



HAGEMAN-AGUIAR, INC.

Underground Contamination Investigations, Groundwater Consultants, Environmental Engineering

**QUARTERLY
GROUNDWATER SAMPLING REPORT**

(sampled June 4, 1993)

19100 Mission Blvd
Hayward, California

June 10, 1993

8/9/93

Spoke to Mr. Aguiar
about whether on-site
well is really confined.
He said that it is because
the soil above aquifer
is still dry clay and
... the table has
... upper

I. INTRODUCTION

The site location is the property at 19100 Mission Blvd, Hayward, California. The location of the site is shown in Figure 1. In conjunction with an auto service operation, the site has historically operated two underground fuel storage tanks for a number of years.

On June 5, 1990, one 550-gallon underground Gasoline storage tank and one 280-gallon underground Waste Oil storage tank were removed by Decon Environmental Services, Inc., Hayward, California. The results of laboratory analyses performed on soil samples indicated the presence of Oil & Grease at concentrations of up to 700 mg/kg (ppm).

A map of the site is shown in Figure 2. This map shows the layout of the facility, along with the location of the previous underground tank excavation.

Based upon the results of the analytical data generated during the tank removal, a groundwater investigation was required by the Alameda County Department of Environmental Health. An on-site subsurface investigation was subsequently completed by Hageman-Aguiar, Inc. The purpose of the investigation was to install and sample one on-site monitoring well (MW-1) in order to define the extent of any petroleum constituents that may be present in the shallow groundwater beneath the site in the immediate vicinity of the underground storage tanks. The results of the investigation were presented in a report by Hageman-Aguiar, Inc., dated November 18, 1992.

On June 4, 1993, the on-site monitoring well MW-1 was sampled for the subsequent laboratory analysis for dissolved petroleum constituents. This sampling represents the second

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ATTACHMENT A -- Well Sampling Logs

ATTACHMENT B -- Analytical Results: Groundwater

MISSION BOULEVARD

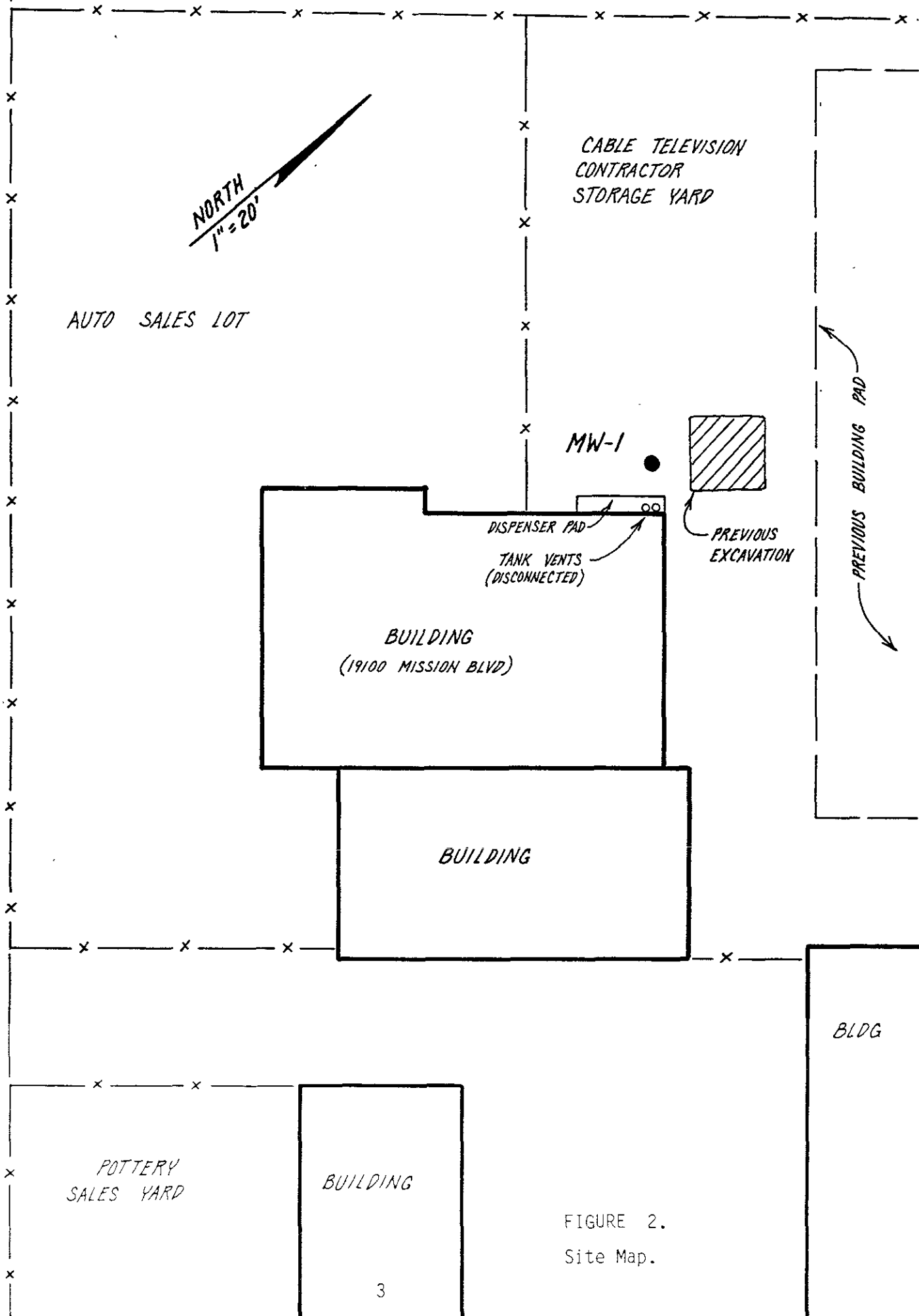


FIGURE 2.
Site Map.

round of regular quarterly shallow groundwater monitoring, as required by Juliet Shin of the Alameda County Department of Environmental Health on December 30, 1992, and as required by the California State Regional Water Quality Control Board (RWQCB), San Francisco Bay Region.

II. FIELD WORK

Monitoring Well Sampling

On June 4, 1993, 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 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 26.28 feet below ground surface on June 4, 1993.

Waste Generation.

All water removed from the well during development and purging was drummed and stored on-site until the results of laboratory analyses were obtained. Based upon these results, the water should be sewered (if possible) as a non-hazardous liquid waste in accordance with local sewerage agency permit requirements, or else it should be transported as a hazardous liquid waste under proper manifest to an appropriate TSD facility for treatment and disposal. The disposal of wastewater is the responsibility of the property owner (waste generator), and is beyond the scope of work as described in this report.

II. SHALLOW GROUNDWATER SAMPLING RESULTS

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 Extractable Petroleum Hydrocarbons (EPA method 8015), 3) Benzene, Toluene, Ethylbenzene, and Total Xylenes (EPA method 602), 4) Halogenated Volatile Organics (EPA method 601) and 5) Oil & Grease (EPA method 5520).

Analytical Results: Groundwater

Tables 1 and 2 present the results of the laboratory analysis of the groundwater samples collected from monitoring well MW-1.

As shown in Table 1, no detectable concentrations of either Total Extractable Petroleum Hydrocarbons (Dissolved Gasoline, Diesel, Kerosene, Motor Oil) or Oil & Grease were found in the shallow groundwater sample.

The results presented in Table 2 indicate that no detectable concentrations of any Halogenated Volatile Organics were 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 Gasoline (ug/L)	TPH as Kerosene (ug/L)	TPH as Diesel (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl-benzene (ug/L)	Total Xylenes (ug/L)	Motor Oil (mg/L)	Oil & Grease (mg/L)
MW-1	11-12-92	ND	ND	ND	ND	ND	ND	ND	ND	ND
	12-07-92	78	ND	ND	ND	ND	1.6	6.4	ND	ND
	03-06-93	ND	ND	ND	ND	ND	ND	ND	ND	ND
	06-04-93	ND	ND	ND	ND	ND	ND	ND	ND	ND
Detection Limit		50	50	50	0.5	0.5	0.5	0.5	0.5	0.5

ND = Not Detected

TABLE 2.

Groundwater Sampling Results

Halogenated Volatile Organics by EPA Method 601

Well	Date	Chloroform (ug/L)	Methylene Chloride (ug/L)	Trichloro- ethene (ug/L)	1,1,1-Trichloro- ethane (ug/L)	Tetrachloroethene (ug/L)	Other Organics (ug/L)
MW-1	11-12-92	ND	ND	ND	ND	ND	ND
	12-07-92	ND	ND	ND	ND	ND	ND
	03-06-93	ND	ND	ND	ND	ND	ND
	06-04-93	ND	ND	ND	ND	ND	ND
Detection Limit		0.5	0.5	0.5	0.5	0.5	0.5

ND = Not Detected

QUARTERLY SAMPLING REPORT
19100 Mission Blvd, Hayward, California

June 10, 1993



Gary Aguiar

RCE 34262

Rick Milelli
Rick Milelli Env. Engineer

ATTACHMENT A

WELL SAMPLING LOGS

WELL SAMPLING LOG

Project/No. NIP ASSOCIATES Page 1 of 1
Site Location MISSION ST, HAYWARD Date 6/4/73
Well No. MW 1 Time Began 1402
Weather RAIN / 60°F Completed 1445

EVACUATION DATA

Description of Measuring Point (MP) WELL BOX AT GRADE
Total Sounded Depth of Well Below MP 43.62
- Depth to Water Below MP 26.28 Diameter of Casing 2"
= Water Column in Well 17.34
Gallons in Casing 2.8 + Annular Space 10.5 = Total Gallons 13.3
(30% porosity) (x3 = 39.9)
Gallons Pumped Prior to Sampling 45
Evacuation Method PVC BAILER

SAMPLING DATA / FIELD PARAMETERS

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

	<u>1402</u>	<u>1415</u>	<u>1434</u>	<u>1445</u>
Time				
Gals Removed	<u>0</u>	<u>15</u>	<u>30</u>	<u>45</u>
Temperature	<u>18.3</u>	<u>18.2</u>	<u>17.9</u>	<u>18.2</u>
Conductivity	<u>900</u>	<u>900</u>	<u>900</u>	<u>900</u>
pH	<u>7.1</u>	<u>7.0</u>	<u>7.1</u>	<u>7.0</u>
Color / Odor	<u>BRN/NO</u>	<u>BRN/NO</u>	<u>BRN/NO</u>	<u>BRN/NO</u>
Turbidity	<u>LOW</u>	<u>MED</u>	<u>MED</u>	<u>MED</u>

Comments: NONE

ATTACHMENT B

ANALYTICAL RESULTS: GROUNDWATER



PRIORITY ENVIRONMENTAL LABS

Precision Environmental Analytical Laboratory

June 10, 1993

PEL # 9306021

HAGEMAN - AGUIAR, INC.

Attn: Jeffrey Roth
Re: One water sample for Gasoline/BTEX, TEPH, and Oil & Grease analyses.

Project name: NIP Associates
Project location: Mission Blvd., _ Hayward, CA.

Date sampled: Jun 04, 1993
Date extracted: June 08-09, 1993

Date submitted: Jun 08, 1993
Date analyzed: Jun 08-09, 1993

RESULTS: *→ C7-C12 Kerosene C7-C18*

SAMPLE I.D.	Stoddard Solvent (ug/L)	Gasoline (ug/L)	Diesel (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)	Oil & Grease (mg/L)	Motor Oil (mg/L)
MW 1	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Blank	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Spiked Recovery	84.7%	92.1%	89.2%	93.5%	91.4%	92.8%	102.0%	---	---
Detection limit	50	50	50	0.5	0.5	0.5	0.5	0.5	0.5
Method of Analysis	3510 / 8015	5030 / 8015	3510 / 8015	602	602	602	602	5520 C & F	3510 / 8015

David Duong
David Duong
Laboratory Director



PRIORITY ENVIRONMENTAL LABS

Precision Environmental Analytical Laboratory

June 09, 1993

PEL #: 9306021

HAGEMAN - AGUIAR, INC.

Attn: Jeffrey Roth

Project name: NIP Associates

Project location: Mission Blvd., Hayward, CA.

Sample I.D.: MW 1

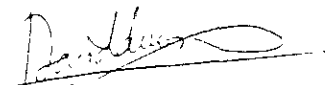
Date Sampled: Jun 04, 1993
Date Analyzed: Jun 08, 1993

Date Submitted: Jun 08, 1993

Method of Analysis: EPA 601

Detection limit: 0.5 ug/L

COMPOUND NAME	CONCENTRATION (ug/L)	SPIKE RECOVERY (%)
Chloromethane	N.D.	-----
Vinyl Chloride	N.D.	87.2
Bromomethane	N.D.	-----
Chloroethane	N.D.	-----
Trichlorofluoromethane	N.D.	-----
1,1-Dichloroethene	N.D.	91.0
Methylene Chloride	N.D.	-----
1,2-Dichloroethene (TOTAL)	N.D.	-----
1,1-Dichloroethane	N.D.	89.4
Chloroform	N.D.	-----
1,1,1-Trichloroethane	N.D.	-----
Carbon Tetrachloride	N.D.	-----
1,2-Dichloroethane	N.D.	93.1
Trichloroethene	N.D.	92.4
1,2-Dichloropropane	N.D.	-----
Bromodichloromethane	N.D.	-----
2-Chloroethylvinylether	N.D.	-----
Trans-1,3-Dichloropropene	N.D.	-----
Cis-1,3-Dichloropropene	N.D.	-----
1,1,2-Trichloroethane	N.D.	-----
Tetrachloroethene	N.D.	101.8
Dibromochloromethane	N.D.	-----
Chlorobenzene	N.D.	-----
Bromoform	N.D.	-----
1,1,2,2-Tetrachloroethane	N.D.	-----
1,3-Dichlorobenzene	N.D.	-----
1,4-Dichlorobenzene	N.D.	-----
1,2-Dichlorobenzene	N.D.	-----


David Duong

Laboratory Director

FEL # 9306021

9306021

INV # 23676

CHAIN OF CUSTODY RECORD

PROJECT NAME AND ADDRESS: <i>NIP ASSOCIATES</i> <i>MISSION BLVD</i> <i>HAYWARD, CA</i>					SAMPLER: (Signature) <i>[Signature]</i>		ANALYSIS REQUESTED <i>TPH GHS/BTEX</i> <i>EPA 601</i> <i>TEPH</i> <i>OIL & GREASE</i>					
					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>6/4/93</i>	<i>1445</i>		<i>X</i>	<i>MONITORING WELL # 1</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>			<i>NORM TAT</i>
RELINQUISHED BY (Signature) <i>[Signature]</i>					DATE <i>6/8/93</i>	RECEIVED BY: (Signature)					DATE	
					TIME <i>1505</i>						TIME	
RELINQUISHED BY (Signature)					DATE	RECEIVED BY: (Signature)					DATE	
					TIME						TIME	
RELINQUISHED BY (Signature)					DATE	RECEIVED BY: (Signature)					DATE	
					TIME						TIME	
RELINQUISHED BY (Signature)					DATE	RECEIVED FOR LABORATORY BY: (Signature) <i>[Signature]</i>					DATE <i>6/8/93</i>	
					TIME						TIME <i>15:05</i>	