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

March 20, 1992

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

Re : Chevron Service Station #9-8139
16304 Foothill Rd., San Leandro, California

Mr. Seery :

Enclosed is quarterly monitoring and sampling report prepared by Burlington Environmental Inc. dated March 1992. Briefly, nondetectable (ND) levels of dissolved hydrocarbons were measured from monitoring wells MW-1, MW-2, MW-3, and MW-7. Total petroleum hydrocarbon as gasoline (TPH-G), benzene, toluene, ethylbenzene, xylenes (BTEX) were measured in the remaining wells with the exception of MW-8 which had ND for ethylbenzene. Both the rinsate and travel blanks were ND. During this sampling period, depth to water ranged from 14.70 feet to 22.42 feet.

Chevron intends to install to additional off-site wells to define the hydrocarbon plume, and Chevron will notify your office when the additional wells will be installed.

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

Sincerely,

Kenneth Kan

Kenneth Kan
Engineer

LKAN/MacFile 9-8139R2

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., Inc.

QUARTERLY MONITORING REPORT
FIRST QUARTER 1992

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

March 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

March 17, 1992
CHV149/353

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

Re: **QUARTERLY MONITORING REPORT**
First 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 January 30 and 31, 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 wells 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. 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 January 30, 1992, ranged from 104.44 to 112.38 feet above mean sea level (see Table 2). A contour map of these data is presented in Figure 3. Also included and contoured in Figure 3 are the average water level elevations collected in the three extraction wells on October 29, 1991. As shown on the contour map, the general groundwater flow direction

beneath the site is to the south with an approximate gradient of 0.03 ft/ft. Also shown on Figure 3 is 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 January 1992 quarterly sampling event. Figures 4 and 5 present isoconcentration contours for TPH and benzene, respectively. 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
Figure 5 - 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 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)	1.0	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
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
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	16,000	NA	NA	3,800	920	700	2,600	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-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	2.40
(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

(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
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)	1.0	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	0.7	ND(<.5)	1.1	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
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	Cr	Cd	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)	D(<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
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

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
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
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
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)

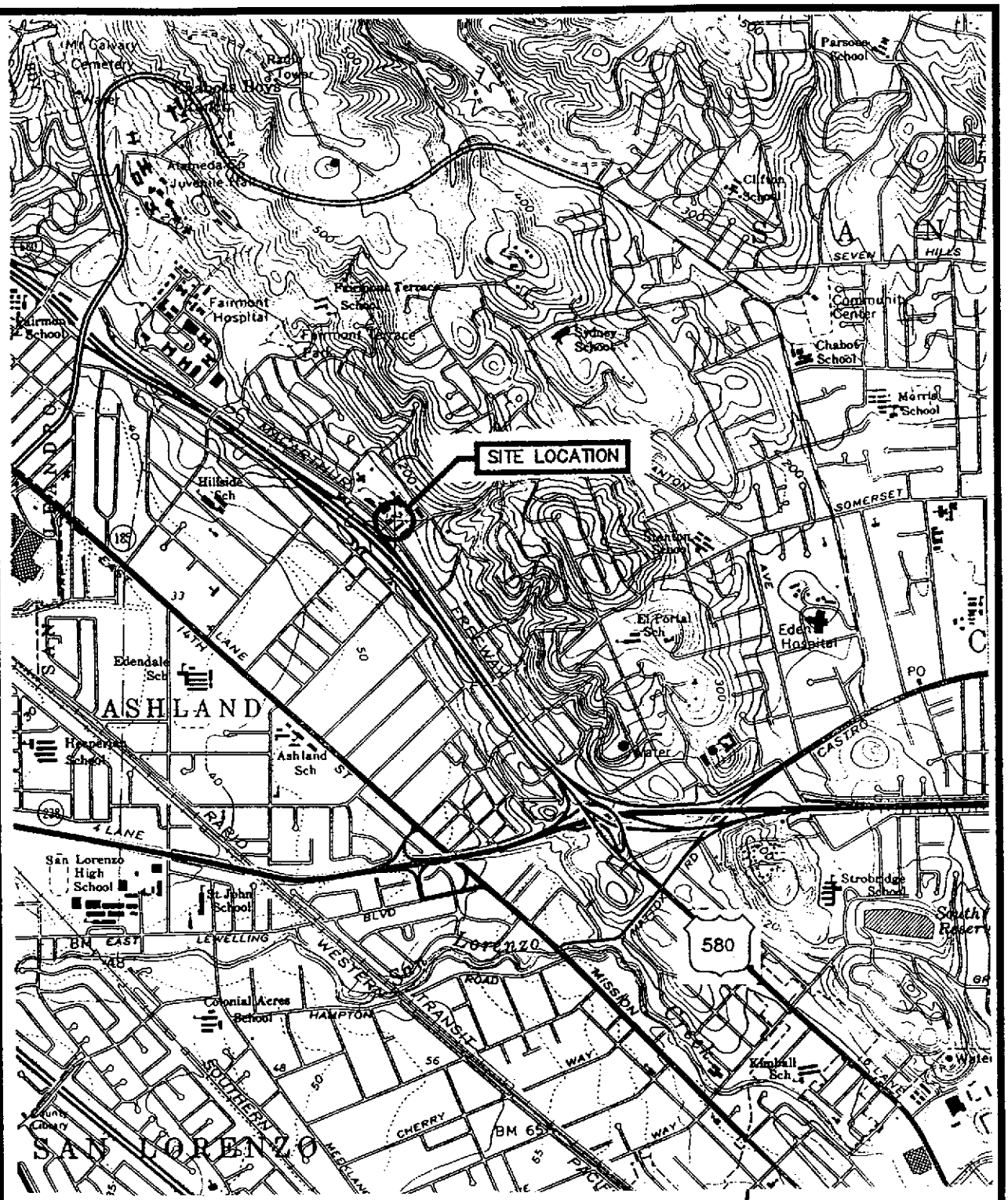
(continued)

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-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
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
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
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
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

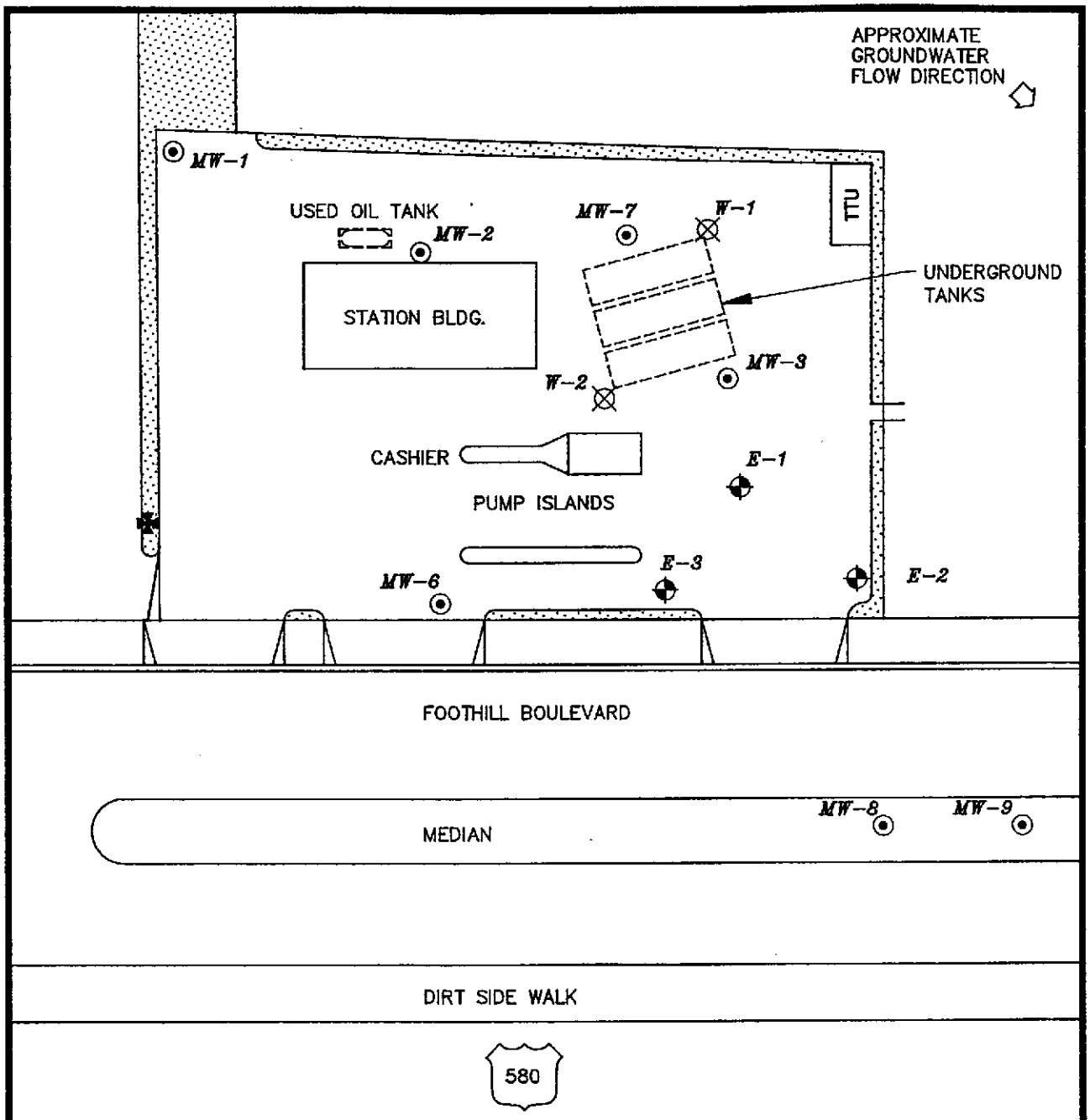
BURLINGTON ENVIRONMENTAL INC.
CHEMPRO Division

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

Reviewed By : [signature] Date : 3/2/92

Figure 1

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



EXPLANATION

- EXTRACTION WELL
- GROUNDWATER MONITORING WELL
- BENCHMARK: RAILROAD SPIKE IN POWER POLE ELEVATION 123.23 [ALA. Co. DATUM]
- OBSERVATION WELL

0 20 40Ft.

SCALE

BURLINGTON ENVIRONMENTAL INC.
CHEMPRO Division

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

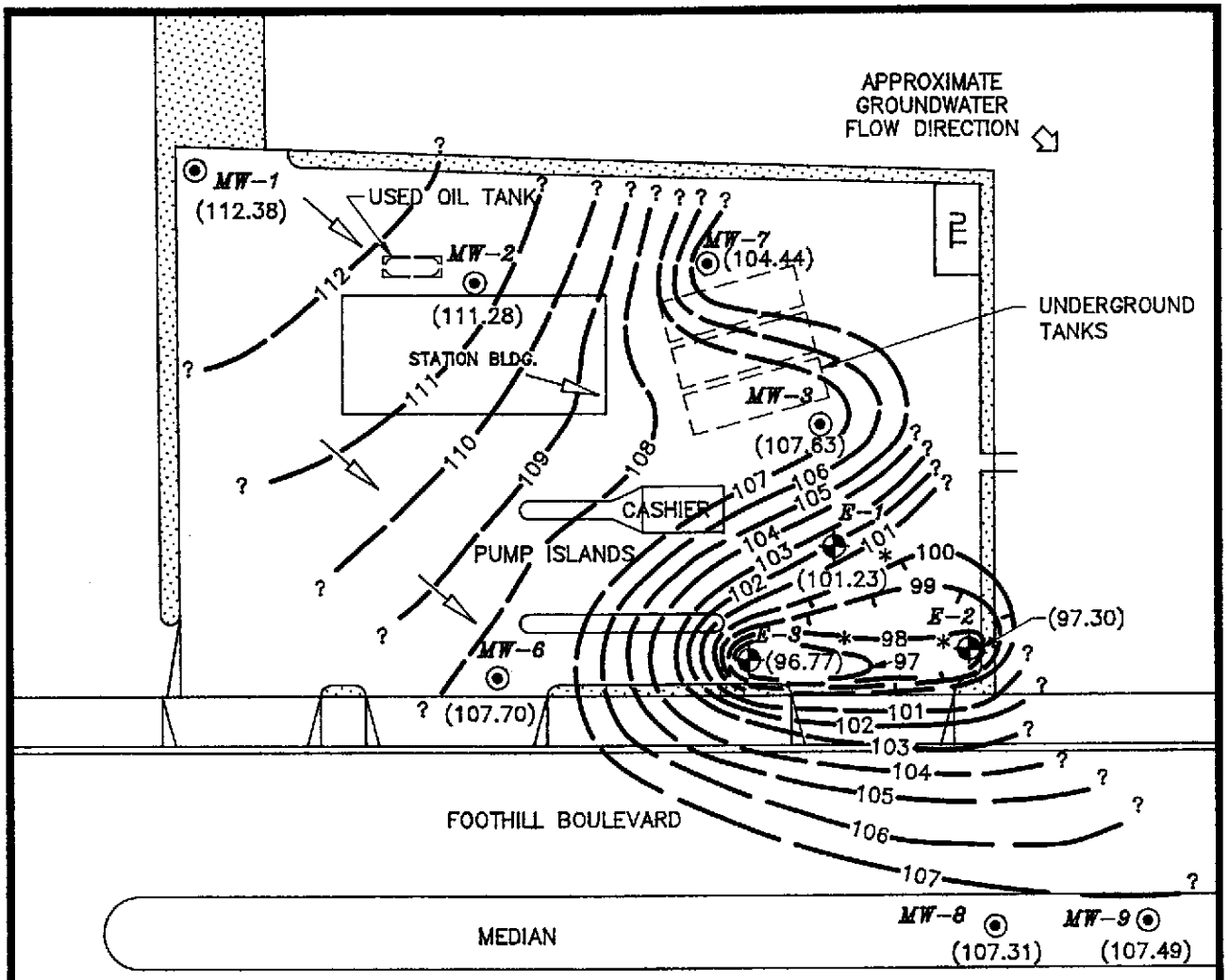
Reviewed By: Felicia Rei Date: 3/2/92

Figure 2

Project No. CHV149/158

Drawn By	Date
PPK	6/28/91

Drawing No. A0615802



580

EXPLANATION

- ⊙ GROUNDWATER MONITORING WELL
- ⊕ GROUNDWATER EXTRACTION WELL
- (107.31) GROUNDWATER ELEVATION (FT–MSL) MEASURED ON: 1/30/92
- —100— GROUNDWATER ELEVATION CONTOUR LINE (FT–MSL)
  CONTOUR INTERVAL = 1 ft
- ⟵ APPROXIMATE GROUNDWATER FLOW DIRECTION
- * AVERAGE DEPRESSED ELEVATIONS, AS MEASURED ON 10/29/91

N

0 20 40FT.

SCALE

First Quarter 1992

BURLINGTON ENVIRONMENTAL INC.

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

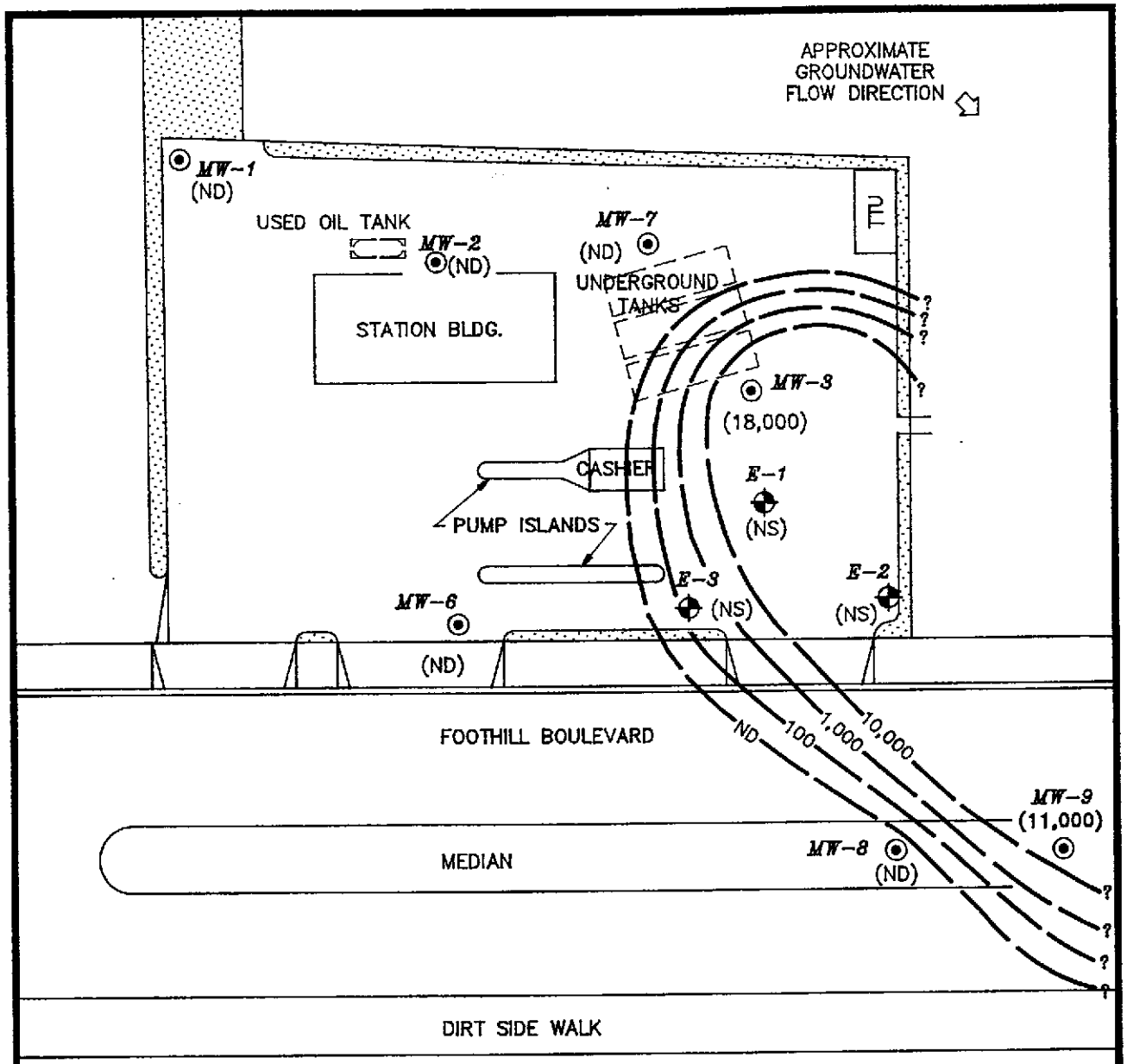
Reviewed By : Felicia Niles Date : 3/2/92

Figure 3

Project No. CHV–149

Drawn By PPK | Date 2/27/92

Drawing No. A0629734



EXPLANATION

- ⊙ GROUNDWATER MONITORING WELL
- ⊕ GROUNDWATER EXTRACTION WELL
- (18,000) CONCENTRATION OF TPH AS GASOLINE IN GROUNDWATER (ppb)
- (ND) NOT DETECTED (METHOD DETECTION LIMIT = 50 ppb)
  SAMPLES COLLECTED ON: 1/30/92–1/31/92
- 1,000 ISOCONCENTRATION CONTOUR LINE OF TPH AS GASOLINE IN GROUNDWATER (ppb)
- (NS) NOT SAMPLED

N

0 20 40FT.

SCALE

First Quarter 1992

BURLINGTON ENVIRONMENTAL INC.

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

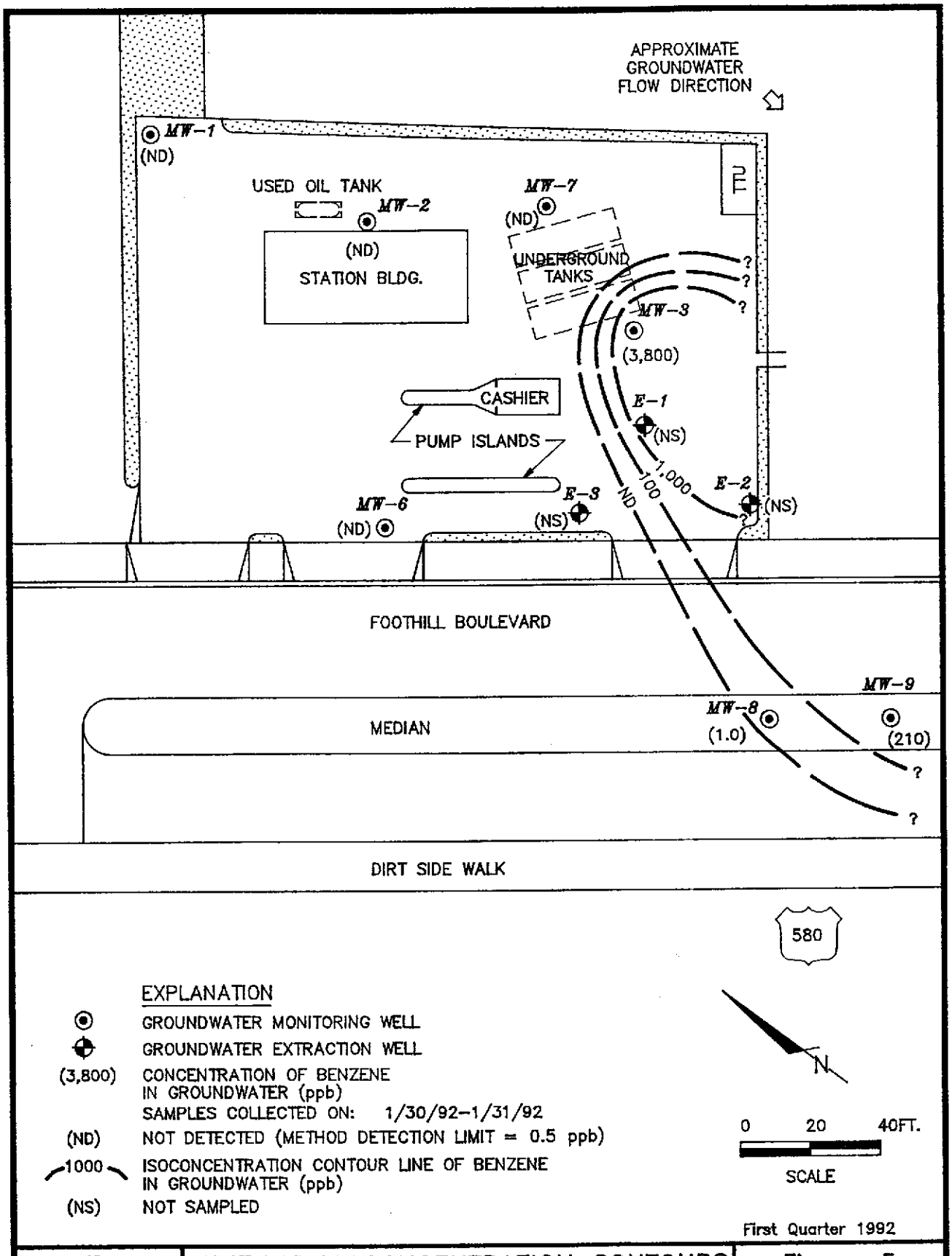
Reviewed By : Julie Nelson Date : 3/2/92

Figure 4

Project No. CHV–149

Drawn By PPK | Date 2/27/92

Drawing No. A0629735



BURLINGTON ENVIRONMENTAL INC.

BENZENE ISOCONCENTRATION CONTOURS

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

Reviewed By : Felicia Klein Date : 3/2/92

Figure 5

Project No. CHV-149

Drawn By PPK | Date 2/27/92

Drawing No. A0629736

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

No rinsate sample was collected because all purging and sampling bailers have been dedicated to their respective wells. All sample bailers were cleaned properly prior to dedication. 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. Duplicate sample analysis was performed on groundwater samples collected from monitoring well MW-6 and 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 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.: 297 LOCATION: 16304 Foothill Blvd., San Leandro SAMPLER: DAC

STATION NO.: 9.8139 DATE: 1.30.92 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	27.50	2	14.71	-	-	1125	1.30.92
MW-2	30.22	2	14.70	-	-	1131	1.30.92
MW-7	25.80	2	22.42	-	-	1137	1.30.92
MW-3	25.56	2	19.14	-	-	1144	1.30.92
MW-6	28.87	2	16.48	-	-	1159	1.30.92
MW-8	30.71	2	16.30	-	-	1213	1.30.92
MW-9	26.75	2	16.71	-	-	1239	1.30.92

WATER DATA SHEET

PROJECT NO.: 297

SAMPLE ID.: WS - 59 - SL

LOCATION: 16304 Foothill Blvd., San Leandro DATE: 1.31.92

STATION NO.: 9.8139

WELL/SAMPLE POINT DESIGNATION: MW-1

SAMPLER: DAL

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

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

Casing Elev. (ft.): 127.09

TD (Actual) (ft.): 30

Screened Int. (ft.): 25-30

Initial DTW (ft.): 14.71 @ 1125

Initial TD (ft.): 27.50

Water Column Height (ft.): 12.79

80 % Recovery (ft.): 17.27

Calc. Casing Vol. (gal.): 2.17
(2" = .17) (3" = .38) (4" = .66) (6" = 1.5)

Calc. Purge Vol. (gal.): 8.69

Final DTW (ft.): 15.80 @ 1015 on 1.31.92

Final TD (ft.): 27.58

Product Bailed (gal.): Ø

FIELD MEASUREMENTS

TIME	VOLUME (gal.)	pH (units)	TEMP. (degrees F)	E.C. (umhos/cm)	COLOR	DTW (if dry)
0746	2.25	11.83	55.0	1.85×10^3	CLEAR	25.20
0750	4.50	12.12	65.1	2.10×10^3	PEWTER	18.32
0906	-	-	-	-	-	15.80
1015	-	-	-	-	-	

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: Initial WATER LEVEL(S) TAKEN ON 1.30.92
WS-59-SL SAMPLED @ 1020 ON 1.31.92
~ 520.

WATER DATA SHEET

PROJECT NO.: 297

SAMPLE ID.: WS - 54 - SL

LOCATION: 16304 Foothill Blvd, San Leandro

DATE: 1.30.92

STATION NO.: 9.8139

WELL/SAMPLE POINT DESIGNATION: MW-9

SAMPLER: DAL

[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.): 16.71 @1239

Initial TD (ft.): 26.75

Water Column Height (ft.): 10.04

80 % Recovery (ft.): 18.72

Calc. Casing Vol. (gal.): 1.70
(2" = .17) (3" = .38) (4" = .66) (6" = 1.5)

Calc. Purge Vol. (gal.): 6.82

Final DTW (ft.): 16.76 @ 1303

Final TD (ft.): 26.73

Product Bailed (gal.): Ø

Casing Elev. (ft.): 124.20

TD (Actual) (ft.): 27

FIELD MEASUREMENTS

TIME	VOLUME (gal.)	pH (units)	TEMP. (degrees F)	E.C. (umhos/cm)	COLOR	DTW (if dry)
1248	1.75	7.22	65.3	1.29×10^3	TAN	
1252	3.50	7.25	66.8	1.13×10^3	CAMEL	
1256	5.25	7.26	67.8	1.10×10^3	CAMEL	
1300	7.0	7.26	67.7	1.09×10^3	CAMEL	

Odor? NONE

Actual Purge Vol. (gal.): 7

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.54.SL Sampled @ 1320 on 1.30.92

Sunny, ~64°.

WATER DATA SHEET

PROJECT NO.: 297

SAMPLE ID.: WS-55-SL

LOCATION: 16304 Foothill Blvd., San Leandro

DATE: 1-30-92

STATION NO.: 9-8139

WELL/SAMPLE POINT DESIGNATION: MW-8

SAMPLER: DAC

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

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

Casing Elev. (ft.): 123.61

TD (Actual) (ft.): 31

Screened Int. (ft.): 21.5-30.5

Initial DTW (ft.): 16.30 @ 1213

Initial TD (ft.): 30.71

Water Column Height (ft.): 14.41

80 % Recovery (ft.): 19.18

Calc. Casing Vol. (gal.): 2.44
(2" = .17) (3" = .38) (4" = .66) (6" = 1.5)

Calc. Purge Vol. (gal.): 9.80

Final DTW (ft.): 16.44 @ 1350

Final TD (ft.): 30.74

Product Bailed (gal.): Ø

FIELD MEASUREMENTS

TIME	VOLUME (gal.)	pH (units)	TEMP. (degrees F)	E.C. (umhos/cm)	COLOR	DTW (if dry)
1332	2.5	7.80	68.7	1.13×10^3	PEWTER	
1337	5.0	7.74	68.6	1.12×10^3	TAN	
1342	7.5	7.68	68.6	1.11×10^3	CAMEL	
1347	10.0	7.66	68.4	1.11×10^3	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-55-SL SAMPLED @ 1405 ON 1-30-92.
SLIGHT BREEZE, SUNNY, ~65°.

WATER DATA SHEET

PROJECT NO.: 297 SAMPLE ID.: WS-56-SL

LOCATION: 16304 Foothill Blvd, San Lea. DATE: 1.31.92

STATION NO.: 9.8139 WELL/SAMPLE POINT DESIGNATION: MW-2

SAMPLER: DAL

[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.): 14.70 @ 1131

Initial TD (ft.): 30.22

Casing Elev. (ft.): 125.98 Water Column Height (ft.): 15.52

TD (Actual) (ft.): 30 80 % Recovery (ft.): 17.80

Calc. Casing Vol. (gal.): 2.63
(2" = .17) (3" = .38) (4" = .66) (6" = 1.5)

Calc. Purge Vol. (gal.): 10.55

Final DTW (ft.): 27.58 @ 0820 on 1.31.92

Final TD (ft.): 30.23

Product Bailed (gal.): Ø

FIELD MEASUREMENTS

TIME	VOLUME (gal.)	pH (units)	TEMP. (degrees F)	E.C. (umhos/cm)	COLOR	DTW (if dry)
0806	2.5	9.09	56.9	1.05×10^3	CLEAR	
0811	5.0	8.98	59.8	1.21×10^3	Butterscotch	
0814	7.5	8.86	62.4	1.20×10^3	Butterscotch	
0818	11.0	8.42	60.7	1.19×10^3	Butterscotch	

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: Intial Water Level(s) taken on 1.30.92.
WS-56-SL Sampled @ 0835 on 1.31.92
partly cloudy, ~ 52°

WATER DATA SHEET

PROJECT NO.: 297

SAMPLE ID.: WS-58-S

LOCATION: 16304 Foothill Blvd. San Leandro

DATE: 1.31.92

STATION NO.: 9.8139

WELL/SAMPLE POINT DESIGNATION: MW-3

SAMPLER: DAL

[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.): 19.14 @ 1144

Initial TD (ft.): 25.56

Casing Elev. (ft.): 126.77

Water Column Height (ft.): 6.42

TD (Actual) (ft.): 25.5

80 % Recovery (ft.): 20.42

Calc. Casing Vol. (gal.): 1.09
(2" = .17) (3" = .38) (4" = .66) (6" = 1.5)

Calc. Purge Vol. (gal.): 4.36

Final DTW (ft.): 23.28 @0950 ON 1.31

Final TD (ft.): 25.54

Product Bailed (gal.): Ø

FIELD MEASUREMENTS

TIME	VOLUME (gal.)	pH (units)	TEMP. (degrees F)	E.C. (umhos/cm)	COLOR	DTW (ft dry)
0933	1	7.96	58.8	8.28×10^2	GRAY	
0938	2	7.85	61.9	9.00×10^2	CHARCOAL	
0942	3	7.77	60.8	9.23×10^2	CHARCOAL	
0946	4.5	7.69	64.9	9.48×10^2	CHARCOAL	

Odor? moderate to STRONG

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: Initial water levels taken on 1.30.92.
WS-58-S Sampled @ 1000 on 1.31.92

WATER DATA SHEET

PROJECT NO.: 297

SAMPLE ID.: WS-57-SL

LOCATION: 16304 Foothill Blvd, San Lea. DATE: 1.31.92

STATION NO.: 9.8139

WELL/SAMPLE POINT DESIGNATION: MW-7

SAMPLER: DAL

[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.): 22.42 @ 1137

Initial TD (ft.): 25.80

Water Column Helght (ft.): 3.38

80 % Recovery (ft.): 23.09

Calc. Casing Vol. (gal.): .57
(2" = .17) (3" = .38) (4" = .66) (6" = 1.5)

Calc. Purge Vol. (gal.): 2.29

Final DTW (ft.): 24.62 @ 0900 on 1.31.92

Final TD (ft.): 25.80

Product Bailed (gal.): Ø

Casing Elev. (ft.): 126.86

TD (Actual) (ft.):

FIELD MEASUREMENTS

TIME	VOLUME (gal.)	pH (units)	TEMP. (degrees F)	E.C. (umhos/cm)	COLOR	DTW (if dry)
0850	.5	8.53	58.2	6.62×10^2	TAN	
0853	1.0	8.43	60.8	6.81×10^2	CAMEL	
0856	1.5	8.33	61.0	6.86×10^2	CAMEL	
0859	2.5	8.31	60.2	6.85×10^2	CAMEL	

Odor? NONE

Actual Purge Vol. (gal.): 2.5

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

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

REMARKS: INTIAL WATER LEVEL(S) TAKEN ON 1.30.92.
WS-57-SL SAMPLED @ 0915 ON 1.31.92
PARTY CLOUDY, ~ 53°

WATER DATA SHEET WS-61-SL (Duplicate)

PROJECT NO.: 297

LOCATION: 16304 Foothill Blvd., San Lea.

STATION NO.: 9.8139

SAMPLER: DAC

SAMPLE ID.: WS-60-SL

DATE: 1.31.92

WELL/SAMPLE POINT DESIGNATION: MW-6

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

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

Casing Elev. (ft.): 124.18

TD (Actual) (ft.): 29.2

Screened Int. (ft.): 24.6 - 29.2

Initial DTW (ft.): 16.48 @ 1159

Initial TD (ft.): 28.87

Water Column Height (ft.): 12.39

80 % Recovery (ft.): 18.96

Calc. Casing Vol. (gal.): 2.10
(2" = .17) (3" = .38) (4" = .66) (6" = 1.5)

Calc. Purge Vol. (gal.): 8.42

Final DTW (ft.): 20.42 @ 1110 on 1.31.92

Final TD (ft.): 28.85

Product Bailed (gal.): Ø

FIELD MEASUREMENTS

TIME	VOLUME (gal.)	pH (units)	TEMP. (degrees F)	E.C. (umhos/cm)	COLOR	DTW (if dry)
1052	2	8.59	61.3	6.23×10^2	YELLOW/TAN	
1056	4	8.44	63.9	6.93×10^2	CAMEL	
1100	6	8.28	65.5	7.07×10^2	CAMEL	
1104	8.5	8.24	66.1	6.78×10^2		

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: Initial water level(s) taken on 1.30.92.
WS-60-SL sampled @ 1115 on 1.31.92
WS-61-SL sampled @ 1130 on 1.31.92
Overcast ~55°.

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.: 12755
CLIENT: Burlington/Chempro
CLIENT JOB NO.: 297

DATE RECEIVED: 01/31/92
DATE REPORTED: 02/05/92

Lab Number	Customer Sample Identification	Date Sampled	Date Analyzed
12755- 1	TB-8-SL	01/30/92	02/03/92
12755- 2	RS-8-SL	01/30/92	02/03/92
12755- 3	WS-54-SL	01/30/92	02/03/92
12755- 4	WS-55-SL	01/30/92	02/04/92
12755- 5	WS-56-SL	01/31/92	02/03/92
12755- 6	WS-57-SL	01/31/92	02/03/92
12755- 7	WS-58-SL	01/31/92	02/03/92
12755- 8	WS-59-SL	01/31/92	02/04/92
12755- 9	WS-60-SL	01/31/92	02/03/92
12755-10	WS-61-SL	01/31/92	02/03/92

Laboratory Number:	12755 1	12755 2	12755 3	12755 4	12755 5
ANALYTE LIST	Amounts/Quantitation Limits (ug/L)				
OIL AND GREASE:	NA	NA	NA	NA	NA
TPH/GASOLINE RANGE:	ND<50	ND<50	11000	ND<50	ND<50
TPH/DIESEL RANGE:	NA	NA	NA	NA	NA
BENZENE:	ND<0.5	ND<0.5	210	1.0	ND<0.5
TOLUENE:	ND<0.5	ND<0.5	29	0.7	ND<0.5
ETHYL BENZENE:	ND<0.5	ND<0.5	110	ND<0.5	ND<0.5
XYLENES:	ND<0.5	ND<0.5	1900	1.1	ND<0.5

Laboratory Number:	12755 6	12755 7	12755 8	12755 9	12755 10
ANALYTE LIST	Amounts/Quantitation Limits (ug/L)				
OIL AND GREASE:	NA	NA	NA	NA	NA
TPH/GASOLINE RANGE:	ND<50	18000	ND<50	ND<50	ND<50
TPH/DIESEL RANGE:	NA	NA	NA	NA	NA
BENZENE:	ND<0.5	3800	0.5	ND<0.5	ND<0.5
TOLUENE:	ND<0.5	920	ND<0.5	ND<0.5	ND<0.5
ETHYL BENZENE:	ND<0.5	700	ND<0.5	ND<0.5	ND<0.5
XYLENES:	ND<0.5	2600	0.5	ND<0.5	ND<0.5

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

CERTIFICATE OF ANALYSIS

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

QA/QC INFORMATION
SET: 12755

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: 11/29/91

ANALYTE	REFERENCE	SPIKE LEVEL	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Oil & Grease	NA	NA	NA	NA	NA
Diesel	NA	NA	NA	NA	NA
Gasoline	11/29/91	200ng	92/93	0.5	70-114
Benzene	11/29/91	200ng	95/93	2.1	78-123
Toluene	11/29/91	200ng	103/100	3.0	77-119
Ethyl Benzene	11/29/91	200ng	108/107	0.9	79-122
Total Xylene	11/29/91	600ng	108/106	1.7	78-119

Richard Srna, Ph.D.
Laboratory Director

Fax copy of Lab Report and COC to Chevron Contact: ☐ No [redacted] 12495 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., SanLeandro
Consultant Project Number 297
Consultant Name Burlington Environmental
Address 950-B Gilman St., Berkeley
Project Contact (Name) Felicia A Rein
(Phone) 524-9372 (Fax Number) 524-7437

Chevron Contact (Name) Walt Poslusny
(Phone) 842-9527
Laboratory Name Superior
Laboratory Release Number 4758680
Samples Collected by (Name) Daryl A. Lamb
Collection Date 1-30 - 1-31-92
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-8-SL		1	W	G	0900	HCL	Y	X													1-30-92
RS-8-SL		3	W	G	1100	HCL	Y	X													1-30-92
WS-54-SL		3	W	G	1320	HCL	Y	X													1-30-92
WS-55-SL		3	W	G	1405	HCL	Y	X													1-30-92
WS-56-SL		3	W	G	0835	HCL	Y	X													1-31-92
WS-57-SL		3	W	G	0915	HCL	Y	X													1-31-92
WS-58-SL		3	W	G	1000	HCL	Y	X													1-31-92
WS-59-SL		3	W	G	1020	HCL	Y	X													1-31-92
WS-60-SL		3	W	G	1115	HCL	Y	X													1-31-92
WS-61-SL		3	W	G	1130	HCL	Y	X													1-31-92

Please initial: RP
Samples Stored in ice. yes
Appropriate containers. yes
Samples preserved. yes
VOA's without headspace. yes
Comments: OK

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	B.E.	1-31-92		Express-IT X519	1/31/92/1443
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	Express-IT X519	1/31/92/1528			
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time
					1/31/92 1528

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