



GETTLER-RYAN INC.

January 26, 2001
Job #386616

Mr. Brett Hunter
Chevron Products Company
P.O. Box 6004
San Ramon, CA 94583

Re: **Event of December 12, 2000**
Groundwater Monitoring & Sampling Report
Chevron Service Station #9-1183
10921 19th Avenue, SE
Everett, Washington

Dear Mr. Hunter:

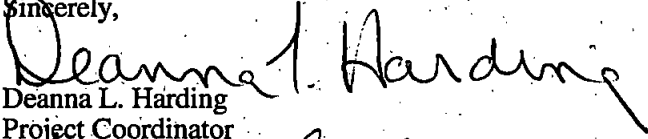
This report documents the most recent groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R) at the referenced site. All field work was conducted in accordance with G-R Standard Operating Procedure - Groundwater Sampling (attached).

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 as specified by G-R Standard Operating Procedure - Groundwater Sampling (attached). Purge water was treated by filtration through granular activated carbon and was subsequently discharged. The field data sheets for this event are attached. The samples were analyzed by North Creek Analytical, Inc. Analytical results are presented in Table 1 and a Concentration Map is included as Figure 2. The chain of custody document and laboratory analytical reports are attached.

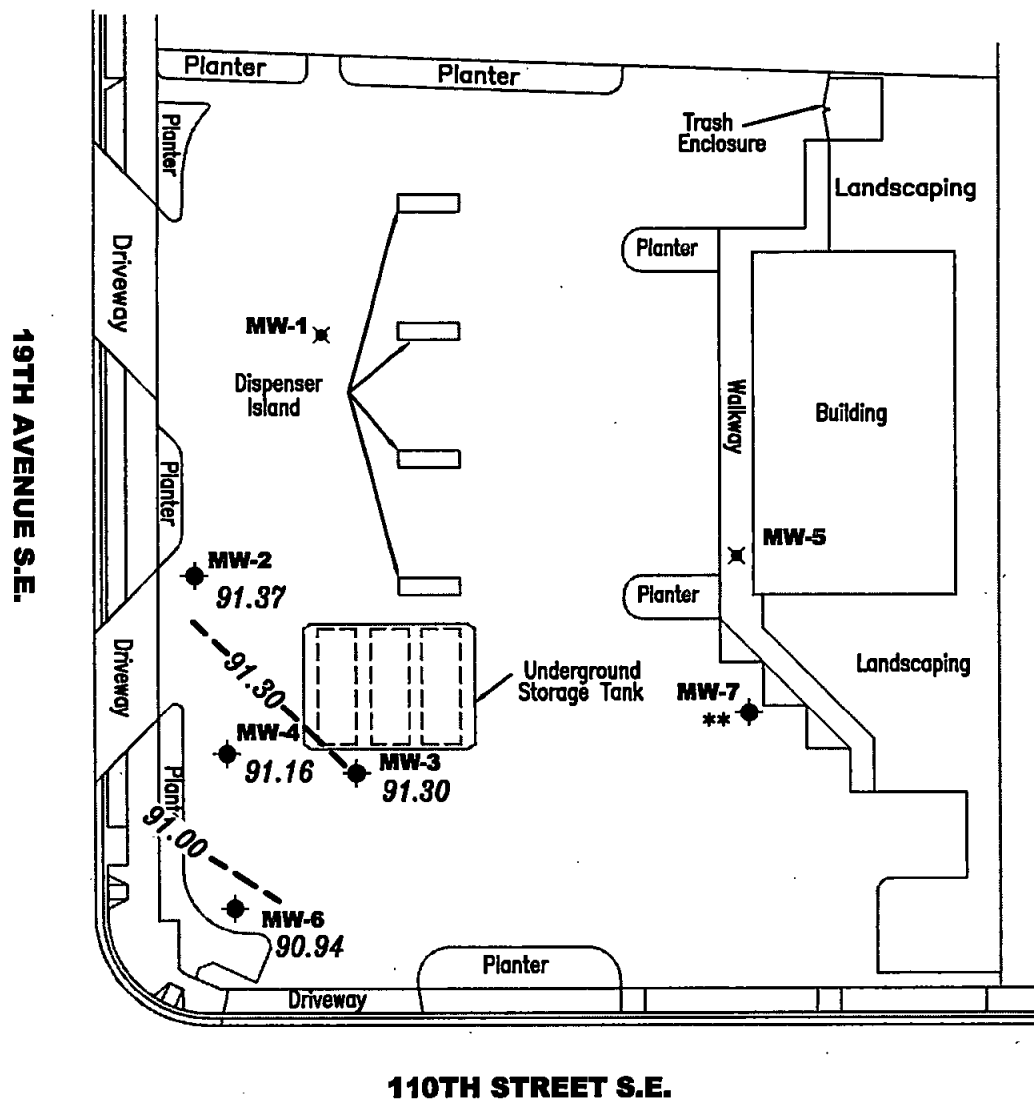
Please call if you have any questions or comments regarding this report. Thank you.

Sincerely,


Deanna L. Harding
Project Coordinator


Stephen J. Carter
Senior Geologist

Figure 1: Potentiometric Map
Figure 2: Concentration 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

× Abandoned well

99.99 Groundwater elevation in feet referenced to an arbitrary site datum

— 99.99 — Groundwater elevation contour, dashed where inferred.

** Inaccessible

Approximate groundwater flow direction at a gradient of 0.009 Ft./Ft.

Source: Figure modified from drawing provided by Delta Environmental Consultants, Inc.



Gettler - Ryan Inc.

8747 Sierra Ct., Suite J
Dublin, CA 94568

(925) 551-7555

POTENTIOMETRIC MAP
Chevron Service Station #9-1183
10921 19th Avenue S.E.
Everett, Washington

FIGURE

1

PROJECT NUMBER

386616

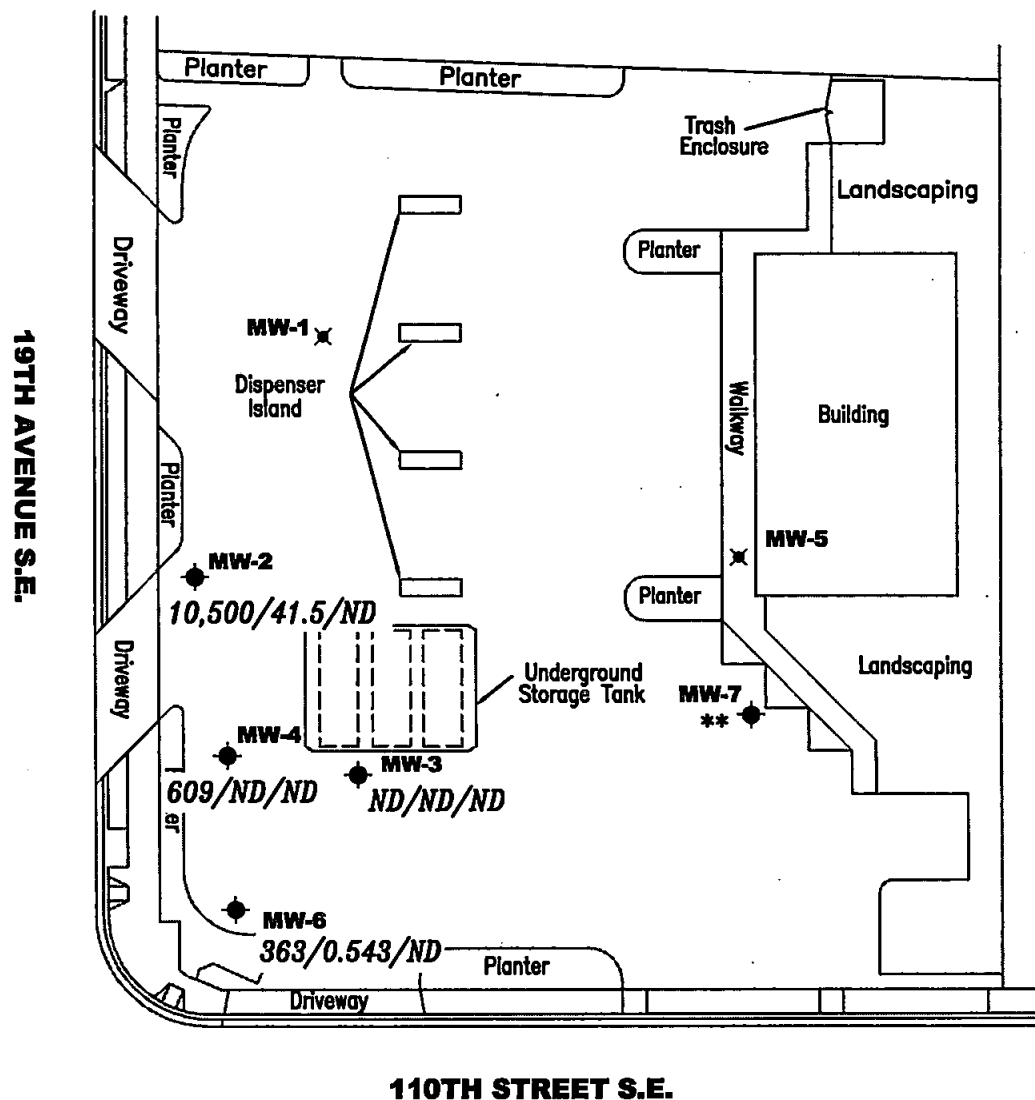
REVIEWED BY

DATE

December 12, 2000

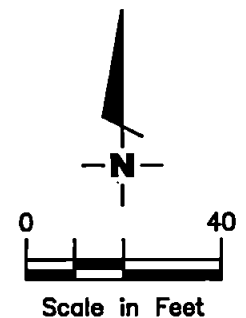
REVISED DATE

FILE NAME: P:\ENVIRO\CHEVRON\9-1183\Q00-9-1183.DWG | Layout Tab: Pot4



EXPLANATION

- ◆ Groundwater monitoring well
- × Abandoned well
- A/B/C Total Petroleum Hydrocarbons (TPH) as Gasoline/Benzene/MTBE concentrations as ppb
- ND Not Detected
- NA Not Analyzed
- ** Inaccessible



Source: Figure modified from drawing provided by Delta Environmental Consultants, Inc.



Gettler - Ryan Inc.

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Dublin, CA 94568

(925) 551-7555

CONCENTRATION MAP
Chevron Service Station #9-1183
10921 19th Avenue S.E.
Everett, Washington

FIGURE

2

PROJECT NUMBER
386616

REVIEWED BY

DATE
December 12, 2000

REVISED DATE

FILE NAME: P:\ENVIRO\CHEVRON\9-1183\Q00-9-1183.DWG | Layout Tab: Con4

Table 1
Groundwater Monitoring Data and Analytical Results
Chevron Service Station # 9-1183
10921 19th Avenue, SE
Everett, Washington

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	D-Lead (ppm)
MW-1	ABANDONED									
MW-2	09/26/00	--	--	--	--	--	--	--	--	--
99.53	12/12/00	8.16	91.37	10,500	41.5	10.3	219	420	ND ¹	0.0106
MW-3	09/26/00	--	--	--	--	--	--	--	--	--
97.79	12/12/00	6.49	91.30	ND	ND	ND	ND	ND	ND	0.00172
MW-4	09/26/00	--	--	--	--	--	--	--	--	--
98.07	12/12/00	6.91	91.16	609	ND	ND	ND	2.72	ND	ND
MW-5	ABANDONED									
MW-6	09/26/00	6.50	90.02	--	--	--	--	--	--	--
96.52	12/12/00	5.58	90.94	363	0.543	3.66	ND	8.88	ND	0.00357
MW-7	09/26/00	6.40	91.35	--	--	--	--	--	--	--
97.75	12/12/00	INACCESSIBLE		--	--	--	--	--	--	--

Table 1
Groundwater Monitoring Data and Analytical Results
Chevron Service Station # 9-1183
10921 19th Avenue, SE
Everett, Washington

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	D. Lead (ppm)
-----------------------	------	--------------	--------------	----------------	------------	------------	------------	------------	---------------	------------------

Trip Blank

TB-LB	12/12/00	--	--	ND	ND	ND	ND	ND	ND	--
-------	----------	----	----	----	----	----	----	----	----	----

	TPH-G	B	T	E	X	MTBE	D. Lead
Current Laboratory Reporting Limits:	50.0	0.500	0.500	0.500	1.00	5.00	0.00100
MTCA Method A Cleanup Levels:	1,000	5.0	40	30	20	--	--
Current Method:	NWTPH-G and EPA 8021B						

Table 1
Groundwater Monitoring Data and Analytical Results
Chevron Service Station # 9-1183
10921 19th Avenue, SE
Everett, Washington

EXPLANATIONS:

Groundwater monitoring data prior to December 12, 2000, were provided by Delta Environmental Consultants.

TOC = Top of Casing

(ft.) = Feet

DTW = Depth to Water

GWE = Groundwater Elevation

TPH-G = Total Petroleum Hydrocarbons as Gasoline (Gasoline Range Hydrocarbons)

B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylenes

MTBE = Methyl tertiary butyl ether
(ppb) = Parts per billion

D. Lead = Dissolved Lead

(ppm) = Parts per million

ND = Not Detected

-- = Not Measured/Not Analyzed

MTCA = Model Toxics Control Act Cleanup Regulations
[WAC 173-340-720(2)(a)(I), as amended 12/93].

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

¹ Detection limit raised. Refer to analytical reports.

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

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

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

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

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

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

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

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/ Chevron
Facility # 9-1183

Address: 10921 19th Ave. SE

City: Everett, WA

Job #: 386616

Date: 12-12-00

Sampler: BWN

Well ID MW 2

Well Condition: OK

Well Diameter 2 in.

Hydrocarbon Thickness: Ø (feet) Amount Bailed Ø (product/water): (Gallons)

Total Depth 16.45 ft.

Volume Factor (VF) 2" = 0.17 3" = 0.38 4" = 0.66
6" = 1.50 12" = 5.80

Depth to Water 8.16 ft.

8.29 X VF .17 = .14 X 3 (case volume) = Estimated Purge Volume: 4 (gal.)

Purge Equipment: Disposable Bailer
Bailer
Stack
Suction
Grundfos
Other: _____

Sampling Equipment: Disposable Bailer
Bailer
Pressure Bailer
Grab Sample
Other: _____

Starting Time: 11:30

Weather Conditions: Sunny

Sampling Time: 12:00

Water Color: gray Odor: yes

Purging Flow Rate: _____ gpm.

Sediment Description: _____

Did well de-water? no

If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ mhos/cm	Temperature $^{\circ}$ F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>11:34</u>	<u>1.3</u>	<u>6.52</u>	<u>338</u>	<u>12.1</u>			
<u>11:38</u>	<u>2.6</u>	<u>6.49</u>	<u>331</u>	<u>11.8</u>			
<u>12:02</u>	<u>4</u>	<u>6.46</u>	<u>326</u>	<u>11.6</u>			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW 2</u>	<u>3 VOA VIAL</u>	<u>Y</u>	<u>HCl</u>	<u>SECUM NCA</u>	<u>TPH(G)/btex/mtbe</u>
<u>MW 2</u>	<u>1 500mL PI</u>	<u>Y</u>	<u>HNO3</u>	<u>NCA</u>	<u>Dissolved lead</u>

COMMENTS: _____

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/ Chevron
Facility # 9-1183

Job#: 386616

Address: 10921 19th Ave SE

Date: 12-12-00

City: Everett, WA

Sampler: BWN

Well ID MW3
Well Diameter 2 in.
Total Depth 11.70 ft.
Depth to Water 6.49 ft.

Well Condition: OK

Hydrocarbon Thickness:	(feet)	Amount Bailed (product/water):	(Gallons)
Volume Factor (VF)	2" = 0.17 6" = 1.50	3" = 0.38 12" = 5.80	4" = 0.66

5.21 X VF .17 = .88 X 3 (case volume) = Estimated Purge Volume: 2.5 (gal.)

Purge Equipment: Disposable Bailer
Bailer
Stack
Suction
Grundfos
Other: _____

Sampling Equipment: Disposable Bailer
Bailer
Pressure Bailer
Grab Sample
Other: _____

Starting Time: 11:25
Sampling Time: 11:40
Purging Flow Rate: _____ gpm.
Did well de-water? no

Weather Conditions: cloudy
Water Color: clear Odor: no
Sediment Description: _____
If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ mhos/cm	Temperature $^{\circ}$ F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>11:28</u>	<u>.8</u>	<u>6.55</u>	<u>399</u>	<u>11.8</u>			
<u>11:31</u>	<u>1.6</u>	<u>6.54</u>	<u>391</u>	<u>11.5</u>			
<u>11:34</u>	<u>2.5</u>	<u>6.54</u>	<u>390</u>	<u>10.9</u>			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW3</u>	<u>3 VIAL</u>	<u>Y</u>	<u>H4</u>	<u>SEQUOIA - NCA</u>	<u>TPH(GI)/btox/mpbe</u>
<u>MW3</u>	<u>1 500mL Pl.</u>	<u>Y</u>	<u>HNO3</u>	<u>NCA</u>	<u>Dissolved Lead</u>

COMMENTS: _____

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/ Chevron

Facility # 7-1183

Address: 10921 19th Ave. SE

City: Everett, WA

Job#: 386616

Date: 12-12-00

Sampler: BWN

Well ID MW 4

Well Condition: OK

Well Diameter 2 in.

Hydrocarbon Thickness: Ø (feet) Amount Bailed (product/water): Ø (Gallons)

Total Depth 12.50 ft.

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66
	6" = 1.50	12" = 5.80	

Depth to Water 6.91 ft.

5.59 x VF 1.17 = .95 x 3 (case volume) = Estimated Purge Volume: 3 (gal.)

Purge Equipment:

Disposable Bailer

Bailer
Stack
Suction
Grundfos
Other: _____

Sampling Equipment:

Disposable Bailer

Bailer
Pressure Bailer
Grab Sample
Other: _____

Starting Time: 11:00

Weather Conditions: cloudy

Sampling Time: 11:15

Water Color: clear Odor: no

Purging Flow Rate: _____ gpm.

Sediment Description: _____

Did well de-water? no

If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm}$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>11:03</u>	<u>1</u>	<u>6.53</u>	<u>415</u>	<u>10.5</u>			
<u>11:06</u>	<u>2</u>	<u>6.49</u>	<u>408</u>	<u>10.1</u>			
<u>11:09</u>	<u>3</u>	<u>6.43</u>	<u>401</u>	<u>9.9</u>			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW4</u>	<u>3 NOVAIAL</u>	<u>Y</u>	<u>HCl</u>	<u>SEQUOIA NCA</u>	<u>TPH(GI)/bTEX/mtbe</u>
<u>MW4</u>	<u>1.500 mL PI</u>	<u>Y</u>	<u>HNO3</u>	<u>NCA</u>	<u>Dissolved Lead</u>

COMMENTS: _____

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/ Chevron
 Facility # 9-1183
 Address: 10921 19th Ave. SE
 City: Everett, WA

Job#: 386616
 Date: 12-12-05
 Sampler: BWN

Well ID MW 6 Well Condition: OK
 Well Diameter 2 in.
 Total Depth 15.50 ft.
 Depth to Water 5.58 ft.
 Hydrocarbon Thickness: Ø (feet) Amount Bailed Ø (Gallons)
 Volume Factor (VF) 2" = 0.17 3" = 0.38 4" = 0.66
 6" = 1.50 12" = 5.80
9.92 x VF .17 = 1.68 x 3 (case volume) = Estimated Purge Volume: 5 (gal.)

Purge Equipment:

☒ Disposable Bailer
☐ Bailer
☐ Stack
☐ Suction
☐ Grundfos
☐ Other: _____

Sampling Equipment:

☒ Disposable Bailer
☐ Bailer
☐ Pressure Bailer
☐ Grab Sample
☐ Other: _____

Starting Time: 10:30
 Sampling Time: 10:50
 Purging Flow Rate: _____ gpm.
 Did well de-water? no

Weather Conditions: Sunny!
 Water Color: clear Odor: no
 Sediment Description: _____
 If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ mhos/cm	Temperature $^{\circ}$ F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>10:35</u>	<u>1.7</u>	<u>6.67</u>	<u>566</u>	<u>9.4</u>			
<u>10:40</u>	<u>3.4</u>	<u>6.57</u>	<u>561</u>	<u>9.3</u>			
<u>10:45</u>	<u>5</u>	<u>6.52</u>	<u>533</u>	<u>9.1</u>			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW 6</u>	<u>3 YOAVIDAL</u>	<u>Y</u>	<u>HCl</u>	<u>SEAWATER NCA</u>	<u>TPH(G)/btex/mtbe</u>
<u>MW 6</u>	<u>1 500 mL PL.</u>	<u>Y</u>	<u>HNO₃</u>	<u>A NCA</u>	<u>D:53- lead</u>

COMMENTS: _____

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/ Chevron
 Facility # 9-1183
 Address: 10921 19th Ave. SE
 City: Everett, WA

Job#: 386616
 Date: 12-12-00
 Sampler: BWN

Well ID MW 7
 Well Diameter 2 in.
 Total Depth 15.5 ft.
 Depth to Water _____ ft.

Well Condition: Stalled car parked over well

Hydrocarbon Thickness:	Amount Bailed			
	(feet)	(product/water): (Gallons)		
Volume	2" = 0.17	3" = 0.38	4" = 0.66	
Factor (VF)	6" = 1.50	12" = 5.80		

_____ X VF _____ = _____ X 3 (case volume) = Estimated Purge Volume: _____ (gal.)

Purge Equipment: _____
 Disposable Bailer
 Bailer
 Stack
 Suction
 Grundfos
 Other: _____

Sampling Equipment: _____
 Disposable Bailer
 Bailer
 Pressure Bailer
 Grab Sample
 Other: _____

Starting Time: _____
 Sampling Time: _____
 Purging Flow Rate: _____ gpm.
 Did well de-water? _____

Weather Conditions: _____
 Water Color: _____ Odor: _____
 Sediment Description: _____
 If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ mhos/cm	Temperature $^{\circ}$ F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
		Y		SEQUOIA	TPH(G)/btex/mtbe

COMMENTS: Stalled car parked over well - owner whereabouts not known.

☐ No

MR. BRETT HUNTER

Chevron Facility Number #9-1183
Facility Address 10921 19TH AVE. SE, EVERETT, WA
Consultant Project Number 386616
Consultant Name Gettler-Ryan Inc.
Address 6747 Sierra Court, Suite G, Dublin, CA 94568
Project Contact (Name) Deanna L. Harding
(Phone) 925-551-7555 (Fax Number) 925-551-7899

Chevron Contact (Name) MR. BRETT HUNTER
(Phone) 925-842-8695
Laboratory Name North Creek Analytical
Laboratory Service Order _____
Laboratory Service Code _____
Samples Collected by (Name) Ben Newton
Signature Ben Newton

Sample Number		Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Sample Preservation	Date/Time	State Method: <input type="checkbox"/> CA <input type="checkbox"/> OR <input checked="" type="checkbox"/> WA <input type="checkbox"/> NW Series <input type="checkbox"/> CO <input type="checkbox"/> UT														Remarks						
						BTEX/MTBE+TPH GAS (8020 + 8015)	BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oxygenates (8260)	Purgeable Halocarbons (8010)	Purgeable Organics (8260)	Extractable Organics (8270)	Oil and Grease (5520)	Metals (ICAP or AA) Cd,Cr,Pb,Zn,Mn	BTEX (8020)	BTEX/MTBE/Naph. (8020)	TPH - HClD	TPH-D Extended	Dissolved Lead							Lab Sample No.
TB LB		1	W	ACI	12-12-00	X																				* Dissolved Lead samples were field filtered
MW 2		4			12:40	X																				01 Run Mth
MW 3		4			11:40	X																				02 by 8260
MW 4		4			10:55	X																				03 on ALL
MW 6		4	↓	↓	10:50	X																				04 8020
																										05 Hits
																	</									



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8223
425.420.9200 fax 425.420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
509.924.9200 fax 509.924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

Gettler-Ryan Inc. - Dublin
6747 Sierra Court Suite G
Dublin CA, 94568

Project: Chevron #9-1183
Project Number: 386616
Project Manager: Deanna Harding

Reported:
01/02/01 13:39

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB LB	B0L0419-01	Water	12/12/00 12:00	12/16/00 10:20
MW 2	B0L0419-02	Water	12/12/00 12:10	12/16/00 10:20
MW 3	B0L0419-03	Water	12/12/00 11:40	12/16/00 10:20
MW 4	B0L0419-04	Water	12/12/00 11:15	12/16/00 10:20
MW 6	B0L0419-05	Water	12/12/00 10:50	12/16/00 10:20

North Creek Analytical - Bothell

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.


Robert Greer, Project Manager

North Creek Analytical, Inc.
Environmental Laboratory Network

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Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8223
425.420.9200 fax 425.420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
509.924.9200 fax 509.924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

Gettler-Ryan Inc. - Dublin
6747 Sierra Court Suite G
Dublin CA, 94568

Project: Chevron #9-1183
Project Number: 386616
Project Manager: Deanna Harding

Reported:
01/02/01 13:39

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TB LB (B0L0419-01) Water Sampled: 12/12/00 12:00 Received: 12/16/00 10:20									
Gasoline Range Hydrocarbons	ND	50.0	ug/l	1	0L23001	12/23/00	12/23/00	WTPH-G/8021B	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	72.3 %	50-150			"	"	"	"	
Surrogate: 4-BFB (PID)	84.0 %	50-150			"	"	"	"	
MW 2 (B0L0419-02) Water Sampled: 12/12/00 12:10 Received: 12/16/00 10:20									
Gasoline Range Hydrocarbons	10500	250	ug/l	5	0L23001	12/23/00	12/23/00	WTPH-G/8021B	
Benzene	41.5	2.50	"	"	"	"	"	"	
Toluene	10.3	2.50	"	"	"	"	"	"	
Ethylbenzene	219	2.50	"	"	"	"	"	"	
Xylenes (total)	420	5.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	25.0	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	179 %	50-150			"	"	"	"	S-04
Surrogate: 4-BFB (PID)	169 %	50-150			"	"	"	"	S-04
MW 3 (B0L0419-03) Water Sampled: 12/12/00 11:40 Received: 12/16/00 10:20									
Gasoline Range Hydrocarbons	ND	50.0	ug/l	1	0L23001	12/23/00	12/23/00	WTPH-G/8021B	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	91.7 %	50-150			"	"	"	"	
Surrogate: 4-BFB (PID)	98.5 %	50-150			"	"	"	"	

North Creek Analytical - Bothell

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Gettler-Ryan Inc. - Dublin
6747 Sierra Court Suite G
Dublin CA, 94568

Project: Chevron #9-1183
Project Number: 386616
Project Manager: Deanna Harding

Reported:
01/02/01 13:39

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW 4 (B0L0419-04) Water Sampled: 12/12/00 11:15 Received: 12/16/00 10:20									
Gasoline Range Hydrocarbons	609	50.0	ug/l	1	0L23001	12/23/00	12/23/00	WTPH-G/8021B	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	2.72	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	133 %	50-150			"	"	"	"	
Surrogate: 4-BFB (PID)	125 %	50-150			"	"	"	"	
MW 6 (B0L0419-05) Water Sampled: 12/12/00 10:50 Received: 12/16/00 10:20									
Gasoline Range Hydrocarbons	363	50.0	ug/l	1	0L23001	12/23/00	12/23/00	WTPH-G/8021B	
Benzene	0.543	0.500	"	"	"	"	"	"	
Toluene	3.66	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	8.88	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	125 %	50-150			"	"	"	"	
Surrogate: 4-BFB (PID)	122 %	50-150			"	"	"	"	

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Gettler-Ryan Inc. - Dublin
6747 Sierra Court Suite G
Dublin CA, 94568

Project: Chevron #9-1183
Project Number: 386616
Project Manager: Deanna Harding

Reported:
01/02/01 13:39

Dissolved Metals by EPA 6000/7000 Series Methods
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW 2 (B0L0419-02) Water Sampled: 12/12/00 12:10 Received: 12/16/00 10:20									
Lead	0.0106	0.00100	mg/l	1	0L20050	12/20/00	12/22/00	EPA 6020	
MW 3 (B0L0419-03) Water Sampled: 12/12/00 11:40 Received: 12/16/00 10:20									
Lead	0.00172	0.00100	mg/l	1	0L20050	12/20/00	12/22/00	EPA 6020	
MW 4 (B0L0419-04) Water Sampled: 12/12/00 11:15 Received: 12/16/00 10:20									
Lead	ND	0.00100	mg/l	1	0L20050	12/20/00	12/22/00	EPA 6020	
MW 6 (B0L0419-05) Water Sampled: 12/12/00 10:50 Received: 12/16/00 10:20									
Lead	0.00357	0.00100	mg/l	1	0L20050	12/20/00	12/22/00	EPA 6020	

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Dublin CA, 94568

Project: Chevron #9-1183
Project Number: 386616
Project Manager: Deanna Harding

Reported:
01/02/01 13:39

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Quality Control

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD	RPD Limit	Notes
Batch 0L23001: Prepared 12/23/00 Using EPA 5030B (P/T)									
Blank (0L23001-BLK1)									
Gasoline Range Hydrocarbons	ND	50.0	ug/l						
Benzene	ND	0.500	"						
Toluene	ND	0.500	"						
Ethylbenzene	ND	0.500	"						
Xylenes (total)	ND	1.00	"						
Methyl tert-butyl ether	ND	5.00	"						
Surrogate: 4-BFB (FID)	39.5		"	48.0		82.3 50-150			
Surrogate: 4-BFB (PID)	43.5		"	48.0		90.6 50-150			
LCS (0L23001-BS1)									
Gasoline Range Hydrocarbons	514	50.0	ug/l	500		103 70-130			
Surrogate: 4-BFB (FID)	53.1		"	48.0		111 50-150			
Duplicate (0L23001-DUP1) Source: B0L0427-03									
Gasoline Range Hydrocarbons	11700	500	ug/l		12700		8.20	25	
Surrogate: 4-BFB (FID)	58.5		"	48.0		122 50-150			
Duplicate (0L23001-DUP2) Source: B0L0379-08									
Gasoline Range Hydrocarbons	ND	50.0	ug/l		ND		54.1	25	Q-05
Surrogate: 4-BFB (FID)	41.3		"	48.0		86.0 50-150			
Matrix Spike (0L23001-MS1) Source: B0L0379-04									
Benzene	9.87	0.500	ug/l	10.0	ND	98.1 70-130			
Toluene	10.1	0.500	"	10.0	ND	98.8 70-130			
Ethylbenzene	10.3	0.500	"	10.0	ND	103 70-130			
Xylenes (total)	30.0	1.00	"	30.0	ND	99.2 70-130			
Methyl tert-butyl ether	9.72	5.00	"	10.0	ND	97.2 70-130			
Surrogate: 4-BFB (PID)	47.9		"	48.0		99.8 50-150			

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Gettler-Ryan Inc. - Dublin
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Dublin CA, 94568

Project: Chevron #9-1183
Project Number: 386616
Project Manager: Deanna Harding

Reported:
01/02/01 13:39

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0L23001: Prepared 12/23/00 Using EPA 5030B (P/T)										
Matrix Spike Dup (0L23001-MSD1)				Source: B0L0379-04						
Benzene	10.1	0.500	ug/l	10.0	ND	100	70-130	2.30	15	
Toluene	10.2	0.500	"	10.0	ND	99.8	70-130	0.985	15	
Ethylbenzene	10.6	0.500	"	10.0	ND	106	70-130	2.87	15	
Xylenes (total)	31.4	1.00	"	30.0	ND	104	70-130	4.56	15	
Methyl tert-butyl ether	10.3	5.00	"	10.0	ND	103	70-130	5.79	15	
Surrogate: 4-BFB (PID)	50.7		"	48.0		106	50-150			

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Reported:
01/02/01 13:39

Dissolved Metals by EPA 6000/7000 Series Methods - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0L20050: Prepared 12/20/00 Using EPA 3005A										
Blank (0L20050-BLK1)										
Lead	ND	0.00100	mg/l							
LCS (0L20050-BS1)										
Lead	0.201	0.00100	mg/l	0.200		101	80-120			
Matrix Spike (0L20050-MS1)										
Source: B0L0002-02										
Lead	0.177	0.00100	mg/l	0.200	0.00190	87.5	75-125			
Matrix Spike Dup (0L20050-MSD1)										
Source: B0L0002-02										
Lead	0.181	0.00100	mg/l	0.200	0.00190	89.5	75-125	2.23	20	

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Project: Chevron #9-1183
Project Number: 386616
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01/02/01 13:39

Notes and Definitions

Q-05 Analyses are not controlled on RPD values from sample concentrations less than 10 times the reporting limit.
S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference

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