

ENVIRONMENTAL  
PROTECTION



**Chevron**

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March 2, 1995

**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

Ms. Amy Leech  
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. Leech:

Enclosed is the Quarterly Ground Water Sampling report dated January 27, 1995, prepared by our consultant Sierra Environmental Services (SES) 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 represent a deviation from historical results. Low concentrations of hydrocarbons were detected in samples collected from C-4, C-6, C-9, C-10, and C-11 while historically these wells have not contained concentrations above method detection limits. At this time the reason for this occurrence is unclear, however it may be related to cross contamination during the sample collection and handling process. After reviewing field procedures and data with SES, no determination could be made regarding whether cross contamination is responsible for the concentrations observed in the wells mentioned above.

To determine the validity of the current data set, we propose to continue monitoring and sampling all wells at this site on a quarterly basis. We will carefully evaluate data gathered during the next quarter to determine possible trends. We anticipate that concentrations will return to historic levels during the next quarter.

The ground water extraction system is temporarily off due to a small leak in the system and carbon breakthrough. As we recently discussed, we would like to obtain results from the next quarterly sampling event to assist in determining whether restarting the system is required.

Also enclosed are copies of aerial photographs from 1959 and 1973 indicating the location of former facilities at the site and surrounding sites. We are currently reviewing historical records to determine who the operators and/or owners of the service station properties and facilities were.

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

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March 2, 1995  
Chevron SS#9-0504

Sincerely,  
CHEVRON U.S.A. PRODUCTS COMPANY



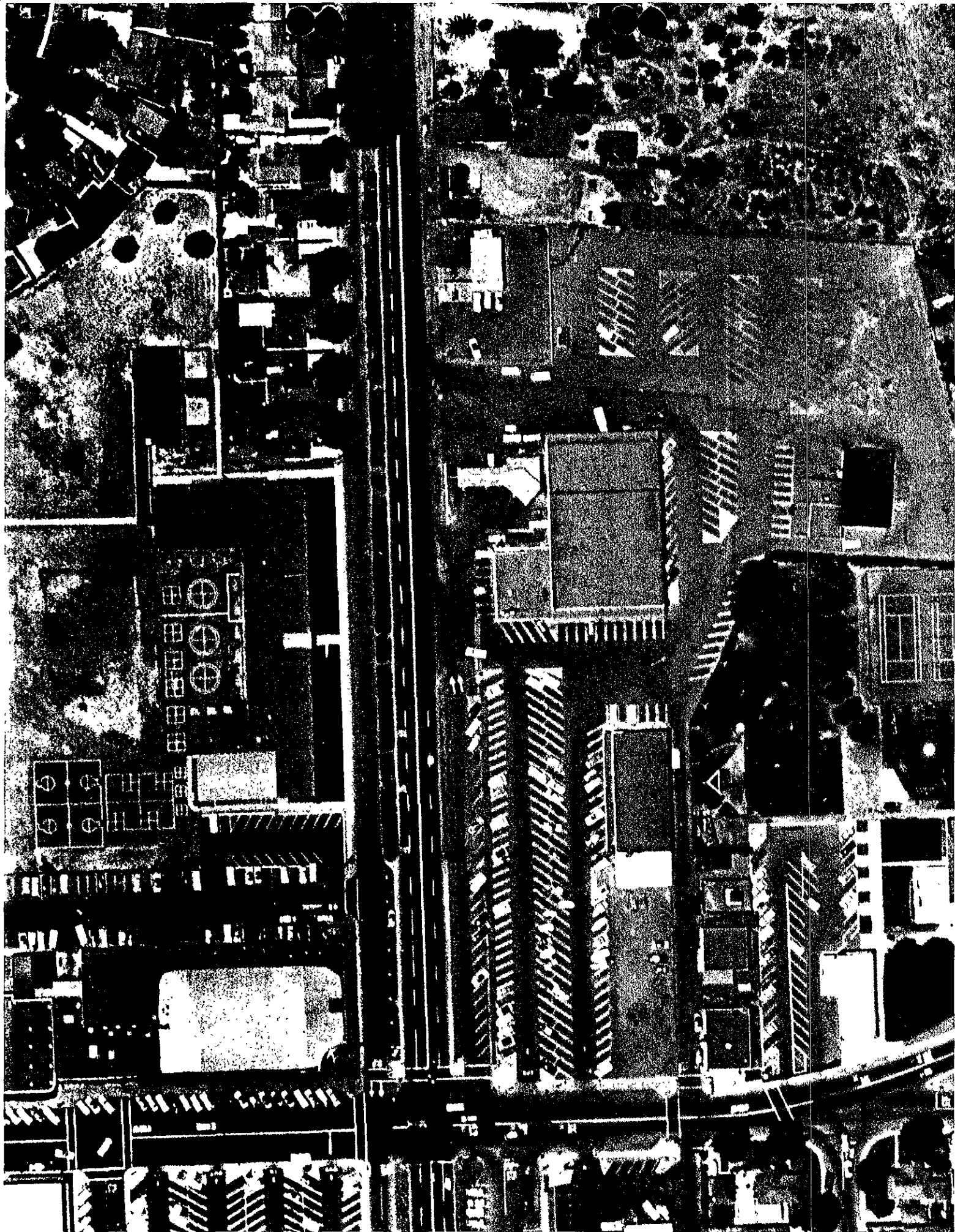
Mark A. Miller  
Site Assessment and Remediation Engineer

Enclosure

cc: Mr. S.A. Willer  
Ms. B.C. Owen

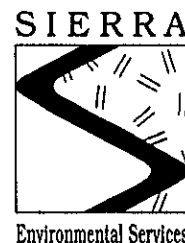
Mr. Ron Sykora  
David E. Bohannon Organization  
60 Hillsdale Mall  
San Mateo, CA 94403

File: 9-0504 QM10





Reviewed by *Jeff O'Beach*  
on 3/8/95



January 27, 1995

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 for the fourth quarter of 1994 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 December 14, 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 December 14, 1994, in accordance with SES Standard Operating Procedure - Ground Water Sampling (attached). The field water 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.



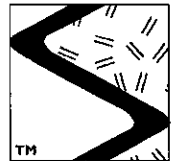
Sincerely,  
Sierra Environmental Services

*[Signature]*  
Richard E. (Rick) Hilton  
Staff Environmental Scientist

*[Signature]*  
Chris J. Bramer  
Professional Engineer #C48846

REH/CJB/lmo  
39104QM.DE4

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



SIERRA

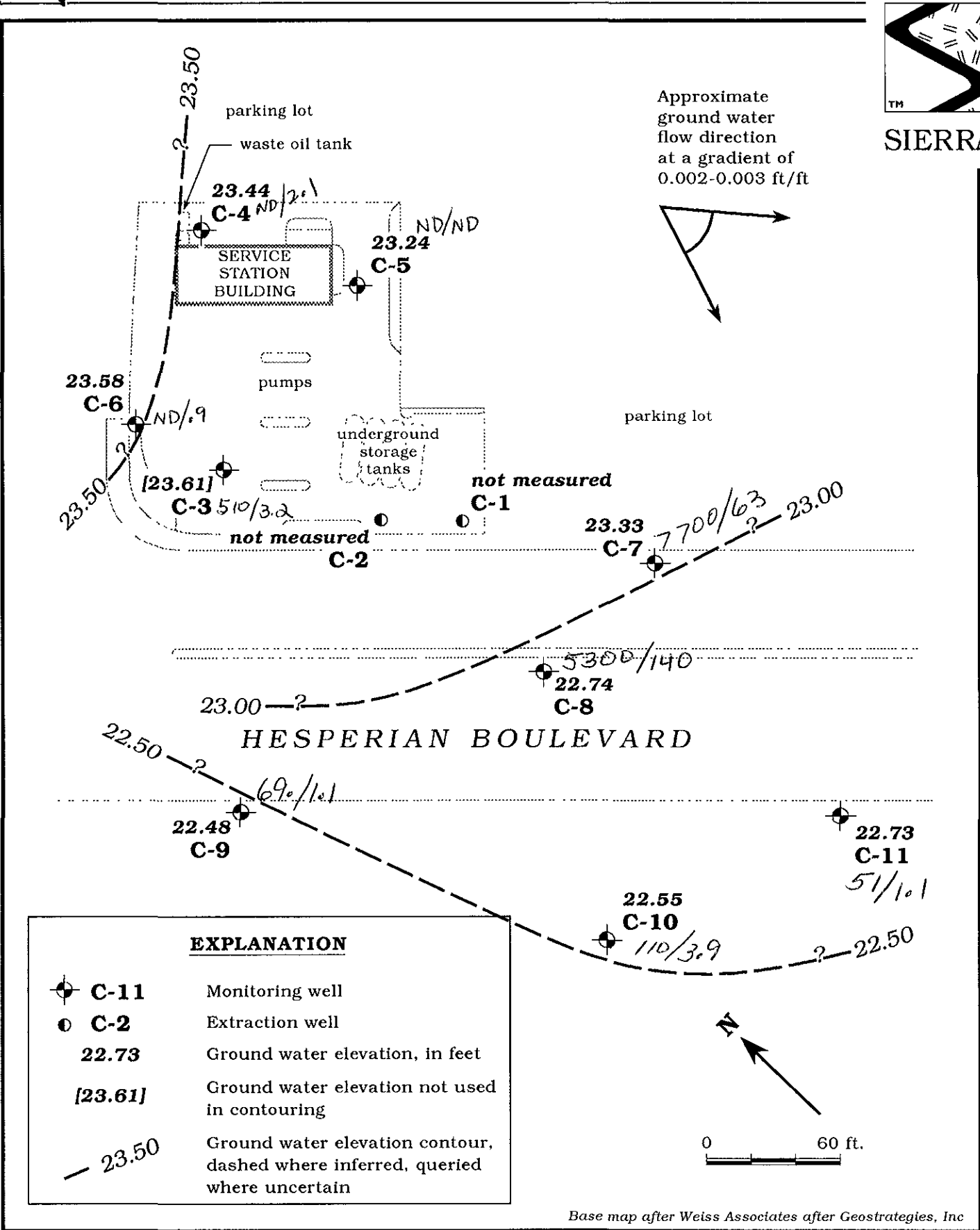


Figure 1. Monitoring Well Locations and Ground Water Elevation Contour Map - December 14, 1994 - Chevron Service Station #9-0504, 15900 Hesperian Boulevard, San Lorenzo, California





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	C	HVOCs
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	---	---
35.46 <sup>2</sup> (d)	9/7/90	15.31	20.15	0	8015/8020	490	6.0	<0.5	41	120	---	---
	9/7/90	---	---	0	8015/8020	460	6.0	<0.5	40	110	---	---
(d)	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 <sup>3</sup>	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 <sup>5</sup>	13.84	21.62	0	8015/8020	2,500	<25	<25	<25	220	---	---
	11/9/94 <sup>6</sup>	---	---	0	8015/8020	170	<0.5	0.8	3.3	16	---	---
	<b>12/14/94</b>	<b>11.85</b>	<b>23.61</b>	<b>0</b>	<b>8015/8020</b>	<b>510</b>	<b>3.2</b>	<b>1.4</b>	<b>28</b>	<b>60</b>	---	---
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 <sup>2</sup>	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	---	---





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	C	HVOCs
C-4 (cont)	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	---	---
	3/31/94 <sup>4</sup>	---	---	---	---	---	---	---	---	---	---	---
	6/8/94	11.92	23.31	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---	---
	9/29/94 <sup>5</sup>	13.76	21.47	0	8015/8020/8010	<2,500	<25	<25	<25	<25	<0.5	ND <sup>7</sup>
	11/9/94 <sup>6</sup>	---	---	0	8015/8020/8010	<50	<0.5	<0.5	<0.5	<0.5	<0.5	ND <sup>7</sup>
	<b>12/14/94</b>	<b>11.79</b>	<b>23.44</b>	<b>0</b>	<b>8015/8020/8010</b>	<b>&lt;50</b>	<b>2.1</b>	<b>3.0</b>	<b>1.9</b>	<b>3.7</b>	<b>1.8</b>	<b>ND<sup>7</sup></b>
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 <sup>2</sup>	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 <sup>3</sup>	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 <sup>5</sup>	13.10	21.51	0	8015/8020	<2,500	<25	<25	<25	<25	---	---
	11/9/94 <sup>6</sup>	---	---	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---	---
	<b>12/14/94</b>	<b>11.37</b>	<b>23.24</b>	<b>0</b>	<b>8015/8020</b>	<b>&lt;50</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	---	---
C-6	12/8/89	---	---	0	8015/8020	<500	<0.5	<0.5	<0.5	<0.5	---	---
36.89 <sup>2</sup>	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	---	---



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	-----ppb----->			C	HVOCs
									E	X			
C-6 (cont)	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	---	---	
	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 <sup>5</sup>	14.88	21.69	0	8015/8020	<2,500	<25	<25	<25	<25	---	---	
	11/9/94 <sup>6</sup>	---	---	0	8015/8020	<50	<0.5	0.5	<0.5	<0.5	---	---	
	<b>12/14/94</b>	<b>12.99</b>	<b>23.58</b>	<b>0</b>	<b>8015/8020</b>	<b>&lt;50</b>	<b>0.9</b>	<b>1.5</b>	<b>1.3</b>	<b>2.6</b>	---	---	
C-7 32.75 <sup>2</sup>	12/8/89	---	---	0	8015/8020	1,700	32	12	17	150	---	---	
	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 <sup>6</sup>	---	---	0	8015/8020	7,800	33	18	570	1,100	---	---		
<b>12/14/94</b>	<b>8.99</b>	<b>23.33</b>	<b>0</b>	<b>8015/8020</b>	<b>7,700</b>	<b>63</b>	<b>16</b>	<b>140</b>	<b>1,200</b>	---	---		
C-8 33.82 <sup>2</sup>	12/8/89	---	---	0	8015/8020	4,800	62	11	95	180	---	---	
	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	---	---	



Table I. 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	-----ppb-----			C	HVOCs
									E	X			
C-8 (cont)	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	---	---	
	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 <sup>6</sup>	---	---	0	8015/8020	3,200	82	44	160	110	---	---	
	<b>12/14/94</b>	<b>10.51</b>	<b>22.74</b>	<b>0</b>	<b>8015/8020</b>	<b>5,300</b>	<b>140</b>	<b>30</b>	<b>170</b>	<b>310</b>	---	---	
C-9/ 33.43 <sup>2</sup>	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	---	---	
	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 <sup>5</sup>	12.40	20.57	0	8015/8020	<5,000	<50	<50	<50	<50	---	---	
	11/9/94 <sup>6</sup>	---	---	0	8015/8020	<50	<0.5	<0.5	<0.5	0.7	---	---	
<b>12/14/94</b>	<b>10.49</b>	<b>22.48</b>	<b>0</b>	<b>8015/8020</b>	<b>69</b>	<b>1.1</b>	<b>2.2</b>	<b>3.4</b>	<b>7.8</b>	---	---		
C-10/ 31.63 <sup>2</sup>	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	---	---	



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	C	HVOCs
									-----> ppb <----->					
C-10 (cont) (d)        31.16	9/26/91	12.42	19.21	0	8015/8020	<50	<0.5	<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	<0.5	---	---	
	1/27/92	---	---	0	8015/8020	<50	<0.5	1.3	<0.5	<0.5	<0.5	---	---	
	4/20/92	8.55	23.06	0	8015/8020	<50	<0.5	<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	<0.5	---	---	
	10/29/92	12.40	19.23	0	8015/8020	<50	<0.5	<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	<0.5	---	---	
	5/3/93	7.92	23.71	0	8015/8020	<50	<0.5	<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	<0.5	<1.5	---	---	
	10/27/93	10.30	20.86	0	8015/8020	<50	<0.5	<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	<0.5	---	---	
	6/8/94	8.85	22.31	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	
	9/29/94 <sup>5</sup>	10.70	20.46	0	8015/8020	<5,000	<50	<50	<50	<50	<50	---	---	
	11/9/94 <sup>5</sup>	---	---	0	8015/8020	<50	<0.5	1.4	0.8	1.2	---	---	---	
	<b>12/14/94</b>	<b>8.61</b>	<b>22.55</b>	<b>0</b>	<b>8015/8020</b>	<b>110</b>	<b>3.9</b>	<b>5.4</b>	<b>4.3</b>	<b>11</b>	---	---		
C-11/ 31.58 <sup>2</sup>	9/7/90	12.22	19.36	0	8015/8020	<50	<0.5	<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	<0.5	---	---	
	3/6/91	16.15	15.43	0	8015/8020	<50	<0.5	<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	<0.5	---	---	
	9/26/91	12.20	19.38	0	8015/8020	<50	<0.5	<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	<0.5	---	---	
	4/20/92	8.56	23.02	0	8015/8020	<50	<0.5	<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	<0.5	---	---	
	10/29/92	12.07	19.51	0	8015/8020	<50	<0.5	<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	<0.5	---	---	
	5/3/93	7.95	23.63	0	8015/8020	<50	<0.5	<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	<0.5	<1.5	---	---	
	10/27/93	10.17	21.06	0	8015/8020	<50	<0.5	<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	<0.5	---	---	
	6/8/94	8.76	22.47	0	8015/8020	<50	<0.5	<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	<0.5	---	---	
	11/9/94	---	---	0	8015/8020	<50	<0.5	0.6	<0.5	0.7	---	---	---	
<b>12/14/94</b>	<b>8.50</b>	<b>22.73</b>	<b>0</b>	<b>8015/8020</b>	<b>51</b>	<b>1.1</b>	<b>1.7</b>	<b>1.6</b>	<b>4.0</b>	---	---			
Trip Blank	9/7/90	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	
	12/20/90	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	



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	C	HVOCs
						-----ppb-----						
Trip Blank (cont)	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	---	---
	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	---	---
	<b>12/14/94</b>	---	---	---	<b>8015/8020</b>	<b>&lt;50</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	---	---
DTSC MCLs	---	---	---	---	---	NE	1.0	100 <sup>†</sup>	680	1,750	---	---



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

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  
C = Chloroform  
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
- <sup>1</sup> 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.
- <sup>2</sup> Elevation of well box.
- <sup>3</sup> Depth to water measured from top of well vault.
- <sup>4</sup> Well inaccessible due to down-hole extraction equipment.
- <sup>5</sup> Detection limit raised due to foaming sample.
- <sup>6</sup> All site monitoring wells were re-sampled due to an excessive number of foaming samples on the 9/29/94 event.
- <sup>7</sup> Other HVOCs were not detected at detection limits of 0.5 - 1.0 ppb.



## 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  $\pm 0.5^{\circ}\text{F}$ , 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  $4^{\circ}\text{C}$ ) 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.

Trey Blank



**WATER SAMPLING DATA**

Job Name 15900 Hesperian Blvd Job Number 1-391-04 Sampler J.C.  
 Well Number TB-LB Date 12/14/94 Well Diameter \_\_\_\_\_  
 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 \_\_\_\_\_ 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/ft<sup>3</sup>  
 $V_{2.5}^*$  casing = 0.163 gal/ft  
 $V_{3.0}^*$  casing = 0.367 gal/ft  
 $V_{3.5}^*$  casing = 0.653 gal/ft  
 $V_{4.0}^*$  casing = 0.826 gal/ft  
 $V_{4.5}^*$  casing = 1.47 gal/ft  
 $V_{5.0}^*$  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: \_\_\_\_\_

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
TB-LB	2	1	—	HCl	Y	SFA	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 \_\_\_\_\_



UN SAMPLED DUE TO  
DOWN HOLE EXTRACTION EQUIPMENT



**WATER SAMPLING DATA**

Job Name 15900 HESPERIAN Blvd. Job Number 1-391-04 Sampler J.C.  
 Well Number C-1 Date 12/14/94 Well Diameter 2'  
 Sample Point Location/Description on site South East of SERVICE STA. Bldg. 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 Sub pump Sampled With DISPOSABLE BAILEY  
 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/ft<sup>3</sup>  
 V<sub>3"</sub> casing = 0.163 gal/ft  
 V<sub>4"</sub> casing = 0.367 gal/ft  
 V<sub>4.5"</sub> casing = 0.653 gal/ft  
 V<sub>6"</sub> casing = 1.47 gal/ft  
 V<sub>8"</sub> 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: UNSAMPLED DUE TO DOWN HOLE EXTRACTION EQUIPMENT

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
<u>C-1</u>	<u>2</u>	<u>1</u>	<u>—</u>	<u>HCl</u>	<u>Y</u>	<u>SPA</u>	<u>Z/BTEX</u>

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 \_\_\_\_\_

UNSAMPLED DUE TO DOWN  
HOLE EXTRACTION EQUIPMENT



**WATER SAMPLING DATA**

Job Name 15900 Hesperian Blvd. Job Number 1-391-04 Sampler J.C.  
 Well Number C-2 Date 12/14/94 Well Diameter 2'  
 Sample Point Location/Description on site north of Hesperian Blvd 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 Sub pump Sampled With DISPOSABLE BALES  
 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/ft<sup>3</sup>  
 V<sub>2"</sub> casing = 0.163 gal/ft  
 V<sub>3"</sub> casing = 0.367 gal/ft  
 V<sub>4"</sub> casing = 0.653 gal/ft  
 V<sub>4.5"</sub> casing = 0.826 gal/ft  
 V<sub>6"</sub> casing = 1.47 gal/ft  
 V<sub>8"</sub> 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: UNSAMPLED DUE TO DOWN HOLE EXTRACTIONS

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
<u>C-2</u>	<u>2</u>	<u>1</u>	<u>-</u>	<u>HCL</u>	<u>Y</u>	<u>SPA</u>	<u>Z/BTEX</u>

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 \_\_\_\_\_



### WATER SAMPLING DATA

Job Name 15700 HESPERIAN Blvd. Job Number 1-391-04 Sampler J.C.  
 Well Number C-3 Date 12/11/94 Well Diameter 3"  
 Sample Point Location/Description on site south of service STA. Bldg Well Depth (spec.)       
 Depth to Water (static) 11.85 Well Depth (sounded) 19.25  
 Initial height of water in casing 7.4 Volume 2.71 gallons  
 Volume to be purged 8 gallons  
 Purged With Sub pump Sampled With DISPOSABLE BAILES  
 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/ft<sup>3</sup>  
 $V_{10}$  casing = 0.163 gal/ft  
 $V_{20}$  casing = 0.367 gal/ft  
 $V_{30}$  casing = 0.653 gal/ft  
 $V_{40}$  casing = 0.826 gal/ft  
 $V_{50}$  casing = 1.47 gal/ft  
 $V_{60}$  casing = 2.61 gal/ft

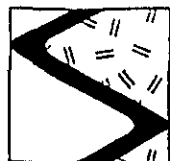
### CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
3:57	3:58	2	2	7.9	65	1580	
	4:00	3	5	7.9	65	1660	
	4:02	3	8	7.8	64	1620	

SAMPLES COLLECTED Time 4:11 Total volume purged (gal.) 8  
 Water color Slight cloud Odor Hydrocarbon  
 Description of sediments or material in sample: Some sed.  
 Additional Comments: NO PRESEN.  
 NOTE: WELL NEEDS IMMEDIATE, WELL LID REPAIR.

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
C-3	2	1	—	HCl	Y	SPA	J/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 15700 HESPERIAN Blvd. Job Number 1-391-04 Sampler J.C.  
 Well Number C-4 Date 12/14/94 Well Diameter 3"  
 Sample Point Location/Description ON SITE BEHIND SERVICE STA. Bldg. NORTH END Well Depth (spec.)       
 Depth to Water (static) 11.79 Well Depth (sounded) 19.75  
 Initial height of water in casing 7.94 Volume 2.92 gallons  
 Volume to be purged      9 gallons  
 Purged With Sub pump Sampled With DISPOSABLE BAILEY  
 Pumped or Bailed Dry?      Yes X 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/ft<sup>3</sup>  
~~V<sub>s</sub> casing = 0.115 gal/ft~~  
 V<sub>s</sub> casing = 0.367 gal/ft  
 V<sub>s</sub> casing = 0.653 gal/ft  
 V<sub>s</sub> casing = 0.826 gal/ft  
 V<sub>s</sub> casing = 1.47 gal/ft  
 V<sub>s</sub> 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
1:40	1:42	3	3	7.8	70	1600	
	1:44	3	6	7.7	68	1600	
	1:46	3	9	7.6	66	1600	

SAMPLES COLLECTED Time 1:57 Total volume purged (gal.) 9  
 Water color CLEAR Odor NONE  
 Description of sediments or material in sample: NONE  
 Additional Comments:       
 NOTE: SEE FIELD REPORT FOR REFERENCE, too

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
C-4	2	1	—	HCL	Y	SPA	Y/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 \_\_\_\_\_



### WATER SAMPLING DATA

Job Name 15900 Hesperian Blvd. Job Number 1-391-04 Sampler J.C.  
 Well Number C-5 Date 12/14/94 Well Diameter 3"  
 Sample Point Location/Description on site on side of service STA. Bldg south Well Depth (spec.)       
 Depth to Water (static) 11.37 Well Depth (sounded) 18.65  
 Initial height of water in casing 7.28 Volume 2.6 gallons  
 Volume to be purged 8 gallons  
 Purged With Sub pump Sampled With DISPOSABLE BAILEY  
 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/ft<sup>3</sup>  
 $V_{2"}^{casing} = 0.163$  gal/ft  
 $V_{3"}^{casing} = 0.367$  gal/ft  
 $V_{4"}^{casing} = 0.853$  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
2:20	2:21	2	2	7.9	68	1480	
	2:23	3	5	7.9	68	1510	
	2:25	3	8	7.8	67	1530	

SAMPLES COLLECTED Time 2:34 Total volume purged (gal.) 8  
 Water color Clear Odor NONE  
 Description of sediments or material in sample: SOME SEED.  
 Additional Comments: NOTE! SEE FIELD REPORT FOR REFERENCE.

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
C-5	2	1	—	HCl	Y	SPA	Z/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 \_\_\_\_\_



### WATER SAMPLING DATA

Job Name 15900 HESPERIAN Blvd. Job Number 1-391-04 Sampler J.C.  
 Well Number C-6 Date 12/14/94 Well Diameter 2"  
 Sample Point Location/Description ON SITE NEAR AID & WATER Well Depth (spec.) 25'  
 Depth to Water (static) 12.99 Well Depth (sounded)       
 Initial height of water in casing 12.01 Volume 1.95 gallons  
 Volume to be purged      gallons  
 Purged With Sub pump Sampled With DISPOSABLE BAILES  
 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/ft<sup>3</sup>  
 $V_{2"} casing = 0.163 gal/ft$   
 $V_{3"} casing = 0.367 gal/ft$   
 $V_{4"} casing = 0.653 gal/ft$   
 $V_{5"} casing = 0.826 gal/ft$   
 $V_{6"} casing = 1.47 gal/ft$   
 $V_{8"} casing = 2.61 gal/ft$

### CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°F)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
2:55	2:56	2	2	7.9	66	1630	
	2:57	2	4	7.9	65	1670	
	2:58	2	6	7.8	64	1700	

SAMPLES COLLECTED Time 3:07 Total volume purged (gal.) 6  
 Water color CLEAR Odor NONE  
 Description of sediments or material in sample: NONE  
 Additional Comments: NOTE: SEE FIELD REPORT FOR REFERENCE.

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
C-6	2	1	—	HCl	Y	SPA	J/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 \_\_\_\_\_



### WATER SAMPLING DATA

Job Name 15900 Hesperian Blvd. Job Number 1-391-04 Sampler J.C.  
 Well Number C-7 Date 12/4/94 Well Diameter 2"  
 Sample Point Location/Description South East of site on Hesperian Blvd. Well Depth (spec.) 25  
 Depth to Water (static) 8.99 Well Depth (sounded)       
 Initial height of water in casing 16.01 Volume 2,000 gallons  
 Volume to be purged 8 gallons  
 Purged With Sub pump Sampled With DISPOSABLE BAILERS  
 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/ft<sup>3</sup>  
 $V_{2"}^{casing} = 0.163$  gal/ft  
 $V_{3"}^{casing} = 0.367$  gal/ft  
 $V_{4"}^{casing} = 0.653$  gal/ft  
 $V_{4.5"}^{casing} = 0.826$  gal/ft  
 $V_{5"}^{casing} = 1.47$  gal/ft  
 $V_{6"}^{casing} = 2.61$  gal/ft

### CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°F)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
11:20	11:21	2	2	7.8	66	920	
	11:23	3	5	7.9	64	980	
	11:25	3	8	7.9	64	1020	

SAMPLES COLLECTED Time 11:32 Total volume purged (gal.) 8  
 Water color CLEAR Odor HYDROCARBON  
 Description of sediments or material in sample: SOME SED.  
 Additional Comments: NO PRESEN.

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
C-7	2	1	—	HCL	Y	SPA	2/STEX

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 \_\_\_\_\_



### WATER SAMPLING DATA

Job Name 15900 Hesperian Blvd. Job Number 1-391-04 Sampler J.C.  
 Well Number C-8 Date 12/14/94 Well Diameter 2'  
 Sample Point Location/Description South of site ON HESPERIAN Blvd. Well Depth (spec.) 25'  
 Depth to Water (static) 10:51 Well Depth (sounded)         
 Initial height of water in casing 4.49 Volume 2.36 gallons  
 Volume to be purged 7 gallons  
 Purged With Sub pump Sampled With DISPOSABLE BAILEY  
 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. =  $\pi r^2 h$   
 $7.48 \text{ gal/ft}^3$   
 $V_{2'} \text{ casing} = 0.163 \text{ gal/ft}$   
 $V_{3'} \text{ casing} = 0.367 \text{ gal/ft}$   
 $V_{4'} \text{ casing} = 0.653 \text{ gal/ft}$   
 $V_{4.5'} \text{ casing} = 0.826 \text{ gal/ft}$   
 $V_{5'} \text{ casing} = 1.47 \text{ gal/ft}$   
 $V_{6'} \text{ casing} = 2.61 \text{ gal/ft}$

### CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
10:40	10:41	2	2	7.9	69	1540	
	10:43	3	5	7.8	68	1560	
	10:44	2	7	7.7	68	1520	

SAMPLES COLLECTED Time 10:52 Total volume purged (gal.) 7  
 Water color CLEAR Odor Hydrocarbon  
 Description of sediments or material in sample: NONE  
 Additional Comments: NO PRESEN.

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
C-8	2	1	—	HCl	Y	SPA	Z/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 \_\_\_\_\_





### WATER SAMPLING DATA

Job Name 15900 HESPERIAN Blvd. Job Number 1-391-04 Sampler J.C.  
 Well Number C-9 Date 12/14/94 Well Diameter 2'  
 Sample Point Location/Description South of site @ Hesperian Blvd. on curb. Well Depth (spec.) 25'  
 Depth to Water (static) 10.49 Well Depth (sounded)       
 Initial height of water in casing 14.57 Volume 2.36 gallons  
 Volume to be purged 7 gallons  
 Purged With Sub pump Sampled With DISPOSABLE BAILEY'S  
 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/ft<sup>3</sup>  
 $V_{10}^*$  casing = 0.163 gal/ft  
 $V_{20}^*$  casing = 0.367 gal/ft  
 $V_{30}^*$  casing = 0.653 gal/ft  
 $V_{40}^*$  casing = 0.826 gal/ft  
 $V_{50}^*$  casing = 1.47 gal/ft  
 $V_{60}^*$  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
11:50	11:51	2	2	7.5	64	240	
	11:53	3	5	7.6	63	220	
	11:54	2	7	7.6	63	240	

SAMPLES COLLECTED Time 12:03 Total volume purged (gal.) 7  
 Water color CLEAR Odor Hydrocarbon  
 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-9	2	1	—	HCl	Y	SPA	2/1/95

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 \_\_\_\_\_



### WATER SAMPLING DATA

Job Name 15900 Hesperian Blvd. Job Number 1-391-04 Sampler J.C.  
 Well Number C-10 Date 12/14/94 Well Diameter 2"  
 Sample Point Location/Description South of site in video handicapped parking STALL Well Depth (spec.) 25  
 Depth to Water (static) 8.61 Well Depth (sounded)       
 Initial height of water in casing 16.39 Volume 2.67 gallons  
 Volume to be purged 8 gallons  
 Purged With Sub pump Sampled With DISPOSABLE BAILES  
 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/ft<sup>3</sup>  
 $V_{2"}$  casing = 0.163 gal/ft  
 $V_{3"}$  casing = 0.367 gal/ft  
 $V_{4"}$  casing = 0.653 gal/ft  
 $V_{5"}$  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
3:25	3:26	2	2	7.9	65	138 <del>0</del>	
	3:28	3	5	7.8	66	136 <del>0</del>	
	3:30	3	8	7.8	65	133 <del>0</del>	

SAMPLES COLLECTED Time 3:36 Total volume purged (gal.) 8  
 Water color CLEAR Odor NONE  
 Description of sediments or material in sample: NONE  
 Additional Comments: NOTE: SEE field report for REFERENCE.

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
C-10	2	1	—	HCl	Y	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 \_\_\_\_\_



### WATER SAMPLING DATA

Job Name 15900 HESPERIAN Blvd. Job Number 1-391-04 Sampler J.C.  
 Well Number C-11 Date 12/14/94 Well Diameter 2"  
 Sample Point Location/Description South East of site, South of Hesperian Blvd. on curb Well Depth (spec.) 25  
 Depth to Water (static) 8.50 Well Depth (sounded)         
 Initial height of water in casing 16.5 Volume 2.48 gallons  
 Volume to be purged        gallons  
 Purged With Sub pump Sampled With DISPOSABLE BAILEY  
 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/ft<sup>3</sup>  
 $V_{1/2}$  casing = 0.163 gal/ft  
 $V_{1/3}$  casing = 0.367 gal/ft  
 $V_{1/4}$  casing = 0.653 gal/ft  
 $V_{1/5}$  casing = 0.826 gal/ft  
 $V_{1/6}$  casing = 1.47 gal/ft  
 $V_{1/8}$  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	12:21	2	2	7.6	65	930	
	12:23	3	5	7.6	65	970	
	12:25	3	8	7.5	65	970	

SAMPLES COLLECTED Time 12:32 Total volume purged (gal.) 8  
 Water color CLEAR Odor Slight Hydrocarbon  
 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-11	2	1	—	HCl	Y	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 \_\_\_\_\_

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

80086

Chain-of-Custody-Record

<p>Chevron U.S.A. Inc. P.O. BOX 5004 San Ramon, CA 94583 FAX (415)842-9591</p>	<p>Chevron Facility Number <u>9-0504</u>                  Facility Address <u>15900 HESPERIAN Blvd., SAN RAFAEL</u>                  Consultant Project Number <u>1-391-04</u>                  Consultant Name <u>Sierra Environmental Services</u>                  Address <u>P.O. Box 2546, Martinez, CA</u>                  Project Contact (Name) <u>Ed Morales</u>                  (Phone) <u>370-1280</u> (Fax Number) <u>370-7959</u></p>	<p>Chevron Contact (Name) <u>Mark Miller</u>                  (Phone) <u>842-8134</u>                  Laboratory Name <u>SPA</u>                  Laboratory Release Number <u>7583810</u>                  Samples Collected by (Name) <u>Joe Carter</u>                  Collection Date <u>12/14/94</u>                  Signature <u>Joe Carter</u></p>
--	--	--

Sample Number	Lab Sample Number	Number of Containers	Matrix			Time	Sample Preservation	Iced (Yes or No)	Analytes To Be Performed											Remarks				
			S = Soil	A = Air	W = Water				C = Charcoal	Type	G = Grab	C = Composite	D = Discrete	BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (8020)	Purgeable Hydrocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)		Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)		
TB-LB		2	W		G	-	HEL	Y	✓															ANALYZE
G-8						10:52	NONE	Y	✓															
C-7						11:32	NONE		✓															
C-11						12:32	HEL		✓															
C-9						12:03			✓															
C-4	4					1:57			✓		✓												4.36	
C-5						2:34			✓															
C-6						3:07			✓															
C-10						3:36			✓															
C-3						4:11	NONE	✓	✓															

Note: Do Not Bill TB-LB Samples

Please initial:

Samples Stored in ice

Appropriate containers

Samples preserved Yes  No

VOA's without headspace

Comments:

\* NOTE: Some Samples are NOT Preserved.

Relinquished By (Signature) <u>Joe Carter</u>	Organization <u>SES</u>	Date/Time	Received By (Signature)	Organization	Date/Time	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. 5 Days 10 Days <input checked="" type="radio"/> As Contracted 4:25
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature) <u>Nicky Heath</u>	Organization	Date/Time <u>12/15/94</u>	



# Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

Sierra Environmental  
P.O. Box 2546  
Martinez, CA 94553

Date: December 23, 1994

Attn: ED MORALES

Laboratory Number : 80266

Project Number/Name : 1-391-04

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This report has been reviewed and  
approved for release.

---

Senior Chemist  
Account Manager

---

Certified Laboratories

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

1555 Burke St., Unit 1  
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

Sierra Environmental  
Attn: ED MORALES

Project 1-391-04  
Reported on December 17, 1994

## Halogenated Volatile Organics by EPA SW-846 Methods 5030/8010

Chronology

Laboratory Number 80266

Sample ID

Sampled Received Extract. Analyzed QC Batch LAB #

C-4 12/14/94 12/15/94 12/16/94 12/16/94 AL161.07 06

QC Samples

QC Batch # QC Sample ID TypeRef. Matrix Extract. Analyzed

AL161.07-01 Method Blank MB Water 12/16/94 12/16/94

AL161.07-02 979SB02 MS 80274-02 Water 12/16/94 12/16/94

AL161.07-03 979SB02 MSD 80274-02 Water 12/16/94 12/16/94



# Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

Sierra Environmental  
Attn: ED MORALES

Project 1-391-04  
Reported on December 17, 1994

## Halogenated Volatile Organics by EPA SW-846 Methods 5030/8010

LAB ID	Sample ID	Matrix	Moisture
80266-06	C-4	Water	-

### RESULTS OF ANALYSIS

Compound                      80266-06  
    Conc. RL  
    ug/L

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	1.8	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-Dichloropropane	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-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5

>> Surrogate Recoveries (%) <<  
 4-Bromofluorobenzene              90



# Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

Halogenated Volatile Organics by EPA SW-846 Methods 5030/8010

## Quality Assurance and Control Data

Laboratory Number: 80266

Method Blank(s)

AL161.07-01

Conc. RL

ug/L

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-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5

>> Surrogate Recoveries (%) <<

4-Bromofluorobenzene 99





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Halogenated Volatile Organics by EPA SW-846 Methods 5030/8010

## Quality Assurance and Control Data

Laboratory Number: 80266

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L)						
AL161.07 02 / 03 - Sample Spiked: 80274 - 02						
1,1-Dichloroethene	ND	100	78/84	78/84	50-189	7
Trichloroethene	ND	100	86/95	86/95	53-161	10
Chlorobenzene	ND	100	93/102	93/102	57-171	9
>> Surrogate Recoveries (%) <<						
4-Bromofluorobenzene				90/93	50-150	

### Definitions:

ND = Not Detected

RL = Reporting Limit

NA = Not Analysed

RPD = Relative Percent Difference

ug/L = parts per billion (ppb)

mg/L = parts per million (ppm)

ug/kg = parts per billion (ppb)

mg/kg = parts per million (ppm)



# Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

Sierra Environmental  
Attn: ED MORALES

Project 1-391-04  
Reported on December 23, 1994

## TOTAL PETROLEUM HYDROCARBONS

LAB #	Sample ID	Sampled	Analyzed	Matrix
80266-01	TB-LB	12/14/94	12/21/94	Water
80266-02	C-8	12/14/94	12/21/94	Water
80266-03	C-7	12/14/94	12/22/94	Water
80266-04	C-11	12/14/94	12/22/94	Water
80266-05	C-9	12/14/94	12/21/94	Water
80266-06	C-4	12/14/94	12/21/94	Water
80266-07	C-5	12/14/94	12/21/94	Water
80266-08	C-6	12/14/94	12/21/94	Water
80266-09	C-10	12/14/94	12/21/94	Water
80266-10	C-3	12/14/94	12/21/94	Water

## RESULTS OF ANALYSIS

Laboratory Number:	80266-01	80266-02	80266-03	80266-04	80266-05
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Gasoline_Range	ND<50	5300	7700	51	69
Benzene	ND<0.5	140	63	1.1	1.1
Toluene	ND<0.5	30	16	1.7	2.2
Ethyl Benzene	ND<0.5	170	140	1.6	3.4
Total Xylenes	ND<0.5	310	1200	4.0	7.8

Concentration:	ug/L	ug/L	ug/L	ug/L	ug/L
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Laboratory Number:	80266-06	80266-07	80266-08	80266-09	80266-10
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Gasoline_Range	ND<50	ND<50	ND<50	110	510
Benzene	2.1	ND<0.5	0.9	3.9	3.2
Toluene	3.0	ND<0.5	1.5	5.4	1.4
Ethyl Benzene	1.9	ND<0.5	1.3	4.3	28
Total Xylenes	3.7	ND<0.5	2.6	11	60

Concentration:	ug/L	ug/L	ug/L	ug/L	ug/L
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# Superior Precision Analytical, Inc.

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## CERTIFICATE OF ANALYSIS

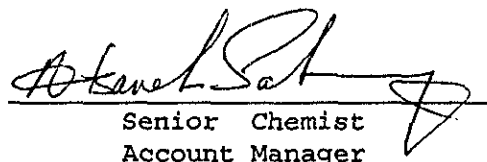
### TOTAL PETROLEUM HYDROCARBONS

QA/QC Information  
Laboratory Number: 80266

NA - Analysis NOT required  
ND - Not Detected above quantitation limit

Matrix: Water

Analyte	Spike Recovery	RPD	Control Limits
Gasoline_Range	116/133	14	65-135
Benzene	98/92	6	65-135
Toluene	100/93	7	65-135
Ethyl Benzene	129/135	5	65-135
Total Xylenes	132/118	11	65-135

  
Senior Chemist  
Account Manager