

ALCO  
HAZMAT

94 MAR 30 PM 2: 21

March 29, 1994

8-019

Ms. Juliet Shin  
Alameda County Department of  
Environmental Health  
Hazardous Materials Division  
80 Swan Way, Room 200  
Oakland, CA 94621


Re: Former Mobil S/S No. 10-L1X, 15884 Hesperian Boulevard, San Lorenzo, CA

Dear Mr. Shin:

Enclosed please find one copy of Hydro-Environmental Technologies, Inc.'s (HETT's) Quarterly Monitoring Report for sampling conducted on February 18, 1994 at the above-referenced site.

If you have any questions or require additional information, please feel free to call me at (510) 521-2684.

Sincerely,  
HYDRO-ENVIRONMENTAL TECHNOLOGIES, INC.

  
Scott D. Kellstedt  
Operations Manager

enclosure

cc: Ms. Michele Fear - Mobil Oil Corporation, Fairfax, VA (w/o enclosure)

## **QUARTERLY MONITORING REPORT**

**Former Mobil Service Station No. 10-L1X  
15884 Hesperian Boulevard  
San Lorenzo, California**

**Sampling Date: February 18, 1994**

Prepared for:

**MOBIL OIL CORPORATION  
3225 Gallows Rd., Rm 2M211  
Fairfax, VA 22037**

Prepared by:

**HYDRO-ENVIRONMENTAL TECHNOLOGIES, INC.  
2363 Mariner Square Drive, Suite 243  
Alameda, California 94501  
HETI Job No. 8-019**

**March 18, 1994**

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## 1.0 INTRODUCTION

This report presents the results of quarterly ground water sampling conducted by Hydro-Environmental Technologies, Inc. (HETI) at former Mobil Service Station No. 10-L1X, located at 15884 Hesperian Boulevard in San Lorenzo, California. A site location map is attached as Figure 1. Ground water sampling was performed on February 18, 1994.

Work performed at the site by HETI included: (1) well gauging, (2) well purging, (3) collection of ground water samples from all monitoring wells at the site and (4) analysis of water samples for total petroleum hydrocarbons as gasoline (TPHg) using EPA Method 8015 (modified), and benzene, toluene, ethylbenzene and total xylenes (BTEX) using EPA Method 8020 (modified).

## 2.0 BACKGROUND

The site was previously a Mobil gasoline service station located at the northern corner of the intersection of Hesperian Boulevard and Post Office Street in San Lorenzo, California. It is presently a paved parking lot for a shopping mall. Figure 2 shows the vicinity of the site, and Figure 3 shows the layout of the site and the location of existing monitoring wells.

In July 1986, Kaprealian Engineering, Inc. (KEI) installed four two-inch diameter monitoring wells (MW-1 through MW-4) on-site. In December 1987, in preparation to abandon the site, the underground storage tanks were removed and the tank pit was over-excavated.

In October 1991, HETI continued with further subsurface investigation. After HETI's initial site inspection to locate the wells, the following conditions were observed: monitoring well MW-2 was found in good condition, the casing to MW-3 was broken off and debris had filled the well, and wells MW-1 and MW-4 could not be located and their existence/condition is unknown.

In January 1992, HETI installed three monitoring wells on-site (MW-5, MW-6 and MW-7) and properly abandoned monitoring well MW-3. Results of that phase of the investigation and a detailed project history were presented in HETI's *Phase I Report* dated May 7, 1992.

In August 1993, HETI installed one additional downgradient monitoring well (MW-8), off-site on the southwestern side of Hesperian Boulevard. Results of that phase of the investigation were presented in HETI's *Phase II Subsurface Investigation and Quarterly Monitoring Report* dated September 16, 1993. All monitoring well locations are shown on the Site Plan (Figure 3).

### 3.0 FIELD ACTIVITIES

HETI personnel collected ground water samples from all monitoring wells at the site on February 18, 1994. All sampling was performed according to HETI standard protocol, using methods which are consistent with guidelines established by the lead regulatory agencies. A copy of HETI's Ground Water Sampling Protocol has previously been submitted to the Alameda County Department of Environmental Health (ACDEH).

Prior to purging, the depth to water in each of the three wells to be sampled was gauged to the nearest hundredth of a foot using an electronic water sounder. All five wells were re-gauged on February 24, 1994 in order to provide ground water data for use in preparing ground water elevation contours. Prior to sampling, the wells were purged of three well casing volumes or purged dry while the parameters of temperature, pH and conductivity were monitored for stabilization. Purging data is included in Appendix A. All  
measured  
again

Following recovery of the water level in the wells to at least 80 percent of their static level, ground water samples were collected with dedicated bailers. The samples were transferred to sample containers provided by the analytical laboratory. Sample containers were documented, labeled and placed in a cooler. A chain of custody was prepared and accompanied the samples to the laboratory; a copy is included in Appendix B. Ground water sample analysis was performed by Sequoia Analytical, a state DHS-certified laboratory located in Redwood City, California.

## 4.0 RESULTS

### 4.1 Ground Water Data

On February 24, 1994, depth to ground water in the wells ranged between 10.30 to 11.55 feet below grade. Depth to water measurements and calculated ground water elevations in the wells are presented on Table 1. The depth to water measurements and the wellhead elevation data were used to calculate ground water elevation contours. These contours are shown on Figure 4, the Ground Water Contour Map. Figure 4 shows ground water flow to be towards the southwest at an approximate gradient of 0.0025 ft/ft (0.25%).

### 4.2 Laboratory Analytical Results

Neither TPHg nor BTEX were detected in concentrations exceeding the method detection limits in the ground water samples collected from any of the monitoring wells except well MW-7. TPHg and benzene were detected in the ground water sample collected from well MW-7 at concentrations of 61 ppb and 1.2 ppb, respectively.

Analytical results are presented graphically on Figure 5, the Hydrocarbon Concentration Map. A summary of ground water analytical results is presented on Table 1. Copies of the laboratory reports and the chain-of-custody forms are attached in Appendix B.

## 5.0 SUMMARY

The results of the field activities and laboratory analyses of soil and ground water samples collected during this investigation are discussed below.

- Ground water levels measured in all the wells ranged from 10.30 to 11.55 feet below grade. The ground water gradient was calculated to be approximately 0.0025 ft/ft in a general southwesterly direction beneath the site.
- Separate phase petroleum was not detected in any of the monitoring wells.
- Neither TPHg nor BTEX were detected in the ground water samples collected from any of the monitoring wells except MW-7.

## 6.0 RECOMMENDATIONS

Pursuant to recommendations presented in HETI's *Quarterly Monitoring Report* dated February 3, 1994, MW-2 will be deleted from the sampling program starting with the next sampling event, since no benzene has been detected in samples collected from that well for four consecutive quarters. HETI will confirm authorization with the Alameda County Department of Environmental Health before conducting the next sampling round.

## 7.0 CERTIFICATION

This report was prepared under the supervision of a registered professional engineer. All statements, conclusions and recommendations are based solely upon field observations and analytical analyses performed by a state-certified laboratory related to work performed by Hydro-Environmental Technologies, Inc.

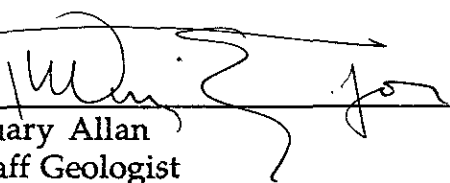
It is possible that variations in soil or ground water conditions exist beyond the points explored in this investigation. Also, site conditions are subject to change at some time in the future due to variations in rainfall, temperature, regional water usage, or other factors.

The service performed by Hydro-Environmental Technologies, Inc. has been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the area of the site. No other warranty, expressed or implied, is made.

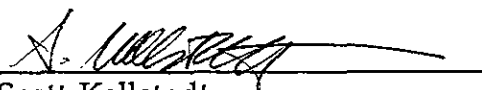
Hydro-Environmental Technologies, Inc. includes in this report chemical analytical data from a state-certified laboratory. These analyses are performed according to procedures suggested by the U.S. EPA and the State of California. Hydro-Environmental Technologies, Inc. is not responsible for laboratory errors in procedure or result reporting.

HYDRO-ENVIRONMENTAL TECHNOLOGIES, INC.


Prepared by:

  
Ruary Allan  
Staff Geologist

Reviewed by:

  
Scott Kellstedt  
Office Operations Manager

Reviewed by:

  
John Turney P.E.  
Senior Engineer



# TABLES

Table 1

GROUND WATER ELEVATIONS AND ANALYTICAL RESULTS

Former Mobil Station No. 10-L1X  
 15884 Hesperian Boulevard  
 San Lorenzo, California

MW-No.	Date	TOC (feet)	DTW (feet)	GWE (feet)	TPHd (ppb)	TPHg (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)
MW-2	2/12/92	31.81	12.74	19.07	NT	190	4.4	ND<0.3	4.7	3.8
	5/4/92	31.81	11.36	20.45	NT	480	9.1	1.4	4.4	2.3
	8/20/92	31.81	13.80	18.01	NT	ND<50	0.99	ND<0.5	ND<0.5	ND<0.5
	11/27/92	31.81	14.30	17.51	NT	56	3.2	ND<0.5	0.87	2.1
	2/24/93	31.81	9.73	22.08	NT	330	14	ND<0.5	ND<0.5	ND<0.5
	5/19/93	31.81	11.82	19.99	NT	100	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	8/19/93	31.81	12.27	19.54	NT	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	11/19/93	31.81	12.91	18.90	NT	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	2/18/94*	31.81	10.30	21.51	NT	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5
MW-5	2/12/92	32.92	13.59	19.33	ND<50	0.3	ND<0.3	ND<0.3	ND<0.3	ND<0.3
	5/4/92	32.92	12.25	20.67	ND<50	ND<30	ND<0.3	ND<0.3	ND<0.3	ND<0.3
	8/20/92	32.92	14.62	18.30	NT	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	11/27/92	32.92	15.14	17.78	NT	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	2/24/93	32.92	10.57	22.35	NT	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	5/19/93	32.92	11.66	21.26	NT	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	8/19/93	32.92	13.01	19.91	NT	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	11/19/93	32.92	13.69	19.23	NT	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	2/18/94*	32.92	11.10	21.82	NT	NT	NT	NT	NT	NT
MW-6	2/12/92	32.68	13.57	19.11	NT	2700	14	3.5	27	39
	5/4/92	32.68	12.23	20.45	NT	ND<30	ND<0.3	ND<0.3	ND<0.3	ND<0.3
	8/20/92	32.68	14.64	18.04	NT	ND<50	ND<0.5	ND<0.5	ND<0.5	3.8
	11/27/92	32.68	15.14	17.54	NT	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	2/24/93	32.68	10.62	22.06	NT	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	5/19/93	32.68	11.66	21.02	NT	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	8/19/93	32.68	13.06	19.62	NT	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5

Table 1

**GROUND WATER ELEVATIONS AND ANALYTICAL RESULTS**

Former Mobil Station No. 10-L1X  
 15884 Hesperian Boulevard  
 San Lorenzo, California

MW-No.	Date	TOC (feet)	DTW (feet)	GWE (feet)	TPHd (ppb)	TPHg (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)
MW-6	11/19/93	32.68	13.73	18.95	NT	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	2/18/94*	32.68	11.20	21.48	NT	NT	NT	NT	NT	NT
MW-7	2/12/92	33.08	13.90	19.18	NT	ND<30	ND<0.3	ND<0.3	ND<0.3	ND<0.3
	5/4/92	33.08	12.60	20.48	NT	640	4.5	ND<0.6	11	14
	8/20/92	33.08	14.96	18.12	NT	220	1.2	ND<0.5	3.8	4.3
	11/27/92	33.08	15.49	17.59	NT	82	1.6	ND<0.5	4.3	3.6
	2/24/93	33.08	10.97	22.11	NT	82	1.5	ND<0.5	6.0	4.0
	5/19/93	33.08	12.09	20.99	NT	67	0.85	ND<0.5	6.4	3.8
	8/19/93	33.08	13.48	19.60	NT	88	1.7	ND<0.5	9.0	4.8
	11/19/93	33.08	14.10	18.98	NT	50	ND<0.5	ND<0.5	1.5	ND<0.5
2/18/94*	33.08	11.55	21.53	NT	61	1.2	ND<0.5	8.0	3.2	
MW-8	8/19/93	31.31	12.21	19.10	NT	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	11/19/93	31.31	12.84	18.47	NT	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	2/18/94*	31.31	10.41	20.90	NT	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5
MW-No.	Date	TOG (ppm)	HVO (ppb)	SVO (ppb)	PCB (ppb)	Cd (ppm)	Cr (ppm)	Ni (ppm)	Zn (ppm)	O-Pb (ppm)
MW-5	2/12/92	ND<1.0	ND<0.5-5.0	NT	NT	ND<0.010	ND<0.010	ND<0.050	ND<0.010	ND<0.050
	5/4/92	ND<1.0	ND<0.5-5.0	NT	NT	ND<0.010	ND<0.010	ND<0.050	ND<0.010	ND<0.050
	8/20/92	ND<1.0	ND<0.5-5.0	ND<2-10	ND<0.5-2.0	ND<0.010	ND<0.010	ND<0.050	0.012	ND<0.050

## Table 1

### GROUND WATER ELEVATIONS AND ANALYTICAL RESULTS

Former Mobil Station No. 10-L1X

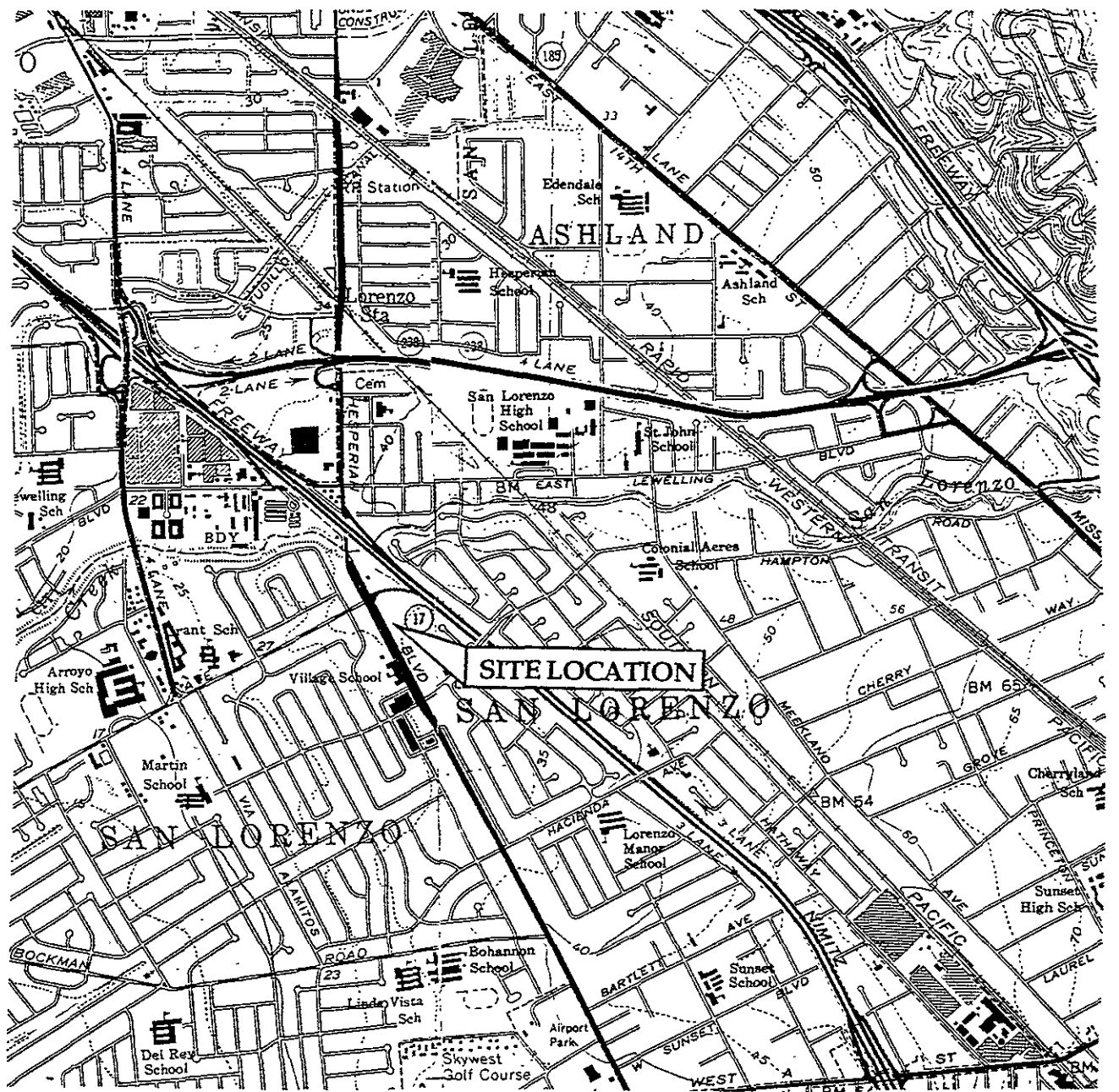
15884 Hesperian Boulevard

San Lorenzo, California

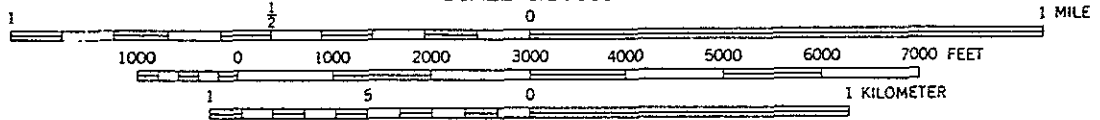
#### Notes:

MW No. :	Monitoring well number
Date :	Ground water sample collection date
TOC :	Elevation at the north side of the top of the well casing referenced to approximate mean sea level
DTW :	Depth to water
GWE :	Ground water elevation
TPHd :	Total petroleum hydrocarbons as diesel by EPA Method 8015
TPHg :	Total petroleum hydrocarbons as gasoline by EPA Method 8015
BTEX :	Benzene, Toluene, Ethylbenzene and total Xylenes by EPA Method 8020
TOG :	Total oil and grease by EPA Method 413.2 (I.R.)
HVO :	Halogenated volatile organics by EPA Method 8010
SVO :	Semi-volatile organics by EPA Method 8270 GC/MS
PCB :	Polychlorinated biphenyls by EPA Method 8080
Cd, Cr,	
Ni, Zn :	Cadmium, chromium, nickel and zinc by EPA Method 6000
O-Pb	Organic lead by California LUFT Manual (revised)
ppb :	Parts per billion ( $\mu\text{g/L}$ )
ppm :	Parts per million ( $\text{mg/L}$ )
ND :	Not detected in concentrations exceeding the indicated laboratory method detection limit
NT :	Not tested
*	Wells gauged on 2/24/94

# FIGURES



SCALE 1:24 000



SOURCE: U.S. GEOLOGICAL SURVEY  
7.5 MINUTE QUADRANGLE MAPS  
ENTITLED: "SAN LEANDRO, CALIFORNIA"  
AND "HAYWARD, CALIFORNIA"  
PHOTOREVISED 1980



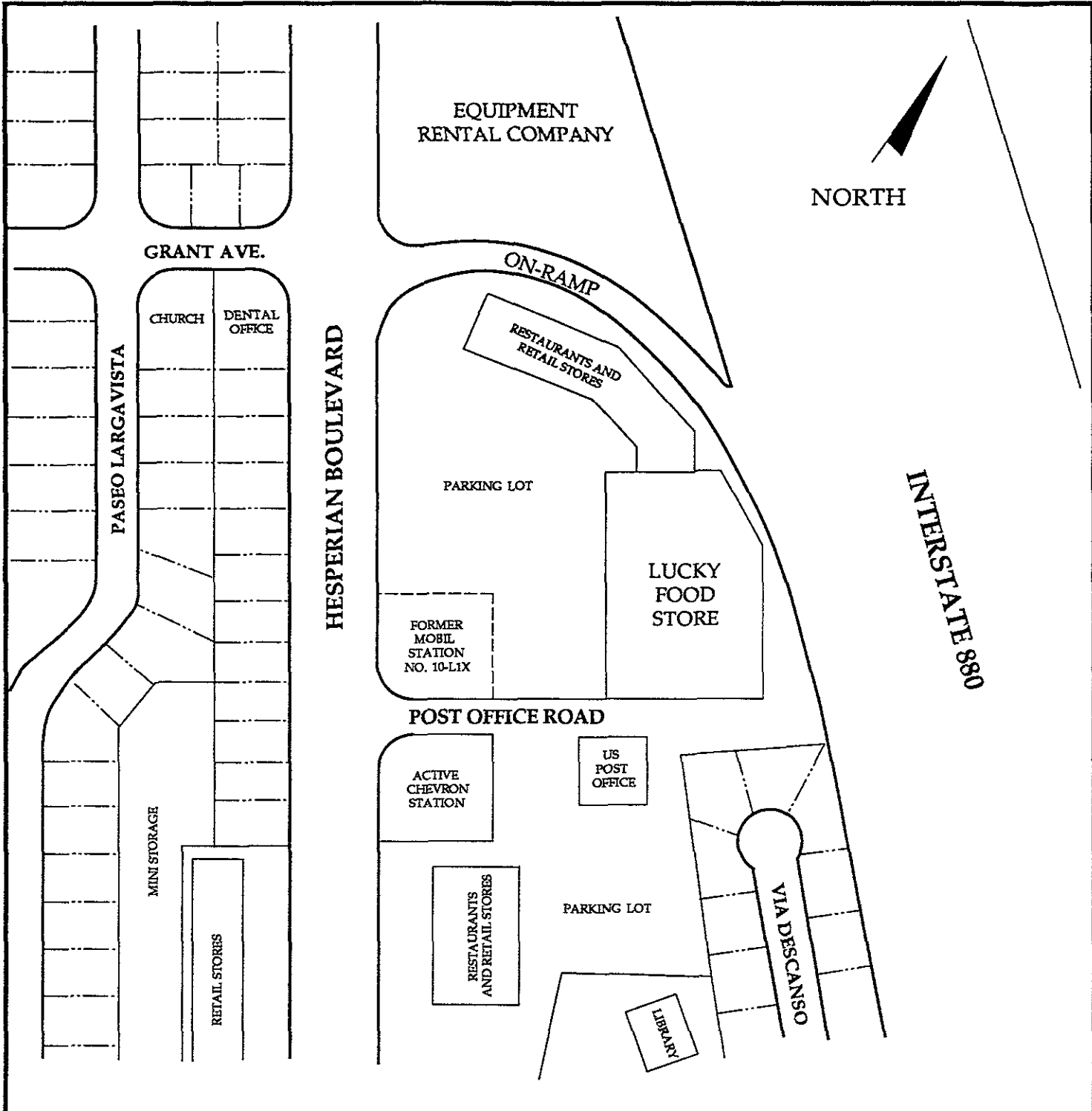
NORTH

**HYDR** -  
**ENVIR** & **NMENTAL**  
**TECHN** & **LOGIES, INC.**

**SITE LOCATION MAP**  
Former Mobil Service Station No. 10-L1X  
15884 Hesperian Boulevard  
San Lorenzo, California

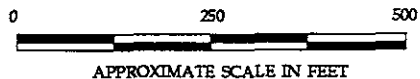
Figure  
**1**

8-019 1/94



**LEGEND**

----- = Residential Property Line

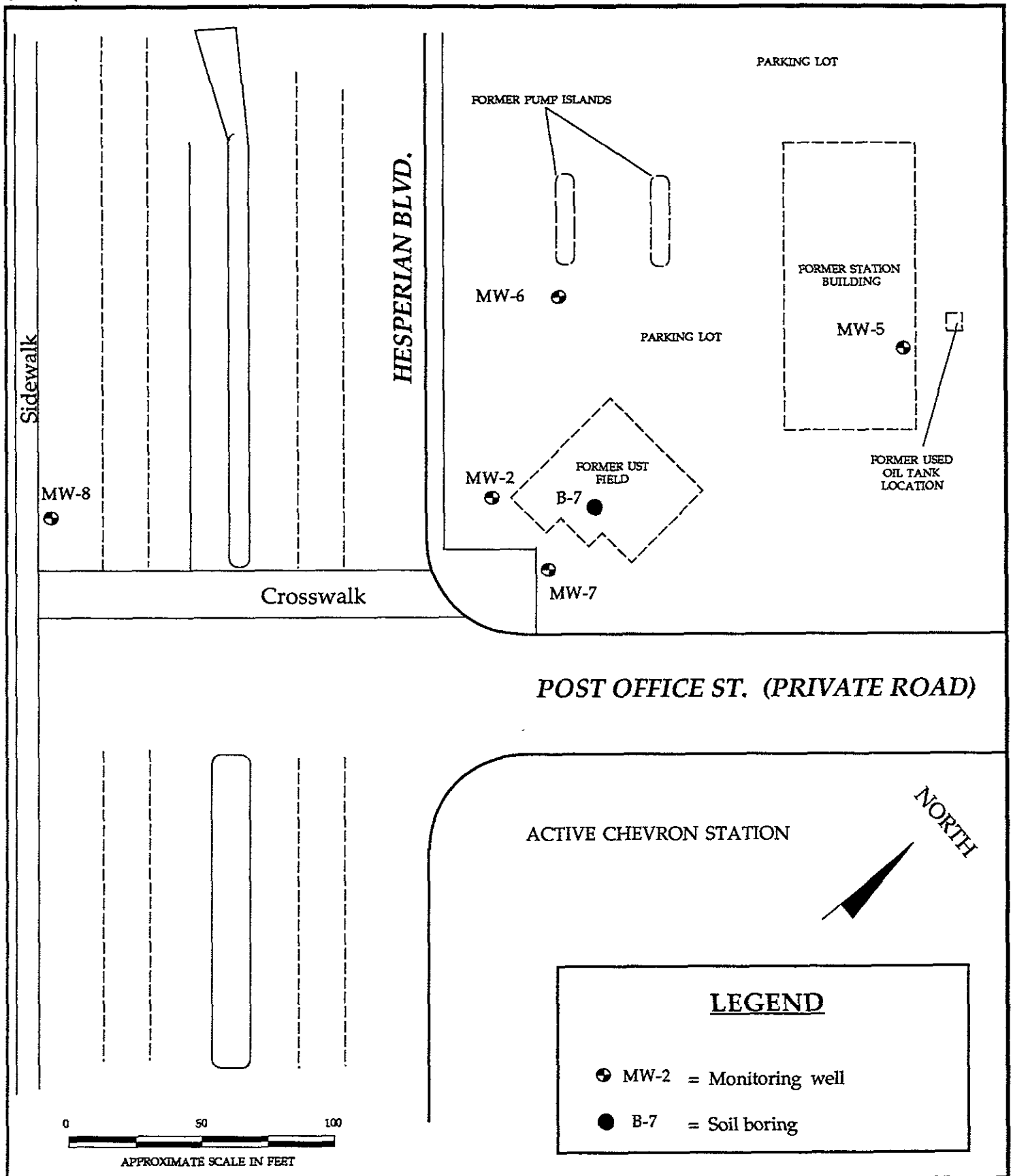


**HYDR -  
 ENVIR NMENTAL  
 TECHN LOGIES, INC.**

**SITE VICINITY MAP**  
 Former Mobil Service Station No. 10-L1X  
 15884 Hesperian Boulevard  
 San Lorenzo, California

Figure  
**2**

8-019 9/93

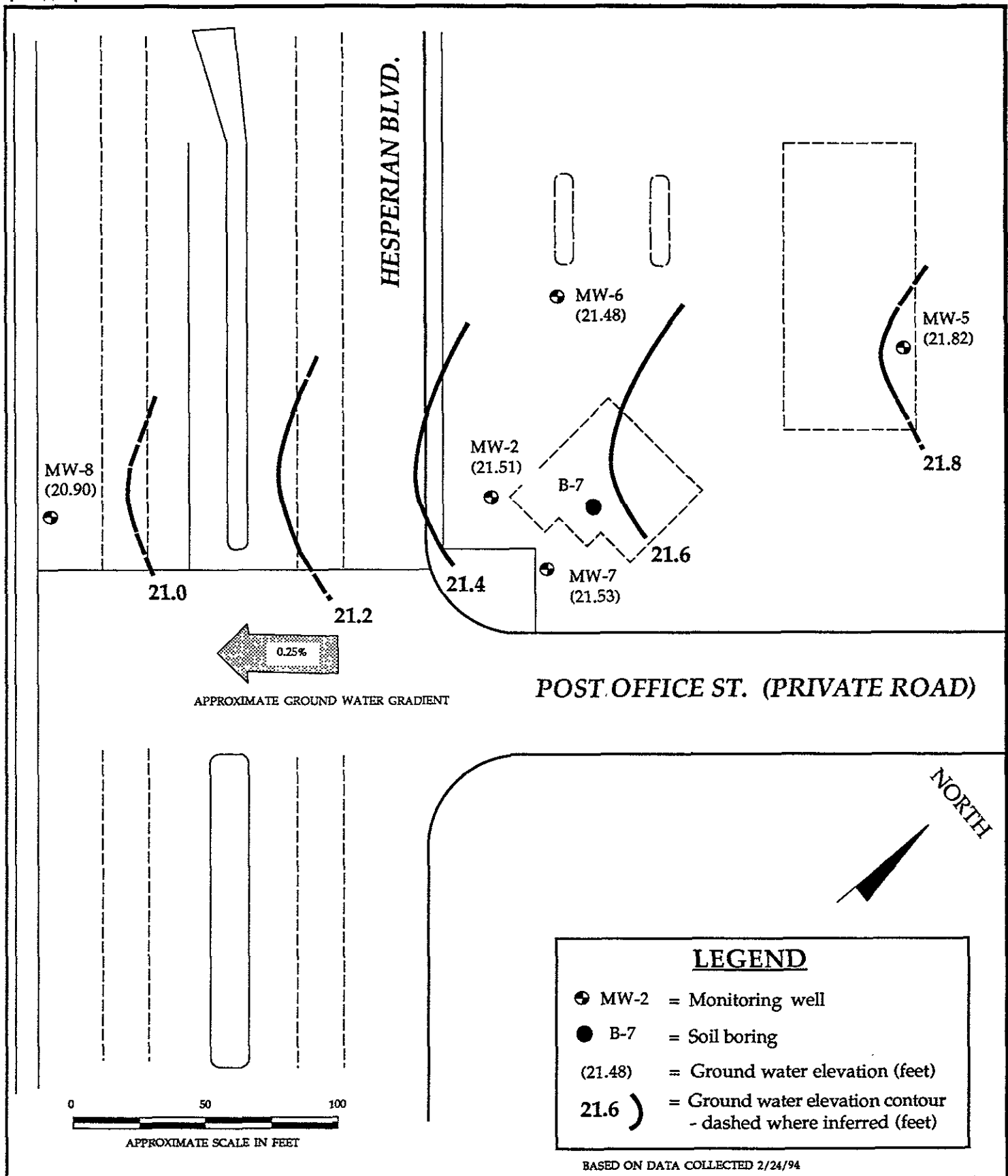


**HYDR** -  
**ENVIR**  **NMENTAL**  
**TECHN**  **LOGIES, INC.**

**SITE PLAN**  
 Former Mobil Service Station No. 10-L1X  
 15884 Hesperian Blvd.  
 San Lorenzo, California

Figure  
**3**  
 8-019 9/93

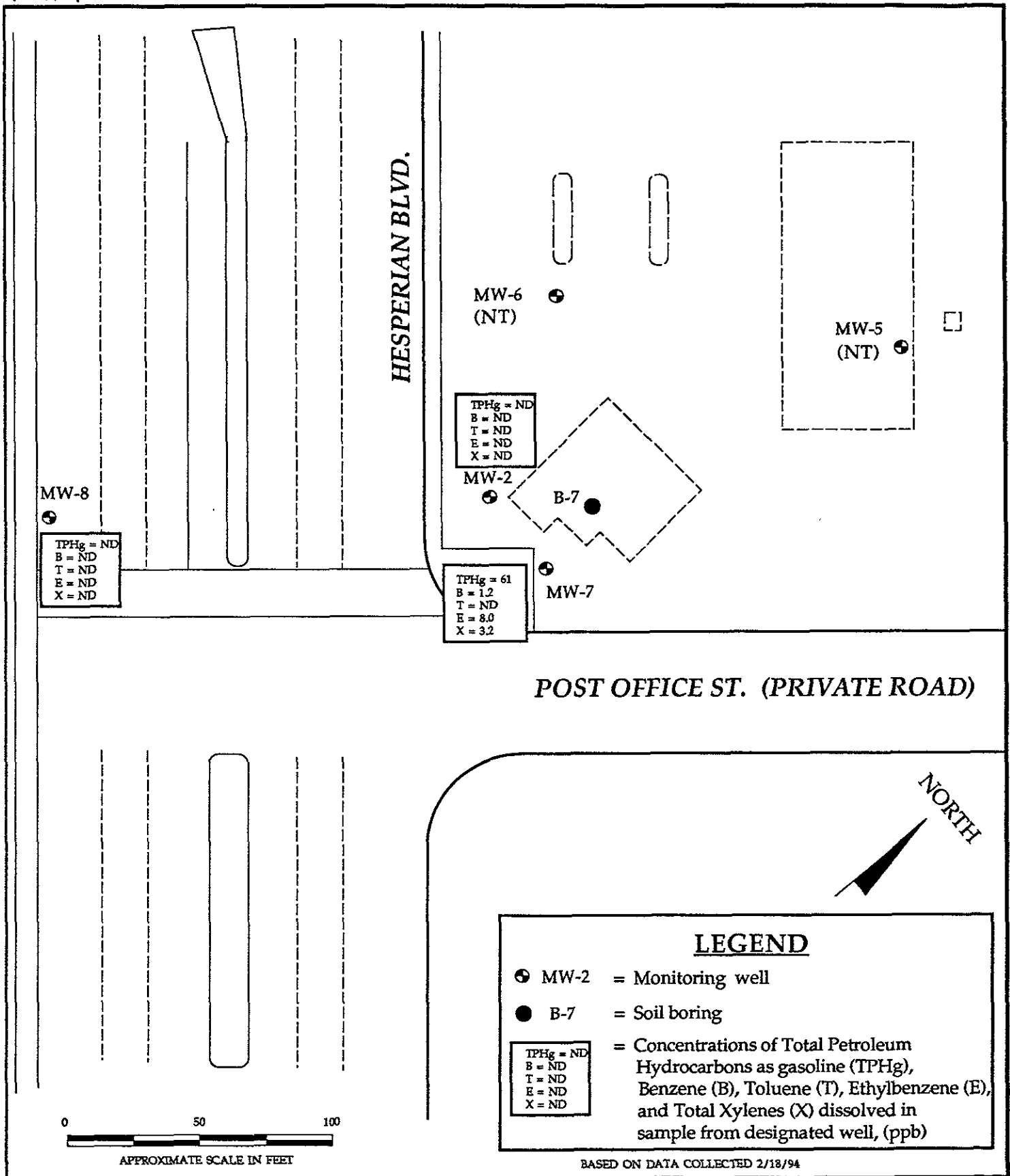




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TECHNOLOGIES, INC.**

**GROUND WATER CONTOUR MAP**  
Former Mobil Service Station No. 10-L1X  
15884 Hesperian Blvd.  
San Lorenzo, California

Figure  
**4**  
8-019 3/94



**HYDR - ENVIRONMENTAL TECHNOLOGIES, INC.**

**HYDROCARBON CONCENTRATION MAP**  
 Former Mobil Service Station No. 10-L1X  
 15884 Hesperian Blvd.  
 San Lorenzo, California

**Figure 5**  
 8-019 3/94

# APPENDIX A

PURGED/SAMPLED BY: RA

DATE: 2-18-74

GAUGING DATA:

Depth to bottom: 25.75 ft.

Depth to water: 10.78 ft.

Saturated Thickness: 14.97 ft.

Conversion	
diam.	gals/ft.
2 in.	x 0.16
4 in.	x 0.65
6 in.	x 1.44

Well casing volume 2.4 gallons

# volumes to purge x 3 vols.

\*Total volume to purge = 7.5 gallons

\* unless chemical parameters stabilize earlier

PURGING DATA:

Purge method: PVC bailer / Submersible pump / Suction lift pump / \_\_\_\_\_  
(circle one)

Time	Volume (gallons)	Temp. (°F)	Conductivity (mS/cm)	pH
2.10	0			
	3	64.1	1.45	7.31
	5.5	67.3	1.55	7.33
2.15	8	68.2	1.55	7.28

Color: gray

Turbidity: mod

Recharge: good

SPP 0 ft.

SAMPLING DATA:

Sampling method: Dedicated bailer

Sample for: (circle)

- TPHg/BTEX
- METALS
- TOC
- 8010
- TPHm
- O-Pb
- TEL
- 8020
- TPH no
- Total Pb
- EDB
- 8240
- 601
- 602
- Nitrates
- 8260
- 8270
- Other: \_\_\_\_\_

HYDRO-  
ENVIRONMENTAL  
TECHNOLOGIES, INC.

MONITORING WELL PURGE/SAMPLE SHEET

WELL # MW-2

LOCATION Motel San Lorenzo

Job No.  
8-019  
SHEET  
1 of 1

PURGED/SAMPLED BY: RA DATE: 2-18-99

GAUGING DATA:

Depth to bottom: 24.25 ft.  
 Depth to water: 11.97 ft.  
 Saturated Thickness: 12.28 ft.

Conversion	
diam.	gals/ft.
2 in.	x 0.16
4 in.	x 0.65
6 in.	x 1.44

Well casing volume 7.98 gallons  
 # volumes to purge x 3 vols.  
 \*Total volume to purge = 24 gallons  
 \* unless chemical parameters stabilize earlier

PURGING DATA:

Purge method: PVC bailer / Submersible pump / Suction lift pump / \_\_\_\_\_  
 (circle one)

Time	Volume (gallons)	Temp. (°F)	Conductivity (mS/cm)	pH
2-30	0			
	5	68.7	1.00	10.08
	10	69.5	1.12	9.10
	15	69.3	1.28	8.50
2-38	20	70.1	1.42	7.90
	24	Well dry at		20 gal

Color: low Turbidity: mod  
 Recharge: poor-mod SPP 0 ft.

SAMPLING DATA:

Sampling method: Dedicated bailer

- Sample for: (circle)
- IPHg/BTEX
  - METALS
  - TOC
  - 3010
  - TPHd
  - O-Pb
  - TEL
  - 8020
  - TPH no
  - Total Pb
  - EDB
  - 8240
  - 601
  - 602
  - Nitrates
  - 8263
  - 8270
  - Other: \_\_\_\_\_

**HYDRO-  
 ENVIRONMENTAL  
 TECHNOLOGIES, INC.**

MONITORING WELL PURGE/SAMPLE SHEET  
 WELL # MW-07  
 LOCATION Mobile, Sar Lorenzo

Job No. 8-017  
 SHEET 1 of 1

PURGED/SAMPLED BY: RA DATE: 2-18-94

GAUGING DATA:

Depth to bottom: 22.4 ft.  
 Depth to water: 10.82 ft.  
 Saturated Thickness: 11.58 ft.

Conversion	
diam.	gals/ft.
2 in.	x 0.16
4 in.	x 0.65
6 in.	x 1.44

Well casing volume 1.85 gallons  
 # volumes to purge x 3 vols.  
 \*Total volume to purge = 6 gallons  
 \* unless chemical parameters stabilize earlier

PURGING DATA:

Purge method: (PVC bailer) Submersible pump/ Suction lift pump/ \_\_\_\_\_  
 (circle one)

Time	Volume (gallons)	Temp. (°F)	Conductivity (mS/cm)	pH
<u>1400</u>	<u>0</u>			
	<u>3</u>	<u>67.8</u>	<u>1.21</u>	<u>7.75</u>
<u>140.5</u>	<u>6</u>	<u>68.1</u>	<u>1.13</u>	<u>7.68</u>

Color: tan Turbidity: mod  
 Recharge: good SPP φ ft.

SAMPLING DATA:

Sampling method: Dedicated bailer /

- Sample for: (circle)
- TPHg/BTEX METALS TOC 8010
  - TPHd O-Pb TEL 8020
  - TPHmo Total Pb EDS 8240
  - 601 602 Nitrates 8260 8270
  - Other: \_\_\_\_\_

**HYDRO-  
 ENVIRONMENTAL  
 TECHNOLOGIES, INC.**

MONITORING WELL PURGE/SAMPLE SHEET  
 WELL # MW-8  
 LOCATION Mobil, San Lorenzo

Job No. 8-019  
 SHEET  
 1 of 1

# APPENDIX B



# SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063  
(415) 364-9600 • FAX (415) 364-9233

RECEIVED MAR - 7 1994  
ANALYTICAL DATA

Hydro Environmental 2363 Mariner Sq. Dr., Bldg. 3, Ste 243 Alameda, CA 94501 Attention: Scott Kellstedt	Client Project ID: 8-019, Mobil 10-LIX Sample Matrix: Water Analysis Method: EPA 5030/8015 Mod./8020 First Sample #: 4BC7301	Sampled: Feb 18, 1994 Received: Feb 22, 1994 Reported: Mar 1, 1994
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## TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 4BC7301 MW-2	Sample I.D. 4BC7302 MW-7	Sample I.D. 4BC7303 MW-8
Purgeable Hydrocarbons	50	N.D.	61	N.D.
Benzene	0.50	N.D.	1.2	N.D.
Toluene	0.50	N.D.	N.D.	N.D.
Ethyl Benzene	0.50	N.D.	8.0	N.D.
Total Xylenes	0.50	N.D.	3.2	N.D.
Chromatogram Pattern:		--	Gas	--

### Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0
Date Analyzed:	2/23/94	2/23/94	2/23/94
Instrument Identification:	GCHP-3	GCHP-3	GCHP-3
Surrogate Recovery, %: (QC Limits = 70-130%)	114	97	105

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.  
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Vickie Tague  
Project Manager





# SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063  
(415) 364-9600 • FAX (415) 364-9233

Hydro Environmental 2363 Mariner Sq. Dr., Bldg. 3, Ste 243 Alameda, CA 94501 Attention: Scott Kellstedt	Client Project ID: 8-019, Mobil 10-LIX Matrix: Liquid QC Sample Group: 4BC7301-3	Reported: Mar 1, 1994
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## QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel

MS/MSD Batch#:	4BC0223	4BC0223	4BC0223	4BC0223
Date Prepared:	-	-	-	-
Date Analyzed:	2/23/94	2/23/94	2/23/94	2/23/94
Instrument I.D.#:	GCHP-3	GCHP-3	GCHP-3	GCHP-3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Matrix Spike % Recovery:	120	120	120	117
Matrix Spike Duplicate % Recovery:	130	130	120	123
Relative % Difference:	8.0	8.0	0.0	5.0

LCS Batch#:	-	-	-	-
Date Prepared:	-	-	-	-
Date Analyzed:	-	-	-	-
Instrument I.D.#:	-	-	-	-
LCS % Recovery:	-	-	-	-

% Recovery Control Limits:	71-133	72-128	72-130	71-120
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**Please Note:**

The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL

*V. Tague*  
Vickie Tague  
Project Manager

# Mobil Chain of Custody



**SEQUOIA  
ANALYTICAL**

Redwood City: (415) 364-9600  
 Concord: (510) 686-9600  
 Sacramento: (916) 921-9600

Consulting Firm Name: <u>HYDRO-ENVIRONMENTAL TECH.</u>	Site SS #: <u>10-LIX / SAN LORENZO</u>	Phase of Work:
Address: <u>2363 MARINER SQ DR #263</u>	Mobil Site Address: <u>15884 Hesperian Blvd</u>	<input type="checkbox"/> A. Emrg. Response
City: <u>ALAMEDA</u> State: <u>CA</u> Zip Code: <u>94501</u>	Mobil Engineer: <u>Michelle Fear</u>	<input type="checkbox"/> B. Site Assessment
Telephone: <u>(510) 521-2684</u> FAX #: <u>521-5078</u>	Consultant Project #: <u>8-019</u>	<input type="checkbox"/> C. Remediation
Project Contact: <u>SCOTT KEUSEN</u> Sampled by: <u>R. ALAN</u>	Sequoia's Work Order Release #:	<input checked="" type="checkbox"/> D. Monitoring
		<input type="checkbox"/> E. OGC/Claims

Turnaround Time:  Standard TAT (5 - 10 Working Days)  
 Other \_\_\_\_\_

Analyses Requested

Client Sample I.D.	Date/Time Sampled	Matrix Description	# of Containers	Sequoia's Sample #	Analyses Requested					Comments
					TPH Gas/BTEX	TPH Diesel	TPH by I.R. EPA 418.1	Oil & Grease EPA 413.2		
1. MW-2	2-18-94 2 PM	H <sub>2</sub> O	2		X					9402073-01
2. MW-7	↓	↓	↓		↓					-02
3. MW-8	↓	↓	↓		↓					-03
4.										
5.										
6.										
7.										
8.										
9.										
10.										

Relinquished By: <u>Randy Allen</u>	Date: <u>2-21-94</u>	Time: <u>12 AM</u>	Received By: <u>A. Willstetter</u>	Date: <u>2/21/94</u>	Time: <u>12 PM</u>
Relinquished By: <u>A. Willstetter</u>	Date: <u>2/22-94</u>	Time: <u>12:10</u>	Received By: <u>D Phillips</u>	Date: <u>2/22/94</u>	Time: <u>12:10</u>
Relinquished By: <u>D Phillips</u>	Date: <u>2-22-94</u>	Time: <u>1:05</u>	Received By: <u>T. Davis</u>	Date: <u>2/22/94</u>	Time: <u>13:05</u>