Chevron U.S.A. Products Company
2410 Camino Ramon, San Ramon, California • Phone (510) 842-9500
Mail Address: P.O. Box 5004, San Ramon, CA 94583-0804

December 18, 1992

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

Re : Chevron Service Station No. 9-8139
16304 Foothill Rd., San Leandro, California

Mr. Seery :

Enclosed is the quarterly monitoring and sampling report prepared by Burlington Environmental and dated December 1992.

During this sampling period, monitoring wells MW-2, MW-6, MW-7, MW-8, MW-10, and MW-11 were nondetect (ND) for total petroleum hydrocarbon as gasoline (TPH-G), benzene, toluene, ethylbenzene, and xylenes (BTEX). Well MW-1 contained only 0.6 ppb benzene which is probably an anomaly because the result is close to the detection limit, and the previous results were less than 0.5 ppb. Well MW-3 had 6600 ppb TPH-G, 1100 ppb benzene, 41 ppb toluene, 220 ppb ethylbenzene, and 570 ppb xylenes while MW-9 had 3200 ppb TPH-G, 38 ppb benzene, 19 ppb ethylbenzene, and 200 ppb xylenes. Depth to water ranged from 15.62 to 22.11 feet.

If you have any questions or comments, please feel free to call me at (510) 842-8752.

Sincerely,

Chevron U.S.A. Products Co.

Kenneth Kan
Engineer

LKAN/MacFile 9-8139R5

Enclosure

cc : Mr. Lester Feldman
RWQCB-S.F.Bay Region
2101 Webster Str., Suite 500
Oakland, CA 94612

Ms. Bette Owen
Chevron U.S.A. Products Co.

QUARTERLY MONITORING REPORT
FOURTH QUARTER 1992

CHEVRON SERVICE STATION NO. 9-8139
16304 Foothill Boulevard
San Leandro, California

December 1992

Prepared for

CHEVRON USA, INC.

CHV149/353

Burlington Environmental Inc.
950 'B' Gilman Street • Berkeley, CA 94710
(510) 524-9372 • FAX: (510) 524-7439

BURLINGTON ENVIRONMENTAL

December 3, 1992
CHV149/353

Mr. Kenneth Kan
Environmental Engineer
Chevron USA, Inc.
2410 Camino Ramon
San Ramon, California 94583-0804

Re: **QUARTERLY MONITORING REPORT**
Fourth Quarter 1992
Chevron Service Station No. 9-8139
16304 Foothill Boulevard
San Leandro, California

Dear Mr. Kan:

Burlington Environmental Inc. (Burlington) is pleased to submit the following quarterly monitoring report for Chevron USA, Inc. (Chevron) Service Station No. 9-8139, located at 16304 Foothill Boulevard in San Leandro, California. The groundwater monitoring and sampling was conducted by Burlington on October 26 and 27, 1992.

MONITORING ACTIVITIES

The site is occupied by an operating service station located on Foothill Boulevard in southern San Leandro, California (see Figure 1). The service station is located approximately 250 feet east of Highway 580, and 6,000 feet south of Lake Chabot. There are currently five groundwater monitoring wells and three groundwater extraction well located onsite and two groundwater monitoring wells located offsite (see Figure 2). In each monitoring well, the depth to groundwater and the presence or absence of phase-separated hydrocarbons (PSH) were determined. Groundwater samples were collected and analyzed according to Chevron and EPA guidelines to determine the concentrations of total petroleum hydrocarbons as gasoline (TPH) and benzene, toluene, ethylbenzene, and total xylenes (BTEX). The monitoring and sampling procedures are presented in Appendix A. Field data sheets are presented in Appendix B.

Superior Precision Analytical, Inc., located in San Francisco, California, performed the analyses. Analytical results, techniques, and detection limits are presented in Table 1.

RESULTS

The groundwater elevation in the monitoring wells beneath the site on October 26 and 27, 1992, ranged from 104.75 to 111.19 feet above mean sea level (see Table 2). A contour map of these data is presented in Figure 3. As shown on the contour

map, the general groundwater flow direction beneath the site is to the south with an approximate gradient of 0.12 ft/ft.

The results of the chemical analyses are presented in Table 1. No PSH were detected in any of the monitoring wells during the October quarterly sampling event. Figure 4 presents the isoconcentrations contours for benzene. Chain-of-custody documentation and certified analytical reports are presented in Appendix C.

We appreciate the opportunity to provide you with quality environmental consulting services. Please do not hesitate to contact us if we can provide further assistance.

Best regards,
BURLINGTON ENVIRONMENTAL

Larry Miller
Field Project Manager

David C. Tight, R.G. No. 4603
Investigation/Remediation Manager

Attachments: Table 1 - Groundwater Analytical Results
Table 2 - Groundwater Elevation Data

Figure 1 - Site Location Map
Figure 2 - Site Vicinity Map
Figure 3 - Groundwater Elevation Contours
Figure 4 - Benzene Isoconcentration Contours

Appendix A - Groundwater Sampling and Analysis Procedures
Appendix B - Water Sample Field Data Sheets
Appendix C - Chain-of-Custody Records and Certified Analytical Reports

Table 1
GROUNDWATER ANALYTICAL RESULTS

Chevron Service Station No. 9-8139
16304 Foothill Blvd, San Leandro, California

WELL NUMBER	SAMPLE NO.	DATE SAMPLED	TPH Gasoline	TPH Diesel	TOTAL OIL & GREASE	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES		TOTAL METALS			ETHYLENE DIBROMIDE
										Pb	Cr	Cd	Zn	
EPA Detection Method:			8015	8015	413	602*	602*	602*	602*	7420	7190	7130	7950	504
MW-1	WS-1SL	12/5/89	ND(<500)	ND(<1000)	ND(<5000)	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	ND(<500)	ND(<100)	20	20	ND(<.05)
	WS-1SL	5/24/90	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	1WSSL	9/6/90	ND(<50)	NA	NA	ND(<.5)	0.8	ND(<.5)	0.5	NA	NA	NA	NA	ND(<.05)
	WS13SL	11/29/90	ND(<50)	NA	NA	0.7	0.9	ND(<.5)	1	NA	NA	NA	NA	NA
	WS18SL	2/20/91	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS27SL	5/22/91	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS39SL	8/22/91	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS47SL	11/13/91	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS59SL	1/31/92	ND(<50)	NA	NA	0.5	ND(<.5)	ND(<.5)	0.5	NA	NA	NA	NA	NA
	WS64SL	4/23/92	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS75SL	7/27/92	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS84SL	10/26/92	ND(<50)	NA	NA	0.6	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
MW-2	WS-2SL	12/5/89	ND(<500)	ND(<1000)	ND(<5000)	ND(<.5)	ND(<.5)	ND(<.5)	0.9	ND(<500)	ND(<100)	ND(<10)	10	ND(<.05)
	WS-2SL	5/24/90	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	2WSSL	9/6/90	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	ND(<.05)
	WS10SL	11/29/90	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS19SL	2/20/91	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS26SL	5/22/91	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS38SL	8/22/91	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS46SL	11/13/91	58	NA	NA	ND(<.5)	0.5	0.7	2.3	NA	NA	NA	NA	NA
	WS56SL	1/31/92	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS62SL	4/23/92	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS73SL	7/27/92	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	1.1	NA	NA	NA	NA	NA
	WS82SL	10/26/92	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
MW-3	WS-3SL	12/5/89	24,000	NA	NA	2,400	1,800	360	2,600	NA	NA	NA	NA	ND(<.05)
	WS-5SL (d)	12/5/89	24,000	NA	ND(<5000)	2,500	1,900	390	2,600	ND(<500)	ND(<100)	ND(<10)	40	ND(<.05)
	WS-3SL	5/24/90	9,000	NA	NA	2,600	1,700	250	1,500	NA	NA	NA	NA	NA
	WS-4SL (d)	5/24/90	10,000	NA	NA	2,600	1,800	260	1,600	NA	NA	NA	NA	NA
	3WSSL	9/6/90	3,500	NA	NA	900	550	110	460	NA	NA	NA	NA	ND(<.05)
	WS15SL	11/29/90	9,200	NA	NA	1,100	1,100	210	1,100	NA	NA	NA	NA	NA
	WS21SL	2/20/91	8,800	NA	NA	960	780	200	920	NA	NA	NA	NA	NA
	WS29SL	5/22/91	28,000	NA	NA	5,800	1,200	460	2,300	NA	NA	NA	NA	NA
	WS41SL	8/22/91	21,000	NA	NA	3,100	2,000	480	2,000	NA	NA	NA	NA	NA
	WS42SL (d)	8/22/91	19,000	NA	NA	2,700	1,800	420	1,700	NA	NA	NA	NA	NA
	WS49SL	11/13/91	18,000	NA	NA	2,400	1,200	450	2,200	NA	NA	NA	NA	NA
	WS58SL	1/31/92	18,000	NA	NA	3,800	920	700	2,600	NA	NA	NA	NA	NA
	WS65SL	4/23/92	46,000	NA	NA	5,000	1,900	1,000	3,500	NA	NA	NA	NA	NA
	WS76SL	7/27/92	26,000	NA	NA	4,900	1,100	1,200	3,600	NA	NA	NA	NA	NA
	WS85SL	10/26/92	6,600	NA	NA	1,100	41	220	570	NA	NA	NA	NA	NA

(continued)

Table 1
GROUNDWATER ANALYTICAL RESULTS

Chevron Service Station No. 9-8139
16304 Foothill Blvd, San Leandro, California
(continued)

WELL NUMBER	SAMPLE NO.	DATE SAMPLED	TPH Gasoline	TPH Diesel	TOTAL OIL & GREASE	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	TOTAL METALS Pb	Cr	Cd	Zn	ETHYLENE DIBROMIDE
EPA Detection Method:			8015	8015	413	602*	602*	602*	602*	7420	7190	7130	7950	504
MW-4**	WS-4SL	12/5/89	19,000	NA	NA	390	1,300	460	1,800	NA	NA	NA	NA	ND(<.05)
(EW-3)	WS-5SL	5/24/90	4,600	NA	NA	210	460	140	480	NA	NA	NA	NA	NA
	4WSSL	9/6/90	6,000	NA	NA	680	520	170	580	NA	NA	NA	NA	ND(<.05)
	WS16SL	11/29/90	15,000	NA	NA	800	1,400	430	1,700	NA	NA	NA	NA	NA
	WS22SL	2/20/91	15,000	NA	NA	640	590	420	1,600	NA	NA	NA	NA	NA
	WS23SL (d)	2/20/91	15,000	NA	NA	680	410	450	1,600	NA	NA	NA	NA	NA
	WS30SL	5/22/91	9,800	NA	NA	580	140	310	740	NA	NA	NA	NA	NA
	WS31SL (d)	5/22/91	7,200	NA	NA	520	130	270	670	NA	NA	NA	NA	NA
MW-5**	WS-6SL *	5/25/90	28,000	NA	NA	920	1,100	460	1,300	NA	NA	NA	NA	2.4
(EW-2)	NS *	9/7/90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NS	11/29/90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NS	2/20/91	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NS	5/22/91	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-6	WS-7SL *	5/25/90	ND(<50)	NA	NA	ND(<2)	ND(<3)	ND(<3)	ND(<3)	NA	NA	NA	NA	ND(<.02)
	6WSSL *	9/7/90	ND(<50)	NA	NA	ND(<2)	ND(<3)	ND(<3)	ND(<3)	NA	NA	NA	NA	ND(<.05)
	WS17SL	11/29/90	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS24SL	2/20/91	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS32SL	5/22/91	ND(<50)	NA	NA	0.5	0.7	ND(<.5)	1.1	NA	NA	NA	NA	NA
	WS45SL	8/23/91	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS50SL	11/14/91	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS51SL	11/14/91	ND(<50)	NA	NA	ND(<.5)	0.6	ND(<.5)	1.1	NA	NA	NA	NA	NA
	WS60SL	1/31/92	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS61SL (d)	1/31/92	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS66SL	4/23/92	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS67SL (d)	4/23/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	WS77SL	7/27/92	ND(<50)	NA	NA	1.2	0.6	ND(<.5)	1.9	NA	NA	NA	NA	NA
	WS86SL	10/27/92	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
MW-7	WS-8SL *	5/25/90	ND(<50)	NA	NA	ND(<2)	ND(<3)	ND(<3)	ND(<3)	NA	NA	NA	NA	ND(<.02)
	7WSSL *	9/7/90	ND(<50)	NA	NA	ND(<2)	ND(<3)	ND(<3)	ND(<3)	NA	NA	NA	NA	ND(<.05)
	8WSSL (d)*	9/7/90	ND(<50)	NA	NA	ND(<2)	ND(<3)	ND(<3)	ND(<3)	NA	NA	NA	NA	ND(<.05)
	WS14SL	11/29/90	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS20SL	2/20/91	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS28SL	5/22/91	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS40SL	8/22/91	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS48SL	11/13/91	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS57SL	1/31/92	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS63SL	4/23/92	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS74SL	7/27/92	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS83SL	10/26/92	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA

(continued)

Table 1
GROUNDWATER ANALYTICAL RESULTS

Chevron Service Station No. 9-8139
16304 Foothill Blvd, San Leandro, California
(continued)

WELL NUMBER	SAMPLE NO.	DATE SAMPLED	TPH Gasoline	TPH Diesel	TOTAL OIL & GREASE	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	METALS Pb	TOTAL Cr	METALS Cd	Zn	ETHYLENE DIBROMIDE
EPA Detection Method:			8015	8015	413	602*	602*	602*	602*	7420	7190	7130	7950	504
MW-8	9WSSL	9/7/90	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	ND(<.05)
	WS11SL	11/29/90	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS12SL (d)	11/29/90	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS25SL	2/20/91	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS33SL	5/22/91	ND(<50)	NA	NA	0.6	ND(<.5)	ND(<.5)	1	NA	NA	NA	NA	NA
	WS44SL	8/23/91	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS52SL	11/14/91	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS55SL	1/30/92	ND(<50)	NA	NA	1	0.7	ND(<.5)	1.1	NA	NA	NA	NA	NA
	WS68SL	4/24/92	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS81SL	7/27/92	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS87SL	10/27/92	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
MW-9	WS43SL	8/22/91	9600	NA	NA	46	170	98	1,200	NA	NA	NA	NA	ND(<.05)
	WS53SL	11/14/91	11,000	NA	NA	130	58	86	1,500	NA	NA	NA	NA	ND(<.05)
	WS54SL	1/30/92	11,000	NA	NA	210	29	110	1,900	NA	NA	NA	NA	NA
	WS69SL	4/24/92	11,000	NA	NA	180	25	100	1,900	NA	NA	NA	NA	NA
	WS80SL	7/27/92	2,800	NA	NA	59	1.6	18	280	NA	NA	NA	NA	NA
	WS88SL	10/27/92	[illegible]	NA	NA	[illegible]	ND(<.5)	[illegible]	[illegible]	NA	NA	NA	NA	NA
MW-10	WS78SL	7/27/92	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS90SL	10/27/92	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
MW-11	WS79SL	7/27/92	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	WS89SL	10/27/92	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
EW-1**	WS-9SL *	5/25/90	3,900	NA	NA	260	430	64	340	NA	NA	NA	NA	0.03
RINSATE	RS-4SL	12/5/89	ND(<500)	NA	ND(<5000)	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	ND(<500)	ND(<100)	ND(<10)	ND(<10)	ND(<.05)
	RS-1SL	5/24/90	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	1RSSL	9/7/90	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	ND(<.05)
	RS3SL	2/20/91	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	RS4SL	5/22/91	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	RS7SL	8/22/91	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	RS7SL	11/13/91	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	RS8SL	1/30/92	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	RS9SL	4/23/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

(continued)

Table 1
GROUNDWATER ANALYTICAL RESULTS

Chevron Service Station No. 9-8139
16304 Foothill Blvd, San Leandro, California
(continued)

WELL NUMBER	SAMPLE NO.	DATE SAMPLED	TPH Gasoline	TPH Diesel	TOTAL OIL & GREASE	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	TOTAL METALS Pb	Cr	Cd	Zn	ETHYLENE DIBROMIDE
EPA Detection Method:			8015	8015	413	602*	602*	602*	602*	7420	7190	7130	7950	504
TRIP BLANK	TB3SL	2/20/91	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	TB4SL	5/22/91	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	TB6SL	5/22/91	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	TB7SL	11/13/91	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	TB8SL	1/30/92	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	TB-LB	4/23/92	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	TB-LB	7/27/92	ND(<.5)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA
	TB-LB	10/26/92	ND(<.5)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA

Notes:
Groundwater chemistry values presented in parts per billion (ppb)
ND = Less than method detection limit
NS = Not Sampled due to the presence of floating product
NA = No Analysis
(d) = Duplicate Sample
*In 5/90 and in 9/90 MW-5, MW-6, MW-7 and EW-1 were analyzed for Volatile Organics using EPA Method 8240 (624).
Other samples were analyzed using EPA Method 8020 (602).
**MW-4 and MW-5 were converted to extraction wells EW-3 and EW-2, respectively, on June 10, 1991.
Extraction wells are not monitored in quarterly events.

Table 2

GROUNDWATER ELEVATION DATA

Chevron Service Station No. 9-8139

16304 Foothill Blvd., San Leandro, California

Well Number	Date Sampled	Casing Diameter (inches)	TOC Elevation (ft-MSL)	Depth to Water (ft-BTOC)	PSH (ft)	Water Elevation (ft-MSL)
MW-1	3/23/90	2.0	127.09	12.92	ND	114.17
	9/6/90	2.0	127.09	14.68	ND	112.41
	9/25/90	2.0	127.09	15.01	ND	112.08
	11/29/90	2.0	127.09	14.82	ND	112.27
	2/20/91	2.0	127.09	14.29	ND	112.80
	4/19/91	2.0	127.09	12.16	ND	114.93
	5/22/91	2.0	127.09	13.69	ND	113.40
	8/22/91	2.0	127.09	15.38	ND	111.71
	11/13/91	2.0	127.09	15.80	ND	111.29
	1/30/92	2.0	127.09	14.71	ND	112.38
	4/23/92	2.0	127.09	12.22	ND	114.87
	7/27/92	2.0	127.09	14.30	ND	112.79
	10/26/92	2.0	127.09	15.90	ND	111.19
MW-2	3/23/90	2.0	125.98	12.40	ND	113.58
	9/6/90	2.0	125.98	14.85	ND	111.13
	9/25/90	2.0	125.98	14.80	ND	111.18
	11/29/90	2.0	125.98	14.40	ND	111.58
	2/20/91	2.0	125.98	14.09	ND	111.89
	4/19/91	2.0	125.98	12.62	ND	113.36
	5/22/91	2.0	125.98	12.98	ND	113.00
	8/22/91	2.0	125.98	14.93	ND	111.05
	11/13/91	2.0	125.98	15.42	ND	110.56
	1/30/92	2.0	125.98	14.70	ND	111.28
	4/23/92	2.0	125.98	13.83	ND	112.15
	7/27/92	2.0	125.98	15.30	ND	110.68
	10/26/92	2.0	125.98	15.62	ND	110.36
MW-3 (a)	3/23/90	2.0	127.84	17.50	ND	110.34
	9/6/90	2.0	126.77	18.72	ND	108.05
	9/25/90	2.0	126.77	18.40	ND	108.37
	11/29/90	2.0	126.77	18.97	ND	107.80
	2/20/91	2.0	126.77	19.20	ND	107.57
	4/19/91	2.0	126.77	17.81	ND	108.96
	5/22/91	2.0	126.77	17.88	ND	108.89
	8/1/91	2.0	126.77	19.23	ND	107.54
	8/22/91	2.0	126.77	20.17	ND	106.60
	11/13/91	2.0	126.77	19.95	ND	106.82
	1/30/92	2.0	126.77	19.14	ND	107.63
	4/23/92	2.0	126.77	17.75	ND	109.02
	7/27/92	2.0	126.77	19.00	ND	107.77
	10/26/92	2.0	126.77	19.62	ND	107.15

(continued)

Table 2

GROUNDWATER ELEVATION DATA

Chevron Service Station No. 9-8139

16304 Foothill Blvd., San Leandro, California

(continued)

Well Number	Date Sampled	Casing Diameter (inches)	TOC Elevation (ft-MSL)	Depth to Water (ft-BTOC)	PSH (ft)	Water Elevation (ft-MSL)
MW-4 (c)	3/23/90	2.0	125.22	16.02	ND	109.20
	9/6/90	2.0	125.22	17.35	ND	107.87
	9/25/90	2.0	125.22	17.48	ND	107.74
	11/29/90	2.0	125.22	17.61	ND	107.61
	2/20/91	2.0	125.22	17.81	ND	107.41
	4/19/91	2.0	125.22	15.80	ND	109.42
	5/22/91	2.0	125.22	16.68	ND	108.54
MW-5 (c)	3/23/90	2.0	125.85	16.89	ND	108.96
	9/7/90	2.0	125.85	18.46	0.04	107.42 (b)
	9/25/90	2.0	125.85	19.30	1.3	107.58 (b)
	11/29/90	2.0	125.85	18.87	0.71	107.54 (b)
	2/20/91	2.0	125.85	18.91	0.47	107.31 (b)
	4/19/91	2.0	125.85	16.99	0.48	109.24 (b)
	5/22/91	2.0	125.85	17.69	0.33	108.42 (b)
MW-6	3/23/90	2.0	124.18	18.51	ND	105.67
	9/7/90	2.0	124.18	16.18	ND	108.00
	9/25/90	2.0	124.18	16.42	ND	107.76
	11/29/90	2.0	124.18	16.11	ND	108.07
	2/20/91	2.0	124.18	16.09	ND	108.09
	4/19/91	2.0	124.18	15.15	ND	109.03
	5/22/91	2.0	124.18	15.41	ND	108.77
	8/23/91	2.0	124.18	17.80	ND	106.38
	11/14/91	2.0	124.18	16.52	ND	107.66
	1/30/92	2.0	124.18	16.48	ND	107.70
	4/23/92	2.0	124.18	16.20	ND	107.98
	7/27/92	2.0	124.18	16.52	ND	107.66
	10/26/92	2.0	124.18	17.12	ND	107.06
MW-7	3/23/90	2.0	126.86	21.40	ND	105.46
	9/7/90	2.0	126.86	18.38	ND	108.48
	9/25/90	2.0	126.86	19.25	ND	107.61
	11/29/90	2.0	126.86	18.55	ND	108.31
	2/20/91	2.0	126.86	18.55	ND	108.31
	4/19/91	2.0	126.86	17.33	ND	109.53
	5/22/91	2.0	126.86	17.42	ND	109.44
	8/22/91	2.0	126.86	19.05	ND	107.81
	11/13/91	2.0	126.86	21.84	ND	105.02
	1/30/92	2.0	126.86	22.42	ND	104.44
	4/23/92	2.0	126.86	22.04	ND	104.82
	7/27/92	2.0	126.86	22.24	ND	104.62
	10/26/92	2.0	126.86	22.11	ND	104.75

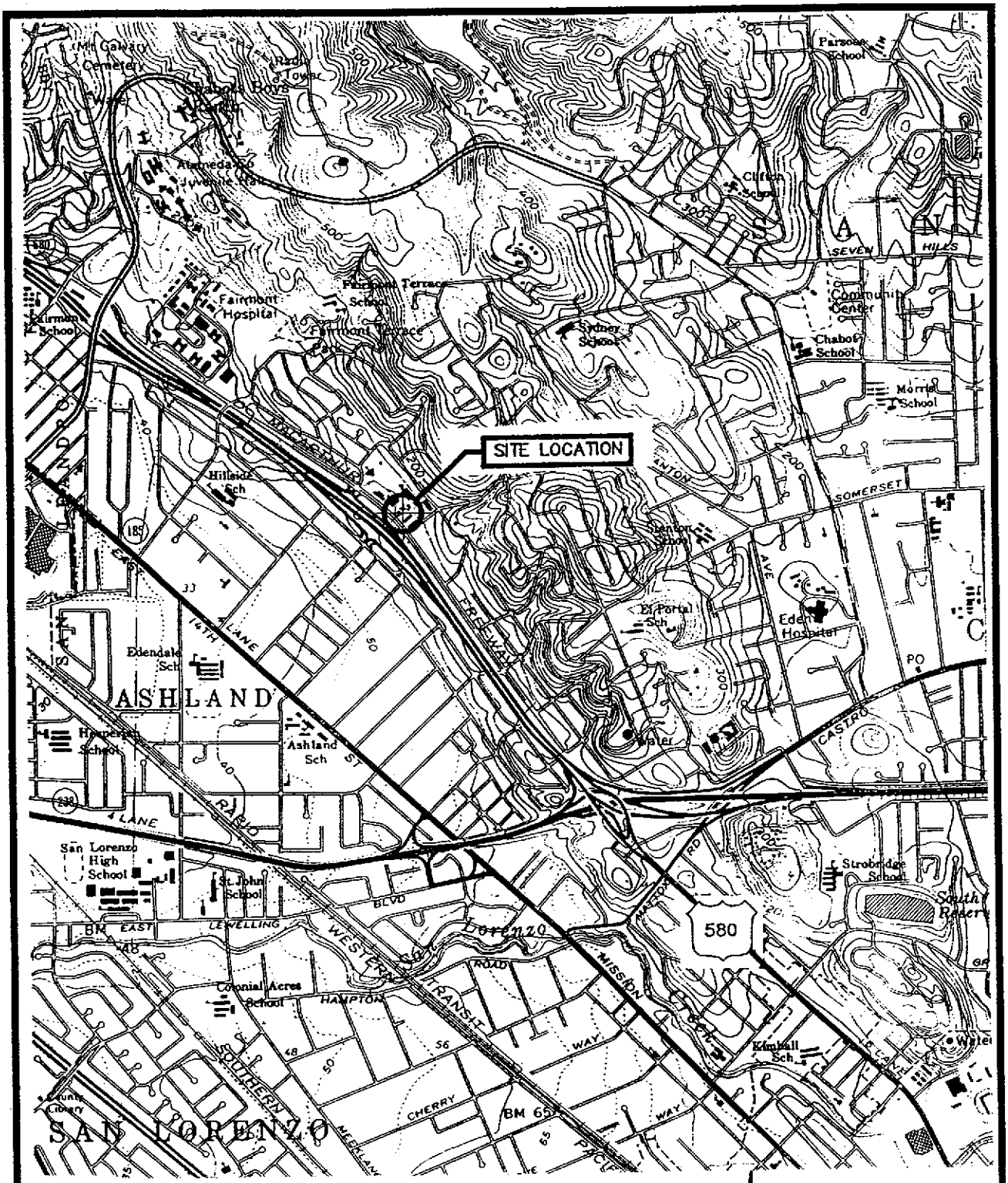
(continued)

Table 2
GROUNDWATER ELEVATION DATA

Chevron Service Station No. 9-8139
16304 Foothill Blvd., San Leandro, California
(continued)

Well Number	Date Sampled	Casing Diameter (inches)	TOC Elevation (ft-MSL)	Depth to Water (ft-BTOC)	PSH (ft)	Water Elevation (ft-MSL)
MW-8	9/7/90	2.0	123.61	16.07	ND	107.54
	9/25/90	2.0	123.61	16.20	ND	107.41
	11/29/90	2.0	123.61	16.30	ND	107.31
	2/20/91	2.0	123.61	16.32	ND	107.29
	4/19/91	2.0	123.61	14.71	ND	108.90
	5/22/91	2.0	123.61	15.42	ND	108.19
	8/22/91	2.0	123.61	17.15	ND	106.46
	11/14/91	2.0	123.61	16.99	ND	106.62
	1/30/92	2.0	123.61	16.30	ND	107.31
	4/23/92	2.0	123.61	15.05	ND	108.56
	7/27/92	2.0	123.61	16.08	ND	107.53
	10/26/92	2.0	123.61	16.72	ND	106.89
MW-9	8/22/91	2.0	124.20	17.60	ND	106.60
	11/14/91	2.0	124.20	17.48	ND	106.72
	1/30/92	2.0	124.20	16.71	ND	107.49
	4/23/92	2.0	124.20	15.23	ND	108.97
	7/27/92	2.0	124.20	16.72	ND	107.48
	10/26/92	2.0	124.20	17.22	ND	106.98
MW-10	7/27/92	2.0	125.03	17.52	ND	107.51
	10/27/92	2.0	125.03	18.06	ND	106.97
MW-11	7/27/92	2.0	122.92	15.38	ND	107.54
	10/26/92	2.0	122.92	15.97	ND	106.95
EW-1	8/1/91	6.0	124.95	17.54	ND	107.41
EW-2	8/1/91	4.0	125.79	18.07	ND	107.72
EW-3	8/1/91	4.0	125.22	17.49	ND	107.73

Notes:
TOC = Top of casing
ft-MSL = Feet above mean sea level
ft-BTOC = Feet below top of casing
ND = Not detected
(a) MW-3 wellhead modified and resurveyed on 9/6/90.
(b) Corrected water elevation in MW-5 due to presence of phase separate hydrocarbon.
(c) Well decommissioned on June 10, 1991, and replaced with groundwater extraction well.
Assumed density of gasoline = 0.79



Hayward, California [NE/4 Hayward 15' Quadrangle]
N3737.5–W12200/7.5

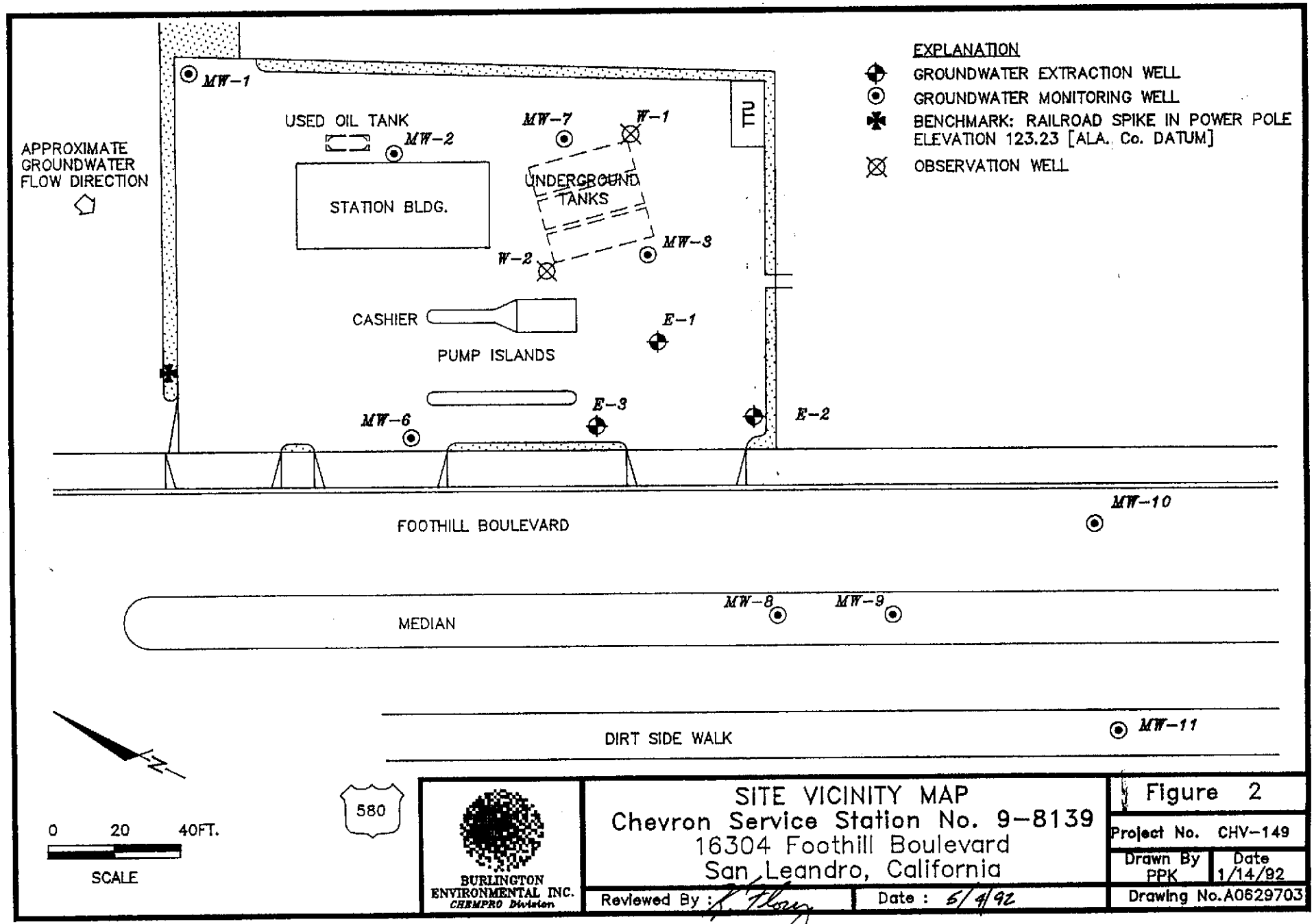
BURLINGTON ENVIRONMENTAL INC.
CHEMPRO Division

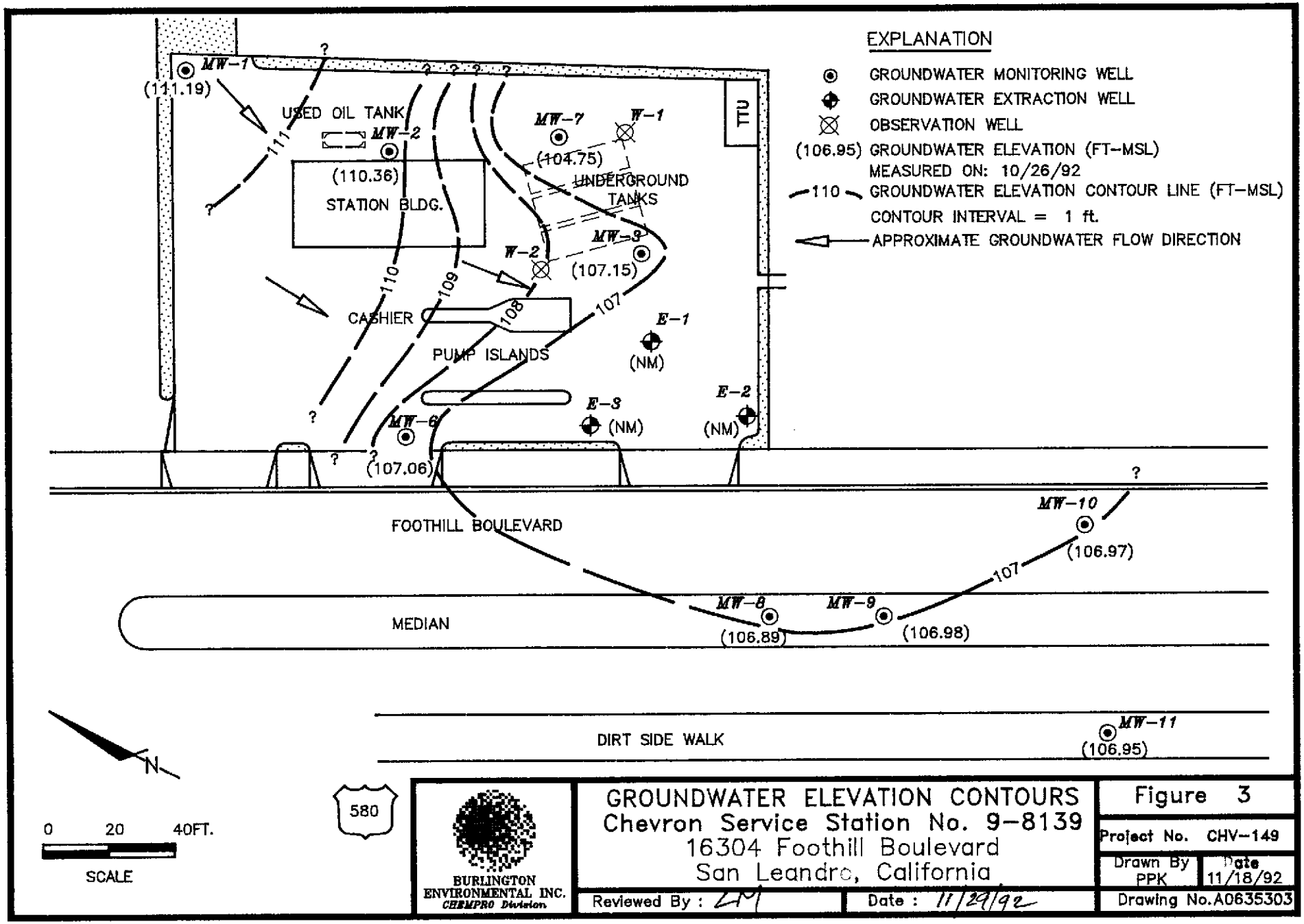
SITE LOCATION MAP
Chevron Service Station No. 9–8139
16304 Foothill Boulevard
San Leandro, California

Reviewed By : R. Flory Date : 7/1/92

Figure 1

Project No.	CHV149
Drawn By PPK	Date 6/28/91
Drawing No.	A0629701


EXPLANATION
GROUNDWATER EXTRACTION WELL
GROUNDWATER MONITORING WELL
BENCHMARK: RAILROAD SPIKE IN POWER POLE ELEVATION 123.23 [ALA. Co. DATUM]
OBSERVATION WELL
APPROXIMATE GROUNDWATER FLOW DIRECTION
MW-1
USED OIL TANK
MW-2
MW-7
W-1
STATION BLDG.
UNDERGROUND TANKS
MW-3
W-2
CASHIER
E-1
PUMP ISLANDS
E-3
E-2
MW-6
FOOTHILL BOULEVARD
MW-10
MEDIAN
MW-8
MW-9
DIRT SIDE WALK
MW-11
580
0 20 40FT.
SCALE
BURLINGTON ENVIRONMENTAL INC.
CHEMPRO Division
SITE VICINITY MAP
Chevron Service Station No. 9-8139
16304 Foothill Boulevard
San Leandro, California
Reviewed By :
Date : 5/4/92
Figure 2
Project No. CHV-149
Drawn By PPK
Date 1/14/92
Drawing No.A0629703



BURLINGTON ENVIRONMENTAL INC.
CHEMPRO Division

GROUNDWATER ELEVATION CONTOURS
Chevron Service Station No. 9-8139
16304 Foothill Boulevard
San Leandro, California

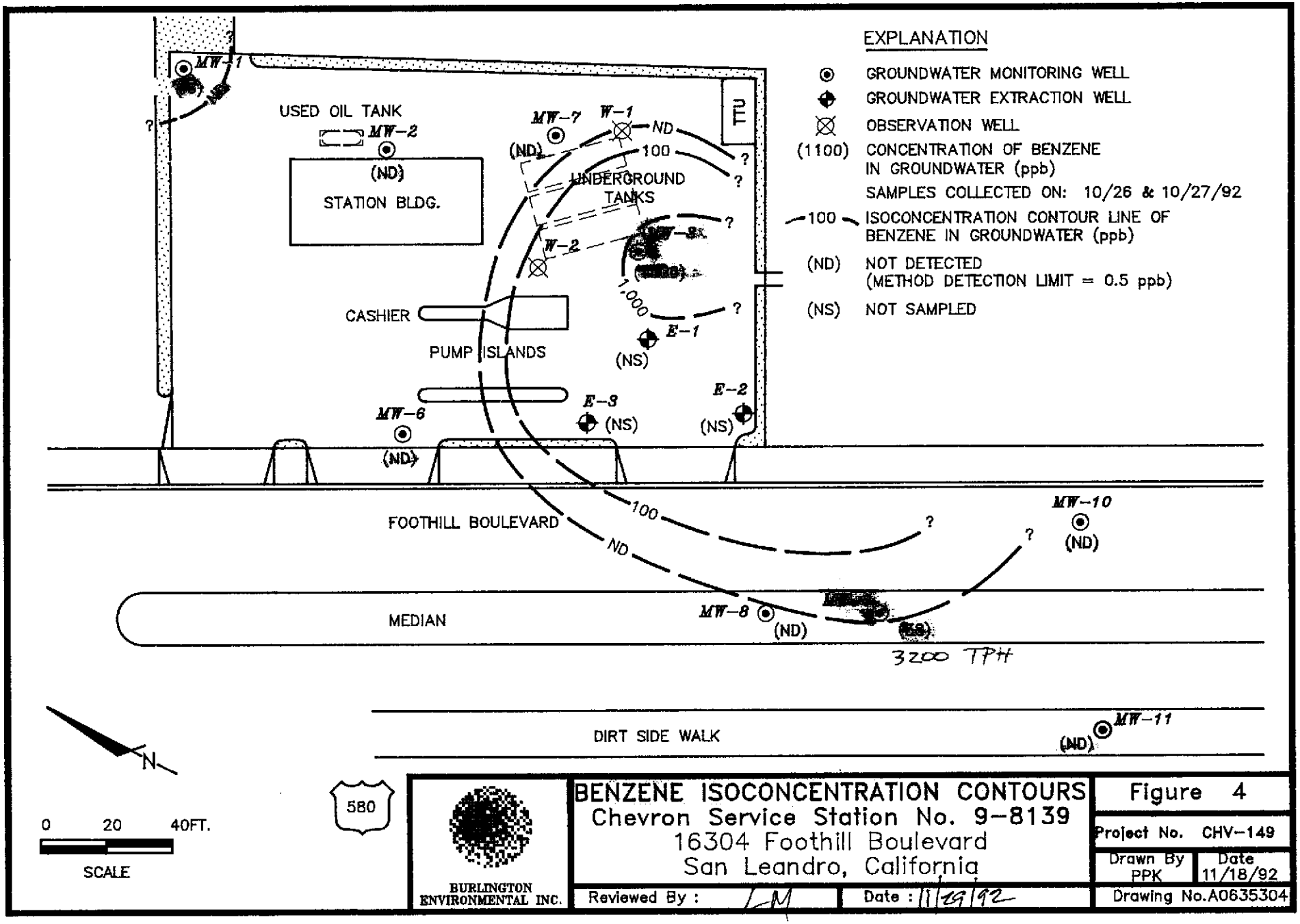
Figure 3

Project No. CHV-149

Drawn By PPK | Date 11/18/92

Reviewed By : LM | Date : 11/29/92

Drawing No. A0635303


EXPLANATION
GROUNDWATER MONITORING WELL
GROUNDWATER EXTRACTION WELL
OBSERVATION WELL
(1100) CONCENTRATION OF BENZENE IN GROUNDWATER (ppb)
SAMPLES COLLECTED ON: 10/26 & 10/27/92
100 ISOCONCENTRATION CONTOUR LINE OF BENZENE IN GROUNDWATER (ppb)
(ND) NOT DETECTED (METHOD DETECTION LIMIT = 0.5 ppb)
(NS) NOT SAMPLED
MW-1
USED OIL TANK
MW-2
(ND)
STATION BLDG.
MW-7
W-1
ND
100
(ND)
UNDERGROUND TANKS
W-2
1,000
CASHIER
PUMP ISLANDS
E-1
(NS)
E-2
(NS)
E-3
(NS)
MW-6
(ND)
FOOTHILL BOULEVARD
MW-10
(ND)
MW-8
(ND)
MEDIAN
3200 TPH
DIRT SIDE WALK
MW-11
(ND)
N
0 20 40FT.
SCALE
580
BURLINGTON ENVIRONMENTAL INC.
BENZENE ISOCONCENTRATION CONTOURS
Chevron Service Station No. 9-8139
16304 Foothill Boulevard
San Leandro, California
Figure 4
Project No. CHV-149
Drawn By PPK
Date 11/18/92
Reviewed By :
Date : 11/19/92
Drawing No. A0635304

APPENDIX A

GROUNDWATER SAMPLING AND ANALYSIS PROCEDURES

Appendix A

GROUNDWATER SAMPLING AND ANALYSIS PROCEDURES

INTRODUCTION

The sampling and analysis procedures for water-quality monitoring programs are contained in this Appendix. These procedures ensure that consistent and reproducible sampling methods are used, proper analytical methods are applied, analytical results are accurate, precise, and complete, and the overall objectives of the monitoring program are achieved.

SAMPLE COLLECTION

Sample collection procedures include equipment cleaning, water-level and total well-depth measurements, and well purging and sampling.

Equipment Cleaning

Sample bottles, caps, and septa were precleaned and provided by a Chevron-approved laboratory. All sampling containers were used only once and discarded after analysis is complete.

Before starting the sampling event, all equipment to be placed in the well or come in contact with groundwater was disassembled and cleaned thoroughly with detergent water, then steam cleaned with service station tap water, and rinsed with distilled water. Any parts that may absorb contaminants, such as plastic pump valves or bladders, were cleaned as described above or replaced.

During the sampling event all equipment used in the well was washed with detergent, steam-cleaned, and rinsed with distilled water before purging or sampling the next well. The water level sounder was washed with detergent and rinsed with distilled water before use in each well. The rinse water is stored in 55-gallon drums onsite and will be disposed of by Chevron.

Quality Assurance Samples

No rinsate sample was collected because the bailers were all dedicated to their site. All sample bailers were steam cleaned first, and washed with TSP before being dedicated to its respective monitoring well. A trip blank was taken to insure contamination did not result from travel exposure.

Water-Level, Phase-Separated Hydrocarbon, and Total Well-Depth Measurements

Before purging and sampling, the depth to water, floating hydrocarbon thickness, and the well total depth were measured using an oil water interface probe and an electric sounder. The electric sounder, manufactured by Slope-Indicator, Inc., is a transistorized instrument that uses a reel-mounted, two conductor, coaxial cable that connects the control panel to the sensor. Cable markings are stamped at 1-foot intervals. An engineers rule was used to measure the depths to the closest 0.01 foot. The water level was measured by lowering the sensor into the monitoring well. A low current circuit is completed when the sensor contacts the water, which serves as an electrolyte. The current is amplified and fed across an indicator light and audible buzzer, signaling when water has been contacted. A sensitivity control compensates for very saline or conductive water. The oil water interface probe signals with a solid sound when it contacts phase separated hydrocarbons. When the probe detects water, the sound changes to a beeping sound.

Floating hydrocarbon was not encountered in any of the monitoring wells. When floating product is detected at greater than 1/32-inch in thickness, a sample is not collected.

All liquid measurements were recorded to the nearest 0.01 foot in the field logbook. The groundwater elevation at each monitoring well was calculated by subtracting the measured depth to water from the surveyed well-casing elevation. Well total depth was then measured by lowering the sensor to the bottom of the well. Well total depth, used to calculate purge volumes and to determine whether the well screen is partially obstructed by silt, was recorded to the nearest 0.5 foot in the field log book.

Well Purging

Before sampling, standing water in the casing was purged from the monitoring wells using a PVC hand bailer. Samples were collected from the monitoring wells after a minimum of

four casing volumes had been evacuated or the pH, electrical conductivity, and temperature had stabilized. In the case that the monitoring well was purged until dry, the well was allowed to recover to within 80% of its static water level and sampled.

The pH, electrical conductivity, and temperature meter were calibrated each day before beginning field activities. After every well volume of groundwater removed from monitoring well, field measurements were taken. The data is presented on the water sample field data sheets. The calibration was checked once each day to verify meter performance. All field meter calibrations were recorded in the field log book.

Groundwater generated from well-purging operations were contained for temporary storage in 55-gallon drums. All drums were labeled and stored onsite in a location designated by the station manager. The sampler recorded the following information on the drum label for each drum generated:

* Drum content (i.e., groundwater)
* Source (i.e., well identification code)
* Date generated
* Client contact
* Project number
* Name of sampler

Well Sampling

A Teflon bailer was used for well sampling. Glass bottles of at least 40 milliliters volume and fitted with Teflon-lined septa were used in sampling for volatile organics. These bottles were filled completely to prevent air from remaining in the bottle. A positive meniscus forms when the bottle is completely full. A convex Teflon septum is placed over the meniscus to eliminate air. After capping, the bottle was inverted and tapped to verify that it did not contain air bubbles. The sample containers for other parameters were filled, and capped. Duplicate sample analysis was performed on groundwater samples taken from monitoring well 9 were analyzed for the same chemical analyses.

SAMPLE HANDLING AND DOCUMENTATION

The following section specifies the procedures and documentation used during sample handling.

Sample Handling

All sample containers were labeled immediately following sample collection. Samples were kept cool with ice cubes until received by the laboratory. Ice cubes were replaced each day to maintain refrigeration. At the time of sampling, each sample was logged on a chain-of-custody record which accompanied the sample to Superior Laboratory.

Sample Documentation

The following procedures were used during sampling and analysis to provide chain-of-custody control during sample handling from collection through storage. Sample documentation included the use of the following:

* Field log books to document sampling activities in the field
* Labels to identify individual samples
* Chain-of-custody record sheets for documenting possession and transfer of samples

Field Log Book

In the field, the sampler recorded the following information on the Water Sample Field Data Sheet for each sample collected:

* Project number
* Client name
* Location
* Name of sampler
* Date and time
* Pertinent well data (e.g., casing diameter, depth to water, well depth)
* Calculated and actual purge volumes

* Purging equipment used
* Sampling equipment used
* Appearance of each sample (e.g., color, turbidity, sediment)
* Results of field analyses (i.e., temperature, pH, electrical conductivity)
* General comments

The field logbooks were signed by the sampler.

Labels

Sample labels contained the following information:

* Project number
* Sample number (i.e., well designation)
* Sampler's initials
* Date and time of collection
* Type of preservative used (if any)

Sampling and Analysis Chain-of-Custody Record

The Sampling and Analysis Chain-of-Custody record, initiated at the time of sampling, contains, but is not limited to, the well number, sample type, analytical request, date of sampling, and the name of the sampler. The record sheet was signed, timed, and dated by the sampler when transferring the samples. The number of custodians in the chain of possessions were kept to a minimum. A copy of the Sampling and Analysis Chain-of-Custody record is included in Appendix C.

APPENDIX B

WATER SAMPLE FIELD DATA SHEETS

FIELD REPORT
WATER LEVEL / FLOATING PRODUCT SURVEY

PROJECT NO.: CHV-149 / 353 LOCATION: 16304 Foothill Blvd., San Leandro SAMPLER: DAL
STATION NO.: 9-8139 DATE: 10-26-92 TIME AND DATE OF SYSTEM START-UP:

WELL ID	TOTAL DEPTH (Feet)	WELL DIAMETER (in)	DEPTH TO WATER (Feet)	DEPTH TO FLOATING PRODUCT (Feet)	FLOATING PRODUCT THICKNESS (Feet)	TIME	COMMENTS
MW-1	27.62	2	15.90	-	-	1030	10-26-92
MW-2	30.37	2	15.62	-	-	1057	10-26-92
MW-7	25.95	2	22.11	-	-	1108	10-26-92
MW-3	25.70	2	19.62	-	-	1158	10-26-92
MW-6	28.84	2	17.12	-	-	1240	10-26-92
MW-8	30.64	2	16.72	-	-	1309	10-26-92
MW-9	26.68	2	17.22	-	-	1318	10-26-92
MW-11	29.32	2	15.97	-	-	1327	10-26-92
MW-10	29.50	2	18.06	-	-	1028	10-27-92

WATER DATA SHEET

PROJECT NO.: 353 SAMPLE ID.: WS - 84 - SL

LOCATION: 16304 Foothill Blvd., San Leandro DATE: 10·26·92

STATION NO.: 9·8139 WELL/SAMPLE

SAMPLER: DAL POINT DESIGNATION: MW-1

[X] SAMPLING [ ] DEVELOPING [ ] BAILING FLOATING PRODUCT

Casing Diameter:
2 inch X
3 inch
4 inch
6 inch
other

Screened Int. (ft.): 25-30

Initial DTW (ft.): 15.90 @1030

Initial TD (ft.): 27.62

Water Column Height (ft.): 11.72

80 % Recovery (ft.): 18.24

Calc. Casing Vol. (gal.): 1.99
(2" = .17) (3" = .38) (4" = .66) (6" = 1.5)

Calc. Purge Vol. (gal.): 7.97

Final DTW (ft.): 17.30 @1246

Final TD (ft.): 27.62

Casing Elev. (ft.): 127.09

TD (Actual) (ft.): 30

Product Bailed (gal.): Ø

FIELD MEASUREMENTS

TIME	VOLUME (gal.)	pH (units)	TEMP. (degrees F)	E.C. (umhos/cm)	COLOR	DTW (if dry)
1040	2	11.07	71.2	9.74×10^2	CLEAR	
1045	4	12.03	70.9	15.83×10^2	CLEAR	26.32
1130	-	-	-	-	-	20.94
1246	-	-	-	-	-	17.30

Odor? NONE

Actual Purge Vol. (gal.): 4

PURGE METHOD:
___ Bailer (Teflon)
X Bailer (PVC)
___ Well Wizard
___ Dedicated Bailer
___ Other

SAMPLE METHOD:
X Bailer (Teflon)
___ Bailer (PVC)
___ Dedicated Bailer
___ Other

REMARKS: WS·84·SL Sampled @ 1250 on 10·26·92

WEATHER: Sunny, hazy, ~65°.

CHEMICAL PROCESSORS, INC.

WATER DATA SHEET

PROJECT NO.: 353 SAMPLE ID.: WS - 82 - SL

LOCATION: 16304 Foothill BLVD, San Leandro DATE: 10.26.92

STATION NO.: 9.8139 WELL/SAMPLE

SAMPLER: DAL POINT DESIGNATION: MW-2

[X] SAMPLING [ ] DEVELOPING [ ] BAILING FLOATING PRODUCT

Casing Diameter:
2 Inch X
3 Inch ____
4 Inch ____
6 Inch ____
other ____

Screened Int. (ft.): 25-30

Initial DTW (ft.): 15.62 @ 1057

Initial TD (ft.): 30.37

Water Column Height (ft.): 14.75

80 % Recovery (ft.): 18.57

Calc. Casing Vol. (gal.): 2.50
(2" = .17) (3" = .38) (4" = .66) (6" = 1.5)

Calc. Purge Vol. (gal.): 10.03

Final DTW (ft.): 22.96 @ 1129

Final TD (ft.): 30.33

Product Bailed (gal.): Ø

Casing Elev. (ft.): 125.98

TD (Actual) (ft.): 30

FIELD MEASUREMENTS

TIME	VOLUME (gal.)	pH (units)	TEMP. (degrees F)	E.C. (umhos/cm)	COLOR	DTW (if dry)
1112	2.5	8.86	74.0	7.68×10^2	CAMEL	
1116	5.0	8.75	73.2	7.80×10^2	CAMEL	
1119	7.5	8.63	71.6	7.52×10^2	CAMEL	
1123	10.0	8.44	71.9	7.54×10^2	CAMEL	

Odor? NONE

Actual Purge Vol. (gal.): 10

PURGE METHOD:
___ Bailer (Teflon)
X Bailer (PVC)
___ Well Wizard
___ Dedicated Bailer
___ Other ____

SAMPLE METHOD:
X Bailer (Teflon)
___ Bailer (PVC)
___ Dedicated Bailer
___ Other ____

REMARKS: WS-82-SL Sampled @ 1155 on 10.26.92

WEATHER: Sunny, hazy, ~68°.

CHEMICAL PROCESSORS, INC.

WATER DATA SHEET

PROJECT NO.: 353 SAMPLE ID.: WS - 85 - SL

LOCATION: 16304 Foothill BLVD, San Leandro DATE: 10·26·92

STATION NO.: 9·8139 WELL/SAMPLE

SAMPLER: DAL POINT DESIGNATION: MW-3

[X] SAMPLING [ ] DEVELOPING [ ] BAILING FLOATING PRODUCT

Casing Diameter:
2 inch X
3 inch ____
4 inch ____
6 inch ____
other ____

Screened Int. (ft.): 15.5-25.5
Initial DTW (ft.): 19.62 @1158
Initial TD (ft.): 25.70
Water Column Height (ft.): 6.08
80 % Recovery (ft.): 20.84

Calc. Casing Vol. (gal.): 1.03
(2" = .17) (3" = .38) (4" = .66) (6" = 1.5)
Calc. Purge Vol. (gal.): 4.13
Final DTW (ft.): 22.95 @1343
Final TD (ft.): 25.65
Product Bailed (gal.): Ø

Casing Elev. (ft.): 126.77

TD (Actual) (ft.): 25.5

FIELD MEASUREMENTS

TIME	VOLUME (gal.)	pH (units)	TEMP. (degrees F)	E.C. (umhos/cm)	COLOR	DTW (if dry)
1330	1	7.84	72.9	7.02 x10²	CLEAR	
1333	2	7.77	72.5	7.22 x10²	PEWTER	
1336	3	7.70	72.2	7.17 x10²	H. OLIVE	
1339	4.25	7.68	71.2	7.09 x10²	H. OLIVE	

Odor? MODERATE to STRONG

Actual Purge Vol. (gal.): 4.25

PURGE METHOD:
___ Bailer (Teflon)
X Bailer (PVC)
___ Well Wizard
___ Dedicated Bailer
___ Other ____

SAMPLE METHOD:
X Bailer (Teflon)
___ Bailer (PVC)
___ Dedicated Bailer
___ Other ____

REMARKS: WS·85·SL Sampled @1400 on 10·26·92

WEATHER: SUNNY, HAZY, ~71°.

CHEMICAL PROCESSORS, INC.

WATER DATA SHEET

PROJECT NO.: 353 SAMPLE ID.: WS - 86 - SL

LOCATION: 16304 Foothill Blvd, San Lendro DATE: 10-27-92

STATION NO.: 9-8139 WELL/SAMPLE

SAMPLER: DAL POINT DESIGNATION: MW-6

[X] SAMPLING [ ] DEVELOPING [ ] BAILING FLOATING PRODUCT

Casing Diameter:
2 Inch X
3 Inch ____
4 Inch ____
6 Inch ____
other ____

Screened Int. (ft.): 24.6 - 29.2 10/24/92

Initial DTW (ft.): 17.12 @ 1240

Initial TD (ft.): 28.84

Casing Elev. (ft.): 124.18

Water Column Height (ft.): 11.72

TD (Actual) (ft.): ____

80 % Recovery (ft.): 19.46

Calc. Casing Vol. (gal.): 1.99
(2" = .17) (3" = .38) (4" = .66) (6" = 1.5)

Calc. Purge Vol. (gal.): 7.97

Final DTW (ft.): 24.76 @ 0758

Final TD (ft.): 28.93

Product Bailed (gal.): Ø

FIELD MEASUREMENTS

TIME	VOLUME (gal.)	pH (units)	TEMP. (degrees F)	E.C. (umhos/cm)	COLOR	DTW (if dry)
0741	2	7.77	66.3	4.68×10^2	CLEAR	
0745	4	7.71	67.1	4.46×10^2	CAMEL	
0750	6	7.68	67.7	4.56×10^2	CAMEL	
0755	8	7.67	67.7	4.39×10^2	CAMEL	

Odor? NONE

Actual Purge Vol. (gal.): 8

PURGE METHOD:
___ Bailer (Teflon)
X Bailer (PVC)
___ Well Wizard
___ Dedicated Bailer
___ Other ____

SAMPLE METHOD:
X Bailer (Teflon)
___ Bailer (PVC)
___ Dedicated Bailer
___ Other ____

REMARKS: WS-86-SL SAMPLED @0820 ON 10/27/92

WEATHER: Foggy, ~62°.

CHEMICAL PROCESSORS, INC.

WATER DATA SHEET

PROJECT NO.: 353 SAMPLE ID.: WS - 83 - SL

LOCATION: 16304 Foothill Blvd, San Leandro DATE: 10-26-92

STATION NO.: 9-8139 WELL/SAMPLE

SAMPLER: DAL POINT DESIGNATION: MW-7

[X] SAMPLING [ ] DEVELOPING [ ] BAILING FLOATING PRODUCT

Casing Diameter:
2 inch X
3 inch ____
4 inch ____
6 inch ____
other ____

Screened Int. (ft.): 21.5-26.5

Initial DTW (ft.): 22.11 @1108

Initial TD (ft.): 25.95

Water Column Height (ft.): 3.84

80 % Recovery (ft.): 22.88

Calc. Casing Vol. (gal.): .65
(2" = .17) (3" = .38) (4" = .66) (6" = 1.5)

Calc. Purge Vol. (gal.): 2.61

Final DTW (ft.): 24.22 @ 1220

Final TD (ft.): 25.92

Casing Elev. (ft.): 126.86

TD (Actual) (ft.): ____

Product Bailed (gal.): Ø

FIELD MEASUREMENTS

TIME	VOLUME (gal.)	pH (units)	TEMP. (degrees F)	E.C. (umhos/cm)	COLOR	DTW (if dry)
1206	75	8.78	73.0	5.29×10^2	CLEAR	
1210	1.50	8.67	72.7	5.12×10^2	PEWTER	
1214	2.25	8.44	71.3	5.18×10^2	TAN	
1218	2.75	8.42	71.1	5.16×10^2	TAN	

Odor? NONE

Actual Purge Vol. (gal.): 2.75

PURGE METHOD:
___ Bailer (Teflon)
X Bailer (PVC)
___ Well Wizard
___ Dedicated Bailer
___ Other ____

SAMPLE METHOD:
X Bailer (Teflon)
___ Bailer (PVC)
___ Dedicated Bailer
___ Other ____

REMARKS: WS-83-SL SAMPLED @1235 ON 10-26-92

WEATHER: SUNNY, HAZY, ~69°

CHEMICAL PROCESSORS, INC.

WATER DATA SHEET

PROJECT NO.: 353 SAMPLE ID.: WS - 87 - SL

LOCATION: 16304 Foothill Blvd., San Leandro DATE: 10-27-92

STATION NO.: 9.8139 WELL/SAMPLE

SAMPLER: DAL POINT DESIGNATION: MW-8

[X] SAMPLING [ ] DEVELOPING [ ] BAILING FLOATING PRODUCT

Casing Diameter:
2 inch X
3 inch ____
4 inch ____
6 inch ____
other ____

Screened Int. (ft.): 21.5 - 30.5

Initial DTW (ft.): 16.72 @ 1309 10/26/92

Initial TD (ft.): 30.64

Casing Elev. (ft.): 123.61

Water Column Height (ft.): 13.92

TD (Actual) (ft.): 31

80 % Recovery (ft.): 19.50

Calc. Casing Vol. (gal.): 2.36
(2" = .17) (3" = .38) (4" = .66) (6" = 1.5)

Calc. Purge Vol. (gal.): 9.46

Final DTW (ft.): 16.95 @ 0847

Final TD (ft.): 30.75

Product Bailed (gal.): Ø

FIELD MEASUREMENTS

TIME	VOLUME (gal.)	pH (units)	TEMP. (degrees F)	E.C. (µmhos/cm)	COLOR	DTW (if dry)
0830	2	7.79	66.8	SL [redacted] x10²	TAN	
0835	4	7.76	67.3	5.71 x10²	BUTTERSCOTCH	
0840	6	7.74	67.5	5.78 x10²	BUTTERSCOTCH	
0845	9.5	7.73	67.9	5.76 x10²	BUTTERSCOTCH	

Odor? NONE

Actual Purge Vol. (gal.): 9.5

PURGE METHOD:
___ Bailer (Teflon)
X Bailer (PVC)
___ Well Wizard
___ Dedicated Bailer
___ Other ____

SAMPLE METHOD:
X Bailer (Teflon)
___ Bailer (PVC)
___ Dedicated Bailer
___ Other ____

REMARKS: WS-87-SL SAMPLED @0910 ON 10/27/92

WEATHER: Foggy, ~ 63°.

CHEMICAL PROCESSORS, INC.

WATER DATA SHEET

PROJECT NO.: 353 SAMPLE ID.: WS - 88 - SL

LOCATION: 16304 Foothill Blvd, San Leandro DATE: 10/27/92

STATION NO.: 9-8139 WELL/SAMPLE

SAMPLER: DAL POINT DESIGNATION: MW-9

[X] SAMPLING [ ] DEVELOPING [ ] BAILING FLOATING PRODUCT

Casing Diameter:
2 Inch X
3 Inch ____
4 Inch ____
6 Inch ____
other ____

Screened Int. (ft.): 17-27

Initial DTW (ft.): 17.22 @ 1338 10/26/92

Initial TD (ft.): 26.68

Calc. Casing Vol. (gal.): 1.61 (2" = .17) (3" = .38) (4" = .66) (6" = 1.5)

Calc. Purge Vol. (gal.): 6.43

Final DTW (ft.): 17.36 @0929

Final TD (ft.): 26.65

Casing Elev. (ft.): 124.20

Water Column Height (ft.): 9.46

TD (Actual) (ft.): 27

80 % Recovery (ft.): 19.11

Product Bailed (gal.): Ø

FIELD MEASUREMENTS

TIME	VOLUME (gal.)	pH (units)	TEMP. (degrees F)	E.C. (umhos/cm)	COLOR	DTW (if dry)
0915	1.5	7.90	68.3	5.90 x10²	TAN	
0919	3.0	7.88	68.5	5.86 x10²	CAMEL	
0923	4.5	7.87	69.3	5.94 x10²	CAMEL	
0927	6.5	7.86	69.2	5.94 x10²	CAMEL	

Odor? NONE

Actual Purge Vol. (gal.): 6.5

PURGE METHOD:
- ___ Bailer (Teflon)
- X Bailer (PVC)
- ___ Well Wizard
- X Dedicated Bailer
- ___ Other ____

SAMPLE METHOD:
- X Bailer (Teflon)
- ___ Bailer (PVC)
- X Dedicated Bailer
- ___ Other ____

REMARKS: WS-88-SL Samples @ 0940 on 10/27/92

WEATHER: Foggy ~65°.

CHEMICAL PROCESSORS, INC.

WATER DATA SHEET

PROJECT NO.: 353 SAMPLE ID.: WS - 90 - SL

LOCATION: 16304 Foothill Blvd., San Leandro DATE: 10-27-92

STATION NO.: 9-8139 WELL/SAMPLE

SAMPLER: DAL POINT DESIGNATION: MW-10

[X] SAMPLING [ ] DEVELOPING [ ] BAILING FLOATING PRODUCT

Casing Diameter:
2 inch X
3 inch ____
4 inch ____
6 inch ____
other ____

Screened Int. (ft.): 14.5-29.5

Initial DTW (ft.): 18.06 @ 1028

Initial TD (ft.): 29.50

Casing Elev. (ft.): 125.03

Water Column Height (ft.): 11.44

TD (Actual) (ft.): 29.5

80 % Recovery (ft.): 20.35

Calc. Casing Vol. (gal.): 1.94
(2" = .17) (3" = .38) (4" = .66) (6" = 1.5)

Calc. Purge Vol. (gal.): 7.78

Final DTW (ft.): 20.96 @ 1050

Final TD (ft.): 29.48

Product Bailed (gal.): Ø

FIELD MEASUREMENTS

TIME	VOLUME (gal.)	pH (units)	TEMP. (degrees F)	E.C. (umhos/cm)	COLOR	DTW (if dry)
1030	2	7.83	72.0	6.86 x10²	CAMEL	
1035	4	7.82	71.1	6.64 x10²	CAMEL	
1040	6	7.79	70.5	6.69 x10²	CAMEL	
1045	8	7.79	69.9	6.68 x10²	CAMEL	

Odor? NONE

Actual Purge Vol. (gal.): 8

PURGE METHOD:
___ Bailer (Teflon)
X Bailer (PVC)
___ Well Wizard
___ Dedicated Bailer
___ Other ____

SAMPLE METHOD:
X Bailer (Teflon)
___ Bailer (PVC)
___ Dedicated Bailer
___ Other ____

REMARKS: WS-90-SL Sampled @1120 on 10-27-92

WEATHER: Sunny, ~70°.

CHEMICAL PROCESSORS, INC.

WATER DATA SHEET

PROJECT NO.: 353 SAMPLE ID.: WS - 89 - SL

LOCATION: 16304 Foothill BLVD, SanLeandro DATE: 10/27/92

STATION NO.: 9-8139 WELL/SAMPLE

SAMPLER: DM POINT DESIGNATION: MW-11

[X] SAMPLING [ ] DEVELOPING [ ] BAILING FLOATING PRODUCT

Casing Diameter:
2 inch X
3 inch ____
4 inch ____
6 inch ____
other ____

Screened Int. (ft.): 14.5 - 29.5 Calc. Casing Vol. (gal.): 2.27

(2" = .17) (3" = .38) (4" = .66) (6" = 1.5)

Initial DTW (ft.): 15.97 @ 1327 10/26/92 Calc. Purge Vol. (gal.): 9.07

Initial TD (ft.): 29.32 Final DTW (ft.): 16.95 @1002

Casing Elev. (ft.): 122.92 Water Column Height (ft.): 13.35 Final TD (ft.): 29.33

TD (Actual) (ft.): 29.5 80 % Recovery (ft.): 18.64 Product Bailed (gal.): Ø

FIELD MEASUREMENTS

TIME	VOLUME (gal.)	pH (units)	TEMP. (degrees F)	E.C. (umhos/cm)	COLOR	DTW (if dry)
0945	2.25	7.93	68.2	5.36×10^2	CAMEL	
0950	4.50	7.90	68.8	5.34×10^2	CAMEL	
0955	6.75	7.88	68.5	5.33×10^2	CAMEL	
0959	9	7.87	68.7	5.31×10^2	CAMEL	

Odor? NONE

Actual Purge Vol. (gal.): 9

PURGE METHOD:
___ Bailer (Teflon)
X Bailer (PVC)
___ Well Wizard
___ Dedicated Bailer
___ Other ____

SAMPLE METHOD:
X Bailer (Teflon)
___ Bailer (PVC)
___ Dedicated Bailer
___ Other ____

REMARKS: WS-89-SL SAMPLED @1020 ON 10/27/92

WEATHER: SUNNY, Fog beginning to break; ~70°

CHEMICAL PROCESSORS, INC.

APPENDIX C

CHAIN-OF-CUSTODY RECORDS AND CERTIFIED ANALYTICAL REPORTS

Superior Precision Analytical, Inc.
1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

Burlington/Chempro
Attn: LARRY MILLER

Project CHV-149/353
Reported 11/05/92

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed	Matrix
13661- 1	TB-LB	10/26/92	11/03/92	Water
13661- 3	WS-82-SL	10/26/92	11/03/92	Water
13661- 4	WS-83-SL	10/26/92	11/03/92	Water
13661- 5	WS-84-SL	10/26/92	11/04/92	Water
13661- 6	WS-85-SL	10/26/92	11/03/92	Water
13661- 7	WS-86-SL	10/27/92	11/03/92	Water
13661- 8	WS-87-SL	10/27/92	11/03/92	Water
13661- 9	WS-88-SL	10/27/92	11/03/92	Water
13661-10	WS-89-SL	10/27/92	11/03/92	Water
13661-11	WS-90-SL	10/27/92	11/03/92	Water

RESULTS OF ANALYSIS

Laboratory Number:	13661- 1	13661- 3	13661- 4	13661- 5	13661- 6
Gasoline:	ND<50	ND<50	ND<50	ND<50	6600
Benzene:	ND<0.5	ND<0.5	ND<0.5	0.6	1100
Toluene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	41
Ethyl Benzene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	220
Xylenes:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	570
Concentration:	ug/L	ug/L	ug/L	ug/L	ug/L

Laboratory Number:	13661- 7	13661- 8	13661- 9	13661-10	13661-11
Gasoline:	ND<50	ND<50	3200	ND<50	ND<50
Benzene:	ND<0.5	ND<0.5	38	ND<0.5	ND<0.5
Toluene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Ethyl Benzene:	ND<0.5	ND<0.5	19	ND<0.5	ND<0.5
Xylenes:	ND<0.5	ND<0.5	200	ND<0.5	ND<0.5
Concentration:	ug/L	ug/L	ug/L	ug/L	ug/L

Superior Precision Analytical, Inc.
1555 Burke, Unit I ▪ San Francisco, California 94124 ▪ (415) 647-2081 / 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

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

QA/QC INFORMATION
SET: 13661

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
ug/L = parts per billion (ppb)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Water: 5000ug/L

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Water: 50ug/L

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Water: 50ug/L

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Water: 0.5ug/L

ANALYTE	MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	101/90	12%	76-111
Benzene:	93/97	4%	78-110
Toluene:	90/92	2%	78-111
Ethyl Benzene:	91/91	0%	78-118
Xylenes:	99/101	2%	73-113

Richard Srna, Ph.D.
Laboratory Director

Fax copy of Lab Report and COC to Chevron Contact: ☐ 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 9-8139
Facility Address 16304 Foothill Blvd., San Leandro
Consultant Project Number CHV-149 / 353
Consultant Name Burlington Environmental
Address 950-B Gilman St., Berkeley
Project Contact (Name) Larry Miller
(510) (Phone) 524-9372 (Fax Number) 524-7439

Chevron Contact (Name) Ken Kan
(Phone) (510) 842-8752
Laboratory Name Superior
Laboratory Release Number 4758680
Samples Collected by (Name) Daryl A. Lamb
Collection Date 10-26 - 10-27-92
Signature Daryl A. Lamb

NOTE:
DO NOT BILL
TB-LB SAMPLES

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: 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)	Remarks
TB-LB		1	W	G	0700	HCL	Y	X								10-26-92
RS-12-SL		3	W	G	1005	HCL	Y	X								10-26-92 (HOLD)
WS-82-SL		3	W	G	1155	HCL	Y	X								10-26-92
WS-83-SL		3	W	G	1235	HCL	Y	X								10-26-92
WS-84-SL		3	W	G	1250	HCL	Y	X								10-26-92
WS-85-SL		3	W	G	1400	HCL	Y	X								10-27-92
WS-86-SL		3	W	G	0820	HCL	Y	X								10-27-92
WS-87-SL		3	W	G	0910	HCL	Y	X								10-27-92
WS-88-SL		3	W	G	0940	HCL	Y	X								10-27-92
WS-89-SL		3	W	G	1020	HCL	Y	X								10-27-92
WS-90-SL		3	W	G	1120	HCL	Y	X								

Please Initial: KA
Samples Stored in Ice. ✓
Appropriate Containers. ✓
Samples preserved. ✓
VOA's without headspace. ✓
Comments:

Relinquished By (Signature)	Organization	Date/Time
[signature]	Burlington	10/27/92 1245
[signature]	Express-IT	10/27/92 1300
[signature]	Express-IT	10/27/92 1420

Received By (Signature)	Organization	Date/Time
[signature]	Express-IT	10-27-92 12:45
[signature]	Express IT	10/27/92 1330
Cecilia G. Joaquino		10/27/92 1503

Turn Around Time (Circle Choice)
24 Hrs.
48 Hrs.
5 Days
(10 Days)
As Contracted

COC-3.DWG/0F 04/HCH