



**Chevron**

April 26, 1994

Mr. Eva Chu  
Alameda County Environmental Health  
80 Swan Way, Room 200  
Oakland, CA 94621

**Chevron U.S.A. Products Company**

2410 Camino Ramon  
San Ramon, CA 94583  
P.O. Box 5004  
San Ramon, CA 94583-0804

**Marketing Department**

Phone 510 842 9500

Re: Chevron Station # 9-1924, 4904 South Front Street, Livermore, CA  
Attached groundwater monitoring report (GTI, 3/4/94)

Dear Ms. Chu:

Attached you will find a report dated March 4, 1994, which was prepared by Chevron's consultant, Groundwater Technology, Inc. (GTI), to describe the results of groundwater monitoring performed at the subject site on January 20, 1994.

The measured direction of groundwater flow in January was generally toward the west. Seventeen of the eighteen site monitoring wells were sampled and analyzed for the presence of TPHGas and BTEX constituents. Monitoring well C-18 was inaccessible and not sampled. The measured levels of dissolved hydrocarbons were consistent with data collected during previous site monitoring events.

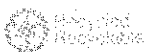
Chevron is preparing a work plan to propose the installation of additional groundwater monitoring wells in the vicinity downgradient well C-17. At the same time, efforts will be made to locate and repair well C-18.

If you have any questions or comments, I can be reached at (510) 842-8695.

Sincerely,

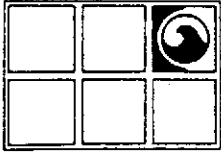
Brett L. Hunter  
Environmental Engineer  
Site Assessment and Remediation

94 APR 28 PM 1:13  
ALCO  
HAZMAT



Attachment

cc: Eddie So, San Francisco Bay RWQCB, Oakland, CA  
Jeanne Price, 213 Del Mesa Carmel, Carmel, CA 93921  
Dave Baker, Mobil Oil, 3225 Gallows Rd., Rm. 1W109, Fairfax, Virginia, 22037  
Scott Hooton, BP Oil, Northwest Division, Southcenter Place Bldg., 16400 Southcenter  
Parkway, Suite 301, Tukwila, Washington, 98188



# GROUNDWATER TECHNOLOGY, INC.

1401 Halyard Drive, Suite 140, West Sacramento, CA 95691, (916) 372-4700

FAX (916) 372-8781

March 4, 1994

Project No. 02010 4233

Mr. Brett L. Hunter  
Chevron U.S.A. Products Company  
2410 Camino Ramon  
San Ramon, CA 94583-0804

**RE: QUARTERLY MONITORING AND SAMPLING ACTIVITIES  
CHEVRON SERVICE STATION 9-1924  
4904 SOUTHFRONT ROAD  
LIVERMORE, CALIFORNIA**

Dear Mr. Hunter:

Groundwater Technology, Inc. submits this letter as a summary of quarterly groundwater monitoring and sampling data collected at the above-referenced site on January 20, 1994. Seventeen of the eighteen site-related groundwater monitoring wells were gauged to determine depth to groundwater (DTW) and to check for the presence of separate-phase petroleum hydrocarbons (SP). Monitoring well C-18 has been paved over with asphalt and is not accessible. A potentiometric surface map (Figure 1) and a summary of groundwater monitoring data (Table 1) are included. The January 20, 1994 potentiometric surface map includes data collected on the same date by MPDS Services, Inc. for the Unocal station northwest of the Chevron site. After measuring DTW, the seventeen accessible monitoring wells were purged and sampled. The groundwater samples were analyzed for dissolved benzene, toluene, ethylbenzene and xylenes (BTEX), and total petroleum hydrocarbons-as-gasoline (TPH-G). Results of the chemical analyses are summarized in Table 1. Laboratory reports and chain-of-custody manifests are included in Attachment I. All purge water generated during sampling was collected in a Department of Transportation (DOT)-approved purge water trailer and transported for recycling to the Chevron refinery in Richmond, California.

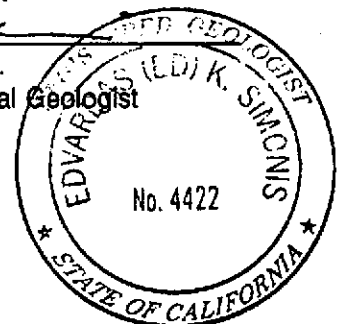
Groundwater Technology, Inc. is pleased to assist Chevron on this project. If you have any questions or comments please call our West Sacramento office.

Sincerely,  
Groundwater Technology, Inc.  
Written/Submitted by

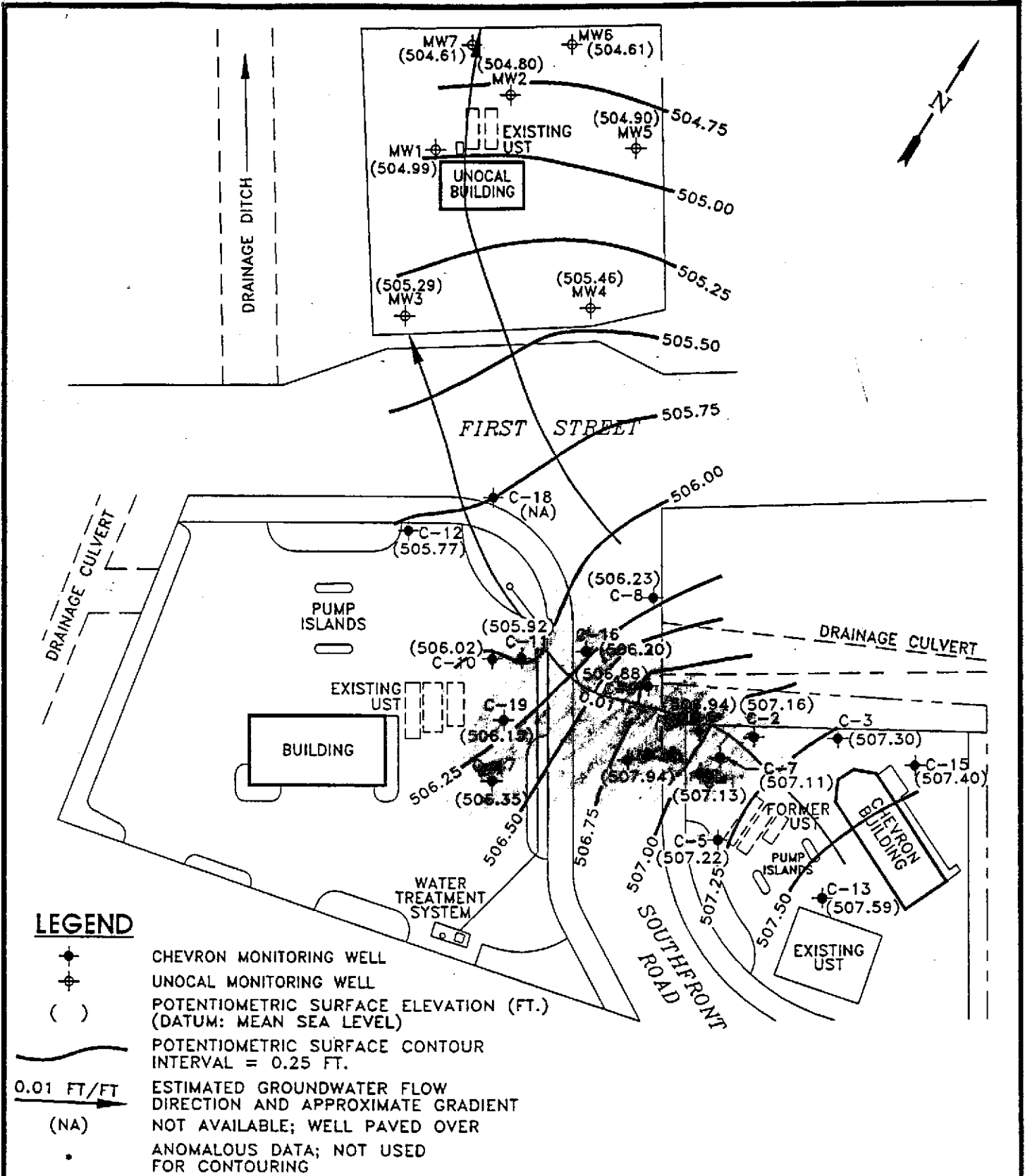
BRUCE H. EPPLER  
Environmental Geologist  
Project Manager

Groundwater Technology, Inc.  
Reviewed/Approved by

E. K. SIMONIS, R.G.  
Senior Environmental Geologist



PR   
DSB/BHE/EKS:rz  
Attachments  
4233QTR1.LTR



				<b>POTENTIOMETRIC SURFACE MAP</b> <b>JANUARY 20, 1994</b>	
<b>CLIENT:</b> CHEVRON U.S.A. PRODUCTS CO. SERVICE STATION NO. 9-1924		<b>FILE:</b> 4233SMA/4233PSM		<b>PROJECT NO.:</b> 02070-4233	
<b>LOCATION:</b> 4904 SOUTHFRONT ROAD LIVERMORE, CALIFORNIA		<b>REV.:</b> 2		<b>PM:</b> 	
		<b>DES.:</b> DSB		<b>PE/RG:</b> 	
		<b>DET.:</b> AJK		<b>FIGURE:</b> 1	
		<b>DATE:</b> 3/3/94			

**Table 1  
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA**

CHEVRON SERVICE STATION #9-1924  
4904 SOUTHFRONT ROAD, LIVERMORE, CALIFORNIA

WELL ID/ ELEVATION (TOC)	DATE	BENZENE (ppb)	TOLUENE (ppb)	ETHYL- BENZENE (ppb)	XYLENES (ppb)	TPH-G (ppb)	TOG (ppb)	1,2- DCA (ppb)	OTHER (ppb)	MC (ppb)	1,1,1- TCA (ppb)	1,1- DCA (ppb)	PCE (ppb)	DTW (feet)	SPT (feet)	WTE (feet)
C-1 520.39	03/28/86	--	--	--	--	--	--	--	--	--	--	--	--	11.75	0.00	508.64
	03/15/88	770	87	610	2,100	27,000	--	--	--	--	--	--	--	13.50	0.00	506.89
	05/10/88	--	--	--	--	--	--	--	--	--	--	--	--	13.65	0.00	506.74
	06/10/88	--	--	--	--	--	--	--	--	--	--	--	--	14.72	0.00	505.67
	07/25/88	--	--	--	--	--	--	--	--	--	--	--	--	13.50	0.00	506.89
	10/13/88	220	11	62	130	3,200	--	--	--	--	--	--	--	12.89	0.00	507.50
	01/01/89	--	--	--	--	--	--	--	--	--	--	--	--	12.89	0.00	507.50
	01/12/89	820	43	490	260	4,000	--	--	--	--	--	--	--	--	--	--
	04/10/89	100	ND	70	50	4,000	ND	ND	--	--	--	--	--	13.65	0.00	506.74
	04/10/89	100	ND	60	50	4,000	--	ND	--	--	--	--	--	13.65	0.00	506.74
	06/26/89	97	20	60	50	600	ND	3	--	--	--	--	--	13.94	0.00	506.45
	06/26/89	86	15	44	35	570	--	1.7	--	--	--	--	--	13.94	0.00	506.45
	10/13/89	64	ND	51	48	1,600	ND	ND	5	--	--	--	--	13.92	0.00	506.47
	01/03/90	36	0.68	30	30	1,100	--	1	--	--	--	--	--	13.80	0.00	506.59
	05/08/90	37	9.2	40	32	1,300	--	1.2	--	ND	--	ND	--	13.91	0.00	506.48
	09/29/90	19	1.2	32	31	350	--	ND	ND	0.7	1.4	ND	--	13.93	0.00	506.46
	01/03/91	12	ND	17	14	400	--	ND	ND	ND	ND	ND	ND	13.85	0.00	506.54
	04/12/91	--	--	--	--	--	--	--	--	--	--	--	--	13.51	0.00	506.88
	09/04/91	--	--	--	--	--	--	--	--	--	--	--	--	14.10	0.00	506.29
	04/06/92	12	0.8	31	31	1,000	--	ND	ND	ND	ND	ND	ND	13.06	0.00	507.33
	07/28/92	47	110	96	260	4,200	--	--	--	--	--	--	--	13.93	0.00	506.46
	10/16/92	11	ND	32.0	55.0	1,800	--	--	--	--	--	--	--	14.45	0.00	505.94
	01/14/93*	24	ND	98	62	2,000	--	--	--	--	--	--	--	11.23	0.00	509.16
	03/26/93	21	12	120	100	4,400	--	--	--	--	--	--	--	10.94	0.00	509.45
	04/22/93	26	44	580	330	18,000	--	--	--	--	--	--	--	16.25	SHEEN	504.14
	07/20,21/93	73	11	470	470	7,100**	--	--	--	--	--	--	--	15.29	0.00	505.10
10/20/93	19	26	260	190	880**	--	--	--	--	--	--	--	13.50	0.00	506.89	
01/20/94	13	10	130	60	2,900	--	--	--	--	--	--	--	13.26	0.00	507.13	

**Table 1**  
**HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA**

CHEVRON SERVICE STATION #9-1924  
4904 SOUTHFRONT ROAD, LIVERMORE, CALIFORNIA

WELL ID/ ELEVATION (TOC)	DATE	BENZENE (ppb)	TOLUENE (ppb)	ETHYL- BENZENE (ppb)	XYLENES (ppb)	TPH-G (ppb)	TOG (ppb)	1,2- DCA (ppb)	OTHER (ppb)	MC (ppb)	1,1,1- TCA (ppb)	1,1- DCA (ppb)	PCE (ppb)	DTW (feet)	SPT (feet)	WTE (feet)
C-2 520.76	03/28/86	---	---	---	---	---	---	---	---	---	---	---	---	11.98	0.00	508.78
	03/15/88	3,900	1,900	1,200	1,200	22,000	---	---	---	---	---	---	---	13.77	0.00	506.99
	05/10/88	---	---	---	---	---	---	---	---	---	---	---	---	14.03	0.00	506.73
	06/10/88	---	---	---	---	---	---	---	---	---	---	---	---	15.12	0.00	505.64
	07/25/88	---	---	---	---	---	---	---	---	---	---	---	---	13.86	0.00	506.90
	10/13/88	ND	ND	ND	ND	ND	ND	---	---	---	---	---	---	14.11	0.00	506.65
	01/01/89	---	---	---	---	---	---	---	---	---	---	---	---	12.83	0.00	507.93
	01/12/89	25	3	83	59	1,000	---	---	---	---	---	---	---	---	---	---
	04/10/89	2.5	ND	15	12	600	ND	ND	---	---	---	---	---	14.04	0.00	506.72
	04/10/89	ND	ND	11	11	ND	---	ND	---	---	---	---	---	14.04	0.00	506.72
	06/26/89	5.3	8	18	14	640	ND	ND	---	---	---	---	---	14.34	0.00	506.42
	06/26/89	3.7	0.6	13	8.2	750	---	2	---	---	---	---	---	14.34	0.00	506.42
	10/13/89	ND	ND	17	10	630	---	ND	---	---	---	---	---	13.92	0.00	506.84
	01/03/90	3	ND	19	17	880	---	1	---	---	---	---	---	14.11	0.00	506.65
	05/08/90	1.3	2.7	8.4	11	340	---	1.1	---	---	ND	ND	---	14.28	0.00	506.48
	09/29/90	ND	ND	4.6	1.8	74	---	ND	ND	1.7	0.5	ND	---	14.25	0.00	506.51
	01/03/91	270	ND	79	93	2,000	---	ND	ND	ND	ND	ND	---	14.15	0.00	506.61
	04/12/91	---	---	---	---	---	---	---	---	---	---	---	---	13.86	0.00	506.90
	09/04/91	---	---	---	---	---	---	---	---	---	---	---	---	14.50	0.00	506.26
	04/06/92	ND	ND	54.0	6.1	1,200	---	ND	ND	ND	ND	ND	---	13.47	0.00	507.29
	07/28/92	5.2	2.9	26	16	1,000	---	---	---	---	---	---	---	14.35	0.00	506.41
	10/16/92	ND	2.2	20	10	2,000	---	---	---	---	---	---	---	14.84	0.00	505.92
	01/14/93*	49	50	31	29	1,800	---	---	---	---	---	---	---	11.22	0.00	509.54
03/26/93	15	12	14	6	820**	---	---	---	---	---	---	---	10.77	0.00	509.99	
04/22/93	12	12	28	29	2,000	---	---	---	---	---	---	---	12.93	0.00	507.83	
07/20,21/93	28	8	4	4	1,100**	---	---	---	---	---	---	---	16.02	0.00	504.74	
10/20/93	140	18	22	27	1,600**	---	---	---	---	---	---	---	13.84	0.00	506.92	
01/20/94	36*	3	7	3	760*	---	---	---	---	---	---	---	13.60	0.00	507.16	
C-3 521.31	03/28/86	---	---	---	---	---	---	---	---	---	---	---	---	12.24	0.00	509.07
	03/15/88	86	8	30	36.0	2,100	---	---	---	---	---	---	---	14.21	0.00	507.10
	05/10/88	---	---	---	---	---	---	---	---	---	---	---	---	14.43	0.00	506.88
	06/10/88	---	---	---	---	---	---	---	---	---	---	---	---	15.53	0.00	505.78
	07/25/88	---	---	---	---	---	---	---	---	---	---	---	---	14.22	0.00	507.09
	10/13/88	ND	ND	ND	ND	ND	---	---	---	---	---	---	---	14.10	0.00	507.21
	01/01/89	---	---	---	---	---	---	---	---	---	---	---	---	12.70	0.00	508.61
	04/10/89	2.1	ND	4.4	2.6	200	ND	1.4	---	---	---	---	---	14.36	0.00	506.95
	06/26/89	1.1	0.7	4.9	1.6	260	ND	1.5	---	---	---	---	---	14.74	0.00	506.57
	10/13/89	ND	ND	ND	ND	ND	---	ND	---	---	---	---	---	14.70	0.00	506.61
	01/03/90	ND	ND	0.9	1.4	ND	---	0.7	---	---	---	---	---	14.42	0.00	506.89
	05/08/90	ND	ND	ND	ND	ND	---	0.7	---	---	---	---	---	14.65	0.00	506.66
	09/27/90	ND	1.0	ND	ND	71	---	ND	ND	1.1	1.6	ND	---	14.67	0.00	506.64
	01/03/91	ND	ND	ND	ND	57	---	ND	ND	ND	ND	ND	---	14.58	0.00	506.73
	04/12/91	ND	ND	1.6	ND	98	---	ND	ND	ND	ND	ND	---	14.23	0.00	507.08
	09/04/91	ND	ND	ND	ND	64	---	ND	ND	ND	ND	ND	---	14.88	0.00	506.43
	04/06/92	ND	ND	0.8	ND	88	---	ND	ND	ND	ND	ND	---	13.83	0.00	507.48
	07/28/92	ND	ND	0.5	1.1	80	---	---	---	---	---	---	---	14.80	0.00	506.51
	10/16/92	ND	ND	6.6	11	1,400	---	---	---	---	---	---	---	15.23	0.00	506.08
	01/14/93*	ND	ND	ND	1.3	100	---	---	---	---	---	---	---	11.45	0.00	509.86
	03/26/93	0.7	1	ND	ND	74	---	---	---	---	---	---	---	11.27	0.00	510.04
	04/22/93	ND	ND	ND	ND	ND***	---	---	---	---	---	---	---	12.61	0.00	508.70
	07/20,21/93	ND	ND	ND	ND	ND	---	---	---	---	---	---	---	16.17	0.00	505.14
10/20/93	ND	1	ND	0.8	ND	---	---	---	---	---	---	---	14.23	0.00	507.08	
01/20/94	ND	ND	ND	ND	ND	---	---	---	---	---	---	---	14.01	0.00	507.30	

**Table 1  
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA**

CHEVRON SERVICE STATION #9-1924  
4904 SOUTHFRONT ROAD, LIVERMORE, CALIFORNIA

WELL ID/ ELEVATION (TOC)	DATE	BENZENE (ppb)	TOLUENE (ppb)	ETHYL- BENZENE (ppb)	XYLENES (ppb)	TPH-G (ppb)	TOG (ppb)	1,2- DCA (ppb)	OTHER (ppb)	MC (ppb)	1,1,1- TCA (ppb)	1,1- DCA (ppb)	PCE (ppb)	DTW (feet)	SPT (feet)	WTE (feet)
C-5 520.82	03/28/86	---	---	---	---	---	---	---	---	---	---	---	---	12.00	0.00	508.82
	03/15/88	82	7	77	95	1,600	---	---	---	---	---	---	---	13.75	0.00	507.07
	05/10/88	---	---	---	---	---	---	---	---	---	---	---	---	13.92	0.00	506.90
	07/10/88	---	---	---	---	---	---	---	---	---	---	---	---	13.72	0.00	507.10
	07/25/88	---	---	---	---	---	---	---	---	---	---	---	---	13.72	0.00	507.10
	10/13/88	ND	ND	ND	ND	2,500	---	---	---	---	---	---	---	13.84	0.00	506.98
	01/01/89	---	---	---	---	---	---	---	---	---	---	---	---	13.41	0.00	507.41
	01/12/89	42	3	44	52	ND	---	---	---	---	---	---	---	---	0.00	520.82
	04/10/89	2.6	ND	6.2	5.5	180	ND	1.4	---	---	---	---	---	13.88	---	---
	06/26/89	7.6	0.8	40	56	420	ND	1.5	---	---	---	---	---	14.14	0.00	506.68
	10/13/89	ND	ND	10	ND	620	ND	ND	---	---	---	---	---	14.15	0.00	506.67
	01/03/90	0.7	ND	8	6	ND	---	---	---	---	---	---	---	14.10	0.00	506.72
	05/08/90	0.6	0.8	11	7.2	140	---	0.8	---	ND	---	ND	---	14.00	0.00	506.82
	09/27/90	ND	3.2	5.2	6.4	360	---	ND	ND	0.7	ND	ND	ND	14.00	0.00	506.82
	01/03/91	ND	ND	ND	3	90	---	ND	ND	ND	ND	ND	ND	14.00	0.00	506.82
	04/12/91	12	ND	19	7	270	---	0.5	ND	ND	ND	ND	ND	13.71	0.00	507.11
	09/04/91	ND	ND	ND	ND	ND	---	ND	ND	ND	ND	ND	ND	14.30	0.00	506.52
	04/06/92	12	ND	40	ND	670	---	ND	ND	ND	ND	ND	ND	13.29	0.00	507.53
	07/28/92	15	ND	1.8	0.5	130	---	---	---	---	---	---	---	14.13	0.00	506.69
	10/16/92	ND	ND	ND	1.2	ND	---	---	---	---	---	---	---	14.68	0.00	506.14
01/14/93*	13	ND	110	10	2,300	---	---	---	---	---	---	---	11.87	0.00	508.95	
03/26/93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
04/22/93	220	18	120	65	2,300**	---	---	---	---	---	---	---	12.12	0.00	508.70	
07/20.21/93	18	5	8	14	970**	---	---	---	---	---	---	---	16.04	0.00	504.78	
10/20/93	7	5	3	15	2,200	---	---	---	---	---	---	---	14.10	0.00	506.72	
01/20/94	4	1	11	0.6	440	---	---	---	---	---	---	---	13.60	0.00	507.22	

**Table 1  
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA**

CHEVRON SERVICE STATION #9-1924  
4904 SOUTHFRONT ROAD, LIVERMORE, CALIFORNIA

WELL ID/ ELEVATION (TOC)	DATE	BENZENE (ppb)	TOLUENE (ppb)	ETHYL- BENZENE (ppb)	XYLENES (ppb)	TPH-G (ppb)	TOG (ppb)	1,2- DCA (ppb)	OTHER (ppb)	MC (ppb)	1,1,1- TCA (ppb)	1,1- DCA (ppb)	PCE (ppb)	DTW (feet)	SPT (feet)	WTE (feet)
C-6 519.62	03/28/86	--	--	--	--	--	--	--	--	--	--	--	--	11.12	0.00	508.50
	03/15/88	870	4,600	1,500	8,200	46,000	--	--	--	--	--	--	--	12.93	0.00	506.69
	05/10/88	1,400	10,000	3,000	19,000	86,000	--	--	--	--	--	--	--	13.03	0.00	506.59
	06/10/88	--	--	--	--	--	--	--	--	--	--	--	--	14.11	0.00	505.51
	07/25/88	--	--	--	--	--	--	--	--	--	--	--	--	12.95	0.00	506.67
	10/13/88	300	600	260	1,600	5,300	--	--	--	--	--	--	--	13.14	0.00	506.48
	01/01/89	--	--	--	--	--	--	--	--	--	--	--	--	12.14	0.00	507.48
	01/12/89	260	110	270	720	5,000	--	--	--	--	--	--	--	--	--	--
	04/12/89	90	190	190	680	5,000	4.0	ND	--	--	--	--	--	12.98	0.00	506.64
	06/26/89	77	250	140	610	3,600	ND	ND	--	--	--	--	--	13.39	0.00	506.23
	10/13/89	32	81	100	530	3,500	ND	ND	--	--	--	--	--	13.40	0.00	506.22
	01/03/90	20	97	65	410	3,200	--	1	--	--	--	--	--	13.18	0.00	506.44
	05/08/90	17	140	ND	400	1,800	--	1.6	--	--	ND	--	ND	13.39	0.00	506.23
	09/29/90	58	210	260	2,100	8,000	--	1.0	ND	ND	2.4	1.8	ND	13.32	0.00	506.30
	01/03/91	4	79	59	380	2,300	--	0.5	ND	ND	ND	ND	ND	13.19	0.00	506.43
	04/12/91	--	--	--	--	--	--	--	--	--	--	--	--	12.91	0.00	506.71
	09/04/91	--	--	--	--	--	--	--	--	--	--	--	--	13.56	0.00	506.06
	04/06/92	ND	120	740	3,400	44,000	--	ND	ND	ND	ND	ND	ND	12.48	0.00	507.14
	07/28/92	220	1,100	3,000	13,000	120,000	--	--	--	--	--	--	--	13.47	0.00	506.15
	10/16/92	ND	830	3,300	9,600	570,000	--	--	--	--	--	--	--	13.95	0.00	505.67
	01/14/93*	ND	25	460	980	19,000	--	--	--	--	--	--	--	10.39	0.00	509.23
	03/26/93	30	90	290	1,100	11,000**	--	--	--	--	--	--	--	9.83	0.00	509.79
	04/22/93	29	170	640	2,400	20,000	--	--	--	--	--	--	--	11.32	0.00	508.30
07/20,21/93	130	490	1,000	4,900	32,000**	--	--	--	--	--	--	--	14.92	TRACE	504.70	
10/20/93	290	790	2,500	7,600	77,000**	--	--	--	--	--	--	--	12.91	0.00	506.71	
01/20/94	10	86	510	29	22,000	--	--	--	--	--	--	--	12.68	0.00	506.94	
C-7 520.30	03/28/86	--	--	--	--	--	--	--	--	--	--	--	--	11.67	0.00	508.63
	03/15/88	98	690	120	120	8,000	--	--	--	--	--	--	--	13.48	0.00	506.82
	05/10/88	--	--	--	--	--	--	--	--	--	--	--	--	13.60	0.00	506.70
	06/10/88	--	--	--	--	--	--	--	--	--	--	--	--	14.68	0.00	505.62
	07/25/88	--	--	--	--	--	--	--	--	--	--	--	--	13.43	0.00	506.87
	10/13/88	4,400	220	1,000	3,000	16,000	--	--	--	--	--	--	--	13.61	0.00	506.69
	01/01/89	--	--	--	--	--	--	--	--	--	--	--	--	12.66	0.00	507.64
	01/12/89	950	47	670	640	8,000	--	--	--	--	--	--	--	--	--	--
	04/12/89	1,100	30	760	370	6,000	ND	ND	--	--	--	--	--	13.60	0.00	506.70
	06/26/89	1,300	50	600	340	6,000	ND	ND	--	--	--	--	--	13.88	0.00	506.42
	10/13/89	1,300	ND	160	150	3,900	--	ND	--	--	--	--	--	13.81	0.00	506.49
	01/03/90	1,200	13	180	200	5,600	--	1	--	--	--	--	--	13.71	0.00	506.59
	05/08/90	1,100	15	110	140	3,500	--	1.7	--	--	ND	--	ND	13.85	0.00	506.45
	09/29/90	580	ND	46	68	2,400	--	0.7	ND	ND	ND	ND	ND	13.80	0.00	506.50
	01/03/91	300	2	110	120	2,500	--	0.7	ND	ND	ND	ND	ND	13.71	0.00	506.59
	04/12/91	190	1	81	87	2,300	--	0.6	ND	ND	ND	ND	ND	13.46	0.00	506.84
	09/04/91	--	--	--	--	--	--	--	--	--	--	--	--	14.09	0.00	506.21
	10/07/91	170	1.9	97	59	4,700	--	ND	ND	24	ND	ND	ND	--	--	--
	04/06/92	95	0.8	110	100	2,400	--	ND	ND	ND	ND	ND	ND	13.02	0.00	507.28
	07/28/92	120	3.4	110	110	2,000	--	--	--	--	--	--	--	13.76	0.00	506.54
	10/16/92	130	4.2	68	74	2,700	--	--	--	--	--	--	--	14.42	0.00	505.88
	01/14/93*	160	33	380	210	7,800	--	--	--	--	--	--	--	10.98	0.00	509.32
	03/26/93	39	9	28	15	1,400	--	--	--	--	--	--	--	10.61	0.00	509.69
04/22/93	130	18	43	36	3,800	--	--	--	--	--	--	--	11.84	0.00	508.46	
07/20,21/93	35	18	61	87	1,900	--	--	--	--	--	--	--	15.36	SHEEN	504.94	
10/20/93	72	26	250	160	5,500	--	--	--	--	--	--	--	13.41	0.00	506.89	
01/20/94	12	12	150	69	3,800	--	--	--	--	--	--	--	13.19	0.00	507.11	



**Table 1**  
**HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA**

CHEVRON SERVICE STATION #9-1924  
4904 SOUTHFRONT ROAD, LIVERMORE, CALIFORNIA

WELL ID/ ELEVATION (TOC)	DATE	BENZENE (ppb)	TOLUENE (ppb)	ETHYL- BENZENE (ppb)	XYLENES (ppb)	TPH-G (ppb)	TOG (ppb)	1,2- DCA (ppb)	OTHER (ppb)	MC (ppb)	1,1,1- TCA (ppb)	1,1- DCA (ppb)	PCE (ppb)	DTW (feet)	SPT (feet)	WTE (feet)
C-8 519.74	03/28/86	--	--	--	--	--	--	--	--	--	--	--	--	11.78	0.00	507.96
	03/15/88	360	25	10	ND	7,500	--	--	--	--	--	--	--	13.63	0.00	506.11
	05/10/88	--	--	--	--	--	--	--	--	--	--	--	--	13.74	0.00	506.00
	06/10/88	--	--	--	--	--	--	--	--	--	--	--	--	14.89	0.00	504.85
	07/25/88	--	--	--	--	--	--	--	--	--	--	--	--	13.65	0.00	506.09
	10/13/88	6	5.3	ND	ND	ND	--	--	--	--	--	--	--	13.78	0.00	505.96
	01/01/89	--	--	--	--	--	--	--	--	--	--	--	--	12.68	0.00	507.06
	01/12/89	37	4	1	5	ND	--	--	--	--	--	--	--	--	--	--
	04/12/89	13	ND	ND	ND	3,000	12.0	5	--	--	--	--	--	13.77	0.00	505.97
	06/26/89	14	6	ND	6	780	ND	4	--	--	--	--	--	14.03	0.00	505.71
	10/13/89	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--	14.06	0.00	505.68
	01/03/90	ND	ND	1	1	910	--	1.5	--	--	--	--	--	13.74	0.00	506.00
	05/07/90	3.9	6	0.5	3.4	620	--	1.9	--	ND	ND	ND	--	14.10	0.00	505.64
	09/29/90	ND	1.4	ND	ND	77	--	ND	ND	0.6	ND	ND	ND	13.97	0.00	505.77
	01/03/91	2	2	ND	2	67	--	ND	ND	0.7	ND	ND	ND	13.81	0.00	505.93
	04/12/91	4	ND	ND	ND	180	--	0.6	ND	ND	ND	ND	ND	13.60	0.00	506.14
	09/04/91	1.8	4.7	0.8	4.8	140	--	ND	ND	ND	ND	ND	ND	14.14	0.00	505.60
	04/06/92	ND	ND	ND	ND	150	--	ND	ND	ND	ND	ND	ND	13.12	0.00	506.62
	07/28/92	ND	ND	ND	0.8	90	--	--	--	--	--	--	--	14.10	0.00	505.64
	10/16/92	ND	ND	ND	ND	51	--	--	--	--	--	--	--	14.57	0.00	505.17
01/14/93*	ND	1.6	1.0	3.5	120	--	--	--	--	--	--	--	10.95	0.00	508.79	
03/26/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/22/93	ND	0.6	0.6	0.8	68**	--	--	--	--	--	--	--	12.07	0.00	507.67	
07/20,21/93	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	15.70	0.00	504.04	
10/20/93	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	13.51	0.00	506.23	
01/20/94	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	13.51	0.00	506.23	
C-9 519.52	03/28/86	--	--	--	--	--	--	--	--	--	--	--	--	11.24	0.00	508.28
	03/15/88	540	560	580	3,900	29,000	--	--	--	--	--	--	--	12.92	0.00	506.60
	05/10/88	--	--	--	--	--	--	--	--	--	--	--	--	13.12	0.00	506.40
	06/10/88	--	--	--	--	--	--	--	--	--	--	--	--	14.16	0.00	505.36
	07/25/88	--	--	--	--	--	--	--	--	--	--	--	--	13.00	0.00	506.52
	10/13/88	57	8	20	150	2,200	--	--	--	--	--	--	--	13.13	0.00	506.39
	01/01/89	--	--	--	--	--	--	--	--	--	--	--	--	12.19	0.00	507.33
	01/12/89	39	12	51	46	2,000	--	--	--	--	--	--	--	--	--	
	04/12/89	16	20	55	240	6,000	ND	2.1	--	--	--	--	--	13.11	0.00	506.41
	04/11/89	14	25	45	290	6,000	--	ND	--	--	--	--	--	13.11	0.00	506.41
	06/26/89	37	63	140	690	3,900	ND	ND	--	--	--	--	--	13.40	0.00	506.12
	10/13/89	7	ND	26	50	1,300	ND	ND	--	--	--	--	--	13.48	0.00	506.06
	01/03/90	ND	0.7	202	37	1,500	--	1.5	--	--	--	--	--	13.30	0.00	506.22
	05/07/90	21	33	89	500	7,100	--	1.9	--	ND	--	ND	--	13.48	0.00	506.04
	09/29/90	21	3.9	31	110	1,000	--	1.0	ND	0.7	1.8	1.0	--	13.39	0.00	506.13
	01/03/91	ND	ND	32	140	3,200	--	0.8	ND	ND	ND	ND	ND	13.28	0.00	506.44
	04/12/91	--	--	--	--	--	--	--	--	--	--	--	--	13.00	0.00	506.72
	09/04/91	--	--	--	--	--	--	--	--	--	--	--	--	13.61	0.00	506.11
	04/06/92	ND	ND	33	130	2,800	--	ND	ND	ND	ND	ND	ND	12.54	0.00	507.18
	07/28/92	6.5	2.4	17	37	1,000	--	--	--	--	--	--	--	13.45	0.00	506.27
10/16/92	ND	730	960	2,000	190,000	--	--	--	--	--	--	--	13.98	0.00	505.74	
01/14/93*	ND	ND	27	77	2,200	--	--	--	--	--	--	--	10.44	0.00	509.28	
03/26/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
04/22/93	60	40	68	98	7,300	--	--	--	--	--	--	--	11.43	0.00	508.29	
07/20,21/93	160	130	450	1,100	30,000**	--	--	--	--	--	--	--	15.20	0.00	504.52	
10/20/93	22	200	440	930	36,000	--	--	--	--	--	--	--	12.96	0.00	506.76	
01/20/94	55	57	27	210	12,000	--	--	--	--	--	--	--	12.84	0.00	506.88	

**Table 1**  
**HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA**

CHEVRON SERVICE STATION #9-1924  
4904 SOUTHFRONT ROAD, LIVERMORE, CALIFORNIA

WELL ID/ ELEVATION (TOC)	DATE	BENZENE (ppb)	TOLUENE (ppb)	ETHYL- BENZENE (ppb)	XYLENES (ppb)	TPH-G (ppb)	TOG (ppb)	1,2- DCA (ppb)	OTHER (ppb)	MC (ppb)	1,1,1- TCA (ppb)	1,1- DCA (ppb)	PCE (ppb)	DTW (feet)	SPT (feet)	WTE (feet)
C-10 520.41	03/28/86	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/15/88	7	ND	ND	ND	90	--	--	--	--	--	--	--	14.86	0.00	505.55
	05/10/88	--	--	--	--	--	--	--	--	--	--	--	--	14.90	0.00	505.51
	06/10/88	--	--	--	--	--	--	--	--	--	--	--	--	15.94	0.00	504.47
	07/25/88	--	--	--	--	--	--	--	--	--	--	--	--	14.85	0.00	505.56
	10/13/88	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	14.90	0.00	505.51
	01/01/89	--	--	--	--	--	--	--	--	--	--	--	--	14.83	0.00	505.58
	01/12/89	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--
	04/11/89	4.8	ND	ND	ND	ND	ND	ND	6.1	--	--	--	--	14.90	0.00	505.51
	06/26/89	0.7	ND	ND	ND	1.5	ND	4.0	ND	--	--	--	--	15.12	0.00	505.29
	10/13/89	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	15.11	0.00	505.30
	01/03/90	ND	ND	ND	ND	ND	ND	ND	ND	3	--	--	--	15.01	0.00	505.40
	05/07/90	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.53	0.00	504.88
	09/27/90	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	15.20	0.00	505.21
	01/03/91	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.06	0.00	505.35
	04/12/91	16	ND	2.9	2.7	110	--	--	1	ND	ND	ND	ND	14.86	0.00	505.55
	09/04/91	ND	ND	ND	ND	ND	--	--	ND	ND	ND	ND	ND	15.22	0.00	505.19
	04/06/92	ND	ND	ND	ND	ND	57	--	1.1	ND	ND	ND	ND	14.21	0.00	506.20
	07/28/92	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	14.78	0.00	505.63
	10/16/92	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	15.51	0.00	504.90
	01/14/93*	4.7	ND	2.3	1.6	88	--	--	--	--	--	--	--	13.44	0.00	506.97
03/26/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	12.55	0.00	507.86	
04/22/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	13.74	0.00	506.67	
07/20,21/93	ND	ND	ND	ND	ND	100	--	--	--	--	--	--	16.49	0.00	503.92	
10/20/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	14.84	0.00	505.77	
01/20/94	ND	ND	ND	ND	ND	ND**	--	--	--	--	--	--	14.39	0.00	506.02	
C-11 520.04	03/28/86	--	--	--	--	--	--	--	--	--	--	--	--	13.82	0.00	506.22
	03/15/88	--	--	--	--	--	--	--	--	--	--	--	--	14.49	0.00	505.55
	05/10/88	--	--	--	--	--	--	--	--	--	--	--	--	14.31	0.00	505.73
	06/10/88	--	--	--	--	--	--	--	--	--	--	--	--	15.47	0.00	504.57
	07/25/88	--	--	--	--	--	--	--	--	--	--	--	--	13.60	0.00	506.44
	10/14/88	240	33	4.7	67	2	--	--	--	--	--	--	--	14.53	0.00	505.51
	01/01/89	--	--	--	--	--	--	--	--	--	--	--	--	14.10	0.00	505.94
	01/12/89	ND	0.8	ND	ND	ND	--	--	--	--	--	--	--	--	--	--
	04/12/89	4.3	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	14.36	0.00	505.68
	06/26/89	2	ND	ND	ND	ND	ND	4.0	ND	--	--	--	--	14.58	0.00	505.46
	10/13/89	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	14.71	0.00	505.33
	01/03/90	ND	ND	ND	0.7	ND	--	--	ND	--	--	--	--	14.61	0.00	505.43
	05/08/90	12	11	0.9	22	110	--	--	ND	--	--	--	--	15.53	0.00	504.51
	09/28/90	2.0	1.4	ND	3.3	ND	ND	ND	ND	1.2	ND	ND	ND	15.51	0.00	504.53
	01/03/91	2	ND	ND	2	ND	--	--	ND	ND	ND	ND	1	14.63	0.00	505.41
	04/12/91	--	--	--	--	--	--	--	--	--	--	--	--	14.30	0.00	505.74
	09/04/91	--	--	--	--	--	--	--	--	--	--	--	--	14.84	0.00	505.20
	04/06/92	ND	ND	ND	ND	ND	ND	--	ND	ND	ND	ND	ND	13.56	0.00	506.48
	07/28/92	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	14.39	0.00	505.65
	10/16/92	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	15.79	0.00	504.25
	01/14/93*	ND	1.3	0.7	6	94	--	--	--	--	--	--	--	12.14	0.00	507.90
03/26/93	2	ND	0.8	1	130	--	--	--	--	--	--	--	11.81	0.00	508.23	
04/22/93	0.8	ND	ND	ND	ND	ND	--	--	--	--	--	--	12.94	0.00	507.10	
07/20,21/93	3	1	ND	1	1,200	--	--	--	--	--	--	--	16.48	0.00	503.56	
10/20/93	2	ND	ND	ND	ND	ND**	--	--	--	--	--	--	14.46	0.00	505.58	
01/20/94	5	0.6	3	4	4	--	--	--	--	--	--	--	14.12	0.00	505.92	

**Table 1  
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA**

CHEVRON SERVICE STATION #9-1924  
4904 SOUTHFRONT ROAD, LIVERMORE, CALIFORNIA

WELL ID/ ELEVATION (TOC)	DATE	BENZENE (ppb)	TOLUENE (ppb)	ETHYL- BENZENE (ppb)	XYLENES (ppb)	TPH-G (ppb)	TOG (ppb)	1,2- DCA (ppb)	OTHER (ppb)	MC (ppb)	1,1,1- TCA (ppb)	1,1- DCA (ppb)	PCE (ppb)	DTW (feet)	SPT (feet)	WTE (feet)
C-12 519.82	03/28/86	--	--	--	--	--	--	--	--	--	--	--	--	13.61	0.00	506.21
	03/15/88	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	14.55	0.00	505.27
	05/10/88	--	--	--	--	--	--	--	--	--	--	--	--	14.57	0.00	505.25
	06/10/88	--	--	--	--	--	--	--	--	--	--	--	--	15.63	0.00	504.19
	07/25/88	--	--	--	--	--	--	--	--	--	--	--	--	14.51	0.00	505.31
	10/13/88	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	14.60	0.00	505.22
	01/12/89	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	14.62	0.00	505.20
	04/11/89	ND	ND	ND	ND	ND	--	ND	--	--	--	--	--	14.61	0.00	505.21
	06/26/89	ND	ND	ND	ND	ND	--	ND	--	--	--	--	--	14.75	0.00	505.07
	10/13/89	ND	ND	ND	ND	ND	--	ND	--	--	--	--	--	14.77	0.00	505.05
	01/03/90	ND	ND	ND	ND	0.6	ND	ND	--	--	--	--	--	14.85	0.00	504.97
	05/07/90	ND	ND	ND	ND	ND	--	ND	--	ND	--	ND	--	14.75	0.00	505.07
	09/27/90	ND	ND	ND	ND	ND	--	ND	--	ND	ND	ND	--	14.61	0.00	505.21
	01/03/91	ND	ND	ND	ND	ND	--	ND	--	ND	ND	ND	--	14.70	0.00	505.12
	04/12/91	--	--	--	--	--	--	--	--	--	--	--	--	14.52	0.00	505.30
	09/04/91	--	--	--	--	--	--	--	--	--	--	--	--	14.83	0.00	504.99
	04/06/92	ND	ND	ND	ND	ND	ND	--	ND	ND	ND	ND	--	13.81	0.00	506.01
	07/28/92	ND	ND	ND	ND	ND	ND	--	ND	ND	ND	ND	--	14.32	0.00	505.50
	10/16/92	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	15.12	0.00	504.70
	01/14/93*	ND	ND	ND	ND	1.7	65	--	--	--	--	--	--	13.23	0.00	506.59
	03/26/93	0.9	ND	ND	ND	ND	ND	--	--	--	--	--	--	12.20	0.00	507.62
04/22/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	13.21	0.00	506.61	
07/20,21/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	16.71	0.00	503.11	
10/20/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	14.19	0.00	505.63	
01/20/94	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	14.05	0.00	505.77	
C-13 522.24	03/28/86	--	--	--	--	--	--	--	--	--	--	--	--	12.95	0.00	509.29
	03/15/88	2	ND	9	3	250	--	--	--	--	--	--	--	14.82	0.00	507.42
	05/10/88	--	--	--	--	--	--	--	--	--	--	--	--	15.03	0.00	507.21
	06/10/88	--	--	--	--	--	--	--	--	--	--	--	--	16.10	0.00	506.14
	07/25/88	--	--	--	--	--	--	--	--	--	--	--	--	14.73	0.00	507.51
	10/13/88	1.9	ND	ND	ND	ND	--	--	--	--	--	--	--	14.91	0.00	507.33
	01/01/89	--	--	--	--	--	--	--	--	--	--	--	--	14.10	0.00	508.14
	01/12/89	ND	0.6	4	ND	ND	--	--	--	--	--	--	--	--	--	--
	04/10/89	ND	ND	8	ND	ND	--	ND	--	--	--	--	--	14.99	0.00	507.25
	06/26/89	0.3	ND	ND	ND	ND	--	ND	--	--	--	--	--	15.16	0.00	507.08
	10/13/89	ND	ND	ND	ND	ND	--	ND	--	--	--	--	--	15.23	0.00	507.01
	01/03/90	ND	ND	0.5	0.6	ND	--	ND	--	--	--	--	--	15.15	0.00	507.09
	05/08/90	ND	ND	ND	ND	ND	--	ND	--	ND	--	ND	--	15.02	0.00	507.22
	09/27/90	ND	0.6	ND	ND	ND	--	ND	--	ND	ND	ND	--	15.11	0.00	507.13
	01/03/91	ND	ND	ND	0.6	ND	--	ND	--	ND	ND	ND	ND	15.08	0.00	507.16
	04/12/91	--	--	--	--	--	--	--	--	--	--	--	--	14.77	0.00	507.47
	09/04/91	--	--	--	--	--	--	--	--	--	--	--	--	15.43	0.00	506.81
	04/06/92	ND	ND	ND	ND	66	--	ND	ND	ND	ND	ND	--	14.43	0.00	507.81
	07/28/92	8.2	ND	ND	ND	1.1	60	--	--	--	--	--	--	15.37	0.00	506.87
	10/16/92	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	15.87	0.00	506.37
	01/14/93*	ND	ND	ND	ND	1.3	100	--	--	--	--	--	--	12.83	0.00	509.41
03/26/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	12.59	0.00	509.65	
04/22/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	13.16	0.00	508.08	
07/20,21/93	4	13	2	7	99	--	--	--	--	--	--	--	16.52	0.00	505.72	
10/20/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	15.13	0.00	507.11	
01/20/94	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	14.65	0.00	507.59	

**Table 1  
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA**

CHEVRON SERVICE STATION #9-1924  
4904 SOUTHFRONT ROAD, LIVERMORE, CALIFORNIA

WELL ID/ ELEVATION (TOC)	DATE	BENZENE (ppb)	TOLUENE (ppb)	ETHYL- BENZENE (ppb)	XYLENES (ppb)	TPH - G (ppb)	TOG (ppb)	1,2- DCA (ppb)	OTHER (ppb)	MC (ppb)	1,1,1- TCA (ppb)	1,1- DCA (ppb)	PCE (ppb)	DTW (feet)	SPT (feet)	WTE (feet)
C-14 520.08	03/28/86	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/15/88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/10/88	13,000	29,000	2,700	18	120,000	--	--	--	--	--	--	--	13.39	0.00	506.69
	06/10/88	--	--	--	--	--	--	--	--	--	--	--	--	14.85	0.00	505.43
	07/25/88	--	--	--	--	--	--	--	--	--	--	--	--	13.47	0.00	506.61
	10/13/88	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	13.58	0.00	506.50
	01/01/89	--	--	--	--	--	--	--	--	--	--	--	--	13.00	0.00	507.08
	01/12/89	ND	ND	ND	ND	NS	--	--	--	--	--	--	--	--	--	--
	04/12/89	ND	ND	ND	ND	NS	ND	ND	ND	--	--	--	--	13.47	0.00	506.61
	06/26/89	14,000	25,000	3,400	26,000	140,000	--	30	--	--	--	--	--	13.80	0.00	506.28
	10/13/89	12,000	16,000	1,600	13,000	86,000	--	--	--	--	--	--	--	13.62	0.00	506.46
	01/03/90	9,500	16,000	1,800	13,000	120,000	--	25	3	--	--	--	--	13.91	0.00	506.17
	01/04/90	3,900	8,100	1,200	7,700	76,000	--	18	1	--	--	--	--	13.91	0.00	506.17
	05/08/90	7,500	17,000	1,400	14,000	62,000	--	13	--	ND	--	ND	--	13.89	0.00	506.19
	09/27/90	--	--	--	--	--	--	--	--	--	--	--	--	13.78	0.00	506.30
	01/03/91	--	--	--	--	--	--	--	--	--	--	--	--	13.72	0.00	506.36
	04/12/91	750	3,800	720	9,200	60,000	--	ND	ND	ND	ND	ND	ND	12.97	0.00	507.11
	09/04/91	2,800	11,000	1,300	13,000	110,000	--	--	--	--	--	--	--	13.84	0.00	506.24
	04/06/92	190	1,800	440	5,100	41,000	--	ND	ND	ND	ND	ND	ND	12.44	0.00	507.64
	07/28/92	2,300	9,700	1,800	15,000	130,000	--	--	--	--	--	--	--	13.70	0.00	506.38
	10/16/92	--	--	--	--	--	--	--	--	--	--	--	--	14.38	0.00	505.70
	01/14/93*	220	790	220	2,700	27,000	--	--	--	--	--	--	--	8.80	0.00	511.28
	03/26/93	330	1,600	460	4,000	23,000**	--	--	--	--	--	--	--	9.12	0.00	510.96
04/22/93	840	2,300	190	3,500	17,000	--	--	--	--	--	--	--	12.10	SHEEN	507.98	
TRAFFIC #	07/20,21/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/20/93	--	--	--	--	--	--	--	--	--	--	--	--	14.31	0.00	505.77
	01/20/94	130	790	270	2,400	22,000	--	--	--	--	--	--	--	12.14	0.00	507.94
C-15 522.41	03/28/86	--	--	--	--	--	--	--	--	--	--	--	--	13.14	0.00	509.27
	03/15/88	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	15.13	0.00	507.28
	05/10/88	--	--	--	--	--	--	--	--	--	--	--	--	15.40	0.00	507.01
	06/10/88	--	--	--	--	--	--	--	--	--	--	--	--	16.49	0.00	505.92
	07/25/88	--	--	--	--	--	--	--	--	--	--	--	--	15.17	0.00	507.24
	10/13/88	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	15.33	0.00	507.08
	01/01/89	--	--	--	--	--	--	--	--	--	--	--	--	13.70	0.00	508.71
	01/12/89	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--
	04/12/89	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	15.34	0.00	507.07
	06/26/89	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	15.72	0.00	506.69
	10/13/89	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	15.96	0.00	506.45
	01/03/90	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	15.42	0.00	506.99
	05/08/90	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	15.62	0.00	506.79
	09/27/90	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	15.59	0.00	506.82
	01/03/91	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.50	0.00	506.91
	04/12/91	--	--	--	--	--	--	--	--	--	--	--	--	15.21	0.00	507.20
	09/04/91	--	--	--	--	--	--	--	--	--	--	--	--	15.90	0.00	506.51
	04/06/92	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14.88	0.00	507.53
	07/28/92	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.82	0.00	506.59
	10/16/92	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16.25	0.00	506.16
	01/14/93*	ND	1.9	0.8	5.1	61	--	--	--	--	--	--	--	12.48	0.00	509.93
	03/26/93	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	12.67	0.00	509.74
	04/22/93	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13.60	0.00	508.81
07/20,21/93	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16.87	0.00	505.54	
10/20/93	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.24	0.00	507.17	
01/20/94	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.01	0.00	507.40	

**Table 1**  
**HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA**

CHEVRON SERVICE STATION #9-1924  
4904 SOUTHFRONT ROAD, LIVERMORE, CALIFORNIA

WELL ID/ ELEVATION (TOC)	DATE	BENZENE (ppb)	TOLUENE (ppb)	ETHYL- BENZENE (ppb)	XYLENES (ppb)	TPH-G (ppb)	TOG (ppb)	1,2- DCA (ppb)	OTHER (ppb)	MC (ppb)	1,1,1- TCA (ppb)	1,1- DCA (ppb)	PCE (ppb)	DTW (feet)	SPT (feet)	WTE (feet)
C-16 519.68	03/28/86	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/15/88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/10/88	1,000	73	140	180	4,500	--	--	--	--	--	--	--	13.78	0.00	505.90
	06/10/88	--	--	--	--	--	--	--	--	--	--	--	--	14.88	0.00	504.80
	07/25/88	--	--	--	--	--	--	--	--	--	--	--	--	13.69	0.00	505.99
	10/13/88	16	5.5	ND	16	1,600	--	--	--	--	--	--	--	13.80	0.00	505.88
	01/01/89	--	--	--	--	--	--	--	--	--	--	--	--	13.45	0.00	506.23
	01/12/89	360	11	78	51	1,000	--	--	--	--	--	--	--	--	--	--
	04/11/89	130	4	21	19	15,800	ND	8	--	--	--	--	--	13.78	0.00	505.90
	06/26/89	170	8	37	43	1,300	ND	ND	--	--	--	--	--	14.02	0.00	505.66
	10/13/89	20	ND	7	ND	1,000	ND	ND	--	--	--	--	--	14.01	0.00	505.67
	01/03/90	150	3	41	24	1,300	--	5	--	--	--	--	--	13.97	0.00	505.71
	05/07/90	49	4.4	29	13	480	--	4.5	--	ND	--	ND	--	14.45	0.00	505.23
	09/29/90	18	2.1	11	8.0	360	--	1.8	ND	ND	ND	ND	--	14.32	0.00	505.36
	01/03/91	12	ND	6	6	230	--	2	ND	0.8	ND	ND	ND	13.96	0.00	505.72
	04/12/91	--	--	--	--	--	--	--	--	--	--	--	--	13.74	0.00	505.94
	09/04/91	--	--	--	--	--	--	--	--	--	--	--	--	14.22	0.00	505.46
	04/06/92	30	ND	14	12.0	360	--	1.0	ND	ND	ND	ND	--	13.18	0.00	506.50
	07/28/92	31	ND	6.8	16	210	--	--	--	--	--	--	--	13.93	0.00	505.75
	10/16/92	11	ND	5.1	3.4	140	--	--	--	--	--	--	--	14.92	0.00	504.76
	01/14/93*	24	ND	36	21	740	--	--	--	--	--	--	--	11.81	0.00	507.87
	03/26/93	22	2	16	10	730	--	--	--	--	--	--	--	11.36	0.00	508.32
	04/22/93	46	ND	24	6	850	--	--	--	--	--	--	--	12.30	0.00	507.38
TRAFFIC	07/20,21/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/20/93	18	2	16	17	290**	--	--	--	--	--	--	--	14.00	0.00	505.68
	01/20/94	10	1	12	9	360	--	--	--	--	--	--	--	13.48	0.00	506.20

**Table 1  
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA**

CHEVRON SERVICE STATION #9-1924  
4904 SOUTHFRONT ROAD, LIVERMORE, CALIFORNIA

WELL ID/ ELEVATION (TOC)	DATE	BENZENE (ppb)	TOLUENE (ppb)	ETHYL- BENZENE (ppb)	XYLENES (ppb)	TPH-G (ppb)	TOG (ppb)	1,2- DCA (ppb)	OTHER (ppb)	MC (ppb)	1,1,1- TCA (ppb)	1,1- DCA (ppb)	PCE (ppb)	DTW (feet)	SPT (feet)	WTE (feet)
C-17 520.82	03/28/86	--	--	--	--	--	--	--	--	--	--	--	--	13.48	0.00	507.34
	03/15/88	--	--	--	--	--	--	--	--	--	--	--	--	14.76	0.00	506.06
	05/10/88	--	--	--	--	--	--	--	--	--	--	--	--	14.77	0.00	506.05
	06/10/88	--	--	--	--	--	--	--	--	--	--	--	--	15.84	0.00	504.98
	07/25/88	--	--	--	--	--	--	--	--	--	--	--	--	14.63	0.00	506.19
	10/13/88	18	900	760	5,500	270,000	--	--	--	--	--	--	--	14.83	0.00	505.99
	01/01/89	--	--	--	--	--	--	--	--	--	--	--	--	14.78	0.00	506.04
	01/12/89	ND	490	2,100	6,700	190,000	--	--	--	--	--	--	--	--	--	--
	04/11/89	30	150	320	1,000	27,000	6.0	ND	--	--	--	--	--	14.83	0.00	505.99
	06/26/89	50	390	660	2,000	20,000	ND	ND	--	--	--	--	--	15.03	0.00	505.79
	06/26/89	40	420	740	2,200	27,000	--	ND	--	--	--	--	--	15.03	0.00	505.79
	10/13/89	ND	48	230	480	17,000	ND	ND	--	--	--	--	--	15.02	0.00	505.80
	01/03/90	ND	29	120	210	14,000	--	ND	--	--	--	--	--	15.10	0.00	505.72
	05/08/90	25	130	210	470	9,500	--	ND	--	--	ND	--	--	15.12	0.00	505.70
	09/29/90	ND	ND	ND	ND	ND	--	ND	ND	ND	1.9	ND	--	14.99	0.00	505.83
	09/29/90	ND	3.4	ND	ND	ND	--	ND	ND	ND	1.8	1.9	ND	14.99	0.00	505.83
	01/03/91	ND	28	56	140	3,700	--	ND	ND	ND	1.8	1.9	ND	14.92	0.00	505.90
	01/03/91	ND	10	59	150	8,600	--	ND	ND	ND	ND	ND	ND	14.92	0.00	505.90
	04/12/91	ND	5	47	120	8,600	--	ND	ND	ND	ND	ND	ND	14.71	0.00	506.11
	04/12/91	ND	11	48	120	4,400	--	ND	ND	ND	ND	ND	ND	14.71	0.00	506.11
	09/04/91	ND	27	49	79	5,800	--	ND	ND	ND	ND	ND	ND	15.17	0.00	505.65
	09/04/91	ND	21	36	61	4,100	--	ND	ND	ND	ND	ND	ND	15.17	0.00	505.65
	04/06/92	ND	5.8	27	29	2,300	--	ND	ND	ND	ND	ND	ND	14.14	0.00	506.68
	07/28/92	99	180	170	430	11,000	--	--	--	--	--	--	--	15.18	0.00	505.64
	10/16/92	ND	4,800	3,900	6,600	1,200,000	--	--	--	--	--	--	--	15.76	0.00	505.06
	01/14/93*	9.3	9.1	23	34	3,500	--	--	--	--	--	--	--	13.44	0.00	507.38
	03/26/93	ND	19	20	35	3,700**	--	--	--	--	--	--	--	12.46	0.00	508.36
	04/22/93	16	68	44	97	8,900	--	--	--	--	--	--	--	13.30	0.00	507.52
	07/20,21/93	5	35	33	62	4,200	--	--	--	--	--	--	--	17.21	0.00	503.61
	10/20/93	5	12	43	64	4,500	--	--	--	--	--	--	--	15.09	0.00	505.73
01/20/94	4	42	24	73	1,900	--	--	--	--	--	--	--	14.47	0.00	506.35	

**Table 1  
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA**

CHEVRON SERVICE STATION #9-1924  
4904 SOUTHFRONT ROAD, LIVERMORE, CALIFORNIA

WELL ID/ ELEVATION (TOC)	DATE	BENZENE (ppb)	TOLUENE (ppb)	ETHYL- BENZENE (ppb)	XYLENES (ppb)	TPH-G (ppb)	TOG (ppb)	1,2- DCA (ppb)	OTHER (ppb)	MC (ppb)	1,1,1- TCA (ppb)	1,1- DCA (ppb)	PCE (ppb)	DTW (feet)	SPT (feet)	WTE (feet)
C-18 518.96	03/28/86	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	03/15/88	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	05/10/88	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	06/10/88	---	---	---	---	---	---	---	---	---	---	---	---	14.89	0.00	504.07
	07/25/88	---	---	---	---	---	---	---	---	---	---	---	---	13.79	0.00	505.17
	10/13/88	ND	ND	ND	ND	ND	ND	---	---	---	---	---	---	13.86	0.00	505.10
	01/01/89	---	---	---	---	---	---	---	---	---	---	---	---	13.94	0.00	505.02
	01/12/89	ND	ND	ND	ND	ND	ND	---	---	---	---	---	---	---	0.00	518.96
	04/11/89	ND	ND	ND	ND	ND	ND	3.6	---	---	---	---	---	14.86	0.00	504.10
	06/26/89	ND	ND	ND	ND	ND	ND	3.1	---	---	---	---	---	14.02	0.00	504.94
	10/13/89	ND	ND	ND	ND	ND	ND	ND	---	---	---	---	---	15.06	0.00	503.90
	01/03/90	ND	ND	ND	ND	ND	ND	1	---	---	---	---	---	14.07	0.00	504.89
	05/07/90	ND	ND	ND	ND	ND	ND	ND	---	ND	---	ND	---	14.01	0.00	504.95
	09/27/90	ND	ND	ND	ND	ND	ND	ND	ND	0.6	ND	ND	ND	13.91	0.00	505.05
	01/03/91	ND	ND	ND	ND	ND	ND	---	ND	ND	ND	ND	ND	13.98	0.00	504.98
	04/12/91	ND	ND	ND	ND	ND	ND	---	ND	ND	ND	ND	ND	13.83	0.00	505.13
	09/04/91	ND	ND	ND	ND	ND	ND	---	ND	ND	ND	ND	ND	14.20	0.00	504.76
	04/06/92	ND	ND	ND	ND	ND	ND	---	ND	ND	ND	ND	ND	13.07	0.00	505.89
	07/28/92	ND	ND	ND	ND	ND	ND	---	---	---	---	---	---	13.55	0.00	505.41
	10/16/92	ND	ND	ND	ND	ND	ND	---	---	---	---	---	---	14.38	0.00	504.58
01/14/93*	ND	ND	ND	ND	1.8	56	---	---	---	---	---	---	12.46	0.00	506.50	
03/26/93	ND	ND	ND	ND	ND	ND	---	---	---	---	---	---	11.46	0.00	507.50	
04/22/93	ND	ND	ND	ND	ND	ND	---	---	---	---	---	---	12.58	0.00	506.38	
07/20,21/93	ND	0.5	ND	ND	ND	92	---	---	---	---	---	---	15.64	0.00	503.32	
PAVED OVER	10/20/93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PAVED OVER	01/20/94	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

**Table 1**  
**HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA**

CHEVRON SERVICE STATION #9-1924  
4904 SOUTHFRONT ROAD, LIVERMORE, CALIFORNIA

WELL ID/ ELEVATION (TOC)	DATE	BENZENE (ppb)	TOLUENE (ppb)	ETHYL- BENZENE (ppb)	XYLENES (ppb)	TPH-G (ppb)	TOG (ppb)	1,2- DCA (ppb)	OTHER (ppb)	MC (ppb)	1,1,1- TCA (ppb)	1,1- DCA (ppb)	PCE (ppb)	DTW (feet)	SPT (feet)	WTE (feet)
C-19 520.99	03/28/86	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	03/15/88	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	05/10/88	1,400	360	350	1,300	18	---	---	---	---	---	---	---	15.23	0.00	505.76
	06/10/88	---	---	---	---	---	---	---	---	---	---	---	---	16.58	0.00	504.41
	07/25/88	---	---	---	---	---	---	---	---	---	---	---	---	15.19	0.00	505.80
	10/13/88	8.3	4.7	4.4	ND	ND	---	---	---	---	---	---	---	15.27	0.00	505.72
	01/01/89	---	---	---	---	---	---	---	---	---	---	---	---	15.20	0.00	505.79
	01/12/89	5	4	ND	ND	ND	---	---	---	---	---	---	---	---	---	---
	04/11/89	1.8	ND	ND	ND	ND	ND	13	---	---	---	---	---	15.24	0.00	505.75
	04/11/89	1.2	ND	0.6	0.6	500	---	14	---	---	---	---	---	15.24	0.00	505.75
	06/26/89	2.5	ND	ND	ND	500	---	26	---	---	---	---	---	15.44	0.00	505.55
	10/13/89	ND	ND	ND	ND	540	ND	13	13	---	---	---	---	15.47	0.00	505.52
	01/03/90	1.2	0.7	1.3	0.9	ND	---	11	---	---	---	---	---	15.45	0.00	505.54
	05/07/90	ND	ND	ND	ND	ND	---	4.6	---	ND	---	ND	---	15.68	0.00	505.31
	09/28/90	ND	ND	ND	ND	ND	---	---	ND	1.2	ND	ND	---	15.52	0.00	505.47
	01/03/91	ND	ND	ND	ND	66	---	1	ND	ND	ND	ND	0.9	15.56	0.00	505.43
	04/12/91	---	---	---	---	---	---	---	---	---	---	---	---	15.20	0.00	505.79
	09/04/91	---	---	---	---	---	---	---	---	---	---	---	---	15.60	0.00	505.39
	04/06/92	0.7	ND	1.0	ND	110	---	1.9	ND	ND	ND	ND	ND	14.58	0.00	506.41
	07/28/92	1.4	ND	1.0	4.2	ND	---	---	---	---	---	---	---	15.26	0.00	505.73
	10/16/92	ND	ND	ND	ND	ND	---	---	---	---	---	---	---	16.00	0.00	504.99
	01/14/93*	1.1	ND	0.9	0.9	100	---	---	---	---	---	---	---	13.69	0.00	507.30
	03/26/93	ND	ND	ND	ND	ND	---	---	---	---	---	---	---	12.96	0.00	508.03
04/22/93	0.6	1	1	1	250**	---	---	---	---	---	---	---	14.18	0.00	506.81	
07/20,21/93	ND	ND	0.8	2	390**	---	---	---	---	---	---	---	16.58	0.00	504.41	
10/20/93	ND	ND	ND	ND	ND**	---	---	---	---	---	---	---	15.23	0.00	505.76	
01/20/94	ND	ND	ND	ND	ND	---	---	---	---	---	---	---	14.84	0.00	506.15	

**Explanation**

Elevations are expressed as feet above mean sea level.  
 TOC = Top of casing  
 WTE = Water table elevation (well elevation - (DTW - (SPT x 0.8))  
 DTW = Depth to water  
 SPT = Separate-phase hydrocarbon thickness  
 TPH-G = Total Petroleum Hydrocarbons as Gasoline (ppb)  
 TOG = Total Oil & Grease (EPA Method 503D & 503E)  
 \* = Rinstate sample contaminated; resampled 03/26/93  
 \*\* = Uncategorized compound not included in gasoline hydrocarbon total  
 \*\*\* = Hydrocarbon pattern uncharacteristic of fresh gasoline  
 # = Not enough water to purge and sample

PCE = Tetrachloroethene  
 1,2-DCA = 1,2-Dichloroethane  
 MC = Methylene Chloride  
 TCA = 1,1,1-Trichloroethane  
 1,1-DCA = 1,1-Dichloroethane  
 ND = Not detected at or above the minimum quantitation limit (MQL)  
 -- = Not sampled, not monitored, inaccessible  
 OTHER = 5 ppb Carbon Disulfide detected in C-1 on 10/13/89  
 3 ppb Vinyl Chloride detected in C-14 on 1/3/90  
 1 ppb Vinyl Chloride detected in C-14 on 1/4/90  
 13 ppb Carbon Disulfide detected in C-19 on 10/13/89



**ATTACHMENT I**

**ANALYTICAL LABORATORY REPORTS**

**AND**

**CHAIN-OF-CUSTODY MANIFESTS**



ENVIRONMENTAL  
LABORATORIES, INC.

4080 Pike Lane  
Concord, CA 94520  
(510) 685-7852  
(800) 544-3422 Inside CA  
(800) 423-7143 Outside CA  
(510) 825-0720 FAX

Client Number: 020704233  
Consultant Project Number: 020704233.0610  
Facility Number: 9-1924  
Project ID: 4904 South Front  
Livermore  
Work Order Number: C4-01-0269

January 27, 1994

Bruce Eppler  
Groundwater Technology, Inc.  
1401 W. Halyard Dr., Ste. 140  
West Sacramento, CA 95691

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories, Inc. on 01/21/94.

A formal Quality Assurance/Quality Control (QA/QC) program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria, unless otherwise stated in the footnotes.

GTEL is certified by the California State Department of Health Services, Laboratory certification number E1075, to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

If you have any questions concerning this analysis or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,  
GTEL Environmental Laboratories, Inc.

Rashmi Shah  
Laboratory Director

Client Number: 020704233  
 Consultant Project Number: 020704233.0610  
 Facility Number: 9-1924  
 Project ID: 4904 South Front  
 Livermore  
 Work Order Number: C4-01-0269

**Table 1**  
**ANALYTICAL RESULTS**  
 Aromatic Volatile Organics and  
 Total Petroleum Hydrocarbons as Gasoline in Water  
 EPA Methods 5030, 8020, and Modified 8015<sup>a</sup>

GTEL Sample Number		01	02	03	04 <sup>b</sup>
Client Identification		C-15	C-11	C-12	C-10
Date Sampled		01/20/94	01/20/94	01/20/94	01/20/94
Date Analyzed		01/22/94	01/22/94	01/22/94	01/22/94
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.5	<0.5	5	<0.5	<0.5
Toluene	0.5	<0.5	0.6	<0.5	<0.5
Ethylbenzene	0.5	<0.5	3	<0.5	<0.5
Xylene, total	0.5	<0.5	4	<0.5	<0.5
TPH as Gasoline	50	<50	140	<50	<50
Detection Limit Multiplier		1	1	1	1
BFB surrogate, % recovery		116	125	124	126

- a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Board LUFT Manual procedures. Bromofluorobenzene surrogate recovery acceptability limits are 70-130%.
- b. Uncategorized compound is not included in gasoline hydrocarbon concentration.

Client Number: 020704233  
 Consultant Project Number: 020704233.0610  
 Facility Number: 9-1924  
 Project ID: 4904 South Front  
 Livermore  
 Work Order Number: C4-01-0269

**Table 1 (continued)**

**ANALYTICAL RESULTS**

**Aromatic Volatile Organics and**

**Total Petroleum Hydrocarbons as Gasoline in Water**

**EPA Methods 5030, 8020, and Modified 8015a**

GTEL Sample Number		05	06	07	08
Client Identification		C-13	C-3	C-19	C-8
Date Sampled		01/20/94	01/20/94	01/20/94	01/20/94
Date Analyzed		01/22/94	01/22/94	01/22/94	01/22/94
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.5	<0.5	<0.5	<0.5	<0.5
Toluene	0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	0.5	<0.5	<0.5	<0.5	<0.5
Xylene, total	0.5	<0.5	<0.5	<0.5	<0.5
TPH as Gasoline	50	<50	<50	<50	<50
Detection Limit Multiplier		1	1	1	1
BFB surrogate, % recovery		123	122	124	126

- a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Board LUFT Manual procedures. Bromofluorobenzene surrogate recovery acceptability limits are 70-130%.

Client Number: 020704233  
 Consultant Project Number: 020704233.0610  
 Facility Number: 9-1924  
 Project ID: 4904 South Front  
 Livermore  
 Work Order Number: C4-01-0269

**Table 1 (continued)**  
**ANALYTICAL RESULTS**  
 Aromatic Volatile Organics and  
 Total Petroleum Hydrocarbons as Gasoline in Water  
 EPA Methods 5030, 8020, and Modified 8015<sup>a</sup>

GTEL Sample Number		09	10	11	12
Client Identification		C-16	C-5	C-1	C-2
Date Sampled		01/20/94	01/20/94	01/20/94	01/20/94
Date Analyzed		01/22/94	01/23/94	01/23/94	01/23/94
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.5	10	2	13	36
Toluene	0.5	1	1	10	3
Ethylbenzene	0.5	12	11	130	7
Xylene, total	0.5	9	0.6	60	3
TPH as Gasoline	50	360	440	2900	760
Detection Limit Multiplier		1	1	5	1
BFB surrogate, % recovery		120	87.7	119	88.3

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Board LUFT Manual procedures. Bromofluorobenzene surrogate recovery acceptability limits are 70-130%.

Client Number: 020704233  
 Consultant Project Number: 020704233.0610  
 Facility Number: 9-1924  
 Project ID: 4904 South Front  
 Livermore  
 Work Order Number: C4-01-0269

**Table 1 (continued)**

**ANALYTICAL RESULTS**

**Aromatic Volatile Organics and**

**Total Petroleum Hydrocarbons as Gasoline in Water**

**EPA Methods 5030, 8020, and Modified 8015<sup>a</sup>**

GTEL Sample Number		13	14	15	16
Client Identification		C-17	C-7	C-9	C-14
Date Sampled		01/20/94	01/20/94	01/20/94	01/20/94
Date Analyzed		01/23/94	01/23/94	01/23/94	01/25/94
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.5	4	12	55	130
Toluene	0.5	42	12	57	790
Ethylbenzene	0.5	24	150	27	270
Xylene, total	0.5	73	69	210	2400
TPH as Gasoline	50	1900	3600	12000	22000
Detection Limit Multiplier		1	5	10	25
BFB surrogate, % recovery		139 <sup>b</sup>	126	129	97.8

- a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Board LUFT Manual procedures. Bromofluorobenzene surrogate recovery acceptability limits are 70-130%.
- b. BFB recovery was high due to interference of the target compounds at the BFB peak.

Client Number: 020704233  
 Consultant Project Number: 020704233.0610  
 Facility Number: 9-1924  
 Project ID: 4904 South Front  
 Livermore  
 Work Order Number: C4-01-0269

**Table 1 (continued)**  
**ANALYTICAL RESULTS**  
 Aromatic Volatile Organics and  
 Total Petroleum Hydrocarbons as Gasoline in Water  
 EPA Methods 5030, 8020, and Modified 8015<sup>a</sup>

GTEL Sample Number		17	18	G012294	
Client Identification		C-6	TBLB	METHOD BLANK	
Date Sampled		01/20/94	01/20/94	--	
Date Analyzed		01/26/94	01/22/94	01/22/94	
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.5	10	<0.5	<0.5	
Toluene	0.5	86	<0.5	<0.5	
Ethylbenzene	0.5	510	<0.5	<0.5	
Xylene, total	0.5	29	<0.5	<0.5	
TPH as Gasoline	50	22000	<50	<50	
Detection Limit Multiplier		50	1	1	
BFB surrogate, % recovery		84.5	119	124	

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Board LUFT Manual procedures. Bromofluorobenzene surrogate recovery acceptability limits are 70-130%.

Client Number: 020704233  
 Consultant Project Number: 020704233.0610  
 Facility Number: 6-1924  
 Project ID: 4904 South Front  
 Livermore  
 Work Order Number: C4-01-0269

### QC Matrix Spike and Duplicate Spike Results

Matrix: Water

Analyte	Sample ID	Spike Amount	Units	Recovery, %	Duplicate Recovery, %	RPD, %	Control Limits
<b>Modified EPA 8020:</b>							
Benzene	C4010260-01	20.0	ug/L	94.5	93.5	1.06	57.3 - 138
Toluene	C4010260-01	20.0	ug/L	111	109	1.82	63.0 - 134
Ethylbenzene	C4010260-01	20.0	ug/L	120	116	3.39	59.3 - 137
Xylene, total	C4010260-01	60.0	ug/L	132	128	3.08	59.3 - 144



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

Chain-of-Custody-Record

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 Southfront, Livermore ✓  
Consultant Project Number 02070423300610 ✓  
Consultant Name Groundwater Technology, Inc. ✓  
Address 401 Halyard Dr. #140, W. Sacramento, CA 95691  
Project Contact (Name) Bruce Eppler ✓  
(Phone) 916-372-4700 (Fax Number)

Chevron Contact (Name) Brett Hunter  
(Phone) 570-842-8695  
Laboratory Name GTCL  
Laboratory Release Number 9033280  
Samples Collected by (Name) ANTHONY SMITH / JEFF NELSON  
Collection Date 1-20-94  
Signature Anthony Smith Sr. / Jeff Nelson

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type C = Grab C = Composite D = Diurnal	Time	Sample Preservation	Lead (Yes or No)	Analysis To Be Performed										Remarks			
								BTX + TPH GAS (8020 + 8015) <sup>Y20</sup>	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-15	01 ✓	3	W		17:10	HCL	Y	X	ND												
C-11	02 ✓	3			17:10			X	ND 2 plg												
C-12	03 ✓	3			17:15			X	ND												
C-10	04 ✓	3			17:15			X	ND												
C-13	05 ✓	3			17:20			X	ND												
C-3	06 ✓	3			17:20			X	ND												
C-19	07 ✓	3			17:25			X	ND												
C-8	08 ✓	3			17:25			X	ND												
C-16	09 ✓	3			17:30			X	18 plg benz												
C-5	10 ✓	3			17:30			X	7 plg benz												
C-1	11 ✓	3			17:35			X	19 plg benz												
C-2	12 ✓	3			17:35			X	140 benz												
C-17	13 ✓	3	W		17:40			X	12 tel												
C-7	14 ✓	3	W		17:40	HCL	Y	X	257 EB x 5												

NOTE:  
Do NOT BILL  
TB-LB SAMPLES  
4°C  
Remarks

**C4010269 1 OF 2**

Relinquished By (Signature) <u>Anthony Smith Sr.</u>	Organization <u>GTI</u>	Date/Time <u>1-21-94 11:00</u>	Received By (Signature) <u>John Weber</u>	Organization <u>GTCL</u>	Date/Time <u>1-21-94 11:00</u>	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. 5 Days 10 Days <u>As Contracted</u>
Relinquished By (Signature) <u>John Weber</u>	Organization <u>GTCL</u>	Date/Time <u>1-21-94 11:10</u>	Received By (Signature)	Organization	Date/Time	
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature) <u>Ronald C. Jensen</u>		Date/Time <u>1/21/94 11:10</u>	

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

Chain-of-Custody-Record

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 Southfront, Livermore  
Consultant Project Number 02070423300610  
Consultant Name Groundwater Technology, Inc.  
Address 1401 Halvard Dr. #140, W. Sacramento, CA 95691  
Project Contact (Name) Bruce Eppler  
(Phone) 916-372-4700 (Fax Number)

Chevron Contact (Name) Brett Hunter  
(Phone) 570-842-8695  
Laboratory Name GTEL  
Laboratory Release Number 9033280  
Samples Collected by (Name) ANDREW SMITH / JEFF NELSON  
Collection Date 1-20-94  
Signature Andrew Smith & Jeff Nelson

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Core/soil	Type G = Grab C = Composite D = Diurnal	Time	Sample Preservation	Iced (Yes or No)	Analyses 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)				
C-9	15	3	W	<del>1745</del>	1745	HCL	Y	X	X	0									
C-14	16	2		<del>1745</del>	1745			X											
C-6	17	3	W	<del>1750</del>	1750	HCL	Y	X		EB 2400									
TBL0	18	2	W			HCL	Y	X											

NOTE:  
Do NOT BILL  
TB-LB SAMPLES

**C4010269 2052**

Relinquished By (Signature) <u>Andrew Smith</u>	Organization <u>GTF</u>	Date/Time <u>1-21-94 11:00</u>	Received By (Signature) <u>John Weber</u>	Organization <u>GTEL</u>	Date/Time <u>1-21-94 11:00</u>
Relinquished By (Signature) <u>John Weber</u>	Organization <u>GTEL</u>	Date/Time <u>1-21-94 11:10</u>	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature) <u>Ronald C. Jensen</u>		Date/Time <u>1/21/94 11:10</u>

Turn Around Time (Circle Choice)

- 24 Hrs.
- 48 Hrs.
- 5 Days
- 10 Days
- As Contracted