

59 FEB 26 PM 1:31

February 25, 1999

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

Ms. Eva Chu Alameda County Health Care Services Division of Environmental Protection 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 Philip R. Briggs
Project Manager
Site Assessment & Remediation
Phone 925 842-9136
Fax 925 842-8370

Re: Chevron Service Station #9-4800

1700 Castro Street Oakland, California

Dear Ms. Chu:

Enclosed is the Fourth Quarter Groundwater Monitoring and Sampling Report for 1998 that was prepared by our consultant Blaine Tech Services Inc. for the above noted facility. This is a change in consultants (Gettler-Ryan Inc.) from the previous sampling event. The groundwater samples were analyzed for the presence of TPH-g, TPH-d, BTEX and MtBE. All wells are sampled quarterly.

Monitoring wells MW-1 and MW-2 showed a decrease in the benzene constituent while well MW-3 showed an increase from the previous sampling event. The TPH-d constituent detected in wells MW1, MW-2 and MW-3 indicated the presence of an unidentified hydrocarbon. To confirm the presence of MtBE, EPA Method 8260 was used to analyze for MtBE only in monitoring well MW-2, since this well has the highest concentration of the three wells onsite. MtBE was confirmed by this method.

Depth to ground water varied from 24.69 feet to 25.91 feet below grade with a direction of flow westerly.

A Work Plan and Work Plan Addendum was recently submitted for the installation of additional groundwater monitoring wells to further delineate the lateral extent of MtBE in the groundwater beneath the site. Chevron is awaiting your concurrence to the submitted Work Plan and Work Plan Addendum.

February 25, 1999 Ms. Eva Chu Chevron Service Station #9-4800 Page 2

If you have any questions to the submitted Work Plan/Addendum or this report, call me at (925) 842-9136.

Sincerely,

CHEVRON PRODUCTS COMPANY

Philip R. Briggs

Site Assessment and Remediation Project Manager

Enclosure

Cc. Mr. Bill Scudder, Chevron



1680 ROGERS AVENUE SAN JOSE, CA 95112-1105 (408) 573-7771 FAX (408) 573-0555 PHONE

February 23, 1999

Phil Briggs Chevron U.S.A. Products Company P.O. Box 6004 San Ramon, CA 94583-0904

#### 4th Quarter 1998 Monitoring at 9-4800

Fourth Quarter 1998 Groundwater Monitoring at Chevron Service Station Number 9-4800 1700 Castro St. Oakland, CA

Monitoring Performed on December 9, 1998

#### Groundwater Sampling Report 981209-Y-3

This report covers the routine monitoring of groundwater wells at this Chevron facility. Blaine Tech Services, Inc.'s work at the site includes inspection, gauging, evacuation, purgewater containment, sample collection and sample handling in accordance with standard procedures that conform to Regional Water Quality Control Board requirements.

Routine field data collection includes depth to water, total well depth, thickness of any separate immiscible layer, water column volume, calculated volume of a three-case volume purge, elapsed evacuation time, total volume of water removed, and standard water parameter instrument readings. Sample material is collected, contained, stored, and transported to the laboratory in conformance with EPA standards. Purgewater is, likewise, collected and transported to McKittrick Waste Treatment Site for disposal.

Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of WELL DATA AND ANALYTICAL RESULTS. The full analytical report for the most recent samples is located in the Analytical Appendix. The table also contains new groundwater elevation calculations taken from the computer plotted gradient

map which is located in the Professional Engineering Appendix.

At a minimum, Blaine Tech Services, Inc. field personnel are certified upon completion of a forty-hour Hazardous Materials and Emergency Response training course per 29 CFR 1910.120. Field personnel are also enrolled in annual eight hour refresher courses.

Blaine Tech Services, Inc. conducts sampling and documentation assignments of this type as an independent third party. In order to avoid compromising the objectivity necessary for the proper and disinterested performance of this work, Blaine Tech Services, Inc. concentrates on objective data collection and does not participate in the interpretation of analytical results, the definition of geological or hydrological conditions, the formulation of recommendations, or the marketing of remedial systems.

Please call if you have any questions.

Yours truly,

Christine Lillie Project Coordinator

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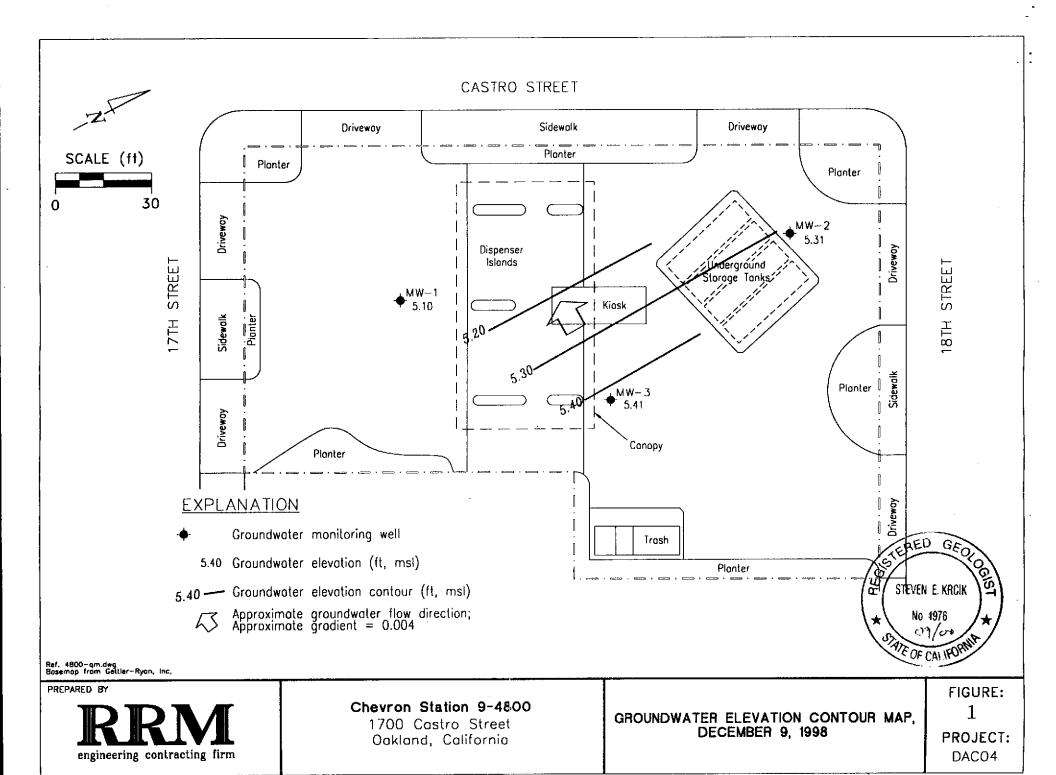
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attachments: Professional Engineering Appendix

Cumulative Table of Well Data and Analytical Results

Analytical Appendix Field Data Sheets

# Professional Engineering Appendix



# Table of Well Data and Analytical Results

#### Cumulative Table of Well Data and Analytical Results

Vertical Mea	asurements	are in feet.	Analyt	ical results are in parts po	er billion (ppb)						
DATE	Well Head Elev	Ground Water Elev.	Depth To Water	Notes	TPH- Gasoline	Benzene	Toluene	Ethyl- Benzene	Xylene	MTBE	TPH- Diesel
MW-1											
06/04/97	30.75	4.39	25.82		890	100	· 110	29	150	<10	71*
09/16/97	30.75	4.85	25.90		1600	210	210	60	250	<10	75*
12/17/97	30.75	4.88	25.87		940	120	100	41	160	<25	65*
03/18/98	30.75	5.90	24.85		530	91	39	22	65	6.8	77*
06/28/98	30.75	5.92	24.83		1100	220	140	37	120	14	140*
09/07/98	30.75	5.56	25.19		1700	530	86	84	240	49	280*
12/09/98	30.75	5.10	25.65		1700	240	130	100	270	32	240*
MW-2											
06/04/97	30.00	5.13	24.87		13,000	790	30	420	1700	4000	4000*
09/16/97	30.00	5.06	24.94		4000	360	9.7	210	460	1500	2200*
12/17/97	30.00	5.18	24.82		4100	380	<10	200	460	2100	2100*
03/18/98	30.00	6.43	23.57		8400	1800	<50	350	630	13,000	3700*
06/28/98	30.00	6.21	23.79	EPA 8260	9300	740	340	710	2300	3800	4400*
09/07/98	30.00	5.78	24.22		9900	1000	150	640	1800	4500	3100*
09/07/98	30.00	5.78	24.22	Confirmation run						4100	
12/09/98	30.00	5.31	24.69		8500	860	74	610	960	2600	1900*
12/09/98	30.00	5.31	24.69	Confirmation run				<del></del>		2600	
MW-3											
06/04/97	31.32	5.27	26.05	••	190	26	20	1.5	16	8.2	<50
09/16/97	31.32	5.17	26.15		270	58	53	6.1	30	21	<50
12/17/97	31.32	5.22	26.10		290	50	54	8.1	37	21	<50
03/18/98	31.32	6.42	24.90	to 49	390	140	33	4.6	30	94	<50
06/28/98	31.32	6.39	24.93		290	90	11	1.6	13	150	<50
09/07/98	31.32	5.97	25.35	_2	170	46	20	4.3	19	120	<50
12/09/98	31.32	5.41	25.91		660	120	93	22	72	150	55*

<sup>\*</sup> Chromatogram pattern indicates an unidentified hydrocarbon.

#### Cumulative Table of Well Data and Analytical Results

Vertical Mea	asurements	are in feet.	Analyt	ical results are in	parts per billion (ppb)						
DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH- Gasoline	Benzene	Toluene	Ethyl- Benzene	Xylene	MTBE	TPH- Diesel
TRIP B	LANK										
06/04/97					<50	<0.5	<0.5	<0.5	<0.5	<2.5	
09/16/97		_			<50	<0.5	<0.5	<0.5	<0.5	<2.5	
12/17/97					<50	<0.5	<0.5	<0.5	<0.5	<2.5	
03/18/98					<50	<0.5	<0.5	<0.5	<0.5	<2.5	
06/28/98					<50	<0.5	<0.5	<0.5	<0.5	<2.5	
09/07/98					<50	<0.5	<0.5	<0.5	<0.5	<2.5	
12/09/98					<50	<0.5	<0.5	<0.5	<0.5	<2.5	

Note: Blaine Tech Services, Inc. began routine monitoring of the groundwater wells at this site on December 9, 1998. Earlier field data and analytical results are drawn from the September 7, 1998, Gettler-Ryan, Inc. report.

#### **ABBREVIATIONS:**

TPH = Total Petroleum Hydrocarbons

ND = Not detected at or above the minimum quantitation limit. See laboratory reports for minimum quantitation limits.

MTBE = Methyl-tert-butyl ether

## Analytical Appendix



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954

(650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865

FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112

Client Proj. ID: Chevron 9-4800/981209-Y3 Sample Descript: MW-1

Sampled: 12/09/98 Received: 12/10/98

Matrix: LIQUID

Extracted: 12/17/98 Analyzed: 12/18/98

Attention: Christine Lillie

Analysis Method: EPA 8015 Mod Lab Number: 9812826-01

Reported: 12/29/98

QC Batch Number: GC1217980HBPEXD

instrument ID: GCHP4B

#### Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Dete	ection Limit ug/L	Sa	ample Results ug/L
TEPH as Diesel Chromatogram Pattern:		50 C9-C24		240 UnidHC
Surrogates n-Pentacosane (C25)	<b>Cont</b> 50	rol Limits %	% <b>I</b>	Recovery 95

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

SEQUOIA ANALYTICAL -ELAP #1210

Mike Gregory Project Manager

Page:



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954 (650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112

Attention: Christine Lillie

Client Proj. ID: Chevron 9-4800/981209-Y3

Sample Descript: MW-1

Matrix: LIQUID

Analysis Method: 8015Mod/8020 Lab Number: 9812826-01 Sampled: 12/09/98 Received: 12/10/98

Analyzed: 12/16/98 Reported: 12/29/98

QC Batch Number: GC121698802009A

Instrument ID: HP9

#### Total Purgeable Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Det	ection Limit ug/L		Sample Results ug/L
TPPH as Gas		500		1700
Methyl t-Butyl Ether		25		32
Benzene		5.0		240
Toluene		5.0		130
Ethyl Benzene		5.0		100
Xylenes (Total)		5.0		270
Chromatogram Pattern:		•••		GAS
Surrogates .	Con	trol Limits %	9/	& Recovery
Trifluorotoluene	70		130	94

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

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Mike Gregory Project Manager

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Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954

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FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Sampled: 12/09/98

Received: 12/10/98

Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112

Client Proj. ID: Chevron 9-4800/981209-Y3

Sample Descript: MW-2

Matrix: LIQUID Analysis Method: EPA 8015 Mod

Extracted: 12/17/98 Analyzed: 12/18/98 Reported: 12/29/98 Lab Number: 9812826-02

QC Batch Number: GC1217980HBPEXD

Instrument ID: GCHP4B

Attention: Christine Lillie

#### Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	De	tection Limit ug/L		San	nple Results ug/L
TEPH as Diesel Chromatogram Pattern:		50 C9-C24			1900 UnidHC
Surrogates n-Pentacosane (C25)	<b>Cor</b> 50	ntrol Limits %	150	% R€	ecovery 94

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

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ELAP #1210

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Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954

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FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112

Attention: Christine Lillie

Client Proj. ID: Chevron 9-4800/981209-Y3

Sample Descript: MW-2

Matrix: LIQUID

Analysis Method: 8015Mod/8020

Received: 12/10/98

Sampled: 12/09/98

Lab Number: 9812826-02

Analyzed: 12/16/98 Reported: 12/29/98

QC Batch Number: GC121698802009A

Instrument ID: HP9

#### Total Purgeable Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Det	ection Limit ug/L	Sample Results ug/L
TPPH as Gas Methyl t-Butyl Ether Benzene Toluene Ethyl Benzene Xylenes (Total) Chromatogram Pattern:		5000 250 50 50 50 50	
Surrogates Trifluorotoluene	<b>Cont</b> 70	trol Limits % 130	% Recovery 95

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

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Mike Gregory Project Manager

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Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954 (650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112

vices Client Proj. ID: Chevron 9-4800/981209-Y3
enue Sample Descript: MW-2

Sampled: 12/09/98 Received: 12/10/98

San Jose, CA 95112

Attention: Christine Lillie

Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9812826-02

Analyzed: 12/17/98 Reported: 12/29/98

QC Batch Number: MS1216988260S2A

Instrument ID: MS-2

#### Methyl t-Butyl Ether (MTBE)

Analyte	Detectio ug/		Sample Results ug/L
Methyl t-Butyl Ether	2.0		2600
Surrogates	Control L	imits %	% Recovery
1,2-Dichloroethane-d4	76	114	Q
Toluene-d8	88	110	Q
4-Bromofluorobenzene	86	115	Q

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

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Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954 (650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112 Client Proj. ID: Chevron 9-4800/981209-Y3 Sample Descript: MW-3

Sampled: 12/09/98 Received: 12/10/98

Attention: Christine Lillie

Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9812826-03 Extracted: 12/17/98 Analyzed: 12/18/98 Reported: 12/29/98

QC Batch Number: GC1217980HBPEXD

Instrument ID: GCHP4B

#### Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	De	tection Limit ug/L		Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:		50 C9-C24		55 UnidHC
Surrogates n-Pentacosane (C25)	<b>Cor</b> 50	ntrol Limits %	150	6 Recovery 83

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

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Mike Clegory Project Manager

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Redwood City. CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954 (650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112

Attention: Christine Lillie

Client Proj. ID: Chevron 9-4800/981209-Y3

Sample Descript: MW-3

Matrix: LIQUID

Analysis Method: 8015Mod/8020

Lab Number: 9812826-03

Sampled: 12/09/98 Received: 12/10/98

Analyzed: 12/16/98 Reported: 12/29/98

QC Batch Number: GC121698802009A

Instrument ID: HP9

#### Total Purgeable Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Det	ection Limit ug/L	Sample Results ug/L
TPPH as Gas Methyl t-Butyl Ether Benzene Toluene Ethyl Benzene Xylenes (Total) Chromatogram Pattern:		2.5 0.50 0.50 0.50 0.50	
Surrogates Trifluorotoluene	<b>Cont</b> 70	trol Limits %	% Recovery 97

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

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Mike Gregory Project Manager

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Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954 (650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112 Client Proj. ID: Chevron 9-4800/981209-Y3

Sample Descript: TB Matrix: LIQUID

Analysis Method: 8015Mod/8020

Sampled: 12/09/98 Received: 12/10/98

Attention: Christine Lillie

Lab Number: 9812826-04

Analyzed: 12/16/98 Reported: 12/29/98

QC Batch Number: GC121698802009A

Instrument ID: HP9

#### Total Purgeable Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas Methyl t-Butyl Ether Benzene Toluene Ethyl Benzene Xylenes (Total) Chromatogram Pattern:	50 2.5 0.50 0.50 0.50 0.50	N.D. N.D. N.D. N.D. N.D. N.D.
Surrogates Trifluorotoluene	Control Limits % 70 130	% Recovery 94

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

SEQUOÍA ANALYTICAL - ELAP #1271

Mike Gregory Project Manager

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Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112 Attention: Christine Lillie Client Proj. ID: Chevron 9-4800/981209-Y3

Received: 12/10/98

Lab Proj. ID: 9812826

Reported: 12/29/98

#### LABORATORY NARRATIVE

#### MTBE(8260):

The surrogate used for sample #2 was Dibromofluoromethane, which had a recovery of 100% with control limits 50-150.

#### TPH-GAS/BTEX:

Sample 9812826-01 was diluted 10-fold. Sample 9812826-02 was diluted 100-fold.

SEQUOIA ANALYTICAL

Mike Gregory Project Manager

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Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112 Attention: Christine Lillie Client Project ID: Chevron 9-4800/981209-Y3

QC Sample Group: 9812826-01-03

Reported: Dec 29, 1998

#### QUALITY CONTROL DATA REPORT

Matrix:

Liquid

Method: Analyst: EPA 8015A A. PORTER

**ANALYTE** 

Diesel

QC Batch #: GC1217980HBPEXD

Sample No.: 9812920-04

Date Prepared:

12/15/98

Date Analyzed:

12/16/98

Instrument I.D.#:

GCHP5A

Sample Conc., ug/L:

N.D.

Conc. Spiked, ug/L:

1000

Matrix Spike, ug/L:

780

% Recovery:

78

Matrix

Spike Duplicate, ug/L:

770

% Recovery:

77

Relative % Difference:

1.3

**RPD** Control Limits:

0-50

LCS Batch#: BLK121798DS

Date Prepared:

12/17/98

Date Analyzed:

12/18/98

Instrument I.D.#:

GCHP5A

Conc. Spiked, ug/L:

1000

Recovery, ug/L:

860

LCS % Recovery:

86

Percent Recovery Control Limits:

MS/MSD LCS

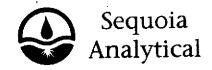
50-150 60-140

SEQUOIA ANALYTICAL

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

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.

roject Manager



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954 (650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Blaine Tech Services, Inc.

1680 Rogers Ave.

San Jose, CA 95112

Attention: Christine Lillie

Client Project ID: Chevron 9-4800/981209-Y3

Matrix:

Liquid

Work Order #:

9812826 -01-04

Reported:

Dec 29, 1998

#### **QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl	Xylenes	BTEX as TPH
			Benzene		
QC Batch#:	GC121698802009A	GC121698802009A	GC121698802009A	GC121698802009A	GC121698802009A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030				
Analyst:	C. Westwater				
MS/MSD #:	8120658	8120658	8120658	8120658	8120658
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	12/16/98	12/16/98	12/16/98	12/16/98	12/16/98
Analyzed Date:	12/16/98	12/16/98	12/16/98	12/16/98	12/16/98
Instrument I.D.#:	HP9	HP9	HP9	HP9	HP9
Conc. Spiked:	20 μg/L	20 μg/L	20 μg/L	- 60 μg/L	330 μg/L
Result:	20	21	22	68	320
MS % Recovery:	100	105	110	113	97
Dup. Result:	19	20	21	66	320
MSD % Recov.:	95	100	105	110	97
RPD:	5.1	4.9	4.7	3.0	0.0
RPD Limit:	0-20	0-20	0-20	0-20	0-50
LCS #:	LC\$121698	LCS121698	LCS121698	LCS121698	LCS121698
Prepared Date:	12/16/98	12/16/98	12/16/98	12/16/98	12/16/98
Analyzed Date:	12/16/98	12/16/98	12/16/98	12/16/98	12/16/98
Instrument I.D.#:	HP9	HP9	HP9	HP9	HP9
Conc. Spiked:	20 μg/L	20 μg/L	20 μg/L	60 μg/L	330 μg/L
LCS Result:	20	22	23	70	320
LCS % Recov.:	100	110	115	117	97
MS/MSD	60-140	60-140	60-140	60-140	
LCS Control Limits	70-130	70-130	70-130	70-130	50-150

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

9812826.BLA <1>





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Blaine Tech Services, Inc.

1680 Rogers Ave.

San Jose, CA 95112 Attention: Christine Lillie Client Project ID: (

Chevron 9-4800/981209-Y3

Matrix:

Liquid

Work Order #:

9812826-02

Reported: Dec 29, 1998

#### QUALITY CONTROL DATA REPORT

Analyte:

MTBE

QC Batch#: MS1216988260S2A Analy. Method: EPA 8260 Prep. Method: EPA 5030

Analyst:

N. Nelson

MS/MSD #: Sample Conc.: 8120988

Sample Conc.: N.D.
Prepared Date: 12/16/98
Analyzed Date: 12/16/98
Instrument I.D.#: GCMS2

50 μg/L

Result:

Conc. Spiked:

69

MS % Recovery:

138

Dup. Result:

65

MSD % Recov.:

130

RPD:

6.0

RPD Limit:

0-25

LCS #:

LCS121698

Prepared Date:

12/16/98

Analyzed Date: Instrument I.D.#:

12/16/98

Conc. Spiked:

GCMS2 50 µg/L

LCS Result:

61

LCS % Recov.:

122

MS/MSD

60-140

ĽCS

70-130

**Control Limits** 

**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

9812826.BLA <2>



Fax copy of l	_ab Rep	ort and CO	OC to Chev	ron Gontact: E	Yes No	Chain-	of-Custod	y-Record
Chevron Products Co. P.O. BOX 6004 San Ramon, CA 94583 FAX (925)842—8370	Address	oject NumberBLAINE TEC	Castro St., S/2 CH SERVICE, II AVE., SAN JOSI ISTINE LILLIE	<u>E</u>	- Laboratory Name C - Laboratory Service ( - Laboratory Service (	ome) PHIL BRIGGS  hone) (925) 842-91  SEQUOIA  Order 9144488	36	(26)
Somple Number  Number of Containers  Matrix  S. S. S. A. A.		38		od: CA OR	C4.C4.Ph.Zh.Ni C4.C4.Ph.Zh.Ni BITEX (8020) BITEX/ATBE/Noph. (8020) TPH - HCID	MT32	1 UT	Remarks  Lab Sample No.
MW 5 01 MW 2 5 0 MW 3 5 00 TB 3 M	<del>                                     </del>	1336 X 1330 X 13:22 X	X Y X			<b>X</b>		
								—
Relinquished By (Signature)  Relinquished By (Signature)	Organiza Organiza Organiza	5 10.12.95 10.12.95 10.12.95	Received By (S	1 53QU	10:20	Iced Y/N Iced Y/N	Turn Around Time (Circ 24 Hrs. 48 Hrs. 5 Days 10 Days As Contracted	

# Field Data Sheets

WELL GAUGING DATA

Project#_	98/20	5 <b>43</b> Date_	12/9/9	Client	HEV	· .
	,		•	OAKIAN		

Well ID	Well Size (in.)	Sheen / Odor		Thickness of Immiscible Liquid (ft.)		Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	
								TOC	
MW/ MW3	2			·		25.65 24.69	<i>30</i> :32		
mw3	~					25.91	29,92	0	
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### CHEVRON WELL MONITORING DATA SHEET

Project #: 98/209 y3	Station #: 9-4800				
Sampler: B. TAYLOR	Date: 12/9/98				
Well I.D.: MW /	Well Diameter: 2 3 4 6 8				
Total Well Depth: 30.人5	Depth to Water: 2565				
Depth to Free Product:	Thickness of Free Product (feet):				
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH				
Well Diameter         Multiplier           2"         0.16           3"         0.37           4"         0.65	Well Diameter         Multiplier           5*         1.02           6*         1.47           Other         radius² * 0.163				
Purge Method:  Disposable Bailer  Middleburg  Electric Submersible  Extraction Pump  Other:	Sampling Method:  Disposable Bailer  Extraction Port  Other:				
1 Case Volume (Gals.) X Specified V	= 25 Gals. Volumes Calculated Volume				
Time Temp (°F) pH Cond.	Gals. Removed Observations				
1331629 6.9 1378					
1333 69.2 6.9 1321	2				
1334 69.7 6.8 1259	3				
, in the second					
Did well dewater? Yes No	Gallons actually evacuated: 3				
Sampling Time: /3 3 8 Sampling Date: /2/9/98					
Sample I.D.: Mul Laboratory: Sequestra CORE N. Creek Assoc. Labs					
Analyzed for: TPH-G BTEX MTBE TPH-D Other:					
Duplicate I.D.: Analyzed for	: TPH-G BTEX MTBE TPH-D Other:				
D.O. (if req'd): Pre-purg	e: mg/ /L Post-purge: mg/ /L				
O.R.P. (if req'd): Pre-purg	e: mV Post-purge: mV				

## CHEVRON WELL MONITORING DATA SHEET

Project #: 981209 \ \ 3	Station #: 9-4800				
Sampler: 3. TAYLOR	Date: /2/5/58				
Well I.D.: Mw2	Well Diameter: 2 3 4 6 8				
Total Well Depth: 30.32	Depth to Water: 2 4 6 8				
Depth to Free Product:	Thickness of Free Product (feet):				
Referenced to: PVO Grade	D.O. Meter (if req'd): YSI HACH				
Well Diameter         Multiplier           2"         0.16           3"         0.37           4"         0.65	Well Diameter         Multiplier           5"         1.02'           6"         1.47           Other         radius² * 0.163				
Purge Method:  Bailer  Disposable Bailer  Middleburg  Electric Submersible  Extraction Pump  Other:	Sampling Method: Bailer  Disposable Baile  Extraction Port  Other:				
I Case Volume (Gals.) Specified	Gais.  Calculated Volume				
Time Temp (°F) pH Cond.	Gals. Removed Observations				
1343 60.3 7.2 1021					
1345 62 77.0 842	2				
1346 64.1 6.9 841	3				
Did well dewater? Yes No	Gallons actually evacuated: 3				
Sampling Time: 13 50	Sampling Date: 12/9/95				
Sample I.D.: Mw2	Laboratory: Sequoia CORE N. Creek Assoc. Labs				
Analyzed for: RPH-G BTEX MTBE TPH-D Other:					
Duplicate I.D.: Analyzed for	: TPH-G BTEX MTBE TPH-D Other:				
D.O. (if req'd): Pre-purge	e: Post-purge: mg				
O.R.P. (if req'd): Pre-purge	e: mV Post-purge: mV				

### CHEVRON WELL MONITORING DATA SHEET

Project #: 98/209 Y3	Station #: 9-4800				
Sampler: B. TAYLOR	Date: /2/9/98				
Well I.D.: MW3	Well Diameter: (2) 3 4 6 8				
Total Well Depth: 29,92	Depth to Water: 259/				
Depth to Free Product:	Thickness of Free Product (feet):				
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH				
Well Diameter         Multiplier           2"         0.16           3"         0.37           4"         0.65	Well Diameter         Multiplier           5"         1.02           6"         1.47           Other         radius² * 0.163				
Purge Method:  Disposable Bailer  Middleburg  Electric Submersible  Extraction Pump  Other:	Sampling Method:  Bailer  Sisposable Bailer  Extraction Port  Other:				
1 Case Volume (Gals.) X Specified V	columes Gals.  Calculated Volume				
Time Temp (°F) pH Cond.	Gals. Removed Observations				
1317 661 70 811	5				
1318 684 69 849					
1319 69.8 6.9 752	2				
Did well dewater? Yes No	Gallons actually evacuated: 2				
Sampling Time: /3 22	Sampling Date: /2/9/98				
Sample I.D.: Mw3	Laboratory: Sequeia CORE N. Creek Assoc. Labs				
Analyzed for: TPH-G BTEX MTBE TPH-D Other:					
Duplicate I.D.: Analyzed for:					
D.O. (if req'd): Pre-purge	: Post-purge: mg/L				
O.R.P. (if req'd): Pre-purge	: mV Post-purge: mV				