



*Underground Contamination Investigations, Groundwater Consultants, Environmental Engineering*

September 21, 1995

**Dale Klettke  
Alameda County  
Department of Environmental Health  
1131 Harbor Bay Parkway  
Room 250  
Alameda, CA 94502-6577**

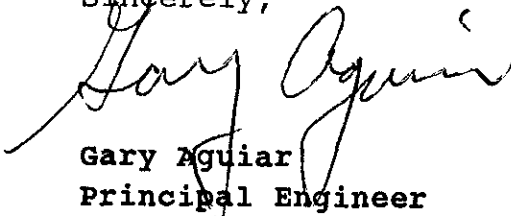
**RE: Rodding-Cleaning Services,  
2585 Nicholson Street, San Leandro, CA**

Dear Mr. Klettke:

Please find enclosed a copy of the "Revised Proposed Workplan for Soil and Water Investigation (SWI)", by Hageman-Aguiar, Inc., dated September 20, 1995. This revised workplan is provided as a response to your suggestion that a rapid site assessment tool be employed prior to the installation of any permanent monitoring wells at the site.

If you have any questions, please contact me at (510)284-1661.

Sincerely,



**Gary Aguiar  
Principal Engineer**

cc: Steven Jones, Madden, Jones & Cole



*Underground Contamination Investigations, Groundwater Consultants, Environmental Engineering*

September 19, 1995

**GROUNDWATER SAMPLING REPORT**

(sampled September 5, 1995)

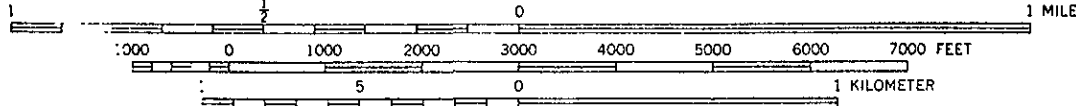
**RODDING-CLEANING SERVICE  
2585 Nicholson Street  
San Leandro, CA**

**Introduction**

The site location is the Rodding-Cleaning Service facility in San Leandro, California. The location of the site is shown in Figure 1. In conjunction with the facility operation, the site has historically operated one underground fuel storage tank and one underground waste oil storage tank for a number of years.

The two underground storage tanks were removed from the site by Scott-Broadway in 1991. At the time of the removal, four soil samples and two groundwater samples were collected from the two tank excavations. The results of the analysis of soil samples collected from the tank sidewalls indicated the presence of Diesel and Gasoline at concentrations of up to 470 mg/kg (ppm) and 1,400 mg/kg (ppm), respectively. In

SCALE 1:24 000



CONTOUR INTERVAL 20 FEET  
DOTTED LINES REPRESENT 5-FOOT CONTOURS  
NATIONAL GEODETIC VERTICAL DATUM OF 1929

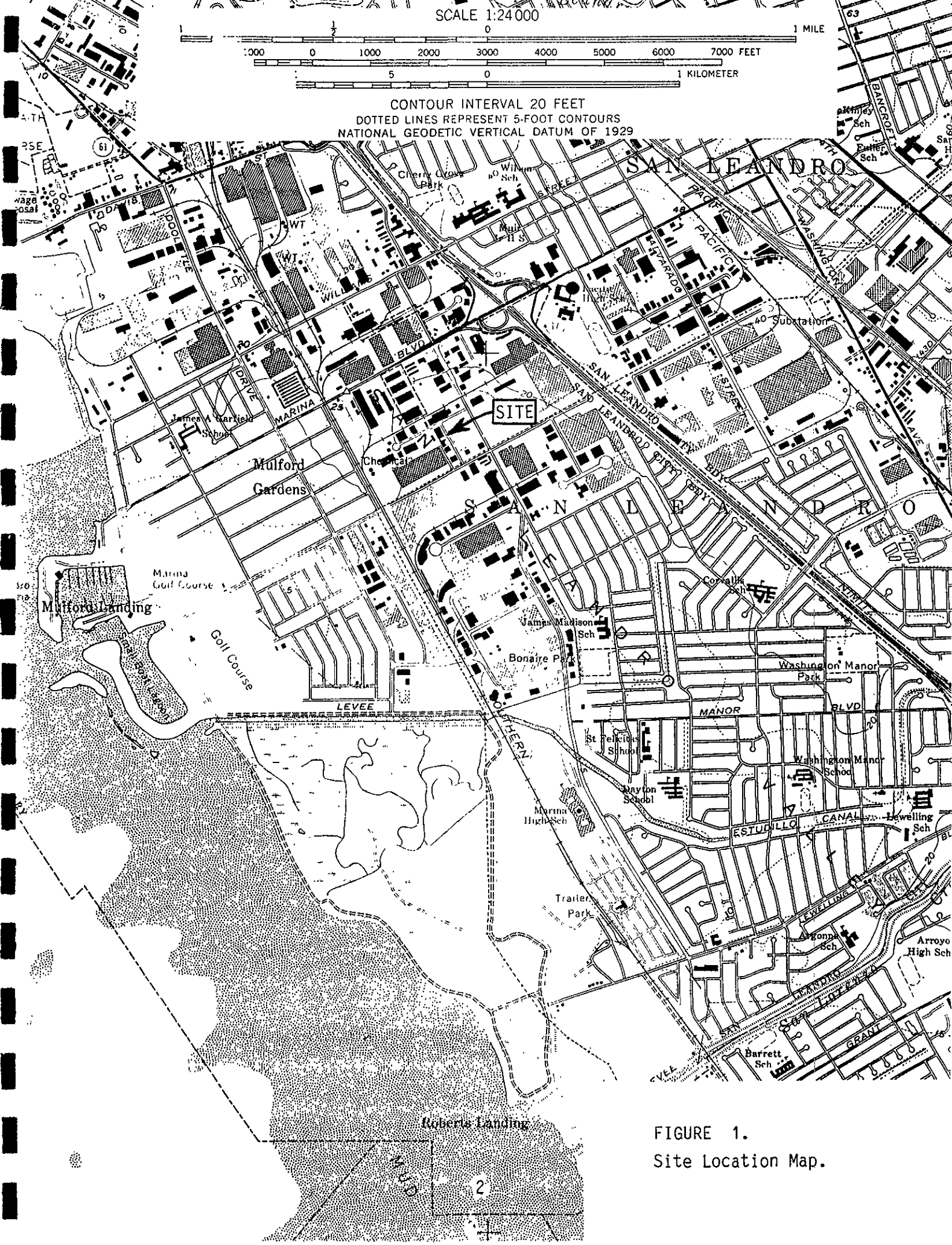


FIGURE 1.  
Site Location Map.

addition, the results of the groundwater sample analyses indicated the presence of Total Petroleum Hydrocarbons as Gasoline at concentrations of up to 38 mg/L (ppm).

Based upon the tank removal analytical results, a soil and groundwater investigation was conducted by Hageman-Aguiar, Inc. The scope of work undertaken by Hageman-Aguiar, Inc., included: 1) a soil sampling program in order to determine the lateral extent of subsurface soil contamination surrounding the locations of the former underground storage tanks, and 2) the installation of one shallow groundwater monitoring at the perceived down-gradient location. The results of the investigation were presented in a report by Hageman-Aguiar, Inc., dated July 29, 1992.

This most recent groundwater sampling conducted on September 5, 1995, represents the tenth "round" of shallow groundwater sampling at the site following the initial subsurface investigation.

#### Monitoring Well Sampling

On September 5, 1995, groundwater samples were collected from the one on-site monitoring well. The location of the monitoring well is shown in Figure 2 (site map). Prior to groundwater sampling, the well was purged by bailing several casing volumes of water. Field conductivity, temperature, and pH meters were present on-site during the monitoring well sampling. As the purging process proceeded, the three parameters were monitored. Purging continued until readings appeared to have reasonably stabilized. After the water level in the well had attained 80% or more of the original static water level, a groundwater sample was collected using a clean teflon bailer. The water sample was placed inside appropriate 40 mL VOA vials and 1-liter amber bottles free of any headspace. The samples were immediately placed on Blue

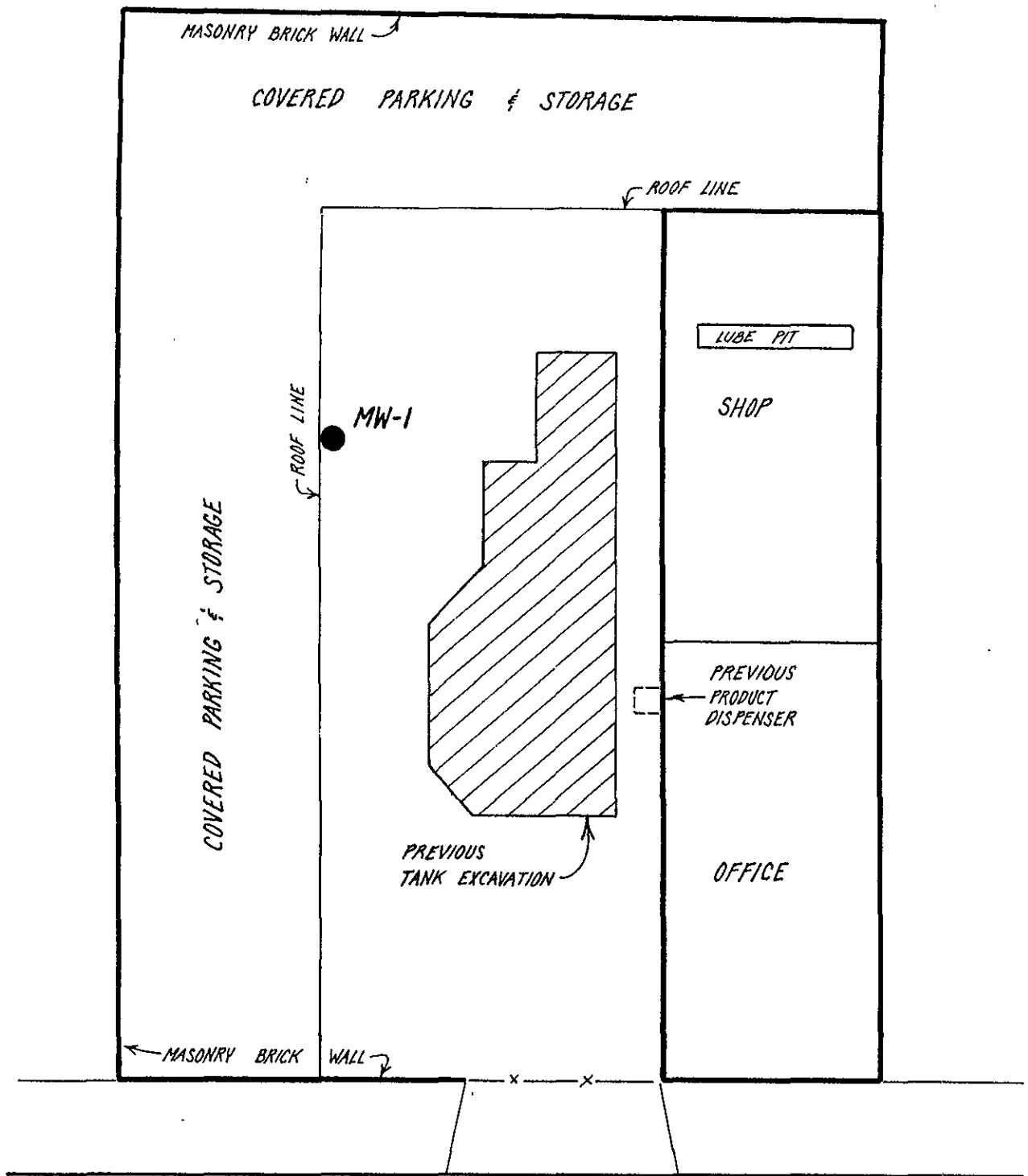


FIGURE 2.  
Site Map.

Ice, then transported under chain-of-custody to the laboratory at the end of the work day.

At the time the monitoring well was sampled, the following information was recorded in the field: 1) depth-to-water prior to purging, using an electrical well sounding tape, 2) identification of any floating product, sheen, or odor prior to purging, using a clear teflon bailer, 3) sample pH, 4) sample temperature, and 5) specific conductance of the sample.

A copy of the well sampling log is included as Attachment A.

#### **Free Product Thickness**

Table 1 presents the results of free-floating product thickness measurements collected since June 8, 1992. Table 1 shows that free-floating product was present in the well casing during this sampling episode at a measured thickness of 1.25".

#### **Water Level Measurement**

The shallow groundwater elevation in MW-1 was measured as 6.61 feet below ground surface on September 5, 1995.

**TABLE 1.**

**Product Thickness  
(inches)**

<b>WELL</b>	<b>Date of Measurement</b>								
	<b>6-8-92</b>	<b>11-9-92</b>	<b>4-23-93</b>	<b>7-28-93</b>	<b>12-10-93</b>	<b>3-14-94</b>	<b>6-30-94</b>	<b>9-14-94</b>	<b>12-14-94</b>
<b>MW-1</b>	<b>0</b>	<b>0</b>	<b>1.9</b>	<b>0.4</b>	<b>0</b>	<b>0.1</b>	<b>0.36</b>	<b>0.24</b>	<b>0.48</b>

<b>WELL</b>	<b>Date of Measurement</b>								
	<b>4-20-95</b>	<b>9-5-95</b>							
<b>MW-1</b>	<b>2.0</b>	<b>1.25</b>							

### Laboratory Analysis

All analyses were conducted by a California State DOHS certified laboratory in accordance with EPA recommended procedures. All groundwater samples were analyzed for 1) Total Petroleum Hydrocarbons as Gasoline (EPA method 8015), 2) Total Petroleum Hydrocarbons as Diesel (EPA method 8015), 3) Benzene, Toluene, Ethylbenzene and Total Xylenes (BTEX) (EPA method 602), 4) Motor Oil (EPA method 8015), 5) Kerosene (EPA method 8015), and 6) Stoddard Solvent (EPA method 8015).

### Laboratory Results

Table 2 presents the results of the laboratory analysis for TPH as Gasoline, TPH as Diesel, Benzene, Toluene, Ethylbenzene, and Xylene (BTEX), and TEPH as Kerosene, Motor Oil, and Stoddard Solvent of the groundwater sample collected from monitoring well MW-1. As shown in this table, laboratory analysis of the shallow groundwater sample indicated the presence of dissolved Gasoline and Diesel at concentrations of 33,000  $\mu\text{g/L}$  (ppb) and 46,000  $\mu\text{g/L}$  (ppb), respectively for this most recent round of sampling.

In addition, Benzene, Toluene, Ethylbenzene and Total Xylenes were detected in the shallow groundwater sample collected from well MW-1 at concentrations of 140  $\mu\text{g/L}$  (ppb), 270  $\mu\text{g/L}$  (ppb), 260  $\mu\text{g/L}$  (ppb) and 1,100  $\mu\text{g/L}$  (ppb), respectively.

Stoddard Solvent was also present in the groundwater sample collected from well MW-1 at a concentration of 4,900  $\mu\text{g/L}$  (ppb).

A copy of the laboratory certificate for the water sample analysis is included as Attachment B.



TABLE 2.

Shallow Groundwater Sampling Results

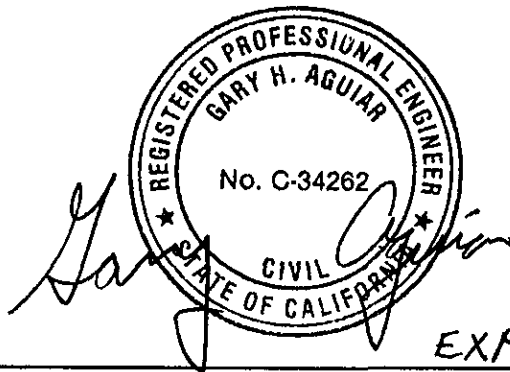
Well	Date	TPH as Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl-benzene (ug/L)	Total Xylenes (ug/L)	TPH as Kerosene (ug/L)	TPH as Diesel (ug/L)	TPH as Stoddard Solvent (ug/L)	TPH as Motor Oil (mg/L)
MW-1	06-08-92	10,000	110	81	62	280	---	ND	---	---
	11-09-92	9,800	23	14	22	96	---	ND	---	---
	04-23-93	18,000	42	47	50	190	ND	560	370	ND
	07-28-93	27,000	40	45	63	190	ND	ND	ND	ND
	12-10-93	7,800	13	16	20	77	ND	3,800	ND	ND
	03-14-94	280,000	970	880	620	1,700	ND	620	3,300	ND
	06-30-94	8,500	23	13	8.5	19	ND	ND	ND	ND
	09-14-94	2,400	5.3	2.6	2.5	6.0	ND	52	ND	ND
	12-14-94	4,800	32	32	16	50	ND	1,300	1,000	ND
	04-20-95	74,000	320	350	350	940	ND	3,700	570	ND
09-05-95	33,000	140	270	260	1,100	ND	46,000	4,900	ND	
<b>Detection Limit</b>		50	0.5	0.5	0.5	0.5	50	50	50	0.5

ND = not detected

*8760*  
*6.61'* →

QUARTERLY GROUNDWATER SAMPLING REPORT  
RODDING-CLEANING SERVICE  
2585 Nicholson Street, San Leandro, CA

September 19, 1995



*EXP. 9-30-99*

Gary Aguiar

RCE 34262

**ATTACHMENT A**

**WELL SAMPLING LOGS**

## WELL SAMPLING LOG

Project/No. Redding Cleaning Page 1 of 1  
 Site Location San Leandro CA Date 9/5/95  
 Well No. MW-1  
 Weather Sunny High 80's Time Began \_\_\_\_\_  
 Completed \_\_\_\_\_

### EVACUATION DATA

Description of Measuring Point (MP) Well Box @ Grade  
 Total Sounded Depth of Well Below MP 18.49  
 - Depth to Water Below MP 6.61 Diameter of Casing 6"  
 = Water Column in Well 11.88  
 Gallons in Casing 17.44 + Annular Space (x 4) = Total Gallons 69.7  
(30% porosity)  
 Gallons Pumped Prior to Sampling 70  
 Evacuation Method PVC Bailer

### SAMPLING DATA / FIELD PARAMETERS

Inspection for Free Product: 1/4" Free Product, Dark Brown, Gas Odor, water  
(thickness to 0.1 inch, if any) was clear, low

	<u>13:12</u>	<u>13:25</u>	<u>13:38</u>	<u>13:54</u>	<u>Turbidity</u>
Gals Removed	<u>10</u>	<u>30</u>	<u>50</u>	<u>70</u>	
Temperature	<u>71.7</u>	<u>70.0</u>	<u>70.1</u>	<u>69.5</u>	
Conductivity	<u>990</u>	<u>920</u>	<u>960</u>	<u>960</u>	
pH	<u>6.59</u>	<u>6.79</u>	<u>6.80</u>	<u>6.82</u>	
Color / Odor	<u>Clear with Brown free Product Gas odor</u>	<u>Clear with Brown free Product Gas odor</u>	<u>Clear with Brown free Product Gas odor</u>	<u>Clear with Brown free Product Gas odor</u>	
Turbidity	<u>Mod</u>	<u>Mod</u>	<u>Mod</u>	<u>Mod</u>	

Comments: Excellent Recharge

**ATTACHMENT B**

**ANALYTICAL RESULTS: GROUNDWATER**



# PRIORITY ENVIRONMENTAL LABS

Precision Environmental Analytical Laboratory

September 08, 1995

PEL # 9509008

HAGEMAN - AGUIAR, INC.

Attn: Mark Hainsworth

Re: One water sample for Gasoline/BTEX and TEPH analyses.

Project name: Rodding Cleaning Service

Project location: 2585 Nicholson St., - San Leandro, CA.

Date sampled: Sept 05, 1995

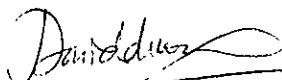
Date submitted: Sept 06, 1995

Date extracted: Sept 06-08, 1995

Date analyzed: Sept 06-08, 1995

RESULTS:

SAMPLE I.D.	Kerosene (ug/L)	Gasoline (ug/L)	Diesel (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylene (ug/L)	Motor Oil (mg/L)	Stoddard Solvent (ug/L)
MW-1	N.D.	33000	46000	140	270	260	1100	N.D.	4900
Blank	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Spiked Recovery	---	90.4%	88.6%	105.7%	97.0%	97.9%	91.1%	---	---
Detection limit	50	50	50	0.5	0.5	0.5	0.5	0.5	50
Method of Analysis	3510 / 8015	5030 / 8015	3510 / 8015	602	602	602	602	3510 / 8015	3510 / 8015

  
 David Duong  
 Laboratory Director

PEL # 9509008

INV # 26317

# CHAIN OF CUSTODY RECORD

PROJECT NAME AND ADDRESS: <i>Rodding Cleaning Service</i> <i>2585 Nicholson Street</i> <i>San Leandro CA</i>					SAMPLE: (Signature) <i>Mark Haimowitz</i>					ANALYSIS REQUESTED <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px; transform: rotate(-45deg);">TPH Gas/BTEX</div> <div style="border: 1px solid black; padding: 5px; transform: rotate(-45deg);">TEPH</div> </div>				
HAGEMAN - AGUIAR, INC. 3732 Mt. Diablo Blvd., Suite 372 Lafayette, CA 94549 (415)284-1661 (415)284-1664 (FAX)														
CROSS REFERENCE NUMBER	DATE	TIME	SOIL	WATER	STATION LOCATION						REMARKS			
<i>MW-1</i>	<i>9/15/95</i>			<i>X</i>	<i>Monitoring Well #1</i>	<i>X</i>	<i>X</i>					<i>Norm TAT</i>		
RELINQUISHED BY: (Signature) <i>Mark Haimowitz</i>					DATE <i>9/16/95</i>	TIME <i>8:45</i>	RECEIVED BY: (Signature)					DATE _____	TIME _____	
RELINQUISHED BY: (Signature)					DATE _____	TIME _____	RECEIVED BY: (Signature)					DATE _____	TIME _____	
RELINQUISHED BY: (Signature)					DATE _____	TIME _____	RECEIVED BY: (Signature)					DATE _____	TIME _____	
RELINQUISHED BY: (Signature)					DATE _____	TIME _____	RECEIVED FOR LABORATORY BY: (Signature) <i>[Signature]</i>					DATE <i>9/16/95</i>	TIME <i>8:45 AM</i>	