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

QUARTERLY
GROUNDWATER SAMPLING REPORT

(sampled December 28, 1993)

BERNITA LESKOWSKI PROPERTY
1701 Webster Street
Alameda, CA

January 5, 1994

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

TABLE OF CONTENTS

I. INTRODUCTION

The subject site is the Bernita Leskowski property located at 1701 Webster Street in Alameda, California. The location of the site is shown on Figure 1 (site location map).

On May 2 and 3, 1989, one 500-gallon and two 550-gallon underground storage tanks were removed from the site. Petroleum hydrocarbon contamination was detected in soil samples collected from the tank excavation and the excavated soil pile. Due to the locations of nearby structures and utilities, some petroleum-contaminated soil was left in place. Following the underground storage tank removals, Blymyer Engineers installed three shallow groundwater monitoring wells and subsequently sampled the wells on November 9, 1989. The laboratory results indicated the presence of Gasoline at concentrations of up to 360 µg/L (ppb) and Benzene at "trace" concentrations of up to 0.71 µg/L (ppb).

On December 28, 1993, all three shallow groundwater monitoring wells were sampled for the laboratory analysis for dissolved petroleum constituents. This round of groundwater sampling has been conducted as a part of the continued quarterly shallow groundwater monitoring program at the site, as required by the Alameda County Environmental Health Department (Ref. Attachment A - July 23, 1993 letter from Ms. Juliet Shin to Mr. Carl Searway).

FIGURE 1.
Site Location Map.

II. FIELD WORK

Monitoring Well Sampling

On December 28, 1993, groundwater samples were collected from the three monitoring wells MW-1, MW-2 and MW-3. The locations of the monitoring wells are shown on Figure 2 (site map).

Prior to groundwater sampling, each well was purged by pumping several casing volumes of water using a stainless steel air-lift pump. 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 each 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.

Copies of the well sampling logs are included as Attachment B.

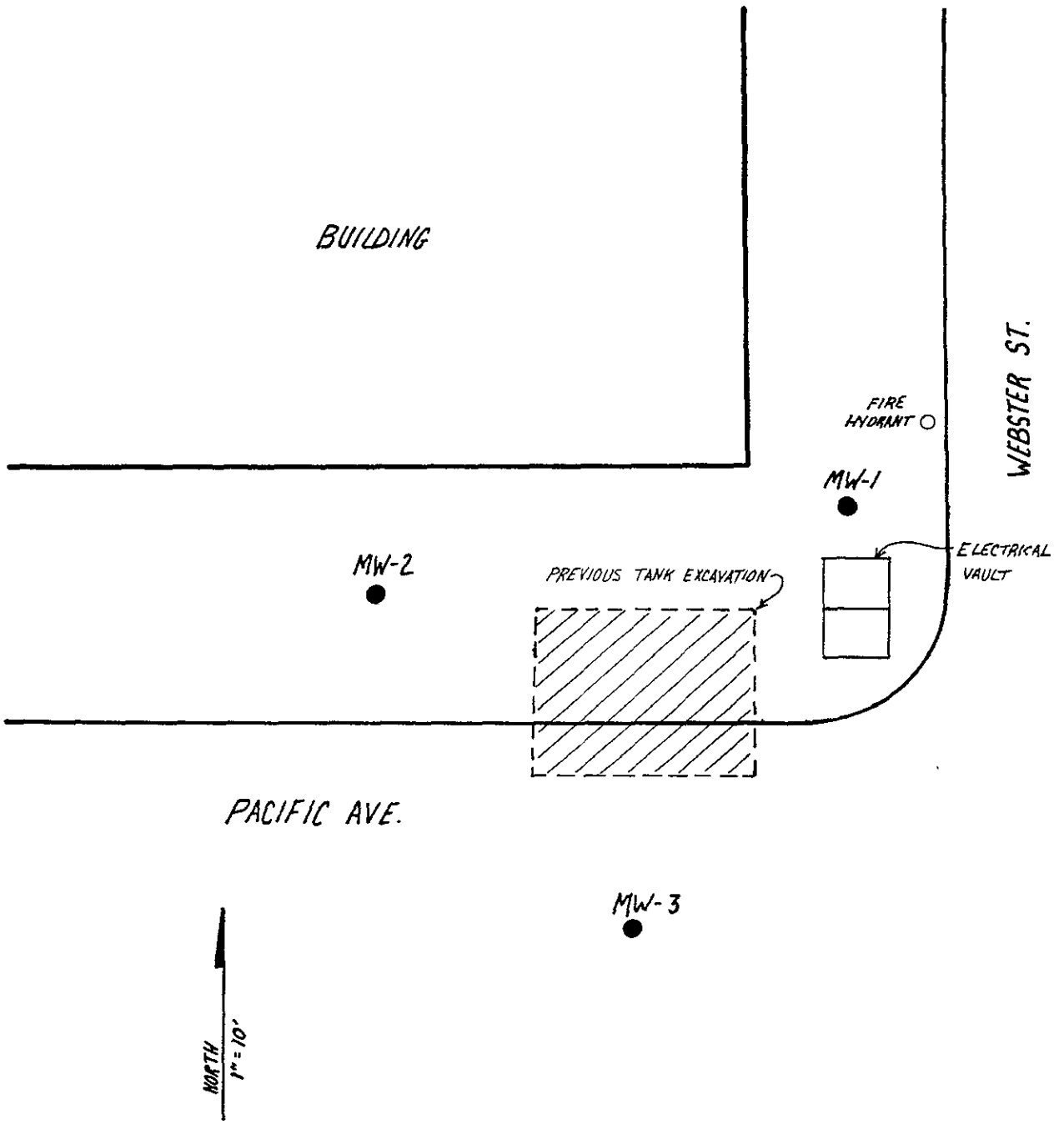


FIGURE 2.
Site Map.

Wastewater Generation

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

TABLE 1.

Shallow Water Table Elevations
December 28, 1993

Well	Top of Casing Elevation (feet)	Depth to Water (feet)	Water Table Elevation (feet)
MW-1	15.23	7.05	8.18
MW-2	14.96	7.12	7.84
MW-3	15.05	7.10	7.95

Based upon National Geodetic Survey Monument WEB PAC,
located at NE corner Webster Street and Pacific Street
Elev = 14.055 feet MSL (May 1990)

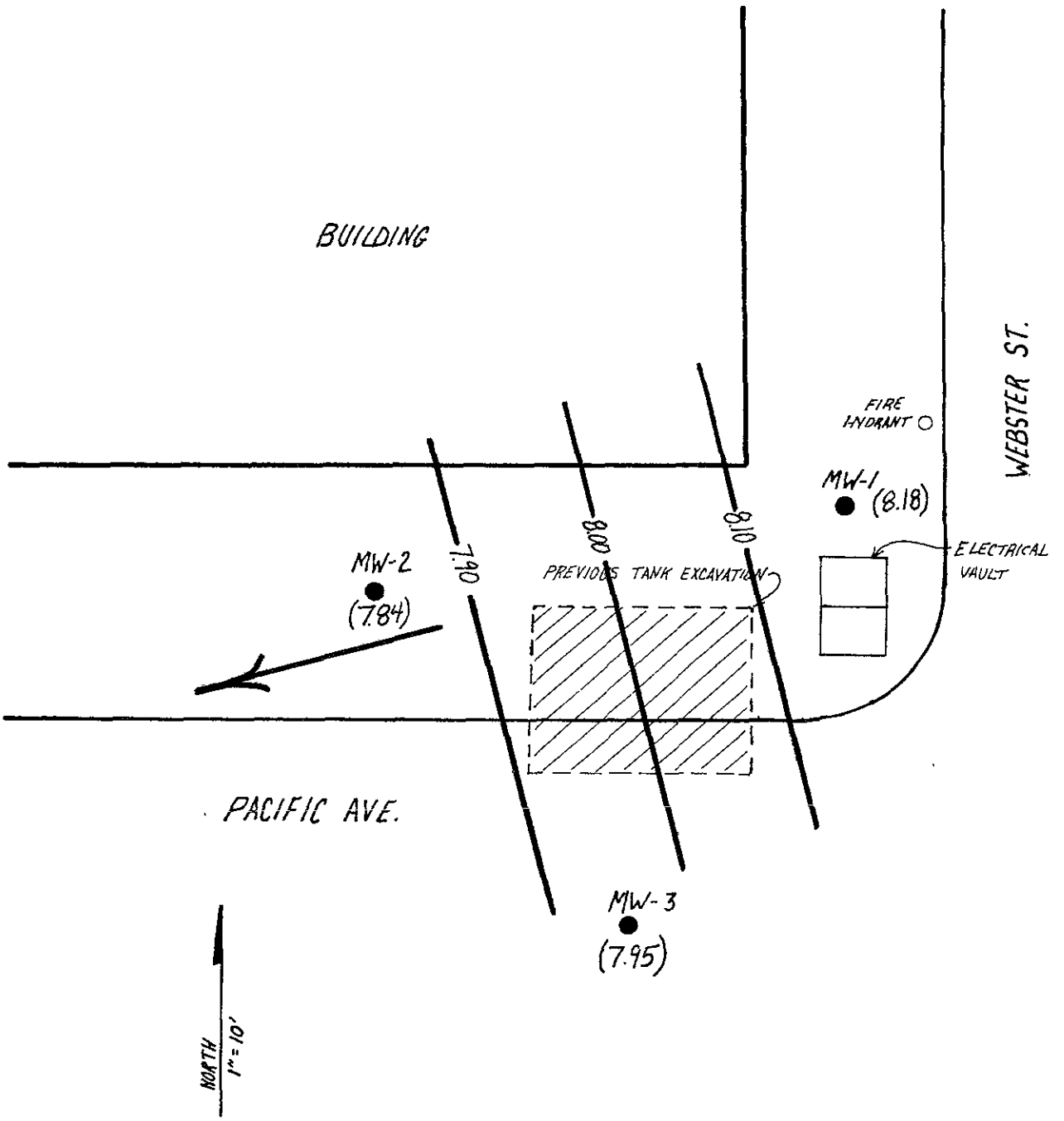


FIGURE 3. Shallow Groundwater Table Contour Map, measured on December 28, 1993.

TABLE 2.
Historical Water Table Elevations
(feet)

Well	Date of Measurement								
	6-17-93	9-23-93	12-28-93						
MW-1	9.11	8.24	8.18						
MW-2	8.84	7.92	7.84						
MW-3	8.94	8.04	7.95						
Flow Direction	W	W	W						
Hydraulic Gradient	0.0091	0.011	0.011						

IV. SHALLOW GROUNDWATER SAMPLING RESULTS

Laboratory Analysis

All analyses were conducted by a California State DOHS certified laboratory in accordance with EPA recommended procedures (Priority Environmental Labs, Milpitas, CA).

All Groundwater samples were analyzed for 1) Total Petroleum Hydrocarbons as Diesel (EPA method 8015), 2) Total Petroleum Hydrocarbons as Gasoline (EPA method 8015), and 3) Benzene, Toluene, Ethylbenzene, and Total Xylenes (EPA method 602).

Results of Laboratory Analysis

Table 3 presents the results of the laboratory analysis of the groundwater samples collected from monitoring wells MW-1, MW-2, and MW-3.

For this most recent round of quarterly sampling, dissolved Gasoline was detected in well MW-2 at a concentration of 92 µg/L (ppb). In addition, the water sample indicated the presence of Benzene, Toluene, Ethylbenzene, and Total Xylenes at concentrations of 0.7 µg/L (ppb), 1.1 µg/L (ppb), 1.7 µg/L (ppb) and 5.4 µg/L (ppb), respectively.

As shown in Table 3, **no detectable concentrations of Total Petroleum Hydrocarbon as Gasoline, Benzene, Toluene, Ethylbenzene or Total Xylenes were found in wells MW-1 and MW-3.**

TABLE 3.

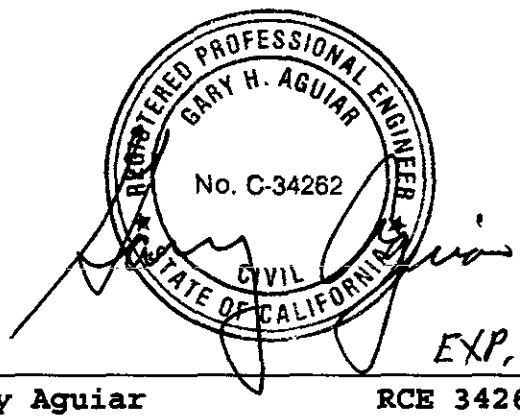
Shallow Groundwater Sampling Results

Well	Date	TPH as Gasoline (ug/L)	TPH as Diesel (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl-benzene (ug/L)	Total Xylenes (ug/L)
MW-1	11-09-89	**360**	---	**0.71**	ND	**0.81**	**1.4**
	06-17-93	ND	**53**	ND	ND	ND	ND
	09-23-93	ND	ND	ND	ND	ND	ND
	12-28-93	ND	ND	ND	ND	ND	ND
MW-2	11-09-89	**71**	---	ND	**0.85**	ND	ND
	06-17-93	ND	ND	ND	ND	ND	ND
	09-23-93	ND	ND	ND	ND	ND	ND
	12-28-93	**92**	ND	**0.7**	**1.1**	**1.7**	**5.4**
MW-3	11-09-89	**320**	---	**0.58**	ND	**1.2**	**2.1**
	06-17-93	ND	ND	ND	ND	ND	ND
	09-23-93	ND	ND	ND	ND	ND	ND
	12-28-93	ND	ND	ND	ND	ND	ND
Detection Limit		50	50	0.5	0.5	0.5	0.5

ND = not detected

GROUNDWATER SAMPLING REPORT
BERNITA LESKOWSKI PROPERTY
1701 Webster Street, Alameda, CA

January 5, 1994



EXP. 9-30-95

Gary Aguiar **RCE 34262**

Gerard F. Aarons
Staff Geologist

ATTACHMENT A

CORRESPONDENCE

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program
80 Swan Way, Rm 200
Oakland, CA 94621
(510) 271-4530

July 23, 1993

Mr. Carl Searway
6319 Castle Drive
Oakland, CA 94611

STID 3804

Re: Investigations at 1701 Webster St., Alameda, California

Dear Mr. Searway,

Per Section 2672, Article 7, Title 23 California Code of Regulations, you are required to either remove the piping from the above site, that was presumably once associated with the underground storage tanks or pump island, or, rinse the piping and cap them. This work must be documented and you must submit a figure showing locations of the piping.

Per our conversation on July 23, 1993, you may backfill the piping trenches, since soil samples collected from those depths did not identify contaminant concentrations in the past.

At this time, you are required to continue quarterly ground water monitoring of the site's wells. A minimum of four quarters of NonDetect, or near NonDetect, results are required before sites are usually considered for closure. In the case of your site, monitoring may have to continue for a longer duration of time, primarily due to the elevated levels of soil contamination identified from a number of borings at 7 feet to 8 feet below ground surface. Although, the monitoring wells are not currently identifying elevated levels of contaminants, this office is concerned about the possibility that the concentrations observed in the soil could eventually leach out and impact the ground water.

Therefore, at this time, quarterly ground water monitoring and water level measurements shall continue at the site. If you have any questions or comments, please contact me at (510) 271-4530.

Sincerely,

Juliet Shin
Hazardous Materials Specialist

ATTACHMENT B

Well Sampling Logs

WELL SAMPLING LOG

Project/No. 1701 WEBSTER ST. Page 1 of 3

Site Location ALAMEDA, CA

Date 12/28/93

Well No. MW 1

Time Began 1325
Completed 1415

Weather CLEAR / 60°F

EVACUATION DATA

Description of Measuring Point (MP) WELL BOX AT GRADE

Total Sounded Depth of Well Below MP 18.78

- Depth to Water Below MP 7.05

= Water Column in Well 11.73

Diameter of Casing 4"

Gallons in Casing 7.5 + Annular Space (30% porosity) 6.6 = Total Gallons 14.1 (x3 = 42.3)

Gallons Pumped Prior to Sampling 45

Evacuation Method AIRLIFT PUMP

SAMPLING DATA / FIELD PARAMETERS

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

Time	1325	1341	1353	1408
Gals Removed	0	15	30	45
Temperature	20.3	19.4	20.4	20.1
Conductivity	280	280	290	290
pH	6.2	6.2	6.2	6.2
Color / Odor	BRN/ORG	CLR/ORG	CLR/ORG	CLR/ORG
Turbidity	HIGH	LOW	LOW	LOW

Comments: NONE

WELL SAMPLING LOG

Project/No. 1701 WEBSTER ST. Page 2 of 3

Site Location ALAMEDA, CA

Date 12/20/93

Well No. MW 2

Time Began 1223
Completed 1330

Weather CLEAR / 60°F

EVACUATION DATA

Description of Measuring Point (MP) WELL BOX AT GRADE

Total Sounded Depth of Well Below MP 19.52

Diameter of Casing 4"

- Depth to Water Below MP 7.12

= Water Column in Well 12.40

Gallons in Casing 7.9 + Annular Space (30% porosity) 7.0 = Total Gallons 14.9 (X 3 = 44.8)

Gallons Pumped Prior to Sampling 45

Evacuation Method AIRLIFT PUMP

SAMPLING DATA / FIELD PARAMETERS

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

Time	1223	1240	1256	1315
Gals Removed	0	15	30	45
Temperature	21.3	21.7	20.6	21.3
Conductivity	310	300	290	290
pH	6.1	6.1	6.1	6.0
Color / Odor	CLR/ORG	CLR/ORG	CLR/ORG	CLR/ORG
Turbidity	LOW	LOW	LOW	LOW

Comments: NONE

WELL SAMPLING LOG

Project/No. 1701 WEBSTER ST Page 3 of 3

Site Location ALAMEDA, CA

Date 12/28/93

Well No. MW 3

Weather OVERCAST / 50°F

Time Began 1108
Completed 1230

EVACUATION DATA

Description of Measuring Point (MP) WELL BOX AT GRADE

Total Sounded Depth of Well Below MP 19.50

- Depth to Water Below MP 7.10

= Water Column in Well 12.40

Diameter of Casing 4"

Gallons in Casing 7.9 + Annular Space (30% porosity) 7.0 = Total Gallons 14.9 (x3 = 44.8)

Gallons Pumped Prior to Sampling 45

Evacuation Method AIRLIFT PUMP

SAMPLING DATA / FIELD PARAMETERS

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

Time	1108	1120	1133	1205
Gals Removed	0	15	30	45
Temperature	19.4	19.7	20.0	20.0
Conductivity	260	290	320	330
pH	7.0	6.4	6.2	6.1
Color / Odor	BRN/ORG	BRN/ORG	BRN/ORG	LT. BRN/ORG
Turbidity	HIGH	HIGH	MED	LOW

Comments: NONE

ATTACHMENT C

ANALYTICAL RESULTS: GROUNDWATER

PRIORITY ENVIRONMENTAL LABS

Precision Environmental Analytical Laboratory

December 31, 1993 PEL # 9312086

HAGEMAN - AGUIAR, INC.

Attn: Jeffrey Roth
Re: Three water samples for Gasoline/BTEX and TEPH analyses.

Project name: 1701 Webster St.
Project location: Alameda

Date sampled: Dec 28, 1993 Date submitted: Dec 30, 1993
Date extracted: Dec 30-31, 1993 Date analyzed: Dec 30-31, 1993

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)	Motor Oil (mg/L)	Stoddard Solvent (ug/L)
MW 1	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
MW 2	N.D.	92	N.D.	0.7	1.1	1.7	5.4	N.D.	N.D.
MW 3	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	---	94.8%	93.4%	96.0%	98.1%	95.6%	95.4%	---	---
Duplicate Spiked Recovery	---	87.3%	94.0%	108.3%	94.3%	101.3%	93.0%	---	---
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

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

Priority Environmental Labs
1764 Houret Court
Milpitas, CA 95035
(408) 946-9636
1764 Houret Ct. Milpitas,CA.95035 Tel:408-946-9636 Fax:

PEL # 9312086

INV # 24337

Chain of Custody

DATE: 12/30/93 PAGE: 1 OF: 1

PROJECT MGR.: GARY AGUIAR
COMPANY: HAGEMAN-AGUIAR
ADDRESS: 3732 MT. DIABLO BLVD
: LAFAYETTE, CA
PHONE: 510-284-1661 FAX:
SIGNATURE:

ANALYSIS REPORT

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	TPH-Gasoline (EPA 5030,8015)	TPH-Gasoline(5030,8015) w/BTEX(EPA 602,8020)	TPH-Diesel (EPA 3510/3550,8015)	PURGEABLE AROMATICS BTEX (EPA 602,8020)	TOTAL OIL & GREASE (EPA 5520 E&F)	PESTICIDES/PCB (EPA 608,8080)	TOTAL RECOVERABLE HYDROCARBONS EPA 418.1	TEPH									NUMBER OF CONTAINERS
MW 1	12-28-93	1415	H_2O			X						X									3
MW 2	12-28-93	1330	H_2O			X						X									3
MW 3	12-28-93	1230	H_2O			X						X									3

PROJECT INFORMATION
PROJECT NAME:: 1701 WEBSTER ST
PROJECT NUMBER: ALAMEDA

SAMPLE RECEIPT
TOTAL # OF CONTAINERS: 9
RECD. GOOD COND./COLD:

INSTRUCTIONS & COMMENTS: NORM TAT

RELINQUISHED BY: 1	RECEIVED BY: 1	RELINQUISHED BY: 2	RECEIVED BY: 2
J. ROTH	VICTOR DUSONG		
SIGNATURE: Date: 12-30-93	SIGNATURE: Date: 12/30/93	SIGNATURE: Date:	SIGNATURE: Date:
NAME: Time: 0915	NAME: Time: 915	NAME: Time:	NAME: Time:
COMPANY: HAGEMAN	COMPANY: PEL	COMPANY:	COMPANY: