



**Chevron U.S.A. Inc.**

2410 Camino Ramon, San Ramon, California • Phone (415) 842-9500  
Mail Address: P.O. Box 5004, San Ramon, CA 94583-0804

Marketing Department

March 29, 1991

**Mr. Rafat Shahid**  
Alameda County Environmental Health  
80 Swan Way, Room 200  
Oakland, CA 94621

**Re:**    **Chevron S.S. #9-1924**  
            **4904 South Front Street, Livermore, CA**

**Dear Mr. Shahid:**

Enclosed is a quarterly monitoring report dated March 4, 1991 which describes groundwater monitoring by Chevron's consultant, Alton Geoscience (Alton), on January 3, 1991 at the site referenced above.

Chevron has been monitoring the groundwater at this site since the installation of nineteen (19) wells in March of 1986. Chevron's five year monitoring program has generated the following information:

- (1)    Direction of groundwater gradient has consistently been in an easterly direction throughout all monitoring events.
- (2)    The horizontal extent of dissolved phase hydrocarbons in the groundwater has been determined and has been shown to be consistent.
- (3)    A decrease in concentration of dissolved phase hydrocarbons has been observed over the five year period.

As a result of the groundwater information gathered over the last five years and the consistency of the information Chevron has collected, Chevron feels that continued monitoring on a quarterly basis will not contribute any significant new information but rather will merely generate a large quantity of redundant numbers. Chevron feels that a revision of its monitoring program is warranted at this time and has instructed its consultant to follow the monitoring and reporting programs defined below:

**Monitoring**

- Measure the groundwater elevations in all wells (C1 through C19) on a semi-annual basis during the first and third quarters of each year.
- Obtain groundwater samples for laboratory analysis from wells C-3, C-5, C-7, C-8, C-10, C-14, C-17, and C-18 on a semi-annual basis during the first and third quarters of each year.
- Obtain groundwater samples for laboratory analysis from wells C-1, C-2, C-6, C-9, C-11, C-12, C-13, C-15, C-16, and C-19 on an annual basis during the first quarter of each year (note that well C-4 was previously destroyed).

Reporting

- Submit a report to the appropriate regulatory agencies on a semi-annual basis to document all groundwater monitoring activity since the previous report.

If you have any questions or comments, please contact Mr. Clint Rogers at (415) 842-8658. Mr. Rogers has recently become the project manager for this site replacing Ms. Nancy Vukelich.

Sincerely,

Chevron U.S.A.

By Clint B. Rogers  
Clint B. Rogers  
Environmental Engineer

Enclosure

cc: Lester Feldman, San Francisco Bay RWQCB  
Stephen Rosen, Alton Geoscience, Concord, CA  
Bette Owen, Chevron U.S.A.

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- Obtain groundwater samples for laboratory analysis from wells C-1, C-2, C-6, C-9, C-11, C-12, C-13, C-15, C-16, and C-19 on an annual basis during the first quarter of each year (note that well C-4 was previously destroyed).

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- Submit a report to the appropriate regulatory agencies on a semi-annual basis to document all groundwater monitoring activity since the previous report.

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Enclosure

cc: Lester Feldman, San Francisco Bay RWQCB  
Stephen Rosen, Alton Geoscience, Concord, CA  
Bette Owen, Chevron U.S.A.



March 4, 1991

Mr. Clint Rogers  
Chevron U.S.A., Inc.  
Post Office Box 5004  
San Ramon, California 94583-0804

30-284

Subject: Quarterly Ground Water Monitoring Report  
Chevron Station No. 9-1924  
4904 Southfront Road  
Livermore, California

Dear Mr. Rogers:

In accordance with our agreement, Alton Geoscience, Inc. transmits this Quarterly Ground Water Monitoring and Sampling Report for Chevron Station No. 9-1924, located at 4904 Southfront Road, Livermore, California. The site location is shown in Figure 1.

Monitoring and sampling of the ground water monitoring wells was performed on January 3 and 4, 1991, 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, the depth to ground water in each well was measured from the top of casing to the nearest 0.01 foot using an electronic interface probe. Ground water samples were also collected at this time and checked for the presence of liquid-phase hydrocarbons or sheen.

Ground water analytical samples were collected after more than 3 casing volumes of ground water were purged from each well. Each sample was collected using a clean bailer (dedicated for each well), and then transferred to the appropriate clean sample containers for delivery to a California-certified laboratory following proper preservation and chain of custody procedures. Purged ground water was stored in a 600-gallon, trailer-mounted steel tank (California Department of Health Services-registered) manifested, and hauled to a proper facility for disposal.

#### **SAMPLING AND ANALYTICAL RESULTS**

The results of the monitoring and laboratory analyses of the ground water samples for this quarter, as well as the results of previous quarterly monitoring and sampling events, are

Mr. Clint Rogers  
March 4, 1991  
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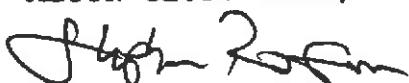
summarized in Table 1. Based on the previous wellhead elevation survey data and depth to water measurements collected during this monitoring event, ground water elevations and the general ground water flow direction at this site are presented in Figure 2.

No liquid-phase hydrocarbons or sheen was noted in any of the ground water samples. The water sampling survey forms presenting the results of the field activities and observations, as well as the official laboratory reports and chain of custody records are included in Appendix A.

Please call if you have any questions concerning this report.

Sincerely,

ALTON GEOSCIENCE, INC.



Stephan Rosen  
Supervising Geologist



Al Sevilla, R.C.E. 26392  
Regional Manager

Enclosures

pw.91924  
vct

Table 1  
Summary of Results of Ground Water Sampling  
Chevron Service Station #9-1924  
4904 Southfront Road, Livermore, California

Concentrations in parts per billion (ppb)

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION	DEPTH TO WATER	GROUND WATER ELEVATION	TPH-G	TG	B	I	E	X	1,2-DCEa	OTHER	NC	TCA	1,1-DCEa	PCE	LAB	
C-1	03-28-86	520.39	11.75	508.64	---	---	---	---	---	---	---	---	---	---	---	---	NA	
C-1	03-15-88	520.39	13.50	506.89	27000	---	770	87	610	2100	---	---	---	---	---	---	GTEL	
C-1	05-10-88	520.39	13.65	506.74	---	---	---	---	---	---	---	---	---	---	---	---	NA	
C-1	06-10-88	520.39	14.72	505.67	---	---	---	---	---	---	---	---	---	---	---	---	NA	
C-1	07-25-88	520.39	13.50	506.89	---	---	---	---	---	---	---	---	---	---	---	---	NA	
C-1	10-13-88	520.39	12.89	507.50	3200	---	220	11	62	130	---	---	---	---	---	---	NA	
C-1	01-01-89	520.39	12.89	507.50	---	---	---	---	---	---	---	---	---	---	---	---	NA	
C-1	01-12-89	---	---	4000	---	820	43	490	260	---	---	---	---	---	---	---	SAL	
C-1	04-10-89	520.39	13.65	506.74	4000	ND(3.0)	100	ND(5)	70	50	ND(5)	---	---	---	---	---	ECAS	
C-1D	04-10-89	520.39	13.65	506.74	4000	---	100	ND(5)	60	50	ND(5)	---	---	---	---	---	CCAS	
C-1	06-26-89	520.39	13.94	506.45	600	ND(3.0)	97	20	60	50	3	---	---	---	---	---	NA	
C-1D	06-26-89	520.39	13.94	506.45	570	---	86	15	44	35	1.7	---	---	---	---	---	CCAS	
C-1	10-13-89	520.39	13.92	506.47	1600	ND(5)	64	ND(5)	51	48	ND(5)	5	---	---	---	---	SAL	
C-1	01-03-90	520.39	13.80	506.59	1100	---	36	0.68	30	30	1	---	---	---	---	---	SAL	
C-1	05-08-90	520.39	13.91	506.48	1300	---	37	9.2	40	32	1.2	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	---	PACE	
C-1	09-29-90	520.39	13.93	506.46	350	---	19	1.2	32	31	ND(0.5)	ND(0.5)	0.7*	1.4	ND(0.5)	ND(0.5)	---	PACE
C-1	01-03-91	520.39	13.85	506.54	400	---	12	ND(0.5)	17	14	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	SAL	
C-2	03-28-86	520.76	11.98	508.78	---	---	---	---	---	---	---	---	---	---	---	---	NA	
C-2	03-15-88	520.76	13.77	506.99	22000	---	3900	1900	1200	1200	---	---	---	---	---	---	GTEL	
C-2	05-10-88	520.76	14.03	506.73	---	---	---	---	---	---	---	---	---	---	---	---	NA	
C-2	06-10-88	520.76	15.12	505.64	---	---	---	---	---	---	---	---	---	---	---	---	NA	
C-2	07-25-88	520.76	13.86	506.90	---	---	---	---	---	---	---	---	---	---	---	---	NA	
C-2	10-13-88	520.76	14.11	506.65	ND(1000.0)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	---	---	---	---	---	---	NA	
C-2	01-01-89	520.76	12.83	507.93	---	---	---	---	---	---	---	---	---	---	---	---	SAL	
C-2	01-12-89	---	---	1000	---	25	3	83	59	---	---	---	---	---	---	---	SAL	
C-2	04-10-89	520.76	14.04	506.72	600	ND(3.0)	2.5	ND(0.2)	15	12	ND(0.2)	---	---	---	---	---	CCAS	
C-20	04-10-89	520.76	14.04	506.72	ND(10000)	---	ND(10)	ND(10)	11	11	ND(10)	---	---	---	---	---	CCAS	
C-2	06-26-89	520.76	14.34	506.42	640	ND(3.0)	5.3	8	10	14	ND(0.5)	---	---	---	---	---	CCAS	
C-20	06-26-89	520.76	14.34	506.42	750	---	3.7	0.6	13	8.2	2	---	---	---	---	---	CCAS	
C-2	10-13-89	520.76	13.92	506.42	630	---	ND(5)	ND(5)	17	10	ND(5)	---	---	---	---	---	SAL	
C-2	01-03-90	520.76	14.11	506.65	880	---	3	ND(0.5)	19	17	1	---	---	---	---	---	PACE	
C-2	05-08-90	520.76	14.28	506.48	340	---	1.3	2.7	0.4	11	1.1	ND(0.5)	ND(0.5)	0.5	ND(0.5)	ND(0.5)	PACE	
C-2	09-29-90	520.76	14.25	506.51	74	---	ND(0.5)	ND(0.5)	4.6	1.0	ND(0.5)	ND(0.5)	1.7*	0.5	ND(0.5)	ND(0.5)	ND(0.5)	---
C-2	01-03-91	520.76	14.15	506.61	2000	---	270	ND(3)	79	93	ND(0.5)	ND(0.5)	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 #9-1924**  
**4904 Southfront Road, Livermore, California**

Concentrations in parts per billion (ppb)

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION	DEPTH TO WATER	GROUND WATER ELEVATION	TPH-G	TG	B	I	E	X	1,2- DCE*	OTHER	MC	TCA	1,1- DCE*	PCE	LAB
C-3	03-28-86	521.31	12.24	509.07	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-3	03-15-88	521.31	14.21	507.10	2100	---	86	6	30	36	---	---	---	---	---	---	GTEL
C-3	05-10-88	521.31	14.43	506.88	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-3	06-10-88	521.31	15.53	505.78	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-3	07-25-88	521.31	14.22	507.09	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-3	10-13-88	521.31	14.10	507.21	ND(1000.0)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	---	---	---	---	---	---	BC
C-3	01-01-89	521.31	12.70	508.61	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-3	04-10-89	521.31	14.36	506.95	200	ND(3.0)	2.1	ND(0.2)	4.4	2.6	1.4	---	---	---	---	---	CCAS
C-3	06-26-89	521.31	14.74	506.57	260	ND(3.0)	1.1	0.7	4.9	1.6	1.5	---	---	---	---	---	CCAS
C-3	10-13-89	521.31	14.70	506.61	ND(500)	---	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	---	---	---	---	---	SAL
C-3	01-03-90	521.31	14.42	506.89	ND(500)	---	ND(0.5)	ND(0.5)	0.9	1.4	0.7	---	---	---	---	---	SAL
C-3	05-08-90	521.31	14.65	506.66	ND(50)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	PACE
C-3	09-27-90	521.31	14.67	506.64	71	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	PACE
C-3	01-03-91	521.31	14.58	506.73	57	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	SAL
C-5	03-28-86	520.82	12.00	508.82	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-5	03-15-88	520.82	13.75	507.07	1600	---	82	7	77	95	---	---	---	---	---	---	GTEL
C-5	05-10-88	520.82	13.92	506.90	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-5	07-10-88	520.82	13.72	507.10	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-5	07-25-88	520.82	13.72	507.10	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-5	10-13-88	520.82	13.84	506.98	2500	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	---	---	---	---	---	---	BC
C-5	01-01-89	520.82	13.41	507.41	---	---	---	---	---	---	---	---	---	---	---	---	SAL
C-5	01-12-89	---	---	ND(1000.0)	---	42	3	44	52	---	---	---	---	---	---	---	CCAS
C-5	04-10-89	520.82	13.88	506.94	180	ND(3.0)	2.6	ND(0.2)	6.2	5.5	1.4	---	---	---	---	---	NA
C-5	06-26-89	520.82	14.14	506.68	420	ND(3.0)	7.6	0.8	40	56	1.5	---	---	---	---	---	SAL
C-5	10-13-89	520.82	14.15	506.68	620	ND(5)	ND(5)	ND(5)	10	ND(5)	ND(5)	---	---	---	---	---	SAL
C-5	01-03-90	520.82	14.10	506.72	ND(500)	---	0.7	ND(0.5)	8	6	ND(0.5)	---	---	---	---	---	PACE
C-5	05-08-90	520.82	14.00	506.82	140	---	0.6	0.8	11	7.2	0.8	---	ND(0.5)	---	ND(0.5)	---	PACE
C-5	09-27-90	520.82	14.00	506.82	360	---	ND(0.5)	3.2	5.2	6.4	ND(0.5)	ND(0.5)	0.7*	ND(0.5)	ND(0.5)	ND(0.5)	PACE
C-5	01-03-91	520.82	14.00	506.82	90	---	ND(0.5)	ND(0.5)	ND(0.5)	3	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	SAL

Table 1  
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Concentrations in parts per billion (ppb)

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C-6	03-26-86	519.62	11.12	508.50	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-6	03-15-88	519.62	12.93	506.69	46000	---	870	4600	1500	8200	---	---	---	---	---	---	GTEL
C-6	05-10-88	519.62	13.03	506.59	86000	---	1400	10000	3000	19000	---	---	---	---	---	---	NA
C-6	06-10-88	519.62	14.11***	505.51	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-6	07-25-88	519.62	12.95	506.67	---	---	---	---	---	---	---	---	---	---	---	---	BC
C-6	10-13-88	519.62	13.14	506.48	5300	---	300	600	260	1600	---	---	---	---	---	---	NA
C-6	01-01-89	519.62	12.14	507.40	---	---	---	---	---	---	---	---	---	---	---	---	SAL
C-6	01-12-89	---	---	5000	---	260	110	270	720	---	---	---	---	---	---	---	CCAS
C-6	04-12-89	519.62	12.98	506.64	5000	4.0	90	190	190	680	ND(20)	---	---	---	---	---	CCAS
C-6	06-26-89	519.62	13.39	506.23	3600	ND(3.0)	77	250	140	610	ND(5.0)	---	---	---	---	---	SAL
C-6	10-13-89	519.62	13.40	506.22	3500	ND(5)	32	81	100	530	ND(50)	---	---	---	---	---	SAL
C-6	01-03-90	519.62	13.18	506.44	3200	---	20	97	65	410	1	---	---	---	---	---	PACE
C-6	05-08-90	519.62	13.39***	506.23	1800	---	17	140	ND(2.5)	400	1.6	ND(0.5)	---	ND(0.5)	---	---	PACE
C-6	09-29-90	519.62	13.32	506.30	8000	---	50	210	260	2100	1.0	ND(0.5)	2.4	1.6	---	---	SAL
C-6	01-03-91	519.62	13.19	506.43	2300	---	4	79	59	380	0.5	ND(1)	ND(0.5)	ND(0.5)	ND(0.5)	---	SAL
C-7	03-20-86	520.30	11.67	508.63	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-7	03-15-88	520.30	13.48	506.82	8000	---	98	690	120	120	---	---	---	---	---	---	GTEL
C-7	05-10-88	520.30	13.60	506.70	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-7	06-10-88	520.30	14.68	505.62	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-7	07-25-88	520.30	13.43	506.87	---	---	---	---	---	---	---	---	---	---	---	---	BC
C-7	10-13-88	520.30	13.61	506.69	16000	---	4400	220	1000	3000	---	---	---	---	---	---	NA
C-7	01-01-89	520.30	12.66	507.64	---	---	---	---	---	---	---	---	---	---	---	---	SAL
C-7	01-12-89	---	---	8000	---	950	47	670	640	---	---	---	---	---	---	---	CCAS
C-7	04-12-89	520.30	13.60	506.70	6000	ND(3.0)	1100	30	760	370	ND(20)	---	---	---	---	---	CCAS
C-7	06-26-89	520.30	13.88	506.42	6000	ND(3.0)	1300	50	600	340	ND(10)	---	---	---	---	---	SAL
C-7	10-13-89	520.30	13.81	506.49	3900	---	1300	ND(50)	160	150	ND(50)	---	---	---	---	---	SAL
C-7	01-03-90	520.30	13.71	506.59	5600	---	1200	13	180	200	1	---	---	---	---	---	PACE
C-7	05-08-90	520.30	13.85	506.45	3500	---	1100	15	110	140	1.7	ND(0.5)	---	ND(0.5)	---	---	SAL
C-7	09-29-90	520.30	13.80	506.50	2400	---	580	ND(10)	46	68	0.7	ND(1)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	SAL
C-7	01-03-91	520.30	13.71	506.59	2500	---	300	2	110	120	0.7	ND(1)	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 #9-1924**  
**4904 Southfront Road, Livermore, California**

Concentrations in parts per billion (ppb)

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION	DEPTH TO WATER	GROUND WATER ELEVATION	TPH-6	TOD	B	T	E	X	1,2-DCEs	OTHER	MC	TCA	1,1-DCEs	PCE	LAB
C-8	03-28-86	519.74	11.78	507.96	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-8	03-15-88	519.74	13.63	506.11	7500	---	360	25	10	ND(0.5)	---	---	---	---	---	6TEL	
C-8	05-10-88	519.74	13.74	506.00	---	---	---	---	---	---	---	---	---	---	---	NA	
C-8	06-10-88	519.74	14.89	504.85	---	---	---	---	---	---	---	---	---	---	---	NA	
C-8	07-25-88	519.74	13.65	506.09	---	---	---	---	---	---	---	---	---	---	---	BC	
C-8	10-13-88	519.74	13.78	505.96	ND(1000)	---	6	5.3	ND(0.5)	ND(0.5)	---	---	---	---	---	NA	
C-8	01-01-89	519.74	12.68	507.06	---	---	---	---	---	---	---	---	---	---	---	SAL	
C-8	01-12-89	---	---	ND(1000)	---	37	4	1	5	---	---	---	---	---	---	CCAS	
C-8	04-12-89	519.74	13.77	505.97	3000	12.0	13	ND(5)	ND(5)	ND(5)	5	---	---	---	---	CCAS	
C-8	06-26-89	519.74	14.03	505.71	780	ND(3.0)	14	6	ND(2.0)	6	4	---	---	---	---	SAL	
C-8	10-13-89	519.74	14.06	505.68	ND(500)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	---	---	---	---	SAL	
C-8	01-03-90	519.74	13.74	506.00	910	---	ND(0.5)	ND(0.5)	1	1	1.5	---	---	---	---	PACE	
C-8	05-07-90	519.74	14.10	505.64	620	---	3.9	6	0.5	3.4	1.9	ND(0.5)	---	ND(0.5)	---	PACE	
C-8	09-29-90	519.74	13.97	505.77	77	---	ND(0.5)	1.4	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	SAL	
C-8	01-03-91	519.74	13.81	505.93	67	---	2	2	ND(0.5)	2	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	
C-9	03-28-86	519.52	11.24	508.28	---	---	---	---	---	---	---	---	---	---	---	NA	
C-9	03-15-88	519.52	12.92	506.60	29000	---	540	560	580	3900	---	---	---	---	---	6TEL	
C-9	05-10-88	519.52	13.12	506.40	---	---	---	---	---	---	---	---	---	---	---	NA	
C-9	06-10-88	519.52	14.16	505.36	---	---	---	---	---	---	---	---	---	---	---	NA	
C-9	07-25-88	519.52	13.00	506.52	---	---	---	---	---	---	---	---	---	---	---	BC	
C-9	10-13-88	519.52	13.13	506.39	2200	---	57	8	20	150	---	---	---	---	---	NA	
C-9	01-01-89	519.52	12.19	507.33	---	---	---	---	---	---	---	---	---	---	---	SAL	
C-9	01-12-89	---	---	2000	---	39	12	51	46	---	---	---	---	---	---	CCAS	
C-9	04-12-89	519.52	13.11	506.41	6000	ND(3.0)	16	20	55	240	2.1	---	---	---	---	CCAS	
C-90	04-11-89	519.52	13.11	506.41	6000	---	14	25	45	290	ND(5.0)	---	---	---	---	CCAS	
C-9	06-26-89	519.52	13.40	506.12	3900	ND(3.0)	37	63	140	690	ND(5.0)	---	---	---	---	SAL	
C-9	10-13-89	519.52	13.46	506.06	1300	ND(5)	7	ND(5)	26	50	ND(5)	---	---	---	---	SAL	
C-9	01-03-90	519.52	13.30	506.32	1500	---	ND(0.5)	0.7	202	37	1.5	---	---	---	---	PACE	
C-9	05-07-90	519.52	13.48	506.04	7100	---	21	33	89	500	1.9	ND(0.5)	---	ND(0.5)	---	PACE	
C-9	09-29-90	519.52	13.39	506.13	1000	---	21	3.9	31	110	1.0	ND(0.5)	0.7*	1.8	1.0	---	
C-9	01-03-91	519.72	13.28	506.44	3200	---	ND(3)	ND(3)	32	140	0.8	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 #9-1924  
 4904 Southfront Road, Livermore, California

Concentrations in parts per billion (ppb)

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION	DEPTH TO WATER	GROUND WATER ELEVATION	TPH-G	TG	B	T	E	X	1,2-DCE <sub>a</sub>	OTHER	MC	TCA	1,1-DCE <sub>a</sub>	PCE	LAB	
C-10	03-28-86	520.41	---	505.55	---	---	---	7	ND(0.5)	ND(0.5)	ND(0.5)	---	---	---	---	---	NA	
C-10	03-15-88	520.41	14.86	505.51	90	---	---	---	ND(0.5)	ND(0.5)	ND(0.5)	---	---	---	---	---	GTEL	
C-10	05-10-88	520.71	14.90	505.51	---	---	---	---	---	---	---	---	---	---	---	---	NA	
C-10	06-10-88	520.41	15.94	504.47	---	---	---	---	---	---	---	---	---	---	---	---	NA	
C-10	07-25-88	520.41	14.85	505.56	---	---	---	---	---	---	---	---	---	---	---	---	BC	
C-10	10-13-88	520.41	14.90	505.51	ND(1000)	---	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	---	---	---	---	---	NA	
C-10	01-01-89	520.41	14.83	505.58	---	---	---	---	---	---	---	---	---	---	---	---	SAL	
C-10	01-12-89	---	---	ND(1000)	---	---	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.3)	---	---	---	---	---	CCAS	
C-10	04-11-89	520.41	14.90	505.51	ND(300)	ND(3.0)	4.8	ND(0.5)	ND(0.5)	ND(1)	6.1	---	---	---	---	---	CCAS	
C-10	06-26-89	520.41	15.12	505.29	ND(100)	4.0	0.7	ND(0.5)	ND(0.5)	1.5	ND(0.5)	---	---	---	---	---	SAL	
C-10	10-13-89	520.41	15.11	505.30	ND(500)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	---	---	---	---	---	SAL	
C-10	01-03-90	520.41	15.01	505.40	ND(500)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	3	---	---	---	---	PACE	
C-10	05-07-90	520.41	15.53	504.88	ND(50)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	PACE	
C-10	09-27-90	520.41	15.20	505.21	ND(50)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	SAL	
C-10	01-03-91	520.41	15.06	505.35	ND(50)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	SAL	
C-11	03-28-86	520.04	13.82	506.22	---	---	---	---	---	---	---	---	---	---	---	---	NA	
C-11	03-15-88	520.04	14.49	505.55	---	---	---	---	---	---	---	---	---	---	---	---	NA	
C-11	05-10-88	520.04	14.31	505.73	---	---	---	---	---	---	---	---	---	---	---	---	NA	
C-11	06-10-88	520.04	15.47	504.57	---	---	---	---	---	---	---	---	---	---	---	---	NA	
C-11	07-25-88	520.04	13.60	506.44	---	---	---	---	---	---	---	---	---	---	---	---	BC	
C-11	10-14-88	520.04	14.53	505.51	1.9	---	240	33	4.7	67	---	---	---	---	---	---	NA	
C-11	01-01-89	520.04	14.10	505.94	---	---	---	---	0.8	ND(0.3)	ND(0.3)	ND(0.3)	---	---	---	---	SAL	
C-11	01-12-89	---	---	ND(1000)	---	---	ND(0.3)	0.8	ND(1)	ND(1)	ND(1)	ND(1)	---	---	---	---	CCAS	
C-11	04-12-89	520.04	14.36	505.68	ND(50)	ND(3.0)	4.3	ND(1)	ND(1)	ND(1)	ND(1)	---	---	---	---	---	CCAS	
C-11	06-26-89	520.04	14.58	505.46	ND(50)	4.0	2	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(0.2)	---	---	---	---	SAL	
C-11	10-13-89	520.04	14.71	505.33	ND(500)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	---	---	---	---	SAL	
C-11	01-03-90	520.04	14.61	505.43	ND(500)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	0.7	ND(0.5)	---	---	---	---	PACE	
C-11	05-08-90	520.04	15.53	504.51	110	---	12	11	0.9	22	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	PACE
C-11	09-28-90	520.04	15.51	504.53	ND(50)	---	2.0	1.4	ND(0.5)	3.3	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	PACE
C-11	01-03-91	520.04	14.63	505.41	ND(50)	---	2	ND(0.5)	ND(0.5)	2	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	1	SAL

Table 1  
 Summary of Results of Ground Water Sampling  
 Chevron Service Station #9-1924  
 4904 Southfront Road, Livermore, California

Concentrations in parts per billion (ppb)

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION	DEPTH TO WATER	GROUND WATER ELEVATION	TPH-6	TOD	B	I	E	X	1,2-DCEa	OTHER	NC	TCA	1,1-DCEa	PCE	LAB
C-12	03-28-86	519.82	13.61	506.21	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-12	03-15-88	519.82	14.55	505.27	ND(1.0)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	---	---	---	---	---	---	GTEL
C-12	05-10-88	519.82	14.57	505.25	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-12	06-10-88	519.82	15.63	504.19	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-12	07-25-88	519.82	14.51	505.31	---	---	---	---	---	---	---	---	---	---	---	---	BC
C-12	10-13-88	519.82	14.60	505.22	ND(1000)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	---	---	---	---	---	---	SAL
C-12	01-12-89	519.82	14.62	505.20	ND(1000)	---	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.3)	---	---	---	---	---	---	CCAS
C-12	04-11-89	519.82	14.61	505.21	ND(100)	ND(3.0)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	---	---	---	---	---	CCAS
C-12	06-26-89	519.82	14.75	505.07	ND(50)	ND(3.0)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	---	---	---	---	---	SAL
C-12	10-13-89	519.82	14.77	505.05	ND(500)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	---	---	---	---	---	SAL
C-12	01-03-90	519.82	14.85	504.97	ND(500)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	---	---	---	---	PACE
C-12	05-07-90	519.82	14.75	505.07	ND(50)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	PACE
C-12	09-27-90	519.82	14.61	505.21	ND(50)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	SAL
C-12	01-03-91	519.82	14.70	505.12	ND(50)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	NA
C-13	03-28-86	522.24	12.95	509.29	---	---	---	---	---	---	---	---	---	---	---	---	GTEL
C-13	03-15-88	522.24	14.82	507.42	250	---	2	ND(0.5)	9	3	---	---	---	---	---	---	NA
C-13	05-10-88	522.24	15.03	507.21	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-13	06-10-88	522.24	16.10	506.14	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-13	07-25-88	522.24	14.73	507.51	---	---	---	---	---	---	---	---	---	---	---	---	BC
C-13	10-13-88	522.24	14.91	507.33	ND(1000.0)	---	1.9	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	---	---	---	---	---	NA
C-13	01-01-89	522.24	14.10	508.14	---	---	---	---	---	---	---	---	---	---	---	---	SAL
C-13	01-12-89	---	---	---	ND(1000)	---	ND(0.3)	0.6	4	ND(0.3)	---	---	---	---	---	---	CCAS
C-13	04-10-89	522.24	14.99	507.25	ND(100)	ND(3.0)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	---	---	---	---	---	CCAS
C-13	06-26-89	522.24	15.16	507.08	ND(50)	ND(3.0)	0.3	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	---	---	---	---	---	SAL
C-13	10-13-89	522.24	15.23	507.01	ND(500)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	---	---	---	---	SAL
C-13	01-03-90	522.24	15.15	507.09	ND(500)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	PACE
C-13	05-08-90	522.24	15.02	507.22	ND(50)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	PACE
C-13	09-27-90	522.24	15.11	507.13	ND(50)	---	ND(0.5)	0.6	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	SAL
C-13	01-03-91	522.24	15.08	507.16	ND(50)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	NA

Table 1  
 Summary of Results of Ground Water Sampling  
 Chevron Service Station #9-1924  
 4904 Southfront Road, Livermore, California

Concentrations in parts per billion (ppb)

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION	DEPTH TO WATER	GROUND WATER ELEVATION	TPH-G	TG	B	I	E	X	1,2-DCEa	OTHER	MC	TCA	1,1-DCEa	PCE	LAB
C-14	03-28-86	520.08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-14	03-15-88	520.08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-14	05-10-88	520.08	13.39	506.69	120000	---	13000	29000	2700	10	---	---	---	---	---	---	GTEL
C-14	06-10-88	520.08	14.65	505.43	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-14	07-25-88	520.08	13.47	506.61	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-14	10-13-88	520.08	13.58	506.50	ND	---	ND	ND	ND	ND	---	---	---	---	---	---	NA
C-14	01-01-89	520.08	13.00	507.08	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-14	01-12-89	---	---	MS	---	ND	ND	ND	ND	ND	ND	---	---	---	---	---	NA
C-14	04-12-89	520.08	13.47	506.61	MS	ND	ND	ND	ND	ND	ND	---	---	---	---	---	NA
C-14	06-26-89	520.08	13.80	506.28	140000	---	14000	25000	3400	26000	30	---	---	---	---	---	SAL
C-146	10-13-89	520.08	13.62	506.46	86000	---	12000	16000	1600	13000	---	---	---	---	---	---	SAL
C-14	01-03-90	520.08	13.91	506.17	120000	---	9500	16000	1800	13000	25	3	---	---	---	---	SAL
C-146	01-04-90	520.08	13.91	506.17	76000	---	3900	8100	1200	7700	10	1	---	---	---	---	PACE
C-14	05-08-90	520.08	13.89	506.19	62000	---	7500	17000	1400	14000	13	---	ND(0.5)	---	ND(0.5)	---	NA
C-14**	09-27-90	520.08	13.78	506.30	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-14**	01-03-91	520.08	13.72	506.36	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-15	03-28-86	522.41	13.14	509.27	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-15	03-15-88	522.41	15.13	507.28	ND(1.0)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	---	---	---	---	---	---	GTEL
C-15	05-10-88	522.41	15.40	507.01	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-15	06-10-88	522.41	16.49	505.92	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-15	07-25-88	522.41	15.17	507.24	---	---	---	---	---	---	---	---	---	---	---	---	BC
C-15	10-13-88	522.41	15.33	507.08	ND(1000.0)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	---	---	---	---	---	---	NA
C-15	01-01-89	522.41	13.70	508.71	---	---	---	---	---	---	---	---	---	---	---	---	SAL
C-15	01-12-89	---	---	ND(1000)	---	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.3)	---	---	---	---	---	---	CCAS
C-15	04-12-89	522.41	15.34	507.07	ND(100)	ND(3.0)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	---	---	---	---	---	CCAS
C-15	06-26-89	522.41	15.72	506.69	ND(50)	ND(3.0)	ND(0.2)	ND(0.2)	ND(2.0)	ND(2.0)	ND(0.2)	---	---	---	---	---	SAL
C-15	10-13-89	522.41	15.96	506.45	ND(500)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	---	---	---	---	---	SAL
C-15	01-03-90	522.41	15.42	506.99	ND(500)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	---	---	---	---	---	PACE
C-15	05-08-90	522.41	15.62	506.79	ND(50)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	PACE
C-15	09-27-90	522.41	15.59	506.82	ND(50)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	0.6	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	SAL
C-15	01-03-91	522.41	15.50	506.91	ND(50)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	NA

**Table 1**  
**Summary of Results of Ground Water Sampling**  
**Chevron Service Station #9-1924**  
**4904 Southfront Road, Livermore, California**

Concentrations in parts per billion (ppb)

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION	DEPTH TO WATER	GROUND WATER ELEVATION	TPH-6	TOD	B	T	E	X	1,2-DCEa	OTHER	MC	TCA	1,1-DCEa	PCE	LAB
C-16	03-28-86	519.68	---	505.90	4500	---	1000	73	140	180	---	---	---	---	---	---	NA
C-16	03-15-88	519.68	---	505.90	---	---	---	---	---	---	---	---	---	---	---	---	GTEL
C-16	05-10-88	519.68	13.78	505.90	4500	---	1000	73	140	180	---	---	---	---	---	---	NA
C-16	06-10-88	519.68	14.88	504.80	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-16	07-25-88	519.68	13.69	505.99	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-16	10-13-88	519.68	13.80	505.88	1600	---	16	5.5	ND(1.0)	16	---	---	---	---	---	---	NA
C-16	01-01-89	519.68	13.45	506.23	---	---	---	---	---	---	---	---	---	---	---	---	SAL
C-16	01-12-89	---	---	505.90	1000	---	360	11	78	51	---	---	---	---	---	---	CCAS
C-16	04-11-89	519.68	13.78	505.90	15800	ND(3.0)	130	4	21	19	8	---	---	---	---	---	CCAS
C-16	06-26-89	519.68	14.02	505.66	1300	ND(3.0)	170	8	37	43	ND(1.0)	---	---	---	---	---	SAL
C-16	10-13-89	519.68	14.01	505.67	1000	ND(5)	20	ND(5)	7	ND(5)	ND(5)	---	---	---	---	---	SAL
C-16	01-03-90	519.68	13.97	505.71	1300	---	150	3	41	24	5	---	---	---	---	---	PACE
C-16	05-07-90	519.68	14.45	505.23	480	---	49	4.4	29	13	4.5	ND(0.5)	---	ND(0.5)	ND(0.5)	---	PACE
C-16	09-29-90	519.68	14.32	505.36	360	---	18	2.1	11	8.0	1.8	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	SAL
C-16	01-03-91	519.68	13.96	505.72	230	---	12	ND(0.5)	6	6	2	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	NA
C-17	03-20-86	520.82	13.48	507.34	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-17	03-15-88	520.82	14.76	506.06	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-17	05-10-88	520.82	14.77	506.05	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-17	06-10-88	520.82	15.84	504.98	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-17	07-25-88	520.82	14.63	506.19	---	---	---	---	---	---	---	---	---	---	---	---	BC
C-17	10-13-88	520.82	14.83	505.99	270000	---	18	900	760	5500	---	---	---	---	---	---	NA
C-17	01-01-89	520.82	14.78	506.04	---	---	---	---	---	---	---	---	---	---	---	---	SAL
C-17	01-12-89	---	---	506.04	190000	---	ND(15)	490	2100	6700	---	---	---	---	---	---	CCAS
C-17	04-11-89	520.82	14.83	506.06	27000	6.0	30	150	320	1000	ND(10)	---	---	---	---	---	CCAS
C-17	06-26-89	520.82	15.03	505.79	20000	ND(3.0)	50	390	660	2000	ND(10)	---	---	---	---	---	CCAS
C-170	06-26-89	520.82	15.03	505.79	27000	---	40	420	740	2200	ND(10)	---	---	---	---	---	SAL
C-17	10-13-89	520.82	15.02	505.80	17000	ND(5)	ND(25)	48	230	480	ND(25)	---	---	---	---	---	SAL
C-17	01-03-90	520.82	15.10	505.72	14000	---	ND(0.3)	29	120	210	ND(0.5)	---	---	---	---	---	PACE
C-17	05-08-90	520.82	15.12	505.70	9500	---	25	130	210	470	ND(0.5)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	PACE
C-17	09-29-90	520.82	14.99	505.83	ND(50)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	PACE
C-170	09-29-90	520.82	14.99	505.83	ND(50)	---	ND(0.5)	3.4	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
C-17	01-03-91	520.82	14.92	505.90	3700	---	ND(0.5)	28	56	140	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	SAL
C-170	01-03-91	520.82	14.92	505.90	8600	---	ND(3)	10	59	150	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	NA

Table 1  
 Summary of Results of Ground Water Sampling  
 Chevron Service Station #9-1924  
 4904 Southfront Road, Livermore, California

Concentrations in parts per billion (ppb)

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION	DEPTH TO WATER	GROUND WATER ELEVATION	TPH-G	T06	B	T	E	X	1,2-DCEa	OTHER	NC	TCA	1,1-DCEa	PCE	LAB	
C-18	03-28-86	518.96	---	---	---	---	---	---	---	---	---	---	---	---	---	---	NA	
C-18	03-15-88	518.96	---	---	---	---	---	---	---	---	---	---	---	---	---	---	NA	
C-18	05-10-88	518.96	---	---	---	---	---	---	---	---	---	---	---	---	---	---	NA	
C-18	06-10-88	518.96	14.89	504.07	---	---	---	---	---	---	---	---	---	---	---	---	NA	
C-18	07-25-88	518.96	13.79	505.17	---	---	---	---	---	---	---	---	---	---	---	---	NA	
C-18	10-13-88	518.96	13.86	505.10	ND(1000)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	---	---	---	---	---	---	NA	
C-18	01-01-89	518.96	13.94	505.02	---	---	---	---	---	---	---	---	---	---	---	---	SAL	
C-18	01-12-89	---	---	ND(1000)	---	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.3)	---	---	---	---	---	---	CCAS	
C-18	04-11-89	518.96	14.86	504.10	ND(200)	ND(3.0)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.4)	3.6	---	---	---	---	---	CCAS	
C-18	06-26-89	518.96	14.02	504.94	ND(50)	ND(3.0)	ND(0.2)	ND(0.2)	ND(0.2)	ND(2.0)	3.1	---	---	---	---	---	SAL	
C-18	10-13-89	518.96	15.06	503.90	ND(500)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	---	---	---	---	---	SAL	
C-18	01-03-90	518.96	14.07	504.89	ND(500)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	1	---	---	---	---	PACE	
C-18	05-07-90	518.96	14.01	504.95	ND(50)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	---	PACE	
C-18	09-27-90	518.96	13.91	505.05	ND(50)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	SAL	
C-18	01-03-91	518.96	13.98	504.98	ND(50)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	NA	
C-19	03-28-86	520.99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	NA	
C-19	03-15-88	520.99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	GTEL	
C-19	05-10-88	520.99	15.23	505.76	18	---	1400	360	350	1300	---	---	---	---	---	---	NA	
C-19	06-10-88	520.99	16.58	504.41	---	---	---	---	---	---	---	---	---	---	---	---	NA	
C-19	07-25-88	520.99	15.19	505.80	---	---	---	---	---	---	---	---	---	---	---	---	BC	
C-19	10-13-88	520.99	15.27	505.72	ND(1000)	---	8.3	4.7	4.4	ND(0.5)	---	---	---	---	---	---	NA	
C-19	01-01-89	520.99	15.20	505.79	---	---	---	---	---	---	---	---	---	---	---	---	SAL	
C-19	01-12-89	---	---	ND(1000)	---	5	4	ND(0.3)	ND(0.3)	---	---	---	---	---	---	CCAS		
C-19	04-11-89	520.99	15.24	505.75	ND(1000)	ND(3.0)	1.8	ND(2)	ND(2)	ND(4)	13	---	---	---	---	---	CCAS	
C-19D	04-11-89	520.99	15.24	505.76	500	---	1.2	ND(0.2)	0.6	0.6	14	---	---	---	---	---	CCAS	
C-19	06-26-89	520.99	15.44	505.55	500	ND(3.0)	2.5	ND(5.0)	ND(5.0)	ND(5.0)	26	---	---	---	---	---	SAL	
C-19	10-13-89	520.99	15.47	505.52	540	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	13	13	---	---	---	---	SAL	
C-19	01-03-90	520.99	15.45	505.54	ND(500)	---	1.2	0.7	1.3	0.9	11	---	---	---	---	---	PACE	
C-19	05-07-90	520.99	15.68	505.31	ND(50)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	PACE	
C-19	09-28-90	520.99	15.52	505.47	ND(50)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	0.9	SAL
C-19	01-03-91	520.99	15.56	505.43	66	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	NA	

Table 1  
Summary of Results of Ground Water Sampling  
Chevron Service Station #9-1924  
4904 Southfront Road, Livermore, California

Concentrations in parts per billion (ppb)

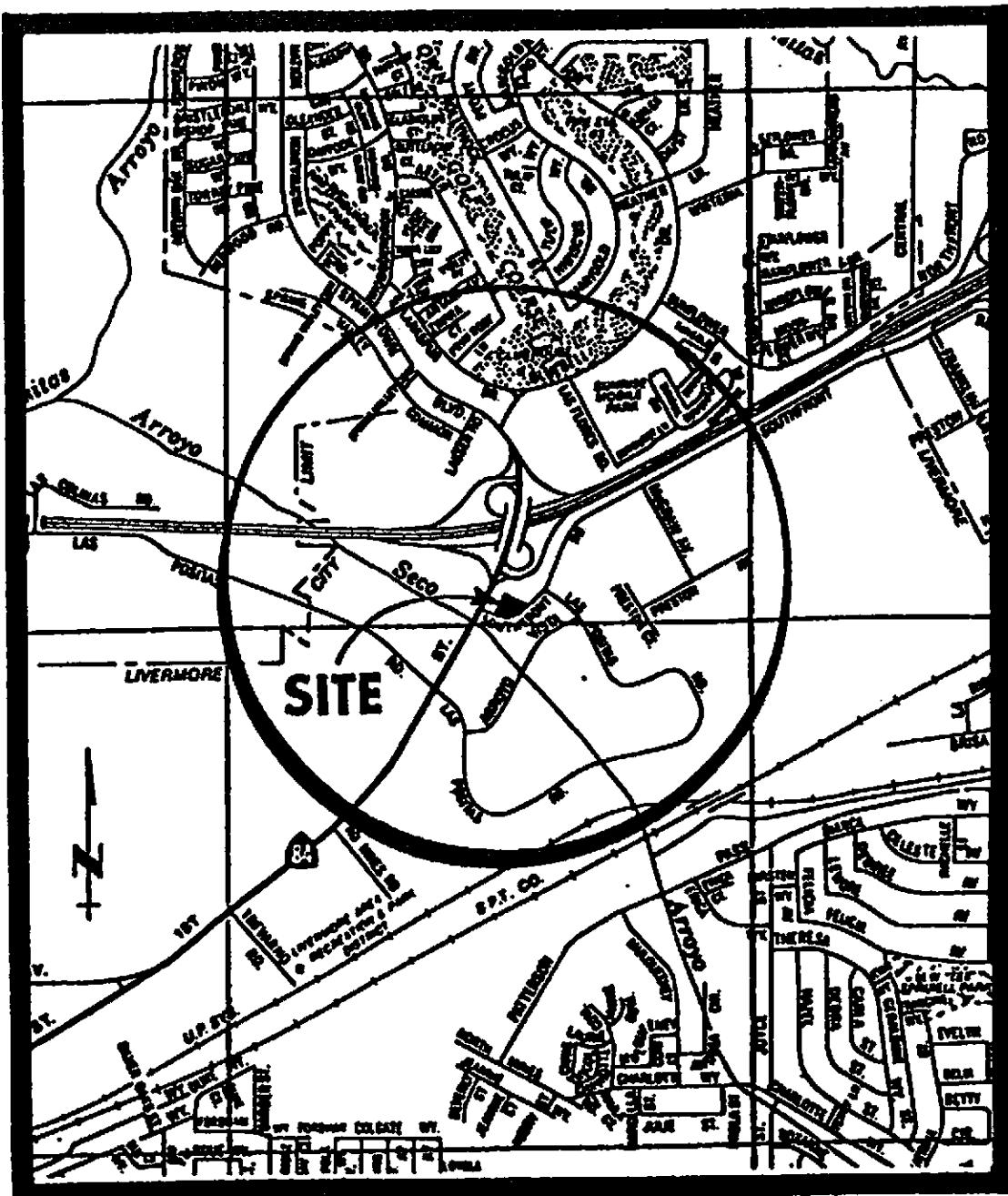
WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION	DEPTH TO WATER	GROUND WATER ELEVATION	TPH-G	TOG	B	T	E	X	1,2-DCEa	OTHER	MC	TCA	1,1-DCEa	PCE	LAB
TB	01-12-89	NA	NA	NA	---	---	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.3)	---	---	---	---	---	---	SAL
TB	04-12-89	NA	NA	NA	ND(50)	---	ND(0.5)	ND(0.5)	ND(1.0)	ND(1.0)	ND(1.0)	---	---	---	---	---	CCAS
TB	06-26-89	NA	NA	NA	ND(50)	---	ND(0.1)	ND(0.1)	ND(1.0)	ND(1.0)	ND(0.1)	---	---	---	---	---	CCAS
TB	10-13-89	NA	NA	NA	ND(500)	---	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	---	---	---	---	---	SAL
TB	01-03-90	NA	NA	NA	ND(500)	---	ND(0.5)	0.5	ND(0.5)	0.7	ND(0.5)	---	---	---	---	---	SAL
TB	05-07-90	NA	NA	NA	ND(50)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	---	ND(0.5)	---	ND(0.5)	---	PACE
TB	09-28-90	NA	NA	NA	ND(50)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	---	---	---	---	---	PACE
TB	01-03-91	NA	NA	NA	ND(50)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	---	---	---	---	---	SAL
RINSATE	09-27-90	NA	NA	NA	ND(50)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	---	---	---	---	---	SAL
RINSATE	01-03-91	NA	NA	NA	ND(50)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	0.6	---	---	---	---	PACE

EXPLANATION OF ABBREVIATIONS:

TPH-G	: Total Petroleum Hydrocarbons as Gasoline (EPA method 8015 modified)	ND	:Not Detected
TOG	: Total Oil & Grease (EPA Method 503D & 503E)	TB	:Trip Blank
B	: Benzene (EPA method 8020 or 8240)	D	:Duplicate
T	: Toluene (EPA method 8020 or 8240)	GTEL	:GTEL Laboratory
E	: Ethylbenzene (EPA method 8020 or 8240)	BC	:Brown & Caldwell Laboratory
X	: Xylenes (EPA method 8020 or 8240)	SAL	:Superior Analytical Laboratory
1,2-DCEa	: 1,2-Dichloroethane	CCAS	:CCAS Laboratory
MC	: Methylene Chloride	PACE	:PACE Labs
OTHER	: Carbon Disulfide(5,13) Vinyl Chloride (3,1)	*	:Probable laboratory contamination.
TCA	: 1,1,1-Trichloroethane	**	:Not sampled due to insufficient water in well.
PCE	: Tetrachloroethene	***	:0.01 feet L-PH measured.
---	: Not Analyzed/Not Measured	****	:Sheen observed.
NA	: Not Applicable/Not Available	ND!	:Not detected at various detection limits (See laboratory reports).
		14G	:Grab sample.

Note: Top of casing and Ground Water Elevations are expressed as feet above mean sea level (NGVD -1929).

L7cm



**FIGURE 1. SITE VICINITY MAP**

NOT TO SCALE

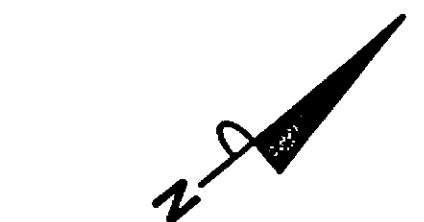
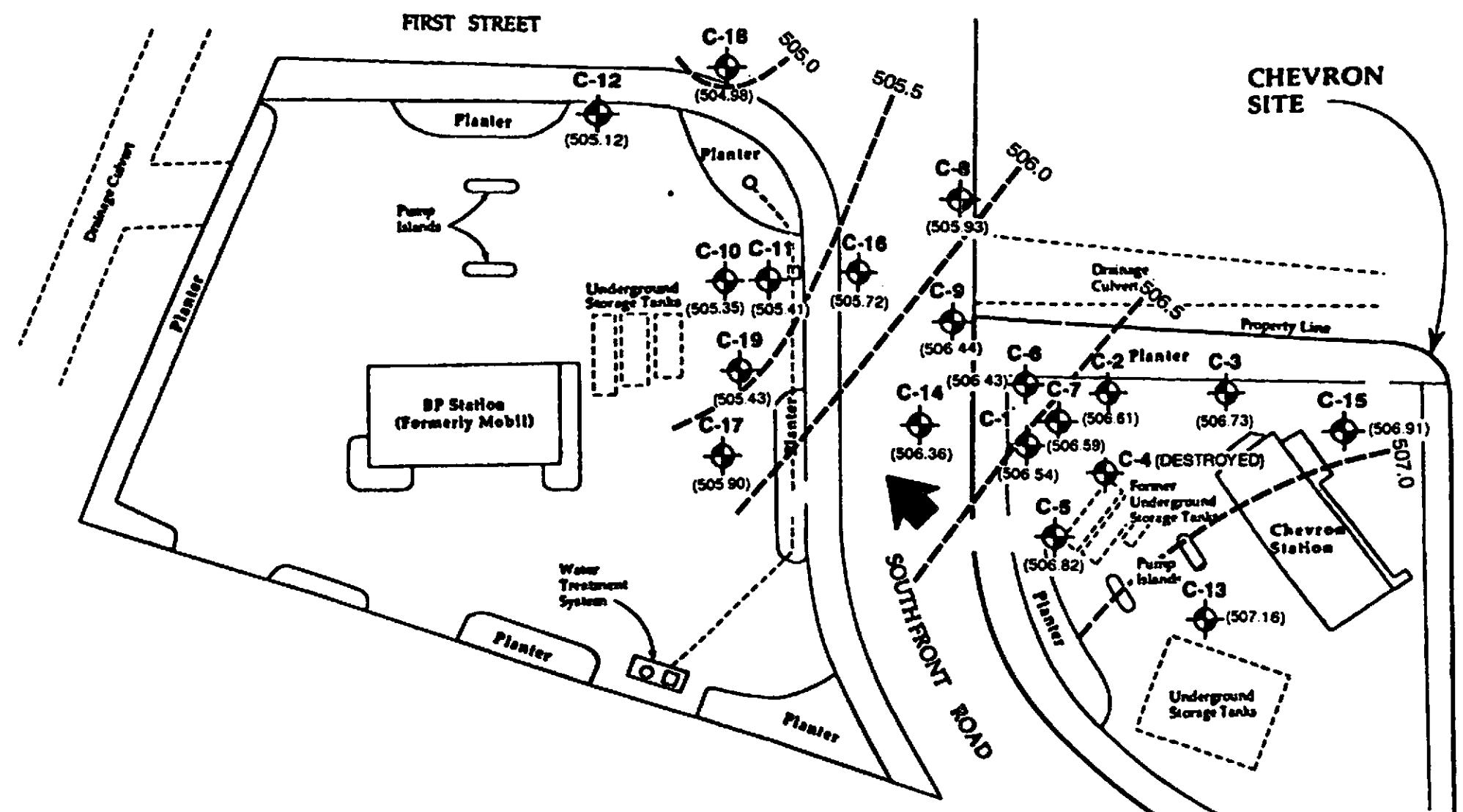
CHEVRON U.S.A.  
CHEVRON SERVICE STATION NO. 9-1924  
4904 SOUTH FRONT ROAD  
LIVERMORE, CALIFORNIA

PROJECT NO. 30-284

SOURCE: WESTERN GEOLOGIC RESOURCES, INC.



**ALTON GEOSCIENCE**  
1000 Burnett Ave., Ste. 140  
Concord, CA 94520



20  
APPROXIMATE SCALE IN FEET

**LEGEND:**

- ◆ GROUND WATER MONITORING WELL
- (506.54) GROUND WATER ELEVATION (FEET ABOVE MEAN SEA LEVEL (NOVD-1929))
- - - GROUND WATER ELEVATION CONTOUR
- ▼ GENERAL DIRECTION OF GROUND WATER FLOW

**Note:**  
Contour lines are interpretive based on fluid levels in monitoring wells measured on 01/03/91.

**FIGURE 2. GROUND WATER ELEVATION CONTOUR MAP**

**CHEVRON U.S.A.  
CHEVRON SERVICE STATION  
NO. 9 - 1924  
4904 SOUTHFRONT ROAD  
LIVERMORE, CALIFORNIA**

**APPENDIX A**  
**FIELD SAMPLE FORMS,**  
**OFFICIAL LABORATORY RESULTS, AND**  
**CHAIN OF CUSTODY FORMS**

**ALTCN GECSCIENCE, INC**  
1170 Burnett Ave., Ste. S  
Concord, CA 94520

ICB NUMBER 300284

**TECHNICIAN** 

JOB NUMBER 91924  
JOB LOCATION Livermore

DATE 1/3/91

**ALTON GEOSCIENCE, INC.**  
**Water Sampling Field Survey**

WELL # C-1 PROJECT# 300284 LOCATION Livermore DATE 1/3/91  
SAMPLING TEAM Dennis SAMPLING METHOD: BAILER PUMP X  
DECONTAMINATION METHOD: TRIPLE RINSE W/TSP AND DEIONIZED WATER X  
STEAM CLEAN

## WELL DATA:

DEPTH TO WATER 13.85 ft  
TOTAL DEPTH 18.85 ft  
HT. WATER COL 5.00 ft

CONVERSION	
diam	gal/ft
2 in	X0.16
3 in	X0.36
4 in	X0.65
6 in	X1.44

Volume of Water Column 1.85 gal  
Volumes to Purge x 3 Vol  
Total Volume to Purge 6 gal

## **CHEMICAL DATA:**

T (F)	SC/umhos	pH	Time	Comments	Volume (gal)
57.3	9.79	4.40	9:30	<u>Cloudy-Clear</u>	1.25
62.2	10.20	4.25	9:32	" "	2.5
65.2	10.48	4.20	9:34	<u>Clear</u>	3.75
66.6	10.49	4.16	9:35	"	5
63.1	10.34	4.17	9:37	"	6
				.	

**COMMENTS:**

ALTON GEOSCIENCE, INC.  
Water Sampling Field Survey

WELL # C-2 PROJECT# 300284 LOCATION Livermore DATE 1/3/91  
 SAMPLING TEAM Dennis SAMPLING METHOD: BAILER    PUMP X  
 DECONTAMINATION METHOD: TRIPLE RINSE W/TSP AND DEIONIZED WATER X  
 STEAM CLEAN   

**WELL DATA:**

DEPTH TO WATER 14.15 ft  
 TOTAL DEPTH 23.82 ft  
 HT. WATER COL 9.67 ft

CONVERSION	
diam	gal/ft
2 in	X0.16
3 in	X0.36
4 in	X0.65
6 in	X1.44

Volume of Water Column 3.70 gal  
 Volumes to Purge x 3 Vol  
 Total Volume to Purge 11.5 gal

**CHEMICAL DATA:**

T (F)	SC/umhos	pH	Time	Comments	Volume (gal)
63.6	11.12	4.24	3:48	Cloudy-Clear	2.5
65.0	11.09	4.09	3:51	" "	5
63.8	10.79	4.20	3:55	Clear	7.5
65.5	11.02	4.06	3:59	"	10
65.9	11.17	4.05	4:04	"	11.5
	.				.
				ACTUAL VOLUME PURGED	<u>12 gal</u>

COMMENTS:

ALTON GEOSCIENCE, INC.  
Water Sampling Field Survey

WELL # C-3 PROJECT# 300284

LOCATION Livermore

DATE 1/5/91

SAMPLING TEAM Dennis

SAMPLING METHOD: BAILER PUMP X

DECONTAMINATION METHOD: TRIPLE RINSE W/TSP AND DEIONIZED WATER X  
STEAM CLEAN   

**WELL DATA:**

DEPTH TO WATER 458 ft

CONVERSION	
diam	gal/ft
2 in	X0.16
3 in	X0.36
4 in	X0.65
6 in	X1.44

Volume of Water Column 148 gal

Volumes to Purge X 3 Vol

Total Volume to Purge 5 gal

TOTAL DEPTH 17.94 ft

HT. WATER COL 3.36 ft

**CHEMICAL DATA:**

T (F)	SC/umhos	pH	Time	Comments	Volume (gal)
68.5	14.12	4.39	11:18	<i>Cloudy, H. ben.</i>	1
67.8	12.10	4.28	11:20	" "	2
67.6	12.12	4.21	11:23	" "	3
67.3	12.13	4.17	11:25	" "	4
67.1	12.09	4.16	11:28	" "	5
					.
<b>ACTUAL VOLUME PURGED</b>					<b>5.5 /gal</b>

**COMMENTS:**

ALTON GEOSCIENCE, INC.  
Water Sampling Field Survey

WELL # C-5 PROJECT # 300284 LOCATION Livermore DATE 1/31/91  
SAMPLING TEAM Dennis SAMPLING METHOD: BAILER    PUMP X  
DECONTAMINATION METHOD: TRIPLE RINSE W/TSP AND DEIONIZED WATER X  
STEAM CLEAN

## WELL DATA:

DEPTH TO WATER 14.00 ft  
TOTAL DEPTH 18.97 ft  
HT. WATER COL 4.97 ft

CONVERSION	
diam	gal/ft
2 in	x0.16
3 in	x0.36
4 in	x0.65
6 in	x1.44

Volume of Water Column 185 gal  
Volumes to Purge x 3 Vol  
Total Volume to Purge 6 gal

**CHEMICAL DATA:**

T (F)	SC/umhos	pH	Time	Comments	Volume (gal)
62.9	10.70	4.53	3:20	Cloudy-Clear	1.25
67.1	11.29	4.39	3:22	" "	2.5
66.6	11.02	4.30	3:23	Clear	3.75
66.9	11.10	4.31	3:24	"	5
67.6	11.35	4.24	3:27	"	6
	.	.		.	

### **COMMENTS:**

**ALTON GEOSCIENCE, INC.**  
**Water Sampling Field Survey**

WELL # C-6 PROJECT# 300284 LOCATION Livermore DATE 1/3/91  
SAMPLING TEAM Dennis SAMPLING METHOD: BAILER  PUMP X  
DECONTAMINATION METHOD: TRIPLE RINSE W/TSP AND DEIONIZED WATER X  
STEAM CLEAN

## **WELL DATA:**

DEPTH TO WATER 13.9 ft  
TOTAL DEPTH 21.72 ft  
HT. WATER COL 8.53 ft

CONVERSION	
diam	gal/ft
2 in	X0.16
3 in	X0.36
4 in	X0.65
6 in	X1.44

Volume of Water Column 333 gal

Volumes to Purge x 3 Vol

Total Volume to Purge 10 gal

#### **CHEMICAL DATA:**

T (F)	SC/umhos	pH	Time	Comments	Volume (gal)
62.5	10.09	4.34	10:03	Cloudy, St. gray	2
65.3	10.60	4.15	10:05	" "	4
64.2	10.47	4.14	10:07	Clear	6
65.3	10.63	4.11	10:10	"	8
65.0	10.63	4.08	10:13	"	10
				.	.

## **COMMENTS : →**

**ALTON GEOSCIENCE, INC.**  
**Water Sampling Field Survey**

WELL # C-7 PROJECT# 300284 LOCATION Livermore DATE 1/3/91  
SAMPLING TEAM Dennis SAMPLING METHOD: BAILER X PUMP X  
DECONTAMINATION METHOD: TRIPLE RINSE W/TSP AND DEIONIZED WATER X  
STEAM CLEAN

#### **WELL DATA:**

DEPTH TO WATER 3.71 ft  
TOTAL DEPTH 21.57 ft  
HT. WATER COL 7.86 ft

CONVERSION	
diam	gal/ft
2 in	X0.16
3 in	X0.36
4 in	X0.65
6 in	X1.44

Volume of Water Column 2.96 gal  
Volumes to Purge x 3 Vol  
Total Volume to Purge 9 gal

## **CHEMICAL DATA:**

T (F)	SC/umhos	pH	Time	Comments	Volume (gal)
64.6	11.04	4.23	10:30	Cloudy-Clear	2
66.8	11.20	4.07	10:32	" "	4
67.8	10.26	4.01	10:35	Clear	6
68.9	11.45	3.96	10:37	"	8
69.1	11.52	3.98	10:40	"	9
	.			.	.

**COMMENTS:** ↵

ALTON GEOSCIENCE, INC.  
Water Sampling Field Survey

WELL # C-8 PROJECT# 300284 LOCATION Livermore DATE 1/8/91  
 SAMPLING TEAM Dennis SAMPLING METHOD: BAILER PUMP   
 DECONTAMINATION METHOD: TRIPLE RINSE W/TSP AND DEIONIZED WATER   
 STEAM CLEAN

WELL DATA:

DEPTH TO WATER 13.81 ft  
 TOTAL DEPTH 22.16 ft  
 HT. WATER COL 8.35 ft

CONVERSION	
diam	gal/ft
2 in	X0.16
3 in	X0.36
4 in	X0.65
6 in	X1.44

Volume of Water Column 3.33 gal  
 Volumes to Purge x 3 Vol  
 Total Volume to Purge 10 gal

CHEMICAL DATA:

T (F)	SC/umhos	pH	TIME	Comments	Volume (gal)
51.9	9.04	4.51	8:55	Cloudy, H. gray	2
56.3	9.29	4.52	8:58	" "	4
57.3	9.41	4.30	9:01	" "	6
58.0	9.60	4.20	9:03	" "	8
58.7	9.64	4.18	9:05	" "	10

ACTUAL VOLUME PURGED 10.5 gal

COMMENTS:

ALTON GEOSCIENCE, INC.  
Water Sampling Field Survey

WELL # C-9 PROJECT # 300284

**LOCATION** Livermore

DATE 1/3/91

SAMPLING TEAM Dennis

SAMPLING METHOD: BAILER  PUMP

**SAMPLING TEAM** \_\_\_\_\_

SAMPLING METHOD: BAILER  PUMP

DECONTAMINATION METHOD: TRIPLE RINSE W/TSP AND DEIONIZED WATER X  
STEAM CLEAN

### **WELL DATA:**

DEPTH TO WATER 13.28ft

TOTAL DEPTH 21.93 ft

HT. WATER COL 8.65 ft

CONVERSION	
diam	gal/ft
2 in	x0.16
3 in	x0.36
4 in	x0.65
6 in	x1.44

Volume of Water Column 3.33 gal

Volumes to Purge x 3 Vol

Total Volume to Purge 10 gal

CHEMICAL DATA:

T (F)	SC/umhos	pH	Time	Comments	Volume (gal)
66.4	7.60	4.44	11:05	Cloudy, H. gray	2
67.1	9.29	4.19	11:07	" "	4
66.9	8.85	4.14	11:10	" "	6
67.3	9.86	4.04	11:12	" "	8
66.5	10.00	3.98	11:14	" "	10
	.			.	.

COMMENTS

ALTON GEOSCIENCE, INC.  
Water Sampling Field Survey

WELL # C-10 PROJECT # 300284

LOCATION Livermore

DATE 1/3/91

SAMPLING TEAM Dennis

SAMPLING METHOD: BAILER    PUMP X

DECONTAMINATION METHOD: TRIPLE RINSE W/TSP AND DEIONIZED WATER X  
STEAM CLEAN   

**WELL DATA:**

DEPTH TO WATER 15.06 ft  
TOTAL DEPTH 33.10 ft  
HT. WATER COL 18.04 ft

CONVERSION	
diam	gal/ft
2 in	X0.16
3 in	X0.36
4 in	X0.65
6 in	X1.44

Volume of Water Column 6.66 gal

Volumes to Purge X 3 Vol

Total Volume to Purge 20 gal

**CHEMICAL DATA:**

T (F)	SC/umhos	pH	Time	Comments	Volume (gal)
62.8	12.14	4.48	12:01	<u>Claudy, St. blue.</u>	4
64.2	12.26	4.39	12:04	" "	8
64.3	12.23	4.30	12:06	" "	12
63.5	11.93	4.26	12:09	" "	16
63.5	12.12	4.23	12:12	" "	20

ACTUAL VOLUME PURGED 20.5 gal

**COMMENTS:**

**ALTON GEOSCIENCE, INC.**  
**Water Sampling Field Survey**

WELL # C-11 PROJECT# 300284

**LOCATION** Livermore.

**DATE** 1/3/91

SAMPLING TEAM Dennis

SAMPLING METHOD: BAILER  PUMP

**DECONTAMINATION METHOD: TRIPLE RINSE W/TSP AND DEIONIZED WATER X  
STEAM CLEAN**

### **WELL DATA:**

DEPTH TO WATER 14.63ft

TOTAL DEPTH 18.38 ft

BT. WATER COL 3.75 ft

CONVERSION	
diam	gal/ft
2 in	x0.16
3 in	x0.36
4 in	x0.65
6 in	x1.44

Volume of Water Column 1.48 gal

Volumes to Purge      x 3 Vol

Total Volume to Purge 5 gal

## **CHEMICAL DATA:**

**COMMENTS:** Hand bail!

Slow producer! Dry @ 3:00 moved to C-5.

Dug@ 10:54. Still Dug@ 10:52

ALTON GEOSCIENCE, INC.  
Water Sampling Field Survey

WELL # C-12 PROJECT# 300284

LOCATION Livermore

DATE 1/3/91

SAMPLING TEAM Dennis

SAMPLING METHOD: BAILER X PUMP X

DECONTAMINATION METHOD: TRIPLE RINSE W/TSP AND DEIONIZED WATER X  
STEAM CLEAN   

**WELL DATA:**

DEPTH TO WATER 14.70 ft

CONVERSION	
diam	gal/ft
2 in	X0.16
3 in	X0.36
4 in	X0.65
6 in	X1.44

Volume of Water Column 148 gal

Volumes to Purge x 3 Vol

Total Volume to Purge 5 gal

TOTAL DEPTH 18.08 ft

HT. WATER COL 3.38 ft

**CHEMICAL DATA:**

T (F)	SC/umhos	pH	Time	Comments	Volume (gal)
61.0	10.22	4.55	12:32	<u>Cloudy, lt. br.</u>	1
62.4	10.32	4.46	12:34	" "	2
62.8	10.29	4.40	12:36	" "	3
62.9	10.24	4.37	12:39	" "	4
62.8	10.20	4.34	12:42	" "	5
				.	

ACTUAL VOLUME PURGED 5.5 /gal

**COMMENTS:**

**ALTON GEOSCIENCE, INC.**  
**Water Sampling Field Survey**

WELL # C-13 PROJECT# 300284

**LOCATION** Livermore

DATE 1/3/91

SAMPLING TEAM Dennis

SAMPLING METHOD: BAILER  PUMP

SAMPLING TEAM \_\_\_\_\_  
DECONTAMINATION METHOD: TRIPLE RINSE W/TSP AND DEIONIZED WATER X  
STEAM CLEAN \_\_\_\_\_

### **WELL DATA:**

DEPTH TO WATER /5.08ft

TOTAL DEPTH 20.84 ft

HT. WATER COL 5.76 ft

CONVERSION	
diam	gal/ft
2 in	x0.16
3 in	x0.36
4 in	x0.65
6 in	x1.44

Volume of Water Column 2.22 gal

Volumes to Purge 3 Vol

Total Volume to Purge 7 gal

**CHEMICAL DATA:**

T (F)	SC/umhos	pH	Time	Comments	Volume (gal)
65.3	12.87	4.33	12:56	Cloudy, lt. brown.	1.5
67.5	12.38	4.22	12:58	" "	3
67.7	12.49	4.19	1:00	" "	4.5
67.2	12.23	4.20	1:03	" "	6
67.5	12.28	4.13	1:06	" "	7
	.			.	.
ACTUAL VOLUME PURGED					7.5 /gal

**COMMENTS:**

ALTON GEOSCIENCE, INC.  
Water Sampling Field Survey

WELL # C-15 PROJECT# 300284 LOCATION Livermore DATE 1/3/91

SAMPLING TEAM Dennis SAMPLING METHOD: BAILER PUMP

DECONTAMINATION METHOD: TRIPLE RINSE W/TSP AND DEIONIZED WATER   
STEAM CLEAN

**WELL DATA:**

DEPTH TO WATER 5.50ft  
TOTAL DEPTH 21.00 ft  
HT. WATER COL 5.50 ft

CONVERSION	
diam	gal/ft
2 in	x0.16
3 in	x0.36
4 in	x0.65
6 in	x1.44

Volume of Water Column 2.22 gal  
Volumes to Purge x 3 Vol  
Total Volume to Purge 7 gal

**CHEMICAL DATA:**

T (F)	SC/umhos	pH	Time	Comments	Volume (gal)
64.1	15.56	4.19	1:28	<u>Cloudy, h. brn.</u>	1.5
65.7	15.86	4.16	1:30	" "	3
64.7	15.61	4.19	1:32	" "	4.5
65.0	15.87	4.21	1:35	<u>Clean</u>	6
66.3	15.97	4.14	1:38	"	7
	.	.		.	.

ACTUAL VOLUME PURGED 7.5 1gal

**COMMENTS:**

**ALTON GEOSCIENCE, INC.**  
**Water Sampling Field Survey**

WELL # C-16 PROJECT# 300284

**LOCATION** Livermore

**DATE** 1/8/91

SAMPLING TEAM Dennis

SAMPLING METHOD: BAILER        PUMP X

DECONTAMINATION METHOD: TRIPLE RINSE W/TSP AND DEIONIZED WATER X  
STEAM CLEAN

## WELL DATA:

DEPTH TO WATER /3.96 ft

TOTAL DEPTH 2827 ft

HT. WATER COL 14.5/ft

CONVERSION	
diam	gal/ft
2 in	X0.16
3 in	X0.36
4 in	X0.65
6 in	X1.44

Volume of Water Column 5.55 gal

Volumes to Purge x 3 Vol

Total Volume to Purge 17 gal

**CHEMICAL DATA:**

T (F)	SC/umhos	pH	Time	Comments	Volume (gal)
64.2	11.64	4.33	8:19	Cloudy, lt. gray	3.5
59.5	10.93	4.16	8:22	" "	7
58.3	10.68	4.13	8:27	" "	10.5
56.5	10.42	4.15	8:32	" "	14
58.8	10.53	4.12	8:35	" "	17

## **COMMENTS:**

ALTON GEOSCIENCE, INC.  
Water Sampling Field Survey

WELL # C-17 PROJECT# 300284 LOCATION Livermore DATE 1/9/91  
SAMPLING TEAM Dennis SAMPLING METHOD: BAILER  PUMP X  
DECONTAMINATION METHOD: TRIPLE RINSE W/TSP AND DEIONIZED WATER X  
STEAM CLEAN

## **WELL DATA:**

DEPTH TO WATER 14.92 ft

TOTAL DEPTH 20.01 ft

HT. WATER COL 5.09 ft

CONVERSION	
diam	gal/ft
2 in	x0.16
3 in	x0.36
4 in	x0.65
6 in	x1.44

Volume of Water Column 1.85 gal

Volumes to Purge x 3 Vol

Total Volume to Purge 6 gal

**CHEMICAL DATA:**

T (F)	SC/umhos	pH	Time	Comments	Volume (gal)
64.3	5.30	4.55	11:35	dark gray	1.25
65.8	5.65	4.37	11:37	Cloudy, H gray	2.50
66.9	5.91	4.24	11:39	" "	3.75
66.2	8.13	4.10	11:42	dark gray	5
66.4	10.15	4.05	11:45	" "	6
				.	

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**COMMENTS:** Went dry @ 11:45

**ALTON GEOSCIENCE, INC.**  
**Water Sampling Field Survey**

WELL # C-18 PROJECT# 300284

**LOCATION** Livermore

**DATE** 1/3/91

SAMPLING TEAM Dennis

SAMPLING METHOD: BAILER        PUMP X

DECONTAMINATION METHOD: TRIPLE RINSE W/TSP AND DEIONIZED WATER X  
STEAM CLEAN

## **WELL DATA:**

DEPTH TO WATER 398 ft

TOTAL DEPTH 26.37 ft

HT. WATER COL/2.39 ft

CONVERSION	
diam	gal/ft
2 in	x0.16
3 in	x0.36
4 in	x0.65
6 in	x1.44

Volume of Water Column 2.08 gal

Volumes to Purge      x 3 Vol

Total Volume to Purge 7 gal

#### **CHEMICAL DATA:**

T (F)	SC/umhos	pH	Time	Comments	Volume (gal)
62.9	11:11	4.56	1:58	Cloudy, lt. brown.	1.5
63.6	11:05	4.42	2:00	" "	3
64.0	11:10	4.33	2:02	" "	4.5
63.3	11:00	4.32	2:05	" "	6
63.4	11:11	4.28	2:07	" "	7
					.

## COMMENTS:

**ALTON GEOSCIENCE, INC.**  
**Water Sampling Field Survey**

WELL # C-19 PROJECT # 300284 LOCATION Livermore DATE 1/3/91  
SAMPLING TEAM Dennis SAMPLING METHOD: BAILER  PUMP X  
DECONTAMINATION METHOD: TRIPLE RINSE W/TSP AND DEIONIZED WATER X  
STEAM CLEAN

## WELL DATA:

DEPTH TO WATER 1556 ft  
TOTAL DEPTH 20.00 ft  
HT. WATER COL 4.44 ft

CONVERSION	
diam	gal/ft
<u>2 in</u>	x0.16
3 in	x0.36
4 in	x0.65
6 in	x1.44

Volume of Water Column 0.80 gal  
Volumes to Purge x 3 Vol  
Total Volume to Purge 3 gal

**CHEMICAL DATA:**

T (F)	SC/umhos	pH	Time	Comments	Volume (gal)
65.2	12.95	4.31	2:27	Cloudy, lt. gray	.5
65.9	12.88	4.19	2:29	" "	1
66.7	13.51	4.12	2:32	" "	1.5
66.2	13.18	4.11	2:33	" "	2
66.4	12.90	4.09	2:35	" "	3
					.

**COMMENTS:**

JAN 22 1991

## SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

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

LABORATORY NO.: 11345  
CLIENT: Alton Geoscience  
CLIENT JOB NO.: 300284; Facility # 91924

DATE RECEIVED: 01/07/91  
DATE REPORTED: 01/15/91

Page 1 of 3

Lab Number	Customer Sample Identification	Date Sampled	Date Analyzed
11345- 1	0191031	01/03/91	01/10/91
11345- 2	0191101	01/03/91	01/10/91
11345- 3	0191121	01/03/91	01/10/91
11345- 4	0191131	01/03/91	01/10/91
11345- 5	0191151	01/03/91	01/10/91
11345- 6	0191181	01/03/91	01/10/91
11345- 7	0191191	01/03/91	01/10/91
11345- 8	0191111	01/03/91	01/10/91
11345- 9	0191051	01/03/91	01/10/91
11345-10	0191021	01/03/91	01/10/91

**Laboratory Number:**      11345      11345      11345      11345      11345  
                                1                2                3                4                5

**ANALYTE LIST**      **Amounts/Quantitation Limits (ug/l)**

OIL AND GREASE:	NA	NA	NA	NA	NA
TPH/GASOLINE RANGE:	57	ND<50	ND<50	ND<50	ND<50
TPH/DIESEL RANGE:	NA	NA	NA	NA	NA
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	0.6	0.6

Laboratory Number: 11345 11345 11345 11345 11345  
6 7 8 9 10

ANALYTE LIST      Amounts/Quantitation Limits (ug/l)

OIL AND GREASE:	NA	NA	NA	NA	NA
TPH/GASOLINE RANGE:	ND<50	66	ND<50	90	2000
TPH/DIESEL RANGE:	NA	NA	NA	NA	NA
BENZENE:	ND<0.5	ND<0.5	2	ND<0.5	270
TOLUENE:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3
ETHYL BENZENE:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	79
XYLENES:	ND<0.5	ND<0.5	2	3	93

OUTSTANDING QUALITY AND SERVICE

JAN 22 1991

**SUPERIOR ANALYTICAL LABORATORY, INC.**

1555 BURKE, UNIT I · SAN FRANCISCO, CA 94124 · PHONE (415) 647-2081

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

LABORATORY NO.: 11345  
CLIENT: Alton Geoscience  
CLIENT JOB NO.: 300284

DATE RECEIVED: 01/07/91  
DATE REPORTED: 01/15/91

Page 2 of 3

Lab Number	Customer Sample Identification	Date Sampled	Date Analyzed
11345-11	0191161	01/03/91	01/10/91
11345-12	0191081	01/03/91	01/10/91
11345-13	0191011	01/03/91	01/10/91
11345-14	0191061	01/03/91	01/10/91
11345-15	0191071	01/03/91	01/10/91
11345-16	0191091	01/03/91	01/10/91
11345-17	0191171	01/03/91	01/12/91
11345-18	0191173	01/03/91	01/11/91
11345-19	0191002	01/03/91	01/11/91
11345-20	0191004	01/03/91	01/11/91

Laboratory Number:	11345 11	11345 12	11345 13	11345 14	11345 15
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ANALYTE LIST	Amounts/Quantitation Limits (ug/l)				
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OIL AND GREASE:	NA	NA	NA	NA	NA
TPH/GASOLINE RANGE:	230	67	400	2300	2500
TPH/DIESEL RANGE:	NA	NA	NA	NA	NA
BENZENE:	12	2	12	4	300
TOLUENE:	ND<0.5	2	ND<0.5	79	2
ETHYL BENZENE:	6	ND<0.5	17	59	110
XYLEMES:	6	2	14	380	120

Laboratory Number:	11345 16	11345 17	11345 18	11345 19	11345 20
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ANALYTE LIST	Amounts/Quantitation Limits (ug/l)				
--------------	------------------------------------	--	--	--	--

OIL AND GREASE:	NA	NA	NA	NA	NA
TPH/GASOLINE RANGE:	3200	3700	8600	ND<50	ND<50
TPH/DIESEL RANGE:	NA	NA	NA	NA	NA
BENZENE:	ND<3	ND<0.5	ND<3	ND<0.5	ND<0.5
TOLUENE:	ND<3	28	10	ND<0.5	ND<0.5
ETHYL BENZENE:	32	56	59	ND<0.5	ND<0.5
XYLEMES:	140	140	150	0.8	0.6

OUTSTANDING QUALITY AND SERVICE

JAN 22 1991

**SUPERIOR ANALYTICAL LABORATORY, INC.**

1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

**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: 11345

NA = ANALYSIS NOT REQUESTED

ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT

ug/l = part per billion (ppb)

OIL AND GREASE ANALYSIS By Standard Methods Method 503E:  
Minimum Detection Limit in Water: 5000ug/L

Modified EPA-SW846 Method 8015 for Extractable Hydrocarbons:  
Minimum Quantitation Limit for Diesel in Water: 50ug/l  
Standard Reference: NA

EPA-SW846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:  
Minimum Quantitation Limit for Gasoline in Water: 50ug/l  
Standard Reference: 08/24/90

SW-846 Method 8020/BTXE  
Minimum Quantitation Limit in Water: 0.5ug/l  
Standard Reference: 10/22/90

ANALYTE	REFERENCE	SPIKE LEVEL	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Oil & Grease	NA	NA	NA	NA	NA
Diesel	NA	NA	NA	NA	NA
Gasoline	10/22/90	200ng	92/90	3	75-125
Benzene	10/22/90	200ng	91/93	2	75-130
Toluene	10/22/90	200ng	94/95	2	75-130
Ethyl Benzene	10/22/90	200ng	97/99	2	75-130
Total Xylene	10/22/90	600ng	98/99	2	75-130

Richard Srna, Ph.D.

Laboratory Director

OUTSTANDING QUALITY AND SERVICE

JAN 22 1991

**SUPERIOR ANALYTICAL LABORATORY, INC.**

1555 BURKE, UNIT I · SAN FRANCISCO, CA 94124 · PHONE (415) 647-2081

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

LABORATORY NO.: 11345-13  
CLIENT: Alton Geoscience  
JOB NO.: 300284 Facility# 91924

DATE SAMPLED: 01/03/91  
DATE RECEIVED: 01/07/91  
DATE ANALYZED: 01/11/91

EPA SW-846 METHOD 8010  
HALOGENATED VOLATILE ORGANICS  
SAMPLE: 0191011

Compound	MDL (ug/l)	RESULTS (ug/l)
Chloromethane/Vinyl Chloride	1	ND
Bromomethane/Chloroethane	1	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene	0.5	ND
Methylene Chloride	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
Chloroform	0.5	ND
1,1,1-Trichloroethane	0.5	ND
Carbon tetrachloride	0.5	ND
1,2-Dichloroethane	0.5	ND
Trichloroethylene	0.5	ND
1,2-Dichloropropane	0.5	ND
Bromodichloromethane	0.5	ND
Cis-1,3-Dichloropropene	0.5	ND
trans-1,3-Dichloropropene	0.5	ND
1,1,2-Trichloroethane	0.5	ND
Tetrachloroethene	0.5	ND
Dibromochloromethane	0.5	ND
Chlorobenzene	0.5	ND
Bromoform	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,2-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
Cis-1,2-Dicloroethene	0.5	ND

MDL = Method Detection Limit

ug/l = parts per billion (ppb)

QA/QC Summary: Daily Standard RPD = <15%

MS/MSD average recovery = 85% : MS/MSD RPD = < 3%

Richard Srna, Ph.D.

Laboratory Director

JAN 22 1991

SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I · SAN FRANCISCO, CA 94124 · PHONE (415) 647-2081

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

LABORATORY NO.: 11345-10  
CLIENT: Alton Geoscience  
JOB NO.: 300284 Facility# 91924

DATE SAMPLED: 01/03/91  
DATE RECEIVED: 01/07/91  
DATE ANALYZED: 01/11/91

EPA SW-846 METHOD 8010  
HALOGENATED VOLATILE ORGANICS  
SAMPLE: 0191021

Compound	MDL (ug/l)	RESULTS (ug/l)
Chloromethane/Vinyl Chloride	1	ND
Bromomethane/Chloroethane	1	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene	0.5	ND
Methylene Chloride	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
Chloroform	0.5	ND
1,1,1-Trichloroethane	0.5	ND
Carbon tetrachloride	0.5	ND
1,2-Dichloroethane	0.5	ND
Trichloroethylene	0.5	ND
1,2-Dichloropropane	0.5	ND
Bromodichloromethane	0.5	ND
Cis-1,3-Dichloropropene	0.5	ND
trans-1,3-Dichloropropene	0.5	ND
1,1,2-Trichloroethane	0.5	ND
Tetrachloroethene	0.5	ND
Dibromochloromethane	0.5	ND
Chlorobenzene	0.5	ND
Bromoform	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,2-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
Cis-1,2-Dicloroethene	0.5	ND

MDL = Method Detection Limit

ug/l = parts per billion (ppb)

QA/QC Summary: Daily Standard RPD = <15%

MS/MSD average recovery = 85% :MS/MSD RPD = < 3%

Richard Srna, Ph.D.

Laboratory Director

JAN 22 1991

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

LABORATORY NO.: 11345-1                    DATE SAMPLED: 01/03/91  
CLIENT: Alton Geoscience                    DATE RECEIVED: 01/07/91  
JOB NO.: 300284 Facility# 91924            DATE ANALYZED: 01/11/91

EPA SW-846 METHOD 801  
HALOGENATED VOLATILE ORGANICS  
SAMPLE: 0191031

Compound	MDL (ug/kg)	RESULTS (ug/kg)
Chloromethane/Vinyl Chloride	1	ND
Bromomethane/Chloroethane	1	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene	0.5	ND
Methylene Chloride	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
Chloroform	0.5	ND
1,1,1-Trichloroethane	0.5	ND
Carbon tetrachloride	0.5	ND
1,2-Dichloroethane	0.5	ND
Trichloroethylene	0.5	ND
1,2-Dichloropropane	0.5	ND
Bromodichloromethane	0.5	ND
Cis-1,3-Dichloropropene	0.5	ND
trans-1,3-Dichloropropene	0.5	ND
1,1,2-Trichloroethane	0.5	ND
Tetrachloroethene	0.5	ND
Dibromochloromethane	0.5	ND
Chlorobenzene	0.5	ND
Bromoform	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,2-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
Cis-1,2-Dichloroethene	0.5	ND

MDL = Method Detection Limit

ug/kg = parts per billion (ppb)

QA/QC Summary: Daily Standard RPD = <15%

MS/MSD average recovery = 85% :MS/MSD RPD = < 3%

Richard Srna, Ph.D.

Laboratory Director

JAN 22 1991

SUPERIOR ANALYTICAL LABORATORY, INC.

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

LABORATORY NO.: 11345-9                    DATE SAMPLED: 01/03/91  
CLIENT: Alton Geoscience                    DATE RECEIVED: 01/07/91  
JOB NO.: 300284 Facility# 91924            DATE ANALYZED: 01/11/91

EPA SW-846 METHOD 8010  
HALOGENATED VOLATILE ORGANICS  
SAMPLE: 0191051

Compound	MDL (ug/l)	RESULTS (ug/l)
Chloromethane/Vinyl Chloride	1	ND
Bromomethane/Chloroethane	1	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene	0.5	ND
Methylene Chloride	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
Chloroform	0.5	ND
1,1,1-Trichloroethane	0.5	ND
Carbon tetrachloride	0.5	ND
1,2-Dichloroethane	0.5	ND
Trichloroethylene	0.5	ND
1,2-Dichloropropane	0.5	ND
Bromodichloromethane	0.5	ND
Cis-1,3-Dichloropropene	0.5	ND
trans-1,3-Dichloropropene	0.5	ND
1,1,2-Trichloroethane	0.5	ND
Tetrachloroethylene	0.5	ND
Dibromochloromethane	0.5	ND
Chlorobenzene	0.5	ND
Bromoform	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,2-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
Cis-1,2-Dicloroethene	0.5	ND

MDL = Method Detection Limit

ug/l = parts per billion (ppb)

QA/QC Summary: Daily Standard RPD = <15%

MS/MSD average recovery = 85% :MS/MSD RPD = < 3%

Richard Srna, Ph.D.

Laboratory Director

JAN 22 1991

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

LABORATORY NO.: 11345-14  
CLIENT: Alton Geoscience  
JOB NO.: 300284 Facility# 91924

DATE SAMPLED: 01/03/91  
DATE RECEIVED: 01/07/91  
DATE ANALYZED: 01/11/91

EPA SW-846 METHOD 8010  
HALOGENATED VOLATILE ORGANICS  
SAMPLE: 0191061

Compound	MDL (ug/l)	RESULTS (ug/l)
Chloromethane/Vinyl Chloride	1	ND
Bromomethane/Chloroethane	1	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene	0.5	ND
Methylene Chloride	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
Chloroform	0.5	ND
1,1,1-Trichloroethane	0.5	ND
Carbon tetrachloride	0.5	0.5
1,2-Dichloroethane	0.5	ND
Trichloroethylene	0.5	ND
1,2-Dichloropropane	0.5	ND
Bromodichloromethane	0.5	ND
Cis-1,3-Dichloropropene	0.5	ND
trans-1,3-Dichloropropene	0.5	ND
1,1,2-Trichloroethane	0.5	ND
Tetrachloroethene	0.5	ND
Dibromochloromethane	0.5	ND
Chlorobenzene	0.5	ND
Bromoform	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,2-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
Cis-1,2-Dicloroethene	0.5	ND

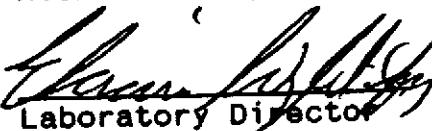
MDL = Method Detection Limit

ug/l = parts per billion (ppb)

QA/QC Summary: Daily Standard RPD = <15%

MS/MSD average recovery = 85% : MS/MSD RPD = < 3%

Richard Srna, Ph.D.

  
Laboratory Director

JAN 22 1991

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

LABORATORY NO.: 11345-15                    DATE SAMPLED: 01/03/91  
CLIENT: Alton Geoscience                    DATE RECEIVED: 01/07/91  
JOB NO.: 300284 Facility# 91924            DATE ANALYZED: 01/11/91

EPA SW-846 METHOD 8010  
HALOGENATED VOLATILE ORGANICS  
SAMPLE: 0191071

Compound	MDL (ug/l)	RESULTS (ug/l)
Chloromethane/Vinyl Chloride	1	ND
Bromomethane/Chloroethane	1	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene	0.5	ND
Methylene Chloride	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
Chloroform	0.5	ND
1,1,1-Trichloroethane	0.5	ND
Carbon tetrachloride	0.5	0.7
1,2-Dichloroethane	0.5	ND
Trichloroethylene	0.5	ND
1,2-Dichloropropane	0.5	ND
Bromodichloromethane	0.5	ND
Cis-1,3-Dichloropropene	0.5	ND
trans-1,3-Dichloropropene	0.5	ND
1,1,2-Trichloroethane	0.5	ND
Tetrachloroethene	0.5	ND
Dibromochloromethane	0.5	ND
Chlorobenzene	0.5	ND
Bromoform	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,2-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
Cis-1,2-Dicloroethene	0.5	ND

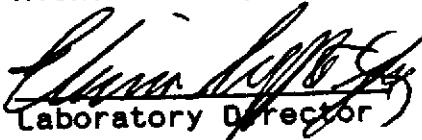
MDL = Method Detection Limit

ug/l = parts per billion (ppb)

QA/QC Summary: Daily Standard RPD = <15%

MS/MSD average recovery = 85% :MS/MSD RPD = < 3%

Richard Srna, Ph.D.

  
Laboratory Director

JAN 22 1991

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

LABORATORY NO.: 11345-12  
CLIENT: Alton Geoscience  
JOB NO.: 300284 Facility# 91924

DATE SAMPLED: 01/03/91  
DATE RECEIVED: 01/07/91  
DATE ANALYZED: 01/11/91

EPA SW-846 METHOD 8010  
HALOGENATED VOLATILE ORGANICS  
SAMPLE: 0191081

Compound	MDL (ug/l)	RESULTS (ug/l)
Chloromethane/Vinyl Chloride	1	ND
Bromomethane/Chloroethane	1	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene	0.5	0.7
Methylene Chloride	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
Chloroform	0.5	ND
1,1,1-Trichloroethane	0.5	ND
Carbon tetrachloride	0.5	ND
1,2-Dichloroethane	0.5	ND
Trichloroethylene	0.5	ND
1,2-Dichloropropane	0.5	ND
Bromodichloromethane	0.5	ND
Cis-1,3-Dichloropropene	0.5	ND
trans-1,3-Dichloropropene	0.5	ND
1,1,2-Trichloroethane	0.5	ND
Tetrachloroethene	0.5	ND
Dibromochloromethane	0.5	ND
Chlorobenzene	0.5	ND
Bromoform	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,2-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
Cis-1,2-Dichloroethene	0.5	ND

MDL = Method Detection Limit

ug/l = parts per billion (ppb)

QA/QC Summary: Daily Standard RPD = <15%

MS/MSD average recovery = 85% :MS/MSD RPD = < 3%

Richard Srna, Ph.D.

Laboratory Director

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

LABORATORY NO.: 11345-16  
CLIENT: Alton Geoscience  
JOB NO.: 300284 Facility# 91924

DATE SAMPLED: 01/03/91  
DATE RECEIVED: 01/07/91  
DATE ANALYZED: 01/11/91

EPA SW-846 METHOD 8010  
HALOGENATED VOLATILE ORGANICS  
SAMPLE: 0191091

Compound	MDL (ug/1)	RESULTS (ug/1)
Chloromethane/Vinyl Chloride	1	ND
Bromomethane/Chloroethane	1	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene	0.5	ND
Methylene Chloride	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
Chloroform	0.5	ND
1,1,1-Trichloroethane	0.5	ND
Carbon tetrachloride	0.5	0.8
1,2-Dichloroethane	0.5	ND
Trichloroethylene	0.5	ND
1,2-Dichloropropane	0.5	ND
Bromodichloromethane	0.5	ND
Cis-1,3-Dichloropropene	0.5	ND
trans-1,3-Dichloropropene	0.5	ND
1,1,2-Trichloroethane	0.5	ND
Tetrachloroethene	0.5	ND
Dibromochloromethane	0.5	ND
Chlorobenzene	0.5	ND
Bromoform	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,2-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
Cis-1,2-Dicloroethene	0.5	ND

MDL = Method Detection Limit

ug/1 = parts per billion (ppb)

QA/QC Summary: Daily Standard RPD = <15%

MS/MSD average recovery = 85% : MS/MSD RPD = < 3%

Richard Srna, Ph.D.

Laboratory Director

JAN 22 1991

SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I · SAN FRANCISCO, CA 94124 · PHONE (415) 647-2081

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

LABORATORY NO.: 11345-2  
CLIENT: Alton Geoscience  
JOB NO.: 300284 Facility# 91924

DATE SAMPLED: 01/03/91  
DATE RECEIVED: 01/07/91  
DATE ANALYZED: 01/11/91

EPA SW-846 METHOD 801  
HALOGENATED VOLATILE ORGANICS  
SAMPLE: 0191101

Compound	MDL (ug/kg)	RESULTS (ug/kg)
Chloromethane/Vinyl Chloride	1	ND
Bromomethane/Chloroethane	1	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene	0.5	ND
Methylene Chloride	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
Chloroform	0.5	ND
1,1,1-Trichloroethane	0.5	ND
Carbon tetrachloride	0.5	ND
1,2-Dichloroethane	0.5	ND
Trichloroethylene	0.5	ND
1,2-Dichloropropane	0.5	ND
Bromodichloromethane	0.5	ND
Cis-1,3-Dichloropropene	0.5	ND
trans-1,3-Dichloropropene	0.5	ND
1,1,2-Trichloroethane	0.5	ND
Tetrachloroethene	0.5	ND
Dibromochloromethane	0.5	ND
Chlorobenzene	0.5	ND
Bromoform	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,2-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
Cis-1,2-Dichloroethene	0.5	ND

MDL = Method Detection Limit

ug/kg = parts per billion (ppb)

QA/QC Summary: Daily Standard RPD = <15%

MS/MSD average recovery = 85% :MS/MSD RPD = < 3%

Richard Srna, Ph.D.

Laboratory Director

JAN 22 1991

SUPERIOR ANALYTICAL LABORATORY, INC.

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

LABORATORY NO.: 11345-8  
CLIENT: Alton Geoscience  
JOB NO.: 300284 Facility# 91924

DATE SAMPLED: 01/03/91  
DATE RECEIVED: 01/07/91  
DATE ANALYZED: 01/11/91

EPA SW-846 METHOD 8010  
HALOGENATED VOLATILE ORGANICS  
SAMPLE: 0191111

Compound	MDL (ug/l)	RESULTS (ug/l)
Chloromethane/Vinyl Chloride	1	ND
Bromomethane/Chloroethane	1	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene	0.5	ND
Methylene Chloride	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
Chloroform	0.5	ND
1,1,1-Trichloroethane	0.5	ND
Carbon tetrachloride	0.5	ND
1,2-Dichloroethane	0.5	ND
Trichloroethylene	0.5	ND
1,2-Dichloropropane	0.5	ND
Bromodichloromethane	0.5	ND
Cis-1,3-Dichloropropene	0.5	ND
trans-1,3-Dichloropropene	0.5	ND
1,1,2-Trichloroethane	0.5	1
Tetrachloroethene	0.5	ND
Dibromochloromethane	0.5	ND
Chlorobenzene	0.5	ND
Bromoform	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,2-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
Cis-1,2-Dichloroethene	0.5	ND

MDL = Method Detection Limit

ug/l = parts per billion (ppb)

QA/QC Summary: Daily Standard RPD = <15%

MS/MSD average recovery = 85% : MS/MSD RPD = < 3%

Richard Srna, Ph.D.

Laboratory Director

JAN 22 1991

SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I · SAN FRANCISCO, CA 94124 · PHONE (415) 647-2081

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

LABORATORY NO.: 11345-3                            DATE SAMPLED: 01/03/91  
CLIENT: Alton Geoscience                            DATE RECEIVED: 01/07/91  
JOB NO.: 300284 Facility# 91924                    DATE ANALYZED: 01/11/91

EPA SW-846 METHOD 801  
HALOGENATED VOLATILE ORGANICS  
SAMPLE: 0191121

Compound	MDL (ug/kg)	RESULTS (ug/kg)
Chloromethane/Vinyl Chloride	1	ND
Bromomethane/Chloroethane	1	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene	0.5	ND
Methylene Chloride	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
Chloroform	0.5	ND
1,1,1-Trichloroethane	0.5	ND
Carbon tetrachloride	0.5	ND
1,2-Dichloroethane	0.5	ND
Trichloroethylene	0.5	ND
1,2-Dichloropropane	0.5	ND
Bromodichloromethane	0.5	ND
Cis-1,3-Dichloropropene	0.5	ND
trans-1,3-Dichloropropene	0.5	ND
1,1,2-Trichloroethane	0.5	ND
Tetrachloroethene	0.5	ND
Dibromochloromethane	0.5	ND
Chlorobenzene	0.5	ND
Bromoform	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,2-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
Cis-1,2-Dicloroethene	0.5	ND

MDL = Method Detection Limit

ug/kg = parts per billion (ppb)

QA/QC Summary: Daily Standard RPD = <15%

MS/MSD average recovery = 85% :MS/MSD RPD = < 3%

Richard Srna, Ph.D.

Laboratory Director

JAN 22 1991

SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I · SAN FRANCISCO, CA 94124 · PHONE (415) 647-2081

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

LABORATORY NO.: 11345-4  
CLIENT: Alton Geoscience  
JOB NO.: 300284 Facility# 91924

DATE SAMPLED: 01/03/91  
DATE RECEIVED: 01/07/91  
DATE ANALYZED: 01/11/91

EPA SW-846 METHOD 801  
HALOGENATED VOLATILE ORGANICS  
SAMPLE: 0191131

Compound	MDL (ug/kg)	RESULTS (ug/kg)
Chloromethane/Vinyl Chloride	1	ND
Bromomethane/Chloroethane	1	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene	0.5	ND
Methylene Chloride	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
Chloroform	0.5	ND
1,1,1-Trichloroethane	0.5	ND
Carbon tetrachloride	0.5	ND
1,2-Dichloroethane	0.5	ND
Trichloroethylene	0.5	ND
1,2-Dichloropropane	0.5	ND
Bromodichloromethane	0.5	ND
Cis-1,3-Dichloropropene	0.5	ND
trans-1,3-Dichloropropene	0.5	ND
1,1,2-Trichloroethane	0.5	ND
Tetrachloroethene	0.5	ND
Dibromochloromethane	0.5	ND
Chlorobenzene	0.5	ND
Bromoform	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,2-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
Cis-1,2-Dicloroethene	0.5	ND

MDL = Method Detection Limit

ug/kg = parts per billion (ppb)

QA/QC Summary: Daily Standard RPD = <15%

MS/MSD average recovery = 85% :MS/MSD RPD = < 3%

Richard Srna, Ph.D.

Laboratory Director

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JAN 22 1991

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

LABORATORY NO.: 11345-5  
CLIENT: Alton Geoscience  
JOB NO.: 300284 Facility# 91924

DATE SAMPLED: 01/03/91  
DATE RECEIVED: 01/07/91  
DATE ANALYZED: 01/11/91

EPA SW-846 METHOD 801  
HALOGENATED VOLATILE ORGANICS  
SAMPLE: 0191151

Compound	MDL (ug/kg)	RESULTS (ug/kg)
Chloromethane/Vinyl Chloride	1	ND
Bromomethane/Chloroethane	1	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene	0.5	ND
Methylene Chloride	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
Chloroform	0.5	ND
1,1,1-Trichloroethane	0.5	ND
Carbon tetrachloride	0.5	ND
1,2-Dichloroethane	0.5	ND
Trichloroethylene	0.5	ND
1,2-Dichloropropane	0.5	ND
Bromodichloromethane	0.5	ND
Cis-1,3-Dichloropropene	0.5	ND
trans-1,3-Dichloropropene	0.5	ND
1,1,2-Trichloroethane	0.5	ND
Tetrachloroethene	0.5	ND
Dibromochloromethane	0.5	ND
Chlorobenzene	0.5	ND
Bromoform	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,2-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
Cis-1,2-Dichloroethene	0.5	ND

MDL = Method Detection Limit

ug/kg = parts per billion (ppb)

QA/QC Summary: Daily Standard RPD = <15%

MS/MSD average recovery = 85% :MS/MSD RPD = < 3%

Richard Srna, Ph.D.

Laboratory Director

JAN 22 1991

**SUPERIOR ANALYTICAL LABORATORY, INC.**

1555 BURKE, UNIT I · SAN FRANCISCO, CA 94124 · PHONE (415) 647-2081

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

LABORATORY NO.: 11345-11  
CLIENT: Alton Geoscience  
JOB NO.: 300284 Facility# 91924

DATE SAMPLED: 01/03/91  
DATE RECEIVED: 01/07/91  
DATE ANALYZED: 01/11/91

**EPA SW-846 METHOD 8010  
HALOGENATED VOLATILE ORGANICS  
SAMPLE: 0191161**

Compound	MDL (ug/l)	RESULTS (ug/l)
Chloromethane/Vinyl Chloride	1	ND
Bromomethane/Chloroethane	1	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene	0.5	0.8
Methylene Chloride	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
Chloroform	0.5	ND
1,1,1-Trichloroethane	0.5	ND
Carbon tetrachloride	0.5	2
1,2-Dichloroethane	0.5	ND
Trichloroethylene	0.5	ND
1,2-Dichloropropane	0.5	ND
Bromodichloromethane	0.5	ND
Cis-1,3-Dichloropropene	0.5	ND
trans-1,3-Dichloropropene	0.5	ND
1,1,2-Trichloroethane	0.5	ND
Tetrachloroethylene	0.5	ND
Dibromochloromethane	0.5	ND
Chlorobenzene	0.5	ND
Bromoform	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,2-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
Cis-1,2-Dichloroethene	0.5	ND

MDL = Method Detection Limit

ug/l = parts per billion (ppb)

QA/QC Summary: Daily Standard RPD = <15%

MS/MSD average recovery = 85% : MS/MSD RPD = < 3%

Richard Srna, Ph.D.

Laboratory Director

JAN 22 1991

SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

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

LABORATORY NO.: 11345-17  
CLIENT: Alton Geoscience  
JOB NO.: 300284 Facility# 91924

DATE SAMPLED: 01/03/91  
DATE RECEIVED: 01/07/91  
DATE ANALYZED: 01/11/91

EPA SW-846 METHOD 8010  
HALOGENATED VOLATILE ORGANICS  
SAMPLE: 0191171

Compound	MDL (ug/l)	RESULTS (ug/l)
Chloromethane/Vinyl Chloride	1	ND
Bromomethane/Chloroethane	1	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene	0.5	ND
Methylene Chloride	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
Chloroform	0.5	ND
1,1,1-Trichloroethane	0.5	ND
Carbon tetrachloride	0.5	ND
1,2-Dichloroethane	0.5	ND
Trichloroethylene	0.5	ND
1,2-Dichloropropane	0.5	ND
Bromodichloromethane	0.5	ND
Cis-1,3-Dichloropropene	0.5	ND
trans-1,3-Dichloropropene	0.5	ND
1,1,2-Trichloroethane	0.5	ND
Tetrachloroethene	0.5	ND
Dibromochloromethane	0.5	ND
Chlorobenzene	0.5	ND
Bromoform	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,2-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
Cis-1,2-Dicloroethene	0.5	ND

MDL = Method Detection Limit

ug/l = parts per billion (ppb)

QA/QC Summary: Daily Standard RPD = <15%

MS/MSD average recovery = 85% :MS/MSD RPD = < 3%

Richard Srna, Ph.D.

Laboratory Director

OUTSTANDING QUALITY AND SERVICE

JAN 22 1991

SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I · SAN FRANCISCO, CA 94124 · PHONE (415) 647-2081

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

LABORATORY NO.: 11345-6  
CLIENT: Alton Geoscience  
JOB NO.: 300284 Facility# 91924

DATE SAMPLED: 01/03/91  
DATE RECEIVED: 01/07/91  
DATE ANALYZED: 01/11/91

EPA SW-846 METHOD 801  
HALOGENATED VOLATILE ORGANICS  
SAMPLE: 0191181

Compound	MDL (ug/kg)	RESULTS (ug/kg)
Chloromethane/Vinyl Chloride	1	ND
Bromomethane/Chloroethane	1	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene	0.5	ND
Methylene Chloride	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
Chloroform	0.5	ND
1,1,1-Trichloroethane	0.5	ND
Carbon tetrachloride	0.5	ND
1,2-Dichloroethane	0.5	ND
Trichloroethylene	0.5	ND
1,2-Dichloropropane	0.5	ND
Bromodichloromethane	0.5	ND
Cis-1,3-Dichloropropene	0.5	ND
trans-1,3-Dichloropropene	0.5	ND
1,1,2-Trichloroethane	0.5	ND
Tetrachloroethene	0.5	ND
Dibromochloromethane	0.5	ND
Chlorobenzene	0.5	ND
Bromoform	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,2-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
Cis-1,2-Dicloroethene	0.5	ND

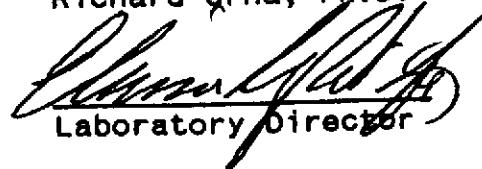
MDL = Method Detection Limit

ug/kg = parts per billion (ppb)

QA/QC Summary: Daily Standard RPD = <15%

MS/MSD average recovery = 85% : MS/MSD RPD = < 3%

Richard Srna, Ph.D.



Laboratory Director

JAN 22 1991

SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

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

LABORATORY NO.: 11345-7  
CLIENT: Alton Geoscience  
JOB NO.: 300284 Facility# 91924

DATE SAMPLED: 01/03/91  
DATE RECEIVED: 01/07/91  
DATE ANALYZED: 01/11/91

EPA SW-846 METHOD 801  
HALOGENATED VOLATILE ORGANICS

SAMPLE: 019284

01/11/91

Compound	MDL (ug/kg)	RESULTS (ug/kg)
Chloromethane/Vinyl Chloride	1	ND
Bromomethane/Chloroethane	1	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene	0.5	ND
Methylene Chloride	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	1
Chloroform	0.5	ND
1,1,1-Trichloroethane	0.5	ND
Carbon tetrachloride	0.5	ND
1,2-Dichloroethane	0.5	ND
Trichloroethylene	0.5	ND
1,2-Dichloropropane	0.5	ND
Bromodichloromethane	0.5	ND
Cis-1,3-Dichloropropene	0.5	ND
trans-1,3-Dichloropropene	0.5	ND
1,1,2-Trichloroethane	0.5	0.9
Tetrachloroethene	0.5	ND
Dibromochloromethane	0.5	ND
Chlorobenzene	0.5	ND
Bromoform	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,2-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
Cis-1,2-Dichloroethene	0.5	ND

MDL = Method Detection Limit

ug/kg = parts per billion (ppb)

QA/QC Summary: Daily Standard RPD = <15%

MS/MSD average recovery = 85% : MS/MSD RPD = < 3%

Richard Srna, Ph.D.

Laboratory Director

229-1512

SF# 11345

Page 1 of 2 Chain-of-Custody-Record

12  
Chevron U.S.A. Inc.  
P.O. BOX 5004  
San Ramon, CA 94583  
Fax (415)842-9591

12  
Chevron Facility Number # 91924  
Facility Address Livermore, Ca.  
Consultant Project Number # 3002-84  
Consultant Name ALTON GEOSCIENCE  
Address 1000 Burnett Ave #140  
Project Contact (Name) Stephan Rosen  
(Phone) 415-682-1582 (Fax Number) 415-682-8921

12  
Chevron Contact (Name) John Randall  
(Phone) 415-842-9625  
Laboratory Name Superior  
Laboratory Address Number  
Samples Collected by (Name) DENNIS VERNON  
Collection Date 1/3 & 1/4/91  
Signature Dennis Vernon

JAN Sample Number	Number of Containers	Matrix S = Soil W = Water	Air Charged A = C =	Type G = Composite C = Discrete D =	Time	Sample Preservation	Load (Yes or No)	Analyses To Be Performed										Remarks
								TEX + TPH CAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (8020)	Chlorinated HC (8010)	Non Chlorinated HC (8020)	Total Lead (AA)	Mobile Octane Pump Test (8020 or AA)				
0191031	6	W	G	11:40	HCl	X	X			X								6X40mL
0191101	6			12:15			X			X								
0191121	6			12:45			X			X								
0191131	6			1:15			X			X								
0191151	6			1:45			X			X								
0191181	6			2:15			X			X								
0191191	6			2:40			X			X								
0191111	6			12:25			X			X								
0191051	6			3:35			X			X								
0191021	6			4:15			X			X								
0191161	6			8:45			X			X								
0191081	6			9:10			X			X								
0191011	6			9:45			X			X								
0191061	6	V	V	10:20			X			X								

12 Released By (Signature) <u>Dennis Vernon</u>	Organization ALTON GEOSCIENCE	Date/Time 1/7/91	Received By (Signature) <u>Don Larson</u>	Organization EXPRESS-IT	Date/Time 1/7/91 12:20	Turn Around Time (Check One) 24 Hrs. 48 Hrs. <input checked="" type="radio"/> 5 Days 10 Days No Contracted
12 Released By (Signature) <u>Don Larson</u>	Organization EXPRESS-IT	Date/Time 1/7/91 14:48	Received By (Signature) <u>Cecilia G. Gregor</u>	Organization EXPRESS-IT	Date/Time 1/7/91 14:18	
12 Released By (Signature) <u>John Randall</u>	Organization EXPRESS-IT	Date/Time 1/7/91 14:48	Registered For Laboratory By (Signature)			

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

Chevron Facility Number # 91924  
Facility Address Livermore  
Consultant Project Number # 300284  
Consultant Name Alton Geosciences  
Address 1000 BURNETT AVE #140  
Project Contact (Name) Stephan Rosed  
(Phone) 415-682-1592 (Fax Number) 415-682-8921

Chevron Contact (Name) John RANDALL  
(Phone) 415-842-9625

Laboratory Name Superior

Laboratory Release Number

Sample Collected by (Name) DENNIS VERNON

Collection Date Y3 + Y4/91

Signature Dennis Vernon

Sample Number	Number of Containers	Matrix	Air	A = Charcoal	C =	Grab Sample	Type	C = Discrete	C =	C =	Time	Sample Preservation	Load (lbs or kg)	Analyses To Be Performed								Remarks
														STED + TPH GAS (6020)	TPH Damp (6015)	Oil and Grease (5520)	Chlorinated HC (6010)	Non Chlorinated HC (6020)	Total Lead (mg)	Nitrate, Cr, Pb, Zn, Ni (6018)		
0191071	6	W	G	1045	HGL	X	X						X									6X40mL
0191091	6			11:25									X									↓
0191171	6			1200									X				X					3X40mL
0191173	3			1210									X									2X40mL
0191002	2			9:00									X									2X40mL
0191004	2	▽	▽	11:30	▽	▽	▽	▽	▽	▽			X									

Please initial:

Samples Stored in ice.

Appropriate containers.

Samples preserved.

VQA's without headspace.

Comments:

Turn Around Time (Circle Choice)	24 Hrs.	48 Hrs.	5 Days	10 Days	As Contracted
Received By (Signature) <u>Dennis Vernon</u>	Organization Alton Geosciences	Date/Time 1/7/91	Received By (Signature) <u>John Carlson</u>	Organization Express-It	Date/Time 1/7/91 12:00
Relinquished By (Signature) <u>John Carlson</u>	Organization Express-It	Date/Time	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature) <u>Don Johnson</u>	Organization Express-It	Date/Time 1/7/91 14:18	Released For Laboratory By (Signature) <u>Debbie G. Johnson</u>	Date/Time 1/7/91 14:18	