



Chevron U.S.A. Products Company

2410 Camino Ramon, San Ramon, California • Phone (510) 842-9500
Mail Address: P.O. Box 5904, San Ramon, CA 94583-0804

11/128

Marketing Department

May 13, 1992

~~Mr. Scott Seery
Alameda County Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621~~

RECEIVED

2:47 pm, May 04, 2009

Alameda County
Environmental Health

Re: Chevron Station # 9-1924, 4904 South Front Street, Livermore, CA

Enclosed groundwater monitoring report for first quarter 1992
Enclosed compliance sampling report for groundwater remediation system
Enclosed Waste Analysis Plan for groundwater remediation system
Enclosed Inspection Schedule for groundwater remediation system
Enclosed Training Documents for groundwater remediation system
Enclosed Contingency Plan for groundwater remediation system
Enclosed copy of letter from Chevron to Alameda County dated March 29, 1991
Enclosed copy of Chevron project manager's informal project note log

Dear Mr. Seery:

I have received your letter dated May 8, 1992. I apologize for any lapses in communication between our offices in the past, and with this letter I hope to facilitate an improvement in this critical area. In response to your requests, I have enclosed several documents regarding the remediation and monitoring of the subject site. If you would like additional information, please let me know and I'll be glad to help.

Enclosed you will find a groundwater monitoring report dated April 27, 1992, which was prepared by Chevron's consultant, Alton Geoscience (Alton), to describe the results of monitoring performed on April 6, 1992. During this monitoring event, Alton measured the elevation of groundwater and collected groundwater samples from each of the wells at the site. Samples were analyzed for the presence of total purgeable hydrocarbons in the gasoline range (TPHG) and for benzene, toluene, ethylbenzene, and total xylenes (BTEX).

Following five years of monitoring the nineteen site wells quarterly from 1986 to 1991, during which time the groundwater gradient direction and the concentrations of dissolved gasoline constituents had been thoroughly characterized, Chevron proposed reducing the frequency of groundwater monitoring to semi-annual in a letter to Alameda County dated March 29, 1991 (enclosed). No response to this proposal was received from Alameda County, so Chevron went ahead and enacted the proposed change. Your letter of May 8, 1992 indicated that you do not concur with the sampling frequency currently in place. Accordingly, I have instructed Chevron's consultant, Alton Geoscience (Alton), to recommence quarterly monitoring of the site. Alton will report the results to Chevron quarterly, and Chevron will forward copies of the reports to the appropriate regulatory agencies.

Mr. Scott Seery
May 13, 1992
Page 2

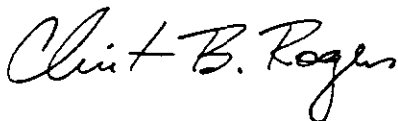
Several of the groundwater monitoring wells are located in close proximity to other wells. I would appreciate if Alameda County would consider allowing Chevron to reduce the sampling frequency of some of the wells at the site. This would make the monitoring much more cost efficient without sacrificing the quality of the monitoring data. As it is, with nineteen wells sampled every quarter, the laboratory analyses alone will cost over \$6,500 per year. Chevron will not enact a frequency reduction without permission from Alameda County or the San Francisco Bay Regional Water Control Board (SFBRWQCB), but Chevron would appreciate a reasonably prompt reply regarding this request.

In regard to your questions concerning the groundwater remediation system at the site, I have enclosed the most recent discharge compliance report as well as packages of information which describe the system and its operation. Due to the tight geology of the subsurface, significant groundwater flow rates were not possible. When the system shut down in December 1990 due to scaling problems, Chevron decided against restarting the system due to its marginal continued benefit to the remediation of the site. Chevron decided to enact verification monitoring to insure that the remaining dissolved hydrocarbons do not pose a threat to public health or safety during their natural biodegradation process.

In an attempt to aid your understanding of Chevron's environmental activities at this site, I have enclosed a copy of my informal project note log, which I began during my initial review of Chevron's files pertaining to this site. The enclosed log is current through today, May 13, 1992. The log is not meant to be used for any purpose other than a quick index of the general activities which have transpired. The entries are handwritten using acronyms, abbreviations, and broken language for my convenience.

I hope the information enclosed is helpful. If you have any questions or comments, I can be reached at (510) 842-8658.

Sincerely,



Clint B. Rogers
Engineer, Site Assessment and Remediation

Enclosures

cc: (w/o enclosures)
Eddie So, San Francisco Bay RWQCB, Oakland, CA
Jeanne Price, 213 Del Mesa Carmel, Carmel, CA 93921
John DeGeorge, Alton Geoscience, Pleasanton, CA
Ed Hoepker, Mobil Oil, 836-B Southampton, Suite 300, Benicia, CA 94510
Peter DeSantis, BP Oil, 2868 Prospect Park Dr., Suite 360, Rancho Cordova, CA 95670

April 27, 1992

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

31-0284

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

Dear Mr. Rogers:

In accordance with our agreement, Alton Geoscience transmits this Semiannual Ground Water Monitoring and Sampling Report for Chevron Station No. 9-1924, 4904 Southfront Road, Livermore, California. Figure 1 shows the site location.

Monitoring and sampling of the ground water monitoring wells was performed on April 6, 1992, in accordance with the requirements and procedures of the California Regional Water Quality Control Board (RWQCB) and local regulatory agencies.

FIELD PROCEDURES

Prior to purging and sampling the wells, each well was checked for liquid-phase hydrocarbons or sheen. The depth to ground water and, if present, free product 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. Clint Rogers
April 27, 1992
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31-0284

SAMPLING AND ANALYTICAL RESULTS

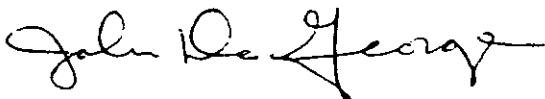
The results of the monitoring and laboratory analyses of ground water samples for this quarter, as well as the results of previous monitoring and sampling events, are summarized in Table 1. Based on the previous wellhead elevation survey data and depth to water measurements collected during this monitoring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

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

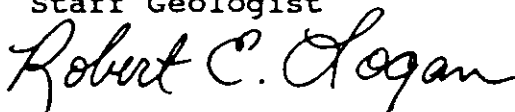
Please call John De George at (510) 734-8134 if you have any questions regarding this report.

Sincerely,

ALTON GEOSCIENCE,



John De George
Staff Geologist



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

wp91924jd

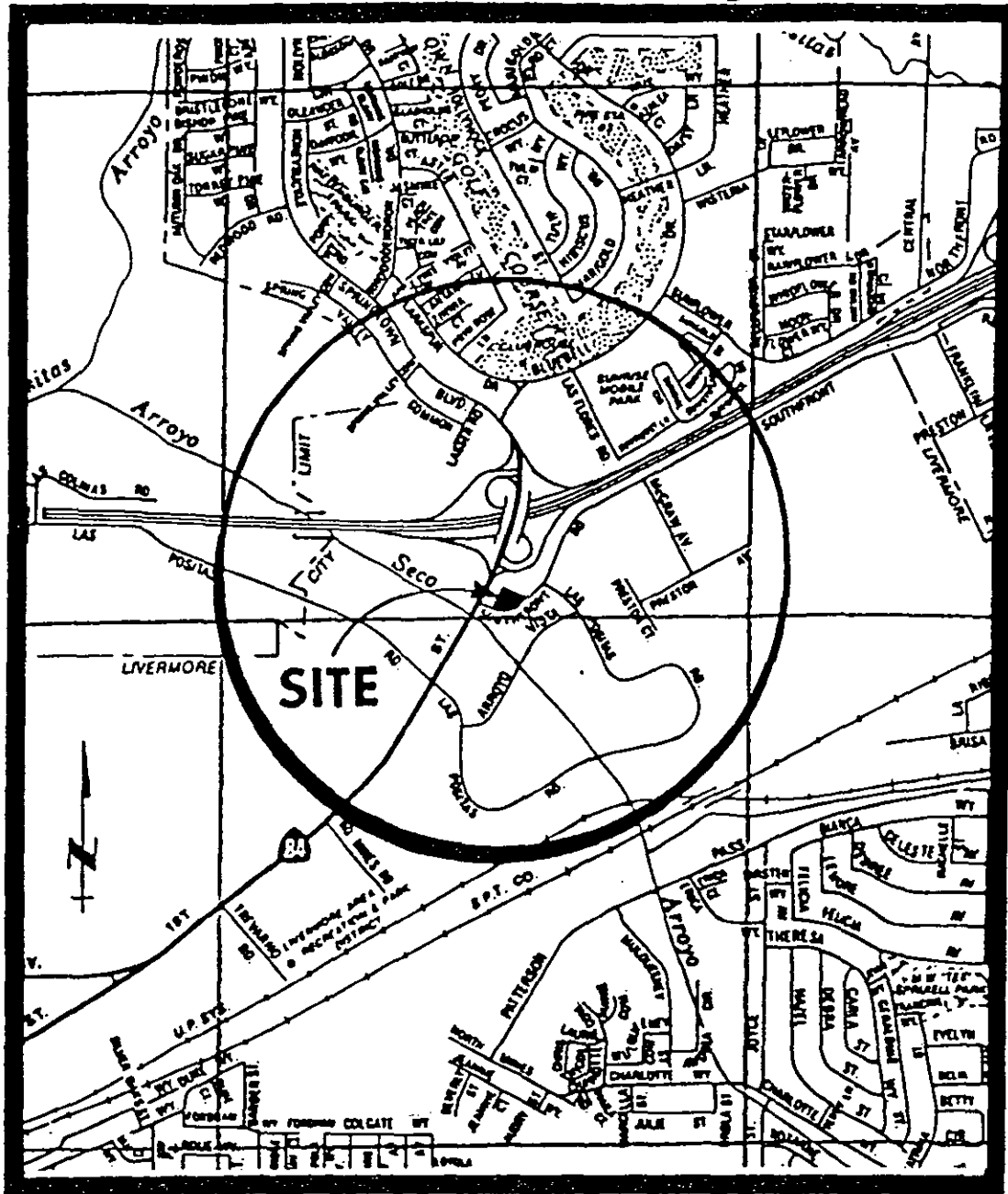



FIGURE 1. SITE VICINITY MAP

NOT TO SCALE

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

PROJECT NO. 31-0284

SOURCE: WESTERN GEOLOGIC RESOURCES, INC.



ALTON GEOSCIENCE
 Pleasanton, California

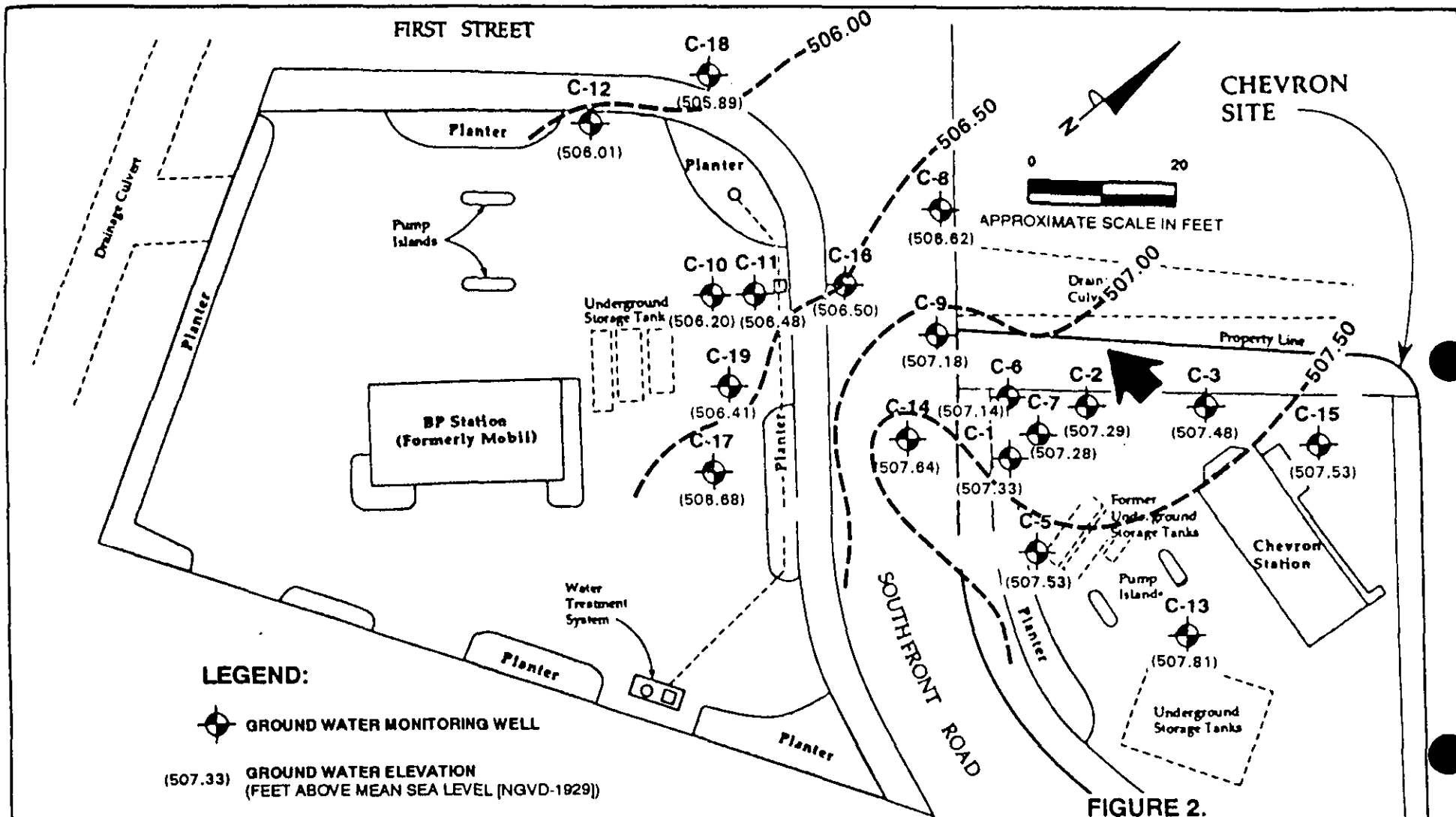


FIGURE 2.

**GROUND WATER
ELEVATION
CONTOUR MAP**

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



ALTON GEOSCIENCE
Pleasanton, California

Table 1
 Summary of Results of Ground Water Sampling
 Chevron Service Station #7-1924
 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-DCA	OTHER	MC	1,1,1-TCA	1,1-DCA	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	---	---	---	---	---	---	GTE
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	---	---	---	---	---	CCA
C-10	04-10-89	520.39	13.65	506.74	4000	---	100	ND(5	60	50	ND(5	---	---	---	---	---	CCA
C-1	06-26-89	520.39	13.94	506.45	600	ND(3.0	97	20	60	50	3	---	---	---	---	---	NA
C-10	06-26-89	520.39	13.94	506.45	570	---	86	15	44	35	1.7	---	---	---	---	---	CCA
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	---	PAC1
C-1	09-29-90	520.39	13.93	506.46	350	---	19	1.2	32	31	ND(0.5	ND!	0.7*	1.4	ND(0.5	---	PAC1
C-1	01-03-91	520.39	13.85	506.54	400	---	12	ND(0.5	17	14	ND(0.5	ND!	ND(0.5	ND(0.5	ND(0.5	ND(0.5	SAL
C-1	04/12/91	520.39	13.51	506.88	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-1	09/04/91	520.39	14.10	506.29	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-1	04/06/92	520.39	13.06	507.33	1000	---	12	0.8	31	31	ND(0.5	ND!	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 #9-1124
 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	i	E	X	1,2-DCA	OTHER	MC	1,1,1-TCA	1,1-DCA	PCE	LAB
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	1400	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)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	---	---	---	---	---	---	BC
C-2	01-01-89	520.76	12.83	507.93	---	---	---	---	---	---	---	---	---	---	---	---	NA
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	18	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)	14	17	1	---	---	---	---	---	SAL
C-2	05-08-90	520.76	14.28	506.48	340	---	1.3	2.7	8.4	11	1.1	---	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	1.8	ND(0.5)	ND!	1.7*	0.5	ND(0.5)	---	PACE
C-2	01-03-91	520.76	14.15	506.61	2000	---	270	ND(3)	74	93	ND(0.5)	ND!	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	SAL
C-2	04/12/91	520.76	13.86	506.90	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-2	09/04/91	520.76	14.50	506.26	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-2	04/06/92	520.76	13.47	507.29	1200	---	ND(0.5)	ND(0.5)	54	6.1	ND(0.5)	ND!	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	TOG	B	T	E	X	1,2-DCA	OTHER	MC	1,1,1-TCA	1,1-DCA	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	8	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)	---	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(500)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	0.7	---	ND(0.5)	---	ND(0.5)	---	PACE
C-3	09-27-90	521.31	14.67	506.64	71	---	ND(0.5)	1.0	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	1.1*	1.6	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-3	04/12/91	521.31	14.23	507.08	98	---	ND(0.5)	ND(0.5)	1.6	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	SAL
C-3	09/04/91	521.31	14.88	506.43	64	---	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-3	04/06/92	521.31	13.83	507.48	88	---	ND(0.5)	ND(0.5)	0.8	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	27	9*	---	---	---	---	---	---	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	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-5	01-12-89	---	---	---	ND(1000)	---	42	3	44	52	---	---	---	---	---	---	SAL
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	---	---	---	---	---	CCAS
C-5	06-26-89	520.82	14.14	506.68	420	ND(3.0)	7.6	0.8	46	56	1.5	---	---	---	---	---	CCAS
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)	---	---	---	---	---	SAL
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)	---	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
C-5	04/12/91	520.82	13.71	507.11	270	---	12	ND(0.5)	19	7	0.5	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	SAL
C-5	09/04/91	520.82	14.30	506.52	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)	SAL
C-5	04/06/92	520.82	13.29	507.53	670	---	12	ND(0.5)	40	ND(0.5)	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 # 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	TQG	B	T	E	X	1,2-DCA	OTHER	MC	1,1,1-TCA	1,1-DCA	PCE	LAB
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	---	---	---	---	---	---	GTEL
C-6	06-10-88	519.62	14.11***	505.51	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-6	07-25-88	519.62	12.95	506.67	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-6	10-13-88	519.62	13.14	506.48	5300	---	300	600	260	1600	---	---	---	---	---	---	BC
C-6	01-01-89	519.62	12.14	507.48	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-6	01-12-89	---	---	---	5000	---	260	110	270	720	---	---	---	---	---	---	SAL
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	---	---	---	---	---	CCAS
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	---	---	---	---	---	SAL
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	---	58	210	260	2100	1.0	ND!	ND(0.5	2.4	1.6	---	PACE
C-6	01-03-91	519.62	13.19	506.43	2300	---	4	79	59	380	0.5	ND!	ND(0.5	ND(0.5	ND(0.5	ND(0.5	SAL
C-6	04/12/91	519.62	12.91	506.71	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-6	09/04/91	519.62	13.56	506.06	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-6	04/06/92	519.62	12.48	507.14	44000	---	ND(5	120	740	3400	ND(0.5	ND!	ND(0.5	ND(0.5	ND(0.5	ND(0.5	SAL
C-7	03-28-86	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	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-7	10-13-88	520.30	13.61	506.69	16000	---	4400	220	1000	3000	---	---	---	---	---	---	BC
C-7	01-01-89	520.30	12.66	507.64	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-7	01-12-89	---	---	---	8000	---	950	47	670	640	---	---	---	---	---	---	SAL
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	---	---	---	---	---	CCAS
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	---	---	---	---	---	SAL
C-7	05-08-90	520.30	13.85	506.45	3500	---	1100	15	110	140	1.7	---	ND(0.5	---	ND(0.5	---	PACE
C-7	09-29-90	520.30	13.80	506.50	2400	---	580	ND(10	46	68	0.7	ND!	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!	ND(0.5	ND(0.5	ND(0.5	ND(0.5	SAL
C-7	04/12/91	520.30	13.46	506.84	2300	---	190	1	81	67	0.6	ND!	ND(0.5	ND(0.5	ND(0.5	ND(0.5	SAL
C-7	09/04/91	520.30	14.09	506.21	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-7	10/07/91	520.30	---	---	4700	---	170	1.9	97	59	ND(0.5	ND!	24	ND(0.5	ND(0.5	ND(0.5	SAL
C-7	04/06/92	520.30	13.02	507.28	2400	---	95	0.8	110	100	ND(0.5	ND!	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 # 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	F	X	1,2- OCA	OTHER	MC	1,1,1- TCA	1,1- OCA	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	---	---	---	---	---	---	GTEL
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	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-8	10-13-88	519.74	13.78	505.96	ND<1000	---	6	5.3	ND<0.5	ND<0.5	---	---	---	---	---	---	BC
C-8	01-01-89	519.74	12.68	507.06	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-8	01-12-89	---	---	---	ND<1000	---	37	4	1	5	---	---	---	---	---	---	SAL
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	---	4	---	---	---	---	---	CCAS
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	---	---	---	---	---	SAL
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!	0.6*	ND<0.5	ND<0.5	---	PACE
C-8	01-03-91	519.74	13.81	505.93	67	---	2	2	ND<0.5	2	ND<0.5	ND!	0.7	ND<0.5	ND<0.5	ND<0.5	SAL
C-8	04/12/91	519.74	13.60	506.14	180	---	4	ND<0.5	ND<0.5	ND<0.5	0.6	ND!	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-8	09/04/91	519.74	14.14	505.60	140	---	1.8	4.7	0.8	4.8	ND<0.5	ND!	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-8	04/06/92	519.74	13.12	506.62	150	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND!	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
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	---	---	---	---	---	---	GTEL
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	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-9	10-13-88	519.52	13.13	506.39	2200	---	57	8	20	150	---	---	---	---	---	---	BC
C-9	01-01-89	519.52	12.19	507.33	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-9	01-12-89	---	---	---	2000	---	39	12	51	46	---	---	---	---	---	---	SAL
C-9	04-12-89	519.52	13.11	506.41	6000	ND<3.0	16	20	55	240	2.1	---	---	---	---	---	CCAS
C-9	04-11-89	519.52	13.11	506.41	6000	---	14	25	45	240	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	---	---	---	---	---	CCAS
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	---	---	---	---	---	SAL
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!	0.7*	1.8	1.0	---	PACE
C-9	01-03-91	519.72	13.28	506.44	3200	---	ND<3	ND<3	32	140	0.8	ND!	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-9	04/12/91	519.72	13.00	506.72	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-9	09/04/91	519.72	13.61	506.11	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-9	04/06/92	519.72	12.54	507.18	2800	---	ND<0.5	ND<0.5	33	130	ND<0.5	ND!	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 # 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	I	E	X	1,2-DCA	OTHER	MC	1,1,1-TCA	1,1-DCA	PCE	LAB
C-10	03-28-86	520.41	---	---	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-10	03-15-88	520.41	14.86	505.55	90	---	7	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	---	---	---	---	---	---	---	---	---	---	---	---	NA
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	---	---	---	---	---	---	BC
C-10	01-01-89	520.41	14.83	505.58	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-10	01-12-89	---	---	---	ND<1000	---	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	---	---	---	---	---	SAL
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	---	---	---	---	---	CCAS
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	3	---	---	---	---	---	SAL
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	---	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!	1.2*	ND<0.5	ND<0.5	---	PACE
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!	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-10	04/12/91	520.41	14.86	505.55	110	---	16	ND<0.5	2.9	2.7	1	ND!	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-10	09/04/91	520.41	15.22	505.19	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND!	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-10	04/06/92	520.41	14.21	506.20	57 !!	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.1	ND!	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	---	---	---	---	---	---	---	---	---	---	---	---	NA
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	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-11	01-12-89	---	---	---	ND<1000	---	ND<0.3	0.8	ND<0.3	ND<0.3	---	---	---	---	---	---	SAL
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<0.2	---	---	---	---	---	CCAS
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	---	---	---	---	---	SAL
C-11	01-03-90	520.04	14.61	505.43	ND<500	---	ND<0.5	ND<0.5	ND<0.5	0.7	ND<0.5	---	---	---	---	---	SAL
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	---	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!	1.2*	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!	ND<0.5	ND<0.5	ND<0.5	1	SAL
C-11	04/12/91	520.04	14.30	505.74	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-11	09/04/91	520.04	14.84	505.20	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-11	04/06/92	520.04	13.56	506.48	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND!	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 #71924
 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	TGG	B	T	E	x	1,2-DCA	OTHER	MC	1,1,1-ICA	1,1-DCA	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	---	---	---	---	---	---	---	---	---	---	---	---	NA
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)	---	---	---	---	---	---	BC
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)	---	---	---	---	---	---	SAL
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(0.4)	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(2.0)	ND(2.0)	ND(0.2)	---	---	---	---	---	CCAS
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)	0.6	ND(0.5)	---	---	---	---	---	SAL
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)	---	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(1.2)	---	ND(0.5)	ND(0.5)	---	PACE
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)	SAL
C-12	04/12/91	519.82	14.52	505.30	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-12	09/04/91	519.82	14.83	504.99	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-12	04/06/92	519.82	13.81	506.01	ND(50)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	---	ND(0.5)	ND(0.5)	ND(0.5)	SAL
C-13	03-28-86	522.24	12.95	509.29	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-13	03-15-88	522.24	14.82	507.42	250	---	2	ND(0.5)	9	3	---	---	---	---	---	---	GTEL
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	---	---	---	---	---	---	---	---	---	---	---	---	NA
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)	---	---	---	---	---	---	BC
C-13	01-01-89	522.24	14.10	508.14	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-13	01-12-89	---	---	---	ND(1000)	---	ND(0.3)	0.6	4	ND(0.3)	---	---	---	---	---	---	SAL
C-13	04-10-89	522.24	14.99	507.25	ND(100)	ND(3.0)	ND(0.2)	ND(0.2)	8	ND(0.4)	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(0.2)	---	---	---	---	---	CCAS
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)	---	---	---	---	---	SAL
C-13	01-03-90	522.24	15.15	507.09	ND(500)	---	ND(0.5)	ND(0.5)	0.5	0.6	ND(0.5)	---	---	---	---	---	SAL
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)	---	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(1.7)	---	ND(0.5)	ND(0.5)	---	PACE
C-13	01-03-91	522.24	15.08	507.16	ND(50)	---	ND(0.5)	ND(0.5)	ND(0.5)	0.6	ND(0.5)	ND(0.5)	---	ND(0.5)	ND(0.5)	ND(0.5)	SAL
C-13	04/12/91	522.24	14.77	507.47	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-13	09/04/91	522.24	15.43	506.81	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-13	04/06/92	522.24	14.43	507.81	66 !!	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	---	ND(0.5)	ND(0.5)	ND(0.5)	SAL

Table 1
 Summary of Results of Ground Water Sampling
 Chevron Service Station #9-1724
 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	I	E	X	1,2-DCA	OTHER	MC	1,1,1-TCA	1,1-DCA	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	18	---	---	---	---	---	---	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	---	---	---	NS	---	ND	ND	ND	ND	---	---	---	---	---	---	NA
C-14	04-12-89	520.08	13.47	506.61	NS	ND	ND	ND	ND	ND	ND	---	---	---	---	---	NA
C-14	06-26-89	520.08	13.80	506.28	140000	---	14000	25000	3400	26000	30	---	---	---	---	---	NA
C-14G	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	1600	13000	25	3	---	---	---	---	SAL
C-14G	01-04-90	520.08	13.91	506.17	76000	---	3900	8100	1200	7700	18	1	---	---	---	---	SAL
C-14	05-08-90	520.08	13.89	506.19	62000	---	7500	17000	1400	14000	13	---	ND<0.5	---	ND<0.5	---	PAGE
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-14	04/12/91	520.08	12.97	507.11	60000	---	750	3800	720	9200	ND<0.5	ND!	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-14###	09/04/91	520.08	13.84	506.24	110000	---	2800	11000	1300	13000	---	---	---	---	---	---	SAL
C-14	04/06/92	520.08	12.44	507.64	41000	---	190	1800	440	5100	ND<0.5	ND!	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
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	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-15	10-13-88	522.41	15.33	507.08	ND<1000	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---	---	---	BC
C-15	01-01-89	522.41	13.70	508.71	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-15	01-12-89	---	---	---	ND<1000	---	ND<0.3	ND<0.3	ND<0.3	ND<0.3	---	---	---	---	---	---	SAL
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<0.4	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	---	---	---	---	---	CCAS
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	---	---	---	---	---	SAL
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	---	PAGE
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	ND!	2.9*	ND<0.5	ND<0.5	---	PAGE
C-15	01-03-91	522.41	15.50	506.91	ND<50	---	ND<0.5	ND<0.5	ND<0.5	0.6	ND<0.5	ND!	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-15	04/12/91	522.41	15.21	507.20	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-15	09/04/91	522.41	15.90	506.51	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-15	04/06/92	522.41	14.88	507.53	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND!	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 1224
 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	F	E	X	1,2-OCA	OTHER	MC	1,1,1-ICA	1,1-DCA	PCE	LAB
C-16	03-28-86	519.68	---	---	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-16	03-15-88	519.68	---	---	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-16	05-10-88	519.68	13.78	505.90	4500	---	1000	73	140	180	---	---	---	---	---	---	STEL
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	5.3	ND(1.0)	16	---	---	---	---	---	---	BC
C-16	01-01-89	519.68	13.45	506.23	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-16	01-12-89	---	---	---	1000	---	360	11	78	51	---	---	---	---	---	---	SAL
C-16	04-11-89	519.68	13.78	505.90	15800	ND(3.0)	130	4	1	17	8	---	---	---	---	---	CCAS
C-16	06-26-89	519.68	14.02	505.66	1300	ND(3.0)	170	8	37	43	ND(1.0)	---	---	---	---	---	CCAS
C-16	10-13-89	519.68	14.01	505.67	1000	ND(5)	20	ND(5)	---	ND(5)	ND(5)	---	---	---	---	---	SAL
C-16	01-03-90	519.68	13.97	505.71	1300	---	150	3	41	24	5	---	---	---	---	---	SAL
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)	---	PAGE
C-16	09-29-90	519.68	14.32	505.36	360	---	18	2.1	11	6.0	1.8	ND(	ND(0.5)	ND(0.5)	ND(0.5)	---	PAGE
C-16	01-03-91	519.68	13.96	505.72	230	---	12	ND(0.5)	6	4	2	ND(	0.8	ND(0.5)	ND(0.5)	ND(0.5)	SAL
C-16	04/12/91	519.68	13.74	505.94	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-16	09/04/91	519.68	14.22	505.46	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-16	04/06/92	519.68	13.18	506.50	360	---	30	ND(0.5)	14	12	1.0	ND(	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 #1724
 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	1PH-G	10G	B	I	E	X	1,2-DCA	OTHER	MC	1,1,1-TCA	1,1-DCA	PCE	LAB
C-17	03-28-86	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	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-17	10-13-88	520.82	14.83	505.99	270000	---	18	300	700	5500	---	---	---	---	---	---	BC
C-17	01-01-89	520.82	14.78	506.04	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-17	01-12-89	---	---	---	190000	---	ND(15	490	2100	6700	---	---	---	---	---	---	SAL
C-17	04-11-89	520.82	14.83	506.06	27000	6.0	30	150	300	1000	ND(10	---	---	---	---	---	CCAS
C-17	06-26-89	520.82	15.03	505.79	20000	ND(3.0	50	390	600	2000	ND(10	---	---	---	---	---	CCAS
C-17D	06-26-89	520.82	15.03	505.79	27000	---	40	420	740	2200	ND(10	---	---	---	---	---	CCAS
C-17	10-13-89	520.82	15.02	505.80	17000	ND(5	ND(25	46	270	480	ND(25	---	---	---	---	---	SAL
C-17	01-03-90	520.82	15.10	505.72	14000	---	ND(0.3	29	100	210	ND(0.5	---	---	---	---	---	SAL
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	---	PAGE
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!	ND(0.5	1.9	ND(0.5	---	PAGE
C-17D	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!	ND(0.5	1.9	ND(0.5	---	PAGE
C-17	01-03-91	520.82	14.92	505.90	3700	---	ND(0.5	28	56	140	ND(0.5	ND!	1.8*	1.9	ND(0.5	ND(0.5	PAGE
C-17D	01-03-91	520.82	14.92	505.90	8600	---	ND(3	10	59	150	ND(0.5	ND!	ND(0.5	ND(0.5	ND(0.5	ND(0.5	SAL
C-17	04/12/91	520.82	14.71	506.11	8600	---	ND(5 **	5	47	120	ND(0.5	ND!	ND(0.5	ND(0.5	ND(0.5	ND(0.5	SAL
C-17D	04/12/91	520.82	14.71	506.11	4400	---	ND(5 **	11	46	120	ND(0.5	ND!	ND(0.5	ND(0.5	ND(0.5	ND(0.5	SAL
C-17	09/04/91	520.82	15.17	505.65	5800	---	ND(5 **	27	49	79	ND(0.5	ND!	ND(0.5	ND(0.5	ND(0.5	ND(0.5	SAL
C-17D	09/04/91	520.82	15.17	505.65	4100	---	ND(5 **	21	36	61	ND(0.5	ND!	ND(0.5	ND(0.5	ND(0.5	ND(0.5	SAL
C-17	04/06/92	520.82	14.14	506.68	2300	---	ND(0.5	5.8	27	29	ND(0.5	ND!	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 1724
 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	TQG	B	T	E	X	1,2-DCA	OTHER	MC	1,1,1-TCA	1,1-DCA	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	---	---	---	---	---	---	BC
C-18	01-01-89	518.96	13.94	505.02	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-18	01-12-89	---	---	---	ND(1000	---	ND(0.3	ND(0.3	ND(0.3	ND(0.3	---	---	---	---	---	---	SAL
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(0.0	ND(2.0	3.1	---	---	---	---	---	CCAS
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	1	---	---	---	---	---	SAL
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	---	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(	0.6*	ND(0.5	ND(0.5	---	PACE
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(	ND(0.5	ND(0.5	ND(0.5	ND(0.5	SAL
C-18	04/12/91	518.96	13.83	505.13	ND(50	---	ND(0.5	ND(0.5	ND(0.5	ND(0.5	ND(0.5	ND(	ND(0.5	ND(0.5	ND(0.5	ND(0.5	SAL
C-18	09/04/91	518.96	14.20	504.76	ND(50	---	ND(0.5	ND(0.5	ND(0.5	ND(0.5	ND(0.5	ND(	ND(0.5	ND(0.5	ND(0.5	ND(0.5	SAL
C-18	04/06/92	518.96	13.07	505.89	ND(50	---	ND(0.5	ND(0.5	ND(0.5	ND(0.5	ND(0.5	ND(	ND(0.5	ND(0.5	ND(0.5	ND(0.5	SAL
C-19	03-28-86	520.99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-19	03-15-88	520.99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-19	05-10-88	520.99	15.23	505.76	18	---	1400	360	350	1300	---	---	---	---	---	---	GTEL
C-19	06-10-88	520.99	16.58	504.41	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-19	07-25-88	520.99	15.19	505.80	---	---	---	---	---	---	---	---	---	---	---	---	NA
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	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-19	01-12-89	---	---	---	ND(1000	---	5	4	ND(0.3	ND(0.3	---	---	---	---	---	---	SAL
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	---	3.2	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	---	---	---	---	---	CCAS
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	---	---	---	---	---	SAL
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	4.6	---	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(	1.2*	ND(0.5	ND(0.5	---	PACE
C-19	01-03-91	520.99	15.56	505.43	66	---	ND(0.5	ND(0.5	ND(0.5	ND(0.5	1	ND(	ND(0.5	ND(0.5	ND(0.5	0.9	SAL
C-19	04/12/91	520.99	15.20	505.79	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-19	09/04/91	520.99	15.60	505.39	---	---	---	---	---	---	---	---	---	---	---	---	NA
C-19	04/06/92	520.99	14.58	506.41	110	---	0.7	ND(0.5	1.0	ND(0.5	1.9	ND(	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 # 1114
 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-DCA	OTHER	MC	1,1,1-TCA	1,1-DCA	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)	---	---	---	---	---	---	PACE
TB	01-03-91	NA	NA	NA	ND(50)	---	ND(0.5)	ND(0.5)	ND(0.5)	0.8	---	---	---	---	---	---	SAL
TB	04/12/91	NA	NA	NA	ND(50)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	---	---	---	---	---	---	SAL
TB	09/04/91	NA	NA	NA	ND(50)	---	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	---	---	---	---	---	---	SAL
TB	04/06/92	NA	NA	NA	ND(50)	---	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)	---	---	---	---	---	---	PACE
RINSATE	01-03-91	NA	NA	NA	ND(50)	---	ND(0.5)	ND(0.5)	ND(0.5)	0.6	---	---	---	---	---	---	SAL
RINSATE	04/12/91	NA	NA	NA	ND(50)	---	ND(0.5)	0.6	ND(0.5)	0.5	---	---	---	---	---	---	SAL
RINSATE	09/04/91	NA	NA	NA	ND(50)	---	ND(0.5)	0.6	ND(0.5)	0.5	---	---	---	---	---	---	SAL
RINSATE	04/06/92	NA	NA	NA	ND(50)	---	ND(0.5)	0.7	ND(0.5)	0.6	---	---	---	---	---	---	SAL

EXPLANATION OF ABBREVIATIONS:

TPH-G	: Total Petroleum Hydrocarbons as Gasoline (EPA method 8015 modified)	---	: Not Analyzed/Not Measured	OTHER	.5 ppb Carbon Disulfide detected in C-1 on 10-13-89.
TOG	: Total Oil & Grease (EPA Method 503D & 503E)	NA	: Not Applicable/Not Available		3 ppb Vinyl Chloride detected in C-14 on 1-3-90.
B	: Benzene (EPA method 8020 or 8240)	ND	: Not Detected		1 ppb Vinyl Chloride detected in C-14 on 1-4-90.
T	: Toluene (EPA method 8020 or 8240)	TB	: Trip Blank		13 ppb Carbon Disulfide detected in C-19 on 10-13-89.
E	: Ethylbenzene (EPA method 8020 or 8240)	D	: Duplicate		Probable laboratory contamination.
X	: Xylenes (EPA method 8020 or 8240)	GTEL	: GTEL Laboratory	**	Not sampled due to insufficient water in well.
1,2-DCA	: 1,2-Dichloroethane	BC	: Brown & Caldwell Laboratory	***	0.01 feet L-PH measured.
MC	: Methylene Chloride	SAL	: Superior Analytical Laboratory	#	Sheen observed.
TCA	: 1,1,1-Trichloroethane	CCAS	: CCAS Laboratory	##	Diluted 1:10.
1,1-DCA	: 1,1-Dichloroethane	PACE	: PACE Laboratory	###	Insufficient water in well for EPA 8010 analysis, only 1 and 1/2 40-ml VOA's sampled.
PCE	: Tetrachloroethene	C-146	: Grab sample.	'	see laboratory reports for various detection limits.
				!!	Non-typical gasoline pattern observed in chromatogram.

Monitoring Wells C-3, C-5, C-7, C-8, C-10, C-14, C-17, and C-18 sampled semiannually, 1st and 3rd quarter.
 Monitoring Wells C-1, C-2, C-6, C-9, C-11, C-12, C-13, C-15, C-16, and C-19 sampled annually, 1st quarter.

Note: Top of casing and ground water elevations are expressed as feet above mean sea level (NGVD-1929).

APPENDIX A
OFFICIAL LABORATORY RESULTS
AND
CHAIN OF CUSTODY FORMS



CERTIFICATE OF ANALYSIS

LABORATORY NO.: 12972
CLIENT: Alton Geoscience
CLIENT JOB NO.: 31-0284

DATE RECEIVED: 04/07/92
DATE REPORTED: 04/14/92

Table with 4 columns: Lab Number, Customer Sample Identification, Date Sampled, Date Analyzed. Rows 1-10.

Summary row for Laboratory Number: 12972 (1-5)

ANALYTE LIST table for samples 1-5 with columns for analyte and amounts/limits.

Summary row for Laboratory Number: 12972 (6-10)

ANALYTE LIST table for samples 6-10 with columns for analyte and amounts/limits.



CERTIFICATE OF ANALYSIS

LABORATORY NO.: 12972
CLIENT: Alton Geoscience
CLIENT JOB NO.: 31-0284

DATE RECEIVED: 04/07/92
DATE REPORTED: 04/14/92

Table with 4 columns: Lab Number, Customer Sample Identification, Date Sampled, Date Analyzed. Rows 12972-11 to 12972-20.

Summary table for Laboratory Number 12972, samples 11-15.

ANALYTE LIST table for samples 11-15, listing OIL AND GREASE, TPH/GASOLINE RANGE, etc.

Summary table for Laboratory Number 12972, samples 16-20.

ANALYTE LIST table for samples 16-20, listing OIL AND GREASE, TPH/GASOLINE RANGE, etc.



CERTIFICATE OF ANALYSIS

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 3 of 3
QA/QC INFORMATION
SET: 12972

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: 10/12/91

SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Water: 0.5ug/L
Standard Reference: 04/03/92

Table with 6 columns: ANALYTE, REFERENCE, SPIKE LEVEL, MS/MSD RECOVERY, RPD, CONTROL LIMIT. Rows include Oil & Grease, Diesel, Gasoline, Benzene, Toluene, Ethyl Benzene, and Total Xylene.

* Gasoline range concentration reported. A non-typical gasoline pattern was observed in the chromatogram.

Richard Srna, Ph.D.
Cecilia Donguon (for)
Laboratory Director



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

LABORATORY NO.: 12972-15
CLIENT: Alton Geoscience
JOB NO.: 31-0284

DATE SAMPLED: 04/06/92
DATE RECEIVED: 04/07/92
DATE ANALYZED: 04/07/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE: C-1

Compound	MDL (ug/L)	RESULTS (ug/L)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	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/L = parts per billion (ppb)

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

MS/MSD average recovery = 104 % :MS/MSD RPD = 3.6 %

Richard Srna, Ph.D.

Cecilia G. Joergin (for)
Laboratory Director



CERTIFICATE OF ANALYSIS

LABORATORY NO.: 12972-12
CLIENT: Alton Geoscience
JOB NO.: 31-0284

DATE SAMPLED: 04/06/92
DATE RECEIVED: 04/07/92
DATE ANALYZED: 04/07/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE:C-2

Table with 3 columns: Compound, MDL (ug/L), and RESULTS (ug/L). Lists various organic compounds and their detection limits and results.

MDL = Method Detection Limit

ug/L = parts per billion (ppb)

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

MS/MSD average recovery = 104 % :MS/MSD RPD = 3.6 %

Richard Srna, Ph.D.

Cecilia G. Jorgensen (for)
Laboratory Director



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

LABORATORY NO.: 12972-3
CLIENT: Alton Geoscience
JOB NO.: 31-0284

DATE SAMPLED: 04/06/92
DATE RECEIVED: 04/07/92
DATE ANALYZED: 04/07/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE: C-3

Compound	MDL (ug/L)	RESULTS (ug/L)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	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/L = parts per billion (ppb)

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

MS/MSD average recovery = 104 % :MS/MSD RPD = 3.6 %

Richard Srna, Ph.D.

Cecilia G. Jorgensen (for)
Laboratory Director



CERTIFICATE OF ANALYSIS

LABORATORY NO.: 12972-10
CLIENT: Alton Geoscience
JOB NO.: 31-0284

DATE SAMPLED: 04/06/92
DATE RECEIVED: 04/07/92
DATE ANALYZED: 04/07/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE: C-5

Compound	MDL (ug/L)	RESULTS (ug/L)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	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/L = parts per billion (ppb)

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

MS/MSD average recovery = 104 % :MS/MSD RPD = 3.6 %

Richard Srna, Ph.D.

Cecilia J. Jorgensen (for)
Laboratory Director



Superior Precision Analytical, Inc.

1175 Highway 101 • San Jose, CA 95128 • (415) 847-7777 • Fax (415) 821-7123

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

LABORATORY NO.: 12972-16
CLIENT: Alton Geoscience
JOB NO.: 31-0284

DATE SAMPLED: 04/06/92
DATE RECEIVED: 04/07/92
DATE ANALYZED: 04/07/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE: C-6

Compound	MDL (ug/L)	RESULTS (ug/L)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	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/L = parts per billion (ppb)

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

MS/MSD average recovery = 104 % :MS/MSD RPD = 3.6 %

Richard Srna, Ph.D.

Cecilia G. Jorgensen (for)
Laboratory Director



Superior Precision Analytical, Inc.

1555 Ruffalo Drive • Canton, Ohio 44705-9412 • 419-647-1111 • FAX 419-821-7123

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

LABORATORY NO.: 12972-17
CLIENT: Alton Geoscience
JOB NO.: 31-0284

DATE SAMPLED: 04/06/92
DATE RECEIVED: 04/07/92
DATE ANALYZED: 04/07/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE: C-7

Compound	MDL (ug/L)	RESULTS (ug/L)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	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/L = parts per billion (ppb)

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

MS/MSD average recovery = 104 % :MS/MSD RPD = 3.6 %

Richard Srna, Ph.D.

Cecilia G. Ingram (for)
Laboratory Director



Superior Precision Analytical, Inc.

1555 Burt Street • Lincoln, Nebraska 68502 • Phone: (415) 477-9424 • Fax: (415) 477-2661 • Telex: (415) 821-7123

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

LABORATORY NO.: 12972-14
CLIENT: Alton Geoscience
JOB NO.: 31-0284

DATE SAMPLED: 04/06/92
DATE RECEIVED: 04/07/92
DATE ANALYZED: 04/07/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE: C-8

Compound	MDL (ug/L)	RESULTS (ug/L)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	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/L = parts per billion (ppb)

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

MS/MSD average recovery = 104 % :MS/MSD RPD = 3.6 %

Richard Srna, Ph.D.

Cecilia G. Jorgensen (for)
Laboratory Director



Superior Precision Analytical Inc.

1535 E. 10th Street • Superior, WI 54880 • (414) 821-7123 • FAX (414) 821-7123

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 12972-18
CLIENT: Alton Geoscience
JOB NO.: 31-0284

DATE SAMPLED: 04/06/92
DATE RECEIVED: 04/07/92
DATE ANALYZED: 04/07/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE: C-9

Compound	MDL (ug/L)	RESULTS (ug/L)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	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/L = parts per billion (ppb)

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

MS/MSD average recovery = 104 % :MS/MSD RPD = 3.6 %

Richard Srna, Ph.D.

Cecilia G. Janssen (for)
Laboratory Director



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

LABORATORY NO.: 12972-4
CLIENT: Alton Geoscience
JOB NO.: 31-0284

DATE SAMPLED: 04/06/92
DATE RECEIVED: 04/07/92
DATE ANALYZED: 04/07/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE: C-10

Compound	MDL (ug/L)	RESULTS (ug/L)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	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	1.1
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 = 104 % :MS/MSD RPD = 3.6 %

Richard Srna, Ph.D.

Cecilia J. Srna (for)
Laboratory Director



CERTIFICATE OF ANALYSIS

LABORATORY NO.: 12972-11
CLIENT: Alton Geoscience
JOB NO.: 31-0284

DATE SAMPLED: 04/06/92
DATE RECEIVED: 04/07/92
DATE ANALYZED: 04/07/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE: C-11

Compound	MDL (ug/L)	RESULTS (ug/L)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	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/L = parts per billion (ppb)

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

MS/MSD average recovery = 104 % :MS/MSD RPD = 3.6 %

Richard Srna, Ph.D.

Cecilia G. Jassem (for)
Laboratory Director



Superior Precision Analytical, Inc.

1555 Baker Unit • Columbus, Ohio 43204 • 615-647-2111 • FAX 615-621-7123

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

LABORATORY NO.: 12972-5
CLIENT: Alton Geoscience
JOB NO.: 31-0284

DATE SAMPLED: 04/06/92
DATE RECEIVED: 04/07/92
DATE ANALYZED: 04/09/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE: C-12

Compound	MDL (ug/L)	RESULTS (ug/L)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	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/L = parts per billion (ppb)

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

MS/MSD average recovery = 101% :MS/MSD RPD = 7.5%

Richard Srna, Ph.D.

Richard Srna
Laboratory Director



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

LABORATORY NO.: 12972-6
CLIENT: Alton Geoscience
JOB NO.: 31-0284

DATE SAMPLED: 04/06/92
DATE RECEIVED: 04/07/92
DATE ANALYZED: 04/07/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE: C-13

Compound	MDL (ug/L)	RESULTS (ug/L)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	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/L = parts per billion (ppb)

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

MS/MSD average recovery = 104 % :MS/MSD RPD = 3.6 %

Richard Srna, Ph.D.

Cecilia J. Jonzani (for)
Laboratory Director



Superior Precision Analytical, Inc.

1555 Boulder Drive • Suite 100 • Boulder, CO 80501 • (303) 440-1000 • (415) 647-2081 • Fax: (415) 321-7123

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

LABORATORY NO.: 12972-20
CLIENT: Alton Geoscience
JOB NO.: 31-0284

DATE SAMPLED: 04/06/92
DATE RECEIVED: 04/07/92
DATE ANALYZED: 04/09/92

EPA SW-846 METHOD 8010 HALOGENATED VOLATILE ORGANICS SAMPLE: C-14

Compound	MDL (ug/L)	RESULTS (ug/L)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	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/L = parts per billion (ppb)

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

MS/MSD average recovery = 101 % :MS/MSD RPD = 7.5 %

Richard Srna, Ph.D.

Cecilia G. Jongman (for)
Laboratory Director



Superior Precision Analytical, Inc.

15475 Buena Vista • San Francisco, California 94134 • (415) 471-8100 • FAX (415) 821-1103

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

LABORATORY NO.: 12972-7
CLIENT: Alton Geoscience
JOB NO.: 31-0284

DATE SAMPLED: 04/06/92
DATE RECEIVED: 04/07/92
DATE ANALYZED: 04/07/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE: C-15

Compound	MDL (ug/L)	RESULTS (ug/L)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	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/L = parts per billion (ppb)

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

MS/MSD average recovery = 104 % :MS/MSD RPD = 3.6 %

Richard Srna, Ph.D.

Cecilia J. Jorgensen (for)
Laboratory Director



CERTIFICATE OF ANALYSIS

LABORATORY NO.: 12972-13
CLIENT: Alton Geoscience
JOB NO.: 31-0284

DATE SAMPLED: 04/06/92
DATE RECEIVED: 04/07/92
DATE ANALYZED: 04/07/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE:C-16

Table with 3 columns: Compound, MDL (ug/L), RESULTS (ug/L). Lists various organic compounds and their detection limits and results.

MDL = Method Detection Limit
ug/L = parts per billion (ppb)
QA/QC Summary: Daily Standard RPD =< 15%
MS/MSD average recovery = 104 % :MS/MSD RPD = 3.6 %

Richard Srna, Ph.D.

Cecilia G. ... (for)
Laboratory Director



CERTIFICATE OF ANALYSIS

LABORATORY NO.: 12972-19
CLIENT: Alton Geoscience
JOB NO.: 31-0284

DATE SAMPLED: 04/06/92
DATE RECEIVED: 04/07/92
DATE ANALYZED: 04/07/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE:C-17

Compound	MDL (ug/L)	RESULTS (ug/L)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	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/L = parts per billion (ppb)

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

MS/MSD average recovery = 104 % :MS/MSD RPD = 3.6 %

Richard Srna, Ph.D.

Cecilia J. Jonz
Laboratory Director



CERTIFICATE OF ANALYSIS

LABORATORY NO.: 12972-8
CLIENT: Alton Geoscience
JOB NO.: 31-0284

DATE SAMPLED: 04/06/92
DATE RECEIVED: 04/07/92
DATE ANALYZED: 04/07/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE: C-18

Compound	MDL (ug/L)	RESULTS (ug/L)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	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/L = parts per billion (ppb)

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

MS/MSD average recovery = 104 % :MS/MSD RPD = 3.6 %

Richard Srna, Ph.D.

Cecilia G. Janssen (for)
Laboratory Director



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

LABORATORY NO.: 12972-9
CLIENT: Alton Geoscience
JOB NO.: 31-0284

DATE SAMPLED: 04/06/92
DATE RECEIVED: 04/07/92
DATE ANALYZED: 04/09/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE:C-19

Compound	MDL (ug/L)	RESULTS (ug/L)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	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	1.9
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 = 101 % :MS/MSD RPD = 7.5 %

Richard Srna, Ph.D.

Cecilia G. Young (for)
Laboratory Director

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

Chevron Facility Number 9-1924
Facility Address 4904 Southport Rd, Livermore
Consultant Project Number 31-0284
Consultant Name Alton Geoscience
Address 5870 Stoneridge Dr. #6, Pleasanton
Project Contact (Name) John DeGeorge
(Phone) (510) 734-8134 (Fax Number) (510) 734-8420

Chevron Contact (Name) Clint Rogers
(Phone) 842-9500
Laboratory Name Superior Analytical
Laboratory Release Number 461220
Samples Collected by (Name) Jon VAIL / Lang
Collection Date 4-6-92
Signature [Signature]

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water C = Charcoal	A = Air C = Composite O = Other	Time	Sample Preservation	Iced (Yes or No)	Analytes To Be Performed										Remarks					
								BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)								
TB	1	2	W	G	1258	HCL	Y	X															
RINS	2	2	W	G	1259	HCL	Y	X															Analyze
C-3	3	4			1302																		Analyze
C-10	4				1318																		
C-12	5				1328																		
C-13	6				1345																		
C-15	7				1410																		
C-18	8				1427																		
C-19	9				1443																		
C-5	10				1417																		
C-11	11				1550																		
C-2	12				1400																		
C-16	13				1430																		
C-8	14				1445																		

Primary
 Secondary
 Appropriate container
 Samples preserved
 (ICAPs without lead space)
Comments:

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>ALTON</u>	Date/Time <u>4/7/92/0810</u>	Received By (Signature) <u>[Signature]</u>	Organization <u>Alton</u>	Date/Time <u>4/7/92</u>	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. 5 Days 10 Days As Contracted <u>STAT</u>
Relinquished By (Signature) <u>[Signature]</u>	Organization <u>Alton</u>	Date/Time <u>4-7-92</u>	Received By (Signature) <u>W EICH</u>	Organization <u>Exp-it</u>	Date/Time <u>4-7-92</u>	
Relinquished By (Signature) <u>W Eich</u>	Organization <u>Exp-it</u>	Date/Time <u>4/7/92</u>	Received By (Signature) <u>[Signature]</u>	Organization <u>Exp-it</u>	Date/Time <u>4/7/92</u>	

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

Chevron Facility Number 1-1924
 Facility Address 4904 Southfront Rd, Livermore
 Consultant Project Number 31-0284
 Consultant Name Alton Geoscience
 Address 5870 Stoneridge Dr #6, Pleasanton
 Project Contact (Name) John De George
 (510) (Phone) 734-8134 (Fax Number) (510) 734-8420

Chevron Contact (Name) Clint Rogers
 (Phone) 842-9500
 Laboratory Name SAL
 Laboratory Release Number 4611220
 Samples Collected by (Name) LARRY/John
 Collection Date 4/6/92
 Signature [Signature]

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed										Remarks				
								BTX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)							
C-1	15	4	W	G	1502	Hcl	yes	X													analyzed	
C-6	16				1529																	
C-7	17				1544																	
C-9	18				1601																	
C-17	19				1640																	
C-14	20				1650																	

Properly labeled
 Samples stored in proper containers
 Appropriate container caps
 Samples preserved
 COC's without blank space
 Comments: only 2 vials Y/T on 4/14

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>ALTON</u>	Date/Time <u>4/7/92 1:15:20</u>	Received By (Signature) <u>[Signature]</u>	Organization <u>Alton</u>	Date/Time <u>4/7/92</u>	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. <input checked="" type="checkbox"/> 5 Days 10 Days As Contracted
Relinquished By (Signature) <u>[Signature]</u>	Organization <u>Alton</u>	Date/Time <u>4-7-92 01:43</u>	Received By (Signature) <u>W. Eich</u>	Organization <u>Expil</u>	Date/Time <u>4-7-92</u>	
Relinquished By (Signature) <u>W. Eich</u>	Organization <u>Expil</u>	Date/Time <u>4-7-92</u>	Received By (Signature) <u>[Signature]</u>	Organization <u>Expil</u>	Date/Time <u>4/7/92</u>	