



HAGEMAN-AGUIAR, INC.

Underground Contamination Investigations, Groundwater Consultants, Environmental Engineering

December 3, 1992

GROUNDWATER SAMPLING REPORT
(sampled November 9, 1992)

RODDING-CLEANING SERVICE
2585 Nicholson Street
San Leandro, CA

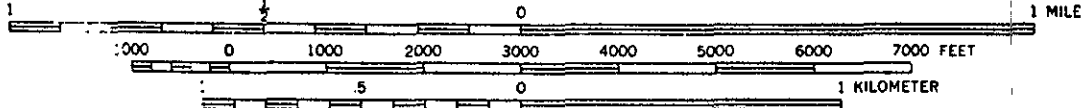
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Introduction

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) the conduct of 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 November 9, 1992, represents the first "round" of shallow groundwater monitoring at the site following the initial subsurface investigation.

Monitoring Well Sampling and Laboratory Analysis

On November 9, 1992, 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 approximately 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

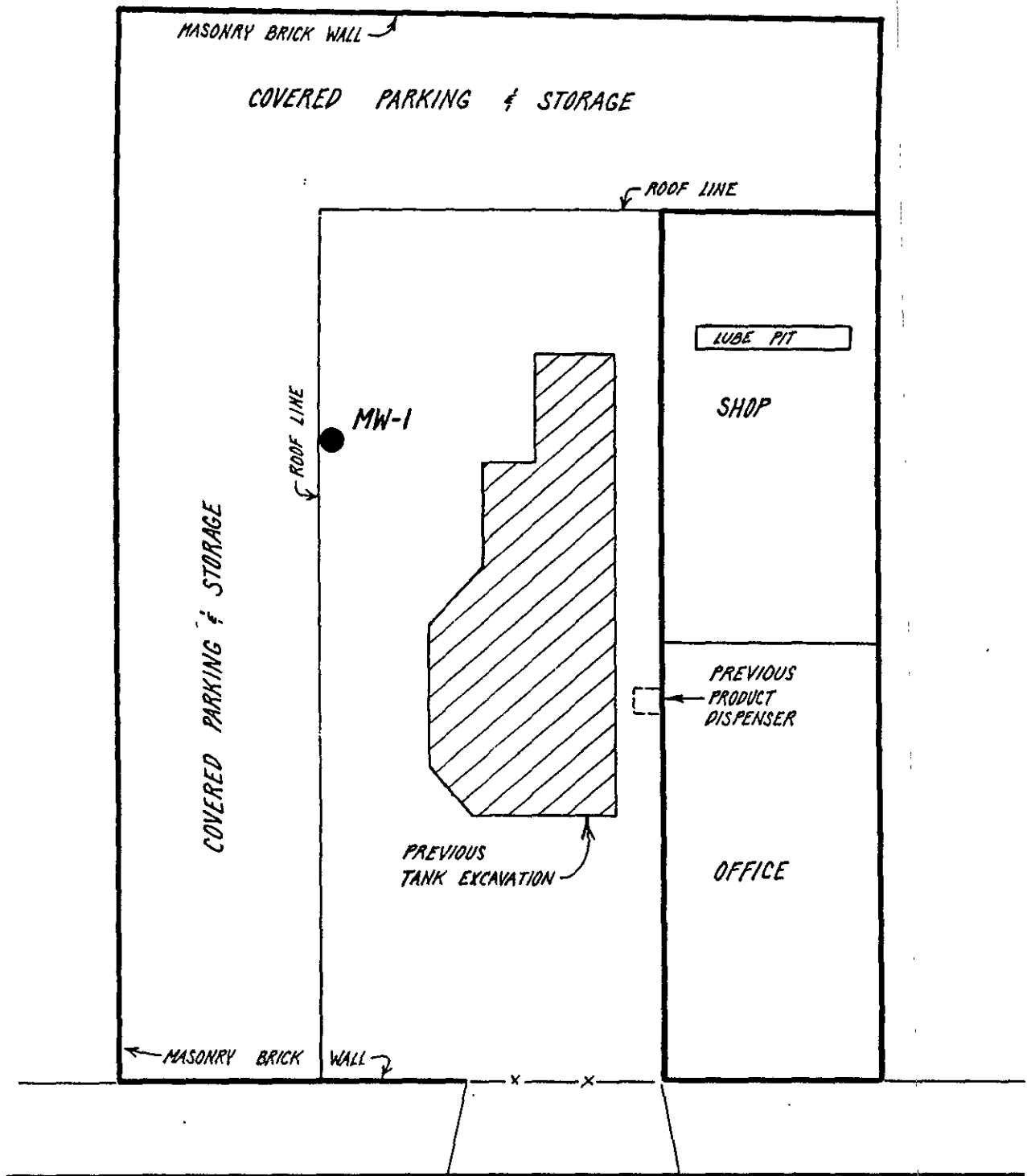


FIGURE 2.
Site Map.

immediately placed on crushed 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.

Water Level Measurement.

The shallow groundwater elevation in MW-1 was measured as 6.78 feet below ground surface on November 9, 1992.

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 Total Petroleum Hydrocarbons as Gasoline (EPA method 8015), Total Petroleum Hydrocarbons as Diesel (EPA method 8015), and Benzene, Toluene, Ethylbenzene and Total Xylenes (BTEX) (EPA method 602).

Laboratory Results.

Table 1 presents the results of the laboratory analysis for TPH-gas, TPH-diesel and BTEX 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 9,800 $\mu\text{g/L}$ (ppb) of dissolved Gasoline in the shallow groundwater sample 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 23 $\mu\text{g/L}$ (ppb), 14 $\mu\text{g/L}$ (ppb), 22 $\mu\text{g/L}$ (ppb) and 96 $\mu\text{g/L}$ (ppb), respectively.

As shown in Table 1, no detectable concentration of Diesel was found in the shallow groundwater sample.

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

TABLE 1.

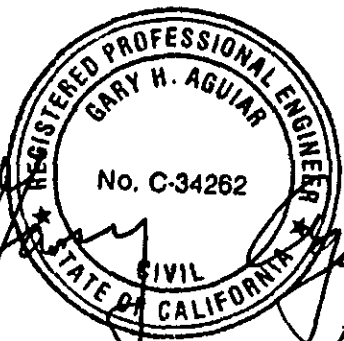
Shallow Groundwater Sampling Results

Well	Date	TPH as Diesel (ug/L)	TPH as Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl-benzene (ug/L)	Total Xylenes (ug/L)
MW-1	06-08-92	ND	10,000	110	81	62	280
	11-09-92	ND	9,800	23	14	22	96
Detection Limit		50	0.5	0.5	0.5	0.5	0.5

ND = not detected

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

December 3, 1992


Gary Aguiar EXP. 9-30-95
RCE 34262


Bruce Hageman

ATTACHMENT A

WELL SAMPLING LOGS

WELL SAMPLING LOG

Project/No. RODDING CLEANING Page 1 of 1
 Site Location SAN LEANDRO, CA Date 11/9/92
 Well No. MW 1 Time Began 1420
 Weather CLEAR / 65°F Completed 1515

EVACUATION DATA

Description of Measuring Point (MP) WELL BOX AT GRADE
 Total Sounded Depth of Well Below MP 18.84
 - Depth to Water Below MP 6.78 Diameter of Casing 6"
 = Water Column in Well 12.06
 Gallons in Casing 9.8 + Annular Space _____ = Total Gallons _____
 (30% porosity)
 Gallons Pumped Prior to Sampling 55
 Evacuation Method AIRLIIFT COMPRESSOR PUMP

SAMPLING DATA / FIELD PARAMETERS

Inspection for Free Product: NONE DETECTED
 (thickness to 0.1 inch, if any)

Time	<u>1420</u>	<u>1435</u>	<u>1450</u>	<u>1505</u>
Gals Removed	<u>5</u>	<u>20</u>	<u>40</u>	<u>55</u>
Temperature	<u>19.5</u>	<u>19.0</u>	<u>18.6</u>	<u>17.8</u>
Conductivity	<u>1150</u>	<u>1100</u>	<u>1100</u>	<u>1100</u>
pH	<u>7.2</u>	<u>7.5</u>	<u>7.4</u>	<u>7.5</u>
Color / Odor	<u>LT. GRY / ORG</u>	<u>LT. GRY / ORG</u>	<u>CLR / HCL</u>	<u>CLR / ORG</u>
Turbidity	<u>MED</u>	<u>MED</u>	<u>LOW</u>	<u>LOW</u>

Comments: NONE

ATTACHMENT B

ANALYTICAL RESULTS: GROUNDWATER



PRIORITY ENVIRONMENTAL LABS

Precision Environmental Analytical Laboratory

November 11, 1992

PEL # 9211022

HAGEMAN - AGUIAR, INC.

Attn: Jeffrey Roth

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

Project name: Rodding Cleaning

Project location: San Leandro, CA.

Date sampled: Nov 09, 1992

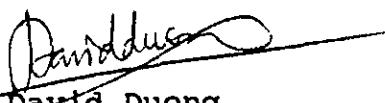
Date submitted: Nov 09, 1992

Date extracted: Nov 10-11, 1992

Date analyzed: Nov 10-11, 1992

RESULTS:

SAMPLE I.D.	Gasoline (ug/L)	Diesel (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)
MW 1	9800	N.D.	23	14	22	96
Blank	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Spiked Recovery	94.8%	97.9%	102.3%	105.1%	98.6%	107.0%
Detection limit	50	50	0.5	0.5	0.5	0.5
Method of Analysis	5030 / 8015	3510 / 8015	602	602	602	602


David Duong
Laboratory Director

