Chevron

August 31, 1998

Chevron Products Company
6001 Bollinger Canyon Road
Building L, Room 1110
PO Box 6004
San Ramon, CA 94583-0904

Philip R. Briggs
Project Manager
Site Assessment & Remediation
Phone 925 842-9136
Fax 925 842-8370

Ms. Susan Hugo
Alameda County Health Care Services
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Chevron Service Station #9-0338
5500 Telegraph Avenue
Oakland, California

Dear Ms. Hugo:

Enclosed is a Groundwater Monitoring & Sampling Report, dated August 12, 1998, that was prepared by our consultant Gettler-Ryan Inc. for the above noted site. Ground water samples were collected from the three wells on the site and analyzed for the TPH-g, BTEX and MtBE constituents.

In monitoring wells C-1, C-2 and C-3 the concentrations were below method detection limits for all constituents. Depth to ground water varied from 7.85 feet to 8.74 feet below grade with direction of flow southwesterly.

Due to the proposed reconstruction of the service station facilities including the removal and replacement of tanks and lines that was scheduled for July, the monitoring wells were resampled. The last groundwater-sampling event occurred in November 1993.

For your information a Remedial Action Completion Certification was received from your office on April 5, 1995(copy enclosed), however, the monitoring wells were not abandoned.

Due to the location of the new service station building on the site, monitoring well C-3 was abandoned, however wells C-1 and C-2 still remain.

The tanks were removed July 22 and the product lines July 27, with Mr. Griffin and Mr. Gomez, from the Office of Emergency Services, City of Oakland, respectively present. A copy of the tank and product line removal report will be sent to your office when it is

received. However, based on the minimal petroleum hydrocarbon concentrations detected at the site and the below method detection limits in the groundwater, it appears that the site would continue to be considered for no further action.

If you have any questions or comments, call me at (925) 842-9136.

Sincerely,
CHEVRON PRODUCTS COMPANY

Philip R. Briggs
Site Assessment and Remediation Project Manger

Enclosure

Cc. Mr. Bill Scudder, Chevron

GETTLER-RYAN INC.

August 12, 1998

Job #6456.80

Mr. Phil Briggs
Chevron Products Company
P.O. Box 6004
San Ramon, CA 94583

Re: Groundwater Monitoring & Sampling Report
Chevron Service Station #9-0338
5500 Telegraph Avenue
Oakland, California

Dear Mr. Briggs:

This report documents a groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R). On June 28, 1998, field personnel were on-site to monitor and sample three wells (C-1, C-2 and C-3) at the above referenced site.

Static groundwater levels were measured and all wells were checked for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were not present in any of 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). The field data sheets for each event are also attached. The samples were analyzed by Sequoia Analytical. Analytical results are presented in Table 1. The chain of custody documents and laboratory analytical reports are attached.

Thank you for allowing Gettler-Ryan Inc. to provide environmental services to Chevron. Please call if you have any questions or comments regarding this report.

Sincerely,

Jeannie Nevaeu/FOR

Deanna L. Harding
Project Coordinator

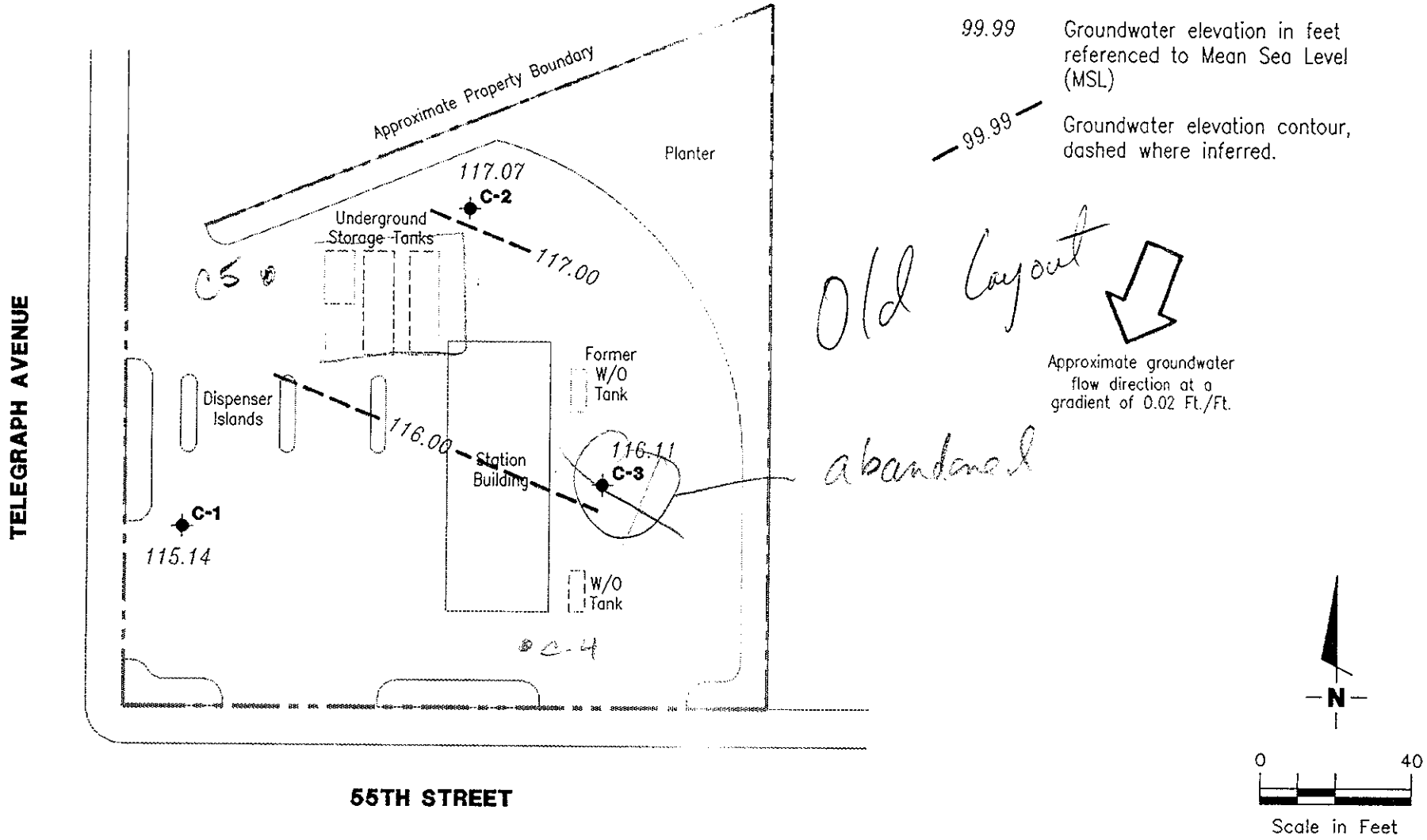
Stephen J. Carter/FOR

Barbara Sieminski
Project Geologist, R.G. No. 6676

REGISTERED GEOLOGIST
STEPHEN J. CARTER
No. 5577
STATE OF CALIFORNIA

DLH/BS/dlh
6456.QML

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



Gettler - Ryan Inc.

6747 Sierra Ct., Suite J (925) 551-7555
Dublin, CA 94568

POTENTIOMETRIC MAP
Chevron Service Station No. 9-0338
5500 Telegraph Avenue
Oakland, California

FIGURE
1

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
6456		June 28, 1998	

Table 1. Water Level Data and Groundwater Analytical Results - Chevron Service Station #9-0338, 5500 Telegraph Avenue, Oakland, California

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness (ft)	TPH-Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE
					<----------ppb---------->					
C-1										
123.88	11/21/89	10.75	113.13	0	<500	<0.5	<0.5	<0.5	<0.5	---
	03/20/90	9.93	113.95	0	<50	<0.5	<0.5	<0.5	<0.5	---
	06/27/90[1]	9.64	114.24	0	<50	<0.5	<0.5	<0.5	<0.5	---
(d)	06/27/90[1]	9.64	114.24	0	<50	<0.5	<0.5	<0.5	<0.5	---
	10/12/90[2]	10.91	112.97	0	---	---	---	---	---	---
(d)	10/12/90	10.91	112.97	0	<50	<0.5	<0.5	<0.5	<0.5	---
	12/20/90	9.76	114.12	0	75	<0.5	0.9	0.8	3	---
(d)	12/20/90	9.76	114.12	0	73	<0.5	0.6	0.7	2	---
	04/10/91	8.76	115.12	0	<50	0.7	1.2	<0.5	1.0	---
(d)	04/10/91	8.76	115.12	0	<50	0.9	1.5	<0.5	2	---
	02/26/92	8.08	115.80	0	<50	<0.5	<0.5	<0.5	<0.5	---
	02/04/93	8.26	115.62	0	<50	<0.5	<0.5	<0.5	<0.5	---
	07/27/93	10.04	113.84	0	<50	<0.5	<0.5	<0.5	<1.5	---
	09/22/93	10.32	113.56	0	79	<0.5	<0.5	<0.5	<1.5	---
	11/15/93	10.40	113.48	0	<50	<0.5	<0.5	<0.5	<0.5	---
	06/28/98	**8.74**	**115.14**	**0**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<2.5**
C-2										
124.92	11/21/89	10.75	114.17	0	<500	<0.5	<0.5	<0.5	<0.5	---
	03/20/90	9.44	115.48	0	<50	<0.5	<0.5	<0.5	<0.5	---
	06/27/90[1]	9.55	115.37	0	<50	<0.5	<0.5	<0.5	<0.5	---
	10/12/90	10.89	114.03	0	<50	<0.5	<0.5	<0.5	<0.5	---
	12/20/90	9.65	115.27	0	<50	<0.5	<0.5	<0.5	<0.5	---
	04/10/91	8.04	116.88	0	<50	<0.5	<0.5	<0.5	<05	---
	02/26/92	7.03	117.89	0	<50	<0.5	<0.5	<0.5	<0.5	---
	02/04/93	7.06	117.86	0	<50	<0.5	<0.5	<0.5	<0.5	---
	07/27/93	9.78	115.14	0	<50	<0.5	<0.5	<0.5	<1.5	---
	09/22/93	9.97	114.95	0	<50	<0.5	<0.5	<0.5	<1.5	---
	11/15/93	10.32	114.60	0	<50	<0.5	<0.5	<0.5	<0.5	---
	06/28/98	**7.85**	**117.07**	**0**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<2.5**
C-3										
125.64	11/21/89	11.28	114.36	0	<500	<0.5	<0.5	<0.5	<0.5	---
	01/12/90[3]	---	---	0	---	---	---	---	---	---
	03/20/90[4]	10.39	115.25	0	<50	<0.5	<0.5	<0.5	<0.5	---
	06/27/90[1]	10.32	115.32	0	<50	<0.5	<0.5	<0.5	<0.5	---
	10/12/90	11.28	114.36	0	<50	<0.5	<0.5	<0.5	<0.5	---
	12/20/90	10.25	115.39	0	<50	<0.5	<0.5	<0.5	<0.5	---
	04/10/91	8.79	116.85	0	<50	<0.5	<0.5	<0.5	<0.5	---
	02/26/92	7.83	117.81	0	<50	<0.5	<0.5	<0.5	<0.5	---
	02/04/93	7.94	117.70	0	<50	<0.5	<0.5	<0.5	<0.5	---

Table 1. Water Level Data and Groundwater Analytical Results - Chevron Service Station #9-0338, 5500 Telegraph Avenue, Oakland, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness (ft)	TPH-Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE
					<----------ppb---------->					
C-3 (cont)	07/27/93	10.59	115.05	0	280[5]	<0.5	<0.5	<0.5	<0.5	---
	09/22/93	10.78	114.86	0	<50	<0.5	<0.5	<0.5	<0.5	---
	11/15/93[6]	11.06	114.86	0	<50	<0.5	<0.5	<0.5	<0.5	---
	06/28/98	**9.53**	**116.11**	**0**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<2.5**
Rinsate	06/27/90	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	---
	10/12/90[2]	---	---	---	---	---	---	---	---	---
	12/20/90	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	---
	04/10/91	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	---
	02/26/92	---	---	---	<50	<0.5	<0.5	<0.5	3.3	---
	11/15/93	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	---
Trip Blank										
	03/20/90[7]	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	---
	06/27/90	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	---
	10/12/90[2]	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	---
	12/20/90	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	---
	04/10/91	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	---
	02/26/92	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	---
	07/27/93	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	---
	09/22/93	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	---
	11/15/93	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	---
TB-LB	**06/28/98**	**---**	**---**	**---**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<2.5**

Table 1. Water Level Data and Groundwater Analytical Results - Chevron Service Station #9-0338, 5500 Telegraph Avenue, Oakland, California (continued)

EXPLANATION:

TOC = Top of casing elevation
(ft) = Feet
DTW = Depth to water
GWE = Groundwater elevation
msl = Measurements referenced relative to mean sea level
TPH-Gasoline = Total Purgeable Petroleum Hydrocarbons as gasoline
MTBE = Methyl tertiary-butyl ether
TPH-Diesel = Total Purgeable Petroleum Hydrocarbons as diesel
ppb = Parts per billion
--- = Not analyzed/Not applicable
(d) = Duplicate

NOTES:

1. Sample was tested for lead; results were <0.5 ppb.
2. Sample was broken by laboratory.
3. Sample was tested fir TPH-Diesel and Total Oil and Grease; results were <1,000 ppb and <5,000 ppb, respectively.
4. Sample was tested for TPH-Diesel and Total Oil and Grease; results were <50 ppb and <5,000 ppb, respectively.
5. Gasoline range concentrations reported. The pattern of peaks observed in the chromatogram shows only single peak in the gasoline range.
6. Dichloromethane reported at 1.0 ppb.
7. Sample was tested for TPH-Diesel; results were <50 ppb.

6456.tqm

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 a MMC flexi-dip 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.

Groundwater samples are collected using Chevron-designated disposable bailers. The water samples are transferred from the bailer 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. 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.

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

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/ Facility #: Chevron #9-6338 | Job#: 6456
Address: 5500 Telegraph | Date: 6-28-96
City: Oakland CA | Sampler: F. Cline

Well ID: C-1 | Well Condition: Okay
Well Diameter: 2" in. | Hydrocarbon Thickness: C in. | Amount Bailed (product/water): C (gal.)
Total Depth: 30' ft.
Depth to Water: 8.74 ft.

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

21.26 X VF 0.17 = 3.6 X 3 (case volume) = Estimated Purge Volume: 10.8 (gal.)

Purge Equipment: Disposable Bailer; Bailer; (Stack); (Suction); Grundfos; Other:

Sampling Equipment: (Disposable Bailer); Bailer; Pressure Bailer; Grab Sample; Other:

Starting Time: 13:18 | Weather Conditions: Clear Warm
Sampling Time: 13:26 | Water Color: Clear | Odor: None
Purging Flow Rate: 2.0 gpm | Sediment Description: None
Did well de-water? No | If yes; Time: ____ Volume: ____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
1325	9.0	6.89	575	20.9			
1323	8.0	6.96	693	21.1			
1324	12.0	6.98	686	20.9			
1326	13.0	6.96	690	20.9			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-1	3 x 40ml VOA	Y	HCl	SEQ	602 BTXE 8010's

COMMENTS:

9/97-fieldat.frm

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/ Facility #: Chevron #9-0338 | Job#: 6456.85
Address: 5500 Telegraph | Date: 6-28-95
City: Oakland CA | Sampler: F. Cline

Well ID: C-2 | Well Condition: okay
Well Diameter: 2" in. | Hydrocarbon Thickness: — in. | Amount Bailed (product/water): — (gal.)
Total Depth: 28.5 ft.
Depth to Water: 7.85 ft.

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

20.65 X VF 0.17 = 3.5 X 3 (case volume) = Estimated Purge Volume: 10.5 (gal.)

Purge Equipment: Disposable Bailer; Bailer; ~~Stack~~; ~~Suction~~; Grundfos; Other: —

Sampling Equipment: Disposable Bailer; ~~Bailer~~; Pressure Bailer; Grab Sample; Other: —

Starting Time: 13:33 | Weather Conditions: Clear Warm
Sampling Time: 1341 | Water Color: Clear | Odor: None
Purging Flow Rate: 2 gpm. | Sediment Description: None
Did well de-water? — | If yes; Time: — | Volume: — (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
1335	4	6.85	720	20.2			
1337	8	6.80	726	19.7			
1339	12	6.84	720	19.6			
1341	13	6.83	722	19.7			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-2	3x40ml VOA	Y	Ice	SBCL	Gas BTXE MTBE

COMMENTS: —

9/97-fieldat.frm

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # Chevron # 9-C338 Job#: 6956.85

Address: 5500 Telegraph Ave Date: 6-28-9E

City: Oakland CA Sampler: ~~Clay~~ FM

Well ID C-3 Well Condition: okay

Well Diameter 2" in. Hydrocarbon Thickness: ~~C~~ in. Amount Bailed (product/water): ~~C~~ (gal.)

Total Depth 28.15 ft.

Depth to Water 9.53 ft.

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

18.97 X VF 0.17 = 32 X 3 (case volume) = Estimated Purge Volume: 96 (gal.)

Purge Equipment: Disposable Bailer; Bailer; ~~Stack~~; ~~Suction~~; Grundfos; Other:

Sampling Equipment: (Disposable Bailer); Bailer; Pressure Bailer; Grab Sample; Other:

Starting Time: 1301 Weather Conditions: Clear warm

Sampling Time: 1309 Water Color: clear Odor: Mod

Purging Flow Rate: ~~3.4~~ 1.7 gpm. Sediment Description: Mod

Did well de-water? If yes; Time: Volume: (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
1303	~~3.4~~ 3.4	7.90	582	21.2			
1305	~~5.4~~ 6.8	6.88	533	19.2			
1307	~~8.1~~ 10.2	6.85	515	19.1			
1309	11.6	6.85	526	19.2			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-3	3x40ml VOA	Y	HCl	STL	GASOLINE BTEX

COMMENTS:

Fax copy of Lab Report and COC to Chevron Contact: ☐ No

Chain-of-Custody-Record

Chevron U.S.A. Inc.
P.O. BOX 5004
San Ramon, CA 94583
FAX (415)842-9591

Chevron Facility Number #9-0338
Facility Address 5500 Telegraph Ave, OAKLAND, CA
Consultant Project Number 6456.80
Consultant Name Gettler-Ryan
Address 6747 Sierra Ct, Ste J, Dublin 94568
Project Contact (Name) Deanna Harding
(Phone) 551-7555 (Fax Number) 551-7888

Chevron Contact (Name) MR. PHIL BRIGGS
(Phone) (925) 842-9136
Laboratory Name SEQUOIA Service Code: ZZ02790
Laboratory Service Order #
Samples Collected by (Name) F. Cline
Collection Date 6-28-98
Signature

Analyses To Be Performed 9806I86

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	TPH Gas + BTEX w/MTBE (8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)					DO NOT BILL TB-LB ANALYSIS Remarks
01 Trip Blank		#1	W	TB	—	HCl	Y	X												
02 MW-3	C-3	3		G	1309			X												
03 MW-1	C-1	3			1326			X												
04 MW-2	C-2	3			1341			X												
	24																			

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	G-R Inc.	6/29/98/0800	D. Harding	G-R Inc.	6/29/98
D. Harding	G-R	6/29/98		Sequoia	6/29/98 2:50
	Sequoia	6/29/98	Received For Laboratory By (Signature) Jennifer Dennis		Date/Time 6/29 1545

Turn Around Time (Circle Choice)
24 Hrs.
48 Hrs.
5 Days
10 Days
As Contracted

3.DWG/03 91/MCH

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (925) 988-9600, FAX (925) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Gettler Ryan/Geostrategies
6747 Sierra Court Suite J
Dublin, CA 94568

Attention: Deanna Harding

Client Proj. ID: Chevron 9-0338, Oakland
Sample Descript: TB
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9806I86-01

Sampled: 06/28/98
Received: 06/29/98

Analyzed: 07/06/98
Reported: 07/13/98

QC Batch Number: GC070698BTEX06A
Instrument ID: GCHP06

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	116

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (925) 988-9600, FAX (925) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Gettler Ryan/Geostrategies
6747 Sierra Court Suite J
Dublin, CA 94568

Attention: Deanna Harding

Client Proj. ID: Chevron 9-0338, Oakland
Sample Descript: C-1
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9806I86-03

Sampled: 06/28/98
Received: 06/29/98

Analyzed: 07/06/98
Reported: 07/13/98

QC Batch Number: GC070698BTEX06A
Instrument ID: GCHP06

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	96

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
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Gettler Ryan/Geostrategies
6747 Sierra Court Suite J
Dublin, CA 94568

Attention: Deanna Harding

Client Proj. ID: Chevron 9-0338, Oakland
Sample Descript: C-2
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9806I86-04

Sampled: 06/28/98
Received: 06/29/98

Analyzed: 07/06/98
Reported: 07/13/98

QC Batch Number: GC070698BTEX06A
Instrument ID: GCHP06

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		N.D.

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	90

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

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Gettler Ryan/Geostrategies
6747 Sierra Court Suite J
Dublin, CA 94568

Attention: Deanna Harding

Client Proj. ID: Chevron 9-0338, Oakland
Sample Descript: C-3
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9806I86-02

Sampled: 06/28/98
Received: 06/29/98

Analyzed: 07/06/98
Reported: 07/13/98

QC Batch Number: GC070698BTEX06A
Instrument ID: GCHP06

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		N.D.

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	92

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

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Gettler Ryan/Geostrategies
6747 Sierra Court Suite J
Dublin, CA 94568
Attention: Deanna Harding

Client Proj. ID: Chevron 9-0338, Oakland

Lab Proj. ID: 9806186

Received: 06/29/98

Reported: 07/13/98

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 7 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager

Sequoia Analytical

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Gettler Ryan/Geostrategies
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Deanna Harding

Client Project ID: Chevron 9-0338, Oakland

QC Sample Group: 9806186-01-04

Reported: Jul 13, 1998

QUALITY CONTROL DATA REPORT

Matrix: Liquid
Method: EPA 8020
Analyst: G. PESHINA

ANALYTE	Benzene	Toluene	Ethylbenzene	Xylenes
QC Batch #:	GC070698BTEX06A			
Sample No.:	GW9806G23-1			
Date Prepared:	7/6/98	7/6/98	7/6/98	7/6/98
Date Analyzed:	7/6/98	7/6/98	7/6/98	7/6/98
Instrument I.D.#:	GCHP6	GCHP6	GCHP6	GCHP6
Sample Conc., ug/L:	N.D.	N.D.	N.D.	N.D.
Conc. Spiked, ug/L:	10	10	10	30
Matrix Spike, ug/L:	10	10	11	32
% Recovery:	100	100	110	107
Matrix Spike Duplicate, ug/L:	11	11	11	32
% Recovery:	110	110	110	107
Relative % Difference:	9.5	9.5	0.0	0.0
RPD Control Limits:	0-25	0-25	0-25	0-25

LCS Batch#:	GWBLK070698A			
Date Prepared:	7/6/98	7/6/98	7/6/98	7/6/98
Date Analyzed:	7/6/98	7/6/98	7/6/98	7/6/98
Instrument I.D.#:	GCHP6	GCHP6	GCHP6	GCHP6
Conc. Spiked, ug/L:	10	10	10	30
LCS Recovery, ug/L:	10	10	10	32
LCS % Recovery:	100	100	100	107

Percent Recovery Control Limits:

MS/MSD	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.