ENVIRONMENTAL
PROTECTION

98 MAY -5 PM 2:35

Chevron

Chevron Products Company
6001 Bollinger Canyon Road
Building L
San Ramon, CA 94583
P.O. Box 6004
San Ramon, CA 94583-0904

Marketing – Sales West
Phone 510 842-9500

May 1, 1998

Ms. Pam Evans
Alameda County Health Care Services
Division of Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Chevron Service Station #9-4800
1700 Castro Street
Oakland, California

Dear Ms. Evans:

Enclosed is the First Quarter Groundwater Monitoring and Sampling Report for 1998 that was prepared by our consultant Gettler-Ryan Inc. for the above noted facility. The groundwater samples were analyzed for the presence of TPH-g, TPH-d, BTEX and MtBE. All wells are sampled quarterly.

Monitoring well MW-1 showed a decrease in the benzene constituent while wells MW-2 and MW-3 showed an increase from the previous sampling event. The TPH-d constituent detected in wells MW1 and MW-2 indicated the presence of an unidentified hydrocarbon.

Depth to ground water varied from 23.57 feet to 24.90 feet below grade with a direction of flow westerly.

Chevron will continue to monitor as noted above. For the next sampling event, the EPA Method 8260 will be used to confirm the presence of MtBE in well MW-2. If you have any questions call me at (510) 842-9136.

Sincerely,
CHEVRON PRODUCTS COMPANY

Philip R. Briggs
Site Assessment and Remediation Project Manager

Enclosure

Cc. Mr. Bill Scudder, Chevron

GETTLER-RYAN INC.

April 28, 1998 Job #6383.80

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

Re: First Quarter 1998 Groundwater Monitoring & Sampling Report
Chevron Service Station #9-4800
1700 Castro Street
Oakland, California

Dear Mr. Briggs:

This report documents the quarterly groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R). On March 18, 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. 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 this event are also attached. The samples were analyzed by Sequoia Analytical. Analytical results are presented in Table 1. The chain of custody document 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,

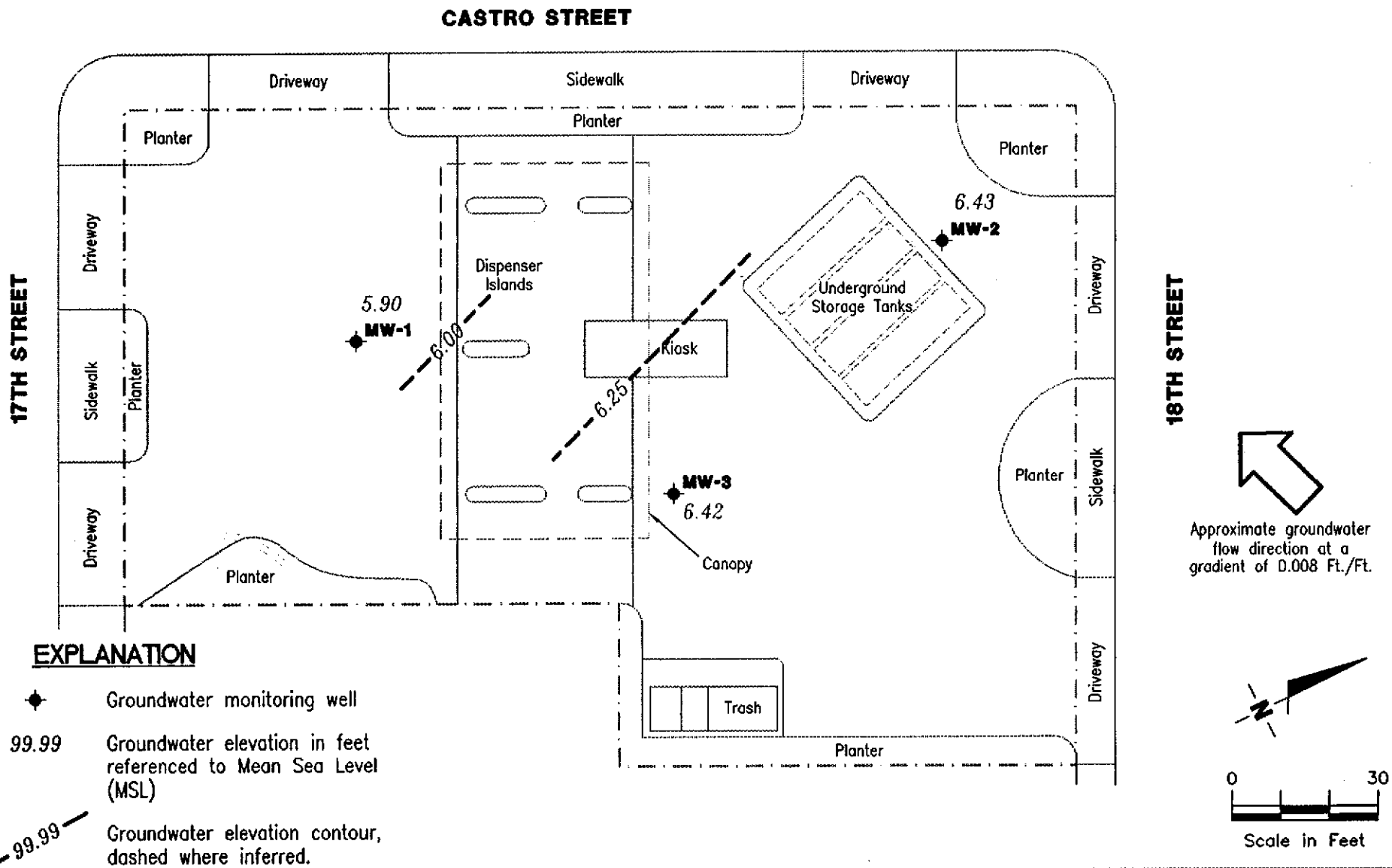
Deanna L. Harding
Project Coordinator

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

REGISTERED GEOLOGIST
BARBARA SIEMINSKI
No. 6676
STATE OF CALIFORNIA

DLH/bs/dlh
6383.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. 9-4800
1700 Castro Street
Oakland, California

FIGURE
1

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
6383		March 18, 1998	

Table 1. Water Level Data and Groundwater Analytical Results - Chevron Service Station #9-4800, 1700 Castro Street, Oakland, California

Well ID/ TOC(ft)	Date Sampled	Depth to Water (ft)	GWE (msl)	Product Thickness (ft)	TPH(D)	TPH(G)	B	T	E	X	MTBE
					<--------		ppb				-------->
MW-1											
30.75[1]	06/04/97	25.82	4.39	0.00	71[2]	890	100	110	29	150	<10
	09/16/97	25.90	4.85	0.00	75[2]	1,600	210	210	60	250	<10
	12/17/97	25.87	4.88	0.00	65[2]	940	120	100	41	160	<25
	03/18/98	**24.85**	**5.90**	**0.00**	**77[2]**	**530**	**91**	**39**	**22**	**65**	**6.8**
MW-2											
30.00[1]	06/04/97	24.87	5.13	0.00	4,000[2]	13,000	790	30	420	1,700	4,000
	09/16/97	24.94	5.06	0.00	2,200[2]	4,000	360	9.7	210	460	1,500
	12/17/97	24.82	5.18	0.00	2,100[2]	4,100	380	<10	200	460	2,100
	03/18/98	**23.57**	**6.43**	**0.00**	**3,700[2]**	**8,400**	**1,800**	**<50**	**350**	**630**	**13,000**
MW-3											
31.32[1]	06/04/97	26.05	5.27	0.00	<50	190	26	20	1.5	16	8.2
	09/16/97	26.15	5.17	0.00	<50	270	58	53	6.1	30	21
	12/17/97	26.10	5.22	0.00	<50	290	50	54	8.1	37	21
	03/18/98	**24.90**	**6.42**	**0.00**	**<50**	**390**	**140**	**33**	**4.6**	**30**	**94**
Trip Blank	06/04/97	—	—	—	—	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	09/16/97	—	—	—	—	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	12/17/97	—	—	—	—	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	03/18/98	**—**	**—**	**—**	**—**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<2.5**

Table 1. Water Level Data and Groundwater Analytical Results - Chevron Service Station #9-4800, 1700 Castro Street, Oakland, California (continued)

EXPLANATION:

TOC = Top of casing elevation
(ft) = feet
GWE = Groundwater elevation
(msl) = Referenced relative to mean sea level
TPH(D) = Total Petroleum Hydrocarbons as diesel
TPH(G) = Total Petroleum Hydrocarbons as gasoline
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
MTBE = Methyl tertiary-butyl ether
ppb = Parts per billion
— = Not analyzed, not measured

ANALYTICAL METHODS:

EPA Method 8015 Modified for TPH as Diesel
EPA Method 8015 for TPH as Gasoline
EPA Method 8020 for BTEX & MTBE

NOTES:

[1] MW-1 through MW-3 were surveyed on June 18, 1997, by Virgil Chavez Land Surveying (PLS #6323). Benchmark used for TOC is the back of sidewalk on 18th Street as reference line. Benchmark Elevation = 29.65' (msl).

[2] Laboratory report indicates unidentified hydrocarbons C9-C24.

6383.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 # 9-4800 Job#: 6383.80

Address: 1700 Castro Street Date: 3-18-92

City: Oakland, CA Sampler: F.Cline

Well ID MW- #1 Well Condition: clay

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

Total Depth 30.3 ft.

Depth to Water 24.85 ft.

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

5.45 X VF 0.17 = 0.93 X 3 (case volume) = Estimated Purge Volume: 2.77 (gal.)

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

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

Starting Time: 1121 Weather Conditions: Clear warm

Sampling Time: _____ Water Color: _____ Odor: _____

Purging Flow Rate: N/A gpm. Sediment Description: _____

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)
1124	1	6.73	1142	20.9			
1127	2	6.76	1185	20.9			
1130	3	6.87	1183	20.6			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW- 1	3 x 40m/VOA	Y	HCL	SEQUOIA	TPH-Gas/BTEX/MTBE
MW- 1	2 X Liter	Y	NONE	SEQUOIA	TPH-Diesel

COMMENTS: _____

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Chevron Facility # 9-4800 Job#: 6383.80

Address: 1700 Castro Street Date: 3-18-9E

City: Oakland, CA Sampler: F.Cline

Well ID MW-2 Well Condition: okay

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

Total Depth 30.15 ft.

Depth to Water 23.57 ft.

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

6.58 X VF 0.17 = 1.1 X 3 (case volume) = Estimated Purge Volume: 3.4 (gal.)

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

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

Starting Time: 1143 Weather Conditions: Clear warm.

Sampling Time: 1151 Water Color: Clear Odor: None

Purging Flow Rate: NA gpm. Sediment Description: Light Silt

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)
1145	1	6.78	826	21.0			
1148	2	6.78	916	21.0			
1151	3	6.80	926	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
MW-2	2 X Liter	Y	NONE	SEQUOIA	TPH-Diesel

COMMENTS:

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Chevron Facility # 9-4800 Job#: 6383.80

Address: 1700 Castro Street Date: 3-18-98

City: Oakland, CA Sampler: F.Cline

Well ID MW- 3 Well Condition: Okay

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

Total Depth 30.23 ft.

Depth to Water 24.90 ft.

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

5.33 X VF 0.17 = 0.91 X 3 (case volume) = Estimated Purge Volume: 2.7 (gal.)

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

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

Starting Time: 1104 Weather Conditions: clear - warm

Sampling Time: 1113 Water Color: Odor:

Purging Flow Rate: NA gpm. Sediment Description:

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)
1107	1	6.77	1073	20.6			
1110	2	6.76	1103	20.4			
1113	3	6.86	1083	20.4			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW- 3	3 x 40m/VOA	Y	HCL	SEQUOIA	TPH-Gas/BTEX/MTBE
MW- 3	2 X Liter	Y	NONE	SEQUOIA	TPH-Diesel

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 #9-4800
Facility Address 1700 CASTRO STREET, OAKLAND, CA
Consultant Project Number 6383
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) (510) 842-9136
Laboratory Name SEQUOIA Service Code: ZZ02790
Laboratory Service Order #9051783
Samples Collected by (Name) F. Clin
Collection Date 3-18-98
Signature [signature]

Analyses To Be Performed 9803E39

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 (8015) (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		✓												DO NOT BILL TB-LB ANALYSIS ~~Confirm highest hit of (8020) MTBE by 8260~~
MW-3	02	5	↓	G	1113	↓ Non		✓	✓											TPGBMW
MW-1	03	5	↓	↓	1130	↓		✓	✓											WC
MW-2	04	5	↓	↓	1151			✓	✓											

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
[signature]	G-R Inc.	3-19-98 / 08:00	D. Harding	G-R Inc.	3/19/98
D. Harding	GR	3/19/98	[signature]	Sequoia	3/20/98 2:00
[signature]		3/20	Received For Laboratory By (Signature): [signature]		3/20/98 1632

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

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-4800, Oakland	Sampled: 03/18/98
6747 Sierra Court Suite J	Sample Descript: TB-LB	Received: 03/20/98
Dublin, CA 94568	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 03/31/98
Attention: Deanna Harding	Lab Number: 9803E39-01	Reported: 04/02/98

QC Batch Number: GC033198802009A
Instrument ID: GCHP09

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	100

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

SEQUOIA ANALYTICAL - ELAP #1271

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, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-4800, Oakland	Sampled: 03/18/98
6747 Sierra Court Suite J	Sample Descript: MW-1	Received: 03/20/98
Dublin, CA 94568	Matrix: LIQUID	Extracted: 03/24/98
	Analysis Method: EPA 8015 Mod	Analyzed: 03/25/98
Attention: Deanna Harding	Lab Number: 9803E39-03	Reported: 04/02/98

QC Batch Number: GC0324980HBPEXB
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	77
Chromatogram Pattern:	C9-C24	Unid.-HC

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	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

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-4800, Oakland	Sampled: 03/18/98
6747 Sierra Court Suite J	Sample Descript: MW-1	Received: 03/20/98
Dublin, CA 94568	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 03/31/98
Attention: Deanna Harding	Lab Number: 9803E39-03	Reported: 04/02/98

QC Batch Number: GC033198802009A
Instrument ID: GCHP09

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	530
Methyl t-Butyl Ether	2.5	6.8
Benzene	0.50	91
Toluene	0.50	39
Ethyl Benzene	0.50	22
Xylenes (Total)	0.50	65
Chromatogram Pattern:		Gas

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	108

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

SEQUOIA ANALYTICAL - ELAP #1271

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, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-4800, Oakland	Sampled: 03/18/98
6747 Sierra Court Suite J	Sample Descript: MW-2	Received: 03/20/98
Dublin, CA 94568	Matrix: LIQUID	Extracted: 03/24/98
	Analysis Method: EPA 8015 Mod	Analyzed: 03/26/98
Attention: Deanna Harding	Lab Number: 9803E39-04	Reported: 04/02/98

QC Batch Number: GC0324980HBPEXB
Instrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	100	3700
Chromatogram Pattern:	C9-C24	Unid.-HC

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	82

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, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-4800, Oakland	Sampled: 03/18/98
6747 Sierra Court Suite J	Sample Descript: MW-2	Received: 03/20/98
Dublin, CA 94568	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 03/31/98
Attention: Deanna Harding	Lab Number: 9803E39-04	Reported: 04/02/98

QC Batch Number: GC033198802009A
Instrument ID: GCHP09

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**5000**	**8400**
Methyl t-Butyl Ether	**250**	**13000**
Benzene	**50**	**1800**
Toluene	50	N.D.
Ethyl Benzene	**50**	**350**
Xylenes (Total)	**50**	**630**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	104

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

SEQUOIA ANALYTICAL - ELAP #1271

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, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-4800, Oakland	Sampled: 03/18/98
6747 Sierra Court Suite J	Sample Descript: MW-3	Received: 03/20/98
Dublin, CA 94568	Matrix: LIQUID	Extracted: 03/23/98
	Analysis Method: EPA 8015 Mod	Analyzed: 03/25/98
Attention: Deanna Harding	Lab Number: 9803E39-02	Reported: 04/02/98

QC Batch Number: GC0323980HBPEXC
Instrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	81

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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404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Gettler Ryan/Geostrategies	Client Proj. ID: Chevron 9-4800, Oakland	Sampled: 03/18/98
6747 Sierra Court Suite J	Sample Descript: MW-3	Received: 03/20/98
Dublin, CA 94568	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 03/31/98
Attention: Deanna Harding	Lab Number: 9803E39-02	Reported: 04/02/98

QC Batch Number: GC033198802009A
Instrument ID: GCHP09

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**50**	**390**
Methyl t-Butyl Ether	**2.5**	**94**
Benzene	**0.50**	**140**
Toluene	**0.50**	**33**
Ethyl Benzene	**0.50**	**4.6**
Xylenes (Total)	**0.50**	**30**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	108

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

SEQUOIA ANALYTICAL - ELAP #1271

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 9-4800, Oakland
Lab Proj. ID: 9803E39

Received: 03/20/98
Reported: 04/02/98

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 12 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

TPGBMW: Sample 9803E39-04 was diluted 100-fold.

TPHD: Sample 9803E39-04 was diluted 2-fold.

SEQUOIA ANALYTICAL

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Project Manager

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

Client Project ID: Chevron 9-4800, Oakland
Matrix: Liquid
Work Order #: 9803E39 -01-04

Reported: Apr 2, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC033198802009A	GC033198802009A	GC033198802009A	GC033198802009A	GC033198802009A
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:	D. Newcomb	D. Newcomb	D. Newcomb	D. Newcomb	D. Newcomb
MS/MSD #:	8032067	8032067	8032067	8032067	8032067
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	3/31/98	3/31/98	3/31/98	3/31/98	3/31/98
Analyzed Date:	3/31/98	3/31/98	3/31/98	3/31/98	3/31/98
Instrument I.D.#:	HP9	HP9	HP9	HP9	HP9
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	350 µg/L
Result:	19	21	22	67	340
MS % Recovery:	95	105	110	112	97
Dup. Result:	19	21	22	66	330
MSD % Recov.:	95	105	110	110	94
RPD:	0.0	0.0	0.0	1.5	3.0
RPD Limit:	0-25	0-25	0-25	0-20	0-50
LCS #:	LCS033198	LCS033198	LCS033198	LCS033198	LCS033198
Prepared Date:	3/31/98	3/31/98	3/31/98	3/31/98	3/31/98
Analyzed Date:	3/31/98	3/31/98	3/31/98	3/31/98	3/31/98
Instrument I.D.#:	HP9	HP9	HP9	HP9	HP9
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	350 µg/L
LCS Result:	20	22	22	68	340
LCS % Recov.:	100	110	110	113	97
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	70-130

SEQUOIA ANALYTICAL
Elap #1271

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

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Gettler Ryan/Geostrategies	Client Project ID:	Chevron 9-4800, Oakland	
6747 Sierra Court, Ste J	Matrix:	Liquid	
Dublin, CA 94568			
Attention: Deanna Harding	Work Order #:	9803E39-02	Reported: Apr 2, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Diesel
QC Batch#:	GC0323980HBPEXC
Analy. Method:	EPA 8015M
Prep. Method:	EPA 3520
Analyst:	G. Fish
MS/MSD #:	BLK032398
Sample Conc.:	N.D.
Prepared Date:	3/23/98
Analyzed Date:	3/24/98
Instrument I.D.#:	GCHP5
Conc. Spiked:	1000 µg/L
Result:	790
MS % Recovery:	79
Dup. Result:	790
MSD % Recov.:	79
RPD:	0.0
RPD Limit:	0-50

LCS #:	
Prepared Date:	
Analyzed Date:	
Instrument I.D.#:	
Conc. Spiked:	
LCS Result:	
LCS % Recov.:	

MS/MSD	50-150
LCS	60-140
Control Limits	

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager

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Gettler Ryan/Geostrategies	Client Project ID:	Chevron 9-4800, Oakland	
6747 Sierra Court, Ste J	Matrix:	Liquid	
Dublin, CA 94568			
Attention: Deanna Harding	Work Order #:	9803E39-03, 04	Reported: Apr 2, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Diesel
QC Batch#:	GC0324980HBPEXB
Analy. Method:	EPA 8015M
Prep. Method:	EPA 3510
Analyst:	A. Porter
MS/MSD #:	9803E3903
Sample Conc.:	77
Prepared Date:	3/24/98
Analyzed Date:	3/25/98
Instrument I.D.#:	GCHP4
Conc. Spiked:	1000 µg/L
Result:	820
MS % Recovery:	74
Dup. Result:	880
MSD % Recov.:	80
RPD:	7.1
RPD Limit:	0-50

LCS #:	BLK032498
Prepared Date:	3/24/98
Analyzed Date:	3/25/98
Instrument I.D.#:	GCHP4
Conc. Spiked:	1000 µg/L
LCS Result:	730
LCS % Recov.:	73

MS/MSD	50-150
LCS	60-140
Control Limits	

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager

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