



The Benham Companies, LLC
A Wholly Owned Subsidiary

RECEIVED

APR 26 2010

DEPT. OF ECOLOG
TCP-NWRO

March 31, 2010

Ms. Olivia Skance
Chevron Environmental Management Company
6111 Bollinger Canyon Road, Ste. 3636
San Ramon, CA 94583-5186

Subject: **First Quarter 2010 Groundwater Monitoring Report**
Former Tidewater Service Station No. 30-3189
7301 MLK Jr. Way South
Seattle, Washington

Dear Ms. Skance:

COMPLETED

Site Req. 5/14/10

Science Applications International Corporation (SAIC), on behalf of Chevron Environmental Management Company (Chevron), has prepared this letter summarizing the latest groundwater monitoring and sampling results from the above referenced site in Seattle, Washington. The first quarter 2010 groundwater monitoring and sampling event was conducted by Gettler-Ryan Inc. on February 11, 2010.

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

1.0 FIELD ACTIVITIES

Depth-to-groundwater measurements were collected from each of the three monitoring wells (MW-1, MW-2 and MW-3) present on the property. Each monitoring well was also checked for the presence of separate-phase hydrocarbon (SPH). SPH was not detected in any of the monitoring wells gauged during this event.

At the time of this monitoring event, groundwater elevations ranged from 98.41 feet in monitoring well MW-3 to 92.07 feet in monitoring well MW-2, based on an arbitrary benchmark elevation of 100.00 feet. Groundwater flow at the time of this event was toward the north-northeast at an approximate gradient of 0.08 feet per foot (ft/ft), and groundwater elevation had decreased an average of 0.45 feet since the previous groundwater monitoring event performed in November 2009. Figure 1 of the enclosed Attachment A depicts groundwater elevations and well locations.

Groundwater samples were collected from each of the three monitoring wells on the property and submitted to Lancaster Laboratories of Lancaster, Pennsylvania for the following analyses:

- Gasoline-range hydrocarbons by Washington State Department of Ecology (WDOE) Method NWTPH-Gx;
- Diesel- and heavy oil-range hydrocarbons by WDOE Method NWTPH-D extended; and
- Benzene, toluene, ethylbenzene, total xylenes (BTEX), and methyl tertiary-butyl ether (MTBE) by United States Environmental Protection Agency (USEPA) Method 8260B.

Science Applications International Corporation

18912 North Creek Parkway | Suite 101 / Bothell, WA 98011 / tel: (425) 485-5800 / fax: (425) 485-5566 | saic.com

2.0 ANALYTICAL RESULTS

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

- Gasoline-range hydrocarbons, benzene, ethylbenzene, and total xylenes in monitoring well MW-2; and
- Diesel-range hydrocarbons in monitoring well MW-1.

Diesel- and heavy oil-range hydrocarbons could not be analyzed for in monitoring well MW-2 due to the well dewatering during sampling. None of the other constituents analyzed for were present at concentrations exceeding their respective MTCA Method A CULs. Groundwater analytical results are summarized in Table 1 of Attachment A.

3.0 SUMMARY

Groundwater analytical results are consistent with historical results for the subject Site. The concentrations of gasoline-range hydrocarbons and benzene in monitoring well MW-2 are likely due to residual soil impacts related to the former underground storage tanks (USTs), which were located upgradient from this well.

Groundwater monitoring results indicate an increase in the concentration of gasoline-range hydrocarbons and BTEX in monitoring well MW-2 when compared to the previous sampling event. In addition, diesel-range hydrocarbons were detected in monitoring well MW-1 at a concentration exceeding the MTCA Method A CULs for the first time since April 2009. The increase in concentrations is likely due to the drop in the groundwater elevation suggesting that variations in hydrocarbon concentrations likely correspond with seasonal groundwater fluctuation.

Groundwater monitoring will continue at this site on a quarterly basis in order to establish analytical trends during seasonal high and low groundwater periods. Quarterly groundwater monitoring will continue with the next sampling event planned for May 2010.

Please feel free to contact me at 425-482-3321 or at catterallp@saic.com if you have any questions or comments regarding the information provided.

Sincerely,

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION



Peter Catterall
Project Manager

Enclosures:

Attachment A: Gettler-Ryan Inc. - *Groundwater Monitoring & Sampling Report*, Event of February 11, 2010, Former Tidewater Service Station No. 30-3189, 7301 MLK Jr. Way South, Seattle, Washington

cc: Ms. Donna Musa, Washington State Department of Ecology, Northwest Regional Office, Toxics Cleanup Program
Mr. Larry Hard, Seattle Housing Authority
File

Attachment A:
Gettler-Ryan Inc. – Groundwater Monitoring and Sampling Report
Event of February 11, 2010, Former Tidewater Service Station No. 30-3189
7301 MLK Jr. Way South, Seattle, Washington



GETTLER-RYAN INC.

TRANSMITTAL

March 12, 2010
G-R #385862

TO: Mr. Peter Catterall
SAIC
18912 North Creek Parkway, Ste. 101
Bothell, Washington 98011

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

RE: **Chevron Facility**
#303189
(Former Tidewater Service Stn.)
7301 MLK Jr. Way South
Seattle, Washington

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
4	March 9, 2010	Groundwater Monitoring and Sampling Report Event of February 11, 2010

COMMENTS:

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

Ms. Olivia Skance, Chevron Environmental Management Company, 6111 Bollinger Canyon Road, Ste. 3636, San Ramon, CA 94583
Mr. Larry Hard, Seattle Housing Authority, P.O. Box 19028, Seattle, Washington 98109-1028
Ms. Donna Musa, Washington State Department of Ecology, Northwest Region, Toxics Cleanup Program, 3190 160th Avenue SE, Bellevue, WA 98008

Current Site Check List included.

Enclosure

trans/303189-OS



CHEVRON - SITE CHECK LIST

Facility#: **Chevron #303189** Date: *2-11-10*
Address: **7301 Martin Luther King Jr. Way South**
City/St.: **Seattle, WA**
Status of Site: *VACANT LOT*

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



#	Description	Condition	Labeling	Contents	Location
	<i>NO</i>				
	<i>Drums</i>				

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-1	<i>OK</i>	<i>OK</i>	<i>OK</i>	<i>OK</i>	
MW-2	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	
MW-3	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	

Additional Comments/Observations:



GETTLER-RYAN INC.

March 9, 2010
Job #386795

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

RE: Event of February 11, 2010
Groundwater Monitoring & Sampling Report
Chevron Facility (Former Tidewater) #303189
7301 Martin Luther King Jr. Way South
Seattle, Washington

Dear Ms. Skance:

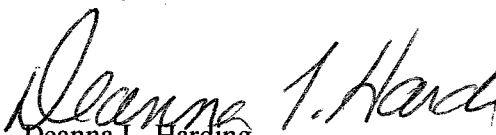
This report documents the most recent groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R) at the referenced site. All field work was conducted in accordance with G-R Standard Operating Procedure - Groundwater Sampling (attached).

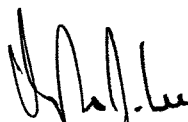
Static groundwater levels were measured and the wells were checked for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were not present in the wells. Static water level data and groundwater elevations are presented in Table 1. A Potentiometric Map is included as Figure 1.

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

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

Sincerely,

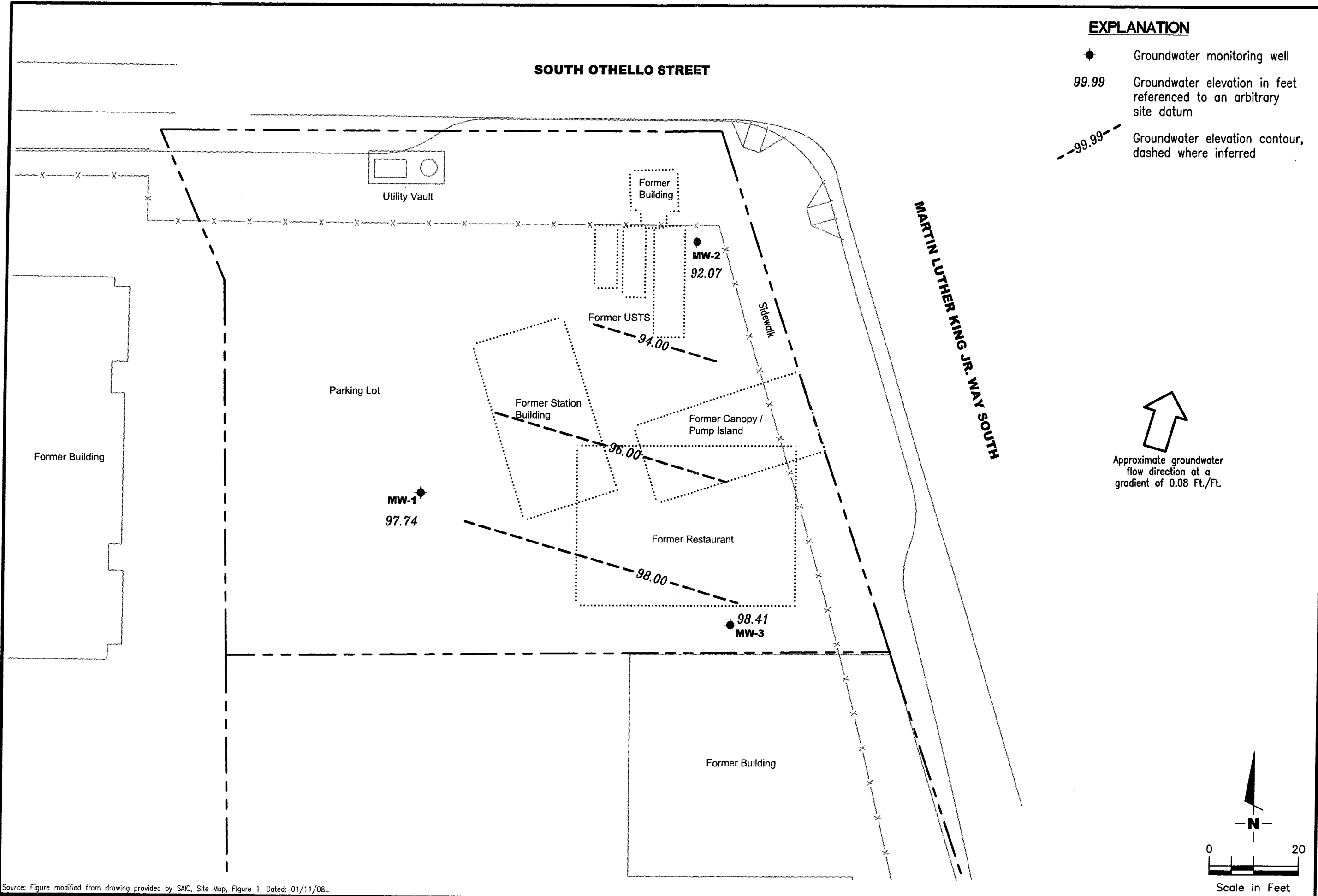

Deanna L. Harding
Project Coordinator


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



Douglas J. Lee

Figure 1: Potentiometric Map
Table 1: Groundwater Monitoring Data and Analytical Results
Attachments: Standard Operating Procedure - Groundwater Sampling
Field Data Sheets
Chain of Custody Document and Laboratory Analytical Reports



EXPLANATION

- ◆ Groundwater monitoring well
- 99.99 Groundwater elevation in feet referenced to an arbitrary site datum
- - - 99.99 - - - Groundwater elevation contour, dashed where inferred

Approximate groundwater flow direction at a gradient of 0.08 Ft./Ft.

Source: Figure modified from drawing provided by SAIC, Site Map, Figure 1, Dated: 01/11/08.

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

POTENTIOMETRIC MAP
 Chevron Facility (Former Tidewater) #303189
 7301 Martin Luther King Jr. Way South
 Seattle, Washington

PROJECT NUMBER: 385862
 REVIEWED BY: [Signature]
 DATE: February 11, 2010
 FILE NAME: P:\Enviro\Chevron\303189\Q10-303189.dwg | Layout Tab: Pot1

Table 1
Groundwater Monitoring Data and Analytical Results
Chevron Facility (Former Tidewater) #303189
7301 Martin Luther King Jr. Way South
Seattle, Washington

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (ft.)	TPH-DRO (µg/L)	TPH-HRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	T. LEAD (µg/L)
MW-1												
08/31/07 ¹	--	--	--	930	190	<50	<0.5	<0.5	<0.5	<1.5	--	0.052
04/24/09	LFP	99.66	2.36	97.30	650	<76	<50	<0.5	<0.5	<0.5	<0.5	--
08/12/09	LFP	99.66	4.24	95.42	370	<67	<50	<0.5	<0.5	<0.5	<0.5	--
11/14/09	LFP	99.66	1.78	97.88	270 ³	<68 ³	<50	<0.5	<0.5	<0.5	<0.5	--
02/11/10	LFP	99.66	1.92	97.74	560	<69	<50	<0.5	<0.5	<0.5	<0.5	--
MW-2												
08/31/07 ¹	--	--	--	2,100	1,200	26,000	3,200	190	1,400	3,300	--	--
04/24/09	PER	99.05	7.34	91.71	-- ²	-- ²	16,000	4,100	99	1,500	2,000	<3
08/12/09	PER	99.05	8.18	90.87	-- ²	-- ²	27,000	4,000	100	1,300	1,900	<3
11/14/09	PER	99.05	5.75	93.30	-- ²	-- ²	19,000	2,800	62	950	1,300	<3
02/11/10	PER	99.05	6.98	92.07	--²	--²	25,000	3,400	97	1,600	2,200	<0.5
MW-3												
08/31/07 ¹	--	--	--	120	<100	<50	<0.5	<0.5	<0.5	<1.5	--	0.055
04/24/09	LFP	100.00	2.13	97.87	58	<75	<50	<0.5	<0.5	<0.5	<0.5	--
08/12/09	LFP	100.00	4.47	95.53	620	170	<50	<0.5	<0.5	<0.5	<0.5	--
11/14/09	LFP	100.00	1.60	98.40	450	370	<50	<0.5	<0.5	<0.5	<0.5	--
02/11/10	LFP	100.00	1.59	98.41	160	130	<50	<0.5	<0.5	<0.5	<0.5	--
B-9												
05/01/02 ¹	--	--	--	0.660	0.310	32	530	<100	1,600	4,300	--	--
B-10												
05/01/02 ¹	--	--	--	5.10	<0.0630	26	240	110	240	330	--	--

Table 1
Groundwater Monitoring Data and Analytical Results
Chevron Facility (Former Tidewater) #303189
7301 Martin Luther King Jr. Way South
Seattle, Washington

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (ft.)	TPH-DRO (µg/L)	TPH-HRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	T. LEAD (µg/L)
TRIP BLANK												
QA												
04/24/09	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
08/12/09	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
11/14/09	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
02/11/10	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--

	TPH-DRO	TPH-HRO	TPH-GRO	B	T	E	X	MTBE	T. LEAD	
Standard Laboratory Reporting Limits:	--	--	50	0.5	0.5	0.5	0.5	1	--	
MTCA Method A Cleanup Levels:	500	500	800/1,000	5	1,000	700	1,000	0.5	15	
Current Method:	NWTPH-Dx + Extended			NWTPH-Gx and EPA 8021B/8260B					EPA 7421	

Table 1
Groundwater Monitoring Data and Analytical Results
Chevron Facility (Former Tidewater) #303189
7301 Martin Luther King Jr. Way South
Seattle, Washington

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to April 24, 2009, were compiled for wells MW-1, MW-2, and MW-3 by Science Application International Corporation prior. Results for wells B-9 and B-10 were provided by GeoEngineers.

TOC = Top of Casing
(ft.) = Feet

DTW = Depth to Water

GWE = Groundwater Elevation

TPH = Total Petroleum Hydrocarbons

DRO = Diesel Range Organics

HRO = Heavy Range Organics

B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylenes

MTBE = Methyl Tertiary Butyl Ether

(µg/L) = Micrograms per liter

PER = Peristaltic Pump

LFP = Low Flow Purge

< = The analyte was not detected at or above the reported value.

-- = Not Measured/Not Analyzed

QA = Quality Assurance/Trip Blank

MTCA = Model Toxics Control Act Cleanup Regulations

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

ANALYTICAL METHOD:

Prior to April 24, 2009, Benzene, Toluene, Ethylbenzene, Xylene Analysis by USEPA 8021

Gasoline-range hydrocarbons (TPH-GRO) Method NWTPH-Gx.

Diesel- and lube oil-range hydrocarbons (TPH-DRO) by Method NWTPH-Dx.

TPH-DRO and TPH-HRO analyzed with silica gel cleanup

BTEX and MTBE Analysis by Method 8260B

* TOC elevations are expressed in feet relative to an arbitrary datum.

¹ Data provided by SAIC.

² Not sampled due to insufficient water.

³ Laboratory report indicates the surrogate data is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. The DRO result for the reextraction is 610 ug/L, the HRO result for the reextract is ND.

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.

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

Standard Operating Procedure, Low-Flow Purging and Sampling

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

In each well, the Static Water Level (SWL) is measured prior to the installation of the pump or tubing in the 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 #303189 Job Number: 385862
 Site Address: 7301 Martin Luther King Jr. Way S Event Date: 2-11-10 (inclusive)
 City: Seattle, WA Sampler: ML

Well ID: MW-1
 Well Diameter: .75 in.
 Total Depth: 11.53 ft.
 Depth to Water: 1.92 ft.

Date Monitored: 2-11-10

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

Check if water column is less than 0.50 ft.

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

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

Purge Equipment:

Disposable Bailer _____
 Stainless Steel Bailer _____
 Stack Pump _____
 Suction Pump _____
 Grundfos _____
 Peristaltic Pump 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): 0900 Weather Conditions: Cloudy
 Sample Time/Date: 0930 2-11-10 Water Color: Clear Odor: Y 10
 Approx. Flow Rate: 150 ml gpm. Sediment Description: None
 Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 3.70

Time (2400 hr.)	Volume (L)	pH	Conductivity (µmhos/cm-µS)	Temperature (C F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
<u>0910</u>	<u>1.5</u>	<u>7.06</u>	<u>562</u>	<u>10.6</u>			<u>4.69</u>
<u>0913</u>	<u>2</u>	<u>7.11</u>	<u>567</u>	<u>10.6</u>			<u>4.77</u>
<u>0916</u>	<u>2.4</u>	<u>7.10</u>	<u>565</u>	<u>10.6</u>			<u>4.89</u>

LABORATORY INFORMATION

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

COMMENTS: _____

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



GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #303189 Job Number: 385862
 Site Address: 7301 Martin Luther King Jr. Way S Event Date: 2-11-10 (inclusive)
 City: Seattle, WA Sampler: ML

Well ID: MW-2
 Well Diameter: .75 in.
 Total Depth: 9.42 ft.
 Depth to Water: 6.98 ft.

Date Monitored: 2-11-10

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

Check if water column is less than 0.50 ft.

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

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

Purge Equipment:

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

Sampling Equipment:

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

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

Start Time (purge): 1045 Weather Conditions: Cloudy
 Sample Time/Date: 1125 / 2-11-10 Water Color: Clear Odor: DN Medium
 Approx. Flow Rate: 100 ml/gpm Sediment Description: _____
 Did well de-water? YES If yes, Time: 1052 Volume: 700 ml DTW @ Sampling: 8.11

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



LABORATORY INFORMATION

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

COMMENTS: ONLY ABLE TO COLLECT (6) VOA'S DUE TO WELL DEWATERING AND SLOW RECHARGE. DARK OIL LIKE SUBSTANCE PRESENT ON TUBING UPON REMOVAL FROM WELL.

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



GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #303189 Job Number: 385862
 Site Address: 7301 Martin Luther King Jr. Way S Event Date: 2-11-10 (inclusive)
 City: Seattle, WA Sampler: ML

Well ID: MW-3 Date Monitored: 2-11-10
 Well Diameter: .75 in.
 Total Depth: 9.50 ft.
 Depth to Water: 1.59 ft. Check if water column is less than 0.50 ft.
 Volume Factor (VF) table:

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

 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): 0950 Weather Conditions: Cloudy
 Sample Time/Date: 1020 12-11-10 Water Color: clear Odor: Y10
 Approx. Flow Rate: 150 ml/gpm Sediment Description: none
 Did well de-water? no If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 3.50

Time (2400 hr.)	Volume (gal)	pH	Conductivity (µmhos/cm -18°)	Temperature (°F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
<u>1000</u>	<u>1.5</u>	<u>7.06</u>	<u>622</u>	<u>11.1</u>			<u>3.96</u>
<u>1003</u>	<u>2</u>	<u>7.09</u>	<u>630</u>	<u>11.1</u>			<u>4.18</u>
<u>1006</u>	<u>2.4</u>	<u>7.10</u>	<u>632</u>	<u>11.2</u>			<u>4.36</u>

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-3</u>	<u>6</u> x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260)
	<u>2</u> x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sg

COMMENTS:

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

Chevron Northwest Region Analysis Request/Chain of Custody



For Lancaster Laboratories use only
 Acct. #: 11260 Sample #: 5904278-87 SCR#: _____

Group # 1182233

Facility #: **SS#303189-OML G-R#385862**
 Site Address: 7301 Martin Luther King Jr. Way South, SEATTLE, WA
 Chevron PM: OS Lead Consultant: SAICPC
 Consultant/Office: G-R, Inc., 6747 Sierra Court, Suite J, Dublin, CA 94568
 Consultant Prj. Mgr.: Deanna L. Harding (deanna@grinc.com)
 Consultant Phone #: 925-551-7555 Fax #: 925-551-7899
 Sampler: Mike Lombard
 Service Order #: _____ Non SAR: _____

Analyses Requested

Preservation Codes	
<input type="checkbox"/> BTEX + MTBE <input type="checkbox"/> 8260 full scan <input type="checkbox"/> Oxygenates <input checked="" type="checkbox"/> TPH G <input checked="" type="checkbox"/> TPH D <input checked="" type="checkbox"/> Extended Ring Silica Gel Cleanup <input type="checkbox"/> Lead Total <input type="checkbox"/> Diss. <input type="checkbox"/> Method <input type="checkbox"/> VPH/EPH <input type="checkbox"/> NWT/PH HCl/D <input type="checkbox"/> quantification	<input type="checkbox"/> H <input type="checkbox"/> N <input type="checkbox"/> S <input type="checkbox"/> T <input type="checkbox"/> B <input type="checkbox"/> O

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

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Oil	Air	Total Number of Containers	BTEX + MTBE	8021	8260	Naphth	8260 full scan	Oxygenates	TPH G	TPH D	Extended Ring Silica Gel Cleanup	Lead Total	Diss.	Method	VPH/EPH	NWT/PH HCl/D	quantification
QA	2-11-10		X			X				X						X	X	X						
MW-1	↓	0930	X			X				X						X	X	X						
MW-2	↓	1125	X			X				X						X	X	X						
MW-3	↓	1020	X			X				X						X	X	X						

Comments / Remarks

Turnaround Time Requested (TAT) (please circle)
 (STD) TAT: 24 hour, 72 hour, 48 hour, 4 day, 5 day
Data Package Options (please circle if required)
 QC Summary: Type I - Full, Disk / EDD, Standard Format, Other.
 Type VI (Raw Data)
 WIP (RWQCB)
 Disk

Relinquished by: <u>[Signature]</u>	Date: <u>2-11-10</u>	Time: <u>1600</u>	Received by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____	Received by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____	Received by: _____	Date: _____	Time: _____
Relinquished by Commercial Carrier: UPS <u>FedEx</u> Other _____	Temperature Upon Receipt: <u>1.0-2.2 °C</u>		Received by: <u>[Signature]</u>	Date: <u>2/12/10</u>	Time: <u>1045</u>
Custody Seals Intact? <u>Yes</u> No					



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2661 • www.lancasterlabs.com

ANALYTICAL RESULTS

Prepared for:

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

925-842-8582

Prepared by:

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

February 23, 2010

Project: 303189

RECEIVED
FEB 23 2010
GETTLER-RYAN INC.
GENERAL CONTRACTORS

Samples arrived at the laboratory on Friday, February 12, 2010. The PO# for this group is 0015045667 and the release number is SKANCE. The group number for this submittal is 1182233.

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
QA Water Sample	5904278
MW-1 Grab Water Sample	5904279
MW-2 Grab Water Sample	5904280
MW-3 Grab Water Sample	5904281

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: Cheryl Hansen



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2661 • www.lancasterlabs.com

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

Respectfully Submitted,

A handwritten signature in cursive script that reads "Susan M Goshert".

Susan M. Goshert
Group Leader



Analysis Report

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

Sample Description: QA Water Sample
Facility# 303189 Job# 385862
7301 Martin Luther King Jr Way S-Seattle, WA

LLI Sample # WW 5904278
LLI Group # 1182233
WA

Project Name: 303189

Collected: 02/11/2010

Account Number: 11260

Submitted: 02/12/2010 10:45
Reported: 02/23/2010 at 17:20
Discard: 03/26/2010

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

LUTQA

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	
06054	Benzene	71-43-2	N.D.	0.5	1
06054	Ethylbenzene	100-41-4	N.D.	0.5	1
06054	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
06054	Toluene	108-88-3	N.D.	0.5	1
06054	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
06054	BTEX+MTBE by 8260B	SW-846 8260B	1	F100481AA	02/17/2010 12:59	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F100481AA	02/17/2010 12:59	Anita M Dale	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	10048B20A	02/17/2010 23:29	Tyler O Griffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	10048B20A	02/17/2010 23:29	Tyler O Griffin	1



Analysis Report

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

Sample Description: MW-1 Grab Water Sample

Facility# 303189 Job# 385862
7301 Martin Luther King Jr Way S-Seattle, WA

LLI Sample # WW 5904279

LLI Group # 1182233

WA

Project Name: 303189

Collected: 02/11/2010 09:30 by ML

Account Number: 11260

Submitted: 02/12/2010 10:45

Chevron

Reported: 02/23/2010 at 17:20

6001 Bollinger Canyon Road

Discard: 03/26/2010

L4310

San Ramon CA 94583

LUTM1

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	
06054	Benzene	71-43-2	N.D.	0.5	1
06054	Ethylbenzene	100-41-4	N.D.	0.5	1
06054	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
06054	Toluene	108-88-3	N.D.	0.5	1
06054	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.	560	29	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	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
06054	BTEX+MTBE by 8260B	SW-846 8260B	1	F100492AA	02/18/2010 08:20	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F100492AA	02/18/2010 08:20	Anita M Dale	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	10048B20A	02/18/2010 00:56	Tyler O Griffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	10048B20A	02/18/2010 00:56	Tyler O Griffin	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	100490005A	02/19/2010 14:52	Glorines Suarez-Rivera	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	100490005A	02/18/2010 14:10	Timothy J Attenberger	1



Analysis Report

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

Sample Description: MW-2 Grab Water Sample
Facility# 303189 Job# 385862
7301 Martin Luther King Jr Way S-Seattle, WA

LLI Sample # WW 5904280
LLI Group # 1182233
WA

Project Name: 303189

Collected: 02/11/2010 11:25 by ML

Account Number: 11260

Submitted: 02/12/2010 10:45
Reported: 02/23/2010 at 17:20
Discard: 03/26/2010

Chevron
6001 Bollinger Canyon Road
L4310
San Ramon CA 94583

LUTM2

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	
06054	Benzene	71-43-2	3,400	10	20
06054	Ethylbenzene	100-41-4	1,600	10	20
06054	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
06054	Toluene	108-88-3	97	0.5	1
06054	Xylene (Total)	1330-20-7	2,200	10	20
GC Volatiles ECY 97-602 NWTPH-Gx			ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	25,000	500	10

General Sample Comments

State of Washington Lab Certification No. C259

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06054	BTEX+MTBE by 8260B	SW-846 8260B	1	F100481AA	02/17/2010 14:05	Anita M Dale	1
06054	BTEX+MTBE by 8260B	SW-846 8260B	1	F100492AA	02/18/2010 08:41	Anita M Dale	20
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F100481AA	02/17/2010 14:05	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	F100492AA	02/18/2010 08:41	Anita M Dale	20
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	10048B20A	02/18/2010 06:22	Tyler O Griffin	10
01146	GC VOA Water Prep	SW-846 5030B	1	10048B20A	02/18/2010 06:22	Tyler O Griffin	10



Analysis Report

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

Sample Description: MW-3 Grab Water Sample
Facility# 303189 Job# 385862
7301 Martin Luther King Jr Way S-Seattle, WA

LLI Sample # WW 5904281
LLI Group # 1182233
WA

Project Name: 303189

Collected: 02/11/2010 10:20 by ML

Account Number: 11260

Submitted: 02/12/2010 10:45

Chevron

Reported: 02/23/2010 at 17:20

6001 Bollinger Canyon Road

Discard: 03/26/2010

L4310

San Ramon CA 94583

LUTM3

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B					
06054	Benzene	71-43-2	N.D.	0.5	1
06054	Ethylbenzene	100-41-4	N.D.	0.5	1
06054	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
06054	Toluene	108-88-3	N.D.	0.5	1
06054	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC Volatiles ECY 97-602 NWTPH-Gx					
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Extractable TPH ECY 97-602 NWTPH-Dx					
w/Si Gel modified					
02211	DRO C12-C24 w/Si Gel	n.a.	160	28	1
02211	HRO C24-C40 w/Si Gel	n.a.	130	66	1

General Sample Comments

State of Washington Lab Certification No. C259

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06054	BTEX+MTBE by 8260B	SW-846 8260B	1	F100492AA	02/18/2010 09:03	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F100492AA	02/18/2010 09:03	Anita M Dale	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	10048B20A	02/18/2010 01:18	Tyler O Griffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	10048B20A	02/18/2010 01:18	Tyler O Griffin	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	100490005A	02/19/2010 15:13	Glorines Suarez-Rivera	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	100490005A	02/18/2010 14:10	Timothy J Attenberger	1

Quality Control Summary

 Client Name: Chevron
 Reported: 02/23/10 at 05:20 PM

Group Number: 1182233

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: F100481AA	Sample number(s): 5904278, 5904280							
Benzene	N.D.	0.5	ug/l	87	89	79-120	3	30
Ethylbenzene	N.D.	0.5	ug/l	86	88	79-120	2	30
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	86	85	76-120	1	30
Toluene	N.D.	0.5	ug/l	87	90	79-120	3	30
Xylene (Total)	N.D.	0.5	ug/l	90	92	80-120	2	30
Batch number: F100492AA	Sample number(s): 5904279-5904281							
Benzene	N.D.	0.5	ug/l	90		79-120		
Ethylbenzene	N.D.	0.5	ug/l	91		79-120		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	82		76-120		
Toluene	N.D.	0.5	ug/l	91		79-120		
Xylene (Total)	N.D.	0.5	ug/l	94		80-120		
Batch number: 10048B20A	Sample number(s): 5904278-5904281							
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	109	100	75-135	9	30
Batch number: 100490005A	Sample number(s): 5904279, 5904281							
DRO C12-C24 w/Si Gel	N.D.	30.	ug/l	86	83	50-100	4	20
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					

Sample Matrix Quality Control

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

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: F100481AA	Sample number(s): 5904278, 5904280 UNSPK: P904250								
Benzene	93		80-126						
Ethylbenzene	92		71-134						
Methyl Tertiary Butyl Ether	85		72-126						
Toluene	93		80-125						
Xylene (Total)	95		79-125						
Batch number: F100492AA	Sample number(s): 5904279-5904281 UNSPK: P905480								
Benzene	99	94	80-126	5	30				
Ethylbenzene	100	95	71-134	5	30				
Methyl Tertiary Butyl Ether	86	83	72-126	4	30				
Toluene	99	95	80-125	5	30				
Xylene (Total)	104	99	79-125	5	30				
Batch number: 10048B20A	Sample number(s): 5904278-5904281 UNSPK: P904266								

* - 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: 02/23/10 at 05:20 PM

Group Number: 1182233

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
NWTPH-Gx water C7-C12	91		57-157						

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+MTBE by 8260B
Batch number: F100481AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5904278	101	105	101	97
5904280	93	91	102	108
Blank	98	98	97	93
LCS	104	101	100	100
LCSD	105	105	100	100
MS	99	100	97	98
Limits:	80-116	77-113	80-113	78-113

Analysis Name: BTEX+MTBE by 8260B
Batch number: F100492AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5904279	102	102	99	97
5904281	102	102	101	95
Blank	102	100	100	97
LCS	102	101	99	98
MS	104	102	100	100
MSD	102	100	98	98
Limits:	80-116	77-113	80-113	78-113

Analysis Name: NWTPH-Gx water C7-C12
Batch number: 10048B20A

	Trifluorotoluene-F
5904278	99
5904279	99
5904280	136*
5904281	100
Blank	100
LCS	121
LCSD	125
MS	125
Limits:	63-135

Analysis Name: NWTPH-Dx water w/Si Gel
Batch number: 100490005A

*- 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: 02/23/10 at 05:20 PM

Group Number: 1182233

Surrogate Quality Control

Orthoterphenyl

5904279	95
5904281	90
Blank	98
LCS	111
LCS D	108

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.

Lancaster Laboratories Explanation of Symbols and Abbreviations

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

N.D.	none detected	BMQL	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	MPN	Most Probable Number
IU	International Units	CP Units	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	NTU	nephelometric turbidity units
C	degrees Celsius	F	degrees Fahrenheit
Cal	(diet) calories	lb.	pound(s)
meq	milliequivalents	kg	kilogram(s)
g	gram(s)	mg	milligram(s)
ug	microgram(s)	l	liter(s)
ml	milliliter(s)	ul	microliter(s)
m3	cubic meter(s)	fib >5 um/ml	fibers greater than 5 microns in length per ml
<	less than – The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
ppm	parts per million – One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.		

U.S. EPA data qualifiers:

Organic Qualifiers	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 amount not within control limits
E Concentration exceeds the calibration range of the instrument	S Method of standard additions (MSA) used for calculation
J Estimated value	U Compound was not detected
N Presumptive evidence of a compound (TICs only)	W Post digestion spike out of control limits
P Concentration difference between primary and confirmation columns >25%	* Duplicate analysis not within control limits
U Compound was not detected	+ Correlation coefficient for MSA <0.995
X,Y,Z Defined in case narrative	

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

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

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



The Benham Companies, LLC
A Wholly Owned Subsidiary

Holly Park
Seattle

December 1, 2010

Ms. Olivia Skance
Chevron Environmental Management Company
6111 Bollinger Canyon Road, Ste. 3636
San Ramon, CA 94583-5186

**Subject: Second Quarter 2010 Groundwater Monitoring Report
Former Tidewater Service Station No. 30-3189
7301 MLK Jr. Way South
Seattle, Washington**

RECEIVED

DEC 06 2010

DEPT. OF ECOLOGY

Dear Ms. Skance:

The Benham Companies, LLC, an SAIC Company (SAIC-Benham), on behalf of Chevron Environmental Management Company (CEMC), prepared this letter summarizing the latest groundwater monitoring and sampling results from Former Tidewater Service Station No. 30-3189 (the site) in Seattle, Washington. The second quarter 2010 groundwater monitoring and sampling event was conducted by Gettler-Ryan Inc. (Gettler-Ryan) on May 24, 2010.

Groundwater elevation and analytical data are presented, along with field data sheets and a laboratory analytical report, in the Gettler-Ryan Inc. groundwater monitoring and sampling report for the May 2010 event (Attachment A).

FIELD ACTIVITIES

Depth-to-groundwater measurements were collected from all three monitoring wells at the site; each monitoring well was checked for the presence of separate-phase hydrocarbons (SPH). SPH were not detected in any of the monitoring wells gauged during this event.

At the time of this monitoring event, groundwater elevations ranged from 91.63 feet in monitoring well MW-2 to 98.17 feet in monitoring well MW-3, based on an arbitrary benchmark elevation of 100.00 feet. Groundwater elevations increased an average of 0.61 foot since the previous monitoring event performed on February 11, 2010. Groundwater flow at the time of this event was towards the north at a gradient of 0.08 feet per foot.

The Benham Companies, LLC, an SAIC Company

18912 North Creek Parkway | Suite 101 / Bothell, WA 98011 / tel: (425) 485-5800 / fax: (425) 485-5566 | saic.com



Groundwater samples were collected from all three monitoring wells present at the site and submitted to Lancaster Laboratories, Inc. in Pennsylvania for the following analyses:

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

ANALYTICAL RESULTS

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

- Gasoline-range hydrocarbons, benzene, ethylbenzene, and total xylenes in monitoring well MW-2; and
- Diesel-range hydrocarbons in monitoring well MW-1.

Diesel- and heavy oil-range hydrocarbons could not be analyzed for in monitoring well MW-2 due to the well dewatering during sampling. None of the other analyzed constituents were detected in concentrations exceeding their respective MTCA Method A CULs. Groundwater analytical results are summarized in Table 1 of Attachment A.

SUMMARY

Groundwater analytical results are consistent with historical results for the site. The highest concentrations of petroleum contamination continue to come from MW-2, likely due to residual soil impacts related to the former underground storage tanks, which were located up gradient from this well.

Gasoline-range hydrocarbons and BTEX remain above MTCA Method A CULs in monitoring well MW-2 with slightly lower concentrations for all analytes from previous levels. Diesel-range hydrocarbons in monitoring well MW-1 dropped below MTCA Method A CULs.

Groundwater monitoring will continue at this site on a quarterly basis to establish analytical trends during seasonal high and low groundwater periods. Quarterly groundwater monitoring will continue with the next sampling event planned for August 2010.

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

Sincerely,

The Benham Companies, LLC, an SAIC Company



Michael Lange
Project Manager

Enclosure:

Attachment A: Gettler-Ryan Inc. - *Groundwater Monitoring & Sampling Report*, Event of May 24, 2010, Former Tidewater Service Station No. 30-3189, 7301 MLK Jr. Way South, Seattle, Washington

cc: Ms. Donna Musa – WDOE Northwest Regional Office Toxics Cleanup Program
3190 160th Avenue SE, Bellevue, WA 98008-5452
Mr. Larry Hard – Seattle Housing Authority
Project File

PLEASE NOTE: In an effort to adopt practices that reduce negative impacts on the environment, SAIC-Benham 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.

Attachment A:
Gettler-Ryan Inc. – Groundwater Monitoring and Sampling Report
Event of May 24, 2010
Former Tidewater Service Station No. 30-3189
7301 MLK JR. Way South, Seattle, Washington



GETTLER-RYAN INC.

TRANSMITTAL

June 22, 2010
G-R #385862

TO: Mr. Peter Catterall
SAIC
18912 North Creek Parkway, Ste. 101
Bothell, Washington 98011

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

RE: **Chevron Facility**
#303189
(Former Tidewater Service Stn.)
7301 MLK Jr. Way South
Seattle, Washington

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
4	June 15, 2010	Groundwater Monitoring and Sampling Report Event of May 24, 2010

COMMENTS:

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

- Ms. Olivia Skance, Chevron Environmental Management Company, 6111 Bollinger Canyon Road, Ste. 3636, San Ramon, CA 94583
- Mr. Larry Hard, Seattle Housing Authority, P.O. Box 19028, Seattle, Washington 98109-1028
- Ms. Donna Musa, Washington State Department of Ecology, Northwest Region, Toxics Cleanup Program, 3190 160th Avenue SE, Bellevue, WA 98008

Current Site Check List included.

Enclosure

trans/303189-OS



CHEVRON - SITE CHECK LIST

Facility#: **Chevron #303189** Date: **5-24-10**
 Address: **7301 Martin Luther King Jr. Way South**
 City/St.: **Seattle, WA**
 Status of Site: **VACANT LOT**

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-1	OK	OK	OK	OK	
MW-2	↓	↓	↓	↓	
MW-3	↓	↓	↓	↓	

Additional Comments/Observations:



GETTLER - RYAN INC.

June 15, 2010
Job #386795

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

RE: Event of May 24, 2010
Groundwater Monitoring & Sampling Report
Chevron Facility (Former Tidewater) #303189
7301 Martin Luther King Jr. Way South
Seattle, Washington

Dear Ms. Skance:

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

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

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

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

Sincerely,

Deanna L. Harding
Project Coordinator

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



Douglas J. Lee

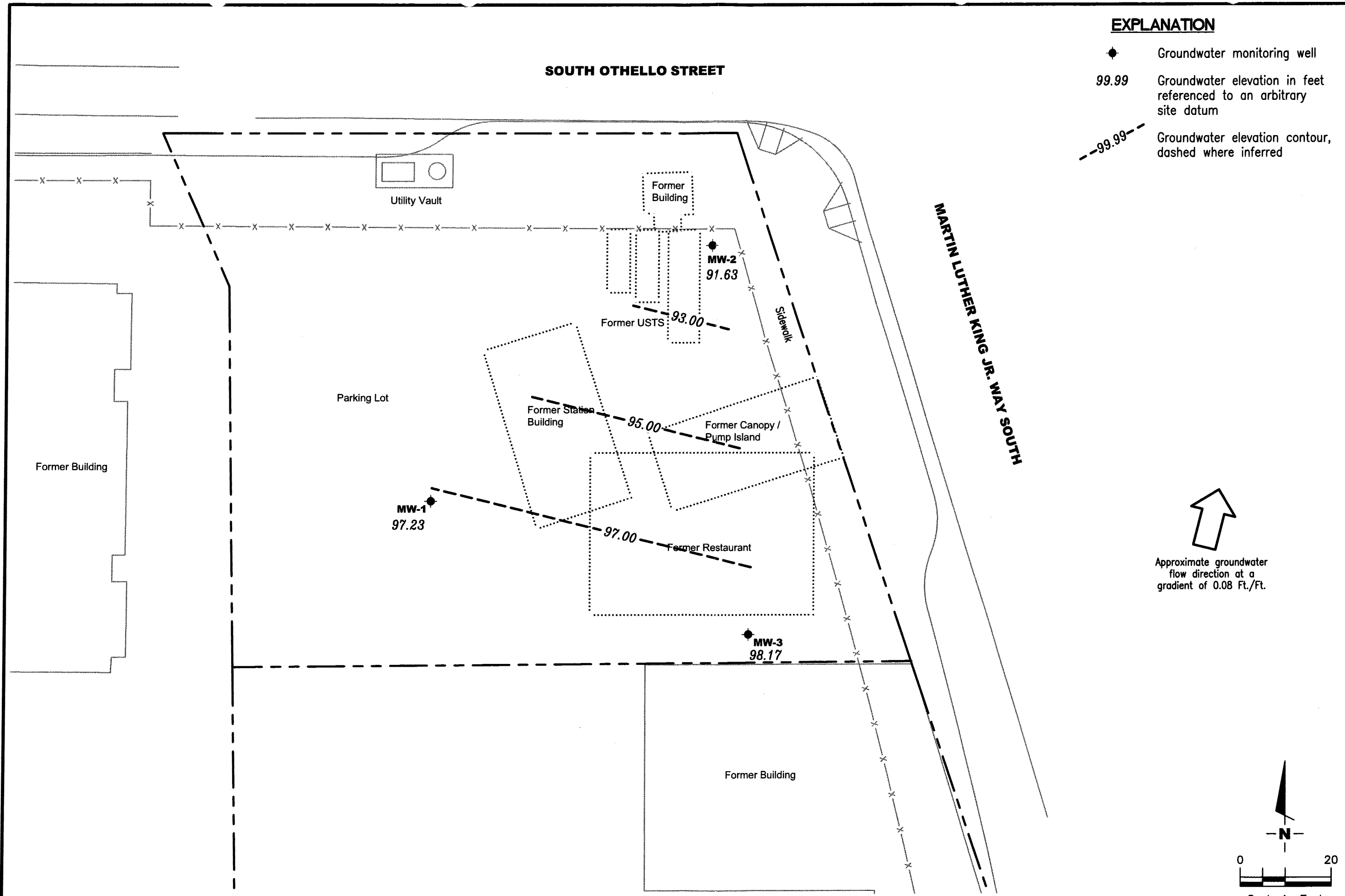
Figure 1: Potentiometric Map
Table 1: Groundwater Monitoring Data and Analytical Results
Attachments: Standard Operating Procedure - Groundwater Sampling
Field Data Sheets
Chain of Custody Document and Laboratory Analytical Reports

EXPLANATION

- ◆ Groundwater monitoring well
- 99.99 Groundwater elevation in feet referenced to an arbitrary site datum
- - - 99.99 - - - Groundwater elevation contour, dashed where inferred

SOUTH OHELLO STREET

MARTIN LUTHER KING JR. WAY SOUTH



POTENTIOMETRIC MAP
 Chevron Facility (Former Tidewater) #303189
 7301 Martin Luther King Jr. Way South
 Seattle, Washington

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

PROJECT NUMBER: 385862
 REVIEWED BY: [Signature]
 DATE: May 24, 2010
 REVISED DATE: [Blank]
 FILE NAME: P:\Environ\Chevron\303189\010-303189.dwg | Layout Tab: Pot2

Source: Figure modified from drawing provided by SAIC, Site Map, Figure 1, Dated: 01/11/08..

Table 1
Groundwater Monitoring Data and Analytical Results
Chevron Facility (Former Tidewater) #303189
7301 Martin Luther King Jr. Way South
Seattle, Washington

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (ft.)	TPH-DRO (µg/L)	TPH-HRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	T. LEAD (µg/L)
MW-1												
08/31/07 ¹	--	--	--	930	190	<50	<0.5	<0.5	<0.5	<1.5	--	0.052
04/24/09	LFP 99.66	2.36	97.30	650	<76	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
08/12/09	LFP 99.66	4.24	95.42	370	<67	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
11/14/09	LFP 99.66	1.78	97.88	270 ³	<68 ³	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
02/11/10	LFP 99.66	1.92	97.74	560	<69	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
05/24/10	LFP 99.66	2.43	97.23	91	<68	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
MW-2												
08/31/07 ¹	--	--	--	2,100	1,200	26,000	3,200	190	1,400	3,300	--	--
04/24/09	PER 99.05	7.34	91.71	-- ²	-- ²	16,000	4,100	99	1,500	2,000	<3	--
08/12/09	PER 99.05	8.18	90.87	-- ²	-- ²	27,000	4,000	100	1,300	1,900	<3	--
11/14/09	PER 99.05	5.75	93.30	-- ²	-- ²	19,000	2,800	62	950	1,300	<3	--
02/11/10	PER 99.05	6.98	92.07	-- ²	-- ²	25,000	3,400	97	1,600	2,200	<0.5	--
05/24/10	PER 99.05	7.42	91.63	-- ²	-- ²	19,000	2,900	88	1,400	2,000	<1	--
MW-3												
08/31/07 ¹	--	--	--	120	<100	<50	<0.5	<0.5	<0.5	<1.5	--	0.055
04/24/09	LFP 100.00	2.13	97.87	58	<75	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
08/12/09	LFP 100.00	4.47	95.53	620	170	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
11/14/09	LFP 100.00	1.60	98.40	450	370	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
02/11/10	LFP 100.00	1.59	98.41	160	130	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
05/24/10	LFP 100.00	1.83	98.17	910	310	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
B-9												
05/01/02 ¹	--	--	--	0.660	0.310	32	530	<100	1,600	4,300	--	--
B-10												
05/01/02 ¹	--	--	--	5.10	<0.0630	26	240	110	240	330	--	--

Table 1
Groundwater Monitoring Data and Analytical Results
 Chevron Facility (Former Tidewater) #303189
 7301 Martin Luther King Jr. Way South
 Seattle, Washington

WELL ID/ DATE	TOC* (ft)	DTW (ft)	GWE (ft)	TPH-DRO (µg/L)	TPH-HRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	T. LEAD (µg/L)
TRIP BLANK												
QA												
04/24/09	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
08/12/09	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
11/14/09	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
02/11/10	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
05/24/10	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--

	TPH-DRO	TPH-HRO	TPH-GRO	B	T	E	X	MTBE	T. LEAD
Standard Laboratory Reporting Limits:	--	--	50	0.5	0.5	0.5	0.5	1	--
MTCA Method A Cleanup Levels:	500	500	800/1,000	5	1,000	700	1,000	0.5	15
Current Method:	NWTPH-Dx + Extended			NWTPH-Gx and EPA 8021B/8260B					EPA 7421

Table 1
Groundwater Monitoring Data and Analytical Results
Chevron Facility (Former Tidewater) #303189
7301 Martin Luther King Jr. Way South
Seattle, Washington

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to April 24, 2009, were compiled for wells MW-1, MW-2, and MW-3 by Science Application International Corporation prior. Results for wells B-9 and B-10 were provided by GeoEngineers.

TOC = Top of Casing
ft.) = Feet

DTW = Depth to Water

GWE = Groundwater Elevation

TPH = Total Petroleum Hydrocarbons

DRO = Diesel Range Organics

HRO = Heavy Range Organics

B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylenes

MTBE = Methyl Tertiary Butyl Ether

(µg/L) = Micrograms per liter

PER = Peristaltic Pump

LFP = Low Flow Purge

< = The analyte was not detected at or above the reported value.

-- = Not Measured/Not Analyzed

QA = Quality Assurance/Trip Blank

MTCA = Model Toxics Control Act Cleanup Regulations

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

ANALYTICAL METHOD:

Prior to April 24, 2009, Benzene, Toluene, Ethylbenzene, Xylene Analysis by USEPA 8021

Gasoline-range hydrocarbons (TPH-GRO) Method NWTPH-Gx.

Diesel- and lube oil-range hydrocarbons (TPH-DRO) by Method NWTPH-Dx.

TPH-DRO and TPH-HRO analyzed with silica gel cleanup

MTBE and MTX Analysis by Method 8260B

TOC elevations are expressed in feet relative to an arbitrary datum.

Data provided by SAIC.

Not sampled due to insufficient water.

Laboratory report indicates the surrogate data is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. The DRO result for the reextraction is 610 ug/L, the HRO result for the reextract is ND.

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 #303189 Job Number: 385862
 Site Address: 7301 Martin Luther King Jr. Way S Event Date: 5-24-10 (inclusive)
 City: Seattle, WA Sampler: ML

Well ID: MW-1
 Well Diameter: .75 in.
 Total Depth: 11.53 ft.
 Depth to Water: 2.43 ft.

Date Monitored: 5-24-10

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

Check if water column is less than 0.50 ft.

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

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

Purge Equipment:

Disposable Bailer _____
 Stainless Steel Bailer _____
 Stack Pump _____
 Suction Pump _____
 Grundfos _____
 Peristaltic Pump 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): 1040 Weather Conditions: SUNNY
 Sample Time/Date: 1110 / 5-24-10 Water Color: Clear Odor: YIN
 Approx. Flow Rate: 100 ml gpm. Sediment Description: none
 Did well de-water? no If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 5.98

Time (2400 hr.)	Volume (L)	pH	Conductivity (µmhos/cm - 25)	Temperature (°C / F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
<u>1050</u>	<u>1</u>	<u>6.92</u>	<u>972</u>	<u>17.1</u>			<u>5.69</u>
<u>1053</u>	<u>1.3</u>	<u>6.94</u>	<u>975</u>	<u>17.1</u>			<u>5.84</u>
<u>1056</u>	<u>1.6</u>	<u>6.95</u>	<u>976</u>	<u>17.1</u>			<u>5.98</u>

LABORATORY INFORMATION

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

COMMENTS:

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



GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #303189 Job Number: 385862
 Site Address: 7301 Martin Luther King Jr. Way S Event Date: 5-24-10 (inclusive)
 City: Seattle, WA Sampler: ML

Well ID: MW-2
 Well Diameter: .75 in.
 Total Depth: 9.42 ft.
 Depth to Water: 7.42 ft.

Date Monitored: 5-24-10

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

Check if water column is less than 0.50 ft.

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

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

Purge Equipment:

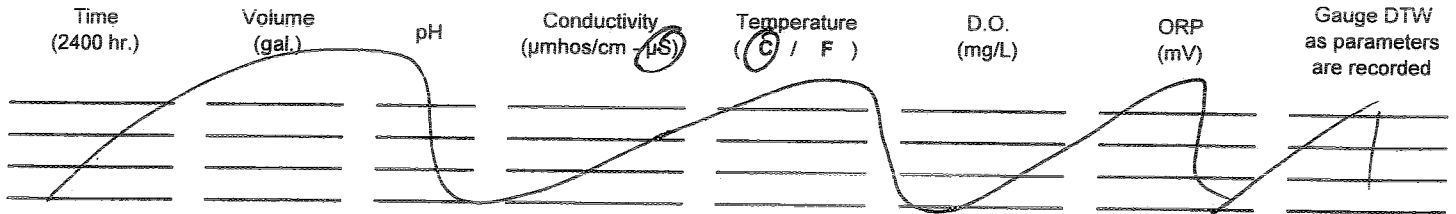
Disposable Bailer _____
 Stainless Steel Bailer _____
 Stack Pump _____
 Suction Pump _____
 Grundfos _____
 Peristaltic Pump X
 QED Bladder Pump _____
 Other: _____

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): 1130 Weather Conditions: SUNNY
 Sample Time/Date: 1300 5-24-10 Water Color: clear Odor: GIN
 Approx. Flow Rate: 100ml gpm. Sediment Description: none
 Did well de-water? YES If yes, Time: 1133 Volume: 300ml DTW @ Sampling: 7.49



LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-2	6 x voa vial	YES	HCL	LANCASTER	NWTPH-Gx/BTEX+MTBE(8260)
	x 1 liter canisters	YES	HCL	LANCASTER	NWTPH-Dx w/sg

COMMENTS: WELL DEWATERED, RETURNED LATER TO SAMPLE. ONLY ABLE TO COLLECT 6 VOA'S DUE TO WELL DEWATERING.

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



GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #303189 Job Number: 385862
 Site Address: 7301 Martin Luther King Jr. Way S Event Date: 5-24-10 (inclusive)
 City: Seattle, WA Sampler: ML

Well ID: MW-3
 Well Diameter: .75 in.
 Total Depth: 9.50 ft.
 Depth to Water: 1.83 ft.

Date Monitored: 5-24-10

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

Check if water column is less than 0.50 ft.

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

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

Purge Equipment:

Disposable Bailer _____
 Stainless Steel Bailer _____
 Stack Pump _____
 Suction Pump _____
 Grundfos _____
 Peristaltic Pump 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): 0950 Weather Conditions: SUNNY
 Sample Time/Date: 1020 5-24-10 Water Color: clear Odor: Y10
 Approx. Flow Rate: 100ml/gpm Sediment Description: none
 Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 4.09

Time (2400 hr.)	Volume (L)	pH	Conductivity (µmhos/cm - µS)	Temperature (°F)	D.O. (mg/L)	ORP (mV)	Gauge DTW as parameters are recorded
<u>1000</u>	<u>1</u>	<u>6.75</u>	<u>681</u>	<u>17.1</u>			<u>3.86</u>
<u>1003</u>	<u>1.3</u>	<u>6.77</u>	<u>682</u>	<u>17.1</u>			<u>4.01</u>
<u>1006</u>	<u>1.6</u>	<u>6.78</u>	<u>682</u>	<u>17.1</u>			<u>4.09</u>

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-3</u>	<u>6</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>NWTPH-Gx/BTEX+MTBE(8260)</u>
	<u>2</u> x 1 liter ambers	<u>YES</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>NWTPH-Dx w/sg</u>

COMMENTS:

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

Chevron Northwest Region Analysis Request/Chain of Custody



For Lancaster Laboratories use only
 Acct. #: 11260 Sample #: 5993610-13

ser#: gm 1196651

Facility #: SS#303189-OML G-R#385862
 Site Address: 7301 Martin Luther King Jr. Way South, SEATTLE, WA
 Chevron PM: OS Lead Consultant: SAICPC
 Consultant/Office: G-R, Inc., 6747 Sierra Court, Suite J, Dublin, CA 94568
 Consultant Prj. Mgr.: Deanna L. Harding (deanna@grinc.com)
 Consultant Phone #: 925-551-7555 Fax #: 925-551-7899
 Sampler: Mike Lombard
 Service Order #: _____ Non SAR: _____

Sample Identification			Date/Time		Matrix		Total Number of Containers		Analyses Requested										Preservative Codes						
			Date Collected	Time Collected	Soil	Water	Oil	Air	BTEX + MTBE	8021	8260	8260 full scan	Oxygenates	TPH Gx	TPH X	Lead Total	Diss.	Method	VPH/EPH	NWTPH H-ClID	quantification	H = HCl	T = Thiosulfate		
<u>QA</u>	<u>5-24-10</u>							<u>2</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<u>MW-1</u>	<u>↓</u>	<u>1100</u>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<u>9</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<u>MW-2</u>	<u>↓</u>	<u>1300</u>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<u>6</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<u>MW-3</u>	<u>↓</u>	<u>1020</u>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<u>8</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

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

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

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

Relinquished by: [Signature] Date: 5-28-10 Time: 11:00 Received by: _____ Date: _____ Time: _____

Relinquished by: _____ Date: _____ Time: _____ Received by: _____ Date: _____ Time: _____

Relinquished by Commercial Carrier: _____ Received by: [Signature] Date: 5/28/10 Time: 1000

UPS FedEx Other _____ Temperature Upon Receipt: 29-2-1 °C Custody Seals Intact? [Signature] No



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

Analysis Report

ANALYTICAL RESULTS

RECEIVED

Prepared by:

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

Prepared for
JUN 09 2010

Chevron
600 Bollinger Canyon Road
L4310
San Ramon CA 94583
GETTLER RYAN INC.
GENERAL CONTRACTORS

June 09, 2010

Project: 303189

Submittal Date: 05/29/2010
Group Number: 1196651
PO Number: 0015061199
Release Number: SKANCE
State of Sample Origin: WA

Client Sample Description

QA Water Sample
MW-1 Grab Water Sample
MW-2 Grab Water Sample
MW-3 Grab Water Sample

Lancaster Labs (LLI) #
5993610
5993611
5993612
5993613

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: Cheryl Hansen



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2661 • www.lancasterlabs.com

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

Respectfully Submitted,


Sarah M. Snyder
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

Sample Description: QA Water Sample
Facility# 303189 Job# 385862
7301 MLK Jr Way S-Seattle, WA

LLI Sample # WW 5993610
LLI Group # 1196651
Account # 11260

Project Name: 303189

Collected: 05/24/2010

Chevron

Submitted: 05/29/2010 10:00

6001 Bollinger Canyon Road

Reported: 06/09/2010 11:46

L4310

Discard: 07/10/2010

San Ramon CA 94583

MLK-Q

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	Methyl Tertiary Butyl Ether	1634-04-4	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/MTBE 8260 Water	SW-846 8260B	1	Z101533AA	06/02/2010 23:45	Florida A Cimino	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z101533AA	06/02/2010 23:45	Florida A Cimino	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	10152A07A	06/01/2010 14:32	Martha L Seidel	1
01146	GC VOA Water Prep	SW-846 5030B	1	10152A07A	06/01/2010 14:32	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

Sample Description: MW-1 Grab Water Sample
 Facility# 303189 Job# 385862
 7301 MLK Jr Way S-Seattle, WA

LLI Sample # WW 5993611
 LLI Group # 1196651
 Account # 11260

Project Name: 303189

Collected: 05/24/2010 11:10 by ML

Chevron

6001 Bollinger Canyon Road

Submitted: 05/29/2010 10:00

L4310

Reported: 06/09/2010 11:46

San Ramon CA 94583

Discard: 07/10/2010

MLK-1

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	Methyl Tertiary Butyl Ether	1634-04-4	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 ECY 97-602 NWTPH-Dx modified			ug/l	ug/l	
w/Si Gel					
02211	DRO C12-C24 w/Si Gel	n.a.	91	29	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	68	1

General Sample Comments

State of Washington Lab Certification No. C259

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX/MTBE 8260 Water	SW-846 8260B	1	Z101533AA	06/03/2010 02:41	Florida A Cimino	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z101533AA	06/03/2010 02:41	Florida A Cimino	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	10152A07A	06/01/2010 18:55	Martha L Seidel	1
01146	GC VOA Water Prep	SW-846 5030B	1	10152A07A	06/01/2010 18:55	Martha L Seidel	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	101530014A	06/08/2010 01:26	Melissa McDermott	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	101530014A	06/03/2010 02:15	Sherry L Morrow	1



Analysis Report

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

Sample Description: MW-2 Grab Water Sample
Facility# 303189 Job# 385862
7301 MLK Jr Way S-Seattle, WA

LLI Sample # WW 5993612
LLI Group # 1196651
Account # 11260

Project Name: 303189

Collected: 05/24/2010 13:00 by ML

Chevron

6001 Bollinger Canyon Road
L4310

San Ramon CA 94583

Submitted: 05/29/2010 10:00

Reported: 06/09/2010 11:46

Discard: 07/10/2010

MLK-2

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	2,900	13	25
10943	Ethylbenzene	100-41-4	1,400	13	25
10943	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	1	2.5
10943	Toluene	108-88-3	88	1	2.5
10943	Xylene (Total)	1330-20-7	2,000	13	25
GC Volatiles ECY 97-602 NWTPH-Gx			ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	19,000	250	5

General Sample Comments

State of Washington Lab Certification No. C259

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX/MTBE 8260 Water	SW-846 8260B	1	Z101533AA	06/03/2010 03:06	Florida A Cimino	2.5
10943	BTEX/MTBE 8260 Water	SW-846 8260B	1	Z101533AA	06/03/2010 03:31	Florida A Cimino	25
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z101533AA	06/03/2010 03:06	Florida A Cimino	2.5
01163	GC/MS VOA Water Prep	SW-846 5030B	2	Z101533AA	06/03/2010 03:31	Florida A Cimino	25
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	10152A07A	06/01/2010 19:47	Martha L Seidel	5
01146	GC VOA Water Prep	SW-846 5030B	1	10152A07A	06/01/2010 19:47	Martha L Seidel	5



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: MW-3 Grab Water Sample
 Facility# 303189 Job# 385862
 7301 MLK Jr Way S-Seattle, WA

LLI Sample # WW 5993613
 LLI Group # 1196651
 Account # 11260

Project Name: 303189

Collected: 05/24/2010 10:20 by ML

Chevron

Submitted: 05/29/2010 10:00

6001 Bollinger Canyon Road

Reported: 06/09/2010 11:46

L4310

Discard: 07/10/2010

San Ramon CA 94583

MLK-3

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B					
10943	Benzene	71-43-2	N.D.	0.5	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	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					
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Extractable TPH ECY 97-602 NWTPH-Dx					
w/Si Gel modified					
02211	DRO C12-C24 w/Si Gel	n.a.	910	29	1
02211	HRO C24-C40 w/Si Gel	n.a.	310	67	1

General Sample Comments

State of Washington Lab Certification No. C259

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX/MTBE 8260 Water	SW-846 8260B	1	Z101533AA	06/03/2010 03:57	Florida A Cimino	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z101533AA	06/03/2010 03:57	Florida A Cimino	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	10152A07A	06/01/2010 19:21	Martha L Seidel	1
01146	GC VOA Water Prep	SW-846 5030B	1	10152A07A	06/01/2010 19:21	Martha L Seidel	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	101530014A	06/08/2010 01:46	Melissa McDermott	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	101530014A	06/03/2010 02:15	Sherry L Morrow	1

Quality Control Summary

 Client Name: Chevron
 Reported: 06/09/10 at 11:46 AM

Group Number: 1196651

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: Z101533AA	Sample number(s): 5993610-5993613							
Benzene	N.D.	0.5	ug/l	91		79-120		
Ethylbenzene	N.D.	0.5	ug/l	96		79-120		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	92		76-120		
Toluene	N.D.	0.5	ug/l	95		79-120		
Xylene (Total)	N.D.	0.5	ug/l	96		80-120		
Batch number: 10152A07A	Sample number(s): 5993610-5993613							
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	100	100	75-135	0	30
Batch number: 101530014A	Sample number(s): 5993611,5993613							
DRO C12-C24 w/Si Gel	N.D.	30.	ug/l	84	84	50-100	0	20
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					

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: Z101533AA	Sample number(s): 5993610-5993613 UNSPK: P993588								
Benzene	99	90	80-126	9	30				
Ethylbenzene	100	90	71-134	7	30				
Methyl Tertiary Butyl Ether	95	88	72-126	7	30				
Toluene	104	95	80-125	9	30				
Xylene (Total)	102	92	79-125	7	30				
Batch number: 10152A07A	Sample number(s): 5993610-5993613 UNSPK: P990965								
NWTPH-Gx water C7-C12	86		57-157						

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: Z101533AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5993610	98	97	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: 06/09/10 at 11:46 AM

Group Number: 1196651

Surrogate Quality Control

5993611	96	96	100	96
5993612	95	95	100	98
5993613	96	96	100	96
Blank	97	96	100	96
LCS	97	98	100	97
MS	97	97	100	96
MSD	96	98	100	97

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

Analysis Name: NWTPH-Gx water C7-C12
Batch number: 10152A07A
Trifluorotoluene-F

5993610	97
5993611	99
5993612	157*
5993613	95
Blank	97
LCS	112
LCSD	113
MS	109

Limits: 63-135

Analysis Name: NWTPH-Dx water w/Si Gel
Batch number: 101530014A
Orthoterphenyl

5993611	101
5993613	100
Blank	98
LCS	113
LCSD	112

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 \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.