GETTLER-RYAN INC.

September 7, 1998 Job #6433.80

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

Re: Groundwater Monitoring & Sampling Report
Chevron Service Station #9-3322
7225 Bancroft Avenue
Oakland, California

Dear Mr. Briggs:

This report documents the monthly groundwater monitoring and sampling events performed by Gettler-Ryan Inc. (G-R). On June 16, July 29, and August 13, 1998, field personnel were on-site to monitor and sample three wells (MW-1, MW-2 and MW-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. Potentiometric Maps are included as Figures 1, 2 and 3.

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.

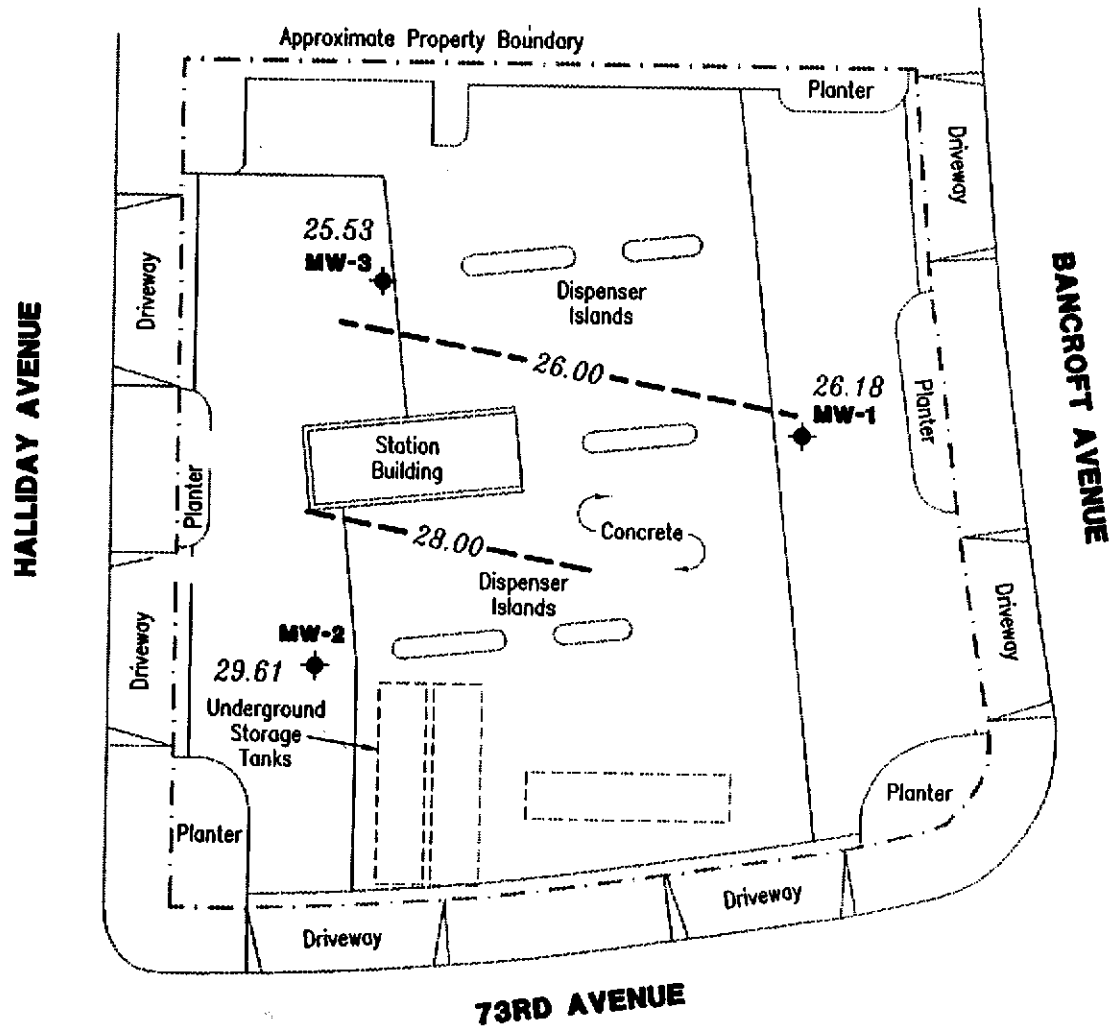
Sincerely,

Deanna L. Harding
Project Coordinator

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

DLH/BS/dlh
6433.QML

Figure 1: Potentiometric Map - June 16, 1998
Figure 2: Potentiometric Map - July 29, 1998
Figure 3: Potentiometric Map - August 13, 1998
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



EXPLANATION

- Groundwater monitoring well
- 99.99 — Groundwater elevation in feet referenced to Mean Sea Level (MSL)
- 99.99 — Groundwater elevation contour, dashed where inferred.

Approximate groundwater flow direction at a gradient of 0.07 Ft./Ft.

N

0 30

Scale in Feet

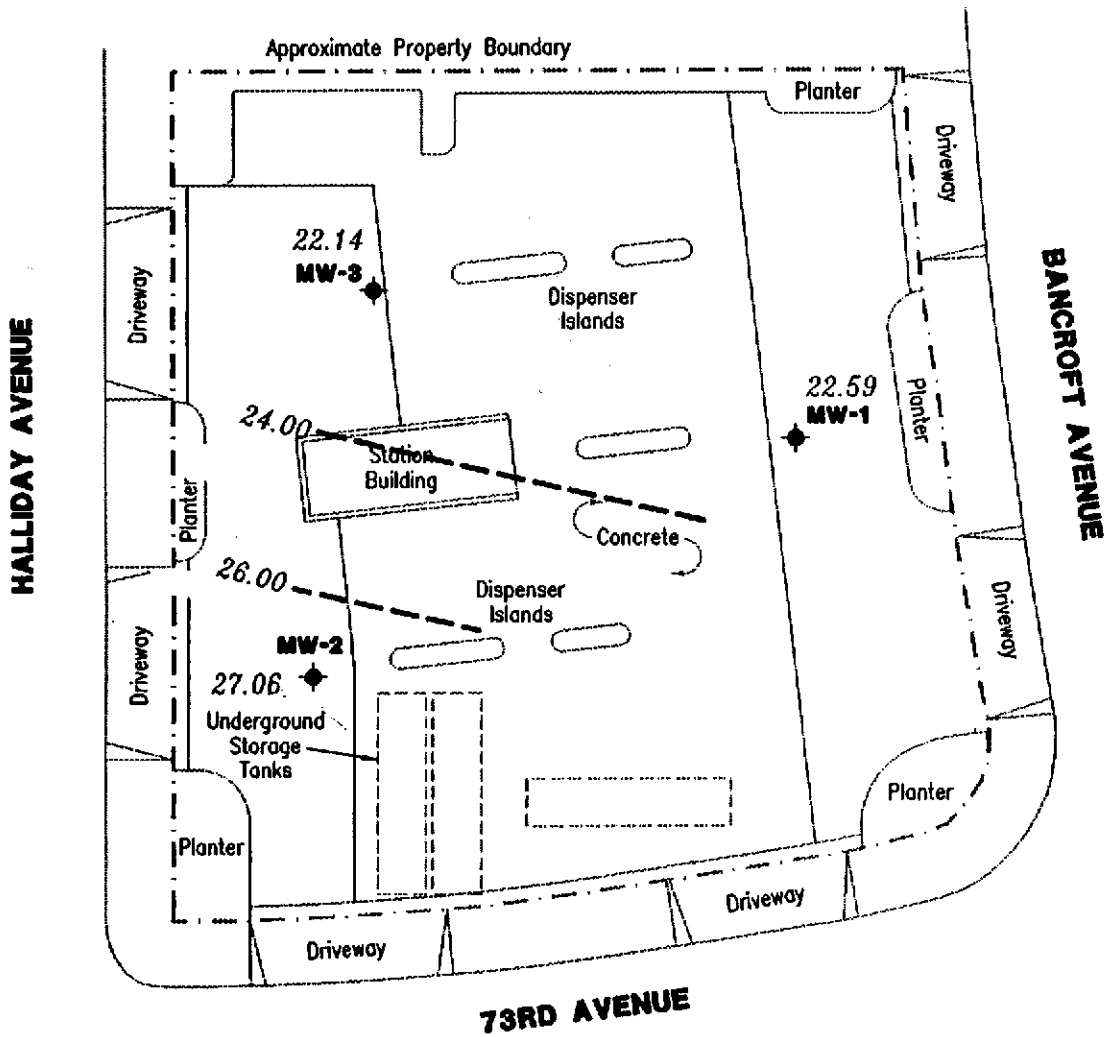
Source: Figure Modified From Drawing Provided By Chevron.

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

POTENTIOMETRIC MAP
Chevron Service Station No. 9-3322
7225 Bancroft Avenue
Oakland, California

FIGURE 1

JOB NUMBER 6433 | REVIEWED BY | DATE June 16, 1998 | REVISED DATE



EXPLANATION

- Groundwater monitoring well
- 99.99 — Groundwater elevation in feet referenced to Mean Sea Level (MSL)
- 99.99 — Groundwater elevation contour, dashed where inferred.

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

N

0 30

Scale in Feet

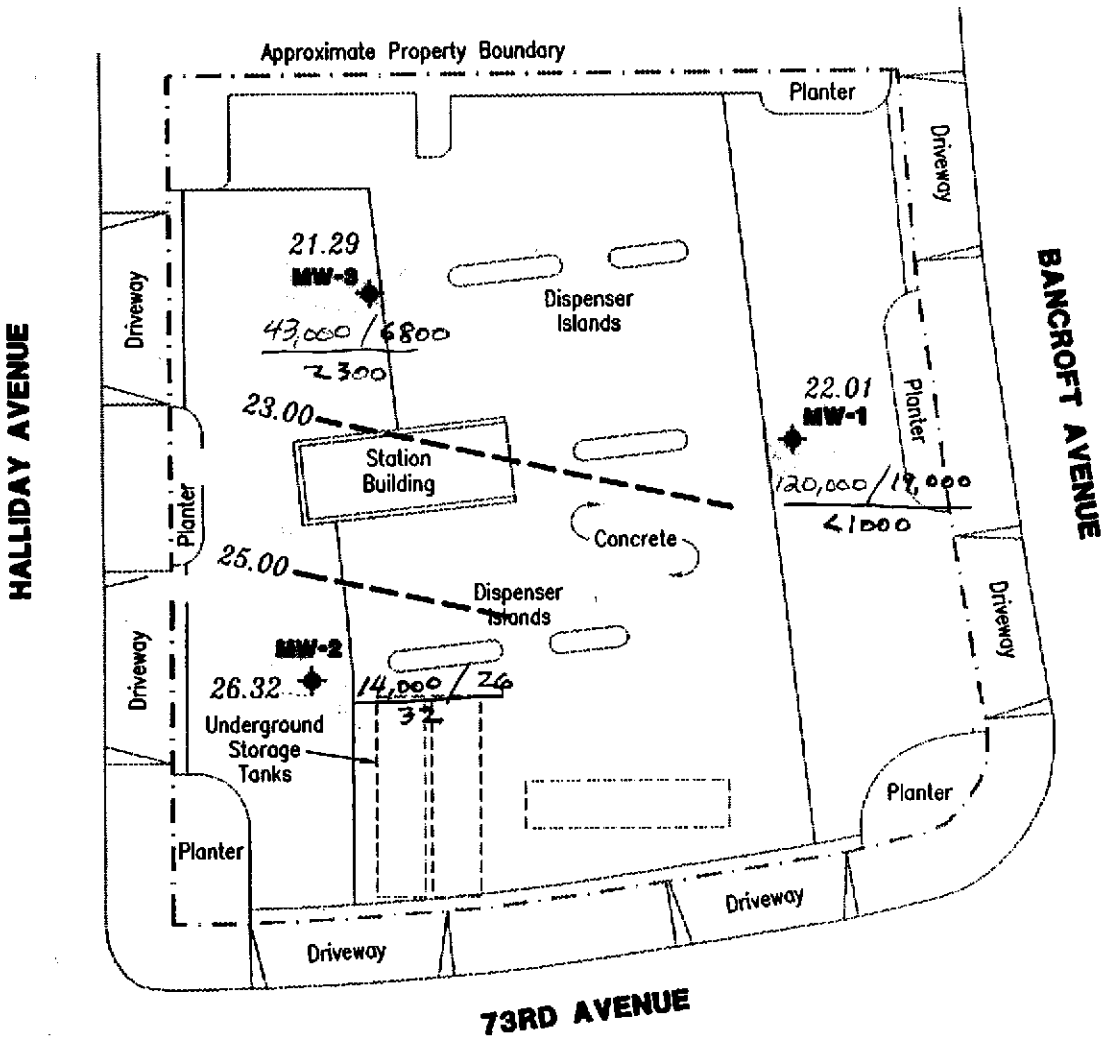
Source: Figure Modified From Drawing Provided By Chevron.

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

POTENTIOMETRIC MAP
Chevron Service Station No. 9-3322
7225 Bancroft Avenue
Oakland, California

FIGURE
2

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
6433		July 29, 1998	



EXPLANATION

- Groundwater monitoring well
- 99.99 — Groundwater elevation in feet referenced to Mean Sea Level (MSL)
- 99.99 — Groundwater elevation contour, dashed where inferred.

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

TPH-G / benzene
MtBE ug/l

N

0 30
Scale in Feet

Source: Figure Modified From Drawing Provided By Chevron.

FIGURE 3

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

POTENTIOMETRIC MAP
Chevron Service Station No. 9-3322
7225 Bancroft Avenue
Oakland, California

JOB NUMBER 6433
REVIEWED BY
DATE August 13, 1998
REVISED DATE

Table 1. Water Level Data and Groundwater Analytical Results - Chevron Service Station #9-3322, 7225 Bancroft Avenue, Oakland, California.

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness (ft)	TPH-Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE
					<----------ppb---------->					
MW-1										
40.41	02/08/98	13.88	26.53	0	130,000	9,700	8,200	3,200	15,000	<250
	06/16/98	**14.23**	**26.18**	**0**	**96,000**	**15,000**	**12,000**	**2,600**	**11,000**	**1,300**
	07/29/98	**17.82**	**22.59**	**0**	**370,000**	**19,000**	**14,000**	**5,800**	**15,000**	**<2,500**
	08/13/98	**18.40**	**22.01**	**0**	**120,000**	**19,000**	**16,000**	**2,900**	**14,000**	**<1,000**
MW-2										
38.73	02/08/98	7.60	31.13	0	24,000	130	170	450	1,900	2,300
	06/16/98	**9.12**	**29.61**	**0**	**8,900**	**31**	**46**	**310**	**1,100**	**260**
	07/29/98	**11.67**	**27.06**	**0**	**7,600**	**15**	**21**	**150**	**480**	**82**
	08/13/98	**12.41**	**26.32**	**0**	**14,000**	**26**	**80**	**500**	**2,100**	**32**
MW-3										
39.51	02/08/98	14.60	24.91	0	94,000	12,000	4,400	2,000	10,000	8,000
	06/16/98	**13.98**	**25.53**	**0**	**38,000**	**5,600**	**1,400**	**1,200**	**4,700**	**6,300/4,600[1]**
	07/29/98	**17.37**	**22.14**	**0**	**58,000**	**4,100**	**700**	**1,300**	**4,200**	**4,100**
	08/13/98	**18.22**	**21.29**	**0**	**43,000**	**6,800**	**1,900**	**1,600**	**6,800**	**2,300**
Trip Blank										
TB-LB	02/08/98	---	---	---	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	06/16/98	**—**	**—**	**—**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<2.5**
	07/29/98	**—**	**—**	**—**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<2.5**
	08/13/98	**—**	**—**	**—**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<2.5**

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
ppb = Parts per billion
--- = Not analyzed/Not applicable

NOTES:

Wells MW-1 through MW-3 were surveyed on January 28, 1998, by Virgil Chavez of Vallejo, California (PLS #6323).

[1] MTBE by EPA Method 8260.

6433.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

Chevron Facility # 9-3322 Job#: 6433.80

Address: 7225 Bancroft Ave. Date: 6-16-98

City: Oakland, CA Sampler: F. Cline

Well ID MW-1 Well Condition: okay

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

Total Depth 36.15 ft.

Depth to Water 14.23 ft.

Vol Factor (VF)	2"	3"	4" = 0.17	= 0.38
	6"	12"	= 1.50	

22.25 X VF 0.17 = 3.8 X 3 (case volume) = Estimated Purge Volume: 11.3 (gal.)

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

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

Starting Time: 11:53 Weather Conditions: clear Hot

Sampling Time: 1204 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	pH	Conductivity µmhos/cm	Temperature °F	D.O.	ORP	Alkalinity
1155	~~9~~	6.86	991	21.1			
1157	8	6.87	963	20.9			
1159	12	6.83	1094	21.3			
1201	13	6.84	1090	21.0			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-1	3 x 40m/VOA	Y	HCL	SEQUOIA	TPH-Gas/BTEX/MTBE

COMMENTS:

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Chevron Facility # 9-3322 Job#: 6433.80

Address: 7225 Bancroft Ave. Date: 6-16-9E

City: Oakland, CA Sampler: E. Cline

Well ID MW-2 Well Condition: clear

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

Total Depth 31.5 ft.

Depth to Water 9.12 ft.

Vol Factor (VF)	2"	3"	4"	6"	12"
	0.17				1.50

22.38 X VF 0.17 = 3.8 X 3 (case volume) = Estimated Purge Volume: 11.4 (gal.)

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

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

Starting Time: 1122 Weather Conditions: clear warm

Sampling Time: 1135 Water Color: clear Odor: None

Purging Flow Rate: 2 gpm. Sediment Description: None

Did well de-water? No If yes; Time: Volume: (gal.)

Time	Volume	pH	Conductivity µmhos/cm	Temperature	D.O.	ORP	Alkalinity
1129	4	6.99	422	23.4			
1131	8	6.97	468	21.2			
1133	12	6.96	466	21.1			
1135	13	6.96	467	21.2			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-2	3 x 40m/VOA	Y	HCL	SEQUOIA	TPH-Gas/BTEX/MTBE

COMMENTS:

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Chevron Facility # 9-3322 Job#: 6433.80

Address: 7225 Bancroft Ave. Date: 6-16-98

City: Oakland, CA Sampler: F. Cline

Well ID MW-3 Well Condition: clay

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

Total Depth 34.5 ft.

Depth to Water 13.98 ft.

Vol. Factor (VF)	2"	3"	4"	= 0.17
	6"	12"		= 1.50

20.52 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: 1140 Weather Conditions: Clear Hot

Sampling Time: 1148 Water Color: Clear Odor: Mild

Purging Flow Rate: 2 gpm. Sediment Description: Clear

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

Time	Volume	pH	Conductivity µmhos/cm	Temperature	D.O.	ORP	Alkalinity
1142	4	6.68	1099	21.8			
1144	8	6.67	1083	21.4			
1146	12	6.68	986	21.3			
1148	13	6.68	990	21.4			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-3	3 x 40m/VOA		HCL	SEQUOIA	TPH-Gas/BTEX/MTBE
					confirm MTBE
					by 8260

COMMENTS: _____

9/97-fieldst.frm

Fax copy of Lab Report and COC to Chevron Contact: ☐ Yes ☐ 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 9-3322
Facility Address 7225 Bancroft Ave. Oakland, CA
Consultant Project Number 6433.80
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 Analytical Service Code: 2202790
Laboratory Service Order # 9098256
Samples Collected by (Name) F. Chiang
Collection Date 6-16-98
Signature

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed: 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)	MTBE by 8260					DO NOT BILL TB-LB ANALYSIS Remarks
TB-LB	1	2	W	TB	—	HCl	Y	X													Confirm
MW-2	2	3		G	1135			X													m+be by 8260
MW-3	3	4			1145			X								X					on MW-3 only
MW-1	4	3			1200			X													
										9806 C5-8											

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	G-R Inc.	6/16/98/0800	D. Harding	G-R Inc.	6/16/98
Relinquished By (Signature) D. Harding	Organization G-R	Date/Time 6/17/98	Received By (Signature)	Organization Sequoia	Date/Time 6/17/98 2:2
Relinquished By (Signature)	Organization Sequoia	Date/Time 6/17/98	Received For Laboratory By (Signature)		Date/Time

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

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 9-3322, Oakland
Sample Descript: TB-LB
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9806C58-01

Sampled: 06/16/98
Received: 06/17/98
Analyzed: 06/23/98
Reported: 06/30/98

QC Batch Number: GC062398BTEX17A
Instrument ID: GCHP17

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	91

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-3322, Oakland	Sampled: 06/16/98
6747 Sierra Court Suite J	Sample Descript: MW-1	Received: 06/17/98
Dublin, CA 94568	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 06/25/98
Attention: Deanna Harding	Lab Number: 9806C58-04	Reported: 06/30/98

QC Batch Number: GC062598BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	20000	96000
Methyl t-Butyl Ether	1000	1300
Benzene	200	15000
Toluene	200	12000
Ethyl Benzene	200	2600
Xylenes (Total)	200	11000
Chromatogram Pattern:		GAS

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	86

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

SEQUOIA ANALYTICAL - ELAP #1210

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 Proj. ID: Chevron 9-3322, Oakland
Sample Descript: MW-2
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9806C58-02

Sampled: 06/16/98
Received: 06/17/98

Analyzed: 06/24/98
Reported: 06/30/98

QC Batch Number: GC062498BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	1000	8900
Methyl t-Butyl Ether	50	260
Benzene	10	31
Toluene	10	46
Ethyl Benzene	10	310
Xylenes (Total)	10	1100
Chromatogram Pattern:		Gas

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	85

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

SEQUOIA ANALYTICAL - ELAP #1210

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 Proj. ID: Chevron 9-3322, Oakland
Sample Descript: MW-3
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9806C58-03

Sampled: 06/16/98
Received: 06/17/98

Analyzed: 06/24/98
Reported: 06/30/98

QC Batch Number: GC062498BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	5000	38000
Methyl t-Butyl Ether	250	6300
Benzene	50	5600
Toluene	50	1400
Ethyl Benzene	50	1200
Xylenes (Total)	50	4700
Chromatogram Pattern:		Gas

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	93

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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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 9-3322, Oakland
Sample Descript: MW-3
Matrix: LIQUID
Analysis Method: EPA 8260
Lab Number: 9806C58-03

Sampled: 06/16/98
Received: 06/17/98

Analyzed: 06/26/98
Reported: 06/30/98

QC Batch Number: MS062498MTBEF2A
Instrument ID: F2

Methyl t-Butyl Ether (MTBE)

Analyte	Detection Limit ug/L	Sample Results ug/L
Methyl t-Butyl Ether	100	4600

Surrogates	Control Limits %		% Recovery
1,2-Dichloroethane-d4	76	114	103

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-3322, Oakland	Received: 06/17/98
6747 Sierra Court Suite J		
Dublin, CA 94568	Lab Proj. ID: 9806C58	Reported: 06/30/98
Attention: Deanna Harding		

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 10 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

TPH-Gas/BTEX Note:
Sample 9806C58-02 was diluted 20-fold.
Sample 9806C58-03 was diluted 100-fold.
Sample 9806C58-04 was diluted 400-fold.

MTBE(8260) Note:
Sample 9806C58-03 was diluted 50-fold.

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
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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 Project ID: Chevron 9-3322, Oakland

QC Sample Group: 9806C58-02,03

Reported: Jun 30, 1998

QUALITY CONTROL DATA REPORT

Matrix:	Liquid
Method:	EPA 8015
Analyst:	N. HERRERA
ANALYTE	Gasoline

QC Batch #: GC062498BTEX03A

Sample No.:	GW9806C39-4
Date Prepared:	6/24/98
Date Analyzed:	6/24/98
Instrument I.D.#:	GCHP03
Sample Conc., ug/L:	N.D.
Conc. Spiked, ug/L:	250
Matrix Spike, ug/L:	220
% Recovery:	86
Matrix Spike Duplicate, ug/L:	240
% Recovery:	96
Relative % Difference:	11
RPD Control Limits:	0-25

LCS Batch#: GWBLK062498ABS

Date Prepared:	6/24/98
Date Analyzed:	6/24/98
Instrument I.D.#:	GCHP03
Conc. Spiked, ug/L:	250
LCS Recovery, ug/L:	220
LCS % Recovery:	90

Percent Recovery Control Limits:

MS/MSD	60-140
LCS	70-130

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

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.

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Project Manager

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

Client Project ID: Chevron 9-3322, Oakland

QC Sample Group: 9806C58-04

Reported: Jun 30, 1998

QUALITY CONTROL DATA REPORT

Matrix: Liquid
Method: EPA 8020
Analyst: N. HERRERA

ANALYTE	Benzene	Toluene	Ethylbenzene	Xylenes
QC Batch #:	GC062598BTEX03A			
Sample No.:	GW9806E82-2			
Date Prepared:	6/25/98	6/25/98	6/25/98	6/25/98
Date Analyzed:	6/25/98	6/25/98	6/25/98	6/25/98
Instrument I.D.#:	GCHP03	GCHP03	GCHP03	GCHP03
Sample Conc., ug/L:	26	N.D.	N.D.	N.D.
Conc. Spiked, ug/L:	10	10	10	30
Matrix Spike, ug/L:	39	9.1	9.5	30
% Recovery:	130	91	95	100
Matrix Spike Duplicate, ug/L:	40	9.4	9.8	30
% Recovery:	140	94	98	100
Relative % Difference:	7.4	3.2	3.1	0.0
RPD Control Limits:	0-25	0-25	0-25	0-25

LCS Batch#:	GWBLK062598ABS			
Date Prepared:	6/25/98	6/25/98	6/25/98	6/25/98
Date Analyzed:	6/25/98	6/25/98	6/25/98	6/25/98
Instrument I.D.#:	GCHP03	GCHP03	GCHP03	GCHP03
Conc. Spiked, ug/L:	10	10	10	30
LCS Recovery, ug/L:	7.7	8.0	8.6	26
LCS % Recovery:	77	80	86	87

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.

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.

SEQUOIA ANALYTICAL

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Project Manager

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

Client Project ID: Chevron 9-3322, Oakland

QC Sample Group: 9806C58-01

Reported: Jun 30, 1998

QUALITY CONTROL DATA REPORT

Matrix:	Liquid			
Method:	EPA 8020			
Analyst:				
ANALYTE	Benzene	Toluene	Ethylbenzene	Xylenes
QC Batch #:	GC062398BTEX17A			
Sample No.:	GW9806C39-2			
Date Prepared:	6/23/98	6/23/98	6/23/98	6/23/98
Date Analyzed:	6/23/98	6/23/98	6/23/98	6/23/98
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Sample Conc., ug/L:	N.D.	N.D.	N.D.	N.D.
Conc. Spiked, ug/L:	10	10	10	30
Matrix Spike, ug/L:	8.9	8.6	9.0	27
% Recovery:	89	86	90	90
Matrix Spike Duplicate, ug/L:	8.7	8.4	9.7	26
% Recovery:	87	84	97	87
Relative % Difference:	2.3	2.4	7.5	3.4
RPD Control Limits:	0-25	0-25	0-25	0-25

LCS Batch#:	GWBLK062398ABS			
Date Prepared:	6/23/98	6/23/98	6/23/98	6/23/98
Date Analyzed:	6/23/98	6/23/98	6/23/98	6/23/98
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked, ug/L:	10	10	10	30
LCS Recovery, ug/L:	8.6	8.4	10	25
LCS % Recovery:	86	84	100	83

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.

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.

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Chevron Facility # 9-3322 Job#: 6433.80

Address: 7225 Bancroft Ave. Date: 2-29-9E

City: Oakland, CA Sampler: E. Cline

Well ID MW- 4 Well Condition: okay

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

Total Depth 36.5 ft.

Depth to Water 17.82 ft.

Vo[1] Factor (VF)	2"	3"	=0.17	= 0.38
	6"	12"	= 1.50	

18.68 X VF 0.17 = 3.2 X 3 (case volume) = Estimated Purge Volume: 9.6 (gal.)

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

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

Starting Time: 12:29 Weather Conditions: cloudy cool

Sampling Time: 1227 Water Color: clear Odor: Mild

Purging Flow Rate: 1.6 gpm Sediment Description: Non

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

Time	Volume (")	pH	Conductivity µmhos/cm	Temperature —	D.O.	ORP	Alkalinity
1221	3.2	6.51	1212	20.9			
1223	6.4	6.48	1233	20.6			
1225	9.6	6.43	1260	20.5			
1227	10.0	6.44	1255	20.6			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-1	3 x 40m/VOA		HCL	SEQUOIA	TPH-Gas/BTEX/MTBE

COMMENTS:

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Chevron Facility # 9-3322 Job#: 6433.80

Address: 7225 Bancroft Ave. Date: 7-29-9E

City: Oakland, CA Sampler: F. Cline

Well ID MW-2 Well Condition: okay

Well Diameter 2 in. Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)

Total Depth 31.5 ft.

Depth to Water 11.67 ft.

Volume Factor (VF)	2"	3"	4"	6"	12"
			0.17		1.50

= 0.38

19.83 X VF 0.17 = 3.4 X 3 (case volume) = Estimated Purge Volume: 10.1 (gal.)

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

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

Starting Time: 1139 Weather Conditions: Cloudy Cool

Sampling Time: 1147 Water Color: clear Odor: Mild

Purging Flow Rate: 1.8 gpm. Sediment Description: Mod Clear

Did well de-water? No If yes; Time: Volume: (gal.)

Time	Volume (gal)	pH	Conductivity µmhos/cm	Temperature (F)	D.O.	ORP	Alkalinity
1141	3.6	6.41	462	21.0			
1143	7.2	6.40	457	20.9			
1145	10.8	6.38	461	20.9			
1147	11.0	6.39	460	21.0			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-2	3 x 40m/VOA	Y	HCL	SEQUOIA	TPH-Gas/BTEX/MTBE

COMMENTS:

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Chevron Facility # 9-3322 Job#: 6433.80

Address: 7225 Bancroft Ave. Date: 7-29-9E

City: Oakland, CA Sampler: F. Cline

Well ID MW-3 Well Condition: clay

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

Total Depth 34.5 ft.

Depth to Water 17.37 ft.

Vo[1] Factor (VF)	2"	3"	=0.17	= 0.38
	6"	12"	= 1.50	

17.13 X VF 0.17 = 2.9 X 3 (case volume) = Estimated Purge Volume: 8.7 (gal.)

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

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

Starting Time: 1201 Weather Conditions: ~~clear~~ cloudy cool

Sampling Time: 1209 Water Color: clear Odor: none

Purging Flow Rate: .5 gpm Sediment Description: NA

Did well de-water? No If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (")	pH	Conductivity µmhos/cm	Temperature (F)	D.O.	ORP	Alkalinity
1203	3	6.39	1040	20.9			
1206	6	6.42	1008	20.8			
1207	9	6.44	1006	20.7			
1209	10	6.43	1010	20.8			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-3	3 x 40m/VOA	Y	HCL	SEQUOIA	TPH-Gas/BTEX/MTBE

COMMENTS: _____

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

Chain-of-Custody-Record

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

JL 30 12 22

Chevron Facility Number: 9-3322
Facility Address: 7225 Bancroft Ave. Oakland, CA
Consultant Project Number: 6433.80
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 Analytical Service Code: ZZ02790
Laboratory Service Order # 9098256
Samples Collected by (Name): P. Cline
Collection Date: 7-29-98
Signature:

Analyses To Be Performed 9807H63

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	TPH Gas + BTEX w/MTBE (8020)	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
TB-LB	1	2	W	TB	—	HCl	Y	X												
MW-2	2	3		G	1123			X												
MW-3	3	3			1209			X												
MW-1	4	3			1223			X												

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	G-R Inc.	7-30-98/1800	D. Harding	G-R Inc.	7/30/98
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
D. Harding	G-R Inc.	7/30/98		Sequoia	7/30/98 11:40
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time
	Sequoia	7/30/98			7/30/98 1223

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

Sequoia Analytical

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

Attention: Deanna Harding

Client Proj. ID: Chevron 9-3322, Oakland
Sample Descript: TB-LB
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9807H63-01

Sampled: 07/29/98
Received: 07/30/98
Analyzed: 08/06/98
Reported: 08/12/98

QC Batch Number: GC080698BTEX02A
Instrument ID: GCHP02

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	94

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-3322, Oakland	Sampled: 07/29/98
6747 Sierra Court Suite J	Sample Descript: MW-1	Received: 07/30/98
Dublin, CA 94568	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 08/04/98
Attention: Deanna Harding	Lab Number: 9807H63-04	Reported: 08/12/98

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**50000**	**370000**
Methyl t-Butyl Ether	2500	N.D.
Benzene	**500**	**19000**
Toluene	**500**	**14000**
Ethyl Benzene	**500**	**5800**
Xylenes (Total)	**500**	**15000**
Chromatogram Pattern:		**GAS**

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 #1849

Mike Gregory
Project Manager

Sequoia Analytical

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Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-3322, Oakland	Sampled: 07/29/98
6747 Sierra Court Suite J	Sample Descript: MW-2	Received: 07/30/98
Dublin, CA 94568	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 08/04/98
Attention: Deanna Harding	Lab Number: 9807H63-02	Reported: 08/12/98

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	500	7600
Methyl t-Butyl Ether	25	82
Benzene	5.0	15
Toluene	5.0	21
Ethyl Benzene	5.0	150
Xylenes (Total)	5.0	480
Chromatogram Pattern:		GAS

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	87

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

SEQUOIA ANALYTICAL - ELAP #1849

Mike Gregory
Project Manager

Sequoia Analytical

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Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-3322, Oakland	Sampled: 07/29/98
6747 Sierra Court Suite J	Sample Descript: MW-3	Received: 07/30/98
Dublin, CA 94568	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 08/04/98
Attention: Deanna Harding	Lab Number: 9807H63-03	Reported: 08/12/98

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	5000	58000
Methyl t-Butyl Ether	250	4100
Benzene	50	4100
Toluene	50	700
Ethyl Benzene	50	1300
Xylenes (Total)	50	4200
Chromatogram Pattern:		GAS

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	93

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

SEQUOIA ANALYTICAL - ELAP #1849

Mike Gregory
Project Manager

Sequoia Analytical

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Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-3322, Oakland	Received: 07/30/98
6747 Sierra Court Suite J		
Dublin, CA 94568	Lab Proj. ID: 9807H63	Reported: 08/12/98
Attention: Deanna Harding		

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 8 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

TPH-GAS/BTEX:

Sample 9807H63-02 was diluted 10-fold.
Sample 9807H63-03 was diluted 100-fold.
Sample 9807H63-04 was diluted 1000-fold.

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 9-3322, Oakland

QC Sample Group: 9807H63-01

Reported: Aug 12, 1998

QUALITY CONTROL DATA REPORT

Matrix:	Liquid
Method:	EPA 8015
Analyst:	N. Herrera
ANALYTE	Gasoline

QC Batch #: GC080698BTEX02A

Sample No.:	GW9807E98-3
Date Prepared:	8/6/98
Date Analyzed:	8/6/98
Instrument I.D.#:	GCHP02
Sample Conc., ug/L:	N.D.
Conc. Spiked, ug/L:	250
Matrix Spike, ug/L:	220
% Recovery:	86
Matrix Spike Duplicate, ug/L:	210
% Recovery:	85
Relative % Difference:	1.2
RPD Control Limits:	0-25

LCS Batch#: GWLCS080698A

Date Prepared:	8/6/98
Date Analyzed:	8/6/98
Instrument I.D.#:	GCHP02
Conc. Spiked, ug/L:	250
LCS Recovery, ug/L:	210
LCS % Recovery:	85

Percent Recovery Control Limits:

MS/MSD	60-140
LCS	70-130

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

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.

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager

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1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

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

Client Project ID: Chevron 9-3322, Oakland
Matrix: Liquid
Work Order #: 9807H63 -02-04

Reported: Aug 12, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	08V8035	08V8035	08V8035	08V8035
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	L. Hall	L. Hall	L. Hall	L. Hall
LCS/LCSD #:	LCS080498	LCS080498	LCS080498	LCS080498
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	8/4/98	8/4/98	8/4/98	8/4/98
Analyzed Date:	8/4/98	8/4/98	8/4/98	8/4/98
Instrument I.D.#:	-	-	-	-
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	20 µg/L
Result:	19	19	19	20
LCS % Recovery:	95	95	95	100
Dup. Result:	19	19	19	20
LCSD % Recov.:	95	95	95	100
RPD:	0.0	0.0	0.0	0.0
RPD Limit:	0-25	0-25	0-25	0-25

MS/MSD LCS Control Limits	80-120	80-120	80-120	80-120

SEQUOIA ANALYTICAL
Elap #1849

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.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Chevron Facility # 9-3322 Job#: 6433.80

Address: 7225 Bancroft Ave. Date: 8-13-98

City: Oakland, CA Sampler: F. Cline

Well ID MW-1 Well Condition: clear

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

Total Depth 36.50 ft.

Depth to Water 18.40 ft.

Vol Factor (VF)	2"	3"	4"	= 0.17
	6"	12"		= 1.50

= 0.38

18.10 x VF 0.17 = 3 X 3 (case volume) = Estimated Purge Volume: 9.23 (gal.)

Purge Equipment:
- Disposable Bailer
- Bailer
- Stack
- Suction
- Grundfos
- Other: ____

Sampling Equipment:
- Disposable Bailer
- Bailer
- Pressure Bailer
- Grab Sample
- Other: ____

Starting Time: 839 Weather Conditions: Clear Warm

Sampling Time: 847 Water Color: Clear Odor: Mild

Purging Flow Rate: 1.5 gpm. Sediment Description: None

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

Time	Volume	pH	Conductivity µmhos/cm	Temperature	D.O.	ORP	Alkalinity
841	3	7.04	1236	20.0			
843	6	7.05	1276	20.0			
845	9	7.05	1270	20.0			
847	10	7.04	1280	20.0			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-1	3 x 40m/VOA	Y	HCL	SEQUOIA	TPH-Gas/BTEX/MTBE

COMMENTS: ____

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Chevron Facility # 9-3322 Job#: 6433.80

Address: 7225 Bancroft Ave. Date: 8-13-98

City: Oakland, CA Sampler: F. Cline

Well ID MW-2 Well Condition: clear

Well Diameter 2 in. Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)

Total Depth 31.5 ft.

Depth to Water 12.41 ft.

Vol Factor (VF)	2"	3"	4"	= 0.17
	6"	12"		= 1.50

= 0.38

19.09 x VF 0.17 = 3.2 X 3 (case volume) = Estimated Purge Volume: 9.7 (gal.)

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

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

Starting Time: 8:09

Sampling Time: 817

Purging Flow Rate: 1.6 gpm

Did well de-water? No

Weather Conditions: clear - warm.

Water Color: clear Odor: n/a

Sediment Description: n/a

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

Time	Volume	pH	Conductivity µmhos/cm	Temperature	D.O.	ORP	Alkalinity
811	3.2	7.39	478	21.3			
813	6.4	7.14	476	21.1			
815	9.6	7.17	478	21.1			
817	10.5	7.16	475	21.1			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-2	3 x 40m/VOA	Y	HCL	SEQUOIA	TPH-Gas/BTEX/MTBE

COMMENTS: _____

9/97-fieldst.frm

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Chevron Facility # 9-3322 Job#: 6433.80

Address: 7225 Bancroft Ave. Date: 8-13-9E

City: Oakland, CA Sampler: F. Cline

Well ID MW-3 Well Condition: Clay

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

Total Depth 34.5 ft.

Depth to Water 18.22 ft.

Vol. Factor (VF)	2"	3"	4"	= 0.38
	6"	12"	= 1.50	

16.28 x VF 0.17 = 2.8 X 3 (case volume) = Estimated Purge Volume: 8.3 (gal.)

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

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

Starting Time: 8:23 Weather Conditions: clear warm

Sampling Time: 8:31 Water Color: Clear Odor: Mild

Purging Flow Rate: 1.5 gpm. Sediment Description: Clear

Did well de-water? NO If yes; Time: Volume: (gal.)

Time	Volume	pH	Conductivity µmhos/cm	Temperature	D.O.	ORP	Alkalinity
8:25	~~1.5~~ 3	6.98	961	20.3			
8:27	~~3~~ 6	6.97	976	20.2			
8:29	~~4.5~~ 9	6.97	963	20.2			
8:31	~~6~~ 12	6.98	965	20.3			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-3	3 x 40m/VOA	Y	HCL	SEQUOIA	TPH-Gas/BTEX/MTBE

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: 9-3322
Facility Address: 7225 Bancroft Ave. Oakland, CA
Consultant Project Number: 6433.80
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 Analytical Service Code: ZZ02790
Laboratory Service Order # 9098256
Samples Collected by (Name): F. Cline
Collection Date: 8-13-98
Signature:

9808967

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed: TPH Gas + BTEX w/MTBE (8020)	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)					Remarks
TB-LB	01	2	W	TB	—	HCl	Y	X												DO NOT BILL TB-LB ANALYSIS
MW-2	02	3		G	827			X												
MW-3	03	3			831			X												
MW-1	04	3			841			X												

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	G-R Inc.	8/14/98 0756		G-R Inc.	
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time 8/14/98 0750

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

Sequoia Analytical

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

Attention: Deanna Harding

Client Proj. ID: Chevron 9-3322, Oakland, CA
Sample Descript: TB-LB
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9808967-01

Sampled: 08/13/98
Received: 08/14/98

Analyzed: 08/19/98
Reported: 08/26/98

QC Batch Number: GC081998802007A
Instrument ID: GC-7

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	5.0	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	75

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	Client Proj. ID: Chevron 9-3322, Oakland	Sampled: 08/13/98
6747 Sierra Court Suite J	Sample Descript: MW-1	Received: 08/14/98
Dublin, CA 94568	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 08/20/98
Attention: Deanna Harding	Lab Number: 9808967-04	Reported: 08/26/98

QC Batch Number: GC082098802007A
Instrument ID: GC-7

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**10000**	**120000**
Methyl t-Butyl Ether	1000	N.D.
Benzene	**100**	**19000**
Toluene	**100**	**16000**
Ethyl Benzene	**100**	**2900**
Xylenes (Total)	**100**	**14000**
Chromatogram Pattern:		**GAS**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	79

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-3322, Oakland	Sampled: 08/13/98
6747 Sierra Court Suite J	Sample Descript: MW-2	Received: 08/14/98
Dublin, CA 94568	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 08/19/98
Attention: Deanna Harding	Lab Number: 9808967-02	Reported: 08/26/98

QC Batch Number: GC081998802007A
Instrument ID: GC-7

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	1000	14000
Methyl t-Butyl Ether	5.0	32
Benzene	10	26
Toluene	10	80
Ethyl Benzene	10	500
Xylenes (Total)	10	2100
Chromatogram Pattern:		GAS

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	101

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-3322, Oakland	Sampled: 08/13/98
6747 Sierra Court Suite J	Sample Descript: MW-3	Received: 08/14/98
Dublin, CA 94568	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 08/19/98
Attention: Deanna Harding	Lab Number: 9808967-03	Reported: 08/26/98

QC Batch Number: GC081998802007A
Instrument ID: GC-7

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	10000	43000
Methyl t-Butyl Ether	1000	2300
Benzene	100	6800
Toluene	100	1900
Ethyl Benzene	100	1600
Xylenes (Total)	100	6800
Chromatogram Pattern:		GAS

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	99

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-3322, Oakland	Received: 08/14/98
6747 Sierra Court Suite J		
Dublin, CA 94568	Lab Proj. ID: 9808967	Reported: 08/26/98
Attention: Deanna Harding		

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 6 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

TPH-GAS/BTEX:
Sample 9808967-02 was diluted 20-fold.
Sample 9808967-03 was diluted 200-fold.
Sample 9808967-04 was diluted 200-fold.

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager

Sequoia Analytical

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

Client Project ID: Chevron 9-3322, Oakland
Matrix: Liquid
Work Order #: 9808967 -01-03

Reported: Aug 27, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC081998802007A	GC081998802007A	GC081998802007A	GC081998802007A	GC081998802007A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	S.L.	S.L.	S.L.	S.L.	S.L.
MS/MSD #:	98080419	98080419	98080419	98080419	-
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	-
Prepared Date:	8/19/98	8/19/98	8/19/98	8/19/98	-
Analyzed Date:	8/19/98	8/19/98	8/19/98	8/19/98	-
Instrument I.D.#:	GC7	GC7	GC7	GC7	-
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	-
Result:	25	25	18	57	-
MS % Recovery:	125	123	91	95	-
Dup. Result:	16	17	17	53	-
MSD % Recov.:	82	85	87	88	-
RPD:	43.9	38.1	5.7	7.3	-
RPD Limit:	0-25	0-25	0-25	0-25	-
LCS #:	LCS081998	LCS081998	LCS081998	LCS081998	LCS081998
Prepared Date:	8/19/98	8/19/98	8/19/98	8/19/98	8/19/98
Analyzed Date:	8/19/98	8/19/98	8/19/98	8/19/98	8/19/98
Instrument I.D.#:	GC7	GC7	GC7	GC7	GC7
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	500 µg/L
LCS Result:	16	17	18	55	403
LCS % Recov.:	81	83	90	91	81
MS/MSD	60-140	60-140	60-140	60-140	
LCS	70-130	70-130	70-130	70-130	60-140
Control Limits					

SEQUOIA ANALYTICAL
Elap #2142

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.

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

Sequoia Analytical

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1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Gettler Ryan/Geostrategies	Client Project ID:	Chevron 9-3322, Oakland
6747 Sierra Court, Ste J	Matrix:	Liquid
Dublin, CA 94568		
Attention: Deanna Harding	Work Order #:	9808967-04

Reported: Aug 27, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC082098802007A	GC082098802007A	GC082098802007A	GC082098802007A	GC082098802007A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	S.L.	S.L.	S.L.	S.L.	S.L.
MS/MSD #:	98080471	98080471	98080471	98080471	-
Sample Conc.:	1817	90	26	49	-
Prepared Date:	8/20/98	8/20/98	8/20/98	8/20/98	-
Analyzed Date:	8/20/98	8/20/98	8/20/98	8/20/98	-
Instrument I.D.#:	GC7	GC7	GC7	GC7	-
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	-
Result:	499	105	46	106	-
MS % Recovery:	-	79	98	97	-
Dup. Result:	479	107	47	108	-
MSD % Recov.:	-	88	102	100	-
RPD:	4.1	1.9	2.2	1.9	-
RPD Limit:	0-25	0-25	0-25	0-25	-
LCS #:	LCS082098	LCS082098	LCS082098	LCS082098	LCS082098
Prepared Date:	8/20/98	8/20/98	8/20/98	8/20/98	8/20/98
Analyzed Date:	8/20/98	8/20/98	8/20/98	8/20/98	8/20/98
Instrument I.D.#:	GC7	GC7	GC7	GC7	GC7
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	500 µg/L
LCS Result:	17	17	18	56	419
LCS % Recov.:	84	86	92	94	84
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	

SEQUOIA ANALYTICAL
Elap #2142

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.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference