

June 16, 1994

ALCO
HAZMAT

8-019

94 JUN 20 PM 4:35

Ms. Juliet Shin
Alameda County Department of
Environmental Health
Hazardous Materials Division
80 Swan Way, Room 200
Oakland, CA 94612

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 (HETI's) Quarterly Monitoring Report for sampling conducted on May 24, 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: May 24, 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

June 7, 1994

TABLE OF CONTENTS

	Page
1.0 INTRODUCTION.....	1
2.0 BACKGROUND.....	1
3.0 FIELD ACTIVITIES.....	2
4.0 RESULTS.....	3
4.1 Ground Water Data.....	3
4.2 Laboratory Analytical Results.....	3
5.0 SUMMARY.....	3
6.0 RECOMMENDATIONS.....	4
7.0 CERTIFICATION.....	5

TABLES

Table 1: Ground Water Elevations and Analytical Results

FIGURES

Figure 1: Site Location Map
Figure 2: Site Vicinity Map
Figure 3: Site Plan
Figure 4: Ground Water Contour Map
Figure 5: Hydrocarbon Concentration Map

APPENDICES

Appendix A: Monitoring Well Purge/Sample Sheets
Appendix B: Laboratory Reports and Chain-of-Custody Records

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 May 24, 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 May 24, 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 five wells was gauged to the nearest hundredth of a foot using an electronic water sounder. Prior to sampling, the wells were purged of three well casing volumes while the parameters of temperature, pH and conductivity were monitored for stabilization. Purging data is included in Appendix A.

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 May 24, 1994, depth to ground water in the wells ranged between 11.21 to 12.48 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 0.0023 (0.23%).

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 83 parts per billion (ppb) and 0.95 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 report and the chain-of-custody form 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 11.21 to 12.48 feet below grade. The ground water gradient was calculated to be approximately 0.0023 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 DISCUSSION

As described in the Recommendations sections of HETI's previous quarterly monitoring reports, and confirmed in correspondence from the ACDEH, a revised sampling program has been implemented at this site. Wells MW-2, MW-5, MW-6 and MW-8 will now be sampled on a semi-annual basis, since no contaminants have been detected in the samples collected from these wells for the past year. Since these wells were sampled this quarter, they will next be sampled in November, 1994. However, since TPHg and benzene continue to be detected in samples collected from well MW-7, this well will continue to be sampled quarterly.

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.

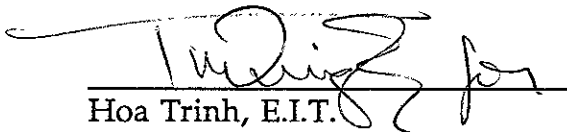
It is possible that variations in soil or ground water conditions exist beyond the points explored in this investigation. Also, site conditions are subject to change at some time in the future due to variations in rainfall, temperature, regional water usage, or other factors.

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:




Hoa Trinh, E.I.T.
Staff Engineer

Reviewed by:



Scott Kellstedt
Regional 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
	5/24/94	31.81	11.25	20.56	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
	5/24/94	32.92	12.03	20.89	NT	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5
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

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	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
	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
	5/24/94	32.68	12.11	20.57	NT	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5
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
5/24/94	33.08	12.48	20.60	NT	83	0.95	ND<0.5	10	4.0	
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
	5/24/94	31.31	11.21	20.10	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

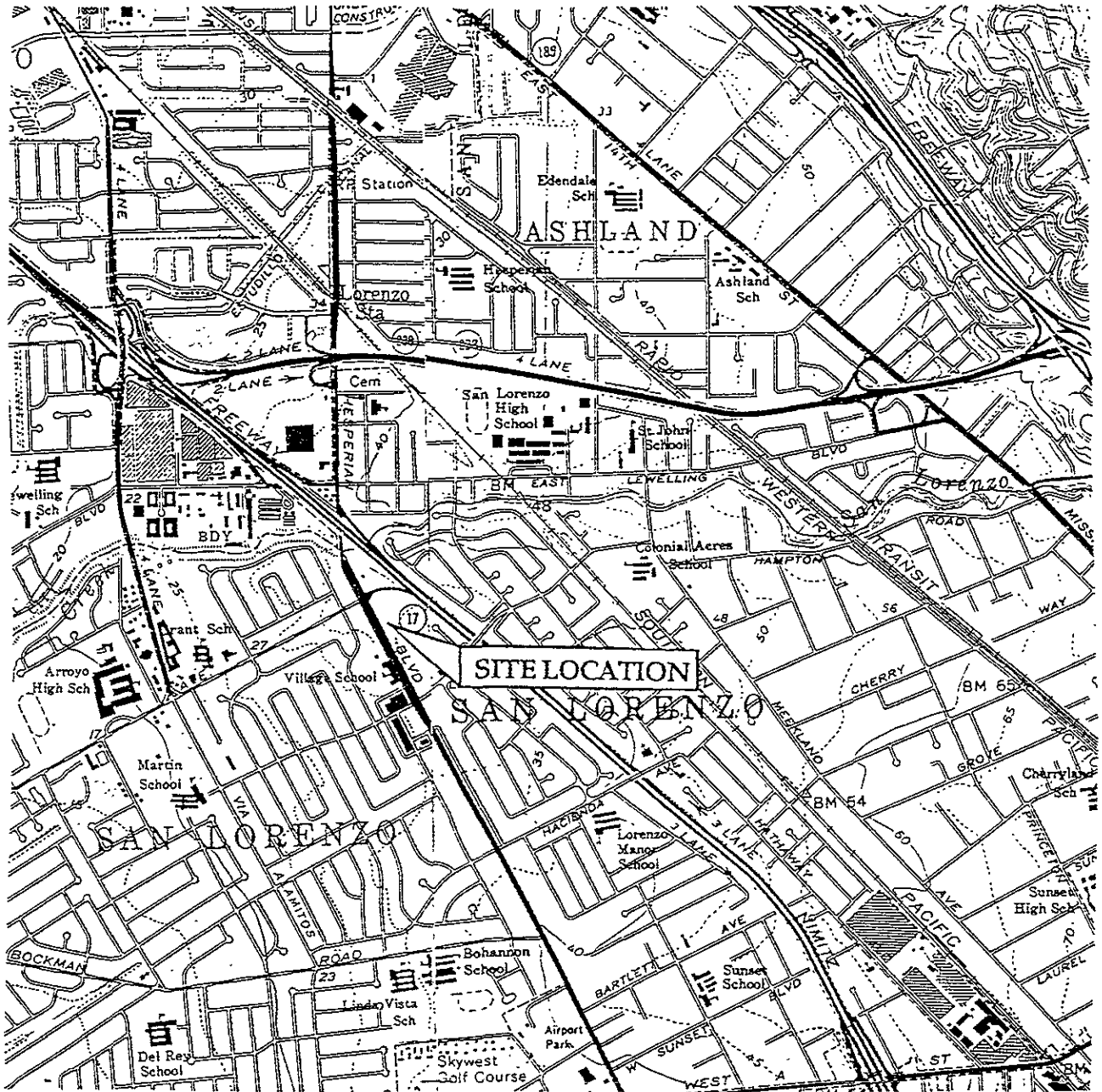
San Lorenzo, California

MW-No.	Date	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

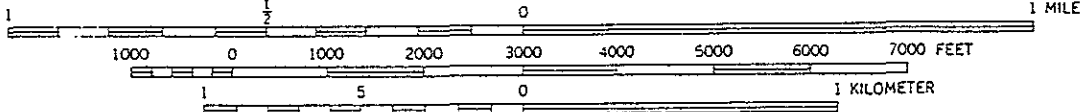
Notes:

- 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 (µg/L)
- ppm : Parts per million (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

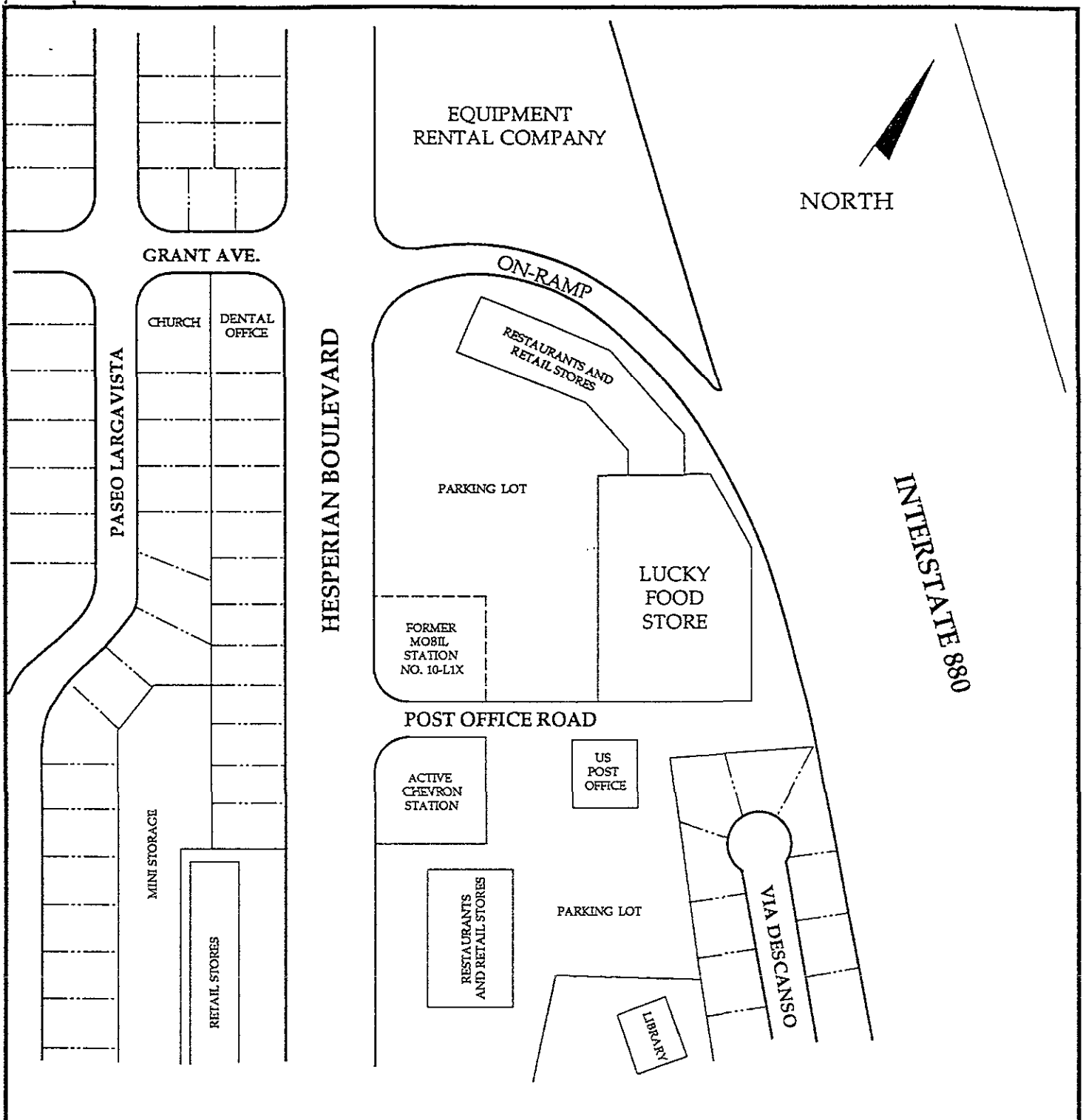


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SITE LOCATION MAP
 Former Mobil Service Station No. 10-L1X
 15884 Hesperian Boulevard
 San Lorenzo, California

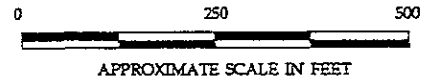
Figure
1

8-019 1/94



LEGEND

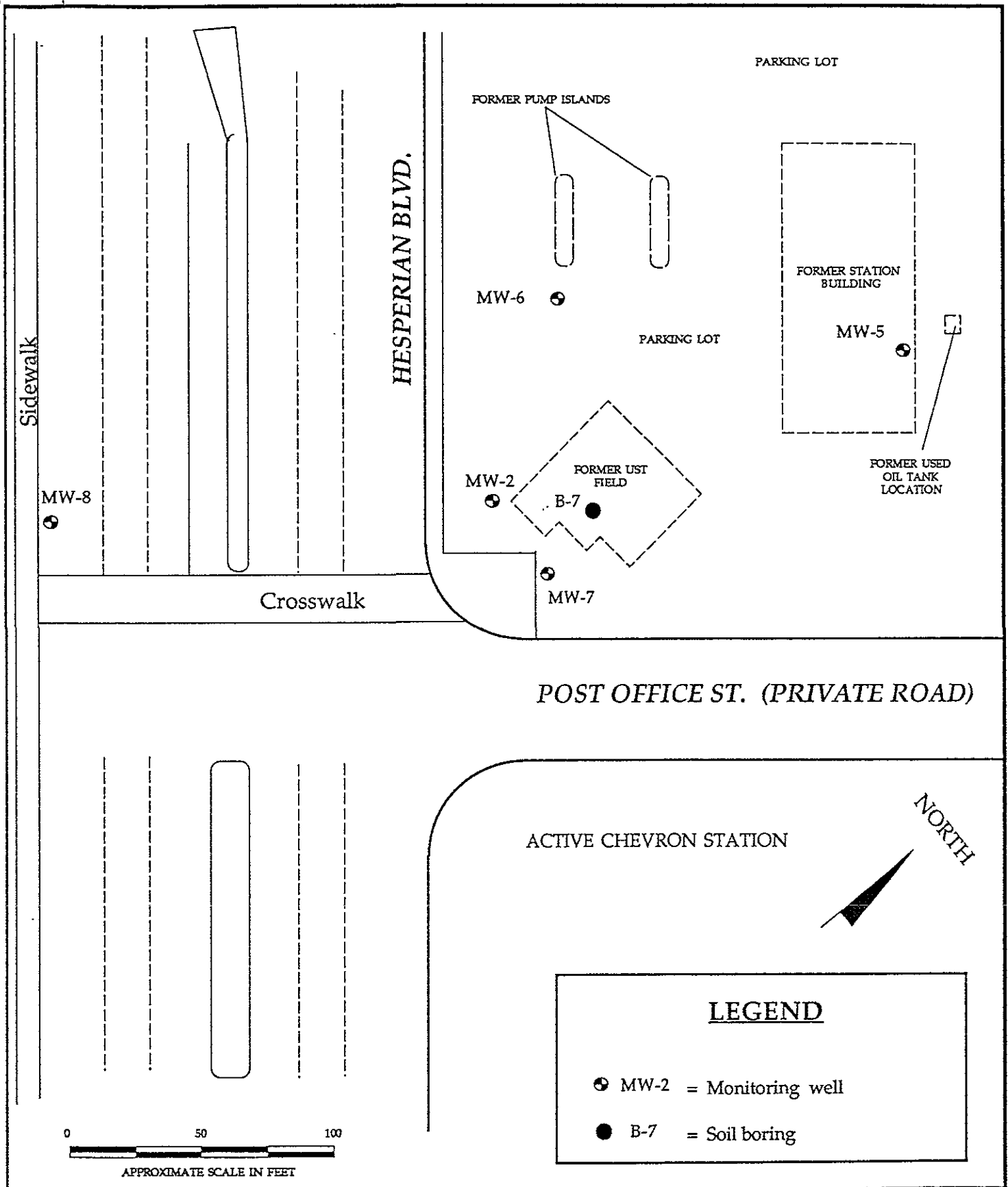
----- = Residential Property Line



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TECHN **LOGIES, INC.**

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

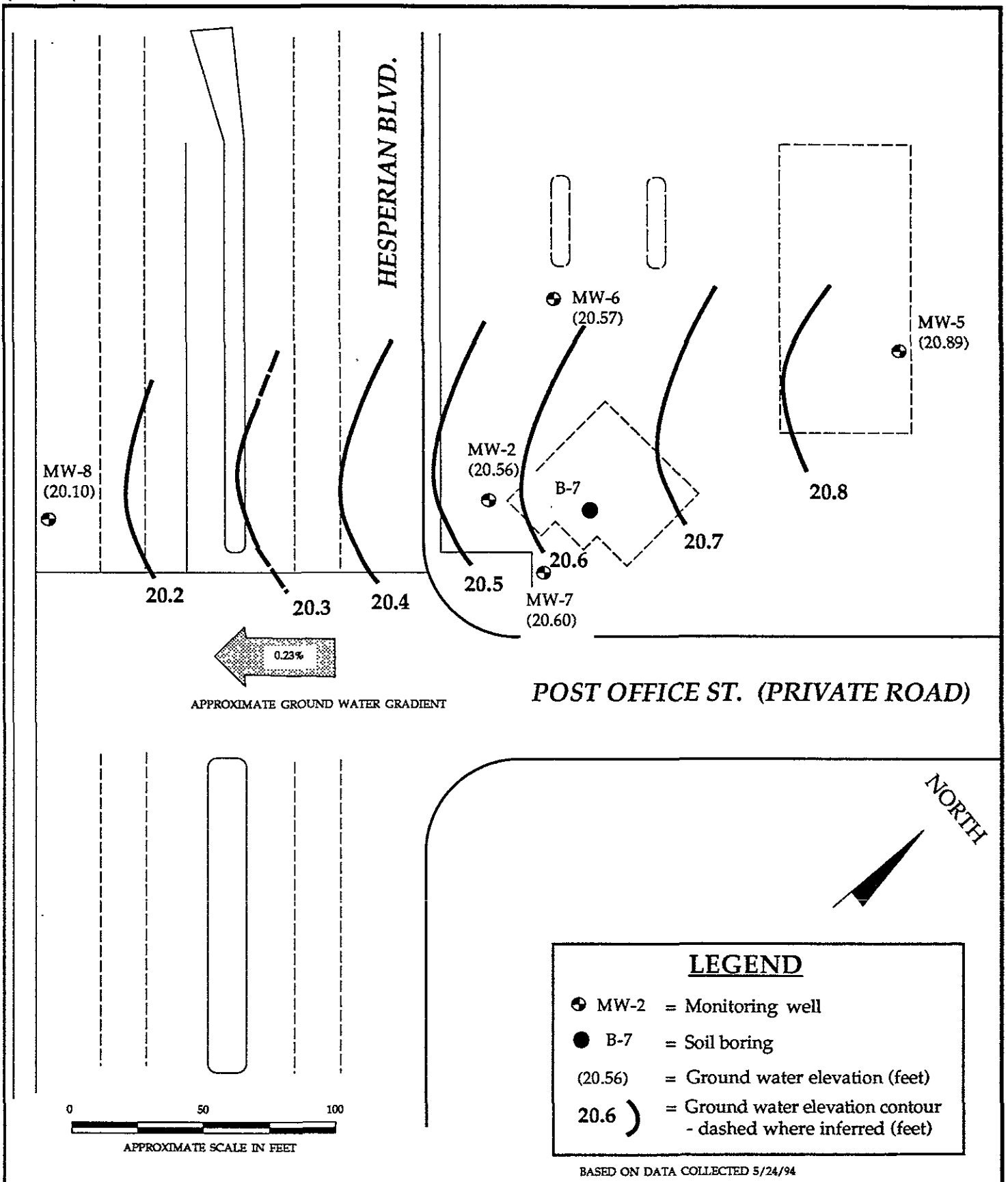
Figure
2
 8-019 9/93



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TECHN & **LOGIES, INC.**

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

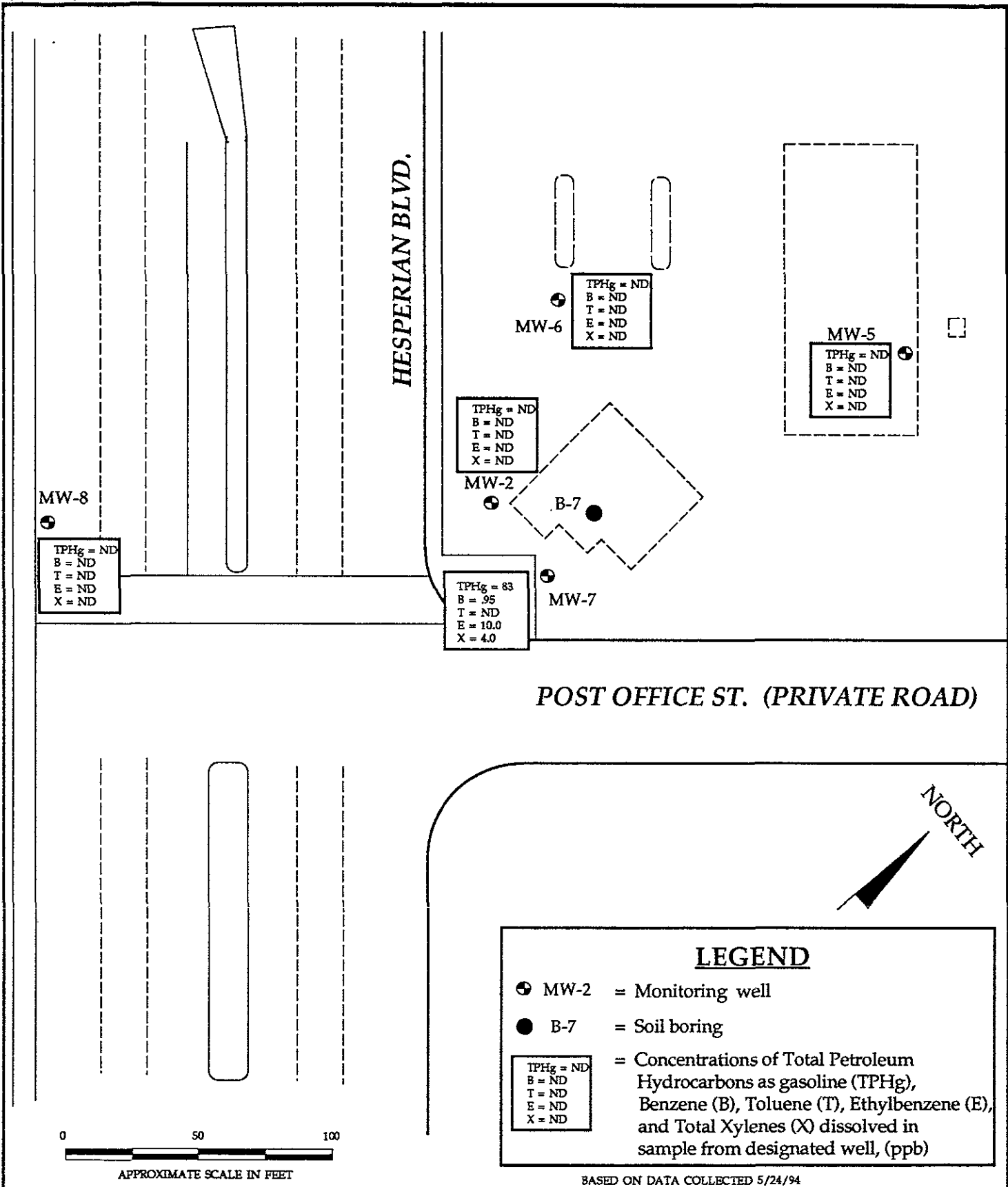
Figure
3
 8-019 9/93



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

Figure
4
8-019 5/94



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

Figure
5
 8-019 6/94

APPENDIX A

PURGED/SAMPLED BY: HCT

DATE: 5.24.94

GAUGING DATA:

Depth to bottom: 22.15 ft.

Depth to water: 12.03 ft.

Saturated Thickness: 10.12 ft.

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

Well casing volume 6.6 gallons

volumes to purge x 3 vols.

*Total volume to purge = 20 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
0945	0	—	—	—
↓	5	69.0	1.19	8.5
↓	10	69.0	1.09	8.4
↓	15	68.0	1.16	8.4
1005	20	68.5	1.23	8.2
<p>family dry after 20 gallons let recharge before sampling</p>				

Color: blue-tan

Turbidity: low-med.

Recharge: poor-med.

SPP 0 ft.

SAMPLING DATA:

Sampling method: Dedicated bailer / _____

Sample for: (circle)

- TPH₈/BTEX
 - METALS
 - TOC
 - 8010
 - TPH₄
 - O-Pb
 - TEL
 - 8020
 - TPH₁₀₀
 - Total Pb
 - ED8
 - 8240
 - 601
 - 602
 - Nitrates
 - 8260
 - 8270
- Other: _____

**HYDRA-
ENVIRONMENTAL
TECHNOLOGIES, INC.**

MONITORING WELL PURGE/SAMPLE SHEET
WELL # MW-5
LOCATION San Lorenzo

Job No. 9018
SHEET
1 of 1

PURGED/SAMPLED BY: HCT DATE: 5-24-94

GAUGING DATA:

Depth to bottom: 22-25 ft.
 Depth to water: 12-11 ft.
 Saturated Thickness: 10.14 ft.

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

Well casing volume 6.6 gallons
 # volumes to purge x 3 vols.
 *Total volume to purge = 20 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
10:30	0	—	—	—
	5	68.9	1.24	7.8
	10	69.7	1.26	7.6
	15	69.4	1.24	7.6
10:45	20	69.9	1.24	7.5
	fancy dry after 20 gal - let recharge.			

Color: blue-green/tan Turbidity: low
 Recharge: slow-fair SPP Ø ft.

SAMPLING DATA:

Sampling method: Dedicated bailer

- Sample for: (circle)
- TPH₄/BTEX
 - METALS
 - TOC
 - 8010
 - TPH₄
 - O-Pb
 - TEL
 - 8020
 - TPH_{inc}
 - Total Pb
 - ED8
 - 8240
 - 601
 - 602
 - Nitrates
 - 8260
 - 8270
- Other: _____

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 ENVIRONMENTAL
 TECHNOLOGIES, INC.**

MONITORING WELL PURGE/SAMPLE SHEET
 WELL # MW-6
 LOCATION San Lorenzo

Job No. 9-018
 SHEET
 1 of 1

PURGED/SAMPLED BY: Hut

DATE: 5.24.94

GAUGING DATA:

Depth to bottom: 22.35 ft.

Depth to water: 11.21 ft.

Saturated Thickness: 11.14 ft.

Conversion	
diam.	gals/ft
<u>2 in.</u>	x 0.18
4 in.	x 0.65
6 in.	x 1.44

Well casing volume 1.8 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
1110	0	-	-	-
	2	68.8	1.29	7.4
	3	68.4	1.28	7.2
1120	6	67.5	1.27	7.1

Color: tan, silty
Recharge: good

Turbidity: med-high
SPP 0 ft.

SAMPLING DATA:

Sampling method: Dedicated bailer

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

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ENVIRONMENTAL
TECHNOLOGIES, INC.

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

Job No. 9018
SHEET
1 of 1

PURGED/SAMPLED BY: HOA DATE: 6-24-94

GAUGING DATA:

Depth to bottom: 25.75 ft.
 Depth to water: 11.25 ft.
 Saturated Thickness: 14.5 ft.

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

Well casing volume 2.3 gallons
 # volumes to purge x 3 vols.
 *Total volume to purge = 7 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
1255	0	—	—	—
	2 1/2	71.6	1.39	6.2
	5	72.4	1.44	6.8
1305	7	72.5	1.45	7.2

Color: tan Turbidity: clear-med
 Recharge: good SPP 0 ft.

SAMPLING DATA:

Sampling method: Dedicated bailer

- Sample for: (circle)
- IPHg/STEX METALS TOG 8010
 - IPHd C-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 San Lorenzo

Job No. 9018
 SHEET 1 of 1

PURGED/SAMPLED BY: flc DATE: 5-24-94

GAUGING DATA:

Depth to bottom: 24.25 ft.
 Depth to water: 12.48 ft.
 Saturated Thickness: 11.77 ft.

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

Well casing volume 7.7 gallons
 # volumes to purge x 3 vols.
 *Total volume to purge = 23 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
1320	—	—	—	—
	5	78.1	1.16	7.0
	10	75.9	1.68	7.1
	15	75.1	1.85	7.1
	20	74.8	1.02	7.2
1340	23	73.7	1.05	7.1

Color: tan-clear Turbidity: low
 Recharge: fairly good SPP 0 ft.

SAMPLING DATA:

Sampling method: Dedicated bailer

- Sample for: (circle)
- TPHg/BIEX 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-7
 LOCATION San Lorenzo

Job No.
9-018
 SHEET
 (of 1)

APPENDIX B



Sequoia Analytical

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
 1900 Bates Avenue, Suite L Concord, CA 94520 (510) 686-9600 FAX (510) 686-9689
 819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

Hydro Environmental	Client Project ID: Mobil, 10-LIX	Sampled: May 24, 1994
2363 Mariner Square Dr., Ste 243	Sample Matrix: Water	Received: May 25, 1994
Alameda, CA 94501	Analysis Method: EPA 5030/8015 Mod./8020	Reported: May 31, 1994
Attention: Scott Kellstedt	First Sample #: 4EF1901	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 4EF1901 MW-5	Sample I.D. 4EF1902 MW-6	Sample I.D. 4EF1902 MW-8	Sample I.D. 4EF1902 MW-2	Sample I.D. 4EF1902 MW-7	Sample I.D.
Purgeable Hydrocarbons	50	N.D.	N.D.	N.D.	N.D.	83	
Benzene	0.50	N.D.	N.D.	N.D.	N.D.	0.95	
Toluene	0.50	N.D.	N.D.	N.D.	N.D.	N.D.	
Ethyl Benzene	0.50	N.D.	N.D.	N.D.	N.D.	10	
Total Xylenes	0.50	N.D.	N.D.	N.D.	N.D.	4.0	
Chromatogram Pattern:		--	--	--	--	Gas	

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0
Date Analyzed:	5/26/94	5/26/94	5/26/94	5/26/94	5/26/94
Instrument Identification:	GCHP-2	GCHP-2	GCHP-2	GCHP-2	GCHP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	90	81	85	87	89

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

SEQUOIA ANALYTICAL

T.O.
 Todd Olive
 Project Manager



Hydro Environmental Client Project ID: Mobil, 10-LIX
 2363 Mariner Square Dr., Ste 243 Matrix: Liquid
 Alameda, CA 94501
 Attention: Scott Kellstedt QC Sample Group: 4EF1901 - 05 Reported: May 31, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	R. Vincent	R. Vincent	R. Vincent	R. Vincent

MS/MSD				
Batch#:	G4EC9204	G4EC9204	G4EC9204	G4EC9204
Date Prepared:	5/26/94	5/26/94	5/26/94	5/26/94
Date Analyzed:	N.A.	N.A.	N.A.	N.A.
Instrument I.D.#:	GCHP-2	GCHP-2	GCHP-2	GCHP-2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Matrix Spike				
% Recovery:	100	100	99	100
Matrix Spike Duplicate %				
Recovery:	110	110	110	113
Relative %				
Difference:	9.5	9.5	11	12

LCS Batch#:

Date Prepared:
 Date Analyzed:
 Instrument I.D.#:

LCS %
 Recovery:

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

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

Todd Olive
 Project Manager

Mobil Chain of Custody



SEQUOIA ANALYTICAL

Redwood City:
Concord:
Sacramento:

(510) 948-1100
(916) 948-1100

Consulting Firm Name: <u>Hydro Environmental</u>	Site SS #: <u>10-LIX</u>	Phase of Work: <input type="checkbox"/> A. Emrg. Response <input type="checkbox"/> B. Site Assessment <input type="checkbox"/> C. Remediation <input checked="" type="checkbox"/> D. Monitoring <input type="checkbox"/> E. OGC/Claims
Address: <u>2363 Mariner Square Drive Ste 243</u>	Mobil Site Address: <u>15884 Hesperian Blvd San Lorenzo</u>	
City: <u>Alameda</u> State: <u>CA</u> Zip Code: <u>94501</u>	Mobil Engineer: <u>S. P. P. M. FEAR</u>	
Telephone: <u>(510) 521-2684</u> FAX #: <u>521-5078</u>	Consultant Project #: <u>8-019</u>	
Project Contact: <u>SCOTT KELLSTEDT</u> Sampled by: <u>HOM TRINH</u>	Sequoia's Work Order Release #:	

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	TPPH by I.R. EPA 418.1	Oil & Grease EPA 413.2		
1. MW5	5/24/94 1230	H ₂ O	3		✓					9405F19-01
2. MW6	5/24/94 1220		3		✓					-02
3. MW8	5/24/94 1130		3		✓					-03
4. MW2	5/24/94 1310		3		✓					-04
5. MW7	5/24/94 1355	↓	3		✓					-05
6.	IO on	VOA	Sms							
7.	'mw17'	DW								
8.		Sequoia Sample Control								
9.										
10.										

Relinquished By: <u>[Signature]</u>	Date: <u>5/24/94</u> Time: <u>16:00</u>	Received By: <u>[Signature]</u>	Date: <u>5/24/94</u> Time: <u>16:00</u>
Relinquished By: <u>[Signature]</u>	Date: <u>5/25/94</u> Time: <u>10:10</u>	Received By: <u>[Signature]</u>	Date: <u>5/25/94</u> Time: <u>10:10</u>
Relinquished By: <u>[Signature]</u>	Date: <u>5/25/94</u> Time: <u>11:18</u>	Received By: <u>[Signature]</u>	Date: <u>5/25/94</u> Time: <u>11:38</u>

Method of Shipment: REG. COURIER