



HAGEMAN-AGUIAR, INC.

*Underground Contamination Investigations, Groundwater Consultants, Environmental Engineering*

ENVIRONMENTAL  
PROTECTION  
95 MAR 14 PM 2:25

QUARTERLY  
GROUNDWATER SAMPLING REPORT

(sampled February 13, 1995)

RIX INDUSTRIES  
6460 Hollis Street  
Emeryville, CA

March 2, 1995

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## I. INTRODUCTION

The site location is the property at 6460 Hollis Street in Emeryville, California. The location of the site is shown in Figure 1.

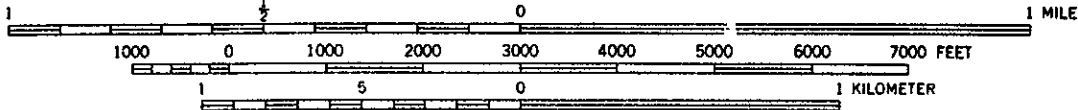
The current occupant a the property, Rix Industries, has been present for more than twenty years. The current Rix Industries operation involves the construction of compressor parts, as well as compressor performance testing. In conjunction with a previous paint formulation plant that occupied the property prior to Rix Industries, ten (10) underground chemical storage tanks had been present for a number of years on the property. Five (5) of the underground tanks are located beneath the existing Rix Industries fabrication building.

On June 27, 1992, three shallow groundwater monitoring wells were installed on the site (wells MW-1, MW-2 and MW-3) by Hageman-Aguiar, Inc. The locations of the monitoring wells are shown in Figure 2, along with the locations of the ten (10) underground storage tanks. The report of that investigation was issued on July 24, 1992.

On July 30, 1994, the five (5) underground storage tanks inside the facility were closed-in-place under the direction of Hageman-Aguiar, Inc., in accord with Alameda County Department of Environmental Health's tank closure requirements. Prior to being filled with a neat cement slurry, each tank had its contents removed.

On the 27th and 28th of December 1994, the five (5) remaining underground storage tanks at the site were removed by Minter & Fahy Construction, of Pacheco, under the direction of

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.

NORTH  
1"=10'

FIVE (5)  
UNDERGROUND TANKS  
REMOVED 12-28-94

STORAGE  
YARD

BACK FILLED  
EXCAVATION

WOOD  
ROOF

MW-3

TANK J

TANK L

UNDERGROUND  
TANKS

TANK H

TANK F

TANK K

MW-1

MW-2

BUILDING

109'

(PROPERTY LINE)

GATE

CURB

SYBASE FACILITY

HOLLIS STREET

FIGURE 2. Site Map.

Hageman-Aguiar, Inc. The tanks were removed in accord with Alameda County Department of Environmental Health's tank closure requirements. A copy of the Hageman-Aguiar "Tank Closure Report", dated January 27, 1995, was issued to Susan Hugo of the Alameda County's Hazardous Materials Division.

On February 13, 1995 all three on-site monitoring wells were sampled for the laboratory analysis for dissolved petroleum constituents, alcohols and ketones, and volatile organic compounds. This sampling represents the third "round" of quarterly sampling, following the soil and groundwater investigation (well installations) previously conducted at the site by Hageman-Aguiar in July 1992.

## II. FIELD WORK

### Monitoring Well Sampling

On February 13, 1995, groundwater samples were collected from each of the three (3) on-site monitoring wells MW-1, MW-2 and MW-3.

Prior to groundwater sampling, each well was purged by bailing approximately 10 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 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 A.

### Wastewater Generation

All water removed from the wells during development and purging was drummed and stored on-site until the results of laboratory analyses were obtained. Based upon these results, this water should be collected by a licensed waste hauler and 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.



### III. RESULTS OF WATER LEVEL MEASUREMENTS

#### Shallow Groundwater Flow Direction

Shallow water table elevations were measured on February 13, 1995. These measurements are shown in Table 1. Figure 3 presents a contour map for the shallow groundwater table beneath the site. As shown in this figure, the data from these monitoring wells indicate that the shallow groundwater beneath the site flows in the westerly direction.

#### Shallow Water Table Hydraulic Gradient

Figure 3 presents the contour map for the shallow groundwater table beneath the site. As shown in this figure, the shallow groundwater table beneath the site appears to be relatively flat, with a calculated hydraulic gradient of  $dH/dL = 1.0'/13.5' = 0.0740$ .

#### Historical Water Level Measurements

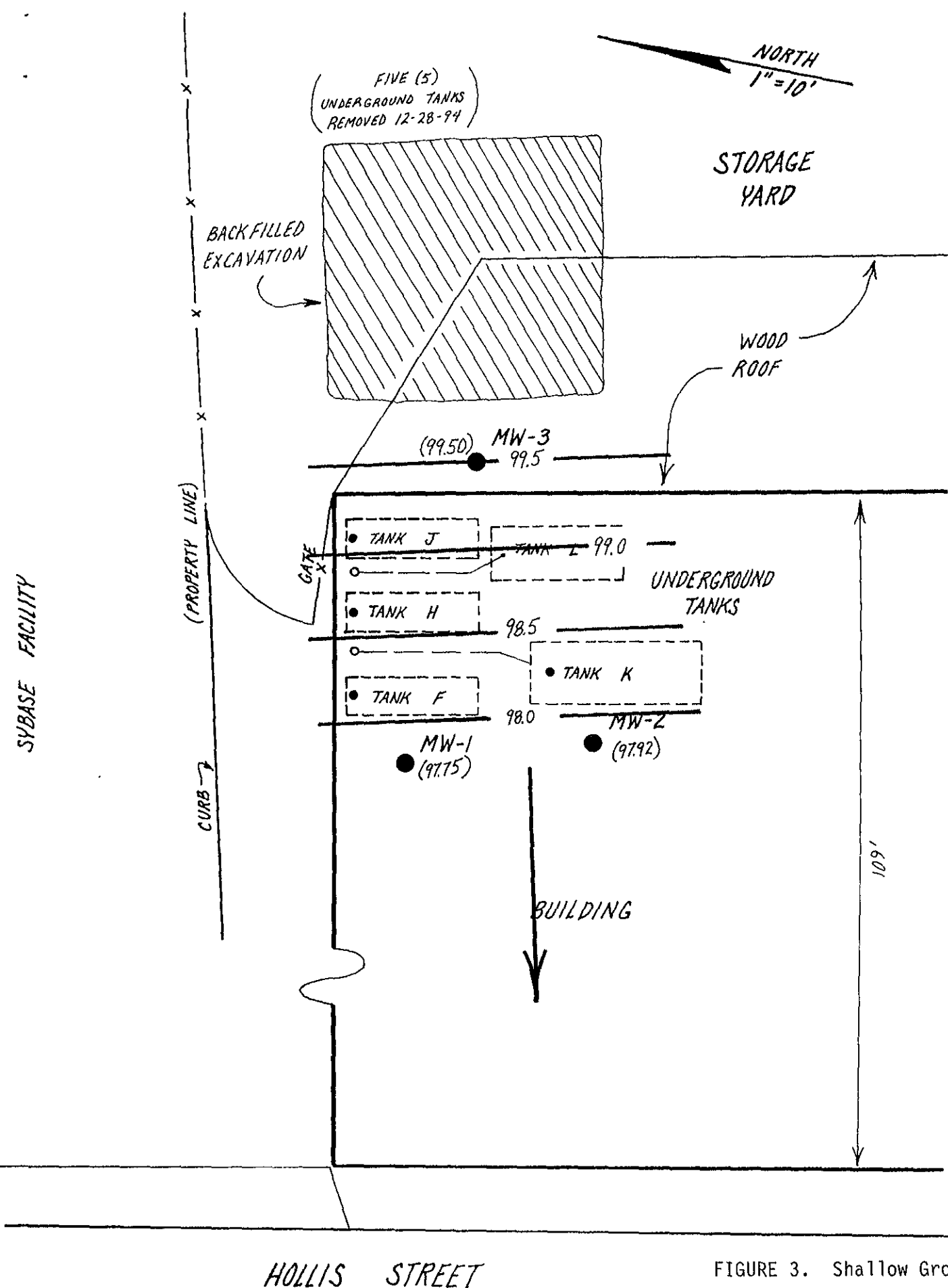
Table 2 presents the results of all water level measurements collected between July 7, 1992, and the present time.

**TABLE 1.**

**Shallow Water Table Elevations  
February 13, 1995**

<b>Well</b>	<b>Top of Casing Elevation (feet)</b>	<b>Depth to Water (feet)</b>	<b>Water Table Elevation (feet)</b>
<b>MW-1</b>	100.00	2.25	97.75
<b>MW-2</b>	100.04	2.12	97.92
<b>MW-3</b>	101.99	2.49	99.50

Datum is the top-of-rim on MW-1 well box set at 100.00 feet.



HOLLIS STREET

FIGURE 3. Shallow Groundwater Table Contour Map. (February 13, 1995)

**TABLE 2.**

**Historical Water Table Elevations  
( feet )**

<b>Well</b>	<b>Date of Measurement</b>								
	<b>7-7-92</b>	<b>8-11-94</b>	<b>11-11-94</b>	<b>2-13-95</b>					
<b>MW-1</b>	96.10	95.87	97.92	97.75					
<b>MW-2</b>	96.38	96.08	98.15	97.92					
<b>MW-3</b>	97.64	97.65	99.61	99.50					
<b>Hydraulic Gradient</b>	0.070	0.080	0.072	0.074					
<b>Flow Direction</b>	W	W	W	W					

#### 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 Lab, Milpitas, CA). All Groundwater samples were analyzed for 1) Total Petroleum Hydrocarbons as Gasoline, Benzene, Toluene, Ethylbenzene, and Total Xylenes; 2) Kerosene, Diesel and Mineral Spirits; 3) Isopropanol, sec-Butanol, Methyl Ethyl Ketone (MEK), Methyl Isobutyl Ketone (MIBK) and Acetone; and, 4) Volatile Organic Compounds.

##### 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 Total Petroleum Hydrocarbons as Gasoline, Benzene, Toluene, Ethylbenzene, Total Xylenes.

Total Petroleum Hydrocarbons as Gasoline were detected in groundwater samples collected from monitoring wells MW-1, MW-2 and MW-3 at concentrations of 630  $\mu\text{g/L}$  (ppb) 1,000  $\mu\text{g/L}$  (ppb) and 410  $\mu\text{g/L}$  (ppb), respectively. In addition, Toluene, Ethylbenzene and Total Xylenes were detected in the ground-water samples from wells MW-1, MW-2 and MW-3 at concentrations of up to 1.7  $\mu\text{g/L}$  (ppb) 3.2  $\mu\text{g/L}$  (ppb) and 6.4  $\mu\text{g/L}$  (ppb), respectively.

**TABLE 3.****Shallow Groundwater Sampling Results**

<b>Well</b>	<b>Date</b>	<b>TPH as Gasoline (ug/L)</b>	<b>Benzene (ug/L)</b>	<b>Toluene (ug/L)</b>	<b>Ethyl-benzene (ug/L)</b>	<b>Total Xylenes (ug/L)</b>
<b>MW-1</b>	07-07-92	<b>680</b>	<b>3.8</b>	ND	<b>38</b>	<b>3.4</b>
	08-11-94	ND	ND	ND	ND	ND
	11-11-94	<b>440</b>	ND	<b>0.8</b>	<b>2.6</b>	<b>6.2</b>
	02-13-95	<b>630</b>	ND	<b>0.5</b>	<b>1.2</b>	<b>3.6</b>
<b>MW-2</b>	07-07-92	<b>1,400</b>	ND	<b>12</b>	<b>69</b>	<b>530</b>
	08-11-94	<b>4,800</b>	ND	<b>1.2</b>	<b>5.6</b>	<b>18</b>
	11-11-94	<b>810</b>	ND	<b>1.2</b>	<b>4.3</b>	<b>11</b>
	02-13-95	<b>1,000</b>	ND	<b>0.9</b>	<b>3.2</b>	<b>6.4</b>
<b>MW-3</b>	07-07-92	<b>9,300</b>	ND	<b>3,600</b>	ND	<b>700</b>
	08-11-94	<b>4,300</b>	ND	<b>10</b>	<b>2.6</b>	<b>10</b>
	11-11-94	<b>920</b>	ND	<b>3.7</b>	<b>3.2</b>	<b>16</b>
	02-13-95	<b>410</b>	ND	<b>1.7</b>	<b>0.5</b>	<b>2.5</b>
<b>Detection Limit</b>		<b>50</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>

ND = Not Detected

Table 4 presents the results of the laboratory analysis of the groundwater samples collected from monitoring wells MW-1, MW-2 and MW-3 for Total Petroleum Hydrocarbons as Kerosene, Diesel and Mineral Spirits.

As shown in Table 4, Total Petroleum Hydrocarbons as Diesel were detected in groundwater samples collected from monitoring wells MW-1, MW-2, and MW-3 at concentrations of 1,400  $\mu\text{g/L}$  (ppb), 810  $\mu\text{g/L}$  (ppb) and 900  $\mu\text{g/L}$  (ppb), respectively. In addition, Total Petroleum Hydrocarbons as Mineral Spirits were detected in the groundwater samples from wells MW-1, MW-2 and MW-3 at concentrations of 310  $\mu\text{g/L}$  (ppb), 350  $\mu\text{g/L}$  (ppb) and 370  $\mu\text{g/L}$  (ppb), respectively.

For this round of groundwater sampling, no detectable concentrations of Total Petroleum Hydrocarbons as Kerosene were detected in any of the shallow groundwater samples.

Table 5 presents the results of the laboratory analysis of the groundwater samples collected from monitoring wells MW-1, MW-2 and MW-3 for Acetone, Isopropanol, Methyl Ethyl Ketone, Methyl Isobutyl Ketone and Sec-butanol.

Acetone was detected in groundwater samples collected from monitoring wells MW-1, MW-2 and MW-3 at concentrations of 610  $\mu\text{g/L}$  (ppb), 2,500  $\mu\text{g/L}$  (ppb) and 1,300  $\mu\text{g/L}$  (ppb), respectively.

Isopropanol was detected in groundwater samples collected from monitoring wells MW-1, MW-2 and MW-3 at concentrations of 6,400  $\mu\text{g/L}$  (ppb), 4,900  $\mu\text{g/L}$  (ppb), and 5,800  $\mu\text{g/L}$  (ppb), respectively.

**TABLE 4.**

**Shallow Groundwater Sampling Results**

<b>Well</b>	<b>Date</b>	<b>TPH as Kerosene (ug/L)</b>	<b>TPH as Diesel (ug/L)</b>	<b>TPH as Mineral Spirits (ug/L)</b>	<b>Oil &amp; Grease (ug/L)</b>
<b>MW-1</b>	07-07-92	<b>6,100</b>	<b>6,100</b>	<b>6,400</b>	<b>14</b>
	08-11-94	<b>960</b>	<b>590</b>	ND	---
	11-11-94	ND	<b>1,000</b>	<b>190</b>	---
	02-13-95	ND	<b>1,400</b>	<b>310</b>	---
<b>MW-2</b>	07-07-92	<b>17,000</b>	<b>17,000</b>	<b>20,000</b>	<b>19</b>
	08-11-94	<b>490</b>	<b>320</b>	ND	---
	11-11-94	ND	<b>620</b>	<b>160</b>	---
	02-13-95	ND	<b>810</b>	<b>350</b>	---
<b>MW-3</b>	07-07-92	<b>20,000</b>	<b>20,000</b>	<b>21,000</b>	<b>28</b>
	08-11-94	<b>470</b>	<b>310</b>	ND	---
	11-11-94	ND	ND	ND	---
	02-13-95	ND	<b>900</b>	<b>370</b>	---
<b>Detection Limit</b>		<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>

ND = Not Detected



**TABLE 5.**  
**Shallow Groundwater Sampling Results**  
**Alcohols & Ketones**

<b>Monitoring Well</b>	<b>Date</b>	<b>Acetone (ug/L)</b>	<b>Iso-Propanol (ug/L)</b>	<b>Methyl Ethyl Ketone (ug/L)</b>	<b>Methyl Isobutyl Ketone (ug/L)</b>	<b>Sec-Butanol (ug/L)</b>
<b>MW-1</b>	07-07-92	ND	ND	ND	ND	ND
	08-11-94	210	9,100	230	180	710
	11-11-94	2,700	17,000	1,500	420	ND
	02-13-95	610	6,400	1,300	600	ND
<b>MW-2</b>	07-07-92	ND	ND	ND	ND	ND
	08-11-94	ND	410	ND	ND	90
	11-11-94	1,100	4,600	18,000	360	ND
	02-13-95	2,500	4,900	22,000	ND	ND
<b>MW-3</b>	07-07-92	ND	ND	ND	ND	ND
	08-11-94	ND	9,400	370	250	820
	11-11-94	810	6,700	40,000	22,000	ND
	02-13-95	1,300	5,800	19,000	4,500	ND
<b>Detection Limit</b>		50 to 400	100 to 1,000	50 to 1,000	50 to 100	50 to 200

ND = Not Detected

Methyl Ethyl Ketone was detected in groundwater samples collected from monitoring wells MW-1, MW-2 and MW-3 at concentrations of 1,300  $\mu\text{g/L}$  (ppb), 22,000  $\mu\text{g/L}$  (ppb) and 19,000  $\mu\text{g/L}$  (ppb), respectively.

Methyl Iso-butyl Ketone was detected in groundwater samples collected from monitoring wells MW-1 and MW-3 at concentrations of 600  $\mu\text{g/L}$  (ppb) and 4,500  $\mu\text{g/L}$  (ppb), respectively.

For this round of groundwater sampling, no detectable concentrations of Sec-butanol were detected in groundwater samples collected from monitoring wells MW-1, MW-2 and MW-3.

Copies of the laboratory certificates for these water sample analyses are included as Attachment B.

Table 6 presents the results of the laboratory analysis of the groundwater samples collected from monitoring wells MW-1, MW-2 and MW-3 for Volatile Organic Compounds.

Trichlorofluoromethane was detected in the groundwater sample collected from monitoring wells MW-1, MW-2 and MW-3 at concentrations of 9.8  $\mu\text{g/L}$  (ppb), 3.6  $\mu\text{g/L}$  (ppb) and 30  $\mu\text{g/L}$  (ppb), respectively.

1,1-Dichloroethane was detected in groundwater samples collected from monitoring wells MW-1, MW-2 and MW-3 at concentrations of 32  $\mu\text{g/L}$  (ppb), 9.6  $\mu\text{g/L}$  (ppb) and 52  $\mu\text{g/L}$  (ppb), respectively.

1,1-Dichloroethene was detected in the groundwater sample collected from monitoring wells MW-1, MW-2 and MW-3 at concentrations of 1.0  $\mu\text{g/L}$  (ppb), 2.0  $\mu\text{g/L}$  (ppb) and 48  $\mu\text{g/L}$  (ppb), respectively.

Total 1,2-Dichloroethene was detected in the groundwater samples collected from monitoring wells MW-1, MW-2 and MW-3 at concentrations of 8.5  $\mu\text{g/L}$  (ppb), 11  $\mu\text{g/L}$  (ppb) and 6.6  $\mu\text{g/L}$  (ppb), respectively.

1,2-Dichloroethane was detected in the groundwater sample collected from monitoring wells MW-1, MW-2 and MW-3 at concentrations of 1.1  $\mu\text{g/L}$  (ppb), 3.2  $\mu\text{g/L}$  (ppb) and 8.5  $\mu\text{g/L}$  (ppb), respectively.

Chloroform was detected in the groundwater sample collected from monitoring wells MW-1, MW-2 and MW-3 at concentrations of 1.8  $\mu\text{g/L}$  (ppb), 2.7  $\mu\text{g/L}$  (ppb) and 4.3  $\mu\text{g/L}$  (ppb), respectively.

TABLE 6.

Shallow Groundwater Sampling Results  
Volatile Organic Compounds

Well	Date	EPA Method	Trichloro-fluoromethane (ug/L)	1,1-Dichloro-ethane (ug/L)	1,1-Dichloro-ethene (ug/L)	(Total) 1,2-Dichloro-ethene (ug/L)	1,2-Dichloro-ethane (ug/L)
MW-1	07-08-92	601	ND	36	ND	ND	ND
	11-11-94	8240	--	33	ND	ND	ND
	02-13-95	601	9.8	32	1.0	8.5	1.1
MW-2	07-08-92	601	ND	22	ND	99	ND
	11-11-94	8240	--	17	ND	45	ND
	02-13-95	601	3.6	9.6	2.0	11	3.2
MW-3	07-08-92	601	ND	30	ND	630	ND
	11-11-94	8240	--	47	29	327	ND
	02-13-95	601	30	52	48	6.6	8.5
<b>Detection Limit</b>			0.5	1.0 to 5.0	1.0 to 5.0	0.5 to 5.0	0.5 to 5.0

ND = Not Detected

TABLE 6. (Continued)

Shallow Groundwater Sampling Results  
Volatile Organic Compounds

Well	Date	EPA Method	Tetrachloroethene (ug/L)	1,1,1-Trichloroethane (ug/L)	Trichloroethene (ug/L)	Vinyl Chloride (ug/L)	Chloroform (ug/L)
MW-1	07-08-92	601	ND	ND	ND	ND	ND
	11-11-94	8240	ND	ND	ND	ND	ND
	02-13-95	601	ND	0.7	15	ND	1.8
MW-2	07-08-92	601	52	ND	21	46	ND
	11-11-94	8240	34	ND	20	ND	ND
	02-13-95	601	49	4.8	41	ND	2.7
MW-3	07-08-92	601	2,200	81	300	ND	ND
	11-11-94	8240	110	12	290	67	ND
	02-13-95	601	54	28	140	ND	4.3
<b>Detection Limit</b>			1.0 to 5.0	1.0 to 5.0	1.0 to 5.0	1.0 to 10	0.5 to 5.0

ND = Not Detected

Tetrachloroethene was detected in groundwater samples collected from monitoring wells MW-2 and MW-3 at concentrations of 49  $\mu\text{g/L}$  (ppb) and 54  $\mu\text{g/L}$  (ppb), respectively.

1,1,1- Trichloroethane was detected in groundwater sample collected from monitoring wells MW-1, MW-2 and MW-3 at concentrations of 0.7  $\mu\text{g/L}$  (ppb), 4.8  $\mu\text{g/L}$  (ppb) and 28  $\mu\text{g/L}$  (ppb), respectively.

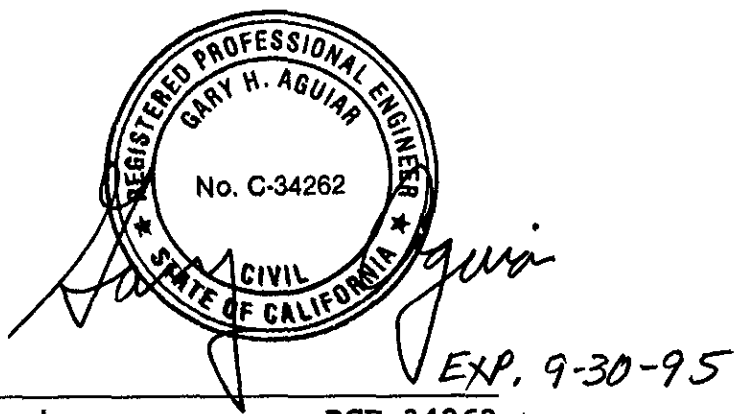
Trichloroethene was detected in groundwater samples collected from monitoring wells MW-1, MW-2 and MW-3 at concentrations of 15  $\mu\text{g/L}$  (ppb), 41  $\mu\text{g/L}$  (ppb) and 140  $\mu\text{g/L}$  (ppb), respectively.

Vinyl Chloride was not detected in groundwater samples collected from monitoring wells MW-1, MW-2 and MW-3.

Copies of the laboratory certificates for these water sample analyses are also included as Attachment B.

QUARTERLY GROUNDWATER SAMPLING REPORT  
RIX INDUSTRIES  
6460 Hollis Street, Emeryville, California

March 2, 1995



Gary Aguiar

RCE 34262

Gerard F. Aarons 3-2-95  
Gerard F. Aarons Geologist

**ATTACHMENT B**

**ANALYTICAL RESULTS: GROUNDWATER**



**ATTACHMENT A**

**WELL SAMPLING LOGS**

# WELL SAMPLING LOG

Project/No. Rix Industries Page 1 of 3  
Site Location \_\_\_\_\_ Date 2-13-95  
Well No. MW-1 Time Began 14:30  
Weather \_\_\_\_\_ Completed \_\_\_\_\_

## EVACUATION DATA

Description of Measuring Point (MP) Well Box @ Grade  
Total Sounded Depth of Well Below MP 14.75  
- Depth to Water Below MP 2.25 Diameter of Casing 2"  
= Water Column in Well 12.50  
Gallons in Casing 2.0 + Annular Space (x 10) = Total Gallons 20  
(30% porosity)  
Gallons Pumped Prior to Sampling 20  
Evacuation Method Teflon Bailer

## SAMPLING DATA / FIELD PARAMETERS

Inspection for Free Product: \_\_\_\_\_  
(thickness to 0.1 inch, if any)

	<u>14:57</u>	<u>15:09</u>	<u>15:21</u>	<u>15:31</u>
Time				
Gals Removed	<u>5</u>	<u>10</u>	<u>15</u>	<u>20</u>
Temperature	<u>16.4</u>	<u>16.4</u>	<u>16.2</u>	<u>16.1</u>
Conductivity	<u>700</u>	<u>700</u>	<u>700</u>	<u>700</u>
pH	<u>6.15</u>	<u>6.20</u>	<u>6.19</u>	<u>6.19</u>
Color / Odor	<u>clear with rusty growth</u>	<u>sheen</u>	<u>sheen-gray</u>	<u>gray</u>
Turbidity	<u>Low</u>	<u>mod</u>	<u>mod</u>	<u>mod</u>

Comments: \_\_\_\_\_

WELL SAMPLING LOG

Project/No. Rix Industries

Page 2 of 3

Site Location \_\_\_\_\_

Date 2-13-95

Well No. MW-2

Time Began 1430

Weather \_\_\_\_\_

Completed \_\_\_\_\_

EVACUATION DATA

Description of Measuring Point (MP) Well Box @ Grade

Total Sounded Depth of Well Below MP 14.93

- Depth to Water Below MP 2.12

Diameter of Casing 2"

= Water Column in Well 12.81

Gallons in Casing 2.1 + Annular Space \_\_\_\_\_ = Total Gallons \_\_\_\_\_  
(30% porosity)

Gallons Pumped Prior to Sampling \_\_\_\_\_

Evacuation Method Sheen

SAMPLING DATA / FIELD PARAMETERS

Inspection for Free Product: \_\_\_\_\_  
(thickness to 0.1 inch, if any)

Time	<u>15:35</u>	<u>15:50</u>	<u>16:00</u>	<u>16:09</u>
Gals Removed	<u>5</u>	<u>10</u>	<u>15</u>	<u>20</u>
Temperature	<u>15.1 °C</u>	<u>16.5 °C</u>	<u>16.4 °C</u>	<u>16.4 °C</u>
Conductivity	<u>750</u>	<u>650</u>	<u>650</u>	<u>650</u>
pH	<u>6.24</u>	<u>6.23</u>	<u>6.24</u>	<u>6.22</u>
Color / Odor	<u>Lt Green paint thinner</u>	<u>Lt Green w sheen</u>	<u>Lt Green @ sheen</u>	<u>Lt Green @ sheen</u>
Turbidity	<u>Low</u>	<u>mod</u>	<u>mod</u>	<u>mod</u>

Comments: \_\_\_\_\_

**WELL SAMPLING LOG**

Project/No. Rix Industries

Page 3 of 3

Site Location \_\_\_\_\_

Date 2-13-95

Well No. MW-3

Time Began 1430

Weather \_\_\_\_\_

Completed \_\_\_\_\_

**EVACUATION DATA**

Description of Measuring Point (MP) Well Box @ Grade

Total Sounded Depth of Well Below MP 17.19

- Depth to Water Below MP 2.49

Diameter of Casing 2"

= Water Column in Well 14.70

Gallons in Casing 2.4 + Annular Space (x10) = Total Gallons 24  
(30% porosity)

Gallons Pumped Prior to Sampling 25

Evacuation Method Teflon Bailor

**SAMPLING DATA / FIELD PARAMETERS**

Inspection for Free Product: Sheen  
(thickness to 0.1 inch, if any)

	<u>14:47</u>	<u>14:57</u>	<u>15:05</u>	<u>15:12</u>	<u>15:22</u>
Time	<u>14:47</u>	<u>14:57</u>	<u>15:05</u>	<u>15:12</u>	<u>15:22</u>
Gals Removed	<u>5</u>	<u>10</u>	<u>15</u>	<u>20</u>	<u>25</u>
Temperature	<u>15.0°C</u>	<u>15.2°C</u>	<u>15.1°C</u>	<u>15.0°C</u>	<u>15.0°C</u>
Conductivity	<u>0940</u>	<u>0950</u>	<u>0940</u>	<u>0950</u>	<u>0940</u>
pH	<u>6.31</u>	<u>6.27</u>	<u>6.25</u>	<u>6.28</u>	<u>6.29</u>
Color / Odor	<u>Lt Green No Odor</u>	<u>Lt Green No Odor</u>	<u>Gray SL HC</u>	<u>Lt Gray SL HC</u>	<u>Lt Gray SL HC</u>
Turbidity	<u>Low</u>	<u>Mod</u>	<u>Mod</u>	<u>Low/mod</u>	<u>Low/mod</u>

Comments: \_\_\_\_\_

**ATTACHMENT B**

**ANALYTICAL RESULTS: GROUNDWATER**



# PRIORITY ENVIRONMENTAL LABS

Precision Environmental Analytical Laboratory

February 17, 1995

PEL # 9502040

HAGEMAN - AGUIAR, INC.

Attn: Gary Aguiar

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

Project name: Rix Industries

Project location: 6460 Hollis St., - Emeryville, CA.

Date sampled: Feb 13, 1995

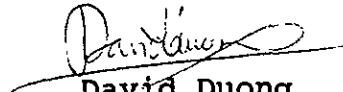
Date submitted: Feb 14, 1995

Date extracted: Feb 14-15, 1995

Date analyzed: Feb 14-15, 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 Xylenes (ug/L)	Motor Oil (mg/L)	Mineral Spirits (ug/L)
MW-1	N.D.	630	1400	N.D.	0.5	1.2	3.6	N.D.	310
MW-2	N.D.	1000	810	N.D.	0.9	3.2	6.4	N.D.	350
MW-3	N.D.	410	900	N.D.	1.7	0.5	2.5	N.D.	370
Blank	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Spiked Recovery	---	106.2%	91.7%	82.0%	103.2%	92.3%	103.1%	---	---
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



# PRIORITY ENVIRONMENTAL LABS

Precision Environmental Analytical Laboratory

February 17, 1995

PEL # 9502040

HAGEMAN - AGUIAR, INC.

Attn: Gary Aguiar

Re: Three water samples for Acetone, Isopropanol, MEK, MIBK, and Sec-Butanol analyses.

Project name: Rix Industries

Project location: 6460 Hollis St., - Emeryville, CA.

Date sampled: Feb 13, 1995

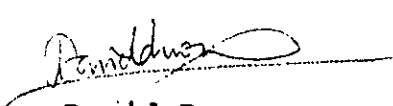
Date submitted: Feb 14, 1995

Date extracted: Feb 14-17, 1995

Date analyzed: Feb 14-17, 1995

## RESULTS:

SAMPLE I.D.	Acetone (ug/L)	Isopropanol (mg/L)	MEK (mg/L)	MIBK (mg/L)	Sec-Butanol (mg/L)
MW-1	610	6.4	1.3	0.6	N.D.
MW-2	2500	4.9	22	N.D.	N.D.
MW-3	1300	5.8	19	4.5	N.D.
Blank	N.D.	N.D.	N.D.	N.D.	N.D.
Detection limit	50	0.5	0.5	0.5	0.5
Method of Analysis	8015	8015	8015	8015	8015

  
David Duong  
Laboratory Director



# PRIORITY ENVIRONMENTAL LABS

Precision Environmental Analytical Laboratory

February 17, 1995

PEL #: 9502040

HAGEMAN - AGUIAR, INC.

Attn: Gary Aguiar

Project name: Rix Industries Project location: 6460 Hollis St.-Emeryville, CA.

Sample I.D.: MW-1

Date Sampled: Feb 13, 1995  
Date Analyzed: Feb 14-16, 1995

Date Submitted: Feb 14, 1995

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.	-----
Bromomethane	N.D.	-----
Chloroethane	N.D.	85.5
Trichlorofluoromethane	9.8	-----
1,1-Dichloroethene	1.0	-----
Methylene Chloride	N.D.	-----
1,2-Dichloroethene (TOTAL)	8.5	-----
1,1-Dichloroethane	32	-----
Chloroform	1.8	80.1
1,1,1-Trichloroethane	0.7	-----
Carbon Tetrachloride	N.D.	-----
1,2-Dichloroethane	1.1	-----
Trichloroethene	15	86.6
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.	89.5
Dibromochloromethane	N.D.	-----
Chlorobenzene	N.D.	90.8
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





# PRIORITY ENVIRONMENTAL LABS

Precision Environmental Analytical Laboratory

February 17, 1995

PEL #: 9502040

HAGEMAN - AGUIAR, INC.

Attn: Gary Aguiar

Project name: Rix Industries Project location: 6460 Hollis St. - Emeryville, CA.

Sample I.D.: MW-2

Date Sampled: Feb 13, 1995  
Date Analyzed: Feb 14-16, 1995

Date Submitted: Feb 14, 1995

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.	-----
Bromomethane	N.D.	-----
Chloroethane	N.D.	85.5
Trichlorofluoromethane	3.6	-----
1,1-Dichloroethene	2.0	-----
Methylene Chloride	N.D.	-----
1,2-Dichloroethene (TOTAL)	11	-----
1,1-Dichloroethane	9.6	-----
Chloroform	2.7	80.1
1,1,1-Trichloroethane	4.8	-----
Carbon Tetrachloride	N.D.	-----
1,2-Dichloroethane	3.2	-----
Trichloroethene	41	86.6
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	49	89.5
Dibromochloromethane	N.D.	-----
Chlorobenzene	N.D.	90.8
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



# PRIORITY ENVIRONMENTAL LABS

Precision Environmental Analytical Laboratory

February 17, 1995

PEL #: 9502040

HAGEMAN - AGUIAR, INC.

Attn: Gary Aguiar

Project name: Rix Industries Project location: 6460 Hollis St.-Emeryville, CA.

Sample I.D.: MW-3

Date Sampled: Feb 13, 1995  
Date Analyzed: Feb 14-16, 1995

Date Submitted: Feb 14, 1995

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.	-----
Bromomethane	N.D.	-----
Chloroethane	N.D.	85.5
Trichlorofluoromethane	30	-----
1,1-Dichloroethene	48	-----
Methylene Chloride	N.D.	-----
1,2-Dichloroethene (TOTAL)	6.6	-----
1,1-Dichloroethane	52	-----
Chloroform	4.3	80.1
1,1,1-Trichloroethane	28	-----
Carbon Tetrachloride	N.D.	-----
1,2-Dichloroethane	8.5	-----
Trichloroethene	140	86.6
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	54	89.5
Dibromochloromethane	N.D.	-----
Chlorobenzene	N.D.	90.8
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

