

SUMMARY REPORT
First Quarter 1990

Project No. 330-06.05
April 13, 1990

ARCO Service Station No. 608
17601 Hesperian Boulevard at Hacienda
San Lorenzo, California 94580

Alameda County

BACKGROUND

For site history prior to 1990 refer to the October-December 1989 Quarterly Summary Report issued in January 1990.

- o January 1990, PACIFIC initiated permits and encroachment for the installation of six additional on-site and off-site groundwater monitoring wells.
- o February 1990, PACIFIC continued permit and encroachment activities and pursued approval of PACIFIC's October 1989 work plan with Alameda County.
- o March 1990, PACIFIC performed quarterly groundwater monitoring of site wells; prepared and transmitted the October-December 1989 groundwater monitoring report; received verbal approval of PACIFIC's October 1989 work plan from Alameda County; and initiated the installation of five additional groundwater monitoring wells (the sixth well can not be installed at this time due to Alameda County's current moratorium on issuance of encroachment permits).

SOIL CONDITIONS

No change from last quarter.

QUARTERLY GROUNDWATER MONITORING

Table 1 summarizes historical groundwater analytical results. See Figure 1 for site map. Dryness in existing site wells is attributed to current drought conditions.

STATUS SUMMARY: REMEDIATION

No change from last quarter.

ANTICIPATED WORK FOR THE SECOND QUARTER 1990

- o Complete field and lab work associated with the current investigation.

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April 13, 1990

- o Prepare and transmit the January-March 1990 quarterly groundwater monitoring results.
- o Continue quarterly groundwater monitoring of site wells (and include the new monitoring wells).
- o Issue a letter on the results of the pump test conducted at the site in 1989.

TABLE 1
 QUARTERLY GROUNDWATER MONITORING RESULTS
 ARCO Service Station No. 0608
 Low-Boiling Hydrocarbons

WELL NO.	SAMPLE DATE	DEPTH TO GROUNDWATER (FT.) *	GASOLINE (ppb)	BENZENE (ppb)	TOLUENE (ppb)	ETHYL-BENZENE (ppb)	XYLENES (ppb)
MW-1	01/88	NA		300** 20	50	10	80
	06/21/89			----- Well not locatable -----			
	12/12/89	NA		-----Well dry-----			
MW-2	01/88	NA		3,300** 804	115	168	166
	06/88			----- Well destroyed -----			
MW-3	01/88	NA		1,800** 20	20	80	60
	03/07/89	11.96	150,000	4,600	5,200	5,600	13,000
	06/21/89	12.85	63,000	2,700	5,800	3,300	12,000
	12/12/89	13.46		--Insufficient Volume of Water for Sampling--			
MW-4	01/88	NA		62,000** 2,700	7,900	850	5,200
	03/07/89	10.76	84,000	2,400	3,400	2,500	7,600
	06/21/89	11.96	31,000	400	800	200	1,500
	12/12/89	NA		-----Well dry-----			

TABLE 1 (continued)
 QUARTERLY GROUNDWATER MONITORING RESULTS
 ARCO Service Station No. 0608
 Low-Boiling Hydrocarbons

WELL NO.	SAMPLE DATE	DEPTH TO GROUNDWATER (FT.)*	GASOLINE (ppb)	BENZENE (ppb)	TOLUENE (ppb)	ETHYL-BENZENE (ppb)	XYLENES (ppb)
MW-5	01/88	NA	31,000**	4,000	2,700	3,800	5,500
	03/07/89	12.74	1,300	340	ND	140	50
	06/21/89	13.26	1,100	200	ND	130	40
	12/12/89	NA	----- Well dry -----				
E-1***	06/21/89	12.48	1,700	170	170	85	290
	12/12/89	13.16	500	26	7	8	18

Notes:

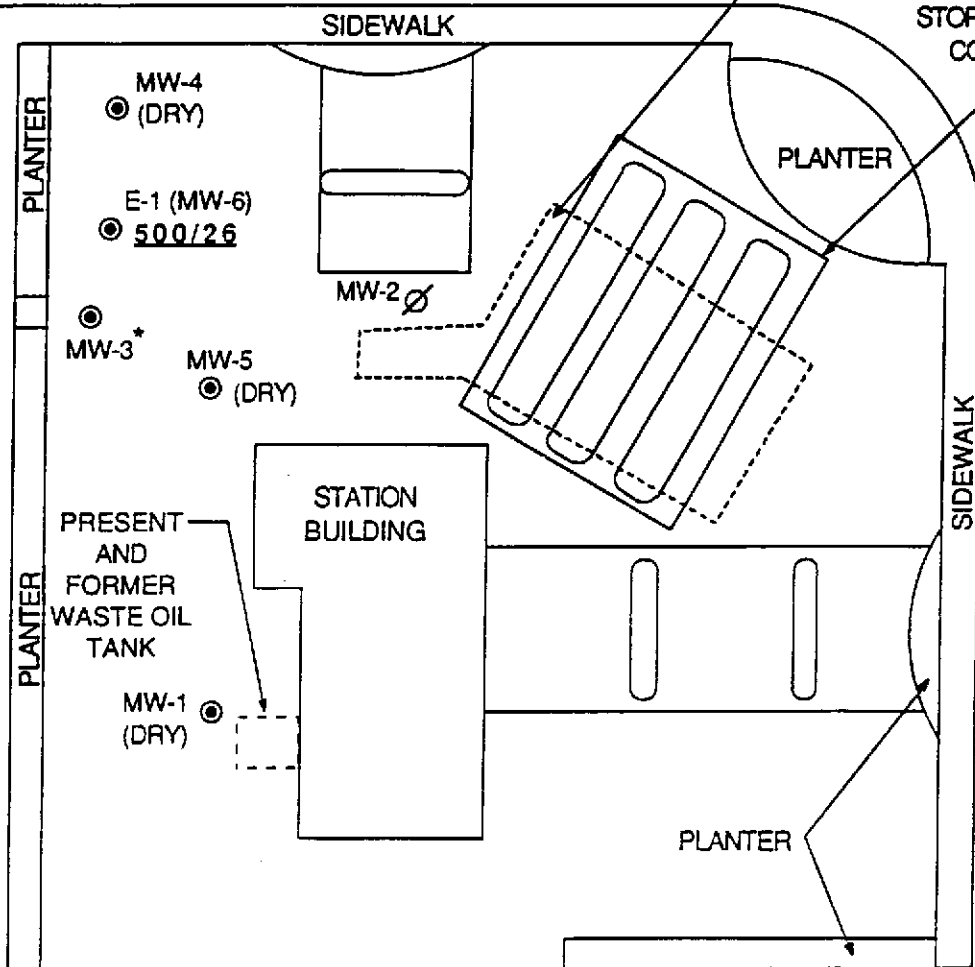
- NA = Not available
- ppb = parts per billion
- * = Well elevations not surveyed.
- ** = Analysis reported as total volatile hydrocarbons
- *** = Well I.D. No. is equivalent to Well I.D. No. MW-6.



HACIENDA AVENUE

FORMER UNDERGROUND STORAGE TANK COMPLEX

EXISTING UNDERGROUND STORAGE TANK COMPLEX



HESPERIAN BOULEVARD

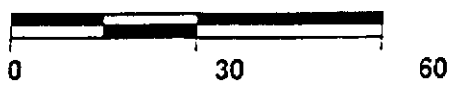
LEGEND

- MW-3 GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- MW-2 DESTROYED MONITORING WELL LOCATION AND DESIGNATION
- 500/26 DISSOLVED GASOLINE/BENZENE CONCENTRATION IN PARTS PER BILLION, 12-12-89
- * INSUFFICIENT WATER FOR SAMPLING
- (DRY) NO GROUNDWATER IN WELL, 12-12-89

APPROXIMATE DIRECTION OF REGIONAL GROUNDWATER FLOW



SCALE



PACIFIC ENVIRONMENTAL GROUP, INC.

ARCO STATION #0608
17601 Hesperian Boulevard
San Lorenzo, California

GASOLINE AND BENZENE CONCENTRATION MAP

FIGURE: 1
PROJECT: 330-06.05

SUMMARY REPORT
October-December Quarter, 1989

Project No. 330-06.05
January 9, 1990

ARCO Service Station No. 0608
17601 Hesperian Boulevard
San Lorenzo, California

Alameda County

BACKGROUND

ARCO Service Station No. 0608 is located at the southwest corner of the intersection of Hesperian Boulevard and Hacienda Avenue in San Lorenzo, California (see Figure 1). Following is a brief chronological summary of this past quarter's investigative activities for the site:

- o October 1989, Pacific Environmental Group Inc., (PACIFIC) submitted a comprehensive technical workplan proposing additional studies be performed at the site. Currently awaiting Alameda County approval of the workplan prior to conducting field work.
- o November 1989, PACIFIC performed an aquifer performance test on Wells MW-3, MW-4 and MW-5. The data will be presented in the form of a letter during the January-March 1990 quarter.
- o December 1989, PACIFIC performed quarterly groundwater monitoring.

SUMMARY: SITE INVESTIGATION

- o Currently the soil and groundwater conditions are not fully assessed, although a soil gas survey conducted in February 1989 indicates that a hydrocarbon plume may extend downgradient of the site.

QUARTERLY GROUNDWATER MONITORING

- o The existing wells (MW-3 to MW-5) have been on a quarterly sampling program since March 1989. A quarterly groundwater monitoring report for the October-December 1989 sampling event will be issued during the January-March quarter.

STATUS SUMMARY: REMEDIATION

- o No change from last quarter. No groundwater remediation is planned for the January-March quarter.

ANTICIPATED WORK FOR THE JANUARY-MARCH QUARTER

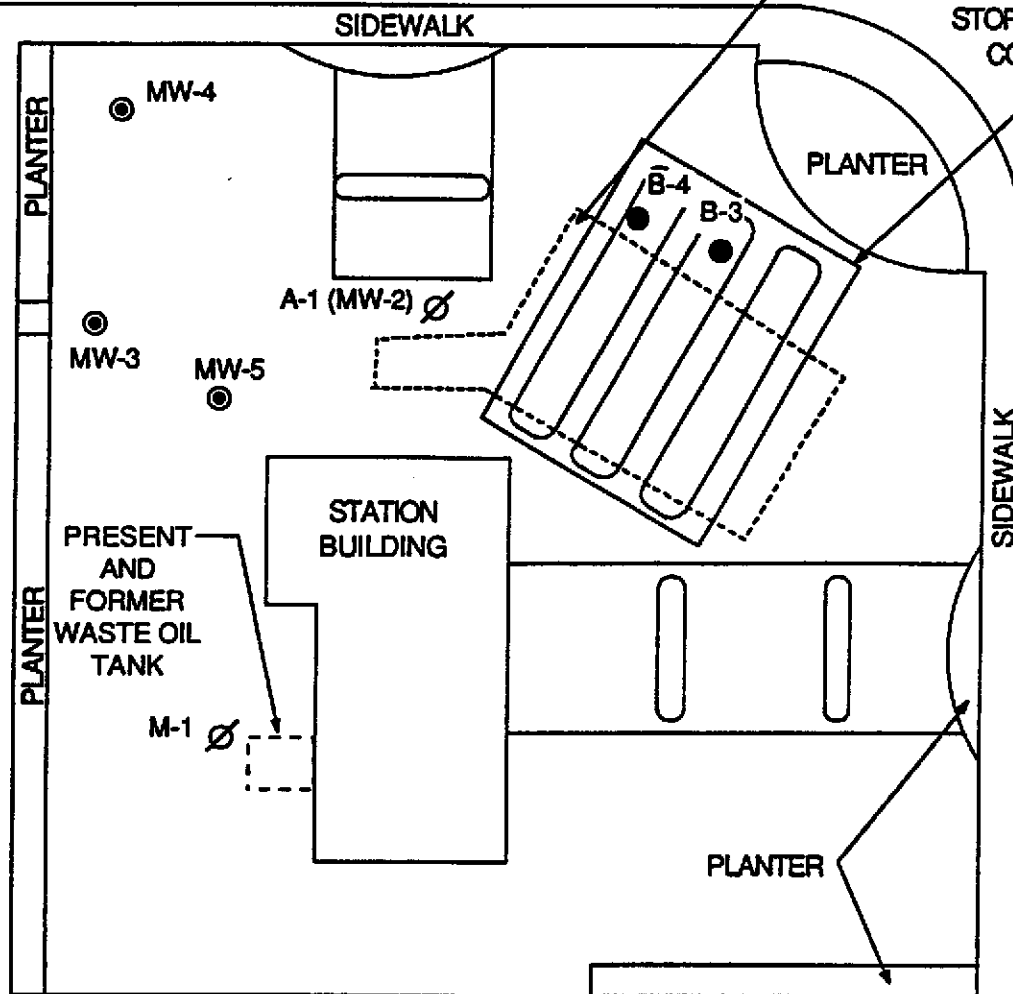
- o Pending approval of the technical workplan, the field work will be initiated.
- o Transmittal of the October-December 1989 quarterly groundwater monitoring results.
- o Conduct quarterly groundwater monitoring.



HACIENDA AVENUE

FORMER UNDERGROUND STORAGE TANK COMPLEX

EXISTING UNDERGROUND STORAGE TANK COMPLEX

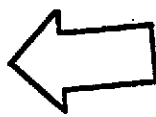


HESPERIAN BOULEVARD

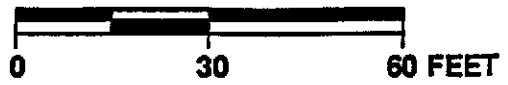
LEGEND

- MW-1 ● GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- A-1 (MW-2) ∅ DESTROYED MONITORING WELL LOCATION AND DESIGNATION
- B-3 ● SOIL BORING LOCATION AND DESIGNATION

APPROXIMATE DIRECTION OF REGIONAL GROUNDWATER FLOW



SCALE



PACIFIC ENVIRONMENTAL GROUP, INC.

ARCO STATION #0608
17601 Hesperian Boulevard
San Lorenzo, California

SITE MAP

FIGURE:
1
PROJECT:
330-06.05