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10:21 am, Jun 09, 2011

Alameda County
Environmental Health

Thomas Bauhs
Project Manager
Marketing Business Unit

**Chevron Environmental
Management Company**
6101 Bollinger Canyon Road
San Ramon, CA 94583
Tel (925) 790-6231
Fax (925) 984-8373
tbauhs@chevron.com

Alameda County Health Care Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Former Chevron Service Station No. 20-9339
5940 College Avenue
Oakland, California

I accept the **First Semi-Annual 2011 Groundwater Monitoring and Sampling Report** dated June 7, 2011.

I agree with the conclusions and recommendations presented in this document. The information included is accurate to the best of my knowledge, and appears to meet local agency and Regional Board guidelines. This **First Semi-Annual 2011 Groundwater Monitoring and Sampling** was prepared by Conestoga Rovers & Associates, upon whose assistance and advice I have relied.

This letter is submitted pursuant to the requirements of California Water Code Section 13267(b)(1) and the regulating implementation entitled Appendix A pertaining thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Sincerely,

A handwritten signature in black ink that reads "Thomas Bauhs".

Thomas Bauhs
Project Manager

Attachment: First Semi-Annual 2011 Groundwater Monitoring and Sampling



**CONESTOGA-ROVERS
& ASSOCIATES**

5900 Hollis Street, Suite A
Emeryville, California 94608
Telephone: (510) 420-0700 Fax: (510) 420-9170
<http://www.craworld.com>

June 7, 2011

Reference No. 311954

Mr. Mark Detterman
Alameda County Environmental Health (ACEH)
1131 Harbor Bay Parkway
Alameda, California 94502

Re: First Semi-Annual 2011
Groundwater Monitoring and Sampling Report
Former Chevron Service Station 20-9339
5940 College Avenue
Oakland, California
ACEH Case No. RO0000466

Dear Mr. Mark Detterman:

Conestoga-Rovers & Associates (CRA) is submitting this *First Semi-Annual 2011 Groundwater Monitoring and Sampling Report* for the site referenced above (Figure 1) on behalf of Chevron Environmental Management Company. Groundwater monitoring and sampling was performed by Gettler-Ryan, Inc. of Dublin, California. G-R's April 19, 2011 *Groundwater Monitoring and Sampling Data Package* is included as Attachment A. Current groundwater monitoring and sampling data are presented in Table 1. Lancaster Laboratories' April 20, 2011 *Analytical Results* is included as Attachment B. Historical groundwater data are included as Attachment C.

CRA contacted Golden Gate Tank Removal (GGTR) to request first semi-annual groundwater monitoring and sampling data and was informed joint monitoring and sampling was not performed by GGTR during this event.

Equal
Employment Opportunity
Employer



**CONESTOGA-ROVERS
& ASSOCIATES**

June 7, 2011

Reference No. 311954

- 2 -

Please contact Kiersten Hoey at (510) 420-3347 if you have any questions or require additional information.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

David Grunat

Brandon S. Wilken, PG 7564

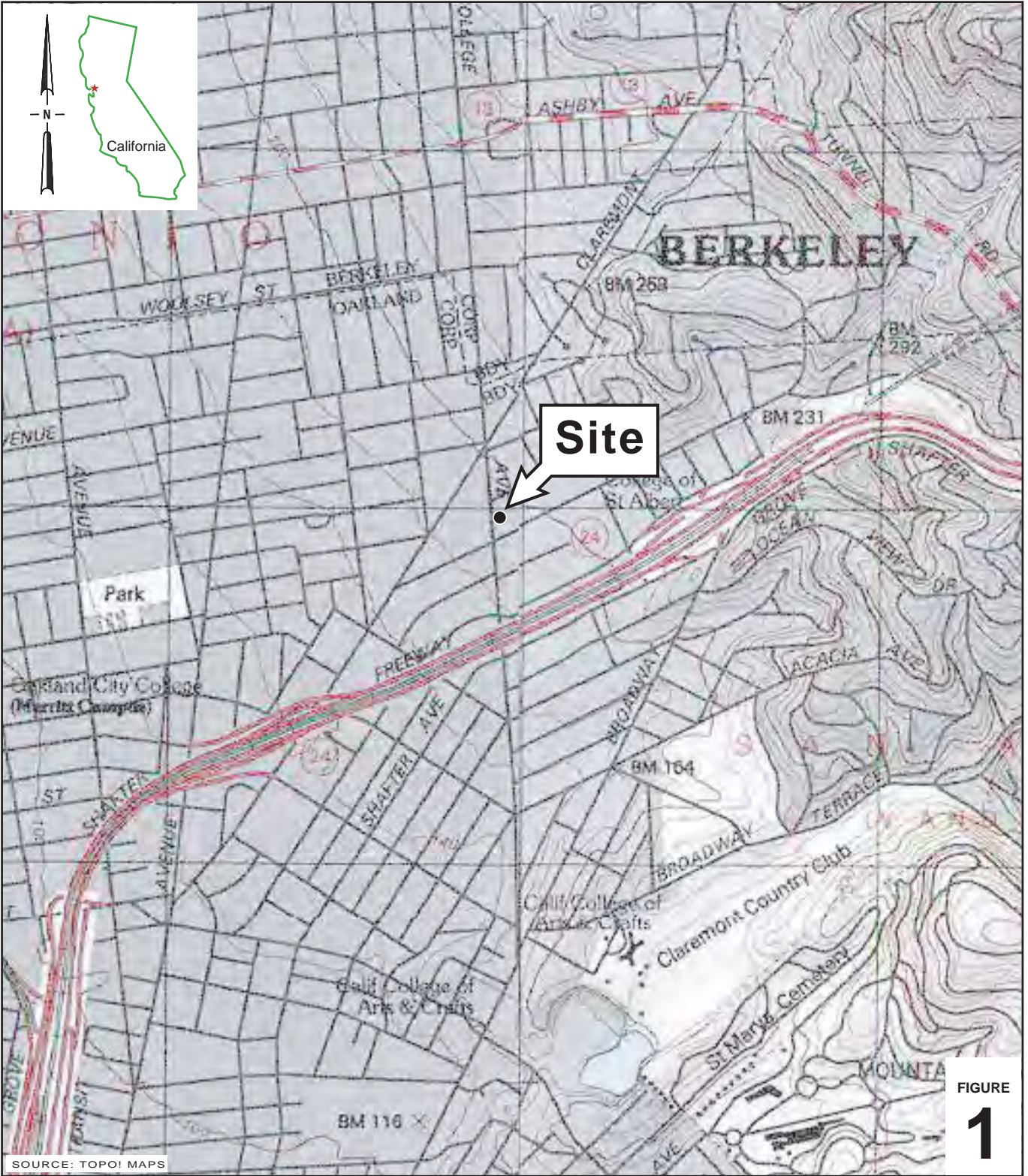


DG/aa/6
Encl.

Figure 1	Vicinity Map
Figure 2	Groundwater Elevation and Hydrocarbon Concentration Map
Table 1	Groundwater Monitoring and Sampling Data
Attachment A	Monitoring Data Package
Attachment B	Laboratory Analytical Report
Attachment C	Historical Groundwater Data

cc: Mr. Tom Bauhs, Chevron
Mr. Donald Sweet, San Francisco Property MGMT
Mr. Patrick Elwood, College Square Associates

FIGURES



I:\Chevron\3119--\311954_20-9339_Oakland\311954_Prc_September 2008\Figures\20-9339_VICINITY-MAP_AI

SOURCE: TOPOI MAPS

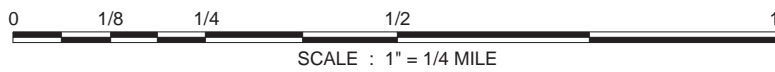


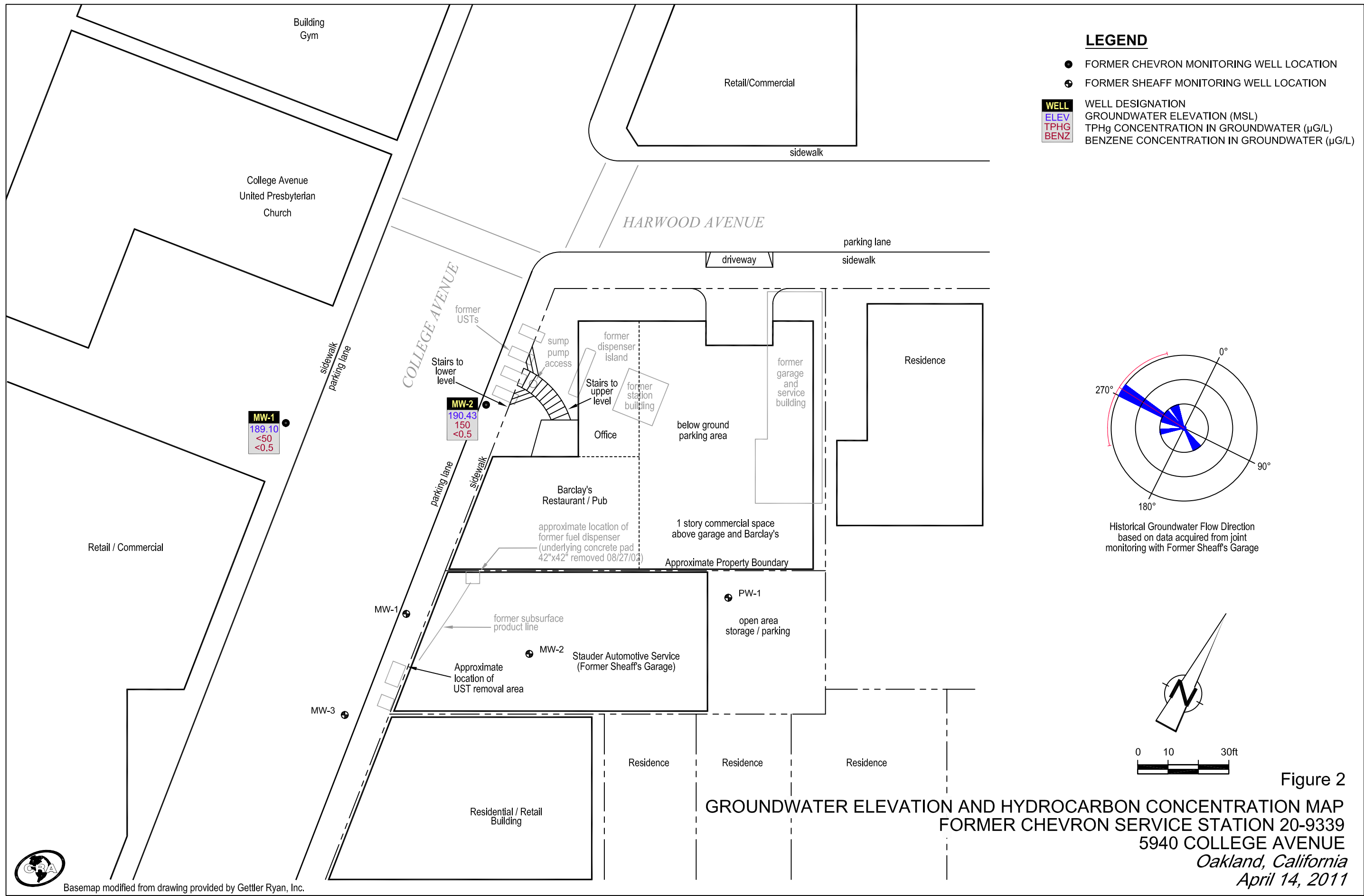
FIGURE
1

Chevron Service Station 20-9339
 5940 College Avenue
 Oakland, California



**CONESTOGA-ROVERS
& ASSOCIATES**

Vicinity Map



Basemap modified from drawing provided by Gettler Ryan, Inc.

TABLE

TABLE 1

**GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 20-9339
5940 COLLEGE AVENUE
OAKLAND, CALIFORNIA**

Location	Date	TOC	DTW	GWE	HYDROCARBONS	PRIMARY VOCS			
					TPH-GRO	B	T	E	X
	Units	ft	ft	ft-amsl	µg/L	µg/L	µg/L	µg/L	µg/L
MW-1	10/14/2010	196.91	13.25	183.66	<50	<0.5	<0.5	<0.5	<1.5
MW-1	04/14/2011	196.91	7.81	189.10	<50	<0.5	<0.5	<0.5	<1.5
MW-2	10/14/2010	197.35	12.15	185.20	480	1.3	<2.0	<2.0	7.1
MW-2	04/14/2011	197.35	6.92	190.43	150	<0.5	<0.5	<0.5	<5.0
QA	10/14/2010	-	-	-	<50	<0.5	<0.5	<0.5	<1.5
QA	04/14/2011	-	-	-	<50	<0.5	<0.5	<0.5	<1.5

Abbreviations and Notes:

TOC = Top of Casing

DTW = Depth to Water

GWE = Groundwater elevation

(ft-amsl) = Feet Above Mean sea level

ft = Feet

µg/L = Micrograms per Liter

TPH-GRO = Total Petroleum Hydrocarbons - Gasoline Range Organics

VOCS = Volatile Organic Compounds

B = Benzene

T = Toluene

E = Ethylbenzene

TABLE 1

**GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 20-9339
5940 COLLEGE AVENUE
OAKLAND, CALIFORNIA**

X = Xylene

-- = Not available / not applicable

<x = Not detected above laboratory method detection limit

* TOC elevations were surveyed on December 27, 2000, by Virgil Chavez Land Surveying.

The benchmark used for the survey was the City of Oakland benchmark being

a cut square in the top of curb, at the curb return at the northeast corner of

College Avenue and Miles Avenue (Benchmark Elev. 179.075 feet msl).

ATTACHMENT A

MONITORING DATA PACKAGE




GETTLER-RYAN Inc.



TRANSMITTAL

April 19, 2011
G-R #386521

TO: Mr. David Grunat
Conestoga-Rovers & Associates
5900 Hollis Street, Suite A
Emeryville, CA 94608

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

RE: **Former Chevron Service Station
#209339
5940 College Avenue
Oakland, California
RO 0000466**

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DESCRIPTION
VIA PDF	Groundwater Monitoring and Sampling Data Package First Semi-Annual Event of April 14, 2011

COMMENTS:

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

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

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

trans/209339

WELL CONDITION STATUS SHEET

Client/Facility #: Chevron #209339
 Site Address: 5940 College Avenue
 City: Oakland, CA

Job # 386521
 Event Date: 4-14-11
 Sampler: Joe

WELL ID	Vault Frame Condition	Gasket/O-Ring (M)missing	BOLTS (M) Missing (R) Replaced	Bolt Flanges B= Broken S= Stripped R=Retap	APRON Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK Y/N	REPLACE CAP Y/N	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Yes / No
MW-1	O.K						→	N	N	8"Boart-L- / 3	No
MW-2	O.K						→	N	N	"	No

Comments _____

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.

As requested by Chevron Environmental Management Company, the purge water and decontamination water generated during sampling activities is transported by IWM to Chemical Waste Management located in Kettleman Hills, California.



GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #209339 Job Number: 386521
 Site Address: 5940 College Avenue Event Date: 4-14-11 (inclusive)
 City: Oakland, CA Sampler: Joe

Well ID: MW-1
 Well Diameter: 2 in.
 Total Depth: 20.15 ft.
 Depth to Water: 7.81 ft.

Date Monitored: 4-14-11

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.

12.34 xVF 0.17 = 2.10 x3 case volume = Estimated Purge Volume: 6.5 gal.

Depth to Water w/ 80% Recharge ((Height of Water Column x 0.20) + DTW): 10.27

Purge Equipment:

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

Sampling Equipment:

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

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

Start Time (purge): 0700 Weather Conditions: cloudy
 Sample Time/Date: 0730 4-14-11 Water Color: clear Odor: Y1(N)
 Approx. Flow Rate: ~ gpm. Sediment Description: none
 Did well de-water? no If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 8.38

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (°F)	D.O. (mg/L)	ORP (mV)
<u>0706</u>	<u>2</u>	<u>7.20</u>	<u>1065</u>	<u>16.0</u>	_____	_____
<u>0712</u>	<u>4</u>	<u>7.16</u>	<u>1073</u>	<u>15.7</u>	_____	_____
<u>0717</u>	<u>6.5</u>	<u>7.24</u>	<u>1071</u>	<u>15.5</u>	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-1</u>	<u>3 x vial</u>	<u>YES</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>TPH-GRO(8015)/BTEX(8021)</u>

COMMENTS:

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



GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #209339 Job Number: 386521
 Site Address: 5940 College Avenue Event Date: 4-14-11 (inclusive)
 City: Oakland, CA Sampler: Joe

Well ID: MW-2 Date Monitored: 4-14-11
 Well Diameter: 2 in.
 Total Depth: 20.10 ft.
 Depth to Water: 6.92 ft. Check if water column is less than 0.50 ft.
13.18 xVF 0.17 = 2.24 x3 case volume = Estimated Purge Volume: 7 gal.
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.55

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

Purge Equipment:

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

Sampling Equipment:

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

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

Start Time (purge): 0750 Weather Conditions: cloudy
 Sample Time/Date: 0825 14-14-11 Water Color: clear Odor: Oil Moderate
 Approx. Flow Rate: _____ gpm. Sediment Description: none
 Did well de-water? no If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 7.56

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - <u>DS</u>)	Temperature (°C / °F)	D.O. (mg/L)	ORP (mV)
<u>0757</u>	<u>2.5</u>	<u>6.71</u>	<u>552</u>	<u>16.4</u>	_____	_____
<u>0804</u>	<u>5</u>	<u>6.74</u>	<u>563</u>	<u>16.2</u>	_____	_____
<u>0810</u>	<u>7</u>	<u>6.68</u>	<u>567</u>	<u>16.2</u>	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-2</u>	<u>3</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>TPH-GRO(8015)/BTEX(8021)</u>

COMMENTS:

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

Chevron California Region Analysis Request/Chain of Custody



041411-02

For Lancaster Laboratories use only

Acct. #: _____

Sample # _____

Group #: **006083**

Facility #: SS#209339-OML G-R#386521 Global ID#T06019752694
Site Address: 5940 COLLEGE AVENUE, OAKLAND, CA
Chevron PM: TB Lead Consultant: CRADG Gruna
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: JOE ASEMIAN

Matrix

Potable NPDES
Water
Soil
Oil Air

Total Number of Containers

Analyses Requested

Preservation Codes

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 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 <input type="checkbox"/> 8260 <input type="checkbox"/> 8021 <input checked="" type="checkbox"/>	TPH 8015 MOD GRO	TPH 8015 MOD DRO	8260 full scan	Oxygenates	Total Lead Method	Dissolved Lead Method					
<i>QA</i>			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										
<i>MW-1</i>	<i>4/14/11</i>	<i>0730</i>	<input type="checkbox"/>			<input type="checkbox"/>			3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										
<i>MW-2</i>	<i>"</i>	<i>0825</i>	<input type="checkbox"/>			<input type="checkbox"/>			3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										

Comments / Remarks

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

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

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

Data Package Options (please circle if required)
QC Summary Type I - Full **EDF/EDD**
Type VI (Raw Data) Coelt Deliverable not needed
WIP (RWQCB)
Disk

Relinquished by Commercial Carrier: _____ Received by: _____
UPS FedEx Other _____
Temperature Upon Receipt _____ C° Custody Seals Intact? Yes No

ATTACHMENT B

LABORATORY ANALYTICAL REPORT

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

April 20, 2011

Project: 209339

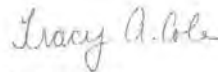
Submittal Date: 04/15/2011
Group Number: 1242341
PO Number: 0015075227
Release Number: FROHNAPPLE
State of Sample Origin: CAClient Sample DescriptionQA-T-110414 NA Water
MW-1-W-110414 Grab Water
MW-2-W-110414 Grab WaterLancaster Labs (LLI) #6259147
6259148
6259149

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

ELECTRONIC COPY TO	CRA c/o Gettler-Ryan	Attn: Rachelle Munoz
ELECTRONIC COPY TO	Chevron c/o CRA	Attn: Report Contact
ELECTRONIC COPY TO	Chevron	Attn: Anna Avina
ELECTRONIC COPY TO	Conestoga-Rovers & Associates	Attn: David Grunat

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

Respectfully Submitted,



Tracy A. Cole
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-T-110414 NA Water
Facility# 209339 Job# 386521 GRD
5940 College Ave-Oakland T06019752694 QA

LLI Sample # WW 6259147
LLI Group # 1242341
Account # 10904

Project Name: 209339

Collected: 04/14/2011

Chevron

Submitted: 04/15/2011 09:55

6001 Bollinger Canyon Rd L4310

Reported: 04/20/2011 15:38

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles					
01729	TPH-GRO N. CA water C6-C12	SW-846 8015B n.a.	ug/l N.D.	ug/l 50	1
GC Volatiles					
02102	Benzene	SW-846 8021B 71-43-2	ug/l N.D.	ug/l 0.5	1
02102	Ethylbenzene	100-41-4	N.D.	0.5	1
02102	Toluene	108-88-3	N.D.	0.5	1
02102	Total Xylenes	1330-20-7	N.D.	1.5	1

General Sample Comments

State of California Lab Certification No. 2501

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
01729	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11108A53B	04/19/2011 10:18	Carrie E Miller	1
02102	Method 8021 Water Master	SW-846 8021B	1	11108A53B	04/19/2011 10:18	Carrie E Miller	1
01146	GC VOA Water Prep	SW-846 5030B	1	11108A53B	04/19/2011 10:18	Carrie E Miller	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-W-110414 Grab Water
Facility# 209339 Job# 386521 GRD
5940 College Ave-Oakland T06019752694 MW-1

LLI Sample # WW 6259148
LLI Group # 1242341
Account # 10904

Project Name: 209339

Collected: 04/14/2011 07:30 by JA

Chevron

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Submitted: 04/15/2011 09:55

Reported: 04/20/2011 15:38

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles					
01729	TPH-GRO N. CA water C6-C12	SW-846 8015B n.a.	ug/l N.D.	ug/l 50	1
GC Volatiles					
02102	Benzene	SW-846 8021B 71-43-2	ug/l N.D.	ug/l 0.5	1
02102	Ethylbenzene	100-41-4	N.D.	0.5	1
02102	Toluene	108-88-3	N.D.	0.5	1
02102	Total Xylenes	1330-20-7	N.D.	1.5	1

General Sample Comments

State of California Lab Certification No. 2501

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
01729	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11108A53B	04/19/2011 11:12	Carrie E Miller	1
02102	Method 8021 Water Master	SW-846 8021B	1	11108A53B	04/19/2011 11:12	Carrie E Miller	1
01146	GC VOA Water Prep	SW-846 5030B	1	11108A53B	04/19/2011 11:12	Carrie E Miller	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-W-110414 Grab Water
Facility# 209339 Job# 386521 GRD
5940 College Ave-Oakland T06019752694 MW-2

LLI Sample # WW 6259149
LLI Group # 1242341
Account # 10904

Project Name: 209339

Collected: 04/14/2011 08:25 by JA

Chevron

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Submitted: 04/15/2011 09:55

Reported: 04/20/2011 15:38

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles					
01729	TPH-GRO N. CA water C6-C12	SW-846 8015B n.a.	ug/l 150	ug/l 50	1
GC Volatiles					
02102	Benzene	SW-846 8021B 71-43-2	ug/l N.D.	ug/l 0.5	1
02102	Ethylbenzene	100-41-4	N.D.	0.5	1
02102	Toluene	108-88-3	N.D.	0.5	1
02102	Total Xylenes	1330-20-7	N.D.	5.0	1
Reporting limits were raised due to interference from the sample matrix.					

General Sample Comments

State of California Lab Certification No. 2501

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
01729	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11108A53B	04/19/2011 11:38	Carrie E Miller	1
02102	Method 8021 Water Master	SW-846 8021B	1	11108A53B	04/19/2011 11:38	Carrie E Miller	1
01146	GC VOA Water Prep	SW-846 5030B	1	11108A53B	04/19/2011 11:38	Carrie E Miller	1

Quality Control Summary

Client Name: Chevron

Group Number: 1242341

Reported: 04/20/11 at 03:38 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11108A53B	Sample number(s): 6259147-6259149							
Benzene	N.D.	0.2	ug/l	100	95	80-120	5	30
Ethylbenzene	N.D.	0.2	ug/l	100	95	80-120	5	30
Toluene	N.D.	0.2	ug/l	100	100	80-120	0	30
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	109	109	75-135	0	30
Total Xylenes	N.D.	0.6	ug/l	105	100	80-120	5	30

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: Method 8021 Water Master
Batch number: 11108A53B

	Trifluorotoluene-F	Trifluorotoluene-P
6259147	80	77
6259148	76	78
6259149	79	78
Blank	81	78
LCS	98	82
LCSD	96	80
Limits:	63-135	58-146

*- Outside of specification

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

Chevron California Region Analysis Request/Chain of Custody



041411-02

For Lancaster Laboratories use only

Acct. #: 10904 Sample # 6259147-49 Group #: 006083

G# 1242341

Facility #: SS#209339-OML G-R#386521 Global ID#T06019752694 Site Address: 5940 COLLEGE AVENUE, OAKLAND, CA Chevron PM: TB Lead Consultant: CRADG Gruna 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: JOE ASEMIAN				Matrix <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Soil <input type="checkbox"/> Water <input type="checkbox"/> Oil <input type="checkbox"/> Air			Analyses Requested																				
				Preservation Codes										Preservative Codes H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ O = Other <input type="checkbox"/> J value reporting needed <input type="checkbox"/> Must meet lowest detection limits possible for 8260 compounds 8021 MTBE Confirmation <input type="checkbox"/> Confirm highest hit by 8260 <input type="checkbox"/> Confirm all hits by 8260 <input type="checkbox"/> Run ___ oxy's on highest hit <input type="checkbox"/> Run ___ oxy's on all hits													
Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Oil	Air	Total Number of Containers	BTEX- 8021	8021	TPH 8015 MOD GRO	TPH 8015 MOD DRO	Silica Gel Cleanup	8260 full scan	Oxygenates	Total Lead Method	Dissolved Lead Method									
QA			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									Comments / Remarks Please forward the lab results directly to the Lead Consultant and cc: G-R.							
MW-1	4-14-11	0730	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																
MW-2	"	0825	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																
Turnaround Time Requested (TAT) (please circle)				Relinquished by: <i>[Signature]</i>				Date: 4-14-11		Time: 0930		Received by: <i>[Signature]</i>		Date: 14 APR 11		Time: 0930											
STD. TAT 72 hour 48 hour 24 hour 4 day 5 day				Relinquished by: <i>[Signature]</i>				Date: 14 APR 11		Time: 1630		Received by: <i>[Signature]</i>		Date:		Time:											
Data Package Options (please circle if required)				Relinquished by:				Date:		Time:		Received by:		Date:		Time:											
QC Summary Type I - Full EDF/EDD Type VI (Raw Data) <input type="checkbox"/> Coelt Deliverable not needed WIP (RWQCB) Disk				Relinquished by Commercial Carrier:				UPS FedEx Other		Received by: <i>[Signature]</i>		Date: 4/15/11		Time: 0950													
				Temperature Upon Receipt: <i>[Signature]</i> °C								Custody Seals Intact? <input checked="" type="checkbox"/> No															

Explanation of Symbols and Abbreviations

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

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

U.S. EPA CLP Data Qualifiers:

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

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

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

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

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ATTACHMENT C

HISTORICAL GROUNDWATER DATA

Table 1
Groundwater Monitoring Data and Analytical Results
Former Chevron Service Station #209339
5940 College Avenue
Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)
MW-1									
01/03/01	196.91	12.75	184.16	930 ¹	2.9	6.9	2.7	7.6	14/<2.0 ³
04/25/01	196.91	9.23	187.68	210 ⁴	2.0	1.5	2.0	3.3	5.3/<2.0 ³
07/09/01	196.91	11.86	185.05	290 ⁵	1.8	2.0	2.5	0.96	<2.5
06/08/00	196.91	13.49	183.42	200	<0.50	<0.50	<0.50	<1.5	<2.5
01/13/02	196.91	7.33	189.58	<50	<0.50	<0.50	<0.50	<0.50	<2.5
04/08/02	196.91	7.45	189.46	670	<0.50	<2.0	<1.0	5.6	<2.5
10/15/02	196.91	13.68	183.23	260	0.62	0.82	<0.50	<1.5	--
04/15/03	196.91	6.82	190.09	1,700	1.3	<5.0	<2.0	<5.0	--
10/31/03	196.91	13.72	183.19	150	<2.0	0.7	<2.0	<5.0	--
04/23/04	196.91	9.02	187.89	<50	<0.5	<0.5	<0.5	<1.5	--
10/22/04	196.91	11.50	185.41	63	<0.5	<0.5	<0.5	<1.5	--
04/14/05	196.91	7.11	189.80	<50	<0.5	<0.5	<0.5	<1.5	--
10/14/05	196.91	11.90	185.01	160	<0.5	<0.5	0.6	<5.0	--
04/14/06	196.91	6.95	189.96	<50	<0.5	<0.5	<0.5	<1.5	--
10/26/06	196.91	11.68	185.23	<50	<0.5	<0.5	<0.5	<1.5	--
04/13/07 ⁶	196.91	10.71	186.20	1,200	3.4	<5.0	2.1	<20	--
10/22/07	196.91	13.75	183.16	<50	<0.5	<0.5	<0.5	<1.5	--
04/21/08	196.91	9.95	186.96	120	<0.5	<0.5	<0.5	<1.5	--
10/15/08	196.91	14.30	182.61	<50	<0.5	<0.5	<0.5	<1.5	--
04/15/09	196.91	9.20	187.71	<50	<0.5	<0.5	<0.5	<1.5	--
10/01/09	196.91	14.26	182.65	<50	<0.5	<0.5	<0.5	<1.5	--
04/12/10	196.91	7.04	189.87	<50	<0.5	<0.5	<0.5	<1.5	--
MW-2									
01/03/01	197.35	12.48	184.87	2,100 ²	110	11	63	25	83/2.2 ³
04/25/01	197.35	8.90	188.45	1,700 ⁴	150	12	30	15	150/<2.0 ³
07/09/01	197.35	11.44	185.91	2,500 ⁵	200	21	55	26	<50
04/08/02	197.35	13.37	183.98	4,200	87	2.8	29	9.8	<2.5
01/13/02	197.35	6.55	190.80	410	20	2.9	<2.5	4.4	27/<2.0 ³
04/08/02	197.35	8.37	188.98	4,000	70	1.7	17	17	<2.5
10/15/02	197.35	13.00	184.35	3,100	41	2.2	16	<6.0	--
04/15/03	197.35	7.58	189.77	2,400	37	<2.5	12	<7.5	--
10/31/03	197.35	13.02	184.33	2,300	12	3.4	4.8	<7.5	--

Table 1
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Former Chevron Service Station #209339
5940 College Avenue
Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)
MW-2 (cont)									
04/23/04	197.35	8.38	188.97	960	8.9	1.0	2.4	<1.5	--
10/22/04	197.35	11.41	185.94	2,200	24	<2.5	4.1	<10	--
04/14/05	197.35	6.69	190.66	640	2.1	<2.0	<2.0	7.5	--
10/14/05	197.35	11.14	186.21	1,200	6.9	<2.5	<2.5	<7.5	--
04/14/06	197.35	6.54	190.81	180	<0.5	<0.5	<0.5	<5.0	--
10/26/06	197.35	11.02	186.33	550	<2.0	0.5	<2.0	<10	--
04/13/07 ⁶	197.35	9.95	187.40	<50	<0.5	<0.5	<0.5	<1.5	--
10/22/07	197.35	12.63	184.72	3,200	12	<5.0	4.7	<20	--
04/21/08	197.35	9.31	188.04	860	1.0	<2.0 ⁷	<2.0 ⁷	<10 ⁷	--
10/15/08	197.35	13.71	183.64	480	1.3	0.8	1.1	<5.0 ⁸	--
04/15/09	197.35	8.79	188.56	370	0.7	1.3	0.9	6.5	--
10/01/09	197.35	13.67	183.68	<50	<0.5	<0.5	<0.5	<1.5	--
04/12/10	197.35	6.62	190.73	310	1.0	<0.5	0.5	<1.5	--
TRIP BLANK									
TB-LB									
01/03/01	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
04/25/01	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
07/09/01	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
QA									
10/08/01	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
01/13/02	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
04/08/02	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
10/15/02	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	--
04/15/03	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
10/31/03	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
04/23/04	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
10/22/04	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
04/14/05	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
10/14/05	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
04/14/06	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
10/26/06	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
04/13/07	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--

Table 1
Groundwater Monitoring Data and Analytical Results
Former Chevron Service Station #209339
5940 College Avenue
Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)
QA (cont)									
10/22/07	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
04/21/08	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
10/15/08	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
04/15/09	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
10/01/09	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
04/12/10	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--

Table 1
Groundwater Monitoring Data and Analytical Results
Former Chevron Service Station #209339
5940 College Avenue
Oakland, California

EXPLANATIONS:

TOC = Top of Casing
(ft.) = Feet

DTW = Depth to Water

GWE = Groundwater Elevation
(msl) = Mean sea level

TPH = Total Petroleum Hydrocarbons

GRO = Gasoline Range Organics

B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylenes

MTBE = Methyl Tertiary Butyl Ether

(µg/L) = Micrograms per liter

-- = Not Measured/Not Analyzed

QA = Quality Assurance/Trip Blank

* TOC elevations were surveyed on December 27, 2000, by Virgil Chavez Land Surveying. The benchmark used for the survey was a City of Oakland benchmark being a cut square in the top of curb, at the curb return at the northeast corner of College Avenue and Miles Avenue, (Benchmark Elev. = 179.075 feet, msl).

¹ Laboratory report indicates unidentified hydrocarbons C6-C12.

² Laboratory report indicates gasoline C6-C12.

³ MTBE by EPA Method 8260.

⁴ Laboratory report indicates gasoline C6-C12 + unidentified hydrocarbons <C6.

⁵ Laboratory report indicates gasoline C6-C12 + unidentified hydrocarbons C6-C12.

⁶ Current laboratory analytical results do not coincide with historical data, although the laboratory results were confirmed.

⁷ Laboratory report indicates that due to the presence of interferent near their retention time, normal reporting limits were not attained for toluene, ethylbenzene, and total xylenes. The presence or concentration of these compounds cannot be determined below the reporting limits due to the presence of these interferents.

⁸ Laboratory report indicates that due to the presence of an interferent near its retention time, the normal reporting limit was not attained for total xylenes. The presence or concentration of this compound cannot be determined due to the presence of this interferent.

Table 2
Groundwater Analytical Results - Oxygenate Compounds
Former Chevron Service Station #209339
5940 College Avenue
Oakland, California

WELL ID	DATE	ETHANOL (µg/L)	TBA (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)
MW-1	01/03/01	<500	<50	<2.0	<2.0	<2.0	<2.0	<2.0
	04/25/01	--	<20	<2.0	<2.0	<2.0	<2.0	--
MW-2	01/03/01	<500	<50	2.2	<2.0	<2.0	<2.0	<2.0
	04/25/01	--	<20	<2.0	<2.0	<2.0	<2.0	--
	01/13/02	--	<20	<2.0	<2.0	<2.0	<2.0	--

EXPLANATIONS:

TBA = t-Butyl alcohol
MTBE = Methyl Tertiary Butyl Ether
DIPE = di-Isopropyl ether
ETBE = Ethyl t-butyl ether

TAME = t-Amyl methyl ether
1,2-DCA = 1,2-Dichloroethane
(µg/L) = Micrograms per liter
-- = Not Analyzed

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

Table 3
Groundwater Analytical Results
Former Chevron Service Station #209339
5940 College Avenue
Oakland, California

WELL ID	DATE	FERROUS IRON (mg/L)	TOTAL ALKALINITY (mg/L)	SULFATE AS SO ₄ (mg/L)
MW-1	04/25/01	0.15	380	11
	07/09/01	<0.050	410	6.8
	10/08/01	-- ¹	414	5.4
	01/13/02	<0.10 ²	390	10
MW-2	04/25/01	0.093	680	21
	07/09/01	0.44	600	9.3
	10/08/01	-- ¹	683	3.8
	01/13/02	<0.10 ²	630	7.0

EXPLANATIONS:

(mg/L) = milligrams per liter

-- = Not Analyzed

ANALYTICAL METHODS:

EPA Method SM 3500 Fe for Ferrous Iron

EPA Method 310.1 for Total Alkalinity

EPA Method 300.0 for Sulfate as SO₄

¹ Analysis was not performed by the laboratory as requested on the Chain of Custody.

² Due to sample transfer by the lab from one laboratory to another, the sample was received beyond the EPA recommended holding time.

Table 4

Field Measurements

Former Chevron Service Station #209339

5940 College Avenue

Oakland, California

WELL ID	DATE	D.O.	ORP
		Before Purging (mg/L)	Before Purging (mV)
MW-1	07/09/01	1.25	111
	10/08/01	1.20	64
	01/13/02 ¹	--	--
MW-2	07/09/01	1.89	16
	10/08/01	1.04	58
	01/13/02 ¹	--	--

EXPLANATIONS:

D.O. = Dissolved Oxygen Concentration

(mg/L) = Milligrams per liter

ORP = Oxygen Reduction Potential

(mV) = Millivolt

-- = Not Measured

¹ D.O. and ORP meter erratic; measurements not taken.