SHELL OIL COMPANY
15275 WASHINGTON
SAN LEANDRO

1/9/89

BRIEF HISTORY

- Installed four groundwater monitoring wells (S-1 through S-4) on June 18, 1985 to assess soil and groundwater conditions on site. Gasoline concentrations in the groundwater samples taken from these wells ranged from 0.52 ppm to 32.0 ppm. Well S-3 contained approximately 0.5 feet of separate phase product. Soil samples taken from the borings contained gasoline concentrations ranging from none detected to 3,900 ppm. Report prepared by Emcon Associates dated August 12, 1985.

- Four borings (S-A through S-D) were drilled on August 15, 1986 prior to tank removal/replacement. Borings S-B through S-D were placed within the underground gasoline storage tank complex. Gasoline concentrations from soil samples taken from these borings ranged from none detected to 1,700 ppm. Boring S-B was converted to a temporary tank complex monitoring well. Approximately 0.13 feet of separate phase product was measured in S-B. Boring S-A was placed adjacent to the waste oil tank; however, laboratory analysis reports that no waste oil was detected. Report prepared by Emcon Associates dated September 12, 1986.

- Installed one additional groundwater monitoring well (S-5) adjacent to the waste oil tank. Gasoline and benzene concentrations in the groundwater were detected at 7.8 ppm and 0.38 ppm respectively. Report prepared by Emcon Associates dated January 28, 1987.

- One mile radius well survey conducted February 13, 1987 by Emcon Associates.

- Underground gasoline storage tanks were removed in June of 1987. Temporary tank complex monitoring well S-B was removed during construction. All site wells were inaccessible from June to August of 1987.

- Wells S-2 and S-4 were destroyed during the tank replacement project.

- A work plan dated July 28, 1987 was prepared by Pacific Environmental Group, Inc. recommending the installation of additional wells to define the extent of contamination.

WORK COMPLETED THIS PERIOD

- A soil-gas survey was conducted on October 4, 1988.

- **Seven groundwater monitoring wells were installed on November 3, and** to further define soil and groundwater contamination at the site. A report documenting the findings of this investigation is pending.

GROUNDWATER MONITORING **FREQUENCY: WEEKLY**

- INITIAL: Four wells (S-1 through S-4), static groundwater at 7 feet, 0.5 feet of separate phase product in well S-3.

- HISTORICAL: Four wells (S-1 through S-4) and one tank backfill observation well (S-B). Separate phase product in S-3 and S-B reduced to a film. From August 1985 to September 1987 separate phase product in S-B ranged from 0.05 feet to 1.05 feet. Monitoring wells (S-2 and S-4), have been covered or destroyed. The tank backfill observation well S-B was removed during tank excavation.

- CURRENT: Ten groundwater monitoring wells are located at or near the site. Groundwater is encountered at a depth of 7 to 9 feet below grade. A hydrocarbon film is present in well S-3.

- PRODUCT RECOVERED: Approximately 60 gallons

GROUNDWATER SAMPLING **FREQUENCY: QUARTERLY**

- INITIAL: Monitoring wells S-1, S-2, and S-4 were sampled on July 9, 1985 and gasoline concentrations ranged from 0.52 ppm to 32.0 ppm with well S-4 containing the greater concentrations.

- HISTORICAL: See the attached table summarizing the results of previous groundwater analyses.

- CURRENT: Groundwater samples collected on November 17, 1988 contained benzene concentrations ranging from none detected to 4.60 ppm.

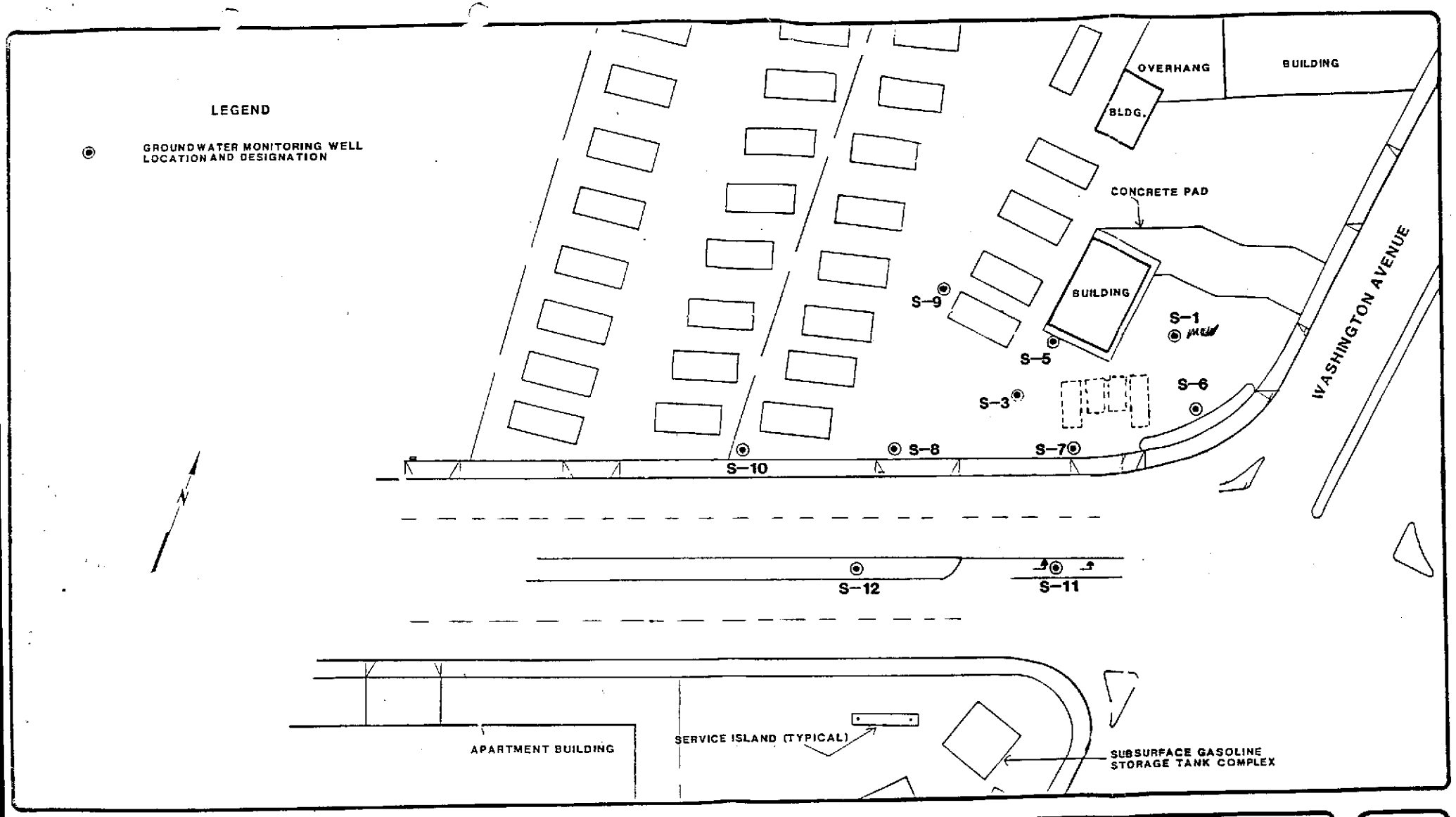
PROPOSED ACTION:

- If necessary, prepare a work plan to further define soil and groundwater contamination at the site. The work plan will be prepared under the direction of a registered professional.

- Prepare a remedial system design for the site. The remedial system design will be prepared under the direction of a registered professional.

- Perform field work upon receipt of all necessary permits.

- Continue quarterly groundwater sampling.



SHELL SERVICE STATION
LEWELLING BLVD. AND WASHINGTON AVE.
SAN LEANDRO, CALIFORNIA

SITE MAP

FIGURE 1

JOB NO. 100-57.01

ANALYTICAL LOG

DATE	SAMPLE POINT	TVHC (PPM)	BENZENE (PPM)	TOLUENE (PPM)	XYLENES (PPM)
DETECTION LIMITS --------		0.05	0.0005	0.001	0.004
09-Jul-85	S-1	0.52			
08-Jan-87	S-1	7.80	0.3800	0.510	1.000
09-Jul-85	S-2	2.20			
09-Jul-85	S-4	32.00			

DATE	SAMPLE POINT	TVHC (PPM)	BENZENE (PPM)	TOLUENE (PPM)	ETHYL (PPM)	XYLENES (PPM)
DETECTION LIMITS --------		0.05	0.0005	0.001	0.001	0.003
06-Sep-88	S-1	<0.05	<0.0005	<0.001	<0.001	<0.003
17-Nov-88	S-1	<0.05	<0.0005	<0.001	<0.001	<0.003
06-Sep-88	S-3	96.00	3.4000	9.500	2.700	17.000
17-Nov-88	S-3	70.00	4.6000	8.400	2.500	13.000
06-Sep-88	S-5	7.00	2.6000	0.060	0.400	0.700
17-Nov-88	S-5	3.00	0.6600	0.060	0.120	0.220
17-Nov-88	S-6	0.05	0.0007	<0.001	<0.001	<0.003
17-Nov-88	S-7	0.10	0.0051	0.015	0.002	0.013
17-Nov-88	S-8	0.21	0.0050	<0.001	0.001	0.005
17-Nov-88	S-9	1.40	0.0690	0.003	0.052	0.180
17-Nov-88	S-10	0.33	0.0005	<0.001	0.001	0.011
17-Nov-88	S-11	<0.05	<0.0005	<0.001	<0.001	<0.003
17-Nov-88	S-12	0.05	0.0035	<0.001	<0.001	<0.003

gettler — ryan inc.

MONITOR DATA LOG

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DATE - Date site monitored.

WELL - Well number.

DTH - Depth to Hydrocarbon.
Measured to the nearest hundredth of a foot from the top of the sidewalk box only if hydrocarbon is present. Space will be left blank if no hydrocarbon is present.

DTW - Depth to Water
Measured to the nearest hundredth of a foot from the top of the sidewalk box only if no hydrocarbon is present. If hydorcarbon is found, a negative one (1.00) is entered, which is used by the computer for specific hydraulic calculations. DW in this column denotes a dry well.

HT - Hydrocarbon Thickness.
Measured to the nearest hundredth of a foot. .00 is entered to indicate a trace or film of hydrocarbon.

BAILED - Amount of Product Bailed from the well in Gallons.

FLOWMETER- Flowmeter Reading in Cumulative Gallons.

PT-LIQ. - Total Inches of Liquid in Product Tank.

PT-H2O - Total Inches of Water in Product Tank.
Amount of product in Product Tank = PT-LIQ. - PT-H2O.

EMP - Gettler-Ryan Inc. - internal use only.

C.ELEV. - Surface Elevation of Sidewalk Box.

PPM - Vapor Readings in Parts Per Million.

LEL - Vapor Readings in % of the Lower Explosive Limit

NORM - Established Normal Vapor Reading for the Well.
Measured in PPM unless specified as LEL.

DTB - Depth to Bottom of Well.

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DATE	WELL	DTH	DTW	HT	BAILED	FLOWMETER	PT-LIQ.	PT-H2O	EMP	C.ELEV
06-Dec-88	1		7.87	0.00					GS	
20-Dec-88	1		8.17	0.00					SM	
06-Dec-88	3	7.56	(1.00)	.00						
20-Dec-88	3	8.01	(1.00)	.00						
06-Dec-88	5		8.15	0.00						
20-Dec-88	5		N/A							
06-Dec-88	6		8.48	0.00						
20-Dec-88	6		8.72	0.00						
06-Dec-88	7		8.15	0.00						
20-Dec-88	7		8.38	0.00						
06-Dec-88	8		7.60	0.00						
20-Dec-88	8		7.90	0.00						
06-Dec-88	9		7.61	0.00						
20-Dec-88	9		7.93	0.00						
06-Dec-88	10		7.69	0.00						
20-Dec-88	10		8.00	0.00						
06-Dec-88	11		8.45	0.00						
20-Dec-88	11		8.74	0.00						
06-Dec-88	12		8.11	0.00						
20-Dec-88	12		8.42	0.00						