LOP 1881

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

Marketing Department

June 22, 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 quarterly monitoring and sampling report dated June 15, 1992.

Briefly, nondetectable (ND) levels of dissolved hydrocarbons were measured from monitoring wells MW-1, MW-2, MW-6, MW-7, and MW-8. Total petroleum hydrocarbon as gasoline (TPH-G), benzene, toluene, ethylbenzene, xylenes (BTEX) were detected in the remaining wells. Both the rinsate and travel blanks were ND. During this sampling period, depth to water ranged from 12.22 feet to 22.04 feet.

The new wells were not sampled this quarter because the wells were developed and sampled the week after the quarterly monitoring and sampling event. The wells will be sampled next quarter.

The last cover letter dated March 20, 1992 incorrectly reported MW-3 as nondetect for TPH-G and BTEX when it should be MW-6. Chevron apologize for the error.

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

Sincerely,

Chevron U.S.A. Products Co.

Kenneth Kan
Engineer

LKAN/MacFile 9-8139R3

Enclosure

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

Mr. Bill Scudder, Chevron U.S.A. Products Co.

Reviewed
8/12/92
SDS

QUARTERLY MONITORING REPORT
SECOND QUARTER 1992

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

June 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

June 15, 1992
CHV149/353

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

Re: **QUARTERLY MONITORING REPORT**
Second 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 April 23 and 24, 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. At the time of this report, there were five groundwater monitoring wells and three groundwater extraction wells located onsite and four groundwater monitoring wells located offsite (see Figure 2). However, the two new offsite wells MW-10 and MW-11 were installed by Burlington on April 21 and 22, 1992. These wells were developed and sampled the following week after the monitoring event. These wells will be included in future quarterly monitoring events.

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. The analytical results, techniques, and detection limits are presented in Table 1.

RESULTS

The groundwater elevation in the monitoring wells beneath and in the vicinity of the site on April 23, 1992, ranged from 104.82 to 114.87 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 0.04 ft/ft. Past water level monitoring in the extraction wells indicated a pronounced groundwater depression in the vicinity of the extraction wells.

The results of the chemical analyses are presented in Table 1. No PSH were detected in any of the monitoring wells during the April 1992 quarterly sampling event. Figure 4 presents isoconcentration contours for TPH. Chain-of-custody documentation and certified analytical results are presented in Appendix C.

Burlington appreciates the opportunity to provide Chevron with quality consulting and remediation services. Please feel free to contact us if we can provide further assistance.

Very truly yours,
BURLINGTON ENVIRONMENTAL INC.

Felicia A Rein
Environmental Scientist

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

Attachments: Table 1 - Groundwater Analyses and Analytical Techniques
Table 2 - Groundwater Elevation Data

Figure 1 - Site Location Map
Figure 2 - Site Vicinity Map
Figure 3 - Groundwater Elevation Contours
Figure 4 - TPH 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 ANALYSES AND ANALYTICAL TECHNIQUES

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 Pb	Cr	Cd	Zn	ETHYLENE DIBROMIDE
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
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
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

(continued)

Table 1
GROUNDWATER ANALYSES AND ANALYTICAL TECHNIQUES

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	TOTAL METALS Cr	TOTAL METALS Cd	TOTAL METALS 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	4,500	NA	NA	210	440	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	1,000	430	1,700	NA	NA	NA	NA	NA
	WS22SL	2/20/91	15,000	NA	NA	640	390	420	1,600	NA	NA	NA	NA	NA
	WS23SL (d)	2/20/91	15,000	NA	NA	680	410	430	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

(continued)

Table 1
GROUNDWATER ANALYSES AND ANALYTICAL TECHNIQUES

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-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
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
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	17,000	NA	NA	180	25	100	1,900	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

(continued)

Table 1
GROUNDWATER ANALYSES AND ANALYTICAL TECHNIQUES

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	TOTAL METALS Cr	TOTAL METALS Cd	TOTAL METALS Zn	ETHYLENE DIBROMIDE
EPA Detection Method:			8015	8015	413	602*	602*	602*	602*	7420	7190	7130	7950	504
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
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

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
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
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
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

(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-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
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
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

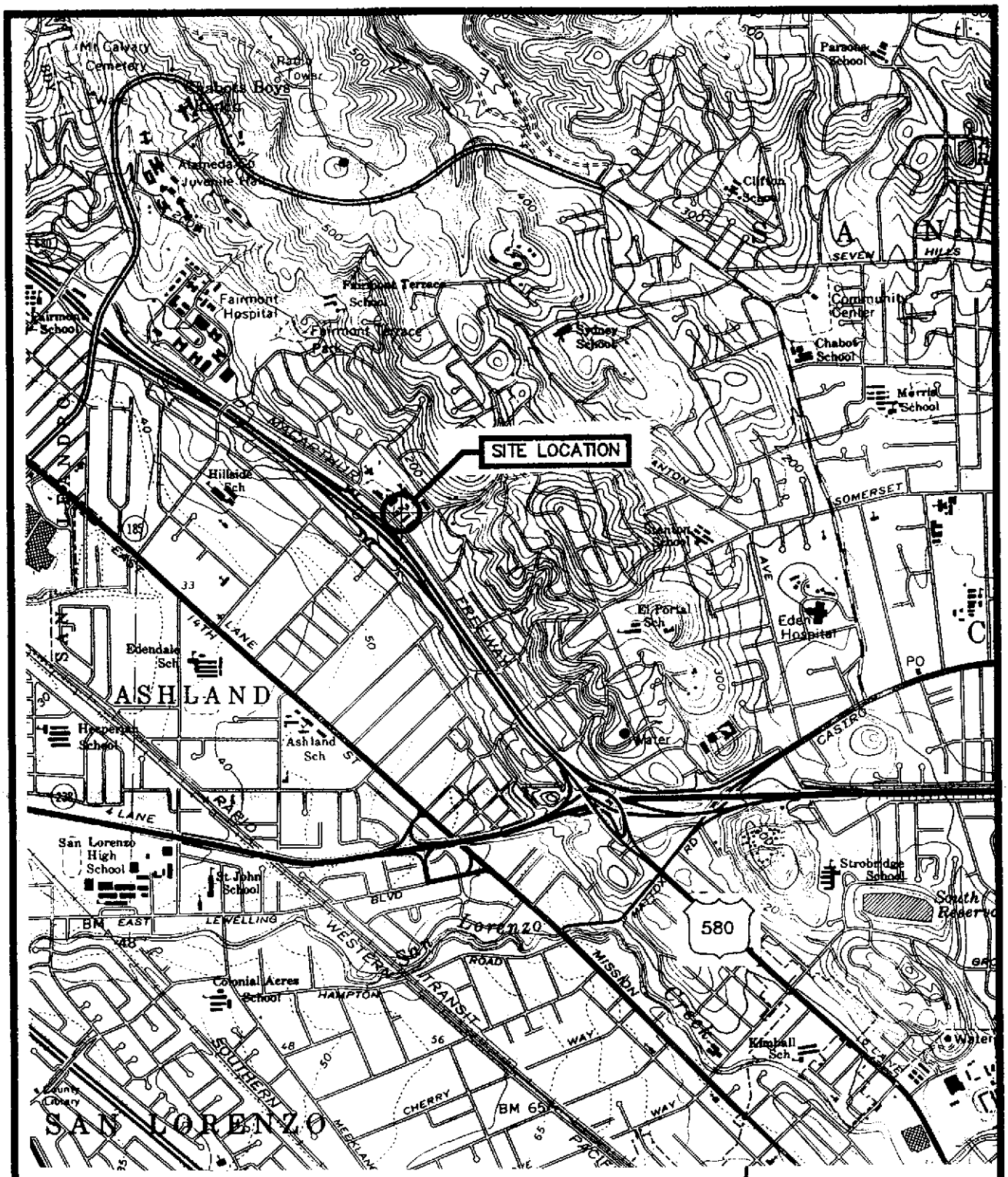
(continued)

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-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
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

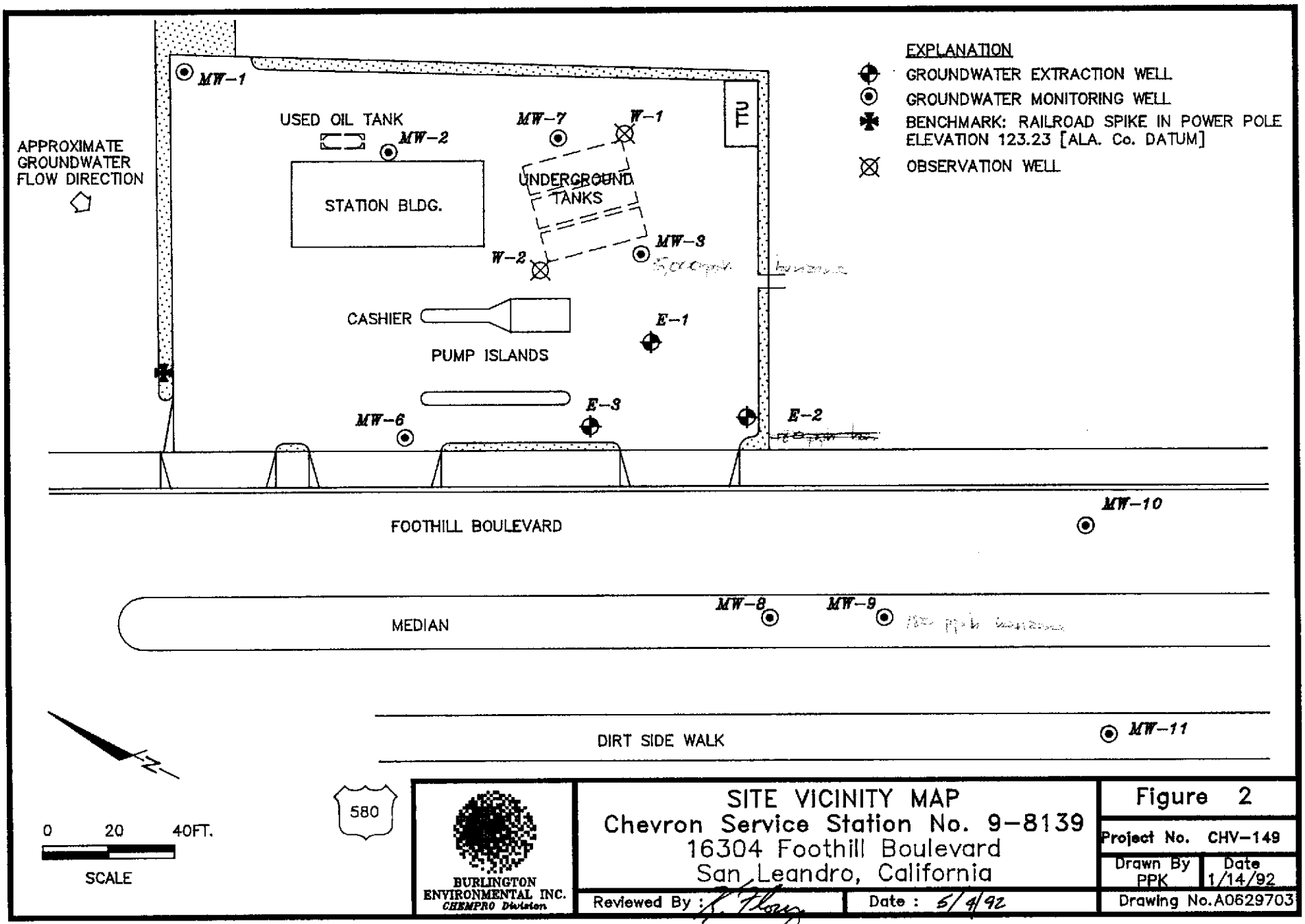


Hayward, California [NE/4 Hayward 15' Quadrangle]
N3737.5–W12200/7.5

BURLINGTON ENVIRONMENTAL, INC.
CHEMPRO Division

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

DRAWN BY: JU	
DATE: 3/29/91	
PROJECT No. 1158	FIGURE 1
Drawing No. A0615823	



BURLINGTON ENVIRONMENTAL INC.
CHEMPRO Division

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

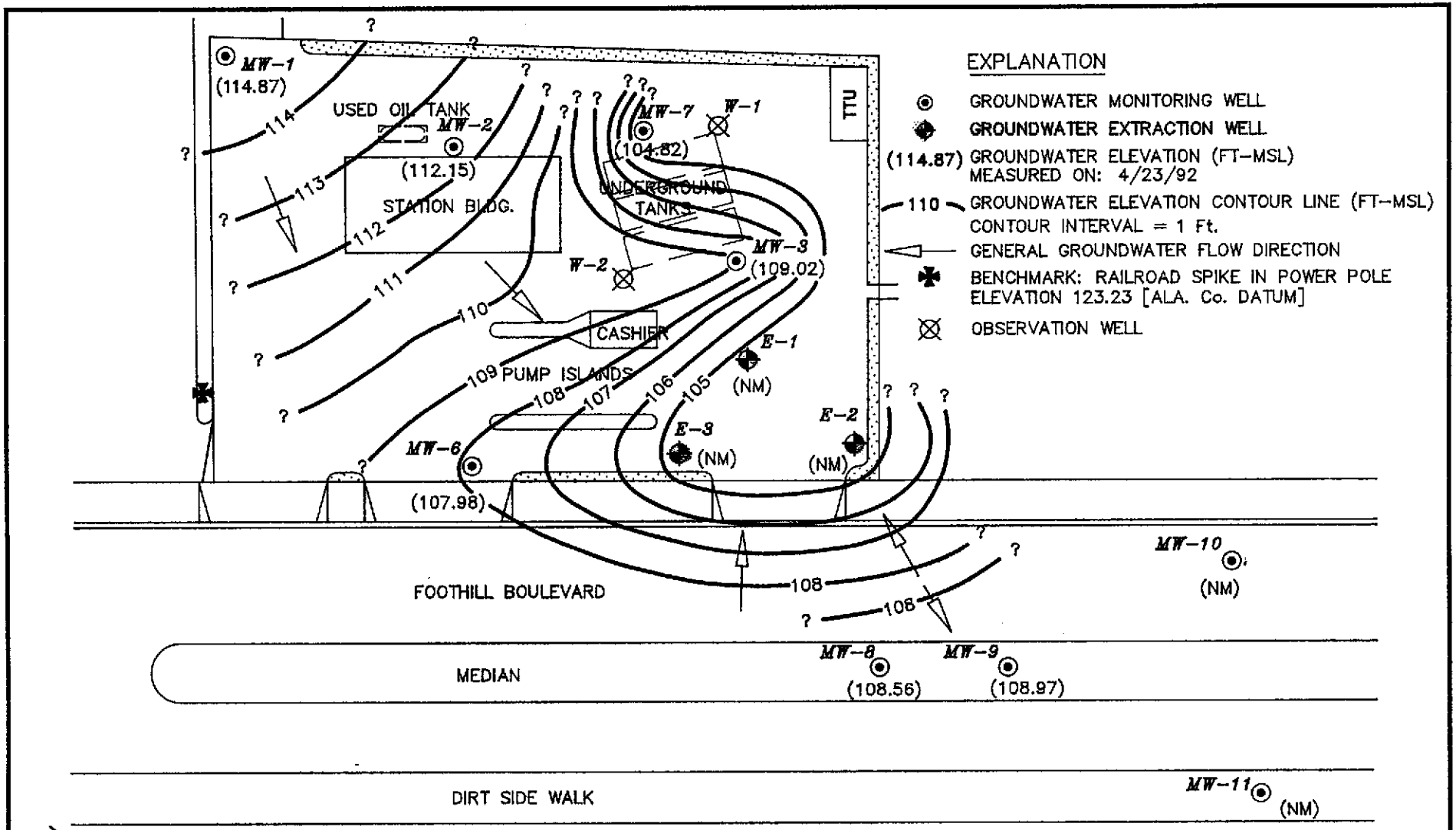
Figure 2

Project No. CHV-149

Drawn By PPK | Date 1/14/92

Reviewed By : [signature] | Date : 5/4/92

Drawing No. A0629703



SECOND QUARTER 1992

BURLINGTON ENVIRONMENTAL INC.

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

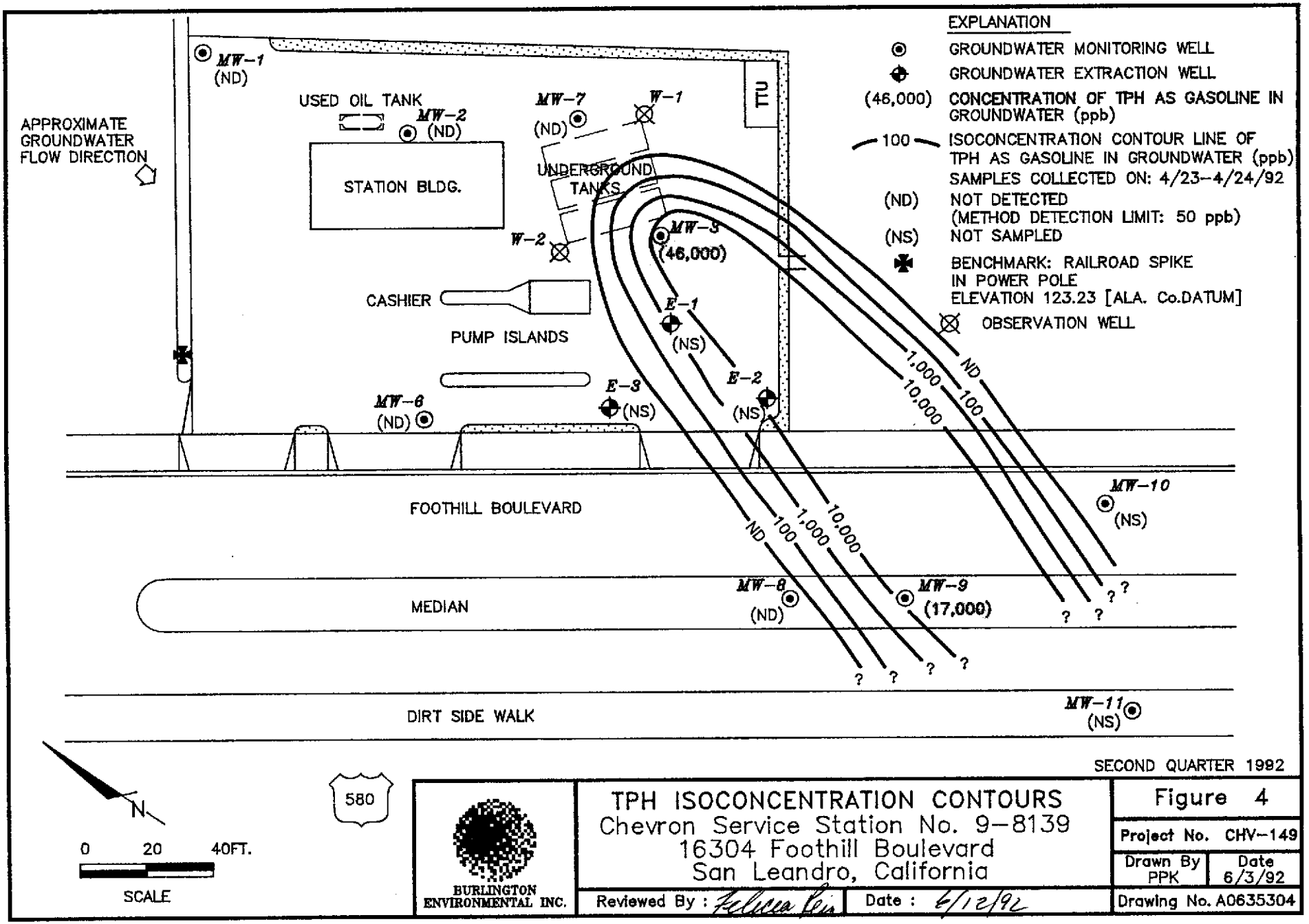
Figure 3

Project No. CHV-149

Drawn By PPK | Date 6/3/92

Reviewed By : [signature] Date : 6/12/92

Drawing No. A0635303



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

Figure 4

Project No. CHV-149

Drawn By PPK | Date 6/3/92

Reviewed By : Felicia Leis | Date : 6/12/92

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 was 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 purgewater was treated onsite by pumping the water into a camlock fitting on the influent to the treatment system.

Quality Assurance Samples

A rinsate sample was collected to insure that contamination did not result from the sampling equipment. All sample bailers were steam cleaned initially, washed with TSP and rinsed with distilled water before being used in the monitoring wells. A trip blank was taken to insure contamination did not result from travel exposure.

Water-Level, Floating-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 monitor 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.

No phase-separated hydrocarbons were detected in any of the monitoring wells. When PSH 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 monitor 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 0.01 foot in the field log book.

Well Purging

Before sampling, standing water in the casing was purged from the monitor wells using a PVC hand bailer. Samples were collected from the monitor 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 monitor 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 the 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 then emptied onsite by pumping the water through the system. 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. A duplicate sample was collected from monitoring well MW-6 and was placed

on hold in the laboratory to be analyzed if determined necessary based on preliminary analytical results.

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 the Superior Precision Analytical.

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:
STATION NO.: 9.8139 DATE: 4.23.92 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-2	30.30	2	13.83	-	-	1015	4.23.92
MW-7	25.88	2	22.04	-	-	1106	4.23.92
MW-1	27.55	2	12.22	-	-	0955	4.23.92
MW-3	25.60	2	17.75	-	-	1154	4.23.92
MW-6	28.73	2	16.20	-	-	1321	4.23.92
MW-8	30.61	2	15.05	-	-	1250	4.23.92
MW-9	26.63	2	15.23	-	-	1259	4.23.92

WATER DATA SHEET

PROJECT NO.: 353 SAMPLE ID.: WS - 64 - SC

LOCATION: 16304 Foothill Blvd., San Leandro DATE: 4-23-92

STATION NO.: 9-8139 WELL/SAMPLE

SAMPLER: OAL 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.): 12.22 @ 0955

Initial TD (ft.): 27.55

Water Column Height (ft.): 15.33

80 % Recovery (ft.): 15.38

Calc. Casing Vol. (gal.): 2.61
(2" = .17) (3" = .38) (4" = .66) (6" = 1.5)

Calc. Purge Vol. (gal.): 10.42

Final DTW (ft.): 14.63 @ 1202

Final TD (ft.): 27.54

Product Bailed (gal.): Ø

Casing Elev. (ft.): 127.09

TD (Actual) (ft.): 30

FIELD MEASUREMENTS

TIME	VOLUME (gal.)	pH (units)	TEMP. (degrees F)	E.C. (umhos/cm)	COLOR	DTW (if dry)
0955	2.5	11.52	68.5	1.55×10^3	CLEAR	
1000	4.5	11.73	68.1	2.13×10^3	SLIGHTLY CLOUDY	26.87
1038	–	–	–	–	–	20.24
1202	–	–	–	–	–	14.63

Odor? None

Actual Purge Vol. (gal.): 4.5

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

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

REMARKS: WS-64-SC SAMPLED @ 1205 ON 4-23-92

WEATHER: Sunny, ~70°.

CHEMICAL PROCESSORS, INC.

WATER DATA SHEET

PROJECT NO.: [redacted]353 SAMPLE ID.: WS - 62 - SL

LOCATION: 6304 Foothill Blvd, SAN LEANDRO DATE: 4-23-92

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.): 13.83 @ 1015

Initial TD (ft.): 30.30

Casing Elev. (ft.): 125.98

Water Column Height (ft.): 16.47

TD (Actual) (ft.): 30

80 % Recovery (ft.): 17.12

Calc. Casing Vol. (gal.): 2.79
(2" = .17) (3" = .38) (4" = .66) (6" = 1.5)

Calc. Purge Vol. (gal.): 11.19

Final DTW (ft.): 24.80 @ 1036

Final TD (ft.): 30.29

Product Bailed (gal.): Ø

FIELD MEASUREMENTS

TIME	VOLUME (gal.)	pH (units)	TEMP. (degrees F)	E.C. (umhos/cm)	COLOR	DTW (if dry)
1020	3	8.59	69.4	9.78×10^2	PEWTER	
1025	6	8.33	69.1	1.08×10^3	CAMEL	
1030	9	8.25	69.0	9.69×10^2	CAMEL	
1035	11.25	8.28	69.4	8.76×10^2	CAMEL	

Odor? NONE

Actual Purge Vol. (gal.): 11.25

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

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

REMARKS: WS-62-SL Samples @ 1045 on 4-23-92

WEATHER: Sunny, ~ 70°

CHEMICAL PROCESSORS, INC.

WATER DATA SHEET

PROJECT NO.: 353 SAMPLE ID.: WS - 65 - SL

LOCATION: 16304 Foothill Blvd, San Leandro DATE: 4.23.92

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.): 17.75 @ 1154

Initial TD (ft.): 25.60

Water Column Height (ft.): 7.85

80 % Recovery (ft.): 19.32

Calc. Casing Vol. (gal.): 1.33
(2" = .17) (3" = .38) (4" = .66) (6" = 1.5)

Calc. Purge Vol. (gal.): 5.33

Final DTW (ft.): 23.03 @ 1233

Final TD (ft.): 2561

Casing Elev. (ft.): 126.77

TD (Actual) (ft.): 25.5

Product Bailed (gal.): Ø

FIELD MEASUREMENTS

TIME	VOLUME (gal.)	pH (units)	TEMP. (degrees F)	E.C. (umhos/cm)	COLOR	DTW (if dry)
1219	1	7.19	75.4	1.05 x10³	pewter	
1224	2	7.21	73.6	1.04 x10³	lt. gray	
1228	3	7.23	72.4	1.05 x10³	gray/olive	
1232	5.5	7.34	71.9	1.06x10³	gray/olive	

Odor? moderate to strong

Actual Purge Vol. (gal.): 5.5

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

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

REMARKS: WS-65-SL Sampled @ 1245 on 4-23-92

WEATHER: Sunny, Slight breeze, ~73°.

CHEMICAL PROCESSORS, INC.

WATER DATA SHEET

WS·67·SL (Duplicate)

PROJECT NO.: 353 SAMPLE ID.: WS - 66 - SL

LOCATION: 16304 Foothill Blvd. San Fernando DATE: 4.23.92

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

Initial DTW (ft.): 16.20 @ 1321

Initial TD (ft.): 28.73

Water Column Height (ft.): 12.53

80 % Recovery (ft.): 18.71

Calc. Casing Vol. (gal.): 2.13
(2" = .17) (3' = .38) (4" = .66) (6" = 1.5)

Calc. Purge Vol. (gal.): 8.52

Final DTW (ft.): 23.27 1437

Final TD (ft.): 28.85

Casing Elev. (ft.): 124.18

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)
1422	2	7.36	74.3	7.94×10^2	TAN	
1426	4	7.35	74.5	7.45×10^2	YELLOW/BRN.	
1430	6	7.36	73.6	7.43×10^2	YELLOW/BRN.	
1435	8.5	7.35	73.4	7.41×10^2	YELLOW/BRN.	

Odor? NONE

Actual Purge Vol. (gal.): 8.5

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

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

REMARKS: WS·66·SL SAMPLED @ 1345 ON 4.23.92
WS·67·SL SAMPLED @ 1400 ON 4.23.92.

WEATHER: SUNNY, SLIGHT BREEZE, ~ 74°.

CHEMICAL PROCESSORS, INC.

WATER DATA SHEET

PROJECT NO.: 353 SAMPLE ID.: WS - 63 - SL

LOCATION: 16304 Foothill Blvd., San Leandro DATE: 4.23.92

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.): 22.04 @ 1106

Initial TD (ft.): 25.88

Water Column Height (ft.): 3.84

80 % Recovery (ft.): 22.81

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

Calc. Purge Vol. (gal.): 2.61

Final DTW (ft.): 24.92 @ 1123

Final TD (ft.): 25.82

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)
1111	.75	7.76	73.2	8.71×10^2	pewter	
1115	1.50	7.71	72.9	7.99×10^2	TAN	
1118	2.25	7.66	71.7	8.07×10^2	TAN	
1120	2.75	7.65	71.6	7.95×10^2	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)
- [redacted] Bailer (PVC)
- ___ Dedicated Bailer
- ___ Other ____

REMARKS: WS-63-SL sampled @ 1130 on 4.23.92

WEATHER: Sunny, ~71°

CHEMICAL PROCESSORS, INC.

WATER DATA SHEET

PROJECT NO.: 353 SAMPLE ID.: WS - 68 - SL

LOCATION: 16304 Foothill Blvd, San Leandro DATE: 4.24.92

STATION NO.: 9-8139 WELL/SAMPLE

SAMPLER: DAC POINT DESIGNATION: MW-8

☒ SAMPLING ☐ DEVELOPING ☐ BAILING FLOATING PRODUCT

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

Screened Int. (ft.): 21.5 - 30.5 Calc. Casing Vol. (gal.): 7.64
4.23.92 (2" = .17) (3" = .38) (4" = .66) (6" = 1.5)

Initial DTW (ft.): 16.05 @1250 Calc. Purge Vol. (gal.): 10.58

Initial TD (ft.): 30.61 Final DTW (ft.): 14.90 @0741

Casing Elev. (ft.): 12361 Water Column Height (ft.): 15.56 Final TD (ft.): 30.62

TD (Actual) (ft.): 31 80 % Recovery (ft.): 18.16 Product Bailed (gal.): Ø

FIELD MEASUREMENTS

TIME	VOLUME (gal.)	pH (units)	TEMP. (degrees F)	E.C. (umhos/cm)	COLOR	DTW (if dry)
0725	2.5	6.49	63.4	7.70×10^2	PEWTER	
0730	5.0	6.59	64.9	7.80×10^2	TAN	
0735	7.5	6.71	66.4	7.88×10^2	TAN	
0740	11	6.79	66.4	7.82×10^2	YELLOW/BRN.	

Odor? NONE

Actual Purge Vol. (gal.): 11

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

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

REMARKS: WS.68.SL SAMPLED @ 0755 ON 4.24.92

WEATHER: SUNNY, COOL, ~60°

CHEMICAL PROCESSORS, INC.

WATER DATA SHEET

PROJECT NO.: 353 SAMPLE ID.: WS - 69 - SL

LOCATION: 16304 Foothill Blvd, San Leandro DATE: 4.24.92

STATION NO.: 9.8139 WELL/SAMPLE

SAMPLER: DAC POINT DESIGNATION: MW-9

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

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

Casing Elev. (ft.): 124.20

TD (Actual) (ft.): 27

Screened Int. (ft.): 17-27

Initial DTW (ft.): 15.23 @ 1259 4.23.92

Initial TD (ft.): 26.63

Water Column Height (ft.): 11.40

80 % Recovery (ft.): 1751

Calc. Casing Vol. (gal.): 1.93
(2" = .17) (3" = .38) (4" = .66) (6" = 1.5)

Calc. Purge Vol. (gal.): 8

Final DTW (ft.): 15.30 @ 0820

Final TD (ft.): 26.60

Product Bailed (gal.): Ø

FIELD MEASUREMENTS

TIME	VOLUME (gal.)	pH (units)	TEMP. (degrees F)	E.C. (umhos/cm)	COLOR	DTW (if dry)
0803	2	6.65	63.7	8.20×10^2		
0806	4	6.66	63.8	8.15×10^2		
0810	6	6.82	64.6	8.28×10^2		
0815	8	6.72	64.9	8.26×10^2		

Odor? NONE

Actual Purge Vol. (gal.): 8

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-69-SL Samples @ 0835 on 4.24.92

WEATHER: Sunny, cool, ~ 61°.

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

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

LABORATORY NO.: 13041
CLIENT: Burlington/Chempro
CLIENT JOB NO.: 353

DATE RECEIVED: 04/24/92
DATE REPORTED: 04/29/92

Lab Number	Customer Sample Identification	Date Sampled	Date Analyzed
13041- 1	TB-LB	04/23/92	04/28/92
13041- 2	RS-9-SL	04/23/92	/ /
13041- 3	WS-62-SL	04/23/92	04/28/92
13041- 4	WS-63-SL	04/23/92	04/28/92
13041- 5	WS-64-SL	04/23/92	04/28/92
13041- 6	WS-65-SL	04/23/92	04/28/92
13041- 7	WS-66-SL	04/23/92	04/28/92
13041- 8	WS-67-SL	04/23/92	/ /
13041- 9	WS-68-SL	04/24/92	04/28/92
13041-10	WS-69-SL	04/24/92	04/29/92

Laboratory Number:	13041 1	13041 2	13041 3	13041 4	13041 5
ANALYTE LIST	Amounts/Quantitation Limits (ug/L)				
OIL AND GREASE:	NA	NA	NA	NA	NA
TPH/GASOLINE RANGE:	ND<50	NA	ND<50	ND<50	ND<50
TPH/DIESEL RANGE:	NA	NA	NA	NA	NA
BENZENE:	ND<0.5	NA	ND<0.5	ND<0.5	ND<0.5
TOLUENE:	ND<0.5	NA	ND<0.5	ND<0.5	ND<0.5
ETHYL BENZENE:	ND<0.5	NA	ND<0.5	ND<0.5	ND<0.5
XYLENES:	ND<0.5	NA	ND<0.5	ND<0.5	ND<0.5

Laboratory Number:	13041 6	13041 7	13041 8	13041 9	13041 10
ANALYTE LIST	Amounts/Quantitation Limits (ug/L)				
OIL AND GREASE:	NA	NA	NA	NA	NA
TPH/GASOLINE RANGE:	46000	ND<50	NA	ND<50	17000
TPH/DIESEL RANGE:	NA	NA	NA	NA	NA
BENZENE:	5000	ND<0.5	NA	ND<0.5	180
TOLUENE:	1900	ND<0.5	NA	ND<0.5	25
ETHYL BENZENE:	1000	ND<0.5	NA	ND<0.5	100
XYLENES:	3500	ND<0.5	NA	ND<0.5	1900

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: 13041

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

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

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

EPA-SW846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Water: 50ug/l
Standard Reference: 10/12/91

SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Water: 0.5ug/l
Standard Reference: 04/07/92

ANALYTE	REFERENCE	SPIKE LEVEL	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Oil & Grease	NA	NA	NA	NA	NA
Diesel	NA	NA	NA	NA	NA
Gasoline	04/07/92	200ng	101/90	11.2	76-111
Benzene	04/07/92	200ng	92/89	3.1	78-110
Toluene	04/07/92	200ng	96/91	6.0	78-111
Ethyl Benzene	04/07/92	200ng	102/96	5.7	78-118
Total Xylene	04/07/92	600ng	97/91	6.4	73-113

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

Fax copy of Lab Report and COC to Chevron Contact: ☐ Yes ☐ No T3091

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 353
Consultant Name Burlington Environmental
Address 950-B Gilman St., Berkeley, CA.
Project Contact (Name) Felicia A Rein
(510) (Phone) 524-9372 (Fax Number) 524-7439

Chevron Contact (Name) Ken Kan
(Phone) 842 8752
Laboratory Name Superior
Laboratory Release Number 4758680
Samples Collected by (Name) Daryl A. Lamb
Collection Date 4-23 - 4-24-92
Signature [signature]

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	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	1	W	G	0700	HCL	Y	X								4-23-92
RS-9-SL	2	3	W	G	0930	HCL	Y	X								HOLD: 4-23-92
WS-62-SL	3	3	W	G	1045	HCL	Y	X								4-23-92
WS-63-SL	4	3	W	G	1130	HCL	Y	X								4-23-92
WS-64-SL	5	3	W	G	1205	HCL	Y	X								4-23-92
WS-65-SL	6	3	W	G	1245	HCL	Y	X								4-23-92
WS-66-SL	7	3	W	G	1345	HCL	Y	X								4-23-92
WS-67-SL	8	3	W	G	1400	HCL	Y	X								HOLD: 4-23-92
WS-68-SL	9	3	W	G	0755	HCL	Y	X								4-24-92
WS-69-SL	10	3	W	G	0835	HCL	Y	X								4-24-92

Analyses To Be Performed

NOTE: DO NOT BILL TB-LB SAMPLES

Please initial: PP
Samp[illegible] yes
Appr[illegible] yes
Samp[illegible] yes
VOA[illegible] y
Comments: OK

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
J. Joh[illegible]	Burlington	4/24/92 1215	K. Ross	Express-it	4/24/92 12/15
K. Ross	EXPRESS IT	4/24/92 1250	N. Baker	Ex-it	4-24-92 1330
N. Baker	Ex-it	4-24 1337	Received For Laboratory By (Signature): [signature]		4/24/92 1337

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

COC-3.DWG/03 91/HCH