



Chevron

921 2-1 3:00

May 4, 1993

Chevron U.S.A. Products Company
2410 Camino Ramon
San Ramon, CA 94583

Marketing Department
Phone 510 842 9500

4037

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

**Re: Chevron Service Station #9-4587
609 Oak Street, Oakland, CA**

Dear Ms. Eberle:

sheen, .05, .05, .15

Enclosed is the Quarterly Ground Water Monitoring Report dated April 27, 1993, prepared by our consultant Alton Geoscience for the above referenced site. As indicated in the report, ground water samples collected were analyzed for total petroleum hydrocarbons as gasoline and BTEX. Benzene was detected only in monitor well C-2 at a concentration of 990 ppb. Separate-phase hydrocarbons were detected in monitor wells C-1, CR-1, and tank pit backfill wells C-B and C-C at measured thicknesses of ~~0.01, 0.02, 0.04, and 0.03 feet~~, respectively. Approximately 0.20 gallons of separate-phase hydrocarbons were recovered during the last quarter. Removal of separate-phase hydrocarbons will continue on a monthly basis until the dedicated recovery system is installed and activated. Depth to ground water was measured at approximately 8.1 to 9.5 feet below grade and the direction of flow is to the southeast.

As you are aware, the City of Oakland Planning Department (City) has conditionally approved installation of the ground water extraction system. Conditions to be met for approval include the design of a landscape plan by a licensed landscape architect and installation of ivy-type plants and quick growing shrubs around the enclosure. This will undoubtedly require additional expenditures of both time and money and once again delay the installation of the remediation system. Geraghty & Miller is currently discussing the conditional approval with the City to negotiate these conditions and expedite system installation.

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. Rich Hiatt, RWQCB - Bay Area
Mr. Kent O'Brien, Geraghty & Miller - Richmond
Ms. B.C. Owen
File (9-4587 QM1)

Mr. Dewey Barjockey
The Paris Company
8520 Pardee
Oakland, CA 94621

Mr. James Kimberlin
1100 Howe Avenue #415
Sacramento, CA 94825

Mr. William Kimberlin
51 Eureka Street
Kensington, CA 94707

April 27, 1993

Mr. Mark Miller
Chevron U.S.A. Products Company
Post Office Box 5004
San Ramon, California 94583-0804

31-0564

Subject: Quarterly Ground Water Monitoring Report
Chevron Station No. 9-4587
609 Oak Street
Oakland, California

Dear Mr. Miller:

In accordance with our agreement, Alton Geoscience transmits this Quarterly Ground Water Monitoring and Sampling Report for Chevron Station No. 9-4587, located at 609 Oak Street, Oakland, California. Figure 1 shows the site location.

Monitoring and sampling of the ground water monitoring wells was performed on March 18, 1993, 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 was measured in each well from the top of casing using an electronic interface probe with 0.01 foot tolerance.

Ground water 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 transported, as non-hazardous, to the Chevron Richmond Terminal for treatment.

Mr. Mark Miller
April 27, 1993
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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.

Free product was observed in monitoring wells C-1, C-B, C-C, and CR-1. Approximately 0.20 gallons of free product, in total, has been manually recovered from the wells since the previous sampling event on December 16, 1992. The official laboratory reports and chain of custody records are included in Appendix A.

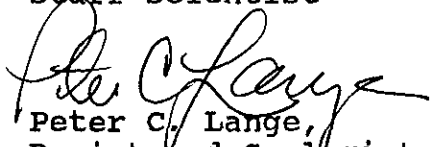
Please call Todd B. Pearson at (510) 734-8134 if you have any questions regarding this report.

Sincerely,

ALTON GEOSCIENCE,

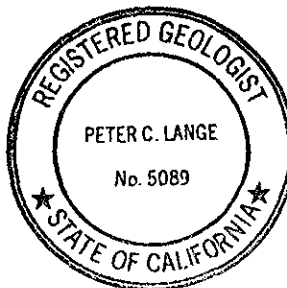


Todd B. Pearson
Staff Scientist



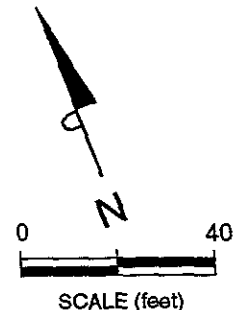
Peter C. Lange,
Registered Geologist, # 5089

wp94587tp

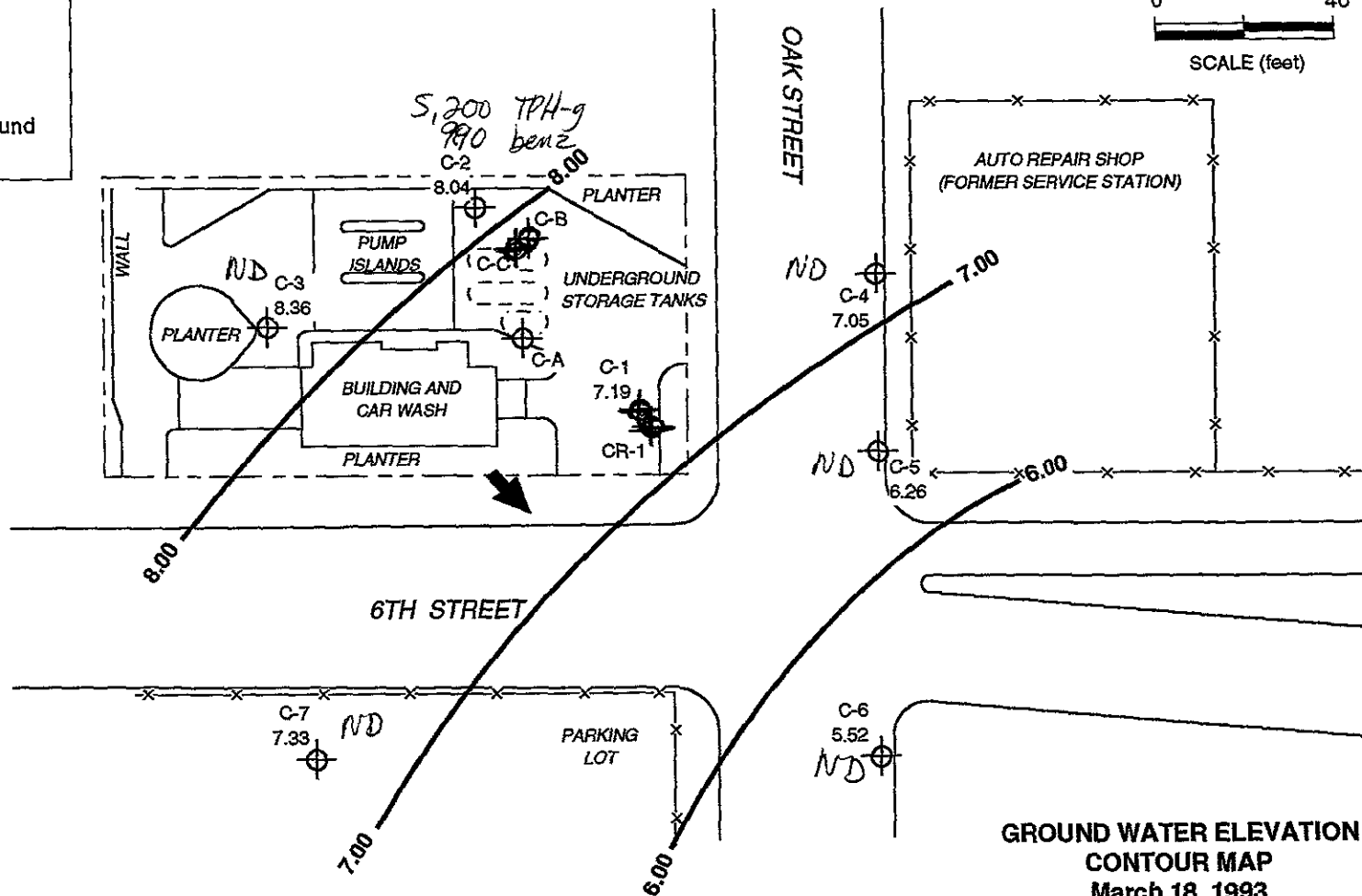


LEGEND

- ⊕ C-7 Ground water monitoring well
- 7.33 Ground water elevation, feet above mean sea level [NGVD-1929]
- Ground water elevation contour line
- ↘ General direction of ground water gradient



⊕ mw w/PP



NOTES:
Contour lines are interpretive based on fluid levels collected March 18, 1993.
Contour interval = 1.0 foot.

**GROUND WATER ELEVATION
CONTOUR MAP
March 18, 1993**

Chevron Station No. 9-4587
609 Oak Street
Oakland, California

FIGURE 2



SOURCE: Geostrategies, Inc.

Table 1
 Summary of Results of Ground Water Sampling
 Chevron Station No. 9-4587
 609 Oak Street, Oakland, California

Concentrations in parts per billion (ppb)

WELL ID	DATE OF SAMPLING/ MONITORING	TOP OF WELL BOX ELEVATION	DEPTH TO WATER	FREE PRODUCT THICKNESS	FREE PRODUCT BAILED (GALLONS)	GROUND WATER ELEVATION	TPH-G	B	T	E	X	LAB
C-A	12/06/89	---	---	0.00	0.00	---	44000	20000	66	1600	2220	NA
C-A	10/30/90	---	11.20	SHEEN	0.00	---	31000	23000	110	1100	160	SAL
C-AD	10/30/90	---	11.20	SHEEN	0.00	---	30000	23000	150	1000	180	SAL
C-A	01/14/91	---	11.25	0.00	0.00	---	12000	30000	540	1400	560	SAL
C-A	04/03/91	---	9.82	0.00	0.00	---	59000	33000	2400	2200	3100	SAL
C-A	07/17/91	---	10.93	0.00	0.00	---	52000	38000	380	1300	500	SAL
C-A***	10/07/91	---	---	---	---	---	---	---	---	---	---	NA
C-A***	06/25/92	---	---	---	---	---	---	---	---	---	---	NA
C-A***	09/17/92	---	---	---	---	---	---	---	---	---	---	NA
C-A***	12/16/92	---	---	---	---	---	---	---	---	---	---	NA
C-A***	03/18/93	---	---	---	---	---	---	---	---	---	---	NA
C-B	12/06/89	---	---	0.01	---	---	---	---	---	---	---	NA
C-B	10/30/90	---	11.19	0.01	---	---	---	---	---	---	---	NA
C-B	01/14/91	---	11.40	0.01	---	---	---	---	---	---	---	NA
C-B	04/03/91	---	9.55	1.00	---	---	---	---	---	---	---	NA
C-B	04/04/91	---	10.54	1.06	0.75	---	---	---	---	---	---	NA
C-B	07/17/91	---	10.84	0.03	---	---	---	---	---	---	---	NA
C-B	10/07/91	---	11.10	0.04	0.01	---	---	---	---	---	---	NA
C-B	02/04/92	---	10.78	0.01	0.01	---	---	---	---	---	---	NA
C-B	03/06/92	---	---	---	---	---	---	---	---	---	---	NA
C-B	04/01/92	---	10.33	1.02	0.15	---	---	---	---	---	---	NA
C-B	06/25/92	---	11.20	0.68	0.10	---	---	---	---	---	---	NA
C-B	09/17/92	---	11.07	0.13	0.02	---	---	---	---	---	---	NA
C-B	12/16/92	---	10.41	0.38	0.03	---	---	---	---	---	---	NA
C-B	03/18/93	---	9.19	0.05	0.04	---	---	---	---	---	---	NA

Table 1
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WELL ID	DATE OF SAMPLING/ MONITORING	TOP OF WELL BOX ELEVATION	DEPTH TO WATER	FREE PRODUCT THICKNESS	FREE PRODUCT BAILED (GALLONS)	GROUND WATER ELEVATION	TPH-G	B	T	E	X	LAB
C-C	12/06/89	---	---	0.15	---	---	---	---	---	---	---	NA
C-C	10/30/90	---	10.84	0.03	---	---	---	---	---	---	---	NA
C-C	01/14/91	---	11.01	0.11	---	---	---	---	---	---	---	NA
C-C	04/03/91	---	9.19	0.02	---	---	---	---	---	---	---	NA
C-C	07/17/91	---	10.53	0.03	---	---	---	---	---	---	---	NA
C-C	10/07/91	---	10.98	0.08	0.01	---	---	---	---	---	---	NA
C-C	02/04/92	---	10.45	0.09	0.10	---	---	---	---	---	---	NA
C-C	03/06/92	---	8.83	0.09	0.10	---	---	---	---	---	---	NA
C-C	04/01/92	---	9.23	0.16	0.10	---	---	---	---	---	---	NA
C-C	06/25/92	---	10.40	0.12	0.06	---	---	---	---	---	---	NA
C-C	09/17/92	---	10.84	0.12	1.00	---	---	---	---	---	---	NA
C-C	12/16/92	---	10.02	0.12	0.04	---	---	---	---	---	---	NA
C-C	03/18/93	---	8.70	0.15	0.03	---	---	---	---	---	---	NA
C-1	12/06/89	16.07	---	0.20	---	---	---	---	---	---	---	NA
C-1	10/30/90	16.07	10.79	0.02	---	5.30	---	---	---	---	---	NA
C-1	01/14/91	16.07	11.39	0.02	---	4.70	---	---	---	---	---	NA
C-1	04/03/91	16.07	9.43	0.02	---	6.66	---	---	---	---	---	NA
C-1	07/17/91	16.07	10.46	0.04	---	5.64	---	---	---	---	---	NA
C-1	10/07/91	16.07	10.74	0.04	0.01	5.36	---	---	---	---	---	NA
C-1	02/04/92	16.07	10.37	0.01	0.01	5.71	---	---	---	---	---	NA
C-1	03/06/92	16.07	9.20	0.00	0.00	6.87	---	---	---	---	---	NA
C-1	04/01/92	16.07	9.28	0.00	0.00	6.79	---	---	---	---	---	NA
C-1	06/25/92	16.07	9.98	0.01	0.01	6.10	100000	8800	7000	2800	19000	SAL
C-1	09/17/92	16.07	10.51	SHEEN	0.01	5.56	---	---	---	---	---	NA
C-1	12/16/92	16.07	9.81	SHEEN	0.01	6.26	---	---	---	---	---	NA
C-1	03/18/93	16.07	8.88	SHEEN	0.01	7.19	---	---	---	---	---	NA

Table 1
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Concentrations in parts per billion (ppb)

WELL ID	DATE OF SAMPLING/ MONITORING	TOP OF WELL BOX ELEVATION	DEPTH TO WATER	FREE PRODUCT THICKNESS	FREE PRODUCT BAILED (GALLONS)	GROUND WATER ELEVATION	TPH-G	B	T	E	X	LAB
C-2	12/06/89	16.84	---	0.00	0.00	---	16000	250	1200	550	1400	NA
C-2	10/30/90	16.84	11.16	0.00	0.00	5.68	28000	3700	1900	1200	4300	SAL
C-2	01/14/91	16.84	11.11	0.00	0.00	5.73	24000	3300	1200	1100	4100	SAL
C-2D	01/14/91	16.84	11.11	0.00	0.00	5.73	30000	3900	1500	1500	5000	SAL
C-2	04/03/91	16.84	9.53	0.00	0.00	7.31	12000	1100	840	650	1800	SAL
C-2D	04/03/91	16.84	9.53	0.00	0.00	7.31	14000	1100	990	680	1800	SAL
C-2	07/17/91	16.84	10.68	0.00	0.00	6.16	13000	1700	560	650	1700	SAL
C-2D	07/17/91	16.84	10.68	0.00	0.00	6.16	14000	1700	640	720	1900	SAL
C-2	10/07/91	16.84	11.02	0.00	0.00	5.82	25000	3700	1300	1400	3800	SAL
C-2	02/04/92	16.84	10.60	0.00	0.00	6.24	16000	2600	300	880	1900	SAL
C-2	04/01/92	16.84	9.30	0.00	0.00	7.54	15000	1900	300	700	1500	SAL
C-2	06/25/92	16.84	10.45	0.00	0.00	6.39	23000	3400	740	1300	3400	SAL
C-2	09/17/92	16.84	10.78	0.00	0.00	6.06	18000	3500	550	1400	3900	SAL
C-2	12/16/92	16.84	9.94	0.00	0.00	6.90	12000	1200	120	460	1100	SAL
C-2	03/18/93	16.84	8.80	0.00	0.00	8.04	5200	990	130	290	430	SAL
C-3	12/06/89	16.48	---	0.00	0.00	---	ND<500	ND<0.5	ND<0.5	ND<0.5	0.74	NA
C-3	10/30/90	16.48	10.44	0.00	0.00	6.04	410	4	4	2	9	SAL
C-3	01/14/91	16.48	10.34	0.00	0.00	6.14	80	ND<0.5	ND<0.5	ND<0.5	1	SAL
C-3	04/03/91	16.48	9.01	0.00	0.00	7.47	53	ND<0.5	ND<0.5	ND<0.5	2	SAL
C-3	07/17/91	16.48	10.00	0.00	0.00	6.48	ND<50	5.9	ND<0.5	ND<0.5	ND<0.5	SAL
C-3	10/07/91	16.48	10.38	0.00	0.00	6.10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-3	02/04/92	16.48	10.00	0.00	0.00	6.48	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-3	04/01/92	16.48	8.83	0.00	0.00	7.65	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-3	06/25/92	16.48	9.85	0.00	0.00	6.63	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-3	09/17/92	16.48	10.20	0.00	0.00	6.28	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-3	12/16/92	16.48	9.40	0.00	0.00	7.08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-3	03/18/93	16.48	8.12	0.00	0.00	8.36	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.5	SAL

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C-4	12/06/89	16.53	---	0.00	0.00	---	---	---	---	---	---	NA
C-4	10/30/90	16.53	11.56	0.00	0.00	4.97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-4	01/14/91	16.53	11.44	0.00	0.00	5.09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-4	04/03/91	16.53	10.00	0.00	0.00	6.53	150	3	ND<0.5	12	9	SAL
C-4	07/17/91	16.53	11.16	0.00	0.00	5.37	290	2.3	0.4	52	0.4	SAL
C-4	10/07/91	16.53	11.39	0.00	0.00	5.14	ND<50	ND<0.5	ND<0.5	4.6	ND<0.5	SAL
C-4	02/04/92	16.53	11.02	0.00	0.00	5.51	ND<50	ND<0.5	ND<0.5	2.8	ND<0.5	SAL
C-4D	02/04/92	16.53	11.02	0.00	0.00	5.51	ND<50	ND<0.5	ND<0.5	2.5	0.5	SAL
C-4	04/01/92	16.53	9.83	0.00	0.00	6.70	480	4.9	ND<0.5	64	4.3	SAL
C-4	06/25/92	16.53	10.88	0.00	0.00	5.65	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-4	09/17/92	16.53	11.24	0.00	0.00	5.29	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-4	12/16/92	16.53	10.40	0.00	0.00	6.13	56	ND<0.5	ND<0.5	1.0	ND<0.5	SAL
C-4	03/18/93	16.53	9.48	0.00	0.00	7.05	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.5	SAL
C-5	12/06/89	14.70	9.97	0.00	0.00	4.73	---	---	---	---	---	NA
C-5	10/30/90	14.70	---	0.00	0.00	---	ND<50	0.8	ND<0.5	ND<0.5	0.5	SAL
C-5	01/14/91	14.70	9.87	0.00	0.00	4.83	54	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-5	04/03/91	14.70	8.72	0.00	0.00	5.98	1800	330	200	52	170	SAL
C-5	07/17/91	14.70	9.63	0.00	0.00	5.07	170	120	5.3	12	20	SAL
C-5	10/07/91	14.70	9.83	0.00	0.00	4.87	ND<50	1.1	ND<0.5	ND<0.5	ND<0.5	SAL
C-5	02/04/92	14.70	9.53	0.00	0.00	5.17	91	16	ND<0.5	2.4	2.0	SAL
C-5	04/01/92	14.70	8.57	0.00	0.00	6.13	960	200	5.4	21	33	SAL
C-5	06/25/92	14.70	9.44	0.00	0.00	5.26	800	2.5	ND<0.5	1.3	7.3	SAL
C-5	09/17/92	14.70	9.72	0.00	0.00	4.98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-5	12/16/92	14.70	9.07	0.00	0.00	5.63	81	5.4	1.2	1.5	4.3	SAL
C-5	03/18/93	14.70	8.44	0.00	0.00	6.26	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.5	SAL

Table 1
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WELL ID	DATE OF SAMPLING/ MONITORING	TOP OF WELL BOX ELEVATION	DEPTH TO WATER	FREE PRODUCT THICKNESS	FREE PRODUCT BAILED (GALLONS)	GROUND WATER ELEVATION	TPH-G	B	T	E	X	LAB
C-6	12/06/89	13.87	---	0.00	0.00	---	---	---	---	---	---	NA
C-6	10/30/90	13.87	9.43	0.00	0.00	4.44	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-6	01/14/91	13.87	9.41	0.00	0.00	4.46	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-6	04/03/91	13.87	8.66	0.00	0.00	5.21	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-6	07/17/91	13.87	9.25	0.00	0.00	4.62	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-6	10/07/91	13.87	9.34	0.00	0.00	4.53	67	ND<0.5	0.6	ND<0.5	0.6	SAL
C-6	02/04/92	13.87	9.16	0.00	0.00	4.71	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-6	04/01/92	13.87	8.59	0.00	0.00	5.28	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-6	06/25/92	13.87	9.11	0.00	0.00	4.76	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-6	09/17/92	13.87	9.28	0.00	0.00	4.59	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-6	12/16/92	13.87	8.88	0.00	0.00	4.99	120	9.3	1.9	2.7	7.4	SAL
C-6	03/18/93	13.87	8.35	0.00	0.00	5.52	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.5	SAL
C-7	02/07/91	15.78	9.88	0.00	0.00	5.90	ND<50	ND<0.5	0.8	ND<0.5	ND<0.5	SAL
C-7	04/03/91	15.78	9.04	0.00	0.00	6.74	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-7	07/17/91	15.78	9.86	0.00	0.00	5.92	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-7	10/07/91	15.78	10.10	0.00	0.00	5.68	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-7	02/04/92	15.78	9.74	0.00	0.00	6.04	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-7	04/01/92	15.78	8.96	0.00	0.00	6.82	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-7	06/25/92	15.78	9.62	0.00	0.00	6.16	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-7	09/17/92	15.78	9.75	0.00	0.00	6.03	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-7+	12/16/92	15.78	9.41	0.00	0.00	6.37	---	---	---	---	---	NA
C-7	03/18/93	15.78	8.45	0.00	0.00	7.33	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.5	SAL
CR-1**	10/30/90	---	10.51	---	---	---	9600	7100	65	610	190	SAL
CR-1	01/14/91	---	10.29	0.00	0.00	---	1500	3200	52	190	77	SAL
CR-1	07/17/91	---	10.19	0.00	0.00	---	15000	9300	220	680	530	SAL
CR-1	10/07/91	---	10.46	0.00	0.00	---	17000	7600	50	440	68	SAL
CR-1D	10/07/91	---	10.46	0.00	0.00	---	14000	9400	52	430	110	SAL
CR-1	02/04/92	---	10.12	0.00	0.00	---	19000	6100	32	350	100	SAL
CR-1	04/01/92	---	9.24	0.00	0.00	---	29000	5300	820	380	1200	SAL
CR-1	06/25/92	---	10.03	0.01	0.02	---	12000	3300	280	210	460	SAL
CR-1	09/17/92	---	10.30	0.01	0.02	---	---	---	---	---	---	NA
CR-1	12/16/92	---	9.59	SHEEN	0.01	---	---	---	---	---	---	NA
CR-1	03/18/93	---	8.82	0.05	0.02	---	---	---	---	---	---	NA

Table 1
 Summary of Results of Ground Water Sampling
 Chevron Station No. 9-4587
 609 Oak Street, Oakland, California

Concentrations in parts per billion (ppb)

WELL ID	DATE OF SAMPLING/ MONITORING	TOP OF WELL BOX ELEVATION	DEPTH TO WATER	FREE PRODUCT THICKNESS	FREE PRODUCT BAILED (GALLONS)	GROUND WATER ELEVATION	TPH-G	B	T	E	X	LAB
TB*	10/30/90	---	---	---	---	---	---	---	---	---	---	NA
TB	01/14/91	---	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
TB	02/07/91	---	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
TB	04/03/91	---	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
TB	07/17/91	---	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
TB	10/07/91	---	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
TB	02/04/92	---	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
TB	04/01/92	---	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
TB	06/25/92	---	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
TB	09/17/92	---	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
TB	12/16/92	---	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
TB	03/18/93	---	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.5	SAL
RINSATE	10/30/90	---	---	---	---	---	ND<50	ND<0.5	0.6	ND<0.5	ND<0.5	SAL
RINSATE	10/07/91	---	---	---	---	---	ND<50	ND<0.5	0.5	ND<0.5	ND<0.5	SAL
RINSATE	02/04/92	---	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
RINSATE	04/01/92	---	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
RINSATE	06/25/92	---	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
RINSATE	09/17/92	---	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
RINSATE	12/16/92	---	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL

APPENDIX A
OFFICIAL LABORATORY RESULTS
AND
CHAIN OF CUSTODY FORMS



Alton Geoscience
Attn: JON VAIL

Project 31-0564
Reported 03/29/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
88125- 1	TB-LB	03/18/93	03/25/93 Water
88125- 2	C-7	03/18/93	03/25/93 Water
88125- 3	C-3	03/18/93	03/25/93 Water
88125- 4	C-5	03/18/93	03/26/93 Water
88125- 5	C-4	03/18/93	03/26/93 Water
88125- 6	C-6	03/18/93	03/26/93 Water
88125- 7	C-2	03/18/93	03/26/93 Water

RESULTS OF ANALYSIS

Laboratory Number: 88125- 1 88125- 2 88125- 3 88125- 4 88125- 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<1.5	ND<1.5	ND<1.5	ND<1.5	ND<1.5
Concentration:	ug/L	ug/L	ug/L	ug/L	ug/L

Laboratory Number: 88125- 6 88125- 7

Gasoline:	ND<50	5200
Benzene:	ND<0.5	990
Toluene:	ND<0.5	130
Ethyl Benzene:	ND<0.5	290
Xylenes:	ND<1.5	430
Concentration:	ug/L	ug/L



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 2 of 2
QA/QC INFORMATION
SET: 88125

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:	97/97	0%	70-130
Benzene:	96/92	4%	70-130
Toluene:	95/92	3%	70-130
Ethyl Benzene:	101/96	5%	70-130
Xylenes:	100/97	3%	70-130

Richard Srna, Ph.D.

Richard Srna
Laboratory Director

