



Chevron U.S.A. Products Company

2410 Camino Ramon, San Ramon, California • Phone (510) 842-9500
Mail Address: PO Box 5004, San Ramon, CA 94583-0804

93 JAN 17 11:25

December 22, 1992

Ms. Juliet Shin
Alameda County Health Care Services
Department of Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

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

Dear Ms. Shin:

Enclosed we are forwarding the Quarterly Ground Water Monitoring Report dated December 8, 1992, prepared by our consultant Alton Geoscience for the above referenced site. As indicated in the report, groundwater samples collected were analyzed for total petroleum hydrocarbons as gasoline (TPH-g) and BTEX. Benzene was detected in monitor wells C-3, C-7, and C-8 only at concentrations of 2.4, 1.3, and 29 ppb, respectively. Depth to groundwater was measured at approximately 12 to 17 feet below grade, and the direction of flow is to the southwest.

The on-site groundwater remediation system has been installed and was started on September 2, 1992. As of November 13, 1992, the system has treated approximately 92,390 gallons of ground water.

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

Very truly yours,
CHEVRON U.S.A. PRODUCTS COMPANY

Mark A. Miller
Site Assessment and Remediation Engineer

Enclosure

cc: Mr. Eddy So, RWQCB-Bay Area
Mr. Thomas Berry - Weiss Associates
Mr. S.A. Willer
File (9-0504 QM2)

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

December 8, 1992

Ms. Nancy Vukelich
Chevron U.S.A. Products Company
Post Office Box 5004
San Ramon, California 94583-0804

31-0561

Subject: Quarterly Ground Water Monitoring Report
Chevron Service Station No. 9-0504
15900 Hesperian Boulevard
San Lorenzo, California

Dear Ms. Vukelich:

In accordance with our agreement, Alton Geoscience transmits this Quarterly Ground Water Monitoring and Sampling Report for Chevron Station No. 9-0504, 15900 Hesperian Boulevard, San Lorenzo, California. Figure 1 shows the site location.

Monitoring and sampling of the ground water monitoring wells was performed on October 29, 1992, in accordance with the requirements and procedures of the California Regional Water Quality Control Board (RWQCB) and local regulatory agencies.

FIELD PROCEDURES

Prior to purging and sampling the wells, each well was checked for liquid-phase hydrocarbons or sheen. The depth to ground water and, if present, free product thickness was measured in each well from the top of casing using an electronic interface probe with 0.01 foot tolerance.

Ground water analytical samples were collected after more than 3 casing volumes of ground water was purged from each well. Each sample was collected using a clean bailer. Ground water samples were then decanted into the appropriate clean sample containers for delivery to a California-certified laboratory following proper preservation and chain of custody procedures. Purged ground water was transferred to a 600-gallon, trailer-mounted, steel tank (California Department of Health Services-registered), and delivered as non-hazardous to the Chevron Richmond Terminal for treatment.

Ms. Nancy Vukelich
December 8, 1992
Page 2

31-0561

SAMPLING AND ANALYTICAL RESULTS

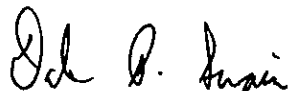
The results of the monitoring and laboratory analyses of ground water samples for this quarter, as well as the results of previous monitoring and sampling events, are summarized in Table 1. Based on the previous wellhead elevation survey data and depth to water measurements collected during this monitoring event, ground water elevations and the general ground water gradient direction at this site are presented in Figure 2.

No liquid-phase hydrocarbons or sheen were observed in any of the ground water samples. The official laboratory reports and chain of custody records are included in Appendix A.

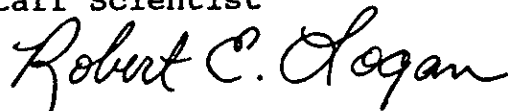
Please call Dale P. Swain at (510) 734-8134 if you have any questions regarding this report.

Sincerely,

ALTON GEOSCIENCE,



Dale P. Swain
Staff Scientist



Robert E. Logan R. G. 5088
Manager, Northern California Operations

wp90504ds



FIGURE 1: SITE VICINITY MAP

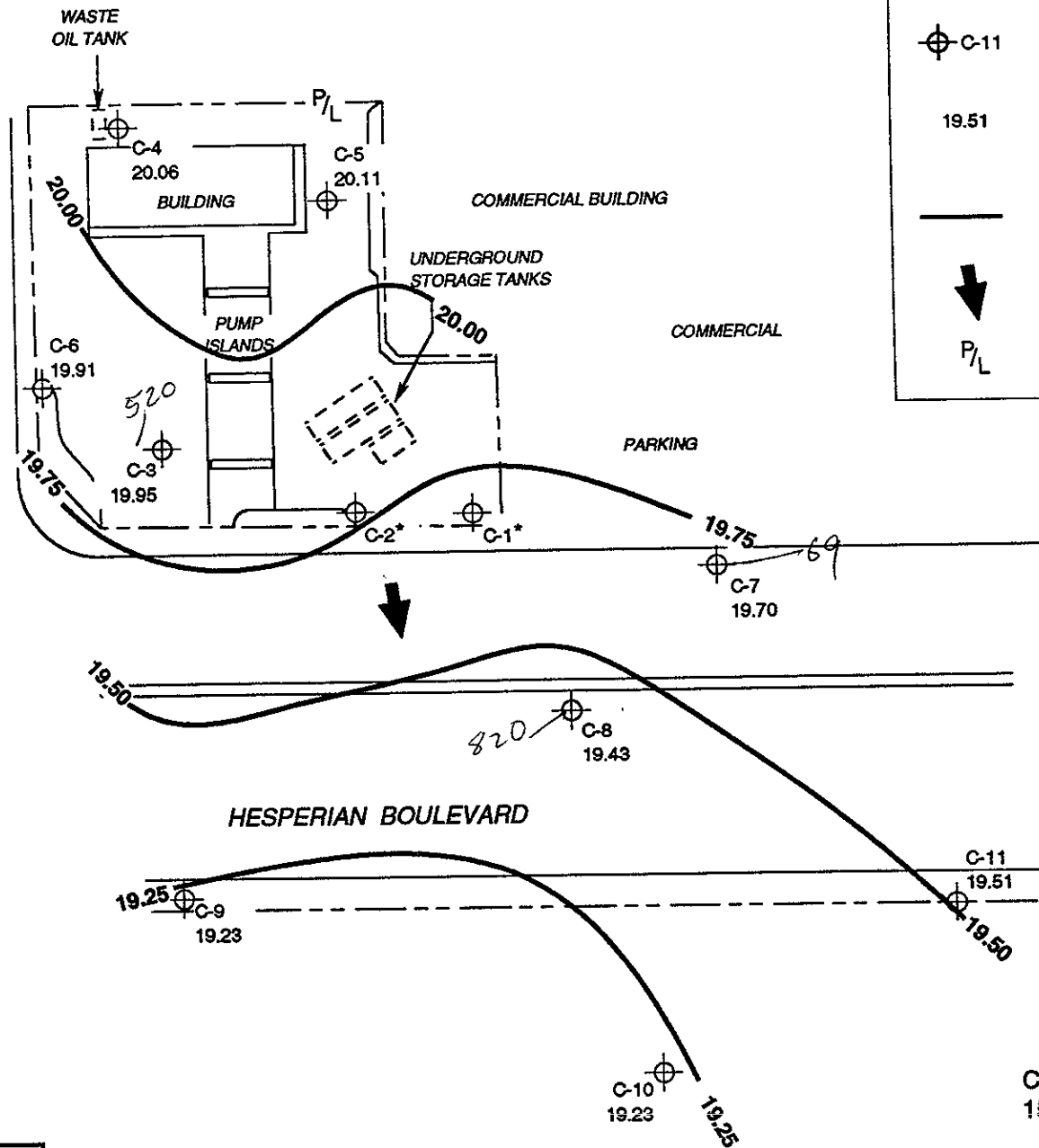
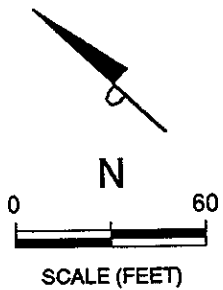
CHEVRON SERVICE STATION
 NUMBER 9-0504
 15900 HESPERIAN BOULEVARD
 SAN LORENZO, CALIFORNIA

SOURCE: THE THOMAS GUIDE
 ALAMEDA COUNTY STREET
 GUIDE & DIRECTORY

PROJECT NO. 31-0561



ALTON GEOSCIENCE
 Pleasanton, California



LEGEND	
	C-11 Ground water monitoring well
19.51	Ground water elevation in feet above mean sea level [NGVD-1929]
	Ground water elevation contour line
	General direction of ground water gradient
P/L	Property line

NOTES:
 Contour lines are interpretive based on fluid-level measurements collected October 29, 1992.
 Contour interval = 0.25 foot.
 * = Well not accessible.

GROUND WATER ELEVATION CONTOUR MAP
 October 29, 1992

Chevron Station No. 9-0504
 15900 Hesperian Boulevard
 San Lorenzo, California



Source: Geostrategies, Inc.

FIGURE 2

Table 1
 Summary of Results of Ground Water Sampling
 Chevron Service Station No. 9-0504
 15900 Hesperian Boulevard, San Lorenzo, California
 Concentrations in parts per billion (ppb)

WELL ID	DATE OF SAMPLING/ MONITORING	TOP OF WELL BOX TO ELEV.	DEPTH WATER	L-PH	GROUND WATER ELEV.	TPH-G	TPH-D	B	T	E	X	TOG	TPH-O	LAB
C-1	06/06/89	---	---	---	---	5100	---	250	170	200	990	---	---	NA
C-1	12/08/89	---	13.14	0.01	---	---	---	---	---	---	---	---	---	NA
C-1	09/07/90	33.93	14.04	0.03	19.91	---	---	---	---	---	---	---	---	NA
C-1	12/20/90	33.93	13.87	0.01	20.07	---	---	---	---	---	---	---	---	NA
C-1	03/15/91	33.93	11.40	---	22.53	37000	---	220	53	580	1900	---	---	SAL
C-1	06/28/91	33.93	12.25	SHEEN	21.68	3300	---	110	6.2	100	350	---	---	SAL
C-1	09/26/91	33.93	14.02	---	19.91	3200	---	220	6.9	230	710	---	---	SAL
C-1	01/27/92	33.93	12.63	---	21.30	330	---	20	0.6	10	48	---	---	SAL
C-1	04/20/92	33.93	10.43	---	23.50	2700	---	130	3.4	200	690	---	---	SAL
C-1	07/17/92	33.93	12.61	---	21.32	490	---	17	ND<0.5	19	52	---	---	SAL
C-1*	10/29/92	33.93	---	---	---	---	---	---	---	---	---	---	---	SAL
C-2	06/06/89	---	---	---	---	130000	---	14000	28000	3400	24000	---	---	NA
C-2	12/08/89	---	13.44	0.15	---	---	---	---	---	---	---	---	---	NA
C-2	09/07/90	34.21	14.28	0.10	20.01	---	---	---	---	---	---	---	---	NA
C-2	12/20/90	34.21	14.06	0.01	20.16	---	---	---	---	---	---	---	---	NA
C-2	03/15/91	34.21	11.59	0.01	22.63	1200000	---	4700	16000	13000	140000	---	---	SAL
C-2	06/28/91	34.21	12.55	SHEEN	21.66	150000	---	3500	4200	2100	16000	---	---	SAL
C-2	09/26/91	34.21	14.20	---	20.01	4900	---	220	290	130	880	---	---	SAL
C-2	01/27/92	34.21	12.46	---	21.75	8200	---	510	590	230	1300	---	---	SAL
C-2	04/20/92	34.21	10.24	---	23.97	19000	---	1700	1700	930	4700	---	---	SAL
C-2	07/17/92	34.21	12.81	---	21.40	20000	---	950	640	1300	4700	---	---	SAL
C-2*	10/29/92	34.21	---	---	---	---	---	950	640	1300	4700	---	---	SAL

wrong well was not sampled.

Due to groundwater extraction system operating.

Table 1
 Summary of Results of Ground Water Sampling
 Chevron Service Station No. 9-0504
 15900 Hesperian Boulevard, San Lorenzo, California

Concentrations in parts per billion (ppb)

WELL ID	DATE OF SAMPLING/ MONITORING	TOP OF WELL BOX TO ELEV.	DEPTH TO WATER	L-PH	GROUND WATER ELEV.	TPH-G	TPH-D	B	T	E	X	TOG	TPH-O	LAB
C-3	06/06/89	---	---	---	---	2600	---	63	20	390	370	---	---	NA
C-3	12/08/89	---	---	---	---	680	---	6	1	31	58	---	---	SAL
C-3	09/07/90	35.46	15.31	---	20.15	490	---	6	ND<0.5	41	120	---	---	SAL
C-3D	09/07/90	35.46	15.31	---	20.15	460	---	6	ND<0.5	40	110	---	---	SAL
C-3	12/20/90	35.46	15.17	---	20.29	100	---	5	ND<0.5	27	130	---	---	SAL
C-3	03/06/91	35.46	13.27	---	22.19	1300	---	7	ND<0.5	75	250	---	---	SAL
C-3D	03/06/91	35.46	13.27	---	22.19	1400	---	8	ND<0.5	76	250	---	---	SAL
C-3	06/28/91	35.46	13.67	---	21.79	770	---	6.0	ND<0.5	81	71	---	---	SAL
C-3D	06/28/91	35.46	13.67	---	21.79	990	---	5.5	ND<0.5	86	75	---	---	SAL
C-3	09/26/91	35.46	15.32	---	20.14	1400	---	7.9	ND<0.5	98	340	---	---	SAL
C-3	01/27/92	35.46	13.91	---	21.55	150	---	0.7	ND<0.5	12	12	---	---	SAL
C-3	04/20/92	35.46	11.66	---	23.80	1600	---	9.3	1.0	190	370	---	---	SAL
C-3	07/17/92	35.46	13.96	---	21.50	460	---	18	ND<0.5	20	52	---	---	SAL
C-3	10/29/92	35.46	15.51	---	19.95	520	---	2.4	1.0	30	79	---	---	SAL
C-4	06/06/89	---	---	---	---	ND<50	---	ND<0.05	ND<1	ND<1	ND<3	---	ND<500	NA
C-4	12/08/89	---	---	---	---	ND<500	ND<1000	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ND<5000	SAL
C-4	09/07/90	35.78	15.58	---	20.20	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	ND<5000	SAL
C-4	12/20/90	35.78	15.42	---	20.36	170	---	1	ND<0.5	ND<0.5	4	---	---	SAL
C-4	03/06/91	35.78	13.54	---	22.24	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-4	06/28/91	35.78	13.93	---	21.85	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.8	---	---	SAL
C-4	09/26/91	35.78	15.64	---	20.14	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-4D	09/26/91	35.78	15.64	---	20.14	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-4	01/27/92	35.78	13.96	---	21.82	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-4	04/20/92	35.78	11.71	---	24.07	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-4	07/17/92	35.78	14.19	---	21.59	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-4	10/29/92	35.78	15.72	---	20.06	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL

Table 1
 Summary of Results of Ground Water Sampling
 Chevron Service Station No. 9-0504
 15900 Hesperian Boulevard, San Lorenzo, California

Concentrations in parts per billion (ppb)

WELL ID	DATE OF SAMPLING/ MONITORING	TOP OF WELL BOX TO ELEV.	DEPTH WATER	L-PH	GROUND WATER ELEV.	TPH-G	TPH-D	B	T	E	X	TOG	TPH-O	LAB
C-5	06/06/89	---	---	---	---	ND<50	---	ND<0.05	ND<1	ND<1	ND<3	---	---	NA
C-5	12/08/89	---	---	---	---	ND<500	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-5	09/07/90	35.31	15.10	---	20.21	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-5	12/20/90	35.31	14.94	---	20.37	80	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-5	03/06/91	35.31	13.06	---	22.25	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-5	06/28/91	35.31	13.46	---	21.85	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-5	09/26/91	35.31	15.14	---	20.17	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-5	01/27/92	35.31	13.31	---	22.00	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-5	04/20/92	35.31	11.10	---	24.21	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-5	07/17/92	35.31	13.73	---	21.58	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-5	10/29/92	35.31	15.20	---	20.11	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-6	12/08/89	---	---	---	---	ND<500	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-6	09/07/90	36.89	16.83	---	20.06	57	---	ND<0.5	ND<0.5	0.6	4	---	---	SAL
C-6	12/20/90	36.89	16.66	---	20.23	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-6	03/06/91	36.89	14.80	---	22.09	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-6	06/28/91	36.89	15.16	---	21.73	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-6	09/26/91	36.89	16.82	---	20.07	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-6	01/27/92	36.89	15.44	---	21.45	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-6	04/20/92	36.89	13.17	---	23.72	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-6	07/17/92	36.89	15.44	---	21.45	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-6	10/29/92	36.89	16.98	---	19.91	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL

Table 1
 Summary of Results of Ground Water Sampling
 Chevron Service Station No. 9-0504
 15900 Hesperian Boulevard, San Lorenzo, California
 Concentrations in parts per billion (ppb)

WELL ID	DATE OF SAMPLING/ MONITORING	TOP OF WELL BOX ELEV.	DEPTH TO WATER	L-PH	GROUND WATER ELEV.	TPH-G	TPH-D	B	T	E	X	TOG	TPH-O	LAB
C-7	12/08/89	---	---	---	---	1700	---	32	12	17	150	---	---	SAL
C-7	09/07/90	32.75	13.02	---	19.73	880	---	84	23	46	180	---	---	SAL
C-7	12/20/90	32.75	12.28	---	20.47	560	---	24	3	19	21	---	---	SAL
C-7	03/06/91	32.75	16.92	---	15.83	240	---	25	2	4	26	---	---	SAL
C-7	06/28/91	32.75	11.31	---	21.44	2600	---	130	13	82	220	---	---	SAL
C-7	09/26/91	32.75	12.28	---	20.47	8100	---	47	35	350	1200	---	---	SAL
C-7	01/27/92	32.75	11.43	---	21.32	12000	---	170	40	420	830	---	---	SAL
C-7	04/20/92	32.75	9.28	---	23.47	1200	---	80	11	90	110	---	---	SAL
C-7	07/17/92	32.75	11.49	---	21.26	2400	---	20	7.4	95	200	---	---	SAL
C-7	10/29/92	32.75	13.05	---	19.70	69	---	1.3	ND<0.5	3.8	7.2	---	---	SAL
C-8	12/08/89	---	---	---	---	4800	---	62	11	95	180	---	---	SAL
C-8	09/07/90	33.82	14.32	---	19.50	3700	---	170	31	180	270	---	---	SAL
C-8	12/20/90	33.82	14.21	---	19.61	3900	---	120	20	130	180	---	---	SAL
C-8	03/06/91	33.82	14.80	---	19.02	1200	---	45	6	34	57	---	---	SAL
C-8	06/28/91	33.82	12.65	---	21.17	6900	---	180	46	340	640	---	---	SAL
C-8	09/26/91	33.82	14.29	---	19.53	1400	---	66	9.8	38	40	---	---	SAL
C-8	01/27/92	33.82	12.60	---	21.22	3600	---	100	26	170	260	---	---	SAL
C-8	04/20/92	33.82	10.36	---	23.46	2600	---	110	32	180	260	---	---	SAL
C-8	07/17/92	33.82	12.88	---	20.94	1100	---	34	5.9	35	52	---	---	SAL
C-8	10/29/92	33.82	14.39	---	19.43	820	---	29	4.8	23	27	---	---	SAL

Concentrations have gone down quite a bit since pumping began.

Table 1
 Summary of Results of Ground Water Sampling
 Chevron Service Station No. 9-0504
 15900 Hesperian Boulevard, San Lorenzo, California
 Concentrations in parts per billion (ppb)

WELL ID	DATE OF SAMPLING/ MONITORING	TOP OF WELL BOX TO ELEV.	DEPTH WATER	L-PH	GROUND WATER ELEV.	TPH-G	TPH-D	B	T	E	X	TOG	TPH-O	LAB
C-9	09/07/90	33.43	14.06	---	19.37	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-9	12/20/90	33.43	14.03	---	19.40	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-9	03/06/91	33.43	12.12	---	21.31	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-9	06/28/91	33.43	12.41	---	21.02	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-9	09/26/91	33.43	14.02	---	19.41	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-9	01/27/92	33.43	12.53	---	20.90	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-9	04/20/92	33.43	10.22	---	23.21	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-9	07/17/92	33.43	12.64	---	20.79	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-9	10/29/92	33.43	14.20	---	19.23	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-10	09/07/90	31.63	12.49	---	19.14	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-10	12/20/90	31.63	12.36	---	19.27	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-10	03/06/91	31.63	10.45	---	21.18	ND<50	---	ND<0.5	0.8	ND<0.5	0.8	---	---	SAL
C-10	06/28/91	31.63	10.74	---	20.89	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-10	09/26/91	31.63	12.42	---	19.21	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-10	01/27/92	31.63	10.84	---	20.79	ND<50	---	ND<0.5	1.3	ND<0.5	ND<0.5	---	---	SAL
C-10D	01/27/92	31.63	10.84	---	20.79	ND<50	---	ND<0.5	1.3	ND<0.5	ND<0.5	---	---	SAL
C-10	04/20/92	31.63	8.55	---	23.08	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-10	07/17/92	31.63	11.02	---	20.61	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-10	10/29/92	31.63	12.40	---	19.23	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-11	09/07/90	31.58	12.22	---	19.36	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-11	12/20/90	31.58	12.08	---	19.50	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-11	03/06/91	31.58	16.15	---	15.43	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-11	06/28/91	31.58	10.52	---	21.06	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-11	09/26/91	31.58	12.20	---	19.38	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-11	01/27/92	31.58	10.73	---	20.85	ND<50	---	ND<0.5	0.8	ND<0.5	ND<0.5	---	---	SAL
C-11	04/20/92	31.58	8.56	---	23.02	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-11	07/17/92	31.58	10.78	---	20.80	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
C-11	10/29/92	31.58	12.07	---	19.51	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL

Table 1
 Summary of Results of Ground Water Sampling
 Chevron Service Station No. 9-0504
 15900 Mesperian Boulevard, San Lorenzo, California

Concentrations in parts per billion (ppb)

WELL ID	DATE OF SAMPLING/ MONITORING	TOP OF WELL BOX TO ELEV.	DEPTH TO WATER	L-PH	GROUND WATER ELEV.	TPH-G	TPH-D	B	T	E	X	TOG	TPH-O	LAB
TB	09/07/90	NA	NA	NA	NA	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
TB	03/06/91	NA	NA	NA	NA	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
TB	06/28/91	NA	NA	NA	NA	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
TB	09/26/91	NA	NA	NA	NA	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
TB	01/27/92	NA	NA	NA	NA	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
TB	04/20/92	NA	NA	NA	NA	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
TB	07/17/92	NA	NA	NA	NA	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
TB	10/29/92	NA	NA	NA	NA	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
RINSATE	03/06/91	NA	NA	NA	NA	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
RINSATE	09/26/91	NA	NA	NA	NA	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
RINSATE	01/27/92	NA	NA	NA	NA	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
RINSATE	04/20/92	NA	NA	NA	NA	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
RINSATE	07/17/92	NA	NA	NA	NA	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL
RINSATE	10/29/92	NA	NA	NA	NA	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	SAL

EXPLANATION OF ABBREVIATIONS:

TPH-G	:Total Petroleum Hydrocarbons as Gasoline (EPA method 8015 modified)	B	:Benzene (EPA Method 8020 or 8240)
TPH-D	:Total Petroleum Hydrocarbons as Diesel (EPA method 8015 modified)	T	:Toluene (EPA Method 8020 or 8240)
TPH-O	:Total Petroleum Hydrocarbons as Oil (EPA method 8015 modified)	E	:Ethylbenzene (EPA Method 8020 or 8240)
TOG	:Total Oil and Grease (EPA method 5520)	X	:Xylenes (EPA Method 8020 or 8240)
L-PH	:Liquid-Phase Hydrocarbons (expressed in feet)	ND	:Not detected
		NA	:Not applicable/Not available
		---	:Not analyzed/Not measured
		TB	:Trip Blank
		SAL	:Superior Analytical Laboratory
		*	:The well was not accessible for measurement.

Note: Top of well box and ground water elevations are expressed at feet above mean sea level (NGVD - 1929)

APPENDIX A
OFFICIAL LABORATORY RESULTS
AND
CHAIN OF CUSTODY FORMS



Alton Geoscience
Attn: DALE SWAIN

Project 31-0561
Reported 11/13/92

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
87074- 1	TB-LB	11/02/92	11/09/92 Water
87074- 2	RIN	11/02/92	11/06/92 Water
87074- 3	C-4	11/02/92	11/06/92 Water
87074- 4	C-5	11/02/92	11/06/92 Water
87074- 5	C-6	11/02/92	11/06/92 Water
87074- 6	C-9	11/02/92	11/09/92 Water
87074- 7	C-10	11/02/92	11/06/92 Water
87074- 8	C-11	11/02/92	11/09/92 Water
87074- 9	C-7	11/02/92	11/07/92 Water
87074-10	C-8	11/02/92	11/07/92 Water

RESULTS OF ANALYSIS

Laboratory Number: 87074- 1 87074- 2 87074- 3 87074- 4 87074- 5

Gasoline:	ND<50	ND<50	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	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Ethyl Benzene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Xylenes:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Concentration:	ug/L	ug/L	ug/L	ug/L	ug/L

Laboratory Number: 87074- 6 87074- 7 87074- 8 87074- 9 87074-10

Gasoline:	ND<50	ND<50	ND<50	69	820
Benzene:	ND<0.5	ND<0.5	ND<0.5	1.3	29
Toluene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	4.8
Ethyl Benzene:	ND<0.5	ND<0.5	ND<0.5	3.8	23
Xylenes:	ND<0.5	ND<0.5	ND<0.5	7.2	27
Concentration:	ug/L	ug/L	ug/L	ug/L	ug/L



Alton Geoscience
Attn: DALE SWAIN

Project 31-0561
Reported 11/13/92

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
87074-11	C-3	11/02/92	11/07/92 Water

RESULTS OF ANALYSIS

Laboratory Number: 87074-11

Gasoline:	520
Benzene:	2.4
Toluene:	1.0
Ethyl Benzene:	30
Xylenes:	79

Concentration: ug/L

NOV 18 1992



Superior Precision Analytical, Inc.

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

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

Page 3 of 3
QA/QC INFORMATION
SET: 87074

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	SPIKE LEVEL	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	200 ng	88/93	6%	70-130
Benzene:	200 ng	93/90	3%	70-130
Toluene:	200 ng	90/87	3%	70-130
Ethyl Benzene:	200 ng	96/92	4%	70-130
Xylenes:	200 ng	94/91	3%	70-130

Richard Srna, Ph.D.
Renee A. Nelson for
Laboratory Director

