

HAGEMAN-AGUIAR, INC.

Underground Contamination Investigations
Groundwater Consultants, Environmental Engineering

revised 3/27/92
SES

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March 20, 1992

REPORT OF SEMIANNUAL GROUNDWATER SAMPLING

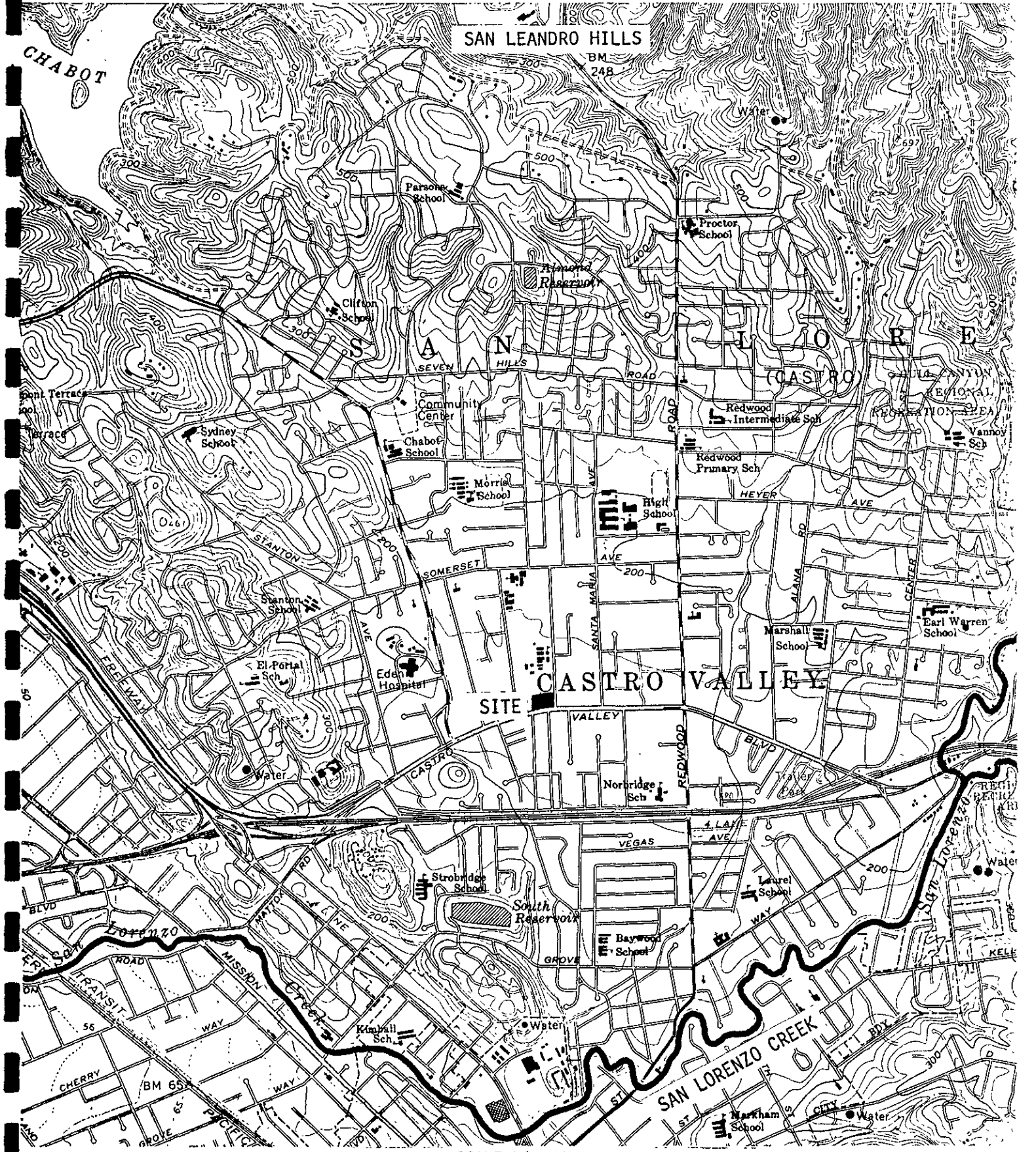
ADOBE PLAZA
3098 Castro Valley Blvd
Castro Valley, CA

On March 9, and 18, 1992, all three on-site monitoring wells were sampled for the laboratory analysis for dissolved petroleum constituents. The location of the site is shown in Figure 1 (site vicinity map). The locations of the monitoring wells are shown in Figure 2 (site map).

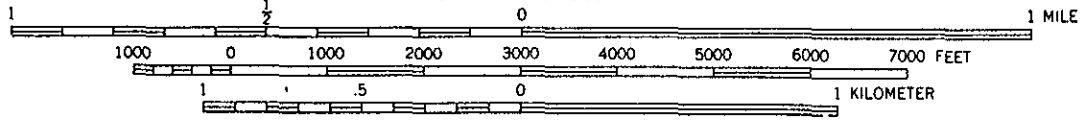
Based upon the letter from Scott Seery, Alameda County Department of Environmental Health, dated September 13, 1991, the sampling frequency for monitoring well MW-2 has been increased to quarterly. A copy of this letter is included in Attachment A.

Monitoring Well Sampling and Laboratory Analysis

On March 9 and 18, 1992, groundwater samples were collected from each of the on-site monitoring wells. Prior to groundwater sampling, each well was purged by bailing 5 to 7



SCALE 1:24 000



CONTOUR INTERVAL 20 FEET

FIGURE 1. Site Location Map.

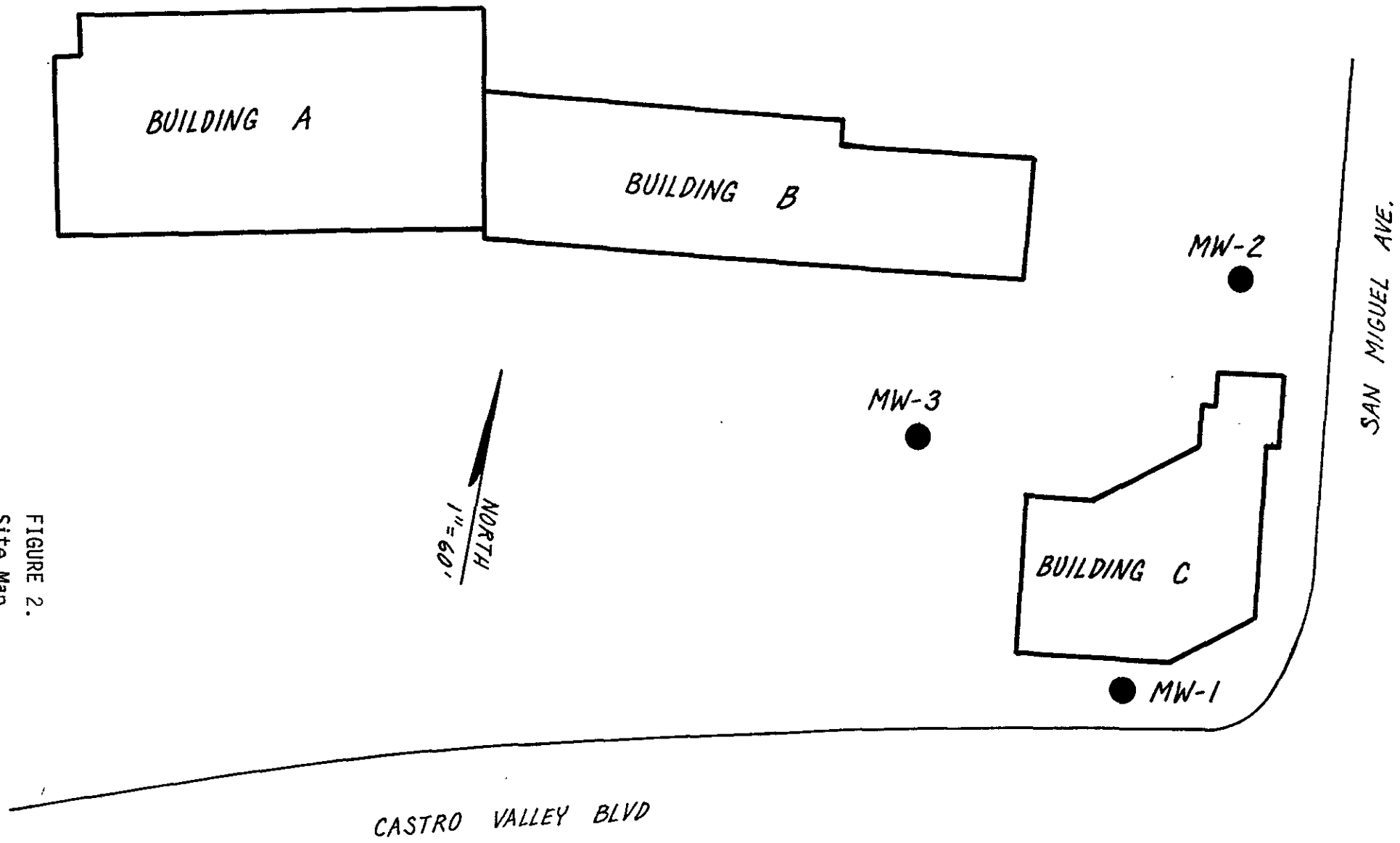


FIGURE 2.
Site Map.

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 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 B.

All analyses were conducted by a California State DOHS certified laboratory in accordance with EPA recommended procedures (Chromalab Laboratory, San Ramon, CA). All groundwater samples were analyzed for Total Petroleum Hydrocarbons as Gasoline, Benzene, Toluene, Ethylbenzene, and Total Xylenes.

All water removed from the wells during the most recent purging and sampling has been drummed and stored on-site until the results of laboratory analyses could be obtained.

Water Level Measurements.

Shallow water table elevations were measured on March 18, 1992. 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 flow beneath the site continues to be in the southeasterly direction.

Results of Quarterly Monitoring.

Table 2 presents the results of the laboratory analysis for Total Petroleum Hydrocarbons as Gasoline, Benzene, Toluene, Ethylbenzene, and Total Xylenes of the shallow groundwater samples collected from the monitoring wells. No detectable concentrations of any petroleum constituents were found in the samples collected from wells MW-1, MW-2 and MW-3.

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

TABLE 1.

**Shallow Water Table Elevations
March 18, 1992**

Well	Top of Casing Elevation (feet)	Depth to Water (feet)	Water Table Elevation (feet)
MW-1	99.73	8.60	91.13
MW-2	100.00	6.96	93.04
MW-3	99.76	5.50	94.26

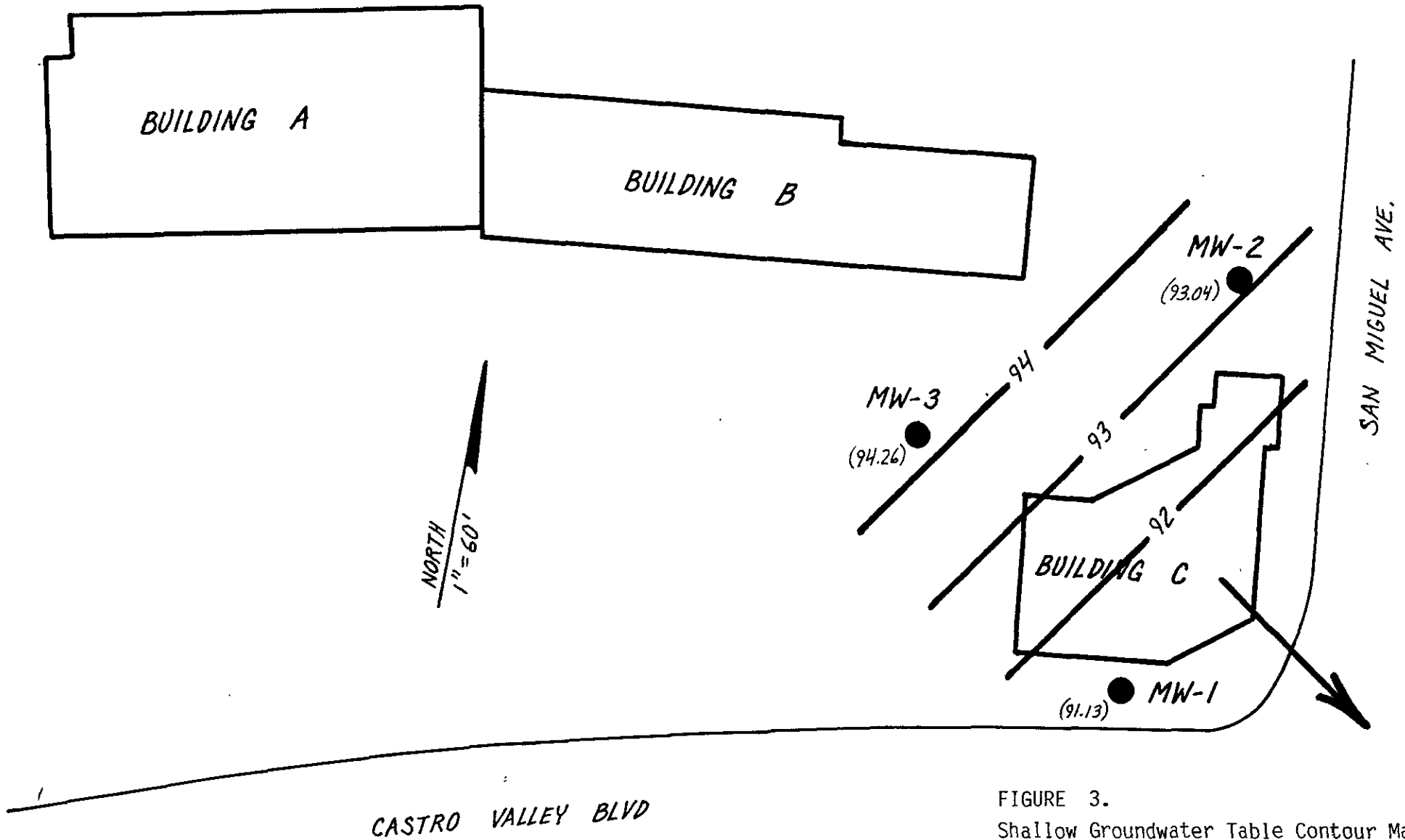


FIGURE 3.
 Shallow Groundwater Table Contour Map.
 (measured March 18, 1992)

TABLE 2.
Shallow Groundwater Sampling Results

Well	Date	TPH as Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl-benzene (ug/L)	Xylenes (ug/L)
1	08-22-89	ND	0.5	1.2	ND	3.1
	05-24-90	ND	ND	ND	ND	ND
	08-29-90	ND	ND	ND	ND	ND
	11-28-90	ND	ND	ND	ND	ND
	03-08-91	ND	ND	ND	ND	ND
	10-10-91	ND	ND	ND	ND	ND
	03-09-92	ND	ND	ND	ND	ND
2	08-22-89	110	5.3	ND	ND	ND
	09-06-89	ND	ND	ND	ND	ND
	05-24-90	ND	ND	ND	ND	ND
	08-29-90	110	ND	0.8	1.1	0.6
	11-28-90	ND	ND	ND	ND	ND
	03-08-91	ND	ND	ND	ND	ND
	10-10-91	160	13	3.2	2.0	18
	03-09-92	ND	ND	ND	ND	ND
3	08-22-89	ND	ND	ND	ND	ND
	06-08-90	ND	ND	ND	ND	ND
	08-29-90	ND	ND	ND	ND	ND
	11-28-90	ND	ND	ND	ND	ND
	03-08-91	ND	ND	ND	ND	ND
	10-10-91	ND	ND	ND	ND	ND
	03-18-92	ND	ND	ND	ND	ND
Detection Limit		50	0.5	0.5	0.5	0.5


REPORT OF SEMIANNUAL GROUNDWATER SAMPLING
ADOBE PLAZA
3098 Castro Valley Blvd, Castro Valley, CA

March 20, 1992



Gary Aguiar

RCE 34262



Bruce Hageman

ATTACHMENT A

CORRESPONDENCE

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



RAFAT A. SHAHID, Assistant Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Division
80 Swan Way, Rm. 200
Oakland, CA 94621
(510) 271-4320

February 10, 1992

Mr. Clifton Sherwood
Adobe Associates
P.O. Box 2673
Castro Valley, CA 94546

RE: FREQUENCY OF SAMPLING, ADOBE PLAZA, 3098 CASTRO VALLEY BLVD.

Dear Mr. Sherwood:

The Department has completed review of the November 15, 1991 Hageman-Aguiar ground water monitoring report. This document reflects the results of ground water sampling occurring at the referenced site on October 10, 1991. Gasoline constituents have again been detected in monitoring well MW-2, the first time since August 1990.

As a result of these recent "hits," well MW-2 shall be sampled quarterly. At this time, please continue monitoring and sampling wells MW-1 and -3 semiannually.

Please feel free to contact me at 510/271-4320 should you have any questions.

Sincerely,


Scott O. Seery, CHMM
Senior Hazardous Materials Specialist

cc: Rafat A. Shahid, Assistant Agency Director, Environmental Health
Edgar Howell, Chief, Hazardous Materials Division
Gil Jensen, Alameda County District Attorney's Office
Lester Feldman, RWQCB
Howard Hatayama, DTSC
Bob Bohman, Castro Valley Fire Department
Gary Aguiar, Hageman-Aguiar

ATTACHMENT B

WELL SAMPLING LOGS

WELL SAMPLING LOG

Project/No. ADOBE PLAZA Page 1 of 3
Site Location CASTRO VALLEY, CA Date 3-9-92
Well No. MW-1
Weather SUNNY, 65°F Time Sampling Began 13:00
Completed 13:40

EVACUATION DATA

Description of Measuring Point (MP) WELL BOX (LID)
Total Sounded Depth of Well Below MP 23.16
Depth to Water Below MP 9.00 Diameter of Casing 2"
Water Column in Well 14.16
Gallons in Well 2.3 Gallons Pumped/Bailed
Prior to Sampling 15
Evacuation Method TEFLON BAIKER

SAMPLING DATA / FIELD PARAMETERS

Color CLEAR Odor SEPTIC
Appearance NO SHEEN Temperature 19 °F 20 °C
Specific Conductance (umhos/cm) 720 pH 6.7
Sampling Method and Material TEFLON BAIKER

FIELD ANALYSES:	Start	Mid	End
Time	<u>13:15</u>	<u>13:25</u>	<u>13:35</u>
Temperature	<u>20.0</u>	<u>19.0</u>	<u>19.0</u>
Conductivity	<u>710</u>	<u>720</u>	<u>720</u>
pH	<u>6.7</u>	<u>6.7</u>	<u>6.7</u>

Sampling Personnel Keith Jay

WELL SAMPLING LOG

Project/No. ADOBE PLAZA Page 2 of 3
Site Location CASTRO VALL
Well No. MW-2 Date 3-9-92
Weather SUNNY, 65°F Time Sampling Began 13:45
Completed 14:20

EVACUATION DATA

Description of Measuring Point (MP) WELL BDX (LID)
Total Sounded Depth of Well Below MP 18.74
Depth to Water Below MP 7.82 Diameter of Casing 2"
Water Column in Well 10.92
Gallons in Well 1.8 Gallons Pumped/Bailed
Prior to Sampling 10
Evacuation Method TEFLON BAILER

SAMPLING DATA / FIELD PARAMETERS

Color CLEAR Odor NONE
Appearance NO SHEEN Temperature 19.0°F ⊙ ⊙
Specific Conductance (umhos/cm) 1100 pH 6.7
Sampling Method and Material TEFLON BAILER

FIELD ANALYSES:	Start	Mid	End
Time	<u>13:55</u>	<u>14:05</u>	<u>14:15</u>
Temperature	<u>18.5°</u>	<u>19.0°</u>	<u>19.0°</u>
Conductivity	<u>1100</u>	<u>1100</u>	<u>1100</u>
pH	<u>6.7</u>	<u>6.7</u>	<u>6.7</u>

Sampling Personnel Keith Jay

WELL SAMPLING LOG

Project/No. ADOBE PLAZA Page 3 of 3
Site Location CASTRO VALLEY Date 3-9-92
Well No. MW-3 Time Sampling Began 14:25
Weather SUNNY, 65°F Completed 14:25

EVACUATION DATA

Description of Measuring Point (MP) WELL BOX (LID)
Total Sounded Depth of Well Below MP 23.38
Depth to Water Below MP 5.50 Diameter of Casing 2"
Water Column in Well 17.88
Gallons in Well _____ Gallons Pumped/Bailed Prior to Sampling _____
Evacuation Method _____

SAMPLING DATA / FIELD PARAMETERS

Color _____ Odor _____
Appearance _____ Temperature _____ °F / °C
Specific Conductance (umhos/cm) _____ pH _____
Sampling Method and Material _____

FIELD ANALYSES:	Start	Mid	End
Time	_____	_____	_____
Temperature	_____	_____	_____
Conductivity	_____	_____	_____
pH	_____	_____	_____

Sampling Personnel Kerth Jay

WELL SAMPLING LOG

Project/No. ADOBE PLAZA Page 1 of 3
Site Location CASTRO VALLEY, CA Date 3-18-92
Well No. MW-3
Weather SUNNY, 60° F Time Sampling Began 14:15
Completed 15:00

EVACUATION DATA

Description of Measuring Point (MP) WELL BOX (AT GRADE)
Total Sounded Depth of Well Below MP 23.34
Depth to Water Below MP 5.50 Diameter of Casing 2"
Water Column in Well 17.74
Gallons in Well 2.9 Gallons Pumped/Bailed
Prior to Sampling 15
Evacuation Method TEFLON BAWLER

SAMPLING DATA / FIELD PARAMETERS

Color CLEAR Odor NONE
Appearance NO SHEEN Temperature 19.5° F, 19.5° C
Specific Conductance (umhos/cm) 1875 pH 7.4
Sampling Method and Material TEFLON BAWLER

FIELD ANALYSES:

	Start	Mid	End
Time	<u>14:25</u>	<u>14:35</u>	<u>14:45</u>
Temperature	<u>20.0</u>	<u>19.5</u>	<u>19.5</u>
Conductivity	<u>1875</u>	<u>1875</u>	<u>1875</u>
pH	<u>7.4</u>	<u>7.4</u>	<u>7.4</u>

Sampling Personnel Keith Jay

WELL SAMPLING LOG

Project/No. ADOBE PLAZA Page 2 of 3
Site Location CASTRO VALLEY, CA Date 3-18-92
Well No. MW-1
Weather SUNNY, 60°F Time Sampling Began 14:50
Completed 14:50

EVACUATION DATA

Description of Measuring Point (MP) WELL BOX (AT GRADE)
Total Sounded Depth of Well Below MP _____
Depth to Water Below MP 8.60' Diameter of Casing 2"
Water Column in Well _____
Gallons Pumped/Bailed _____
Gallons in Well _____ Prior to Sampling _____
Evacuation Method _____

SAMPLING DATA / FIELD PARAMETERS

Color _____ Odor _____
Appearance _____ Temperature _____ °F / °C
Specific Conductance (umhos/cm) _____ pH _____
Sampling Method and Material _____

FIELD ANALYSES:	Start	Mid	End
Time	_____	_____	_____
Temperature	_____	_____	_____
Conductivity	_____	_____	_____
pH	_____	_____	_____

Sampling Personnel Keith Jay

WELL SAMPLING LOG

Project/No. ADOBE PLAZA Page 3 of 3
Site Location CASTRO VALLEY, CA Date 3-18-92
Well No. MW-2 Time Sampling Began 14:55
Weather SUNNY, 60°F Completed 14:55

EVACUATION DATA

Description of Measuring Point (MP) WELL BOX (AT GRADE)
Total Sounded Depth of Well Below MP _____
Depth to Water Below MP 6.96' Diameter of Casing 2"
Water Column in Well _____ Gallons Pumped/Bailed _____
Gallons in Well _____ Prior to Sampling _____
Evacuation Method _____

SAMPLING DATA / FIELD PARAMETERS

Color _____ Odor _____
Appearance _____ Temperature _____ °F / °C
Specific Conductance (umhos/cm) _____ pH _____
Sampling Method and Material _____

FIELD ANALYSES:	Start	Mid	End
Time	_____	_____	_____
Temperature	_____	_____	_____
Conductivity	_____	_____	_____
pH	_____	_____	_____

Sampling Personnel Veeth Jay

ATTACHMENT C

ANALYTICAL RESULTS: GROUNDWATER

CHROMALAB, INC.

5 DAYS TURNAROUND

Analytical Laboratory (E694)

March 16, 1992

ChromaLab File No.: 0392087

HAGEMAN-AGUIAR, INC.

Attn: Gary Aguiar

RE: Two water samples for Gas/BTEX analysis

Project Name: ADOBE PLAZA

Project Location: Castro Valley Blvd., Castro

Date Sampled: Mar. 9, 1992

Date Submitted: Mar. 9, 1992

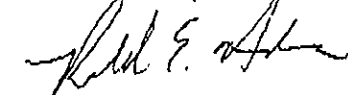
Date Extracted: Mar. 12, 1992

Date Analyzed: Mar. 12, 1992

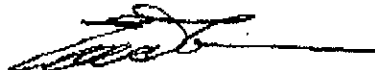
RESULTS:

Sample I.D.	Gasoline ($\mu\text{g/L}$)	Benzene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	Ethyl Benzene ($\mu\text{g/L}$)	Total Xylenes ($\mu\text{g/L}$)
MW-1	N.D.	N.D.	N.D.	N.D.	N.D.
MW-2	N.D.	N.D.	N.D.	N.D.	N.D.
BLANK	N.D.	N.D.	N.D.	N.D.	N.D.
SPIKE RECOVERY	103%	99%	99%	102%	102%
DETECTION LIMIT	50	0.5	0.5	0.5	0.5
METHOD OF ANALYSIS	5030/8015	602	602	602	602

ChromaLab, Inc.



Ronald Halsne
Analytical Chemist



Eric Tam
Laboratory Director

CHROMALAB, INC.

5 DAYS TURNAROUND

Analytical Laboratory (E694)

March 20, 1992

ChromaLab File No.: 0392179

HAGEMAN-AGUIAR, INC.

Attn: Gary Aguiar

RE: One water sample for Gas/BTEX analysis

Project Name: ADOBE PLAZA

Project Location: Castro Valley Blvd., Castro Valley, CA

Date Sampled: Mar. 18, 1992

Date Submitted: Mar. 18, 1992

Date Extracted: Mar. 19, 1992

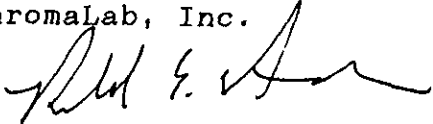
Date Analyzed: Mar. 19, 1992

RESULTS:

Sample I.D.	Gasoline ($\mu\text{g/L}$)	Benzene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	Ethyl Benzene ($\mu\text{g/L}$)	Total Xylenes ($\mu\text{g/L}$)
MW-3	N.D.	N.D.	N.D.	N.D.	N.D.

BLANK	N.D.	N.D.	N.D.	N.D.	N.D.
SPIKE RECOVERY	99%	91%	91%	81%	83%
DETECTION LIMIT	50	0.5	0.5	0.5	0.5
METHOD OF ANALYSIS	5030/8015	602	602	602	602

ChromaLab, Inc.


Ronald Halsne
Analytical Chemist


Eric Tam
Laboratory Director