

ST10 459

DH



November 7, 1998

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

Mr. Thomas Peacock, Manager
Environmental Protection Division
Alameda County Health Care Services
Department of Environmental Health
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 #9-2506
2630 Broadway
Oakland, California**

Dear Mr. Peacock:

Enclosed is the Third Quarter (Semi-Annual) Groundwater Monitoring Report for 1998 prepared by our consultant Gettler-Ryan, Inc. for the above noted facility. Ground water samples were analyzed for TPH-g, BTEX, and MtBE. As previously agreed, sampling for monitoring wells B-2 and B-4 have been suspended. Monitoring wells B-3, B-9 and B-10 were sampled for SVOC using EPA Method 8270.

Monitoring well B-10 was below method detection limits for all constituents while wells B-3, B-7, B-8, B-9 and B-12 were below method detection limits for the BTEX constituents. The benzene constituent declined in well B-6 from the previous sampling event while increasing in wells B-1, B-5 and B-11.

All of the SVOC constituents were below method detection limits in wells B-3, B-9 and B-10. Groundwater samples were requested for SVOC in these wells, due to the detection of SVOC in the soil samples in the area of the used oil tank, which had been previously removed. Since no SVOC's were detected in the groundwater, no further sampling for these constituents will be conducted. Refer to the Analytical Lab Sheets for the results.

Depth to ground water varied from 6.33 feet to 10.91 feet below grade with a variable direction of flow westerly from well B-5 to well B-10 and easterly from well B-5 to well B-8.

November 7, 1998
Mr. Thomas Peacock
Chevron Service Station #9-2506
Page 2

Demolition of the building and canopies are on hold pending approval of the demolition permit by the City Of Oakland. Expect to receive the permit and proceed with demolition of remaining facilities in the month of December.

Confirmation of MtBE in wells B-1, B-3, B-5, B-6 and B-7 by using EPA Method 8260 will be conducted in the First Quarter of 1999. If you have any questions or comments, call me at (925) 842-9136.

Sincerely,
CHEVRON PRODUCTS COMPANY

Philip R. Briggs
Site Assessment and Remediation Project Manager

Enclosure

Cc. Mr. Bill Scudder, Chevron



GETTLER - RYAN INC.

October 19, 1998

Job #5203.80

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

Re: Semi-Annual Groundwater Monitoring & Sampling Report
Chevron Service Station #9-2506
2630 Broadway
Oakland, California

Dear Mr. Briggs:

This report documents the semi-annual groundwater sampling event performed by Gettler-Ryan Inc. (G-R). On September 15, 1998, field personnel were on-site to monitor and sample ten wells (B-1, B-3, and B-5 through B-12) at the above mentioned 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.

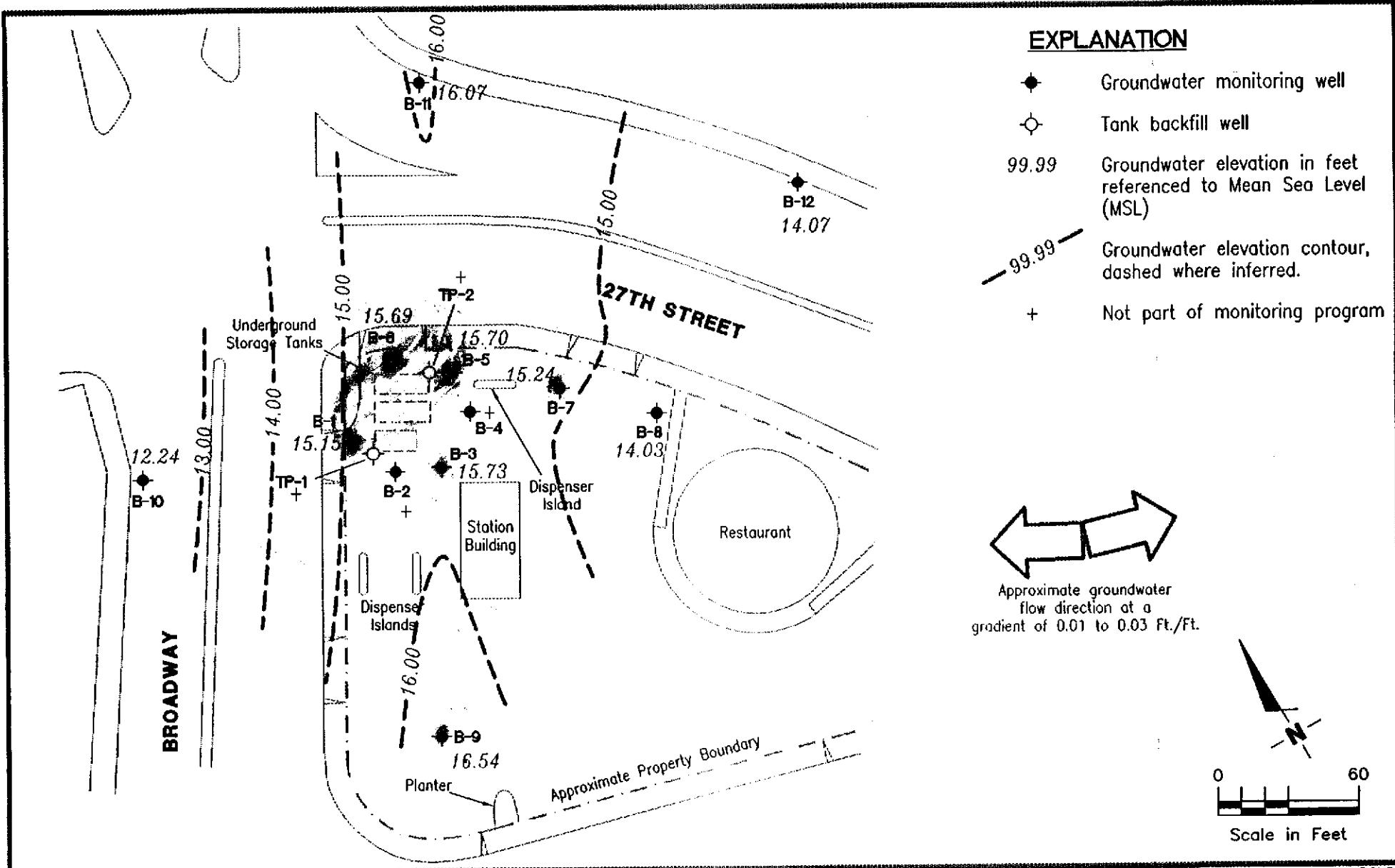
Sincerely,

Deanna L. Harding
Deanna L. Harding
Project Coordinator
Barbara Sieminski
Barbara Sieminski
Project Geologist, R.G. No. 6676



DLH/SJC/dh
5203.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



91

Gettler - Ryan Inc.

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

JOB NUMBER
5203

REVIEWED BY

POTENTIOMETRIC MAP

Chevron Service Station No. 9-2506
2630 Broadway
Oakland, California

REVISED DATE

FIGURE

1

Table 1. Water Level Data and Groundwater Analytical Results - Chevron Service Station #9-2506, 2630 Broadway, Oakland, California

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	TPH(G) <-----	B	T	E	X	MTBE >
						ppb	ppb	ppb	ppb	ppb
B-1/										
23.00 ¹	3/18/82	7.81	15.19	0	---	---	---	---	---	---
	3/25/82	8.67	14.33	0	---	---	---	---	---	---
	5/21/82	9.30	13.70	0	---	---	---	---	---	---
	5/26/82	10.18	12.82	0	---	---	---	---	---	---
	6/24/82	9.92	13.08	0	---	---	---	---	---	---
	9/9/93	9.90	13.10	0	8,800 ²	240	280	<2.5	<7.5	---
	12/2/93	9.10	13.90	0	1,100	100	7.9	3.4	3.9	---
	3/17/94	9.41	13.59	0	1,600	370	13	13	26	---
	6/10/94	9.89	13.11	0	1,400	270	24	18	78	---
	9/15/94	11.24	11.76	0	4,100	740	<5	270	300	---
25.67 ³	12/28/94	9.25	16.42	0	1,200	200	32	37	79	---
	3/29/95	8.32	17.35	0	13,000	540	54	77	120	---
	6/5/95	9.72	15.95	0	3,000	610	<25	<25	<25	---
	9/21/95	10.92	14.75	0	630 ⁴	5.4	<0.5	1.3	6.1	---
	12/22/95	10.14	15.53	0	<50	<0.50	<0.50	<0.50	<0.50	40,000
	3/22/96	8.83	16.84	0	<1,200 ¹¹	150	<12	<12	<12	32,000
	9/25/96	10.80	14.87	0	28,000 ¹²	19	<12	<12	<12	38,000
	3/6/97	9.15	16.52	0	<5,000 ¹³	52	<50	<50	<50	18,000
	9/12/97	10.72	14.95	0	89	<0.50	0.54	<0.50	1.3	9,200
	4/2/98	9.26	16.41	0	<5,000	110	<50	<50	<50	25,000
	9/15/98	10.52	15.15	0	<5,000	270	<50	<60	<60	51,000
B-2/										
22.28 ¹	3/18/82	3.83	18.45	0	---	---	---	---	---	---
	3/25/82	5.79	16.49	0	---	---	---	---	---	---
	5/21/82	4.85	17.43	0	---	---	---	---	---	---
	5/26/82	8.53	13.75	0	---	---	---	---	---	---
	6/24/82	8.40	13.88	0	---	---	---	---	---	---
	9/9/93	6.46	15.82	0	4,700	470	630	180	590	---
	12/2/93	5.41	16.87	0	2,200	59	27	110	350	---
	3/17/94	7.44	14.84	0	1,800	52	33	97	320	---
	6/10/94	8.15	14.13	0	1,200	37	48	20	93	---
	9/15/94	10.00	12.28	0	4,900	710	12	340	450	---
25.13 ³	12/28/94	7.32	17.81	0	2,600	63	49	56	370	---
	3/29/95 ⁵	---	---	---	---	---	---	---	---	---
B-3/										
21.78 ¹	3/18/82	5.65	16.13	0	---	---	---	---	---	---
	3/25/82	5.75	16.03	0	---	---	---	---	---	---
	5/21/82	5.58	16.20	0	---	---	---	---	---	---
	5/26/82	7.99	13.79	0	---	---	---	---	---	---
	6/24/82	7.68	14.10	0	---	---	---	---	---	---

Table 1. Water Level Data and Groundwater Analytical Results - Chevron Service Station #9-2506, 2630 Broadway, Oakland, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness*	TPH(G) <-----	B	T	E	X	MTBE >
						ppb	ppb	ppb	ppb	ppb
B-3 (cont) 24.35 ³	9/9/93	5.99	15.79	0	7,800	500	760	180	720	---
	12/2/93	5.70	16.08	0	9,800	790	870	380	1,500	---
	3/17/94	6.50	15.28	0	2,400	88	55	74	270	---
	6/10/94	7.23	14.55	0	2,300	110	95	84	240	---
	9/15/94	9.16	12.62	0	5,000	670	9.3	340	410	---
	12/28/94	6.44	17.91	0	4,100	650	34	320	440	---
	3/29/95	5.47	18.88	0	3,300	170	2.2	51	8.9	---
	6/5/95	7.05	17.30	0	2,500	850	31	170	85	---
	9/21/95	8.92	15.43	0	2,900 ⁷	1,300	280	140	100	---
	12/22/95	8.53	15.82	0	5,400 ⁹	340	37	150	460	8,600
B-4/ 21.35 ¹ 24.11 ³	3/22/96	5.98	18.37	0	2,200	79	50	58	200	1,600
	9/25/96	9.02	15.33	0	11,000	530	97	74	400	7,200
	3/6/97	6.71	17.64	0	<500 ¹⁶	20	<5.0	<5.0	<5.0	420
	9/12/97	9.31	15.04	0	<500 ¹⁸	<5.0	<5.0	<5.0	<5.0	1,900
	4/2/98	7.33	17.02	0	110	8.3	0.79	4.0	7.4	590
	9/15/98 ²⁰	8.62	15.73	0	100	<0.50	<0.50	<0.50	<0.60	940
	3/18/82	4.65	16.70	0	---	---	---	---	---	---
	3/25/82	5.08	16.27	0	---	---	---	---	---	---
	5/21/82	--	--	2.5	---	---	---	---	---	---
	5/26/82	9.21	12.14	--	---	---	---	---	---	---
B-5/ 21.53 ¹ 24.11 ³	6/24/82	8.22	13.13	0.5	---	---	---	---	---	---
	9/9/93	6.09	15.26	0	88,000	3,200	16,000	2,000	9,500	---
	12/2/93	5.54	15.81	0	110,000	3,600	25,000	2,800	15,000	---
	3/17/94	6.00	15.35	0	60,000	1,400	16,000	1,800	8,900	---
	6/10/94	6.87	14.48	0	25,000	770	880	190	1,100	---
	9/15/94	8.74	12.61	0	3,300	800	8.0	300	350	---
	12/28/94	5.74	18.37	0	17,000	400	4,000	630	2,900	---
	3/29/95 ⁵	--	--	--	---	---	---	---	---	---
	3/18/82	5.13	16.40	0	---	---	---	---	---	---
	3/25/82	5.27	16.26	0	---	---	---	---	---	---

Table 1. Water Level Data and Groundwater Analytical Results - Chevron Service Station #9-2506, 2630 Broadway, Oakland, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	TPH(G) <	B	T	ppb	E	X	MTBE >
24.23 ³	12/28/94	6.55	17.68	0	94,000	4,600	10,000		4,400	19,000	---
B-5	3/29/95	5.59	18.64	0	59,000	1,500	3,100		2,100	8,100	---
(cont)	6/5/95	7.19	17.04	0	58,000	2,300	4,300		2,600	11,000	---
	9/21/95	9.10	15.13	0	3,500 ⁶	300	30		260	330	---
	12/22/95	8.61	15.62	0	6,500 ⁶	370	120		400	870	5,500
	3/22/96	6.02	18.21	0	13,000	410	1,000		750	2,900	5,400
	9/25/96	9.20	15.03	0	8,000	170	<5.0		140	110	7,200
	3/6/97	6.63	17.60	0	60,000	630	320		2,300	9,500	4,700
	9/12/97	8.30	15.93	0	1,400	66	<10		59	24	3,300
	4/2/98	7.23	17.00	0	1,000 ¹⁹	5.9	2.1		18	5.1	470
	9/15/98	8.53	15.70	0	11,000	250	<100		290	740	4,600
B-6/ 22.03 ¹	3/18/82	7.56	14.47	0	---	---	---		---	---	---
	3/25/82	6.08	15.95	0	---	---	---		---	---	---
	5/21/82	4.85	17.18	0	---	---	---		---	---	---
	5/26/82	8.31	13.72	0	---	---	---		---	---	---
	6/24/82	8.03	14.00	0	---	---	---		---	---	---
	9/9/93	8.12	13.91	0	6,800 ²	<0.5	<0.5		<0.5	<1.5	---
	12/2/93	7.06	14.97	0	320	29	<0.5		<0.5	<0.5	---
	3/17/94	7.57	14.46	0	570	130	6.2		4.7	14	---
	6/10/94	8.21	13.82	0	1,500	100	81		51	240	---
	9/15/94	9.94	12.09	0	6,400	900	24		490	620	---
24.72 ³	12/28/94	7.45	17.27	0	350	110	4.4		3.7	14	---
	3/29/95	6.40	18.32	0	3,300	46	<0.5		1.3	1.2	---
	6/5/95	8.07	16.65	0	230	<0.5	<0.5		<0.5	<0.5	---
	9/21/95	9.55	15.17	0	<50 ⁶	<0.5	<0.5		<0.5	<0.5	---
	12/22/95	8.91	15.81	0	<50	<0.50	<0.50		<0.50	<0.50	15,000
	3/22/96	6.94	17.78	0	<1,200 ¹⁰	<12	<12		<12	<12	18,000
	9/25/96	9.63	15.09	0	15,000 ¹²	<10	<10		<10	<10	20,000
	3/6/97	7.50	17.22	0	<5,000 ¹⁴	<50	<50		<50	<50	18,000
	9/12/97	9.70	15.02	0	<100 ¹⁸	<1.0	<1.0		<1.0	<1.0	1,300
	4/2/98	7.81	16.91	0	<500	17	<5.0		<5.0	<5.0	5,800
	9/15/98	9.03	15.69	0	210	<1.0	<1.0		<1.0	<1.2	8,800
B-7/ 19.54 ¹	3/18/82	4.08	15.46	0	---	---	---		---	---	---
	3/25/82	4.00	15.54	0	---	---	---		---	---	---
	5/21/82	3.00	16.54	0	---	---	---		---	---	---
	5/26/82	4.96	14.58	0	---	---	---		---	---	---
	6/24/82	4.90	14.64	0	---	---	---		---	---	---
	9/9/93	6.54	13.00	0	230	1.3	2.3		0.6	2.1	---
	12/2/93	6.20	13.34	0	190	4.7	<0.5		1.1	1.9	---

Table 1. Water Level Data and Groundwater Analytical Results - Chevron Service Station #9-2506, 2630 Broadway, Oakland, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	TPH(G) <----- ppb----->	B	T	E	X	MTBE
B-7 (cont)	3/17/94	5.19	14.35	0	320	15	3.3	1.0	3.0	---
	6/10/94	5.97	13.57	0	210	6.1	5.7	2.3	5.8	---
	9/15/94	7.78	11.76	0	<50	<0.5	<0.5	<0.5	<0.5	---
22.22 ³	12/28/94	5.04	17.18	0	520	17	4.8	2.5	2.1	---
	3/29/95	4.35	17.87	0	420	6.0	2.3	1.8	0.9	---
	6/5/95	5.79	16.43	0	65	<0.5	<0.5	<0.5	<0.5	---
	9/21/95	7.55	14.67	0	<50 ⁴	<0.5	<0.5	<0.5	<0.5	---
	12/22/95	9.16	13.06	0	<50	<0.50	<0.50	<0.50	<0.50	930
	3/22/96	4.60	17.62	0	300	1.0	0.5	<0.5	0.6	280
	9/25/96	7.98	14.24	0	310 ¹²	<0.5	0.6	<0.5	0.8	420
	3/6/97	5.06	17.16	0	1,200	9.0	<0.5	<0.5	2.9	1,000
	9/12/97	7.85	14.37	0	<500 ¹⁸	<5.0	<5.0	<5.0	<5.0	3,500
	4/2/98	4.32	17.90	0	<500	26	1.0	9.0	20	2,200
	9/15/98	6.98	15.24	0	330	<0.50	<0.50	<0.50	<0.60	1,200
B-8/ 18.49 ¹	3/18/82	4.27	14.22	0	---	---	---	---	---	---
	3/25/82	4.06	14.43	0	---	---	---	---	---	---
	5/21/82	4.86	13.63	0	---	---	---	---	---	---
	5/26/82	4.96	13.53	0	---	---	---	---	---	---
	6/24/82	4.87	13.62	0	---	---	---	---	---	---
	9/9/93	5.20	13.29	0	<50	3.4	<0.5	<0.5	<1.5	---
	12/2/93	5.31	13.18	0	<50	<0.5	<0.5	<0.5	<0.5	---
	3/17/94	4.87	13.62	0	<50	1.7	0.5	<0.5	0.6	---
	6/10/94	5.63	12.86	0	<50	<0.5	<0.5	<0.5	<0.5	---
	9/15/94	7.10	11.39	0	<50	<0.5	<0.5	<0.5	<0.5	---
	12/28/94	4.63	16.38	0	<50	<0.5	<0.5	<0.5	<0.5	---
	3/29/95	4.20	16.81	0	<50	<0.5	<0.5	<0.5	<0.5	---
	6/5/95	5.18	15.83	0	<50	<0.5	<0.5	<0.5	<0.5	---
	9/21/95	6.80	14.21	0	<50 ⁴	<0.5	<0.5	<0.5	<0.5	---
21.01 ³	12/22/95	6.48	14.53	0	<50	<0.50	<0.50	<0.50	<0.50	190
	3/22/96	4.49	16.52	0	<50	<0.5	<0.5	<0.5	<0.5	86
	9/25/96	7.18	13.83	0	90 ¹²	<0.5	<0.5	<0.5	1.0	110
	3/6/97 ¹³	---	---	---	---	---	---	---	---	---
	9/12/97 ¹³	---	---	---	---	---	---	---	---	---
	4/2/98	4.22	16.79	0	<50	<0.50	<0.50	<0.50	<0.50	56
	9/15/98	6.98	14.03	0	<50	<0.50	<0.50	<0.50	<0.60	54
B-9/ ⁴	8/4/94	11.53	14.08	---	650	4.4	2.4	6.3	14	---
	11/2/94	9.42	16.19	---	---	---	---	---	---	---
25.61 ³	12/28/94	8.35	17.26	0	2,400	290	8.4	90	36	---
	3/29/95	7.43	18.18	0	5,900	540	24	200	84	---

Table 1. Water Level Data and Groundwater Analytical Results - Chevron Service Station #9-2506, 2630 Broadway, Oakland, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	TPH(G) <	B	T	E	X	MTBE
							ppb			>
B-9 (cont)	6/5/95	8.47	17.14	0	3,000	130	<25	<25	<25	---
	9/21/95	8.99	16.62	0	240 ^a	1,500	14	62	55	---
	12/22/95	9.20	16.41	0	1,800	170	6.6	59	20	<6.0
	3/22/96	7.84	17.77	0	2,400	230	6.2	77	9.7	9.2
	9/25/96	9.24	16.37	0	1,800	28	4.7	39	13	56
	3/6/97	8.46	17.15	0	3,400	68	3.3	45	18	47
	9/12/97	9.15	16.46	0	560	13	7.9	5.8	16	67
	4/2/98	7.93	17.68	0	2,500 ^b	93	14	15	39	30
	9/15/98 ^c	9.07	16.54	0	1,400	<0.50	<0.50	<0.50	<0.60	69
B-10 ^d 23.15 ^d	8/4/94	10.95	12.20	---	<50	<0.5	<0.5	<0.5	<0.5	---
	11/2/94	11.19	11.96	---	---	---	---	---	---	---
	12/28/94	10.30	12.85	0	<50	<0.5	<0.5	<0.5	<0.5	---
	3/29/95	9.68	13.47	0	<50	<0.5	<0.5	<0.5	<0.5	---
	6/5/95	10.59	12.56	0	<50	<0.5	<0.5	<0.5	<0.5	---
	9/21/95	10.87	12.28	0	<50	<0.5	<0.5	<0.5	<0.5	---
	12/22/95	10.41	12.74	0	<50	<0.50	<0.50	<0.50	<0.50	<0.60
	3/22/96	10.11	13.04	0	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	9/25/96	10.15	13.00	0	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	3/6/97	9.98	13.17	0	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	9/12/97	10.90	12.25	0	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	4/2/98	10.18	12.97	0	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	9/15/98 ^c	10.91	12.24	0	<50	<0.50	<0.50	<0.50	<0.60	<10
B-11 ^d 25.23 ^d	8/4/94	10.39	14.84	---	<50	<0.5	<0.5	<0.5	<0.5	---
	11/2/94	11.50	13.73	---	---	---	---	---	---	---
	12/28/94	9.09	16.14	0	<50	<0.5	<0.5	<0.5	<0.5	---
	3/29/95	7.40	17.83	0	<50	<0.5	<0.5	<0.5	<0.5	---
	6/5/95	8.26	16.97	0	<50	<0.5	<0.5	<0.5	<0.5	---
	9/21/95	9.79	15.44	0	<50	<0.5	<0.5	<0.5	<0.5	---
	12/22/95	9.55	15.68	0	<50	<0.50	<0.50	<0.50	<0.50	<0.60
	3/22/96	7.35	17.88	0	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	9/25/96	10.21	15.02	0	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	3/6/97	7.76	17.47	0	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	9/12/97	10.08	15.15	0	<50	<0.50	<0.50	<0.50	<0.50	2.5
	4/2/98	6.93	18.30	0	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	9/15/98	9.16	16.07	0	<50	0.82	1.5	<0.50	2.0	<10

Table 1. Water Level Data and Groundwater Analytical Results - Chevron Service Station #9-2506, 2630 Broadway, Oakland, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	TPH(G) <	ppb					MTBE >
						B	T	E	X		
B-12/4	8/4/94	6.41	13.99	--	<50	<0.5	<0.5	<0.5	<0.5	--	
	11/2/94	8.75	11.65	--	--	--	--	--	--	--	
20.40 ³	12/28/94	2.76	17.64	0	74	1.0	2.6	1.3	4.4	--	
	3/29/95	2.46	17.94	0	210	<0.5	<0.5	0.7	1.6	--	
	6/5/95	4.59	15.81	0	<50	<0.5	<0.5	<0.5	0.7	--	
	9/21/95	7.36	13.04	0	<50	<0.5	<0.5	<0.5	<0.5	--	
	12/22/95	3.96	16.44	0	140 ¹²	<0.50	<0.50	<0.50	0.93	<0.60	
	3/22/96	2.92	17.48	0	150	<0.5	0.8	<0.5	2.0	<5.0	
	9/25/96	7.84	12.56	0	90	<0.5	<0.5	<0.5	<0.5	<5.0	
	3/6/97	3.17	17.23	0	270 ¹²	<0.5	<0.5	<0.5	<0.5	<5.0	
	9/12/97	6.81	13.59	0	130 ¹⁷	<1.0	<1.0	<1.0	<1.0	<5.0	
	4/2/98	2.14	18.26	0	110 ¹⁹	1.2	<0.50	<0.50	<0.50	12	
	9/15/98	6.33	14.07	0	130	<0.50	<0.50	<0.50	<0.60	<10	
TP-1/	---	7.33	--	0	8,500	770	890	120	590	--	
TP-2/	---	6.18	--	0	13,000	2,400	3,200	380	1,900	--	
Trip-Blank											
TB-LB	9/9/93	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	
	12/2/93	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
	3/17/94	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
	6/10/94	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
	9/15/94	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
	12/28/94	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
	3/29/95	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
	6/5/95	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
	9/21/95	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
	12/22/95	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<0.60	
	3/22/96	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	9/25/96	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	3/6/97	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	9/12/97	--	--	--	<50	<0.50	0.55	<0.50	<0.50	<2.5	
	4/2/98	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	
	9/15/98	--	--	--	<50	<0.50	<0.50	<0.50	<0.60	<10	
Bailer Blank											
BB	9/9/93	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	
	12/2/93	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
	3/17/94	--	--	--	<50	<0.5	<0.5	<0.5	0.6	--	

Table 1. Water Level Data and Groundwater Analytical Results - Chevron Service Station #9-2506, 2630 Broadway, Oakland, California (continued)

EXPLANATION:

TOC = Top of casing elevation

(ft) = feet

DTW = Depth to water

GWE = Groundwater elevation

msl = Measurements referenced relative to mean sea level

TPH(G) = Total Purgeable Petroleum Hydrocarbons as Gasoline

B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylenes

MTBE = Methyl tertiary-butyl ether

ppb = Parts per billion

-- = Not analyzed/Not applicable

SVO's = Semi-Volatile Organics

ANALYTICAL METHODS:

EPA Method 8015/5030 for TPH(G)

EPA Method 8020 for BTEX & MTBE

EPA Method 8270 for SVO's

NOTES:

Water level data and laboratory analytical results prior to March 29, 1995, compiled from the quarterly monitoring reports prepared for Chevron by Sierra Environmental Services.

* Product thickness was measured on and after September 9, 1993, with an MMC flexi-dip interface probe.

¹ Top of casing elevations were compiled from IT Enviroscience Program Report, August 2, 1982. TOC for MW-1 was assumed to be 23 feet MSL.

² Laboratory indicates a non-typical gasoline pattern.

NOTES (continued):

³ Wells were resurveyed. Top of casing elevations were compiled from RESNA Subsurface Investigation Report, October 19, 1994.

⁴ Water level and analytic data prior to 12/28/94 from RESNA Subsurface Investigation Report, October 19, 1994.

⁵ Well removed from monitoring program January 11, 1995, per approval of Alameda County Health Services.

⁶ Laboratory report indicates uncategorized compounds are not included in gasoline concentration.

⁷ Laboratory report indicates uncategorized compounds are not included in gasoline concentration. Data obtained from multiple dilutions. Dilution factor noted represents the dilution used for majority of results.

⁸ BFB recovery high due to interference of hydrocarbons.

⁹ Laboratory report indicates gasoline and discrete peaks.

¹⁰ Laboratory report indicates hydrocarbons in the gasoline range do not match the gasoline standard pattern. The TPH as gasoline value was 4,200 ug/L which was attributed to the presence of MTBE.

¹¹ Laboratory report indicates hydrocarbons in the gasoline range do not match the gasoline standard pattern. The TPH as gasoline value was 9,600 ug/L which was attributed to the presence of MTBE.

¹² Laboratory report indicates hydrocarbons in the gasoline range do not match the gasoline standard pattern.

¹³ Well was inaccessible.

¹⁴ Laboratory report indicates the TPH as Gasoline value was 22,000 ug/L which was attributed to the presence of a single target analyte.

¹⁵ Laboratory report indicates the TPH as Gasoline value was 21,000 ug/L which was attributed to the presence of a single target analyte.

¹⁶ Laboratory report indicates the TPH as Gasoline value was 770 ug/L which was attributed to the presence of a single target analyte.

¹⁷ Laboratory report indicates unidentified hydrocarbons >C8.

¹⁸ Laboratory report indicates discrete peaks.

¹⁹ Laboratory report indicates gas and unidentified hydrocarbons C6-C12.

²⁰ Well analyzed for SVO's. All compounds were ND.



STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Gettier-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 # 9-2506
 Address: 2630 Broadway
 City: Oakland, CA

Job#: 5203.80
 Date: 9.15.96
 Sampler: E.Cline

Well ID	<u>B-1</u>	Well Condition:	<u>dry</u>
Well Diameter	<u>2"</u> in.	Hydrocarbon Thickness:	<u>6</u> in.
Total Depth	<u>29'</u> ft.	Volume Factor (VF)	<u>2" = 0.17</u> <u>3" = 0.38</u> <u>4" = 0.66</u>
Depth to Water	<u>10.52</u> ft.		<u>6" = 1.50</u> <u>12" = 5.80</u>

$$18.48 \times VF 0.17 = 3.1 \times 3 \text{ (case volume)} = \text{Estimated Purge Volume: } 9.42 \text{ (gal.)}$$

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

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

Starting Time: 18:35
 Sampling Time: 18:41
 Purging Flow Rate: 1.5 gpm
 Did well de-water? _____

Weather Conditions: Cloudy cool
 Water Color: clear Odor: Mild
 Sediment Description: None
 If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{hos/cm}$	Temperature $^{\circ}\text{C}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
18:33	3	6.67	901	21.0			
18:36	6	6.71	930	20.6			
18:39	9	6.73	926	20.4			
18:41	10	6.72	928	20.2			

LABORATORY INFORMATION

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

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Chevron Facility # 9-2506
 Address: 2630 Broadway
 City: Oakland, CA

Job#: 5203.80
 Date: 9-15-98
 Sampler: F.Cline

Well ID	<u>B-3</u>	Well Condition:	<u>OK</u>)		
Well Diameter	<u>2"</u>	in.	Hydrocarbon Thickness:	<u>1"</u>	in. Amount Bailed (product/water): <u>1 gal.</u>
Total Depth	<u>19'</u>	ft.	Volume Factor (VF)	<u>2" = 0.17</u>	<u>3" = 0.38</u>
Depth to Water	<u>8.62</u>	ft.		<u>6" = 1.50</u>	<u>4" = 0.66</u>
					<u>12" = 5.80</u>

$$\underline{16.38} \times \text{VF } \underline{0.17} \times \underline{1.76} \times 3 \text{ (case volume)} = \text{Estimated Purge Volume: } \underline{5.3} \text{ (gal.)}$$

Purge Equipment:	Disposable Bailer Bailer Stack <u>Suction</u> Grundfos Other: _____	Sampling Equipment:	Disposable Bailer Bailer Pressure Bailer Grab Sample Other: _____
------------------	--	---------------------	---

Starting Time:	<u>15³¹</u>	Weather Conditions:	<u>Cloudy</u>		
Sampling Time:	<u>15³⁹</u>	Water Color:	<u>Clear</u>		
Purging Flow Rate:	<u>1</u> gpm.	Sediment Description:	<u>Na</u>		
Did well de-water?	_____	If yes; Time:	_____	Volume:	(gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm}$	Temperature $^{\circ}\text{C}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>15³³</u>	<u>2</u>	<u>6.71</u>	<u>1437</u>	<u>20.9</u>			
<u>15³²</u>	<u>4</u>	<u>6.75</u>	<u>1446</u>	<u>20.8</u>			
<u>15³¹</u>	<u>6</u>	<u>6.78</u>	<u>1429</u>	<u>20.3</u>			
<u>15³⁹</u>	<u>7</u>	<u>6.76</u>	<u>1430</u>	<u>20.1</u>			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV.	TYPE	LABORATORY	ANALYSES
<u>B-3</u>	<u>3 x 40m/VOA</u>	<u>Y</u>	<u>HCL</u>	<u>None</u>	<u>NETTLE SEQUOIA</u>	<u>TPH-Gas/BTEX/MTBE</u>
<u>B-3</u>	<u>2 x 1ml</u>	<u>Y</u>	<u>None</u>		<u>SRA</u>	<u>BPA-827C</u>

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Chevron Facility # 9-2506
 Address: 2630 Broadway
 City: Oakland, CA

Job #: 5203.80
 Date: 9-16-98
 Sampler: F.Cline

Well ID	<u>B-5</u>	Well Condition:	<u>OKAY</u>		
Well Diameter	<u>2"</u>	in.	Hydrocarbon Thickness:	<u>19'</u>	in.
Total Depth	<u>19'</u>	ft	Amount Bailed (product/water):	<u>1</u>	
Depth to Water	<u>8.53</u>	ft	Volume Factor (VF)	<u>2" = 0.17</u>	<u>3" = 0.38</u>
				<u>6" = 1.50</u>	<u>4" = 0.66</u>
				<u>12" = 5.80</u>	

$$16.47 \times VF \frac{0.17}{1.8} = 1.8 \times 3 \text{ (case volume)} = \text{Estimated Purge Volume: } 5.3 \text{ (gal.)}$$

Purge Equipment:	Disposable Bailer <u>Stack</u> Suction Grundfos Other: _____	Sampling Equipment:	<u>Disposable Bailer</u> Bailer Pressure Bailer Grab Sample Other: _____
------------------	--	---------------------	--

Starting Time:	<u>18:19</u>	Weather Conditions:	<u>Cloudy, cool</u>		
Sampling Time:	<u>18:32</u>	Water Color:	<u>Clear</u>	Odor:	<u>Mix</u>
Purging Flow Rate:	<u>1</u> gpm	Sediment Description:	<u>None</u>		
Did well de-water?	<u>No</u>	If yes; Time:	Volume: _____ (gal.)		

Time	Volume (gal.)	pH	Conductivity $\mu\text{hos/cm}$	Temperature $^{\circ}\text{C}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>18:16</u>	<u>2</u>	<u>6.73</u>	<u>808</u>	<u>22.4</u>			
<u>18:18</u>	<u>4</u>	<u>6.70</u>	<u>800</u>	<u>22.5</u>			
<u>18:20</u>	<u>6</u>	<u>6.69</u>	<u>805</u>	<u>22.4</u>			
<u>18:22</u>	<u>7</u>	<u>6.70</u>	<u>804</u>	<u>22.4</u>			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV.	TYPE	LABORATORY	ANALYSES
<u>B-5</u>	<u>3 x 40m/VOA</u>	<u>Y</u>	<u>HCL</u>	<u>NET/OTEL SEQUOIA</u>	<u>TPH-Gas/BTEX/MTBE</u>	

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Chevron Facility # 9-2506

Job#: 5203.80

Address: 2630 Broadway

Date: 9-15-98

City: Oakland, CA

Sampler: F.Cline

Well ID B- 6

Well Condition: ckay

Well Diameter 2" in.

Hydrocarbon ✓ in. Amount Bailed ✓ (product/water): (gal.)

Total Depth 19' ft.

Thickness: in. (gal.)

Depth to Water 9.63 ft.

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

$$\underline{9.97} \times \underline{0.17} = \underline{1.7} \quad \text{X 3 (case volume)} = \text{Estimated Purge Volume: } \underline{5.1} \text{ (gal.)}$$

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

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

Starting Time: 18:06

Weather Conditions: Cloudy cooling

Sampling Time: 18:14

Water Color: clear Odor: Mild

Purging Flow Rate: 1 gpm

Sediment Description: 11c

Did well de-water? No

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

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm}$	Temperature $^{\circ}\text{C}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>18:08</u>	<u>2</u>	<u>6.69</u>	<u>863</u>	<u>21.9</u>			
<u>18:10</u>	<u>4</u>	<u>6.70</u>	<u>865</u>	<u>22.2</u>			
<u>18:12</u>	<u>6</u>	<u>6.73</u>	<u>992</u>	<u>21.5</u>			
<u>18:14</u>	<u>7</u>	<u>6.72</u>	<u>990</u>	<u>21.6</u>			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV.	TYPE	LABORATORY	ANALYSES
<u>B- 6</u>	<u>3 x 40m/VOA</u>	<u>Y</u>	<u>HCL</u>	<u>MEMPHIS SEQ VOA</u>	<u>TPH-Gas/BTEX/MTBE</u>	

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Chevron Facility # 9-2506
 Address: 2630 Broadway
 City: Oakland, CA

Job#: 5203.80
 Date: 9-15-98
 Sampler: F.Cline

Well ID	<u>B-7</u>	Well Condition:	<u>dry</u>		
Well Diameter	<u>2"</u> in.	Hydrocarbon Thickness:	<u>1</u> in.	Amount Bailed (product/water):	<u>1</u> gal.
Total Depth	<u>19'</u> ft.	Volume Factor (VF)	<u>2" = 0.17</u>	<u>3" = 0.38</u>	<u>4" = 0.66</u>
Depth to Water	<u>6.98</u> ft.		<u>6" = 1.50</u>	<u>12" = 5.80</u>	

$$\underline{12.02} \times \text{VF } \underline{0.17} = \underline{2.0} \quad \text{X 3 (case volume)} = \text{Estimated Purge Volume: } \underline{6.13} \text{ (gal.)}$$

Purge Equipment:	Disposable Bailer Bailer Stack <u>Suction</u> Grundfos Other: _____	Sampling Equipment:	Disposable Bailer Bailer Pressure Bailer Grab Sample Other: _____
------------------	--	---------------------	---

Starting Time:	<u>17:04</u>	Weather Conditions:	<u>cloudy cooling</u>		
Sampling Time:	<u>18:04</u>	Water Color:	<u>clear</u>	Odor:	<u>alco</u>
Purging Flow Rate:	<u>1</u> gpm	Sediment Description:	<u>N/a</u>		
Did well de-water?	<u>NC</u>	If yes; Time:	Volume: _____ (gal.)		

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm}$	Temperature $^{\circ}\text{C}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>17:04</u>	<u>2</u>	<u>6.77</u>	<u>782</u>	<u>22.5</u>			
<u>18:04</u>	<u>4</u>	<u>6.81</u>	<u>780</u>	<u>23.1</u>			
<u>18:05</u>	<u>6</u>	<u>6.87</u>	<u>792</u>	<u>22.8</u>			
<u>18:09</u>	<u>7</u>	<u>6.85</u>	<u>789</u>	<u>22.8</u>			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV.	TYPE	LABORATORY	ANALYSES
<u>B-7</u>	<u>3 x 40m/VOA</u>	<u>Y</u>	<u>HCL</u>	<u>NET/SEQ/VOA</u>	<u>TPH-Gas/BTEX/MTBE</u>	

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Chevron Facility # 9-2506
 Address: 2630 Broadway
 City: Oakland, CA

Job#: 5203.80
 Date: 9-15-96
 Sampler: E.Cline

Well ID	<u>B-8</u>	Well Condition:	<u>okay</u>
Well Diameter	<u>2"</u> in.	Hydrocarbon Thickness:	<u>0</u> in.
Total Depth	<u>18'</u> ft.	Amount Bailed (product/water):	<u>0</u> gal.
Depth to Water	<u>6.98</u> ft.	Volume Factor (VF)	<u>2" = 0.17 3" = 0.38 4" = 0.66</u> <u>6" = 1.50 12" = 5.80</u>

$$11.02 \times VF 0.17 = 1.87 \quad X \text{ 3 (case volume)} = \text{Estimated Purge Volume: } 5.6 \text{ (gal.)}$$

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

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

Starting Time: 1722
 Sampling Time: 1723
 Purging Flow Rate: 1 gpm.
 Did well de-water? No

Weather Conditions: cloudy cooling
 Water Color: clear Odor: Nice
 Sediment Description: 1/4"
 If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm}$	Temperature °C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>1717</u>	<u>2</u>	<u>6.73</u>	<u>927</u>	<u>22.8</u>			
<u>1719</u>	<u>4</u>	<u>6.85</u>	<u>921</u>	<u>23.2</u>			
<u>1721</u>	<u>6</u>	<u>6.95</u>	<u>918</u>	<u>23.2</u>			
<u>1723</u>	<u>7</u>	<u>6.93</u>	<u>910</u>	<u>23.3</u>			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV.	TYPE	LABORATORY	ANALYSES
<u>B-8</u>	<u>3 x 40m/VOA</u>	<u>Y</u>	<u>HCL</u>	<u>NEUT/OTEL SEQUOIA</u>	<u>TPH-Gas/BTEX/MTBE</u>	

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Chevron Facility # 9-2506
 Address: 2630 Broadway
 City: Oakland, CA

Job #: 5203.80
 Date: 9-15-96
 Sampler: F.Cline

Well ID	<u>B-9</u>	Well Condition:	<u>Okay</u>
Well Diameter	<u>2"</u> in.	Hydrocarbon Thickness:	<u>1"</u> in.
Total Depth	<u>19'</u> ft	Volume Factor (VF)	<u>2" = 0.17</u>
Depth to Water	<u>9.07</u> ft	<u>6" = 1.50</u>	<u>3" = 0.38</u>
			<u>12" = 5.80</u>
			<u>4" = 0.66</u>

$$9.93 \times V 0.17 = 1.7 \quad \times 3 \text{ (case volume)} = \text{Estimated Purge Volume: } 5.06 \text{ (gal.)}$$

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

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

Starting Time: 16:20
 Sampling Time: 16:20
 Purging Flow Rate: 1 gpm
 Did well de-water? No

Weather Conditions: clear -
 Water Color: clear Odor: Mild
 Sediment Description: clear
 If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm}$	Temperature $^{\circ}\text{C}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>16:20</u>	<u>2</u>	<u>6.74</u>	<u>1100</u>	<u>23.3</u>			
<u>16:24</u>	<u>4</u>	<u>6.77</u>	<u>1070</u>	<u>23.3</u>			
<u>16:26</u>	<u>6</u>	<u>6.86</u>	<u>1067</u>	<u>23.3</u>			
<u>16:28</u>	<u>7</u>	<u>6.84</u>	<u>1068</u>	<u>23.3</u>			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV.	TYPE	LABORATORY	ANALYSES
<u>B-9</u>	<u>3 x 40m/VOA</u>	<u>Y</u>	<u>HCL</u>	<u>NET/STL SEQ vol A</u>	<u>TPH-Gas/BTEX/MTBE</u>	
<u>B-9</u>	<u>2 x 114v</u>	<u>Y</u>	<u>Na</u>	<u>SEQ</u>	<u>1891.82%</u>	

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Chevron Facility # 9-2506

Job #: 5203.80

Address: 2630 Broadway

Date: 9-15-98

City: Oakland, CA

Sampler: F.Cline

Well ID B-11

Well Condition: dry

Well Diameter 2" in.

Hydrocarbon Thickness: 0 in.

Amount Bailed (product/water): 0 gal.

Total Depth 18 ft

Volume Factor (VF) 0.17

2" = 0.17 3" = 0.38 4" = 0.66

Depth to Water 9 1/6 ft

6" = 1.50 12" = 5.80

$$\frac{8.84}{18} \times 0.17 = 1.5 \quad \text{X 3 (case volume)} = \text{Estimated Purge Volume: } 4.5 \text{ (gal.)}$$

Purge Equipment:

Disposable Bailer

Sampling Equipment:

Bailer

Disposable Bailer

Stack

Bailer

Suction

Pressure Bailer

Grundfos

Grab Sample

Other: _____

Other: _____

Starting Time: 1636

Weather Conditions: Clear warm

Sampling Time: 1645

Water Color: Clear Odor: N/a

Purging Flow Rate: 1.5 gpm

Sediment Description: N/a

Did well de-water? _____

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

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm}$	Temperature $^{\circ}\text{C}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>1637</u>	<u>1.5</u>	<u>6.82</u>	<u>577</u>	<u>22.6</u>	—	—	—
<u>1638</u>	<u>3.0</u>	<u>6.90</u>	<u>582</u>	<u>22.5</u>	—	—	—
<u>1639</u>	<u>4.5</u>	<u>6.94</u>	<u>584</u>	<u>22.3</u>	—	—	—
<u>1640</u>	<u>5.0</u>	<u>6.92</u>	<u>583</u>	<u>23.4</u>	—	—	—

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV.	TYPE	LABORATORY	ANALYSES
<u>B-11</u>	<u>3 x 40m/VOA</u>	<u>Y</u>	<u>HCL</u>	<u>NET/STL SEQ VOL A</u>	<u>TPH-Gas/BTEX/MTBE</u>	

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Chevron Facility # 9-2506
 Address: 2630 Broadway
 City: Oakland, CA

Job#: 5203.80
 Date: 9-15-98
 Sampler: F.Cline

Well ID	<u>B-12</u>	Well Condition:	<u>dry</u>
Well Diameter	<u>2"</u> in.	Hydrocarbon Thickness:	<u>0</u> in.
Total Depth	<u>18'</u> ft.	Amount Bailed (product/water):	<u>0</u> gal.
Depth to Water	<u>6.33</u> ft.	Volume Factor (VF)	<u>2" = 0.17 3" = 0.38 4" = 0.66 6" = 1.50 12" = 5.80</u>

$$11.67 \times VF 0.17 = 1.9 \quad X 3 \text{ (case volume)} = \text{Estimated Purge Volume: } 5.9 \text{ (gal.)}$$

Purge Equipment:	Disposable Bailer Bailer <u>Stack</u> Suction Grundfos Other: _____	Sampling Equipment: <u>Disposable Bailer</u> Pressure Bailer Grab Sample Other: _____
------------------	--	---

Starting Time:	<u>16:57</u>	Weather Conditions:	<u>Cloudy cooling</u>
Sampling Time:	<u>17:05</u>	Water Color:	<u>Clear</u>
Purging Flow Rate:	<u>1 gpm</u>	Sediment Description:	<u>N/a</u>
Did well de-water?	<u>No</u>	If yes; Time:	Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm}$	Temperature $^{\circ}\text{C}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>16:59</u>	<u>2</u>	<u>6.39</u>	<u>569</u>	<u>21.4</u>			
<u>17:01</u>	<u>4</u>	<u>6.49</u>	<u>589</u>	<u>22.9</u>			
<u>17:03</u>	<u>6</u>	<u>6.50</u>	<u>586</u>	<u>21.9</u>			
<u>17:05</u>	<u>7</u>	<u>6.48</u>	<u>585</u>	<u>21.5</u>			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV.	TYPE	LABORATORY	ANALYSES
<u>B-12</u>	<u>3 x 40m/VOA</u>	<u>Y</u>	<u>HCL</u>	<u>NET/SEQ/VOA</u>	<u>TPH-Gas/BTEX/MTBE</u>	

COMMENTS: _____

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

Challan-of-Custody-Recd

<p>Chevron U.S.A. Inc. P.O. BOX 5004 San Ramon, CA 94583 FAX (415)842-9591</p>	Chevron Facility Number	#9-2506
	Facility Address	2630 Broadway, Oakland, CA
	Consultant Project Number	5203
	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	
Laboratory Service Order #	9144488	
Samples Collected by (Name)	FICLINE	
Collection Date	9-15-98	
Signature	See attached	

Relinquished By (Signature)

Relinquished By (Signature)

Wished By (Signature)

Organization

G-R Inc

G-18-T

Organization

Date/Time

9-16-98/2

9-16-9

Date/Time

Received By (Signature)

See who

Fig. 10. *Leptothrix*.

Received For Laboratory

Organization

G-R THE.

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1

Date/Time 09-00

9-16-98

4.10-18
1000

also see [dark](#)

Turn Around Time (Circle Choice)

24 Hrs.

48 Hrt.

5 Days

10 Days

As Contracted



**Sequoia
Analytical**

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FAX (916) 921-0100
FAX (707) 792-0342

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

Attention: Deanna Harding

Client Proj. ID: Chevron 9-2586
Sample Descript: TB-LB
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9809950-01

RECEIVED

Sampled: 09/15/98
Received: 09/16/98

OCT 06 1998

Analyzed: 09/18/98
Reported: 09/30/98

GETTLER-RYAN INC.

GENERAL CONTRACTORS

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	10	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.60	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 #1197

Mike Gregory
Project Manager



**Sequoia
Analytical**

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

Attention: Deanna Harding

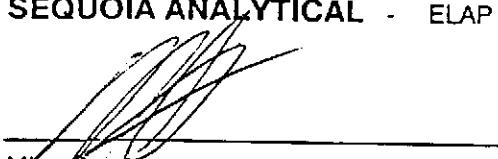
Client Proj. ID: Chevron 9-2506
Sample Descript: B-1
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9809950-11

Sampled: 09/15/98
Received: 09/16/98
Analyzed: 09/24/98
Reported: 09/30/98

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	5000	N.D.
Methyl t-Butyl Ether	1000	51000
Benzene	50	270
Toluene	50	N.D.
Ethyl Benzene	50	N.D.
Xylenes (Total)	60	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	106

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

SEQUOIA ANALYTICAL - ELAP #1197


Mike Gregory
Project Manager



**Sequoia
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6747 Sierra Court Suite J
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Attention: Deanna Harding

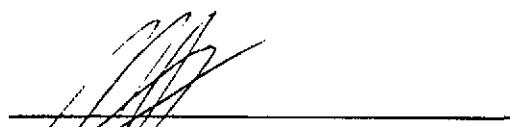
Client Proj. ID: Chevron 9-2506
Sample Descript: B-3
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9809950-07

Sampled: 09/15/98
Received: 09/16/98
Analyzed: 09/24/98
Reported: 09/30/98

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50
Methyl t-Butyl Ether	100
Benzene	0.50
Toluene	0.50
Ethyl Benzene	0.50
Xylenes (Total)	0.60
Chromatogram Pattern:	GAS
Surrogates		Control Limits %
Trifluorotoluene		70 130
		% Recovery
		153 Q

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

SEQUOIA ANALYTICAL - ELAP #1197


Mike Gregory
Project Manager



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

Attention: Deanna Harding

Client Proj. ID: Chevron 9-2506
Sample Descript: B-3
Matrix: LIQUID
Analysis Method: EPA 8270
Lab Number: 9809950-07

Sampled: 09/15/98
Received: 09/16/98
Extracted: 09/17/98
Analyzed: 09/18/98
Reported: 09/30/98

QC Batch Number: MS0915988270EXD
Instrument ID: H5

Semivolatile Organics (EPA 8270)

Analyte	Detection Limit ug/L	Sample Results ug/L
Acenaphthene	5.0	N.D.
Acenaphthylene	5.0	N.D.
Anthracene	5.0	N.D.
Benzoic Acid	10	N.D.
Benzo(a)anthracene	5.0	N.D.
Benzo(b)fluoranthene	5.0	N.D.
Benzo(k)fluoranthene	5.0	N.D.
Benzo(g,h,i)perylene	5.0	N.D.
Benzo(a)pyrene	5.0	N.D.
Benzyl alcohol	5.0	N.D.
Bis(2-chloroethoxy)methane	5.0	N.D.
Bis(2-chloroethyl)ether	5.0	N.D.
Bis(2-chloroisopropyl)ether	5.0	N.D.
Bis(2-ethylhexyl)phthalate	10	N.D.
4-Bromophenyl phenyl ether	5.0	N.D.
Butyl benzyl phthalate	5.0	N.D.
4-Chloroaniline	10	N.D.
2-Chloronaphthalene	5.0	N.D.
4-Chloro-3-methylphenol	5.0	N.D.
2-Chlorophenol	5.0	N.D.
4-Chlorophenyl phenyl ether	5.0	N.D.
Chrysene	5.0	N.D.
Dibenzo(a,h)anthracene	5.0	N.D.
Dibenzofuran	5.0	N.D.
Di-n-butyl phthalate	10	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
3,3-Dichlorobenzidine	10	N.D.
2,4-Dichlorophenol	5.0	N.D.
Diethyl phthalate	5.0	N.D.
2,4-Dimethylphenol	5.0	N.D.
Dimethyl phthalate	5.0	N.D.
4,6-Dinitro-2-methylphenol	10	N.D.
2,4-Dinitrophenol	10	N.D.
2,4-Dinitrotoluene	5.0	N.D.
2,6-Dinitrotoluene	5.0	N.D.
Di-n-octyl phthalate	5.0	N.D.
Fluoranthene	5.0	N.D.



**Sequoia
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Gettier Ryan/Geostrategies
6747 Sierra Court Suite J
Dublin, CA 94568

Attention: Deanna Harding

Client Proj. ID: Chevron 9-2506
Sample Descript: B-3
Matrix: LIQUID
Analysis Method: EPA 8270
Lab Number: 9809950-07

Sampled: 09/15/98
Received: 09/16/98
Extracted: 09/17/98
Analyzed: 09/18/98
Reported: 09/30/98

QC Batch Number: MS0915988270EXD
Instrument ID: H5

Analyte	Detection Limit ug/L	Sample Results ug/L
Fluorene	5.0	N.D.
Hexachlorobenzene	5.0	N.D.
Hexachlorobutadiene	5.0	N.D.
Hexachlorocyclopentadiene	10	N.D.
Hexachloroethane	5.0	N.D.
Indeno(1,2,3-cd)pyrene	5.0	N.D.
Isophorone	5.0	N.D.
2-Methylnaphthalene	5.0	N.D.
2-Methylphenol	5.0	N.D.
4-Methylphenol	5.0	N.D.
Naphthalene	5.0	N.D.
2-Nitroaniline	10	N.D.
3-Nitroaniline	10	N.D.
4-Nitroaniline	10	N.D.
Nitrobenzene	5.0	N.D.
2-Nitrophenol	5.0	N.D.
4-Nitrophenol	10	N.D.
n-Nitrosodiphenylamine	5.0	N.D.
n-Nitroso-di-n-propylamine	5.0	N.D.
Pentachlorophenol	10	N.D.
Phenanthrene	5.0	N.D.
Phenol	5.0	N.D.
Pyrene	5.0	N.D.
1,2,4-Trichlorobenzene	5.0	N.D.
2,4,5-Trichlorophenol	10	N.D.
2,4,6-Trichlorophenol	5.0	N.D.
Surrogates		
2-Fluorophenol	21	110
Phenol-d5	10	110
Nitrobenzene-d5	35	114
2-Fluorobiphenyl	43	116
2,4,6-Tribromophenol	10	123
p-Terphenyl-d14	33	141

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

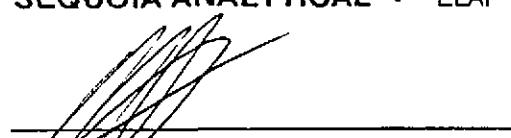
Client Proj. ID: Chevron 9-2506
Sample Descript: B-5
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9809950-10

Sampled: 09/15/98
Received: 09/16/98
Analyzed: 09/24/98
Reported: 09/30/98

Analyte	Detection Limit ug/L	Sample Results ug/L	
TPPH as Gas	10000	.....	11000
Methyl t-Butyl Ether	2000	.....	4600
Benzene	100	.....	250
Toluene	100	.....	N.D.
Ethyl Benzene	100	.....	290
Xylenes (Total)	120	.....	740
Chromatogram Pattern:	.....	.....	GAS
Surrogates		Control Limits %	% Recovery
Trifluorotoluene		70 130	104

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

SEQUOIA ANALYTICAL - ELAP #1197


Mike Gregory
Project Manager



Sequoia
Analytical

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Sacramento, CA 95834	(916) 921-9600	FAX (916) 921-0100
Petaluma, CA 94954	(707) 792-1865	FAX (707) 792-0342

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

Client Proj. ID: Chevron 9-2506
Sample Descript: B-6
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9809950-09

Sampled: 09/15/98
Received: 09/16/98

Analyzed: 09/24/98
Reported: 09/30/98

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	100	210
Methyl t-Butyl Ether	200	8800
Benzene	1.0	N.D.
Toluene	1.0	N.D.
Ethyl Benzene	1.0	N.D.
Xylenes (Total)	1.2	N.D.
Chromatogram Pattern:		GAS
Surrogates		Control Limits %
Trifluorotoluene	70	130
		% Recovery
		105

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

SEQUOIA ANALYTICAL : ELAP #1197

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 9-2506
Sample Descript: B-7
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9809950-08

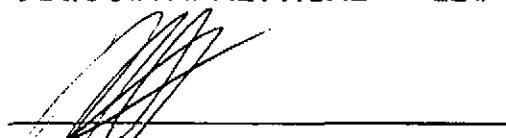
Sampled: 09/15/98
Received: 09/16/98

Analyzed: 09/24/98
Reported: 09/30/98

Analyte	Detection Limit ug/L	Sample Results ug/L	
TPPH as Gas	50	.....	330
Methyl t-Butyl Ether	100	.....	1200
Benzene	0.50	.....	N.D.
Toluene	0.50	.....	N.D.
Ethyl Benzene	0.50	.....	N.D.
Xylenes (Total)	0.60	.....	N.D.
Chromatogram Pattern:	.....	.....	GAS
Surrogates		Control Limits %	% Recovery
Trifluorotoluene	70	130	115

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

SEQUOIA ANALYTICAL - ELAP #1197


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 9-2506
Sample Descript: B-8
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9809950-06

Sampled: 09/15/98
Received: 09/16/98

Analyzed: 09/18/98
Reported: 09/30/98

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	10	54
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.60	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	96

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

SEQUOIA ANALYTICAL - ELAP #1197

Mike Gregory
Project Manager



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

Attention: Deanna Harding

Client Proj. ID: Chevron 9-2506
Sample Descript: B-9
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9809950-03

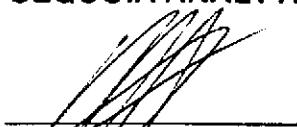
Sampled: 09/15/98
Received: 09/16/98

Analyzed: 09/18/98
Reported: 09/30/98

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	1400
Methyl t-Butyl Ether	10	69
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.60	N.D.
Chromatogram Pattern:	.....	GAS
Surrogates		Control Limits %
Trifluorotoluene	70	130
		% Recovery
		91

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

SEQUOIA ANALYTICAL - ELAP #1197


Mike Gregory
Project Manager

Page:

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

Attention: Deanna Harding

Client Proj. ID: Chevron 9-2506
Sample Descript: B-9
Matrix: LIQUID
Analysis Method: EPA 8270
Lab Number: 9809950-03

Sampled: 09/15/98
Received: 09/16/98
Extracted: 09/17/98
Analyzed: 09/18/98
Reported: 09/30/98

QC Batch Number: MS0915988270EXD
Instrument ID: H5

Semivolatile Organics (EPA 8270)

Analyte	Detection Limit ug/L	Sample Results ug/L
Acenaphthene	5.0	N.D.
Acenaphthylene	5.0	N.D.
Anthracene	5.0	N.D.
Benzoic Acid	10	N.D.
Benzo(a)anthracene	5.0	N.D.
Benzo(b)fluoranthene	5.0	N.D.
Benzo(k)fluoranthene	5.0	N.D.
Benzo(g,h,i)perylene	5.0	N.D.
Benzo(a)pyrene	5.0	N.D.
Benzyl alcohol	5.0	N.D.
Bis(2-chloroethoxy)methane	5.0	N.D.
Bis(2-chloroethyl)ether	5.0	N.D.
Bis(2-chloroisopropyl)ether	5.0	N.D.
Bis(2-ethylhexyl)phthalate	10	N.D.
4-Bromophenyl phenyl ether	5.0	N.D.
Butyl benzyl phthalate	5.0	N.D.
4-Chloroaniline	10	N.D.
2-Chloronaphthalene	5.0	N.D.
4-Chloro-3-methylphenol	5.0	N.D.
2-Chlorophenol	5.0	N.D.
4-Chlorophenyl phenyl ether	5.0	N.D.
Chrysene	5.0	N.D.
Dibenzo(a,h)anthracene	5.0	N.D.
Dibenzofuran	5.0	N.D.
Di-n-butyl phthalate	10	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
3,3-Dichlorobenzidine	10	N.D.
2,4-Dichlorophenol	5.0	N.D.
Diethyl phthalate	5.0	N.D.
2,4-Dimethylphenol	5.0	N.D.
Dimethyl phthalate	5.0	N.D.
4,6-Dinitro-2-methylphenol	10	N.D.
2,4-Dinitrophenol	10	N.D.
2,4-Dinitrotoluene	5.0	N.D.
2,6-Dinitrotoluene	5.0	N.D.
Di-n-octyl phthalate	5.0	N.D.
Fluoranthene	5.0	N.D.



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

Attention: Deanna Harding

Client Proj. ID: Chevron 9-2506
Sample Descript: B-9
Matrix: LIQUID
Analysis Method: EPA 8270
Lab Number: 9809950-03

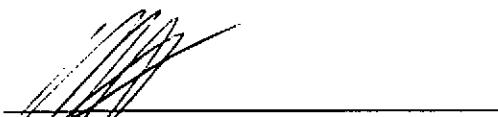
Sampled: 09/15/98
Received: 09/16/98
Extracted: 09/17/98
Analyzed: 09/18/98
Reported: 09/30/98

QC Batch Number: MS0915988270EXD
Instrument ID: H5

Analyte	Detection Limit ug/L	Sample Results ug/L
Fluorene	5.0	N.D.
Hexachlorobenzene	5.0	N.D.
Hexachlorobutadiene	5.0	N.D.
Hexachlorocyclopentadiene	10	N.D.
Hexachloroethane	5.0	N.D.
Indeno(1,2,3-cd)pyrene	5.0	N.D.
Isophorone	5.0	N.D.
2-Methylnaphthalene	5.0	N.D.
2-Methylphenol	5.0	N.D.
4-Methylphenol	5.0	N.D.
Naphthalene	5.0	N.D.
2-Nitroaniline	10	N.D.
3-Nitroaniline	10	N.D.
4-Nitroaniline	10	N.D.
Nitrobenzene	5.0	N.D.
2-Nitrophenol	5.0	N.D.
4-Nitrophenol	10	N.D.
n-Nitrosodiphenylamine	5.0	N.D.
n-Nitroso-di-n-propylamine	5.0	N.D.
Pentachlorophenol	10	N.D.
Phenanthrene	5.0	N.D.
Phenol	5.0	N.D.
Pyrene	5.0	N.D.
1,2,4-Trichlorobenzene	5.0	N.D.
2,4,5-Trichlorophenol	10	N.D.
2,4,6-Trichlorophenol	5.0	N.D.
Surrogates		
2-Fluorophenol	21	110
Phenol-d5	10	110
Nitrobenzene-d5	35	114
2-Fluorobiphenyl	43	116
2,4,6-Tribromophenol	10	123
p-Terphenyl-d14	33	141

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager

Page:

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**Sequoia
Analytical**

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

Attention: Deanna Harding

Client Proj. ID: Chevron 9-2506
Sample Descript: B-10
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9809950-02

Sampled: 09/15/98
Received: 09/16/98

Analyzed: 09/18/98
Reported: 09/30/98

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	10	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.60	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	88

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

SEQUOIA ANALYTICAL - ELAP #1197


Mike Gregory
Project Manager



**Sequoia
Analytical**

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

Attention: Deanna Harding

Client Proj. ID: Chevron 9-2506
Sample Descript: B-10
Matrix: LIQUID
Analysis Method: EPA 8270
Lab Number: 9809950-02

Sampled: 09/15/98
Received: 09/16/98
Extracted: 09/17/98
Analyzed: 09/18/98
Reported: 09/30/98

QC Batch Number: MS0915988270EXD
Instrument ID: H5

Semivolatile Organics (EPA 8270)

Analyte	Detection Limit ug/L	Sample Results ug/L
Acenaphthene	5.0	N.D.
Acenaphthylene	5.0	N.D.
Anthracene	5.0	N.D.
Benzoic Acid	10	N.D.
Benzo(a)anthracene	5.0	N.D.
Benzo(b)fluoranthene	5.0	N.D.
Benzo(k)fluoranthene	5.0	N.D.
Benzo(g,h,i)perylene	5.0	N.D.
Benzo(a)pyrene	5.0	N.D.
Benzyl alcohol	5.0	N.D.
Bis(2-chloroethoxy)methane	5.0	N.D.
Bis(2-chloroethyl)ether	5.0	N.D.
Bis(2-chloroisopropyl)ether	5.0	N.D.
Bis(2-ethylhexyl)phthalate	10	N.D.
4-Bromophenyl phenyl ether	5.0	N.D.
Butyl benzyl phthalate	5.0	N.D.
4-Chloroaniline	10	N.D.
2-Chloronaphthalene	5.0	N.D.
4-Chloro-3-methylphenol	5.0	N.D.
2-Chlorophenol	5.0	N.D.
4-Chlorophenyl phenyl ether	5.0	N.D.
Chrysene	5.0	N.D.
Dibenzo(a,h)anthracene	5.0	N.D.
Dibenzofuran	5.0	N.D.
Di-n-butyl phthalate	10	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
3,3-Dichlorobenzidine	10	N.D.
2,4-Dichlorophenol	5.0	N.D.
Diethyl phthalate	5.0	N.D.
2,4-Dimethylphenol	5.0	N.D.
Dimethyl phthalate	5.0	N.D.
4,6-Dinitro-2-methylphenol	10	N.D.
2,4-Dinitrophenol	10	N.D.
2,4-Dinitrotoluene	5.0	N.D.
2,6-Dinitrotoluene	5.0	N.D.
Di-n-octyl phthalate	5.0	N.D.
Fluoranthene	5.0	N.D.



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

Attention: Deanna Harding

Client Proj. ID: Chevron 9-2506
Sample Descript: B-10
Matrix: LIQUID
Analysis Method: EPA 8270
Lab Number: 9809950-02

Sampled: 09/15/98
Received: 09/16/98
Extracted: 09/17/98
Analyzed: 09/18/98
Reported: 09/30/98

QC Batch Number: MS0915988270EXD
Instrument ID: H5

Analyte	Detection Limit ug/L	Sample Results ug/L
Fluorene	5.0	N.D.
Hexachlorobenzene	5.0	N.D.
Hexachlorobutadiene	5.0	N.D.
Hexachlorocyclopentadiene	10	N.D.
Hexachloroethane	5.0	N.D.
Indeno(1,2,3-cd)pyrene	5.0	N.D.
Isophorone	5.0	N.D.
2-Methylnaphthalene	5.0	N.D.
2-Methylphenol	5.0	N.D.
4-Methylphenol	5.0	N.D.
Naphthalene	5.0	N.D.
2-Nitroaniline	10	N.D.
3-Nitroaniline	10	N.D.
4-Nitroaniline	10	N.D.
Nitrobenzene	5.0	N.D.
2-Nitrophenol	5.0	N.D.
4-Nitrophenol	10	N.D.
n-Nitrosodiphenylamine	5.0	N.D.
n-Nitroso-di-n-propylamine	5.0	N.D.
Pentachlorophenol	10	N.D.
Phenanthrene	5.0	N.D.
Phenol	5.0	N.D.
Pyrene	5.0	N.D.
1,2,4-Trichlorobenzene	5.0	N.D.
2,4,5-Trichlorophenol	10	N.D.
2,4,6-Trichlorophenol	5.0	N.D.
Surrogates		
2-Fluorophenol	21	110
Phenol-d5	10	110
Nitrobenzene-d5	35	114
2-Fluorobiphenyl	43	116
2,4,6-Tribromophenol	10	123
p-Terphenyl-d14	33	141

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

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager

Page:

4



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

Attention: Deanna Harding

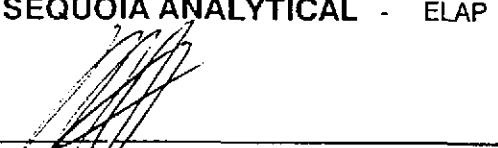
Client Proj. ID: Chevron 9-2506
Sample Descript: B-11
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9809950-04

Sampled: 09/15/98
Received: 09/16/98
Analyzed: 09/18/98
Reported: 09/30/98

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	10	N.D.
Benzene	.....	0.82
Toluene	.....	1.5
Ethyl Benzene	.....	N.D.
Xylenes (Total)	.....	2.0
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	84

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

SEQUOIA ANALYTICAL - ELAP #1197


Mike, Gregory
Project Manager



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

Attention: Deanna Harding

Client Proj. ID: Chevron 9-2506
Sample Descript: B-12
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9809950-05

Sampled: 09/15/98
Received: 09/16/98
Analyzed: 09/18/98
Reported: 09/30/98

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	130
Methyl t-Butyl Ether	10	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.60	N.D.
Chromatogram Pattern:		GAS
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	100

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

SEQUOIA ANALYTICAL - ELAP #1197


Mike Gregory
Project Manager

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**Sequoia
Analytical**

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 1455 McDowell Blvd. North, Ste. D	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
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Gettler Ryan/Geostrategies
6747 Sierra Court, Ste J
Dublin, CA 94568
Attention: Deanna Harding

Client Project ID: Chevron 9-2506
Matrix: Liquid

Work Order #: 9809950-02, 03, 07

Reported: Sep 30, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Phenol	2-Chlorophenol	1,4-Dichloro-benzene	N-Nitroso-Di-N-propylamine
QC Batch#:	MS0915988270EXD	MS0915988270EXD	MS0915988270EXD	MS0915988270EXD
Analy. Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3510	EPA 3510	EPA 3510	EPA 3510

Analyst:	E. Manuel	E. Manuel	E. Manuel	E. Manuel
MS/MSD #:	980984302	980984302	980984302	980984302
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	9/15/98	9/15/98	9/15/98	9/15/98
Analyzed Date:	9/16/98	9/16/98	9/16/98	9/16/98
Instrument I.D. #:	F4	F4	F4	F4
Conc. Spiked:	200 µg/L	200 µg/L	200 µg/L	200 µg/L
Result:	73	141	111	143
MS % Recovery:	37	71	56	72
Dup. Result:	64	125	96	133
MSD % Recov.:	32	63	48	67
RPD:	13	12	14	7.2
RPD Limit:	0-30	0-30	0-30	0-30

LCS #:	LCS091798	LCS091798	LCS091798	LCS091798
Prepared Date:	9/17/98	9/17/98	9/17/98	9/17/98
Analyzed Date:	9/17/98	9/17/98	9/17/98	9/17/98
Instrument I.D. #:	H5	H5	H5	H5
Conc. Spiked:	200 µg/L	200 µg/L	200 µg/L	200 µg/L
LCS Result:	45	90	82	108
LCS % Recov.:	23	45	41	54

MS/MSD LCS Control Limits	12-110	27-123	36-97	41-116
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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

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 9-2506
Matrix: Liquid

Work Order #: 9809950-02, 03, 07

Reported: Sep 30, 1998

QUALITY CONTROL DATA REPORT

Analyte:	1,2,4-Trichloro-benzene	4-Chloro-3-Methylphenol	Acenaphthene	4-Nitrophenol
QC Batch#:	MS0915988270EXD	MS0915988270EXD	MS0915988270EXD	MS0915988270EXD
Analy. Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3510	EPA 3510	EPA 3510	EPA 3510

Analyst:	E. Manuel	E. Manuel	E. Manuel	E. Manuel
MS/MSD #:	980984302	980984302	980984302	980984302
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	9/15/98	9/15/98	9/15/98	9/15/98
Analyzed Date:	9/16/98	9/16/98	9/16/98	9/16/98
Instrument I.D. #:	F4	F4	F4	F4
Conc. Spiked:	200 µg/L	200 µg/L	200 µg/L	200 µg/L
Result:	145	137	124	36
MS % Recovery:	73	69	62	18
Dup. Result:	128	131	119	38
MSD % Recov.:	64	66	60	19
RPD:	12	4.5	4.1	5.4
RPD Limit:	0-30	0-30	0-30	0-30

LCS #:	LCS091798	LCS091798	LCS091798	LCS091798
Prepared Date:	9/17/98	9/17/98	9/17/98	9/17/98
Analyzed Date:	9/17/98	9/17/98	9/17/98	9/17/98
Instrument I.D. #:	H5	H5	H5	H5
Conc. Spiked:	200 µg/L	200 µg/L	200 µg/L	200 µg/L
LCS Result:	109	113	117	57
LCS % Recov.:	55	57	59	29

MS/MSD				
LCS				
Control Limits	39-98	23-97	46-118	10-80

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

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 9-2506
Matrix: Liquid

Work Order #: 9809950-02, 03, 07

Reported: Sep 30, 1998

QUALITY CONTROL DATA REPORT

Analyte:	2,4-Dinitrotoluene	Pentachlorophenol	Pyrene
QC Batch#:	MS0915988270EXD	MS0915988270EXD	MS0915988270EXD
Analy. Method:	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3510	EPA 3510	EPA 3510

Analyst:	E. Manuel	E. Manuel	E. Manuel
MS/MSD #:	980984302	980984302	980984302
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	9/15/98	9/15/98	9/15/98
Analyzed Date:	9/16/98	9/16/98	9/16/98
Instrument I.D. #:	F4	F4	F4
Conc. Spiked:	200 µg/L	200 µg/L	200 µg/L
Result:	140	139	145
MS % Recovery:	70	70	73
Dup. Result:	142	144	148
MSD % Recov.:	71	72	74
RPD:	1.4	3.5	2.0
RPD Limit:	0-30	0-30	0-30

LCS #:	LCS091798	LCS091798	LCS091798
Prepared Date:	9/17/98	9/17/98	9/17/98
Analyzed Date:	9/17/98	9/17/98	9/17/98
Instrument I.D. #:	H5	H5	H5
Conc. Spiked:	200 µg/L	200 µg/L	200 µg/L
LCS Result:	141	153	126
LCS % Recov.:	71	77	63

MS/MSD LCS Control Limits	24-96	9-103	26-127
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SEQUOIA ANALYTICAL

Mike Gregory
Project Manager

Please Note:

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