Chevron U.S.A. Inc.
2410 Camino Ramon, San Ramon, California • Phone (415) 842-9500
Mail Address: P.O. Box 5004, San Ramon, CA 94583-0804

91 APR 11 AM 10:05

Marketing Operations

R. B. Bellinger
Manager, Operations
S. L. Patterson
Area, Manager, Operations
C. G. Trimbach
Manager, Engineering

April 8, 1991

Mr. Larry Seto/Lowell Miller
Alameda County Health Agency
Hazmat Section
470 27th Street, Room 324
Oakland, California 94612

Re: Chevron Service Station #9-8139
16304 Foothill Boulevard
San Leandro, California 94578

Dear Mr.Seto,

Please find attached the most recent quarterly groundwater monitoring report for the above mentioned site. Chevron has seven on-site g.w. monitoring wells, one on-site g.w. extraction well and one off-site g.w. monitoring well. Depth-to-water is between 14.09 and 19.20 feet. The approximate groundwater flow direction is to the south at a gradient of 0.03 ft/ft.

Chevron has a groundwater remediation system on-site, it is temporarily down till we install an oil/water separator prior to the carbon units and two additional groundwater extraction wells. We expect this to occur in the next 6-8 weeks(as soon as all the additional permitting is completed).

I declare under penalty of perjury that the information contained in the attached report is true and correct, and that any recommended actions are appropriate under the current circumstances to the best of my knowledge.

Should you have any questions, please feel free to call me at (415) 842-9040.

Very Truly Yours,

Walter F. Posluszny Jr.
Environmental Engineer
Chevron U.S.A. Inc.

cc: Ms. Penny Silzer/Rich Hiett, RWQCB, Oakland, Ca.
File(MAC 9-8139R10)

QUARTERLY MONITORING REPORT
FIRST QUARTER, 1991

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

April 1991

Prepared for

CHEVRON USA, INC.

Prepared by

BURLINGTON ENVIRONMENTAL, INC.
CHEMPRO Division

950 B Gilman Street
Berkeley, California 94710

Project No. 1158

BURLINGTON
ENVIRONMENTAL INC.
CHEMPRO Division

April 3, 1991
Project No. 1158

Mr. Walt Posluszny
Chevron USA, Inc.
2410 Camino Ramon
San Ramon, CA 94583-0804

Re: **QUARTERLY MONITORING REPORT**
First Quarter, 1991
Chevron Service Station No. 9-8139
16304 Foothill Boulevard
San Leandro, California

Dear Mr. Posluszny:

Burlington Environmental, Inc. - *Chempro Division* (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 Chempro on February 20, 1991.

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 seven groundwater monitoring wells located onsite and one located offsite (see Figure 2). In each well, the depth to groundwater and the presence and thickness of phase-separated hydrocarbons (PSH) were determined. Groundwater samples were collected and analyzed according to Chevron 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 beneath the site on February 20, 1991, ranged from 106.94 to 112.80 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 approximate groundwater flow direction is to the south, with an approximate gradient of 0.03 ft/ft.

950 Gilman Street, Suite B
Berkeley, California 94710
Tel: (415) 524-9372
Fax: (415) 524-7439

The results of the chemical analyses are presented in Table 1. PSH were detected in monitoring well MW-5 at a thickness of 0.47 feet during quarterly sampling on February 20, 1991. Figures 4 and 5 present isoconcentration contours for TPH and benzene, respectively. Chain-of-custody documentation is presented in Appendix C. Certified analytical results are presented in Appendix D.

The groundwater remediation system required modifications to accommodate the expected quantity of PSH. The system is scheduled to resume operation during the second quarter of 1991.

Burlington appreciates the opportunity to provide Chevron with this information. Please feel free to contact us if we can provide further assistance.

Very truly yours,
BURLINGTON ENVIRONMENTAL, INC.
CHEMPRO Division

Carol Bach
for :
Felicia A Rein
Environmental Scientist

David C. Tight
Site Remediation Manager

FR/DT:sw

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
Appendix D - Certified Analytical Results

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	Pb	TOTAL Cr	METALS Cd	Zn	ETHYLENE DIBROMIDE
EPA Detection Method		12/89	8015	8015	413	602	602	602	602	7420	7190	7130	7950	504
		5/90	8015	NA	NA	602/624*	602/624*	602/624*	602/624*	NA	NA	NA	NA	504
		9/90	8015	NA	NA	602/624*	602/624*	602/624*	602/624*	NA	NA	NA	NA	504
		11/90	8015	NA	NA	602	602	602	602	NA	NA	NA	NA	504
		2/91	8015	NA	NA	602	602	602	602	NA	NA	NA	NA	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	1	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
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
MW-3	WS-3SL	12/5/89	24000	NA	NA	2400	1800	360	2600	NA	NA	NA	NA	ND(<.05)
DUP	WS-5SL	12/5/89	24000	NA	ND(<5000)	2500	1900	390	2600	ND(<500)	ND(<100)	ND(<10)	40	ND(<.05)
	WS-3SL	5/24/90	9000	NA	NA	2600	1700	250	1500	NA	NA	NA	NA	NA
DUP	WS-4SL	5/24/90	10000	NA	NA	2600	1800	260	1600	NA	NA	NA	NA	NA
	3WSSL	9/6/90	3500	NA	NA	900	550	110	460	NA	NA	NA	NA	ND(<.05)
	WS15SL	11/29/90	9200	NA	NA	1100	1100	210	1100	NA	NA	NA	NA	NA
	WS21SL	2/20/91	8800	NA	NA	960	780	200	920	NA	NA	NA	NA	NA
MW-4	WS-4SL	12/5/89	19000	NA	NA	390	1300	460	1800	NA	NA	NA	NA	ND(<.05)
	WS-5SL	5/24/90	4500	NA	NA	210	440	140	480	NA	NA	NA	NA	NA
	4WSSL	9/6/90	6000	NA	NA	680	520	170	580	NA	NA	NA	NA	ND(<.05)
	WS16SL	11/29/90	15000	NA	NA	800	1000	430	1700	NA	NA	NA	NA	NA
	WS22SL	2/20/91	15000	NA	NA	640	390	420	1600	NA	NA	NA	NA	NA
DUP	WS23SL	2/20/91	15000	NA	NA	680	410	430	1600	NA	NA	NA	NA	NA
MW-5	WS-6SL	5/25/90	28000	NA	NA	920	1100	460	1300	NA	NA	NA	NA	2.40
	NA	9/7/90	<- - - - - - - - - - - - PSH (0.04 feet), NOT SAMPLED- - - - - - - - - - - - - >											
	NA	11/29/90	<- - - - - - - - - - - - PSH (0.71 feet), NOT SAMPLED- - - - - - - - - - - - - >											
	NA	2/20/91	<- - - - - - - - - - - - PSH (0.47 feet), NOT SAMPLED- - - - - - - - - - - - - >											

(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	Pb	TOTAL Cr	METALS Cd	Zn	ETHYLENE DIBROMIDE
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
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)
DUP	8WSSL	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
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
DUP	WS12SL	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
EW-1**	WS-9SL	5/25/90	3900	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
TRIP BLANK	TB3SL	2/20/91	ND(<50)	NA	NA	ND(<.5)	ND(<.5)	ND(<.5)	ND(<.5)	NA	NA	NA	NA	NA

Groundwater chemistry values presented in parts per billion (ppb)
ND = Less than method detection limit
NA = No Analysis
DUP = Duplicate Sample
* In 5/90 MW-5, MW-6, MW-7 & EW-1 were analyzed for Volatile Organics using EPA Method 8240 (624); other samples were analyzed using EPA Method 8020 (602).
In 9/90 MW-5, MW-6, & MW-7 were analyzed for Volatile Organics using EPA Method 8240 (624); other samples were analyzed using EPA Method 8020 (602).
** EW-1 will not be monitored in future quarterly monitoring activities.

Table 2
GROUNDWATER ELEVATION DATA

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

Well Number	Date Sampled	TOC Elevation (ft-MSL)	Depth to Water (ft-BTOC)	PSH (ft)	Water Elevation (ft-MSL)
MW-1	3/23/90	127.09	12.92	ND	114.17
	9/6/90	127.09	14.68	ND	112.41
	9/25/90	127.09	15.01	ND	112.08
	11/29/09	127.09	14.82	ND	112.27
	2/20/91	127.09	14.29	ND	112.80
MW-2	3/23/90	125.98	12.40	ND	113.58
	9/6/90	125.98	14.85	ND	111.13
	9/25/90	125.98	14.80	ND	111.18
	11/29/90	125.98	14.40	ND	111.58
	2/20/91	125.98	14.09	ND	111.89
MW-3*	3/23/90	127.84	17.50	ND	110.34
	9/6/90	126.77	18.72	ND	108.05
	9/25/90	126.77	18.40	ND	108.37
	11/29/90	126.77	18.97	ND	107.80
	2/20/91	126.77	19.20	ND	107.57
MW-4	3/23/90	125.22	16.02	ND	109.20
	9/6/90	125.22	17.35	ND	107.87
	9/25/90	125.22	17.48	ND	107.74
	11/29/90	125.22	17.61	ND	107.61
	2/20/91	125.22	17.81	ND	107.41
MW-5	3/23/90	125.85	16.89	ND	108.96
	9/7/90	125.85	18.46	0.04	107.39
	9/25/90	125.85	19.30	1.3	106.55
	11/29/90	125.85	18.87	0.71	106.98
	2/20/91	125.85	18.91	0.47	106.94
MW-6	3/23/90	124.18	18.51	ND	105.67
	9/7/90	124.18	16.18	ND	108.00
	9/25/90	124.18	16.42	ND	107.76
	11/29/90	124.18	16.11	ND	108.07
	2/20/91	124.18	16.09	ND	108.09

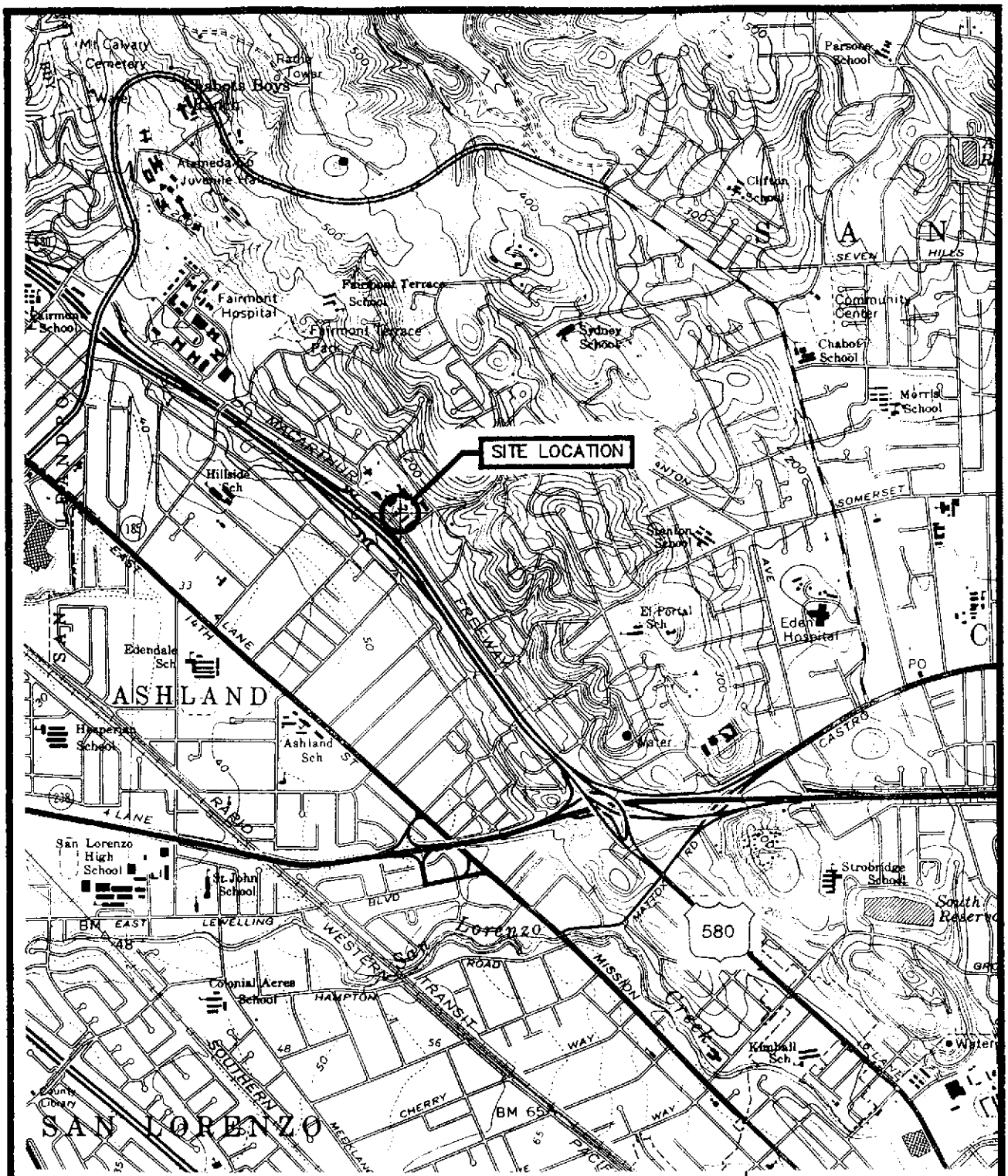
(continued)

Table 2
GROUNDWATER ELEVATION DATA

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

Well Number	Date Sampled	TOC Elevation (ft-MSL)	Depth to Water (ft-BTOC)	PSH (ft)	Water Elevation (ft-MSL)
MW-7	3/23/90	126.86	21.40	ND	105.46
	9/7/90	126.86	18.38	ND	108.48
	9/25/90	126.86	19.25	ND	107.61
	11/29/90	126.86	18.55	ND	108.31
	2/20/91	126.86	18.55	ND	108.31
MW-8	9/7/90	123.61	16.07	ND	107.54
	9/25/90	123.61	16.20	ND	107.41
	11/29/90	123.61	16.30	ND	107.31
	2/20/91	123.61	16.32	ND	107.29

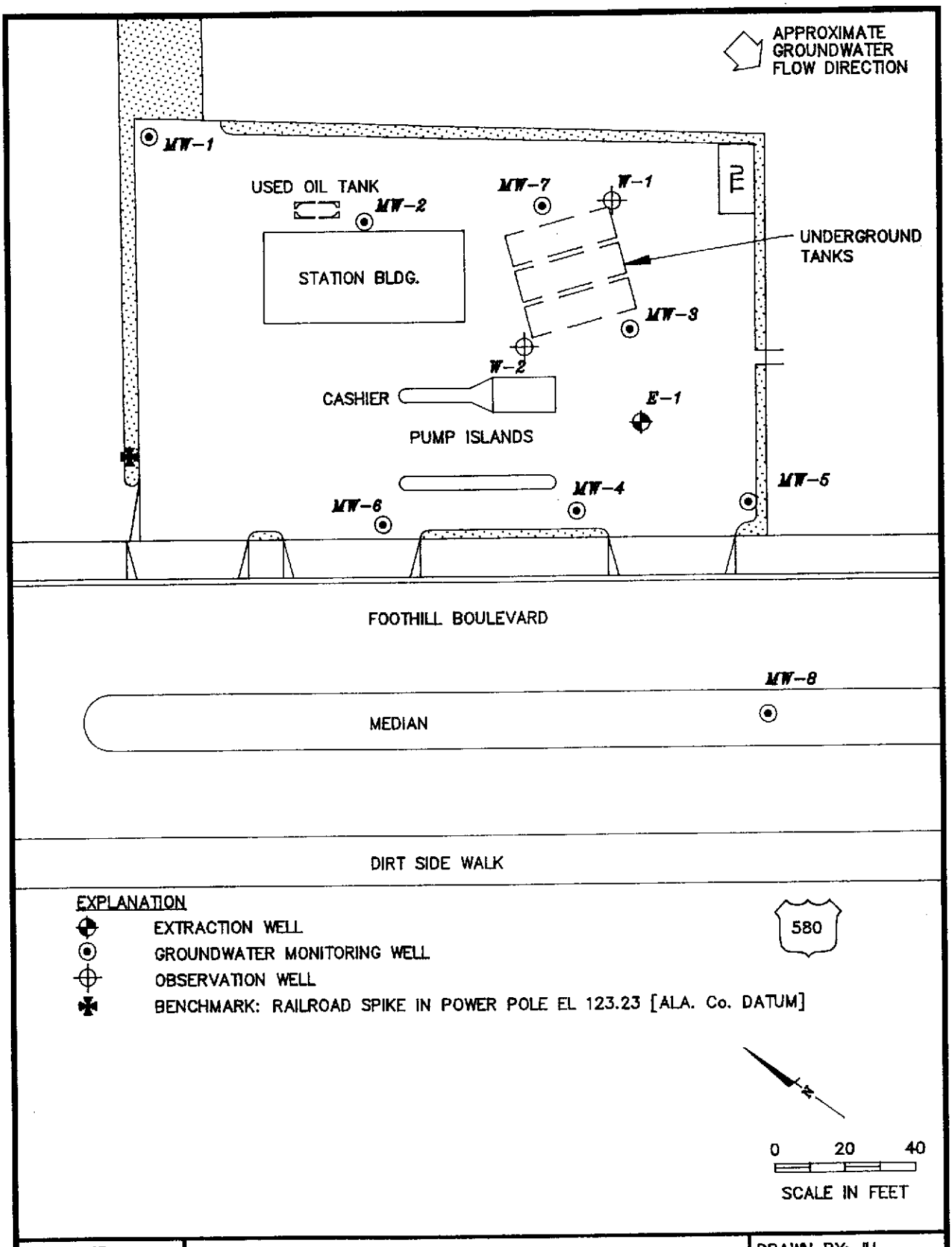
TOC: Top of casing
ft-MSL: Feet above mean sea level
ft-BTOC: Feet below top of casing
ND: Not detected
* MW-3 wellhead modified and resurveyed on 9/6/90



BURLINGTON ENVIRONMENTAL, INC.
CHEMPRO Division

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

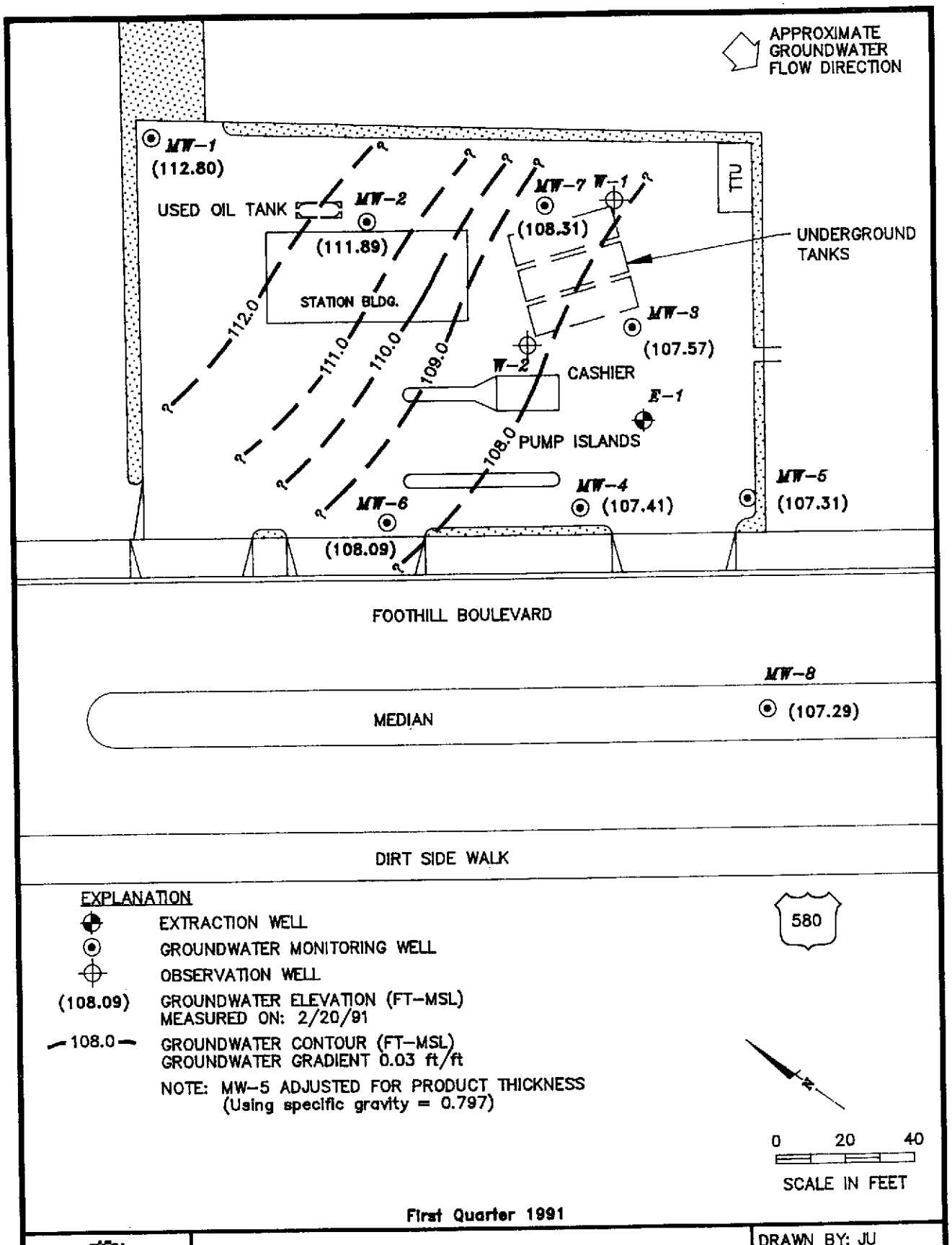
DRAWN BY: JU	
DATE: 3/29/91	
PROJECT No. 1158	FIGURE 1
Drawing No. A0615823	



BURLINGTON ENVIRONMENTAL, INC.
CHEMPRO Division

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

DRAWN BY: JU	
DATE: 3/25/91	
PROJECT No. 1158	FIGURE 2
Drawing No. A0615802	

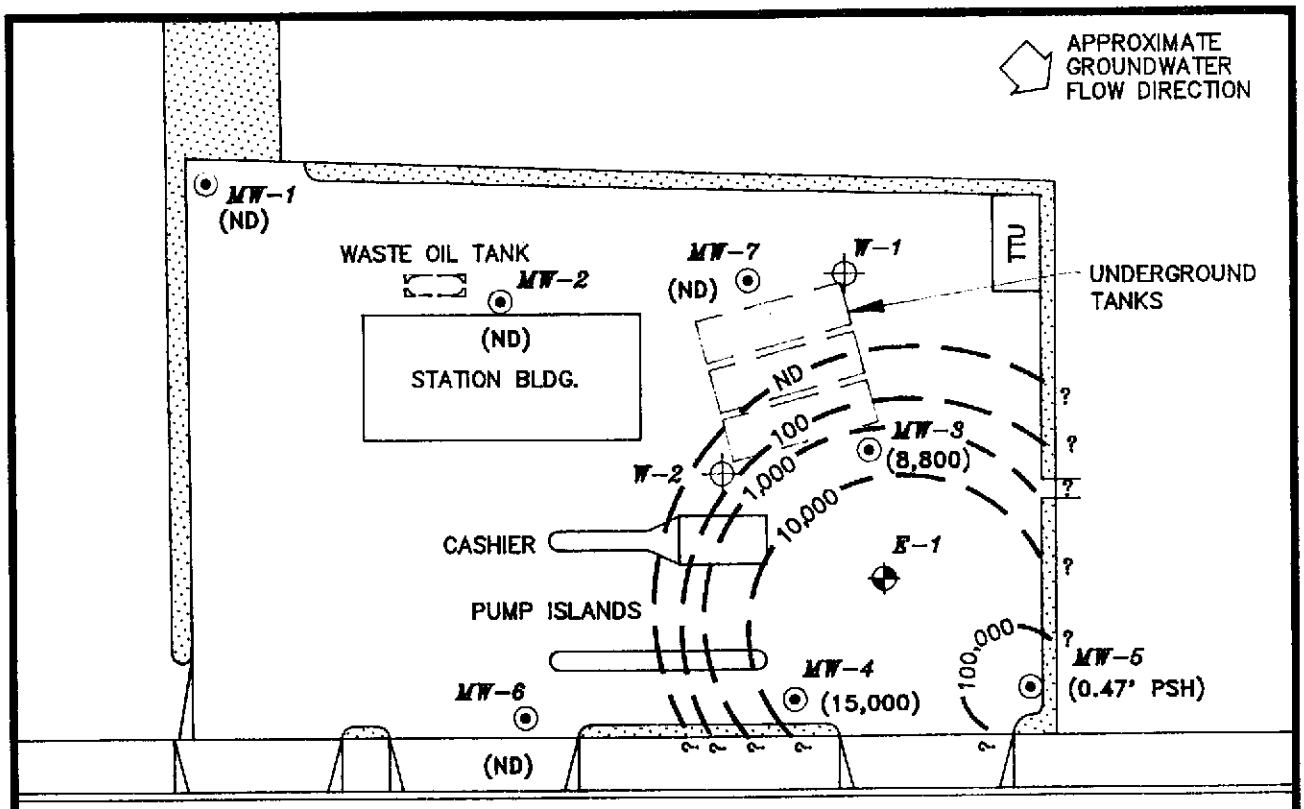


First Quarter 1991

BURLINGTON ENVIRONMENTAL, INC.
CHEMPRO Division

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

DRAWN BY: JU	
DATE: 3/25/91	
PROJECT No. 1158	FIGURE 3
Drawing No. A0615820	



EXPLANATION

- EXTRACTION WELL
- GROUNDWATER MONITORING WELL
- OBSERVATION WELL
- 100 — TPH (TOTAL PETROLEUM HYDROCARBONS) CONCENTRATION IN GROUNDWATER CONTOUR SAMPLES COLLECTED ON: 2/20/91
- (8,800) — CONCENTRATION IN PARTS PER BILLION METHOD DETECTION LIMIT = 50 ppb
- ND — NOT DETECTED
- PSH — PHASE SEPARATED HYDROCARBONS

580

0 20 40

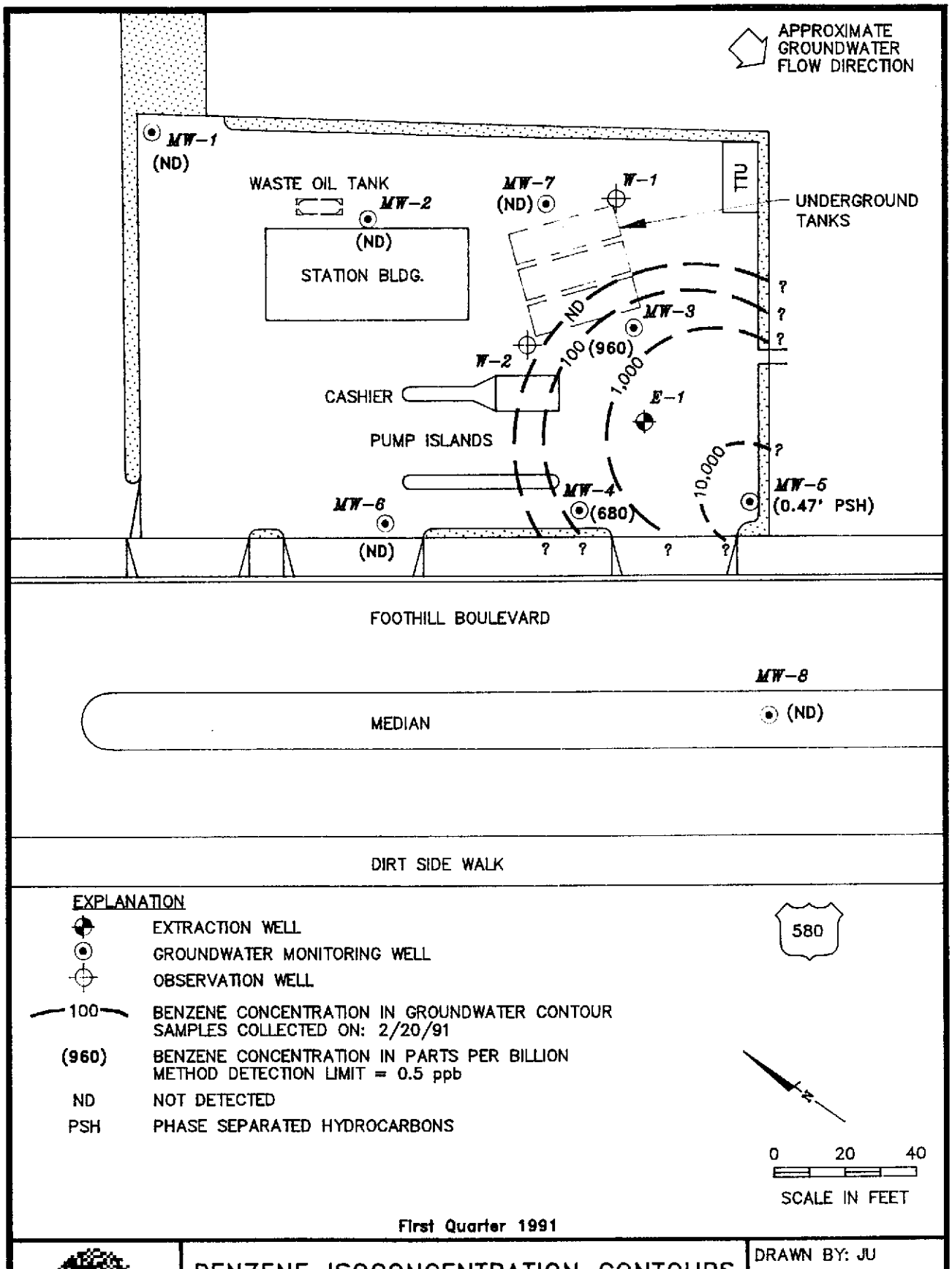
SCALE IN FEET

First Quarter 1991

BURLINGTON ENVIRONMENTAL, INC.
CHEMPRO Division

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

DRAWN BY: JU	
DATE: 3/25/91	
PROJECT No. 1158	FIGURE 4
Drawing No. A0615821	



First Quarter 1991

BURLINGTON ENVIRONMENTAL, INC.
CHEMPRO Division

BENZENE ISOCONCENTRATION CONTOURS

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

DRAWN BY: JU	
DATE: 3/25/91	
PROJECT No. 1158	FIGURE 5
Drawing No. A0615822	

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 the 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 the each well. The purge water was pumped through the remediation system through an attachment on the influent flow line.

Quality Assurance Samples

A rinsate sample was collected to ensure that contamination did not result from the sampling equipment. All sample bailers were steam cleaned first, washed with TSP and rinsed with distilled water before being used in the monitoring well. 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.

Phase separated hydrocarbon were detected in monitoring well MW-5 at a thickness of 0.47 feet. 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 0.5 foot in the field logbook.

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 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 MW-4 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 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 logbooks 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 Logbook

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.: 1158
LOCATION: 16304 Foothill Blvd., San Leandro
SAMPLER: DAL / RR
STATION NO.: 9-8139
DATE: 2/20/91
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-5	—	2"	18.91	18.44	.47	10AM	REMOVE 4 gal OF FLUID
MW-1	27.51	2"	14.29	—	—	8:45	
MW-2	30.32	2"	14.09	—	—	8:50	
MW-7	25.83	2"	18.55	—	—	9:03	
MW-3	25.59	2"	19.20	—	—	9:12	
MW-4	21.97	2"	17.81	—	—	9:35	
MW-6	29.15	2"	16.09	—	—	9:50	
MW-8	30.97	2"	16.32	—	—	10:AM	

WATER DATA SHEET

PROJECT NO.: 1158

LOCATION: SAN LEANDRO

STATION NO.: 9-B:39

SAMPLER: RR. DL

SAMPLE ID.: WS - 18 - SL

DATE: 2/20/91

WELL/SAMPLE POINT DESIGNATION: MW-1

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

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

Casing Elev. (ft.):

TD (Actual) (ft.):

Screened Int. (ft.):

Initial DTW (ft.): 14.29 @ 8:45a

Initial TD (ft.): 27.51

Water Column Height (ft.): 13.22

80 % Recovery (ft.): 16.93

Calc. Casing Vol. (gal.): 2.25
(2" = .17) (3' = .38) (4" = .66) (6" = 1.5)

Calc. Purge Vol. (gal.): 8.99

Final DTW (ft.): 15.52 @ 1:20

Final TD (ft.):

Product Bailed (gal.):

FIELD MEASUREMENTS

TIME	VOLUME (gal.)	pH (units)	TEMP. (degrees F)	E.C. (umhos/cm)	COLOR	DTW (if dry)
10:50	2	12.44	70.4	2310	CLOUDY GREY	
10:53	4	12.51	70.3	2410	"	DRY @ 4 gal (26.40')

Odor?

Actual Purge Vol. (gal.):

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

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

REMARKS: BAILED WATER FROM CHRISTY BOX (1 QT.)
SAMPLED @ 1:30pm

WEATHER:

CHEMICAL PROCESSORS, INC.

WATER DATA SHEET

PROJECT NO.: 1158
SAMPLE ID.: WS - 19 - SL
LOCATION: SAN LEANDRO
DATE: 2/20/91
STATION NO.: 9-8139
WELL/SAMPLE
SAMPLER: RR. DL
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.): ____
Initial DTW (ft.): 14.09 @ 8:50
Initial TD (ft.): 30.32
Water Column Height (ft.): 16.23
80 % Recovery (ft.): 17.34

Calc. Casing Vol. (gal.): 2.76
(2" = .17) (3' = .38) (4" = .66) (6" = 1.5)
Calc. Purge Vol. (gal.): 11.04
Final DTW (ft.): 14.02 @ 1:32
Final TD (ft.): ____
Product Bailed (gal.): ____

Casing Elev. (ft.): ____
TD (Actual) (ft.): ____

FIELD MEASUREMENTS

TIME	VOLUME (gal.)	pH (units)	TEMP. (degrees F)	E.C. (umhos/cm)	COLOR	DTW (if dry)
11:05	3	10.29	69.6	630	CLOUDY BRN	
11:08	6	9.47	68.6	660	" "	
11:11	9	9.20	68.3	680	" "	
11:15	11	9.24	67.6	690	" "	

Odor ? ____

Actual Purge Vol. (gal.): ____

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

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

REMARKS: SAMPLED @ 1:35 pm

WEATHER: ____

CHEMICAL PROCESSORS, INC.

WATER DATA SHEET

PROJECT NO.: 1158
SAMPLE ID.: WS - 21 - SL
LOCATION: SAN LEANDRO
DATE: 2/20/91
STATION NO.: 9-8139
WELL/SAMPLE
SAMPLER: RR · DL
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.):
Initial DTW (ft.): 19.20 @ 9:12
Initial TD (ft.): 25.59
Water Column Height (ft.): 6.39
80 % Recovery (ft.): 20.48

Calc. Casing Vol. (gal.): 1.09
(2" = .17) (3' = .38) (4" = .66) (6" = 1.5)
Calc. Purge Vol. (gal.): 4.35
Final DTW (ft.): 19.27 @ 1:55
Final TD (ft.):
Product Bailed (gal.):

Casing Elev. (ft.):
TD (Actual) (ft.):

FIELD MEASUREMENTS

TIME	VOLUME (gal.)	pH (units)	TEMP. (degrees F)	E.C. (umhos/cm)	COLOR	DTW (if dry)
11:37	1	8.44	72.6	800	V. DRK. GREY	
11:39	2	8.08	72.5	780	DRK GREY	
11:40	3	7.96	72.2	790	GREY	
11:49	5	7.96	71.9	760	GREY	

Odor? HEAVY PROD. - SLIGHT SEWERY

Actual Purge Vol. (gal.):

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

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

REMARKS: SAMPLED @ 2pm

WEATHER:

CHEMICAL PROCESSORS, INC.

WATER DATA SHEET DUP: WS-23-SL

PROJECT NO.: 1158
SAMPLE ID.: WS - 22 - SL
LOCATION: SAN LEANDRO
DATE: 2/20/91
STATION NO.: 9-8139
WELL/SAMPLE
SAMPLER: RR-DL
POINT DESIGNATION: MW-4

☒ SAMPLING ☐ DEVELOPING ☐ BAILING FLOATING PRODUCT

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

Screened Int. (ft.):
Initial DTW (ft.): 17.81 @ 9:35am
Initial TD (ft.): 21.97
Water Column Height (ft.): 4.16
80 % Recovery (ft.): 18.69

Calc. Casing Vol. (gal.): .71
(2" = .17) (3' = .38) (4" = .66) (6" = 1.5)
Calc. Purge Vol. (gal.): 2.83
Final DTW (ft.): 17.87 @ 2:08
Final TD (ft.):
Product Bailed (gal.):

Casing Elev. (ft.):
TD (Actual) (ft.):

FIELD MEASUREMENTS

TIME	VOLUME (gal.)	pH (units)	TEMP. (degrees F)	E.C. (umhos/cm)	COLOR	DTW (if dry)
11:50	1	8.52	72.6	510	CLOUDY	
11:51	2	9.12	73.1	480	CLOUDY TAN	
11:52	3	9.31	72.8	480	〃	
11:55	4	9.42	72.5	480	〃	

Odor? YES

Actual Purge Vol. (gal.):

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

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

REMARKS: Bailed 1 QT. WATER FROM CHRISTY BOX SAMPLED @ 2:10pm

WEATHER:

WATER DATA SHEET (Floating Product)

PROJECT NO.: 1158 SAMPLE ID.: NO - SAMPLE

LOCATION: SAN LEANDRO DATE: 2/20/91

STATION NO.: 9.8139 WELL/SAMPLE

SAMPLER: RR . DL POINT DESIGNATION: MW-5

☐ SAMPLING ☐ DEVELOPING ☒ BAILING FLOATING PRODUCT

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

Screened Int. (ft.): ____

Initial DTW (ft.): 18.91 @ 10^00

Depth to product
Initial ~~FP~~ (ft.): 18.44

Water Column Height (ft.): ____

80 % Recovery (ft.): ____

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

Calc. Purge Vol. (gal.): ____

Final DTW (ft.): 22.49 @ 1015

Final TD (ft.): ____

Casing Elev. (ft.): ____

TD (Actual) (ft.): ____

Product Bailed (gal.): 4

FIELD MEASUREMENTS

TIME	VOLUME (gal.)	pH (units)	TEMP. (degrees F)	E.C. (umhos/cm)	COLOR	DTW (if dry)

Odor? ____

Actual Purge Vol. (gal.): 4

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

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

REMARKS: Approximately .47' of floating product registered on oil/water interface probe. Bailed 4 gallons (well dry). Final depth to H_2O = 22.49. No product registered on final depth to product.

WEATHER: SUNNY ~ 60°

WATER DATA SHEET

PROJECT NO.: 1158 | SAMPLE ID.: WS - 2A - SL

LOCATION: San Leandro | DATE: 2/20/91

STATION NO.: 9-8130 | WELL/SAMPLE

SAMPLER: TAR-PL | 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.): ____

Initial DTW (ft.): 16.09 @ 9:50

Initial TD (ft.): 29.15

Water Column Height (ft.): 13.06

80 % Recovery (ft.): 18.70

Calc. Casing Vol. (gal.): 2.22
(2" = .17) (3' = .38) (4" = .66) (6" = 1.5)

Calc. Purge Vol. (gal.): 8.88

Final DTW (ft.): 16.10 @ 2:12

Final TD (ft.): ____

Casing Elev. (ft.): ____

TD (Actual) (ft.): ____

Product Bailed (gal.): ____

FIELD MEASUREMENTS

TIME	VOLUME (gal.)	pH (units)	TEMP. (degrees F)	E.C. (umhos/cm)	COLOR	DTW (if dry)
12:05	2	8.84	72.4	600	Cloudy BRN	
12:07	4	8.55	72.7	570	〃	
12:10	6	8.43	72.4	550	〃	
12:13	9	8.36	70.8	530	〃	

Odor ? ____

Actual Purge Vol. (gal.): ____

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

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

REMARKS: Sampled @ 2:20 pm

WEATHER: ____

CHEMICAL PROCESSORS, INC.

WATER DATA SHEET

PROJECT NO.: 1158 SAMPLE ID.: WS - 20 - SL

LOCATION: San Leandro DATE: 2/20/91

STATION NO.: 9-B139 WELL/SAMPLE

SAMPLER: RR.DL 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.):

Initial DTW (ft.): 18.55@ 9:03

Initial TD (ft.): 25.83

Water Column Height (ft.): 7.28

80 % Recovery (ft.): 20.01

Calc. Casing Vol. (gal.): 1.24
(2" = .17) (3' = .38) (4" = .66) (6" = 1.5)

Calc. Purge Vol. (gal.): 4.95

Final DTW (ft.): 18.73 @ 1:45

Final TD (ft.):

Casing Elev. (ft.):

TD (Actual) (ft.):

Product Bailed (gal.):

FIELD MEASUREMENTS

TIME	VOLUME (gal.)	pH (units)	TEMP. (degrees F)	E.C. (umhos/cm)	COLOR	DTW (if dry)
11:20	1	9.15	69.7	550	Cloudy BRN	
11:25	2	8.80	70.5	540	" "	
11:26	3	8.60	70.4	560	" "	
11:28	5	8.62	69.8	580	" "	

Odor ?

Actual Purge Vol. (gal.):

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

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

REMARKS: SAMPLED @ 1:50 pm

WEATHER:

CHEMICAL PROCESSORS, INC.

WATER DATA SHEET

PROJECT NO.: 1158 SAMPLE ID.: WS-25-SL

LOCATION: 9-8139@ DATE: 2/20/91

STATION NO.: SAN LEANDRO WELL/SAMPLE

SAMPLER: PR-DL POINT DESIGNATION: MW-8

☒ SAMPLING ☐ DEVELOPING ☐ BAILING FLOATING PRODUCT

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

Screened Int. (ft.): ____

Initial DTW (ft.): 16.32 @ 10AM

Initial TD (ft.): 30.97

Water Column Height (ft.): 14.65

80 % Recovery (ft.): 19.25

Calc. Casing Vol. (gal.): 2.49
(2" = .17) (3" = .38) (4" = .66) (6" = 1.5)

Calc. Purge Vol. (gal.): 9.96

Final DTW (ft.): 16.38 @ 2:02 pm

Final TD (ft.): ____

Product Bailed (gal.): ____

Casing Elev. (ft.): ____

TD (Actual) (ft.): ____

FIELD MEASUREMENTS

TIME	VOLUME (gal.)	pH (units)	TEMP. (degrees F)	E.C. (umhos/cm)	COLOR	DTW (if dry)
12:22	2	8.67	73.0	670	CLOUDY BRN	
12:24	4	8.36	72.6	660	〃	
12:27	7	8.22	71.8	660	〃	
12:32	10	8.15	71.0	690	〃	

Odor? ____

Actual Purge Vol. (gal.): ____

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

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

REMARKS: SAMPLED @ 2:40

WEATHER: ____

CHEMICAL PROCESSORS, INC.

Appendix C

CHAIN-OF-CUSTODY RECORDS

11526

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 #1158 Consultant Name CHEMPRO Address 950 "B" Gilman St., Berkeley, Ca. Project Contact (Name) Felicia A Rein (Phone) 524-9372 (Fax Number) 524-7439	Chevron Contact (Name) Walt Posluszny (Phone) (415) 842-9040 Laboratory Name Superior Laboratory Release Number 2492270 Samples Collected by (Name) DAL/RR Collection Date 2-20-91 Signature [signature]

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)	Chlorinated HC (8010)	Non Chlorinated HC (8020)	Total Lead (AA)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)							Remarks
RS-3-SL	3	W	G	9:30	HCL	Y	X													
TB-3-SL	1	W	G	TRIP 7AM	HCL	Y	X													
WS-18-SL	3	W	G	1:30pm	HCL	Y	X													
WS-19-SL	3	W	G	1:35	HCL	Y	X													
WS-20-SL	3	W	G	1:50	HCL	Y	X													
WS-21-SL	3	W	G	2:00	HCL	Y	X													
WS-22-SL	3	W	G	2:10	HCL	Y	X													
WS-23-SL	3	W	G	2:15	HCL	Y	X													
WS-24-SL	3	W	G	2:20	HCL	Y	X													
WS-25-SL	3	W	G	2:40	HCL	Y	X													

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Turn Around Time (Circle Choice)
[signature]	CHEMPRO	2/21/91	W Eich	EXP-H	2-21-91 8:44	24 Hrs.
Relinquished By (Signature) [signature]	Organization ECS	Date/Time 2-21-91	Received By (Signature)	Organization	Date/Time	48 Hrs. 5 Days
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature) [signature] (BAL)		Date/Time	(10 Days) circled As Contracted

COC-1.DWG/11 90/HCH

Appendix D

CERTIFIED ANALYTICAL RESULTS

SUPERIOR ANALYTICAL LABORATORY, INC.
1555 BURKE, UNIT I · SAN FRANCISCO, CA 94124 · PHONE (415) 647-2081 DOHS #1332

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 11526
CLIENT: Chempro
CLIENT JOB NO.: 1158

DATE RECEIVED: 02/22/91
DATE REPORTED: 03/01/91

Lab Number	Customer Sample Identification	Date Sampled	Date Analyzed
11526- 1	RS-3-SL	02/20/91	02/26/91
11526- 2	TB-3-SL	02/20/91	02/26/91
11526- 3	WS-18-SL	02/20/91	02/26/91
11526- 4	WS-19-SL	02/20/91	02/26/91
11526- 5	WS-20-SL	02/20/91	02/26/91
11526- 6	WS-21-SL	02/20/91	02/26/91
11526- 7	WS-22-SL	02/20/91	02/26/91
11526- 8	WS-23-SL	02/20/91	02/26/91
11526- 9	WS-24-SL	02/20/91	02/26/91
11526-10	WS-25-SL	02/20/91	02/26/91

Laboratory Number:	11526 1	11526 2	11526 3	11526 4	11526 5
ANALYTE LIST	Amounts/Quantitation Limits (ug/L)				
OIL AND GREASE:	NA	NA	NA	NA	NA
TPH/GASOLINE RANGE:	ND<50	ND<50	ND<50	ND<50	ND<50
TPH/DIESEL RANGE:	NA	NA	NA	NA	NA
BENZENE:	ND<0.5	ND<0.5	ND<0.5	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	ND<0.5	ND<0.5	ND<0.5
XYLENES:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5

Laboratory Number:	11526 6	11526 7	11526 8	11526 9	11526 10
ANALYTE LIST	Amounts/Quantitation Limits (ug/L)				
OIL AND GREASE:	NA	NA	NA	NA	NA
TPH/GASOLINE RANGE:	8800	15000	15000	ND<50	ND<50
TPH/DIESEL RANGE:	NA	NA	NA	NA	NA
BENZENE:	960	640	680	ND<0.5	ND<0.5
TOLUENE:	780	390	410	ND<0.5	ND<0.5
ETHYL BENZENE:	200	420	430	ND<0.5	ND<0.5
XYLENES:	920	1600	1600	ND<0.5	ND<0.5

SUPERIOR ANALYTICAL LABORATORY, INC.
1555 BURKE, UNIT I · SAN FRANCISCO, CA 94124 · PHONE (415) 647-2081 DOHS #1332

CERTIFICATE OF ANALYSIS

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

QA/QC INFORMATION
SET: 11526

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: 08/24/90

SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Water: 0.5ug/l
Standard Reference: 01/28/91

ANALYTE	REFERENCE	SPIKE LEVEL	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Oil & Grease	NA	NA	NA	NA	NA
Diesel	NA	NA	NA	NA	NA
Gasoline	08/24/90	200ng	83/83	0.3	63-111
Benzene	01/28/91	200ng	90/85	5.7	72-119
Toluene	01/28/91	200ng	91/88	3.9	70-116
Ethyl Benzene	01/28/91	200ng	94/91	3.8	73-119
Total Xylene	01/28/91	600ng	94/92	2.0	71-118

Richard Srna, Ph.D.
Celia G. Joaquin (for)
Laboratory Director