HAGEMAN-AGUIAR, INC.
Underground Contamination Investigations, Groundwater Consultants, Environmental Engineering

December 21, 1992

GROUNDWATER SAMPLING REPORT
(sampled December 7, 1992)

19100 Mission Blvd
Hayward, California

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

3732 Mt Diablo Blvd. Suite 372 Lafayette, California 94549 (510) 284-1661 FAX (510) 284-1664

FIGURE 1.
Site Location Map.

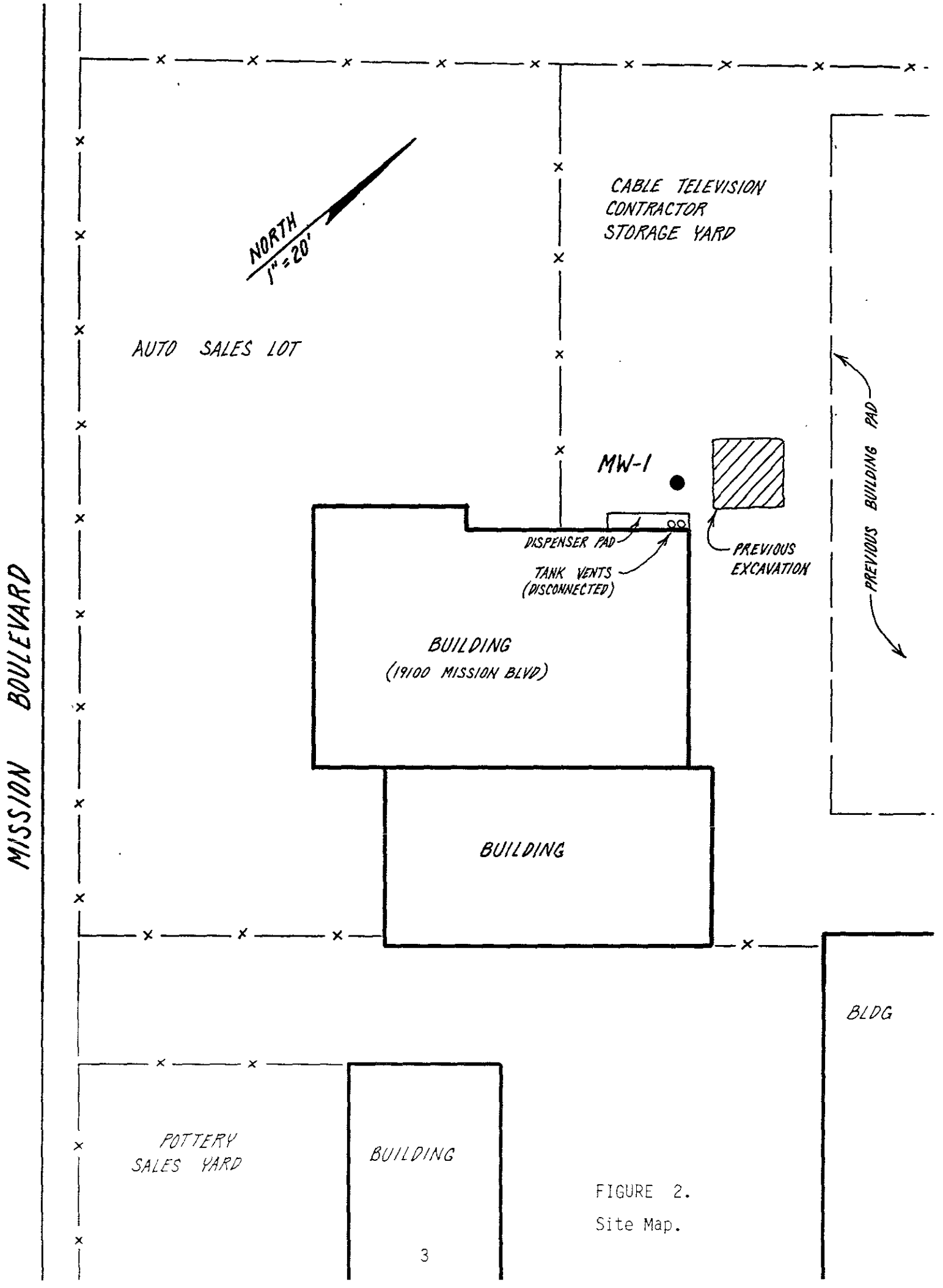


FIGURE 2.
Site Map.

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.

The report by Hageman-Aguiar, Inc., recommended that an additional sampling event be conducted 30 days from the date of the initial sampling. The purpose of this sampling is to confirm the absence of petroleum constituents in the shallow groundwater in a timely manner. This most recent groundwater sampling on December 7, 1992, was conducted in accordance with these stated recommendations.

Monitoring Well Sampling

On December 7, 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 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 32.28 feet below ground surface on December 7, 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 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, for this round of shallow groundwater sampling, dissolved Gasoline was detected in the shallow groundwater at the trace concentration of 78 µg/L (ppb). In addition, Ethylbenzene and Total Xylenes were found in the shallow groundwater sample at concentrations of 1.6 µg/L (ppb) and 6.4 µg/L (ppb), respectively.

As shown in Table 1, no detectable concentrations of either Total Extractable Petroleum Hydrocarbons (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 ~~(mg/L)~~ ppb	TPH as Kerosene (mg/L)	TPH as Diesel (mg/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
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

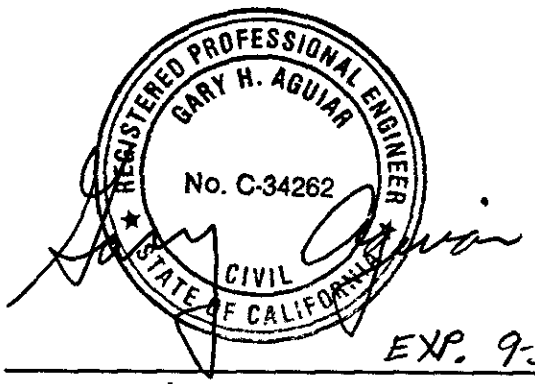
Halogenated Volatile Organics by EPA Method 601

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
Detection Limit		0.5	0.5	0.5	0.5	0.5	0.5

ND = Not Detected

GROUNDWATER SAMPLING REPORT
19100 Mission Blvd, Hayward, California

December 21, 1992



EXP. 9-30-95

Gary Aguiar **RCE 34262**

Bruce Hageman

ATTACHMENT A

Well Sampling Logs

WELL SAMPLING LOG

Project/No. NIP ASSOCIATES

Page 1 of 1

Site Location HAYWARD, CA

Date 12/7/92

Well No. MW 1

Time Began 1427

Weather CLOUDY / 60°F

Completed 1525

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 32.28

Diameter of Casing 2"

= Water Column in Well 11.34

Gallons in Casing 1.8 + Annular Space (30% porosity) 6.8 = Total Gallons 8.6 (x 4 = 34.5)

Gallons Pumped Prior to Sampling 35

Evacuation Method TEFLON BAILER

SAMPLING DATA / FIELD PARAMETERS

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

Time	1427	1450	1503	1515
Gals Removed	0	15	25	35
Temperature	16.2	17.3	16.5	16.8
Conductivity	1150	1150	1100	1100
pH	7.1	7.2	7.2	7.1
Color / Odor	CR/NO	BRN/NO	BRN/NO	BRN/NO
Turbidity	LOW	MED	MED	MED

Comments: NONE

ATTACHMENT B

ANALYTICAL RESULTS: GROUNDWATER

PRIORITY ENVIRONMENTAL LABS

Precision Environmental Analytical Laboratory

December 12, 1992 PEL # 9212023

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 St., -Hayward, CA.

Date sampled: Dec 07, 1992 Date submitted: Dec 10, 1992
Date extracted: Dec 10-11, 1992 Date analyzed: Dec 10-11, 1992

RESULTS:

SAMPLE I.D.	Kerosene (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.	78	N.D.	N.D.	N.D.	1.6	6.4	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	93.1%	89.8%	93.4%	93.5%	89.9%	95.6%	98.2%	---	---
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
Laboratory Director

1764 Houret Court Milpitas, CA. 95035 Tel: 408-946-9636 Fax: 408-946-9663

PRIORITY ENVIRONMENTAL LABS

Precision Environmental Analytical Laboratory

December 11, 1992 PEL #: 9212023

HAGEMAN - AGUIAR, INC. Attn: Jeffrey Roth
Project name: Nip Associates Project location:Mission St.,-Hayward, CA.

Sample I.D.: MW 1

Date Sampled: Dec 07, 1992 Date Submitted: Dec 10, 1992
Date Analyzed: Dec 10-11, 1992

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.	83.1
Bromomethane	N.D.	-----
Chloroethane	N.D.	-----
Trichlorofluoromethane	N.D.	87.6
1,1-Dichloroethene	N.D.	-----
Methylene Chloride	N.D.	-----
1,2-Dichloroethene (TOTAL)	N.D.	-----
1,1-Dichloroethane	N.D.	-----
Chloroform	N.D.	92.4
1,1,1-Trichloroethane	N.D.	-----
Carbon Tetrachloride	N.D.	-----
1,2-Dichloroethane	N.D.	-----
Trichloroethene	N.D.	88.6
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.	-----
Dibromochloromethane	N.D.	-----
Chlorobenzene	N.D.	98.9
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

1764 Houret Court Milpitas, CA. 95035 Tel: 408-946-9636 Fax: 408-946-9663

HAGEMAN-AGUIAR INC

PEL # 9212023

INV # 23257

CHAIN OF CUSTODY RECORD

PROJECT NAME AND ADDRESS
NIP ASSOCIATES
MISSION ST.
HAYWARD, CA

SAMPLER. (Signature)

HAGEMAN - AGUIAR, INC.
3732 Mt. Diablo Blvd., Suite 372
Lafayette, CA 94549
(415)284-1661 (415)284-1664 (FAX)

ANALYSIS REQUESTED

CROSS REFERENCE NUMBER	DATE	TIME	SOIL	WATER	STATION LOCATION	TPH GAS/BTXE	TEPH	Oil + Grease EPA 601				REMARKS
MW 1	12-7-92	1525		X	MONITORING WELL	X	X	X	X			NORM TAT

RELINQUISHED BY (Signature)	DATE 12-10-92 TIME 0805	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)	DATE 12/10/92 TIME 8 05 AM