAMPLED		--	--	--	--	--	--

**Table 1**  
 Groundwater Monitoring Data and Analytical Results  
 Former Texaco Service Station (Site #211577)  
 631 Queen Anne Avenue North  
 Seattle, Washington

WELL ID/ DATE	TOC ( <i>ft.</i> )	DTP ( <i>ft.</i> )	DTW ( <i>ft.</i> )	SPHT ( <i>ft.</i> )	GWE ( <i>nst.</i> )	TPH- DRO ( <i>ug/L</i> )	TPH- HRO ( <i>ug/L</i> )	TPH- GRO ( <i>ug/L</i> )	B ( <i>ug/L</i> )	T ( <i>ug/L</i> )	E ( <i>ug/L</i> )	X ( <i>ug/L</i> )	D-LEAD ( <i>ug/L</i> )
<b>MW-18 (cont)</b>													
11/08-10/05	101.52	--	11.53	0.00	89.99	NOT SAMPLED		--	--	--	--	--	--
02/22/06	101.52	--	9.83	0.00	91.69	--	--	--	--	--	--	--	--
04/17/06	101.52	--	10.93	0.00	90.59	--	--	--	--	--	--	--	--
08/08/06	101.52	--	12.65	0.00	88.87	--	--	1,100	210	74	43	130	--
10/17/06	101.52	--	13.29	0.00	88.23	--	--	--	--	--	--	--	--
04/17/07	101.52	--	15.51	0.00	86.01	--	--	--	--	--	--	--	--
12/04/07	101.52	--	20.30	0.00	81.22	--	--	--	--	--	--	--	--
04/28-29/08	101.52	--	16.76 <sup>24</sup>	0.00	84.76	190	<98	200	140	<0.5	<0.5	<0.5	--
12/11/08 <sup>26</sup>	101.52	--	13.45	0.00	88.07	1,900	<67	790	32	0.9	1	1	--
<b>04/13-16/09</b>	<b>PER 101.52</b>	--	<b>11.81</b>	<b>0.00</b>	<b>89.71</b>	<b>7,600</b>	<b>&lt;390</b>	<b>530</b>	<b>4</b>	<b>0.5</b>	<b>&lt;0.5</b>	<b>1</b>	--
<b>MW-19</b>													
04/29-30/04	--	--	10.63	0.00	--	680 <sup>1</sup>	<250 <sup>1</sup>	18,000	1,700	1,700	470	2,400	<0.99 <sup>16</sup>
07/15-16/04	--	--	11.04	0.00	--	--	--	--	--	--	--	--	--
08/03/04 <sup>8</sup>	101.18	--	11.31	0.00	89.87	--	--	--	--	--	--	--	--
10/28-11/01/04	101.18	--	11.41	0.00	89.77	270 <sup>1</sup>	<100 <sup>1</sup>	21,000	1,900	1,400	880	3,500	--
01/24-31/05	LFP 101.18	--	10.78	0.00	90.40	280 <sup>1</sup>	<250 <sup>1</sup>	25,000	1,700	1,500	940	3,700	--
04/18-21/05	LFP 101.18	--	10.61	0.00	90.57	1,200 <sup>1</sup>	<250 <sup>1</sup>	23,000	1,900	1,400	1,000	3,800	--
07/27-28/05	101.18	--	10.92	0.00	90.26	NOT SAMPLED		--	--	--	--	--	--
11/08-10/05	101.18	--	11.25	0.00	89.93	NOT SAMPLED		--	--	--	--	--	--
02/22/06	101.18	--	9.55	0.00	91.63	--	--	--	--	--	--	--	--
04/17/06	101.18	--	10.61	0.00	90.57	--	--	--	--	--	--	--	--
10/17/06	101.18	--	12.93	0.00	88.25	--	--	--	--	--	--	--	--
04/17/07	101.18	--	15.27	0.00	85.91	<75	<94	130	3.2	<0.5	<0.5	<1.5	--
12/04/07	101.18	--	19.80	0.00	81.38	<78	<98	<50	3.0	<0.5	<0.5	<1.5	--
04/28-29/08	101.18	--	16.45 <sup>24</sup>	0.00	84.73	<78	<98	90	2	<0.5	<0.5	<0.5	--
11/03/08	101.18	--	13.14	0.00	88.04	--	--	--	--	--	--	--	--
<b>04/13-16/09</b>	<b>101.18</b>	--	<b>11.50</b>	<b>0.00</b>	<b>89.68</b>	--	--	--	--	--	--	--	--
<b>MW-20</b>													
10/28-11/01/04	105.64	--	8.91	0.00	96.73	<80 <sup>1</sup>	220 <sup>1</sup>	<50	<0.5	<0.5	<0.5	<1.5	--
01/24-31/05	105.64	--	5.94	0.00	99.70	NOT SAMPLED		--	--	--	--	--	--
04/18-21/05	105.64	--	6.39	0.00	99.25	NOT SAMPLED		--	--	--	--	--	--
07/27-28/05	105.64	--	7.88	0.00	97.76	NOT SAMPLED		--	--	--	--	--	--

**Table 1**  
 Groundwater Monitoring Data and Analytical Results  
 Former Texaco Service Station (Site #211577)  
 631 Queen Anne Avenue North  
 Seattle, Washington

WELL ID/ DATE	TOC <sup>a</sup> (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (mst)	TPH- DRO (µg/L)	TPH- HRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	D-LEAD (µg/L)
<b>MW-20 (cont)</b>													
11/08-10/05	105.64	--	8.08	0.00	97.56	NOT SAMPLED	--	--	--	--	--	--	--
02/22/06	105.64	--	6.56	0.00	99.08	NOT SAMPLED	--	--	--	--	--	--	--
04/17/06	105.64	--	6.64	0.00	99.00	NOT SAMPLED	--	--	--	--	--	--	--
08/08/06	105.64	--	8.00	0.00	97.64	NOT SAMPLED	--	--	--	--	--	--	--
10/17/06	105.64	--	8.32	0.00	97.32	NOT SAMPLED	--	--	--	--	--	--	--
04/17/07	105.64	--	6.93	0.00	98.71	NOT SAMPLED	--	--	--	--	--	--	--
12/04/07	105.64	--	5.46	0.00	100.18	NOT SAMPLED	--	--	--	--	--	--	--
04/28/08	105.64	--	7.07 <sup>24</sup>	0.00	98.57	NOT SAMPLED	--	--	--	--	--	--	--
11/03/08	105.64	--	8.10	0.00	97.54	NOT SAMPLED	--	--	--	--	--	--	--
<b>04/13-16/09</b>	<b>105.64</b>	--	<b>6.51</b>	<b>0.00</b>	<b>99.13</b>	--	--	--	--	--	--	--	--
<b>MW-21</b>													
08/03/04 <sup>8</sup>	94.76	--	25.89	0.00	68.87	--	--	--	--	--	--	--	--
08/12/04 <sup>8</sup>	94.76	--	25.89	0.00	68.87	140	160	120	360	<0.5	<0.5	3.1	<10
10/28-11/01/04	94.76	--	25.95	0.00	68.81	<800 <sup>1,23</sup>	<1,000 <sup>1,23</sup>	31,000	5,200	730	1,300	4,500	--
01/24-31/05	LFP 94.76	--	25.85	0.00	68.91	<250 <sup>1</sup>	<250 <sup>1</sup>	130	230	0.6	<0.5	4.3	--
02/17/05 <sup>8</sup>	94.76	--	25.82	0.00	68.94	<85 <sup>1</sup>	<110 <sup>1</sup>	130	280	<0.5	<0.5	<1.5	--
04/18-21/05	LFP 94.76	--	25.94	0.00	68.82	<250 <sup>1</sup>	<250 <sup>1</sup>	110	230	<0.5	<0.5	3.9	--
07/27-28/05	LFP 94.76	--	25.75	0.00	69.01	<250 <sup>1</sup>	<250 <sup>1</sup>	79	220	<0.5	<0.5	<3.0	--
11/08-10/05	LFP 94.76	--	25.96	0.00	68.80	<78 <sup>1</sup>	<97 <sup>1</sup>	110	250	<0.5	<0.5	<1.5	--
02/22/06	94.76	--	25.58	0.00	69.18	--	--	--	--	--	--	--	--
04/17/06	94.76	--	25.62	0.00	69.14	<79	<99	<48	84	<0.5	<0.5	<1.5	--
08/09/06	94.76	--	25.38	0.00	69.38	--	--	130	170	<0.5	<0.5	1.6	--
10/17/06	94.76	--	25.81	0.00	68.95	--	--	--	--	--	--	--	--
04/17-18/07	94.76	--	25.34	0.00	69.42	<81	<100	57	130	0.6	<0.5	<1.5	--
12/04-05/07	94.76	--	26.36	0.00	68.40	<76	<96	61	140	<0.5	<0.5	<1.5	--
04/28-05/01/08	94.76	--	26.42 <sup>24</sup>	0.00	68.34	<78	<97	83	160	<0.5	<0.5	<0.5	--
11/06/08	94.76	--	26.23	0.00	68.53	<30	<70	79	120	<0.5	<0.5	<0.5	--
<b>04/13-16/09</b>	<b>PER 94.76</b>	--	<b>26.11</b>	<b>0.00</b>	<b>68.65</b>	<b>36</b>	<b>&lt;78</b>	<b>89</b>	<b>120</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	--

**Table 1**  
 Groundwater Monitoring Data and Analytical Results  
 Former Texaco Service Station (Site #211577)  
 631 Queen Anne Avenue North  
 Seattle, Washington

WELL ID/ DATE	TOC <sup>a</sup> (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH- DRO (µg/L)	TPH- HRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	D-LEAD (µg/L)
<b>MW-23</b>													
10/26-27/04 <sup>8</sup>	107.82	--	--	--	--	42,000 <sup>1</sup>	<5,000 <sup>1,23</sup>	57,000	--	--	--	--	--
10/28/04 <sup>8</sup>	107.82	--	9.64	0.00	98.18	--	--	--	--	--	--	--	--
10/28-11/01/04	107.82	--	13.50	0.00	94.32	--	--	--	--	--	--	--	--
01/24-31/05	PER 107.82	--	5.32	0.00	102.50	13,000 <sup>1</sup>	<4,100 <sup>1,23</sup>	19,000	190	210	710	3,600	--
04/18-21/05	PER 107.82	--	8.78	0.00	99.04	2,400 <sup>1</sup>	<250 <sup>1</sup>	54,000	630	7,000	1,700	9,200	--
07/27-28/05	107.82	--	9.71	0.00	98.11	NOT SAMPLED		--	--	--	--	--	--
11/08-10/05	107.82	--	9.69	0.00	98.13	NOT SAMPLED		--	--	--	--	--	--
04/17/06	107.82	--	9.91	0.00	97.91	--	--	--	--	--	--	--	--
04/18/07	107.82	--	9.17	0.00	98.65	7,100	<530 <sup>23</sup>	3,500	27	30	31	310	--
12/06/07	107.82	--	7.85	0.00	99.97	7,200	<940 <sup>23</sup>	310	<0.5	0.6	16	46	--
04/29/08	107.82	--	8.90 <sup>24</sup>	0.00	98.92	--	--	--	--	--	--	--	--
11/03/08	107.82	--	9.44	0.00	98.38	--	--	--	--	--	--	--	--
<b>04/13-16/09</b>	<b>107.82</b>	<b>--</b>	<b>7.93</b>	<b>0.00</b>	<b>99.89</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>MW-24</b>													
10/26-27/04 <sup>8</sup>	107.95	--	--	--	--	<800 <sup>1</sup>	<1,000 <sup>1,23</sup>	500	--	--	--	--	--
10/28/04 <sup>8</sup>	107.95	--	6.41	0.00	101.54	--	--	--	--	--	--	--	--
10/28-11/01/04	107.95	--	14.20	0.00	93.75	--	--	--	--	--	--	--	--
01/24-31/05	PER 107.95	--	5.58	0.00	102.37	<250 <sup>1</sup>	<250 <sup>1</sup>	<50	<0.5	0.6	<0.5	1.6	--
04/18-21/05	107.95	--	4.76	0.00	103.19	NOT SAMPLED		--	--	--	--	--	--
07/27-28/05	107.95	--	6.68	0.00	101.27	NOT SAMPLED		--	--	--	--	--	--
11/08-10/05	107.95	--	4.84	0.00	103.11	NOT SAMPLED		--	--	--	--	--	--
02/22/06	107.95	--	5.81	0.00	102.14	--	--	--	--	--	--	--	--
04/17/06	107.95	--	5.55	0.00	102.40	--	--	--	--	--	--	--	--
04/17/07	107.95	--	5.63	0.00	102.32	--	--	--	--	--	--	--	--
12/04/07	107.95	--	4.61	0.00	103.34	--	--	--	--	--	--	--	--
04/28/08	107.95	--	4.96 <sup>24</sup>	0.00	102.99	--	--	--	--	--	--	--	--
11/03/08	107.95	--	4.65	0.00	103.30	--	--	--	--	--	--	--	--
<b>04/13-16/09</b>	<b>107.95</b>	<b>--</b>	<b>4.65</b>	<b>0.00</b>	<b>103.30</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>MW-25</b>													
10/26-27/04 <sup>8</sup>	--	--	--	--	--	260 <sup>1</sup>	<99 <sup>1</sup>	11,000	--	--	--	--	--
10/28-11/01/04	101.96	--	12.36	0.00	89.60	--	--	--	--	--	--	--	--
01/24-31/05	LFP 101.96	--	11.81	0.00	90.15	440 <sup>1</sup>	<250 <sup>1</sup>	7,400	6.8	42	160	1,100	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
**Former Texaco Service Station (Site #211577)**  
**631 Queen Anne Avenue North**  
**Seattle, Washington**

WELL ID/ DATE		TOC (%)	DTP (%)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH- DRO (µg/L)	TPH- HRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	D-LEAD (µg/L)
<b>MW-25 (cont)</b>														
04/18-21/05	LFP	101.96	--	11.63	0.00	90.33	2,800 <sup>1,19</sup>	<250 <sup>1</sup>	22,000	17	300	750	3,900	--
07/27-28/05	LFP	101.96	--	11.73	0.00	90.23	2,400 <sup>1,20</sup>	<250 <sup>1</sup>	22,000	<20 <sup>23</sup>	210	630	3,100	--
11/08-10/05	LFP	101.96	--	12.23	0.00	89.73	870 <sup>1,20</sup>	<100 <sup>1</sup>	14,000	<20 <sup>23</sup>	59	450	1,600	--
02/22/06		101.96	--	10.50	0.00	91.46	--	--	--	--	--	--	--	--
04/17/06		101.96	--	11.65	0.00	90.31	520	<100	780	<2.0	2.9	14	49	--
08/08/06		101.96	--	13.39	0.00	88.57	1,100	210	6,300	19	31	240	650	--
10/17/06		101.96	--	14.06	0.00	87.90	--	--	--	--	--	--	--	--
04/17/07		101.96	--	16.00	0.00	85.96	1,200	<110	1,900	7.0	13	55	97	--
12/04/07		101.96	--	18.05	0.00	83.91	2,000	<100	2,400	10	2.9	73	47	--
04/28/08		101.96	--	17.34 <sup>24</sup>	0.00	84.62	120	<96	250	1	0.7	11	0.9	--
11/04/08		101.96	--	14.08	0.00	87.88	33	<72	150	2	<0.5	<0.5	<0.5	--
<b>04/13-16/09</b>	<b>PER</b>	<b>101.96</b>	<b>--</b>	<b>12.44</b>	<b>0.00</b>	<b>89.52</b>	<b>340</b>	<b>&lt;66</b>	<b>190</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>--</b>
<b>MW-26</b>														
10/28-11/01/04		100.47	--	11.18	0.00	89.29	760 <sup>1</sup>	<200 <sup>1</sup>	57,000	8,300	4,300	1,600	8,700	--
01/24-31/05	LFP	100.47	--	10.59	0.00	89.88	<250 <sup>1</sup>	<250 <sup>1</sup>	3,100	310	190	54	510	--
02/17/05 <sup>8</sup>		100.47	--	10.56	0.00	89.91	310 <sup>1</sup>	<95 <sup>1</sup>	27,000	6,800	1,900	990	4,800	--
04/18-21/05	LFP	100.47	--	10.39	0.00	90.08	<250 <sup>1</sup>	<250 <sup>1</sup>	3,500	730	320	100	660	--
07/27-28/05	LFP	100.47	--	10.55	0.00	89.92	270 <sup>1,20</sup>	<250 <sup>1</sup>	5,100	1,200	370	130	880	--
11/08-10/05	LFP	100.47	--	11.02	0.00	89.45	1,200 <sup>1,20</sup>	<94 <sup>1</sup>	15,000	5,700	850	590	2,400	--
02/22/06		100.47	--	9.32	0.00	91.15	--	--	--	--	--	--	--	--
04/17/06		100.47	--	10.35	0.00	90.12	<80	<100	<48	<0.5	<0.5	<0.5	<1.5	--
08/08/06		100.47	--	12.11	0.00	88.36	240	150	4,900	1,200	310	160	750	--
10/17/06		100.47	--	12.80	0.00	87.67	--	--	--	--	--	--	--	--
04/17-18/07		100.47	--	15.09	0.00	85.38	440	<100	4,500	730	63	230	660	--
12/04-05/07		100.47	--	18.05	0.00	82.42	400	<130	3,400	1,000	43	200	420	--
04/28-05/01/08		100.47	--	16.31 <sup>24</sup>	0.00	84.16	280	<95	130	9	<0.5	4	<0.5	--
05/01/08	(D)	100.47	--	--	--	--	630	<99	140	10	<0.5	5	<0.5	--
11/06/08		100.47	--	12.82	0.00	87.65	2,500	<66	1,100	450	1	110	3	--
<b>04/13-16/09</b>	<b>PER</b>	<b>100.47</b>	<b>--</b>	<b>11.23</b>	<b>0.00</b>	<b>89.24</b>	<b>460</b>	<b>&lt;66</b>	<b>&lt;50</b>	<b>26</b>	<b>&lt;0.5</b>	<b>11</b>	<b>&lt;0.5</b>	<b>--</b>

**Table 1**  
 Groundwater Monitoring Data and Analytical Results  
 Former Texaco Service Station (Site #211577)  
 631 Queen Anne Avenue North  
 Seattle, Washington

WELL ID/ DATE		TOC (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH- DRO (ug/L)	TPH- HRO (ug/L)	TPH- GRO (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	D LEAD (ug/L)
<b>MW-27</b>														
01/24-31/05	LFP	97.26	--	29.81	0.00	67.45	<250 <sup>1</sup>	<250 <sup>1</sup>	<50	<0.5	<0.5	<0.5	<1.5	--
04/18-21/05		97.26	--	29.85	0.00	67.41	NOT SAMPLED	--	--	--	--	--	--	--
07/27-28/05	LFP	97.26	--	29.86	0.00	67.40	<250 <sup>1</sup>	<250 <sup>1</sup>	<50	<0.5	<0.5	<0.5	<1.5	--
11/08-10/05		97.26	--	29.91	0.00	67.35	NOT SAMPLED	--	--	--	--	--	--	--
11/08-10/05		97.26	--	29.91	0.00	67.35	--	--	--	--	--	--	--	--
04/17/06		97.26	--	29.69	0.00	67.57	--	--	--	--	--	--	--	--
10/18/06		97.26	--	29.90	0.00	67.36	--	--	--	--	--	--	--	--
<b>MW-28</b>														
01/24-31/05	LFP	87.78	--	21.18	0.00	66.60	<250 <sup>1</sup>	<250 <sup>1</sup>	<50	<0.5	<0.5	<0.5	<1.5	--
02/10/05 <sup>8</sup>		87.78	--	21.17	0.00	66.61	<79 <sup>1</sup>	<98 <sup>1</sup>	<48	<0.5	<0.5	<0.5	<1.5	--
04/18-21/05	LFP	87.78	--	21.22	0.00	66.56	<250 <sup>1</sup>	<250 <sup>1</sup>	<50	<0.5	<0.5	<0.5	<1.5	--
07/27-28/05	LFP	87.78	--	21.26	0.00	66.52	<250 <sup>1</sup>	<250 <sup>1</sup>	<50	<0.5	<0.5	<0.5	<1.5	--
11/08-10/05		87.78	--	21.32	0.00	66.46	--	--	--	--	--	--	--	--
04/17/06		87.78	--	21.19	0.00	66.59	--	--	--	--	--	--	--	--
10/18/06		87.78	--	21.28	0.00	66.50	--	--	--	--	--	--	--	--
<b>MW-29</b>														
01/24-31/05	LFP	80.88	--	15.14	0.00	65.74	<250 <sup>1</sup>	<250 <sup>1</sup>	<50	<0.5	<0.5	<0.5	<1.5	--
04/18-21/05		80.88	--	14.31	0.00	66.57	NOT SAMPLED	--	--	--	--	--	--	--
07/27-28/05		80.88	--	14.79	0.00	66.09	NOT SAMPLED	--	--	--	--	--	--	--
11/08-10/05		80.88	--	14.70	0.00	66.18	NOT SAMPLED	--	--	--	--	--	--	--
04/17/06		80.88	--	14.60	0.00	66.28	--	--	--	--	--	--	--	--
10/18/06		80.88	--	15.16	0.00	65.72	--	--	--	--	--	--	--	--
<b>MW-30</b>														
02/10/05 <sup>8</sup>		91.81	--	24.70	0.00	67.11	<77 <sup>1</sup>	<96 <sup>1</sup>	<48	4.1	<0.5	<0.5	<1.5	--
04/18-21/05	LFP	91.81	--	24.76	0.00	67.05	<250 <sup>1</sup>	<250 <sup>1</sup>	<50	<0.5	<0.5	<0.5	<1.5	--
07/27-28/05	LFP	91.81	--	24.72	0.00	67.09	<250 <sup>1</sup>	<250 <sup>1</sup>	<50	<0.5	<0.5	<0.5	<1.5	--
11/08-10/05	LFP	91.81	--	24.82	0.00	66.99	<83 <sup>1</sup>	<100 <sup>1</sup>	<48	<0.5	<0.5	<0.5	<1.5	--
04/17/06		91.81	--	24.68	0.00	67.13	<80	<100	<50	<0.5	<0.5	<0.5	<1.5	--
10/17/06		91.81	--	24.80	0.00	67.01	--	--	--	--	--	--	--	--
04/17-18/07		91.81	--	24.72	0.00	67.09	<76	<94	<50	<0.5	<0.5	<0.5	<1.5	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
**Former Texaco Service Station (Site #211577)**  
**631 Queen Anne Avenue North**  
**Seattle, Washington**

WELL ID/ DATE	TOC (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (mst)	TPH- DRO (µg/L)	TPH- HRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	D. LEAD (µg/L)
<b>MW-30 (cont)</b>													
12/04-05/07	91.81	--	24.84	0.00	66.97	<75	<94	<50	<0.5	<0.5	<0.5	<1.5	--
04/28-30/08	91.81	--	24.81	0.00	67.00	<77	<97	<50	<0.5	<0.5	<0.5	<0.5	--
11/06/08	91.81	--	24.85	0.00	66.96	<30	<71	<50	<0.5	<0.5	<0.5	<0.5	--
11/06/08	(D) 91.81	--	--	0.00	--	<31	<71	<50	<0.5	<0.5	<0.5	<0.5	--
04/13-16/09	PER 91.81	--	24.81	0.00	67.00	<29	<67	<50	<0.5	<0.5	<0.5	<0.5	--
04/13-16/09	(D) 91.81	--	--	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
<b>MW-31</b>													
02/10/05 <sup>8</sup>	87.22	--	19.89	0.00	67.33	<77 <sup>1</sup>	<96 <sup>1</sup>	<48	<0.5	<0.5	<0.5	<1.5	--
04/18-21/05	LFP 87.22	--	20.02	0.00	67.20	<800 <sup>1,23</sup>	<1,000 <sup>1,23</sup>	<50	<0.5	<0.5	<0.5	<1.5	--
07/27-28/05	LFP 87.22	--	19.89	0.00	67.33	<250 <sup>1</sup>	<250 <sup>1</sup>	<50	<0.5	<0.5	<0.5	<1.5	--
11/08-10/05	87.22	--	20.12	0.00	67.10	NOT SAMPLED		--	--	--	--	--	--
04/17/06	87.22	--	19.94	0.00	67.28	--	--	--	--	--	--	--	--
10/17/06	87.22	--	20.14	0.00	67.08	--	--	--	--	--	--	--	--
04/17-18/07	87.22	--	19.78	0.00	67.44	<75	<94	<50	<0.5	<0.5	<0.5	<1.5	--
12/04-05/07	87.22	--	20.14	0.00	67.08	<75	<94	<50	<0.5	<0.5	<0.5	<1.5	--
04/28-30/08	87.22	--	20.06	0.00	67.16	<81	<100	<50	<0.5	<0.5	<0.5	<0.5	--
11/04/08	87.22	--	20.11	0.00	67.11	<29	<69	<50	<0.5	<0.5	<0.5	<0.5	--
04/13-16/09	PER 87.22	--	20.04	0.00	67.18	<29	<67	<50	<0.5	<0.5	<0.5	<0.5	--
<b>MW-32</b>													
07/27-28/05	LFP 101.09	--	11.43	0.00	89.66	1,200 <sup>1,20</sup>	<250 <sup>1</sup>	17,000	2,300	540	630	2,600	--
11/08-10/05	LFP 101.09	--	11.81	0.00	89.28	<80 <sup>1</sup>	<100 <sup>1</sup>	580	200	29	5.4	130	--
02/22/06	101.09	--	10.15	0.00	90.94	--	--	--	--	--	--	--	--
04/17/06	101.09	--	11.12	0.00	89.97	<81	<100	70	47	1.9	4.0	8.7	--
08/08/06	101.09	--	12.86	0.00	88.23	400	140	4,000	1,500	130	210	730	--
04/17-18/07	101.09	--	15.97	0.00	85.12	2,600	<940 <sup>23</sup>	17,000	2,400	170	830	2,400	--
12/04-05/07	101.09	--	18.42	0.00	82.67	<79	<98	670	310	6.6	57	73	--
04/29/08	101.09	--	17.09 <sup>24</sup>	0.00	84.00	<79	<98	95	77	<0.5	9	2	--
11/04/08	101.09	--	13.56	0.00	87.53	41	<71	130	36	<0.5	2	<0.5	--
04/13-16/09	PER 101.09	--	12.00	0.00	89.09	330	<67	<50	<0.5	<0.5	<0.5	<0.5	--



**Table 1**  
 Groundwater Monitoring Data and Analytical Results  
 Former Texaco Service Station (Site #211577)  
 631 Queen Anne Avenue North  
 Seattle, Washington

WELL ID/ DATE		TOC <sup>5</sup> (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH- DRO (µg/L)	TPH- HRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	D-LEAD (µg/L)
<b>MW-33</b>														
07/27-28/05	LFP	100.31	--	28.33	0.00	71.98	630 <sup>1,20</sup>	<250 <sup>1</sup>	2,200	2,500	200	93	170	--
11/08-10/05	LFP	100.31	--	28.50	0.00	71.81	340 <sup>1,20</sup>	<100 <sup>1</sup>	1,900	4,800	180	110	170	--
04/17/06		100.36	--	27.95	0.00	72.41	250	<110	1,900	4,000	140	93	170	--
08/09/06		100.36	--	28.65	0.00	71.71	490	<98	3,000	4,100	220	180	290	--
10/17/06		100.36	--	28.96	0.00	71.40	--	--	--	--	--	--	--	--
04/17-18/07		100.36	--	29.65	0.00	70.71	400	<100	1,600	3,700	130	110	130	--
12/04-05/07		100.36	--	30.46	0.00	69.90	400	<94	1,200	3,300	110	76	86	--
04/28/08		100.36	--	30.46 <sup>24</sup>	0.00	69.90	370	<100	1,300	2,400	86	75	76	--
11/04/08		100.36	--	29.62	0.00	70.74	270	<69	1,200	2,700	97	95	85	--
04/13-16/09	PER	100.36	--	28.95	0.00	71.41	330	<68	1,800	2,500 <sup>27</sup>	73 <sup>27</sup>	110 <sup>27</sup>	76 <sup>27</sup>	--
<b>MW-34</b>														
11/28/05 <sup>8</sup>		--	--	--	--	--	<84 <sup>1</sup>	<110 <sup>1</sup>	<48	--	--	--	--	--
04/17/06		94.35	--	26.97	0.00	67.38	<80	<100	<48	<0.5	<0.5	<0.5	<1.5	--
10/17/06		94.35	--	27.13	0.00	67.22	--	--	--	--	--	--	--	--
04/17-18/07		94.35	--	27.06	0.00	67.29	<81	<100	<50	<0.5	<0.5	<0.5	<1.5	--
12/04-05/07		94.35	--	27.22	0.00	67.13	<78	<98	60	<0.5	<0.5	<0.5	<1.5	--
04/28-30/08		94.35	--	27.15	0.00	67.20	<80	<100	<50	<0.5	<0.5	<0.5	<0.5	--
11/06/08		94.35	--	27.19	0.00	67.16	<31	<73	<50	<0.5	<0.5	<0.5	<0.5	--
04/13-16/09	PER	94.35	--	27.15	0.00	67.20	<29	<67	<50	<0.5	<0.5	<0.5	<0.5	--
<b>MW-35</b>														
11/28/05 <sup>8</sup>		--	--	--	--	--	280 <sup>1,22</sup>	180 <sup>1</sup>	250	--	--	--	--	--
02/22/06		100.52	--	30.32	0.00	70.20	--	--	--	--	--	--	--	--
04/17/06		100.52	--	30.41	0.00	70.11	270	<100	370	100	1.3	1.0	3.9	--
08/09/06		100.52	--	30.75	0.00	69.77	300	230	780	150	3.1	1.9	5.8	--
10/18/06		100.52	--	30.94	0.00	69.58	--	--	--	--	--	--	--	--
04/17/07		100.52	--	31.19	0.00	69.33	--	--	--	--	--	--	--	--
12/04/07		100.52	--	31.89	0.00	68.63	--	--	--	--	--	--	--	--
04/28-05/01/08		100.52	--	31.78 <sup>24</sup>	0.00	68.74	180	<100	110	45	<0.5	<0.5	<0.5	--
11/05/08		100.52	--	31.48	0.00	69.04	110	<67	180	150	<0.5	<0.5	<0.5	--
04/13-16/09	PER	100.52	--	31.22	0.00	69.30	120	<68	83	100	<0.5	<0.5	<0.5	--

**Table 1**

Groundwater Monitoring Data and Analytical Results  
 Former Texaco Service Station (Site #211577)  
 631 Queen Anne Avenue North  
 Seattle, Washington

WELL ID/ DATE	TOC (fL)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH- DRO (µg/L)	TPH- HRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	D. LEAD (µg/L)	
<b>DPE-1/VP-6</b>														
07/24/02	101.90	10.60	12.18	1.58	90.98	NOT SAMPLED DUE TO THE PRESENCE OF SPH						--	--	--
10/17-18/02	101.90	11.35	12.00	0.65	90.42	NOT SAMPLED DUE TO THE PRESENCE OF SPH						--	--	--
01/21/03	101.90	11.27	12.90	1.63	90.30	NOT SAMPLED DUE TO THE PRESENCE OF SPH						--	--	--
04/23-24/03	101.90	10.75	10.90	0.15	91.12	NOT SAMPLED DUE TO THE PRESENCE OF SPH						--	--	--
06/30-07/01/03	101.90	11.32	11.54	0.22	90.54	NOT SAMPLED DUE TO THE PRESENCE OF SPH						--	--	--
10/01-02/03	101.90	12.12	12.91	0.79	89.62	NOT SAMPLED DUE TO THE PRESENCE OF SPH						--	--	--
01/21-23/04	101.90	NOT MONITORED/SAMPLED DUE TO WELL OBSTRUCTION AT 2.41 FEET										--	--	--
04/29-30/04	--	11.20	11.25	0.05	--	NOT SAMPLED DUE TO THE PRESENCE OF SPH						--	--	--
07/15-16/04	--	11.61	11.63	0.02	--	NOT SAMPLED DUE TO THE PRESENCE OF SPH						--	--	--
08/03/04 <sup>s</sup>	101.84	--	11.85	0.00	89.99	--	--	--	--	--	--	--	--	
10/28-11/01/04	101.84	--	11.99	0.00	89.85	180,000 <sup>1</sup>	<20,000 <sup>1,23</sup>	81,000	7,500	9,500	1,100	9,000	--	
01/24-31/05	LFP 101.84	--	11.37	0.00	90.47	21,000 <sup>1</sup>	<1,000 <sup>1,23</sup>	19,000	1,800	1,200	75	3,300	--	
04/18-21/05	LFP 101.84	--	11.19	0.00	90.65	280,000 <sup>1</sup>	<11,000 <sup>1,23</sup>	8,000	190	240	48	800	--	
07/27-28/05	101.84	--	11.50	0.00	90.34	NOT SAMPLED						--	--	--
11/08-10/05	101.84	--	11.76	0.00	90.08	NOT SAMPLED						--	--	--
08/09/05	101.84	11.59	11.60	0.01	90.24	--	--	--	--	--	--	--	--	
11/08-10/05	101.84	NP	11.76	0.00	90.08	--	--	--	--	--	--	--	--	
02/22/06	101.84	Sheen	10.02	0.00	91.82	--	--	--	--	--	--	--	--	
04/17/06	101.84	NP	11.25	0.00	90.59	--	--	--	--	--	--	--	--	
08/31/06	101.84	13.21	13.13	0.00	88.71	--	--	--	--	--	--	--	--	
09/15/06	101.84	13.31	13.35	0.04	88.49	--	--	--	--	--	--	--	--	
10/17/06	101.55	12.85	14.68	1.83	88.33	--	--	--	--	--	--	--	--	
04/17-19/07	101.55	--	15.63	0.00	85.92	5,600	<950 <sup>23</sup>	650	20	4.1	3.7	13	--	
04/17-19/07	(D) 101.55	--	--	0.00	--	<1,500	<1,900 <sup>23</sup>	690	20	4.3	3.9	14	--	
12/04-05/07	101.55	--	20.72	0.00	80.83	240	<100	550	380	4.7	32	15	--	
04/28-29/08	101.63	--	16.74	0.00	84.89	610	<200	260	430	1	1	2	--	
04/29/08	(D) 101.63	--	--	0.00	--	490	<200	250	450	1	1	2	--	
11/03/08	101.63	--	13.50	0.00	88.13	--	--	--	--	--	--	--	--	
04/13-16/09 <sup>18</sup>	101.63	--	11.84	0.00	89.79	--	--	--	--	--	--	--	--	
<b>DPE-2</b>														
04/29-30/04	--	11.31	11.51	0.20	--	NOT SAMPLED DUE TO THE PRESENCE OF SPH						--	--	--
07/15-16/04	--	--	11.73	0.00	--	--	--	--	--	--	--	--	--	
08/03/04 <sup>s</sup>	102.17	--	12.17	0.00	90.00	--	--	--	--	--	--	--	--	
10/28-11/01/04	102.17	--	12.12	0.00	90.05	6,200 <sup>1</sup>	<1,000 <sup>1,23</sup>	48,000	2,500	3,000	940	5,400	--	

**Table 1**  
 Groundwater Monitoring Data and Analytical Results  
 Former Texaco Service Station (Site #211577)  
 631 Queen Anne Avenue North  
 Seattle, Washington

WELL ID/ DATE	TOC (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH- DRO (µg/L)	TPH- HRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	D-LEAD (µg/L)	
<b>DPE-2 (cont)</b>														
01/24-31/05	LFP	102.17	--	11.51	0.00	90.66	870 <sup>1</sup>	<250 <sup>1</sup>	2,200	70	79	13	140	--
04/18-21/05	LFP	102.17	--	11.30	0.00	90.87	290 <sup>1</sup>	<250 <sup>1</sup>	2,000	210	170	42	220	--
07/27-28/05		102.17	--	11.64	0.00	90.53	NOT SAMPLED		--	--	--	--	--	--
11/08-10/05		102.17	--	12.02	0.00	90.15	NOT SAMPLED		--	--	--	--	--	--
02/22/06		102.17	10.06	10.98	0.92	91.93	--	--	--	--	--	--	--	--
02/27/06		102.17	10.20	11.09	0.89	91.79	--	--	--	--	--	--	--	--
04/17/06		102.17	11.25	11.71	0.46	90.83	--	--	--	--	--	--	--	--
07/31/06		102.17	12.76	12.80	0.04	89.40	--	--	--	--	--	--	--	--
08/19/06		102.17	13.33	13.45	0.12	88.82	--	--	--	--	--	--	--	--
09/15/06		102.43	13.69	13.73	0.04	88.73	--	--	--	--	--	--	--	--
09/29/06		102.43	13.83	13.86	0.03	88.59	--	--	--	--	--	--	--	--
10/17/06		102.43	13.91	13.92	0.01	88.52	--	--	--	--	--	--	--	--
10/24/06		102.43	14.20	14.50	0.30	88.17	--	--	--	--	--	--	--	--
04/17/07		102.43	--	15.96	0.00	86.47	110,000	<9,500 <sup>23</sup>	27,000	<10	2.9	14	1,100	--
12/04-05/07		102.43	--	21.52	0.00	80.91	5,300	<480	600	150	5.3	8.6	15	--
04/28-29/08		102.54	--	17.20	0.00	85.34	8,100	<2,000 <sup>23</sup>	770	2	<0.5	<0.5	0.5	--
11/04/08		102.54	--	14.06	0.00	88.48	3,000	<130	340	<0.5	<0.5	<0.5	<0.5	--
04/13-16/09 <sup>18</sup>	PER	102.54	--	12.40	0.00	90.14	83	<72	93	<0.5	<0.5	<0.5	<0.5	--
<b>DPE-3</b>														
10/17/06		103.93	--	14.49	0.00	89.44	--	--	--	--	--	--	--	--
10/26/06		103.93	--	14.79	0.00	89.14	<80	<100	<48	<0.5	<0.5	<0.5	<0.5	--
04/17-19/07		103.93	--	18.25	0.00	85.68	4,900	<2,000	87	<0.5	<0.5	<0.5	3.9	--
12/04/07		103.93	--	18.35	0.00	85.58	NOT SAMPLED DUE TO INSUFFICIENT WATER					--	--	--
04/28/08		104.02	--	18.25	0.00	85.77	NOT SAMPLED DUE TO INSUFFICIENT WATER					--	--	--
11/03/08		104.02	--	14.39	0.00	89.63	NOT SAMPLED DUE TO INSUFFICIENT WATER					--	--	--
04/13-16/09		104.02	--	12.70	0.00	91.32	--	--	--	--	--	--	--	--
<b>DPE-4</b>														
10/17/06		102.26	--	14.29	0.00	87.97	--	--	--	--	--	--	--	--
10/18/06		102.26	--	14.29	0.00	87.97	--	--	--	--	--	--	--	--
10/24/06		102.26	--	14.00	0.00	88.26	920	1,400	4,900	260	240	39	720	--
04/17-19/07		102.26	--	19.17	0.00	83.09	6,700	<1,900 <sup>23</sup>	12,000	2,200	220	400	2,000	--
12/04-06/07		102.26	--	19.42	0.00	82.84	330	<100	210	44	0.9	1	5.5	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
**Former Texaco Service Station (Site #211577)**  
**631 Queen Anne Avenue North**  
**Seattle, Washington**

WELL ID/ DATE	TOC <sup>a</sup> (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH- DRO (µg/L)	TPH- HRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	D. LEAD (µg/L)
<b>DPE-4 (cont)</b>													
04/28-30/08	102.39	--	17.36	0.00	85.03	5,200	<2,500 <sup>23</sup>	410	51	3	2	23	--
04/30/08	(D) 102.39	--	--	0.00	--	2,500	<2,000 <sup>23</sup>	390	51	3	2	23	--
11/03/08	102.39	--	14.14	0.00	88.25	--	--	--	--	--	--	--	--
04/13-16/09 <sup>18</sup>	102.39	--	12.56	0.00	89.83	--	--	--	--	--	--	--	--
<b>DPE-5</b>													
11/28/05 <sup>8</sup>	--	--	--	--	--	5,300 <sup>1,20</sup>	<1,000 <sup>1</sup>	36,000	--	--	--	--	--
01/23/06	113.32	16.70	16.75	0.05	96.61	--	--	--	--	--	--	--	--
02/22/06	113.81	--	17.16	0.00	96.65	--	--	--	--	--	--	--	--
04/17/06	113.81	--	--	--	--	4,800	<190	19,000	1,100	1,400	160	2,900	--
04/17-19/07	113.81	--	23.78	0.00	90.03	4,600	<470	200	17	2.6	1.6	11	--
12/04-06/07	113.81	--	23.72	0.00	90.09	4,000	<470	180	0.6	0.5	0.6	4.3	--
04/28-29/08	113.82	--	18.93	0.00	94.89	11,000	<2,500 <sup>23</sup>	<250	32	4	3	22	--
04/29/08	(D) 113.82	--	--	--	--	3,300	<1,900 <sup>23</sup>	--	--	--	--	--	--
11/03/08 <sup>25</sup>	113.82	--	22.45	0.00	91.37	12,000	<3,500 <sup>23</sup>	460	77	7	4	17	--
04/13-16/09	PER 113.82	--	14.63	0.00	99.19	690	83	110	2	<0.5	1	3	--
<b>DPE-6</b>													
11/28/05 <sup>8</sup>	--	--	--	--	--	170 <sup>1,20</sup>	<100 <sup>1</sup>	280	--	--	--	--	--
02/22/06	113.32	--	19.62	0.00	93.70	--	--	--	--	--	--	--	--
04/17/06	113.32	--	--	--	--	--	--	38,000	3,000	5,400	690	4,900	--
04/17/07	113.32	--	29.83	0.00	83.49	110,000	<9,300 <sup>23</sup>	5,400	27	39	35	350	--
12/04-05/07	113.32	--	28.51	0.00	84.81	1,100	<190	160	<2.0	0.6	<2.0	3.8	--
04/28-29/08	114.14	--	22.81	0.00	91.33	8,500	<480	460	1	6	2	32	--
04/29/08	(D) 114.14	--	--	--	--	6,500	<480	--	--	--	--	--	--
11/04/08	114.14	--	21.30	0.00	92.84	11,000	<1,300 <sup>23</sup>	870	16	12	7	63	--
04/13-16/09	PER 114.14	--	20.60	0.00	93.54	16,000	880	900	100	6	16	24	--
<b>DPE-7</b>													
11/28/05 <sup>8</sup>	--	--	--	--	--	6,200 <sup>1,20</sup>	<1,000 <sup>1,23</sup>	17,000	--	--	--	--	--
02/22/06	113.15	--	19.20	0.00	93.95	--	--	--	--	--	--	--	--
04/17/06	113.15	--	--	--	--	8,600	<500	29,000	4,500	1,800	470	4,200	--
04/17/07	113.15	--	27.00	0.00	86.15	22,000	<4,700 <sup>23</sup>	3,800	78	40	97	180	--

**Table 1**  
 Groundwater Monitoring Data and Analytical Results  
 Former Texaco Service Station (Site #211577)  
 631 Queen Anne Avenue North  
 Seattle, Washington

WELL ID/ DATE	TOC (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH- DRO (µg/L)	TPH- HRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	D-LEAD (µg/L)
<b>DPE-7 (cont)</b>													
12/04-05/07	113.15	--	27.52	0.00	85.63	120,000	<9,900 <sup>23</sup>	760	44	1.7	28	15	--
04/28-29/08	113.13	--	22.26	0.00	90.87	6,100	<980 <sup>23</sup>	<250	7	2	2	6	--
04/29/08	(D) 113.13	--	--	--	--	6,300	<980 <sup>23</sup>	--	--	--	--	--	--
11/03/08	113.13	20.95	20.96	0.01	92.18	--	--	--	--	--	--	--	--
04/13-16/09 <sup>18</sup>	113.13	--	19.90	0.00	93.23	--	--	--	--	--	--	--	--
<b>DPE-8/MW-22</b>													
10/26-27/04 <sup>8</sup>	104.83	--	--	--	--	5,000 <sup>1</sup>	<1,000 <sup>1,23</sup>	54,000	--	--	--	--	--
10/28-11/01/04	104.83	--	14.11	0.00	90.72	--	--	--	--	--	--	--	--
01/24-31/05	PER 104.83	--	13.62	0.00	91.21	980 <sup>1</sup>	<250 <sup>1</sup>	55,000	5,200	6,300	1,500	8,800	--
04/18-21/05	PER 104.83	--	13.72	0.00	91.11	2,000 <sup>1</sup>	<250 <sup>1</sup>	40,000	4,600	4,300	1,200	6,800	--
07/27-28/05	104.83	--	13.53	0.00	91.30	NOT SAMPLED		--	--	--	--	--	--
11/08-10/05	104.83	--	14.14	0.00	90.69	NOT SAMPLED		--	--	--	--	--	--
02/22/06	104.83	--	12.34	0.00	92.49	--	--	--	--	--	--	--	--
04/17/06	104.83	--	14.60	0.00	90.23	--	--	--	--	--	--	--	--
08/08/06	104.83	16.55	16.56	0.01	88.28	2,000	<210	41,000	3,100	3,500	1,200	6,400	--
08/19/06	104.83	15.30	15.65	0.35	89.46	--	--	--	--	--	--	--	--
08/31/06	104.83	15.21	16.33	1.12	89.40	--	--	--	--	--	--	--	--
09/15/06	104.83	15.47	16.55	1.08	89.14	--	--	--	--	--	--	--	--
10/17/06	104.35	15.75	17.12	1.37	88.32	--	--	--	--	--	--	--	--
10/24/06	104.35	16.59	16.59	0.00	87.76	5,200	880	67,000	3,100	4,900	1,800	11,000	--
04/17/07	104.35	--	20.28	0.00	84.07	1,900,000	510,000	9,300	84	34	35	1,100	--
12/04-05/07	104.35	--	20.23	0.00	84.12	120,000	32,000	4,900	2.6	1.0	3.5	49	--
04/28-29/08	104.49	--	18.63	0.00	85.86	38,000	8,900	4,500	14	5	11	29	--
04/30/08	104.49	NO PURGE NWTPHDx SAMPLE				--	820,000	190,000	--	--	--	--	--
04/30/08	104.49	FILTERED, NO PURGE NWTPHDx SAMPLE				--	3,900	<420	--	--	--	--	--
11/06/08	104.49	--	15.51	0.00	88.98	18,000	<3,300 <sup>23</sup>	3,500	35	16	19	140	--
04/13-16/09	PER 104.49	--	13.87	0.00	90.62	12,000	590	2,000	7	1	3	6	--
<b>DPE-9</b>													
10/17/06	103.38	--	14.92	0.00	88.46	--	--	--	--	--	--	--	--
10/18/06	103.38	--	14.92	0.00	88.46	--	--	--	--	--	--	--	--
10/24/06	103.38	Sheen	13.78	0.00	89.60	220	<100	<48	<0.5	<0.5	<0.5	<0.5	--
04/17-18/07	103.38	--	14.13	0.00	89.25	380	530	<50	<0.5	<0.5	<0.5	<1.5	--

**Table 1**

Groundwater Monitoring Data and Analytical Results  
 Former Texaco Service Station (Site #211577)  
 631 Queen Anne Avenue North  
 Seattle, Washington

WELL ID/ DATE	TOC ( <i>ft.</i> )	DTP ( <i>ft.</i> )	DTW ( <i>ft.</i> )	SPHT ( <i>ft.</i> )	GWE ( <i>msl</i> )	TPH- DRO ( <i>ug/L</i> )	TPH- HRO ( <i>ug/L</i> )	TPH- GRO ( <i>ug/L</i> )	B ( <i>ug/L</i> )	T ( <i>ug/L</i> )	E ( <i>ug/L</i> )	X ( <i>ug/L</i> )	D-LEAD ( <i>ug/L</i> )	
<b>DPE-9 (cont)</b>														
12/04/07	103.38	--	16.23	0.00	87.15	NOT SAMPLED DUE TO INSUFFICIENT WATER							--	--
04/28/08	103.46	OBSTRUCTION IN WELL			--	--	--	--	--	--	--	--	--	
11/03/08	103.46	--	15.06	0.00	88.40	NOT SAMPLED DUE TO INSUFFICIENT WATER							--	--
<b>04/13-16/09<sup>18</sup></b>	<b>103.46</b>	--	<b>12.30</b>	<b>0.00</b>	<b>91.16</b>	--	--	--	--	--	--	--	--	
<b>RW-2</b>														
09/90	104.54	12.68	12.72	0.04	91.85	--	--	--	--	--	--	--	--	
03/26-28/91	104.54	10.13	10.21	0.08	94.39	--	--	--	19,000	46,000	2,500	120,000	--	
07/07/93	104.54	--	11.71	0.00	92.83	--	--	--	--	--	--	--	--	
01/97	104.54	--	--	--	--	--	--	390	31	14	6	49	--	
04/97	104.54	--	--	--	--	--	--	11,000	189	243	99	743	--	
07/97	104.54	--	--	--	--	--	--	24,000	4,230	2,490	398	2,732	--	
11/97	104.54	--	--	--	--	--	--	4,400	3,140	1,200	338	2,265	--	
07/24/02	106.63	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--	--	
10/17-18/02	NP	106.63	--	14.44	0.00	92.19	988 <sup>1</sup>	<500 <sup>1</sup>	1,380	90.5	8.05	29.2	31.5	2.23
01/21/03	NP	106.63	--	10.61	0.00	96.02	<250 <sup>1</sup>	<500 <sup>1</sup>	126	33.5	0.859	1.28	4.11	<1.00 <sup>16</sup>
04/23-24/03		106.63	--	10.30	0.00	96.33	<250 <sup>1</sup>	<500 <sup>1</sup>	55.7	<0.500	<0.500	0.642	2.64	<1.00 <sup>16</sup>
06/30-07/01/03		106.63	--	13.72	0.00	92.91	505 <sup>1</sup>	<500 <sup>1</sup>	2,380	53.5	8.72	39.8	43.2	1.43 <sup>16</sup>
10/01-02/03		106.63	--	15.05	0.00	91.58	1,400 <sup>1</sup>	<250 <sup>1</sup>	2,300	75	7.3	29	33	4.9 <sup>16</sup>
01/21-23/04		106.63	--	10.22	0.00	96.41	<250 <sup>1</sup>	<250 <sup>1</sup>	53	1.2	0.7	1.3	8.9	<1.2 <sup>16</sup>
04/29-30/04		106.63	--	13.31	0.00	93.32	270 <sup>1</sup>	<250 <sup>1</sup>	81	11	0.9	2.0	1.9	<0.99 <sup>16</sup>
07/15-16/04		106.63	--	14.41	0.00	92.22	<250 <sup>1</sup>	<500 <sup>1</sup>	634	25.7	2.39	6.18	3.55	<1.00 <sup>16</sup>
08/03/04 <sup>8</sup>		106.63	--	14.90	0.00	91.73	--	--	--	--	--	--	--	--
10/28-11/01/04		106.63	--	14.68	0.00	91.95	280,000 <sup>1</sup>	<40,000 <sup>1,23</sup>	26,000	410	63	470	950	--
01/24-31/05	LFP	106.63	--	11.57	0.00	95.06	<250 <sup>1</sup>	<250 <sup>1</sup>	94	<0.5	<0.5	<2.0	2.5	--
04/18-21/05	LFP	106.63	--	9.18	0.00	97.45	260 <sup>1</sup>	<250 <sup>1</sup>	130	0.8	<0.5	2.3	6.1	--
07/27-28/05		106.63	--	14.16	0.00	92.47	NOT SAMPLED							--
11/08-10/05		106.63	--	9.99	0.00	96.64	NOT SAMPLED							--
04/17/06		106.63	--	10.80	0.00	95.83	--	--	--	--	--	--	--	
10/18/06		106.63	--	17.96	0.00	88.67	--	--	--	--	--	--	--	
04/17-18/07		106.63	--	17.12	0.00	89.51	15,000	<1,900 <sup>23</sup>	650	54	12	10	35	--
12/04-06/07		106.63	--	15.21	0.00	91.42	400	<100	<50	<0.5	<0.5	<0.5	<1.5	--
04/28-29/08		106.63	--	15.84 <sup>24</sup>	0.00	90.79	890	<95	190	12	1	0.9	2	--
11/04/08		106.63	--	15.66	0.00	90.97	1,000	<66	890	82	9	14	6	--
<b>04/13-16/09</b>	<b>PER</b>	<b>106.63</b>	--	<b>13.80</b>	<b>0.00</b>	<b>92.83</b>	<b>840</b>	<b>&lt;65</b>	<b>340</b>	<b>21</b>	<b>0.9</b>	<b>0.5</b>	<b>0.8</b>	--

**Table 1**  
 Groundwater Monitoring Data and Analytical Results  
 Former Texaco Service Station (Site #211577)  
 631 Queen Anne Avenue North  
 Seattle, Washington

WELL ID/ DATE	TOC (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH- DRO (ug/L)	TPH- HRO (ug/L)	TPH- GRO (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	D. LEAD (ug/L)
<b>RW-3</b>													
07/07/93	100.70	--	16.14	0.00	84.56	--	--	--	--	--	--	--	--
07/24/02	100.70	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--	--
10/17-18/02	100.70	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--	--
01/21/03	100.70	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--	--
04/23-24/03	100.70	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--	--
06/30-07/01/03	100.70	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--	--
10/01-02/03	100.70	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--	--
01/21-23/04	100.70	--	10.32	0.00	90.38	3,000 <sup>1</sup>	270 <sup>1</sup>	9,100	4,400	360	520	1,300	12.0 <sup>16</sup>
04/29-30/04	100.70	--	10.19	0.00	90.51	5,200 <sup>1</sup>	<250 <sup>1</sup>	11,000	5,000	750	550	1,600	10.6 <sup>16</sup>
07/15-16/04 <sup>18</sup>	100.70	--	10.59	0.00	90.11	1,300 <sup>1</sup>	1,330 <sup>1</sup>	18,900	5,350	341	554	1,350	2.32 <sup>16</sup>
10/28-11/01/04	100.70	--	10.98	0.00	89.72	680 <sup>1</sup>	<250 <sup>1</sup>	10,000	4,800	120	680	1,100	--
01/24-31/05	LFP	--	10.49	0.00	90.21	770 <sup>1</sup>	<250 <sup>1</sup>	6,600	3,000	170	460	940	--
04/18-21/05	LFP	--	10.17	0.00	90.53	3,700 <sup>1,19</sup>	<250 <sup>1</sup>	8,200	3,900	380	550	1,300	--
07/27-28/05	100.70	--	10.45	0.00	90.25	NOT SAMPLED	--	--	--	--	--	--	--
11/08-10/05	100.70	--	10.57	0.00	90.13	NOT SAMPLED	--	--	--	--	--	--	--
04/17/06	100.70	--	10.72	0.00	89.98	--	--	--	--	--	--	--	--
10/18/06	100.70	--	12.55	0.00	88.15	--	--	--	--	--	--	--	--
<b>RW-4</b>													
06/25/93	110.82	--	20.76	0.00	90.06	--	--	--	--	--	--	--	--
07/07/93	110.82	--	21.65	0.00	89.17	--	--	14,000	6,500	2,800	370	2,000	--
07/24/02	110.82	--	18.30	0.00	92.52	15,000 <sup>1</sup>	<2,000 <sup>1,23</sup>	990	62	1.3	32	7.0	3.3
10/17-18/02	110.82	--	19.29	0.00	91.53	8,930 <sup>1</sup>	939 <sup>1</sup>	3,160	59.8	2.50	40.4	15.6	1.23
01/21/03	110.82	--	17.88	0.00	92.94	2,830 <sup>1</sup>	<500 <sup>1</sup>	689	0.991	<0.500	2.37	7.03	<1.00
04/23-24/03	110.82	INACCESSIBLE - VEHICLE PARKED OVER WELL					--	--	--	--	--	--	--
06/30-07/01/03	110.82	INACCESSIBLE - VEHICLE PARKED OVER WELL					--	--	--	--	--	--	--
10/01-02/03	110.82	INACCESSIBLE - VEHICLE PARKED OVER WELL					--	--	--	--	--	--	--
01/21-23/04	110.82	INACCESSIBLE - VEHICLE PARKED OVER WELL					--	--	--	--	--	--	--
04/29-30/04	110.82	INACCESSIBLE - VEHICLE PARKED OVER WELL					--	--	--	--	--	--	--
07/15-16/04	110.82	17.98	18.20	0.22	92.80**	NOT SAMPLED DUE TO THE PRESENCE OF SPH							
10/28/04 <sup>8</sup>	110.82	--	18.44	0.00	92.38	--	--	--	--	--	--	--	--
10/28-11/01/04	110.82	DRY	--	--	--	--	--	--	--	--	--	--	--
01/24-31/05	110.82	--	18.04	0.00	92.78	NOT SAMPLED DUE TO INSUFFICIENT WATER							
04/18-21/05	110.82	--	17.86	0.00	92.96	NOT SAMPLED DUE TO INSUFFICIENT WATER/OBSTRUCTION							

**Table 1**

Groundwater Monitoring Data and Analytical Results  
 Former Texaco Service Station (Site #211577)  
 631 Queen Anne Avenue North  
 Seattle, Washington

WELL ID/ DATE	TOC (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (mst)	TPH- DRO (µg/L)	TPH- HRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	D-LEAD (µg/L)
<b>RW-4 (cont)</b>													
07/27-28/05	110.82	INACCESSIBLE - VEHICLE PARKED OVER WELL											
11/08-10/05	110.82	--	0.00	0.00	110.82	NOT SAMPLED		--	--	--	--	--	--
10/18/06	110.82	--	23.64	0.00	87.18	--	--	--	--	--	--	--	--
NOT MONITORED/SAMPLED													
<b>RW-5</b>													
07/07/93	104.22	--	12.34	0.00	91.88	--	--	--	--	--	--	--	--
07/24/02	104.22	UNABLE TO LOCATE											
10/17-18/02	104.22	--	12.63	0.00	91.59	84,900 <sup>1</sup>	3,650 <sup>1</sup>	3,370	696	67.2	63.0	408	3.91
01/21/03	NP	--	11.81	0.00	92.41	1,860 <sup>1</sup>	<500 <sup>1</sup>	493	17.1	4.43	1.37	52.9	13.3
04/23-24/03	104.22	--	11.31	0.00	92.91	2,050 <sup>1</sup>	<500 <sup>1</sup>	2,490	9.73	13.4	<5.00	870	7.31 <sup>16</sup>
06/30-07/01/03	104.22	--	11.91	0.00	92.31	8,010 <sup>1</sup>	<500 <sup>1</sup>	2,170	34.6	20.3	8.10	1,050	1.98 <sup>16</sup>
10/01-02/03	104.22	--	13.29	0.00	90.93	NOT SAMPLED DUE TO INSUFFICIENT WATER						--	--
01/21-23/04	104.22	--	11.52	0.00	92.70	1,800 <sup>1</sup>	<250 <sup>1</sup>	470	64	12	2.5	65	1.6 <sup>16</sup>
04/29-30/04	104.22	--	11.88	0.00	92.34	NOT SAMPLED DUE TO WIRE OBSTRUCTION						--	--
07/15-16/04 <sup>18</sup>	104.22	--	13.32	0.00	90.90	NOT SAMPLED DUE TO INSUFFICIENT WATER/OBSTRUCTION						--	--
10/28-11/01/04	104.22	--	12.98	0.00	91.24	36,000 <sup>1</sup>	<10,000 <sup>1,23</sup>	890	120	12	11	58	--
01/24-31/05	LFP	--	11.31	0.00	92.91	3,200 <sup>1</sup>	360 <sup>1</sup>	880	45	13	6.6	190	--
04/18-21/05	LFP	--	11.40	0.00	92.82	1,900 <sup>1,19</sup>	400 <sup>1</sup>	150	1.3	<0.5	0.8	9.4	--
07/27-28/05	104.22	--	12.16	0.00	92.06	NOT SAMPLED		--	--	--	--	--	--
11/08-10/05	104.22	INACCESSIBLE - UNABLE TO MONITOR DUE TO CONSTRUCTION											
04/17/06	104.22	--	12.41	0.00	91.81	--	--	--	--	--	--	--	--
10/18/06	104.22	--	14.38	0.00	89.84	--	--	--	--	--	--	--	--
<b>MP-1</b>													
07/24/02	--	INACCESSIBLE - UNABLE TO OPEN WELL											
10/17-18/02	--	INACCESSIBLE - UNABLE TO OPEN WELL											
08/03/04 <sup>8</sup>	104.95	DRY											
04/17/06	104.95	--	4.32	0.00	100.63	--	--	--	--	--	--	--	--



**Table 1**  
 Groundwater Monitoring Data and Analytical Results  
 Former Texaco Service Station (Site #211577)  
 631 Queen Anne Avenue North  
 Seattle, Washington

WELL ID/ DATE	TOC (fl.)	DTP (fl.)	DTW (fl.)	SPHT (fl.)	GWE (mst)	TPH- DRO (ug/L)	TPH- HRO (ug/L)	TPH- GRO (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	D. LEAD (ug/L)
<b>MP-2</b>													
07/24/02	--	INACCESSIBLE - VEHICLE PARKED OVER WELL											
10/17-18/02	--	--	--	--	--	--	--	--	--	--	--	--	--
08/03/04 <sup>8</sup>	97.04	--	115.00	0.00	-17.96	--	--	--	--	--	--	--	--
04/17/06	97.04	--	114.56	0.00	-17.52	--	--	--	--	--	--	--	--
<b>Station 5</b>													
04/05/91	--	--	--	--	--	--	--	7,400	5,040	12.3	42.1	41.2	--
04/05/91	--	--	--	--	--	--	--	7,030	3,850	15.0	51.8	50.9	--
04/05/91	--	--	--	--	--	--	--	3,000	0.9 J	13.8	10.2	134	--
04/19/91	--	--	--	--	--	--	--	<0.05	<0.5	<1.0	<1.0	1.4 J	--
<b>DVP-1</b>													
09/12/02	--	--	6.00	--	--	--	--	98,100	7,640	18,600	2,660	15,000	--
09/12/02	--	--	6.00	--	--	--	--	107,000	13,500	19,100	2,140	12,400	--
09/12/02	--	--	6.00	--	--	--	--	102,000	12,300	17,400	1,980	11,500	--
<b>VP-1</b>													
06/14/00	103.03	--	--	--	--	75,600	<12,500 <sup>23</sup>	5,000	21.6	14.4	32.8	435	--
07/24/02	103.03	--	11.59	0.00	91.44	18,000 <sup>1</sup>	1,500 <sup>1</sup>	35,000	120	820	280	4,600	22.9
10/17-18/02	103.03	--	12.70	0.00	90.33	7,500 <sup>1</sup>	598 <sup>1,2</sup>	27,300	170	756	334	4,820	18.0 <sup>15</sup>
01/21/03	103.03	--	12.70	0.00	90.33	14,200 <sup>1</sup>	807 <sup>1,2</sup>	36,700	90.5	801	500	6,630	47.1
04/23-24/03	103.03	--	11.63	0.00	91.40	2,830 <sup>1</sup>	<500 <sup>1</sup>	24,200	110	136	225	2,780	36.4 <sup>16</sup>
06/30-07/01/03	103.03	--	12.21	0.00	90.82	20,200 <sup>1</sup>	1,750 <sup>1</sup>	8,000 <sup>7</sup>	36.8 <sup>7</sup>	49.2 <sup>7</sup>	47.1 <sup>7</sup>	618 <sup>7</sup>	13.2 <sup>16</sup>
10/01-02/03	103.03	--	13.11	0.00	89.92	40,000 <sup>1</sup>	6,300 <sup>1</sup>	7,600	56	47	22	690	31.2 <sup>16</sup>
01/21-23/04	103.03	--	12.21	0.00	90.82	17,000 <sup>1</sup>	3,200 <sup>1</sup>	4,500	11	6.2	<20	85	4.2 <sup>16</sup>
04/29-30/04	103.03	--	11.87	0.00	91.16	3,600 <sup>1</sup>	1,100 <sup>1</sup>	4,200	24	3.6	9.8	85	2.6 <sup>16</sup>
07/15-16/04	103.03	--	13.41	0.00	89.62	1,050 <sup>1,14</sup>	<500 <sup>1</sup>	1,880	21.7	2.77	6.92	50.7	2.46 <sup>16</sup>
08/03/04 <sup>8</sup>	103.03	--	12.71	0.00	90.32	--	--	--	--	--	--	--	--
10/28-11/01/04	103.03	--	12.84	0.00	90.19	35,000 <sup>1</sup>	18,000 <sup>1</sup>	2,100	25	5.5	7.6	97	--
01/24-31/05	103.03	--	12.38	0.00	90.65	3,600 <sup>1</sup>	1,300 <sup>1</sup>	670	5.2	0.8	1.4	13	--
04/18-21/05	NP	103.03	12.09	0.00	90.94	5,500 <sup>1</sup>	2,200 <sup>1</sup>	340	<1.0	<0.5	0.7	5.2	--
07/27-28/05	103.03	--	12.38	0.00	90.65	--	--	--	--	--	--	--	--

**Table 1**  
 Groundwater Monitoring Data and Analytical Results  
 Former Texaco Service Station (Site #211577)  
 631 Queen Anne Avenue North  
 Seattle, Washington

WELL ID/ DATE	TOC (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH- DRO (µg/L)	TPH- HRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	D-LEAD (µg/L)		
<b>VP-1 (cont)</b>															
11/08-10/05	103.03	--	13.48	0.00	89.55	NOT SAMPLED DUE TO INSUFFICIENT WATER							--	--	--
02/22/06	103.03	--	10.89	0.00	92.14	--	--	--	--	--	--	--	--		
04/17/06	103.03	--	12.10	0.00	90.93	--	--	--	--	--	--	--	--		
WELL DECOMMISSIONED SEPTEMBER 2006															
<b>VP-3/MW-2</b>															
07/07/93	104.75	--	DRY	--	--	NOT SAMPLED DUE TO INSUFFICIENT WATER							--	--	
07/24/02	104.75	--	DRY	--	--	NOT SAMPLED DUE TO INSUFFICIENT WATER							--	--	
10/17-18/02	104.75	--	DRY	--	--	NOT SAMPLED DUE TO INSUFFICIENT WATER							--	--	
01/21/03	104.75	--	DRY	--	--	NOT SAMPLED DUE TO INSUFFICIENT WATER							--	--	
04/23-24/03	104.75	--	DRY	--	--	NOT SAMPLED DUE TO INSUFFICIENT WATER							--	--	
06/30-07/01/03	104.75	--	DRY	--	--	NOT SAMPLED DUE TO INSUFFICIENT WATER							--	--	
10/01-02/03	104.75	--	9.05	0.00	95.70	NOT SAMPLED DUE TO INSUFFICIENT WATER							--	--	
01/21-23/04	104.75	--	DRY	--	--	NOT SAMPLED DUE TO INSUFFICIENT WATER							--	--	
04/29-30/04	104.75	--	DRY	--	--	NOT SAMPLED DUE TO INSUFFICIENT WATER							--	--	
07/15-16/04	104.75	--	DRY	--	--	NOT SAMPLED DUE TO INSUFFICIENT WATER							--	--	
08/03/04	104.75	--	DRY	--	--	--	--	--	--	--	--	--	--		
10/28-11/01/04	104.75	--	DRY	--	--	NOT SAMPLED DUE TO INSUFFICIENT WATER							--	--	
01/24-31/05	104.75	--	DRY	--	--	NOT SAMPLED DUE TO INSUFFICIENT WATER							--	--	
04/18-21/05	104.75	--	DRY	--	--	NOT SAMPLED DUE TO INSUFFICIENT WATER							--	--	
07/27-28/05	104.75	--	DRY	--	--	NOT SAMPLED DUE TO INSUFFICIENT WATER							--	--	
11/08-10/05	104.75	--	DRY	--	--	NOT SAMPLED DUE TO INSUFFICIENT WATER							--	--	
04/17/06	104.75	--	DRY	--	--	NOT SAMPLED DUE TO INSUFFICIENT WATER							--	--	
WELL DECOMMISSIONED SEPTEMBER 2006															
<b>VP-6</b>															
NOT MONITORED/SAMPLED, REPLACED BY WELL DPE-1, SEE DPE-1 FOR VP-6 DATA															
<b>MW-22</b>															
NOT MONITORED/SAMPLED, REPLACED BY WELL DPE-8, SEE DPE-8 FOR MW-22 DATA															
<b>FIELD BLANK</b>															
FB-1-04/28/08	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--		
FB-2-04/29/08	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--		
FB-3-04/29/08	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--		

**Table 1**  
 Groundwater Monitoring Data and Analytical Results  
 Former Texaco Service Station (Site #211577)  
 631 Queen Anne Avenue North  
 Seattle, Washington

WELL ID/ DATE	TOC (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (nsl)	TPH- DRO (µg/L)	TPH- HRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	D-LEAD (µg/L)
<b>FIELD BLANK (cont)</b>													
<b>MW-6-FB</b>													
11/10/08	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
04/13-16/09	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
<b>MW-17-FB</b>													
11/06/08	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
04/13-16/09	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
<b>MW-30-FB</b>													
11/06/08	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
04/13-16/09	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
<b>TRIP BLANK</b>													
<b>TB-1-1909J</b>													
04/28/08	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
<b>TB-2-1909J</b>													
04/29/08	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
<b>TB-3-1909J</b>													
04/30/08	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
<b>TB-4-1909J</b>													
05/01/08	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
<b>TB-5-1909J</b>													
05/02/08	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
<b>QA</b>													
07/24/02	--	--	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	--
10/17-18/02	--	--	--	--	--	--	--	<50.0	<0.500	<0.500	<0.500	<1.00	--
11/14/02	--	--	--	--	--	--	--	<50.0	<0.500	<0.500	<0.500	<1.00	--
01/21/03	--	--	--	--	--	--	--	--	--	--	--	--	--
04/23-24/03	--	--	--	--	--	--	--	<50.0	<0.500	<0.500	<0.500	<1.00	--
06/30-07/01/03	--	--	--	--	--	--	--	<50.0	<0.500	<0.500	<0.500	<1.00	--
10/01-02/03	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
10/14/03 <sup>8,11</sup>	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
01/21-23/04	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--

**Table 1**

Groundwater Monitoring Data and Analytical Results  
 Former Texaco Service Station (Site #211577)  
 631 Queen Anne Avenue North  
 Seattle, Washington

WELL ID/ DATE	TOC (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH- DRO (µg/L)	TPH- HRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	D. LEAD (µg/L)
QA (cont)													
04/29-30/04	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
05/03/04 <sup>8,11</sup>	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
07/15-16/04	--	--	--	--	--	--	--	<50.0	<0.500	<0.500	<0.500	<1.00	--
10/26-27/04 <sup>8</sup>	--	--	--	--	--	--	--	<50	--	--	--	--	--
10/28-11/01/04	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
01/24-31/05	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
02/10/05 <sup>8</sup>	--	--	--	--	--	--	--	<48	<0.5	<0.5	<0.5	<1.5	--
02/17/05 <sup>8</sup>	--	--	--	--	--	--	--	<48	<0.5	<0.5	<0.5	<1.5	--
04/18-21/05	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
07/27-28/05	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
11/08-10/05	--	--	--	--	--	--	--	<48	<0.5	<0.5	<0.5	<1.5	--
11/03/08	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
11/03/08 <sup>25</sup>	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
11/03/08	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
11/03/08	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
11/03/08	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
11/03/08	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
11/03/08	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
11/03/08	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
11/03/08	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--

**Table 1**  
 Groundwater Monitoring Data and Analytical Results  
 Former Texaco Service Station (Site #211577)  
 631 Queen Anne Avenue North  
 Seattle, Washington

WELL ID/ DATE	TOC (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH- DRO (µg/L)	TPH- HRO (µg/L)	TPH- GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	D-LEAD (µg/L)
QA (cont)													
04/14/09	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
04/15/09	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
04/16/09	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--

	TPH-DRO	TPH-HRO	TPH-GRO	B	T	E	X	D-LEAD
Standard Laboratory Reporting Limits:	250	500	50	0.5	0.5	0.5	1.5	1.00
MTC A Method A Cleanup Levels:	500	500	800/1,000	5	1,000	700	1,000	15
Current Method:	NWTPH-D Extended			NWTPH-G and EPA 8021B				EPA 7421

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
**Former Texaco Service Station (Site #211577)**  
**631 Queen Anne Avenue North**  
**Seattle, Washington**

**EXPLANATIONS:**

Groundwater monitoring data and laboratory analytical results prior to July 24, 2002, were compiled from reports prepared by SAIC.

Groundwater monitoring data and laboratory analytical results between February 22, 2006 and November 3, 2008, were compiled from reports prepared by SAIC.

TOC = Top of Casing

(ft.) = Feet

DTW/P = Depth to Water or Product

GWE = Groundwater Elevation

(msl) = Mean Sea Level

SPHT = Separated Phase Hydrocarbons Thickness

TPH = Total Petroleum Hydrocarbons

DRO = Diesel Range Organics

HRO = Oil Range Organics

J = Estimated result between the method detection limit and the laboratory reporting limit

< = Analyte not detected at or above the laboratory reporting limit. Number represents reporting limit

DRY = The difference between the DTW and the total depth of the well was less than 0.20 inches in thickness, or there was insufficient water column to collect a DTW measurement

\* TOC elevations have been surveyed in feet relative to msl.

\*\* GWE corrected for the presence of SPH; correction factor:  $[(TOC - DTW) + (SPHT \times 0.8)]$ .

\*\*\* GWE corrected for the presence of SPH; correction factor:  $[(TOC - DTP - SPHT) + (SPHT \times 0.8)]$ ; Historical data has been altered to correct error in original reporting of depth to product as depth to water.

Where SPHT > 0.00, GWE is corrected for the presence of SPH; correction factor:  $[(TOC - DTW) + (SPHT \times 0.8)]$ .

**ANALYTICAL METHOD:**

TPH-DRO = Total Petroleum Hydrocarbons (TPH) as diesel organic range, analyzed by ECY 97-602 NWTPH-DX modified Method TPH-Dx with silica-gel cleanup.

TPH-HRO = TPH as heavy oil analyzed by ECY 97-602 NWTPH-DX modified Method TPH-Dx with silica-gel cleanup.

TPH-GRO = TPH as gasoline analyzed by ECY 97-602 NWTPH-GX modified Method.

BTEX = Benzene, (B) toluene, (T) ethylbenzene, (E) and total xylenes (X) analyzed by US Environmental Protection Agency (EPA) Method 8260B.

2,600/2,500 = BTEX analyzed by EPA Methods 8021B and 8260B. Second concentrations listed were obtained by EPA Method 8260B.

1 Analysis with silica gel cleanup.

2 Laboratory report indicates the heavy oil range organics present are due to hydrocarbons eluting primarily in the diesel range.

3 Laboratory report indicates this sample was received and analyzed unpreserved.

4 Laboratory report indicates results in the diesel organics range are primarily due to overlap from a gasoline range product.

5 Laboratory report indicates the sample chromatographic pattern does not resemble the fuel standard used for quantitation.

6 Sample broke during transport to laboratory.

7 Laboratory report indicates this sample was analyzed outside of our recommended holding time. See case narrative.

8 Data provided by SAIC.

9 MTBE by EPA Method 8021 was not detected at or above 10 ppb.

10 MTBE by EPA Method 8021 was not detected at or above 250 ppb.

(ppb) = Parts per billion

QA = Quality Assurance/Trip Blank

NP = No Purge

LFP = Low Flow Purge

PER = Peristaltic Pump used for Purging

(D) = Duplicate

DTSPH = Depth to Separated Phase Hydrocarbons, from the TOC.

MTCA = Model Toxics Control Act Cleanup Regulations

[WAC 173-340-720(2)(a)(I), as amended 02/01].

**Table 1**  
Groundwater Monitoring Data and Analytical Results  
Former Texaco Service Station (Site #211577)  
631 Queen Anne Avenue North  
Seattle, Washington

---

**EXPLANATIONS:**

- 11 MTBE by EPA Method 8021 was not detected at or above 2.5 ppb.
- 12 Absorbent sock in well.
- 13 MTBE by EPA Method 8021 was not detected at or above 50 ppb.
- 14 Laboratory report indicates the hydrocarbons present are a complex mixture of diesel range and heavy oil range organics.
- 15 Organic Lead was <300 ppb.
- 16 Laboratory report indicates this sample was laboratory filtered.
- 17 Due to limited sample volume; no results will be provided.
- 18 Pump in well.
- 19 Laboratory report indicates the observed sample pattern is not typical of diesel/#2 fuel oil.
- 20 Laboratory report indicates the observed sample pattern includes #2 fuel/diesel and an additional pattern which elutes earlier in the DRO range.
- 21 Laboratory report indicates the observed sample pattern includes #2 fuel/diesel, additional patterns which elute earlier and later in the DRO range and individual peaks eluting in the DRO range.
- 22 BTEX by EPA Method 8260.
- 23 Laboratory Detection Limit is greater than the MTCA Method A Cleanup level.
- 24 DTW was adjusted to reflect the difference in measuring tape lengths between different water level meters used to collect DTW measurements across the site.
- 25 Analyzed for Methyl Tertiary Butyl Ether (MTBE); result = <0.5 µg/L.
- 26 Resampled at a later date due to original samples not returned to lab for analysis within the sample holding period.
- 27 Laboratory report indicates preservation requirements were not met. The vial submitted for volatile analysis did not have a pH < 2 at the time of analysis. Due to the volatile nature of the analytes, it is not appropriate for the laboratory to adjust the pH at the time of sample receipt. The pH of this sample was pH = 5.

**Table 2**  
 Groundwater Analytical Results  
 Former Texaco Service Station (Site #211577)  
 631 Queen Anne Avenue North  
 Seattle, Washington

WELL ID/ DATE	Alkalinity to pH 8.3 ( $\mu\text{g/L}$ )	Alkalinity to pH 4.5 ( $\mu\text{g/L}$ )	Iron ( $\mu\text{g/L}$ )	Ferrous Iron ( $\text{mg/L}$ )	Manganese ( $\mu\text{g/L}$ )	Nitrate as Nitrogen ( $\text{mg/L}$ )	Nitrite as Nitrogen ( $\text{mg/L}$ )	Sulfate ( $\mu\text{g/L}$ )	Sulfide ( $\mu\text{g/L}$ )
<b>VP-7/MW-3</b>									
03/26-28/91	--	--	50,000	--	8,600	<0.010	--	--	--
12/14/99	--	--	--	11.7	7.76	<0.10	--	13,400	--
<b>VP-8/ MW-7</b>									
12/11/08	<460	193,000	5,470	<0.100	527	0.840	<0.200	109,000	<54
04/13-16/09	<460	<b>149,000</b>	<b>1,690</b>	<b>0.960</b>	<b>217</b>	<b>0.770</b>	<b>&lt;0.400</b>	<b>43,700</b>	<b>&lt;54</b>
<b>VP-9</b>									
12/15/99	--	--	--	9,400	420	9,200	--	34,000,000	--
<b>MW-4</b>									
12/15/99	--	--	--	6.15	10.5	<0.10	--	<200	--
11/10/08	<460	117,000	<52.2	<0.100	1,460	4.72	<0.200	220,000	<54
04/13-16/09	<460	<b>206,000</b>	<b>299</b>	<b>0.420<sup>1</sup></b>	<b>3,570</b>	<b>1.300</b>	<b>&lt;0.400</b>	<b>133,000</b>	<b>&lt;54</b>
<b>MW-6</b>									
05/01/08	<460	57,400	22,900	17.3	5,170	0.560	<0.200	155,000	270
11/10/08	<460	38,900	6,590	0.698	32,400	21.1	0.300	785,000	<54
11/10/08	(D) <460	39,200	6,370	0.819	32,700	21.0	0.310	843,000	<54
04/13-16/09	<460	<b>298,000</b>	<b>8,860</b>	<b>3.500</b>	<b>14,800</b>	<b>0.280</b>	<b>&lt;0.400</b>	<b>248,000</b>	<b>&lt;54</b>
<b>MW-9</b>									
12/15/99	--	--	--	6.15	10.5	--	--	--	--
11/10/08	<460	578,000	23,400	2.50	21,400	<0.200	<0.200	13,800	200
04/13-16/09	<460	<b>354,000</b>	<b>31,200</b>	<b>30.200</b>	<b>37,000</b>	<b>&lt;0.250</b>	<b>&lt;0.400</b>	<b>242,000</b>	<b>110</b>



**Table 2**  
 Groundwater Analytical Results  
 Former Texaco Service Station (Site #211577)  
 631 Queen Anne Avenue North  
 Seattle, Washington

WELL ID/ DATE	Alkalinity to pH 8.3 ( $\mu\text{g/L}$ )	Alkalinity to pH 4.5 ( $\mu\text{g/L}$ )	Iron ( $\mu\text{g/L}$ )	Ferrous Iron ( $\text{mg/L}$ )	Manganese ( $\mu\text{g/L}$ )	Nitrate as Nitrogen ( $\text{mg/L}$ )	Nitrite as Nitrogen ( $\text{mg/L}$ )	Sulfate ( $\mu\text{g/L}$ )	Sulfide ( $\mu\text{g/L}$ )
<b>MW-10</b>									
03/26-28/91	--	--	15,000	1.59	3,200	0.243	--	--	--
03/26-28/91	(D) --	--	10,000	--	3,400	0.243	--	--	--
12/15/99	--	--	--	<2.00	5.12	0.72	--	70,600	--
05/01/08	<460	208,00	32,800	--	3,110	0.320	<0.200	33,900	<54
11/10/08	<460	168,000	390	0.120	1,570	1.33	<0.200	45,900	<54
<b>04/13-16/09</b>	<b>&lt;460</b>	<b>192,000</b>	<b>575</b>	<b>0.510</b>	<b>2,860</b>	<b>2.000</b>	<b>&lt;0.400</b>	<b>64,400</b>	<b>&lt;54</b>
<b>MW-15</b>									
12/11/08	<460	44,400	116	<0.100	96	0.490	<0.200	25,400	<54
<b>04/13-16/09</b>	<b>&lt;460</b>	<b>29,100</b>	<b>405</b>	<b>&lt;0.010</b>	<b>139</b>	<b>&lt;0.250</b>	<b>&lt;0.400</b>	<b>6,600</b>	<b>&lt;54</b>
<b>MW-16</b>									
05/02/08	<460	121,000	2,250	<0.250	1,240	1.63	0.600	23,900	<54
11/06/08	<460	50,300	181	<0.100	1,900	5.58	<0.200	46,200	<54
<b>04/13-16/09</b>	<b>&lt;460</b>	<b>63,100</b>	<b>508</b>	<b>&lt;0.010</b>	<b>205</b>	<b>9.800</b>	<b>&lt;0.400</b>	<b>24,900</b>	<b>&lt;54</b>
<b>MW-17</b>									
05/01/08	<460	111,000	2,820	<0.250	2,570	<0.200	<0.200	27,600	<54
11/06/08	<460	92,800	499	<0.100	1,990	1.50	<0.200	65,700	<54
11/06/08	(D) <460	111,000	647	<0.100	2,450	1.09	<0.200	68,400	<54
<b>04/13-16/09</b>	<b>&lt;460</b>	<b>92,900</b>	<b>343</b>	<b>0.130</b>	<b>1,520</b>	<b>1.500</b>	<b>&lt;0.400</b>	<b>68,000</b>	<b>&lt;54</b>
<b>MW-18</b>									
12/11/08	<460	266,000	3,170	<0.100	4,300	<0.200	<0.200	55,300	<54
<b>04/13-16/09</b>	<b>&lt;460</b>	<b>196,000</b>	<b>8,880</b>	<b>2.100</b>	<b>3,220</b>	<b>&lt;0.250</b>	<b>&lt;0.400</b>	<b>77,500</b>	<b>&lt;54</b>
<b>MW-21</b>									
05/01/08	<460	268,000	8,110	2.13	395	<0.200	<0.200	21,900	<54
11/06/08	<460	260,000	5,980	0.216	374	<0.200	<0.200	18,400	<54
<b>04/13-16/09</b>	<b>&lt;460</b>	<b>245,000</b>	<b>6,260</b>	<b>4.600</b>	<b>334</b>	<b>&lt;0.250</b>	<b>&lt;0.400</b>	<b>18,900</b>	<b>&lt;54</b>

**Table 2**  
 Groundwater Analytical Results  
 Former Texaco Service Station (Site #211577)  
 631 Queen Anne Avenue North  
 Seattle, Washington

WELL ID/ DATE	Alkalinity to pH 8.3 ( $\mu\text{g/L}$ )	Alkalinity to pH 4.5 ( $\mu\text{g/L}$ )	Iron ( $\mu\text{g/L}$ )	Ferrous Iron ( $\text{mg/L}$ )	Manganese ( $\mu\text{g/L}$ )	Nitrate as Nitrogen ( $\text{mg/L}$ )	Nitrite as Nitrogen ( $\text{mg/L}$ )	Sulfate ( $\mu\text{g/L}$ )	Sulfide ( $\mu\text{g/L}$ )
<b>MW-26</b>									
05/01/08	<460	129,000	3,030	0.373	3,660	<0.200	<0.200	137,000	57
05/01/08	(D) <460	131,000	3,210	0.817	3,660	<0.200	<0.200	133,000	<54
11/06/08	<460	156,000	4,260	0.275	3,710	0.800	<0.200	117,000	78
04/13-16/09	<460	142,000	319	0.071	1,380	5.600 <sup>4</sup>	<8.000 <sup>4</sup>	16,500	<54
<b>MW-30</b>									
04/30/08	<460	228,000	1,570	<0.250	144	4.91	<0.200	16,500	<54
11/06/08	<460	226,000	196	<0.100	108	4.11	<0.200	10,700	<54
11/06/08	(D) <460	224,000	325	<0.100	92.9	4.09	<0.200	11,000	<54
04/13-16/09	<460	225,000	410	<0.010	174	4.800 <sup>2</sup>	<0.400	13,200	<54
<b>MW-34</b>									
04/30/08	<460	113,000	1,750	<0.250	37.4	11.4	<0.200	23,000	<54
11/06/08	<460	90,100	426	<0.100	15.7	15.9	<0.200	24,500	<54
04/13-16/09	<460	96,100	<52.2	0.075 <sup>3</sup>	0.91	15.200	<0.400	47,400	<54
<b>MW-35</b>									
05/01/08	<460	391,000	2,010	0.636	3,620	<0.200	<0.200	<1500	<54
04/13-16/09	<460	357,000	21,300	19.500	2,330	<0.250	<0.400	21,700	73
<b>DPE-8/MW-22</b>									
11/06/08	<460	529,000	99,600	4.62	22,300	<0.200	<0.200	4,200	580
04/13-16/09	<460	228,000	24,200	23.700	5,980	0.340	<0.400	47,300	140

**Table 2**  
Groundwater Analytical Results  
Former Texaco Service Station (Site #211577)  
631 Queen Anne Avenue North  
Seattle, Washington

---

---

**EXPLANATIONS:**

Groundwater monitoring data and laboratory analytical results prior to November 6, 2008, were compiled from reports prepared by SAIC.

( $\mu\text{g/L}$ ) = Micrograms per liter

( $\text{mg/L}$ ) = milligrams per liter

-- = Not Measured/Not Analyzed

(D) = Duplicate

P = The analyte was detected above the instrument detection limit but below the established minimum quantitation limit

< = Analyte not detected at or above the laboratory reporting limit. Number represents reporting limit

J = Analyte was positively identified. The associated numerical result is an estimate

**ANALYTICAL METHODS:**

Manganese analyzed by Method SW-846 6010B

Alkalinity analyzed by SM20 Method 2320 B

Sulfate analyzed by EPA Method 300.0

Nitrate-Nitrogen and Nitrite-Nitrogen analyzed by EPA Method 300.0

Ferrous Iron analyzed by 3500-Fe B

Sulfide analyzed by Method SM20 4500 S2 D

- <sup>1</sup> Laboratory report indicates this sample was analyzed twice for ferrous iron. The result of the second analysis was 471  $\mu\text{g/L}$ .
- <sup>2</sup> Laboratory report indicates this sample was originally analyzed within the 48 hour holding time for nitrate-nitrogen, however the continuing calibration standard bracketing the sample was not within specification. The analysis was repeated on April 17, 2009. The continuing calibration standard bracketing the sample on the second trial was within specification. The first trial result is being reported because it was analyzed within the holding time. The second trial result was 5,100  $\mu\text{g/L}$ .
- <sup>3</sup> Laboratory report indicates this sample was analyzed twice for ferrous iron. The result of the second analysis was 230  $\mu\text{g/L}$ .
- <sup>4</sup> Laboratory report indicates the reporting limit(s) for the analyte(s) was raised due to matrix inference.

**Table 3**  
**Separate Phase Hydrocarbon Thickness/Removal Data**  
Former Texaco Service Station (Site #211577)  
631 Queen Anne Avenue North  
Seattle, Washington

WELL ID/ DATE	DTP (ft.)	DTW (ft.)	SPH THICKNESS (ft.)	AMOUNT BAILED (SPH + WATER) (gallons)
<b>VP-4</b>				
10/17-18/02	12.75	12.78	0.03	0.00
01/21/03	12.61	12.71	0.10	0.00
04/23-24/03	11.72	11.75	0.03	0.00
06/30-07/01/03	12.31	12.34	0.03	0.00
10/01-02/03	13.26	13.29	0.03	0.00
01/21-23/04	12.34	12.37	0.03	0.00
04/29-30/04	--	12.21	0.00	0.00
07/15-16/04	--	12.62	0.00	0.00
10/28-11/01/04	--	12.98	0.00	0.00
01/24-31/05	--	12.39	0.00	0.00
04/18-21/05	--	12.14	0.00	0.00
07/27-28/05	--	12.51	0.00	0.00
11/08-10/05	--	12.91	0.00	0.00
<b>VP-6</b>				
07/24/02	10.60	12.18	1.58	0.00
10/17-18/02	11.35	12.00	0.65	0.00
01/21/03	11.27	12.90	1.63	0.00
04/23-24/03	10.75	10.90	0.15	0.00
06/30-07/01/03	11.32	11.54	0.22	0.00
10/01-02/03	12.12	12.91	0.79	0.00
01/21-23/04	NOT MONITORED/SAMPLED DUE TO WELL OBSTRUCTION AT 2.41 FEET			
	NOT MONITORED/SAMPLED - REPLACED BY DPE-1(VP-6)			
<b>VP-7(MW-3)</b>				
06/30-07/01/03	10.08	10.11	0.03	0.00
10/01-02/03	--	10.98	0.00	0.00
01/21-23/04	--	10.09	0.00	0.00
04/29-30/04	--	9.96	0.00	0.00
07/15-16/04	--	10.38	0.00	0.00
10/28-11/01/04	--	10.76	0.00	0.00
01/24-31/05	--	10.13	0.00	0.00
04/18-21/05	--	9.97	0.00	0.00
07/27-28/05	--	10.28	0.00	0.00
11/08-10/05	--	10.57	0.00	0.00

**Table 3**  
**Separate Phase Hydrocarbon Thickness/Removal Data**  
Former Texaco Service Station (Site #211577)  
631 Queen Anne Avenue North  
Seattle, Washington

WELL ID/ DATE	DTP (ft.)	DTW (ft.)	SPH THICKNESS (ft.)	AMOUNT BAILED (SPH + WATER) (gallons)
<b>MW-6</b>				
10/17-18/02	20.64	20.69	0.05	0.00
01/21/03	21.71	21.74	0.03	0.00
04/23-24/03	20.88	20.91	0.03	0.00
06/30-07/01/03	21.38	21.41	0.03	0.00
10/01-02/03	23.04	23.07	0.03	0.00
01/21-23/04	INACCESSIBLE - JUNKED VEHICLE OVER WELL			--
04/29-30/04 <sup>1</sup>	20.20	20.22	0.02	0.00
07/15-16/04	--	20.48	0.00	0.00
10/28-11/01/04	--	20.93	0.00	0.00
01/24-31/05	--	20.38	0.00	0.00
04/18-21/05	--	20.31	0.00	0.00
07/27-28/05	--	20.39	0.00	0.00
11/08-10/05	--	20.79	0.00	0.00
<b>RW-4</b>				
07/15-16/04	17.98	18.20	0.22	0.00
10/28-11/01/04	DRY	--	--	--
10/28-11/01/04	DRY	--	--	--
01/24-31/05	--	18.04	0.00	0.00
04/18-21/05	--	17.86	0.00	0.00
07/27-28/05	INACCESSIBLE - VEHICLE PARKED OVER WELL			
<b>DPE-1(VP-6)</b>				
04/29-30/04	11.20	11.25	0.05	0.00
07/15-16/04	11.61	11.63	0.02	0.00
10/28-11/01/04	--	11.99	0.00	0.00
01/24-31/05	--	11.37	0.00	0.00
04/18-21/05	--	11.19	0.00	0.00
07/27-28/05	--	11.50	0.00	0.00
11/08-10/05	--	11.76	0.00	0.00
<b>DPE-2</b>				
04/29-30/04	11.31	11.51	0.20	0.00
07/15-16/04	--	11.73	0.00	0.00
10/28-11/01/04	--	12.12	0.00	0.00
01/24-31/05	--	11.51	0.00	0.00
04/18-21/05	--	11.30	0.00	0.00
07/27-28/05	--	11.64	0.00	0.00
11/08-10/05	--	12.02	0.00	0.00

**Table 3**  
**Separate Phase Hydrocarbon Thickness/Removal Data**  
Former Texaco Service Station (Site #211577)  
631 Queen Anne Avenue North  
Seattle, Washington

---

**EXPLANATIONS:**

DTP = Depth to Product

DTW = Depth to Water

(ft.) = Feet

SPH = Separate Phase Hydrocarbons

-- = Not Measured

Note: Historical data has been altered to correct error in original reporting of depth to product as depth to water.

<sup>1</sup> Absorbent sock in well.

**Table 4**  
**Groundwater Analytical Results - SVOCs and PAHs**  
Former Texaco Service Station (Site #211577)  
631 Queen Anne Avenue North  
Seattle, Washington

WELL ID	DATE	2-Methylnaphthalene (ug/L)	2,4-Dimethylphenol (ug/L)	Naphthalene (ug/L)	Phenol (ug/L)	2-Methylphenol (ug/L)	4-Methylphenol (ug/L)	his (2-Ethylhexyl) phthalate (ug/L)	Benzoic acid (ug/L)
VP-1	7/24/2002	84	80	160	ND	13	18	31	<10
VP-2	7/24/2002	UNABLE TO LOCATE			--	--	--	--	--
VP-5(MW-5)	7/24/2002	INACCESSIBLE - VEHICLE PARKED OVER WELL			--	--	--	--	--
VP-7(MW-3)	7/24/2002	69	28	420	ND	<5.0	6	<10	34
VP-8(MW-7)	7/24/2002	<5.0	<5.0	<5.0	ND	<5.0	<5.0	<10	<10
VP-9	7/24/2002	INACCESSIBLE - VEHICLE PARKED OVER WELL			--	--	--	--	--
MW-4	7/24/2002	160	24	500	ND	6	9	<10	<10
MW-10	7/24/2002	<5.0	<5.0	<5.0	ND	<5.0	<5.0	13	<10
MW-11	7/24/2002	<5.0	<5.0	<5.0	ND	<5.0	<5.0	<10	<10
MW-12	10/17-18/02	<10.0	<10.0	<10.0	<10.0	<10.0	--	<50.0	<20.0
MW-13	10/17-18/02	--	--	--	--	--	--	--	--
MW-14	10/17-18/02	--	--	--	--	--	--	--	--
	11/14/02	52.2	13.4	242	34.5	11.0	24.8 <sup>1</sup>	<50.0	<20.0
MW-15	10/17-18/02	--	--	--	--	--	--	--	--
	11/14/02	<10.0	<10.0	<10.0	37.0	<10.0	<10.0 <sup>1</sup>	<50.0	<20.0
RW-4	7/24/2002	<5.0	<5.0	<5.0	ND	<5.0	<5.0	<10	<10

**Table 4**

**Groundwater Analytical Results - SVOCs and PAHs**

Former Texaco Service Station (Site #211577)

631 Queen Anne Avenue North

Seattle, Washington

---

**EXPLANATIONS:**

-- = Not Analyzed

ND = Not Detected

( $\mu\text{g/L}$ ) = Micrograms per liter

<sup>1</sup> Results are for 3 & 4-Methylphenol.

**ANALYTICAL METHODS:**

Semi-Volatile Organic Compounds (SVOC) by EPA Method 8270

Polynuclear Aromatic Hydrocarbons (PAH) by EPA Method 8270

**NOTE:**

Other PAHs and SVOCs constituents were less than the reporting limit.



**Table 5**  
**Groundwater Analytical Results - VOCs**  
Former Texaco Service Station (Site #211577)  
631 Queen Anne Avenue North  
Seattle, Washington

WELL ID/ DATE	Chloroform (µg/L)	cis-1,2-Dichloroethene (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	m+p-Xylene (µg/L)	o-Xylene (µg/L)	Isopropylbenzene (µg/L)	n-Propylbenzene (µg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	sec-Butylbenzene (µg/L)	p-Isopropyltoluene (µg/L)	n-Butylbenzene (µg/L)	Naphthalene (µg/L)	Methyl t-butyl ether (µg/L)	t-Butyl alcohol (µg/L)
<b>VP-3(MW-2)</b> 07/24/02	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>VP-5(MW-5)</b> 07/24/02	INACCESSIBLE - VEHICLE PARKED OVER WELL																		
<b>VP-7(MW-3)</b> 10/17-18/02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10.0	<100
<b>VP-9</b> 07/24/02	INACCESSIBLE - VEHICLE PARKED OVER WELL																		
<b>MW-4</b> 07/24/02	ND	<8.0	12,000	10,000	1,800	ND	ND	8,900	3,500	46	140	500	1,800	<10	<10	23	360	6	120
10/17-18/02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<50.0	<500
<b>MW-10</b> 07/24/02	ND	15	2	<0.5	<0.5	ND	ND	<0.5	<0.5	<2	<1	<1	<1	1	<1	<1	<2	<2	<100
<b>MW-11</b> 07/24/02	ND	<1	<0.5	<0.5	<0.5	ND	ND	<0.5	<0.5	<2	<1	<1	<1	<1	<1	<1	<2	<2	<100
<b>MW-20</b> 10/28-11/01/04 <sup>1</sup>	<0.8	<0.8	<0.5	<0.5	<0.5	<0.8	<1	<0.5	<0.5	-	-	-	-	-	-	-	-	<0.5	-
<b>MW-22</b> 10/26-27/04 <sup>2</sup>	<4	8	6,600	7,500	1,600	<4	9	7,100	2,800	-	-	-	-	-	-	-	-	<3	-

**Table 5**  
**Groundwater Analytical Results - VOCs**  
Former Texaco Service Station (Site #211577)  
631 Queen Anne Avenue North  
Seattle, Washington

WELL ID/ DATE	Chloroform (µg/L)	cis-1,2-Dichloroethene (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	m+p-Xylene (µg/L)	o-Xylene (µg/L)	Isopropylbenzene (µg/L)	n-Propylbenzene (µg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	sec-Butylbenzene (µg/L)	p-Isopropyltoluene (µg/L)	n-Butylbenzene (µg/L)	Naphthalene (µg/L)	Methyl t-butyl ether (µg/L)	t-Butyl alcohol (µg/L)
MW-23 10/26-27/04 <sup>2</sup>	<8	<8	810	10,000	2,200	<8	<10	8,600	3,600	--	--	--	--	--	--	--	--	<5	--
MW-24 10/26-27/04 <sup>2</sup>	<0.8	<0.8	<0.5	<0.5	<0.5	<0.8	<1	2	1	--	--	--	--	--	--	--	--	<0.5	--
MW-25 10/26-27/04 <sup>2</sup>	<4	<4	52	110	340	<4	<5	1,400	450	--	--	--	--	--	--	--	--	<5	--
MW-26 10/28-11/01/04	<4	<4	9,100	4,400	1,500	<4	<5	6,600	2,500	--	--	--	--	--	--	--	--	<5	--
MW-12 10/17-18/02	1.68	9.07	<1.00	<1.00	<1.00	9.58	2.75	<2.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<50.0
MW-13 10/17-18/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-14 10/17-18/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-15 10/17-18/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-32 07/27-28/05	<3	<3	2,100	470	560	<3	<4	1,900	600	--	--	--	--	--	--	--	--	<2	--

**Table 5**  
**Groundwater Analytical Results - VOCs**  
Former Texaco Service Station (Site #211577)  
631 Queen Anne Avenue North  
Seattle, Washington

WELL ID/ DATE	Chloroform (µg/L)	cis-1,2-Dichloroethene (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	m+p-Xylene (µg/L)	o-Xylene (µg/L)	Isopropylbenzene (µg/L)	n-Propylbenzene (µg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	sec-Butylbenzene (µg/L)	p-Isopropyltoluene (µg/L)	n-Butylbenzene (µg/L)	Naphthalene (µg/L)	Methyl t-butyl ether (µg/L)	t-Butyl alcohol (µg/L)
<b>MW-33</b> 07/27-28/05 <sup>3</sup>	<3	<3	4,800	180	86	<3	<4	33	120	--	--	--	--	--	--	--	--	4	--
<b>MW-34</b> 11/28/05 <sup>2</sup>	<0.8	<0.8	<0.5	<0.5	<0.5	1	<1	<0.5	<0.5	--	--	--	--	--	--	--	--	<0.5	--
<b>MW-35</b> 11/28/05 <sup>2</sup>	<0.8	<0.8	30	<0.5	<0.5	<0.8	<1	<0.5	1	--	--	--	--	--	--	--	--	<0.5	--
<b>DPE-5</b> 11/28/05 <sup>2</sup>	<0.8	<0.8	2,200	3,000	660	<0.8	<1	4,000	1,700	--	--	--	--	--	--	--	--	<0.5	--
<b>DPE-6</b> 11/28/05 <sup>2</sup>	<0.8	8	98	4	3	<0.8	<1	7	3	--	--	--	--	--	--	--	--	<0.5	--
<b>DPE-7</b> 11/28/05 <sup>2,4</sup>	<0.8	<0.8	630	1,600	260	<0.8	<1	1,800	630	--	--	--	--	--	--	--	--	<0.5	--
<b>RW-4</b> 07/24/02	ND	<1	70	1	36	ND	ND	3	2	<2	3	<1	20	<1	2	1	5	<2	<100
<b>Trip Blank</b> 10/26-27/04 <sup>2</sup>	<0.8	<0.8	<0.5	<0.5	<0.5	<0.8	<1	<0.5	<0.5	--	--	--	--	--	--	--	--	<0.5	--
11/28/05 <sup>c</sup>	<0.8	<0.8	<0.5	<0.5	<0.5	<0.8	<1	<0.5	<0.5	--	--	--	--	--	--	--	--	<0.5	--

**Table 6**

**Groundwater Analytical Results - Dissolved Metals**  
 Former Texaco Service Station (Site #211577)  
 631 Queen Anne Avenue North  
 Seattle, Washington

WELL ID/ DATE	MERCURY (µg/L)	ARSENIC (µg/L)	CADMIUM (µg/L)	CHROMIUM (µg/L)	SELENIUM (µg/L)	SILVER (µg/L)	BARIUM TR (µg/L)
<b>VP-2</b> 07/24/02	UNABLE TO LOCATE						
<b>VP-3(MW-2)</b> 07/24/02	DRY	--	--	--	--	--	--
<b>VP-5(MW-5)</b> 07/24/02	INACCESSIBLE - VEHICLE PARKED OVER WELL						
<b>VP-6</b> 07/24/02	NOT SAMPLED - DUE TO PRESENCE OF SPH NOT MONITORED/SAMPLED - REPLACED BY DPE-1(VP-6)			--	--	--	--
<b>VP-7(MW-3)</b> 07/24/02	<0.079	97.3	<0.080	2.2	<1.1	0.068	33.6
<b>VP-8(MW-7)</b> 07/24/02	<0.079	2.1	0.13	0.82	<1.1	<0.050	49.6
<b>VP-9</b> 07/24/02	INACCESSIBLE - VEHICLE PARKED OVER WELL						
<b>MW-4</b> 07/24/02	<0.079	31.0	<0.080	<0.28	<1.1	<0.050	63.8
<b>MW-10</b> 07/24/02	<0.079	4.1	0.17	0.38	<1.1	<0.050	52.1
<b>MW-14</b> 11/14/02	<1.00	17.0	<1.00	<1.00	1.48	<1.00	18.4
<b>MW-15</b> 11/14/02	<1.00	1.33	<1.00	<1.00	<1.00	<1.00	<10.0
<b>RW-2</b> 07/24/02	UNABLE TO LOCATE						

**Table 6**  
**Groundwater Analytical Results - Dissolved Metals**  
Former Texaco Service Station (Site #211577)  
631 Queen Anne Avenue North  
Seattle, Washington

<b>WELL ID/ DATE</b>	<b>MERCURY (<math>\mu\text{g/L}</math>)</b>	<b>ARSENIC (<math>\mu\text{g/L}</math>)</b>	<b>CADMIUM (<math>\mu\text{g/L}</math>)</b>	<b>CHROMIUM (<math>\mu\text{g/L}</math>)</b>	<b>SELENIUM (<math>\mu\text{g/L}</math>)</b>	<b>SILVER (<math>\mu\text{g/L}</math>)</b>	<b>BARIUM TR (<math>\mu\text{g/L}</math>)</b>
<b>RW-3</b> 07/24/02	UNABLE TO LOCATE		--	--	--	--	--
<b>RW-4</b> 07/24/02	<0.079	6.1	<0.080	1.2	<1.1	<0.050	66.9
<b>RW-5</b> 07/24/02	UNABLE TO LOCATE		--	--	--	--	--

**EXPLANATIONS:**

( $\mu\text{g/L}$ ) = Micrograms per liter  
-- = Not Analyzed  
(D) - Duplicate

**ANALYTICAL METHODS:**

Dissolved Metals by EPA Method Series 7000  
Barium TR by EPA Method 6010B

**Table 7**  
**Groundwater Analytical Results - Oxygenate Compounds**  
Former Texaco Service Station (Site #211577)  
631 Queen Anne Avenue North  
Seattle, Washington

WELL ID	DATE	ETHANOL ( $\mu\text{g/L}$ )	TBA ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	DIPE ( $\mu\text{g/L}$ )	ETBE ( $\mu\text{g/L}$ )	TAME ( $\mu\text{g/L}$ )	1,2-DCA ( $\mu\text{g/L}$ )	EDB ( $\mu\text{g/L}$ )
MW-12	10/18/02	--	<50.0	<5.00	--	<1.00	<1.00	--	--
MW-3	10/18/02	<40.0	<100	<10.0	<2.00	<2.00	<2.00	<1.00	<1.00
MW-4	10/18/02	<200	<500	<50.0	<10.0	<10.0	<10.0	<5.00	<5.00
MW-20	10/28-11/01/04	--	--	<0.5	--	--	--	<0.5	<0.5
MW-22	10/26-27/04 <sup>1</sup>	--	--	<3	--	--	--	<3	<3
MW-23	10/26-27/04 <sup>1</sup>	--	--	<5	--	--	--	<5	<5
MW-24	10/26-27/04 <sup>1</sup>	--	--	<0.5	--	--	--	<0.5	<0.5
MW-25	10/26-27/04 <sup>1</sup>	--	--	<3	--	--	--	<3	<3
MW-26	10/28-11/01/04	--	--	<3	--	--	--	<3	<3

**EXPLANATIONS:**

TBA = t-Butyl alcohol

MTBE = Methyl Tertiary Butyl Ether

DIPE = di-Isopropyl ether

ETBE = Ethyl t-butyl ether

TAME = t-Amyl methyl ether

1,2- DCA = 1,2-Dichloroethane

EDB = 1,2-Dibromoethane

( $\mu\text{g/L}$ ) = Micrograms per liter

**ANALYTICAL METHOD:**

EPA Method 8260 for Oxygenate Compounds

<sup>1</sup> Data provided by SAIC.

## STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Gettler-Ryan Inc. field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. Prior to sample collection, the type of analysis to be performed is determined. Loss prevention of volatile compounds is controlled and sample preservation for subsequent analysis is maintained.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, all depth to water level measurements are collected with a static water level indicator and are also recorded in the field notes, prior to purging and sampling any wells.

After water levels are collected and prior to sampling, temperature, pH and electrical conductivity are measured. If purging is to occur, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, suction, Grundfos), or disposable bailers. The measurements are taken a minimum of three times during the purging. Purging continues until these parameters stabilize. Purge water is treated by filtering the water through granular activated carbon and is subsequently discharged to the ground surface at the site.

Groundwater samples are collected using disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used for all samples. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler, maintained at 4°C for transport to the laboratory. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. For sampling sets greater than 20 samples, 5% trip blanks are included. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

## Standard Operating Procedure, Low-Flow Purging and Sampling

This procedure is designed to assist the user in taking representative groundwater samples from groundwater monitoring wells. Samples will be collected using low-flow (minimal drawdown) purging and sampling methods as discussed in U.S. EPA, Ground Water Issue, Publication Number EPA/540/S-95/504, April 1996 by Puls, R.W. and M.J. Barcelona - "Low-Flow (Minimal Drawdown) Ground-water Sampling Procedures."

The field sampler's objective is to purge and sample the well so that the water that is discharged from the pump, and subsequently collected, is representative of the formation water from the aquifer's identified zone of interest.

The wells to be sampled are equipped with QED Well Wizard™ bladder (squeeze-type) pumps or Peristaltic Pumps. Each bladder pump or the suction inlet tubing of the peristaltic pump is positioned with its inlet located within the screened interval of the well. The down well equipment includes a bladder pump or Teflon-lined PE (polyethylene) tubing.

### ***Initial Pump Flow Test Procedures***

If possible, the optimum flow rate for each well will be established during well development or redevelopment, or in advance of the actual sampling event. The monitoring well must be gauged for Static Water Level (SWL) prior to the installation of the pump and before pumping of any water from the well. The measurement will be documented on a Low Flow Ground Water Sample Collection Record, or field data sheet.

After pump installation, and confirmation that the SWL has returned to its original level (as determined prior to pump installation), the bladder pump or peristaltic pump should be started at a discharge rate between 100 ml to 300 ml per minute without any in-line flow cell connected. The water level in the well casing must be monitored continuously for any change from the original measurement. If significant drawdown is observed, the pump's flow rate should be incrementally reduced until the SWL drawdown ceases and stabilizes. Total drawdown from the initial (static) water level should not exceed 25% of the distance between pump inlet location and the top of the well screen. (For example, if a well has a 10-foot screen zone and the pump inlet is located mid-screen; the maximum drawdown should be 1.25 feet.) In any case, the water level in the well should not be lowered below the top of the screen/intake zone of the well.

Once the specific well's optimum discharge rate, without an in-line flow cell connected, has been determined and documented, the in-line flow cell system to be used is connected to the well discharge and the control settings required to achieve the well's optimum discharge rate are determined with the in-line flow cell connected. (Due to the system's back-pressure, the discharge rate will be decreased by 10-20%). All control settings are to be documented on the gauging and sampling sheet as specific to that particular well's ID and will be utilized for its subsequent purging and sampling events.

### ***Purge and Sampling Events***

Prior to the initiation of purging a well, the SWL will be measured and documented. The pump will be started utilizing its documented control settings and its discharge rate will be confirmed by volumetric discharge measurement with the in-line flow cell connected. If necessary, any minor modifications to the control settings to achieve the well's optimum discharge rate will be documented on the gauging sheet. When the optimum pump flow rate has been established, the SWL draw down has stabilized within the required range and at least one pump system volume (bladder volume + discharge tubing volume) has been purged, begin taking field measurements for pH, temperature (T), conductivity (Ec), oxygen reduction potential (ORP) and dissolved oxygen (DO) using a "QED" Model MP-20 in-line flow cell, or other multi-parameter meter. All water chemistry field measurements will be documented on the field data sheet. Measurements should be taken every three to five minutes until stabilization has been achieved. Stabilization is achieved after all parameters have stabilized for three consecutive readings. In lieu of measuring all five parameters, a minimum subset would include pH, conductivity and dissolved oxygen. Three consecutive measurements indicating stability should be within:



Temperature	± 10%
pH	± 0.1 units
Conductance	± 03

When water quality parameters have stabilized, and there has been no change in the stabilized SWL (ie. No continuous draw down), sample collection may begin.

### *Equipment List*

The following equipment is needed to conduct low flow purging and sampling:

- Bladder pump installed within the well's screened interval
- Pump controller and air source set to operate at the specific well's documented optimum discharge rate
- In-line flow cell and meter(s) with connection fittings and tubing to measure water quality
- Water level probe or installed dedicated water level measurement system
- Sample containers appropriate for the analytical requirements
- Low Flow Ground Water Sample Collection Record, or field data sheets
- 300-500 milliliter graduated cylinder or measuring cup
- 5 gallon bucket(s) for collecting purge water
- Wristwatch with second hand or stopwatch
- Sufficient cleaning and decontamination supplies if portable water level probe is utilized
- Peristaltic pump & tubing, in place of bladder pump, if applicable
- Multi-parameter meter, in place of in-line flow cell, if applicable

### *Procedure QED Bladder Pumps*

1. Calibrate all field instruments at the start of each day's deployment per the instrument manufacturer's instructions. Record calibration data on the "Field Instruments Calibration Documentation Form."
2. Drive to the first well scheduled to be sampled (typically the least contaminated). Make notes in the field logbook, describing the well condition and activity in the vicinity of the well. Decontaminate the portable water gauging probe by washing with phosphate-free detergent, rinsing with potable water.
3. Measure the depth to water from the surveyed reference mark on the wellhead and record the measurement on the gauging and sampling sheet. Lock the water level meter in place so that the level can be monitored during purging and sampling. When placing the probe in the well, take precautions to not disturb or agitate the water.
4. Connect the compressed air source's airline to the pump controller's "AIR IN" connection (If utilizing a gas-engine operated compressor, locate the compressor at least 25 feet, down wind from the wellhead).
5. Connect the pump controller "AIR OUT" air-line to the bladder pump's air supply fitting at the wellhead.
6. Connect the pump discharge line to the in-line flow cell's "IN" fitting.
7. Connect the flow cell's "OUT" line and secure to drain the purge water into the purge water collection container.
8. Start the air supply to the pump. Set the pump controller settings to the documented settings for the specific well. Confirm the flow rate is equal to the well's established optimum flow rate. Modify as necessary (documenting any required modifications).
9. Monitor the water level and confirm that the SWL draw down has stabilized within the well's allowable limits.
10. After a single pump-system's volume (bladder volume + discharge tubing volume) has been adequately purged, read and record water quality field measurements every three to five minutes until all parameters have stabilized within their allowable ranges for at least three consecutive measurements. When stabilization has been achieved, sample collection may begin.
11. Disconnect the flow cell, and it's tubing, from the pump discharge line before collecting samples. Decrease the pump rate to 100 milliliters per minute or less by lowering the controller's air pressure setting prior to collecting samples for volatiles. Utilize the QED Model 400 Controller's 'MANUAL SAMPLE' button to ensure minimized sample exposure to the ambient air. Refer to

- the task instructions for the correct order and procedures for filling sample containers. Place the samples in a cooler with enough ice to keep them at 4 degrees Centigrade.
12. Once samples for volatiles have been collected, re-establish pump flow rate to the original purge flow rate by inputting the documented controller settings for the well without the in-line flow cell connected and collect remaining samples.
  13. When all sample containers have been filled, make a final measurement of the well's SWL and record the measurement on the gauging and sampling sheet. If the well has a "QED" dedicated bottom sounder, measure the well's total depth and record the measurement, as well.
  14. Measure and record total purge volume collected. Consolidate generated purge water.
  15. Remove and decontaminate the portable water level probe with phosphate-free detergent, rinsing with potable water.
  16. Disconnect the controller air supply to the pump.
  17. Secure the pump's discharge line/discharge adapter in the wellhead.
  18. Secure the wellhead cover and secure with its lock. Move equipment to next well to be sampled.
  19. At the end of each day, post calibrate all field instruments and record the measurements on the "Field Calibration Documentation Form".
  20. Clean and decontaminate the in-line flow cell with phosphate-free detergent, rinsing with potable water.

### ***Procedure Peristaltic Pump***

1. Record all depth to water readings on field data sheets
2. Calibrate all field instruments according to manufacturer's directions.
3. Setup pump and install silicone tubing in the roller head.
4. Place suction tubing at desired intake level in well, (mid screen) and attach to the intake side of the pump roller head.
5. Attach tubing at discharge side of pump head and place in collection container.
6. Start pump and adjust flow rate to achieve flow without depressing water level more than necessary (approx. 0.30').
7. Record parameter readings after parameters have stabilized (3 consecutive readings that fall within the acceptance criteria).
8. Decrease the flow rate of the pump to achieve approximately 100ml/min. when collecting samples.
9. Change all tubing between wells and repeat procedure.



# GETTLER - RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4/13 - 4/16/09 (inclusive)  
 City: Seattle, WA Sampler: ML

Well ID: VP-2  
 Well Diameter: 2 in.  
 Total Depth: 14.94 ft.  
 Depth to Water: 13.88 ft.

Date Monitored: 4-13-09

Volume Factor (VF)	3/4" = 0.02	1" = 0.04	2" = 0.17	3" = 0.38
	4" = 0.66	5" = 1.02	6" = 1.50	12" = 5.80

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: \_\_\_\_\_  
 xVF = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

### Purge Equipment:

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

### Sampling Equipment:

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbant Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): \_\_\_\_\_ Weather Conditions: \_\_\_\_\_  
 Sample Time/Date: 1 Water Color: \_\_\_\_\_ Odor: Y / N  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: \_\_\_\_\_  
 Did well de-water? \_\_\_\_\_ If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: \_\_\_\_\_

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: M10

P10 - 0.0 ppm

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577  
 Site Address: 631 Queen Anne North  
 City: Seattle, WA

Job Number: 386765  
 Event Date: 4/13-4/16 (inclusive)  
 Sampler: ML

Well ID: VP-4  
 Well Diameter: 2 in.  
 Total Depth: 13.93 ft.  
 Depth to Water: 12.89 ft.

Date Monitored: 4-13-09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

xVF = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: \_\_\_\_\_

### Purge Equipment:

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

### Sampling Equipment:

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbant Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): \_\_\_\_\_  
 Sample Time/Date: \_\_\_\_\_  
 Approx. Flow Rate: \_\_\_\_\_ gpm.  
 Did well de-water? \_\_\_\_\_ If yes, Time: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_  
 Water Color: \_\_\_\_\_ Odor: Y / N  
 Sediment Description: \_\_\_\_\_  
 Volume: \_\_\_\_\_ gal. DTW @ Sampling: \_\_\_\_\_

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: WELL HAD INSUFFICIENT WATER TO SAMPLE, DPE-2 SAMPLED INSTEAD. MIO  
PID = 0.0 ppm

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577  
 Site Address: 631 Queen Anne North  
 City: Seattle, WA

Job Number: 386765  
 Event Date: 4/13 - 4/16 (inclusive)  
 Sampler: \_\_\_\_\_

Well ID: VP-5  
 Well Diameter: 2 in.  
 Total Depth: 16.38 ft.  
 Depth to Water: 13.56 ft.  
2.82 xVF \_\_\_\_\_ = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

Date Monitored: 4/13/09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: \_\_\_\_\_

**Purge Equipment:**  
 Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

**Sampling Equipment:**  
 Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbent Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): 1005 Weather Conditions: Sunny  
 Sample Time/Date: 1035 14-16-09 Water Color: Clear Odor: Y10  
 Approx. Flow Rate: 200 ml / min. Sediment Description: None  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 13.73

Time (2400 hr.)	Volume (gall)	pH	Conductivity (µmhos/cm - 25°C)	Temperature (°F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1020	3	6.98	532	13.79	2.11	24.3	13.69
1023	3.6	7.07	508	13.92	2.20	23.7	13.72
1026	4.2	7.05	512	13.94	2.18	23.7	13.72
1029	4.8	7.05	511	13.93	2.17	23.6	13.73

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
VP-5	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: PID-0.0 PPM

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4/13 - 4/16/09 (inclusive)  
 City: Seattle, WA Sampler: ML

Well ID: VP-7  
 Well Diameter: 2 in.  
 Total Depth: 12.42 ft.  
 Depth to Water: 10.86 ft.

Date Monitored: 4-13-09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

1 xVF = 1 x3 case volume = Estimated Purge Volume: 1 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 1

### Purge Equipment:

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

### Sampling Equipment:

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbant Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): \_\_\_\_\_ Weather Conditions: \_\_\_\_\_  
 Sample Time/Date: / Water Color: \_\_\_\_\_ Odor: Y / N  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: \_\_\_\_\_  
 Did well de-water? \_\_\_\_\_ If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: \_\_\_\_\_

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: M/O PLO - 0.0 ppm

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4/13-4/16 (inclusive)  
 City: Seattle, WA Sampler: ML

Well ID: VP-8  
 Well Diameter: 2 in.  
 Total Depth: 17.95 ft.  
 Depth to Water: 12.45 ft.  
5.50 xVF =            x3 case volume = Estimated Purge Volume:            gal.

Date Monitored: 4/13/09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]:           

### Purge Equipment:

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

### Sampling Equipment:

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started:	_____ (2400 hrs)
Time Completed:	_____ (2400 hrs)
Depth to Product:	_____ ft
Depth to Water:	_____ ft
Hydrocarbon Thickness:	_____ ft
Visual Confirmation/Description:	_____
Skimmer / Absorbant Sock (circle one)	_____
Amt Removed from Skimmer:	_____ gal
Amt Removed from Well:	_____ gal
Water Removed:	_____ gal
Product Transferred to:	_____

Start Time (purge): 1105 Weather Conditions: SUNNY  
 Sample Time/Date: 1135 14-1609 Water Color: Clear Odor: Y10  
 Approx. Flow Rate: 100 ml gpm. Sediment Description: None  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 12.99

Time (2400 hr.)	Volume (gal)	pH	Conductivity (µmhos/cm - <u>GS</u> )	Temperature (°F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
<u>1115</u>	<u>1</u>	<u>7.81</u>	<u>480</u>	<u>13.04</u>	<u>3.08</u>	<u>-111.9</u>	<u>12.85</u>
<u>1118</u>	<u>1.3</u>	<u>7.53</u>	<u>474</u>	<u>13.36</u>	<u>2.99</u>	<u>-87.5</u>	<u>12.88</u>
<u>1121</u>	<u>1.6</u>	<u>7.47</u>	<u>473</u>	<u>13.34</u>	<u>2.95</u>	<u>-86.8</u>	<u>12.93</u>
<u>1124</u>	<u>1.9</u>	<u>7.45</u>	<u>470</u>	<u>13.39</u>	<u>2.97</u>	<u>-84.5</u>	<u>12.99</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>VP-8</u>	<u>6</u> x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	<u>2</u> x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	<u>1</u> x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	<u>1</u> x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	<u>2</u> x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	<u>1</u> x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	<u>1</u> x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: MNA PARAMETERS PID: 0.0 ppm

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER - RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4/13 - 4/16 (inclusive)  
 City: Seattle, WA Sampler: ML

Well ID: VP-9  
 Well Diameter: 2 in.  
 Total Depth: 12.47 ft.  
 Depth to Water: 8.11 ft.

Date Monitored: 4-13-09

Volume	3/4" = 0.02	1" = 0.04	2" = 0.17	3" = 0.38
Factor (VF)	4" = 0.66	5" = 1.02	6" = 1.50	12" = 5.80

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: \_\_\_\_\_  
 xVF = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

### Purge Equipment:

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

### Sampling Equipment:

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbent Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): \_\_\_\_\_ Weather Conditions: \_\_\_\_\_  
 Sample Time/Date: 1 Water Color: \_\_\_\_\_ Odor: Y / N  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: \_\_\_\_\_  
 Did well de-water? \_\_\_\_\_ If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: \_\_\_\_\_

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sq
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: M/O PIE - 0.0 ppm

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_





# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577  
 Site Address: 631 Queen Anne North  
 City: Seattle, WA

Job Number: 386765  
 Event Date: 4/13 - 4/16 (inclusive)  
 Sampler: TWK/HL

Well ID: MW-4  
 Well Diameter: 2 in.  
 Total Depth: 17.36 ft.  
 Depth to Water: 12.23 ft.  
5.13 xVF = \_\_\_\_\_

Date Monitored: 4-13-09

Volume	3/4" = 0.02	1" = 0.04	2" = 0.17	3" = 0.38
Factor (VF)	4" = 0.66	5" = 1.02	6" = 1.50	12" = 5.80

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: \_\_\_\_\_

**Purge Equipment:**  
 Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

**Sampling Equipment:**  
 Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbent Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): 0813 Weather Conditions: Partly Cloudy  
 Sample Time/Date: 0841 4/16/09 Water Color: Clear Odor: Y (N)  
 Approx. Flow Rate: 175 gpm / min Sediment Description: NA  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 12.34

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (°C / °F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
0823	0.15	6.51	0.693	13.81	2.90	88.3	12.32
0826	0.30	6.48	0.686	14.08	1.59	73.2	12.33
0829	0.45	6.47	0.684	14.05	1.25	59.6	12.33
0832	0.60	6.44	0.683	14.11	1.13	58.8	12.34
0835	0.75	6.43	0.681	14.23	0.90	45.1	12.34

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-4</u>	<u>6</u> x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	<u>2</u> x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	<u>1</u> x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	<u>1</u> x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	<u>2</u> x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	<u>1</u> x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/MANGANESE (6010)
	<u>1</u> x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: MVA PARAMETERS, turned pump down after 0823 reading  
PIO - 0.0 ppm

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_  
 0838 0.90 6.34 0.680 14.17 0.81 30.4 12.34  
 0841 1.05 6.38 0.681 14.24 0.73 29.0 12.34



# GETTLER - RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4-15-09 - 4-16-09 (inclusive)  
 City: Seattle, WA Sampler: ML

Well ID: MW-6  
 Well Diameter: 2 in.  
 Total Depth: 28.08 ft.  
 Depth to Water: 20.18 ft.  
7.90 xVF = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

Date Monitored: 4-15-09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: \_\_\_\_\_

### Purge Equipment:

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

### Sampling Equipment:

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbant Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): 1200 Weather Conditions: Sunny  
 Sample Time/Date: 1230 4-15-09 Water Color: Clear Odor: Y10  
 Approx. Flow Rate: 200 ml /gpm. Sediment Description: None  
 Did well de-water? No If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 20.31

Time (2400 hr.)	Volume (L)	pH	Conductivity (µmhos/cm - DS)	Temperature (°F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
<u>1215</u>	<u>3</u>	<u>7.47</u>	<u>1073</u>	<u>14.52</u>	<u>2.36</u>	<u>-221.3</u>	<u>20.28</u>
<u>1218</u>	<u>3.6</u>	<u>7.19</u>	<u>1072</u>	<u>14.54</u>	<u>2.21</u>	<u>-226.0</u>	<u>20.31</u>
<u>1221</u>	<u>4.2</u>	<u>7.16</u>	<u>1068</u>	<u>14.58</u>	<u>2.24</u>	<u>-225.6</u>	<u>20.32</u>
<u>1224</u>	<u>4.8</u>	<u>7.15</u>	<u>1065</u>	<u>14.62</u>	<u>2.22</u>	<u>-226.0</u>	<u>20.31</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-6</u>	<u>6</u> x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	<u>2</u> x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	<u>1</u> x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	<u>1</u> x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	<u>2</u> x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	<u>1</u> x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	<u>1</u> x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

### COMMENTS:

MVA PARAMETERS  
DUPLICATE SAMPLE TAKEN FROM THIS WELL (DUP-1)  
FIELD BLANK COLLECTED FROM THIS WELL (FB-1)

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_

(2) 1L AMBERS FOR TPH-Dx BROKE DURING SHIPPING. RESAMPLED FOR TPH-Dx ON 4-16-09 AT 1145.  
PID - 01000M



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577  
 Site Address: 631 Queen Anne North  
 City: Seattle, WA

Job Number: 386765  
 Event Date: 4/13 - 4/16/09 (inclusive)  
 Sampler: \_\_\_\_\_

Well ID: MW-9  
 Well Diameter: 2 in.  
 Total Depth: 27.20 ft.  
 Depth to Water: 24.60 ft.  
2.40 xVF = \_\_\_\_\_ = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

Date Monitored: 4/13/09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: ✓

### Purge Equipment:

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

### Sampling Equipment:

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started:	_____ (2400 hrs)
Time Completed:	_____ (2400 hrs)
Depth to Product:	_____ ft
Depth to Water:	_____ ft
Hydrocarbon Thickness:	_____ ft
Visual Confirmation/Description:	_____
Skimmer / Absorbent Sock (circle one)	_____
Amt Removed from Skimmer:	_____ gal
Amt Removed from Well:	_____ gal
Water Removed:	_____ gal
Product Transferred to:	_____

Start Time (purge): 1105  
 Sample Time/Date: 1140 / 4/15/09  
 Approx. Flow Rate: 0.035 gpm.  
 Did well de-water? no If yes, Time: \_\_\_\_\_

Weather Conditions: overcast + cold  
 Water Color: clear Odor: YIN AD  
 Sediment Description: small amt in beginning of flow  
 Volume: \_\_\_\_\_ gal. DTW @ Sampling: 21.72

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (° F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1115	0.10	6.79	1.121	14.23	0.57	-124.2	21.01
1118	0.20	6.66	1.130	14.43	0.74	-132.2	21.18
1121	0.30	6.69	1.138	14.66	0.71	-127.0	21.29
1124	0.35	6.66	1.145	14.68	0.67	-141.9	21.40
1127	0.40	6.67	1.142	14.86	0.45	-139.3	21.55

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-9</u>	<u>6</u> x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	<u>2</u> x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/wsg
	<u>1</u> x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	<u>1</u> x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	<u>2</u> x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	<u>1</u> x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	<u>1</u> x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: MVA PARAMETERS turned pump down at 1118 reading & 1121 reading & 1124 reading & 1127 reading. Bubbles in flow cell.  
 PID-6.8 ppb

Add/Replaced Lock:	Add/Replaced Plug:	Add/Replaced Bolt:
1130 0.45 6.66 1.137 14.40 0.32 -143.3 21.60		
1133 0.50 6.65 1.132 14.40 0.38 -146.0 21.68		
1121 0.5K 6.67 1.137 14.32 0.38 -146.5 21.72		



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4-13-09 / 4-10/09 (inclusive)  
 City: Seattle, WA Sampler: ML/TK/HL

Well ID: MW-10 Date Monitored: 4-13-09  
 Well Diameter: 2 in.  
 Total Depth: 29.05 ft.  
 Depth to Water: 12.11 ft.  Check if water column is less than 0.50 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

16.94 xVF 1 = 16.94 x3 case volume = Estimated Purge Volume: 16.94 gal.  
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.40

### Purge Equipment:

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

### Sampling Equipment:

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbant Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): 1432 Weather Conditions: Sunny  
 Sample Time/Date: 1500 14-15-09 Water Color: Clear Odor: Y1 (N)  
 Approx. Flow Rate: 300 ml / min Sediment Description: None  
 Did well de-water? No If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 12.40

Time (2400 hr.)	Volume (gal)	pH	M/S Conductivity (µmhos/cm)	Temperature (°F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1443	3.3	7.33	0.529	14.41	0.34	3.5	12.92
1446	4.2	7.41	0.525	14.34	0.47	3.3	13.10
1449	5.1	7.43	0.521	14.19	0.67	2.7	13.20
1452	6.0	7.32	0.521	14.20	0.70	2.0	13.28
1455	6.9	7.30	0.522	14.28	0.75	1.9	13.36

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-10	4 x vov vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	1 x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	1 x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	2 x vov vial	YES	NP	LANCASTER	NITRATE/NITRITES/SULFATE (EPA 300.0)
	1 x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	1 x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: MVA PARAMETERS PID - 2.0 ppm

Add/Replaced Lock: 1458 Add/Replaced Plug: 28 Add/Replaced Bolt: 728  
0.526 14.30 0.79 2.2 13.40



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4/13-4/16 (inclusive)  
 City: Seattle, WA Sampler: ML

Well ID: MW-11 Date Monitored: 4-13-09  
 Well Diameter: 2 in.  
 Total Depth: 17.11 ft.  
 Depth to Water: 11 ft.

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

         xVF =          x3 case volume = Estimated Purge Volume:          gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]:         

### Purge Equipment:

- Disposable Bailer \_\_\_\_\_
- Stainless Steel Bailer \_\_\_\_\_
- Stack Pump \_\_\_\_\_
- Suction Pump \_\_\_\_\_
- Grundfos \_\_\_\_\_
- Peristaltic Pump \_\_\_\_\_
- QED Bladder Pump \_\_\_\_\_
- Other: \_\_\_\_\_

### Sampling Equipment:

- Disposable Bailer \_\_\_\_\_
- Pressure Bailer \_\_\_\_\_
- Discrete Bailer \_\_\_\_\_
- Peristaltic Pump \_\_\_\_\_
- QED Bladder Pump \_\_\_\_\_
- Other: \_\_\_\_\_

Time Started:	_____ (2400 hrs)
Time Completed:	_____ (2400 hrs)
Depth to Product:	_____ ft
Depth to Water:	_____ ft
Hydrocarbon Thickness:	_____ ft
Visual Confirmation/Description:	_____
Skimmer / Absorbant Sock (circle one)	_____
Amt Removed from Skimmer:	_____ gal
Amt Removed from Well:	_____ gal
Water Removed:	_____ gal
Product Transferred to:	_____

Start Time (purge): \_\_\_\_\_ Weather Conditions: \_\_\_\_\_  
 Sample Time/Date: 1 Water Color: \_\_\_\_\_ Odor: Y / N  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: \_\_\_\_\_  
 Did well de-water? \_\_\_\_\_ If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: \_\_\_\_\_

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: OBSTRUCTION IN WELL AT 11.05 feet  
M/O PID - 0.0 ppm

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4/13-4/16 (inclusive)  
 City: Seattle, WA Sampler: ML

Well ID: MW-12  
 Well Diameter: 2 in.  
 Total Depth: 16.30 ft.  
 Depth to Water: 11.71 ft.

Date Monitored: 4-13-09

Volume Factor (VF)	3/4" = 0.02	1" = 0.04	2" = 0.17	3" = 0.38
	4" = 0.66	5" = 1.02	6" = 1.50	12" = 5.80

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]:                      gal.

**Purge Equipment:**  
 Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

**Sampling Equipment:**  
 Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbant Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): \_\_\_\_\_ Weather Conditions: \_\_\_\_\_  
 Sample Time/Date: \_\_\_\_\_ Water Color: \_\_\_\_\_ Odor: Y / N \_\_\_\_\_  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: \_\_\_\_\_  
 Did well de-water? \_\_\_\_\_ If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: \_\_\_\_\_

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: M/D PIED - 2.2 ppm

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER - RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4/13 - 4/16 (inclusive)  
 City: Seattle, WA Sampler: ML

Well ID: MW-13  
 Well Diameter: 2 in.  
 Total Depth: 19.81 ft.  
 Depth to Water: 18.18 ft.

Date Monitored: 4-13-09

Volume	3/4" = 0.02	1" = 0.04	2" = 0.17	3" = 0.38
Factor (VF)	4" = 0.66	5" = 1.02	6" = 1.50	12" = 5.80

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge ((Height of Water Column x 0.20) + DTW): \_\_\_\_\_ gal.

### Purge Equipment:

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

### Sampling Equipment:

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbent Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): \_\_\_\_\_ Weather Conditions: \_\_\_\_\_  
 Sample Time/Date: / Water Color: \_\_\_\_\_ Odor: Y / N  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: \_\_\_\_\_  
 Did well de-water? \_\_\_\_\_ If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: \_\_\_\_\_

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3600 Fe B)
	x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/MANGANESE (6010)
	x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: M/O PID - 2.2 ppm

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4/13 - 4/16 (inclusive)  
 City: Seattle, WA Sampler: \_\_\_\_\_

Well ID: MW-14  
 Well Diameter: 2 in.  
 Total Depth: 24.45 ft.  
 Depth to Water: 12.03 ft.  
12.42 xVF \_\_\_\_\_ = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

Date Monitored: 4/13/09

Volume	3/4" = 0.02	1" = 0.04	2" = 0.17	3" = 0.38
Factor (VF)	4" = 0.66	5" = 1.02	6" = 1.50	12" = 5.80

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: \_\_\_\_\_

### Purge Equipment:

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

### Sampling Equipment:

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: 12.03 ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbant Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): 1017 Weather Conditions: Partly cloudy + cold  
 Sample Time/Date: 1039 1 4/14/09 Water Color: clear Odor: Yes  
 Approx. Flow Rate: 0.04 gpm. Sediment Description: NA  
 Did well de-water? no If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 12.08

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
<u>1020</u>	<u>0.125</u>	<u>6.58</u>	<u>0.798</u>	<u>12.60</u>	<u>15.01</u>	<u>-161.1</u>	<u>12.07</u>
<u>1023</u>	<u>0.25</u>	<u>6.61</u>	<u>0.893</u>	<u>13.55</u>	<u>4.10</u>	<u>-163.3</u>	<u>12.07</u>
<u>1026</u>	<u>0.37</u>	<u>6.60</u>	<u>0.904</u>	<u>13.44</u>	<u>3.12</u>	<u>-157.8</u>	<u>12.08</u>
<u>1029</u>	<u>0.49</u>	<u>6.60</u>	<u>0.912</u>	<u>13.75</u>	<u>2.30</u>	<u>-158.1</u>	<u>12.08</u>
<u>1032</u>	<u>0.61</u>	<u>6.61</u>	<u>0.917</u>	<u>13.87</u>	<u>2.02</u>	<u>-158.9</u>	<u>12.08</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-14</u>	<u>6</u> x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	<u>2</u> x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/MANGANESE (6010)
	x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: PID - 0.0 ppm

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_  
1035 0.73 6.61 0.918 13.88 1.98 -158.3 12.08  
1038 0.85 6.61 0.920 13.92 2.12 -154.7 12.08





# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4/13-4/16/09 (inclusive)  
 City: Seattle, WA Sampler: TK/HL (SATEC)

Well ID: MW-15 Date Monitored: 4/13/09  
 Well Diameter: 2 in.  
 Total Depth: 24.10 ft.  
 Depth to Water: 9.79 ft.  Check if water column is less than 0.50 ft.  
14.31 xVF =          x3 case volume = Estimated Purge Volume:          gal.

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]:         

- Purge Equipment:**
- Disposable Bailer \_\_\_\_\_
  - Stainless Steel Bailer \_\_\_\_\_
  - Stack Pump \_\_\_\_\_
  - Suction Pump \_\_\_\_\_
  - Grundfos \_\_\_\_\_
  - Peristaltic Pump X
  - QED Bladder Pump \_\_\_\_\_
  - Other: \_\_\_\_\_

- Sampling Equipment:**
- Disposable Bailer \_\_\_\_\_
  - Pressure Bailer \_\_\_\_\_
  - Discrete Bailer \_\_\_\_\_
  - Peristaltic Pump X
  - QED Bladder Pump \_\_\_\_\_
  - Other: \_\_\_\_\_

Time Started:	_____ (2400 hrs)
Time Completed:	_____ (2400 hrs)
Depth to Product:	_____ ft
Depth to Water:	_____ ft
Hydrocarbon Thickness:	_____ ft
Visual Confirmation/Description:	_____
Skimmer / Absorbant Sock (circle one)	_____
Amt Removed from Skimmer:	_____ gal
Amt Removed from Well:	_____ gal
Water Removed:	_____ gal
Product Transferred to:	_____

Start Time (purge): 1114 Weather Conditions: Partly Cloudy + cold  
 Sample Time/Date: 1130 4/14/09 Water Color: clear Odor: YIN NO  
 Approx. Flow Rate: 0.10 gpm. Sediment Description: NA  
 Did well de-water? no If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 10.15

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
<u>1117</u>	<u>0.15</u>	<u>6.30</u>	<u>0.108</u>	<u>11.99</u>	<u>6.16</u>	<u>-91.2</u>	<u>10.20</u>
<u>1120</u>	<u>0.30</u>	<u>6.06</u>	<u>0.098</u>	<u>12.04</u>	<u>6.39</u>	<u>-74.2</u>	<u>10.15</u>
<u>1123</u>	<u>0.45</u>	<u>5.96</u>	<u>0.087</u>	<u>12.05</u>	<u>6.41</u>	<u>-64.4</u>	<u>10.15</u>
<u>1126</u>	<u>0.60</u>	<u>5.94</u>	<u>0.084</u>	<u>12.03</u>	<u>6.41</u>	<u>-59.5</u>	<u>10.15</u>
<u>1129</u>	<u>0.75</u>	<u>5.91</u>	<u>0.083</u>	<u>12.09</u>	<u>6.34</u>	<u>-53.7</u>	<u>10.15</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-15</u>	<u>6</u> x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	<u>2</u> x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	<u>1</u> x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	<u>1</u> x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	<u>2</u> x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	<u>1</u> x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	<u>1</u> x 50µl clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: MNA PARAMETERS PID -0.0 ppm

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4/13 - 4/16 (inclusive)  
 City: Seattle, WA Sampler: ML

Well ID: MW-16 Date Monitored: 4-13-09  
 Well Diameter: 2 in.  
 Total Depth: 24.81 ft.  
 Depth to Water: 12.48 ft.  Check if water column is less than 0.50 ft.  
12.33 xVF = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: \_\_\_\_\_

**Purge Equipment:**  
 Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

**Sampling Equipment:**  
 Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbant Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): 0930 Weather Conditions: C/Cloudy  
 Sample Time/Date: 0950 4-14-09 Water Color: Clear Odor: Y 10  
 Approx. Flow Rate: 200ml/gpm Sediment Description: None  
 Did well de-water? No If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 12.50

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm) (µS)	Temperature (°F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
<u>0940</u>	<u>2</u>	<u>7.41</u>	<u>288</u>	<u>13.38</u>	<u>5.02</u>	<u>-60</u>	<u>12.49</u>
<u>0943</u>	<u>2.4</u>	<u>7.35</u>	<u>289</u>	<u>13.47</u>	<u>4.92</u>	<u>-56</u>	<u>12.50</u>
<u>0946</u>	<u>3.2</u>	<u>7.34</u>	<u>290</u>	<u>13.46</u>	<u>5.04</u>	<u>-53</u>	<u>12.50</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-16</u>	<u>6</u> x vov vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	<u>2</u> x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	<u>1</u> x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	<u>1</u> x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	<u>2</u> x vov vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	<u>1</u> x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/MANGANESE (6010)
	<u>1</u> x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: MNA PARAMETERS PID-0.0 ppm

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4/13 - 4/16 (inclusive)  
 City: Seattle, WA Sampler: ML

Well ID: MW-17  
 Well Diameter: 2 in.  
 Total Depth: 25.02 ft.  
 Depth to Water: 10.15 ft.  
14.87 xVF

Date Monitored: 4/13/09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]:          x3 case volume = Estimated Purge Volume:          gal.

### Purge Equipment:

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

### Sampling Equipment:

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbent Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): 1046 Weather Conditions: Cloudy  
 Sample Time/Date: 1112 14-14-09 Water Color: Clear Odor: YIN  
 Approx. Flow Rate: 200 ml /pm. Sediment Description: None  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 10.21

Time (2400 hr.)	Volume (gal)	pH	Conductivity (µmhos/cm - MS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1058	2.4	7.65	288	14.57	1.00	-29	10.21
1121	3.0	7.22	310	14.58	0.70	-19.9	10.21
1124	3.6	7.21	320	14.59	0.55	-20.3	10.22
1107	4.2	7.20	319	14.53	0.52	-21.0	10.21

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-17	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/slg
	1 x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	1 x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	2 x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	1 x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: MNA PARAMETERS 14  
Duplicate SAMPLE TAKEN FROM THIS WELL (DUP-2) 6 BTEX/6 ml  
FIELD BLANK COLLECTED (FB-2) - 6 BTEX/6 ml

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_

PID = 0.0 ppm



# GETTLER - RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4/13-4/16 (inclusive)  
 City: Seattle, WA Sampler: ML

Well ID: MW-18  
 Well Diameter: 2 in.  
 Total Depth: 24.22 ft.  
 Depth to Water: 11.81 ft.

Date Monitored: 4/13/09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.  
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.41 xVF =          x3 case volume = Estimated Purge Volume:          gal.

### Purge Equipment:

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

### Sampling Equipment:

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbant Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): 0810 Weather Conditions: Sunny  
 Sample Time/Date: 0840 4-16-09 Water Color: Clear Odor: 01N  
 Approx. Flow Rate: 200 ml /gpm. Sediment Description: None  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 11.94

Time (2400 hr.)	Volume (L)	pH	Conductivity (µmhos/cm) (US)	Temperature (°F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
<u>0822</u>	<u>2.4</u>	<u>7.26</u>	<u>369</u>	<u>14.36</u>	<u>2.09</u>	<u>-24.6</u>	<u>11.92</u>
<u>0825</u>	<u>3</u>	<u>7.11</u>	<u>365</u>	<u>14.30</u>	<u>2.16</u>	<u>-25.1</u>	<u>11.94</u>
<u>0828</u>	<u>3.6</u>	<u>7.09</u>	<u>362</u>	<u>14.32</u>	<u>2.18</u>	<u>-25.0</u>	<u>11.94</u>
<u>0831</u>	<u>4.2</u>	<u>7.07</u>	<u>360</u>	<u>14.30</u>	<u>2.18</u>	<u>-25.2</u>	<u>11.94</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-18</u>	<u>6</u> x vov vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	<u>2</u> x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	<u>1</u> x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	<u>1</u> x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	<u>2</u> x vov vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	<u>1</u> x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	<u>1</u> x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: MNA PARAMETERS PID - 0.10 ppm

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577  
 Site Address: 631 Queen Anne North  
 City: Seattle, WA

Job Number: 386765  
 Event Date: 4/13 - 4/16 (inclusive)  
 Sampler: ML

Well ID: MW-19  
 Well Diameter: 2 in.  
 Total Depth: 24.24 ft.  
 Depth to Water: 11.50 ft.

Date Monitored: 4/13/09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

xVF = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: \_\_\_\_\_

### Purge Equipment:

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

### Sampling Equipment:

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbant Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): \_\_\_\_\_ Weather Conditions: \_\_\_\_\_  
 Sample Time/Date: \_\_\_\_\_ Water Color: \_\_\_\_\_ Odor: Y / N  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: \_\_\_\_\_  
 Did well de-water? \_\_\_\_\_ If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: \_\_\_\_\_

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe-B)
	x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	x voa vial	YES	NP	LANCASTER	NITRATE/NITRITES/SULFATE (EPA 300.0)
	x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: M/O PID - 0.0 ppm

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bott: \_\_\_\_\_



# GETTLER - RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4/13-4/16 (inclusive)  
 City: Seattle, WA Sampler: ML

Well ID: MW-20  
 Well Diameter: 1 in.  
 Total Depth: 19.72 ft.  
 Depth to Water: 6.51 ft.

Date Monitored: 4-13-09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]:             
 xVF =            x3 case volume = Estimated Purge Volume:            gal.

### Purge Equipment:

Disposable Bailer             
 Stainless Steel Bailer             
 Stack Pump             
 Suction Pump             
 Grundfos             
 Peristaltic Pump             
 QED Bladder Pump             
 Other:           

### Sampling Equipment:

Disposable Bailer             
 Pressure Bailer             
 Discrete Bailer             
 Peristaltic Pump             
 QED Bladder Pump             
 Other:           

Time Started:            (2400 hrs)  
 Time Completed:            (2400 hrs)  
 Depth to Product:            ft  
 Depth to Water:            ft  
 Hydrocarbon Thickness:            ft  
 Visual Confirmation/Description:             
 Skimmer / Absorbant Sock (circle one)  
 Amt Removed from Skimmer:            gal  
 Amt Removed from Well:            gal  
 Water Removed:             
 Product Transferred to:           

Start Time (purge):            Weather Conditions:             
 Sample Time/Date:            Water Color:            Odor: Y / N  
 Approx. Flow Rate:            gpm. Sediment Description:             
 Did well de-water?            If yes, Time:            Volume:            gal. DTW @ Sampling:           

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/MANGANESE (6010)
	x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: M/O PIO - 0.0 ppm

Add/Replaced Lock:            Add/Replaced Plug:            Add/Replaced Bolt:



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4/13 - 4/16 (inclusive)  
 City: Seattle, WA Sampler: ML

Well ID: MW-21 Date Monitored: 4/13/09  
 Well Diameter: 2 in.  
 Total Depth: 35.13 ft.  
 Depth to Water: 26.11 ft.  Check if water column is less than 0.50 ft.

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

9.02 xVF \_\_\_\_\_ = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.  
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: \_\_\_\_\_

**Purge Equipment:**  
 Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

**Sampling Equipment:**  
 Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbent Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): 1510 Weather Conditions: Sunny  
 Sample Time/Date: 1535 4/13/09 Water Color: Clear Odor: YIN  
 Approx. Flow Rate: 200 ml gpm. Sediment Description: NA  
 Did well de-water? No If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 26.34

Time (2400 hr.)	Volume (gal) L	pH	Conductivity (µmhos/cm - 25)	Temperature (°C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1520	2	7.06	534	15.75	1.26	-102.5	26.32
1523	2.6	7.11	550	15.92	1.38	-99.6	26.34
1526	3.2	7.13	548	15.97	1.32	-98.9	26.35
1529	3.8	7.12	547	15.98	1.30	-98.5	26.34

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-21</u>	<u>6</u> x vov vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	<u>2</u> x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	<u>1</u> x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	<u>1</u> x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	<u>2</u> x vov vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	<u>1</u> x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	<u>1</u> x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: MNA PARAMETERS PID-0.0 ppm

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4/13-4/16 (inclusive)  
 City: Seattle, WA Sampler: ML

Well ID: MW-23  
 Well Diameter: 3/4 in.  
 Total Depth: 13.02 ft.  
 Depth to Water: 7.93 ft.

Date Monitored: 4-13-09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: \_\_\_\_\_  
 xVF \_\_\_\_\_ = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

### Purge Equipment:

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

### Sampling Equipment:

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbant Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): \_\_\_\_\_ Weather Conditions: \_\_\_\_\_  
 Sample Time/Date: \_\_\_\_\_ Water Color: \_\_\_\_\_ Odor: Y / N \_\_\_\_\_  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: \_\_\_\_\_  
 Did well de-water? \_\_\_\_\_ If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: \_\_\_\_\_

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	x 1 liter amber	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: M/O P.I.D - 0.0 ppm

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_





# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4/13-4/16 (inclusive)  
 City: Seattle, WA Sampler: ML

Well ID: MW-24  
 Well Diameter: 3/4 in.  
 Total Depth: 12.51 ft.  
 Depth to Water: 4.65 ft.

Date Monitored: 4-13-09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

         xVF          =          x3 case volume = Estimated Purge Volume:          gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]:         

### Purge Equipment:

Disposable Bailer /  
 Stainless Steel Bailer /  
 Stack Pump /  
 Suction Pump /  
 Grundfos /  
 Peristaltic Pump /  
 QED Bladder Pump /  
 Other: /

### Sampling Equipment:

Disposable Bailer /  
 Pressure Bailer /  
 Discrete Bailer /  
 Peristaltic Pump /  
 QED Bladder Pump /  
 Other: /

Time Started:          (2400 hrs)  
 Time Completed:          (2400 hrs)  
 Depth to Product:          ft  
 Depth to Water:          ft  
 Hydrocarbon Thickness:          ft  
 Visual Confirmation/Description:           
 Skimmer / Absorbant Sock (circle one)  
 Amt Removed from Skimmer:          gal  
 Amt Removed from Well:          gal  
 Water Removed:           
 Product Transferred to:         

Start Time (purge):          Weather Conditions:           
 Sample Time/Date:          /          Water Color:          Odor: Y / N  
 Approx. Flow Rate:          gpm Sediment Description:           
 Did well de-water?          If yes, Time:          Volume:          gal. DTW @ Sampling:         

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: MIO

PID - 0.0 ppm

Add/Replaced Lock:          Add/Replaced Plug:          Add/Replaced Bolt:



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4/13-4/16 (inclusive)  
 City: Seattle, WA Sampler: TK/HL (SATEL)

Well ID: MW-25  
 Well Diameter: 4 in.  
 Total Depth: 22.85 ft.  
 Depth to Water: 12.44 ft.

Date Monitored: 4/13/09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: \_\_\_\_\_  
 xVF \_\_\_\_\_ = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

**Purge Equipment:**  
 Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

**Sampling Equipment:**  
 Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: 12.44 ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbant Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): 0920 Weather Conditions: Partly Cloudy + Cold  
 Sample Time/Date: 0945 4/14/09 Water Color: clear Odor: YIN  
 Approx. Flow Rate: 0.05 gpm. Sediment Description: no sediment  
 Did well de-water? no If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 12.85

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C/F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
0923	0.25	6.30	0.610	12.65	9.90	74.9	12.53
0926	0.26	6.37	0.573	12.21	4.01	75.2	12.56
0929	0.27	6.38	0.483	12.49	3.98	76.8	12.62
0932	0.28	6.39	0.555	13.07	5.39	77.1	12.66
0935	0.29	6.41	0.556	13.49	4.76	77.2	12.72
0938	0.30	6.40	0.556	13.49	3.97	77.3	12.78

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-25	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: DO may not have stabilized due to bubbles in flow cell. tried to fix problem. PED - 0.0ppm

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_

0941	0.31	6.41	0.554	13.69	3.55	75.8	12.82
0944	0.32	6.44	0.546	13.78	3.01	75.2	12.85



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577  
 Site Address: 631 Queen Anne North  
 City: Seattle, WA

Job Number: 386765  
 Event Date: 4/13-4/16 (inclusive)  
 Sampler: ML

Well ID: MW-26  
 Well Diameter: 4 in.  
 Total Depth: 22.73 ft.  
 Depth to Water: 11.23 ft.  
10.50 x VF \_\_\_\_\_ = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

Date Monitored: 4-13-09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: \_\_\_\_\_

### Purge Equipment:

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

### Sampling Equipment:

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbent Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): 1312  
 Sample Time/Date: 1335 4/14/09  
 Approx. Flow Rate: 0.11 gpm.  
 Did well de-water? NO If yes, Time: \_\_\_\_\_

Weather Conditions: Partly  
 Water Color: clear Odor: Y/N NO  
 Sediment Description: NA  
 Volume: \_\_\_\_\_ gal. DTW @ Sampling: 11.29

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - US)	Temperature (C/F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1315	0.18	6.42	0.394	13.39	7.16	-59.8	11.26
1318	0.36	6.43	0.398	13.45	3.55	-32.2	11.27
1321	0.54	6.43	0.404	13.85	2.28	-31.5	11.27
1324	0.72	6.41	0.467	14.09	2.27	-29.6	11.28
1327	0.90	6.42	0.406	14.06	1.79	-29.1	11.28

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-26	6 x vov vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	1 x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	1 x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	2 x vov vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	1 x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	1 x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: MVA PARAMETERS PZD 0.0 ppm

Add/Replaced Lock: \_\_\_\_\_

Add/Replaced Plug: \_\_\_\_\_

Add/Replaced Bolt: \_\_\_\_\_

1330	1.08	6.43	0.408	14.07	1.36	-29.3	11.29
1333	1.26	6.43	0.412	14.06	1.20	-29.7	11.29



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4/13-4/16 (inclusive)  
 City: Seattle, WA Sampler: TK/HL

Well ID: MW-30  
 Well Diameter: 2 in.  
 Total Depth: 33.22 ft.  
 Depth to Water: 26.81 ft.  
8.41 xVF = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

Date Monitored: 4-13-09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: \_\_\_\_\_

### Purge Equipment:

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

### Sampling Equipment:

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbant Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): 0938 Weather Conditions: Overcast Fog  
 Sample Time/Date: 1000 14-15-09 Water Color: Clear Odor: Y 10  
 Approx. Flow Rate: 0.10 gpm. Sediment Description: none  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 24.84

Time (2400 hr.)	Volume (gal.)	pH	M/S Conductivity (µmhos/cm - µS)	Temperature (°F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
<u>0941</u>	<u>0.18</u>	<u>6.58</u>	<u>0.418</u>	<u>12.50</u>	<u>3.58</u>	<u>74.1</u>	<u>24.83</u>
<u>0944</u>	<u>0.36</u>	<u>6.57</u>	<u>0.428</u>	<u>12.79</u>	<u>3.57</u>	<u>42.9</u>	<u>24.84</u>
<u>0947</u>	<u>0.54</u>	<u>6.50</u>	<u>0.472</u>	<u>13.88</u>	<u>2.87</u>	<u>32.2</u>	<u>24.84</u>
<u>0950</u>	<u>0.72</u>	<u>6.54</u>	<u>0.488</u>	<u>13.83</u>	<u>2.53</u>	<u>30.2</u>	<u>24.84</u>
<u>0953</u>	<u>0.90</u>	<u>6.45</u>	<u>0.425</u>	<u>14.09</u>	<u>2.60</u>	<u>29.6</u>	<u>24.84</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-30</u>	<u>6</u> x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	<u>2</u> x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	<u>1</u> x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	<u>1</u> x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	<u>2</u> x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	<u>1</u> x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	<u>1</u> x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: MNA PARAMETERS  
DUPLICATE SAMPLE (DUP-3) COLLECTED FROM THIS WELL  
FIELD BLANK (FB-3) COLLECTED PTD=0.0 ppm

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_  
 0956 1.08 6.48 0.500 14.10 2.78 30.0 24.84  
 0959 1.26 6.46 0.501 14.15 2.78 29.9 24.84



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4/13-4/18 (inclusive)  
 City: Seattle, WA Sampler: TK/HL (SAIC)

Well ID: MW-31  
 Well Diameter: 2 in.  
 Total Depth: 28.19 ft.  
 Depth to Water: 20.04 ft.  
8.15 xVF \_\_\_\_\_ = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

Date Monitored: 4/13/09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: \_\_\_\_\_

### Purge Equipment:

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

### Sampling Equipment:

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbant Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_ gal  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): 1451 Weather Conditions: Partly Cloudy + Cold  
 Sample Time/Date: 1510 4/14/09 Water Color: Clear Odor: YIN  
 Approx. Flow Rate: 0.10 gpm. Sediment Description: NA  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 20.07

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C) (F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
<u>1454</u>	<u>0.17</u>	<u>6.52</u>	<u>0.557</u>	<u>14.09</u>	<u>1.12</u>	<u>148.1</u>	<u>20.07</u>
<u>1457</u>	<u>0.34</u>	<u>6.55</u>	<u>0.559</u>	<u>14.19</u>	<u>1.25</u>	<u>85.0</u>	<u>20.07</u>
<u>1500</u>	<u>0.51</u>	<u>6.60</u>	<u>0.557</u>	<u>14.31</u>	<u>1.28</u>	<u>80.02</u>	<u>20.07</u>
<u>1503</u>	<u>0.68</u>	<u>6.58</u>	<u>0.553</u>	<u>14.29</u>	<u>1.27</u>	<u>-3.6</u>	<u>20.07</u>
<u>1506</u>	<u>0.85</u>	<u>6.61</u>	<u>0.554</u>	<u>14.28</u>	<u>1.26</u>	<u>-13.78</u>	<u>20.07</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-31</u>	<u>6</u> x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	<u>2</u> x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: bubbles in flow cell probably due to ORP not stabilizing. Tried to fix. Other parameters look great  
PIP=0.0 ppm

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4/13 - 4/14 (inclusive)  
 City: Seattle, WA Sampler: ML

Well ID: MW-32  
 Well Diameter: 2 in.  
 Total Depth: 28.92 ft.  
 Depth to Water: 12.00 ft.

Date Monitored: 4/13/09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Depth to Water 16.92 xVF          =          x3 case volume = Estimated Purge Volume:          gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]:         

### Purge Equipment:

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

### Sampling Equipment:

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbant Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): 1315 Weather Conditions: Cloudy  
 Sample Time/Date: 1340 14-14-09 Water Color: Clear Odor: Y10  
 Approx. Flow Rate: 200 ml / gpm. Sediment Description: none  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 12.27

Time (2400 hr.)	Volume (L)	pH	Conductivity (µmhos/cm - µS)	Temperature (C) / (F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
<u>1325</u>	<u>2</u>	<u>7.76</u>	<u>277</u>	<u>13.28</u>	<u>1.13</u>	<u>-84.3</u>	<u>12.27</u>
<u>1330</u>	<u>2.6</u>	<u>7.94</u>	<u>277</u>	<u>13.32</u>	<u>0.87</u>	<u>-85.9</u>	<u>12.28</u>
<u>1331</u>	<u>3.2</u>	<u>7.65</u>	<u>283</u>	<u>13.55</u>	<u>0.51</u>	<u>-76.5</u>	<u>12.28</u>
<u>1334</u>	<u>3.8</u>	<u>7.58</u>	<u>278</u>	<u>13.56</u>	<u>0.64</u>	<u>-72.1</u>	<u>12.27</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-32</u>	<u>6</u> x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	<u>2</u> x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: PID - 0.0 ppm

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_

1337    4.4    7.55    280    13.55    0.66    -71.4    12.27



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4/13 - 4/16/08 (inclusive)  
 City: Seattle, WA Sampler: ML

Well ID: MW-33 Date Monitored: 4-15-09  
 Well Diameter: 2 in.  
 Total Depth: 34.91 ft.  
 Depth to Water: 28.95 ft.  Check if water column is less than 0.50 ft.  
5.96 xVF = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: \_\_\_\_\_

**Purge Equipment:**  
 Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

**Sampling Equipment:**  
 Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbant Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): 0925 Weather Conditions: FOGGY  
 Sample Time/Date: 0950 14-15-09 Water Color: Clear Odor: DI N  
 Approx. Flow Rate: 200 ml /pm Sediment Description: None  
 Did well de-water? No If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 29.10

Time (2400 hr.)	Volume (L)	pH	Conductivity (µmhos/cm - (S))	Temperature (°F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
<u>0937</u>	<u>2.4</u>	<u>6.74</u>	<u>423</u>	<u>12.96</u>	<u>3.61</u>	<u>-21.6</u>	<u>29.07</u>
<u>0940</u>	<u>3.0</u>	<u>6.70</u>	<u>431</u>	<u>13.04</u>	<u>3.60</u>	<u>-21.7</u>	<u>29.09</u>
<u>0943</u>	<u>3.0</u>	<u>6.71</u>	<u>434</u>	<u>13.11</u>	<u>3.62</u>	<u>-21.6</u>	<u>29.10</u>
<u>0946</u>	<u>4.2</u>	<u>6.71</u>	<u>435</u>	<u>13.09</u>	<u>3.60</u>	<u>-21.6</u>	<u>29.10</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>ML-33</u>	<u>6</u> x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	<u>2</u> x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: WELL WATER LEVEL TAKEN ON 4-15 BECAUSE IT WAS PARKED OVER 4-13 - 4-14. PTD - 0.0 ppm

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4/13-4/16 (inclusive)  
 City: Seattle, WA Sampler: TK/HL (SAIC)

Well ID: MW-34  
 Well Diameter: 2 in.  
 Total Depth: 36.99 ft.  
 Depth to Water: 27.15 ft.  
9.84 xVF = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

Date Monitored: 4-13-09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: \_\_\_\_\_

**Purge Equipment:**  
 Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

**Sampling Equipment:**  
 Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbant Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): 0818 Weather Conditions: Cloudy  
 Sample Time/Date: 0840 14-15-09 Water Color: Clear Odor: Y10  
 Approx. Flow Rate: 0.06 gpm. Sediment Description: None  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 27.17

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (°F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
<u>0821</u>	<u>0.19</u>	<u>6.61</u>	<u>0.420</u>	<u>11.92</u>	<u>6.56</u>	<u>-1.5</u>	<u>27.17</u>
<u>0824</u>	<u>0.38</u>	<u>6.50</u>	<u>0.438</u>	<u>12.39</u>	<u>4.19</u>	<u>13.1</u>	<u>27.17</u>
<u>0827</u>	<u>0.57</u>	<u>6.45</u>	<u>0.434</u>	<u>13.08</u>	<u>4.09</u>	<u>19.5</u>	<u>27.17</u>
<u>0830</u>	<u>0.76</u>	<u>6.46</u>	<u>0.437</u>	<u>12.41</u>	<u>4.64</u>	<u>20.9</u>	<u>27.17</u>
<u>0833</u>	<u>0.95</u>	<u>6.48</u>	<u>0.438</u>	<u>13.59</u>	<u>4.66</u>	<u>21.0</u>	<u>27.17</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-34</u>	<u>6</u> x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	<u>2</u> x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	<u>1</u> x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	<u>1</u> x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	<u>2</u> x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	<u>1</u> x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	<u>1</u> x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: MNA PARAMETERS PID - 0.0 ppm

Add/Replaced Lock: 0836 Add/Replaced Plug: 1.14 Add/Replaced Bolt: 6.49  
0.439 13.69 4.09 22.8 27.17





# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4/13-4/16 (inclusive)  
 City: Seattle, WA Sampler: ML

Well ID: MW-35  
 Well Diameter: 2 in.  
 Total Depth: 37.22 ft.  
 Depth to Water: 31.22 ft.  
6.00 xVF = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

Date Monitored: 4/13/09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge ((Height of Water Column x 0.20) + DTW): \_\_\_\_\_

### Purge Equipment:

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

### Sampling Equipment:

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbant Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): ~~0830~~ 0835 Weather Conditions: Foggy  
 Sample Time/Date: 0900 14-15-09 Water Color: Cloudy Odor: (Y) N  
 Approx. Flow Rate: 200 ml / pm. Sediment Description: light  
 Did well de-water? No If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 32.44

Time (2400 hr.)	Volume (gal) L	pH	Conductivity (µmhos/cm) (µS)	Temperature (°C) (F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
<u>0845</u>	<u>2</u>	<u>7.11</u>	<u>336</u>	<u>13.56</u>	<u>1.97</u>	<u>-26.3</u>	<u>32.41</u>
<u>0848</u>	<u>2.6</u>	<u>7.22</u>	<u>345</u>	<u>13.74</u>	<u>1.91</u>	<u>-27.1</u>	<u>32.43</u>
<u>0851</u>	<u>3.2</u>	<u>7.16</u>	<u>348</u>	<u>13.78</u>	<u>1.90</u>	<u>-27.0</u>	<u>32.43</u>
<u>0854</u>	<u>3.8</u>	<u>7.15</u>	<u>347</u>	<u>13.79</u>	<u>1.90</u>	<u>-27.1</u>	<u>32.44</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-35</u>	<u>6</u> x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	<u>2</u> x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	<u>1</u> x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	<u>1</u> x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	<u>2</u> x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	<u>1</u> x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	<u>1</u> x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: X MNA PARAMETERS PID 0.0 ppm

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER - RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4/13 - 4/16/09 (inclusive)  
 City: Seattle, WA Sampler: ML

Well ID: DPE-1  
 Well Diameter: 4 in.  
 Total Depth: 21.27 ft.  
 Depth to Water: 11.84 ft.

Date Monitored: 4-13-09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: \_\_\_\_\_  
 xVF \_\_\_\_\_ = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

### Purge Equipment:

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

### Sampling Equipment:

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbant Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): \_\_\_\_\_ Weather Conditions: \_\_\_\_\_  
 Sample Time/Date:       /      /       Water Color: \_\_\_\_\_ Odor: Y / N  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: \_\_\_\_\_  
 Did well de-water? \_\_\_\_\_ If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: \_\_\_\_\_

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	x voa vial	YES	NP	LANCASTER	NITRATE/NITRITE/SULFATE (EPA 300.0)
	x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

### COMMENTS:

MIO PID - 0.0 ppm  
PUMP IN WELL

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4/13-4/16 (inclusive)  
 City: Seattle, WA Sampler: TWK/HL

Well ID: RW-2  
 Well Diameter: 8 in.  
 Total Depth: 21.03 ft.  
 Depth to Water: 13.80 ft.  
7.23 xVF = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

Date Monitored: 4-13-09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: \_\_\_\_\_

### Purge Equipment:

- Disposable Bailer \_\_\_\_\_
- Stainless Steel Bailer \_\_\_\_\_
- Stack Pump \_\_\_\_\_
- Suction Pump \_\_\_\_\_
- Grundfos \_\_\_\_\_
- Peristaltic Pump X
- QED Bladder Pump \_\_\_\_\_
- Other: \_\_\_\_\_

### Sampling Equipment:

- Disposable Bailer \_\_\_\_\_
- Pressure Bailer \_\_\_\_\_
- Discrete Bailer \_\_\_\_\_
- Peristaltic Pump X
- QED Bladder Pump \_\_\_\_\_
- Other: \_\_\_\_\_

Time Started:	_____ (2400 hrs)
Time Completed:	_____ (2400 hrs)
Depth to Product:	_____ ft
Depth to Water:	_____ ft
Hydrocarbon Thickness:	_____ ft
Visual Confirmation/Description:	_____
Skimmer / Absorbant Sock (circle one)	_____
Amt Removed from Skimmer:	_____ gal
Amt Removed from Well:	_____ gal
Water Removed:	_____ gal
Product Transferred to:	_____

Start Time (purge): 0927 Weather Conditions: Partly Cloudy + Cool  
 Sample Time/Date: 0950 4/16/09 Water Color: Clear Odor: YIN  
 Approx. Flow Rate: 175 ml/gpm. Sediment Description: NA  
 Did well de-water? no If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 13.91

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm) (µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
<u>0937</u>	<u>0.15</u>	<u>6.16</u>	<u>0.300</u>	<u>12.22</u>	<u>0.72</u>	<u>1.3</u>	<u>13.86</u>
<u>0940</u>	<u>0.30</u>	<u>6.18</u>	<u>0.300</u>	<u>12.38</u>	<u>0.68</u>	<u>0.3</u>	<u>13.89</u>
<u>0943</u>	<u>0.45</u>	<u>6.18</u>	<u>0.300</u>	<u>12.42</u>	<u>0.51</u>	<u>0.2</u>	<u>13.90</u>
<u>0946</u>	<u>0.60</u>	<u>6.17</u>	<u>0.299</u>	<u>12.43</u>	<u>0.42</u>	<u>0.5</u>	<u>13.91</u>

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>RW-2</u>	<u>6</u> x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	<u>2</u> x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: PID - 0.0 ppm

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4/13 - 4/16 (inclusive)  
 City: Seattle, WA Sampler: ML

Well ID: DPE-2  
 Well Diameter: 4 in.  
 Total Depth: 24.54 ft.  
 Depth to Water: 12.40 ft.  
12.14 xVF = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

Date Monitored: 4-13-09

Volume Factor (VF)	3/4" = 0.02	1" = 0.04	2" = 0.17	3" = 0.38
	4" = 0.66	5" = 1.02	6" = 1.50	12" = 5.80

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: \_\_\_\_\_

**Purge Equipment:**

- Disposable Bailer \_\_\_\_\_
- Stainless Steel Bailer \_\_\_\_\_
- Stack Pump \_\_\_\_\_
- Suction Pump \_\_\_\_\_
- Grundfos \_\_\_\_\_
- Peristaltic Pump X
- QED Bladder Pump \_\_\_\_\_
- Other: \_\_\_\_\_

**Sampling Equipment:**

- Disposable Bailer \_\_\_\_\_
- Pressure Bailer \_\_\_\_\_
- Discrete Bailer \_\_\_\_\_
- Peristaltic Pump X
- QED Bladder Pump \_\_\_\_\_
- Other: \_\_\_\_\_

Time Started:	_____ (2400 hrs)
Time Completed:	_____ (2400 hrs)
Depth to Product:	_____ ft
Depth to Water:	_____ ft
Hydrocarbon Thickness:	_____ ft
Visual Confirmation/Description:	_____
Skimmer / Absorbant Sock (circle one)	_____
Amt Removed from Skimmer:	_____ gal
Amt Removed from Well:	_____ gal
Water Removed:	_____ gal
Product Transferred to:	_____

Start Time (purge): 0910 Weather Conditions: Sunny  
 Sample Time/Date: 0935 14-16-09 Water Color: Clear Odor: 01 N  
 Approx. Flow Rate: 200 ml /pm. Sediment Description: none  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 12.52

Time (2400 hr.)	Volume (gal)	pH	Conductivity (umhos/cm - (S))	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
<u>0920</u>	<u>2</u>	<u>7.34</u>	<u>545</u>	<u>14.78</u>	<u>1.69</u>	<u>-44.9</u>	<u>12.51</u>
<u>0923</u>	<u>2.6</u>	<u>7.29</u>	<u>552</u>	<u>14.87</u>	<u>1.74</u>	<u>-44.3</u>	<u>12.52</u>
<u>0926</u>	<u>3.2</u>	<u>7.27</u>	<u>585</u>	<u>14.88</u>	<u>1.76</u>	<u>-44.2</u>	<u>12.52</u>

**LABORATORY INFORMATION**

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>DPE-2</u>	<u>6</u> x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	<u>2</u> x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: Pump in well PID - 15.9 ppm

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577  
 Site Address: 631 Queen Anne North  
 City: Seattle, WA

Job Number: 386765  
 Event Date: 4/13 - 4/16 (inclusive)  
 Sampler: ML

Well ID: DPE-3  
 Well Diameter: 4 in.  
 Total Depth: 18.31 ft.  
 Depth to Water: 12.70 ft.

Date Monitored: 4-13-09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

xVF \_\_\_\_\_ = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: \_\_\_\_\_

### Purge Equipment:

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

### Sampling Equipment:

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbent Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): \_\_\_\_\_ Weather Conditions: \_\_\_\_\_  
 Sample Time/Date: \_\_\_\_\_ / \_\_\_\_\_ Water Color: \_\_\_\_\_ Odor: Y / N  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: \_\_\_\_\_  
 Did well de-water? \_\_\_\_\_ If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: \_\_\_\_\_

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: \_\_\_\_\_

MIO PID - 0.0 ppm

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER - RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4/13-4/16 (inclusive)  
 City: Seattle, WA Sampler: ML

Well ID: DPE-4  
 Well Diameter: 4 in.  
 Total Depth: 19.94 ft.  
 Depth to Water: 12.56 ft.

Date Monitored: 4-13-09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]:          xVF =          x3 case volume = Estimated Purge Volume:          gal.

### Purge Equipment:

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

### Sampling Equipment:

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbant Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): \_\_\_\_\_ Weather Conditions: \_\_\_\_\_  
 Sample Time/Date:          /          Water Color: \_\_\_\_\_ Odor: Y / N  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: \_\_\_\_\_  
 Did well de-water? \_\_\_\_\_ If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: \_\_\_\_\_

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: M/O Pump in Well. PTD - 0.0 ppm

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577  
 Site Address: 631 Queen Anne North  
 City: Seattle, WA

Job Number: 386765  
 Event Date: 4/13-4/16 (inclusive)  
 Sampler: JMK/HL

Well ID: DPE-S  
 Well Diameter: 4 in.  
 Total Depth: 26.63 ft.  
 Depth to Water: 14.63 ft.  
12.00 xVF

Date Monitored: 4-13-09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

### Purge Equipment:

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

### Sampling Equipment:

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbent Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): 1315 1325  
 Sample Time/Date: 1355 4/15/09  
 Approx. Flow Rate: 0.11 gpm.  
 Did well de-water? NO If yes, Time: \_\_\_\_\_

Weather Conditions: sunny & cool  
 Water Color: cloudy Odor: YIN yes  
 Sediment Description: AA STRONGY PARTS DEE  
 Volume: \_\_\_\_\_ gal. DTW @ Sampling: 16.91

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - 15)	Temperature (°F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1335	0.18	7.37	0.301	13.06	1.75	124.7	16.17
1338	0.36	7.62	0.300	13.22	0.85	93.5	16.35
1341	0.51	7.85	0.300	13.23	0.74	94.7	16.56
1344	0.66	7.52	0.300	13.21	0.63	72.7	16.65
1347	0.81	7.55	0.301	13.17	0.56	69.8	16.80

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>DPE-S</u>	<u>6</u> x vva vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	<u>2</u> x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sq
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	x vva vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: turned down pump @ 1338 reading & 1341 reading.  
PID - 0.0 ppm

Add/Replaced Lock: \$350 Add/Replaced Plug: 096 Add/Replaced Bolt: 759  
0.301 1315 0.46 68.9 16.91



# GETTLER - RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4/13 - 4/16 (inclusive)  
 City: Seattle, WA Sampler: ML

Well ID: DPE-6  
 Well Diameter: 4 in.  
 Total Depth: 32.81 ft.  
 Depth to Water: 20.60 ft.

Date Monitored: 4/13/09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

Depth to Water 18.21 xVF \_\_\_\_\_ = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

Depth to Water w/ 80% Recharge ((Height of Water Column x 0.20) + DTW): \_\_\_\_\_

**Purge Equipment:**

- Disposable Bailer \_\_\_\_\_
- Stainless Steel Bailer \_\_\_\_\_
- Stack Pump \_\_\_\_\_
- Suction Pump \_\_\_\_\_
- Grundfos \_\_\_\_\_
- Peristaltic Pump X
- QED Bladder Pump \_\_\_\_\_
- Other: \_\_\_\_\_

**Sampling Equipment:**

- Disposable Bailer \_\_\_\_\_
- Pressure Bailer \_\_\_\_\_
- Discrete Bailer \_\_\_\_\_
- Peristaltic Pump X
- QED Bladder Pump \_\_\_\_\_
- Other: \_\_\_\_\_

Time Started: _____ (2400 hrs)
Time Completed: _____ (2400 hrs)
Depth to Product: _____ ft
Depth to Water: _____ ft
Hydrocarbon Thickness: _____ ft
Visual Confirmation/Description: _____
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: _____ gal
Amt Removed from Well: _____ gal
Water Removed: _____
Product Transferred to: _____

Start Time (purge): 1020 Weather Conditions: Cloudy  
 Sample Time/Date: 1045 14-15-09 Water Color: Clear Odor: Y10  
 Approx. Flow Rate: 200 ml / gpm. Sediment Description: None  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 20.73

Time (2400 hr.)	Volume (L)	pH	Conductivity (µmhos/cm - 25)	Temperature (°F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
<u>1031</u>	<u>2.2</u>	<u>7.49</u>	<u>1439</u>	<u>14.36</u>	<u>1.60</u>	<u>-392.3</u>	<u>20.72</u>
<u>1034</u>	<u>2.8</u>	<u>7.46</u>	<u>1433</u>	<u>14.48</u>	<u>1.49</u>	<u>-393.0</u>	<u>20.73</u>
<u>1037</u>	<u>3.4</u>	<u>7.47</u>	<u>1438</u>	<u>14.54</u>	<u>1.50</u>	<u>-390.9</u>	<u>20.73</u>

**LABORATORY INFORMATION**

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>DPE-6</u>	<u>6</u> x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	<u>2</u> : x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: PID - 65.9 ppm

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_





# GETTLER - RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4/13 - 4/16 (inclusive)  
 City: Seattle, WA Sampler: ML

Well ID: DPE-7  
 Well Diameter: 4 in.  
 Total Depth: 25.82 ft.  
 Depth to Water: 19.90 ft.

Date Monitored: 4-13-09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: \_\_\_\_\_  
 xVF \_\_\_\_\_ = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

### Purge Equipment:

- Disposable Bailer \_\_\_\_\_
- Stainless Steel Bailer \_\_\_\_\_
- Stack Pump \_\_\_\_\_
- Suction Pump \_\_\_\_\_
- Grundfos \_\_\_\_\_
- Peristaltic Pump \_\_\_\_\_
- QED Bladder Pump \_\_\_\_\_
- Other: \_\_\_\_\_

### Sampling Equipment:

- Disposable Bailer \_\_\_\_\_
- Pressure Bailer \_\_\_\_\_
- Discrete Bailer \_\_\_\_\_
- Peristaltic Pump \_\_\_\_\_
- QED Bladder Pump \_\_\_\_\_
- Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbent Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): \_\_\_\_\_ Weather Conditions: \_\_\_\_\_  
 Sample Time/Date: / Water Color: \_\_\_\_\_ Odor: Y / N  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: \_\_\_\_\_  
 Did well de-water? \_\_\_\_\_ If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: \_\_\_\_\_

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (8M 3500 Fe B)
	x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: \_\_\_\_\_

M/O PUMP IN WELL, PID - 0.0 ppm

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER - RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4/13 - 4/16 (inclusive)  
 City: Seattle, WA Sampler: TWMC / HL

Well ID: DPE-8  
 Well Diameter: 4 in.  
 Total Depth: 23.39 ft.  
 Depth to Water: 13.87 ft.  
9.52 xVF = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

Date Monitored: 4-13-09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: \_\_\_\_\_

**Purge Equipment:**

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

**Sampling Equipment:**

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump X  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbant Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): 1028 Weather Conditions: Partly Cloudy & cool  
 Sample Time/Date: 1052-1 4/16/09 Water Color: yellow/brown Odor: Y1 Yes  
 Approx. Flow Rate: 200 ml / 1 pm. Sediment Description: NA  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 14.23

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm) <sup>M/S</sup>	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1038	0.17	6.49	0.603	13.13	0.77	-58.2	14.15
1041	0.34	6.48	0.607	13.28	0.53	-58.4	14.19
1044	0.51	6.48	0.609	13.38	0.46	-60.2	14.21
1047	0.78	6.48	0.610	13.41	0.47	-67.9	14.22
1050	0.95	6.48	0.610	13.45	0.45	-72.9	14.23

**LABORATORY INFORMATION**

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
DPE-8	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg
	1 x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	1 x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	2 x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	1 x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (6010)
	1 x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: MNA PARAMETERS PID - 0.0 ppm

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER - RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211577 Job Number: 386765  
 Site Address: 631 Queen Anne North Event Date: 4/13 - 4/16 (inclusive)  
 City: Seattle, WA Sampler: ML

Well ID: DPE-9  
 Well Diameter: 4 in.  
 Total Depth: 16.70 ft.  
 Depth to Water: 12.30 ft.

Date Monitored: 4-13-09

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Check if water column is less than 0.50 ft.

xVF = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: \_\_\_\_\_

### Purge Equipment:

Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

### Sampling Equipment:

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

Time Started: \_\_\_\_\_ (2400 hrs)  
 Time Completed: \_\_\_\_\_ (2400 hrs)  
 Depth to Product: \_\_\_\_\_ ft  
 Depth to Water: \_\_\_\_\_ ft  
 Hydrocarbon Thickness: \_\_\_\_\_ ft  
 Visual Confirmation/Description: \_\_\_\_\_  
 Skimmer / Absorbent Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): \_\_\_\_\_ Weather Conditions: \_\_\_\_\_  
 Sample Time/Date: \_\_\_\_\_ / \_\_\_\_\_ Water Color: \_\_\_\_\_ Odor: Y / N  
 Approx. Flow Rate: \_\_\_\_\_ gpm Sediment Description: \_\_\_\_\_  
 Did well de-water? \_\_\_\_\_ If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: \_\_\_\_\_

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sq
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)
	x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)
	x voa vial	YES	NP	LANCASTER	NITRATE/NITRITESULFATE (EPA 300.0)
	x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/MANGANESE (6010)
	x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: M/O PUMP IN WELL, PID = 0.0 ppm

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_

# Chevron Northwest Region Analysis Request/Chain of Custody



For Lancaster Laboratories use only  
 Acct. #: 11260 Sample #: 51048899-06 SCR#:

Group #: 114093a

Facility #: <u>SS#211577-OML G-R#386765</u> Site Address: <u>631 Queen Annie North, SEATTLE, WA</u> Chevron PM: <u>OS</u> Lead Consultant: <u>SAIGPC</u> Consultant/Office: <u>G-R, Inc., 6747 Sierra Court, Suite J, Dublin, CA 94568</u> Consultant Prj. Mgr.: <u>Deanna L. Harding (deanna@grinc.com)</u> Consultant Phone #: <u>925-551-7555</u> Fax #: <u>925-551-7899</u> Sampler: <u>Mike L. Tina K. Heather L</u> Service Order #: _____ <input type="checkbox"/> Non SAR: _____				<b>Matrix</b> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Soil <input type="checkbox"/> Water <input type="checkbox"/> Oil <input type="checkbox"/> Air <input type="checkbox"/>		<b>Analyses Requested</b> Preservation Codes BTEX <input checked="" type="checkbox"/> 8021 <input type="checkbox"/> 8260 <input type="checkbox"/> Naphth <input type="checkbox"/> 8260 full scan <input type="checkbox"/> Oxygenates <input type="checkbox"/> TPH G <input checked="" type="checkbox"/> TPH D <input checked="" type="checkbox"/> Extended Rng. <input type="checkbox"/> Silica Gel Cleanup <input type="checkbox"/> Lead Total <input type="checkbox"/> Diss. <input type="checkbox"/> Method <input type="checkbox"/> ALKALINITY (2100) <input type="checkbox"/> NITRPH ACID <input type="checkbox"/> quantification <input type="checkbox"/> FERROUS IRON (9M 350 F. B) <input type="checkbox"/> Nitrate/Nitrite/Sulfate (FPA) <input type="checkbox"/> Total Iron/MANGANESE (6000) <input type="checkbox"/> SULFIDE (SUZ0 4500 SZ D) <input type="checkbox"/>										<b>Preservative Codes</b> H = HCl T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other <input type="checkbox"/> J value reporting needed <input type="checkbox"/> Must meet lowest detection limits possible for 8260 compounds 8021 MTBE Confirmation <input type="checkbox"/> Confirm MTBE + Naphthalene <input type="checkbox"/> Confirm highest hit by 8260 <input type="checkbox"/> Run ___ oxy s on highest hit <input type="checkbox"/> Run ___ oxy s on all hits											
Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Oil	Air	Total Number of Containers	BTEX	8260 full scan	Oxygenates	TPH G	TPH D	Extended Rng.	Silica Gel Cleanup	Lead Total	Diss.	Method	ALKALINITY (2100)	NITRPH ACID	quantification	FERROUS IRON (9M 350 F. B)	Nitrate/Nitrite/Sulfate (FPA)	Total Iron/MANGANESE (6000)	SULFIDE (SUZ0 4500 SZ D)	Comments / Remarks
QA	4/16/09		X			X			2	X			X	X													
VP-5		1035	X			X			8	X			X	X													
VP-8		1135	X			X			14	X			X	X								X	X	X	X		
MW-4		0844	X			X			14	X			X	X								X	X	X	X		
MW-6		1145	X			X			2	X			X	X								X	X	X	X		
MW-18		0840	X			X			14	X			X	X								X	X	X	X		
RW-2		0950	X			X			8	X			X	X								X	X	X	X		
DPE-2		0935	X			X			8	X			X	X								X	X	X	X		
DPE-8	✓	1052	X			X			14	X			X	X								X	X	X	X		

**Turnaround Time Requested (TAT) (please circle)**

STD. TAT  
 24 hour      72 hour      48 hour  
 4 day      5 day

**Data Package Options (please circle if required)**      **EDF/EDD**

QC Summary      Type I - Full  
 Type VI (Raw Data)      Disk / EDD  
 W/P (RWQCB)      Standard Format  
 Disk      Other.

Relinquished by: [Signature] Date: 4/16/09 Time: 5:00

Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by Commercial Carrier: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received by: [Signature] Date: 4/16/09 Time: 9:00

Temperature Upon Receipt: 17.5°C

Custody Seals Intact?  Yes  No



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

# Analysis Report

## ANALYTICAL RESULTS

RECEIVED

Prepared for:

APR 29 2009

Chevron  
6001 Bollinger Canyon Road  
L4310  
San Ramon CA 94583

GETTLER-RYAN, INC.  
GENERAL CONTRACTORS

925-842-8582

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

April 29, 2009

### SAMPLE GROUP

The sample group for this submittal is 1140932. Samples arrived at the laboratory on Friday, April 17, 2009. The PO# for this group is 0015040041 and the release number is SKANCE.

<u>Client Description</u>	<u>Lancaster Labs Number</u>
QA Water Sample	5648899
VP-5 Grab Water Sample	5648900
VP-8 Grab Water Sample	5648901
MW-4 Grab Water Sample	5648902
MW-18 Grab Water Sample	5648903
RW-2 Grab Water Sample	5648904
DPE-2 Grab Water Sample	5648905
DPE-8 Grab Water Sample	5648906

### METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Chronicle.

ELECTRONIC COPY TO SAIC c/o Gettler-Ryan

Attn: Cheryl Hansen



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-658-2300 Fax: 717-658-2681 • www.lancasterlabs.com

## **Analysis Report**

Questions? Contact your Client Services Representative  
Jill M Parker at (717) 656-2300

Respectfully Submitted,

A handwritten signature in cursive script that reads "Tracy A. Cole".

Tracy A. Cole  
Senior Specialist



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2881 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5648899

Group No. 1140932  
WA

QA Water Sample  
Facility# 211577 Job# 386765  
631 Queen Anne N - Seattle, WA

Collected: 04/16/2009

Account Number: 11260

Submitted: 04/17/2009 09:00  
Reported: 04/29/2009 at 14:28  
Discard: 05/30/2009

Chevron  
6001 Bollinger Canyon Road  
L4310  
San Ramon CA 94583

ANNQA

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846	8260B				
	GC/MS Volatiles		ug/l	ug/l	
06053	Benzene	71-43-2	N.D.	0.5	
06053	Ethylbenzene	100-41-4	N.D.	0.5	1
06053	Toluene	108-88-3	N.D.	0.5	1
06053	Xylene (Total)	1330-20-7	N.D.	0.5	1
ECY 97-602	NWTPH-Gx				
	GC Volatiles		ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1

### General Sample Comments

State of Washington Lab Certification No. C259

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

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	P091132AA	04/23/2009 17:06	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P091132AA	04/23/2009 17:06	Daniel H Heller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09110D20A	04/21/2009 20:43	Tyler O Griffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	09110D20A	04/21/2009 20:43	Tyler O Griffin	1



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

# Analysis Report

Lancaster Laboratories Sample No. WW 5648900

Group No. 1140932  
WA

VP-5 Grab Water Sample  
Facility# 211577 Job# 386765  
631 Queen Anne N - Seattle, WA

Collected: 04/16/2009 10:35 by ML

Account Number: 11260

Submitted: 04/17/2009 09:00  
Reported: 04/29/2009 at 14:28  
Discard: 05/30/2009

Chevron  
6001 Bollinger Canyon Road  
L4310  
San Ramon CA 94583

ANNV5

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846	8260B				
	GC/MS Volatiles		ug/l		
06053	Benzene	71-43-2	N.D.	ug/l	
06053	Ethylbenzene	100-41-4	0.7	0.5	1
06053	Toluene	108-88-3	N.D.	0.5	1
06053	Xylene (Total)	1330-20-7	2	0.5	1
ECY 97-602	NWTPH-Gx				
	GC Volatiles		ug/l		
08273	NWTPH-Gx water C7-C12	n.a.	99	ug/l	
				50	1
ECY 97-602	NWTPH-Dx				
	GC Extractable TPH w/Si Gel		ug/l	ug/l	
02211	DRO C12-C24 w/Si Gel	n.a.	860		
02211	HRO C24-C40 w/Si Gel	n.a.	130	33	1
				78	1

## General Sample Comments

State of Washington Lab Certification No. C259

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

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	P091132AA	04/23/2009 17:33	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P091132AA	04/23/2009 17:33	Daniel H Heller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09110D20A	04/22/2009 00:00	Tyler O Griffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	09110D20A	04/22/2009 00:00	Tyler O Griffin	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	091140016A	04/28/2009 05:09	Diane V Do	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	2	091140016A	04/25/2009 09:30	Cynthia J Salvatori	1





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-658-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5648901

Group No. 1140932  
WA

VP-8 Grab Water Sample  
Facility# 211577 Job# 386765  
631 Queen Anne N - Seattle, WA

Collected: 04/16/2009 11:35 by ML

Account Number: 11260

Submitted: 04/17/2009 09:00  
Reported: 04/29/2009 at 14:28  
Discard: 05/30/2009

Chevron  
6001 Bollinger Canyon Road  
L4310  
San Ramon CA 94583

ANNV8

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>SW-846 8260B</b>	<b>GC/MS Volatiles</b>		ug/l	ug/l	
06053	Benzene	71-43-2	N.D.	0.5	1
06053	Ethylbenzene	100-41-4	N.D.	0.5	1
06053	Toluene	108-88-3	N.D.	0.5	1
06053	Xylene (Total)	1330-20-7	N.D.	0.5	1
<b>ECY 97-602 NWTPH-Gx</b>	<b>GC Volatiles</b>		ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	1,100	50	1
<b>ECY 97-602 NWTPH-Dx modified</b>	<b>GC Extractable TPH w/Si Gel</b>		ug/l	ug/l	
02211	DRO C12-C24 w/Si Gel	n.a.	180	30	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	71	1
<b>SW-846 6010B</b>	<b>Metals</b>		ug/l	ug/l	
01754	Iron	7439-89-6	1,690	52.2	1
07058	Manganese	7439-96-5	217	0.84	1
<b>EPA 300.0</b>	<b>Wet Chemistry</b>		ug/l	ug/l	
00368	Nitrate Nitrogen	14797-55-8	770	250	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	400	5
00228	Sulfate	14808-79-8	43,700	1,500	5
<b>SM20 2320 B</b>	<b>Wet Chemistry</b>		ug/l as CaCO3	ug/l as CaCO3	
00202	Alkalinity to pH 4.5	n.a.	149,000	460	1
00201	Alkalinity to pH 8.3	n.a.	N.D.	460	1
<b>SM20 3500 Fe B modified</b>	<b>Wet Chemistry</b>		ug/l	ug/l	
08344	Ferrous Iron	n.a.	960	40	4
<b>SM20 4500 S2 D</b>	<b>Wet Chemistry</b>		ug/l	ug/l	
00230	Sulfide	18496-25-8	N.D.	54	1

### General Sample Comments

State of Washington Lab Certification No. C259

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

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial# Batch#	Analysis Date and Time	Analyst	Dilution Factor
---------	---------------	--------	---------------	------------------------	---------	-----------------

Lancaster Laboratories Sample No. WW 5648901

Group No. 1140932

VP-8 Grab Water Sample

WA

Facility# 211577 Job# 386765

631 Queen Anne N - Seattle, WA

Collected: 04/16/2009 11:35 by ML

Account Number: 11260

Submitted: 04/17/2009 09:00

Chevron

Reported: 04/29/2009 at 14:28

6001 Bollinger Canyon Road

Discard: 05/30/2009

L4310

San Ramon CA 94583

ANNV8

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	P091132AA	04/23/2009 18:00	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P091132AA	04/23/2009 18:00	Daniel H Heller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09110D20A	04/22/2009 00:21	Tyler O Griffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	09110D20A	04/22/2009 00:21	Tyler O Griffin	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	091120021A	04/28/2009 08:34	Diane V Do	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	091120021A	04/23/2009 11:30	Jessica Agosto	1
01754	Iron	SW-846 6010B	1	091121848001	04/23/2009 21:42	John P Hook	1
07058	Manganese	SW-846 6010B	1	091181848003	04/29/2009 08:46	Joanne M Gates	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	091121848001	04/22/2009 21:00	Mirit S Shenouda	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	2	091181848003	04/28/2009 22:15	Annamaria Stipkovits	1
00368	Nitrate Nitrogen	EPA 300.0	1	09107130101A	04/17/2009 18:04	Ashley M Heckman	5
01506	Nitrite Nitrogen	EPA 300.0	1	09107130101A	04/17/2009 18:04	Ashley M Heckman	5
00228	Sulfate	EPA 300.0	1	09107130101A	04/17/2009 18:04	Ashley M Heckman	5
00202	Alkalinity to pH 4.5	SM20 2320 B	1	09112020201A	04/22/2009 17:06	Geraldine C Smith	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	09112020201A	04/22/2009 17:06	Geraldine C Smith	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	09112834401A	04/22/2009 15:30	Michelle L Lalli	4
00230	Sulfide	SM20 4500 S2 D	1	09110023002A	04/20/2009 23:13	Geraldine C Smith	1

Lancaster Laboratories Sample No. **WW 5648902**

 Group No. **1140932**  
**WA**
**MW-4 Grab Water Sample**  
 Facility# 211577 Job# 386765  
 631 Queen Anne N - Seattle, WA

Account Number: 11260

Collected: 04/16/2009 08:44 by ML

 Chevron  
 6001 Bollinger Canyon Road  
 L4310  
 San Ramon CA 94583

 Submitted: 04/17/2009 09:00  
 Reported: 04/29/2009 at 14:28  
 Discard: 05/30/2009

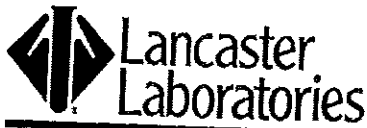
ANNM4

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor	
<b>SW-846 8260B GC/MS Volatiles</b>						
06053	Benzene	71-43-2	22	ug/l		
06053	Ethylbenzene	100-41-4	0.6	0.5	1	
06053	Toluene	108-88-3	0.7	0.5	1	
06053	Xylene (Total)	1330-20-7	4	0.5	1	
<b>ECY 97-602 NWTPH-Gx GC Volatiles</b>						
08273	NWTPH-Gx water C7-C12	n.a.	1,500	ug/l		
				50	1	
<b>ECY 97-602 NWTPH-Dx GC Extractable TPH w/Si Gel modified</b>						
02211	DRO C12-C24 w/Si Gel	n.a.	9,700	ug/l		
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	140	5	
				340	5	
<b>SW-846 6010B Metals</b>						
01754	Iron	7439-89-6	299	ug/l		
07058	Manganese	7439-96-5	3,570	52.2	1	
				0.84	1	
<b>EPA 300.0 Wet Chemistry</b>						
00368	Nitrate Nitrogen	14797-55-8	1,300	ug/l		
01506	Nitrite Nitrogen	14797-65-0	N.D.	250	5	
00228	Sulfate	14808-79-8	133,000	400	5	
				6,000	20	
<b>SM20 2320 B Wet Chemistry</b>						
00202	Alkalinity to pH 4.5	n.a.	206,000	ug/l as CaCO3		
00201	Alkalinity to pH 8.3	n.a.	N.D.	460	1	
				460	1	
<b>SM20 3500 Fe B Wet Chemistry modified</b>						
08344	Ferrous Iron	n.a.	420	ug/l		
	This sample was analyzed twice for ferrous iron. The result of the second analysis was 471 ug/L.				10	1
<b>SM20 4500 S2 D Wet Chemistry</b>						
00230	Sulfide	18496-25-8	N.D.	ug/l		
				54	1	

### General Sample Comments

State of Washington Lab Certification No. C259

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



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-658-2300 Fax: 717-656-2881 • www.lancasterlabs.com

# Analysis Report

Lancaster Laboratories Sample No. WW 5648902

Group No. 1140932  
WA

MW-4 Grab Water Sample  
Facility# 211577 Job# 386765  
631 Queen Anne N - Seattle, WA

Collected: 04/16/2009 08:44 by ML

Account Number: 11260

Submitted: 04/17/2009 09:00

Chevron  
6001 Bollinger Canyon Road  
L4310  
San Ramon CA 94583

Reported: 04/29/2009 at 14:28

Discard: 05/30/2009

ANNM4

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	P091132AA	04/23/2009 18:27	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P091132AA	04/23/2009 18:27	Daniel H Heller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09110D20A	04/22/2009 00:43	Tyler O Griffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	09110D20A	04/22/2009 00:43	Tyler O Griffin	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	091120021A	04/28/2009 10:57	Diane V Do	5
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	091120021A	04/23/2009 11:30	Jessica Agosto	1
01754	Iron	SW-846 6010B	1	091121848001	04/23/2009 21:47	John P Hook	1
07058	Manganese	SW-846 6010B	1	091181848003	04/29/2009 08:59	Joanne M Gates	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	091121848001	04/22/2009 21:00	Mirit S Shenouda	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	2	091181848003	04/28/2009 22:15	Annamaria Stipkovits	1
00368	Nitrate Nitrogen	EPA 300.0	1	09107130101A	04/17/2009 18:23	Ashley M Heckman	5
01506	Nitrite Nitrogen	EPA 300.0	1	09107130101A	04/17/2009 18:23	Ashley M Heckman	5
00228	Sulfate	EPA 300.0	1	09107130101A	04/21/2009 14:18	Ashley M Heckman	20
00202	Alkalinity to pH 4.5	SM20 2320 B	1	09112020202A	04/22/2009 20:39	Geraldine C Smith	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	09112020202A	04/22/2009 20:39	Geraldine C Smith	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	09112834401A	04/22/2009 15:30	Michelle L Lalli	1
00230	Sulfide	SM20 4500 S2 D	1	09110023002A	04/20/2009 23:13	Geraldine C Smith	1

Lancaster Laboratories Sample No. WW 5648903

 Group No. 1140932  
WA

 MW-18 Grab Water Sample  
Facility# 211577 Job# 386765  
631 Queen Anne N - Seattle, WA

Collected: 04/16/2009 08:40 by ML

Account Number: 11260

 Submitted: 04/17/2009 09:00  
Reported: 04/29/2009 at 14:28  
Discard: 05/30/2009

 Chevron  
6001 Bollinger Canyon Road  
L4310  
San Ramon CA 94583

ANN18

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 8260B	GC/MS Volatiles		ug/l	ug/l	
06053	Benzene	71-43-2	4	0.5	1
06053	Ethylbenzene	100-41-4	N.D.	0.5	1
06053	Toluene	108-88-3	0.5	0.5	1
06053	Xylene (Total)	1330-20-7	1	0.5	1
ECY 97-602 NWTPH-Gx	GC Volatiles		ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	530	50	1
ECY 97-602 NWTPH-Dx	GC Extractable TPH w/Si Gel		ug/l	ug/l	
02211	DRO C12-C24 w/Si Gel	n.a.	7,600	170	5
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	390	5
SW-846 6010B	Metals		ug/l	ug/l	
01754	Iron	7439-89-6	8,880	52.2	1
07058	Manganese	7439-96-5	3,220	0.84	1
EPA 300.0	Wet Chemistry		ug/l	ug/l	
00368	Nitrate Nitrogen	14797-55-8	N.D.	250	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	400	5
00228	Sulfate	14808-79-8	77,500	3,000	10
SM20 2320 B	Wet Chemistry		ug/l as CaCO3	ug/l as CaCO3	
00202	Alkalinity to pH 4.5	n.a.	196,000	460	1
00201	Alkalinity to pH 8.3	n.a.	N.D.	460	1
SM20 3500 Fe B	Wet Chemistry		ug/l	ug/l	
08344	Ferrous Iron	n.a.	2,100	50	5
SM20 4500 S2 D	Wet Chemistry		ug/l	ug/l	
00230	Sulfide	18496-25-8	N.D.	54	1

### General Sample Comments

State of Washington Lab Certification No. C259

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

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial# Batch#	Analysis Date and Time	Analyst	Dilution Factor
---------	---------------	--------	---------------	------------------------	---------	-----------------



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-655-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5648903

Group No. 1140932  
WA

MW-18 Grab Water Sample  
Facility# 211577 Job# 386765  
631 Queen Anne N - Seattle, WA

Collected: 04/16/2009 08:40 by ML

Account Number: 11260

Submitted: 04/17/2009 09:00

Chevron

Reported: 04/29/2009 at 14:28

6001 Bollinger Canyon Road  
L4310

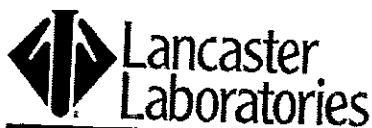
Discard: 05/30/2009

San Ramon CA 94583

ANN18

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	P091112AA	04/21/2009 16:56	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P091112AA	04/21/2009 16:56	Daniel H Heller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09110D20A	04/22/2009 01:05	Tyler O Griffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	09110D20A	04/22/2009 01:05	Tyler O Griffin	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	091120021A	04/28/2009 11:17	Diane V Do	5
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	091120021A	04/23/2009 11:30	Jessica Agosto	1
01754	Iron	SW-846 6010B	1	091121848001	04/23/2009 22:00	John P Hook	1
07058	Manganese	SW-846 6010B	1	091181848003	04/29/2009 09:04	Joanne M Gates	1
01848	NW SW846 ICP Digest (tot rec)	SW-846 3005A	1	091121848001	04/22/2009 21:00	Mirit S Shenouda	1
01848	NW SW846 ICP Digest (tot rec)	SW-846 3005A	2	091181848003	04/28/2009 22:15	Annamaria Stipkovits	1
00368	Nitrate Nitrogen	EPA 300.0	1	09107130101A	04/17/2009 18:41	Ashley M Heckman	5
01506	Nitrite Nitrogen	EPA 300.0	1	09107130101A	04/17/2009 18:41	Ashley M Heckman	5
00228	Sulfate	EPA 300.0	1	09107130101A	04/21/2009 14:35	Ashley M Heckman	10
00202	Alkalinity to pH 4.5	SM20 2320 B	1	09112020202A	04/22/2009 20:39	Geraldine C Smith	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	09112020202A	04/22/2009 20:39	Geraldine C Smith	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	09112834401A	04/22/2009 15:30	Michelle L Lalli	5
00230	Sulfide	SM20 4500 S2 D	1	09110023002A	04/20/2009 23:13	Geraldine C Smith	1



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5648904

Group No. 1140932  
WA

RW-2 Grab Water Sample  
Facility# 211577 Job# 386765  
631 Queen Anne N - Seattle, WA

Collected: 04/16/2009 09:50 by ML

Account Number: 11260

Submitted: 04/17/2009 09:00  
Reported: 04/29/2009 at 14:28  
Discard: 05/30/2009

Chevron  
6001 Bollinger Canyon Road  
L4310  
San Ramon CA 94583

ANNR2

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 8260B	GC/MS Volatiles		ug/l		
06053	Benzene	71-43-2	21	ug/l	
06053	Ethylbenzene	100-41-4	0.5	0.5	1
06053	Toluene	108-88-3	0.9	0.5	1
06053	Xylene (Total)	1330-20-7	0.8	0.5	1
ECY 97-602 NWTPH-Gx	GC Volatiles		ug/l		
08273	NWTPH-Gx water C7-C12	n.a.	340	ug/l	
				50	1
ECY 97-602 NWTPH-Dx modified	GC Extractable TPH w/Si Gel		ug/l		
02211	DRO C12-C24 w/Si Gel	n.a.	840	ug/l	
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	28	1
				65	1

### General Sample Comments

State of Washington Lab Certification No. C259

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

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	P091112AA	04/21/2009 17:25	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P091112AA	04/21/2009 17:25	Daniel H Heller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09110D20A	04/22/2009 01:27	Tyler O Griffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	09110D20A	04/22/2009 01:27	Tyler O Griffin	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	091120021A	04/28/2009 09:15	Diane V Do	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	091120021A	04/23/2009 11:30	Jessica Agosto	1



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5648905

Group No. 1140932  
WA

DPE-2 Grab Water Sample  
Facility# 211577 Job# 386765  
631 Queen Anne N - Seattle, WA

Collected: 04/16/2009 09:35 by ML

Account Number: 11260

Submitted: 04/17/2009 09:00  
Reported: 04/29/2009 at 14:28  
Discard: 05/30/2009

Chevron  
6001 Bollinger Canyon Road  
L4310  
San Ramon CA 94583

ANND2

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 8260B	GC/MS Volatiles		ug/l	ug/l	
06053	Benzene	71-43-2	N.D.	0.5	1
06053	Ethylbenzene	100-41-4	N.D.	0.5	1
06053	Toluene	108-88-3	N.D.	0.5	1
06053	Xylene (Total)	1330-20-7	N.D.	0.5	1
ECY 97-602 NWTPH-Gx	GC Volatiles		ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	93	50	1
ECY 97-602 NWTPH-Dx modified	GC Extractable TPH w/Si Gel		ug/l	ug/l	
02211	DRO C12-C24 w/Si Gel	n.a.	83	31	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	72	1

### General Sample Comments

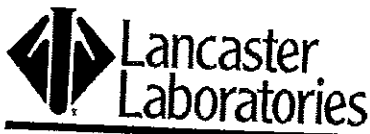
State of Washington Lab Certification No. C259

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

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	P091112AA	04/21/2009 17:53	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P091112AA	04/21/2009 17:53	Daniel H Heller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09110D20A	04/22/2009 01:49	Tyler O Griffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	09110D20A	04/22/2009 01:49	Tyler O Griffin	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	091120021A	04/28/2009 09:36	Diane V Do	1
2135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	091120021A	04/23/2009 11:30	Jessica Agosto	1





2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

# Analysis Report

Lancaster Laboratories Sample No. WW 5648906

Group No. 1140932  
WA

DPE-8 Grab Water Sample  
Facility# 211577 Job# 386765  
631 Queen Anne N - Seattle, WA

Collected: 04/16/2009 10:52 by ML

Account Number: 11260

Submitted: 04/17/2009 09:00

Reported: 04/29/2009 at 14:28

Discard: 05/30/2009

Chevron  
6001 Bollinger Canyon Road  
L4310  
San Ramon CA 94583

ANND8

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>SW-846 8260B GC/MS Volatiles</b>					
06053	Benzene	71-43-2	7	ug/l	
06053	Ethylbenzene	100-41-4	3	0.5	1
06053	Toluene	108-88-3	1	0.5	1
06053	Xylene (Total)	1330-20-7	6	0.5	1
<b>ECY 97-602 NWTPH-Gx GC Volatiles</b>					
08273	NWTPH-Gx water C7-C12	n.a.	2,000	ug/l	
<b>ECY 97-602 NWTPH-Dx GC Extractable TPH modified w/Si Gel</b>					
02211	DRO C12-C24 w/Si Gel	n.a.	12,000	ug/l	
02211	HRO C24-C40 w/Si Gel	n.a.	590	140	5
<b>SW-846 6010B Metals</b>					
01754	Iron	7439-89-6	24,200	ug/l	
07058	Manganese	7439-96-5	5,980	52.2	1
<b>EPA 300.0 Wet Chemistry</b>					
00368	Nitrate Nitrogen	14797-55-8	340	ug/l	
01506	Nitrite Nitrogen	14797-65-0	N.D.	250	5
00228	Sulfate	14808-79-8	47,300	400	5
<b>SM20 2320 B Wet Chemistry</b>					
00202	Alkalinity to pH 4.5	n.a.	228,000	ug/l as CaCO3	
00201	Alkalinity to pH 8.3	n.a.	N.D.	460	1
<b>SM20 3500 Fe B Wet Chemistry modified</b>					
08344	Ferrous Iron	n.a.	23,700	ug/l	
<b>SM20 4500 S2 D Wet Chemistry</b>					
00230	Sulfide	18496-25-8	140	ug/l	
				54	1

## General Sample Comments

State of Washington Lab Certification No. C259

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

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
---------	---------------	--------	--------	--------	------------------------	---------	-----------------



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5648906

Group No. 1140932  
WA

DPE-8 Grab Water Sample  
Facility# 211577 Job# 386765  
631 Queen Anne N - Seattle, WA

Collected: 04/16/2009 10:52 by ML

Account Number: 11260

Submitted: 04/17/2009 09:00  
Reported: 04/29/2009 at 14:28  
Discard: 05/30/2009

Chevron  
6001 Bollinger Canyon Road  
L4310  
San Ramon CA 94583

ANND8

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	P091112AA	04/21/2009 18:19	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P091112AA	04/21/2009 18:19	Daniel H Heller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09110D20A	04/22/2009 02:11	Tyler O Griffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	09110D20A	04/22/2009 02:11	Tyler O Griffin	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	091120021A	04/28/2009 11:58	Diane V Do	5
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	091120021A	04/23/2009 11:30	Jessica Agosto	1
01754	Iron	SW-846 6010B	1	091121848001	04/23/2009 22:04	John P Hook	1
07058	Manganese	SW-846 6010B	1	091181848003	04/29/2009 09:09	Joanne M Gates	1
01848	NW SW846 ICP Digest (tot rec)	SW-846 3005A	1	091121848001	04/22/2009 21:00	Mirit S Shenouda	1
01848	NW SW846 ICP Digest (tot rec)	SW-846 3005A	2	091181848003	04/28/2009 22:15	Annamaria Stipkovits	1
00368	Nitrate Nitrogen	EPA 300.0	1	09107130101A	04/17/2009 18:59	Ashley M Heckman	5
01506	Nitrite Nitrogen	EPA 300.0	1	09107130101A	04/17/2009 18:59	Ashley M Heckman	5
00228	Sulfate	EPA 300.0	1	09107130101A	04/17/2009 18:59	Ashley M Heckman	5
00202	Alkalinity to pH 4.5	SM20 2320 B	1	09112020202A	04/22/2009 20:39	Geraldine C Smith	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	09112020202A	04/22/2009 20:39	Geraldine C Smith	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	09112834401A	04/22/2009 15:30	Michelle L Lalli	100
00230	Sulfide	SM20 4500 S2 D	1	09110023002A	04/20/2009 23:13	Geraldine C Smith	1

## Quality Control Summary

 Client Name: Chevron  
 Reported: 04/29/09 at 02:28 PM

Group Number: 1140932

Matrix QC may not be reported if 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.

### Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: P091112AA	Sample number(s): 5648903-5648906							
Benzene	N.D.	0.5	ug/l	95	97	80-116	3	30
Ethylbenzene	N.D.	0.5	ug/l	93	94	80-113	1	30
Toluene	N.D.	0.5	ug/l	94	94	80-115	0	30
Xylene (Total)	N.D.	0.5	ug/l	94	95	81-114	2	30
Batch number: P091132AA	Sample number(s): 5648899-5648902							
Benzene	N.D.	0.5	ug/l	94	97	80-116	3	30
Ethylbenzene	N.D.	0.5	ug/l	94	95	80-113	0	30
Toluene	N.D.	0.5	ug/l	94	94	80-115	0	30
Xylene (Total)	N.D.	0.5	ug/l	95	95	81-114	1	30
Batch number: 09110D20A NWTPH-Gx water C7-C12	Sample number(s): 5648899-5648906							
	N.D.	50.	ug/l	91	100	75-135	10	30
Batch number: 091120021A DRO C12-C24 w/Si Gel HRO C24-C40 w/Si Gel	Sample number(s): 5648901-5648906							
	N.D.	30.	ug/l	84	79	61-106	6	20
	N.D.	70.	ug/l					
Batch number: 091140016A DRO C12-C24 w/Si Gel HRO C24-C40 w/Si Gel	Sample number(s): 5648900							
	N.D.	30.	ug/l	69	70	61-106	2	20
	N.D.	70.	ug/l					
Batch number: 091121848001 Iron	Sample number(s): 5648901-5648903, 5648906							
	N.D.	52.2	ug/l	104		90-112		
Batch number: 091181848003 Manganese	Sample number(s): 5648901-5648903, 5648906							
	N.D.	0.84	ug/l	102		90-110		
Batch number: 09107130101A Nitrate Nitrogen Nitrite Nitrogen Sulfate	Sample number(s): 5648901-5648903, 5648906							
	N.D.	50.	ug/l	100		90-110		
	N.D.	80.	ug/l	103		90-110		
	N.D.	300.	ug/l	100		89-110		
Batch number: 09110023002A Sulfide	Sample number(s): 5648901-5648903, 5648906							
	N.D.	54.	ug/l	100		90-110		
Batch number: 09112020201A Alkalinity to pH 4.5	Sample number(s): 5648901							
	N.D.	460.	ug/l as CaCO3	100		98-103		
Batch number: 09112020202A Alkalinity to pH 4.5	Sample number(s): 5648902-5648903, 5648906							
	N.D.	460.	ug/l as CaCO3	100		98-103		
Batch number: 09112834401A Ferrous Iron	Sample number(s): 5648901-5648903, 5648906							
	N.D.	10.	ug/l	99		92-105		

\*- 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: 04/29/09 at 02:28 PM

Group Number: 1140932

### 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>
----------------------	---------------------	------------------	---------------------	-----------------	------------------	------------------------	------------	----------------

### 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: P091112AA	Sample number(s): 5648903-5648906 UNSPK: P648041								
Benzene	141*		80-126						
Ethylbenzene	101		77-125						
Toluene	107		80-125						
Xylene (Total)	101		79-125						
Batch number: P091132AA	Sample number(s): 5648899-5648902 UNSPK: P652289								
Benzene	105		80-126						
Ethylbenzene	101		77-125						
Toluene	102		80-125						
Xylene (Total)	101		79-125						
Batch number: 09110D20A	Sample number(s): 5648899-5648906 UNSPK: 5648904								
NWTPH-Gx water C7-C12	105		48-140						
Batch number: 091121848001	Sample number(s): 5648901-5648903, 5648906 UNSPK: P647588 BKG: P647588								
Iron	132 (2)	146 (2)	75-125	1	20	14,800	14,300	3	20
Batch number: 091181848003	Sample number(s): 5648901-5648903, 5648906 UNSPK: P647588 BKG: P647588								
Manganese	101	100	75-125	1	20	138	138	0	20
Batch number: 09107130101A	Sample number(s): 5648901-5648903, 5648906 UNSPK: P648891 BKG: P648891								
Nitrate Nitrogen	106		90-110			5,600	5,700	1	20
Nitrite Nitrogen	102		90-110			N.D.	N.D.	0 (1)	20
Sulfate	103		90-110			344,000	322,000	7	20
Batch number: 09110023002A	Sample number(s): 5648901-5648903, 5648906 UNSPK: P647539 BKG: P647539								
Sulfide	98	98	35-169	0	18	N.D.	N.D.	0 (1)	7
Batch number: 09112020201A	Sample number(s): 5648901 UNSPK: P647584 BKG: P647584								
Alkalinity to pH 4.5	99	100	64-130	0	2	468,000	469,000	0	4
Alkalinity to pH 8.3						N.D.	N.D.	0 (1)	4
Batch number: 09112020202A	Sample number(s): 5648902-5648903, 5648906 UNSPK: P649741 BKG: P649741								
Alkalinity to pH 4.5	98	98	64-130	0	2	258,000	259,000	0	4
Alkalinity to pH 8.3						8,400	8,100	4 (1)	4
Batch number: 09112834401A	Sample number(s): 5648901-5648903, 5648906 UNSPK: P651147 BKG: P651147								
Ferrous Iron	116	119	66-130	2	6	5,400	7,100	27* (1)	10

\*- 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: 04/29/09 at 02:28 PM

Group Number: 1140932

### 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: NWTPH-Gx water C7-C12  
Batch number: 09110D20A  
Trifluorotoluene-F

5648899	97
5648900	102
5648901	106
5648902	106
5648903	109
5648904	113
5648905	99
5648906	122
Blank	96
LCS	115
LCSD	117
MS	133

Limits: 63-135

Analysis Name: NWTPH-Dx water w/Si Gel  
Batch number: 091120021A  
Orthoterphenyl

5648901	82
5648902	123
5648903	124
5648904	96
5648905	95
5648906	119
Blank	104
LCS	106
LCSD	100

Limits: 50-150

Analysis Name: NWTPH-Dx water w/Si Gel  
Batch number: 091140016A  
Orthoterphenyl

5648900	133
Blank	108
LCS	130
LCSD	134

Limits: 50-150

Analysis Name: BTEX by 8260B  
Batch number: P091112AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5648903	103	103		
5648904	104	102	97	88
5648905	103	101	97	89
5648906	105	103	98	89
Blank	104	102	96	93
			97	86

- \*- 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: 04/29/09 at 02:28 PM

Group Number: 1140932

### Surrogate Quality Control

LCS	105			
LCSD	104	102	97	89
MS	105	104	98	89
		104	98	91
Limits:	80-116	77-113	80-113	78-113

Analysis Name: BTEX by 8260B

Batch number: P091132AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5648899	103	102	98	89
5648900	104	102	98	87
5648901	104	104	98	88
5648902	104	99	97	90
Blank	104	103	98	86
LCS	103	104	97	89
LCSD	104	103	98	90
MS	104	103	96	91
Limits:	80-116	77-113	80-113	78-113

\*- 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.

## Lancaster Laboratories Explanation of Symbols and Abbreviations

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

N.D.	none detected	BMQL	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	MPN	Most Probable Number
IU	International Units	CP Units	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	NTU	nephelometric turbidity units
C	degrees Celsius	F	degrees Fahrenheit
Cal	(diet) calories	lb.	pound(s)
meq	milliequivalents	kg	kilogram(s)
g	gram(s)	mg	milligram(s)
ug	microgram(s)	l	liter(s)
ml	milliliter(s)	ul	microliter(s)
m3	cubic meter(s)	fib >5 um/ml	fibers greater than 5 microns in length per ml
<	less than – The number following the sign is the <u>limit of quantitation</u> , 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 of gas 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.		

### U.S. EPA 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
J	Estimated value
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 ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike amount 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 for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

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.

**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 LANCASTER LABORATORIES 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 LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES 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 Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions of Lancaster Laboratories and we hereby object to any conflicting terms contained in any acceptance or order submitted by client.

# Chevron Northwest Region Analysis Request/Chain of Custody



AMENDED

For Lancaster Laboratories use only  
 Acct. #: 11260 Sample #: 51046392-403

SCR#: \_\_\_\_\_  
 Group# 1140486

Facility #: SS#211577-OML G-R#386765  
 Site Address: 631 Queen Anne North, SEATTLE, WA  
 Chevron PM: OS Lead Consultant: SAICPC  
 Consultant/Office: G-R, Inc., 6747 Sierra Court, Suite J, Dublin, CA 94568  
 Consultant Prj. Mgr. Deanna L. Harding (deanna@grinc.com)  
 Consultant Phone # 925-551-7555 Fax #: 925-551-7899  
 Sampler: Mike Lombard  
 Service Order #: \_\_\_\_\_  Non SAR:

Matrix	Analyses Requested											
	Preservation Codes											
	BTEX + 8021	8260	Naphth	Lead Total	Alkalinity (2320)	NWTPH HClD	Alkalinity (2320)	MTBE	Total Aromatics (600)	Sulfide (S120 H50 S2 D)	Heavy Metals (SM 350 Fe B)	Other
Soil	<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"/>
Water	<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"/>
Oil	<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"/>
Air	<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"/>
Total Number of Containers	2	8	14	14	14	8	8	8	8	8	8	8

**Preservative Codes**  
 H = HCl      T = Thiosulfate  
 N = HNO<sub>3</sub>    B = NaOH  
 S = H<sub>2</sub>SO<sub>4</sub>    O = Other

J value reporting needed  
 Must meet lowest detection limits possible for 8260 compounds  
 8021 MTBE Confirmation  
 Confirm MTBE + Naphthalene  
 Confirm highest hit by 8260  
 Confirm all hits by 8260  
 Run \_\_\_ oxy s on highest hit  
 Run \_\_\_ oxy s on all hits

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Oil	Air	Total Number of Containers
<u>QA</u>	<u>4/14/09</u>	<u>---</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>2</u>
<u>MW-14</u>	<u>4/14/09</u>	<u>1039</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>8</u>
<u>MW-15</u>	<u>4/14/09</u>	<u>1130</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>14</u>
<u>MW-16</u>	<u>4/14/09</u>	<u>0950</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>14</u>
<u>MW-17</u>	<u>4/14/09</u>	<u>1112</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>14</u>
<u>MW-21</u>	<u>4/14/09</u>	<u>1535</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>14</u>
<u>MW-25</u>	<u>4/14/09</u>	<u>0945</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>8</u>
<u>MW-26</u>	<u>4/14/09</u>	<u>1335</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>8</u>
<u>MW-31</u>	<u>4/14/09</u>	<u>1510</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>8</u>
<u>MW-32</u>	<u>4/14/09</u>	<u>1340</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>8</u>
<u>DWP-1</u>	<u>---</u>	<u>---</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>6</u>
<u>DWP-2</u>	<u>4/14/09</u>	<u>---</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>6</u>
<u>FB-2</u>	<u>4/14/09</u>	<u>---</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>6</u>

**Comments / Remarks**  
'Grab' samples per CH. gmp 4/14/09

**Turnaround Time Requested (TAT) (please circle)**  
 STD. TAT      72 hour      48 hour  
 24 hour      4 day      5 day

**Data Package Options (please circle if required)**      **EDF/EDD**  
 QC Summary      Type I - Full  
 Type VI (Raw Data)      Disk / EDD  
 WIP (RWQCB)      Standard Format  
 Disk      Other.

Relinquished by: <u>[Signature]</u>	Date: <u>4/14/09</u>	Time: <u>1700</u>	Received by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____	Received by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____	Received by: _____	Date: _____	Time: _____
Relinquished by Commercial Carrier: UPS <u>FedEx</u> Other _____	Temperature Upon Receipt <u>2.433</u> °C		Received by: <u>[Signature]</u>	Date: <u>4/15/09</u>	Time: <u>910</u>
			Custody/Seals Intact? <u>Yes</u> No		



# Chevron Northwest Region Analysis Request/Chain of Custody



For Lancaster Laboratories use only  
 Acct. #: 11260 Sample #: 51640392-403

SCR#:

Group # 1140486

Facility #: SS#211577-OML G-R#386765  
 Site Address: 631 Queen Anne North, SEATTLE, WA  
 Chevron PM: OS Lead Consultant: SAICPC  
 Consultant/Office: G-R, Inc., 6747 Sierra Court, Suite J, Dublin, CA 94568  
 Consultant Prj. Mgr.: Deanna L. Harding (deanna@grinc.com)  
 Consultant Phone #: 925-551-7555 Fax #: 925-551-7899  
 Sampler: Mike Lombard  
 Service Order #:  Non SAR:

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix			Total Number of Containers	Analyses Requested															
					Soil	Water	Oil		8260	8260	8260	8260	8260	8260	8260	8260	8260	8260	8260					
GA	4/14/09	—				X	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-14	4/14/09	1039			X	X	8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-15	4/14/09	1130			X	X	14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-16	4/14/09	0950			X	X	14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-17	4/14/09	1112			X	X	14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-21	4/14/09	1535			X	X	14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-23	4/14/09	0945			X	X	8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-25	4/14/09	1335			X	X	8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-31	4/14/09	1510			X	X	8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-32	4/14/09	1340			X	X	8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
DUP-1																								
DUP-2	4/14/09	—			X	X	6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
FBI-2	4/14/09	—			X	X	6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

**Preservative Codes**  
 H = HCl T = Thiosulfate  
 N = HNO<sub>3</sub> B = NaOH  
 S = H<sub>2</sub>SO<sub>4</sub> O = Other

J value reporting needed  
 Must meet lowest detection limits possible for 8260 compounds

**8260 MTBE Confirmation**  
 Confirm MTBE + Naphthalene  
 Confirm highest hit by 8260  
 Confirm all hits by 8260  
 Run \_\_\_ oxy s on highest hit  
 Run \_\_\_ oxy s on all hits

**Turnaround Time Requested (TAT) (please circle)**  
 STD. TAT 24 hour  
 72 hour  
 4 day  
 48 hour  
 5 day

**Data Package Options (please circle if required)**  
 QC Summary Type I - Full  
 Type VI (Raw Data) Disk / EDD  
 WIP (RWQCB) Standard Format  
 Disk Other

**EDF/EDD**

Relinquished by: <u>[Signature]</u>	Date: <u>4/14/09</u>	Time: <u>1700</u>	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by Commercial Carrier: LPS <u>FedEx</u> Other	Date:	Time:	Received by:	Date:	Time:
Temperature Upon Receipt: <u>24.33</u> °C	Custody/Seals Intact? <u>Yes</u> No		Date:	Time:	



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

# Analysis Report

## ANALYTICAL RESULTS

Prepared for:

Chevron  
6001 Bollinger Canyon Road  
L4310  
San Ramon CA 94583

925-842-8582

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

April 27, 2009

RECEIVED

APR 28 2009

GETTLER-RYAN, INC.  
GENERAL CONTRACTORS

### SAMPLE GROUP

The sample group for this submittal is 1140486. Samples arrived at the laboratory on Wednesday, April 15, 2009. The PO# for this group is 0015040041 and the release number is SKANCE.

### Client Description

QA Water Sample  
MW-14 Grab Water Sample  
MW-15 Grab Water Sample  
MW-16 Grab Water Sample  
MW-17 Grab Water Sample  
MW-21 Grab Water Sample  
MW-25 Grab Water Sample  
MW-26 Grab Water Sample  
MW-31 Grab Water Sample  
MW-32 Grab Water Sample  
DUP-2 Grab Water Sample  
FB-2 Grab Water Sample

### Lancaster Labs Number

5646392  
5646393  
5646394  
5646395  
5646396  
5646397  
5646398  
5646399  
5646400  
5646401  
5646402  
5646403

### METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Chronicle.

ELECTRONIC COPY TO SAIC c/o Gettler-Ryan

Attn: Cheryl Hansen



## ***Analysis Report***

2425 New Holland Pk, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Questions? Contact your Client Services Representative  
Jill M Parker at (717) 656-2300

Respectfully Submitted,

  
Sarah Snyder  
Specialist



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5646392

Group No. 1140486  
WA

QA Water Sample  
Facility# 211577 Job# 386765  
631 Queen Anne North - Seattle, WA

Collected: 04/14/2009

Account Number: 11260

Submitted: 04/15/2009 09:10  
Reported: 04/27/2009 at 11:20  
Discard: 05/28/2009

Chevron  
6001 Bollinger Canyon Road  
L4310  
San Ramon CA 94583

631QA

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846	8260B	GC/MS Volatiles	ug/l	ug/l	
06053	Benzene	71-43-2	N.D.	0.5	1
06053	Ethylbenzene	100-41-4	N.D.	0.5	1
06053	Toluene	108-88-3	N.D.	0.5	1
06053	Xylene (Total)	1330-20-7	N.D.	0.5	1
ECY 97-602	NWTPH-Gx	GC Volatiles	ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1

### General Sample Comments

State of Washington Lab Certification No. C259

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

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	F091102AA	04/20/2009 15:57	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F091102AA	04/20/2009 15:57	Anita M Dale	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09107B20A	04/18/2009 18:23	Fanella S Zamcho	1
01146	GC VOA Water Prep	SW-846 5030B	1	09107B20A	04/18/2009 18:23	Fanella S Zamcho	1



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5646393

Group No. 1140486  
WA

MW-14 Grab Water Sample  
Facility# 211577 Job# 386765  
631 Queen Anne North - Seattle, WA

Collected: 04/14/2009 10:39 by ML

Account Number: 11260

Submitted: 04/15/2009 09:10  
Reported: 04/27/2009 at 11:20  
Discard: 05/28/2009

Chevron  
6001 Bollinger Canyon Road  
L4310  
San Ramon CA 94583

63114

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>SW-846 8260B</b>	<b>GC/MS Volatiles</b>		<b>ug/l</b>	<b>ug/l</b>	
06053	Benzene	71-43-2	15	0.5	1
06053	Ethylbenzene	100-41-4	11	0.5	1
06053	Toluene	108-88-3	3	0.5	1
06053	Xylene (Total)	1330-20-7	4	0.5	1
<b>ECY 97-602 NWTPH-Gx</b>	<b>GC Volatiles</b>		<b>ug/l</b>	<b>ug/l</b>	
08273	NWTPH-Gx water C7-C12	n.a.	6,200	250	5
<b>ECY 97-602 NWTPH-Dx modified</b>	<b>GC Extractable TPH w/Si Gel</b>		<b>ug/l</b>	<b>ug/l</b>	
02211	DRO C12-C24 w/Si Gel	n.a.	8,800	280	10
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	660	10

### General Sample Comments

State of Washington Lab Certification No. C259

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

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	F091102AA	04/20/2009 16:18	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F091102AA	04/20/2009 16:18	Anita M Dale	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09107B20B	04/19/2009 20:09	Carrie E Youtzy	5
01146	GC VOA Water Prep	SW-846 5030B	1	09107B20B	04/19/2009 20:09	Carrie E Youtzy	5
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	091110007A	04/23/2009 08:41	Diane V Do	10
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	091110007A	04/22/2009 16:35	Olivia Arosemena	1



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5646394

Group No. 1140486  
WA

MW-15 Grab Water Sample  
Facility# 211577 Job# 386765  
631 Queen Anne North - Seattle, WA

Collected: 04/14/2009 11:30 by ML

Account Number: 11260

Submitted: 04/15/2009 09:10  
Reported: 04/27/2009 at 11:20  
Discard: 05/28/2009

Chevron  
6001 Bollinger Canyon Road  
L4310  
San Ramon CA 94583

63115

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>SW-846 8260B</b>	<b>GC/MS Volatiles</b>		ug/l	ug/l	
06053	Benzene	71-43-2	N.D.	0.5	1
06053	Ethylbenzene	100-41-4	N.D.	0.5	1
06053	Toluene	108-88-3	N.D.	0.5	1
06053	Xylene (Total)	1330-20-7	N.D.	0.5	1
<b>ECY 97-602 NWTPH-Gx</b>	<b>GC Volatiles</b>		ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
<b>ECY 97-602 NWTPH-Dx modified</b>	<b>GC Extractable TPH w/Si Gel</b>		ug/l	ug/l	
02211	DRO C12-C24 w/Si Gel	n.a.	N.D.	28	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	1
<b>SW-846 6010B</b>	<b>Metals</b>		ug/l	ug/l	
01754	Iron	7439-89-6	405	52.2	1
07058	Manganese	7439-96-5	139	0.84	1
<b>EPA 300.0</b>	<b>Wet Chemistry</b>		ug/l	ug/l	
00368	Nitrate Nitrogen	14797-55-8	N.D.	250	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	400	5
00228	Sulfate	14808-79-8	6,600	1,500	5
<b>SM20 2320 B</b>	<b>Wet Chemistry</b>		ug/l as CaCO3	ug/l as CaCO3	
00202	Alkalinity to pH 4.5	n.a.	29,100	460	1
00201	Alkalinity to pH 8.3	n.a.	N.D.	460	1
<b>SM20 3500 Fe B modified</b>	<b>Wet Chemistry</b>		ug/l	ug/l	
08344	Ferrous Iron	n.a.	N.D.	10	1
<b>SM20 4500 S2 D</b>	<b>Wet Chemistry</b>		ug/l	ug/l	
00230	Sulfide	18496-25-8	N.D.	54	1

### General Sample Comments

State of Washington Lab Certification No. C259

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

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial# Batch#	Analysis Date and Time	Analyst	Dilution Factor
---------	---------------	--------	---------------	------------------------	---------	-----------------



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5646394

Group No. 1140486  
WA

MW-15 Grab Water Sample

Facility# 211577 Job# 386765

631 Queen Anne North - Seattle, WA

Collected: 04/14/2009 11:30 by ML

Account Number: 11260

Submitted: 04/15/2009 09:10

Reported: 04/27/2009 at 11:20

Discard: 05/28/2009

Chevron

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

63115

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	F091102AA	04/20/2009 16:40	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F091102AA	04/20/2009 16:40	Anita M Dale	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09107B20A	04/18/2009 19:54	Fanella S Zamcho	1
01146	GC VOA Water Prep	SW-846 5030B	1	09107B20A	04/18/2009 19:54	Fanella S Zamcho	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	091110007A	04/22/2009 23:37	Diane V Do	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	091110007A	04/22/2009 16:35	Olivia Arosemena	1
01754	Iron	SW-846 6010B	1	091111848001	04/22/2009 09:29	Joanne M Gates	1
07058	Manganese	SW-846 6010B	1	091111848001	04/22/2009 09:29	Joanne M Gates	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	091111848001	04/21/2009 19:30	Annamaria Stipkovits	1
00368	Nitrate Nitrogen	EPA 300.0	1	09105196602A	04/16/2009 05:46	Ashley M Heckman	5
01506	Nitrite Nitrogen	EPA 300.0	1	09105196602A	04/16/2009 05:46	Ashley M Heckman	5
00228	Sulfate	EPA 300.0	1	09105196602A	04/16/2009 05:46	Ashley M Heckman	5
00202	Alkalinity to pH 4.5	SM20 2320 B	1	09110020201A	04/20/2009 16:31	Geraldine C Smith	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	09110020201A	04/20/2009 16:31	Geraldine C Smith	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	09110834401A	04/20/2009 15:45	Michelle L Lalli	1
00230	Sulfide	SM20 4500 S2 D	1	09110023001A	04/20/2009 21:24	Geraldine C Smith	1



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5646395

Group No. 1140486  
WA

MW-16 Grab Water Sample  
Facility# 211577 Job# 386765  
631 Queen Anne North - Seattle, WA

Collected: 04/14/2009 09:50 by ML

Account Number: 11260

Submitted: 04/15/2009 09:10  
Reported: 04/27/2009 at 11:20  
Discard: 05/28/2009

Chevron  
6001 Bollinger Canyon Road  
L4310  
San Ramon CA 94583

63116

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>SW-846 8260B</b>	<b>GC/MS Volatiles</b>		ug/l	ug/l	
06053	Benzene	71-43-2	N.D.	0.5	1
06053	Ethylbenzene	100-41-4	N.D.	0.5	1
06053	Toluene	108-88-3	N.D.	0.5	1
06053	Xylene (Total)	1330-20-7	N.D.	0.5	1
<b>ECY 97-602 NWTPH-Gx</b>	<b>GC Volatiles</b>		ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
<b>ECY 97-602 NWTPH-Dx</b>	<b>GC Extractable TPH</b>		ug/l	ug/l	
<b>modified</b>	<b>w/Si Gel</b>				
02211	DRO C12-C24 w/Si Gel	n.a.	N.D.	31	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	72	1
<b>SW-846 6010B</b>	<b>Metals</b>		ug/l	ug/l	
01754	Iron	7439-89-6	508	52.2	1
07058	Manganese	7439-96-5	205	0.84	1
<b>EPA 300.0</b>	<b>Wet Chemistry</b>		ug/l	ug/l	
00368	Nitrate Nitrogen	14797-55-8	9,800	250	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	400	5
00228	Sulfate	14808-79-8	24,900	1,500	5
<b>SM20 2320 B</b>	<b>Wet Chemistry</b>		ug/l as CaCO3	ug/l as CaCO3	
00202	Alkalinity to pH 4.5	n.a.	63,100	460	1
00201	Alkalinity to pH 8.3	n.a.	N.D.	460	1
<b>SM20 3500 Fe B</b>	<b>Wet Chemistry</b>		ug/l	ug/l	
<b>modified</b>					
08344	Ferrous Iron	n.a.	N.D.	10	1
<b>SM20 4500 S2 D</b>	<b>Wet Chemistry</b>		ug/l	ug/l	
00230	Sulfide	18496-25-8	N.D.	54	1

### General Sample Comments

State of Washington Lab Certification No. C259

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

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial# Batch#	Analysis Date and Time	Analyst	Dilution Factor
---------	---------------	--------	---------------	------------------------	---------	-----------------





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5646395

Group No. 1140486  
WA

MW-16 Grab Water Sample

Facility# 211577 Job# 386765  
631 Queen Anne North - Seattle, WA

Collected: 04/14/2009 09:50 by ML

Account Number: 11260

Submitted: 04/15/2009 09:10

Chevron

Reported: 04/27/2009 at 11:20

6001 Bollinger Canyon Road

Discard: 05/28/2009

L4310

San Ramon CA 94583

63116

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	F091102AA	04/20/2009 17:01	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F091102AA	04/20/2009 17:01	Anita M Dale	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09107B20A	04/18/2009 20:15	Fanella S Zamcho	1
01146	GC VOA Water Prep	SW-846 5030B	1	09107B20A	04/18/2009 20:15	Fanella S Zamcho	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	091110007A	04/22/2009 23:57	Diane V Do	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	091110007A	04/22/2009 16:35	Olivia Arosemena	1
01754	Iron	SW-846 6010B	1	091111848001	04/22/2009 09:33	Joanne M Gates	1
07058	Manganese	SW-846 6010B	1	091111848001	04/22/2009 09:33	Joanne M Gates	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	091111848001	04/21/2009 19:30	Annamaria Stipkovits	1
00368	Nitrate Nitrogen	EPA 300.0	1	09105196602A	04/16/2009 06:01	Ashley M Heckman	5
01506	Nitrite Nitrogen	EPA 300.0	1	09105196602A	04/16/2009 06:01	Ashley M Heckman	5
00228	Sulfate	EPA 300.0	1	09105196602A	04/16/2009 06:01	Ashley M Heckman	5
00202	Alkalinity to pH 4.5	SM20 2320 B	1	09110020201A	04/20/2009 16:31	Geraldine C Smith	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	09110020201A	04/20/2009 16:31	Geraldine C Smith	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	09110834401A	04/20/2009 15:45	Michelle L Lalli	1
00230	Sulfide	SM20 4500 S2 D	1	09110023001A	04/20/2009 21:24	Geraldine C Smith	1



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5646396

Group No. 1140486  
WA

MW-17 Grab Water Sample

Facility# 211577 Job# 386765  
631 Queen Anne North - Seattle, WA

Collected: 04/14/2009 11:12 by ML

Account Number: 11260

Submitted: 04/15/2009 09:10

Chevron

Reported: 04/27/2009 at 11:20

6001 Bollinger Canyon Road

Discard: 05/28/2009

L4310

San Ramon CA 94583

63117

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>SW-846 8260B</b>	<b>GC/MS Volatiles</b>		ug/l	ug/l	
06053	Benzene	71-43-2	5	0.5	1
06053	Ethylbenzene	100-41-4	N.D.	0.5	1
06053	Toluene	108-88-3	N.D.	0.5	1
06053	Xylene (Total)	1330-20-7	N.D.	0.5	1
<b>ECY 97-602 NWTPH-Gx</b>	<b>GC Volatiles</b>		ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
<b>ECY 97-602 NWTPH-Dx modified</b>	<b>GC Extractable TPH w/Si Gel</b>		ug/l	ug/l	
02211	DRO C12-C24 w/Si Gel	n.a.	150	33	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	77	1
<b>SW-846 6010B</b>	<b>Metals</b>		ug/l	ug/l	
01754	Iron	7439-89-6	343	52.2	1
07058	Manganese	7439-96-5	1,520	0.84	1
<b>EPA 300.0</b>	<b>Wet Chemistry</b>		ug/l	ug/l	
00368	Nitrate Nitrogen	14797-55-8	1,500	250	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	400	5
00228	Sulfate	14808-79-8	68,000	1,500	5
<b>SM20 2320 B</b>	<b>Wet Chemistry</b>		ug/l as CaCO3	ug/l as CaCO3	
00202	Alkalinity to pH 4.5	n.a.	92,900	460	1
00201	Alkalinity to pH 8.3	n.a.	N.D.	460	1
<b>SM20 3500 Fe B modified</b>	<b>Wet Chemistry</b>		ug/l	ug/l	
08344	Ferrous Iron	n.a.	130	10	1
<b>SM20 4500 S2 D</b>	<b>Wet Chemistry</b>		ug/l	ug/l	
00230	Sulfide	18496-25-8	N.D.	54	1

### General Sample Comments

State of Washington Lab Certification No. C259

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

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial# Batch#	Analysis Date and Time	Analyst	Dilution Factor
---------	---------------	--------	---------------	------------------------	---------	-----------------



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5646396

Group No. 1140486

WA

MW-17 Grab Water Sample

Facility# 211577 Job# 386765

631 Queen Anne North - Seattle, WA

Collected: 04/14/2009 11:12 by ML

Account Number: 11260

Submitted: 04/15/2009 09:10

Chevron

Reported: 04/27/2009 at 11:20

6001 Bollinger Canyon Road

Discard: 05/28/2009

L4310

San Ramon CA 94583

63117

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	F091102AA	04/20/2009 17:23	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F091102AA	04/20/2009 17:23	Anita M Dale	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09107B20A	04/18/2009 20:37	Fanella S Zamcho	1
01146	GC VOA Water Prep	SW-846 5030B	1	09107B20A	04/18/2009 20:37	Fanella S Zamcho	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	091110007A	04/23/2009 00:17	Diane V Do	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	091110007A	04/22/2009 16:35	Olivia Arosemena	1
01754	Iron	SW-846 6010B	1	091111848001	04/22/2009 09:38	Joanne M Gates	1
07058	Manganese	SW-846 6010B	1	091111848001	04/22/2009 09:38	Joanne M Gates	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	091111848001	04/21/2009 19:30	Annamaria Stipkovits	1
00368	Nitrate Nitrogen	EPA 300.0	1	09105196602A	04/16/2009 06:17	Ashley M Heckman	5
01506	Nitrite Nitrogen	EPA 300.0	1	09105196602A	04/16/2009 06:17	Ashley M Heckman	5
00228	Sulfate	EPA 300.0	1	09105196602A	04/16/2009 06:17	Ashley M Heckman	5
00202	Alkalinity to pH 4.5	SM20 2320 B	1	09110020201A	04/20/2009 16:31	Geraldine C Smith	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	09110020201A	04/20/2009 16:31	Geraldine C Smith	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	09110834401A	04/20/2009 15:45	Michelle L Lalli	1
00230	Sulfide	SM20 4500 S2 D	1	09110023001A	04/20/2009 21:24	Geraldine C Smith	1

Lancaster Laboratories Sample No. WW 5646397

Group No. 1140486

WA

MW-21 Grab Water Sample

Facility# 211577 Job# 386765

631 Queen Anne North - Seattle, WA

Collected: 04/14/2009 15:35 by ML

Account Number: 11260

Submitted: 04/15/2009 09:10

Chevron

Reported: 04/27/2009 at 11:20

6001 Bollinger Canyon Road

Discard: 05/28/2009

L4310

San Ramon CA 94583

63121

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>SW-846 8260B</b>	<b>GC/MS Volatiles</b>		ug/l	ug/l	
06053	Benzene	71-43-2	120	0.5	1
06053	Ethylbenzene	100-41-4	N.D.	0.5	1
06053	Toluene	108-88-3	N.D.	0.5	1
06053	Xylene (Total)	1330-20-7	N.D.	0.5	1
<b>ECY 97-602 NWTPH-Gx</b>	<b>GC Volatiles</b>		ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	89	50	1
<b>ECY 97-602 NWTPH-Dx modified</b>	<b>GC Extractable TPH w/Si Gel</b>		ug/l	ug/l	
02211	DRO C12-C24 w/Si Gel	n.a.	36	33	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	78	1
<b>SW-846 6010B</b>	<b>Metals</b>		ug/l	ug/l	
01754	Iron	7439-89-6	6,260	52.2	1
07058	Manganese	7439-96-5	334	0.84	1
<b>EPA 300.0</b>	<b>Wet Chemistry</b>		ug/l	ug/l	
00368	Nitrate Nitrogen	14797-55-8	N.D.	250	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	400	5
00228	Sulfate	14808-79-8	18,900	1,500	5
<b>SM20 2320 B</b>	<b>Wet Chemistry</b>		ug/l as CaCO3	ug/l as CaCO3	
00202	Alkalinity to pH 4.5	n.a.	245,000	460	1
00201	Alkalinity to pH 8.3	n.a.	N.D.	460	1
<b>SM20 3500 Fe B modified</b>	<b>Wet Chemistry</b>		ug/l	ug/l	
08344	Ferrous Iron	n.a.	4,600	100	10
<b>SM20 4500 S2 D</b>	<b>Wet Chemistry</b>		ug/l	ug/l	
00230	Sulfide	18496-25-8	N.D.	54	1

### General Sample Comments

State of Washington Lab Certification No. C259

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

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial# Batch#	Analysis Date and Time	Analyst	Dilution Factor
---------	---------------	--------	---------------	------------------------	---------	-----------------

Lancaster Laboratories Sample No. WW 5646397

Group No. 1140486

WA

MW-21 Grab Water Sample

Facility# 211577 Job# 386765

631 Queen Anne North - Seattle, WA

Collected: 04/14/2009 15:35 by ML

Account Number: 11260

Submitted: 04/15/2009 09:10

Chevron

Reported: 04/27/2009 at 11:20

6001 Bollinger Canyon Road

Discard: 05/28/2009

L4310

San Ramon CA 94583

63121

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	F091102AA	04/20/2009 17:44	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F091102AA	04/20/2009 17:44	Anita M Dale	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09107B20A	04/18/2009 20:59	Fanella S Zamcho	1
01146	GC VOA Water Prep	SW-846 5030B	1	09107B20A	04/18/2009 20:59	Fanella S Zamcho	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	091110007A	04/23/2009 00:37	Diane V Do	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	091110007A	04/22/2009 16:35	Olivia Arosemena	1
01754	Iron	SW-846 6010B	1	091111848001	04/22/2009 09:42	Joanne M Gates	1
07058	Manganese	SW-846 6010B	1	091111848001	04/22/2009 09:42	Joanne M Gates	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	091111848001	04/21/2009 19:30	Annamaria Stipkovits	1
00368	Nitrate Nitrogen	EPA 300.0	1	09105196602A	04/16/2009 06:32	Ashley M Heckman	5
01506	Nitrite Nitrogen	EPA 300.0	1	09105196602A	04/16/2009 06:32	Ashley M Heckman	5
00228	Sulfate	EPA 300.0	1	09105196602A	04/16/2009 06:32	Ashley M Heckman	5
00202	Alkalinity to pH 4.5	SM20 2320 B	1	09110020201A	04/20/2009 16:31	Geraldine C Smith	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	09110020201A	04/20/2009 16:31	Geraldine C Smith	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	09110834401A	04/20/2009 15:45	Michelle L Lalli	10
00230	Sulfide	SM20 4500 S2 D	1	09110023001A	04/20/2009 21:24	Geraldine C Smith	1

Lancaster Laboratories Sample No. WW 5646398

Group No. 1140486

WA

MW-25 Grab Water Sample

Facility# 211577 Job# 386765

631 Queen Anne North - Seattle, WA

Collected: 04/14/2009 09:45 by ML

Account Number: 11260

Submitted: 04/15/2009 09:10

Chevron

Reported: 04/27/2009 at 11:20

6001 Bollinger Canyon Road

Discard: 05/28/2009

L4310

San Ramon CA 94583

63125

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 8260B	GC/MS Volatiles		ug/l	ug/l	
06053	Benzene	71-43-2	N.D.	0.5	1
06053	Ethylbenzene	100-41-4	N.D.	0.5	1
06053	Toluene	108-88-3	N.D.	0.5	1
06053	Xylene (Total)	1330-20-7	N.D.	0.5	1
ECY 97-602 NWTPH-Gx	GC Volatiles		ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	190	50	1
ECY 97-602 NWTPH-Dx modified	GC Extractable TPH w/Si Gel		ug/l	ug/l	
02211	DRO C12-C24 w/Si Gel	n.a.	340	28	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	1

### General Sample Comments

State of Washington Lab Certification No. C259

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

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	F091102AA	04/20/2009 18:06	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F091102AA	04/20/2009 18:06	Anita M Dale	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09107B20A	04/18/2009 21:21	Fanella S Zamcho	1
01146	GC VOA Water Prep	SW-846 5030B	1	09107B20A	04/18/2009 21:21	Fanella S Zamcho	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	091110007A	04/23/2009 00:57	Diane V Do	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	091110007A	04/22/2009 16:35	Olivia Arosemena	1

Lancaster Laboratories Sample No. WW 5646399

Group No. 1140486

WA

MW-26 Grab Water Sample

Facility# 211577 Job# 386765

631 Queen Anne North - Seattle, WA

Collected: 04/14/2009 13:35 by ML

Account Number: 11260

Submitted: 04/15/2009 09:10

Chevron

Reported: 04/27/2009 at 11:20

6001 Bollinger Canyon Road

Discard: 05/28/2009

L4310

San Ramon CA 94583

63126

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>SW-846 8260B</b>	<b>GC/MS Volatiles</b>		ug/l	ug/l	
06053	Benzene	71-43-2	26	0.5	1
06053	Ethylbenzene	100-41-4	11	0.5	1
06053	Toluene	108-88-3	N.D.	0.5	1
06053	Xylene (Total)	1330-20-7	N.D.	0.5	1
<b>ECY 97-602 NWTPH-Gx</b>	<b>GC Volatiles</b>		ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
Preservation requirements were not met. The vial submitted for volatile analysis did not have a pH < 2 at the time of analysis. Due to the volatile nature of the analytes, it is not appropriate for the laboratory to adjust the pH at the time of sample receipt. The pH of this sample was pH = 5.					
<b>ECY 97-602 NWTPH-Dx modified</b>	<b>GC Extractable TPH w/Si Gel</b>		ug/l	ug/l	
02211	DRO C12-C24 w/Si Gel	n.a.	460	28	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	1
<b>SW-846 6010B</b>	<b>Metals</b>		ug/l	ug/l	
01754	Iron	7439-89-6	319	52.2	1
07058	Manganese	7439-96-5	1,380	0.84	1
<b>EPA 300.0</b>	<b>Wet Chemistry</b>		ug/l	ug/l	
00368	Nitrate Nitrogen	14797-55-8	5,600	250	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	8,000	100
The reporting limit(s) for the analyte(s) above was raised due to matrix interference.					
00228	Sulfate	14808-79-8	16,500	1,500	5
<b>SM20 2320 B</b>	<b>Wet Chemistry</b>		ug/l as CaCO3	ug/l as CaCO3	
00202	Alkalinity to pH 4.5	n.a.	142,000	460	1
00201	Alkalinity to pH 8.3	n.a.	N.D.	460	1
<b>SM20 3500 Fe B modified</b>	<b>Wet Chemistry</b>		ug/l	ug/l	
08344	Ferrous Iron	n.a.	71	10	1
<b>SM20 4500 S2 D</b>	<b>Wet Chemistry</b>		ug/l	ug/l	
00230	Sulfide	18496-25-8	N.D.	54	1



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-856-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5646399

Group No. 1140486  
WA

MW-26 Grab Water Sample  
Facility# 211577 Job# 386765  
631 Queen Anne North - Seattle, WA

Collected: 04/14/2009 13:35 by ML

Account Number: 11260

Submitted: 04/15/2009 09:10  
Reported: 04/27/2009 at 11:20  
Discard: 05/28/2009

Chevron  
6001 Bollinger Canyon Road  
L4310  
San Ramon CA 94583

63126

### General Sample Comments

State of Washington Lab Certification No. C259

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

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	Z091113AA	04/22/2009 03:50	Michael A Ziegler	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z091113AA	04/22/2009 03:50	Michael A Ziegler	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09107B20A	04/18/2009 21:43	Fanella S Zamcho	1
01146	GC VOA Water Prep	SW-846 5030B	1	09107B20A	04/18/2009 21:43	Fanella S Zamcho	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	091110007A	04/23/2009 01:18	Diane V Do	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	091110007A	04/22/2009 16:35	Olivia Arosemena	1
01754	Iron	SW-846 6010B	1	091111848001	04/22/2009 09:46	Joanne M Gates	1
07058	Manganese	SW-846 6010B	1	091111848001	04/22/2009 09:46	Joanne M Gates	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	091111848001	04/21/2009 19:30	Annamaria Stipkovits	1
00368	Nitrate Nitrogen	EPA 300.0	1	09105196602A	04/16/2009 06:48	Ashley M Heckman	5
01506	Nitrite Nitrogen	EPA 300.0	1	09105196602A	04/16/2009 12:27	Ashley M Heckman	100
00228	Sulfate	EPA 300.0	1	09105196602A	04/16/2009 06:48	Ashley M Heckman	5
00202	Alkalinity to pH 4.5	SM20 2320 B	1	09110020201A	04/20/2009 16:31	Geraldine C Smith	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	09110020201A	04/20/2009 16:31	Geraldine C Smith	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	09110834401A	04/20/2009 15:45	Michelle L Lalli	1
00230	Sulfide	SM20 4500 S2 D	1	09110023001A	04/20/2009 21:24	Geraldine C Smith	1





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5646400

Group No. 1140486  
WA

MW-31 Grab Water Sample  
Facility# 211577 Job# 386765  
631 Queen Anne North - Seattle, WA

Collected: 04/14/2009 15:10 by ML

Account Number: 11260

Submitted: 04/15/2009 09:10  
Reported: 04/27/2009 at 11:20  
Discard: 05/28/2009

Chevron  
6001 Bollinger Canyon Road  
L4310  
San Ramon CA 94583

63131

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846	8260B		GC/MS Volatiles	ug/l	
06053	Benzene	71-43-2	N.D.	0.5	1
06053	Ethylbenzene	100-41-4	N.D.	0.5	1
06053	Toluene	108-88-3	N.D.	0.5	1
06053	Xylene (Total)	1330-20-7	N.D.	0.5	1
ECY 97-602	NWTPH-Gx		GC Volatiles	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
ECY 97-602	NWTPH-Dx modified		GC Extractable TPH w/Si Gel	ug/l	
02211	DRO C12-C24 w/Si Gel	n.a.	N.D.	29	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	67	1

### General Sample Comments

State of Washington Lab Certification No. C259

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

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	Z091113AA	04/22/2009 04:15	Michael A Ziegler	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z091113AA	04/22/2009 04:15	Michael A Ziegler	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09107B20A	04/18/2009 22:04	Fanella S Zamcho	1
01146	GC VOA Water Prep	SW-846 5030B	1	09107B20A	04/18/2009 22:04	Fanella S Zamcho	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	091110007A	04/23/2009 01:58	Diane V Do	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	091110007A	04/22/2009 16:35	Olivia Arosemena	1



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5646401

Group No. 1140486

WA

MW-32 Grab Water Sample

Facility# 211577 Job# 386765

631 Queen Anne North - Seattle, WA

Collected: 04/14/2009 13:40 by ML

Account Number: 11260

Submitted: 04/15/2009 09:10

Chevron

Reported: 04/27/2009 at 11:20

6001 Bollinger Canyon Road

Discard: 05/28/2009

L4310

San Ramon CA 94583

63132

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 8260B	GC/MS Volatiles		ug/l	ug/l	
06053	Benzene	71-43-2	N.D.	0.5	1
06053	Ethylbenzene	100-41-4	N.D.	0.5	1
06053	Toluene	108-88-3	N.D.	0.5	1
06053	Xylene (Total)	1330-20-7	N.D.	0.5	1
ECY 97-602 NWTPH-Gx	GC Volatiles		ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
ECY 97-602 NWTPH-Dx modified	GC Extractable TPH w/Si Gel		ug/l	ug/l	
02211	DRO C12-C24 w/Si Gel	n.a.	330	29	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	67	1

### General Sample Comments

State of Washington Lab Certification No. C259

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

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	Z091113AA	04/22/2009 04:40	Michael A Ziegler	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z091113AA	04/22/2009 04:40	Michael A Ziegler	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09110D20A	04/22/2009 04:21	Tyler O Griffin	1
01146	GC VOA Water Prep	SW-846 5030B	2	09110D20A	04/22/2009 04:21	Tyler O Griffin	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	091110007A	04/23/2009 02:18	Diane V Do	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	091110007A	04/22/2009 16:35	Olivia Arosemena	1



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5646402

Group No. 1140486  
WA

DUP-2 Grab Water Sample  
Facility# 211577 Job# 386765  
631 Queen Anne North - Seattle, WA

Collected: 04/14/2009 by ML

Account Number: 11260

Submitted: 04/15/2009 09:10  
Reported: 04/27/2009 at 11:20  
Discard: 05/28/2009

Chevron  
6001 Bollinger Canyon Road  
L4310  
San Ramon CA 94583

631D2

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>SW-846 8260B</b>	<b>GC/MS Volatiles</b>		<b>ug/l</b>	<b>ug/l</b>	
06053	Benzene	71-43-2	3	0.5	1
06053	Ethylbenzene	100-41-4	N.D.	0.5	1
06053	Toluene	108-88-3	N.D.	0.5	1
06053	Xylene (Total)	1330-20-7	N.D.	0.5	1
<b>ECY 97-602 NWTPH-Gx</b>	<b>GC Volatiles</b>		<b>ug/l</b>	<b>ug/l</b>	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1

### General Sample Comments

State of Washington Lab Certification No. C259

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

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	Z091113AA	04/22/2009 05:30	Michael A Ziegler	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z091113AA	04/22/2009 05:30	Michael A Ziegler	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09107B20A	04/18/2009 22:48	Fanella S Zamcho	1
01146	GC VOA Water Prep	SW-846 5030B	1	09107B20A	04/18/2009 22:48	Fanella S Zamcho	1

Lancaster Laboratories Sample No. WW 5646403

Group No. 1140486

WA

FB-2 Grab Water Sample

Facility# 211577 Job# 386765

631 Queen Anne North - Seattle, WA

Collected: 04/14/2009 by ML

Account Number: 11260

Submitted: 04/15/2009 09:10

Chevron

Reported: 04/27/2009 at 11:20

6001 Bollinger Canyon Road

Discard: 05/28/2009

14310

San Ramon CA 94583

631F2

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846	8260B	GC/MS Volatiles	ug/l	ug/l	
06053	Benzene	71-43-2	N.D.	0.5	1
06053	Ethylbenzene	100-41-4	N.D.	0.5	1
06053	Toluene	108-88-3	N.D.	0.5	1
06053	Xylene (Total)	1330-20-7	N.D.	0.5	1
ECY 97-602	NWTPH-Gx	GC Volatiles	ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1

### General Sample Comments

State of Washington Lab Certification No. C259

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

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	Z091113AA	04/22/2009 05:55	Michael A Ziegler	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z091113AA	04/22/2009 05:55	Michael A Ziegler	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09107B20A	04/18/2009 18:49	Fanella S Zamcho	1
01146	GC VOA Water Prep	SW-846 5030B	1	09107B20A	04/18/2009 18:49	Fanella S Zamcho	1

## Quality Control Summary

 Client Name: Chevron  
 Reported: 04/27/09 at 11:20 AM

Group Number: 1140486

Matrix QC may not be reported if 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.

### Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: F091102AA	Sample number(s): 5646392-5646398							
Benzene	N.D.	0.5	ug/l	91		80-116		
Ethylbenzene	N.D.	0.5	ug/l	88		80-113		
Toluene	N.D.	0.5	ug/l	90		80-115		
Xylene (Total)	N.D.	0.5	ug/l	93		81-114		
Batch number: Z091113AA	Sample number(s): 5646399-5646403							
Benzene	N.D.	0.5	ug/l	96		80-116		
Ethylbenzene	N.D.	0.5	ug/l	98		80-113		
Toluene	N.D.	0.5	ug/l	101		80-115		
Xylene (Total)	N.D.	0.5	ug/l	98		81-114		
Batch number: 09107B20A	Sample number(s): 5646392, 5646394-5646400, 5646402-5646403							
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	100	100	75-135	0	30
Batch number: 09107B20B	Sample number(s): 5646393							
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	100	100	75-135	0	30
Batch number: 09110D20A	Sample number(s): 5646401							
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	91	100	75-135	10	30
Batch number: 091110007A	Sample number(s): 5646393-5646401							
DRO C12-C24 w/Si Gel	N.D.	30.	ug/l	74	66	61-106	11	20
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					
Batch number: 091111848001	Sample number(s): 5646394-5646397, 5646399							
Iron	N.D.	52.2	ug/l	104		90-112		
Manganese	N.D.	0.84	ug/l	100		90-110		
Batch number: 09105196602A	Sample number(s): 5646394-5646397, 5646399							
Nitrate Nitrogen	N.D.	50.	ug/l	100		90-110		
Nitrite Nitrogen	N.D.	80.	ug/l	98		90-110		
Sulfate	N.D.	300.	ug/l	98		89-110		
Batch number: 09110020201A	Sample number(s): 5646394-5646397, 5646399							
Alkalinity to pH 4.5	N.D.	460.	ug/l as CaCO3	100		98-103		
Batch number: 09110023001A	Sample number(s): 5646394-5646397, 5646399							
Sulfide	N.D.	54.	ug/l	100		90-110		
Batch number: 09110834401A	Sample number(s): 5646394-5646397, 5646399							
Ferrous Iron	N.D.	10.	ug/l	100		92-105		

\*- 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: 04/27/09 at 11:20 AM

Group Number: 1140486

### 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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: F091102AA	Sample number(s): 5646392-5646398 UNSPK: P647665								
Benzene	98	99	80-126	1	30				
Ethylbenzene	94	93	77-125	1	30				
Toluene	96	96	80-125	0	30				
Xylene (Total)	97	97	79-125	0	30				
Batch number: Z091113AA	Sample number(s): 5646399-5646403 UNSPK: P646852								
Benzene	104	103	80-126	1	30				
Ethylbenzene	107	107	77-125	0	30				
Toluene	106	107	80-125	0	30				
Xylene (Total)	104	105	79-125	0	30				
Batch number: 09107B20A NWTPH-Gx water C7-C12	Sample number(s): 5646392,5646394-5646400,5646402-5646403 UNSPK: 5646396								
	127		48-140						
Batch number: 09107B20B NWTPH-Gx water C7-C12	Sample number(s): 5646393 UNSPK: 5646396								
	127		48-140						
Batch number: 09110D20A NWTPH-Gx water C7-C12	Sample number(s): 5646401 UNSPK: P648904								
	105		48-140						
Batch number: 091111848001	Sample number(s): 5646394-5646397,5646399 UNSPK: P647561 BKG: P647561								
Iron	167 (2)	194 (2)	75-125	1	20	31,200	31,600	1	20
Manganese	443 (2)	305 (2)	75-125	2	20	37,000	37,100	0	20
Batch number: 09105196602A	Sample number(s): 5646394-5646397,5646399 UNSPK: P646767 BKG: P646767								
Nitrate Nitrogen	108		90-110			1,300	1,300	0 (1)	20
Nitrite Nitrogen	100		90-110			N.D.	N.D.	0 (1)	20
Sulfate	129*		90-110			132,000	133,000	1 (1)	20
Batch number: 09110020201A	Sample number(s): 5646394-5646397,5646399 UNSPK: 5646394 BKG: 5646394								
Alkalinity to pH 4.5	99	99	64-130	0	2	29,100	28,700	1	4
Alkalinity to pH 8.3						N.D.	N.D.	0 (1)	4
Batch number: 09110023001A	Sample number(s): 5646394-5646397,5646399 UNSPK: P646362 BKG: P646362								
Sulfide	104	104	35-169	0	18	2,700	2,700	0	7
Batch number: 09110834401A	Sample number(s): 5646394-5646397,5646399 UNSPK: P643761 BKG: P643761								
Ferrous Iron	105	113	66-130	6	6	6,800	6,800	0	10

### 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: NWTPH-Gx water C7-C12  
 Batch number: 09107B20A  
 Trifluorotoluene-F

\*- 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: 04/27/09 at 11:20 AM

Group Number: 1140486

### Surrogate Quality Control

5646392	97
5646394	99
5646395	97
5646396	97
5646397	108
5646398	104
5646399	98
5646400	97
5646402	100
5646403	96
Blank	97
LCS	115
LCSD	116
MS	128

Limits: 63-135

Analysis Name: NWTPH-Gx water C7-C12  
Batch number: 09107B20B  
Trifluorotoluene-F

5646393	97
Blank	97
LCS	115
LCSD	116
MS	128

Limits: 63-135

Analysis Name: NWTPH-Gx water C7-C12  
Batch number: 09110D20A  
Trifluorotoluene-F

5646401	97
Blank	96
LCS	115
LCSD	117
MS	133

Limits: 63-135

Analysis Name: NWTPH-Dx water w/Si Gel  
Batch number: 091110007A  
Orthoterphenyl

5646393	61
5646394	108
5646395	97
5646396	94
5646397	89
5646398	115
5646399	94
5646400	91
5646401	95
Blank	93
LCS	126
LCSD	111

\*- 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: 04/27/09 at 11:20 AM

Group Number: 1140486

### Surrogate Quality Control

Limits: 50-150

Analysis Name: BTEX by 8260B  
Batch number: F091102AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5646392	92	91	81	86
5646393	93	91	83	94
5646394	92	90	82	85
5646395	93	93	84	87
5646396	90	88	85	87
5646397	91	91	86	89
5646398	93	91	87	88
Blank	90	86	81	87
LCS	90	85	82	90
MS	92	89	83	93
MSD	93	92	82	93

Limits: 80-116                      77-113                      80-113                      78-113

Analysis Name: BTEX by 8260B  
Batch number: Z091113AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5646399	92	88	92	85
5646400	93	91	92	84
5646401	93	90	91	84
5646402	92	89	92	85
5646403	95	90	92	84
Blank	93	89	92	84
LCS	91	89	91	87
MS	92	88	91	88
MSD	91	89	92	89

Limits: 80-116                      77-113                      80-113                      78-113

\*- 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.



## Lancaster Laboratories Explanation of Symbols and Abbreviations

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

<b>N.D.</b>	none detected	<b>BMQL</b>	Below Minimum Quantitation Level
<b>TNTC</b>	Too Numerous To Count	<b>MPN</b>	Most Probable Number
<b>IU</b>	International Units	<b>CP Units</b>	cobalt-chloroplatinate units
<b>umhos/cm</b>	micromhos/cm	<b>NTU</b>	nephelometric turbidity units
<b>C</b>	degrees Celsius	<b>F</b>	degrees Fahrenheit
<b>Cal</b>	(diet) calories	<b>lb.</b>	pound(s)
<b>meq</b>	milliequivalents	<b>kg</b>	kilogram(s)
<b>g</b>	gram(s)	<b>mg</b>	milligram(s)
<b>ug</b>	microgram(s)	<b>l</b>	liter(s)
<b>ml</b>	milliliter(s)	<b>ul</b>	microliter(s)
<b>m3</b>	cubic meter(s)	<b>fib &gt;5 um/ml</b>	fibers greater than 5 microns in length per ml
<b>&lt;</b>	less than – The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
<b>&gt;</b>	greater than		
<b>ppm</b>	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 of gas per liter of gas.		
<b>ppb</b>	parts per billion		
<b>Dry weight basis</b>	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.		

### U.S. EPA data qualifiers:

Organic Qualifiers	Inorganic Qualifiers
<b>A</b> TIC is a possible aldol-condensation product	<b>B</b> Value is <CRDL, but ≥IDL
<b>B</b> Analyte was also detected in the blank	<b>E</b> Estimated due to interference
<b>C</b> Pesticide result confirmed by GC/MS	<b>M</b> Duplicate injection precision not met
<b>D</b> Compound quantitated on a diluted sample	<b>N</b> Spike amount not within control limits
<b>E</b> Concentration exceeds the calibration range of the instrument	<b>S</b> Method of standard additions (MSA) used for calculation
<b>J</b> Estimated value	<b>U</b> Compound was not detected
<b>N</b> Presumptive evidence of a compound (TICs only)	<b>W</b> Post digestion spike out of control limits
<b>P</b> Concentration difference between primary and confirmation columns >25%	<b>*</b> Duplicate analysis not within control limits
<b>U</b> Compound was not detected	<b>+</b> Correlation coefficient for MSA <0.995
<b>X,Y,Z</b> Defined in case narrative	

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

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.

**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 LANCASTER LABORATORIES 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 LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES 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 Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions of Lancaster Laboratories and we hereby object to any conflicting terms contained in any acceptance or order submitted by client.

# Chevron Northwest Region Analysis Request/Chain of Custody



For Lancaster Laboratories use only  
 Acct #: 11260 Sample #: 51047559-72

SCR#: \_\_\_\_\_  
**Group # 1140727**

Facility #: SS#211577-OML G-R#386765  
 Site Address: 631 Queen Anne North, SEATTLE, WA  
 Chevron PM: OS Lead Consultant: SAICPC  
 Consultant/Office: G-R, Inc., 6747 Sierra Court, Suite J, Dublin, CA 94568  
 Consultant Prj. Mgr.: Deanna L. Harding (deanna@grinc.com)  
 Consultant Phone #: 925-551-7555 Fax #: 925-551-7899  
 Sampler: Mike Lombard  
 Service Order #: \_\_\_\_\_  Non SAR:

### Analyses Requested

Matrix	Preservation Codes		Total Number of Containers	Analyses Requested										
	Potable	NPDES		8260	8260	8260	8260	8260	8260	8260	8260	8260	8260	8260
Soil	<input type="checkbox"/>	<input 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"/>
Water	<input type="checkbox"/>	<input 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"/>
Oil	<input type="checkbox"/>	<input 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"/>
Air	<input type="checkbox"/>	<input 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"/>

**Preservative Codes**  
 H = HCl      T = Thiosulfate  
 N = HNO<sub>3</sub>    B = NaOH  
 S = H<sub>2</sub>SO<sub>4</sub>    O = Other

- J value reporting needed
- Must meet lowest detection limits possible for 8260 compounds
- 8021 MTBE Confirmation
  - Confirm MTBE + Naphthalene
  - Confirm highest hit by 8260
  - Confirm all hits by 8260
  - Run \_\_\_ oxy s on highest hit
  - Run \_\_\_ oxy s on all hits

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Oil	Air
<u>QA</u>	<u>4-15-09</u>		<input checked="" type="checkbox"/>					
<u>MW-6</u>		<u>1230</u>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<u>MW-9</u>		<u>1140</u>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<u>MW-10</u>		<u>1500</u>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<u>MW-30</u>		<u>1000</u>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<u>MW-33</u>		<u>0950</u>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<u>MW-34</u>		<u>0840</u>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<u>MW-35</u>		<u>0900</u>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<u>DPE-5</u>		<u>1355</u>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<u>DPE-6</u>		<u>1045</u>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<u>DUP-1</u>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<u>DUP-3</u>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

**Comments / Remarks**  
SHORT HOLD SAMPLES

**Turnaround Time Requested (TAT) (please circle)**  
 STD. TAT    72 hour    48 hour  
 24 hour      4 day        5 day

**Data Package Options (please circle if required)**    **EDF/EDD**  
 QC Summary                    Type I - Full  
 Type VI (Raw Data)          Disk / EDD  
 WIP (RWQCB)                 Standard Format  
 Disk                                Other.

Relinquished by: <u>[Signature]</u>	Date: <u>4-15-09</u>	Time: <u>1700</u>	Received by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____	Received by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____	Received by: _____	Date: _____	Time: _____
Relinquished by Commercial Carrier: <u>FedEx</u>	UPS	Other _____	Received by: <u>[Signature]</u>	Date: <u>4/16/09</u>	Time: <u>915</u>
Temperature Upon Receipt: <u>15.4.9</u> °C			Custody Seals Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		



## ANALYTICAL RESULTS

Prepared for:

Chevron  
6001 Bollinger Canyon Road  
L4310

San Ramon CA 94586

925-842-8582

RECEIVED

MAY 05 2009

SETTLER-RYAN INC.  
GENERAL CONTRACTORS

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

May 05, 2009

SAMPLE GROUP

The sample group for this submittal is 1140727. Samples arrived at the laboratory on Thursday, April 16, 2009. The PO# for this group is 0015040041 and the release number is SKANCE.

<u>Client Description</u>	<u>Lancaster Labs Number</u>
QA Water Sample	5647559
MW-6 Grab Water Sample	5647560
MW-9 Grab Water Sample	5647561
MW-10 Grab Water Sample	5647562
MW-30 Grab Water Sample	5647563
MW-33 Grab Water Sample	5647564
MW-34 Grab Water Sample	5647565
MW-35 Grab Water Sample	5647566
DPE-5 Grab Water Sample	5647567
DPE-6 Grab Water Sample	5647568
DUP-1 Grab Water Sample	5647569
DUP-3 Grab Water Sample	5647570
FB-1 Grab Water Sample	5647571
FB-3 Grab Water Sample	5647572

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Chronicle.



## ***Analysis Report***

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • [www.lancasterlabs.com](http://www.lancasterlabs.com)

ELECTRONIC SAIC c/o Gettler-Ryan  
COPY TO

Attn: Cheryl Hansen

Questions? Contact your Client Services Representative  
Jill M Parker at (717) 656-2300

Respectfully Submitted,

A handwritten signature in cursive script that reads "Robert Heisey".

Robert Heisey  
Senior Specialist



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2881 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5647559

Group No. 1140727  
WA

QA Water Sample  
Facility# 211577 Job# 386765  
631 Queen Anne North - Seattle, WA

Collected: 04/15/2009

Account Number: 11260

Submitted: 04/16/2009 09:15  
Reported: 05/05/2009 at 13:22  
Discard: 06/05/2009

Chevron  
6001 Bollinger Canyon Road  
L4310  
San Ramon CA 94583

631-Q

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 8260B	GC/MS Volatiles		ug/l	ug/l	
06053	Benzene	71-43-2	N.D.	0.5	1
06053	Ethylbenzene	100-41-4	N.D.	0.5	1
06053	Toluene	108-88-3	N.D.	0.5	1
06053	Xylene (Total)	1330-20-7	N.D.	0.5	1
ECY 97-602 NWTPH-Gx	GC Volatiles		ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1

### General Sample Comments

State of Washington Lab Certification No. C259

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

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	P091112AA	04/21/2009 12:32	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P091112AA	04/21/2009 12:32	Daniel H Heller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09107B20A	04/18/2009 19:10	Fanella S Zamcho	1
01146	GC VOA Water Prep	SW-846 5030B	1	09107B20A	04/18/2009 19:10	Fanella S Zamcho	1



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5647560

Group No. 1140727  
WA

MW-6 Grab Water Sample  
Facility# 211577 Job# 386765  
631 Queen Anne North - Seattle, WA

Collected: 04/15/2009 12:30 by ML

Account Number: 11260

Submitted: 04/16/2009 09:15  
Reported: 05/05/2009 at 13:22  
Discard: 06/05/2009

Chevron  
6001 Bollinger Canyon Road  
L4310  
San Ramon CA 94583

631M6

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>SW-846 8260B</b>	<b>GC/MS Volatiles</b>		ug/l	ug/l	
06053	Benzene	71-43-2	31	0.5	1
06053	Ethylbenzene	100-41-4	N.D.	0.5	1
06053	Toluene	108-88-3	0.8	0.5	1
06053	Xylene (Total)	1330-20-7	2	0.5	1
<b>ECY 97-602 NWTPH-Gx</b>	<b>GC Volatiles</b>		ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	1,100	50	1
<b>ECY 97-602 NWTPH-Dx modified</b>	<b>GC Extractable TPH w/Si Gel</b>		ug/l	ug/l	
02211	DRO C12-C24 w/Si Gel	n.a.	26,000	280	10
02211	HRO C24-C40 w/Si Gel	n.a.	3,000	660	10
<b>SW-846 6010B</b>	<b>Metals</b>		ug/l	ug/l	
01754	Iron	7439-89-6	8,860	52.2	1
07058	Manganese	7439-96-5	14,800	4.2	5
<b>EPA 300.0</b>	<b>Wet Chemistry</b>		ug/l	ug/l	
00368	Nitrate Nitrogen	14797-55-8	280	250	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	400	5
00228	Sulfate	14808-79-8	248,000	15,000	50
<b>SM20 2320 B</b>	<b>Wet Chemistry</b>		ug/l as CaCO3	ug/l as CaCO3	
00202	Alkalinity to pH 4.5	n.a.	298,000	460	1
00201	Alkalinity to pH 8.3	n.a.	N.D.	460	1
<b>SM20 3500 Fe B modified</b>	<b>Wet Chemistry</b>		ug/l	ug/l	
08344	Ferrous Iron	n.a.	3,500	100	10
<b>SM20 4500 S2 D</b>	<b>Wet Chemistry</b>		ug/l	ug/l	
00230	Sulfide	18496-25-8	N.D.	54	1

### General Sample Comments

State of Washington Lab Certification No. C259  
The bottles for Dx were collected 04/16/09 @ 1145 by ML.  
The bottles were received at the laboratory on 04/17/09 @ 0900.

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



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-658-2300 Fax: 717-856-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5647560

Group No. 1140727  
WA

MW-6 Grab Water Sample

Facility# 211577 Job# 386765  
631 Queen Anne North - Seattle, WA

Collected: 04/15/2009 12:30 by ML

Account Number: 11260

Submitted: 04/16/2009 09:15

Chevron

Reported: 05/05/2009 at 13:22

6001 Bollinger Canyon Road

Discard: 06/05/2009

L4310

San Ramon CA 94583

631M6

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	P091112AA	04/21/2009 12:52	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P091112AA	04/21/2009 12:52	Daniel H Heller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09107B20A	04/18/2009 23:10	Fanella S Zamcho	1
01146	GC VOA Water Prep	SW-846 5030B	1	09107B20A	04/18/2009 23:10	Fanella S Zamcho	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	091140016A	04/28/2009 05:49	Diane V Do	10
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	2	091140016A	04/25/2009 09:30	Cynthia J Salvatori	1
01754	Iron	SW-846 6010B	1	091111848001	04/22/2009 09:51	Joanne M Gates	1
07058	Manganese	SW-846 6010B	1	091111848001	04/22/2009 13:05	Joanne M Gates	5
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	091111848001	04/21/2009 19:30	Annamaria Stipkovits	1
00368	Nitrate Nitrogen	EPA 300.0	1	09106196602A	04/17/2009 13:58	Nicole M Kepley	5
01506	Nitrite Nitrogen	EPA 300.0	1	09106196602A	04/17/2009 01:05	Ashley M Heckman	5
00228	Sulfate	EPA 300.0	1	09106196602A	04/22/2009 09:24	Ashley M Heckman	50
00202	Alkalinity to pH 4.5	SM20 2320 B	1	09112020201A	04/22/2009 17:06	Geraldine C Smith	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	09112020201A	04/22/2009 17:06	Geraldine C Smith	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	09110834401A	04/20/2009 15:45	Michelle L Lalli	10
00230	Sulfide	SM20 4500 S2 D	1	09110023001A	04/20/2009 21:24	Geraldine C Smith	1





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-658-2300 Fax: 717-658-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5647561

Group No. 1140727

MW-9 Grab Water Sample

WA

Facility# 211577 Job# 386765

631 Queen Anne North - Seattle, WA

Collected: 04/15/2009 11:40 by ML

Account Number: 11260

Submitted: 04/16/2009 09:15

Chevron

Reported: 05/05/2009 at 13:22

6001 Bollinger Canyon Road

Discard: 06/05/2009

L4310

San Ramon CA 94583

631M9

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>SW-846 8260B</b>	<b>GC/MS Volatiles</b>		ug/l	ug/l	
06053	Benzene	71-43-2	0.7	0.5	1
06053	Ethylbenzene	100-41-4	N.D.	0.5	1
06053	Toluene	108-88-3	N.D.	0.5	1
06053	Xylene (Total)	1330-20-7	N.D.	0.5	1
<b>ECY 97-602 NWTPH-Gx</b>	<b>GC Volatiles</b>		ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	160	50	1
<b>ECY 97-602 NWTPH-Dx modified</b>	<b>GC Extractable TPH w/Si Gel</b>		ug/l	ug/l	
02211	DRO C12-C24 w/Si Gel	n.a.	1,100	29	1
02211	HRO C24-C40 w/Si Gel	n.a.	69	67	1
<b>SW-846 6010B</b>	<b>Metals</b>		ug/l	ug/l	
01754	Iron	7439-89-6	31,200	52.2	1
07058	Manganese	7439-96-5	37,000	4.2	5
<b>EPA 300.0</b>	<b>Wet Chemistry</b>		ug/l	ug/l	
00368	Nitrate Nitrogen	14797-55-8	N.D.	250	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	400	5
00228	Sulfate	14808-79-8	242,000	6,000	20
<b>SM20 2320 B</b>	<b>Wet Chemistry</b>		ug/l as CaCO3	ug/l as CaCO3	
00202	Alkalinity to pH 4.5	n.a.	354,000	460	1
00201	Alkalinity to pH 8.3	n.a.	N.D.	460	1
<b>SM20 3500 Fe B modified</b>	<b>Wet Chemistry</b>		ug/l	ug/l	
08344	Ferrous Iron	n.a.	30,200	500	50
<b>SM20 4500 S2 D</b>	<b>Wet Chemistry</b>		ug/l	ug/l	
00230	Sulfide	18496-25-8	110	54	1

### General Sample Comments

State of Washington Lab Certification No. C259

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

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
---------	---------------	--------	--------	--------	------------------------	---------	-----------------



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5647561

Group No. 1140727  
WA

MW-9 Grab Water Sample  
Facility# 211577 Job# 386765  
631 Queen Anne North - Seattle, WA

Collected: 04/15/2009 11:40 by ML

Account Number: 11260

Submitted: 04/16/2009 09:15  
Reported: 05/05/2009 at 13:22  
Discard: 06/05/2009

Chevron  
6001 Bollinger Canyon Road  
L4310  
San Ramon CA 94583

631M9

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	P091112AA	04/21/2009 13:13	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P091112AA	04/21/2009 13:13	Daniel H Heller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09107B20A	04/18/2009 23:32	Fanella S Zamcho	1
01146	GC VOA Water Prep	SW-846 5030B	1	09107B20A	04/18/2009 23:32	Fanella S Zamcho	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	091140016A	04/28/2009 04:07	Diane V Do	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	2	091140016A	04/25/2009 09:30	Cynthia J Salvatori	1
01754	Iron	SW-846 6010B	1	091111848001	04/22/2009 07:46	Joanne M Gates	1
07058	Manganese	SW-846 6010B	1	091111848001	04/22/2009 12:40	Joanne M Gates	5
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	091111848001	04/21/2009 19:30	Annamaria Stipkovits	1
00368	Nitrate Nitrogen	EPA 300.0	1	09106196602B	04/17/2009 14:13	Nicole M Kepley	5
01506	Nitrite Nitrogen	EPA 300.0	1	09106196602B	04/17/2009 01:21	Ashley M Heckman	5
00228	Sulfate	EPA 300.0	2	09106196602B	04/23/2009 15:53	Ashley M Heckman	20
00202	Alkalinity to pH 4.5	SM20 2320 B	1	09112020201A	04/22/2009 17:06	Geraldine C Smith	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	09112020201A	04/22/2009 17:06	Geraldine C Smith	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	09110834401A	04/20/2009 15:45	Michelle L Lalli	50
00230	Sulfide	SM20 4500 S2 D	1	09110023001A	04/20/2009 21:24	Geraldine C Smith	1



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-658-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5647562

Group No. 1140727

MW-10 Grab Water Sample

WA

Facility# 211577 Job# 386765

631 Queen Anne North - Seattle, WA

Collected: 04/15/2009 15:00 by ML

Account Number: 11260

Submitted: 04/16/2009 09:15

Chevron

Reported: 05/05/2009 at 13:22

6001 Bollinger Canyon Road

Discard: 06/05/2009

L4310

San Ramon CA 94583

63110

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>SW-846 8260B</b>	<b>GC/MS Volatiles</b>		<b>ug/l</b>	<b>ug/l</b>	
06053	Benzene	71-43-2	N.D.	0.5	1
06053	Ethylbenzene	100-41-4	N.D.	0.5	1
06053	Toluene	108-88-3	N.D.	0.5	1
06053	Xylene (Total)	1330-20-7	N.D.	0.5	1
<b>ECY 97-602 NWTPH-Gx</b>	<b>GC Volatiles</b>		<b>ug/l</b>	<b>ug/l</b>	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
<b>ECY 97-602 NWTPH-Dx modified</b>	<b>GC Extractable TPH w/Si Gel</b>		<b>ug/l</b>	<b>ug/l</b>	
02211	DRO C12-C24 w/Si Gel	n.a.	N.D.	29	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	67	1
<b>SW-846 6010B</b>	<b>Metals</b>		<b>ug/l</b>	<b>ug/l</b>	
01754	Iron	7439-89-6	575	52.2	1
07058	Manganese	7439-96-5	2,860	0.84	1
<b>EPA 300.0</b>	<b>Wet Chemistry</b>		<b>ug/l</b>	<b>ug/l</b>	
00368	Nitrate Nitrogen	14797-55-8	2,000	250	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	400	5
00228	Sulfate	14808-79-8	64,400	1,500	5
<b>SM20 2320 B</b>	<b>Wet Chemistry</b>		<b>ug/l as CaCO3</b>	<b>ug/l as CaCO3</b>	
00202	Alkalinity to pH 4.5	n.a.	192,000	460	1
00201	Alkalinity to pH 8.3	n.a.	N.D.	460	1
<b>SM20 3500 Fe B modified</b>	<b>Wet Chemistry</b>		<b>ug/l</b>	<b>ug/l</b>	
08344	Ferrous Iron	n.a.	510	10	1
<b>SM20 4500 S2 D</b>	<b>Wet Chemistry</b>		<b>ug/l</b>	<b>ug/l</b>	
00230	Sulfide	18496-25-8	N.D.	54	1

### General Sample Comments

State of Washington Lab Certification No. C259

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

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial# Batch#	Analysis Date and Time	Analyst	Dilution Factor
---------	---------------	--------	---------------	------------------------	---------	-----------------



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5647562

Group No. 1140727

WA

MW-10 Grab Water Sample

Facility# 211577 Job# 386765

631 Queen Anne North - Seattle, WA

Collected: 04/15/2009 15:00 by ML

Account Number: 11260

Submitted: 04/16/2009 09:15

Chevron

Reported: 05/05/2009 at 13:22

6001 Bollinger Canyon Road

Discard: 06/05/2009

L4310

San Ramon CA 94583

63110

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	P091112AA	04/21/2009 13:34	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P091112AA	04/21/2009 13:34	Daniel H Heller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09107B20A	04/18/2009 23:53	Fanella S Zamcho	1
01146	GC VOA Water Prep	SW-846 5030B	1	09107B20A	04/18/2009 23:53	Fanella S Zamcho	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	091140016A	04/28/2009 02:25	Diane V Do	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	2	091140016A	04/25/2009 09:30	Cynthia J Salvatori	1
01754	Iron	SW-846 6010B	1	091111848003	04/22/2009 08:47	John W Yanzuk II	1
07058	Manganese	SW-846 6010B	1	091111848003	04/22/2009 08:47	John W Yanzuk II	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	091111848003	04/21/2009 19:30	Annamaria Stipkovits	1
00368	Nitrate Nitrogen	EPA 300.0	1	09106196602B	04/17/2009 15:46	Nicole M Kepley	5
01506	Nitrite Nitrogen	EPA 300.0	1	09106196602B	04/17/2009 02:07	Ashley M Heckman	5
00228	Sulfate	EPA 300.0	1	09106196602B	04/17/2009 02:07	Ashley M Heckman	5
00202	Alkalinity to pH 4.5	SM20 2320 B	1	09112020201A	04/22/2009 17:06	Geraldine C Smith	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	09112020201A	04/22/2009 17:06	Geraldine C Smith	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	09110834401A	04/20/2009 15:45	Michelle L Lalli	1
00230	Sulfide	SM20 4500 S2 D	1	09110023001A	04/20/2009 21:24	Geraldine C Smith	1

Lancaster Laboratories Sample No. WW 5647563

Group No. 1140727

WA

MW-30 Grab Water Sample

Facility# 211577 Job# 386765

631 Queen Anne North - Seattle, WA

Collected: 04/15/2009 10:00 by ML

Account Number: 11260

Submitted: 04/16/2009 09:15

Chevron

Reported: 05/05/2009 at 13:22

6001 Bollinger Canyon Road

Discard: 06/05/2009

L4310

San Ramon CA 94583

63130

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>SW-846 8260B</b>	<b>GC/MS Volatiles</b>		ug/l	ug/l	
06053	Benzene	71-43-2	N.D.	0.5	1
06053	Ethylbenzene	100-41-4	N.D.	0.5	1
06053	Toluene	108-88-3	N.D.	0.5	1
06053	Xylene (Total)	1330-20-7	N.D.	0.5	1
<b>ECY 97-602 NWTPH-Gx</b>	<b>GC Volatiles</b>		ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
<b>ECY 97-602 NWTPH-Dx modified</b>	<b>GC Extractable TPH w/Si Gel</b>		ug/l	ug/l	
02211	DRO C12-C24 w/Si Gel	n.a.	N.D.	29	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	67	1
<b>SW-846 6010B</b>	<b>Metals</b>		ug/l	ug/l	
01754	Iron	7439-89-6	410	52.2	1
07058	Manganese	7439-96-5	174	0.84	1
<b>EPA 300.0</b>	<b>Wet Chemistry</b>		ug/l	ug/l	
00368	Nitrate Nitrogen	14797-55-8	4,800	250	5
This sample was originally analyzed within the 48 hour holding time for nitrate-nitrogen, however the continuing calibration standard bracketing the sample was not within specification. The analysis was repeated on 04/17/2009. The continuing calibration standard bracketing the sample on the second trial was within specification. The first trial result is being reported because it was analyzed within the holding time. The second trial result was 5,100 ug/L.					
01506	Nitrite Nitrogen	14797-65-0	N.D.	400	5
00228	Sulfate	14808-79-8	13,200	1,500	5
<b>SM20 2320 B</b>	<b>Wet Chemistry</b>		ug/l as CaCO3	ug/l as CaCO3	
00202	Alkalinity to pH 4.5	n.a.	225,000	460	1
00201	Alkalinity to pH 8.3	n.a.	N.D.	460	1
<b>SM20 3500 Fe B modified</b>	<b>Wet Chemistry</b>		ug/l	ug/l	
08344	Ferrous Iron	n.a.	N.D.	10	1
<b>SM20 4500 S2 D</b>	<b>Wet Chemistry</b>		ug/l	ug/l	
00230	Sulfide	18496-25-8	N.D.	54	1



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5647564

Group No. 1140727  
WA

MW-33 Grab Water Sample  
Facility# 211577 Job# 386765  
631 Queen Anne North - Seattle, WA

Collected: 04/15/2009 09:50 by ML

Account Number: 11260

Submitted: 04/16/2009 09:15  
Reported: 05/05/2009 at 13:22  
Discard: 06/05/2009

Chevron  
6001 Bollinger Canyon Road  
L4310  
San Ramon CA 94583

63133

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 8260B	GC/MS Volatiles		ug/l	ug/l	
06053	Benzene	71-43-2	2,500	25	50
06053	Ethylbenzene	100-41-4	110	3	5
06053	Toluene	108-88-3	73	3	5
06053	Xylene (Total)	1330-20-7	76	3	5
Preservation requirements were not met. The vial submitted for volatile analysis did not have a pH < 2 at the time of analysis. Due to the volatile nature of the analytes, it is not appropriate for the laboratory to adjust the pH at the time of sample receipt. The pH of this sample was pH = 5.					
ECY 97-602 NWTPH-Gx	GC Volatiles		ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	1,800	50	1
ECY 97-602 NWTPH-Dx modified	GC Extractable TPH w/Si Gel		ug/l	ug/l	
02211	DRO C12-C24 w/Si Gel	n.a.	330	29	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	68	1

### General Sample Comments

State of Washington Lab Certification No. C259

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

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	P091112AA	04/21/2009 14:14	Daniel H Heller	5
06053	BTEX by 8260B	SW-846 8260B	1	P091112AA	04/21/2009 14:34	Daniel H Heller	50
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P091112AA	04/21/2009 14:14	Daniel H Heller	5
01163	GC/MS VOA Water Prep	SW-846 5030B	2	P091112AA	04/21/2009 14:34	Daniel H Heller	50
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09107B20B	04/19/2009 20:31	Tyler O Griffin	1
01146	GC VOA Water Prep	SW-846 5030B	2	09107B20B	04/19/2009 20:31	Carrie E Youtzy	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	091140016A	04/28/2009 03:06	Diane V Do	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	2	091140016A	04/25/2009 09:30	Cynthia J Salvatori	1



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5647565

Group No. 1140727

WA

MW-34 Grab Water Sample

Facility# 211577 Job# 386765

631 Queen Anne North - Seattle, WA

Collected: 04/15/2009 08:40 by ML

Account Number: 11260

Submitted: 04/16/2009 09:15

Chevron

Reported: 05/05/2009 at 13:22

6001 Bollinger Canyon Road

Discard: 06/05/2009

L4310

San Ramon CA 94583

63134

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>SW-846 8260B</b>	<b>GC/MS Volatiles</b>		<b>ug/l</b>	<b>ug/l</b>	
06053	Benzene	71-43-2	N.D.	0.5	1
06053	Ethylbenzene	100-41-4	N.D.	0.5	1
06053	Toluene	108-88-3	N.D.	0.5	1
06053	Xylene (Total)	1330-20-7	N.D.	0.5	1
<b>ECY 97-602 NWTPH-Gx</b>	<b>GC Volatiles</b>		<b>ug/l</b>	<b>ug/l</b>	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
<b>ECY 97-602 NWTPH-Dx modified</b>	<b>GC Extractable TPH w/Si Gel</b>		<b>ug/l</b>	<b>ug/l</b>	
02211	DRO C12-C24 w/Si Gel	n.a.	N.D.	29	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	67	1
<b>SW-846 6010B</b>	<b>Metals</b>		<b>ug/l</b>	<b>ug/l</b>	
01754	Iron	7439-89-6	N.D.	52.2	1
07058	Manganese	7439-96-5	0.91	0.84	1
<b>EPA 300.0</b>	<b>Wet Chemistry</b>		<b>ug/l</b>	<b>ug/l</b>	
00368	Nitrate Nitrogen	14797-55-8	15,200	500	10
01506	Nitrite Nitrogen	14797-65-0	N.D.	400	5
00228	Sulfate	14808-79-8	47,400	1,500	5
<b>SM20 2320 B</b>	<b>Wet Chemistry</b>		<b>ug/l as CaCO3</b>	<b>ug/l as CaCO3</b>	
00202	Alkalinity to pH 4.5	n.a.	96,100	460	1
00201	Alkalinity to pH 8.3	n.a.	N.D.	460	1
<b>SM20 3500 Fe B modified</b>	<b>Wet Chemistry</b>		<b>ug/l</b>	<b>ug/l</b>	
08344	Ferrous Iron	n.a.	75	10	1
This sample was analyzed twice for ferrous iron. The result of the second analysis was 230 ug/L.					
<b>SM20 4500 S2 D</b>	<b>Wet Chemistry</b>		<b>ug/l</b>	<b>ug/l</b>	
00230	Sulfide	18496-25-8	N.D.	54	1

### General Sample Comments

State of Washington Lab Certification No. C259

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



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-658-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5647565

Group No. 1140727

WA

MW-34 Grab Water Sample

Facility# 211577 Job# 386765

631 Queen Anne North - Seattle, WA

Collected: 04/15/2009 08:40 by ML

Account Number: 11260

Submitted: 04/16/2009 09:15

Chevron

Reported: 05/05/2009 at 13:22

6001 Bollinger Canyon Road

Discard: 06/05/2009

L4310

San Ramon CA 94583

63134

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis		Analyst	Dilution Factor
					Date	Time		
06053	BTEX by 8260B	SW-846 8260B	1	P091112AA	04/21/2009	14:55	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P091112AA	04/21/2009	14:55	Daniel H Heller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09107B20A	04/19/2009	00:59	Fanella S Zamcho	1
01146	GC VOA Water Prep	SW-846 5030B	1	09107B20A	04/19/2009	00:59	Fanella S Zamcho	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	091140016A	04/28/2009	03:27	Diane V Do	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	2	091140016A	04/25/2009	09:30	Cynthia J Salvatori	1
01754	Iron	SW-846 6010B	1	091111848003	04/22/2009	09:04	John W Yanzuk II	1
07058	Manganese	SW-846 6010B	1	091111848003	04/22/2009	09:04	John W Yanzuk II	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	091111848003	04/21/2009	19:30	Annamaria Stipkovits	1
00368	Nitrate Nitrogen	EPA 300.0	1	09106196602B	04/17/2009	10:19	Nicole M Kepley	10
01506	Nitrite Nitrogen	EPA 300.0	1	09106196602B	04/17/2009	02:38	Ashley M Heckman	5
00228	Sulfate	EPA 300.0	1	09106196602B	04/17/2009	02:38	Ashley M Heckman	5
00202	Alkalinity to pH 4.5	SM20 2320 B	1	09112020201A	04/22/2009	17:06	Geraldine C Smith	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	09112020201A	04/22/2009	17:06	Geraldine C Smith	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	09112834401A	04/22/2009	15:30	Michelle L Lalli	1
00230	Sulfide	SM20 4500 S2 D	1	09110023001A	04/20/2009	21:24	Geraldine C Smith	1





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-658-2300 Fax: 717-658-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5647566

Group No. 1140727

WA

MW-35 Grab Water Sample

Facility# 211577 Job# 386765

631 Queen Anne North - Seattle, WA

Collected: 04/15/2009 09:00 by ML

Account Number: 11260

Submitted: 04/16/2009 09:15

Chevron

Reported: 05/05/2009 at 13:22

6001 Bollinger Canyon Road

Discard: 06/05/2009

L4310

San Ramon CA 94583

63135

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 8260B	GC/MS Volatiles		ug/l	ug/l	
06053	Benzene	71-43-2	100	0.5	1
06053	Ethylbenzene	100-41-4	N.D.	0.5	1
06053	Toluene	108-88-3	N.D.	0.5	1
06053	Xylene (Total)	1330-20-7	N.D.	0.5	1
ECY 97-602 NWTPH-Gx	GC Volatiles		ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	83	50	1
ECY 97-602 NWTPH-Dx modified	GC Extractable TPH w/Si Gel		ug/l	ug/l	
02211	DRO C12-C24 w/Si Gel	n.a.	120	29	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	68	1
SW-846 6010B	Metals		ug/l	ug/l	
01754	Iron	7439-89-6	21,300	52.2	1
07058	Manganese	7439-96-5	2,330	0.84	1
EPA 300.0	Wet Chemistry		ug/l	ug/l	
00368	Nitrate Nitrogen	14797-55-8	N.D.	250	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	400	5
00228	Sulfate	14808-79-8	21,700	1,500	5
SM20 2320 B	Wet Chemistry		ug/l as CaCO3	ug/l as CaCO3	
00202	Alkalinity to pH 4.5	n.a.	357,000	460	1
00201	Alkalinity to pH 8.3	n.a.	N.D.	460	1
SM20 3500 Fe B modified	Wet Chemistry		ug/l	ug/l	
08344	Ferrous Iron	n.a.	19,500	500	50
SM20 4500 S2 D	Wet Chemistry		ug/l	ug/l	
00230	Sulfide	18496-25-8	73	54	1

### General Sample Comments

State of Washington Lab Certification No. C259

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

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial# Batch#	Analysis Date and Time	Analyst	Dilution Factor
---------	---------------	--------	---------------	------------------------	---------	-----------------



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5647566

Group No. 1140727

WA

MW-35 Grab Water Sample

Facility# 211577 Job# 386765

631 Queen Anne North - Seattle, WA

Collected: 04/15/2009 09:00 by ML

Account Number: 11260

Submitted: 04/16/2009 09:15

Chevron

Reported: 05/05/2009 at 13:22

6001 Bollinger Canyon Road

Discard: 06/05/2009

L4310

San Ramon CA 94583

63135

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis		Analyst	Dilution Factor
					Date	Time		
06053	BTEX by 8260B	SW-846 8260B	1	P091112AA	04/21/2009	15:15	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P091112AA	04/21/2009	15:15	Daniel H Heller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09107B20A	04/19/2009	01:20	Fanella S Zamcho	1
01146	GC VOA Water Prep	SW-846 5030B	1	09107B20A	04/19/2009	01:20	Fanella S Zamcho	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	091140016A	04/28/2009	03:47	Diane V Do	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	2	091140016A	04/25/2009	09:30	Cynthia J Salvatori	1
01754	Iron	SW-846 6010B	1	091111848003	04/22/2009	09:09	John W Yanzuk II	1
07058	Manganese	SW-846 6010B	1	091111848003	04/22/2009	09:09	John W Yanzuk II	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	091111848003	04/21/2009	19:30	Annamaria Stipkovits	1
00368	Nitrate Nitrogen	EPA 300.0	1	09106196602B	04/17/2009	10:35	Nicole M Kepley	5
01506	Nitrite Nitrogen	EPA 300.0	1	09106196602B	04/17/2009	02:53	Ashley M Heckman	5
00228	Sulfate	EPA 300.0	1	09106196602B	04/17/2009	02:53	Ashley M Heckman	5
00202	Alkalinity to pH 4.5	SM20 2320 B	1	09112020201A	04/22/2009	17:06	Geraldine C Smith	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	09112020201A	04/22/2009	17:06	Geraldine C Smith	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	09112834401A	04/22/2009	15:30	Michelle L Lalli	50
00230	Sulfide	SM20 4500 S2 D	1	09110023001A	04/20/2009	21:24	Geraldine C Smith	1



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-658-2300 Fax: 717-658-2881 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5647567

Group No. 1140727  
WA

DPE-5 Grab Water Sample

Facility# 211577 Job# 386765  
631 Queen Anne North - Seattle, WA

Collected: 04/15/2009 13:55 by ML

Account Number: 11260

Submitted: 04/16/2009 09:15

Reported: 05/05/2009 at 13:22

Discard: 06/05/2009

Chevron

6001 Bollinger Canyon Road  
L4310  
San Ramon CA 94583

631D5

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>SW-846 8260B</b>	<b>GC/MS Volatiles</b>		<b>ug/l</b>	<b>ug/l</b>	
06053	Benzene	71-43-2	2	0.5	1
06053	Ethylbenzene	100-41-4	1	0.5	1
06053	Toluene	108-88-3	N.D.	0.5	1
06053	Xylene (Total)	1330-20-7	3	0.5	1
<b>ECY 97-602 NWTPH-Gx</b>	<b>GC Volatiles</b>		<b>ug/l</b>	<b>ug/l</b>	
08273	NWTPH-Gx water C7-C12	n.a.	110	50	1
<b>ECY 97-602 NWTPH-Dx modified</b>	<b>GC Extractable TPH w/Si Gel</b>		<b>ug/l</b>	<b>ug/l</b>	
02211	DRO C12-C24 w/Si Gel	n.a.	690	28	1
02211	HRO C24-C40 w/Si Gel	n.a.	83	66	1

### General Sample Comments

State of Washington Lab Certification No. C259

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

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	P091112AA	04/21/2009 15:35	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P091112AA	04/21/2009 15:35	Daniel H Heller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09110D20A	04/21/2009 21:27	Tyler O Griffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	09110D20A	04/21/2009 21:27	Tyler O Griffin	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	091140016A	04/28/2009 04:28	Diane V Do	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	2	091140016A	04/25/2009 09:30	Cynthia J Salvatori	1



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5647568

Group No. 1140727

WA

DPE-6 Grab Water Sample

Facility# 211577 Job# 386765

631 Queen Anne North - Seattle, WA

Collected: 04/15/2009 10:45 by ML

Account Number: 11260

Submitted: 04/16/2009 09:15

Chevron

Reported: 05/05/2009 at 13:22

6001 Bollinger Canyon Road

Discard: 06/05/2009

L4310

San Ramon CA 94583

631D6

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 8260B	GC/MS Volatiles		ug/l	ug/l	
06053	Benzene	71-43-2	100	0.5	1
06053	Ethylbenzene	100-41-4	16	0.5	1
06053	Toluene	108-88-3	6	0.5	1
06053	Xylene (Total)	1330-20-7	24	0.5	1
ECY 97-602 NWTPH-Gx	GC Volatiles		ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	900	50	1
ECY 97-602 NWTPH-Dx modified	GC Extractable TPH w/Si Gel		ug/l	ug/l	
02211	DRO C12-C24 w/Si Gel	n.a.	16,000	150	5
02211	HRO C24-C40 w/Si Gel	n.a.	880	350	5

### General Sample Comments

State of Washington Lab Certification No. C259

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

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	P091112AA	04/21/2009 15:56	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P091112AA	04/21/2009 15:56	Daniel H Heller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09110D20A	04/21/2009 21:48	Tyler O Griffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	09110D20A	04/21/2009 21:48	Tyler O Griffin	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	091140016A	04/28/2009 05:29	Diane V Do	5
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	2	091140016A	04/25/2009 09:30	Cynthia J Salvatori	1



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-858-2300 Fax: 717-858-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5647569

Group No. 1140727  
WA

DUP-1 Grab Water Sample  
Facility# 211577 Job# 386765  
631 Queen Anne North - Seattle, WA

Collected: 04/15/2009 by ML

Account Number: 11260

Submitted: 04/16/2009 09:15  
Reported: 05/05/2009 at 13:22  
Discard: 06/05/2009

Chevron  
6001 Bollinger Canyon Road  
L4310  
San Ramon CA 94583

631D1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846	8260B	GC/MS Volatiles	ug/l	ug/l	
06053	Benzene	71-43-2	30	0.5	1
06053	Ethylbenzene	100-41-4	2	0.5	1
06053	Toluene	108-88-3	0.8	0.5	1
06053	Xylene (Total)	1330-20-7	3	0.5	1
ECY 97-602	NWTPH-Gx	GC Volatiles	ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	1,000	50	1

### General Sample Comments

State of Washington Lab Certification No. C259

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

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	P091112AA	04/21/2009 16:16	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P091112AA	04/21/2009 16:16	Daniel H Heller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09110D20A	04/21/2009 22:10	Tyler O Griffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	09110D20A	04/21/2009 22:10	Tyler O Griffin	1



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5647570

Group No. 1140727  
WA

DUP-3 Grab Water Sample  
Facility# 211577 Job# 386765  
631 Queen Anne North - Seattle, WA

Collected: 04/15/2009 by ML

Account Number: 11260

Submitted: 04/16/2009 09:15  
Reported: 05/05/2009 at 13:22  
Discard: 06/05/2009

Chevron  
6001 Bollinger Canyon Road  
L4310  
San Ramon CA 94583

631D3

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 8260B	GC/MS Volatiles		ug/l	ug/l	
06053	Benzene	71-43-2	N.D.	0.5	1
06053	Ethylbenzene	100-41-4	N.D.	0.5	1
06053	Toluene	108-88-3	N.D.	0.5	1
06053	Xylene (Total)	1330-20-7	N.D.	0.5	1
ECY 97-602 NWTPH-Gx	GC Volatiles		ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1

### General Sample Comments

State of Washington Lab Certification No. C259

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

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	P091112AA	04/21/2009 16:36	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P091112AA	04/21/2009 16:36	Daniel H Heller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09110D20A	04/21/2009 22:32	Tyler O Griffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	09110D20A	04/21/2009 22:32	Tyler O Griffin	1



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5647571

Group No. 1140727

WA

FB-1 Grab Water Sample

Facility# 211577 Job# 386765

631 Queen Anne North - Seattle, WA

Collected: 04/15/2009 by ML

Account Number: 11260

Submitted: 04/16/2009 09:15

Chevron

Reported: 05/05/2009 at 13:22

6001 Bollinger Canyon Road

Discard: 06/05/2009

L4310

San Ramon CA 94583

631F1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846	8260B	GC/MS Volatiles	ug/l	ug/l	
06053	Benzene	71-43-2	N.D.	0.5	1
06053	Ethylbenzene	100-41-4	N.D.	0.5	1
06053	Toluene	108-88-3	N.D.	0.5	1
06053	Xylene (Total)	1330-20-7	N.D.	0.5	1

A surrogate recovery in the LCS associated with this sample is outside the QC limits. Since the individual spike recoveries are within the limits, the data is accepted.

ECY	97-602	NWTPH-Gx	GC Volatiles	ug/l	ug/l	
08273	NWTPH-Gx water	C7-C12	n.a.	N.D.	50	1

### General Sample Comments

State of Washington Lab Certification No. C259

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

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	F091101AA	04/20/2009 17:57	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F091101AA	04/20/2009 17:57	Anita M Dale	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09110D20A	04/21/2009 23:16	Tyler O Griffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	09110D20A	04/21/2009 23:16	Tyler O Griffin	1



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-658-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Lancaster Laboratories Sample No. WW 5647572

Group No. 1140727  
WA

FB-3 Grab Water Sample  
Facility# 211577 Job# 386765  
631 Queen Anne North - Seattle, WA

Collected: 04/15/2009 by ML

Account Number: 11260

Submitted: 04/16/2009 09:15  
Reported: 05/05/2009 at 13:22  
Discard: 06/05/2009

Chevron  
6001 Bollinger Canyon Road  
L4310  
San Ramon CA 94583

631F3

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846	8260B	GC/MS Volatiles	ug/l	ug/l	
06053	Benzene	71-43-2	N.D.	0.5	1
06053	Ethylbenzene	100-41-4	N.D.	0.5	1
06053	Toluene	108-88-3	N.D.	0.5	1
06053	Xylene (Total)	1330-20-7	N.D.	0.5	1
A surrogate recovery in the LCS associated with this sample is outside the QC limits. Since the individual spike recoveries are within the limits, the data is accepted.					
ECY 97-602	NWTPH-Gx	GC Volatiles	ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1

### General Sample Comments

State of Washington Lab Certification No. C259

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

### Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	F091101AA	04/20/2009 18:18	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F091101AA	04/20/2009 18:18	Anita M Dale	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	09110D20A	04/21/2009 23:38	Tyler O Griffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	09110D20A	04/21/2009 23:38	Tyler O Griffin	1



## Quality Control Summary

 Client Name: Chevron  
 Reported: 05/05/09 at 01:22 PM

Group Number: 1140727

Matrix QC may not be reported if 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.

### Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: P091101AA	Sample number(s): 5647571-5647572							
Benzene	N.D.	0.5	ug/l	93		80-116		
Ethylbenzene	N.D.	0.5	ug/l	89		80-113		
Toluene	N.D.	0.5	ug/l	91		80-115		
Xylene (Total)	N.D.	0.5	ug/l	94		81-114		
Batch number: P091112AA	Sample number(s): 5647559-5647570							
Benzene	N.D.	0.5	ug/l	95	97	80-116	3	30
Ethylbenzene	N.D.	0.5	ug/l	93	94	80-113	1	30
Toluene	N.D.	0.5	ug/l	94	94	80-115	0	30
Xylene (Total)	N.D.	0.5	ug/l	94	95	81-114	2	30
Batch number: 09107B20A	Sample number(s): 5647559-5647563, 5647565-5647566							
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	100	100	75-135	0	30
Batch number: 09107B20B	Sample number(s): 5647564							
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	100	100	75-135	0	30
Batch number: 09110D20A	Sample number(s): 5647567-5647572							
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	91	100	75-135	10	30
Batch number: 091140016A	Sample number(s): 5647560-5647568							
DRO C12-C24 w/Si Gel	N.D.	30.	ug/l	69	70	61-106	2	20
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					
Batch number: 091111848001	Sample number(s): 5647560-5647561							
Iron	N.D.	52.2	ug/l	104		90-112		
Manganese	N.D.	0.84	ug/l	100		90-110		
Batch number: 091111848003	Sample number(s): 5647562-5647563, 5647565-5647566							
Iron	N.D.	52.2	ug/l	102		90-112		
Manganese	N.D.	0.84	ug/l	104		90-110		
Batch number: 09106196602A	Sample number(s): 5647560							
Nitrate Nitrogen	N.D.	50.	ug/l	100		90-110		
Nitrite Nitrogen	N.D.	80.	ug/l	101		90-110		
Sulfate	N.D.	300.	ug/l	101		89-110		
Batch number: 09106196602B	Sample number(s): 5647561-5647563, 5647565-5647566							
Nitrate Nitrogen	N.D.	50.	ug/l	100		90-110		
Nitrite Nitrogen	N.D.	80.	ug/l	101		90-110		
Sulfate	N.D.	300.	ug/l	101		89-110		
Batch number: 09110023001A	Sample number(s): 5647560-5647563, 5647565-5647566							
Sulfide	N.D.	54.	ug/l	100		90-110		
Batch number: 09110834401A	Sample number(s): 5647560-5647563							

\*- 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: 05/05/09 at 01:22 PM

Group Number: 1140727

### 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>
Ferrous Iron	N.D.	10.	ug/l	100		92-105		
Batch number: 09112020201A	Sample number(s): 5647560-5647563,5647565-5647566							
Alkalinity to pH 4.5	N.D.	460.	ug/l as CaCO3	100		98-103		
Batch number: 09112834401A	Sample number(s): 5647565-5647566							
Ferrous Iron	N.D.	10.	ug/l	99		92-105		

### 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: F091101AA	Sample number(s): 5647571-5647572 UNSPK: P645640								
Benzene	97	97	80-126	0	30				
Ethylbenzene	95	97	77-125	1	30				
Toluene	96	97	80-125	1	30				
Xylene (Total)	98	101	79-125	2	30				
Batch number: P091112AA	Sample number(s): 5647559-5647570 UNSPK: P648041								
Benzene	141*		80-126						
Ethylbenzene	101		77-125						
Toluene	107		80-125						
Xylene (Total)	101		79-125						
Batch number: 09107B20A	Sample number(s): 5647559-5647563,5647565-5647566 UNSPK: P646396								
NWTPH-Gx water C7-C12	127		48-140						
Batch number: 09107B20B	Sample number(s): 5647564 UNSPK: P646396								
NWTPH-Gx water C7-C12	127		48-140						
Batch number: 09110D20A	Sample number(s): 5647567-5647572 UNSPK: P648904								
NWTPH-Gx water C7-C12	105		48-140						
Batch number: 091111848001	Sample number(s): 5647560-5647561 UNSPK: 5647561 BKG: 5647561								
Iron	167 (2)	194 (2)	75-125	1	20	31,200	31,600	1	20
Manganese	443 (2)	305 (2)	75-125	2	20	37,000	37,100	0	20
Batch number: 091111848003	Sample number(s): 5647562-5647563,5647565-5647566 UNSPK: P649477 BKG: P649477								
Iron	206 (2)	97 (2)	75-125	4	20	24,500	24,600	0	20
Manganese	110	104	75-125	3	20	478	484	1	20
Batch number: 09106196602A	Sample number(s): 5647560 UNSPK: P647710 BKG: P647710								
Nitrate Nitrogen	106		90-110			N.D.	N.D.	0 (1)	20
Nitrite Nitrogen	92		90-110			N.D.	N.D.	0 (1)	20
Sulfate	112*		90-110			249,000	251,000	1	20
Batch number: 09106196602B	Sample number(s): 5647561-5647563,5647565-5647566 UNSPK: 5647561 BKG: 5647561								
Nitrate Nitrogen	109		90-110			N.D.	N.D.	0 (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: 05/05/09 at 01:22 PM

Group Number: 1140727

### 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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Nitrite Nitrogen Sulfate	113*	107	90-110			N.D.	N.D.	0 (1)	20
Batch number: 09110023001A Sulfide	104	104	35-169	0	18	2,700	2,700	2	20
Sample number(s): 5647560-5647563, 5647565-5647566	UNSPK: P646362 BKG: P646362								
Batch number: 09110834401A Ferrous Iron	105	113	66-130	6	6	6,800	6,800	0	10
Sample number(s): 5647560-5647563	UNSPK: P643761 BKG: P643761								
Batch number: 09112020201A Alkalinity to pH 4.5	99	100	64-130	0	2	468,000	469,000	0	4
Alkalinity to pH 8.3						N.D.	N.D.	0 (1)	4
Sample number(s): 5647560-5647563, 5647565-5647566	UNSPK: P647584 BKG: P647584								
Batch number: 09112834401A Ferrous Iron	116	119	66-130	2	6	5,400	7,100	27* (1)	10
Sample number(s): 5647565-5647566	UNSPK: P651147 BKG: P651147								

### 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: NWTTPH-Gx water C7-C12  
Batch number: 09107B20A  
Trifluorotoluene-F

5647559	96
5647560	103
5647561	98
5647562	97
5647563	97
5647565	98
5647566	109
Blank	97
LCS	115
LCSD	116
MS	128

Limits: 63-135

Analysis Name: NWTTPH-Gx water C7-C12  
Batch number: 09107B20B  
Trifluorotoluene-F

5647564	241*
Blank	97
LCS	115
LCSD	116
MS	128

Limits: 63-135

\*- 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: 05/05/09 at 01:22 PM

Group Number: 1140727

### Surrogate Quality Control

Analysis Name: NWTPH-Gx water C7-C12  
Batch number: 09110D20A  
Trifluorotoluene-F

5647567	98
5647568	111
5647569	102
5647570	99
5647571	98
5647572	98
Blank	96
LCS	115
LCSD	117
MS	133

Limits: 63-135

Analysis Name: NWTPH-Dx water w/Si Gel  
Batch number: 091140016A  
Orthoterphenyl

5647560	250*
5647561	124
5647562	105
5647563	108
5647564	126
5647565	94
5647566	106
5647567	120
5647568	237*
Blank	108
LCS	130
LCSD	134

Limits: 50-150

Analysis Name: BTEX by 8260B  
Batch number: P091101AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5647571	90	88	84	83
5647572	92	88	83	83
Blank	90	88	81	85
LCS	89	86	79*	89
MS	91	87	81	91
MSD	88	86	80	89

Limits: 80-116

77-113

80-113

78-113

Analysis Name: BTEX by 8260B  
Batch number: P091112AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5647559	104	101	97	88
5647560	104	103	97	95
5647561	105	103	96	88
5647562	103	101	98	87

\*- 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: 05/05/09 at 01:22 PM

Group Number: 1140727

### Surrogate Quality Control

5647563	104	102	97	87
5647564	104	102	98	89
5647565	104	99	98	87
5647566	103	103	98	86
5647567	105	104	96	87
5647568	104	102	97	90
5647569	104	101	97	93
5647570	106	102	97	87
Blank	104	102	97	86
LCS	105	102	97	89
LCSD	104	104	98	89
MS	105	104	98	91
Limits:	80-116	77-113	80-113	78-113

\*- 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.

## Lancaster Laboratories Explanation of Symbols and Abbreviations

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

<b>N.D.</b>	none detected	<b>BMQL</b>	Below Minimum Quantitation Level
<b>TNTC</b>	Too Numerous To Count	<b>MPN</b>	Most Probable Number
<b>IU</b>	International Units	<b>CP Units</b>	cobalt-chloroplatinate units
<b>umhos/cm</b>	micromhos/cm	<b>NTU</b>	nephelometric turbidity units
<b>C</b>	degrees Celsius	<b>F</b>	degrees Fahrenheit
<b>Cal</b>	(diet) calories	<b>lb.</b>	pound(s)
<b>meq</b>	millequivalents	<b>kg</b>	kilogram(s)
<b>g</b>	gram(s)	<b>mg</b>	milligram(s)
<b>ug</b>	microgram(s)	<b>l</b>	liter(s)
<b>ml</b>	milliliter(s)	<b>ul</b>	microliter(s)
<b>m3</b>	cubic meter(s)	<b>fib &gt;5 um/ml</b>	fibers greater than 5 microns in length per ml
<b>&lt;</b>	less than – The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
<b>&gt;</b>	greater than		
<b>ppm</b>	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 of gas per liter of gas.		
<b>ppb</b>	parts per billion		
<b>Dry weight basis</b>	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.		

### U.S. EPA data qualifiers:

Organic Qualifiers	Inorganic Qualifiers
<b>A</b> TIC is a possible aldol-condensation product	<b>B</b> Value is <CRDL, but ≥IDL
<b>B</b> Analyte was also detected in the blank	<b>E</b> Estimated due to interference
<b>C</b> Pesticide result confirmed by GC/MS	<b>M</b> Duplicate injection precision not met
<b>D</b> Compound quantitated on a diluted sample	<b>N</b> Spike amount not within control limits
<b>E</b> Concentration exceeds the calibration range of the instrument	<b>S</b> Method of standard additions (MSA) used for calculation
<b>J</b> Estimated value	<b>U</b> Compound was not detected
<b>N</b> Presumptive evidence of a compound (TICs only)	<b>W</b> Post digestion spike out of control limits
<b>P</b> Concentration difference between primary and confirmation columns >25%	<b>*</b> Duplicate analysis not within control limits
<b>U</b> Compound was not detected	<b>+</b> Correlation coefficient for MSA <0.995
<b>X,Y,Z</b> Defined in case narrative	

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

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.

**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 LANCASTER LABORATORIES 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 LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES 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 Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions of Lancaster Laboratories and we hereby object to any conflicting terms contained in any acceptance or order submitted by client.