Reviewed by Aleech 2/1/95

Chevron

95 JAN -9 PM 3:47

Chevron U.S.A. Products Company
6001 Bollinger Canyon Rd., Bldg. L
P.O. Box 5004
San Ramon, CA 94583-0804

Site Assessment & Remediation Group
Phone (510) 842-9500

January 3, 1995

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

Re: Chevron Service Station #9-0504
15900 Hesperian Boulevard, San Lorenzo, CA

Dear Ms. Shin:

Enclosed is the Quarterly Ground Water Sampling report dated December 1, 1994, prepared by our consultant Sierra Environmental Services for the above referenced site. As indicated in the report, ground water samples collected were analyzed for total petroleum hydrocarbons as gasoline (TPH-G) and BTEX. Dissolved concentrations of these constituents observed during the past quarter are consistent with historical results. Depth to ground water was measured at approximately 10.5 to 14.9 feet below grade, and the direction of flow is to the south-southwest.

Concentrations of EPA Method 8010 constituents were below method detection limits in the sample collected from C-4, therefore we will discontinue sampling for these constituents. OK

The ground water extraction system is temporarily off due to a small leak in the system and carbon breakthrough. Startup of this system has been delayed pending submittal and review of our Comprehensive Site Review and Proposed Future Action Plan (CSRPFAP). — Did not receive

We are currently preparing the CSRPFAP for the site and anticipate submitting it to your office during the first quarter of 1995. Based on historic site maps found in our files, it appears that a former service station was located adjacent to the Chevron site in the vicinity of monitor well C-7. We are in the process of gathering additional data on this site and will include our findings in the forthcoming report.

If you have any questions or comments, please do not hesitate to contact me at (510) 842-8134.

Sincerely,
CHEVRON U.S.A. PRODUCTS COMPANY

Mark A. Miller
Site Assessment and Remediation Engineer

Enclosure

cc: Mr. S.A. Willer

Mr. Bruce E. Prigoff, Esq.
Steefel, Levitt & Weiss
One Embarcadero Center, 29th Floor
San Francisco, CA 94111

File: 9-0504 QM9

Received by Alameda
on 2/8/95

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Environmental Services

December 1, 1994

Mark Miller
Chevron USA Products Company
P.O. Box 5004
San Ramon, CA 94583

Re: Chevron Service Station #9-0504
15900 Hesperian Boulevard
San Lorenzo, California
SES Project #1-391-04

Dear Mr. Miller:

This report presents the results of the quarterly ground water sampling at Chevron Service Station #9-0504, located at 15900 Hesperian Boulevard in San Lorenzo, California. Nine wells, C-3 through C-11, were sampled (Figure 1).

On September 29 and November 9, 1994, SES personnel visited the site. Water level measurements were collected in all site wells and all wells were checked for the presence of free-phase hydrocarbons. Free-phase hydrocarbons were not present in any of the site wells. Water level data are shown in Table 1 and ground water elevation contours are included on Figure 1.

The ground water samples were collected on September 29 and November 9, 1994, in accordance with SES Standard Operating Procedure - Ground Water Sampling (attached). The field waer sampling forms for this event are included. All analyses were performed by Superior Precision Analytical, Inc. of Martinez, California. Analytic results for ground water are presented in Table 1. The chain of custody document and laboratory analytic reports are attached. SES is not responsible for laboratory omissions or errors.

Thank you for allowing us to provide services to Chevron. Please call if you have any questions.

REGISTERED PROFESSIONAL ENGINEER
CHRIS J. BRAMER
C 048846
Exp 9/96
CIVIL
STATE OF CALIFORNIA

Sincerely,
Sierra Environmental Services

Richard E. (Rick) Hilton
Staff Environmental Scientist

Chris J. Bramer
Professional Engineer #C48846

REH/CJB/wmc
31904QM.DE4

Attachments: Figure
Tables
SES Standard Operating Procedure
Field Water Sampling Forms
Chain of Custody Document and Laboratory Analytic Reports

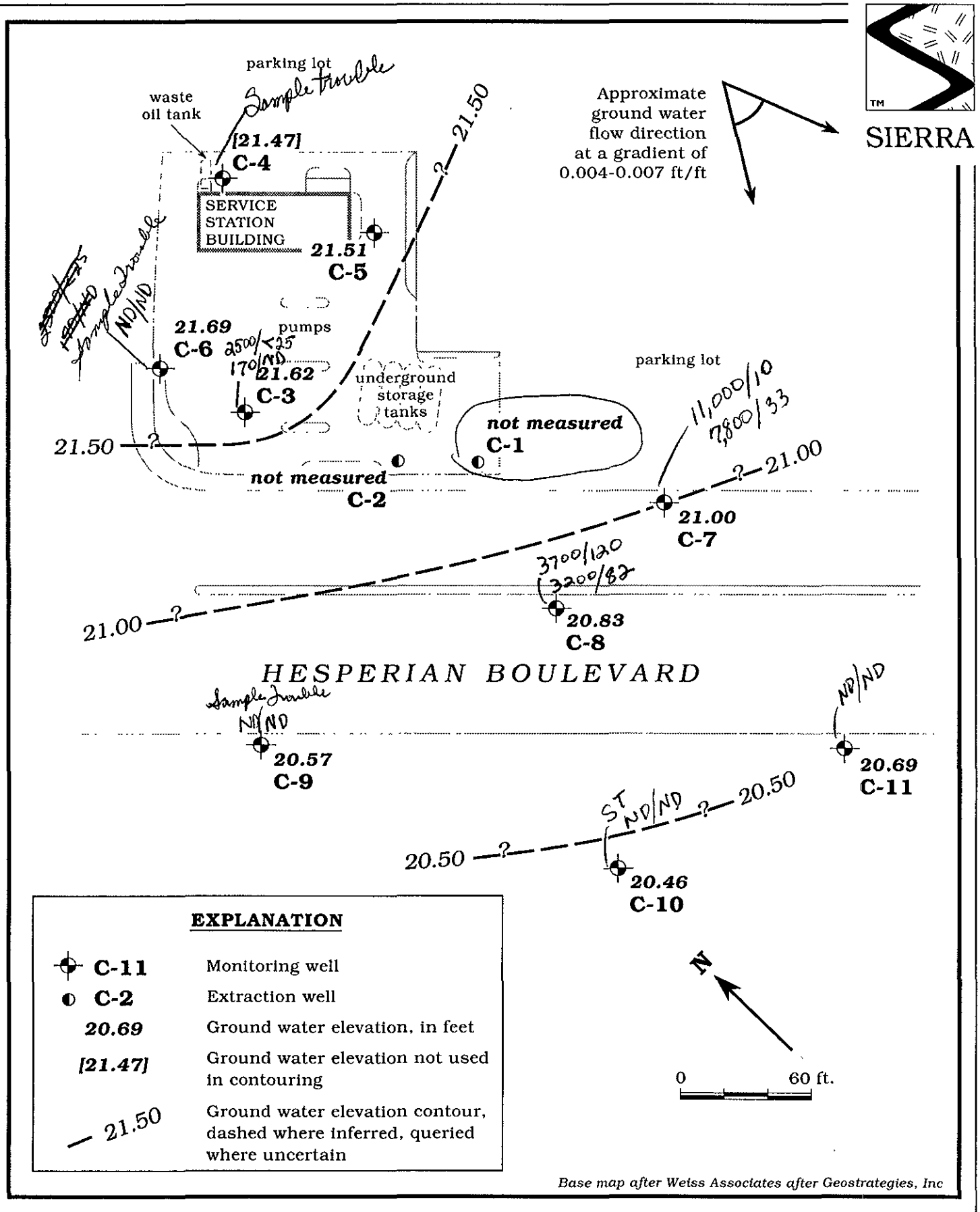

Figure 1. Monitoring Well Locations and Ground Water Elevation Contour Map – September 29, 1994 – Chevron Service Station #9-0504, 15900 Hesperian Boulevard, San Lorenzo, California

1-391-04 10/11/94

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Table 1. Water Level Data and Ground Water Analytic Results - Chevron Service Station #9-0504, 115900 Hesperian Boulevard, San Lorenzo, California

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G)	B	T	E	X
						<----------ppb---------->				
C-1	6/6/89	---	---	0	8015/8020	5,100	250	170	200	990
	12/8/89	13.14	---	0.01	---	---	---	---	---	---
33.93[2]	9/7/90	14.04	19.91[1]	0.03	---	---	---	---	---	---
	12/20/90	13.87	20.07[1]	0.01	---	---	---	---	---	---
	3/15/91	11.40	22.53	0	8015/8020	37,000	220	53	53	1,900
	6/28/91	12.25	21.68	0	8015/8020	3,300	110	6.2	6.2	350
	9/26/91	14.02	19.91	0	8015/8020	3,200	220	6.9	6.9	710
	1/27/92	12.63	21.30	0	8015/8020	330	20	0.6	0.6	48
	4/20/92	10.43	23.50	0	8015/8020	2,700	130	3.4	3.4	690
	7/17/92	12.61	21.32	0	8015/8020	490	17	<0.5	<0.5	52
	1/20/93	9.42	24.51	0	---	---	---	---	---	---
	7/28/93	10.48	23.45	0	---	---	---	---	---	---
32.80	10/27/93	11.32	21.48	0	8015/8020	240	3.6	<0.5	11	23
	3/31/94	9.45	23.35	0	8015/8020	530	23	1.2	10	120
	6/8/94	9.93	22.87	0	8015/8020	990	15	1.5	42	89
	9/29/94[4]	---	---	---	---	---	---	---	---	---
	11/9/94[4]	---	---	---	---	---	---	---	---	---
C-2	6/6/89	---	---	0	8015/8020	130,000	14,000	28,000	3,400	24,000
	12/8/89	13.44	---	0.15	---	---	---	---	---	---
34.21[2]	9/7/90	14.28	20.01[1]	0.10	---	---	---	---	---	---
	12/20/90	14.06	20.16[1]	0.01	---	---	---	---	---	---
	3/15/91	11.59	22.63[1]	0.01	8015/8020	1,200,000	4,700	16,000	13,000	140,000
	6/28/91	12.55	21.66	0	8015/8020	150,000	3,500	4,200	2,100	16,000
	9/26/91	14.20	20.01	0	8015/8020	4,900	220	290	130	880
	1/27/92	12.46	21.75	0	8015/8020	8,200	510	590	230	1,300
	4/20/92	10.24	23.97	0	8015/8020	19,000	1,700	1,700	930	4,700
	7/17/92	12.81	21.40	0	8015/8020	20,000	950	950	1,300	4,700
	1/20/93	8.79	25.42	0	8015/8020	---	---	---	---	---
33.46	10/27/93	12.36	21.10	0	8015/8020	1,600	63	5.8	5.9	190
	3/31/94	9.62	23.84	0	8015/8020	12,000	300	96	510	2,700
	6/8/94	9.98	23.48	0	8015/8020	8,700	140	35	250	1,500
	9/28/94[4]	---	---	---	---	---	---	---	---	---
	11/9/94[4]	---	---	---	---	---	---	---	---	---
C-3	6/6/89	---	---	0	8015/8020	2,600	63	20	390	370
	12/8/89	---	---	0	8015/8020	680	6.0	1.0	31	58

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Table 1. Water Level Data and Ground Water Analytic Results - Chevron Service Station #9-0504, 115900 Hesperian Boulevard, San Lorenzo, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G)	B	T	E	X
						<----------ppb---------->				
C-3 (cont)										
35.46[2]	9/7/90	15.31	20.15	0	8015/8020	490	6.0	<0.5	41	120
(d)	9/7/90	---	---	0	8015/8020	460	6.0	<0.5	40	110
	12/20/90	15.17	20.29	0	8015/8020	100	5.0	<0.5	27	130
	3/6/91	13.27	22.19	0	8015/8020	1,300	7.0	<0.5	75	250
(d)	3/6/91	---	---	0	8015/8020	1,400	8.0	<0.5	76	250
	6/28/91	13.67	21.79	0	8015/8020	770	6.0	<0.5	81	71
(d)	6/28/91	---	---	0	8015/8020	990	5.5	<0.5	86	75
	9/26/91	15.32	20.14	0	8015/8020	1,400	7.9	<0.5	98	340
	1/27/92	13.91	21.55	0	8015/8020	150	0.7	<0.5	12	12
	4/20/92	11.66	23.80	0	8015/8020	1,600	9.3	1.0	190	370
	7/17/92	13.96	21.50	0	8015/8020	460	18	<0.5	20	52
	10/29/92	15.51	19.95	0	8015/8020	520	2.4	1.0	30	79
	1/20/93	10.99	24.47	0	8015/8020	4,200	7.4	<0.5	140	380
	5/3/93	10.97	24.49	0	8015/8020	1,300	6.8	3.2	71	170
	7/28/93	12.41	23.05	0	8015/8020	220	1.4	<0.5	17	39
	10/27/93	13.37	21.78	0	8015/8020	1,800	5.5	0.7	68	290
	3/31/94	11.56[3]	23.90	0	8015/8020	310	1.2	<0.5	19	54
	6/8/94	12.07	23.39	0	8015/8020	300	2.7	1.6	19	48
	9/29/94[5]	13.84	21.62	0	8015/8020	2,500	<25	<25	<25	220
	11/9/94[6]	**---**	**---**	**0**	**8015/8020**	**170**	**<0.5**	**0.8**	**3.3**	**16**
C-4	6/6/89	---	---	0	8015/8020	<50	<0.05	<1.0	<1.0	<3.0
	12/8/89	---	---	0	8015/8020	<500	<0.5	<0.5	<0.5	<0.5
35.78[2]	9/7/90	15.58	20.20	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	12/20/90	15.42	20.36	0	8015/8020	170	1.0	<0.5	<0.5	4.0
	3/6/91	13.54	22.24	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	6/28/91	13.93	21.85	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.8
	9/26/91	15.64	20.14	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	9/26/91	15.64	---	0	8015/8020	<50	<0.5	<0.5	<0.5	---
	1/27/92	13.96	21.82	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	4/20/92	11.71	24.07	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	7/17/92	14.19	21.59	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	10/29/92	15.72	20.06	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	1/20/93	11.17	24.61	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	5/3/93	10.94	24.84	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	7/28/93	12.40	23.38	0	8015/8020	<50	<0.5	<0.5	<0.5	<1.5
35.23	10/27/93	13.32	21.91	0	8015/8020	<50	<0.5	<0.5	<0.5	<1.5

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Table 1. Water Level Data and Ground Water Analytic Results - Chevron Service Station #9-0504, 115900 Hesperian Boulevard, San Lorenzo, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G)	B	T	E	X
						<----------ppb---------->				
C-4	3/31/94[4]	---	---	---	---	---	---	---	---	---
(cont)	6/8/94	11.92	23.31	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	9/29/94[5,7]	13.76	21.47	0	8015/8020/8010	<2,500	<25	<25	<25	<25
	11/9/94[6,7]	**---**	**---**	**0**	**8015/8020/8010**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
C-5	6/6/89	---	---	0	8015/8020	<50	<0.05	<0.05	<1.0	<3.0
	12/8/89	---	---	0	8015/8020	<500	<0.5	<0.5	<0.5	<0.5
35.31[2]	9/7/90	15.10	20.21	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	12/20/90	14.94	20.37	0	8015/8020	80	<0.5	<0.5	<0.5	<0.5
	3/6/91	13.06	22.25	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	6/28/91	13.46	21.85	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	9/26/91	15.14	20.17	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	1/27/92	13.31	22.00	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	4/20/92	11.10	24.21	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	7/17/92	13.73	21.58	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	10/29/92	15.20	20.11	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	1/20/93	10.72	24.59	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	5/3/93	10.43	24.88	0	8015/8020	<50	<0.5	<0.5	<0.5	<1.5
	7/28/93	11.81	23.50	0	8015/8020	<50	<0.5	<0.5	<0.5	<1.5
34.61	10/27/93	12.68	21.93	0	8015/8020	<50	<0.5	<0.5	<0.5	<1.5
	3/31/94	11.00[3]	23.61	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	6/8/94	11.26	23.35	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	9/29/94[5]	13.10	21.51	0	8015/8020	<2,500	<25	<25	<25	<25
	11/9/94[6]	**---**	**---**	**0**	**8015/8020**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
C-6	12/8/89	---	---	0	8015/8020	<500	<0.5	<0.5	<0.5	<0.5
36.89[2]	9/7/90	16.83	20.06	0	8015/8020	57	<0.5	<0.5	0.6	4.0
	12/20/90	16.66	20.23	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	3/6/91	14.80	22.09	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	6/28/91	15.16	21.73	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	9/26/91	16.82	20.07	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	1/27/92	15.44	21.45	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	4/20/92	13.17	23.72	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	7/17/92	15.44	21.45	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	10/29/92	16.98	19.91	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	1/20/93	12.47	24.42	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	5/3/93	---	---	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5

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Table 1. Water Level Data and Ground Water Analytic Results - Chevron Service Station #9-0504, 115900 Hesperian Boulevard, San Lorenzo, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G)	B	T	E	X
						<----------ppb---------->				
C-6 (cont)	7/28/93	13.86	23.03	0	8015/8020	<50	<0.5	<0.5	<0.5	<1.5
36.57	10/27/93	14.85	21.72	0	8015/8020	<50	<0.5	<0.5	<0.5	<1.5
	3/31/94	13.00	23.57	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	6/8/94	13.44	23.13	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	9/29/94[5]	14.88	21.69	0	8015/8020	<2,500	<25	<25	<25	<25
	11/9/94[6]	**---**	**---**	**0**	**8015/8020**	**<50**	**<0.5**	**0.5**	**<0.5**	**<0.5**
C-7	12/8/89	---	---	0	8015/8020	1,700	32	12	17	150
32.75[2]	9/7/90	13.02	19.73	0	8015/8020	880	84	23	46	180
	12/20/90	12.28	20.47	0	8015/8020	560	24	3.0	19	21
	3/6/91	16.92	15.83	0	8015/8020	240	25	2.0	4.0	26
	6/28/91	11.31	21.44	0	8015/8020	2,400	130	13	82	220
	9/26/91	12.28	20.47	0	8015/8020	8,100	47	35	350	1,200
	1/27/92	11.43	21.32	0	8015/8020	12,000	170	40	420	830
	4/20/92	9.28	23.47	0	8015/8020	1,200	80	11	90	110
	7/17/92	11.49	21.26	0	8015/8020	2,400	20	7.4	95	200
	10/29/92	13.05	19.70	0	8015/8020	69	1.3	<0.5	3.8	7.2
	1/20/93	8.69	24.06	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	5/3/93	8.68	24.07	0	8015/8020	2,400	29	8.6	140	210
	7/28/93	9.99	22.76	0	8015/8020	3,600	38	16	290	920
32.32	10/27/93	10.72	21.60	0	8015/8020	22,000	23	26	990	2,600
	3/31/94	9.11	23.21	0	8015/8020	2,300	45	7.0	130	190
	6/8/94	9.22	23.10	0	8015/8020	6,900	46	11	380	820
	9/29/94	11.32	21.00	0	8015/8020	11,000	10	11	620	810
	11/9/94[6]	**---**	**---**	**0**	**8015/8020**	**7,800**	**33**	**18**	**570**	**1,100**
C-8	12/8/89	---	---	0	8015/8020	4,800	62	11	95	180
33.82[2]	9/7/90	14.32	19.50	0	8015/8020	3,700	170	31	180	270
	12/20/90	14.20	19.61	0	8015/8020	3,900	120	20	130	180
	3/6/91	14.80	19.02	0	8015/8020	1,200	45	6.0	34	57
	6/28/91	12.65	21.17	0	8015/8020	6,900	180	46	340	640
	9/26/91	14.29	19.53	0	8015/8020	1,400	66	9.8	38	40
	1/27/92	12.60	21.22	0	8015/8020	3,600	100	26	170	260
	4/20/92	10.36	23.46	0	8015/8020	2,600	110	32	180	260
	7/17/92	12.88	20.94	0	8015/8020	1,100	34	5.9	35	52
	10/29/92	14.39	19.43	0	8015/8020	820	29	4.8	23	27
	1/20/93	10.02	23.80	0	8015/8020	6,000	81	22	200	310

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Table 1. Water Level Data and Ground Water Analytic Results - Chevron Service Station #9-0504, 115900 Hesperian Boulevard, San Lorenzo, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G)	B	T	E	X
						<----------ppb---------->				
C-8 (cont)	5/3/93	9.75	24.07	0	8015/8020	11,000	75	96	880	2,600
	7/28/93	11.14	22.68	0	8015/8020	2,800	60	13	92	150
33.25	10/27/93	12.01	21.24	0	8015/8020	2,700	49	17	60	90
	3/31/94	10.27	22.98	0	8015/8020	190	8.6	1.7	9.1	11
	6/8/94	10.56	22.69	0	8015/8020	2,800	52	110	78	110
	9/29/94	12.42	20.83	0	8015/8020	3,700	120	20	120	85
	11/9/94[6]	---	---	**0**	**8015/8020**	**3,200**	**82**	**44**	**160**	**110**
C-9/										
33.43[2]	9/7/90	14.06	19.37	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	12/20/90	14.03	19.40	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	3/6/91	12.12	21.31	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	6/28/91	12.41	21.02	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	9/26/91	14.02	19.41	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	1/27/92	12.53	20.90	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	4/20/92	10.22	23.21	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	7/17/92	12.64	20.79	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	10/29/92	14.20	19.23	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	1/20/93	9.72	23.71	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	5/3/93	9.55	23.66	0	8015/8020	<50	<0.5	<0.5	<0.5	<1.5
	7/28/93	10.98	22.45	0	8015/8020	<50	<0.5	<0.5	<0.5	<1.5
32.97	10/27/93	11.98	20.99	0	8015/8020	<50	<0.5	<0.5	<0.5	<1.5
	3/31/94	10.17	22.80	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	6/8/94	10.53	22.44	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	9/29/94[5]	12.40	20.57	0	8015/8020	<5,000	<50	<50	<50	<50
	11/9/94[6]	---	---	**0**	**8015/8020**	**<50**	**<0.5**	**<0.5**	**<0.5**	**0.7**
C-10/										
31.63[2]	9/7/90	12.49	19.14	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	12/20/90	12.36	19.27	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	3/6/91	10.45	21.18	0	8015/8020	<50	<0.5	0.8	<0.5	0.8
	6/28/91	10.74	20.69	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	9/26/91	12.42	19.21	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	1/27/92	10.84	20.79	0	8015/8020	<50	<0.5	1.3	<0.5	<0.5
(d)	1/27/92	---	---	0	8015/8020	<50	<0.5	1.3	<0.5	<0.5
	4/20/92	8.55	23.06	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	7/17/92	11.02	20.61	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5

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Table 1. Water Level Data and Ground Water Analytic Results - Chevron Service Station #9-0504, 115900 Hesperian Boulevard, San Lorenzo, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G)	B	T	E	X
						<----------ppb---------->				
C-10 (cont)	10/29/92	12.40	19.23	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	1/20/93	8.14	23.49	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	5/3/93	7.92	23.71	0	8015/8020	<50	<0.5	<0.5	<0.5	<1.5
	7/28/93	9.36	22.27	0	8015/8020	<50	<0.5	<0.5	<0.5	<1.5
31.16	10/27/93	10.30	20.86	0	8015/8020	<50	<0.5	<0.5	<0.5	<1.5
	3/31/94	8.45	22.71	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	6/8/94	8.85	22.31	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	9/29/94[5]	10.70	20.46	0	8015/8020	<5,000	<50	<50	<50	<50
	11/9/94[6]	**---**	**---**	**0**	**8015/8020**	**<50**	**<0.5**	**1.4**	**0.8**	**1.2**
C-11/ 31.58[2]	9/7/90	12.22	19.36	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	12/20/90	12.08	19.50	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	3/6/91	16.15	15.43	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	6/28/91	10.52	21.06	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	9/26/91	12.20	19.38	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	1/27/92	10.73	20.85	0	8015/8020	<50	<0.5	0.8	<0.5	<0.5
	4/20/92	8.56	23.02	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	7/17/92	10.78	20.80	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	10/29/92	12.07	19.51	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	1/20/93	7.97	21.61	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	5/3/93	7.95	23.63	0	8015/8020	<50	<0.5	<0.5	<0.5	<1.5
	7/28/93	9.31	22.27	0	8015/8020	<50	<0.5	<0.5	<0.5	<1.5
31.23	10/27/93	10.17	21.06	0	8015/8020	<50	<0.5	<0.5	<0.5	<1.5
	3/31/94	8.43	22.80	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	6/8/94	8.76	22.47	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	9/29/94	10.54	20.69	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	11/9/94	**---**	**---**	**0**	**8015/8020**	**<50**	**<0.5**	**0.6**	**<0.5**	**0.7**
Trip Blank	9/7/90	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	12/20/90	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	3/6/91	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	6/28/91	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	9/26/91	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	1/27/92	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	4/20/92	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	7/17/92	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5

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Table 1. Water Level Data and Ground Water Analytic Results - Chevron Service Station #9-0504, 115900 Hesperian Boulevard, San Lorenzo, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G)	B	T	E	X
						<----------ppb---------->				
Trip Blank (cont)	10/29/92	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	1/20/93	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	5/3/93	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<1.5
	7/28/93	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<1.5
	10/27/93	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<1.5
	3/31/94	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	6/8/94	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	11/9/94	**---**	**---**	**---**	**8015/8020**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
DTSC MCLs	---	---	---	---	---	NE	1.0	100[†]	680	1,750

EXPLANATION:

DTW = Depth to water
TOC = Top of casing elevation
GWE = Ground water elevation
msl = Measurements referenced relative to mean sea level
TPPH(G) = Total Purgeable Petroleum Hydrocarbons as Gasoline
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
HVOC = Halogenated Volatile Organic Compounds
DTSC = Department of Toxic Substances Control
MCLs = Maximum Contaminant Level
NE = Not established
ppb = Parts per billion
--- = Not available/not applicable

ANALYTIC METHODS:

8015 = EPA Method 8015/5030 for TPPH(G)
8020 = EPA Method 8020 for BTEX
8010 = EPA Method 8010 for HVOCs

NOTES:

Analytic results and ground water elevation data prior to September 29, 1994 were compiled from the Second Quarter 1994 Ground Water Monitoring Report prepared for Chevron by Weiss Associates, July 8, 1994.

Data from June 6, 1989 to July 28, 1993 presented in Groundwater Technology, Inc., September 21, 1993 report.

† DTSC recommended action level for drinking water; MCL not established

1 Ground Water Elevation = [(Top-of-casing elevation - depth to water) + (0.8 x hydrocarbon thickness)]. The assumed specific gravity for free-phase hydrocarbons is 0.8.
2 Elevation of well box.
3 Depth to water measured from top of well vault.
4 Well inaccessible.
5 Detection limit raised due to foaming sample
6 All site monitoring wells were re-sampled due to an excessive number of foaming samples on the 9/29/94 event.
7 Monitoring well was analyzed for HVOCs this event by EPA Method 8010. HVOCs were not detected at detection limits of 0.5 - 1.0 ppb.

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SES STANDARD OPERATING PROCEDURE
GROUND WATER SAMPLING

The following describes sampling procedures used by SES field personnel to collect and handle ground water samples. Before samples are collected, careful consideration is given to the type of analysis to be performed so that precautions are taken to prevent loss of volatile components or contamination of the sample, and to preserve the sample for subsequent analysis. Wells will be sampled no less than 24 hours after well development. Collection methods specific to ground water sampling are presented below.

Prior to sampling, each well is checked for the presence of free-phase hydrocarbons using an MMC flexi-dip interface probe. Product thickness (measured to the nearest 0.01 foot) is noted on the sampling form. Water level measurements are also made using either a water level meter or the interface probe. The water level measurements are also noted on the sampling form.

Prior to sampling, each well is purged of a minimum of three well casing volumes of water using a steam-cleaned PVC bailer, or a pre-cleaned pump. Temperature, pH and electrical conductivity are measured at least three times during purging. Purging is continued until these parameters have stabilized (i.e., changes in temperature, pH or conductivity do not exceed ±0.5°F, 0.1 or 5%, respectively).

The purge water is taken to Chevron's Richmond Refinery for disposal.

Ground water samples are collected from the wells with Chevron designated disposable bailers. The water samples are decanted into the appropriate container for the analysis to be performed. Pre-preserved sample containers may be used or the analytic laboratory may add preservative to the sample upon arrival. Duplicate samples are collected from each well as a back-up sample and/or to provide quality control. The samples are labeled to include the project number, sample ID, date, preservative, and the field person's initials. The samples are placed in polyethylene bags and in an ice chest (maintained at 4°C) for transport under chain of custody to the laboratory.

The chain of custody form includes the project number, analysis requested, sample ID, date analysis and the SES field person's name. The form is signed and dated (with the transfer time) by each person who yields or receives the samples beginning with the field personnel and ending with the laboratory personnel.

A trip blank accompanies each sampling set, or 5% trip blanks are included for sets of greater than 20 samples. The trip blank is analyzed for some or all of the same compounds as the ground water samples.

SIERRA

WATER SAMPLING DATA

Job Name 1-391-04 Job Number San Lorenzo Sampler D.B. / L.C.

Well Number C-3 Date 09/29/94 Well Diameter 2"

Sample Point Location/Description North of Pump Island Well Depth (spec.) _____

Depth to Water (static) 13.84 Well Depth (sounded) 19.00

Initial height of water in casing 5.16 Volume 0.84 gallons

Volume to be purged 2.52 gallons

Purged With Sub Pump Sampled With Disp. Bailer

Pumped or Bailed Dry? ___ Yes ✓ No Time _____ After _____ gallons

Water level at sampling _____ Percent Recovery _____

Formulas/Conversions
r = well radius in ft
h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
V_2" casing = 0.163 gal/ft
V_3" casing = 0.367 gal/ft
V_4" casing = 0.653 gal/ft
$V_{4.5}$" casing = 0.826 gal/ft
V_6" casing = 1.47 gal/ft
V_8" casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
12.50	12.52	1	1	7.65	69.7	—	
	12.54	1	2	7.77	69.9	—	
	12.56	1	3	7.84	69.9	—	

SAMPLES COLLECTED Time 13.10 Total volume purged (gal.) 3

Water color Clear Odor None

Description of sediments or material in sample: None

Additional Comments: —

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
C-3	6	—	1	HCL	Y	SPA	G/BTEX
							+ 8010

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size);
3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size);
5 = Other _____; 6 = Other _____

SIERRA

WATER SAMPLING DATA

Job Name 1-391-04 Job Number San Lorenzo Sampler D.B / L.C.

Well Number C-4 Date 09/29/94 Well Diameter 2"

Sample Point Location/Description East of Gas Station Well Depth (spec.) _____

Depth to Water (static) 13.76 Well Depth (sounded) 19.55

Initial height of water in casing 5.79 Volume 0.94 gallons

Volume to be purged 2.83 gallons

Purged With Sub Pump Sampled With Disp. Bailer

Pumped or Bailed Dry? ___ Yes ✓ No Time ____ After ____ gallons

Water level at sampling _____ Percent Recovery _____

Formulas/Conversions
r = well radius in ft
h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
V_2" casing = 0.163 gal/ft
V_3" casing = 0.367 gal/ft
V_4" casing = 0.653 gal/ft
$V_{4.5}$" casing = 0.826 gal/ft
V_6" casing = 1.47 gal/ft
V_8" casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
12.00	12.02	1	1	2.8	68.4	470	
	12.04	1	2	2.0	68.5	480	
	12.06	1	3	2.9	68.5	450	

SAMPLES COLLECTED Time 12.10 Total volume purged (gal.) 3.0

Water color Cloudy Odor None

Description of sediments or material in sample: Light brown Sediment

Additional Comments: _____

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
C-4	6	—	1	HCL	Y	SPA	G/BTEX
							+ 8010

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size);
3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size);
5 = Other _____; 6 = Other _____

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WATER SAMPLING DATA

Job Name 1-391-04 Job Number San Lorenzo Sampler D.B./L.C.

Well Number C-5 Date 09/29/94 Well Diameter 2"

Sample Point Location/Description South Shore Gas Station Well Depth (spec.) _____

Depth to Water (static) 13.10 Well Depth (sounded) [illegible]

Initial height of water in casing 5.32 Volume 0.86 gallons

Volume to be purged 2.5 gallons

Purged With Sub Pump Sampled With Disp. Bailer

Pumped or Bailed Dry? ___ Yes ✓ No Time ____ After ____ gallons

Water level at sampling _____ Percent Recovery _____

Formulas/Conversions
r = well radius in ft
h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
V_2" casing = 0.163 gal/ft
V_3" casing = 0.367 gal/ft
V_4" casing = 0.653 gal/ft
$V_{4.5}$" casing = 0.826 gal/ft
V_6" casing = 1.47 gal/ft
V_8" casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
12.20	12.22	1	1	7.27	73.2	13.30	
	12.24	1	2	7.20	73.3	6.05	
	12.26	1	3	7.11	74.1	—	

SAMPLES COLLECTED Time 12.35

Water color Clear Total volume purged (gal.) 3

Odor None

Description of sediments or material in sample: —

Additional Comments: —

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Intl)	Analysis Requested
C-5	6	—	1	HCL	Y	SPA	G/BTEX
							+ 8010

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size); 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size); 5 = Other _____; 6 = Other _____

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WATER SAMPLING DATA

Job Name 1-391-04 Job Number San Lorenzo Sampler D.B. / L.C

Well Number C-6 Date 09/29/94 Well Diameter 2"

Sample Point Location/Description North Lot Loop Line Well Depth (spec.) _____

Depth to Water (static) 14.82 Well Depth (sounded) 35.6

Initial height of water in casing 20.78 Volume 1.4 gallons

Volume to be purged _____ gallons

Purged With Sub Pump Sampled With Disp. Bailer

Pumped or Bailed Dry? ___ Yes ✓ No Time ____ After _____ gallons

Water level at sampling _____ Percent Recovery _____

Formulas/Conversions
r = well radius in ft
h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
V_2" casing = 0.163 gal/ft
V_3" casing = 0.367 gal/ft
V_4" casing = 0.653 gal/ft
$V_{4.5}$" casing = 0.826 gal/ft
V_6" casing = 1.47 gal/ft
V_8" casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
12.35	12.37	1	1	6.82	65.9	6.93	
	12.39	1	2	7.01	64	10.75	
	12.41	2	4	7.05	64.4	11.57	

SAMPLES COLLECTED Time 12.45 Total volume purged (gal.) 4

Water color Colorless Odor None

Description of sediments or material in sample: No sediments

Additional Comments: _____

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
C-6	6	—	1	HCL	Y	SPA	GAS/BTEX
							+ 8010

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size);
3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size);
5 = Other _____; 6 = Other _____

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WATER SAMPLING DATA

Job Name 1-391-04 Job Number San Lorenzo Sampler DR / L.C.

Well Number C-7 Date 09/29/94 Well Diameter 2"

Sample Point Location/Description EAST SIDE HESPERIAN BLVD. IN STREET Well Depth (spec.) _____

Depth to Water (static) 11.32 Well Depth (sounded) 24.50

Initial height of water in casing 13.18 Volume 2.14 gallons

Volume to be purged 6.4 gallons

Purged With Sub Pump Sampled With Disp. Bailer

Pumped or Bailed Dry? ___ Yes ✓ No Time ____ After _____ gallons

Water level at sampling _____ Percent Recovery _____

Formulas/Conversions
r = well radius in ft
h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
V_2" casing = 0.163 gal/ft
V_3" casing = 0.367 gal/ft
V_4" casing = 0.653 gal/ft
$V_{4.5}$" casing = 0.826 gal/ft
V_6" casing = 1.47 gal/ft
V_8" casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
13.10	13.15	2	2	6.94	72	—	
	13.17	2	4	6.96	71.3	—	
	13.19	2	6	6.95	71.0	—	

SAMPLES COLLECTED Time 13.25 Total volume purged (gal.) 6

Water color Clear Odor None

Description of sediments or material in sample: No Sediments

Additional Comments: —

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
C-7	6	—	1	HCL	Y	SPA	G/BTEX
							+ 8010

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size);
3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size);
5 = Other _____; 6 = Other _____

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WATER SAMPLING DATA

Job Name 1-391-04 Job Number San Lorenzo Sampler D.B. / L.C.

Well Number C-8 Date 09/29/94 Well Diameter 2"

Sample Point Location/Description Middle of Hesperian Blvd. Well Depth (spec.) _____

Depth to Water (static) 12.42 Well Depth (sounded) 24.57

Initial height of water in casing 12.15 Volume 1.98 gallons

Volume to be purged 5.94 gallons

Purged With Sub Pump Sampled With Disp. Bailer

Pumped or Bailed Dry? ___ Yes ✓ No Time ____ After ____ gallons

Water level at sampling _____ Percent Recovery _____

Formulas/Conversions
r = well radius in ft
h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
V_2" casing = 0.163 gal/ft
V_3" casing = 0.367 gal/ft
V_4" casing = 0.653 gal/ft
$V_{4.5}$" casing = 0.826 gal/ft
V_6" casing = 1.47 gal/ft
V_8" casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°F)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
10:55							
	10:58	2	2	6.70	68.4	4.70	x 1,000
	11:00	2	4	5.70	55.9	4.79	↓
	11:02	1	5	5.65	53.5	4.91	↓

SAMPLES COLLECTED Time 11:05 Total volume purged (gal.) 5

Water color CLEAR Odor PETROLEUM

Description of sediments or material in sample: _____

Additional Comments: _____

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
C-8	6	—	1	HCL	Y	SPA	G/BTEX + 8010

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size); 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size); 5 = Other _____; 6 = Other _____

SIERRA

WATER SAMPLING DATA

Job Name 1-391-04 Job Number San Lorenzo Sampler R.B. / L.C.

Well Number C-9 Date 09/29/94 Well Diameter 2"

Sample Point Location/Description N. SIDE OF WEST SIDE WALK Hesperian Well Depth (spec.) ____

Depth to Water (static) 12.40 Well Depth (sounded) 24.35

Initial height of water in casing 11.95 Volume 1.94 gallons

Volume to be purged 5.84 gallons

Purged With Sub Pump Sampled With Disp. Bailer

Pumped or Bailed Dry? ___ Yes ___ No Time ____ After ____ gallons

Water level at sampling ____ Percent Recovery ____

Formulas/Conversions
r = well radius in ft
h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
V_2" casing = 0.163 gal/ft
V_3" casing = 0.367 gal/ft
V_4" casing = 0.653 gal/ft
$V_{4.5}$" casing = 0.826 gal/ft
V_6" casing = 1.47 gal/ft
V_8" casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
13.25	13.27	2	2	7.33	65.8	—	
	13.29	2	4	7.33	66.3	—	
	13.31	2	6	7.25	65.6	—	

SAMPLES COLLECTED Time 13.35 Total volume purged (gal.) 6

Water color Clear Odor None

Description of sediments or material in sample: None

Additional Comments: —

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Intl)	Analysis Requested
C-9	6	—	1	HCL	Y	SPA	GAS/BTEX + 8010

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size); 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size); 5 = Other ____; 6 = Other ____

SIERRA

WATER SAMPLING DATA

Job Name 1-391-04 Job Number San Lorenzo Sampler D.B./L.C.

Well Number C-10 Date 09/29/94 Well Diameter 2"

Sample Point Location/Description Parking Lot West of Gas Station Well Depth (spec.) _____

Depth to Water (static) 10.70 Well Depth (sounded) 24.32

Initial height of water in casing 13.62 Volume 2.22 gallons

Volume to be purged 6.6 gallons

Purged With Sub Pump Sampled With Disp. Bailer

Pumped or Bailed Dry? ___ Yes ✓ No Time ____ After ____ gallons

Water level at sampling _____ Percent Recovery _____

Formulas/Conversions
r = well radius in ft
h = ht of water col. in ft
vol. in cyl. = πr²h
7.48 gal/ft³
V₂" casing = 0.163 gal/ft
V₃" casing = 0.367 gal/ft
V₄" casing = 0.653 gal/ft
V₅" casing = 0.826 gal/ft
V₆" casing = 1.47 gal/ft
V₈" casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
14.00	14.02	2	2	6.90	72.4	—	
	14.04	2	4	6.86	71.3	—	
	14.06	2	6	6.85	71.1	—	

SAMPLES COLLECTED Time 14.15 Total volume purged (gal.) 6

Water color Clear Odor None

Description of sediments or material in sample: None

Additional Comments: _____

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Intl)	Analysis Requested
C-10	6	—	1	HCL	Y	SPA	G/BTEX
							+ 8010

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size); 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size); 5 = Other _____; 6 = Other _____

SIERRA

WATER SAMPLING DATA

Job Name 1-391-04 Job Number San Lorenzo Sampler DB / L.C.

Well Number C-11 Date 09/29/94 Well Diameter 2"

Sample Point Location/Description S. SIDE, SIDEWALK, WEST OF GAS STATION Well Depth (spec.) _____

Depth to Water (static) 10.54 Well Depth (sounded) 24.34

Initial height of water in casing 13.80 Volume 2.24 gallons

Volume to be purged 6.74 gallons

Purged With Sub Pump Sampled With Disp. Bailer

Pumped or Bailed Dry? ___ Yes ✓ No Time ____ After ____ gallons

Water level at sampling _____ Percent Recovery _____

Formulas/Conversions
r = well radius in ft
h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
V_2" casing = 0.163 gal/ft
V_3" casing = 0.367 gal/ft
V_4" casing = 0.653 gal/ft
$V_{4.5}$" casing = 0.826 gal/ft
V_6" casing = 1.47 gal/ft
V_8" casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
13.40	13.42	2	2	7.15	71.05	—	
	13.44	2	4	7.18	70.30	—	
	13.46	3	7	7.10	70.30	—	

SAMPLES COLLECTED Time 13.55

Water color Clear Total volume purged (gal.) 7

Odor None

Description of sediments or material in sample: None

Additional Comments: _____

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Inst)	Analysis Requested
C-11	8	—	1	HCL	Y	SPA	G/BTEX
							+ 8010

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size); 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size); 5 = Other _____; 6 = Other _____

Superior Precision Analytical, Inc.
A member of ESSCON Environmental Support Service Consortium

Sierra Environmental
Attn: ED MORALES

Project 1-391-04
Reported 06-October-1994

HALOGENATED VOLATILE ORGANICS by EPA SW-846 Methods 5030/8010.

Chronology

Laboratory Number 30779

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
C-4	09/29/94	09/30/94	10/04/94	10/04/94		2

Certified Laboratories

825 Arnold Dr., Suite 114
Martinez, California 94553
(510) 229-1512 / fax (510) 229-1526

1555 Burke St., Unit I
San Francisco, California 94124
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Sierra Environmental
Attn: ED MORALES

Project 1-391-04
Reported 06-October-1994

HALOGENATED VOLATILE ORGANICS by EPA SW-846 Methods 5030/8010.

Laboratory Number	Sample Identification	Matrix
30779- 2	C-4	Water

RESULTS OF ANALYSIS

Laboratory Number: 30779- 2

Chloromethane:	ND<0.5
Vinyl Chloride:	ND<0.5
Bromomethane:	ND<0.5
Chloroethane:	ND<0.5
Trichlorofluoromethane:	ND<0.5
1,1-Dichloroethene:	ND<0.5
Dichloromethane:	ND<1.0
t-1,2-Dichloroethene:	ND<0.5
1,1-Dichloroethane:	ND<0.5
c-1,2-Dichloroethene:	ND<0.5
Chloroform:	ND<0.5
1,1,1-Trichloroethane:	ND<0.5
Carbon tetrachloride:	ND<0.5
1,2-Dichloroethane:	ND<0.5
Trichloroethene:	ND<0.5
c-1,3-Dichloropropene:	ND<0.5
1,2-Dichloropropane:	ND<0.5
t-1,3-Dichloropropene:	ND<0.5
Bromodichloromethane:	ND<0.5
1,1,2-Trichloroethane:	ND<0.5
Tetrachloroethene:	ND<0.5
Dibromochloromethane:	ND<0.5
Chlorobenzene:	ND<0.5
Bromoform:	ND<0.5
1,1,2,2-Tetrachloroeth:	ND<0.5
1,3-Dichlorobenzene:	ND<0.5
1,2-Dichlorobenzene:	ND<0.5
1,4-Dichlorobenzene:	ND<0.5

Concentration: ug/L

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HALOGENATED VOLATILE ORGANICS by EPA SW-846 Methods 5030/8010.
Quality Assurance and Control Data - Water

Laboratory Number 30779

Compound	Method Blank (ug/L)	RL (ug/L)	Spike Recovery (%)	Limits (%)	RPD (%)
Chloromethane:	ND<0.5	0.5			
Vinyl Chloride:	ND<0.5	0.5			
Bromomethane:	ND<0.5	0.5			
Chloroethane:	ND<0.5	0.5			
Trichlorofluoromethane:	ND<0.5	0.5			
1,1-Dichloroethene:	ND<0.5	0.5	62/64	50-189	3%
Dichloromethane:	ND<1.0	1.0			
t-1,2-Dichloroethene:	ND<0.5	0.5			
1,1-Dichloroethane:	ND<0.5	0.5			
c-1,2-Dichloroethene:	ND<0.5	0.5			
Chloroform:	ND<0.5	0.5			
1,1,1-Trichloroethane:	ND<0.5	0.5			
Carbon tetrachloride:	ND<0.5	0.5			
1,2-Dichloroethane:	ND<0.5	0.5			
Trichloroethene:	ND<0.5	0.5	78/76	53-161	3%
c-1,3-Dichloropropene:	ND<0.5	0.5			
1,2-Dichloropropane:	ND<0.5	0.5			
t-1,3-Dichloropropene:	ND<0.5	0.5			
Bromodichloromethane:	ND<0.5	0.5			
1,1,2-Trichloroethane:	ND<0.5	0.5			
Tetrachloroethene:	ND<0.5	0.5			
Dibromochloromethane:	ND<0.5	0.5			
Chlorobenzene:	ND<0.5	0.5	100/98	57-171	2%
Bromoform:	ND<0.5	0.5			
1,1,2,2-Tetrachloroeth:	ND<0.5	0.5			
1,3-Dichlorobenzene:	ND<0.5	0.5			
1,2-Dichlorobenzene:	ND<0.5	0.5			
1,4-Dichlorobenzene:	ND<0.5	0.5			

Definitions:
ND = Not Detected
RPD = Relative Percent Difference
RL = Reporting Limit
ug/L = Parts per billion (ppb)
QC File No. 30779

10/17/94
Senior Chemist
Account Manager

Certified Laboratories

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A member of ESSCON Environmental Support Service Consortium

Sierra Environmental
Attn: ED MORALES

Project 1-391-04
Reported 10/12/94

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed	Matrix
30779- 1	C-3	09/29/94	10/07/94	Water
30779- 2	C-4	09/29/94	10/07/94	Water
30779- 3	C-5	09/29/94	10/07/94	Water
30779- 4	C-6	09/29/94	10/07/94	Water
30779- 5	C-7	09/29/94	10/07/94	Water
30779- 6	C-8	09/29/94	10/07/94	Water
30779- 7	C-9	09/29/94	10/07/94	Water
30779- 8	C-10	09/29/94	10/07/94	Water
30779- 9	C-11	09/29/94	10/07/94	Water

RESULTS OF ANALYSIS

Laboratory Number:	30779- 1*	30779- 2*	30779- 3*	30779- 4*	30779- 5
Gasoline:	ND<2500	ND<2500	ND<2500	ND<2500	11000
Benzene:	ND<25	ND<25	ND<25	ND<25	10
Toluene:	ND<25	ND<25	ND<25	ND<25	11
Ethyl Benzene:	ND<25	ND<25	ND<25	ND<25	620
Total Xylenes:	220	ND<25	ND<25	ND<25	810
Concentration:	ug/L	ug/L	ug/L	ug/L	ug/L

Laboratory Number:	30779- 6	30779- 7*	30779- 8*	30779- 9*
Gasoline:	3700	ND<5000	ND<5000	ND<50
Benzene:	120	ND<50	ND<50	ND<0.5
Toluene:	20	ND<50	ND<50	ND<0.5
Ethyl Benzene:	120	ND<50	ND<50	ND<0.5
Total Xylenes:	85	ND<50	ND<50	ND<0.5
Concentration:	ug/L	ug/L	ug/L	ug/L

* Detection limits raised due to foaming sample.

Certified Laboratories

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Superior Precision Analytical, Inc.
A member of ESSCON Environmental Support Service Consortium

C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

QA/QC INFORMATION
SET: 30779

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
ug/L = parts per billion (ppb)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Water: 5000ug/L

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Water: 50ug/L

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Water: 50ug/L

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Water: 0.5ug/L

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	98/100	2%	56-117
Benzene:	72/72	0%	59-149
Toluene:	80/79	1%	59-149
Ethyl Benzene:	87/85	2%	59-149
Total Xylenes:	92/91	1%	59-149

Senior Chemist 10/17/94

Certified Laboratories

825 Arnold Dr., Suite 114
Martinez, California 94553
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309 S. Cloverdale St., Suite B-24
Seattle, Washington 98108
(206) 763-2992 / fax (206) 763-8429

Fax copy of Lab Report and COC to Chevron Contact: ☐ Yes ☐ No 30779

Chain-of-Custody-Reco

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

Chevron Facility Number: 9-0504
Facility Address: 15900 Hesparian Blvd, San Lorenzo
Consultant Project Number: 1-391-04
Consultant Name: SIERRA ENVIRONMENTAL SERVICES
Address: P.O. BOX 2546 MARTINEZ, CA 94553
Project Contact (Name): ED MORALES
(Phone): 370-1280 (Fax Number): 370-7959

Chevron Contact (Name): Mark Miller
(Phone): 842-8134
Laboratory Name: Superior Analytical
Laboratory Release Number: 1927240
Samples Collected by (Name): David Beardsley
Collection Date: 9-29-94
Signature: [signature]

Analyses To Be Performed

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)					Remarks
C-3	1	6	W	G	13:10	HCl	YES	✓												
C-4	2	↓	↓	↓	12:10	↓	↓	✓												
C-5	3	↓	↓	↓	12:35	↓	↓	✓			✓									
C-6	4	↓	↓	↓	12:45	↓	↓	✓												
C-7	5	↓	↓	↓	13:25	↓	↓	✓												
C-8	6	↓	↓	↓	11:05	↓	↓	✓												
C-9	7	↓	↓	↓	13:35	↓	↓	✓												
C-10	8	↓	↓	↓	14:15	↓	↓	✓												
C-11	9	↓	↓	↓	13:55	↓	↓	✓												

Note:
Do Not Bill
TB-LB Sampl

Please Initial: RG
✓ 5.6%
✓
✓
✓

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
[signature]	SES	9-30-94 11:35			
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time
			R. [signature] SPAHTZ		9/30/94

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

SIERRA

WATER SAMPLING DATA

Job Name Hesperian Blvd. Job Number 1-391-04 Sampler D.B.

Well Number TB Date 11.9.94 Well Diameter 2"

Sample Point Location/Description TRIP BLANK Well Depth (spec.) _____

Depth to Water (static) _____ Well Depth (sounded) _____

Initial height of water in casing ____ Volume _____ gallons

Volume to be purged _____ gallons

Purged With _____ Sampled With _____

Pumped or Bailed Dry? ___ Yes ___ No Time _____ After _____ gallons

Water level at sampling _____ Percent Recovery _____

Formulas/Conversions
r = well radius in ft
h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
V_2" casing = 0.163 gal/ft
V_3" casing = 0.367 gal/ft
V_4" casing = 0.653 gal/ft
$V_{4.5}$" casing = 0.826 gal/ft
V_6" casing = 1.47 gal/ft
V_8" casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm

SAMPLES COLLECTED Time _____ Total volume purged (gal.) _____

Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: TRIP BLANK

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
TB	2	1	—	HCl	YES	SPA	G/BTEX

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size); 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size); 5 = Other _____; 6 = Other _____

SIERRA

WATER SAMPLING DATA

Job Name Hesperian Blvd. Job Number 1-391-04 Sampler D.B.

Well Number C-1 Date 11.9.94 Well Diameter 2"

Sample Point Location/Description _____ Well Depth (spec.) _____

Depth to Water (static) _____ Well Depth (sounded) _____

Initial height of water in casing _____ Volume _____ gallons

Volume to be purged _____ gallons

Purged With ~~Pump~~ Sampled With ~~Disp Bailer~~

Pumped or Bailed Dry? ___ Yes ___ No Time _____ After _____ gallons

Water level at sampling _____ Percent Recovery _____

Formulas/Conversions
r = well radius in ft
h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
V_2" casing = 0.163 gal/ft
V_3" casing = 0.367 gal/ft
V_4" casing = 0.653 gal/ft
$V_{4.5}$" casing = 0.826 gal/ft
V_6" casing = 1.47 gal/ft
V_8" casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm

SAMPLES COLLECTED Time _____ Total volume purged (gal.) _____

Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: Pumping Well Shut Down No Sample

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
C-		1	—	HCl	YES	SRA	G/BTEX
							8010

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size); 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size); 5 = Other _____; 6 = Other _____

SIERRA

WATER SAMPLING DATA

Job Name Hesperian Blvd. Job Number 1-391-04 Sampler D.B.

Well Number C-2 Date 11.9.94 Well Diameter 2"

Sample Point Location/Description _____ Well Depth (spec.) _____

Depth to Water (static) _____ Well Depth (sounded) _____

Initial height of water in casing _____ Volume _____ gallons

Volume to be purged _____ gallons

Purged With PUMP Sampled With Disp Bailer

Pumped or Bailed Dry? ___ Yes ___ No Time _____ After _____ gallons

Water level at sampling _____ Percent Recovery _____

Formulas/Conversions
r = well radius in ft
h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
V_2" casing = 0.163 gal/ft
V_3" casing = 0.367 gal/ft
V_4" casing = 0.653 gal/ft
$V_{4.5}$" casing = 0.826 gal/ft
V_6" casing = 1.47 gal/ft
V_8" casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm

SAMPLES COLLECTED Time _____ Total volume purged (gal.) _____

Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: PUMPING WELL SHUT DOWN, NO SAMPLES

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
C-		1	—	HCl	YES	SRA	G/BTEX
							8010

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size); 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size); 5 = Other _____; 6 = Other _____

SIERRA

WATER SAMPLING DATA

Job Name Hesperian Blvd. Job Number 1-391-04 Sampler D.B.

Well Number C-3 Date 11.9.94 Well Diameter ~~2~~ 3"

Sample Point Location/Description NW. of Pump Island Well Depth (spec.) _____

Depth to Water (static) 12.86 Well Depth (sounded) 19.0

Initial height of water in casing 6.14 Volume 2.25 gallons

Volume to be purged 7 gallons

Purged With PUMP Sampled With Disp Bailer

Pumped or Bailed Dry? ___ Yes ✓ No Time ____ After _____ gallons

Water level at sampling _____ Percent Recovery _____

Formulas/Conversions
r = well radius in ft
h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
V_2" casing = 0.163 gal/ft
V_3" casing = 0.367 gal/ft
V_4" casing = 0.653 gal/ft
$V_{4.5}$" casing = 0.826 gal/ft
V_6" casing = 1.47 gal/ft
V_8" casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
13:20							
			7	METER NOT WORKING			

SAMPLES COLLECTED Time 13:35 Total volume purged (gal.) 7

Water color CLOUDY Odor SLIGHT

Description of sediments or material in sample: _____

Additional Comments: _____

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
C-3	6	1	—	HCl	YES	SPA	G/BTEX
							8010

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size); 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size); 5 = Other _____; 6 = Other _____

SIERRA

WATER SAMPLING DATA

Job Name Hesperian Blvd. Job Number 1-391-04 Sampler D.B.

Well Number C-4 Date 11.9.94 Well Diameter 2"

Sample Point Location/Description N. SIDE SS BLD. Well Depth (spec.) _____

Depth to Water (static) 12.81 Well Depth (sounded) 19.5

Initial height of water in casing 6.69 Volume 2.45 gallons

Volume to be purged 7 gallons

Purged With PUMP Sampled With Disp Bailer

Pumped or Bailed Dry? ___ Yes ✓ No Time ____ After _____ gallons

Water level at sampling _____ Percent Recovery _____

Formulas/Conversions
r = well radius in ft
h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
V_2" casing = 0.163 gal/ft
V_3" casing = 0.367 gal/ft
V_4" casing = 0.653 gal/ft
$V_{4.5}$" casing = 0.826 gal/ft
V_6" casing = 1.47 gal/ft
V_8" casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (F)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
9:15							
	9:17	3	3	7.13	69	*	x 1,000
	9:18	2	5	6.92	↓	1.110	↓
	9:19	2	7	6.90	↓	1.18	↓

SAMPLES COLLECTED Time 9:25 Total volume purged (gal.) 7

Water color CLEAR Odor NO

Description of sediments or material in sample: _____

Additional Comments: C

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
C-4	3	1	—	HCl	YES	SPA	G/BTEX
							8010

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size); 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size); 5 = Other _____; 6 = Other _____

SIERRA

WATER SAMPLING DATA

Job Name Hegenberger Blvd. Job Number 1-391-04 Sampler D.B.

Well Number C-5 Date 11.9.94 Well Diameter ~~2~~ 3"

Sample Point Location/Description S.E. side SS Building Well Depth (spec.) ?

Depth to Water (static) 12.13 Well Depth (sounded) 18.5

Initial height of water in casing 6.37 Volume 2.29 gallons

Volume to be purged 7 gallons

Purged With Pump Sampled With Disp Bailer

Pumped or Bailed Dry? ___ Yes ✓ No Time ___ After ___ gallons

Water level at sampling ___ Percent Recovery ___

Formulas/Conversions
r = well radius in ft
h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
V_2" casing = 0.163 gal/ft
V_3" casing = 0.367 gal/ft
V_4" casing = 0.653 gal/ft
$V_{4.5}$" casing = 0.826 gal/ft
V_6" casing = 1.47 gal/ft
V_8" casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (F)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
12:30							
	12:32	3	3	7.03	68	1.43	x 1,000
	12:33	2	5	7.01	↓	1.47	↓
	12:34	2	7	7.02	↓	1.49	↓

SAMPLES COLLECTED Time 12:45 Total volume purged (gal.) 7

Water color CLOUDY TAN Odor NO

Description of sediments or material in sample: ___

Additional Comments: NEEDS NEW WELL SEAL

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
C-5	6	1	—	HCl	YES	SPA	G/BTEX
							8010

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size); 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size); 5 = Other ___; 6 = Other ___

SIERRA

WATER SAMPLING DATA

Job Name Hesperian Blvd. Job Number 1-391-04 Sampler D.B.

Well Number C-6 Date 11.9.94 Well Diameter 2"

Sample Point Location/Description N. Pump Island Well Depth (spec.) _____

Depth to Water (static) 14.00 Well Depth (sounded) 25.9

Initial height of water in casing 11.0 Volume 1.79 gallons

Volume to be purged 5 gallons

Purged With PUMP Sampled With Disp Bailer

Pumped or Bailed Dry? ___ Yes ✓ No Time _____ After _____ gallons

Water level at sampling _____ Percent Recovery _____

Formulas/Conversions
r = well radius in ft
h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
V_2" casing = 0.163 gal/ft
V_3" casing = 0.367 gal/ft
V_4" casing = 0.653 gal/ft
$V_{4.5}$" casing = 0.826 gal/ft
V_6" casing = 1.47 gal/ft
V_8" casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
12:57							
	12:58	2	2	METER NOT WORKING			
	12:59	2	4				
	13:00	1	5				

SAMPLES COLLECTED Time 13:10 Total volume purged (gal.) 6

Water color CLOUDY Odor NO

Description of sediments or material in sample: _____

Additional Comments: _____

Sample ID	# of Cont.	Container Type	Filtered (size. u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
C-6	6	1	—	HCl	YES	SPA	G/BTEX
							8010

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size); 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size); 5 = Other _____; 6 = Other _____

SIERRA

WATER SAMPLING DATA

Job Name Hesperian Blvd. Job Number 1-391-04 Sampler D.B.

Well Number C-7 Date 11.9.94 Well Diameter 2"

Sample Point Location/Description Hesperian Blvd. Well Depth (spec.) _____

Depth to Water (static) 10.22 Well Depth (sounded) 25.0

Initial height of water in casing 14.78 Volume 2.4 gallons

Volume to be purged 7 gallons

Purged With PUMP Sampled With Disp Bailer

Pumped or Bailed Dry? ___ Yes ✓ No Time ____ After ____ gallons

Water level at sampling _____ Percent Recovery _____

Formulas/Conversions
r = well radius in ft
h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
V_2" casing = 0.163 gal/ft
V_3" casing = 0.367 gal/ft
V_4" casing = 0.653 gal/ft
$V_{4.5}$" casing = 0.826 gal/ft
V_6" casing = 1.47 gal/ft
V_8" casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
10:02							
	10:04	2	2	6.92	68	.166	X 1,000
	10:06	3	5	6.98	↓	.161	↓
	10:07	2	7	7.01	↓	.59	↓

SAMPLES COLLECTED Time 10:15 Total volume purged (gal.) 7

Water color CLEAR Odor STRONG Hydrocarbon

Description of sediments or material in sample: _____

Additional Comments: _____

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
C-7	3	1	—	HCl	YES	SRA	G/BTEX
							8010
							↓

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size); 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size); 5 = Other _____; 6 = Other _____

SIERRA

WATER SAMPLING DATA

Job Name Hesperian Blvd. Job Number 1-391-04 Sampler D.B.

Well Number C-8 Date 11.9.94 Well Diameter 2"

Sample Point Location/Description Medium, Left Turn Lane Well Depth (spec.) _____

Depth to Water (static) 11.51 Well Depth (sounded) 25.0

Initial height of water in casing 13.49 Volume 2.19 gallons

Volume to be purged 6 gallons

Purged With Pump Sampled With Disp Bailer

Pumped or Bailed Dry? ___ Yes ✓ No Time ____ After _____ gallons

Water level at sampling _____ Percent Recovery _____

Formulas/Conversions
r = well radius in ft
h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
V_2" casing = 0.163 gal/ft
V_3" casing = 0.367 gal/ft
V_4" casing = 0.653 gal/ft
$V_{4.5}$" casing = 0.826 gal/ft
V_6" casing = 1.47 gal/ft
V_8" casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°F)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
0937							
	0938	2	2	6.75	67	1.060	X 1,000
	0939	2	4	6.77	↓	1.16	↓
	0940	2	6	6.76	↓	1.14	↓

SAMPLES COLLECTED Time 09:48 Total volume purged (gal.) 6

Water color clear Odor ~~None~~ Hydrocarbon odor

Description of sediments or material in sample: _____

Additional Comments: _____

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
C-8	3	1	—	HCl	YES	SPA	G/BTEX
							8010

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size); 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size); 5 = Other _____; 6 = Other _____

SIERRA

WATER SAMPLING DATA

Job Name Hesperian Blvd. Job Number 1-391-04 Sampler D.B.

Well Number C-9 Date 11.9.94 Well Diameter 2"

Sample Point Location/Description Hesperian Blvd. Sidewalk Well Depth (spec.) _____

Depth to Water (static) 11.54 Well Depth (sounded) _____

Initial height of water in casing 13.96 Volume 2.19 gallons

Volume to be purged ~~6 3.14~~ gallons

Purged With PUMP Sampled With Disp Bailer

Pumped or Bailed Dry? ___ Yes ✓ No Time _____ After _____ gallons

Water level at sampling _____ Percent Recovery _____

Formulas/Conversions
r = well radius in ft
h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
V_2" casing = 0.163 gal/ft
V_3" casing = 0.367 gal/ft
V_4" casing = 0.653 gal/ft
$V_{4.5}$" casing = 0.826 gal/ft
V_6" casing = 1.47 gal/ft
V_8" casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (F)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
10:30							
1	10:33	6	~~6~~ 6	8.27	67	.21	X 1,000
	10:35	4	~~10~~ 10	8.33	↓	.22	
	10:37	4	~~14~~ 14	8.30	↓	.23	

SAMPLES COLLECTED Time 10:45 Total volume purged (gal.) 15

Water color CLEAR Odor N

Description of sediments or material in sample: _____

Additional Comments: _____

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init).	Analysis Requested
C-9	3	1	—	HCl	YES	SPA	G/BTEX
							8010

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size); 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size); 5 = Other _____; 6 = Other _____

SIERRA

WATER SAMPLING DATA

Job Name Hesperian Blvd. Job Number 1-391-04 Sampler D.B.

Well Number C-10 Date 11.9.94 Well Diameter 2"

Sample Point Location/Description Across Hesperian in Parking Lot Well Depth (spec.) _____

Depth to Water (static) 9.78 Well Depth (sounded) 25

Initial height of water in casing 15.22 Volume 2.48 gallons

Volume to be purged 7 gallons

Purged With Pump Sampled With Disp Bailer

Pumped or Bailed Dry? ___ Yes ✓ No Time ____ After ____ gallons

Water level at sampling ∆ Percent Recovery ____

Formulas/Conversions
r = well radius in ft
h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
V_2" casing = 0.163 gal/ft
V_3" casing = 0.367 gal/ft
V_4" casing = 0.653 gal/ft
$V_{4.5}$" casing = 0.826 gal/ft
V_6" casing = 1.47 gal/ft
V_8" casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp F	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
11:28							
	11:30	3	3	7.02	68	1.32	x 1,000
	11:31	2	5	7.00	↓	1.28	↓
	11:32	2	7	7.01	↓	1.25	↓

SAMPLES COLLECTED Time 11:42 Total volume purged (gal.) 8

Water color CLOUDY/ TAN Odor NO

Description of sediments or material in sample: _____

Additional Comments: _____

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
C-10	6	1	—	HCl	YES	SPA	G/BTEX
							8010

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size); 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size); 5 = Other _____; 6 = Other _____

SIERRA

WATER SAMPLING DATA

Job Name Hesperian Blvd. Job Number 1-391-04 Sampler D.B.

Well Number C-11 Date 11.9.94 Well Diameter 2"

Sample Point Location/Description S, ACROSS STREET on SIDEWALK Well Depth (spec.) _____

Depth to Water (static) 9.57 Well Depth (sounded) 25

Initial height of water in casing 15.43 Volume 2.51 gallons

Volume to be purged 7.5 gallons

Purged With PUMP ✓ Sampled With DISP BAILER

Pumped or Bailed Dry? ___ Yes ✓ No Time ____ After _____ gallons

Water level at sampling _____ Percent Recovery _____

Formulas/Conversions
r = well radius in ft
h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
V_2" casing = 0.163 gal/ft
V_3" casing = 0.367 gal/ft
V_4" casing = 0.653 gal/ft
$V_{4.5}$" casing = 0.826 gal/ft
V_6" casing = 1.47 gal/ft
V_8" casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (F)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
10:59							
	11:00	3	3	7.38	66°	.84	X 1,000
	11:01	2	5	7.40	↓	.82	↓
	11:02	2	7	7.41	↓	.80	↓

SAMPLES COLLECTED Time 11:10 Total volume purged (gal.) 7

Water color CLEAR Odor N

Description of sediments or material in sample: _____

Additional Comments: _____

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
C-11	6	1	—	HCl	YES	STA	G/BTEX
							& 8010

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size); 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size); 5 = Other _____; 6 = Other _____

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

3.0844

Chain-of-Custody-Record

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

Chevron Facility Number 9-0504
Facility Address 15900 HESPERIAN BLV.
Consultant Project Number 1-391-04
Consultant Name SIERRA ENVIRONMENTAL SERVICES
Address P.O. BOX 2546 MARTINEZ, CA 94553
Project Contact (Name) ED MORALES
(Phone) 370-1280 (Fax Number) 370-7959

Chevron Contact (Name) MARK MILLER
(Phone) 842-8134
Laboratory Name SPA
Laboratory Release Number 758 3810
Samples Collected by (Name) D.B.
Collection Date 11-9-94
Signature

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed: BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)	Remarks
TB	1	2	W	G	—	HCl	Y	✓								
C-3	2	3			13:35			✓								
C-4	3	3			9:25			✓			✓					
C-5	4	3			12:45			✓								
C-6	5	3			13:10			✓								
C-7	6	3			10:15			✓								
C-8	7	3			9:48			✓								
C-9	8	3			10:45			✓								
C-10	9	3			11:42			✓								
C-11	10	3	↓	↓	11:10	↓	↓	✓								

Please initial: SH
Samples stored in ice 4°C
Appropriate containers —
Samples preserved ✓
VOA's without headspace ✓
Comments: OK -

Note:
Do Not Bill
TB-LB Sample

Remarks

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	SES	11-10-94 16:00	Suman	Superior	11/10 4:00
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time

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

Superior Precision Analytical, Inc.
A member of ESSCON Environmental Support Service Consortium

Sierra Environmental
Attn: ED MORALES

Project 1-391-04
Reported 11/17/94

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed	Matrix
30844- 1	TB	11/09/94	11/15/94	Water
30844- 2	C-3	11/09/94	11/15/94	Water
30844- 3	C-4	11/09/94	11/15/94	Water
30844- 4	C-5	11/09/94	11/15/94	Water
30844- 5	C-6	11/09/94	11/15/94	Water
30844- 6	C-7	11/09/94	11/15/94	Water
30844- 7	C-8	11/09/94	11/15/94	Water
30844- 8	C-9	11/09/94	11/15/94	Water
30844- 9	C-10	11/09/94	11/15/94	Water
30844-10	C-11	11/09/94	11/15/94	Water

RESULTS OF ANALYSIS

Laboratory Number:	30844- 1	30844- 2	30844- 3	30844- 4	30844- 5
Gasoline:	ND<50	170	ND<50	ND<50	ND<50
Benzene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Toluene:	ND<0.5	0.8	ND<0.5	ND<0.5	0.5
Ethyl Benzene:	ND<0.5	3.3	ND<0.5	ND<0.5	ND<0.5
Total Xylenes:	ND<0.5	16	ND<0.5	ND<0.5	ND<0.5
Concentration:	ug/L	ug/L	ug/L	ug/L	ug/L

Laboratory Number:	30844- 6	30844- 7	30844- 8	30844- 9	30844-10
Gasoline:	7800	3200	ND<50	ND<50	ND<50
Benzene:	33	82	ND<0.5	ND<0.5	ND<0.5
Toluene:	18	44	ND<0.5	1.4	0.6
Ethyl Benzene:	570	160	ND<0.5	0.8	ND<0.5
Total Xylenes:	1100	110	0.7	1.2	0.7
Concentration:	ug/L	ug/L	ug/L	ug/L	ug/L

Certified Laboratories

825 Arnold Dr., Suite 114
Martinez, California 94553
(510) 229-1512 / fax (510) 229-1526

1555 Burke St., Unit I
San Francisco, California 94124
(415) 647-2081 / fax (415) 821-7123

309 S. Cloverdale St., Suite B-24
Seattle, Washington 98108
(206) 763-2992 / fax (206) 763-8429

Superior Precision Analytical, Inc.
A member of ESSCON Environmental Support Service Consortium

C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

QA/QC INFORMATION
SET: 30844

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
ug/L = parts per billion (ppb)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Water: 5000ug/L

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Water: 50ug/L

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Water: 50ug/L

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Water: 0.5ug/L

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	88/94	7%	56-117
Benzene:	98/96	2%	59-149
Toluene:	105/102	3%	59-149
Ethyl Benzene:	104/100	4%	59-149
Total Xylenes:	104/98	6%	59-149

Certified Laboratories
Senior Chemist

825 Arnold Dr., Suite 114
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1555 Burke St., Unit I
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(415) 647-2081 / fax (415) 821-7123

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