



RECEIVED

May 23, 2011

MAY 26 2011

Mr. Tom Bauhs
Chevron Environmental Management Company
6101 Bollinger Canyon Road
San Ramon, California 94583

**DEPT OF ECOLOGY
Toxics Cleanup Program**

**Subject: Second Semiannual 2010 Groundwater Monitoring and Sampling Report
Former Texaco Service Station No. 21-1577
631 Queen Anne Avenue North
Seattle, Washington**

Dear Mr. Bauhs:

SAIC Energy, Environment & Infrastructure, LLC (SAIC), on behalf of Chevron Environmental Management Company (CEMC), prepared this letter summarizing the second semiannual 2010 groundwater monitoring and sampling event at former Texaco Service Station No. 21-1577 (the site) in Seattle, Washington (Figure 1).

FIELD ACTIVITIES

Gettler-Ryan Inc. (Gettler-Ryan) conducted the groundwater monitoring and sampling field event on January 17 through the 20, 2011. They collected depth-to-groundwater measurements and checked for the presence of separate-phase hydrocarbons (SPH) in 40 monitoring wells on site.

Groundwater samples were collected from 25 of the 40 monitoring wells and submitted to Lancaster Laboratories, Inc. in Pennsylvania for the following analyses:

- Total petroleum hydrocarbons (TPH) as gasoline-range organics (TPH-GRO) by Washington State Department of Ecology (Ecology) Method NWTPH-Gx;
- TPH as diesel-range organics (TPH-DRO) and TPH as heavy oil-range organics (TPH-HRO) by Ecology Method NWTPH-Dx extended with silica-gel cleanup; and
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) by United States Environmental Protection Agency (EPA) Method 8260.

Additional analyses were performed on 20 of these wells for the following monitored natural attenuation (MNA) parameters:

- 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 4500S2D.

Field data sheets are provided in the Gettler-Ryan groundwater monitoring and sampling data package (Attachment A).

FINDINGS

At the time of this monitoring event, groundwater elevations ranged from 104.66 feet in monitoring well MW-10 to 67.13 feet in monitoring well MW-30, based on an arbitrary benchmark elevation 100 feet. Groundwater potentially flows toward the west-southwest at a gradient of approximately 0.013 to 0.233 feet per foot (Figure 2). Groundwater elevations increased an average of 0.58 foot since the previous semiannual monitoring event in April 2010.

SPH were not detected in any of the monitoring wells monitored.

The following analytes were detected at concentrations exceeding their respective Model Toxics Control Act (MTCA) Method A cleanup levels (CULs):

- TPH-GRO was detected in monitoring wells MW-4 and MW-14;
- TPH-DRO was detected in monitoring wells VP-4, MW-4, MW-6, MW-9, MW-14, MW-25, MW-33, DPE-5, DPE-6, and DPE-8;
- TPH-HRO was detected in monitoring wells VP-4, VP-8, MW-4, MW-6, MW-9, MW-14, MW-21, DPE-6, and DPE-8; and
- Benzene was detected in monitoring wells MW-4, MW-14, MW-21, MW-33, MW-35, and DPE-6.

Historical groundwater elevation data and laboratory analytical results are summarized in Table 1, and MNA data are presented in Table 2. The laboratory analysis report is provided as Attachment B.

DISCUSSION

Groundwater elevations and potential flow direction are consistent with historical data reported at the site.

The January 2011 semiannual sampling event represents the sixth groundwater monitoring event since the shutdown of the dual-phase extraction (DPE) system in April 2008. Petroleum-hydrocarbon constituents continue to be detected at concentrations exceeding their MTCA Method A CULs. However, these data indicate that the DPE system was highly effective in reducing the concentration of BTEX and TPH-GRO within the area of influence. A rebound or an increase in concentrations has not occurred since the system was shut down.

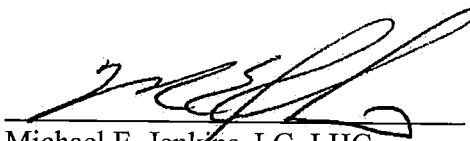
Monitoring well MW-33, located in the southwestern corner of the U-Park parking lot, continues to contain the highest concentration of benzene since the DPE system was inactivated. This area was the furthest away from the remediation system and source area. Detections in monitoring well MW-33 have been declining in concentrations and are likely remnant dissolved-phase impacts from the source area. The continued decline of down-gradient, dissolved-phase groundwater impacts is expected because of the cleanup of the up-gradient source area and ongoing natural attenuation of petroleum hydrocarbons present at the site.

Gettler-Ryan will continue to perform groundwater monitoring and sampling on a semiannual basis. The next groundwater monitoring and sampling event is scheduled for May 2011.

If you have any questions or comments, please contact me at (916) 757-3462 or via email at jenkinsme@saic.com.

Sincerely,

SAIC Energy, Environment & Infrastructure, LLC


Michael E. Jenkins, LG, LHG
Senior Project Manager


Gabriel Cisneros, LG #2357
Geologist



Enclosures:

Figure 1 – Vicinity Map

Figure 2 – Potentiometric Map

Table 1 – Groundwater Monitoring Data and Analytical Results

Table 2 – Groundwater Analytical Results for Monitored Natural Attenuation Parameters

Attachment A – Groundwater Monitoring and Sampling Data Package

Attachment B – Laboratory Analysis Report

cc: Mr. Chris Maurer –Ecology Headquarters Office

P.O. Box 47600, Olympia, WA 98504-7600

Mr. Paul McTaggard – Darco, Inc.

420 East Howell, Seattle, WA 98122

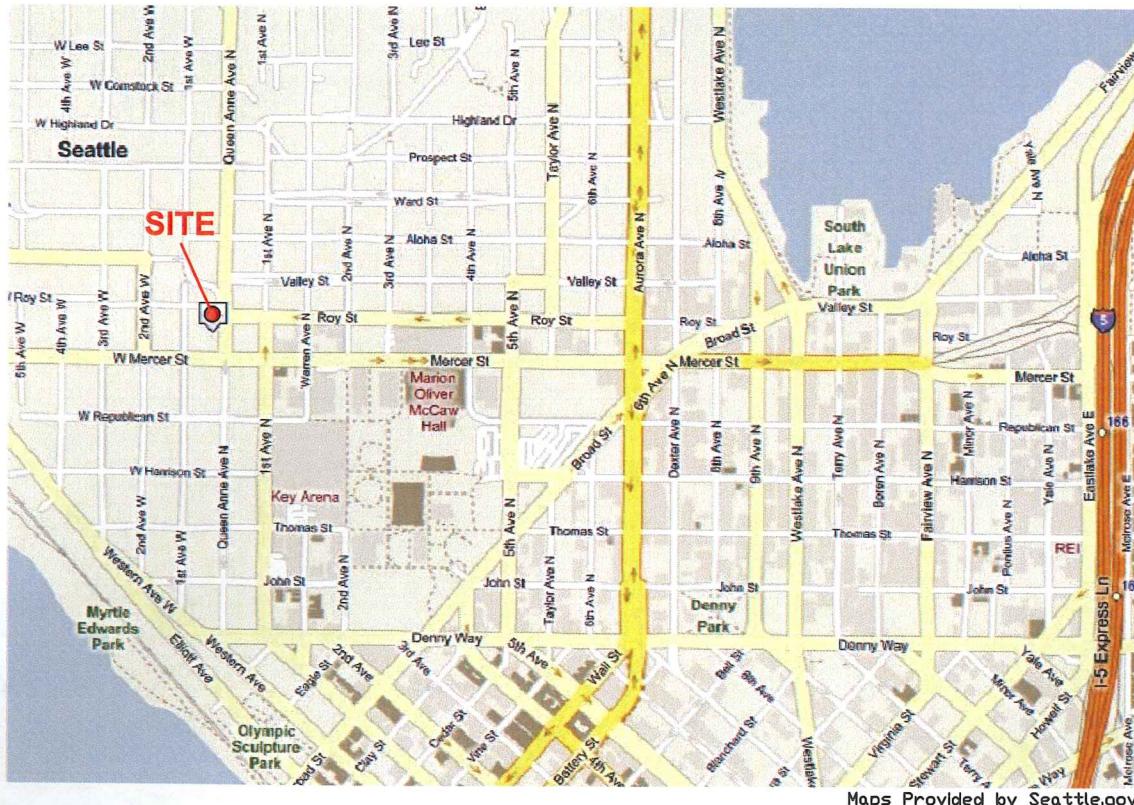
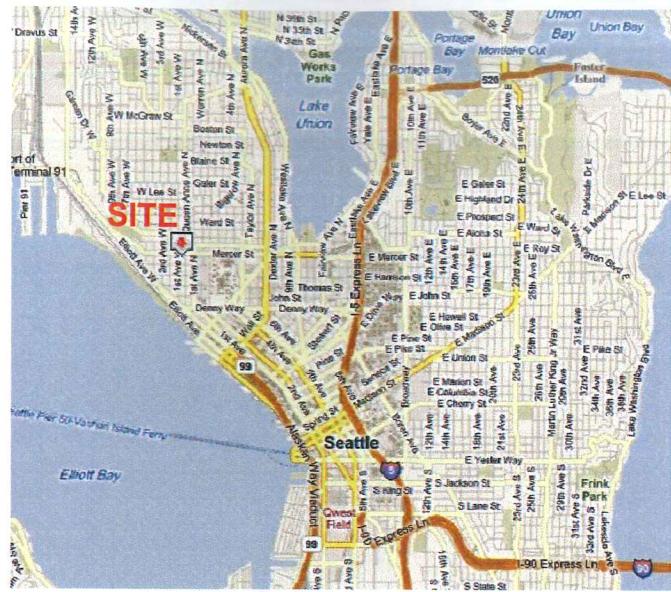
Mr. Gerry Pigotti – Monterey Apartments, LLC

1525 4th Avenue, Suite 500, Seattle, WA, 98101

Mr. Bert Hyde – SoundEarth Strategies

2811 Fairview Ave. E, Suite 2000, Seattle, WA, 98102

Project File



Maps Provided by Seattle.gov

Former Texaco Service Station No. 21-1577
631 Queen Anne Avenue North
Seattle, Washington

FIGURE 1
Vicinity Map

FILE NAME:	DATE:
211577 Vicinity Map.dwg	04/20/2011

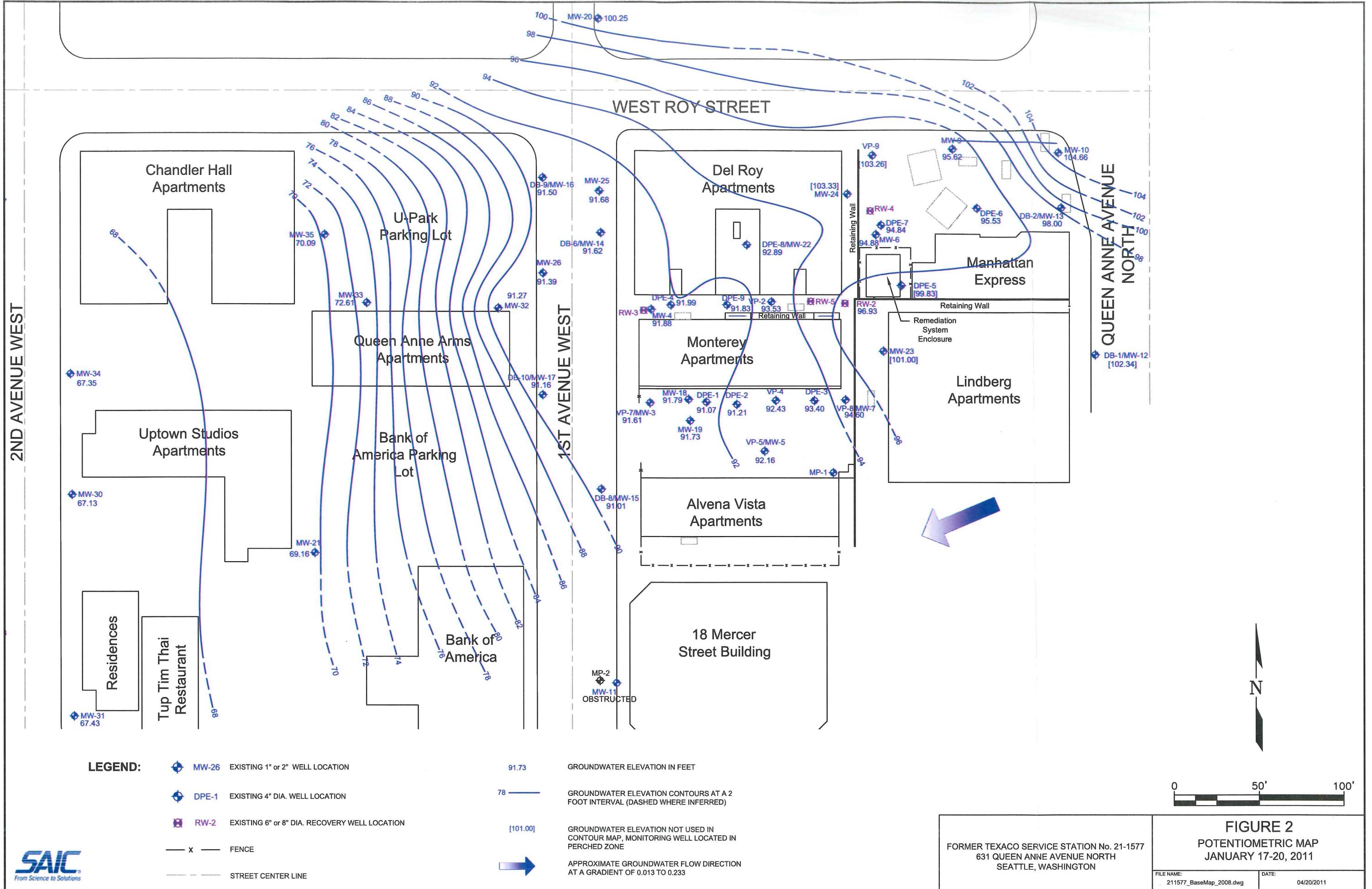


TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
VP-1														
06/14/00		103.03	--	--	--	75,600	<12,500 ²³	5,000	21.6	14.4	32.8	435	--	
07/24/02		103.03	--	11.59	0.00	91.44	18,000 ¹	1,500 ¹	35,000	120	820	280	4,600	22.9
10/17-18/02		103.03	--	12.70	0.00	90.33	7,500 ¹	598 ^{1,2}	27,300	170	756	334	4,820	18.0 ¹⁵
01/21/03		103.03	--	12.70	0.00	90.33	14,200 ¹	807 ^{1,2}	36,700	90.5	801	500	6,630	47.1
04/23-24/03		103.03	--	11.63	0.00	91.40	2,830 ¹	<500 ¹	24,200	110	136	225	2,780	36.4 ¹⁶
06/30-07/01/03		103.03	--	12.21	0.00	90.82	20,200 ¹	1,750 ¹	8,000 ¹	36.8 ⁷	49.2 ⁷	47.1 ⁷	618 ⁷	13.2 ¹⁶
10/01-02/03		103.03	--	13.11	0.00	89.92	40,000 ¹	6,300 ¹	7,600	56	47	22	690	31.2 ¹⁶
01/21-23/04		103.03	--	12.21	0.00	90.82	17,000 ¹	3,200 ¹	4,500	11	6.2	<20	85	4.2 ¹⁶
04/29-30/04		103.03	--	11.87	0.00	91.16	3,600 ¹	1,100 ¹	4,200	24	3.6	9.8	85	2.6 ¹⁶
07/15-16/04		103.03	--	13.41	0.00	89.62	1,050 ^{1,14}	<500 ¹	1,880	21.7	2.77	6.92	50.7	2.46 ¹⁶
08/03/04 ⁸		103.03	--	12.71	0.00	90.32	--	--	--	--	--	--	--	--
10/28-11/01/04		103.03	--	12.84	0.00	90.19	35,000 ¹	18,000 ¹	2,100	25	5.5	7.6	97	--
01/24-31/05		103.03	--	12.38	0.00	90.65	3,600 ¹	1,300 ¹	670	5.2	0.8	1.4	13	--
04/18-21/05	NP	103.03	--	12.09	0.00	90.94	5,500 ¹	2,200 ¹	340	<1.0	<0.5	0.7	5.2	--
07/27-28/05		103.03	--	12.38	0.00	90.65	--	--	--	--	--	--	--	--
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														
VP-2														
12/15/99		104.72	--	--	--	--	29,900	<2,500 ²³	5,980	935	345	43.8	305	--
06/14/00		104.72	--	--	--	--	2,810	<1,000 ²³	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 ¹	<250 ¹	6,230	549	42.6	106	1,120	1.52 ¹⁶
06/30-07/01/03		104.72	--	12.51	0.00	92.21	35,900 ¹	1,380 ¹	3,330	180	58.8	32.4	510	3.97 ¹⁶
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 ¹	<56,000 ^{1,23}	1,700	69	16	<10	210	5.3 ¹⁶
04/29-30/04		104.72	--	10.53	0.00	94.19	850 ¹	2,200 ¹	6,400	1,500	94	68	760	2.1 ¹⁶
07/15-16/04		104.72	--	13.52	0.00	91.20	NOT SAMPLED DUE TO INSUFFICIENT WATER					--	--	--
08/03/04 ⁸		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 ¹	1,600 ¹	640	23	3.6	5.3	57	--
04/18-21/05	NP	105.11	--	13.20	0.00	91.91	120,000 ¹	8,700 ¹	<50	2.1	<0.5	<0.5	3.6	--

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
VP-2 (cont)														
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 ²³	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	--	--	--	--	--	--	--	--
10/12-15/09		105.11	--	14.47	0.00	-- ²⁸	--	--	--	--	--	--	--	--
04/19-22/10		105.11	--	12.25	0.00	92.86	--	--	--	--	--	--	--	--
01/17-20/11		105.11	--	11.58	0.00	93.53	--	--	--	--	--	--	--	--
VP-3/MW-2														
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														

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in $\mu\text{g/L}$

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
VP-4														
06/13/00		103.35	--	--	--	--	1,850	<552 ²³	26,400	1,020	3,270	809	6,160	--
07/24/02		103.35	--	11.89	0.00	91.46	78,000 ¹	<9,700 ^{1,23}	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							
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 ¹	<2,300 ^{1,23}	150	1.7	2.6	1	20	4.0 ¹⁶
07/15-16/04		103.35	--	12.62	0.00	90.73	18,600 ¹	789 ^{1,2}	32,200	2,230	746	212	3,710	8.90 ¹⁶
08/03/04 ⁸		103.35	--	12.91	0.00	90.44	--	--	--	--	--	--	--	--
10/28-11/01/04		103.35	--	12.98	0.00	90.37	330,000 ¹	<100,000 ^{1,23}	48,000	2,500	1,400	560	5,400	--
01/24-31/05		103.35	--	12.38	0.00	90.97	110,000 ¹	<9,500 ^{1,23}	19,000	360	750	89	2,000	--
04/18-21/05	NP	103.35	--	12.14	0.00	91.21	46,000 ¹	<10,000 ^{1,23}	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							
10/12-15/09		103.35	--	13.30	0.00	90.05	NOT SAMPLED DUE TO INSUFFICIENT WATER							
04/19-22/10	LFP	103.35	--	11.32	0.00	92.03	13,000 ¹	2,600 ¹	640	2	0.7	0.8	6	--
01/17-20/11	LFP	103.35	--	10.92	0.00	92.43	8,500 ¹	2,300 ¹	350	0.7	<0.5	<0.5	3	--
VP-5/MW-5														
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 ²³	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 ¹	<500 ¹	15,900	318	49.3	880	1,870	2.29 ¹⁵

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
VP-5/MW-5 (cont)														
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 ¹	270 ¹	22,000	330	76	1,000	2,200	2.4 ¹⁶
01/21-23/04		102.63	--	11.91	0.00	90.72	1,500 ¹	310 ¹	19,000	310	100	980	1,600	1.7 ¹⁶
04/29-30/04		102.63	--	11.80	0.00	90.83	1,400 ¹	400 ¹	3,500	61	13	190	180	<0.99 ¹⁶
07/15-16/04		102.63	--	12.22	0.00	90.41	<250 ¹	<500 ¹	7,900	58.3	18.4	384	475	<1.00 ¹⁶
08/03/04 ⁸		102.63	--	12.52	0.00	90.11	--	--	--	--	--	--	--	--
10/28-11/01/04		102.63	--	12.57	0.00	90.06	710 ¹	<200 ¹	19,000	98	56	860	1,600	--
01/24-31/05	LFP	102.63	--	11.96	0.00	90.67	910 ¹	<250 ¹	16,000	86	60	770	1,300	--
04/18-21/05	LFP	102.63	--	11.75	0.00	90.88	3,100 ¹	<250 ¹	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	LFP	102.63	--	13.56	0.00	89.07	860	130	99	<0.5	<0.5	0.7	2	--
10/12-15/09	LFP	102.63	--	12.92	0.00	89.71	1,900	2,100	380	1	0.6 ²⁹	0.9	2	--
04/19-22/10	LFP	102.63	--	11.02	0.00	91.61	200 ¹	<73 ¹	120	0.7	<0.5	<0.5	<0.5	--
01/17-20/11	LFP	102.63	--	10.47	0.00	92.16	140 ¹	360 ¹	<50	<0.5	<0.5	<0.5	<0.5	--
VP-6														
NOT MONITORED/SAMPLED, REPLACED BY WELL DPE-1, SEE DPE-1 FOR VP-6 DATA														
VP-7/MW-3														
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	--	--	--	3,700	1,600	740	3,500	--
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	--

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
VP-7/MW-3 (cont)														
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 ^{1,2}	54,400	10,000	8,230	1,380	7,470	--
07/24/02		100.40	--	9.74	0.00	90.66	5,800 ¹	580 ¹	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 ¹	510 ^{1,2}	71,600	11,100	5,880	1,940	10,800	2.40
01/21/03		100.40	--	10.29	0.00	90.11	714 ^{1,4}	<500 ¹	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 ¹	520 ¹	61,000	10,000	4,500	2,000	10,000	1.8 ¹⁶
01/21-23/04		100.40	--	10.09	0.00	90.31	<250 ¹	<250 ¹	1,700	660	69	70	350	<1.2 ¹⁶
04/29-30/04		100.40	--	9.96	0.00	90.44	<800 ^{1,2,3}	<1,000 ^{1,2,3}	<50	28	1.7	1.8	6.0	<0.99 ¹⁶
07/15-16/04		100.40	--	10.38	0.00	90.02	342 ¹	<500 ¹	36,800	9,900	985	1,270	2,770	<1.00 ¹⁶
08/03/04 ⁸		100.40	--	10.66	0.00	89.74	--	--	--	--	--	--	--	--
10/28-11/01/04		100.40	--	10.76	0.00	89.64	850 ¹	<1,000 ¹	100	250	<0.5	<0.5	1.6	--
01/24-31/05	LFP	100.40	--	10.13	0.00	90.27	390 ¹	<250 ¹	21,000	4,900	1,900	890	3,200	--
04/18-21/05	LFP	100.40	--	9.97	0.00	90.43	4,000 ¹	<580 ¹	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				--	--	--	--
04/13-16/09		100.40	--	10.86	0.00	89.54	--	--	--	--	--	--	--	--
10/12-15/09		100.40	--	11.17	0.00	89.23	--	--	--	--	--	--	--	--
04/19-22/10		100.40	--	9.31	0.00	91.09	--	--	--	--	--	--	--	--
01/17-20/11		100.40	--	8.79	0.00	91.61	--	--	--	--	--	--	--	--
VP-8/MW-7														
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	--	--	--	280	510	130	1,100	--
07/07/93		104.88	--	12.23	0.00	92.65	--	--	7,000	220	210	61	480	--
10/95		104.88	--	NM	--	--	--	--	3,100	2.5	1.2	3	16	--
01/97		104.88	--	NM	--	--	--	--	8,000	816	824	26	594	--
04/97		104.88	--	NM	--	--	--	--	18,000	605	786	119	1,774	--

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
VP-8/MW-7 (cont)														
07/97		104.88	—	NM	—	—	—	—	9,100 J	96	246	52	980	—
11/97		104.88	—	NM	—	—	—	—	830 J	5.6	7	11	32.6	—
12/15/99		104.88	—	NM	—	—	2,780	<500	7,640	540	927	201	1,430	—
06/13/00		104.88	—	NM	—	—	2,280	<1,100 ²³	233	1.10	1.81	1.95	7.99	—
07/24/02		104.88	—	11.70	0.00	93.18	1,800 ¹	420 ¹	1,500	9.4	9.2	34	50	11.4
10/17-18/02		104.88	—	12.78	0.00	92.10	1,830 ¹	<500 ¹	552	9.75	1.45	4.25	5.73	1.93
01/21/03		104.88	—	12.63	0.00	92.25	1,120 ¹	<500 ¹	1,910	139	291	59.1	216	8.33
04/23-24/03		104.88	—	10.72	0.00	94.16	800 ¹	<500 ¹	700	65.6	35.7	22.9	69.8	3.73 ¹⁶
06/30-07/01/03		104.88	—	12.45	0.00	92.43	939 ¹	<500 ¹	379	2.68	1.57	3.70	4.69	2.06 ¹⁶
10/01-02/03		104.88	—	13.49	0.00	91.39	19,000 ¹	2,100 ¹	290	3.4	1.2	5.8	11	2.4 ¹⁶
01/21-23/04		104.88	—	12.16	0.00	92.72	3,400 ¹	620 ¹	89	<0.5	<0.5	<0.5	<1.5	3.2 ¹⁶
04/29-30/04		104.88	—	11.91	0.00	92.97	620 ¹	<250 ¹	460	0.6	<0.5	1.6	<3.0	<0.99 ¹⁶
07/15-16/04		104.88	—	12.76	0.00	92.12	528 ¹	<500 ¹	430	0.985	<0.500	1.50	2.40	<1.00 ¹⁶
08/03/04 ⁸		104.88	—	12.94	0.00	91.94	—	—	—	—	—	—	—	—
10/28-11/01/04		104.88	—	13.09	0.00	91.79	130,000 ¹	<20,000 ¹	210	2.7	0.7	2.6	9.9	—
01/24-31/05	LFP	104.88	—	12.49	0.00	92.39	<250 ¹	<250 ¹	450	5.1	9.9	3.2	21	—
04/18-21/05	LFP	104.88	—	12.30	0.00	92.58	<250 ¹	<250 ¹	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 ²⁴	0.00	89.65	<76	<95	390	<0.5	<0.5	<0.5	<0.5	<0.5
12/11/08 ²⁶		104.88	—	13.98	0.00	90.90	71	<74	370	<0.5	<0.5	<0.5	<0.5	<0.5
04/13-16/09	LFP	104.88	—	12.45	0.00	92.43	180	<71	1,100	<0.5	<0.5	<0.5	<0.5	<0.5
10/12-15/09	LFP	104.88	—	13.10	0.00	91.78	89	<70	200	<0.5	<0.5	<0.5	<0.5	<0.5
04/19-22/10	LFP	104.88	—	11.15	0.00	93.73	970 ¹	210 ¹	190	<0.5	<0.5	<0.5	<0.5	<0.5
01/17-20/11	LFP	104.88	—	10.28	0.00	94.60	460 ¹	660 ¹	<50	<0.5	<0.5	<0.5	<0.5	<0.5
VP-9														
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 ²³	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 ¹	786 ^{1,2}	1,910	11.3	2.62	8.86	14.7	<1.00

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
VP-9 (cont)														
01/21/03		112.35												
04/23-24/03		112.35	--	8.28	0.00	104.07	<250 ¹	<500 ¹	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00 ¹⁶
06/30-07/01/03		112.35	--	9.74	0.00	102.61	<250 ¹	<500 ¹	681	1.22	0.735	5.07	3.28	<1.00 ¹⁶
10/01-02/03		112.35	--	11.72	0.00	100.63	5,400 ¹	1,300 ¹	1,600	5.3	1.4	2.3	<10	-- ¹⁷
01/21-23/04		112.35												
04/29-30/04		112.35	--	9.58	0.00	102.77	1,500 ¹	<1,000 ^{1,23}	750	0.8	<0.5	13	<1.5	<0.99 ¹⁶
07/15-16/04		112.35	--	11.15	0.00	101.20	259 ¹	<500 ¹	1,270	1.67	0.699	2.79	5.77	<1.00 ¹⁶
08/03/04 ^b		112.35	--	12.50	0.00	99.85	--	--	--	--	--	--	--	--
10/28-11/01/04		112.35	--	9.82	0.00	102.53	<800 ^{1,23}	<1,000 ^{1,23}	610	<0.5	<0.5	<0.5	<1.5	--
01/24-31/05	LFP	112.35	--	10.30	0.00	102.05	<250 ¹	<250 ¹	100	<0.5	<0.5	<0.5	<1.5	--
04/18-21/05		112.35	--	9.00	0.00	103.35	NOT SAMPLED	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--	--	--
04/13-16/09		112.35	--	8.11	0.00	104.24	--	--	--	--	--	--	--	--
10/12-15/09		112.35	--	9.71	0.00	102.64	--	--	--	--	--	--	--	--
04/19-22/10		112.35	--	9.07	0.00	103.28	--	--	--	--	--	--	--	--
01/17-20/11		112.35	--	9.09	0.00	103.26	--	--	--	--	--	--	--	--
MW-4														
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 ²³	74,400	14,400	9,440	1,840	10,800	--
07/24/02		102.07	--	11.18	0.00	90.89	10,000 ¹	680 ¹	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 ¹	697 ^{1,2}	110,000	14,500	11,600	2,630	15,200	10.7 ¹⁵
10/17-18/02 (D)		102.07	--	--	--	--	7,100 ¹	<500 ¹	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 ^{1,5}	<500 ¹	80,000	10,700	10,100	1,920	11,700	14.5

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
MW-4 (cont)														
04/23-24/03		102.07	--	11.03	0.00	91.04	1,680 ¹	<500 ¹	79,300	8,990	7,350	1,780	10,300	5.74 ¹⁶
06/30-07/01/03		102.07	--	11.55	0.00	90.52	3,910 ¹	<500 ¹	108,000	12,100	11,200	2,630	15,300	7.85 ¹⁶
10/01-02/03		102.07	--	12.46	0.00	89.61	3,800 ¹	<500 ¹	100,000	9,700	11,000	2,000	12,000	7.1 ¹⁶
01/21-23/04		102.07	--	11.59	0.00	90.48	62,000 ¹	2,800 ¹	93,000	11,000	10,000	1,800	12,000	6.7 ¹⁶
04/29-30/04		102.07	--	11.48	0.00	90.59	13,000 ¹	610 ¹	80,000	8,900	8,200	1,600	11,000	14.3 ¹⁶
07/15-16/04		102.07	--	11.88	0.00	90.19	943 ¹	<500 ¹	100,000	10,300	7,600	2,090	13,300	9.06 ¹⁶
08/03/04 ^b		102.07	--	12.09	0.00	89.98	--	--	--	--	--	--	--	--
10/28-11/01/04		102.07	--	12.26	0.00	89.81	7,500 ¹	<1,000 ^{1,23}	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 ¹	<250 ¹	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 ¹	<510 ¹	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	--	--	--	--	--	--	--
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 ²⁴	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	LFP	101.95	--	12.23	0.00	89.72	9,700	<340	1,500	22	0.7	0.6	4	--
10/12-15/09	LFP	101.95	--	12.48	0.00	89.47	11,000	<720	3,100	25	2 ³⁰	3	8	--
04/19-22/10	LFP	101.95	--	10.60	0.00	91.35	7,200 ¹	680 ¹	1,400	550	3	8	8	--
01/17-20/11	LFP	101.95	--	10.07	0.00	91.88	4,300 ¹	1,800 ¹	1,600	25	0.7	2	2	--
MW-6														
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 ¹	<10,000 ^{1,23}	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					--	--	--

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
MW-6 (cont)														
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 ¹²		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 ¹	<500 ¹	46,600	9,610	3,190	758	3,060	1.69 ¹⁶
08/03/04 ⁸		113.32	--	20.65	0.00	92.67	--	--	--	--	--	--	--	--
10/28-11/01/04		113.32	--	20.93	0.00	92.39	9,200 ¹	<960 ^{1,23}	24,000	8,600	2,800	690	3,100	--
01/24-31/05	LFP	113.32	--	20.38	0.00	92.94	11,000 ¹	<480 ¹	5,600	220	60	110	310	--
04/18-21/05	LFP	113.32	--	20.31	0.00	93.01	7,700 ¹	<1,000 ^{1,23}	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	--	--	--	--	--	--	--	--
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 ²³	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	LFP	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	--
10/12-15/09	LFP	113.12	--	20.28	0.00	92.84	5,100	<660	1,200	16	1 ³⁰	0.5	2	--
10/12-15/09 (D)		113.12	--	--	0.00	--	--	--	1,200	16	0.9 ³⁰	<0.5	1	--
04/19-22/10	LFP	113.12	--	18.83	0.00	94.29	-- ⁶	-- ⁶	630	20	0.7	<0.5	0.6	--
04/19-22/10 (D)		113.12	--	--	0.00	--	--	--	650	24	0.9	0.6	1	--
01/17-20/11		113.12	--	18.24	0.00	94.88	12,000 ¹	4,600 ¹	90	4	<0.5	<0.5	<0.5	--
01/17-20/11 (D)		113.12	--	--	0.00	--	--	--	130	3	<0.5	<0.5	<0.5	--
MW-6-FB														
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	--
10/12-15/09		--	--	--	--	--	--	--	<50	<0.5	0.9 ³¹	<0.5	<0.5	--

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
MW-9														
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 ¹	671 ^{1,2}	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 ¹	<500 ¹	6,760	388	15.9	277	105	1.31 ¹⁶
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 ¹	<5,000 ^{1,23}	3,500	110	30	100	<100	3.9 ¹⁶
01/21-23/04		114.27	--	20.36	0.00	93.91	100,000 ¹	<5,100 ^{1,23}	2,300	7.2	2.4	45	19	5.5 ¹⁶
04/29-30/04		114.27	--	20.38	0.00	93.89	92,000 ¹	<5,000 ^{1,23}	1,200	2.0	1.2	10	7.8	4.8 ¹⁶
07/15-16/04		114.27	--	20.71	0.00	93.56	2,540 ¹	<500 ¹	9,540	3.84	10.4	25.9	31.6	2.54 ¹⁶
08/03/04 ⁸		114.27	--	20.92	0.00	93.35	--	--	--	--	--	--	--	--
10/28-11/01/04		114.27	--	21.22	0.00	93.05	3,900 ¹	420 ¹	300	1.4	0.5	1.9	<3.0	--
01/24-31/05	LFP	114.27	--	20.66	0.00	93.61	140,000 ¹	<5,300 ^{1,23}	730	1.7	<1.0	2.7	<6.0	--
04/18-21/05	LFP	114.27	--	20.59	0.00	93.68	14,000 ¹	<630 ^{1,23}	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 ²³	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	--
04/13-16/09	LFP	114.27	--	24.60	0.00	89.67	1,100	69	160	0.7	<0.5	<0.5	<0.5	--

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC [*] (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
MW-9 (cont)														
10/12-15/09	LFP	114.27	--	20.67	0.00	93.60	960	<66	83	<0.5	<0.5	<0.5	<0.5	--
04/19-22/10	LFP	114.27	--	19.04	0.00	95.23	1,200 ¹	190 ¹	130	1	<0.5	<0.5	<0.5	--
01/17-20/11	LFP	114.27	--	18.65	0.00	95.62	6,400 ¹	1,400 ¹	280	<0.5	<0.5	<0.5	<0.5	--
MW-10														
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	--	--	--	<5	<5	<5	<5	--
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 ¹	600 ¹	240	2.5	<0.50	<1.0	<1.5	1.3
10/17-18/02		115.28	--	13.59	0.00	101.69	667 ¹	<500 ¹	490	3.42	<0.500	1.34	5.00	<1.00
01/21/03		115.28	--	12.46	0.00	102.82	<250 ¹	<500 ¹	416	3.44	0.550	0.519	3.24	<1.00
04/23-24/03		115.28	--	11.76	0.00	103.52	-- ⁶	-- ⁶	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00 ¹⁶
06/30-07/01/03		115.28	--	12.91	0.00	102.37	<250 ¹	<500 ¹	255	2.01	<0.500	0.535	2.53	<1.00 ¹⁶
10/01-02/03		115.28	--	13.68	0.00	101.60	<250 ¹	<250 ¹	190	2.6	<0.5	0.5	<3.0	<1.2 ¹⁶
01/21-23/04		115.28	--	11.99	0.00	103.29	<250 ¹	<250 ¹	<50	<0.5	<0.5	<0.5	<1.5	<1.2 ¹⁶
04/29-30/04		115.28	--	13.23	0.00	102.05	<250 ¹	<250 ¹	<50	1.5	<0.5	<0.5	<1.5	<0.99 ¹⁶
07/15-16/04		115.28	--	13.44	0.00	101.84	<250 ¹	<500 ¹	362	2.75	<0.500	0.549	3.45	<1.00 ¹⁶
08/03/04 ⁸		115.28	--	13.53	0.00	101.75	--	--	--	--	--	--	--	--
10/28-11/01/04		115.28	--	13.31	0.00	101.97	<82 ¹	<100 ¹	210	4.1	<0.5	1.2	2.1	--
01/24-31/05	LFP	115.28	--	12.36	0.00	102.92	<250 ¹	<250 ¹	<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	--	--	--	--	--	--	--	--

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
MW-10 (cont)														
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 ²	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	LFP	115.28	—	12.11	0.00	103.17	<29	<67	<50	<0.5	<0.5	<0.5	<0.5	—
10/12-15/09	LFP	115.28	—	12.23	0.00	103.05	<29	<67	<50	<0.5	<0.5	<0.5	<0.5	—
04/19-22/10	LFP	115.28	—	11.93	0.00	103.35	<31 ¹	<73 ¹	<50	<0.5	<0.5	<0.5	<0.5	—
01/17-20/11	LFP	115.28	—	10.62	0.00	104.66	<59 ^{1,32}	250 ^{1,32}	<50	<0.5	<0.5	<0.5	<0.5	—
MW-11														
03/26-28/91		97.32	—	11.7	0.00	85.62	—	—	—	<5	<5	<5	<5	—
07/24/02		—	—	11.16	0.00	—	<250 ¹	<250 ¹	<50	<0.50	<0.50	<0.50	<1.5	<1.2
10/17-18/02		—	—	11.43	0.00	—	<250 ¹	<500 ¹	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00
01/21/03		—	—	11.29	0.00	—	<250 ¹	<500 ¹	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00
04/23-24/03		—	—	11.09	0.00	—	<250 ¹	<500 ¹	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00 ¹⁶
06/30-07/01/03		—	—	11.39	0.00	—	<250 ¹	<500 ¹	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00 ¹⁶
10/01-02/03		—	—	12.10	0.00	—	<250 ¹	<250 ¹	<50	<0.5	<0.5	<0.5	<1.5	<1.2 ¹⁶
01/21-23/04		—	—	11.69	0.00	—	<250 ¹	<250 ¹	<50	<0.5	<0.5	<0.5	<1.5	<1.2 ¹⁶
04/29-30/04		—	—	11.41	0.00	—	<250 ¹	<250 ¹	<50	<0.5	<0.5	<0.5	<1.5	<0.99 ¹⁶
07/15-16/04		—	—	11.58	0.00	—	<250 ¹	<500 ¹	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00 ¹⁶
08/03/04 ⁸		97.32	—	11.65	0.00	85.67	NOT SAMPLED	—	—	—	—	—	—	—
10/28-11/01/04		97.32	—	11.73	0.00	85.59	<78 ¹	<98 ¹	<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	—	—	—	—	—	—	—	—
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		—	—	—	—	—	—	—	—	—	—
10/12-15/09		97.32	OBSTRUCTION IN WELL		—	—	—	—	—	—	—	—	—	—
04/19-22/10		97.32	OBSTRUCTION IN WELL		—	—	—	—	—	—	—	—	—	—
01/17-20/11		97.32	OBSTRUCTION IN WELL		—	—	—	—	—	—	—	—	—	—

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in $\mu\text{g/L}$

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
MW-12														
10/17-18/02		113.36	—	12.22	0.00	101.14	<250 ¹	<500 ¹	<50.0	0.516	0.869	<0.500	<1.00	—
01/21/03		113.36	—	11.72	0.00	101.64	<250 ¹	<500 ¹	<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 ¹	<500 ¹	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00 ¹⁶
06/30-07/01/03		113.36	—	11.32	0.00	102.04	1,690 ¹	<500 ¹	1,040	2.91	1.05	10.0	26.5	<1.00 ¹⁶
10/01-02/03		113.36	—	12.12	0.00	101.24	470 ¹	<250 ¹	69	1.2	<0.5	<0.5	<1.5	<1.2 ¹⁶
01/21-23/04		113.36	—	10.02	0.00	103.34	1,500 ¹	5,700 ¹	<50	<0.5	<0.5	<0.5	<1.5	<1.2 ¹⁶
04/29-30/04		113.36	—	10.59	0.00	102.77	260 ¹	440 ¹	<50	<0.5	<0.5	<0.5	<1.5	<0.99 ¹⁶
07/15-16/04		113.36	—	11.44	0.00	101.92	<250 ¹	<500 ¹	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00 ¹⁶
08/03/04 ⁸		113.36	—	12.55	0.00	100.81	NOT SAMPLED	—	—	—	—	—	—	—
10/28-11/01/04		113.36	—	12.03	0.00	101.33	<250 ¹	<250 ¹	<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 ²⁴	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	—	—	—	—	—	—	—	—
10/12-15/09		113.36	—	11.99	0.00	101.37	—	—	—	—	—	—	—	—
04/19-22/10		113.36	—	11.28	0.00	102.08	—	—	—	—	—	—	—	—
01/17-20/11		113.36	—	11.02	0.00	102.34	—	—	—	—	—	—	—	—
MW-13														
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 ⁸		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	—	—	—	—	—	—	—

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
MW-13 (cont)														
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 ²⁴	0.00	95.55	--	--	--	--	--	--	--	--
11/03/08		114.80	--	19.08	0.00	95.72	--	--	--	--	--	--	--	--
04/13-16/09		114.80	--	18.18	0.00	96.62	--	--	--	--	--	--	--	--
10/12-15/09		114.80	--	18.43	0.00	96.37	--	--	--	--	--	--	--	--
04/19-22/10		114.80	--	17.08	0.00	97.72	--	--	--	--	--	--	--	--
01/17-20/11		114.80	--	16.80	0.00	98.00	--	--	--	--	--	--	--	--
MW-14														
10/17-18/02		101.64	--	--	--	--	--	--	--	--	--	--	--	--
11/14/02		101.64	--	11.88	0.00	89.76	4,710 ¹	<500 ¹	43,100 ³	9,900 ³	4,930 ³	1,540 ³	6,020 ³	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 ^{8,10}		101.64	--	--	--	--	2,100 ¹	130 ¹	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 ¹	<250 ¹	27,000	4,800	2,500	910	3,300	<0.99 ¹⁶
07/15-16/04		101.64	--	11.46	0.00	90.18	836 ^{1,14}	<500 ¹	61,800	10,400	5,550	1,350	5,890	<1.00 ¹⁶
10/26-27/04 ⁸		101.64	--	--	--	--	<800 ^{1,23}	<1,000 ^{1,23}	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 ¹	<250 ¹	24,000	4,400	2,300	760	3,300	--
04/18-21/05	LFP	101.64	--	11.19	0.00	90.45	1,500 ^{1,19}	<250 ¹	23,000	5,000	2,500	860	3,700	--
07/27-28/05	LFP	101.64	--	11.36	0.00	90.28	2,300 ^{1,20}	<250 ¹	24,000	5,000	2,200	760	3,300	--
11/08-10/05	LFP	101.64	--	11.82	0.00	89.82	2,600 ^{1,20}	<520 ¹	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 ²³	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	--

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in $\mu\text{g/L}$

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
MW-14 (cont)														
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 ²⁴	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	--
04/13-16/09	LFP	101.56	--	12.03	0.00	89.53	8,800	<660	6,200	15	3	11	4	--
10/12-15/09	LFP	101.56	--	12.21	0.00	89.35	5,200	<700	4,000	13	2 ²⁹	8	3	--
04/19-22/10	LFP	101.56	--	10.41	0.00	91.15	3,200 ¹	350 ¹	1,600	16	2	7	2	--
01/17-20/11	LFP	101.56	--	9.94	0.00	91.62	3,300 ¹	840 ¹	3,000	12	2	3	2	--
MW-15														
10/17-18/02		99.03	--	--	--	--	--	--	--	--	--	--	--	--
11/14/02		99.03	--	9.44	0.00	89.59	780 ¹	<500 ¹	3,280	1,640	5.23	5.06	<10.0	1.04
01/21/03		99.03	--	9.29	0.00	89.74	<250 ¹	<500 ¹	<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 ¹	<250 ¹	810	1,700	60	48	110	<1.2 ¹⁶
01/21-23/04		99.03	--	8.94	0.00	90.09	<250 ¹	<250 ¹	<50	<0.5	<0.5	<0.5	<1.5	<1.2 ¹⁶
04/29-30/04		99.03	--	8.19	0.00	90.84	700 ¹	390 ¹	<50	<0.5	<0.5	<0.5	<1.5	<0.99 ¹⁶
07/15-16/04		99.03	INACCESSIBLE - VEHICLE PARKED OVER WELL					--	--	--	--	--	--	--
08/03/04 ⁸		99.03	--	13.82	0.00	85.21	--	--	--	--	--	--	--	--
10/26-27/04 ⁸		99.03	--	--	--	--	<800 ^{1,23}	<1,000 ^{1,23}	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 ¹	<250 ¹	<50	<0.5	<0.5	<0.5	<1.5	--
04/18-21/05	LFP	99.03	--	8.98	0.00	90.05	<250 ¹	<250 ¹	<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	--	--	--	--	--	--	--	--
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 ²⁴	0.00	84.35	--	--	--	--	--	--	--	--
12/11/08 ²⁶		99.03	--	11.35	0.00	87.68	<28	<66	<50	<0.5	<0.5	<0.5	<0.5	--
04/13-16/09	LFP	99.03	--	9.79	0.00	89.24	<28	<66	<50	<0.5	<0.5	<0.5	<0.5	--
10/12-15/09	LFP	99.03	--	10.11	0.00	88.92	980	<69	<50	<0.5	<0.5	<0.5	<0.5	--
04/19-22/10	LFP	99.03	--	8.85	0.00	90.18	<29 ¹	<67 ¹	<50	<0.5	<0.5	<0.5	<0.5	--
01/17-20/11	LFP	99.03	--	8.02	0.00	91.01	100 ^{1,32}	370 ^{1,32}	<50	<0.5	<0.5	<0.5	<0.5	--

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
MW-16														
10/17-18/02		101.83	--	--	--	--	--	--	--	--	--	--	--	--
11/14/02		101.83	--	12.36	0.00	89.47	<250 ¹	<500 ¹	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00
01/21/03		101.83	--	11.88	0.00	89.95	<250 ¹	<500 ¹	<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 ^{8,9}		101.83	--	--	--	--	<160 ¹	<200 ¹	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 ^{8,9}		101.83	--	--	--	--	<75 ¹	<94 ¹	150	2.1	<0.5	1.7	<1.5	--
07/15-16/04		101.83	--	11.89	0.00	89.94	<250 ¹	<500 ¹	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00 ¹⁶
08/03/04 ⁸		101.83	--	12.03	0.00	89.80	--	--	--	--	--	--	--	--
10/26-27/04 ⁸		101.83	--	--	--	--	<800 ^{1,23}	<1,000 ^{1,23}	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 ¹	<250 ¹	210	8.4	1	6.0	3.2	--
04/18-21/05	LFP	101.83	--	11.69	0.00	90.14	<250 ¹	<250 ¹	<50	<0.5	<0.5	<0.5	<1.5	--
07/27-28/05	LFP	101.83	--	11.81	0.00	90.02	<250 ¹	<250 ¹	<50	<0.5	<0.5	<0.5	<1.5	--
11/08-10/05	LFP	101.83	--	12.36	0.00	89.47	<79 ¹	<99 ¹	<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 ²⁴	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	LFP	101.75	--	12.48	0.00	89.27	<31	<72	<50	<0.5	<0.5	<0.5	<0.5	--
10/12-15/09	LFP	101.75	--	12.65	0.00	89.10	<30	<70	<50	<0.5	<0.5	<0.5	<0.5	--
04/19-22/10	LFP	101.75	--	10.85	0.00	90.90	<31 ¹	<73 ¹	<50	<0.5	<0.5	<0.5	<0.5	--
01/17-20/11	LFP	101.75	--	10.25	0.00	91.50	53 ¹	290 ¹	<50	<0.5	<0.5	<0.5	<0.5	--
MW-17														
10/17-18/02		99.29	--	--	--	--	--	--	--	--	--	--	--	--
11/14/02		99.29	--	10.00	0.00	89.29	<250 ¹	<500 ¹	2,780	569	31.0	91.1	250	<1.00
01/21/03		99.29	--	9.62	0.00	89.67	<250 ¹	<500 ¹	<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					--	--	--	--	--	--	--

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
MW-17 (cont)														
10/01-02/03		99.29	—	10.30	0.00	88.99	<250 ¹	<250 ¹	1,100	420	69	38	130	<1.2 ¹⁶
01/21-23/04		99.29	—	9.48	0.00	89.81	<250 ¹	<250 ¹	<50	1.6	<0.5	<0.5	<1.5	<1.2 ¹⁶
04/29-30/04		99.29	INACCESSIBLE - VEHICLE PARKED OVER WELL						—	—	—	—	—	—
05/03/04 ^{8,13}		99.29	—	—	—	—	190 ¹	<95 ¹	2,300	370	20	89	100	—
07/15-16/04		99.29	—	9.81	0.00	89.48	<250 ¹	<500 ¹	1,310	171	8.98	43.1	83.5	23.7 ¹⁶
08/03/04 ⁸		99.29	—	9.90	0.00	89.39	—	—	—	—	—	—	—	—
10/28-11/01/04		99.29	—	10.11	0.00	89.18	<400 ¹	<500 ¹	5,600	1,900	280	230	700	—
01/24-31/05	PER	99.29	—	9.42	0.00	89.87	<250 ¹	<250 ¹	310	160	4.9	17	27	—
02/17/05 ⁸		99.29	—	9.37	0.00	89.92	<76 ¹	<95 ¹	1,000	320	12	41	52	—
04/18-21/05	LFP	99.29	—	9.32	0.00	89.97	<250 ¹	750 ¹	<50	18	0.6	<0.5	<3.0	—
07/27-28/05	LFP	99.29	—	9.64	0.00	89.65	<250 ¹	<250 ¹	730	230	9.3	17	26	—
11/08-10/05	LFP	99.29	—	9.98	0.00	89.31	<76 ¹	<95 ¹	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 ²⁴	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	—
11/6/08 (D)		99.29	—	—	—	—	150	<66	110	30	0.6	<0.5	<0.5	—
04/13-16/09	LFP	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	—
10/12-15/09	LFP	99.29	—	10.43	0.00	88.86	290	<68	81	3	<0.5	<0.5	<0.5	—
10/12-15/09 (D)		—	—	—	—	—	—	—	89	3	<0.5	<0.5	<0.5	—
04/19-22/10	LFP	99.29	—	8.81	0.00	90.48	<31 ¹	<71 ¹	<50	<0.5	<0.5	<0.5	<0.5	—
04/19-22/10 (D)		—	—	—	—	—	—	—	<50	<0.5	<0.5	<0.5	<0.5	—
01/17-20/11	LFP	99.29	—	8.13	0	91.16	<30 ¹	<71 ¹	<50	<0.5	<0.5	<0.5	<0.5	—
01/17-20/11 (D)		—	—	—	—	—	—	—	<50	<0.5	<0.5	<0.5	<0.5	—
MW-17-FB														
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	—
10/12-15/09		—	—	—	—	—	—	—	<50	<0.5	1 ³¹	<0.5	<0.5	—

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
MW-18														
04/29-30/04		--	--	10.95	0.00	--	1,700 ¹	<250 ¹	76,000	9,200	11,000	1,400	8,400	<0.99 ¹⁶
08/03/04 ⁸		101.52	--	11.66	0.00	89.86	--	--	--	--	--	--	--	--
10/28-11/01/04		101.52	--	11.72	0.00	89.80	230 ¹	<97 ¹	42,000	4,700	5,400	860	4,300	--
01/24-31/05	LFP	101.52	--	11.10	0.00	90.42	270 ¹	<250 ¹	24,000	2,800	3,400	600	3,100	--
04/18-21/05	LFP	101.52	--	10.91	0.00	90.61	1,500 ¹	<250 ¹	20,000	2,500	3,200	540	2,900	--
07/27-28/05		101.52	--	11.22	0.00	90.30	NOT SAMPLED	--	--	--	--	--	--	--
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 ²⁴	0.00	84.76	190	<98	200	140	<0.5	<0.5	<0.5	--
12/11/08 ²⁶		101.52	--	13.45	0.00	88.07	1,900	<67	790	32	0.9	1	1	--
04/13-16/09	LFP	101.52	--	11.81	0.00	89.71	7,600	<390	530	4	0.5	<0.5	1	--
10/12-15/09	LFP	101.52	--	12.13	0.00	89.39	590	<66	310	8	<0.5	<0.5	<0.5	--
04/19-22/10	LFP	101.52	--	10.25	0.00	91.27	1,000 ¹	<75 ¹	91	3	<0.5	<0.5	<0.5	--
01/17-20/11	LFP	101.52	--	9.73	0.00	91.79	270 ¹	270 ¹	<50	0.6	<0.5	<0.5	<0.5	--
MW-19														
04/29-30/04		--	--	10.63	0.00	--	680 ¹	<250 ¹	18,000	1,700	1,700	470	2,400	<0.99 ¹⁶
07/15-16/04		--	--	11.04	0.00	--	--	--	--	--	--	--	--	--
08/03/04 ⁸		101.18	--	11.31	0.00	89.87	--	--	--	--	--	--	--	--
10/28-11/01/04		101.18	--	11.41	0.00	89.77	270 ¹	<100 ¹	21,000	1,900	1,400	880	3,500	--
01/24-31/05	LFP	101.18	--	10.78	0.00	90.40	280 ¹	<250 ¹	25,000	1,700	1,500	940	3,700	--
04/18-21/05	LFP	101.18	--	10.61	0.00	90.57	1,200 ¹	<250 ¹	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 ²⁴	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	--	--	--	--	--	--	--	--
04/13-16/09		101.18	--	11.50	0.00	89.68	--	--	--	--	--	--	--	--

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
MW-19 (cont)														
10/12-15/09		101.18	—	11.83	0.00	89.35	—	—	—	—	—	—	—	—
04/19-22/10		101.18	—	10.06	0.00	91.12	—	—	—	—	—	—	—	—
01/17-20/11		101.18	—	9.45	0.00	91.73	—	—	—	—	—	—	—	—
MW-20														
10/28-11/01/04		105.64	—	8.91	0.00	96.73	<80 ^{1,2,3}	220 ¹	<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	—	—	—	—	—	—	—
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 ^{2,4}	0.00	98.57	NOT SAMPLED	—	—	—	—	—	—	—
11/03/08		105.64	—	8.10	0.00	97.54	NOT SAMPLED	—	—	—	—	—	—	—
04/13-16/09		105.64	—	6.51	0.00	99.13	—	—	—	—	—	—	—	—
10/12-15/09		105.64	—	8.13	0.00	97.51	—	—	—	—	—	—	—	—
04/19-22/10		105.64	—	7.10	0.00	98.54	—	—	—	—	—	—	—	—
01/17-20/11		105.64	—	5.39	0.00	100.25	—	—	—	—	—	—	—	—
MW-21														
08/03/04 ⁸		94.76	—	25.89	0.00	68.87	—	—	—	—	—	—	—	—
08/12/04 ⁸		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 ^{1,2,3}	<1,000 ^{1,2,3}	31,000	5,200	730	1,300	4,500	—
01/24-31/05	LFP	94.76	—	25.85	0.00	68.91	<250 ¹	<250 ¹	130	230	0.6	<0.5	4.3	—
02/17/05 ⁸		94.76	—	25.82	0.00	68.94	<85 ¹	<110 ¹	130	280	<0.5	<0.5	<1.5	—
04/18-21/05	LFP	94.76	—	25.94	0.00	68.82	<250 ¹	<250 ¹	110	230	<0.5	<0.5	3.9	—
07/27-28/05	LFP	94.76	—	25.75	0.00	69.01	<250 ¹	<250 ¹	79	220	<0.5	<0.5	<3.0	—
11/08-10/05	LFP	94.76	—	25.96	0.00	68.80	<78 ¹	<97 ¹	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	—

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in $\mu\text{g/L}$

Well ID/ Date	Purge Method	TOC [*] (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
MW-21 (cont)														
04/28-05/01/08		94.76	--	26.42 ²⁴	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	--
04/13-16/09	LFP	94.76	--	26.11	0.00	68.65	36	<78	89	120	<0.5	<0.5	<0.5	--
10/12-15/09	LFP	94.76	--	25.95	0.00	68.81	<29	<68	<50	88	<0.5	<0.5	<0.5	--
04/19-22/10	LFP	94.76	--	25.65	0.00	69.11	38 ¹	<70 ¹	67	88	<0.5	<0.5	<0.5	--
01/17-20/11	LFP	94.76	--	25.60	0.00	69.16	140 ¹	630 ¹	60	100	<0.5	<0.5	<0.5	--
MW-22														
NOT MONITORED/SAMPLED, REPLACED BY WELL DPE-8, SEE DPE-8 FOR MW-22 DATA														
MW-23														
10/26-27/04 ⁸		107.82	--	--	--	--	42,000 ¹	<5,000 ^{1,23}	57,000	--	--	--	--	--
10/28/04 ⁸		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 ¹	<4,100 ^{1,23}	19,000	190	210	710	3,600	--
04/18-21/05	PER	107.82	--	8.78	0.00	99.04	2,400 ¹	<250 ¹	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 ²³	3,500	27	30	31	310	--
12/06/07		107.82	--	7.85	0.00	99.97	7,200	<940 ²³	310	<0.5	0.6	16	46	--
04/29/08		107.82	--	8.90 ²⁴	0.00	98.92	--	--	--	--	--	--	--	--
11/03/08		107.82	--	9.44	0.00	98.38	--	--	--	--	--	--	--	--
04/13-16/09		107.82	--	7.93	0.00	99.89	--	--	--	--	--	--	--	--
10/12-15/09		107.82	--	9.14	0.00	98.68	--	--	--	--	--	--	--	--
04/19-22/10		107.82	--	8.02	0.00	99.80	--	--	--	--	--	--	--	--
01/17-20/11		107.82	--	6.82	0.00	101.00	--	--	--	--	--	--	--	--
MW-24														
10/26-27/04 ⁸		107.95	--	--	--	--	<800 ¹	<1,000 ^{1,23}	500	--	--	--	--	--
10/28/04 ⁸		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 ¹	<250 ¹	<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	--	--	--	--	--	--	--	--

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
MW-24 (cont)														
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 ²⁴	0.00	102.99	--	--	--	--	--	--	--	--
11/03/08		107.95	--	4.65	0.00	103.30	--	--	--	--	--	--	--	--
04/13-16/09		107.95	--	4.65	0.00	103.30	--	--	--	--	--	--	--	--
10/12-15/09		107.95	--	5.82	0.00	102.13	--	--	--	--	--	--	--	--
04/19-22/10		107.95	--	5.40	0.00	102.55	--	--	--	--	--	--	--	--
01/17-20/11		107.95	--	4.62	0.00	103.33	--	--	--	--	--	--	--	--
MW-25														
10/26-27/04 ⁸		--	--	--	--	--	260 ¹	<99 ¹	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 ¹	<250 ¹	7,400	6.8	42	160	1,100	--
04/18-21/05	LFP	101.96	--	11.63	0.00	90.33	2,800^{1,19}	<250 ¹	22,000	17	300	750	3,900	--
07/27-28/05	LFP	101.96	--	11.73	0.00	90.23	2,400^{1,20}	<250 ¹	22,000	<20 ²³	210	630	3,100	--
11/08-10/05	LFP	101.96	--	12.23	0.00	89.73	870^{1,20}	<100 ¹	14,000	<20 ²³	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 ²⁴	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	--
04/13-16/09	LFP	101.96	--	12.44	0.00	89.52	340	<66	190	<0.5	<0.5	<0.5	<0.5	--
10/12-15/09	LFP	101.96	--	12.62	0.00	89.34	440	<70	570	<0.5	<0.5	3	0.7	--
04/19-22/10	LFP	101.96	--	10.80	0.00	91.16	540¹	93 ¹	<50	<0.5	<0.5	<0.5	<0.5	--
01/17-20/11	LFP	101.96	--	10.28	0.00	91.68	670¹	180 ¹	<50	<0.5	<0.5	<0.5	<0.5	--
MW-26														
10/28-11/01/04		100.47	--	11.18	0.00	89.29	760¹	<200 ¹	57,000	8,300	4,300	1,600	8,700	--
01/24-31/05	LFP	100.47	--	10.59	0.00	89.88	<250 ¹	<250 ¹	3,100	310	190	54	510	--
02/17/05 ⁸		100.47	--	10.56	0.00	89.91	310 ¹	<95 ¹	27,000	6,800	1,900	990	4,800	--
04/18-21/05	LFP	100.47	--	10.39	0.00	90.08	<250 ¹	<250 ¹	3,500	730	320	100	660	--
07/27-28/05	LFP	100.47	--	10.55	0.00	89.92	270^{1,20}	<250 ¹	5,100	1,200	370	130	880	--
11/08-10/05	LFP	100.47	--	11.02	0.00	89.45	1,200^{1,20}	<94 ¹	15,000	5,700	850	590	2,400	--
02/22/06		100.47	--	9.32	0.00	91.15	--	--	--	--	--	--	--	--

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC ^a (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
MW-26 (cont)														
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 ²⁴	0.00	84.16	280	<95	130	9	<0.5	4	<0.5	--
5/1/08 (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	--
04/13-16/09	LFP	100.47	--	11.23	0.00	89.24	460	<66	<50	26	<0.5	11	<0.5	--
10/12-15/09	LFP	100.47	--	11.41	0.00	89.06	1,200	<69	<50	<0.5	<0.5	<0.5	<0.5	--
04/19-22/10	LFP	100.47	--	9.64	0.00	90.83	41 ¹	<74 ¹	<50	<0.5	<0.5	<0.5	<0.5	--
01/17-20/11	LFP	100.47	--	9.08	0.00	91.39	40 ¹	<71 ¹	<50	<0.5	<0.5	<0.5	<0.5	--
MW-27														
01/24-31/05	LFP	97.26	--	29.81	0.00	67.45	<250 ¹	<250 ¹	<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 ¹	<250 ¹	<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	--	--	--	--	--	--	--	--
NOT MONITORED/SAMPLED														
MW-28														
01/24-31/05	LFP	87.78	--	21.18	0.00	66.60	<250 ¹	<250 ¹	<50	<0.5	<0.5	<0.5	<1.5	--
02/10/05 ⁸		87.78	--	21.17	0.00	66.61	<79 ¹	<98 ¹	<48	<0.5	<0.5	<0.5	<1.5	--
04/18-21/05	LFP	87.78	--	21.22	0.00	66.56	<250 ¹	<250 ¹	<50	<0.5	<0.5	<0.5	<1.5	--
07/27-28/05	LFP	87.78	--	21.26	0.00	66.52	<250 ¹	<250 ¹	<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	--	--	--	--	--	--	--	--
NOT MONITORED/SAMPLED														

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
MW-29														
01/24-31/05	LFP	80.88	--	15.14	0.00	65.74	<250 ¹	<250 ¹	<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	--	--	--	--	--	--	--	--
NOT MONITORED/SAMPLED														
MW-30														
02/10/05 ⁸		91.81	--	24.70	0.00	67.11	<77 ¹	<96 ¹	<48	4.1	<0.5	<0.5	<1.5	--
04/18-21/05	LFP	91.81	--	24.76	0.00	67.05	<250 ¹	<250 ¹	<50	<0.5	<0.5	<0.5	<1.5	--
07/27-28/05	LFP	91.81	--	24.72	0.00	67.09	<250 ¹	<250 ¹	<50	<0.5	<0.5	<0.5	<1.5	--
11/08-10/05	LFP	91.81	--	24.82	0.00	66.99	<83 ¹	<100 ¹	<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	--
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	--
11/6/08 (D)		91.81	--	--	0.00	--	<31	<71	<50	<0.5	<0.5	<0.5	<0.5	--
04/13-16/09	LFP	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	--
10/12-15/09	LFP	91.81	--	24.77	0.00	67.04	<29	<68	<50	<0.5	0.5 ²⁹	<0.5	<0.5	--
10/12-15/09 (D)		91.81	--	--	0.00	--	--	--	<50	<0.5	0.6 ²⁹	<0.5	<0.5	--
04/19-22/10	LFP	91.81	--	24.67	0.00	67.14	<30 ¹	<71 ¹	<50	<0.5	<0.5	<0.5	<0.5	--
04/19-22/10 (D)		91.81	--	--	0.00	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
01/17-20/11	LFP	91.81	--	24.68	0.00	67.13	67 ¹	<69 ¹	<50	<0.5	<0.5	<0.5	<0.5	--
01/17-20/11 (D)		91.81	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
MW-30-FB														
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	--
10/12-15/09		--	--	--	--	--	--	--	<50	<0.5	1 ³¹	<0.5	<0.5	--

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC [*] (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
MW-31														
02/10/05 ⁸		87.22	—	19.89	0.00	67.33	<77 ¹	<96 ¹	<48	<0.5	<0.5	<0.5	<1.5	—
04/18-21/05	LFP	87.22	—	20.02	0.00	67.20	<800 ^{1,23}	<1,000 ^{1,23}	<50	<0.5	<0.5	<0.5	<1.5	—
07/27-28/05	LFP	87.22	—	19.89	0.00	67.33	<250 ¹	<250 ¹	<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	LFP	87.22	—	20.04	0.00	67.18	<29	<67	<50	<0.5	<0.5	<0.5	<0.5	—
10/12-15/09	LFP	87.22	—	19.99	0.00	67.23	<29	<68	<50	<0.5	1 ²⁹	<0.5	<0.5	—
04/19-22/10	LFP	87.22	—	19.80	0.00	67.42	<28 ¹	<66 ¹	<50	<0.5	<0.5	<0.5	<0.5	—
01/17-20/11	LFP	87.22	—	19.79	0.00	67.43	32 ¹	<70 ¹	<50	<0.5	<0.5	<0.5	<0.5	—
MW-32														
07/27-28/05	LFP	101.09	—	11.43	0.00	89.66	1,200 ^{1,20}	<250 ¹	17,000	2,300	540	630	2,600	—
11/08-10/05	LFP	101.09	—	11.81	0.00	89.28	<80 ¹	<100 ¹	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 ²³	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 ²⁴	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	LFP	101.09	—	12.00	0.00	89.09	330	<67	<50	<0.5	<0.5	<0.5	<0.5	—
10/12-15/09	LFP	101.09	—	12.21	0.00	88.88	74	<67	<50	<0.5	0.7 ²⁹	<0.5	<0.5	—
04/19-22/10	LFP	101.09	—	10.44	0.00	90.65	<31 ¹	<71 ¹	<50	<0.5	<0.5	<0.5	<0.5	—
01/17-20/11	LFP	101.09	—	9.82	0.00	91.27	34 ¹	<70 ¹	<50	<0.5	<0.5	<0.5	<0.5	—
MW-33														
07/27-28/05	LFP	100.31	—	28.33	0.00	71.98	630 ^{1,20}	<250 ¹	2,200	2,500	200	93	170	—
11/08-10/05	LFP	100.31	—	28.50	0.00	71.81	340 ^{1,20}	<100 ¹	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	—	—	—	—	—	—	—	—

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
MW-33 (cont)														
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 ²⁴	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	LFP	100.36	—	28.95	0.00	71.41	330	<68	1,800	2,500 ²⁷	73 ²⁷	110 ²⁷	76 ²⁷	—
10/12-15/09	LFP	100.36	—	28.63	0.00	71.73	210	<68	1,200	1,300	37	78	40	—
04/19-22/10	LFP	100.36	—	27.91	0.00	72.45	270 ¹	<72 ¹	790	830	17	44	20	—
01/17-20/11	LFP	100.36	—	27.75	0.00	72.61	680 ¹	370 ¹	750	620	10	64	27	—
MW-34														
11/28/05 ⁸		—	—	—	—	—	<84 ¹	<110 ¹	<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	LFP	94.35	—	27.15	0.00	67.20	<29	<67	<50	<0.5	<0.5	<0.5	<0.5	—
10/12-15/09	LFP	94.35	—	27.10	0.00	67.25	<29	<67	<50	<0.5	<0.5	<0.5	<0.5	—
04/19-22/10	LFP	94.35	—	26.96	0.00	67.39	<30 ¹	<69 ¹	<50	<0.5	<0.5	<0.5	<0.5	—
01/17-20/11	LFP	94.35	—	27.00	0.00	67.35	39 ¹	<69 ¹	<50	<0.5	<0.5	<0.5	<0.5	—
MW-35														
11/28/05 ⁸		—	—	—	—	—	280 ^{1,22}	180 ¹	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 ²⁴	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	LFP	100.52	—	31.22	0.00	69.30	120	<68	83	100	<0.5	<0.5	<0.5	—
10/12-15/09	LFP	100.52	—	30.98	0.00	69.54	50	<68	<50	58	<0.5	<0.5	<0.5	—
04/19-22/10	LFP	100.52	—	30.45	0.00	70.07	59 ¹	<71 ¹	<50	66	<0.5	<0.5	<0.5	—
01/17-20/11	LFP	100.52	—	30.43	0.00	70.09	170 ¹	220 ¹	<50	5	<0.5	<0.5	<0.5	—

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
DPE-1/VP-6														
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 ¹⁸		101.84	--	11.85	0.00	89.99	--	--	--	--	--	--	--	--
10/28-11/01/04		101.84	--	11.99	0.00	89.85	180,000 ¹	<20,000 ^{1,23}	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 ¹	<1,000 ^{1,23}	19,000	1,800	1,200	75	3,300	--
04/18-21/05	LFP	101.84	--	11.19	0.00	90.65	280,000 ¹	<11,000 ^{1,23}	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 ²³	650	20	4.1	3.7	13	--
04/17-19/07 (D)		101.55	--	--	0.00	--	<1,500	<1,900 ²³	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	--
4/29/08 (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 ¹⁸		101.63	--	11.84	0.00	89.79	--	--		--	--	--	--	--
10/12-15/09 ¹⁸		101.63	--	12.05	0.00	89.58	--	--		--	--	--	--	--
04/19-22/10 ¹⁸		101.63	--	10.26	0.00	91.37	--	--		--	--	--	--	--
01/17-20/11 ¹⁸		101.63	--	10.56	0.00	91.07	--	--		--	--	--	--	--

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in $\mu\text{g/L}$

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
DPE-2														
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 ¹⁸		102.17	—	12.17	0.00	90.00	—	—	—	—	—	—	—	—
10/28-11/01/04		102.17	—	12.12	0.00	90.05	6,200 ¹	<1,000 ^{1,23}	48,000	2,500	3,000	940	5,400	—
01/24-31/05	LFP	102.17	—	11.51	0.00	90.66	870 ¹	<250 ¹	2,200	70	79	13	140	—
04/18-21/05	LFP	102.17	—	11.30	0.00	90.87	290 ¹	<250 ¹	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 ²³	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 ²³	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 ¹⁸	LFP	102.54	—	12.40	0.00	90.14	83	<72	93	<0.5	<0.5	<0.5	<0.5	<0.5
10/12-15/09	LFP	102.54	—	12.77	0.00	89.77	230	<68	330	0.8	<0.5	<0.5	<0.5	—
04/19-22/10		102.54	—	10.85	0.00	91.69	—	—	—	—	—	—	—	—
01/17-20/11		102.54	—	10.33	0.00	92.21	—	—	—	—	—	—	—	—
DPE-3														
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	<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	—	—	—	—	—	—	—	—
10/12-15/09		104.02	—	13.23	0.00	90.79	—	—	—	—	—	—	—	—
04/19-22/10		104.02	—	11.24	0.00	92.78	—	—	—	—	—	—	—	—
01/17-20/11		104.02	—	10.62	0.00	93.40	—	—	—	—	—	—	—	—

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
DPE-4														
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 ²³	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	—
04/28-30/08		102.39	—	17.36	0.00	85.03	5,200	<2,500 ²³	410	51	3	2	23	—
4/30/08 (D)		102.39	—	—	0.00	—	2,500	<2,000 ²³	390	51	3	2	23	—
11/03/08		102.39	—	14.14	0.00	88.25	—	—	—	—	—	—	—	—
04/13-16/09 ¹⁸		102.39	—	12.56	0.00	89.83	—	—	—	—	—	—	—	—
10/12-15/09		102.39	—	12.76	0.00	89.63	—	—	—	—	—	—	—	—
04/19-22/10		102.39	—	10.95	0.00	91.44	—	—	—	—	—	—	—	—
01/17-20/11		102.39	—	10.40	0.00	91.99	—	—	—	—	—	—	—	—
DPE-5														
11/28/05 ⁸		—	—	—	—	—	5,300 ^{1,20}	<1,000 ¹	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 ²³	<250	32	4	3	22	—
4/29/08 (D)		113.82	—	—	—	—	3,300	<1,900 ²³	—	—	—	—	—	—
11/03/08 ²⁵		113.82	—	22.45	0.00	91.37	12,000	<3,500 ²³	460	77	7	4	17	—
04/13-16/09	LFP	113.82	—	14.63	0.00	99.19	690	83	110	2	<0.5	1	3	—
10/12-15/09	LFP	113.82	—	18.60	0.00	95.22	25,000	<1,400	490	22	2 ³⁰	19	10	—
04/19-22/10	LFP	113.82	—	15.92	0.00	97.90	530 ¹	95 ¹	78	2	<0.5	<0.5	0.5	—
01/17-20/11	LFP	113.82	—	13.99	0.00	99.83	540 ¹	230 ¹	<50	<0.5	<0.5	2	1	—
DPE-6														
11/28/05 ⁸		—	—	—	—	—	170 ^{1,20}	<100 ¹	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 ²³	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	—
4/29/08 (D)		114.14	—	—	—	—	6,500	<480	—	—	—	—	—	—
11/04/08		114.14	—	21.30	0.00	92.84	11,000	<1,300 ²³	870	16	12	7	63	—

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
DPE-6 (cont)														
04/13-16/09	LFP	114.14	--	20.60	0.00	93.54	16,000	880	900	100	6	16	24	--
10/12-15/09	LFP	114.14	--	20.51	0.00	93.63	3,600	<680	490	18	3	8	9	--
04/19-22/10	LFP	114.14	--	19.02	0.00	95.12	10,000 ¹	2,000 ¹	680	44	3	13	13	--
01/17-20/11	LFP	114.14	--	18.61	0.00	95.53	16,000 ¹	27,000 ¹	520	42	2	4	6	--
DPE-7														
11/28/05 ⁸		--	--	--	--	--	6,200 ^{1,20}	<1,000 ^{1,23}	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 ²³	3,800	78	40	97	180	--
12/04-05/07		113.15	--	27.52	0.00	85.63	120,000	<9,900 ²³	760	44	1.7	28	15	--
04/28-29/08		113.13	--	22.26	0.00	90.87	6,100	<980 ²³	<250	7	2	2	6	--
4/29/08 (D)		113.13	--	--	--	--	6,300	<980 ²³	--	--	--	--	--	--
11/03/08		113.13	20.95	20.96	0.01	92.18	--	--	--	--	--	--	--	--
04/13-16/09 ¹⁸		113.13	--	19.90	0.00	93.23	--	--	--	--	--	--	--	--
10/12-15/09		113.13	--	20.25	0.00	92.88	--	--	--	--	--	--	--	--
04/19-22/10		113.13	--	18.76	0.00	94.37	--	--	--	--	--	--	--	--
01/17-20/11		113.13	--	18.29	0.00	94.84	--	--	--	--	--	--	--	--
DPE-8/MW-22														
10/26-27/04 ⁸		104.83	--	--	--	--	5,000 ¹	<1,000 ^{1,23}	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 ¹	<250 ¹	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 ¹	<250 ¹	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	--

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
DPE-8/MW-22 (cont)														
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 ²³	3,500	35	16	19	140	--
04/13-16/09	LFP	104.49	--	13.87	0.00	90.62	12,000	590	2,000	7	1	3	6	--
10/12-15/09	LFP	104.49	--	13.90	0.00	90.59	3,900	<680	940	6	1 ³⁰	0.6	3	--
04/19-22/10	LFP	104.49	--	12.08	0.00	92.41	2,000 ¹	510 ¹	88	2	<0.5	<0.5	<0.5	--
01/17-20/11	LFP	104.49	--	11.60	0.00	92.89	1,400 ¹	1,100 ¹	<50	0.6	<0.5	<0.5	<0.5	--
DPE-9														
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	--
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					--	--	--
04/13-16/09 ¹⁸		103.46	--	12.30	0.00	91.16	--	--	--	--	--	--	--	--
10/12-15/09 ¹⁸		103.46	--	13.56	0.00	89.90	--	--	--	--	--	--	--	--
04/19-22/10 ¹⁸		103.46	--	11.51	0.00	91.95	--	--	--	--	--	--	--	--
01/17-20/11 ¹⁸		103.46	--	11.63	0.00	91.83	--	--	--	--	--	--	--	--
FIELD BLANK														
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	--
FB-1-04/22/10		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
FB-2-04/20/10		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
FB-3-04/21/10		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
FB-1-01/20/11		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
FB-2-01/18/11		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
FB-3-01/18/11		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
RW-2														
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	--

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in $\mu\text{g/L}$

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
RW-2 (cont)														
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 ¹	<500 ¹	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 ¹	<500 ¹	126	33.5	0.859	1.28	4.11	<1.00
04/23-24/03		106.63	—	10.30	0.00	96.33	<250 ¹	<500 ¹	55.7	<0.500	<0.500	0.642	2.64	<1.00 ¹⁶
06/30-07/01/03		106.63	—	13.72	0.00	92.91	505 ¹	<500 ¹	2,380	53.5	8.72	39.8	43.2	1.43 ¹⁶
10/01-02/03		106.63	—	15.05	0.00	91.58	1,400 ¹	<250 ¹	2,300	75	7.3	29	33	4.9 ¹⁶
01/21-23/04		106.63	—	10.22	0.00	96.41	<250 ¹	<250 ¹	53	1.2	0.7	1.3	8.9	<1.2 ¹⁶
04/29-30/04		106.63	—	13.31	0.00	93.32	270 ¹	<250 ¹	81	11	0.9	2.0	1.9	<0.99 ¹⁶
07/15-16/04		106.63	—	14.41	0.00	92.22	<250 ¹	<500 ¹	634	25.7	2.39	6.18	3.55	<1.00 ¹⁶
08/03/04 ⁸		106.63	—	14.90	0.00	91.73	—	—	—	—	—	—	—	—
10/28-11/01/04		106.63	—	14.68	0.00	91.95	280,000 ¹	<40,000 ^{1,23}	26,000	410	63	470	950	—
01/24-31/05	LFP	106.63	—	11.57	0.00	95.06	<250 ¹	<250 ¹	94	<0.5	<0.5	<2.0	2.5	—
04/18-21/05	LFP	106.63	—	9.18	0.00	97.45	260 ¹	<250 ¹	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 ²³	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 ²⁴	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	—
04/13-16/09	LFP	106.63	—	13.80	0.00	92.83	840	<65	340	21	0.9	0.5	0.8	—
10/12-15/09	LFP	106.63	—	14.75	0.00	91.88	4,300	<680	1,100	35	4	7	11	—
04/19-22/10	LFP	106.63	—	12.56	0.00	94.07	430 ¹	240 ¹	160	9	0.7	<0.5	<0.5	—
01/17-20/11	LFP	106.63	—	9.70	0.00	96.93	270 ¹	190 ¹	150	<0.5	<0.5	8	16	—
RW-3														
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	—	—	—	—	—	—	—	—	—	—	—

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
RW-3 (cont)														
01/21-23/04		100.70	--	10.32	0.00	90.38	3,000 ¹	270 ¹	9,100	4,400	360	520	1,300	12.0 ¹⁶
04/29-30/04		100.70	--	10.19	0.00	90.51	5,200 ¹	<250 ¹	11,000	5,000	750	550	1,600	10.6 ¹⁶
07/15-16/04 ¹⁸		100.70	--	10.59	0.00	90.11	1,300 ¹	1,330 ¹	18,900	5,350	341	554	1,350	2.32 ¹⁶
10/28-11/01/04		100.70	--	10.98	0.00	89.72	680 ¹	<250 ¹	10,000	4,800	120	680	1,100	--
01/24-31/05	LFP	100.70	--	10.49	0.00	90.21	770 ¹	<250 ¹	6,600	3,000	170	460	940	--
04/18-21/05	LFP	100.70	--	10.17	0.00	90.53	3,700 ^{1,19}	<250 ¹	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	--	--	--	--	--	--	--	--
NOT MONITORED/SAMPLED														
RW-4														
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 ¹	<2,000 ^{1,23}	990	62	1.3	32	7.0	3.3
10/17-18/02		110.82	--	19.29	0.00	91.53	8,930 ¹	939 ¹	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 ¹	<500 ¹	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 ³		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					--	--	--
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														
RW-5														
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 ¹	3,650 ¹	3,370	696	67.2	63.0	408	3.91
01/21/03	NP	104.22	--	11.81	0.00	92.41	1,860 ¹	<500 ¹	493	17.1	4.43	1.37	52.9	13.3

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
RW-5 (cont)														
04/23-24/03		104.22	--	11.31	0.00	92.91	2,050 ¹	<500 ¹	2,490	9.73	13.4	<5.00	870	7.31 ¹⁶
06/30-07/01/03		104.22	--	11.91	0.00	92.31	8,010 ¹	<500 ¹	2,170	34.6	20.3	8.10	1,050	1.98 ¹⁶
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 ¹	<250 ¹	470	64	12	2.5	65	1.6 ¹⁶
04/29-30/04		104.22	--	11.88	0.00	92.34	NOT SAMPLED DUE TO WIRE OBSTRUCTIO					--	--	--
07/15-16/04 ¹⁸		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 ¹	<10,000 ^{1,23}	890	120	12	11	58	--
01/24-31/05	LFP	104.22	--	11.31	0.00	92.91	3,200 ¹	360 ¹	880	45	13	6.6	190	--
04/18-21/05	LFP	104.22	--	11.40	0.00	92.82	1,900 ^{1,19}	400 ¹	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	INACCESIBLE - 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	--	--	--	--	--	--	--	--
NOT MONITORED/SAMPLED														
MP-1														
07/24/02		--	INACCESIBLE - UNABLE TO OPEN WELL					--	--	--	--	--	--	--
10/17-18/02		--	INACCESIBLE - UNABLE TO OPEN WELL					--	--	--	--	--	--	--
08/03/04 ⁸		104.95	DRY	--	--	--	--	--	--	--	--	--	--	--
04/17/06		104.95	--	4.32	0.00	100.63	--	--	--	--	--	--	--	--
NOT MONITORED/SAMPLED														
MP-2														
07/24/02		--	INACCESSIBLE - VEHICLE PARKED OVER WELL					--	--	--	--	--	--	--
10/17-18/02		--	--	--	--	--	--	--	--	--	--	--	--	--
08/03/04 ⁸		97.04	--	115.00	0.00	-17.96	--	--	--	--	--	--	--	--
04/17/06		97.04	--	114.56	0.00	-17.52	--	--	--	--	--	--	--	--
NOT MONITORED/SAMPLED														
Station 5														
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	--
NOT MONITORED/SAMPLED														

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC [*] (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead
DVP-1														
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	--
NOT MONITORED/SAMPLED														
TRIP BLANK														
TB-1-1909J														
04/28/08		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
TB-2-1909J														
04/29/08		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
TB-3-1909J														
04/30/08		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
TB-4-1909J														
05/01/08		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
TB-5-1909J														
05/02/08		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
QA														
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 ^{8,11}		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
01/21-23/04		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
04/29-30/04		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
05/03/04 ^{8,11}		--	--	--	--	--	--	--	<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 ⁸		--	--	--	--	--	--	--	<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 ⁸		--	--	--	--	--	--	--	<48	<0.5	<0.5	<0.5	<1.5	--
02/17/05 ⁸		--	--	--	--	--	--	--	<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	--

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	D. Lead	
QA (cont)															
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 ³⁵		--	--	--	--	--	--	--	<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	--	
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	--	
10/13/09		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
10/14/09		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
10/15/09		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
04/20/10		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
04/21/10		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
04/22/10		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
01/19/11		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
01/20/11		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
Standard Laboratory Reporting Limits:										50	0.5	0.5	0.5	1.5	1.00
MTCA Method A CULs:										500	500	800/1,000	5	1,000	700
Current Method:										NWTPE-Dx Extended	NWTPE-Gx and USEPA 8021B				USEPA 7421

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.

Analytical results in bold font indicate concentrations exceed MTCA Method A CULs.

TOC = Top of Casing

(ft.) = Feet

DTW/P = Depth to Water or Product

GWE = Groundwater Elevation

(msl) = Mean Sea Level

SPHT = Separate-Phase Hydrocarbons Thickness

TPH = Total Petroleum Hydrocarbons

TPH-DRO = TPH as Diesel-Range Organics

TPH-HRO = TPH as Heavy 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 inch in thickness, or there was insufficient water column to collect a DTW measurement

TPH-GRO = TPH as Gasoline-Range Organics

BTEX = Benzene, toluene, ethylbenzene, and total xylenes

MTBE = Methyl tertiary butyl ether

USEPA = United States Environmental Protection Agency

SAIC = SAIC Energy, Environment & Infrastructure, LLC

D. Lead = Dissolved Lead

-- = Not Measured/Not Analyzed

µg/L = Micrograms per liter

(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 SPH, from the TOC

MTCA = Model Toxics Control Act Cleanup Regulations

CULs = Cleanup levels



TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in $\mu\text{g/L}$

EXPLANATIONS (cont.):

- * TOC elevations have been surveyed in feet based on an arbitrary benchmark.
- ** GWE corrected for the presence of SPH; correction factor: $[(\text{TOC} - \text{DTW}) + (\text{SPHT} \times 0.8)]$.
- *** GWE corrected for the presence of SPH; correction factor: $[(\text{TOC} - \text{DTW} - \text{SPHT}) + (\text{SPHT} \times 0.8)]$; Historical data has been altered to correct error in original reporting of depth to product as depth to water. Where $\text{SPHT} > 0.00$, GWE is corrected for the presence of SPH; correction factor: $[(\text{TOC} - \text{DTW}) + (\text{SPHT} \times 0.8)]$.

ANALYTICAL METHOD:

TPH-DRO analyzed by ECY 97-602 NWTPH-DX modified Method TPH-Dx with silica-gel cleanup.

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

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

BTEX analyzed by USEPA Method 8260B.

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

- 1 Analyzed 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 container broken 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 USEPA Method 8021 was not detected at or above 10 ppb.
- 10 MTBE by USEPA Method 8021 was not detected at or above 250 ppb.
- 11 MTBE by USEPA Method 8021 was not detected at or above 2.5 ppb.
- 12 Absorbent sock in well.
- 13 MTBE by USEPA 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 USEPA Method 8260.
- 23 Laboratory Detection Limit is greater than the MTCA Method A CUL.
- 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 $\mu\text{g/L}$.
- 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.
- 28 Insufficient water to determine GWE.
- 29 The Laboratory report indicates the result reported for toluene in this sample may be attributed to trace amounts of toluene recently found in HCl preserved vials from the manufacturer. The field blank associated with this sample had a trace toluene detection of 1 $\mu\text{g/L}$. Please refer to the letter accompanying the lab report for further explanation.
- 30 The Laboratory report indicates the result reported for toluene in this sample may be attributed to trace amounts of toluene recently found in HCl preserved vials from the manufacturer. The field blank associated with this sample had a trace toluene detection of 0.9 $\mu\text{g/L}$. Please refer to the letter accompanying the lab report for further explanation.
- 31 The Laboratory report indicates the result reported for toluene in this field blank may be attributed to trace amounts of toluene recently found in HCl preserved vials from the manufacturer. Please refer to the letter accompanying the lab report for further explanation.
- 32 Reporting limits were raised due to interference from the sample matrix.

TABLE 2
GROUNDWATER ANALYTICAL RESULTS FOR MONITORED NATURAL ATTENUATION PARAMETERS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in $\mu\text{g/L}$ and mg/L

Well ID/Date	Iron	Manganese	Nitrate as Nitrogen	Nitrite as Nitrogen	Sulfate	Alkalinity to pH 4.5	Alkalinity to pH 8.3	Ferrous Iron	Sulfide
VP-5/MW-5									
04/19-22/10	366	1,740	4.700	<0.400	73,300	69,500	<460	0.130	<54
01/17-20/11	2,350	234	11,600	<0.4	51,300	36,900	<460	26	<0.054
VP-7/MW-3									
03/26-28/91	50,000	8,600	<0.010	--	--	--	--	--	--
12/14/99	--	7.76	<0.10	--	13,400	--	--	11.7	--
VP-8/ MW-7									
12/11/08	5,470	527	0.840	<0.200	109,000	193,000	<460	<0.100	<54
04/13-16/09	1,690	217	0.770	<0.400	43,700	149,000	<460	0.960	<54
10/12-15/09	1,220	187	2.300	<0.400	29,200	112,000	<460	2.800	<54
04/19-22/10	4,400	311	3.300	<0.400	23,700	112,000	<460	1.200	140
01/17-20/11	71,700	4,330	45,600	<0.4	28,100	15,700	<460	33	<0.054
VP-9									
12/15/99	--	420	9,200	--	34,000,000	--	--	9,400	--
MW-4									
12/15/99	--	10.5	<0.10	--	<200	--	--	6.15	--
11/10/08	<52.2	1,460	4.72	<0.200	220,000	117,000	<460	<0.100	<54
04/13-16/09	299	3,570	1.300	<0.400	133,000	206,000	<460	0.420 ¹	<54
10/12-15/09	643	6,300	<0.250	<0.400	99,200	267,000	<460	0.690	230
04/19-22/10	876	5,370	<0.250	<0.400	23,900	233,000	<460	0.690	81
01/17-20/11	4,210	2,630	1,900	<0.4	21,100	217,000	<460	890	<0.054
MW-6									
05/01/08	22,900	5,170	0.560	<0.200	155,000	57,400	<460	17.3	270
11/10/08	6,590	32,400	21.1	0.300	785,000	38,900	<460	0.698	<54
11/10/08 (D)	6,370	32,700	21.0	0.310	843,000	39,200	<460	0.819	<54
04/13-16/09	8,860	14,800	0.280	<0.400	248,000	298,000	<460	3.500	<54
10/12-15/09	4,060	5,560	<0.250	<0.400	72,900	397,000	<460	4.800	230
04/19-22/10	33,600	15,500	<0.250	<0.400	151,000	400,000	<460	37,100	150
01/17-20/11	43,500	23,100	<250	<0.4	270,000	327,000	<460	43,400	0.11
MW-9									
12/15/99	--	10.5	--	--	--	--	--	6.15	--
11/10/08	23,400	21,400	<0.200	<0.200	13,800	578,000	<460	2.50	200
04/13-16/09	31,200	37,000	<0.250	<0.400	242,000	354,000	<460	30.200	110
10/12-15/09	25,300	20,700	<0.250	<0.400	116,000	384,000	<460	25.000	130
04/19-22/10	25,900	13,200	<0.250	<0.400	128,000	328,000	<460	25.300	67
01/17-20/11	68,500	69,300	<250	<0.4	88,800	360,000	<460	27,500	0.41

TABLE 2
GROUNDWATER ANALYTICAL RESULTS FOR MONITORED NATURAL ATTENUATION PARAMETERS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington

Concentrations reported in $\mu\text{g/L}$ and mg/L

Well ID/Date	Iron	Manganese	Nitrate as Nitrogen	Nitrite as Nitrogen	Sulfate	Alkalinity to pH 4.5	Alkalinity to pH 8.3	Ferrous Iron	Sulfide
MW-10									
03/26-28/91	15,000	3,200	0.243	--	--	--	--	1.59	--
03/26-28/91 (D)	10,000	3,400	0.243	--	--	--	--	--	--
12/15/99	--	5.12	0.72	--	70,600	--	--	<2.00	--
05/01/08	32,800	3,110	0.320	<0.200	33,900	208,000	<460	--	<54
11/10/08	390	1,570	1.33	<0.200	45,900	168,000	<460	0.120	<54
04/13-16/09	575	2,860	2.000	<0.400	64,400	192,000	<460	0.510	<54
10/12-15/09	2,970	3,350	<0.250	<0.400	79,600	181,000	<460	0.470	<54
04/19-22/10	1,410	960	3.500	<0.400	50,700	227,000	<460	0.029	<54
01/17-20/11	5,210	4,460	9,200	<0.4	33,300	229,000	<460	<10	<0.054
MW-14									
04/19-22/10	8,080	7,530	<0.250	<0.400	127,000	342,000	<460	8.600	93
01/17-20/11	28,300	6,880	<250	<0.4	38,800	308,000	<460	10,100	0.11
MW-15									
12/11/08	116	96	0.490	<0.200	25,400	44,400	<460	<0.100	<54
04/13-16/09	405	139	<0.250	<0.400	6,600	29,100	<460	<0.010	<54
10/12-15/09	274	330	<0.250	<0.400	99,800	84,800	<460	0.037	<54
04/19-22/10	<52.2	7.2	<0.250	<0.400	3,100	45,000	<460	<0.010	<54
01/17-20/11	4600	238	<250	<0.4	2,300	41,300	<460	20	<0.054
MW-16									
05/02/08	2,250	1,240	1.63	0.600	23,900	121,000	<460	<0.250	<54
11/06/08	181	1,900	5.58	<0.200	46,200	50,300	<460	<0.100	<54
04/13-16/09	508	205	9.800	<0.400	24,900	63,100	<460	<0.010	<54
10/12-15/09	78.4	172	14.9	<0.400	24,700	67,300	<460	0.017	<54
04/19-22/10	925	1,630	7.9	<0.400	22,300	58,100	<460	<0.010	<54
01/17-20/11	43,600	4,020	5,900	<0.4	14,500	67,400	<460	10	<0.054
MW-17									
05/01/08	2,820	2,570	<0.200	<0.200	27,600	111,000	<460	<0.250	<54
11/06/08	499	1,990	1.50	<0.200	65,700	92,800	<460	<0.100	<54
11/06/08 (D)	647	2,450	1.09	<0.200	68,400	111,000	<460	<0.100	<54
04/13-16/09	343	1,520	1.500	<0.400	68,000	92,900	<460	0.130	<54
10/12-15/09	273	2,890	2.900	<0.400	28,000	218,000	<460	0.180	<54
04/19-22/10	1,150	1,090	6,100	<0.400	26,000	74,900	<460	<0.010	<54
01/17-20/11	134	116	4,600	<0.4	26,000	75,400	<460	<10	<0.054

TABLE 2
GROUNDWATER ANALYTICAL RESULTS FOR MONITORED NATURAL ATTENUATION PARAMETERS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in µg/L and mg/L

Well ID/Date	Iron	Manganese	Nitrate as Nitrogen	Nitrite as Nitrogen	Sulfate	Alkalinity to pH 4.5	Alkalinity to pH 8.3	Ferrous Iron	Sulfide
MW-18									
12/11/08	3,170	4,300	<0.200	<0.200	55,300	266,000	<460	<0.100	<54
04/13-16/09	8,880	3,220	<0.250	<0.400	77,500	196,000	<460	2.100	<54
10/12-15/09	2,670	3,820	<0.250	<0.400	41,900	247,000	<460	2.900	66
04/19-22/10	420	1,900	4.100	<0.400	32,800	178,000	<460	0.120	<54
01/17-20/11	106,000	710	7,200	<0.4	22,000	107,000	<460	18	<0.054
MW-21									
05/01/08	8,110	395	<0.200	<0.200	21,900	268,000	<460	2.13	<54
11/06/08	5,980	374	<0.200	<0.200	18,400	260,000	<460	0.216	<54
04/13-16/09	6,260	334	<0.250	<0.400	18,900	245,000	<460	4.600	<54
10/12-15/09	4,740	299	<0.250	<0.400	19,900	234,000	<460	5.100	<54
04/19-22/10	7,320	200	<0.250	<0.400	20,600	164,000	<460	3.900	<54
01/17-20/11	55,800	930	<250	<0.4	40,900	198,000	<460	6,100	0.14 ⁴
MW-25									
04/19-22/10	<52.2	1,280	1.600	<0.400	28,600	180,000	<460	<0.010	<54
01/17-20/11	8,470	1,880	3,600	<0.4	23,800	168,000	<460	46	<0.054
MW-26									
05/01/08	3,030	3,660	<0.200	<0.200	137,000	129,000	<460	0.373	57
05/01/08 (D)	3,210	3,660	<0.200	<0.200	133,000	131,000	<460	0.817	<54
11/06/08	4,260	3,710	0.800	<0.200	117,000	156,000	<460	0.275	78
04/13-16/09	319	1,380	5.600 ⁴	<8.000 ⁴	16,500	142,000	<460	0.071	<54
10/12-15/09	<52.2	1,040	10.300	<0.400	60,800	88,400	<460	0.012	<54
04/19-22/10	<52.2	48.4	17.700	<0.400	44,300	87,200	<460	0.012	<54
01/17-20/11	98.3	55.6	15,300	<0.4	33,700	97,100	<460	20	<0.054
MW-30									
04/30/08	1,570	144	4.91	<0.200	16,500	228,000	<460	<0.250	<54
11/06/08	196	108	4.11	<0.200	10,700	226,000	<460	<0.100	<54
11/06/08 (D)	325	92.9	4.09	<0.200	11,000	224,000	<460	<0.100	<54
04/13-16/09	410	174	4.800 ²	<0.400	13,200	225,000	<460	<0.010	<54
10/12-15/09	59.8	120	9.500	<0.400	15,500	216,000	<460	<0.010	<54
04/19-22/10	1,830	352	0.690	<0.400	8,100	281,000	<460	0.033	<54
01/17-20/11	71,800	6,500	22,700	<0.4	28,800	267,000	<460	<10	<0.054
MW-31									
04/19-22/10	567	10.1	0.340	<0.400	57,300	161,000	<460	0.055	<54
01/17-20/11	247,000	6,290	710	<0.4	41,400	144,000	<460	10	<0.11 ⁴
MW-33									
04/19-22/10	4,650	236	<0.250	<0.400	17,300	252,000	<460	4.100	460
01/17-20/11	12,300	366	<250	<0.4	30,900	243,000	<460	3,900	3.9

TABLE 2
GROUNDWATER ANALYTICAL RESULTS FOR MONITORED NATURAL ATTENUATION PARAMETERS
FORMER TEXACO SERVICE STATION NO. 21-1577
631 Queen Anne Avenue North
Seattle, Washington
Concentrations reported in µg/L and mg/L

Well ID/Date	Iron	Manganese	Nitrate as Nitrogen	Nitrite as Nitrogen	Sulfate	Alkalinity to pH 4.5	Alkalinity to pH 8.3	Ferrous Iron	Sulfide
MW-34									
04/30/08	1,750	37.4	11.4	<0.200	23,000	113,000	<460	<0.250	<54
11/06/08	426	15.7	15.9	<0.200	24,500	90,100	<460	<0.100	<54
04/13-16/09	<52.2	0.91	15.200	<0.400	47,400	96,100	<460	0.075 ³	<54
10/12-15/09	576	15.3	12.300	<0.400	37,100	102,000	<460	0.030	<54
04/19-22/10	8,360	175	9.900	<0.400	23,400	99,600	<460	0.037	<54
01/17-20/11	175,000	3,290	11,700	<0.4	21,200	85,200	<460	21	<0.22 ⁴
MW-35									
05/01/08	2,010	3,620	<0.200	<0.200	<1500	391,000	<460	0.636	<54
04/13-16/09	21,300	2,330	<0.250	<0.400	21,700	357,000	<460	19,500	73
10/12-15/09	14,700	1,880	<0.250	<0.400	37,100	214,000	<460	2,900	170
04/19-22/10	45,100	2,230	<0.250	<0.400	46,500	200,000	<460	4,600	400
01/17-20/11	100,000	3,140	340	<0.4	80,200	173,000	<460	2,000	0.17
DPE-8/MW-22									
11/06/08	99,600	22,300	<0.200	<0.200	4,200	529,000	<460	4.62	580
04/13-16/09	24,200	5,980	0.340	<0.400	47,300	228,000	<460	23,700	140
10/12-15/09	13,600	3,830	<0.250	<0.400	46,800	188,000	<460	15,100	610
04/19-22/10	2,370	1,280	<0.250	<0.400	61,600	109,000	<460	1,500	<54
01/17-20/11	1,340	267	3500	<0.4	34,500	68,900	<460	<10	<0.054

EXPLANATIONS:

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

µg/L = Micrograms per liter

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

mg/L = Milligrams per liter

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

-- = Not Measured/Not Analyzed

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

(D) = Duplicate

USEPA = United States Environmental Protection Agency

ANALYTICAL METHODS:

Manganese analyzed by Method SW-846 6010B

Alkalinity analyzed by SM20 Method 2320 B

Sulfate analyzed by USEPA Method 300.0

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

Ferrous Iron analyzed by 3500-Fe B

Sulfide analyzed by Method SM20 4500 S2 D

1 Laboratory report indicates this sample was analyzed twice for ferrous iron. The result of the second analysis was 471 µg/L.

2 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 µg/L.

3 Laboratory report indicates this sample was analyzed twice for ferrous iron. The result of the second analysis was 230 µg/L.

4 Laboratory report indicates the reporting limit(s) for the analyte(s) was raised due to matrix inference.



Attachment A:
Groundwater Monitoring and Sampling Data Package





GETTLER-RYAN INC.

TRANSMITTAL

January 31, 2011

G-R #386765

TO: Mr. Michael Lange
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	DESCRIPTION
VIA PDF	Groundwater Monitoring and Sampling Data Package Second Semi-Annual Event of January 17, 18, 19, and 20, 2011

COMMENTS:

Pursuant to your request, we are providing you with copies of the above referenced data for your use.

Please provide us the updated historical data prior to the next monitoring and sampling event for our field use.

Please feel free to contact me if you have any comments/questions.

trans/211577



GETTLER - RYAN INC.

CHEVRON - SITE CHECK LIST

Facility#:	Chevron #211577	Date:	1/17 - 1/20/11
Address:	631 Queen Anne North		
City/St.:	Seattle, WA		
Status of Site:	QUEEN ANNE		

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	
VP-4		NO Bolts			
VP-5		OK			
VP-7		OK			
VP-8		NO Bolts			
VP-9		OK			
MW-4		10 Bolts			
MW-6		OK			
MW-9		OK			
MW-10		OK			
MW-11		NO Bolts			
MW-12	1 BROKEN FLANGE	OK			
MW-13		OK			
MW-14		1 MISSING			
MW-15		NO Bolts			
MW-16		--			
MW-17		--			
MW-18		--			
MW-19		OK			
MW-20		1 missing			
MW-21	1 BROKEN FLANGE	NO Bolts			

Additional Comments/Observations:



GETTLER - RYAN INC.

CHEVRON - SITE CHECK LIST

Facility#:	Chevron #211577	Date:	1/17 - 1/20/11
Address:	631 Queen Anne North		
City/St.:	Seattle, WA		
Status of Site:	QUEEN ANNE		

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
MW-23	OK	OK	OK	OK	
MW-24		OK			
MW-25		10 Bolts			
MW-26		..			
MW-30		..			
MW-31		OK			
MW-32		..			
MW-33		..			
MW-34		1 missing			
MW-35		OK			
RW-2		OK			
DPE-1		10 Bolts			
DPE-2		OK			
DPE-3					
DPE-4					
DPE-5					
DPE-6					
DPE-7					
DPE-8			V		
DPE-9			V	V	

Additional Comments/Observations:

Standard Operating Procedure, Low-Flow Purging and Sampling

Gettler-Ryan Inc. field personnel adhere to the following Standard Operating Procedure (SOP) for the collection and handling of representative groundwater samples using the Low-Flow (Minimal-Drawdown) Purging technique. This SOP incorporates purging and sampling methods 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.*"

A QED Well Wizard™ (or equivalent) bladder pump or Peristaltic Pump will be used to purge and sample selected wells as outlined in the scope-of-work. An in-line flow cell or other multi-parameter meter is used to collect water quality indicating parameters during purging.

Initial Pump Discharge Test Procedures

The Static Water Level (SWL) is measured in all wells at the site prior to the installation of the pump or tubing and initiation of the test procedures in any well. In addition, the presence or absence of separate-phase hydrocarbons (SPH) is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot. The SWL measurement and SPH thickness, if any, will be recorded on the field data sheet.

The bladder pump or suction inlet tubing of the peristaltic pump is then positioned with its inlet located within the screened interval of the well. After pump installation, the SWL is allowed to recover to its original level. The pump is then started at a discharge rate between 100 ml to 300 ml per minute without the in-line flow cell connected. The water level is monitored continuously for any change from the original measurement and the discharge rate is adjusted until an optimum discharge rate (ODR) is determined. The goal for the ODR is to produce a stable drawdown of less than 0.1 meter; however the total drawdown from the initial SWL should not exceed 25% of the distance between pump inlet location and the top of the well screen. If the in-line flow cell is to be used, purging is discontinued once the ODR is determined, and the inline flow cell is connected. Purging is then resumed and the ODR is adjusted to allow for the back pressure of the in-line flow cell.

Purging and Water Quality Parameter Measurement

Prior to sampling the well, the SWL will be re-measured and documented and purging will be re-initiated using the ODR. The discharge rate will be confirmed by volumetric discharge measurement and the ODR adjusted as necessary. When the ODR has been re-established, the SWL drawdown has stabilized within the acceptable range and at least one pump system volume (bladder volume and/or discharge tubing volume) has been purged, field measurements for temperature (T), pH, conductivity (Ec), and if required, oxygen reduction potential (ORP) and dissolved oxygen (DO) will be collected and documented on the field data sheet. Measurements should be taken every three to five minutes until parameters stabilize for three consecutive readings. The minimum parameter subset of T ($\pm 10\%$), pH (± 0.1 unit), and Ec (± 10 uS) are required to stabilize. Additional parameters that may be required are DO (± 0.2 mg/l) and ORP (± 20 mV).

Sample Collection

When water quality parameters have stabilized, and there is no change in the SWL drawdown, groundwater sample collection may begin. Water samples are collected from the discharge tubing into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used when possible. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards, as directed by the scope of work. 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. A laboratory supplied trip blank accompanies each sampling set. The trip blank is analyzed for some or all of the same compounds as the groundwater samples. 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.



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: **1/17 - 1/20/11** (inclusive)
 Sampler: **ML**

Well ID **VP-2**

Date Monitored: **1/17-11**

Well Diameter **2** in.

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

Total Depth **141.96** ft.

Depth to Water **11.58** ft.

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: **/**

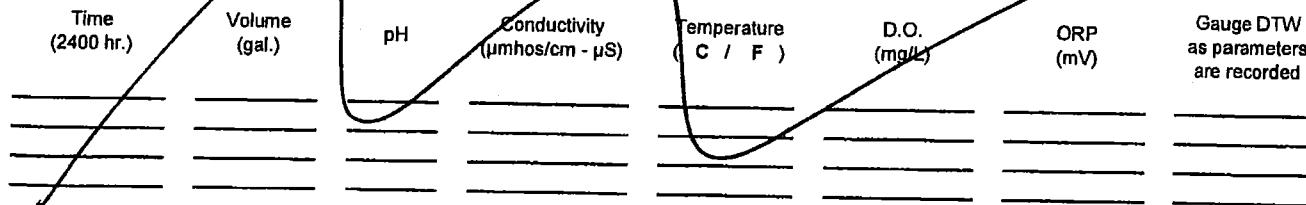
Water Color: _____ Odor: **Y / N** _____

Approx. Flow Rate: **gpm.**

Sediment Description: _____

Did well de-water? **If yes, Time:** _____

Volume: **gal.** DTW @ Sampling: _____



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: **M10**

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: **1/17 - 1/20** (inclusive)
 Sampler: **AW**

Well ID: **VP-4**
 Well Diameter: **2** in.
 Total Depth: **13.96** ft.
 Depth to Water: **10.92** 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

Check if water column is less than 0.50 ft.

3.04 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): **1035**
 Sample Time/Date: **115 / 1-19-11**
 Approx. Flow Rate: **200ml** gpm.
 Did well de-water? **N** If yes, Time: **—** Volume: **—** gal. DTW @ Sampling: **10.98**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm)	Temperature (°C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1050	3.0	7.00	351	12.4	1.44	164	10.95
1053	3.6	7.02	354	12.5	1.45	167	10.97
1056	4.2	7.05	356	12.5	1.45	166	10.98

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
VP-4	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: _____

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: **1-17-1-20** (Inclusive)
 Sampler: **AW**

Well ID: **VP-5 /mw-5** Date Monitored: **1-17-11**
 Well Diameter: **2** in.
 Total Depth: **16.39** ft.
 Depth to Water: **10.47** ft.
5.92 xVF **—** = **—** x3 case volume = Estimated Purge Volume: **—** gal.
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **—**

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

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): **0900** Weather Conditions: **Partly Cloudy**
 Sample Time/Date: **0935 / 1-19-11** Water Color: **Cloudy** Odor: **Y/N**
 Approx. Flow Rate: **200ml** bpm. Sediment Description: **Cloudy**
 Did well de-water? **N** If yes, Time: **—** Volume: **—** gal. DTW @ Sampling: **10.51**

Time (2400 hr.)	Volume (gal.) L	pH	Conductivity (µmhos/cm - µS)	Temperature (°F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
0915	7.00	6.84	239	9.7	1.32	175	10.49
0918	3.6	6.84	241	9.9	1.32	172	10.49
0921	4.2	6.85	245	9.9	1.34	170	10.51

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
VP-5 /mw-5	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/NITRITE/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: **—**

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: **1/17 - 1/20/11** (inclusive)
 Sampler: **ml**

Well ID: **VP-7**
 Well Diameter: **2** in.
 Total Depth: **12.42** ft.
 Depth to Water: **8.79** ft.

Date Monitored: **1-17-11**

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

Check if water column is less than 0.50 ft.

x VF _____ = _____ x 3 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: _____

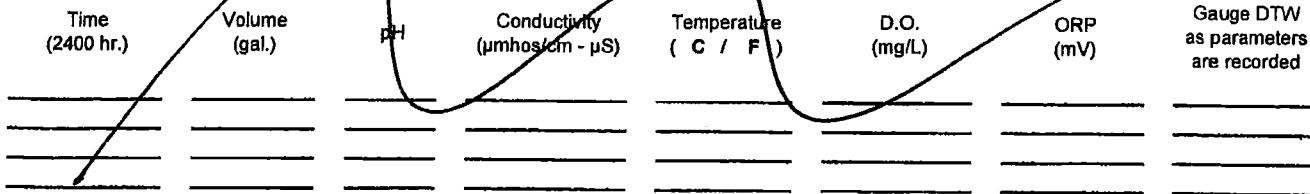
Start Time (purge): _____

Sample Time/Date: _____ / _____

Approx. Flow Rate: _____ gpm.

Did well de-water?

If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: _____



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: **M/H**

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: 1/17-1/20 (inclusive)
 City: Seattle, WA Sampler: Aw

Well ID VP-8 / mw-7 Date Monitored: 1-17-11
 Well Diameter 2 in.
 Total Depth 17.96 ft.
 Depth to Water 10.28 ft.
7.68 xVF — = — x3 case volume = Estimated Purge Volume: — gal.
 Check if water column is less than 0.50 ft.

Volume Factor (VF)	3/4"= 0.02 4"= 0.66	1"= 0.04 5"= 1.02	2"= 0.17 6"= 1.50	3"= 0.38 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 ✓
 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): 0815 Weather Conditions: Sunny
 Sample Time/Date: 0850 / 1-19-11 Water Color: Cloudy Odor: Y / NO
 Approx. Flow Rate: 200ml gpm. Sediment Description: Cloudy
 Did well de-water? N If yes, Time: — Volume: — gal. DTW @ Sampling: 10.32

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
<u>0830</u>	<u>3.0</u>	<u>6.93</u>	<u>338</u>	<u>7.0</u>	<u>1.51</u>	<u>83</u>	<u>10.29</u>
<u>0833</u>	<u>3.6</u>	<u>6.94</u>	<u>340</u>	<u>7.1</u>	<u>1.50</u>	<u>83</u>	<u>10.31</u>
<u>0836</u>	<u>4.2</u>	<u>6.96</u>	<u>342</u>	<u>7.1</u>	<u>1.50</u>	<u>81</u>	<u>10.32</u>

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
VP-8/mw-7	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/NITRITE/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: _____

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: **1/17 - 1/20/11** (inclusive)
 Sampler: **ML**

Well ID: **VP-9**
 Well Diameter: **2** in.
 Total Depth: **12.46** ft.
 Depth to Water: **9.09** 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

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: /

Weather Conditions:

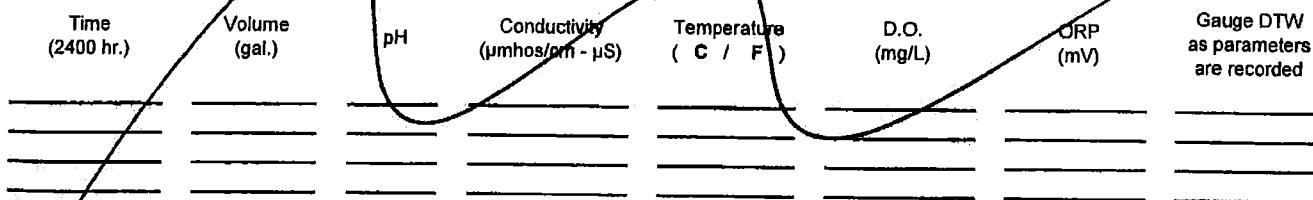
Water Color: Odor: Y / N

Approx. Flow Rate: ppm.

Sediment Description:

Did well de-water?

If yes, Time: Volume: gal. DTW @ Sampling:



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**

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: **1/17 - 1/20/11** (inclusive)
 Sampler: **M.L.**

Well ID: **MW-4**
 Well Diameter: **2** in.
 Total Depth: **17.38** ft.
 Depth to Water: **10.07** ft.

Date Monitored: **1-17-11**

Volume Factor (VF)	3/4" = 0.02 4" = 0.66	1" = 0.04 5" = 1.02	2" = 0.17 6" = 1.50	3" = 0.38 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]: _____
 _____ x VF _____ = _____ x 3 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): **0910**

Weather Conditions: **SUNNY**

Sample Time/Date: **0940/11-19-11**

Water Color: **Clay**

Odor: **Y/N**

Approx. Flow Rate: **200 ml** gpm.

Sediment Description: **none**

Did well de-water? **NO**

If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **10.07**

Time (2400 hr.)	Volume L	pH	Conductivity (umhos/cm - 1)	Temperature (° F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
0925	3	7.22	512	8.0	1.41	69	10.07
0929	3.6	7.18	517	8.1	1.40	74	10.07
0931	4.2	7.17	518	8.1	1.41	73	10.07

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-4	10 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sq
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: _____

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: **1/17 - 1/20/11** (inclusive)
 Sampler: **ML AW**

Well ID: **MW-6**
 Well Diameter: **2** in.
 Total Depth: **28.07** ft.
 Depth to Water: **18.24** ft.

Date Monitored: **1-17-11**

Volume Factor (VF)	3/4"= 0.02 4"= 0.66	1"= 0.04 6"= 1.02	2"= 0.17 8"= 1.50	3"= 0.38 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 **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): **10:30**

Sample Time/Date: **11:00 1/17-11**

Approx. Flow Rate: **200 ml/min.**

Did well de-water? **NO** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **18.27**

Weather Conditions:

Water Color: **Clear** Odor: **Y/N**

Sediment Description:

none

Time (2400 hr.)	Volume (gal)	pH	Conductivity (umhos/cm - US)	Temperature (°F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
10:45	3	6.17	1190	11.5	1.98	56	18.26
10:49	3.6	6.16	1201	11.5	1.94	63	18.27
10:51	4.2	6.23	1200	11.5	1.94	61	18.27

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-6	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	2 x 1 liter amber	YES	HCL	LANCASTER	NWTPH-Dx w/sq
	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: **DVP-1 ? FB-1 COLLECTED FROM THIS WELL**

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: **1/17 - 1/20/11** (inclusive)
 Sampler: **ML AW**

Well ID: **MW-9**
 Well Diameter: **2** in.
 Total Depth: **27.17** ft.
 Depth to Water: **18.65** ft.

Volume Factor (VF)	3/4" = 0.02 4" = 0.66	1" = 0.04 5" = 1.02	2" = 0.17 6" = 1.50	3" = 0.38 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]: _____ x VF _____ = _____ 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): **0850**

Weather Conditions: **Rain**

Sample Time/Date: **0920 1/20/11**

Water Color: **Cloudy**

Odor: **DN STRONG**

Approx. Flow Rate: **2.00 ml/gpm**

Sediment Description: **light**

Did well de-water? **NO**

If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **18.72**

Time (2400 hr.)	Volume 1000 L	pH	Conductivity (µmhos/cm AS)	Temperature (°C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
0905	3	6.55	845	10.1	1.16	36	18.72
0908	3.6	6.61	849	10.1	1.21	40	18.72
0911	4.2	6.62	849	10.1	1.24	41	18.72

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-9	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: _____

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: **1/17 - 1/20/11** (inclusive)
 Sampler: **ML AW**

Well ID: **MW-10**
 Well Diameter: **2** in.
 Total Depth: **29.06** ft.
 Depth to Water: **10.62** ft.

Date Monitored: **1/17-11**

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]: **10.62** ft.

XVF _____ = _____ x3 case volume = Estimated Purge Volume: _____ gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **10.62** ft.

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): **0800**

Sample Time/Date: **0830 11-20-11**

Approx. Flow Rate: **200 ml** gpm.

Did well de-water? **NO** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **10.66**

Weather Conditions: **Rain**

Water Color: **Cloudy** Odor: **Y/N**

Sediment Description: **None**

Time (2400 hr.)	Volume 1000 3	pH 6.53	Conductivity ($\mu\text{mhos}/\text{cm}$) 864	Temperature ($^{\circ}\text{C}$ / $^{\circ}\text{F}$) 9.7	D.O. (mg/L) 0.76	ORP (mV) -42	Gauge DTW as parameters are recorded 10.65
0815	3	6.53	864	9.7	0.76	-42	10.65
0818	3.6	6.49	865	9.8	0.81	-38	10.65
0821	4.2	6.60	867	9.8	0.82	-37	10.66

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-10	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	2 x 1 liter amber	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: _____

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: **1/17 - 1/20/11** (inclusive)
 Sampler: **ML**

Well ID **MW-11**

Date Monitored: **1-17-11**

Well Diameter **2** in.

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

Total Depth **17.11** ft.

Depth to Water **-** ft.

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?

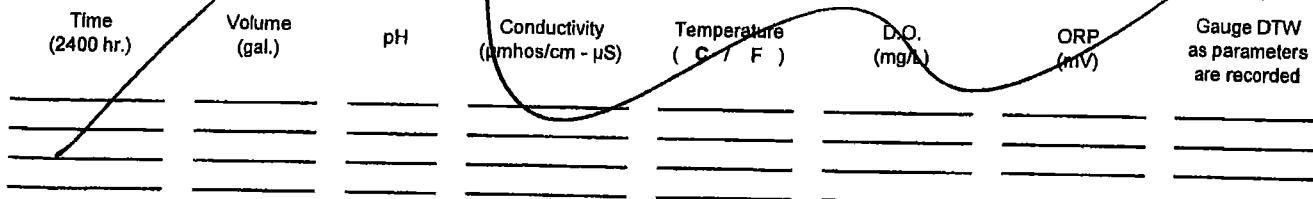
If yes, Time: _____

Weather Conditions:

Water Color: **Odor: Y / N**

Sediment Description: _____

Volume: **gal. DTW @ Sampling:** _____



LABORATORY INFORMATION

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

COMMENTS: **OBSTRUCTED AT ~ 11 FEET**

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: **1/17 - 1/20/11** (inclusive)
 Sampler: **ML**

Well ID: **MW-12**
 Well Diameter: **2** in.
 Total Depth: **16.31** ft.
 Depth to Water: **11.02** ft.

Date Monitored: **1/17-11**

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.

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?

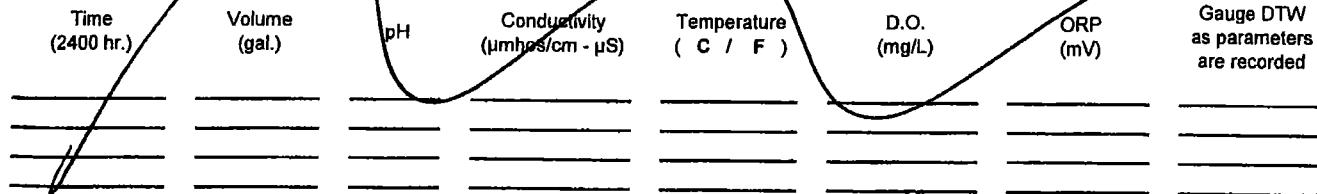
If yes, Time: _____

Weather Conditions:

Water Color: _____ Odor: Y / N _____

Sediment Description: _____

gal. DTW @ Sampling: _____



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: **m/o**

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: **1/17 - 1/20/11** (inclusive)
 Sampler: **ML**

Well ID: **MW-13**
 Well Diameter: **2** in.
 Total Depth: **19.79** ft.
 Depth to Water: **16.80** ft.

Date Monitored: **1-17-11**

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

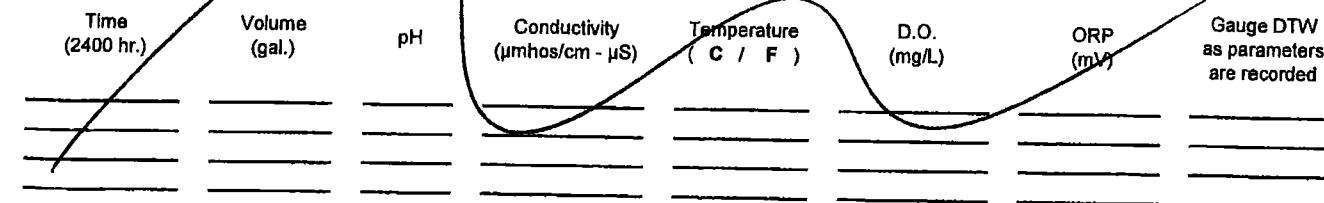
Product Transferred to: _____

Start Time (purge): _____

Sample Time/Date: _____

Approx. Flow Rate: _____ gpm.

Did well de-water? _____ If yes, Time: _____



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**

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: **1/17 - 1/20/11** (inclusive)
 Sampler: **ML**

Well ID: **MW-14**
 Well Diameter: **2** in.
 Total Depth: **24.41** ft.
 Depth to Water: **9.94** ft.

Date Monitored: **1-17-11**

Volume Factor (VF)	3/4" = 0.02 4" = 0.66	1" = 0.04 5" = 1.02	2" = 0.17 6" = 1.50	3" = 0.38 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): **0815**

Sample Time/Date: **0845 11-19-11**

Approx. Flow Rate: **200 ml** gpm.

Did well de-water? **NO** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **9.94**

Weather Conditions: **SUNNY**

Water Color: **Clear** Odor: **Y/N**

Sediment Description: **NONE**

Time (2400 hr.)	Volume (gal)	pH	Conductivity (µmhos/cm - µS)	Temperature (°F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
0830	3	6.81	216	9.6	1.82	24	9.94
0833	3.6	6.86	722	9.6	1.79	27	9.96
0836	4.2	6.87	223	9.6	1.79	28	9.96

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-14	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 260ml 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: _____

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: **1/17 - 1/20/11** (inclusive)
 Sampler: **M.L.**

Well ID: **MW-15**
 Well Diameter: **2** in.
 Total Depth: **24.11** ft.
 Depth to Water: **8.02** ft.

Date Monitored: **1-17-11**

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

Amnt Removed from Skimmer: _____ gal

Amnt Removed from Well: _____ gal

Water Removed: _____

Product Transferred to: _____

Start Time (purge): **11:00**

Weather Conditions: **Sunny**

Sample Time/Date: **1140 1/19/11**

Water Color: **Clear** Odor: **Y/N**

Approx. Flow Rate: **200 ml** gpm.

Sediment Description: **none**

Did well de-water? **NO**

If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **8.14**

Time (2400 hr.)	Volume (gal)	pH	Conductivity (umhos/cm - 15)	Temperature (°C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1125	3	6.43	102	10.0	0.96	56	8.11
1128	3.6	6.47	109	10.0	1.01	56	8.12
1131	9.2	6.98	107	10.0	1.02	59	8.14

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV.	TYPE	LABORATORY	ANALYSES
MW-15	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)	
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sq	
	1 x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM 3500 Fe B)	
	1 x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)	
	6 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: _____

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: **1/18/11 - 1/20/11** (inclusive)
 Sampler: **ML**

Well ID: **MW-16**
 Well Diameter: **2** in.
 Total Depth: **24.80** ft.
 Depth to Water: **10.25** ft.

Date Monitored: **1-18-11**

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.

— VF — = — 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): **1005**

Weather Conditions:

Cloudy

Sample Time/Date: **1035 1/18/11**

Water Color: **CLEAR**

Odor: **Y/R**

Approx. Flow Rate: **200 ml** gpm.

Sediment Description:

None

Did well de-water? **NO**

If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **10.76**

Time (2400 hr.)	Volume 1000 L	pH	Conductivity (µmhos/cm - us)	Temperature (01 F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1020	3	6.62	300	10.9	1.06	-36	10.26
1023	3.6	6.68	307	10.9	1.07	-41	10.26
1026	4.2	6.68	305	11.0	1.10	-40	10.26

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-16	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	2 x 1 liter amber	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: _____

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: **1/17 - 1/20/11** (inclusive)
Sampler: **ML**

Well ID: **MW-17**
Well Diameter: **2** in.
Total Depth: **24.99** ft.
Depth to Water: **8.13** ft.

Date Monitored: **1-17-11**

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.68	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 **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): **1210**

Weather Conditions: **Rain**

Sample Time/Date: **1240 1/18-11**

Water Color: **Clear**

Odor: **Y/N**

Approx. Flow Rate: **200 ml** gpm.

Sediment Description: **none**

Did well de-water? **NO**

If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **8.18**

Time (2400 hr.)	Volume 100 L	pH	Conductivity (µmhos/cm 45)	Temperature (°C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1225	3	7.02	516	11.4	1.26	69	8.17
1228	3.6	7.07	520	11.4	1.30	65	8.17
1231	4.2	7.08	521	11.4	1.29	65	8.18

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-17	2 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sq	
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: **DUP-2 & FB-2 COLLECTED FROM THIS 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: **1/17 - 1/30** (inclusive)
 City: **Seattle, WA** Sampler: **AW**

Well ID: **MW-18**
 Well Diameter: **2** in.
 Total Depth: **24.21** ft.
 Depth to Water: **9.73** ft.
14.48 xVF **—** = **—**

Date Monitored: **1-17-11**

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 **✓**
 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): **0945**
 Sample Time/Date: **1020 / 1-19-11**
 Approx. Flow Rate: **200ml /pm.**
 Did well de-water? **N** If yes, Time: **—** Volume: **—** gal. DTW @ Sampling: **9.78**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity ($\mu\text{mhos/cm}$)	Temperature (°C / °F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1000	3.0	6.88	222	12.4	1.32	170	9.75
1003	3.6	6.87	224	12.4	1.31	169	9.77
1006	4.2	6.87	225	12.5	1.30	169	9.78

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-18	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sq
	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: _____

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: **1/17-1/20/11** (inclusive)
 Sampler: **M/L**

Well ID: **MW-19**
 Well Diameter: **2** in.
 Total Depth: **24.25** ft.
 Depth to Water: **9.45** ft.

Date Monitored: **1/17-11**

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

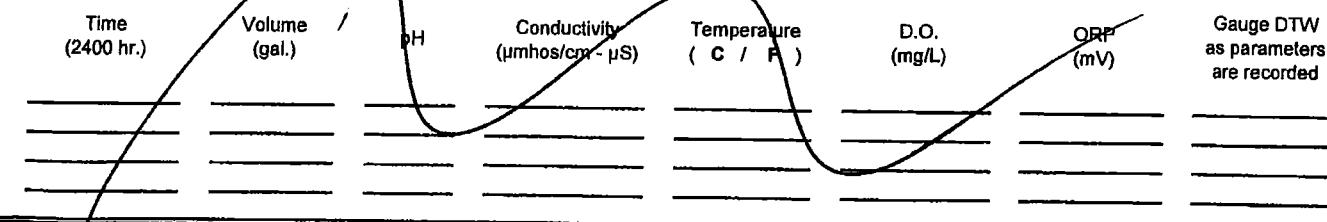
Water Color: _____ Odor: **Y / N** _____

Approx. Flow Rate: **gpm.**

Sediment Description: _____

Did well de-water? _____ If yes, Time: _____

Volume: _____ gal. DTW @ Sampling: _____



LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRG.	PRESERV.	TYPE	LABORATORY	ANALYSES
	x 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 8500 Fe B)	
	x 500ml poly	YES	NP	LANCASTER	ALKALINITY (2320B)	
	x 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/L**

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: **1/17 - 1/20/11** (inclusive)
 Sampler: **M6**

Well ID **MW-20**

Date Monitored: **1/17/11**

Well Diameter **2** in.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.68	5"= 1.02	6"= 1.50	12"= 5.80

Total Depth **19.72** ft.

Depth to Water **5.39** ft.

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: **1/17/11**

Approx. Flow Rate: **gpm.**

Did well de-water? _____

If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: _____

Time (2400 hr.)	Volume (gal.)	pH	Conductivity ($\mu\text{mhos}/\text{cm} - \mu\text{s}$)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
-----------------	---------------	----	---	---------------------	-------------	----------	--------------------------------------

Time (2400 hr.)	Volume (gal.)	pH	Conductivity ($\mu\text{mhos}/\text{cm} - \mu\text{s}$)	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: **M10**

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: **31/17 - 31/20/11** (inclusive)
 Sampler: **ML**

Well ID: **MW-21**
 Well Diameter: **2** in.
 Total Depth: **35.10** ft.
 Depth to Water: **25.60** ft.

Date Monitored: **1-17-11**

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
 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): **0810**
 Sample Time/Date: **0840 1-18-11**
 Approx. Flow Rate: **200 ml** gpm.
 Did well de-water? **NO** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **25.60**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm ^{1/2S})	Temperature (°F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
0825	3	6.57	5260	11.5	1.17	67	25.60
0828	3.6	6.62	530	11.5	1.21	71	25.60
0831	4.2	6.65	531	11.5	1.22	72	25.60

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-21	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sq
	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/NITRITE/SULFATE (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: **RETURNED TO COLLECT SHORT HOLD SAMPLES FOR NITRATE/NITRITE/SULFATE ON 1-19-11. SAMPLE TIME: 1310**

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: **1/17 - 1/20/11** (inclusive)
 Sampler: **ML**

Well ID: **MW-23**
 Well Diameter: **3/4 in.**
 Total Depth: **13.04 ft.**
 Depth to Water: **6.82 ft.**

Date Monitored: **1/17-11**

Volume Factor (VF)	3/4"= 0.02 4"= 0.66	1"= 0.04 5"= 1.02	2"= 0.17 6"= 1.50	3"= 0.38 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]: _____
 x VF = _____ 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: _____

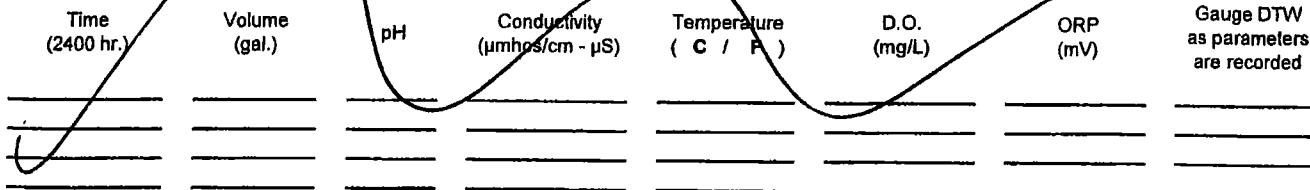
Water Color: _____ Odor: Y / N _____

Approx. Flow Rate: _____ gpm.

Sediment Description: _____

Did well de-water? _____

If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: _____



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: **m/o**

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: **1/17 - 1/20/11** (inclusive)
 Sampler: **M L**

Well ID: **MW-24**
 Well Diameter: **3/4** in.
 Total Depth: **12.50** ft.
 Depth to Water: **4.62** ft.

Date Monitored: **1-17-11**

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

Sample Time/Date: _____

Approx. Flow Rate: _____ gpm.

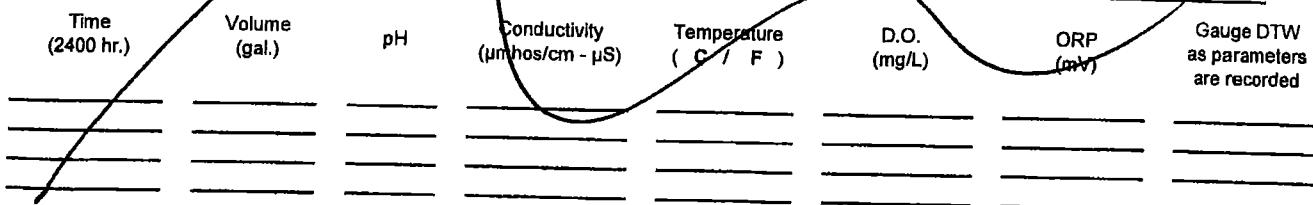
Did well de-water? _____ If yes, Time: _____

Weather Conditions:

Water Color: _____ Odor: Y / N _____

Sediment Description: _____

Volume: _____ gal. DTW @ Sampling: _____



LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	x voa vial	YES	HCL	LANCASTER	NWTPH-GwBTEX(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**

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: **1/17 - 1/20/11** (inclusive)
 Sampler: **ML**

Well ID: **MW-25**
 Well Diameter: **4** in.
 Total Depth: **22.82** ft.
 Depth to Water: **10.28** ft.

Date Monitored: **1-17-11**

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

Sampling Equipment:

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

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): **1010**

Sample Time/Date: **1040 1/19/11**

Approx. Flow Rate: **200 ml/gpm**

Did well de-water? **NO** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **10.28**

Weather Conditions:

SUNNY

Water Color: **Clear**

Odor: **Y/N**

Sediment Description: **none**

Time (2400 hr.)	Volume (gal) L	pH	Conductivity ($\mu\text{mhos}/\text{cm} \mu\text{s}$)	Temperature (°C / °F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1025	3	7.11	609	8.8	2.19	42	10.28
1028	3.16	7.13	615	8.8	2.21	48	10.28
1031	4.1	7.14	616	8.8	2.21	49	10.28

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-25	10 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: _____

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: **1/17 - 1/20/11** (inclusive)
 Sampler: **mL**

Well ID: **MW-26**
 Well Diameter: **4** in.
 Total Depth: **22.73** ft.
 Depth to Water: **9.08** ft.

Date Monitored: **1-17-11**

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): _____ x VF = _____ 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): **1105**

Weather Conditions:

Cloudy

Sample Time/Date: **1140 1/18/11**

Water Color: **Clear**

Odor: **Y/N**

Approx. Flow Rate: **100ml** gpm.

Sediment Description:

none

Did well de-water? **no**

If yes, Time: _____

Volume: _____ gal. DTW @ Sampling: **9.08**

Time (2400 hr.)	Volume 400 L	pH	Conductivity ($\mu\text{mhos/cm}$)	Temperature ($^{\circ}\text{F}$)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1120	3	6.91	602	11.2	2.16	76	9.08
1123	3.6	6.94	606	11.2	2.21	81	9.08
1126	4.2	6.95	607	11.2	2.20	81	9.08

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-26	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
2	x 1 liter amber	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: _____

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: **1/17- 1/20** (inclusive)
 Sampler: **An**

Well ID: **MW-30** Date Monitored: **1-17-11**
 Well Diameter: **2** in.
 Total Depth: **33.20** ft.
 Depth to Water: **24.68** ft. Check if water column is less than 0.50 ft.
 $xVF = \frac{x3 \text{ case volume}}{\text{Estimated Purge Volume}}$ gal.

Volume Factor (VF)	3/4"= 0.02 4"= 0.66	1"= 0.04 5"= 1.02	2"= 0.17 6"= 1.50	3"= 0.38 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
 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): **0910** Weather Conditions: **Brisk / cold.**
 Sample Time/Date: **0945 1-18-11** Water Color: **Cloudy** Odor: **Y/N**
 Approx. Flow Rate: **206ml** gpm. Sediment Description: **Cloudy**
 Did well de-water? **N** If yes, Time: **—** Volume: **—** gal. DTW @ Sampling: **24.73**

Time (2400 hr.)	Volume (gal)	pH	Conductivity ($\mu\text{mhos/cm} \cdot \mu\text{s}$)	Temperature ($^{\circ}\text{F}$)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
0925	3.0	6.46	598	13.2	1.42	19	24.69
0928	3.6	6.47	600	13.2	1.42	22	24.71
0931	4.2	6.49	601	13.3	1.44	24	24.73

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-30	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
7	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)
	x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: **Dup-3 and FB-3 taken from MW-30.**

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: **1/17 - 1/20** (inclusive)
 Sampler: **AW**

Well ID **MW-31**
 Well Diameter **2** in.
 Total Depth **28.22** ft.
 Depth to Water **19.79** ft.

Date Monitored: **1-17-11**

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

— x VF — = — 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): **0815**

Weather Conditions:

Cloudy / Brisk

Sample Time/Date: **0845 / 1-18-11**

Water Color: **Cloudy**

Odor: Y/N

Approx. Flow Rate: **200ml** gpm.

Sediment Description:

Cloudy

Did well de-water? **✓** If yes, Time: _____

Volume: _____

gal. DTW @ Sampling: **19.82**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
0830	3	6.61	398	10.8	2.23	52	19.80
0833	2.6	6.62	401	10.4	2.23	34	19.82
0836	4.2	6.64	402	10.9	2.26	57	19.82

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-31	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
2	1 x 1 liter amber	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/NITRITE/SULFATE (EPA 300.0)
1	x 500ml poly	YES	HNO3	LANCASTER	TOTAL IRON/ MANGANESE (8010)
	x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: RETURNED TO COLLECT SHORT HOLD SAMPLES FOR NITRATE/NITRITE/SULFATE ON 1-19-11. SAMPLE TIME: 1335

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: **1/17 - 1/20** (inclusive)
 Sampler: **Aw**

Well ID: **MW-32**
 Well Diameter: **2** in.
 Total Depth: **28.96** ft.
 Depth to Water: **9.82** ft.

Date Monitored: **1-17-11**

Volume Factor (VF)	3/4"= 0.02 4"= 0.66	1"= 0.04 5"= 1.02	2"= 0.17 6"= 1.50	3"= 0.38 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): **1155**

Sample Time/Date: **1230 / 1-18-11**

Approx. Flow Rate: **200ml/gpm.**

Did well de-water? **N** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **9.87**

Weather Conditions:

Water Color: **Cloudy** Odor: **Y/N**

Sediment Description: **Cloudy**

Time (2400 hr.)	Volume (gall L)	pH	Conductivity ($\mu\text{mhos/cm}$ - μS)	Temperature ($^{\circ}\text{C}$ / $^{\circ}\text{F}$)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1210	3.0	7.19	167	12.2	1.29	6	9.85
1213	3.6	7.18	169	12.3	1.30	8	9.86
1216	4.8	7.16	171	12.2	1.30	8	9.87

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-32	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 4600 S2 D)

COMMENTS: _____

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: **1/17 - 1/20** (inclusive)
 Sampler: **AW**

Well ID: **MW-33**
 Well Diameter: **2** in.
 Total Depth: **34.89** ft.
 Depth to Water: **27.75** ft.

Date Monitored: **1-17-11**

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): **1100**

Weather Conditions:

Cloudy

Sample Time/Date: **1135 / 1-18-11**

Water Color: **Cloudy**

Odor: **Slight**

Approx. Flow Rate: **200 ml** gpm.

Sediment Description:

Cloudy

Did well de-water? **N**

If yes, Time: **—** Volume: **—** gal. DTW @ Sampling: **27.79**

Time (2400 hr.)	Volume (gal.) L	pH	Conductivity (µmhos/cm 15)	Temperature (°F / °C)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1115	3.0	7.60	317	12.0	1.21	-9	27.77
1118	3.6	7.59	318	12.1	1.21	-10	27.78
1121	4.2	7.58	317	12.1	1.20	-10	27.79

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-33	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 3600 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: **—**

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: **1/17 - 1/20/11** (inclusive)
 Sampler: **ML**

Well ID: **MW-34**
 Well Diameter: **2** in.
 Total Depth: **37.03** ft.
 Depth to Water: **27.00** 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

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): **0910**
 Sample Time/Date: **0940 1/18/11**
 Approx. Flow Rate: **200 ml/min.**
 Did well de-water? **NO** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **27.04**

Time (2400 hr.)	Volume 4.0 L	pH	Conductivity (µmhos/cm - 18)	Temperature (°C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
0925	3	6.82	416	12.1	2.61	-17	27.02
0928	3.6	6.78	421	12.2	2.57	-20	27.04
0931	4.2	6.77	420	12.2	2.55	-20	27.04

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-34	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sq
	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: **RETURNED TO COLLECT SHORT HOLD SAMPLES FOR NITRATE/NITRITE/SULFATE ON 1-19-11. SAMPLE TIME 1400.**

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: **1/17 - 1/20** (inclusive)
 Sampler: **Aw**

Well ID: **Mw - 35**
 Well Diameter: **2** in.
 Total Depth: **37.20** ft.
 Depth to Water: **30.43** ft.

Date Monitored: **1-17-11**

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.

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
 Slack 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): **1010**
 Sample Time/Date: **1040 / 1-18-11**
 Approx. Flow Rate: **—** gpm.
 Did well de-water? **N** If yes, Time: **—** Volume: **—** gal. DTW @ Sampling: **30.45**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (μ mhos/cm - 10)	Temperature (0 / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
Mw-35	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8260)
2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/eg	
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: **Setup of peristaltic, water level too deep for peristaltic pump, after running 20min with no result. No purge sample taken after.**

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: **1/17 - 1/20/11** (inclusive)
 Sampler: **ML**

Well ID: **RW-2**
 Well Diameter: **8** in.
 Total Depth: **21.02** ft.
 Depth to Water: **9.70** ft.

Date Monitored: **1-17-11**

Volume Factor (VF)	3/4"= 0.02 4"= 0.66	1"= 0.04 5"= 1.02	2"= 0.17 6"= 1.50	3"= 0.38 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 **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): **1210**

Sample Time/Date: **1/24/11-19-11**

Approx. Flow Rate: **200 ml** gpm.

Did well de-water? **NO** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **9.70**

Weather Conditions: **SUNNY**

Water Color: **Clear** Odor: **Y/N**

Sediment Description: **None**

Time (2400 hr.)	Volume ml C	pH	Conductivity (µmhos/cm 15)	Temperature (°C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
1225	3	6.90	279	7.8	2.21	41	9.70
1228	3.6	6.94	281g	7.8	2.24	43	9.70
1231	4.2	6.94	281	7.8	2.25	45	9.70

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
RW-2	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/NITRITE/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: _____

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: **1/17 - 1/20/11** (inclusive)
 Sampler: **ML**

Well ID: **DPE-1**
 Well Diameter: **4** in.
 Total Depth: **21.25** ft.
 Depth to Water: **10.56** ft.

Date Monitored: **1/17/11**

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

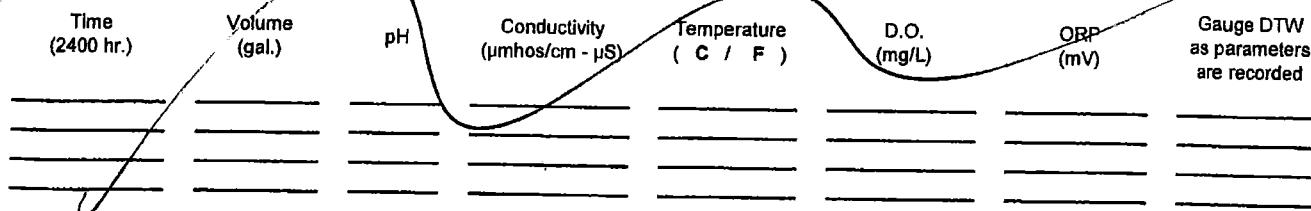
Water Color: _____ Odor: **Y / N** _____

Approx. Flow Rate: **gpm.**

Sediment Description: _____

Did well de-water?

If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: _____



COMMENTS: **PUMP in well** *M/0*

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

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)



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: **1/17 - 1/20** (inclusive)
 Sampler: **Aw**

Well ID: **DPE-2 / SP-3**

Date Monitored: **1-17-11**

Well Diameter: **4** in.

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

Total Depth: **24.55** ft.

Depth to Water: **10.33** ft.

14.22

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: _____ / _____

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 ($\mu\text{mhos}/\text{cm} - \mu\text{s}$)	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 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/0

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: **1/17 - 1/20/11** (inclusive)
 Sampler: **ML**

Well ID: **DPE-3**
 Well Diameter: **4** in.
 Total Depth: **18.29** ft.
 Depth to Water: **10.62** ft.

Date Monitored: **1/17-11**

Volume Factor (VF)	3/4"= 0.02 4"= 0.66	1"= 0.04 5"= 1.02	2"= 0.17 6"= 1.50	3"= 0.38 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]: _____
 x VF _____ = _____ 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

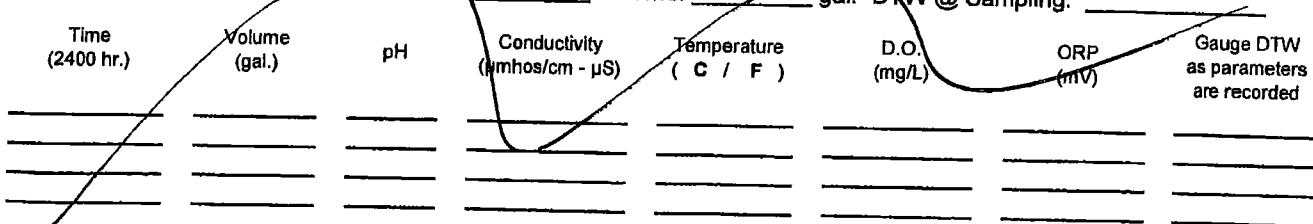
Amt Removed from Well: gal

Water Removed: _____ gal

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: _____



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/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: **M/O**

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: **1/17-1/20/11** (inclusive)
 Sampler: **MCL**

Well ID: **DPE-4**
 Well Diameter: **4** in.
 Total Depth: **19.97** ft.
 Depth to Water: **10.40** ft.

Date Monitored: **1-17-11**

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]: **11.17**
 xVF **1** = **1** x3 case volume = Estimated Purge Volume: **1** 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:

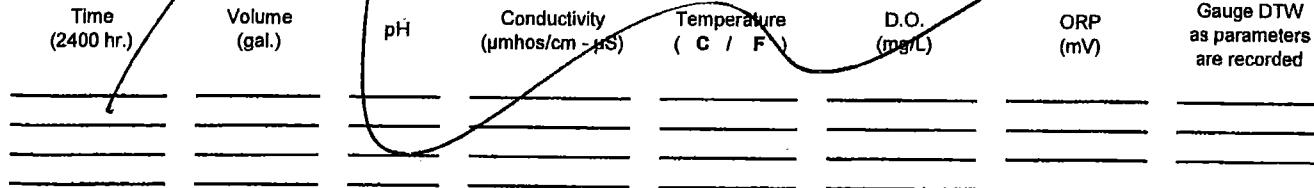
Time Started: **(2400 hrs)**
 Time Completed: **(2400 hrs)**
 Depth to Product: **ft**
 Depth to Water: **ft**
 Hydrocarbon Thickness: **ft**
 Visual Confirmation/Description:
 Skimmer / Absorbant Sock (circle one)
 Amt Removed from Skimmer: **gal**
 Amt Removed from Well: **gal**
 Water Removed:
 Product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

Start Time (purge): **1/17/11**

Sample Time/Date: **1/17/11**

Approx. Flow Rate: **gpm.**

Did well de-water? If yes, Time: **1/17/11** Volume: **1** gal. DTW @ Sampling: **11.17**



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/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/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: **MLO**

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: **1/17 - 1/20/11** (inclusive)
 Sampler: **MC AW**

Well ID: **DPE - 5**
 Well Diameter: **4** in.
 Total Depth: **26.67** ft.
 Depth to Water: **13.99** ft.

Date Monitored: **1-17-11**

Volume Factor (VF)	3/4"= 0.02 4"= 0.66	1"= 0.04 5"= 1.02	2"= 0.17 6"= 1.50	3"= 0.38 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): **1130**

Weather Conditions:

Cloudy

Sample Time/Date: **1200 1/20/11**

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: **14.00**

Time (2400 hr.)	Volume 6.42	pH	Conductivity (μ mhos/cm) HS	Temperature ($^{\circ}$ F) 61	D.O. (mg/L) 1.19	ORP (mV) -34	Gauge DTW as parameters are recorded 14.00
1145	3	7.04	309	11.7	1.19	-34	14.00
1148	3.6	7.06	315	11.7	1.21	-31	14.00
1151	4.2	7.07	316	11.7	1.21	-30	14.00

LABORATORY INFORMATION

SAMPLE ID	# CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
DPE - 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: _____

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: **1/17 - 1/20/11** (Inclusive)
 Sampler: **All Aw**

Well ID: **DPE-6**
 Well Diameter: **4** in.
 Total Depth: **32.76** ft.
 Depth to Water: **18.61** ft.

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

Check if water column is less than 0.50 ft.

— x VF — = — 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 **X**
 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): **0940**

Sample Time/Date: **1010 11-20-11**

Approx. Flow Rate: **200 ml** gpm.

Did well de-water? **NO** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **18.61**

Weather Conditions:

Water Color: **Cloudy** Odor: **O N** medium

Sediment Description: **none**

Time (2400 hr.)	Volume (ml) L	pH	Conductivity (µmhos/cm - US)	Temperature (°C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
0955	3	6.47	1280	12.7	2.16	-32	18.61
0958	3.6	6.51	1772	12.7	2.20	-37	18.61
1001	4.2	6.51	1273	12.7	2.21	-38	18.61

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
DPE-6	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: _____

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: 1/17-1/20/11 (inclusive)
 Sampler: ML

Well ID: DPE-7
 Well Diameter: 4 in.
 Total Depth: 25.80 ft.
 Depth to Water: 18.29 ft.

Date Monitored: 1-17-11

Volume Factor (VF)	3/4" = 0.02	1" = 0.04	2" = 0.17	3" = 0.38
	4" = 0.68	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]: x VF = 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:

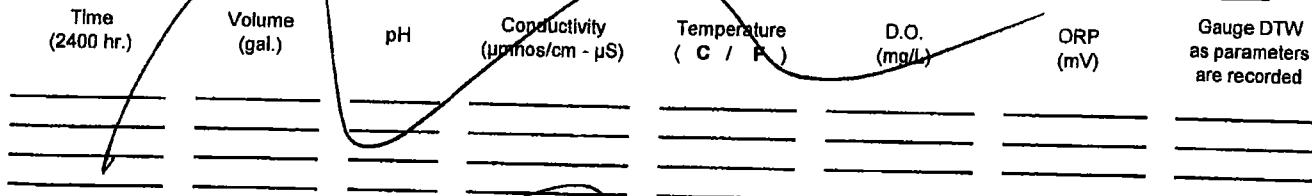
Start Time (purge):
 Sample Time/Date: /
 Approx. Flow Rate: gpm.
 Did well de-water?

Weather Conditions:

Water Color: Odor: Y / N

Sediment Description:

If yes, Time: Volume: gal. DTW @ Sampling:



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: M10

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: 1/17 - 1/20 (inclusive)
 City: Seattle, WA Sampler: AN

Well ID DPE-8Date Monitored: 1-17-11Well Diameter 4 in.

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

Total Depth 23.40 ft.Depth to Water 11.60 ft. 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): 12:00Weather Conditions: SunnySample Time/Date: 12:45 / 1-17-11Water Color: Cloudy Odor: Y/NApprox. Flow Rate: 200ml gpm.Sediment Description: CloudyDid well de-water? N If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 11.64

Time (2400 hr.)	Volume (gal)	pH	Conductivity (µmhos/cm)	Temperature (°F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
12:25	3.0	7.44	185	10.7	1.23	93	11.62
12:28	3.6	7.45	189	10.7	1.27	90	11.63
12:31	4.2	7.44	190	10.9	1.29	87	11.64

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)
	x 500ml clear glass	YES	NaOH & ZnAc	LANCASTER	SULFIDE (SM20 4500 S2 D)

COMMENTS: _____

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: 1/17-1/20/11 (inclusive)
 Sampler: ML

Well ID: DPE-9
 Well Diameter: 4 in.
 Total Depth: 16.70 ft.
 Depth to Water: 11.63 ft.

Date Monitored: 1-17-11

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

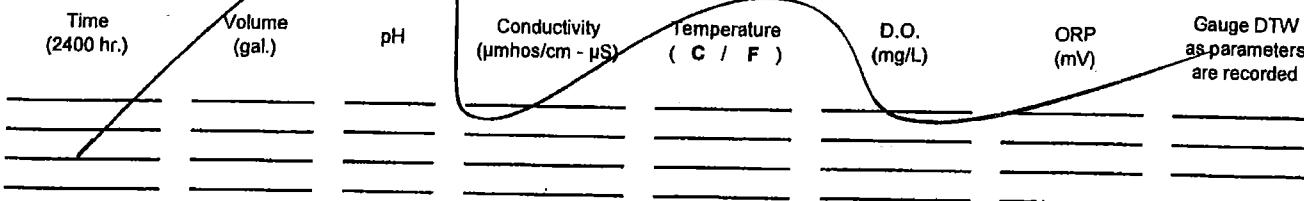
Product Transferred to: _____

Start Time (purge): _____

Sample Time/Date: /

Approx. Flow Rate: gpm.

Did well de-water? If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: _____



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/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

Add/Replaced Lock: _____

Add/Replaced Plug: _____

Add/Replaced Bolt: _____

Chevron Northwest Region Analysis Request/Chain of Custody



For Lancaster Laboratories use only

Acct. #: _____ Sample #: _____ SCR#: _____

Facility #: SS#211577-OML G-R#386765
 Site Address: 631 Queen Anne North, SEATTLE, WA
 Chevron PM: OS Lead Consultant: SAICPC Catterall
 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												Preservative Codes														
			Matrix			Preservation Codes									H	T													
			Soil	Water	Oil	<input type="checkbox"/> Potable	<input type="checkbox"/> NPDES	<input type="checkbox"/> Naphth	<input type="checkbox"/> H	<input type="checkbox"/> TPH	<input type="checkbox"/> Extended Rug	<input type="checkbox"/> Silica Gel Cleanup	<input type="checkbox"/> Lead Total	<input type="checkbox"/> Diss.	<input type="checkbox"/> Method	<input type="checkbox"/> VP/EPH	<input type="checkbox"/> NWTPH H HCID	<input type="checkbox"/> quantification	N	O									
			Total Number of Containers	BTEX +40	8021	8260	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
Sample Identification	Date Collected	Time Collected	Grab	Composite																									
MW-11	1-18-11		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X											
MW-16		1035	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X											
MW-17		1240	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X											
MW-21		0840	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X											
MW-26		1140	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X											
MW-30		0945	Y		X	X	X	X	X	X	X	X	X	X	X	X	X	X											
MW-31		0845	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X											
MW-32		1230	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X											
MW-33		1135	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X											
MW-34		0940	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X											
MW-35		1040	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X											
Turnaround Time Requested (TAT) (please circle)			Relinquished by:			Date			Time			Received by:			Date			Time											
STD. TAT	72 hour	48 hour	<i>M</i>			1-18-11			170																				
24-hour	4 day	5 day	Relinquished by:			Date			Time			Received by:			Date			Time											
Data Package Options (please circle if required)			EDF/EDD			Relinquished by:			Date			Time			Received by:			Date			Time								
QC Summary	Type I - Full					Relinquished by Commercial Carrier:									Received by:						Date			Time					
Type VI (Raw Data)	Disk / EDD					UPS <i>FedEx</i> Other									Received by:						Date			Time					
WIP (RWQCB)	Standard Format					Temperature Upon Receipt _____ °C									Custody Seals Intact? Yes No														
Disk	Other.																												

Lancaster Laboratories, Inc., 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 (717) 656-2300
 Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client.

3468 Rev. 8/6/01

Chevron Northwest Region Analysis Request/Chain of Custody



Facility #:	SS#211577-OML G-R#386765		
Site Address:	631 Queen Anne North, SEATTLE, WA		
Chevron PM:	OS	Lead Consultant:	SAICPC Catt
Consultant/Office:	G-R, Inc., 6747 Sierra Court, Suite J, Dublin, CA 945		
Consultant Prj. Mgr.:	Deanna L. Harding (deanna@grinc.com)		
Consultant Phone #:	925-551-7555	Fax #:	925-551-7899
Sampler:	MIKE LOMBARD		
Service Order #:	<input type="checkbox"/> Non SAR:		
Sample Identification	Date Collected	Time Collected	Grab
QA	1-20-11		X
MW-6		1100	X
MW-9		0920	X
MW-10		0830	X
DPE-5		1200	X
DPE-6		1010	X
DUP-1			X
FB-1	▼		X

Analyses Requested									
Matrix	Preservation Codes								
	H	T	N	S	O	Potable	NPDES	Oil	Air
					<input type="checkbox"/> HCl	<input type="checkbox"/> Thiosulfate			
					<input type="checkbox"/> HNO ₃	<input type="checkbox"/> NaOH			
					<input type="checkbox"/> H ₂ SO ₄	<input type="checkbox"/> Other			
					<input type="checkbox"/> J value reporting needed				
					<input type="checkbox"/> Must meet lowest detection limits possible for 8260 compounds				
					8201 MTBE Confirmation				
					<input type="checkbox"/> Confirm MTBE + Naphthalene				
					<input type="checkbox"/> Confirm highest hit by 8260				
					<input type="checkbox"/> Confirm all hits by 8260				
					<input type="checkbox"/> Run _____ oxy s on highest hit				
					<input type="checkbox"/> Run _____ oxy s on all hits				
					Comments / Remarks				
					FERROUS IRON SAMPLES HAVE BEEN FIELD FILTERED Please forward the lab results directly to the Lead Consultant and cc: G-R.				
	Date	Time	Received by:				Date	Time	
	1-20-11	1600							
	Date	Time	Received by:				Date	Time	
	Date	Time	Received by:				Date	Time	
Commercial Carrier: Other _____				Received by:				Date	Time
Clept _____ C°				Custody Seals Intact?				Yes	No

Lancaster Laboratories, Inc., 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 (717) 656-2300
Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client.

3468 Rev. 8/6/01

Attachment B:
Laboratory Analysis Report



Analysis Report

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

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

January 31, 2011

Project: 211577

Submittal Date: 01/19/2011
Group Number: 1229635
PO Number: 0015061199
Release Number: SKANCE

State of Sample Origin: WA

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
QA Water Sample	6186327
MW-16 Grab Water Sample	6186328
MW-17 Grab Water Sample	6186329
MW-21 Grab Water Sample	6186330
MW-26 Grab Water Sample	6186331
MW-30 Grab Water Sample	6186332
MW-31 Grab Water Sample	6186333
MW-32 Grab Water Sample	6186334
MW-33 Grab Water Sample	6186335
MW-34 Grab Water Sample	6186336
MW-35 Grab Water Sample	6186337
FB-2 Grab Water Sample	6186338
FB-3 Grab Water Sample	6186339
DUP-2 Grab Water Sample	6186340
DUP-3 Grab Water Sample	6186341

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

ELECTRONIC

SAIC c/o Gettler-Ryan

Attn: Rachelle Munoz

COPY TO

ELECTRONIC

SAIC

Attn: Mike Lange

COPY TO



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

Analysis Report

ELECTRONIC SAIC
COPY TO

Attn: Jamalyn Green

Questions? Contact your Client Services Representative
Jill M Parker at (717) 656-2300 Ext. 1241

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Robin C. Runkle".

**Robin C. Runkle
Senior 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

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

LLI Sample # NW 6186327
LLI Group # 1229635
Account # 11260

Project Name: 211577

Collected: 01/18/2011

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

Submitted: 01/19/2011 09:40
Reported: 01/31/2011 14:18

QASEA

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene		71-43-2	N.D.	0.5	1
10943 Ethylbenzene		100-41-4	N.D.	0.5	1
10943 Toluene		108-88-3	N.D.	0.5	1
10943 Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		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
Additional sample volume received on 01/20/11 for VOAs.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943 BTEX 8260B Water	SW-846 8260B	1	D110243AA	01/24/2011 22:53	Kelly E Keller	1	
01163 GC/MS VOA Water Prep	SW-846 5030B	1	D110243AA	01/24/2011 22:53	Kelly E Keller	1	
08273 NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	11021C20A	01/21/2011 17:02	Katrina T Longenecker	1	
01146 GC VOA Water Prep	SW-846 5030B	1	11021C20A	01/21/2011 17:02	Katrina T Longenecker	1	



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 2

Sample Description: MW-16 Grab Water Sample
 Facility# 211577 Job# 386765
 631 Queen Anne N-Seattle, WA

LLI Sample # WW 6186328
 LLI Group # 1229635
 Account # 11260

Project Name: 211577

Collected: 01/18/2011 10:35 by ML

Chevron

Submitted: 01/19/2011 09:40

6001 Bollinger Canyon Road
 L4310
 San Ramon CA 94583

Reported: 01/31/2011 14:18

SEA16

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene		71-43-2	N.D.	0.5	1
10943 Ethylbenzene		100-41-4	N.D.	0.5	1
10943 Toluene		108-88-3	N.D.	0.5	1
10943 Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		ug/l	ug/l	
08273 NWTPH-Gx water C7-C12		n.a.	N.D.	50	1
GC Extractable TPH w/Si Gel	ECY 97-602 NWTPH-Dx modified		ug/l	ug/l	
02211 DRO C12-C24 w/Si Gel		n.a.	53	30	1
02211 HRO C24-C40 w/Si Gel		n.a.	290	70	1
Metals	SW-846 6010B		ug/l	ug/l	
01754 Iron		7439-89-6	43,600	52.2	1
07058 Manganese		7439-96-5	4,020	0.84	1
Wet Chemistry	EPA 300.0		ug/l	ug/l	
00368 Nitrate Nitrogen		14797-55-8	5,900	250	5
01506 Nitrite Nitrogen		14797-65-0	N.D.	400	5
00228 Sulfate		14808-79-8	14,500	1,500	5
	SM20 2320 B		ug/l as CaCO ₃	ug/l as CaCO ₃	
00202 Alkalinity to pH 4.5		n.a.	67,400	460	1
00201 Alkalinity to pH 8.3		n.a.	N.D.	460	1
	SM20 3500 Fe B modified		ug/l	ug/l	
08344 Ferrous Iron		n.a.	10	10	1
	SM20 4500 S2 D		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 Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D110243AA	01/24/2011 23:16	Kelly E Keller	1



Analysis Report

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

Page 2 of 2

Sample Description: MW-16 Grab Water Sample
Facility# 211577 Job# 386765
631 Queen Anne N-Seattle, WA

LLI Sample # WW 6186328
LLI Group # 1229635
Account # 11260

Project Name: 211577

Collected: 01/18/2011 10:35 by ML

Chevron

Submitted: 01/19/2011 09:40

6001 Bollinger Canyon Road
L4310

Reported: 01/31/2011 14:18

San Ramon CA 94583

SEA16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D110243AA	01/24/2011 23:16	Kelly E Keller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	11021C20A	01/21/2011 20:18	Katrina T Longenecker	1
01146	GC VOA Water Prep	SW-846 5030B	1	11021C20A	01/21/2011 20:18	Katrina T Longenecker	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	110210011A	01/25/2011 11:14	Melissa McDermott	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	110210011A	01/21/2011 15:15	Kathryn I DeHaven	1
01754	Iron	SW-846 6010B	1	110201848003	01/21/2011 20:37	John P Hook	1
07058	Manganese	SW-846 6010B	1	110201848003	01/21/2011 20:37	John P Hook	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	110201848003	01/20/2011 20:00	Mirit S Shenouda	1
00368	Nitrate Nitrogen	EPA 300.0	1	11019237902A	01/20/2011 03:51	Ashley M Adams	5
01506	Nitrite Nitrogen	EPA 300.0	1	11019237902A	01/20/2011 03:51	Ashley M Adams	5
00228	Sulfate	EPA 300.0	1	11019237902A	01/20/2011 03:51	Ashley M Adams	5
00202	Alkalinity to pH 4.5	SM20 2320 B	1	11020020201B	01/20/2011 07:46	Susan A Engle	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	11020020201B	01/20/2011 07:46	Susan A Engle	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	11019834401A	01/19/2011 19:25	Daniel S Smith	1
00230	Sulfide	SM20 4500 S2 D	1	11021023001A	01/21/2011 14:35	Susan E Hibner	1



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 2

Sample Description: MW-17 Grab Water Sample
 Facility# 211577 Job# 386765
 631 Queen Anne N-Seattle, WA

LLI Sample # WW 6186329
 LLI Group # 1229635
 Account # 11260

Project Name: 211577

Collected: 01/18/2011 12:40 by ML

Chevron

Submitted: 01/19/2011 09:40

6001 Bollinger Canyon Road

Reported: 01/31/2011 14:18

L4310

San Ramon CA 94583

SEA17

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene		71-43-2	N.D.	0.5	1
10943 Ethylbenzene		100-41-4	N.D.	0.5	1
10943 Toluene		108-88-3	N.D.	0.5	1
10943 Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		ug/l	ug/l	
08273 NWTPH-Gx water C7-C12		n.a.	N.D.	50	1
GC Extractable TPH w/Si Gel	ECY 97-602 NWTPH-Dx modified		ug/l	ug/l	
02211 DRO C12-C24 w/Si Gel		n.a.	N.D.	30	1
02211 HRO C24-C40 w/Si Gel		n.a.	N.D.	71	1
Metals	SW-846 6010B		ug/l	ug/l	
01754 Iron		7439-89-6	134	52.2	1
07058 Manganese		7439-96-5	116	0.84	1
Wet Chemistry	EPA 300.0		ug/l	ug/l	
00368 Nitrate Nitrogen		14797-55-8	4,600	250	5
01506 Nitrite Nitrogen		14797-65-0	N.D.	400	5
00228 Sulfate		14808-79-8	26,000	1,500	5
	SM20 2320 B		ug/l as CaCO ₃	ug/l as CaCO ₃	
00202 Alkalinity to pH 4.5		n.a.	75,400	460	1
00201 Alkalinity to pH 8.3		n.a.	N.D.	460	1
	SM20 3500 Fe B modified		ug/l	ug/l	
08344 Ferrous Iron		n.a.	N.D.	10	1
	SM20 4500 S2 D		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 Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D110243AA	01/25/2011 00:23	Kelly E Keller	1



Analysis Report

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

Page 2 of 2

Sample Description: MW-17 Grab Water Sample
Facility# 211577 Job# 386765
631 Queen Anne N-Seattle, WA

LLI Sample # WW 6186329
LLI Group # 1229635
Account # 11260

Project Name: 211577

Collected: 01/18/2011 12:40 by ML

Chevron

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

Submitted: 01/19/2011 09:40

Reported: 01/31/2011 14:18

SEA17

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D110243AA	01/25/2011 00:23	Kelly E Keller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH- Gx	1	11021C20A	01/21/2011 20:40	Katrina T Longenecker	1
01146	GC VOA Water Prep	SW-846 5030B	1	11021C20A	01/21/2011 20:40	Katrina T Longenecker	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH- Dx modified	1	110210011A	01/25/2011 09:49	Melissa McDermott	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH- Dx 06/97	1	110210011A	01/21/2011 15:15	Kathryn I DeHaven	1
01754	Iron	SW-846 6010B	1	110201848003	01/21/2011 20:40	John P Hook	1
07058	Manganese	SW-846 6010B	1	110201848003	01/21/2011 20:40	John P Hook	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	110201848003	01/20/2011 20:00	Mirit S Shenouda	1
00368	Nitrate Nitrogen	EPA 300.0	1	11019237902A	01/20/2011 04:05	Ashley M Adams	5
01506	Nitrite Nitrogen	EPA 300.0	1	11019237902A	01/20/2011 04:05	Ashley M Adams	5
00228	Sulfate	EPA 300.0	1	11019237902A	01/20/2011 04:05	Ashley M Adams	5
00202	Alkalinity to pH 4.5	SM20 2320 B	1	11020020201B	01/20/2011 07:46	Susan A Engle	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	11020020201B	01/20/2011 07:46	Susan A Engle	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	11019834401A	01/19/2011 19:25	Daniel S Smith	1
00230	Sulfide	SM20 4500 S2 D	1	11021023001A	01/21/2011 14:35	Susan E Hibner	1



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 2

Sample Description: MW-21 Grab Water Sample
 Facility# 211577 Job# 386765
 631 Queen Anne N-Seattle, WA

LLI Sample # WW 6186330
 LLI Group # 1229635
 Account # 11260

Project Name: 211577

Collected: 01/18/2011 08:40 by ML

Chevron

Submitted: 01/19/2011 09:40

6001 Bollinger Canyon Road
 L4310

Reported: 01/31/2011 14:18

San Ramon CA 94583

SEA21

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene		71-43-2	100	0.5	1
10943 Ethylbenzene		100-41-4	N.D.	0.5	1
10943 Toluene		108-88-3	N.D.	0.5	1
10943 Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		ug/l	ug/l	
08273 NWTPH-Gx water C7-C12		n.a.	60	50	1
GC Extractable TPH w/Si Gel	ECY 97-602 NWTPH-Dx modified		ug/l	ug/l	
02211 DRO C12-C24 w/Si Gel		n.a.	140	30	1
02211 HRO C24-C40 w/Si Gel		n.a.	630	70	1
Metals	SW-846 6010B		ug/l	ug/l	
01754 Iron		7439-89-6	55,800	52.2	1
07058 Manganese		7439-96-5	930	0.84	1
Wet Chemistry	EPA 300.0		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	40,900	1,500	5
	SM20 2320 B		ug/l as CaCO ₃	ug/l as CaCO ₃	
00202 Alkalinity to pH 4.5		n.a.	198,000	460	1
00201 Alkalinity to pH 8.3		n.a.	N.D.	460	1
	SM20 3500 Fe B modified		ug/l	ug/l	
08344 Ferrous Iron		n.a.	6,100	200	20
	SM20 4500 S2 D		ug/l	ug/l	
00230 Sulfide		18496-25-8	140	110	2
Reporting limits were raised due to interference from the sample matrix.					

General Sample Comments

State of Washington Lab Certification No. C259

Additional sample volume received on 01/20/11 for VOAs, Nitrate, Nitrite & Sulfate.

Nitrate, Nitrite & Sulfate were collected 1/19/11 at 13:10 by ML.

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 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 2

Sample Description: MW-21 Grab Water Sample
Facility# 211577 Job# 386765
631 Queen Anne N-Seattle, WA

LLI Sample # WW 6186330
LLI Group # 1229635
Account # 11260

Project Name: 211577

Collected: 01/18/2011 08:40 by ML

Chevron

6001 Bollinger Canyon Road

L4310

Submitted: 01/19/2011 09:40

San Ramon CA 94583

Reported: 01/31/2011 14:18

SEA21

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D110243AA	01/25/2011 00:45	Kelly E Keller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D110243AA	01/25/2011 00:45	Kelly E Keller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	11021C20A	01/21/2011 21:01	Katrina T Longenecker	1
01146	GC VOA Water Prep	SW-846 5030B	1	11021C20A	01/21/2011 21:01	Katrina T Longenecker	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	110240015A	01/28/2011 17:29	Melissa McDermott	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	110240015A	01/24/2011 17:00	Kathryn I DeHaven	1
01754	Iron	SW-846 6010B	1	110201848003	01/21/2011 20:43	John P Hook	1
07058	Manganese	SW-846 6010B	1	110201848003	01/21/2011 20:43	John P Hook	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	110201848003	01/20/2011 20:00	Mirit S Shenouda	1
00368	Nitrate Nitrogen	EPA 300.0	1	11019237902A	01/20/2011 12:22	Ashley M Adams	5
01506	Nitrite Nitrogen	EPA 300.0	1	11019237902A	01/20/2011 12:22	Ashley M Adams	5
00228	Sulfate	EPA 300.0	1	11019237902A	01/20/2011 12:22	Ashley M Adams	5
00202	Alkalinity to pH 4.5	SM20 2320 B	1	11020020201B	01/20/2011 07:46	Susan A Engle	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	11020020201B	01/20/2011 07:46	Susan A Engle	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	11019834401A	01/19/2011 19:25	Daniel S Smith	20
00230	Sulfide	SM20 4500 S2 D	1	11021023001A	01/21/2011 14:35	Susan E Hibner	2



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 2

Sample Description: MW-26 Grab Water Sample
Facility# 211577 **Job#** 386765
 631 Queen Anne N-Seattle, WA

LLI Sample # WW 6186331
LLI Group # 1229635
Account # 11260

Project Name: 211577

Collected: 01/18/2011 11:40 by ML

Chevron

Submitted: 01/19/2011 09:40

6001 Bollinger Canyon Road
 L4310

Reported: 01/31/2011 14:18

San Ramon CA 94583

SEA26

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene		71-43-2	N.D.	0.5	1
10943 Ethylbenzene		100-41-4	N.D.	0.5	1
10943 Toluene		108-88-3	N.D.	0.5	1
10943 Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		ug/l	ug/l	
08273 NWTPH-Gx water C7-C12		n.a.	N.D.	50	1
GC Extractable TPH w/Si Gel	ECY 97-602 NWTPH-Dx modified		ug/l	ug/l	
02211 DRO C12-C24 w/Si Gel		n.a.	40	30	1
02211 HRO C24-C40 w/Si Gel		n.a.	N.D.	71	1
Metals	SW-846 6010B		ug/l	ug/l	
01754 Iron		7439-89-6	98.3	52.2	1
07058 Manganese		7439-96-5	55.6	0.84	1
Wet Chemistry	EPA 300.0		ug/l	ug/l	
00368 Nitrate Nitrogen		14797-55-8	15,300	500	10
01506 Nitrite Nitrogen		14797-65-0	N.D.	400	5
00228 Sulfate		14808-79-8	33,700	1,500	5
	SM20 2320 B		ug/l as CaCO3	ug/l as CaCO3	
00202 Alkalinity to pH 4.5		n.a.	97,100	460	1
00201 Alkalinity to pH 8.3		n.a.	N.D.	460	1
	SM20 3500 Fe B modified		ug/l	ug/l	
08344 Ferrous Iron		n.a.	20	10	1
	SM20 4500 S2 D		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 Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D110243AA	01/25/2011 01:07	Kelly E Keller	1



Analysis Report

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

Page 2 of 2

Sample Description: MW-26 Grab Water Sample
 Facility# 211577 Job# 386765
 631 Queen Anne N-Seattle, WA

LLI Sample # WW 6186331
 LLI Group # 1229635
 Account # 11260

Project Name: 211577

Collected: 01/18/2011 11:40 by ML

Chevron

Submitted: 01/19/2011 09:40

6001 Bollinger Canyon Road
 L4310

Reported: 01/31/2011 14:18

San Ramon CA 94583

SEA26

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D110243AA	01/25/2011 01:07	Kelly E Keller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	11021C20A	01/21/2011 21:23	Katrina T Longenecker	1
01146	GC VOA Water Prep	SW-846 5030B	1	11021C20A	01/21/2011 21:23	Katrina T Longenecker	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	110240015A	01/28/2011 14:22	Melissa McDermott	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	110240015A	01/24/2011 17:00	Kathryn I DeHaven	1
01754	Iron	SW-846 6010B	1	110201848003	01/21/2011 20:47	John P Hook	1
07058	Manganese	SW-846 6010B	1	110201848003	01/21/2011 20:47	John P Hook	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	110201848003	01/20/2011 20:00	Mirit S Shenouda	1
00368	Nitrate Nitrogen	EPA 300.0	1	11019237902A	01/20/2011 10:43	Ashley M Adams	10
01506	Nitrite Nitrogen	EPA 300.0	1	11019237902A	01/20/2011 03:37	Ashley M Adams	5
00228	Sulfate	EPA 300.0	1	11019237902A	01/20/2011 03:37	Ashley M Adams	5
00202	Alkalinity to pH 4.5	SM20 2320 B	1	11020020201B	01/20/2011 07:46	Susan A Engle	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	11020020201B	01/20/2011 07:46	Susan A Engle	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	11019834401A	01/19/2011 19:25	Daniel S Smith	1
00230	Sulfide	SM20 4500 S2 D	1	11021023001A	01/21/2011 14:35	Susan E Hibner	1



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 2

Sample Description: MW-30 Grab Water Sample
 Facility# 211577 Job# 386765
 631 Queen Anne N-Seattle, WA

LLI Sample # WW 6186332
 LLI Group # 1229635
 Account # 11260

Project Name: 211577

Collected: 01/18/2011 09:45 by ML

Chevron

Submitted: 01/19/2011 09:40

6001 Bollinger Canyon Road
 L4310
 San Ramon CA 94583

Reported: 01/31/2011 14:18

SEA30

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene		71-43-2	N.D.	0.5	1
10943 Ethylbenzene		100-41-4	N.D.	0.5	1
10943 Toluene		108-88-3	N.D.	0.5	1
10943 Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		ug/l	ug/l	
08273 NWTPH-Gx water C7-C12		n.a.	N.D.	50	1
GC Extractable TPH w/Si Gel	ECY 97-602 NWTPH-Dx modified		ug/l	ug/l	
02211 DRO C12-C24 w/Si Gel		n.a.	67	30	1
02211 HRO C24-C40 w/Si Gel		n.a.	N.D.	69	1
Metals	SW-846 6010B		ug/l	ug/l	
01754 Iron		7439-89-6	71,800	52.2	1
07058 Manganese		7439-96-5	6,500	0.84	1
Wet Chemistry	EPA 300.0		ug/l	ug/l	
00368 Nitrate Nitrogen		14797-55-8	22,700	500	10
01506 Nitrite Nitrogen		14797-65-0	N.D.	400	5
00228 Sulfate		14808-79-8	28,800	1,500	5
	SM20 2320 B		ug/l as CaCO ₃	ug/l as CaCO ₃	
00202 Alkalinity to pH 4.5		n.a.	267,000	460	1
00201 Alkalinity to pH 8.3		n.a.	N.D.	460	1
	SM20 3500 Fe B modified		ug/l	ug/l	
08344 Ferrous Iron		n.a.	N.D.	10	1
	SM20 4500 S2 D		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 Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D110243AA	01/25/2011 01:30	Kelly E Keller	1



Analysis Report

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

Page 2 of 2

Sample Description: MW-30 Grab Water Sample
Facility# 211577 Job# 386765
631 Queen Anne N-Seattle, WA

LLI Sample # WW 6186332
LLI Group # 1229635
Account # 11260

Project Name: 211577

Collected: 01/18/2011 09:45 by ML

Chevron

6001 Bollinger Canyon Road

L4310

Submitted: 01/19/2011 09:40

San Ramon CA 94583

Reported: 01/31/2011 14:18

SEA30

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D110243AA	01/25/2011 01:30	Kelly E Keller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	11021C20A	01/21/2011 21:45	Katrina T Longenecker	1
01146	GC VOA Water Prep	SW-846 5030B	1	11021C20A	01/21/2011 21:45	Katrina T Longenecker	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	110240015A	01/28/2011 14:43	Melissa McDermott	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	110240015A	01/24/2011 17:00	Kathryn I DeHaven	1
01754	Iron	SW-846 6010B	1	110201848003	01/21/2011 20:50	John P Hook	1
07058	Manganese	SW-846 6010B	1	110201848003	01/21/2011 20:50	John P Hook	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	110201848003	01/20/2011 20:00	Mirit S Shenouda	1
00368	Nitrate Nitrogen	EPA 300.0	1	11019237902A	01/20/2011 10:57	Ashley M Adams	10
01506	Nitrite Nitrogen	EPA 300.0	1	11019237902A	01/20/2011 04:19	Ashley M Adams	5
00228	Sulfate	EPA 300.0	1	11019237902A	01/20/2011 04:19	Ashley M Adams	5
00202	Alkalinity to pH 4.5	SM20 2320 B	1	11020020201B	01/20/2011 07:46	Susan A Engle	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	11020020201B	01/20/2011 07:46	Susan A Engle	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	11019834401A	01/19/2011 19:25	Daniel S Smith	1
00230	Sulfide	SM20 4500 S2 D	1	11021023001A	01/21/2011 14:35	Susan E Hibner	1



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 2

Sample Description: MW-31 Grab Water Sample
 Facility# 211577 Job# 386765
 631 Queen Anne N-Seattle, WA

LLI Sample # WW 6186333
 LLI Group # 1229635
 Account # 11260

Project Name: 211577

Collected: 01/18/2011 08:45 by ML

Chevron

6001 Bollinger Canyon Road
 L4310

Submitted: 01/19/2011 09:40

San Ramon CA 94583

Reported: 01/31/2011 14:18

SEA31

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene		71-43-2	N.D.	0.5	1
10943 Ethylbenzene		100-41-4	N.D.	0.5	1
10943 Toluene		108-88-3	N.D.	0.5	1
10943 Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		ug/l	ug/l	
08273 NWTPH-Gx water C7-C12		n.a.	N.D.	50	1
GC Extractable TPH w/Si Gel	ECY 97-602 NWTPH-Dx modified		ug/l	ug/l	
02211 DRO C12-C24 w/Si Gel		n.a.	32	30	1
02211 HRO C24-C40 w/Si Gel		n.a.	N.D.	70	1
Metals	SW-846 6010B		ug/l	ug/l	
01754 Iron		7439-89-6	247,000	52.2	1
07058 Manganese		7439-96-5	6,290	0.84	1
Wet Chemistry	EPA 300.0		ug/l	ug/l	
00368 Nitrate Nitrogen		14797-55-8	710	250	5
01506 Nitrite Nitrogen		14797-65-0	N.D.	400	5
00228 Sulfate		14808-79-8	41,400	1,500	5
	SM20 2320 B		ug/l as CaCO ₃	ug/l as CaCO ₃	
00202 Alkalinity to pH 4.5		n.a.	144,000	460	1
00201 Alkalinity to pH 8.3		n.a.	N.D.	460	1
	SM20 3500 Fe B modified		ug/l	ug/l	
08344 Ferrous Iron		n.a.	10	10	1
	SM20 4500 S2 D		ug/l	ug/l	
00230 Sulfide		18496-25-8	N.D.	110	2
Reporting limits were raised due to interference from the sample matrix.					

General Sample Comments

State of Washington Lab Certification No. C259

Additional sample volume received on 01/20/11 for VOAs, Nitrate, Nitrite & Sulfate.

Nitrate, Nitrite & Sulfate were collected 1/19/11 at 13:35 by ML.

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 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 2

Sample Description: MW-31 Grab Water Sample
Facility# 211577 Job# 386765
631 Queen Anne N-Seattle, WA

LLI Sample # WW 6186333
LLI Group # 1229635
Account # 11260

Project Name: 211577

Collected: 01/18/2011 08:45 by ML

Chevron

6001 Bollinger Canyon Road

L4310

Submitted: 01/19/2011 09:40

San Ramon CA 94583

Reported: 01/31/2011 14:18

SEA31

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D110243AA	01/25/2011 01:52	Kelly E Keller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D110243AA	01/25/2011 01:52	Kelly E Keller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	11021C20A	01/21/2011 22:07	Katrina T Longenecker	1
01146	GC VOA Water Prep	SW-846 5030B	1	11021C20A	01/21/2011 22:07	Katrina T Longenecker	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	110240015A	01/28/2011 15:03	Melissa McDermott	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	110240015A	01/24/2011 17:00	Kathryn I DeHaven	1
01754	Iron	SW-846 6010B	1	110201848003	01/21/2011 20:54	John P Hook	1
07058	Manganese	SW-846 6010B	1	110201848003	01/21/2011 20:54	John P Hook	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	110201848003	01/20/2011 20:00	Mirit S Shenouda	1
00368	Nitrate Nitrogen	EPA 300.0	1	11019237902A	01/20/2011 12:36	Ashley M Adams	5
01506	Nitrite Nitrogen	EPA 300.0	1	11019237902A	01/20/2011 12:36	Ashley M Adams	5
00228	Sulfate	EPA 300.0	1	11019237902A	01/20/2011 12:36	Ashley M Adams	5
00202	Alkalinity to pH 4.5	SM20 2320 B	1	11020020201B	01/20/2011 07:46	Susan A Engle	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	11020020201B	01/20/2011 07:46	Susan A Engle	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	11019834401A	01/19/2011 19:25	Daniel S Smith	1
00230	Sulfide	SM20 4500 S2 D	1	11021023001A	01/21/2011 14:35	Susan E Hibner	2



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

Analysis Report

Page 1 of 1

Sample Description: MW-32 Grab Water Sample
 Facility# 211577 Job# 386765
 631 Queen Anne N-Seattle, WA

LLI Sample # WW 6186334
 LLI Group # 1229635
 Account # 11260

Project Name: 211577

Collected: 01/18/2011 12:30 by ML

Chevron

Submitted: 01/19/2011 09:40

6001 Bollinger Canyon Road
 L4310
 San Ramon CA 94583

Reported: 01/31/2011 14:18

SEA32

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene		71-43-2	N.D.	0.5	1
10943 Ethylbenzene		100-41-4	N.D.	0.5	1
10943 Toluene		108-88-3	N.D.	0.5	1
10943 Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		ug/l	ug/l	
08273 NWTPH-Gx water C7-C12		n.a.	N.D.	50	1
GC Extractable TPH w/Si Gel	ECY 97-602 NWTPH-Dx modified		ug/l	ug/l	
02211 DRO C12-C24 w/Si Gel		n.a.	34	30	1
02211 HRO C24-C40 w/Si Gel		n.a.	N.D.	70	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 Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943 BTEX 8260B Water	SW-846 8260B	1	D110271AA		01/27/2011 22:28	Nicholas R Rossi	1
01163 GC/MS VOA Water Prep	SW-846 5030B	1	D110271AA		01/27/2011 22:28	Nicholas R Rossi	1
08273 NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	11021C20A		01/21/2011 22:29	Katrina T Longenecker	1
01146 GC VOA Water Prep	SW-846 5030B	1	11021C20A		01/21/2011 22:29	Katrina T Longenecker	1
02211 NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	110240015A		01/28/2011 15:24	Melissa McDermott	1
02135 Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	110240015A		01/24/2011 17:00	Kathryn I DeHaven	1



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 2

Sample Description: MW-33 Grab Water Sample
Facility# 211577 **Job#** 386765
 631 Queen Anne N-Seattle, WA

LLI Sample # WW 6186335
LLI Group # 1229635
Account # 11260

Project Name: 211577

Collected: 01/18/2011 11:35 by ML

Chevron

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

Submitted: 01/19/2011 09:40
 Reported: 01/31/2011 14:18

SEA33

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/l	ug/l	
10943	Benzene	71-43-2	620	5	10
10943	Ethylbenzene	100-41-4	64	0.5	1
10943	Toluene	108-88-3	10	0.5	1
10943	Xylene (Total)	1330-20-7	27	0.5	1
GC	Volatiles	ECY 97-602 NWTPH-Gx	ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	750	50	1
GC	Extractable TPH w/Si Gel	ECY 97-602 NWTPH-Dx modified	ug/l	ug/l	
02211	DRO C12-C24 w/Si Gel	n.a.	680	30	1
02211	HRO C24-C40 w/Si Gel	n.a.	370	70	1
Metals		SW-846 6010B	ug/l	ug/l	
01754	Iron	7439-89-6	12,300	52.2	1
07058	Manganese	7439-96-5	366	0.84	1
Wet Chemistry		EPA 300.0	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	30,900	1,500	5
		SM20 2320 B	ug/l as CaCO3	ug/l as CaCO3	
00202	Alkalinity to pH 4.5	n.a.	243,000	460	1
00201	Alkalinity to pH 8.3	n.a.	N.D.	460	1
		SM20 3500 Fe B modified	ug/l	ug/l	
08344	Ferrous Iron	n.a.	3,900	100	10
		SM20 4500 S2 D	ug/l	ug/l	
00230	Sulfide	18496-25-8	3,900	220	4

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 Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D110243AA	01/25/2011 02:37	Kelly E Keller	1



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

Analysis Report

Page 2 of 2

Sample Description: MW-33 Grab Water Sample
Facility# 211577 Job# 386765
631 Queen Anne N-Seattle, WA

LLI Sample # WW 6186335
LLI Group # 1229635
Account # 11260

Project Name: 211577

Collected: 01/18/2011 11:35 by ML

Chevron

Submitted: 01/19/2011 09:40

6001 Bollinger Canyon Road

Reported: 01/31/2011 14:18

L4310

San Ramon CA 94583

SEA33

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D110243AA	01/25/2011 03:00	Kelly E Keller	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D110243AA	01/25/2011 02:37	Kelly E Keller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	D110243AA	01/25/2011 03:00	Kelly E Keller	10
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	11021A20A	01/21/2011 17:12	Martha L Seidel	1
01146	GC VOA Water Prep	SW-846 5030B	1	11021A20A	01/21/2011 17:12	Martha L Seidel	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	110240015A	01/28/2011 15:45	Melissa McDermott	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	110240015A	01/24/2011 17:00	Kathryn I DeHaven	1
01754	Iron	SW-846 6010B	1	110201848003	01/21/2011 20:57	John P Hook	1
07058	Manganese	SW-846 6010B	1	110201848003	01/21/2011 20:57	John P Hook	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	110201848003	01/20/2011 20:00	Mirit S Shenouda	1
00368	Nitrate Nitrogen	EPA 300.0	1	11019237902A	01/20/2011 03:22	Ashley M Adams	5
01506	Nitrite Nitrogen	EPA 300.0	1	11019237902A	01/20/2011 03:22	Ashley M Adams	5
00228	Sulfate	EPA 300.0	1	11019237902A	01/20/2011 03:22	Ashley M Adams	5
00202	Alkalinity to pH 4.5	SM20 2320 B	1	11020020201B	01/20/2011 07:46	Susan A Engle	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	11020020201B	01/20/2011 07:46	Susan A Engle	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	11019834401A	01/19/2011 19:25	Daniel S Smith	10
00230	Sulfide	SM20 4500 S2 D	1	11021023001A	01/21/2011 14:35	Susan E Hibner	4



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 2

Sample Description: MW-34 Grab Water Sample
Facility# 211577 Job# 386765
631 Queen Anne N-Seattle, WA

LLI Sample # WW 6186336
LLI Group # 1229635
Account # 11260

Project Name: 211577

Collected: 01/18/2011 09:40 by ML

Chevron

6001 Bollinger Canyon Road

L4310

Submitted: 01/19/2011 09:40

San Ramon CA 94583

Reported: 01/31/2011 14:18

SEA34

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene		71-43-2	N.D.	0.5	1
10943 Ethylbenzene		100-41-4	N.D.	0.5	1
10943 Toluene		108-88-3	N.D.	0.5	1
10943 Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		ug/l	ug/l	
08273 NWTPH-Gx water C7-C12		n.a.	N.D.	50	1
GC Extractable TPH w/Si Gel	ECY 97-602 NWTPH-Dx modified		ug/l	ug/l	
02211 DRO C12-C24 w/Si Gel		n.a.	39	30	1
02211 HRO C24-C40 w/Si Gel		n.a.	N.D.	69	1
Metals	SW-846 6010B		ug/l	ug/l	
01754 Iron		7439-89-6	175,000	52.2	1
07058 Manganese		7439-96-5	3,290	0.84	1
Wet Chemistry	EPA 300.0		ug/l	ug/l	
00368 Nitrate Nitrogen		14797-55-8	11,700	250	5
01506 Nitrite Nitrogen		14797-65-0	N.D.	400	5
00228 Sulfate		14808-79-8	21,200	1,500	5
	SM20 2320 B		ug/l as CaCO ₃	ug/l as CaCO ₃	
00202 Alkalinity to pH 4.5		n.a.	85,200	460	1
00201 Alkalinity to pH 8.3		n.a.	N.D.	460	1
	SM20 3500 Fe B modified		ug/l	ug/l	
08344 Ferrous Iron		n.a.	21	10	1
	SM20 4500 S2 D		ug/l	ug/l	
00230 Sulfide		18496-25-8	N.D.	220	4
	Reporting limits were raised due to interference from the sample matrix.				

General Sample Comments

State of Washington Lab Certification No. C259

Additional sample volume received on 01/20/11 for VOAs, Nitrate, Nitrite & Sulfate.

Nitrate, Nitrite & Sulfate were collected 1/19/11 at 14:00 by ML.

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 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 2

Sample Description: MW-34 Grab Water Sample
Facility# 211577 Job# 386765
631 Queen Anne N-Seattle, WA

LLI Sample # WW 6186336
LLI Group # 1229635
Account # 11260

Project Name: 211577

Collected: 01/18/2011 09:40 by ML

Chevron

Submitted: 01/19/2011 09:40

6001 Bollinger Canyon Road
L4310

Reported: 01/31/2011 14:18

San Ramon CA 94583

SEA34

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D110243AA	01/25/2011 03:23	Kelly E Keller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D110243AA	01/25/2011 03:23	Kelly E Keller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	11021A20A	01/21/2011 17:34	Martha L Seidel	1
01146	GC VOA Water Prep	SW-846 5030B	1	11021A20A	01/21/2011 17:34	Martha L Seidel	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	110240015A	01/28/2011 16:06	Melissa McDermott	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	110240015A	01/24/2011 17:00	Kathryn I DeHaven	1
01754	Iron	SW-846 6010B	1	110201848010	01/21/2011 16:53	John P Hook	1
07058	Manganese	SW-846 6010B	1	110201848010	01/21/2011 16:53	John P Hook	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	110201848010	01/20/2011 13:03	James L Mertz	1
00368	Nitrate Nitrogen	EPA 300.0	1	11019237902A	01/20/2011 12:51	Ashley M Adams	5
01506	Nitrite Nitrogen	EPA 300.0	1	11019237902A	01/20/2011 12:51	Ashley M Adams	5
00228	Sulfate	EPA 300.0	1	11019237902A	01/20/2011 12:51	Ashley M Adams	5
00202	Alkalinity to pH 4.5	SM20 2320 B	1	11020020201B	01/20/2011 07:46	Susan A Engle	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	11020020201B	01/20/2011 07:46	Susan A Engle	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	11019834401A	01/19/2011 19:25	Daniel S Smith	1
00230	Sulfide	SM20 4500 S2 D	1	11021023001A	01/21/2011 14:35	Susan E Hibner	4



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 2

Sample Description: MW-35 Grab Water Sample
Facility# 211577 **Job#** 386765
 631 Queen Anne N-Seattle, WA

LLI Sample # WW 6186337
LLI Group # 1229635
Account # 11260

Project Name: 211577

Collected: 01/18/2011 10:40 by ML

Chevron
 6001 Bollinger Canyon Road
 L4310
 San Ramon CA 94583

Submitted: 01/19/2011 09:40
 Reported: 01/31/2011 14:18

SEA35

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene		71-43-2	5	0.5	1
10943 Ethylbenzene		100-41-4	N.D.	0.5	1
10943 Toluene		108-88-3	N.D.	0.5	1
10943 Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		ug/l	ug/l	
08273 NWTPH-Gx water C7-C12		n.a.	N.D.	50	1
GC Extractable TPH w/Si Gel	ECY 97-602 NWTPH-Dx modified		ug/l	ug/l	
02211 DRO C12-C24 w/Si Gel		n.a.	170	30	1
02211 HRO C24-C40 w/Si Gel		n.a.	220	69	1
Metals	SW-846 6010B		ug/l	ug/l	
01754 Iron		7439-89-6	100,000	52.2	1
07058 Manganese		7439-96-5	3,140	0.84	1
Wet Chemistry	EPA 300.0		ug/l	ug/l	
00368 Nitrate Nitrogen		14797-55-8	340	250	5
01506 Nitrite Nitrogen		14797-65-0	N.D.	400	5
00228 Sulfate		14808-79-8	80,200	3,000	10
	SM20 2320 B		ug/l as CaCO3	ug/l as CaCO3	
00202 Alkalinity to pH 4.5		n.a.	173,000	460	1
00201 Alkalinity to pH 8.3		n.a.	N.D.	460	1
	SM20 3500 Fe B modified		ug/l	ug/l	
08344 Ferrous Iron		n.a.	2,000	100	10
	SM20 4500 S2 D		ug/l	ug/l	
00230 Sulfide		18496-25-8	170	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 Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D110243AA	01/25/2011 03:45	Kelly E Keller	1



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

Analysis Report

Page 2 of 2

Sample Description: MW-35 Grab Water Sample
Facility# 211577 Job# 386765
631 Queen Anne N-Seattle, WA

LLI Sample # WW 6186337
LLI Group # 1229635
Account # 11260

Project Name: 211577

Collected: 01/18/2011 10:40 by ML

Chevron

Submitted: 01/19/2011 09:40

6001 Bollinger Canyon Road
L4310

Reported: 01/31/2011 14:18

San Ramon CA 94583

SEA35

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D110243AA	01/25/2011 03:45	Kelly E Keller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	11021A20A	01/21/2011 17:56	Martha L Seidel	1
01146	GC VOA Water Prep	SW-846 5030B	1	11021A20A	01/21/2011 17:56	Martha L Seidel	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	110240015A	01/28/2011 16:27	Melissa McDermott	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	110240015A	01/24/2011 17:00	Kathryn I DeHaven	1
01754	Iron	SW-846 6010B	1	110201848010	01/21/2011 16:57	John P Hook	1
07058	Manganese	SW-846 6010B	1	110201848010	01/21/2011 16:57	John P Hook	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	110201848010	01/20/2011 13:03	James L Mertz	1
00368	Nitrate Nitrogen	EPA 300.0	1	11019237902A	01/20/2011 02:40	Ashley M Adams	5
01506	Nitrite Nitrogen	EPA 300.0	1	11019237902A	01/20/2011 02:40	Ashley M Adams	5
00228	Sulfate	EPA 300.0	1	11019237902A	01/25/2011 15:23	Ashley M Adams	10
00202	Alkalinity to pH 4.5	SM20 2320 B	1	11020020201B	01/20/2011 07:46	Susan A Engle	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	11020020201B	01/20/2011 07:46	Susan A Engle	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	11019834401A	01/19/2011 19:25	Daniel S Smith	10
00230	Sulfide	SM20 4500 S2 D	1	11021023001A	01/21/2011 14:35	Susan E Hibner	1



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

Analysis Report

Page 1 of 1

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

LLI Sample # WW 6186338
LLI Group # 1229635
Account # 11260

Project Name: 211577

Collected: 01/18/2011 by ML

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

Submitted: 01/19/2011 09:40
Reported: 01/31/2011 14:18

SEFB2

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene		71-43-2	N.D.	0.5	1
10943 Ethylbenzene		100-41-4	N.D.	0.5	1
10943 Toluene		108-88-3	N.D.	0.5	1
10943 Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		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 Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943 BTEX 8260B Water	SW-846 8260B	1	D110243AA	01/25/2011 04:08	Kelly E Keller	1	
01163 GC/MS VOA Water Prep	SW-846 5030B	1	D110243AA	01/25/2011 04:08	Kelly E Keller	1	
08273 NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	11021A20A	01/21/2011 18:18	Martha L Seidel	1	
01146 GC VOA Water Prep	SW-846 5030B	1	11021A20A	01/21/2011 18:18	Martha L Seidel	1	



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

Sample Description: FB-3 Grab Water Sample
Facility# 211577 **Job#** 386765
 631 Queen Anne N-Seattle, WA

LLI Sample # WW 6186339
 LLI Group # 1229635
 Account # 11260

Project Name: 211577

Collected: 01/18/2011 by ML

Chevron

Submitted: 01/19/2011 09:40

6001 Bollinger Canyon Road
 L4310

Reported: 01/31/2011 14:18

San Ramon CA 94583

SEFB3

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene		71-43-2	N.D.	0.5	1
10943 Ethylbenzene		100-41-4	N.D.	0.5	1
10943 Toluene		108-88-3	N.D.	0.5	1
10943 Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		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 Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943 BTEX 8260B Water	SW-846 8260B	1	D110243AA		01/25/2011 04:30	Kelly E Keller	1
01163 GC/MS VOA Water Prep	SW-846 5030B	1	D110243AA		01/25/2011 04:30	Kelly E Keller	1
08273 NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	11021A20A		01/21/2011 18:39	Martha L Seidel	1
01146 GC VOA Water Prep	SW-846 5030B	1	11021A20A		01/21/2011 18:39	Martha L Seidel	1



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

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

LLI Sample # WW 6186340
LLI Group # 1229635
Account # 11260

Project Name: 211577

Collected: 01/18/2011 by ML

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

Submitted: 01/19/2011 09:40
Reported: 01/31/2011 14:18

SEFD2

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene		71-43-2	N.D.	0.5	1
10943 Ethylbenzene		100-41-4	N.D.	0.5	1
10943 Toluene		108-88-3	N.D.	0.5	1
10943 Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		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 Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943 BTEX 8260B Water	SW-846 8260B		1	D110243AA	01/25/2011 04:53	Kelly E Keller	1
01163 GC/MS VOA Water Prep	SW-846 5030B		1	D110243AA	01/25/2011 04:53	Kelly E Keller	1
08273 NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx		1	11021A20A	01/21/2011 19:01	Martha L Seidel	1
01146 GC VOA Water Prep	SW-846 5030B		1	11021A20A	01/21/2011 19:01	Martha L Seidel	1



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

Sample Description: DUP-3 Grab Water Sample
Facility# 211577 Job# 386765
631 Queen Anne N-Seattle, WA

LLI Sample # WW 6186341
LLI Group # 1229635
Account # 11260

Project Name: 211577

Collected: 01/18/2011 by ML

Chevron

Submitted: 01/19/2011 09:40

6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

Reported: 01/31/2011 14:18

SEFD3

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
	GC/MS Volatiles	SW-846 8260B	ug/l	ug/l	
10943	Benzene	71-43-2	N.D.	0.5	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1
10943	Toluene	108-88-3	N.D.	0.5	1
10943	Xylene (Total)	1330-20-7	N.D.	0.5	1
	GC Volatiles	ECY 97-602 NWTPH-Gx	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 Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D110243AA	01/25/2011 05:16	Kelly E Keller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D110243AA	01/25/2011 05:16	Kelly E Keller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	11021A20A	01/21/2011 19:23	Martha L Seidel	1
01146	GC VOA Water Prep	SW-846 5030B	1	11021A20A	01/21/2011 19:23	Martha L Seidel	1

Quality Control Summary

Client Name: Chevron

Reported: 01/31/11 at 02:18 PM

Group Number: 1229635

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

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: D110243AA			Sample number(s): 6186327-6186333, 6186335-6186341					
Benzene	N.D.	0.5	ug/l	94		79-120		
Ethylbenzene	N.D.	0.5	ug/l	92		79-120		
Toluene	N.D.	0.5	ug/l	97		79-120		
Xylene (Total)	N.D.	0.5	ug/l	95		80-120		
Batch number: D110271AA			Sample number(s): 6186334					
Benzene	N.D.	0.5	ug/l	98		79-120		
Ethylbenzene	N.D.	0.5	ug/l	90		79-120		
Toluene	N.D.	0.5	ug/l	94		79-120		
Xylene (Total)	N.D.	0.5	ug/l	89		80-120		
Batch number: 11021A20A			Sample number(s): 6186335-6186341					
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	100	91	75-135	10	30
Batch number: 11021C20A			Sample number(s): 6186327-6186334					
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	91	89	75-135	2	30
Batch number: 110210011A			Sample number(s): 6186328-6186329					
DRO C12-C24 w/Si Gel	N.D.	30.	ug/l	79		50-100		
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					
Batch number: 110240015A			Sample number(s): 6186330-6186337					
DRO C12-C24 w/Si Gel	N.D.	30.	ug/l	93	103	56-103	10	20
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					
Batch number: 110201848003			Sample number(s): 6186328-6186333, 6186335					
Iron	N.D.	52.2	ug/l	102		90-112		
Manganese	N.D.	0.84	ug/l	101		90-110		
Batch number: 110201848010			Sample number(s): 6186336-6186337					
Iron	N.D.	52.2	ug/l	104		90-112		
Manganese	N.D.	0.84	ug/l	103		90-110		
Batch number: 11019237902A			Sample number(s): 6186328-6186333, 6186335-6186337					
Nitrate Nitrogen	N.D.	50.	ug/l	105		90-110		
Nitrite Nitrogen	N.D.	80.	ug/l	105		90-110		
Sulfate	N.D.	300.	ug/l	107		89-110		
Batch number: 11019834401A			Sample number(s): 6186328-6186333, 6186335-6186337					
Ferrous Iron	N.D.	10.	ug/l	99		92-105		
Batch number: 11020020201B			Sample number(s): 6186328-6186333, 6186335-6186337					
Alkalinity to pH 4.5	N.D.	460.	ug/l as CaCO ₃	100		98-103		
Batch number: 11021023001A			Sample number(s): 6186328-6186333, 6186335-6186337					

*- 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: 01/31/11 at 02:18 PM

Group Number: 1229635

<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 RPD</u>	<u>RPD Max</u>
Sulfide	N.D.	54.	ug/l	91		90-110		

Sample Matrix Quality Control

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

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD RPD</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: D110243AA								
Benzene	85	100	80-126	16	30			
Ethylbenzene	81	94	71-134	16	30			
Toluene	86	102	80-125	17	30			
Xylene (Total)	82	99	79-125	18	30			
Batch number: D110271AA								
Benzene	107	117	80-126	9	30			
Ethylbenzene	100	108	71-134	8	30			
Toluene	103	114	80-125	10	30			
Xylene (Total)	97	108	79-125	11	30			
Batch number: 110210011A								
DRO C12-C24 w/Si Gel			Sample number(s): 6186328-6186329	BKG: P185519				
HRO C24-C40 w/Si Gel					750	470	46* (1)	20
					N.D.	N.D.	0 (1)	20
Batch number: 110201848003								
Iron	104	100	75-125	2	20	712	6 (1)	20
Manganese	96	99	75-125	1	20	1,120	1,100	2
Batch number: 110201848010								
Iron	103	100	75-125	2	20	224	218	3 (1)
Manganese	101	100	75-125	1	20	81.3	84.6	4
Batch number: 11019237902A								
Nitrate Nitrogen	91	90-110	340		380	9 (1)	20	
Nitrite Nitrogen	93	90-110			N.D.	N.D.	0 (1)	20
Sulfate	103	90-110	80,200		80,800	1		20
Batch number: 11019834401A								
Ferrous Iron	96	98	73-120	2	6	2,000	2,100	1 (1)
Batch number: 11020020201B								
Alkalinity to pH 4.5	100		73-121		97,100	98,400	1	5
Alkalinity to pH 8.3					N.D.	N.D.	0 (1)	5
Batch number: 11021023001A								
Sulfide	86	92	69-133	4	5	690	700	2 (1)
								5

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.

*- 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: 01/31/11 at 02:18 PM

Group Number: 1229635

Surrogate Quality Control

Analysis Name: UST VOCs by 8260B - Water

Batch number: D110243AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6186327	101	103	98	85
6186328	101	101	98	86
6186329	100	103	97	85
6186330	98	99	95	91
6186331	98	101	99	108
6186332	102	101	97	86
6186333	102	106	98	86
6186335	96	99	100	92
6186336	101	103	98	85
6186337	100	100	95	84
6186338	100	104	109	86
6186339	98	99	98	87
6186340	98	100	98	87
6186341	99	102	100	89
Blank	99	102	98	86
LCS	97	101	99	95
MS	98	102	97	93
MSD	96	104	99	95

Limits: 80-116 77-113 80-113 78-113

Analysis Name: UST VOCs by 8260B - Water

Batch number: D110271AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6186334	97	104	96	92
Blank	97	101	98	92
LCS	95	101	98	96
MS	95	103	98	98
MSD	95	101	98	96

Limits: 80-116 77-113 80-113 78-113

Analysis Name: NWTPH-Gx water C7-C12

Batch number: 11021A20A

Trifluorotoluene-F

6186335	156*
6186336	90
6186337	90
6186338	90
6186339	92
6186340	91
6186341	91
Blank	88
LCS	108
LCSD	106

Limits: 63-135

Analysis Name: NWTPH-Gx water C7-C12

Batch number: 11021C20A

*- 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: 01/31/11 at 02:18 PM

Group Number: 1229635

Surrogate Quality Control

Trifluorotoluene-F

6186327	76
6186328	75
6186329	77
6186330	85
6186331	78
6186332	78
6186333	78
6186334	75
Blank	78
LCS	97
LCSD	96

Limits: 63-135

Analysis Name: NWTPH-Dx water w/Si Gel
Batch number: 110210011A
Orthoterphenyl

6186328	92
6186329	90
Blank	94
DUP	98
LCS	101

Limits: 50-150

Analysis Name: NWTPH-Dx water w/Si Gel
Batch number: 110240015A
Orthoterphenyl

6186330	111
6186331	100
6186332	111
6186333	105
6186334	121
6186335	114
6186336	107
6186337	118
Blank	137
LCS	118
LCSD	135

Limits: 50-150

*- 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.

Chevron Northwest Region Analysis Request/Chain of Custody



For Lancaster Laboratories use only
Acct. #: 11260 Sample #: 6186327-41

JT# 1229635
SER#

Facility #: SS#211577-OML G-R#386765
Site Address: 631 Queen Anne North, SEATTLE, WA
Chevron PM: OS Lead Consultant: SAICPC Catterall
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	Soil	Water	Oil	Air	Total Number of Containers
QA	1-18-11		X		X	X	X		2
MW-16		1035	X		X	X	X		14
MW-17		1240	X		X	X	X		14
MW-21		0840	X		X	X	X		14
MW-26		1140	X		X	X	X		14
MW-30		0945	X		X	X	X		14
MW-31		0845	X		X	X	X		14
MW-32		1230	X		X	X	X		8
MW-33		1135	X		X	X	X		14
MW-34		0940	X		X	X	X		14
MW-35		1040	X		X	X	X		14

Matrix

Potable
NPDES

Analyses Requested									
Preservation Codes									
H	H	H	H	H	H	H	H	H	H
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTEX + PAHs	8021	8260	Naphth	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ALKALINITY (230B)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Oxygenates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
N/N TPH G X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
N/N TPH D X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Extended Ring Silica Gel Cleanup	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Lead Total	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Diss.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Method	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
VPH/EPH	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
NWTPH H HCID	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Quantification	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
FERRIC IRON (SM 3500 Fe B)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Nitrate/Nitrite/Sulfate (PN 300)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Total Iron/Manganese (G 000B)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
SULFIDE (SM 204500 S2 D)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

Preservative Codes
 H = HCl T = Thiosulfate
 N = HNO₃ B = NaOH
 S = H₂SO₄ 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

Comments / Remarks

FERROUS IRON SAMPLES HAVE BEEN FIELD FILTERED
Please forward the lab results directly to the Lead Consultant and cc: G-R.

Turnaround Time Requested (TAT) (please circle)	Relinquished by:	Date 1-18-11	Time 1700	Received by:	Date	Time
STD. TAT 24 hour	<input type="checkbox"/>	Date	Time	Received by:	Date	Time
72 hour	<input type="checkbox"/>					
48 hour	<input type="checkbox"/>					
24 hour	<input type="checkbox"/>					
4 day	<input type="checkbox"/>					
5 day	<input type="checkbox"/>					
Data Package Options (please circle if required)	EDF/EDD	Relinquished by:	Date	Time	Received by:	Date Time
QC Summary	Type I - Full	Relinquished by Commercial Carrier:	Received by:	Date	Time	
Type VI (Raw Data)	Disk / EDD	UPS FedEx Other	Received by:	Date	Time	
WIP (RWQCB)	Standard Format	Temperature Upon Receipt Z.M-35 C°	Custody Seal is Intact? Yes No	1/19/11	940	
Disk	Other.					

Chevron Northwest Region Analysis Request/Chain of Custody



For Lancaster Laboratories use only
Acct. #: 11260 Sample #: 1181377-41

SCR#:

Aug 1911

Facility #: SS#211577-OML G-R#386765
Site Address: 631 Queen Anne North, SEATTLE, WA
Chevron PM: OS Lead Consultant: SAICPC Ca
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:

Turnaround Time Requested (TAT) (please circle)				Relinquished by:	Date	Time	Received by:	Date	Time	
STD. TAT 24 hour	72 hour 4 day	48 hour 5 day		<i>[Signature]</i>	1-18-11	1700				
				Relinquished by:	Date	Time	Received by:	Date	Time	
Data Package Options (please circle if required)				EDF/EDD	Relinquished by:	Date	Time	Received by:	Date	Time
QC Summary	Type I - Full									
Type VI (Raw Data)	Disk / EDD			Relinquished by Commercial Carrier:			Received by:	Date	Time	
WIP (RWQCB)	Standard Format			UPS	FedEx	Other	<i>Mary M.</i>	1/17/11	940	
Disk	Other.			Temperature Upon Receipt	24.35	°C	Custody Seals Intact?	Yes	No	

Explanation of Symbols and Abbreviations

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

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	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		
J	estimated value – The result is \geq the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).		
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. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is <CRDL, but \geq IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

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

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

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

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, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.



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 by:

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

Prepared for:

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

February 01, 2011

Project: 211577

Submittal Date: 01/20/2011
Group Number: 1229763
PO Number: 0015061199
Release Number: SKANCE
State of Sample Origin: WA

Client Sample Description

QA Water Sample
VP-4 Grab Water Sample
VP-5 Grab Water Sample
VP-8 Grab Water Sample
MW-4 Grab Water Sample
MW-14 Grab Water Sample
MW-15 Grab Water Sample
MW-18 Grab Water Sample
MW-25 Grab Water Sample
DPE-8 Grab Water Sample
RW-2 Grab Water Sample

Lancaster Labs (LLI)

6186916
6186917
6186918
6186919
6186920
6186921
6186922
6186923
6186924
6186925
6186926

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

ELECTRONIC	SAIC c/o Gettler-Ryan	Attn: Rachelle Munoz
COPY TO		
ELECTRONIC	SAIC	Attn: Mike Lange
COPY TO		
ELECTRONIC	SAIC	Attn: Jamalyn Green
COPY TO		



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

Analysis Report

Questions? Contact your Client Services Representative
Jill M Parker at (717) 656-2300 Ext. 1241

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Robin C. Runkle".

Robin C. Runkle
Senior Specialist



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

Analysis Report

Page 1 of 1

Sample Description: QA Water Sample
Facility# 211577 Job# 386765
631 Queen Anne North - Seattle, WA

LLI Sample # WW 6186916
LLI Group # 1229763
Account # 11260

Project Name: 211577

Collected: 01/19/2011

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

Submitted: 01/20/2011 09:10

Reported: 02/01/2011 09:10

JQA19

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene		71-43-2	N.D.	0.5	1
10943 Ethylbenzene		100-41-4	N.D.	0.5	1
10943 Toluene		108-88-3	N.D.	0.5	1
10943 Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		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 Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943 BTEX 8260B Water	SW-846 8260B		1	D110251AA	01/25/2011 15:46	Daniel H Heller	1
01163 GC/MS VOA Water Prep	SW-846 5030B		1	D110251AA	01/25/2011 15:46	Daniel H Heller	1
08273 NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx		1	11021A20A	01/21/2011 16:50	Martha L Seidel	1
01146 GC VOA Water Prep	SW-846 5030B		1	11021A20A	01/21/2011 16:50	Martha L Seidel	1



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

Sample Description: VP-4 Grab Water Sample
Facility# 211577 **Job#** 386765
631 Queen Anne North - Seattle, WA

LLI Sample # WW 6186917
LLI Group # 1229763
Account # 11260

Project Name: 211577

Collected: 01/19/2011 11:15 by ML

Chevron

Submitted: 01/20/2011 09:10

6001 Bollinger Canyon Road
 L4310

Reported: 02/01/2011 09:10

San Ramon CA 94583

VP4--

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene		71-43-2	0.7	0.5	1
10943 Ethylbenzene		100-41-4	N.D.	0.5	1
10943 Toluene		108-88-3	N.D.	0.5	1
10943 Xylene (Total)		1330-20-7	3	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		ug/l	ug/l	
08273 NWTPH-Gx water C7-C12		n.a.	350	50	1
GC Extractable TPH w/Si Gel	ECY 97-602 NWTPH-Dx modified		ug/l	ug/l	
02211 DRO C12-C24 w/Si Gel		n.a.	8,500	720	25
02211 HRO C24-C40 w/Si Gel		n.a.	2,300	1,700	25

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 Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D110251AA	01/25/2011 16:31	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D110251AA	01/25/2011 16:31	Daniel H Heller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	11021A20A	01/21/2011 19:45	Martha L Seidel	1
01146	GC VOA Water Prep	SW-846 5030B	1	11021A20A	01/21/2011 19:45	Martha L Seidel	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	110240015A	01/28/2011 17:08	Melissa McDermott	25
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	110240015A	01/24/2011 17:00	Kathryn I DeHaven	1



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 2

Sample Description: VP-5 Grab Water Sample
Facility# 211577 **Job#** 386765
631 Queen Anne North - Seattle, WA

LLI Sample # WW 6186918
LLI Group # 1229763
Account # 11260

Project Name: 211577

Collected: 01/19/2011 09:35 by ML

Chevron

6001 Bollinger Canyon Road

L4310

Submitted: 01/20/2011 09:10

Reported: 02/01/2011 09:10 San Ramon CA 94583

VP5--

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene		71-43-2	N.D.	0.5	1
10943 Ethylbenzene		100-41-4	N.D.	0.5	1
10943 Toluene		108-88-3	N.D.	0.5	1
10943 Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		ug/l	ug/l	
08273 NWTPH-Gx water C7-C12		n.a.	N.D.	50	1
GC Extractable TPH w/Si Gel	ECY 97-602 NWTPH-Dx modified		ug/l	ug/l	
02211 DRO C12-C24 w/Si Gel		n.a.	140	30	1
02211 HRO C24-C40 w/Si Gel		n.a.	360	71	1
Metals	SW-846 6010B		ug/l	ug/l	
01754 Iron		7439-89-6	2,350	52.2	1
07058 Manganese		7439-96-5	234	0.84	1
Wet Chemistry	EPA 300.0		ug/l	ug/l	
00368 Nitrate Nitrogen		14797-55-8	11,600	250	5
01506 Nitrite Nitrogen		14797-65-0	N.D.	400	5
00228 Sulfate		14808-79-8	51,300	1,500	5
	SM20 2320 B		ug/l as CaCO3	ug/l as CaCO3	
00202 Alkalinity to pH 4.5		n.a.	36,900	460	1
00201 Alkalinity to pH 8.3		n.a.	N.D.	460	1
	SM20 3500 Fe B modified		ug/l	ug/l	
08344 Ferrous Iron		n.a.	26	10	1
	SM20 4500 S2 D		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 Sample Analysis Record

CAT	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D110251AA	01/25/2011 17:39	Daniel H Heller	1



Analysis Report

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

Page 2 of 2

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

LLI Sample # WW 6186918
LLI Group # 1229763
Account # 11260

Project Name: 211577

Collected: 01/19/2011 09:35 by ML

Chevron

Submitted: 01/20/2011 09:10

6001 Bollinger Canyon Road

Reported: 02/01/2011 09:10

L4310

San Ramon CA 94583

VP5--

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D110251AA	01/25/2011 17:39	Daniel H Heller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	11021A20A	01/21/2011 20:06	Martha L Seidel	1
01146	GC VOA Water Prep	SW-846 5030B	1	11021A20A	01/21/2011 20:06	Martha L Seidel	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	110240015A	01/28/2011 16:48	Melissa McDermott	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	110240015A	01/24/2011 17:00	Kathryn I DeHaven	1
01754	Iron	SW-846 6010B	1	110211848005	01/26/2011 02:58	John W Yanzuk II	1
07058	Manganese	SW-846 6010B	1	110211848005	01/26/2011 02:58	John W Yanzuk II	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	110211848005	01/23/2011 12:30	James L Mertz	1
00368	Nitrate Nitrogen	EPA 300.0	1	11020196901A	01/20/2011 16:16	Ashley M Adams	5
01506	Nitrite Nitrogen	EPA 300.0	1	11020196901A	01/20/2011 16:16	Ashley M Adams	5
00228	Sulfate	EPA 300.0	1	11020196901A	01/20/2011 16:16	Ashley M Adams	5
00202	Alkalinity to pH 4.5	SM20 2320 B	1	11025020201A	01/25/2011 08:58	Susan A Engle	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	11025020201A	01/25/2011 08:58	Susan A Engle	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	11023834401A	01/23/2011 07:25	Daniel S Smith	1
00230	Sulfide	SM20 4500 S2 D	1	11025023001A	01/25/2011 13:45	Susan E Hibner	1



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 2

Sample Description: VP-8 Grab Water Sample
Facility# 211577 **Job#** 386765
631 Queen Anne North - Seattle, WA

LLI Sample # WW 6186919
LLI Group # 1229763
Account # 11260

Project Name: 211577

Collected: 01/19/2011 08:50 by ML

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

Submitted: 01/20/2011 09:10
Reported: 02/01/2011 09:10

VP8--

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene		71-43-2	N.D.	0.5	1
10943 Ethylbenzene		100-41-4	N.D.	0.5	1
10943 Toluene		108-88-3	N.D.	0.5	1
10943 Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		ug/l	ug/l	
08273 NWTPH-Gx water C7-C12		n.a.	N.D.	50	1
GC Extractable TPH w/Si Gel	ECY 97-602 NWTPH-Dx modified		ug/l	ug/l	
02211 DRO C12-C24 w/Si Gel		n.a.	460	59	2
02211 HRO C24-C40 w/Si Gel		n.a.	660	140	2
Metals	SW-846 6010B		ug/l	ug/l	
01754 Iron		7439-89-6	71,700	52.2	1
07058 Manganese		7439-96-5	4,330	0.84	1
Wet Chemistry	EPA 300.0		ug/l	ug/l	
00368 Nitrate Nitrogen		14797-55-8	45,600	1,000	20
01506 Nitrite Nitrogen		14797-65-0	N.D.	400	5
00228 Sulfate		14808-79-8	28,100	1,500	5
	SM20 2320 B		ug/l as CaCO3	ug/l as CaCO3	
00202 Alkalinity to pH 4.5		n.a.	15,700	460	1
00201 Alkalinity to pH 8.3		n.a.	N.D.	460	1
	SM20 3500 Fe B modified		ug/l	ug/l	
08344 Ferrous Iron		n.a.	33	10	1
	SM20 4500 S2 D		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 Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D110251AA	01/25/2011 18:02	Daniel H Heller	1



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

Analysis Report

Page 2 of 2

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

LLI Sample # WW 6186919
LLI Group # 1229763
Account # 11260

Project Name: 211577

Collected: 01/19/2011 08:50 by ML

Chevron

Submitted: 01/20/2011 09:10

6001 Bollinger Canyon Road
L4310

Reported: 02/01/2011 09:10

San Ramon CA 94583

VP8--

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D110251AA	01/25/2011 18:02	Daniel H Heller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	11021A20A	01/21/2011 20:28	Martha L Seidel	1
01146	GC VOA Water Prep	SW-846 5030B	1	11021A20A	01/21/2011 20:28	Martha L Seidel	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	110240034A	01/31/2011 09:51	Glorines Suarez-Rivera	2
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	110240034A	01/25/2011 07:30	Kerrie A Freeburn	1
01754	Iron	SW-846 6010B	1	110211848005	01/26/2011 03:01	John W Yanzuk II	1
07058	Manganese	SW-846 6010B	1	110211848005	01/26/2011 03:01	John W Yanzuk II	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	110211848005	01/23/2011 12:30	James L Mertz	1
00368	Nitrate Nitrogen	EPA 300.0	1	11020196901A	01/20/2011 19:09	Ashley M Adams	20
01506	Nitrite Nitrogen	EPA 300.0	1	11020196901A	01/20/2011 16:58	Ashley M Adams	5
00228	Sulfate	EPA 300.0	1	11020196901A	01/20/2011 16:58	Ashley M Adams	5
00202	Alkalinity to pH 4.5	SM20 2320 B	1	11025020201A	01/25/2011 08:58	Susan A Engle	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	11025020201A	01/25/2011 08:58	Susan A Engle	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	11023834401A	01/23/2011 07:25	Daniel S Smith	1
00230	Sulfide	SM20 4500 S2 D	1	11025023001A	01/25/2011 13:45	Susan E Hibner	1



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 2

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

LLI Sample # WW 6186920
 LLI Group # 1229763
 Account # 11260

Project Name: 211577

Collected: 01/19/2011 09:40 by ML

Chevron
 6001 Bollinger Canyon Road
 L4310
 San Ramon CA 94583

Submitted: 01/20/2011 09:10
 Reported: 02/01/2011 09:10

M4---

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/l	ug/l	
10943	Benzene	71-43-2	25	0.5	1
10943	Ethylbenzene	100-41-4	2	0.5	1
10943	Toluene	108-88-3	0.7	0.5	1
10943	Xylene (Total)	1330-20-7	2	0.5	1
GC	Volatiles	ECY 97-602 NWTPH-Gx	ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	1,600	50	1
GC	Extractable TPH w/Si Gel	ECY 97-602 NWTPH-Dx modified	ug/l	ug/l	
02211	DRO C12-C24 w/Si Gel	n.a.	4,300	150	5
02211	HRO C24-C40 w/Si Gel	n.a.	1,800	350	5
Metals		SW-846 6010B	ug/l	ug/l	
01754	Iron	7439-89-6	4,210	52.2	1
07058	Manganese	7439-96-5	2,630	0.84	1
Wet Chemistry		EPA 300.0	ug/l	ug/l	
00368	Nitrate Nitrogen	14797-55-8	1,900	250	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	400	5
00228	Sulfate	14808-79-8	21,100	1,500	5
		SM20 2320 B	ug/l as CaCO3	ug/l as CaCO3	
00202	Alkalinity to pH 4.5	n.a.	217,000	460	1
00201	Alkalinity to pH 8.3	n.a.	N.D.	460	1
		SM20 3500 Fe B modified	ug/l	ug/l	
08344	Ferrous Iron	n.a.	890	40	4
		SM20 4500 S2 D	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 Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D110251AA	01/25/2011 18:24	Daniel H Heller	1



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

Analysis Report

Page 2 of 2

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

LLI Sample # WW 6186920
LLI Group # 1229763
Account # 11260

Project Name: 211577

Collected: 01/19/2011 09:40 by ML

Chevron

6001 Bollinger Canyon Road
L4310

Submitted: 01/20/2011 09:10

San Ramon CA 94583

M4---

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D110251AA	01/25/2011 18:24	Daniel H Heller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	11021A20A	01/21/2011 20:50	Martha L Seidel	1
01146	GC VOA Water Prep	SW-846 5030B	1	11021A20A	01/21/2011 20:50	Martha L Seidel	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	110240034A	01/28/2011 22:40	Glorines Suarez-Rivera	5
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	110240034A	01/25/2011 07:30	Kerrie A Freeburn	1
01754	Iron	SW-846 6010B	1	110211848005	01/26/2011 03:12	John W Yanzuk II	1
07058	Manganese	SW-846 6010B	1	110211848005	01/26/2011 03:12	John W Yanzuk II	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	110211848005	01/23/2011 12:30	James L Mertz	1
00368	Nitrate Nitrogen	EPA 300.0	1	11020196901A	01/20/2011 17:15	Ashley M Adams	5
01506	Nitrite Nitrogen	EPA 300.0	1	11020196901A	01/20/2011 17:15	Ashley M Adams	5
00228	Sulfate	EPA 300.0	1	11020196901A	01/20/2011 17:15	Ashley M Adams	5
00202	Alkalinity to pH 4.5	SM20 2320 B	1	11025020201A	01/25/2011 08:58	Susan A Engle	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	11025020201A	01/25/2011 08:58	Susan A Engle	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	11023834401A	01/23/2011 07:25	Daniel S Smith	4
00230	Sulfide	SM20 4500 S2 D	1	11025023001A	01/25/2011 13:45	Susan E Hibner	1



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 2

Sample Description: MW-14 Grab Water Sample
 Facility# 211577 Job# 386765
 631 Queen Anne North - Seattle, WA

LLI Sample # WW 6186921
 LLI Group # 1229763
 Account # 11260

Project Name: 211577

Collected: 01/19/2011 08:45 by ML

Chevron

6001 Bollinger Canyon Road

L4310

Submitted: 01/20/2011 09:10

San Ramon CA 94583

Reported: 02/01/2011 09:10

M14--

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene		71-43-2	12	0.5	1
10943 Ethylbenzene		100-41-4	3	0.5	1
10943 Toluene		108-88-3	2	0.5	1
10943 Xylene (Total)		1330-20-7	2	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		ug/l	ug/l	
08273 NWTPH-Gx water C7-C12		n.a.	3,000	50	1
GC Extractable TPH w/Si Gel	ECY 97-602 NWTPH-Dx modified		ug/l	ug/l	
02211 DRO C12-C24 w/Si Gel		n.a.	3,300	60	2
02211 HRO C24-C40 w/Si Gel		n.a.	840	140	2
Metals	SW-846 6010B		ug/l	ug/l	
01754 Iron		7439-89-6	28,300	52.2	1
07058 Manganese		7439-96-5	6,880	0.84	1
Wet Chemistry	EPA 300.0		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	38,800	1,500	5
	SM20 2320 B		ug/l as CaCO3	ug/l as CaCO3	
00202 Alkalinity to pH 4.5		n.a.	308,000	460	1
00201 Alkalinity to pH 8.3		n.a.	N.D.	460	1
	SM20 3500 Fe B modified		ug/l	ug/l	
08344 Ferrous Iron		n.a.	10,100	500	50
	SM20 4500 S2 D		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 Sample Analysis Record

CAT	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D110251AA	01/25/2011 18:47	Daniel H Heller	1



Analysis Report

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

Page 2 of 2

Sample Description: MW-14 Grab Water Sample
Facility# 211577 Job# 386765
631 Queen Anne North - Seattle, WA

LLI Sample # WW 6186921
LLI Group # 1229763
Account # 11260

Project Name: 211577

Collected: 01/19/2011 08:45 by ML

Chevron

Submitted: 01/20/2011 09:10

6001 Bollinger Canyon Road
L4310

Reported: 02/01/2011 09:10

San Ramon CA 94583

M14--

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D110251AA	01/25/2011 18:47	Daniel H Heller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	11021A20A	01/21/2011 21:12	Martha L Seidel	1
01146	GC VOA Water Prep	SW-846 5030B	1	11021A20A	01/21/2011 21:12	Martha L Seidel	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	110240034A	01/28/2011 21:59	Glorines Suarez-Rivera	2
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	110240034A	01/25/2011 07:30	Kerrie A Freeburn	1
01754	Iron	SW-846 6010B	1	110211848005	01/26/2011 03:15	John W Yanzuk II	1
07058	Manganese	SW-846 6010B	1	110211848005	01/26/2011 03:15	John W Yanzuk II	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	110211848005	01/23/2011 12:30	James L Mertz	1
00368	Nitrate Nitrogen	EPA 300.0	1	11020196901A	01/20/2011 17:29	Ashley M Adams	5
01506	Nitrite Nitrogen	EPA 300.0	1	11020196901A	01/20/2011 17:29	Ashley M Adams	5
00228	Sulfate	EPA 300.0	1	11020196901A	01/20/2011 17:29	Ashley M Adams	5
00202	Alkalinity to pH 4.5	SM20 2320 B	1	11025020201A	01/25/2011 08:58	Susan A Engle	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	11025020201A	01/25/2011 08:58	Susan A Engle	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	11023834401A	01/23/2011 07:25	Daniel S Smith	50
00230	Sulfide	SM20 4500 S2 D	1	11025023001A	01/25/2011 13:45	Susan E Hibner	1



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 2

Sample Description: MW-15 Grab Water Sample
 Facility# 211577 Job# 386765
 631 Queen Anne North - Seattle, WA

LLI Sample # WW 6186922
 LLI Group # 1229763
 Account # 11260

Project Name: 211577

Collected: 01/19/2011 11:40 by ML

Chevron
 6001 Bollinger Canyon Road
 L4310

Submitted: 01/20/2011 09:10

Reported: 02/01/2011 09:10 San Ramon CA 94583

M15--

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/l	ug/l	
10943	Benzene	71-43-2	N.D.	0.5	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1
10943	Toluene	108-88-3	N.D.	0.5	1
10943	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC	Volatiles	ECY 97-602 NWTPH-Gx	ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC	Extractable TPH w/Si Gel	ECY 97-602 NWTPH-Dx modified	ug/l	ug/l	
02211	DRO C12-C24 w/Si Gel	n.a.	100	59	2
02211	HRO C24-C40 w/Si Gel	n.a.	370	140	2
Reporting limits were raised due to interference from the sample matrix.					
Metals		SW-846 6010B	ug/l	ug/l	
01754	Iron	7439-89-6	4,600	52.2	1
07058	Manganese	7439-96-5	238	0.84	1
Wet Chemistry		EPA 300.0	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	2,300	1,500	5
		SM20 2320 B	ug/l as CaCO ₃	ug/l as CaCO ₃	
00202	Alkalinity to pH 4.5	n.a.	41,300	460	1
00201	Alkalinity to pH 8.3	n.a.	N.D.	460	1
		SM20 3500 Fe B modified	ug/l	ug/l	
08344	Ferrous Iron	n.a.	20	10	1
		SM20 4500 S2 D	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 Sample Analysis Record

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

Page 2 of 2

Sample Description: MW-15 Grab Water Sample
Facility# 211577 Job# 386765
631 Queen Anne North - Seattle, WA

LLI Sample # WW 6186922
LLI Group # 1229763
Account # 11260

Project Name: 211577

Collected: 01/19/2011 11:40 by ML

Chevron

Submitted: 01/20/2011 09:10

6001 Bollinger Canyon Road

Reported: 02/01/2011 09:10

L4310

San Ramon CA 94583

M15--

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D110251AA	01/25/2011 19:10	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D110251AA	01/25/2011 19:10	Daniel H Heller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	11021A20A	01/21/2011 21:34	Martha L Seidel	1
01146	GC VOA Water Prep	SW-846 5030B	1	11021A20A	01/21/2011 21:34	Martha L Seidel	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	110240034A	01/31/2011 09:30	Glorinnes Suarez-Rivera	2
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	110240034A	01/25/2011 07:30	Kerrie A Freeburn	1
01754	Iron	SW-846 6010B	1	110211848005	01/26/2011 03:18	John W Yanzuk II	1
07058	Manganese	SW-846 6010B	1	110211848005	01/26/2011 03:18	John W Yanzuk II	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	110211848005	01/23/2011 12:30	James L Mertz	1
00368	Nitrate Nitrogen	EPA 300.0	1	11020196901A	01/20/2011 17:43	Ashley M Adams	5
01506	Nitrite Nitrogen	EPA 300.0	1	11020196901A	01/20/2011 17:43	Ashley M Adams	5
00228	Sulfate	EPA 300.0	1	11020196901A	01/20/2011 17:43	Ashley M Adams	5
00202	Alkalinity to pH 4.5	SM20 2320 B	1	11026020201A	01/26/2011 08:04	Susan A Engle	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	11026020201A	01/26/2011 08:04	Susan A Engle	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	11023834401A	01/23/2011 07:25	Daniel S Smith	1
00230	Sulfide	SM20 4500 S2 D	1	11025023001A	01/25/2011 13:45	Susan E Hibner	1



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 2

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

LLI Sample # WW 6186923
 LLI Group # 1229763
 Account # 11260

Project Name: 211577

Collected: 01/19/2011 10:20 by ML

Chevron

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

Submitted: 01/20/2011 09:10
 Reported: 02/01/2011 09:10

M18--

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene		71-43-2	0.6	0.5	1
10943 Ethylbenzene		100-41-4	N.D.	0.5	1
10943 Toluene		108-88-3	N.D.	0.5	1
10943 Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		ug/l	ug/l	
08273 NWTPH-Gx water C7-C12		n.a.	N.D.	50	1
GC Extractable TPH w/Si Gel	ECY 97-602 NWTPH-Dx modified		ug/l	ug/l	
02211 DRO C12-C24 w/Si Gel		n.a.	270	28	1
02211 HRO C24-C40 w/Si Gel		n.a.	270	66	1
Metals	SW-846 6010B		ug/l	ug/l	
01754 Iron		7439-89-6	106,000	52.2	1
07058 Manganese		7439-96-5	710	0.84	1
Wet Chemistry	EPA 300.0		ug/l	ug/l	
00368 Nitrate Nitrogen		14797-55-8	7,200	250	5
01506 Nitrite Nitrogen		14797-65-0	N.D.	400	5
00228 Sulfate		14808-79-8	22,000	1,500	5
	SM20 2320 B		ug/l as CaCO3	ug/l as CaCO3	
00202 Alkalinity to pH 4.5		n.a.	107,000	460	1
00201 Alkalinity to pH 8.3		n.a.	N.D.	460	1
	SM20 3500 Fe B modified		ug/l	ug/l	
08344 Ferrous Iron		n.a.	18	10	1
	SM20 4500 S2 D		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 Sample Analysis Record

CAT No.	Analysis Name	Method	Trial# Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1 D110251AA	01/25/2011 19:32	Daniel H Heller	1



Analysis Report

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

Page 2 of 2

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

LLI Sample # WW 6186923
 LLI Group # 1229763
 Account # 11260

Project Name: 211577

Collected: 01/19/2011 10:20 by ML

Chevron

Submitted: 01/20/2011 09:10

6001 Bollinger Canyon Road
 L4310

Reported: 02/01/2011 09:10

San Ramon CA 94583

M18--

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D110251AA	01/25/2011 19:32	Daniel H Heller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	11021A20A	01/21/2011 21:56	Martha L Seidel	1
01146	GC VOA Water Prep	SW-846 5030B	1	11021A20A	01/21/2011 21:56	Martha L Seidel	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	110240034A	01/28/2011 20:15	Glorines Suarez-Rivera	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	110240034A	01/25/2011 07:30	Kerrie A Freeburn	1
01754	Iron	SW-846 6010B	1	110211848005	01/26/2011 03:22	John W Yanzuk II	1
07058	Manganese	SW-846 6010B	1	110211848005	01/26/2011 03:22	John W Yanzuk II	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	110211848005	01/23/2011 12:30	James L Mertz	1
00368	Nitrate Nitrogen	EPA 300.0	1	11020196901A	01/20/2011 17:58	Ashley M Adams	5
01506	Nitrite Nitrogen	EPA 300.0	1	11020196901A	01/20/2011 17:58	Ashley M Adams	5
00228	Sulfate	EPA 300.0	1	11020196901A	01/20/2011 17:58	Ashley M Adams	5
00202	Alkalinity to pH 4.5	SM20 2320 B	1	11026020201A	01/26/2011 08:04	Susan A Engle	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	11026020201A	01/26/2011 08:04	Susan A Engle	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	11023834401A	01/23/2011 07:25	Daniel S Smith	1
00230	Sulfide	SM20 4500 S2 D	1	11025023001A	01/25/2011 13:45	Susan E Hibner	1



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 2

Sample Description: MW-25 Grab Water Sample
Facility# 211577 **Job#** 386765
631 Queen Anne North - Seattle, WA

LLI Sample # WW 6186924
LLI Group # 1229763
Account # 11260

Project Name: 211577

Collected: 01/19/2011 10:40 by ML

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

Submitted: 01/20/2011 09:10
Reported: 02/01/2011 09:10

M25--

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/l	ug/l	
10943	Benzene	71-43-2	N.D.	0.5	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1
10943	Toluene	108-88-3	N.D.	0.5	1
10943	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC	Volatiles	ECY 97-602 NWTPH-Gx	ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC	Extractable TPH w/Si Gel	ECY 97-602 NWTPH-Dx modified	ug/l	ug/l	
02211	DRO C12-C24 w/Si Gel	n.a.	670	30	1
02211	HRO C24-C40 w/Si Gel	n.a.	180	70	1
Metals		SW-846 6010B	ug/l	ug/l	
01754	Iron	7439-89-6	8,470	52.2	1
07058	Manganese	7439-96-5	1,880	0.84	1
Wet Chemistry		EPA 300.0	ug/l	ug/l	
00368	Nitrate Nitrogen	14797-55-8	3,600	250	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	400	5
00228	Sulfate	14808-79-8	23,800	1,500	5
		SM20 2320 B	ug/l as CaCO3	ug/l as CaCO3	
00202	Alkalinity to pH 4.5	n.a.	168,000	460	1
00201	Alkalinity to pH 8.3	n.a.	N.D.	460	1
		SM20 3500 Fe B modified	ug/l	ug/l	
08344	Ferrous Iron	n.a.	46	10	1
		SM20 4500 S2 D	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 Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D110251AA	01/25/2011 19:54	Daniel H Heller	1



Analysis Report

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

Page 2 of 2

Sample Description: MW-25 Grab Water Sample
Facility# 211577 Job# 386765
631 Queen Anne North - Seattle, WA

LLI Sample # WW 6186924
LLI Group # 1229763
Account # 11260

Project Name: 211577

Collected: 01/19/2011 10:40 by ML

Chevron

Submitted: 01/20/2011 09:10

6001 Bollinger Canyon Road
L4310

Reported: 02/01/2011 09:10

San Ramon CA 94583

M25--

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D110251AA	01/25/2011 19:54	Daniel H Heller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	11021A20A	01/21/2011 22:17	Martha L Seidel	1
01146	GC VOA Water Prep	SW-846 5030B	1	11021A20A	01/21/2011 22:17	Martha L Seidel	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	110240034A	01/28/2011 20:36	Glorines Suarez-Rivera	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	110240034A	01/25/2011 07:30	Kerrie A Freeburn	1
01754	Iron	SW-846 6010B	1	110211848005	01/26/2011 03:25	John W Yanzuk II	1
07058	Manganese	SW-846 6010B	1	110211848005	01/26/2011 03:25	John W Yanzuk II	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	110211848005	01/23/2011 12:30	James L Mertz	1
00368	Nitrate Nitrogen	EPA 300.0	1	11020196901A	01/20/2011 18:40	Ashley M Adams	5
01506	Nitrite Nitrogen	EPA 300.0	1	11020196901A	01/20/2011 18:40	Ashley M Adams	5
00228	Sulfate	EPA 300.0	1	11020196901A	01/20/2011 18:40	Ashley M Adams	5
00202	Alkalinity to pH 4.5	SM20 2320 B	1	11026020201A	01/26/2011 08:04	Susan A Engle	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	11026020201A	01/26/2011 08:04	Susan A Engle	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	11023834401A	01/23/2011 07:25	Daniel S Smith	1
00230	Sulfide	SM20 4500 S2 D	1	11025023001A	01/25/2011 13:45	Susan E Hibner	1



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 2

Sample Description: DPE-8 Grab Water Sample
Facility# 211577 **Job#** 386765
 631 Queen Anne North - Seattle, WA

LLI Sample # WW 6186925
LLI Group # 1229763
Account # 11260

Project Name: 211577

Collected: 01/19/2011 12:45 by ML

Chevron
 6001 Bollinger Canyon Road
 L4310
 San Ramon CA 94583

Submitted: 01/20/2011 09:10
 Reported: 02/01/2011 09:10

DPE8-

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/l	ug/l	
10943	Benzene	71-43-2	0.6	0.5	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1
10943	Toluene	108-88-3	N.D.	0.5	1
10943	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC	Volatiles	ECY 97-602 NWTPH-Gx	ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC	Extractable TPH w/Si Gel	ECY 97-602 NWTPH-Dx modified	ug/l	ug/l	
02211	DRO C12-C24 w/Si Gel	n.a.	1,400	30	1
02211	HRO C24-C40 w/Si Gel	n.a.	1,100	70	1
Metals		SW-846 6010B	ug/l	ug/l	
01754	Iron	7439-89-6	1,340	52.2	1
07058	Manganese	7439-96-5	267	0.84	1
Wet Chemistry		EPA 300.0	ug/l	ug/l	
00368	Nitrate Nitrogen	14797-55-8	3,500	250	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	400	5
00228	Sulfate	14808-79-8	34,500	1,500	5
		SM20 2320 B	ug/l as CaCO3	ug/l as CaCO3	
00202	Alkalinity to pH 4.5	n.a.	68,900	460	1
00201	Alkalinity to pH 8.3	n.a.	N.D.	460	1
		SM20 3500 Fe B modified	ug/l	ug/l	
08344	Ferrous Iron	n.a.	N.D.	10	1
		SM20 4500 S2 D	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 Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D110251AA	01/25/2011 20:17	Daniel H Heller	1



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

Analysis Report

Page 2 of 2

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

LLI Sample # WW 6186925
LLI Group # 1229763
Account # 11260

Project Name: 211577

Collected: 01/19/2011 12:45 by ML

Chevron

Submitted: 01/20/2011 09:10

6001 Bollinger Canyon Road

Reported: 02/01/2011 09:10

L4310

San Ramon CA 94583

DPE8-

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D110251AA	01/25/2011 20:17	Daniel H Heller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	11021A20A	01/21/2011 22:39	Martha L Seidel	1
01146	GC VOA Water Prep	SW-846 5030B	1	11021A20A	01/21/2011 22:39	Martha L Seidel	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	110240034A	01/28/2011 21:17	Glorines Suarez-Rivera	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	110240034A	01/25/2011 07:30	Kerrie A Freeburn	1
01754	Iron	SW-846 6010B	1	110211848005	01/26/2011 03:28	John W Yanzuk II	1
07058	Manganese	SW-846 6010B	1	110211848005	01/26/2011 03:28	John W Yanzuk II	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	110211848005	01/23/2011 12:30	James L Mertz	1
00368	Nitrate Nitrogen	EPA 300.0	1	11020196901A	01/20/2011 18:54	Ashley M Adams	5
01506	Nitrite Nitrogen	EPA 300.0	1	11020196901A	01/20/2011 18:54	Ashley M Adams	5
00228	Sulfate	EPA 300.0	1	11020196901A	01/20/2011 18:54	Ashley M Adams	5
00202	Alkalinity to pH 4.5	SM20 2320 B	1	11026020201A	01/26/2011 08:04	Susan A Engle	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	11026020201A	01/26/2011 08:04	Susan A Engle	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	11023834401A	01/23/2011 07:25	Daniel S Smith	1
00230	Sulfide	SM20 4500 S2 D	1	11025023001A	01/25/2011 13:45	Susan E Hibner	1



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

Sample Description: RW-2 Grab Water Sample
Facility# 211577 **Job#** 386765
631 Queen Anne North - Seattle, WA

LLI Sample # NW 6186926
LLI Group # 1229763
Account # 11260

Project Name: 211577

Collected: 01/19/2011 12:40 by ML

Chevron

6001 Bollinger Canyon Road

L4310

Submitted: 01/20/2011 09:10

San Ramon CA 94583

Reported: 02/01/2011 09:10

R2---

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene		71-43-2	N.D.	0.5	1
10943 Ethylbenzene		100-41-4	8	0.5	1
10943 Toluene		108-88-3	N.D.	0.5	1
10943 Xylene (Total)		1330-20-7	16	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		ug/l	ug/l	
08273 NWTPH-Gx water C7-C12		n.a.	150	50	1
GC Extractable TPH w/Si Gel	ECY 97-602 NWTPH-Dx modified		ug/l	ug/l	
02211 DRO C12-C24 w/Si Gel		n.a.	270	30	1
02211 HRO C24-C40 w/Si Gel		n.a.	190	69	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 Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D110251AA	01/25/2011 20:39	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D110251AA	01/25/2011 20:39	Daniel H Heller	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	11021A20A	01/21/2011 23:01	Martha L Seidel	1
01146	GC VOA Water Prep	SW-846 5030B	1	11021A20A	01/21/2011 23:01	Martha L Seidel	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	110240034A	01/28/2011 19:34	Glorines Suarez-Rivera	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	110240034A	01/25/2011 07:30	Kerrie A Freeburn	1

Quality Control Summary

Client Name: Chevron
 Reported: 02/01/11 at 09:10 AM

Group Number: 1229763

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

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: D110251AA			Sample number(s): 6186916-6186926					
Benzene	N.D.	0.5	ug/l	93		79-120		
Ethylbenzene	N.D.	0.5	ug/l	91		79-120		
Toluene	N.D.	0.5	ug/l	95		79-120		
Xylene (Total)	N.D.	0.5	ug/l	91		80-120		
Batch number: 11021A20A			Sample number(s): 6186916-6186926					
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	100	91	75-135	10	30
Batch number: 110240015A			Sample number(s): 6186917-6186918					
DRO C12-C24 w/Si Gel	N.D.	30.	ug/l	93	103	56-103	10	20
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					
Batch number: 110240034A			Sample number(s): 6186919-6186926					
DRO C12-C24 w/Si Gel	N.D.	30.	ug/l	95	93	56-103	3	20
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					
Batch number: 1102111848005			Sample number(s): 6186918-6186925					
Iron	81.0	52.2	ug/l	102		90-112		
Manganese	N.D.	0.84	ug/l	100		90-110		
Batch number: 11020196901A			Sample number(s): 6186918-6186925					
Nitrate Nitrogen	N.D.	50.	ug/l	98		90-110		
Nitrite Nitrogen	N.D.	80.	ug/l	95		90-110		
Sulfate	N.D.	300.	ug/l	101		89-110		
Batch number: 11023834401A			Sample number(s): 6186918-6186925					
Ferrous Iron	N.D.	10.	ug/l	99		92-105		
Batch number: 11025020201A			Sample number(s): 6186918-6186921					
Alkalinity to pH 4.5	N.D.	460.	ug/l as CaCO ₃	100		98-103		
Batch number: 11025023001A			Sample number(s): 6186918-6186925					
Sulfide	N.D.	54.	ug/l	98		90-110		
Batch number: 11026020201A			Sample number(s): 6186922-6186925					
Alkalinity to pH 4.5	N.D.	460.	ug/l as CaCO ₃	100		98-103		

Sample Matrix Quality Control

*- Outside of specification

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

Quality Control Summary

Client Name: Chevron

Group Number: 1229763

Reported: 02/01/11 at 09:10 AM

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 RPD</u>	<u>BKG MAX</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: D110251AA			Sample number(s): 6186916-6186926 UNSPK: 6186917					
Benzene	102	102	80-126	0	30			
Ethylbenzene	98	98	71-134	0	30			
Toluene	102	102	80-125	0	30			
Xylene (Total)	97	95	79-125	2	30			
Batch number: 110211848005			Sample number(s): 6186918-6186925 UNSPK: P187927 BKG: P187927					
Iron	112	109	75-125	2	20	83.7	101	19 (1) 20
Manganese	98	100	75-125	1	20	94.7	91.4	4 20
Batch number: 11020196901A			Sample number(s): 6186918-6186925 UNSPK: 6186918 BKG: 6186918					
Nitrate Nitrogen	100		90-110		11,600	11,600	0	20
Nitrite Nitrogen	96		90-110		N.D.	N.D.	0 (1)	20
Sulfate	103		90-110		51,300	51,700	1	20
Batch number: 11023834401A			Sample number(s): 6186918-6186925 UNSPK: P186935 BKG: P186935					
Ferrous Iron	94	91	73-120	2	6	6,200	6,100	2 (1) 5
Batch number: 11025020201A			Sample number(s): 6186918-6186921 UNSPK: P185740 BKG: P185740					
Alkalinity to pH 4.5	101		73-121		118,000	119,000	1	5
Alkalinity to pH 8.3					N.D.	N.D.	0 (1)	5
Batch number: 11025023001A			Sample number(s): 6186918-6186925 UNSPK: P189475 BKG: P189475					
Sulfide	30*	31*	69-133	3	5	N.D.	N.D.	0 (1) 5
Batch number: 11026020201A			Sample number(s): 6186922-6186925 UNSPK: 6186923 BKG: 6186923					
Alkalinity to pH 4.5	100		73-121		107,000	110,000	3	5
Alkalinity to pH 8.3					N.D.	N.D.	0 (1)	5

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: UST VOCs by 8260B - Water

Batch number: D110251AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6186916	95	102	100	92
6186917	98	102	101	93
6186918	96	103	99	91
6186919	95	101	101	92
6186920	95	100	99	97
6186921	95	101	99	96
6186922	95	101	101	92
6186923	95	103	98	91
6186924	95	100	99	91
*6186925	96	101	100	93
6186926	97	102	100	93
Blank	95	101	100	92
LCS	95	105	100	96

*- 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: 02/01/11 at 09:10 AM

Group Number: 1229763

MS 95 104
 MSD 96 103

Surrogate Quality Control

Limits: 80-116 77-113 80-113 78-113

Analysis Name: NWTPH-Gx water C7-C12
 Batch number: 11021A20A
 Trifluorotoluene-F

6186916	89
6186917	92
6186918	90
6186919	90
6186920	98
6186921	98
6186922	89
6186923	90
6186924	90
6186925	88
6186926	91
Blank	88
LCS	108
LCSD	106

Limits: 63-135

Analysis Name: NWTPH-Dx water w/Si Gel
 Batch number: 110240015A
 Orthoterphenyl

6186917	94
6186918	107
Blank	137
LCS	118
LCSD	135

Limits: 50-150

Analysis Name: NWTPH-Dx water w/Si Gel
 Batch number: 110240034A
 Orthoterphenyl

6186919	96
6186920	120
6186921	123
6186922	101
6186923	111
6186924	121
6186925	103
6186926	111
Blank	112
LCS	123
LCSD	121

Limits: 50-150

*- 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.



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

Analysis Report

Page 4 of 4

Quality Control Summary

Client Name: Chevron
Reported: 02/01/11 at 09:10 AM

Group Number: 1229763

- *- 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.

Chevron Northwest Region Analysis Request/Chain of Custody



For Lancaster Laboratories use only
Acct. #: 11260

Sample #: 6186916-26

Dr# 1729763
SCR#

Facility #:	SS#211577-OML G-R#386765		
Site Address:	631 Queen Anne North, SEATTLE, WA		
Chevron PM:	OS	Lead Consultant:	SAICPC Catterall
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 #:	<input type="checkbox"/> Non SAR:		

Matrix		Analyses Requested																			
		Preservation Codes																			
Soil	Water	Oil	Air	<input type="checkbox"/> Portable	<input type="checkbox"/> NPDES	<input type="checkbox"/> Naphthalene	<input checked="" type="checkbox"/> H	<input checked="" type="checkbox"/> H	<input checked="" type="checkbox"/> H	<input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/> O										
							<input checked="" type="checkbox"/> BTEX + PAHs	<input checked="" type="checkbox"/> 8260	<input checked="" type="checkbox"/> 8260	<input checked="" type="checkbox"/> ALKALINITY (2320B)	<input checked="" type="checkbox"/> Extended Ring Silica Gel Cleanup	<input checked="" type="checkbox"/> Lead Total	<input checked="" type="checkbox"/> Diss. Method	<input checked="" type="checkbox"/> VPH/EPH	<input checked="" type="checkbox"/> NWTP/HClO	<input checked="" type="checkbox"/> quantification	<input checked="" type="checkbox"/> FERROUS IRON (SM 3500 Fe-B)	<input checked="" type="checkbox"/> Nitrate/Nitrite/Sulfate (FAH 300)			
Composite				<input type="checkbox"/> Air	<input type="checkbox"/> Naphthalene	<input type="checkbox"/> TPH D	<input checked="" type="checkbox"/> MW TPH G	<input checked="" type="checkbox"/> MW TPH G	<input checked="" type="checkbox"/> Lead Total	<input checked="" type="checkbox"/> Diss. Method	<input checked="" type="checkbox"/> VPH/EPH	<input checked="" type="checkbox"/> Total Iron/Manganese (G 10 B)	<input checked="" type="checkbox"/> Sulfide (SM 20 4500 SZ-D)								
							<input checked="" type="checkbox"/> BTEX + PAHs	<input checked="" type="checkbox"/> 8021	<input checked="" type="checkbox"/> 8260	<input checked="" type="checkbox"/> Diss. Method	<input checked="" type="checkbox"/> VPH/EPH	<input checked="" type="checkbox"/> quantification	<input checked="" type="checkbox"/> FERROUS IRON (SM 3500 Fe-B)	<input checked="" type="checkbox"/> Nitrate/Nitrite/Sulfate (FAH 300)							
		<table border="1"> <tr> <td><input type="checkbox"/> J value reporting needed</td> </tr> <tr> <td><input type="checkbox"/> Must meet lowest detection limits possible for 8260 compounds</td> </tr> <tr> <td>8021 MTBE Confirmation</td> </tr> <tr> <td><input type="checkbox"/> Confirm MTBE + Naphthalene</td> </tr> <tr> <td><input type="checkbox"/> Confirm highest hit by 8260</td> </tr> <tr> <td><input type="checkbox"/> Confirm all hits by 8260</td> </tr> <tr> <td><input type="checkbox"/> Run ____ oxy s on highest hit</td> </tr> <tr> <td><input type="checkbox"/> Run ____ oxy s on all hits</td> </tr> </table>												<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"/> Confirm all hits by 8260	<input type="checkbox"/> Run ____ oxy s on highest hit	<input type="checkbox"/> Run ____ oxy s on all hits
<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"/> Confirm all hits by 8260																					
<input type="checkbox"/> Run ____ oxy s on highest hit																					
<input type="checkbox"/> Run ____ oxy s on all hits																					
Comments / Remarks																					
<p>FERROUS IRON SAMPLES HAVE BEEN FIELD FILTERED Please forward the lab results directly to the Lead Consultant and cc: G-R.</p> <p>QA from 1/18/11 entered into separate Sampling group. gmp 1/21/11</p>																					

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)

QC Summary

Type I - Full

Type VI (Raw Data)

Disk / EDD

WIP (RWQCB)

Standard Format

Disk

Other.

EDF/EDD

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by Commercial Carrier:

UPS FedEx Other _____

Temperature Upon Receipt 13.3.1 C°

Date 1-19-11 Time 1700 Received by:

Date Time Received by:

Date Time Received by:

Received by:

Mary MM

12011

910

Date Time

Date Time

Date Time

Date Time

Yes No

Explanation of Symbols and Abbreviations

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

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	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		
J	estimated value – The result is \geq the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).		
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. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is <CRDL, but \geq IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

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

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

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

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, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.



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 by:

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

Prepared for:

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

February 02, 2011

Project: 211577

Submittal Date: 01/21/2011
Group Number: 1230006
PO Number: 0015061199
Release Number: SKANCE
State of Sample Origin: WA

Client Sample Description

QA Water Sample
MW-6 Grab Water Sample
MW-9 Grab Water Sample
MW-10 Grab Water Sample
DPE-5 Grab Water Sample
DPE-6 Grab Water Sample
DUP-1 Grab Water Sample
FB-1 Grab Water Sample

Lancaster Labs (LLI)

6188551
6188552
6188553
6188554
6188555
6188556
6188557
6188558

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

ELECTRONIC
COPY TO
ELECTRONIC
COPY TO
ELECTRONIC
COPY TO

SAIC c/o Gettler-Ryan

Attn: Rachelle Munoz

SAIC

Attn: Mike Lange

SAIC

Attn: Jamalyn Green



Analysis Report

2425 New Holland Pike, 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 Ext. 1241

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Robin C. Runkle".

Robin C. Runkle
Senior 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

Sample Description: QA Water Sample

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

LLI Sample # WW 6188551
LLI Group # 1230006
Account # 11260

Project Name: 211577

Collected: 01/20/2011

Chevron

Submitted: 01/21/2011 10:00

6001 Bollinger Canyon Road
L4310

Reported: 02/02/2011 15:02

San Ramon CA 94583

QAQAS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene		71-43-2	N.D.	0.5	1
10943 Ethylbenzene		100-41-4	N.D.	0.5	1
10943 Toluene		108-88-3	N.D.	0.5	1
10943 Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		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 Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D110272AA	01/27/2011 18:31	Nicholas R Rossi	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D110272AA	01/27/2011 18:31	Nicholas R Rossi	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	11026B20A	01/26/2011 20:38	Katrina T Longenecker	1
01146	GC VOA Water Prep	SW-846 5030B	1	11026B20A	01/26/2011 20:38	Katrina T Longenecker	1



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 2

Sample Description: MW-6 Grab Water Sample
Facility# 211577 **Job#** 386765
 631 Queen Anne N - Seattle, WA

LLI Sample # WW 6188552
LLI Group # 1230006
Account # 11260

Project Name: 211577

Collected: 01/20/2011 11:00 by ML

Chevron
 6001 Bollinger Canyon Road
 L4310
 San Ramon CA 94583

Submitted: 01/21/2011 10:00
 Reported: 02/02/2011 15:02

M6QAS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/l	ug/l	
10943	Benzene	71-43-2	4	0.5	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1
10943	Toluene	108-88-3	N.D.	0.5	1
10943	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC	Volatiles	ECY 97-602 NWTPH-Gx	ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	90	50	1
GC	Extractable TPH w/Si Gel	ECY 97-602 NWTPH-Dx modified	ug/l	ug/l	
02211	DRO C12-C24 w/Si Gel	n.a.	12,000	300	10
02211	HRO C24-C40 w/Si Gel	n.a.	4,600	700	10
Metals		SW-846 6010B	ug/l	ug/l	
01754	Iron	7439-89-6	43,500	52.2	1
07058	Manganese	7439-96-5	23,100	4.2	5
Wet Chemistry		EPA 300.0	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	270,000	15,000	50
		SM20 2320 B	ug/l as CaCO3	ug/l as CaCO3	
00202	Alkalinity to pH 4.5	n.a.	327,000	460	1
00201	Alkalinity to pH 8.3	n.a.	N.D.	460	1
		SM20 3500 Fe B modified	ug/l	ug/l	
08344	Ferrous Iron	n.a.	43,400	1,000	100
		SM20 4500 S2 D	ug/l	ug/l	
00230	Sulfide	18496-25-8	110	54	1

General Sample Comments

State of Washington Lab Certification No. C259
 The DRO bottles were received on 1/24/11 at 08:45.

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

Laboratory Sample Analysis Record

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



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

Analysis Report

Page 2 of 2

Sample Description: MW-6 Grab Water Sample
Facility# 211577 Job# 386765
631 Queen Anne N - Seattle, WA

LLI Sample # WW 6188552
LLI Group # 1230006
Account # 11260

Project Name: 211577

Collected: 01/20/2011 11:00 by ML

Chevron

6001 Bollinger Canyon Road
L4310

Submitted: 01/21/2011 10:00

San Ramon CA 94583

Reported: 02/02/2011 15:02

M6QAS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D110272AA	01/27/2011 18:53	Nicholas R Rossi	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D110272AA	01/27/2011 18:53	Nicholas R Rossi	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	11026B20A	01/26/2011 23:11	Katrina T Longenecker	1
01146	GC VOA Water Prep	SW-846 5030B	1	11026B20A	01/26/2011 23:11	Katrina T Longenecker	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	110240034A	01/28/2011 21:38	Glorines Suarez-Rivera	10
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	110240034A	01/25/2011 07:30	Kerrie A Freeburn	1
01754	Iron	SW-846 6010B	1	110241848003	01/25/2011 03:15	John W Yanzuk II	1
07058	Manganese	SW-846 6010B	1	110241848003	01/28/2011 18:19	John P Hook	5
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	110241848003	01/24/2011 12:50	James L Mertz	1
00368	Nitrate Nitrogen	EPA 300.0	1	11021196903A	01/21/2011 16:00	Ashley M Adams	5
01506	Nitrite Nitrogen	EPA 300.0	1	11021196903A	01/21/2011 16:00	Ashley M Adams	5
00228	Sulfate	EPA 300.0	1	11021196903A	01/26/2011 01:33	Ashley M Adams	50
00202	Alkalinity to pH 4.5	SM20 2320 B	1	11028020201A	01/28/2011 07:53	Susan A Engle	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	11028020201A	01/28/2011 07:53	Susan A Engle	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	11022834401A	01/22/2011 07:05	Daniel S Smith	100
00230	Sulfide	SM20 4500 S2 D	1	11025023001A	01/25/2011 13:45	Susan E Hibner	1



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 2

Sample Description: MW-9 Grab Water Sample
 Facility# 211577 Job# 386765
 631 Queen Anne N - Seattle, WA

LLI Sample # WW 6188553
 LLI Group # 1230006
 Account # 11260

Project Name: 211577

Collected: 01/20/2011 09:20 by ML

Chevron
 6001 Bollinger Canyon Road
 L4310
 San Ramon CA 94583

Submitted: 01/21/2011 10:00
 Reported: 02/02/2011 15:02

M9QAS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene		71-43-2	N.D.	0.5	1
10943 Ethylbenzene		100-41-4	N.D.	0.5	1
10943 Toluene		108-88-3	N.D.	0.5	1
10943 Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		ug/l	ug/l	
08273 NWTPH-Gx water C7-C12		n.a.	280	50	1
GC Extractable TPH w/Si Gel	ECY 97-602 NWTPH-Dx modified		ug/l	ug/l	
02211 DRO C12-C24 w/Si Gel		n.a.	6,400	150	5
02211 HRO C24-C40 w/Si Gel		n.a.	1,400	340	5
Metals	SW-846 6010B		ug/l	ug/l	
01754 Iron		7439-89-6	68,500	52.2	1
07058 Manganese		7439-96-5	69,300	8.4	10
Wet Chemistry	EPA 300.0		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	88,800	3,000	10
	SM20 2320 B		ug/l as CaCO3	ug/l as CaCO3	
00202 Alkalinity to pH 4.5		n.a.	360,000	460	1
00201 Alkalinity to pH 8.3		n.a.	N.D.	460	1
	SM20 3500 Fe B modified		ug/l	ug/l	
08344 Ferrous Iron		n.a.	27,500	1,000	100
	SM20 4500 S2 D		ug/l	ug/l	
00230 Sulfide		18496-25-8	410	54	1

General Sample Comments

State of Washington Lab Certification No. C259
 The DRO bottles were received on 1/24/11 at 08:45.

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

Laboratory Sample Analysis Record

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



Analysis Report

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

Page 2 of 2

Sample Description: MW-9 Grab Water Sample
Facility# 211577 Job# 386765
631 Queen Anne N - Seattle, WA

LLI Sample # WW 6188553
LLI Group # 1230006
Account # 11260

Project Name: 211577

Collected: 01/20/2011 09:20 by ML

Chevron

Submitted: 01/21/2011 10:00

6001 Bollinger Canyon Road
L4310

Reported: 02/02/2011 15:02

San Ramon CA 94583

M9QAS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D110272AA	01/27/2011 19:16	Nicholas R Rossi	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D110272AA	01/27/2011 19:16	Nicholas R Rossi	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	11026B20A	01/26/2011 23:32	Katrina T Longenecker	1
01146	GC VOA Water Prep	SW-846 5030B	1	11026B20A	01/26/2011 23:32	Katrina T Longenecker	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	110240034A	01/28/2011 22:20	Glorines Suarez-Rivera	5
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	110240034A	01/25/2011 07:30	Kerrie A Freeburn	1
01754	Iron	SW-846 6010B	1	110241848003	01/25/2011 03:19	John W Yanzuk II	1
07058	Manganese	SW-846 6010B	1	110241848003	01/28/2011 18:23	John P Hook	10
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	110241848003	01/24/2011 12:50	James L Mertz	1
00368	Nitrate Nitrogen	EPA 300.0	1	11021196903A	01/21/2011 16:42	Ashley M Adams	5
01506	Nitrite Nitrogen	EPA 300.0	1	11021196903A	01/21/2011 16:42	Ashley M Adams	5
00228	Sulfate	EPA 300.0	1	11021196903A	01/26/2011 02:09	Ashley M Adams	10
00202	Alkalinity to pH 4.5	SM20 2320 B	1	11028020201A	01/28/2011 07:53	Susan A Engle	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	11028020201A	01/28/2011 07:53	Susan A Engle	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	11022834401A	01/22/2011 07:05	Daniel S Smith	100
00230	Sulfide	SM20 4500 S2 D	1	11025023001A	01/25/2011 13:45	Susan E Hibner	1



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

Analysis Report

Page 1 of 2

Sample Description: MW-10 Grab Water Sample
Facility# 211577 Job# 386765
631 Queen Anne N - Seattle, WA

LII Sample # WW 6188554
LII Group # 1230006
Account # 11260

Project Name: 211577
Collected: 01/20/2011 08:30 by ML

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

Submitted: 01/21/2011 10:00
Reported: 02/02/2011 15:02

10QAS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method	Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B	ug/l				
10943 Benzene	71-43-2	N.D.	0.5		1	
10943 Ethylbenzene	100-41-4	N.D.	0.5		1	
10943 Toluene	108-88-3	N.D.	0.5		1	
10943 Xylene (Total)	1330-20-7	N.D.	0.5			
GC Volatiles	ECY 97-602 NWTPH-Gx	ug/l				
08273 NWTPH-Gx water C7-C12	n.a.	N.D.	50			
GC Extractable TPH w/Si Gel	ECY 97-602 NWTPH-Dx modified	ug/l				
02211 DRO C12-C24 w/Si Gel	n.a.	N.D.	59		2	
02211 HRO C24-C40 w/Si Gel	n.a.	250	140		2	
Reporting limits were raised due to interference from the sample matrix.						
Metals	SW-846 6010B	ug/l				
01754 Iron	7439-89-6	5,210	ug/l			
07058 Manganese	7439-96-5	4,460	52.2		1	
			0.84			
Wet Chemistry	EPA 300.0	ug/l				
00368 Nitrate Nitrogen	14797-55-8	9,200	ug/l as CaCO3			
01506 Nitrite Nitrogen	14797-65-0	N.D.	460		1	
00228 Sulfate	14808-79-8	33,300	460		1	
SM20 2320 B	n.a.	229,000	ug/l			
00202 Alkalinity to pH 4.5	n.a.	N.D.	10			
00201 Alkalinity to pH 8.3	n.a.					
SM20 3500 Fe B modified	n.a.	N.D.	ug/l			
08344 Ferrous Iron			54		1	
SM20 4500 S2 D	18496-25-8	N.D.	ug/l			
00230 Sulfide						

General Sample Comments

State of Washington Lab Certification No. C259
The DRO bottles were received on 1/24/11 at 08:45.

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 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 2

Sample Description: MW-10 Grab Water Sample
Facility# 211577 Job# 386765
631 Queen Anne N - Seattle, WA

LLI Sample # WW 6188554
LLI Group # 1230006
Account # 11260

Project Name: 211577

Collected: 01/20/2011 08:30 by ML

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

Submitted: 01/21/2011 10:00

Reported: 02/02/2011 15:02

10QAS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D110272AA	01/27/2011 19:39	Nicholas R Rossi	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D110272AA	01/27/2011 19:39	Nicholas R Rossi	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	11026B20A	01/26/2011 23:54	Katrina T Longenecker	1
01146	GC VOA Water Prep	SW-846 5030B	1	11026B20A	01/26/2011 23:54	Katrina T Longenecker	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	110270009A	02/02/2011 00:11	Melissa McDermott	2
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	110270009A	01/27/2011 15:35	Kathryn I DeHaven	1
01754	Iron	SW-846 6010B	1	110241848003	01/25/2011 03:22	John W Yanzuk II	1
07058	Manganese	SW-846 6010B	1	110241848003	01/25/2011 03:22	John W Yanzuk II	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	110241848003	01/24/2011 12:50	James L Mertz	1
00368	Nitrate Nitrogen	EPA 300.0	1	11021196903A	01/21/2011 16:56	Ashley M Adams	5
01506	Nitrite Nitrogen	EPA 300.0	1	11021196903A	01/21/2011 16:56	Ashley M Adams	5
00228	Sulfate	EPA 300.0	1	11021196903A	01/21/2011 16:56	Ashley M Adams	5
00202	Alkalinity to pH 4.5	SM20 2320 B	1	11028020201A	01/28/2011 07:53	Susan A Engle	1
00201	Alkalinity to pH 8.3	SM20 2320 B	1	11028020201A	01/28/2011 07:53	Susan A Engle	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	11022834401A	01/22/2011 07:05	Daniel S Smith	1
00230	Sulfide	SM20 4500 S2 D	1	11025023001A	01/25/2011 13:45	Susan E Hibner	1



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

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

LLI Sample # WW 6188555
 LLI Group # 1230006
 Account # 11260

Project Name: 211577

Collected: 01/20/2011 12:00 by ML

Chevron
 6001 Bollinger Canyon Road
 L4310
 San Ramon CA 94583

Submitted: 01/21/2011 10:00
 Reported: 02/02/2011 15:02

D5QAS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene		71-43-2	N.D.	0.5	1
10943 Ethylbenzene		100-41-4	2	0.5	1
10943 Toluene		108-88-3	N.D.	0.5	1
10943 Xylene (Total)		1330-20-7	1	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		ug/l	ug/l	
08273 NWTPH-Gx water C7-C12		n.a.	N.D.	50	1
GC Extractable TPH w/Si Gel	ECY 97-602 NWTPH-Dx modified		ug/l	ug/l	
02211 DRO C12-C24 w/Si Gel		n.a.	540	31	1
02211 HRO C24-C40 w/Si Gel		n.a.	230	71	1

General Sample Comments

State of Washington Lab Certification No. C259
 The DRO bottles were received on 1/24/11 at 08:45.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D110272AA	01/27/2011 20:01	Nicholas R Rossi	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D110272AA	01/27/2011 20:01	Nicholas R Rossi	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	11026B20A	01/27/2011 00:16	Katrina T Longenecker	1
01146	GC VOA Water Prep	SW-846 5030B	1	11026B20A	01/27/2011 00:16	Katrina T Longenecker	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	110270009A	01/31/2011 11:34	Marie D John	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	110270009A	01/27/2011 15:35	Kathryn I DeHaven	1



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

Sample Description: DPE-6 Grab Water Sample
Facility# 211577 **Job#** 386765
 631 Queen Anne N - Seattle, WA

LLI Sample # WW 6188556
LLI Group # 1230006
Account # 11260

Project Name: 211577

Collected: 01/20/2011 10:10 by ML

Chevron

Submitted: 01/21/2011 10:00

6001 Bollinger Canyon Road
 L4310

Reported: 02/02/2011 15:02

San Ramon CA 94583

D6QAS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene		71-43-2	42	0.5	1
10943 Ethylbenzene		100-41-4	4	0.5	1
10943 Toluene		108-88-3	2	0.5	1
10943 Xylene (Total)		1330-20-7	6	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		ug/l	ug/l	
08273 NWTPH-Gx water C7-C12		n.a.	520	50	1
GC Extractable TPH w/Si Gel	ECY 97-602 NWTPH-Dx modified		ug/l	ug/l	
02211 DRO C12-C24 w/Si Gel		n.a.	16,000	780	25
02211 HRO C24-C40 w/Si Gel		n.a.	27,000	1,800	25

General Sample Comments

State of Washington Lab Certification No. C259

The DRO bottles were received on 1/24/11 at 08:45.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D110272AA	01/27/2011 20:24	Nicholas R Rossi	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D110272AA	01/27/2011 20:24	Nicholas R Rossi	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	11026B20A	01/27/2011 00:38	Katrina T Longenecker	1
01146	GC VOA Water Prep	SW-846 5030B	1	11026B20A	01/27/2011 00:38	Katrina T Longenecker	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	110270009A	02/02/2011 01:34	Melissa McDermott	25
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	110270009A	01/27/2011 15:35	Kathryn I DeHaven	1



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

Sample Description: DUP-1 Grab Water Sample
Facility# 211577 Job# 386765
631 Queen Anne N - Seattle, WA

LLI Sample # WW 6188557
LLI Group # 1230006
Account # 11260

Project Name: 211577

Collected: 01/20/2011 by ML

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

Submitted: 01/21/2011 10:00

Reported: 02/02/2011 15:02

FDQAS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/l	ug/l	
10943	Benzene	71-43-2	3	0.5	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1
10943	Toluene	108-88-3	N.D.	0.5	1
10943	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC	Volatiles	ECY 97-602 NWTPH-Gx	ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	130	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 Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D110271AA	01/27/2011 22:51	Nicholas R Rossi	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D110271AA	01/27/2011 22:51	Nicholas R Rossi	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	11026B20A	01/27/2011 01:00	Katrina T Longenecker	1
01146	GC VOA Water Prep	SW-846 5030B	1	11026B20A	01/27/2011 01:00	Katrina T Longenecker	1



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

Sample Description: FB-1 Grab Water Sample
Facility# 211577 Job# 386765
631 Queen Anne N - Seattle, WA

LLI Sample # WW 6188558
LLI Group # 1230006
Account # 11260

Project Name: 211577

Collected: 01/20/2011 by ML

Chevron

Submitted: 01/21/2011 10:00

6001 Bollinger Canyon Road
L4310

Reported: 02/02/2011 15:02

San Ramon CA 94583

FBOAS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene		71-43-2	N.D.	0.5	1
10943 Ethylbenzene		100-41-4	N.D.	0.5	1
10943 Toluene		108-88-3	N.D.	0.5	1
10943 Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		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 Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943 BTEX 8260B Water	SW-846 8260B	1	D110272AA		01/27/2011 20:46	Nicholas R Rossi	1
01163 GC/MS VOA Water Prep	SW-846 5030B	1	D110272AA		01/27/2011 20:46	Nicholas R Rossi	1
08273 NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	11026B20A		01/26/2011 21:00	Katrina T Longenecker	1
01146 GC VOA Water Prep	SW-846 5030B	1	11026B20A		01/26/2011 21:00	Katrina T Longenecker	1

Quality Control Summary

Client Name: Chevron

Group Number: 1230006

Reported: 02/02/11 at 03:02 PM

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

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: D110271AA			Sample number(s): 6188557					
Benzene	N.D.	0.5	ug/l	98		79-120		
Ethylbenzene	N.D.	0.5	ug/l	90		79-120		
Toluene	N.D.	0.5	ug/l	94		79-120		
Xylene (Total)	N.D.	0.5	ug/l	89		80-120		
Batch number: D110272AA			Sample number(s): 6188551-6188556, 6188558					
Benzene	N.D.	0.5	ug/l	107		79-120		
Ethylbenzene	N.D.	0.5	ug/l	98		79-120		
Toluene	N.D.	0.5	ug/l	103		79-120		
Xylene (Total)	N.D.	0.5	ug/l	98		80-120		
Batch number: 11026B20A			Sample number(s): 6188551-6188558					
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	91		75-135	0	30
Batch number: 110240034A			Sample number(s): 6188552-6188553					
DRO C12-C24 w/Si Gel	N.D.	30.	ug/l	95		56-103	3	20
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					
Batch number: 110270009A			Sample number(s): 6188554-6188556					
DRO C12-C24 w/Si Gel	N.D.	30.	ug/l	83		56-103	7	20
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					
Batch number: 110241848003			Sample number(s): 6188552-6188554					
Iron	N.D.	52.2	ug/l	103		90-112		
Manganese	N.D.	0.84	ug/l	105		90-110		
Batch number: 11021196903A			Sample number(s): 6188552-6188554					
Nitrate Nitrogen	N.D.	50.	ug/l	102		90-110		
Nitrite Nitrogen	N.D.	80.	ug/l	99		90-110		
Sulfate	N.D.	300.	ug/l	102		89-110		
Batch number: 11022834401A			Sample number(s): 6188552-6188554					
Ferrous Iron	N.D.	10.	ug/l	100		92-105		
Batch number: 11025023001A			Sample number(s): 6188552-6188554					
Sulfide	N.D.	54.	ug/l	98		90-110		
Batch number: 11028020201A			Sample number(s): 6188552-6188554					
Alkalinity to pH 4.5	N.D.	460.	ug/l as CaCO ₃	100		98-103		

Sample Matrix Quality Control

*- Outside of specification

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

Quality Control Summary

Client Name: Chevron

Group Number: 1230006

Reported: 02/02/11 at 03:02 PM

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 RPD</u>	<u>BKG MAX Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: D110271AA			Sample number(s): 6188557 UNSPK: P188733					
Benzene	107	117	80-126	9	30			
Ethylbenzene	100	108	71-134	8	30			
Toluene	103	114	80-125	10	30			
Xylene (Total)	97	108	79-125	11	30			
Batch number: D110272AA			Sample number(s): 6188551-6188556, 6188558 UNSPK: P187144					
Benzene	105	107	80-126	2	30			
Ethylbenzene	97	97	71-134	0	30			
Toluene	100	103	80-125	3	30			
Xylene (Total)	95	96	79-125	1	30			
Batch number: 110241848003			Sample number(s): 6188552-6188554 UNSPK: P189335 BKG: P189335					
Iron	99	96	75-125	3	20	81.2	110	30* (1)
Manganese	103	102	75-125	1	20	N.D.	N.D.	0 (1)
Batch number: 11021196903A			Sample number(s): 6188552-6188554 UNSPK: 6188552 BKG: 6188552					
Nitrate Nitrogen	105	90-110			N.D.	N.D.	0 (1)	20
Nitrite Nitrogen	104	90-110			N.D.	N.D.	0 (1)	20
Sulfate	115*	90-110			270,000	269,000	0	20
Batch number: 11022834401A			Sample number(s): 6188552-6188554 UNSPK: P186986 BKG: P186986					
Ferrous Iron	91	86	73-120	3	6	22,300	20,600	8* (1)
Batch number: 11025023001A			Sample number(s): 6188552-6188554 UNSPK: P189475 BKG: P189475					
Sulfide	30*	31*	69-133	3	5	N.D.	N.D.	0 (1)
Batch number: 11028020201A			Sample number(s): 6188552-6188554 UNSPK: P189501 BKG: 6188554					
Alkalinity to pH 4.5	97	97	73-121	1	5	229,000	233,000	2
Alkalinity to pH 8.3						N.D.	N.D.	0 (1)

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: UST VOCs by 8260B - Water

Batch number: D110271AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6188557	97	98	97	95
Blank	97	101	98	92
LCS	95	101	98	96
MS	95	103	98	98
MSD	95	101	98	96
Limits:	80-116	77-113	80-113	78-113

Analysis Name: UST VOCs by 8260B - Water

Batch number: D110272AA

Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene

*- 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.



Analysis Report

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

Page 3 of 4

Quality Control Summary

Client Name: Chevron
Reported: 02/02/11 at 03:02 PM

Group Number: 1230006

Surrogate Quality Control

6188551	98	100	99	93
6188552	96	99	99	95
6188553	96	97	98	96
6188554	96	99	99	93
6188555	97	99	97	93
6188556	96	100	98	96
6188558	97	101	99	92
Blank	97	102	97	92
LCS	97	101	98	96
MS	96	102	98	96
MSD	97	104	98	96

Limits: 80-116 77-113 80-113 78-113

Analysis Name: NWTPH-Gx water C7-C12
Batch number: 11026B20A
Trifluorotoluene-F

6188551	78
6188552	90
6188553	80
6188554	77
6188555	75
6188556	103
6188557	89
6188558	74
Blank	78
LCS	97
LCSD	99

Limits: 63-135

Analysis Name: NWTPH-Dx water w/Si Gel
Batch number: 110240034A
Orthoterphenyl

6188552	105
6188553	79
Blank	112
LCS	123
LCSD	121

Limits: 50-150

Analysis Name: NWTPH-Dx water w/Si Gel
Batch number: 110270009A
Orthoterphenyl

6188554	91
6188555	107
6188556	139
Blank	107
LCS	115
LCSD	123

Limits: 50-150

*- 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.

Explanation of Symbols and Abbreviations

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

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	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		
J	estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).		
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. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

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

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

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

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, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.