Seattle Housing Authority Maint Pkg Lot
Release ID: 583079
VCP: NW2220
Seattle
(Not entered)

SIT 2.3.2

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SAIC
From Science to Solutions

February 21, 2011

Ms. Olivia Skance
Chevron Environmental Management Company
6101 Bollinger Canyon Road
San Ramon, California 94583-5186

Subject: **Second Semi-Annual 2010 Groundwater Monitoring Report**
Former Chevron Service Station No. 20-9335
1225 North 45th Street
Seattle, Washington

Dear Ms. Skance:

SAIC Energy, Environment & Infrastructure, LLC (hereafter, SAIC), on behalf of Chevron Environmental Management Company (CEMC), prepared this letter summarizing the second semi-annual 2010 groundwater monitoring and sampling event at former Chevron Service Station No. 20-9335 (the site) in Seattle, Washington (Figure 1).

FIELD ACTIVITIES

Gettler-Ryan Inc. (Gettler-Ryan) conducted the groundwater monitoring and sampling field event on November 19, 2010. Gettler-Ryan collected depth-to-groundwater measurements and checked for the presence of separate-phase hydrocarbons (SPH) in the five monitoring wells on site.

Groundwater samples were collected from four of the five monitoring wells (SPH were present in MW-7) and submitted to Lancaster Laboratories, Inc. in Pennsylvania for the following analyses:

- Total petroleum hydrocarbons (TPH) as gasoline-range organics by Washington State Department of Ecology (Ecology) Method NWTPH-Gx;
- TPH as diesel-range organics and TPH as heavy oil-range organics by Ecology Method NWTPH-Dx extended with silica-gel cleanup;
- Benzene, toluene, ethylbenzene, and total xylenes by United States Environmental Protection Agency (EPA) Method 8021B; and
- Total Lead by EPA Method 6020.

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 170.21 feet above mean sea level (msl) in monitoring well MW-6 to 169.76 feet above msl in monitoring well MW-10. Groundwater potentially flows toward the southeast at a gradient of approximately 0.001 to 0.005 feet per foot (Figure 2). Groundwater elevations decreased an average of 0.09 foot since the previous monitoring event, which was performed on June 9, 2010.

SPH were detected in monitoring well MW-7 at a thickness of 1.26 feet.

The following analyte was detected at concentrations exceeding its Model Toxics Control Act Method A cleanup level:

- Total Lead was detected in monitoring wells MW-9 and MW-10.

Historic groundwater elevation data, SPH thickness data, and laboratory analytical results are summarized in Table 1. 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.

Petroleum-hydrocarbon constituent concentrations continue to fluctuate with seasonal changes in groundwater elevation. Lower concentrations are typically observed during the November/December sampling events. The total lead concentrations detected in monitoring wells MW-9 and MW-10 are consistent with historical data.

SPH were detected in monitoring well MW-7 at a thickness of 1.26 feet.

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

If you have any questions or comments, please contact me at (425) 482-3319 or via email at langem@saic.com.

Sincerely,

SAIC Energy, Environment & Infrastructure, LLC

Michael Lange
Project Manager

Enclosures:

Figure 1 – Vicinity Map

Figure 2 – Potentiometric Map

Table 1 – Groundwater Monitoring Data and Analytical Results

Attachment A – Groundwater Monitoring and Sampling Data Package

Attachment B – Laboratory Analysis Report

cc: Mr. Roger Nye – Ecology, Toxics Cleanup Program
3190 160th Ave SE, Bellevue, WA 98008-5452

Mr. Larry Hard – Seattle Housing Authority
120 Sixth Avenue North, Seattle, WA 98109-5003

Ms. Veronica Redstone – Housing Resources Group
1651 Bellevue Avenue, Seattle, WA, 98122-2014

Project File

PLEASE NOTE: In an effort to adopt practices that reduce negative impacts on the environment, SAIC is in the process of transitioning to an electronic distribution of all Groundwater Monitoring Reports. Please contact me at (425) 482-3319 or via email at langem@saic.com if you would be willing to accept an electronic copy of this report in lieu of a hard copy; in the absence of a response we will continue to provide you a hard copy.

Z:\2004\ChevronTexaco\WA Portfolio\209335 Seattle - 45th\209335 Vicinity Map.dwg greenjamal 20/01/11 - 1:37 P

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Former Chevron Service Station No. 20-9335
1225 North 45th Street
Seattle, Washington

FIGURE 1
Vicinity Map

FILE NAME:	DATE:
20-9335 Vicinity Map.dwg	01/20/2011

NORTH 45TH STREET

Sidewalk

MW-6
170.21

MW-7
170.09

170.01
MW-8

Stoneway
Apartments

Sidewalk

170.20

170.10

170.00

STONE WAY NORTH

Sidewalk

Beso del Sol Restaurant/
Natural Health Clinic

169.90

MW-9
169.88

169.80

169.90

Parking Lot

MW-10
169.76

169.80

Residence

Residence

Residence

Residence

Parking Lot (Asphalt)

Big Wheel Auto Parts

NORTH ALLEN PLACE

N

0 20 40

Feet

Legend

Groundwater Monitoring Well

170.09 Groundwater Elevation in Feet

169.90 Groundwater Eleavtion Contour at an 0.1 Foot Interval (Dashed Where Inferred

Approximate Groundwater Flow Direction at a Gradient of 0.001 to 0.005

State of Washington
2357
Licensed Geologist
Gabriel Cisneros

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FORMER CHEVRON SERVICE STATION NO. 20-9335
1225 NORTH 45TH STREET
SEATTLE, WASHINGTON

FIGURE 2
Potentiometric Map
November 19, 2010

DATE: 02/10/2011

DRAWING: 209335_GW Contours.dwg

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER CHEVRON SERVICE STATION NO. 20-9335
1225 North 45th Street
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (ft.)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethly-benzene	Total Xylenes	MTBE	T. Lead
MW-6															
02/09/06		197.18	--	36.74	0.00	160.44	680	98	1500	<0.5	0.7	1.2	37	--	--
05/03/07		197.18	--	36.74	0.00	160.44	1000	130	380	29	1	4	30	--	--
06/16/09		197.18	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--	--
07/01/09	NP	197.18	--	27.46	0.00	169.72	270[3]	<70[3]	<50	<0.5	<0.5	<0.5	<1.5	--	22.9
12/11/09	NP	197.18	--	27.55	0.00	169.63	35[3]	<69[3]	<50	<0.5	<0.5	<0.5	<1.5	--	0.76
06/09/10	NP	197.18	--	26.84	0.00	170.34	360[3]	<340[3,12]	5,900[13]	<0.5	<0.5	<0.5	350[13]	--	13.2
11/19/10	NP	197.18	--	26.97	0.00	170.21	240	81	750	<0.5	<0.5	<0.5	11		3.7
MW-7															
02/09/06		197.42	37.87	38.17	0.30	159.49**	--	--	--	--	--	--	--	--	--
05/03/07		197.42	26.55	27.80	0.00	169.62**	--	--	--	--	--	--	--	--	--
06/16/09		197.42	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--	--
07/01/09[9]		197.42	27.39	--[10]	--[10]	--[10]	NOT SAMPLED DUE TO THE PRESENCE OF SPI				--	--	--	--	--
12/11/09[9]		197.42	27.50	--[11]	--[11]	--[11]	NOT SAMPLED DUE TO THE PRESENCE OF SPI				--	--	--	--	--
06/09/10[9]		197.42	27.03	28.20	1.17	170.16**	NOT SAMPLED DUE TO THE PRESENCE OF SPH					--	--	--	--
11/19/10		197.42	27.08	28.34	1.26	170.09**	NOT SAMPLED DUE TO THE PRESENCE OF SPH								
MW-8															
02/09/06		197.35	--	36.74	0.00	160.61	280	<96	440	<0.5	1.1	3.3	28	--	--
05/03/07		197.35	--	36.74	0.00	160.61	940	<200	2600	<0.5	<0.5	<0.5	<0.5	--	--
06/16/09		197.35	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--	--
07/01/09	NP	197.35	--	27.84	0.00	169.51	390[3]	<700[3]	430	<0.5	<0.5	<0.5	2.2	--	3.5
12/11/09	NP	197.35	--	27.91	0.00	169.44	300[3]	<69[3]	<50	<0.5	<0.5	<0.5	<1.5	--	7.3
06/09/10	NP	197.35	--	27.21	0.00	170.14	280[3]	180[3]	350	<0.5	<0.5	<0.5	<1.5	--	16.5
11/19/10	NP	197.35	--	27.34	0.00	170.01	320	120	94	<0.5	<0.5	<0.5	<1.5		3.4
MW-9															
05/03/07		208.11	--	36.74	0.00	171.37	<400	<500	<50	<0.5	<0.5	4	18	--	--
06/16/09		208.11	--	38.72	0.00	169.39	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	19.3
07/01/09	NP	208.11	--	38.03	0.00	170.08	<31[3]	<71[3]	--	--	--	--	--	--	--
12/11/09	NP	208.11	--	38.86	0.00	169.25	76[3]	<69[3]	<50	<0.5	<0.5	<0.5	<1.5	--	14.5
06/09/10	NP	208.11	--	38.17	0.00	169.94	42[3]	110[3]	<50	<0.5	<0.5	<0.5	<1.5	--	21.2
11/19/10	NP	208.11	--	38.23	0.00	169.88	<29	130	<50	<0.5	<0.5	<0.5	<1.5		18.7

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER CHEVRON SERVICE STATION NO. 20-9335
1225 North 45th Street
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (ft.)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethly-benzene	Total Xylenes	MTBE	T. Lead
MW-10															
05/03/07		207.29	--	36.74	0.00	170.55	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--
06/16/09		207.29	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--	--
07/01/09	NP	207.29	--	38.72	0.00	168.57	<30[3]	<69[3]	<50	<0.5	<0.5	<0.5	<1.5	--	10.9
12/11/09	NP	207.29	--	35.91	0.00	171.38	49[3]	<69[3]	<50	<0.5	<0.5	<0.5	<1.5	--	13.4
06/09/10	NP	207.29	--	37.48	0.00	169.81	50[3]	88[3]	<50	<0.5	<0.5	<0.5	<1.5	--	7.2
11/19/10	NP	207.29	--	37.53	0.00	169.76	<29	74	<50	<0.5	<0.5	<0.5	<1.5		18.8
MW-1															
10/11/00[1]		97.95	--	34.50	--	63.45	--	--	--	--	--	--	--	--	--
12/16/00		97.95	--	35.91	0.00	62.04	ND[2,3]	ND[2,3]	74.4	ND	ND	ND	ND	ND	ND[4]
03/26/01		97.95	--	36.54	0.00	61.41	ND[3]	ND[3]	ND	ND	ND	ND	ND	ND	--
06/25/01		97.95	--	36.78	0.00	61.17	<281[3]	<842[3]	<50.0	<0.500	<0.500	<0.500	<1.00	--	--
09/24/01		97.95	--	37.14	0.00	60.81	<250[3,8]	<500[3,8]	<50.0	<0.500	<0.500	<0.500	<1.00	--	--
12/13/01		97.95	--	37.25	0.00	60.70	<250[3]	<500[3]	<80.0	<0.500	<0.500	<0.500	<1.00	--	--
03/08/02	NP	97.95	--	36.79	0.00	61.16	<250[3]	<750[3]	<50	<0.50	<0.50	<0.50	<1.5	--	--
05/29/02		97.95	--	36.44	0.00	61.51	SAMPLED SEMI-ANNUALLY			--	--	--	--	--	--
09/16/02	NP	97.95	--	36.71	0.00	61.24	<250[3]	<250[3]	<50	<0.50	<0.50	<0.50	<1.5	--	--
12/05/02		97.95	--	37.09	0.00	60.86	SAMPLED SEMI-ANNUALLY			--	--	--	--	--	--
03/04/03	NP	97.95	--	37.26	0.00	60.69	<250[3]	<250[3]	100	<0.50	<0.50	<0.50	<3.0	--	--
06/03/03		97.95	--	37.09	0.00	60.86	SAMPLED SEMI-ANNUALLY			--	--	--	--	--	--
10/27/03		97.95	--	37.42	0.00	60.53	NOT SAMPLED DUE TO INSUFFICIENT WATER					--	--	--	--
03/31/04	NP	97.95	--	37.12	0.00	60.83	<800[3]	<1,000[3]	<50	<0.5	<0.5	<0.5	<1.5	--	--
06/28/04		97.95	--	37.14	0.00	60.81	SAMPLED SEMI-ANNUALLY			--	--	--	--	--	--
09/29/04		97.95	--	37.50	0.00	60.45	NOT SAMPLED DUE TO INSUFFICIENT WATER					--	--	--	--
01/04/05		97.95	--	37.61	0.00	60.34	SAMPLED SEMI-ANNUALLY			--	--	--	--	--	--
ABANDONED															
MW-2															
10/11/00[1]		98.70	--	34.50	--	64.20	--	--	--	--	--	--	--	--	--
12/16/00		98.70	--	36.46	0.00	62.24	1,000[3]	ND[3]	28,100	283	2,560	693	4,020	ND[2]	0.00194[4]
03/26/01		98.70	--	37.12	0.00	61.58	1,180[3,5]	ND[3]	17,000	143	1,450	378	2,180	[2]ND/ND[6]	--
06/25/01		98.70	--	37.37	0.00	61.33	418[3,5]	<750[3]	11,700	92.3	547	181	1,010	--	--
09/24/01		98.70	--	37.72	0.00	60.98	4,840[3,7,8]	<557[3,8]	22,100	120	1,380	658	4,100	--	--
12/13/01		98.70	--	37.89	0.00	60.81	5,540[3,5]	<500[3]	84,000	185	3,960	1,590	9,950	--	--
03/08/02		98.70	37.24	38.00	0.76	61.31***	NOT SAMPLED DUE TO THE PRESENCE OF SPI				--	--	--	--	--
05/29/02		98.70	36.81	37.54	0.73	61.74***	NOT SAMPLED DUE TO THE PRESENCE OF SPI				--	--	--	--	--

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FORMER CHEVRON SERVICE STATION NO. 20-9335
1225 North 45th Street
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (ft.)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethly-benzene	Total Xylenes	MTBE	T. Lead
MW-2 (cont)															
09/16/02		98.70	37.19	37.61	0.42	61.43***	NOT SAMPLED DUE TO THE PRESENCE OF SPI				--	--	--	--	--
10/15/02		98.70	37.24	37.68	0.44	61.37***	--	--	--	--	--	--	--	--	--
11/22/02		98.70	37.12	37.63	0.51	61.48***	--	--	--	--	--	--	--	--	--
12/05/02		98.70	37.51	38.10	0.59	61.07***	NOT SAMPLED DUE TO THE PRESENCE OF SPI				--	--	--	--	--
01/28/03		98.70	36.77	37.33	0.56	61.82***	--	--	--	--	--	--	--	--	--
02/13/03		98.70	37.44	38.02	0.58	61.14***	--	--	--	--	--	--	--	--	--
03/04/03		98.70	INACCESSIBLE - VEHICLE PARKED OVER WELL				--	--	--	--	--	--	--	--	--
04/21/03		98.70	37.21	37.78	0.57	61.38***	--	--	--	--	--	--	--	--	--
05/08/03		98.70	37.43	37.94	0.51	61.17***	--	--	--	--	--	--	--	--	--
06/03/03		98.70	37.37	37.91	0.54	61.22***	NOT SAMPLED DUE TO THE PRESENCE OF SPH					--	--	--	--
07/06/03		98.70	36.96	37.51	0.55	61.63***	--	--	--	--	--	--	--	--	--
08/18/03		98.70	37.49	38.02	0.53	61.10***	--	--	--	--	--	--	--	--	--
10/27/03		98.70	37.54	39.98	2.44	60.67**	NOT SAMPLED DUE TO THE PRESENCE OF SPH					--	--	--	--
11/17/03		98.70	37.10	37.58	0.48	61.50**	--	--	--	--	--	--	--	--	--
12/31/03		98.70	36.18	38.19	2.01	62.12**	--	--	--	--	--	--	--	--	--
02/09/04		98.70	37.00	37.49	0.49	61.60**	--	--	--	--	--	--	--	--	--
03/04/04		98.70	35.85	37.06	1.21	62.61**	--	--	--	--	--	--	--	--	--
03/31/04		98.70	37.32	39.05	1.73	61.03**	NOT SAMPLED DUE TO THE PRESENCE OF SPH					--	--	--	--
06/28/04		98.70	37.32	39.05	1.73	61.03**	NOT SAMPLED DUE TO THE PRESENCE OF SPH					--	--	--	--
09/11/04		98.70	37.65	39.10	1.45	60.76**	--	--	--	--	--	--	--	--	--
09/29/04		98.70	37.71	39.39	1.68	60.65**	NOT SAMPLED DUE TO THE PRESENCE OF SPH					--	--	--	--
11/22/04		98.70	36.89	38.16	1.27	61.56**	--	--	--	--	--	--	--	--	--
01/04/05		98.70	37.88	39.80	1.92	60.44**	NOT SAMPLED DUE TO THE PRESENCE OF SPH					--	--	--	--
01/14/05		98.70	37.49	39.02	1.53	60.90**	--	--	--	--	--	--	--	--	--
ABANDONED															
MW-3															
10/11/00[1]		98.76	--	34.00	--	64.76	--	--	--	--	--	--	--	--	--
12/16/00		98.76	--	36.39	0.00	62.37	ND[3]	ND[3]	ND	ND	0.612	ND	1.95	ND	ND[4]
03/26/01		98.76	--	37.05	0.00	61.71	ND[3]	ND[3]	ND	ND	ND	ND	ND	ND	--
06/25/01		98.76	--	37.29	0.00	61.47	<250[3]	<750[3]	<50.0	<0.500	<0.500	<0.500	<1.00	--	--
09/24/01		98.76	--	37.64	0.00	61.12	<250[3,8]	<500[3,8]	<50.0	<0.500	<0.500	<0.500	<1.00	--	--
12/13/01		98.76	--	37.78	0.00	60.98	<250[3]	<500[3]	<80.0	<0.500	<0.500	<0.500	<1.00	--	--
03/08/02	NP	98.76	--	37.28	0.00	61.48	<250[3]	<750[3]	320	<0.50	0.64	2.1	15	--	--

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FORMER CHEVRON SERVICE STATION NO. 20-9335
1225 North 45th Street
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (ft.)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethly-benzene	Total Xylenes	MTBE	T. Lead
MW-3 (cont)															
05/29/02		98.76	--	36.92	0.00	61.84	SAMPLED SEMI-ANNUALLY			--	--	--	--	--	--
09/16/02	NP	98.76	--	37.21	0.00	61.55	<250[3]	<250[3]	<50	<0.50	<0.50	<0.50	<1.5	--	--
12/05/02		98.76	--	37.58	0.00	61.18	SAMPLED SEMI-ANNUALLY			--	--	--	--	--	--
03/04/03	NP	98.76	--	37.79	0.00	60.97	<250[3]	<250[3]	<50	<0.50	<0.50	<0.50	<1.5	--	--
06/03/03		98.76	--	37.68	0.00	61.08	SAMPLED SEMI-ANNUALLY			--	--	--	--	--	--
10/27/03	NP	98.76	--	38.00	0.00	60.76	<250[3]	<250[3]	<50	<0.5	<0.5	<0.5	<1.5	--	--
03/31/04	NP	98.76	--	37.65	0.00	61.11	<800[3]	<1,000[3]	<50	<0.5	<0.5	<0.5	<1.5	--	--
06/28/04		98.76	--	37.68	0.00	61.08	SAMPLED SEMI-ANNUALLY			--	--	--	--	--	--
09/29/04	NP	98.76	--	38.01	0.00	60.75	<250[3]	<250[3]	<50	<0.5	<0.5	<0.5	<1.5	--	--
01/04/05		98.76	--	38.19	0.00	60.57	SAMPLED SEMI-ANNUALLY			--	--	--	--	--	--
ABANDONED															
MW-4															
10/11/00[1]		98.52	--	35.00	--	63.52	--	--	--	--	--	--	--	--	--
12/16/00		98.52	--	36.35	0.00	62.17	ND[2,3]	ND[2,3]	58,200	326	5,520	1,430	8,520	ND[2]	0.0123[4]
03/26/01		98.52	--	37.00	0.00	61.52	266[3,5]	ND[3]	27,200	178	2,160	785	4,160	[2]ND/ND[6]	--
06/25/01		98.52	--	37.25	0.00	61.27	<250[3]	<750[3]	12,300	69.0	654	416	1,910	--	--
09/24/01		98.52	--	37.60	0.00	60.92	<250[3,8]	<500[3,8]	4,130	30.1	154	197	684	--	--
12/13/01		98.52	--	37.72	0.00	60.80	<250[3]	<500[3]	5,490	30.3	175	177	679	--	--
03/08/02	NP	98.52	--	38.36	0.00	60.16	<250[3]	<750[3]	9,000	<50	150	170	710	--	--
05/29/02	NP	98.52	--	36.86	0.00	61.66	<250[3]	<750[3]	6,700	22	150	190	780	--	--
08/07/02		98.52	--	36.92	0.00	61.60	--	--	--	--	--	--	--	--	--
09/16/02	NP	98.52	--	37.16	0.00	61.36	<250[3]	<250[3]	7,500	46	230	240	630	--	--
12/05/02	NP	98.52	--	37.53	0.00	60.99	<250[3]	<250[3]	14,000	73	400	540	1,500	--	--
03/04/03		98.52	36.68	36.71	0.03	61.83***	NOT SAMPLED DUE TO THE PRESENCE OF SPH					--	--	--	--
06/03/03		98.52	36.59	36.63	0.04	61.92***	NOT SAMPLED DUE TO THE PRESENCE OF SPH					--	--	--	--
07/06/03		98.52	36.90	36.93	0.03	61.61***	--	--	--	--	--	--	--	--	--
08/18/03		98.52	36.76	36.80	0.04	61.75***	--	--	--	--	--	--	--	--	--
10/27/03	NP	98.52	--	37.96	0.00	60.56	<400[3]	<500[3]	2,200	16	55	76	170	--	--
11/17/03		98.52	36.34	36.37	0.03	62.17**	--	--	--	--	--	--	--	--	--
12/31/03		98.52	--	36.88	0.00	61.64	--	--	--	--	--	--	--	--	--
02/09/04		98.52	36.14	36.17	0.03	62.37**	--	--	--	--	--	--	--	--	--
03/04/04		98.52	--	36.74	0.00	61.78	--	--	--	--	--	--	--	--	--
03/31/04	NP	98.52	--	37.59	0.00	60.93	<250[3]	<250[3]	3,900	14	96	110	340	--	--

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER CHEVRON SERVICE STATION NO. 20-9335
1225 North 45th Street
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (ft.)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethly-benzene	Total Xylenes	MTBE	T. Lead
MW-4 (cont)															
06/28/04	NP	98.52	--	37.54	0.00	60.98	<250[3]	<250[3]	1,600	8.5	15	59	110	--	--
09/11/04		98.52	37.78	37.81	0.03	60.73**	--	--	--	--	--	--	--	--	--
09/29/04	NP	98.52	--	37.86	0.00	60.66	<250[3]	<250[3]	1,500	18	40	76	170	--	--
11/22/04		98.52	--	36.81	0.00	61.71	--	--	--	--	--	--	--	--	--
01/04/05	NP	98.52	--	38.11	0.00	60.41	1,600[3]	<250[3]	1,600	10	13	60	110	--	--
01/14/05		98.52	--	37.58	0.00	60.94	--	--	--	--	--	--	--	--	--
ABANDONED															
MW-5															
10/11/00[1]		99.42	--	34.50	--	64.92	--	--	--	--	--	--	--	--	--
12/16/00		99.42	--	37.18	0.00	62.24	5,080[3]	ND[3]	146,000	ND[2]	15,100	4,160	24,100	ND[2]	0.0200[4]
03/26/01		99.42	--	37.91	0.00	61.51	77,900[3,5]	ND[3]	149,000	256	10,600	4,000	24,200	[2]ND/ND[6]	--
06/25/01		99.42	--	38.14	0.00	61.28	109,000[3]	<18,100[3]	127,000	210	9,580	3,730	21,500	--	--
09/24/01		99.42	38.40	38.44	0.04	61.01***	NOT SAMPLED DUE TO THE PRESENCE OF SPI				--	--	--	--	--
12/13/01		99.42	38.55	38.59	0.04	60.86***	NOT SAMPLED DUE TO THE PRESENCE OF SPI				--	--	--	--	--
03/08/02		99.42	37.96	38.46	0.50	61.36***	NOT SAMPLED DUE TO THE PRESENCE OF SPI				--	--	--	--	--
05/29/02		99.42	37.60	38.05	0.45	61.73***	NOT SAMPLED DUE TO THE PRESENCE OF SPI				--	--	--	--	--
08/07/02		99.42	37.73	38.12	0.39	61.61***	--	--	--	--	--	--	--	--	--
09/16/02		99.42	38.00	38.39	0.39	61.34***	NOT SAMPLED DUE TO THE PRESENCE OF SPI				--	--	--	--	--
10/15/02		99.42	38.09	38.47	0.38	61.25***	--	--	--	--	--	--	--	--	--
11/22/02		99.42	37.84	38.26	0.42	61.50***	--	--	--	--	--	--	--	--	--
12/05/02		99.42	38.42	38.78	0.36	60.93***	NOT SAMPLED DUE TO THE PRESENCE OF SPI				--	--	--	--	--
01/28/03		99.42	37.88	38.24	0.36	61.47***	--	--	--	--	--	--	--	--	--
02/13/03		99.42	38.33	38.68	0.35	61.02***	--	--	--	--	--	--	--	--	--
03/04/03		99.42	37.54	37.89	0.35	61.81***	NOT SAMPLED DUE TO THE PRESENCE OF SPI				--	--	--	--	--
04/21/03		99.42	37.96	38.29	0.33	61.39***	--	--	--	--	--	--	--	--	--
05/08/03		99.42	38.50	38.82	0.32	60.86***	--	--	--	--	--	--	--	--	--
06/03/03		99.42	37.42	37.76	0.34	61.93***	NOT SAMPLED DUE TO THE PRESENCE OF SPI				--	--	--	--	--
07/06/03		99.42	37.77	38.11	0.34	61.58***	--	--	--	--	--	--	--	--	--
08/18/03		99.42	38.54	38.86	0.32	60.82***	--	--	--	--	--	--	--	--	--
10/27/03		99.42	WELL DRY/OBSTRUCTED			--	--	--	--	--	--	--	--	--	--
11/17/03		99.42	37.87	38.17	0.30	61.49**	--	--	--	--	--	--	--	--	--
12/31/03		99.42	WELL DRY/OBSTRUCTED			--	--	--	--	--	--	--	--	--	--
02/09/04		99.42	WELL DRY/OBSTRUCTED			--	--	--	--	--	--	--	--	--	--
03/04/04		99.42	WELL DRY/OBSTRUCTED			--	--	--	--	--	--	--	--	--	--

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER CHEVRON SERVICE STATION NO. 20-9335
1225 North 45th Street
Seattle, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC* (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE (ft.)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethly-benzene	Total Xylenes	MTBE	T. Lead
MW-5 (cont)															
03/31/04		99.42	WELL DRY/OBSTRUCTED			--	--	--	--	--	--	--	--	--	--
06/28/04		99.42	WELL DRY/OBSTRUCTED			--	--	--	--	--	--	--	--	--	--
09/11/04		99.42	WELL DRY/OBSTRUCTED			--	--	--	--	--	--	--	--	--	--
09/29/04		99.42	WELL DRY/OBSTRUCTED			--	--	--	--	--	--	--	--	--	--
11/22/04		99.42	WELL DRY/OBSTRUCTED			--	--	--	--	--	--	--	--	--	--
01/04/05		99.42	WELL DRY/OBSTRUCTED			--	--	--	--	--	--	--	--	--	--
01/14/05		99.42	WELL DRY/OBSTRUCTED			--	--	--	--	--	--	--	--	--	--
ABANDONED															
TRIP BLANK															
12/16/00		--	--	--	--	--	--	--	ND	ND	ND	ND	ND	ND	--
03/26/01		--	--	--	--	--	--	--	ND	ND	ND	ND	ND	ND	--
06/25/01		--	--	--	--	--	--	--	<50.0	<0.500	<0.500	<0.500	<1.00	--	--
09/24/01		--	--	--	--	--	--	--	<50.0	<0.500	<0.500	<0.500	<1.00	--	--
12/13/01		--	--	--	--	--	--	--	<80.0	<0.500	<0.500	<0.500	<1.00	--	--
03/08/02		--	--	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	--	--
05/29/02		--	--	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	--	--
09/16/02		--	--	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	--	--
12/05/02		--	--	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	--	--
03/04/03		--	--	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	--	--
10/27/03		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
QA															
03/31/04		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
06/28/04		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
09/29/04		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
01/04/05		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
06/16/09		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
07/01/09		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
12/11/09		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
06/09/10		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
11/19/10		--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	--
Standard Laboratory Reporting Limits:							--	--	50	0.5	0.5	0.5	1.5	--	0.00100
MTCA Method A CULs:							500	500	800/1,000	5	1,000	700	1,000	20	--
Current Method:							NWTPH-Dx + Extended		NWTPH-Gx and USEPA 8021						USEPA 6020

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER CHEVRON SERVICE STATION NO. 20-9335
1225 North 45th Street
Seattle, Washington
Concentrations reported in µg/L

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to December 16, 2000, were compiled from reports prepared by Delta Environmental Consultants Inc.
Groundwater monitoring data and laboratory analytical results for February 9, 2006, and May 3, 2007, events were compiled from reports prepared by SAIC.

TOC = Top of Casing
(ft.) = Feet
DTP = Depth to Product
DTW = Depth to Water
GWE = Groundwater Elevation
SPH = Separate Phase Hydrocarbon
SPHT = Separate Phase Hydrocarbon Thickness
TPH = Total Petroleum Hydrocarbons
TPH-DRO = TPH as Diesel-Range Organics
TPH-HRO = TPH as Heavy Oil-Range Organics
TPH-GRO = TPH as Gasoline-Range Organics
MTBE = Methyl Tertiary Butyl Ether
T. Lead = Total Lead
ND = Not Detected
NP = No Purge
-- = Not Measured/Not Analyzed
QA = Quality Assurance/Trip Blank
MTCA = Model Toxics Control Act Cleanup Regulations
CULs = Cleanup levels
LNAPL = Light Non-Aqueous Phase Liquid

* TOC elevations provided by SAIC. TOC elevations are referenced to mean sea level.
TOC elevations have been provided by Delta Environmental Consultants, Inc. referenced to an assumed datum in feet.

** GWE has been corrected for the presence of SPH; correction factor = [(TOC - DTW) + (SPHT x 0.80)]

*** GWE has been corrected for the presence of SPH; correction factor = [(TOC - DTP - SPHT) + (SPHT x 0.80)]; Historical data has been altered to correct error in original reporting of depth to product as depth to water.

1 Data provided by Delta Environmental Consultants, Inc.
2 Detection limit raised. Refer to analytical reports.
3 Analyzed with silica-gel cleanup.
4 Filtered at the laboratory.
5 Laboratory report indicates results in the diesel organics range are primarily due to overlap from a gasoline range product.
6 MTBE by USEPA Method 8260.
7 Laboratory report indicates the sample chromatographic pattern does not resemble the fuel standard used for quantitation.
8 Laboratory report indicates the sample was prepared outside of the method established holding time.
9 Skimmer in well.
10 Interface probe could not detect LNAPL/Groundwater Interface, unable to gauge hydrocarbon thickness and calculate corrected GWE. From visual confirmation estimate thickness to be approximately 1.5 feet.
11 Interface probe could not detect LNAPL/Groundwater Interface, unable to gauge hydrocarbon thickness and calculate corrected GWE. From visual confirmation estimate thickness to be approximately 2.25 feet.
12 Laboratory report indicates due to the nature of the sample extract matrix, a dilution was used for the analysis. The reporting limits were raised accordingly.
13 Laboratory confirmed result.

Attachment A:
Groundwater Monitoring and Sampling Data Package

GETTLER-RYAN INC.

TRANSMITTAL

December 1, 2010
G-R #386750

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 Chevron Service Station #209335
1225 North 45th Street
Seattle, Washington

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DESCRIPTION
VIA PDF	Groundwater Monitoring and Sampling Data Package **Second Semi-Annual Event of November 19, 2010**

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/209335

GETTLER-RYAN INC.

CHEVRON - SITE CHECK LIST

Facility#:	**Chevron #209335**	Date: 11-19-10
Address:	**1225 N. 45Th Street**	
City/St.:	**Seattle, WA**	
Status of Site:	APARTMENT GARAGE / SIDEWALK	

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-6	OK	OK	OK	OK	
MW-7	↓	↓	↓	↓	
MW-8					
MW-9					
MW-10					

Additional Comments/Observations:

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Gettler-Ryan Inc. (GR) field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. All work is performed in accordance with the GR Health & Safety Plan and all client-specific programs. The scope of work and type of analysis to be performed is determined prior to commencing field work.

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

After water levels are collected and prior to sampling, if purging is to occur, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, peristaltic or Grundfos), or disposable bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging (additional parameters such as dissolved oxygen, oxidation reduction potential, turbidity may also be measured, depending on specific scope of work.). Purging continues until these parameters stabilize.

Groundwater samples are collected using disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used. 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. 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. 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 #209335 Job Number: 386750
Site Address: 1225 N. 45Th Street Event Date: 11-19-10 (inclusive)
City: Seattle, WA Sampler: ML

Well ID MW-6 Date Monitored: 11-19-10
Well Diameter 2 in.
Total Depth 38.35 ft.
Depth to Water 26.97 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 then 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 X
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: 1055 / 11-19-10
Approx. Flow Rate: — gpm.
Did well de-water? No If yes, Time: Volume: gal.

Weather Conditions: Cloudy
Water Color: Clear Odor: (circle) N Light
Sediment Description: None
DTW @ Sampling: 26.97

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

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-6	3 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8021)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc
	1 x 500ml poly	YES	HNO3	LANCASTER	TOTAL LEAD (ICP/MS 6020)

COMMENTS: NO PURGE

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #209335 Job Number: 386750
Site Address: 1225 N. 45Th Street Event Date: 11-19-10 (inclusive)
City: Seattle, WA Sampler: AM

Well ID MW-7 Date Monitored: 11-19-10
Well Diameter 2 in.
Total Depth 41.62 ft.
Depth to Water 28.34 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: 27.08 ft
Depth to Water: 28.34 ft
Hydrocarbon Thickness: 1.26 ft
Visual Confirmation/Description: BROWN
~~Skimmer / Absorbant Sock~~ (circle one)
Amt Removed from Skimmer: — gal
Amt Removed from Well: — gal
Water Removed: —
Product Transferred to: —

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

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

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8021)
	x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc
	x 500ml poly	YES	HNO3	LANCASTER	TOTAL LEAD (ICP/MS 6020)

COMMENTS: SPH - NO SKIMMER PRESENT IN WELL

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #209335 Job Number: 386750
Site Address: 1225 N. 45Th Street Event Date: 11-19-10 (inclusive)
City: Seattle, WA Sampler: ML

Well ID MW-8 Date Monitored: 11-19-10
Well Diameter 2 in.
Total Depth 41.63 ft.
Depth to Water 27.34 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 then 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 X
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: Clouds
Sample Time/Date: 1030 / 11-19-10 Water Color: Clear Odor: S / N Light
Approx. Flow Rate: — gpm. Sediment Description: Light
Did well de-water? NO If yes, Time: Volume: gal. DTW @ Sampling: 27.34

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

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-8	3 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8021)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc
	1 x 500ml poly	YES	HNO3	LANCASTER	TOTAL LEAD (ICP/MS 6020)

COMMENTS: NO PURGE

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #209335 Job Number: 386750
Site Address: 1225 N. 45Th Street Event Date: 11-19-10 (inclusive)
City: Seattle, WA Sampler: ML

Well ID MW-9 Date Monitored: 11-19-10
Well Diameter 2 in.
Total Depth 41.51 ft.
Depth to Water 38.23 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 then 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:

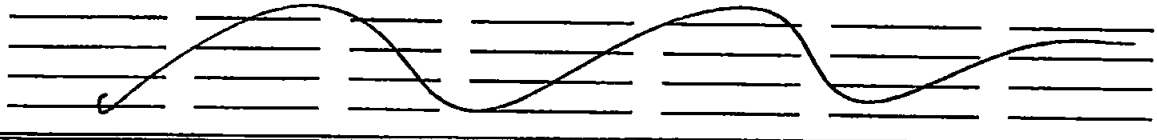
Sampling Equipment:
Disposable Bailer X
Pressure Bailer
Discrete Bailer
Peristaltic Pump
QED Bladder Pump
Other:

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: 1135 / 11-19-10
Approx. Flow Rate: — gpm.
Did well de-water? NO If yes, Time: ____ Volume: ____ gal.

Weather Conditions: Cloudy
Water Color: Clear Odor: Y / (N)
Sediment Description: None
DTW @ Sampling: 38.23

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



LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-9	3 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8021)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc
	1 x 500ml poly	YES	HNO3	LANCASTER	TOTAL LEAD (ICP/MS 6020)

COMMENTS: NO PURGE

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility#: Chevron #209335 Job Number: 386750
Site Address: 1225 N. 45Th Street Event Date: 11-19-10 (inclusive)
City: Seattle, WA Sampler: ML

Well ID MW-10 Date Monitored: 11-19-10
Well Diameter 2 in.
Total Depth 38.16 ft.
Depth to Water 37.53 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 then 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 X
- 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: 1155 / 11-19-10
Approx. Flow Rate: — gpm.
Did well de-water? NO If yes, Time: ____ Volume: ____ gal. DTW @ Sampling: 37.53

Weather Conditions: Cloudy
Water Color: Clear Odor: Y (N)
Sediment Description: none

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

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-10	3 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8021)
	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc
	1 x 500ml poly	YES	HNO3	LANCASTER	TOTAL LEAD (ICP/MS 6020)

COMMENTS: NO PURGE

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

Chevron Northwest Region Analysis Request/Chain of Custody

Lancaster Laboratories
Where quality is a science.

For Lancaster Laboratories use only
Acct. #: _____ Sample #: _____ SCR#: _____

Facility #: SS#209335-OML G-R#386750
Site Address: 1225 N. 45th Street, 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 Lambert
Service Order #: _____ ☐ Non SAR: _____

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Matrix: Water	Matrix: Oil ☐ Air ☐	Total Number of Containers	Analyses Requested / Preservation Codes: BTEX + MTBE 8021 ☒ 8260 ☐ Naphth ☐	8260 full scan	Oxygenates ___	TPH G	TPH D	Extended Rng. ☐ Silica Gel Cleanup ☒	Lead Total ☒ Diss. ☐ Method 6010	VPH/EPH	NWTPH H HCID ☐ quantification
									H			H	H	N			
QA	11-19-10		X			X		2	X			X					
MW-6		1055	X			X		6	X			X	X	X			
MW-8	↓	1030	X			X		6	X			X	X	X			
MW-9		1135	X			X		6	X			X	X	X			
MW-10		1155	X			X		6	X			X	X	X			

Preservative Codes
H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 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

Please forward the lab results directly to the Lead Consultant and cc: G-R.

Turnaround Time Requested (TAT) (please circle)
STD. TAT 72 hour 48 hour
24 hour 4 day 5 day
EDF/EDD

Data Package Options (please circle if required)
QC Summary Type I - Full
Type VI (Raw Data) Disk / EDD
WIP (RWQCB) Standard Format
Disk _____ Other.

	Date	Time		Date	Time
Relinquished by:	11-19-10	1630	Received by:		
Relinquished by:			Received by:		
Relinquished by:			Received by:		
Relinquished by Commercial Carrier: UPS FedEx Other _____			Received by:		
Temperature Upon Receipt _____ C°			Custody Seals intact? Yes No		

Attachment B:
Laboratory Analysis Report

Lancaster Laboratories

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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

December 03, 2010

Project: 209335

Submittal Date: 11/20/2010
Group Number: 1222290
PO Number: 0015061199
Release Number: SKANCE
State of Sample Origin: WA

Client Sample Description	Lancaster Labs (LLI) #
QA Water Sample	6147108
MW-6 Grab Water Sample	6147109
MW-8 Grab Water Sample	6147110
MW-9 Grab Water Sample	6147111
MW-10 Grab Water Sample	6147112

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

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

Lancaster Laboratories

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Analysis Report

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

Respectfully Submitted,

Sarah M. Snyder
Senior Specialist

Lancaster Laboratories

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Analysis Report

Sample Description: QA Water Sample
Facility# 209335 Job# 386750
1225 N. 45th Street - Seattle, WA

LLI Sample # WW 6147108
LLI Group # 1222290
Account # 11260

Project Name: 209335

Collected: 11/19/2010

Submitted: 11/20/2010 09:15
Reported: 12/03/2010 12:55

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

45SQA

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**ECY 97-602 NWTPH-Gx**		ug/l	ug/l	
08274	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Volatiles	**SW-846 8021B**		ug/l	ug/l	
05879	Benzene	71-43-2	N.D.	0.5	1
05879	Ethylbenzene	100-41-4	N.D.	0.5	1
05879	Toluene	108-88-3	N.D.	0.5	1
05879	Total Xylenes	1330-20-7	N.D.	1.5	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
08274	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	10327B53A	11/24/2010 18:55	Katrina T Longenecker	1
05879	BTEX Water	SW-846 8021B	1	10327B53A	11/24/2010 18:55	Katrina T Longenecker	1
01146	GC VOA Water Prep	SW-846 5030B	1	10327B53A	11/24/2010 18:55	Katrina T Longenecker	1

Lancaster Laboratories

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Analysis Report

Sample Description: MW-6 Grab Water Sample
Facility# 209335 Job# 386750
1225 N. 45th Street - Seattle, WA

LLI Sample # WW 6147109
LLI Group # 1222290
Account # 11260

Project Name: 209335

Collected: 11/19/2010 10:55 by ML

Submitted: 11/20/2010 09:15
Reported: 12/03/2010 12:55

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

45S06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08274	NWTPH-Gx water C7-C12	n.a.	750	50	1
GC Volatiles	**SW-846 8021B**		**ug/l**	**ug/l**	
05879	Benzene	71-43-2	N.D.	0.5	1
05879	Ethylbenzene	100-41-4	N.D.	0.5	1
05879	Toluene	108-88-3	N.D.	0.5	1
05879	Total Xylenes	1330-20-7	11	1.5	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.	240	31	1
02211	HRO C24-C40 w/Si Gel	n.a.	81	71	1
Metals	**SW-846 6020**		**ug/l**	**ug/l**	
06035	Lead	7439-92-1	3.7	0.052	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
08274	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	10327B53A	11/24/2010 23:46	Katrina T Longenecker	1
05879	BTEX Water	SW-846 8021B	1	10327B53A	11/24/2010 23:46	Katrina T Longenecker	1
01146	GC VOA Water Prep	SW-846 5030B	1	10327B53A	11/24/2010 23:46	Katrina T Longenecker	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	103330022A	12/01/2010 11:10	Melissa McDermott	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	103330022A	11/30/2010 06:30	Roman Kuropatkin	1
06035	Lead	SW-846 6020	1	103266050001A	11/30/2010 09:45	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3010A modified	1	103266050001	11/22/2010 20:30	Mirit S Shenouda	1

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Analysis Report

Sample Description: MW-8 Grab Water Sample
Facility# 209335 Job# 386750
1225 N. 45th Street - Seattle, WA

LLI Sample # WW 6147110
LLI Group # 1222290
Account # 11260

Project Name: 209335

Collected: 11/19/2010 10:30 by ML

Submitted: 11/20/2010 09:15
Reported: 12/03/2010 12:55

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

45S08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**ECY 97-602 NWTPH-Gx**		ug/l	ug/l	
08274	NWTPH-Gx water C7-C12	n.a.	94	50	1
GC Volatiles	**SW-846 8021B**		ug/l	ug/l	
05879	Benzene	71-43-2	N.D.	0.5	1
05879	Ethylbenzene	100-41-4	N.D.	0.5	1
05879	Toluene	108-88-3	N.D.	0.5	1
05879	Total Xylenes	1330-20-7	N.D.	1.5	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.	320	31	1
02211	HRO C24-C40 w/Si Gel	n.a.	120	72	1
Metals	**SW-846 6020**		ug/l	ug/l	
06035	Lead	7439-92-1	3.4	0.052	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
08274	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	10327B53A	11/25/2010 00:10	Katrina T Longenecker	1
05879	BTEX Water	SW-846 8021B	1	10327B53A	11/25/2010 00:10	Katrina T Longenecker	1
01146	GC VOA Water Prep	SW-846 5030B	1	10327B53A	11/25/2010 00:10	Katrina T Longenecker	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	103330022A	12/01/2010 11:53	Melissa McDermott	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	103330022A	11/30/2010 06:30	Roman Kuropatkin	1
06035	Lead	SW-846 6020	1	103266050001A	11/30/2010 09:47	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3010A modified	1	103266050001	11/22/2010 20:30	Mirit S Shenouda	1

Lancaster Laboratories

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Analysis Report

Sample Description: MW-9 Grab Water Sample
Facility# 209335 Job# 386750
1225 N. 45th Street - Seattle, WA

LLI Sample # WW 6147111
LLI Group # 1222290
Account # 11260

Project Name: 209335

Collected: 11/19/2010 11:35 by ML

Submitted: 11/20/2010 09:15
Reported: 12/03/2010 12:55

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

45S09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08274	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Volatiles	**SW-846 8021B**		**ug/l**	**ug/l**	
05879	Benzene	71-43-2	N.D.	0.5	1
05879	Ethylbenzene	100-41-4	N.D.	0.5	1
05879	Toluene	108-88-3	N.D.	0.5	1
05879	Total Xylenes	1330-20-7	N.D.	1.5	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.	29	1
02211	HRO C24-C40 w/Si Gel	n.a.	130	68	1
Metals	**SW-846 6020**		**ug/l**	**ug/l**	
06035	Lead	7439-92-1	18.7	0.052	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
08274	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	10327B53A	11/25/2010 00:34	Katrina T Longenecker	1
05879	BTEX Water	SW-846 8021B	1	10327B53A	11/25/2010 00:34	Katrina T Longenecker	1
01146	GC VOA Water Prep	SW-846 5030B	1	10327B53A	11/25/2010 00:34	Katrina T Longenecker	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	103330022A	12/01/2010 12:14	Melissa McDermott	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	103330022A	11/30/2010 06:30	Roman Kuropatkin	1
06035	Lead	SW-846 6020	1	103266050001A	11/30/2010 09:49	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3010A modified	1	103266050001	11/22/2010 20:30	Mirit S Shenouda	1

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Analysis Report

Sample Description: MW-10 Grab Water Sample
Facility# 209335 Job# 386750
1225 N. 45th Street - Seattle, WA

LLI Sample # WW 6147112
LLI Group # 1222290
Account # 11260

Project Name: 209335

Collected: 11/19/2010 11:55 by ML

Submitted: 11/20/2010 09:15
Reported: 12/03/2010 12:55

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

45S10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08274	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Volatiles	**SW-846 8021B**		**ug/l**	**ug/l**	
05879	Benzene	71-43-2	N.D.	0.5	1
05879	Ethylbenzene	100-41-4	N.D.	0.5	1
05879	Toluene	108-88-3	N.D.	0.5	1
05879	Total Xylenes	1330-20-7	N.D.	1.5	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.	29	1
02211	HRO C24-C40 w/Si Gel	n.a.	74	67	1
Metals	**SW-846 6020**		**ug/l**	**ug/l**	
06035	Lead	7439-92-1	18.8	0.052	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
08274	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	10327B53A	11/25/2010 00:58	Katrina T Longenecker	1
05879	BTEX Water	SW-846 8021B	1	10327B53A	11/25/2010 00:58	Katrina T Longenecker	1
01146	GC VOA Water Prep	SW-846 5030B	1	10327B53A	11/25/2010 00:58	Katrina T Longenecker	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	103330022A	12/01/2010 12:36	Melissa McDermott	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	103330022A	11/30/2010 06:30	Roman Kuropatkin	1
06035	Lead	SW-846 6020	1	103266050001A	11/30/2010 09:51	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3010A modified	1	103266050001	11/22/2010 20:30	Mirit S Shenouda	1

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Analysis Report

Quality Control Summary

Client Name: Chevron
Group Number: 1222290
Reported: 12/03/10 at 12:55 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

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10327B53A	Sample number(s): 6147108-6147112							
Benzene	N.D.	0.5	ug/l	105	105	80-120	0	30
Ethylbenzene	N.D.	0.5	ug/l	105	105	80-120	0	30
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	91	91	75-135	0	30
Toluene	N.D.	0.5	ug/l	105	105	80-120	0	30
Total Xylenes	N.D.	1.5	ug/l	110	108	80-120	2	30
Batch number: 103330022A	Sample number(s): 6147109-6147112							
DRO C12-C24 w/Si Gel	N.D.	30.	ug/l	86	90	50-100	4	20
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					
Batch number: 103266050001A	Sample number(s): 6147109-6147112							
Lead	N.D.	0.052	ug/l	103		90-115		

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10327B53A	Sample number(s): 6147108-6147112 UNSPK: P147099, P147100								
Benzene	110		80-152						
Ethylbenzene	115		80-133						
NWTPH-Gx water C7-C12	85		57-157						
Toluene	110		80-133						
Total Xylenes	115		80-148						
Batch number: 103266050001A	Sample number(s): 6147109-6147112 UNSPK: P144063 BKG: P144063								
Lead	102	101	83-120	2	20	0.15	0.19	22* (1)	20

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: BTEX Water
Batch number: 10327B53A

Trifluorotoluene-P	Trifluorotoluene-F

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

Quality Control Summary

Client Name: Chevron
Reported: 12/03/10 at 12:55 PM

Group Number: 1222290

Surrogate Quality Control

6147108	86	65
6147109	86	63
6147110	84	63
6147111	86	63
6147112	86	64
Blank	86	66
LCS	86	70
LCSD	86	72
MS	86	66
Limits:	58-146	63-135

Analysis Name: NWTPH-Dx water w/Si Gel
Batch number: 103330022A

	Orthoterphenyl
6147109	103
6147110	100
6147111	95
6147112	88
Blank	107
LCS	115
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.

Chevron Northwest Region Analysis Request/Chain of Custody

Lancaster Laboratories
Where quality is a science.

For Lancaster Laboratories use only
Acct. #: 11260 Sample #: 6147108-12 SCR#: ____________

C# 1222290

Facility #: SS#209335-OML G-R#386750
Site Address: 1225 N. 45th Street, 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

Preservation Codes									H			H	H	N		
Sample Identification	**Date Collected**	**Time Collected**	**Grab**	**Composite**	**Matrix: Soil**	**Water (☐ Potable ☐ NPDES)**	**Oil ☐ Air ☐**	**Total Number of Containers**	**BTEX + [redacted] 8021 ☒ 8260 ☐ Naphth ☐**	**8260 full scan**	**Oxygenates**	**NWTPH G**	**NWTPH D ☐ Extended Rng. ☒ Silica Gel Cleanup**	**Lead Total ☒ Diss. ☐ Method 6020**	**VPH/EPH**	**NWTPH H HCID ☐ quantification**
QA	11-19-10		X			X		2	X			X				
MW-6	↓	1055	X			X		6	X			X	X	X		
MW-8	↓	1030	X			X		6	X			X	X	X		
MW-9	↓	1135	X			X		6	X			X	X	X		
MW-10	↓	1155	X			X		6	X			X	X	X		

Preservative Codes
H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 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

Please forward the lab results directly to the Lead Consultant and cc: G-R.

Turnaround Time Requested (TAT) (please circle)
(STD. TAT — circled) 72 hour 48 hour
24 hour 4 day 5 day

Data Package Options (please circle if required) **EDF/EDD**
QC Summary Type I - Full
Type VI (Raw Data) Disk / EDD
WIP (RWQCB) Standard Format
Disk ________ Other.

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	11-19-10	1630			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by Commercial Carrier: UPS (FedEx — circled) Other ________			Received by: Katie Hartlove	11/20/10	9:15
Temperature Upon Receipt 1.9-3.2 C°			Custody Seals Intact? Yes (No — circled)		

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.

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 limit of quantitation, 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

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

Inorganic Qualifiers

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

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

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

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

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