



HAGEMAN-AGUIAR, INC.

Underground Contamination Investigations, Groundwater Consultants, Environmental Engineering

December 18, 1992

**QUARTERLY
GROUNDWATER SAMPLING REPORT**

**FORMER CHEVRON STATION
11727 Main Street
Sunol, CA**

On December 4, 1992, the on-site monitoring well was sampled for the subsequent laboratory analysis for dissolved petroleum constituents. The sampling is part of the regular quarterly shallow groundwater monitoring program, as required by the Alameda County Environmental Health Department and the California State Regional Water Quality Control Board. The location of the site is shown in Figure 1.

Monitoring Well Sampling and Laboratory Analysis

On December 4, 1992, the on-site well was purged, and a groundwater sample was subsequently collected. The location of the monitoring well is shown in Figure 2 (site map). Prior to groundwater sampling, the well was purged by bailing approximately 4 casing volumes of water. Field conductivity,

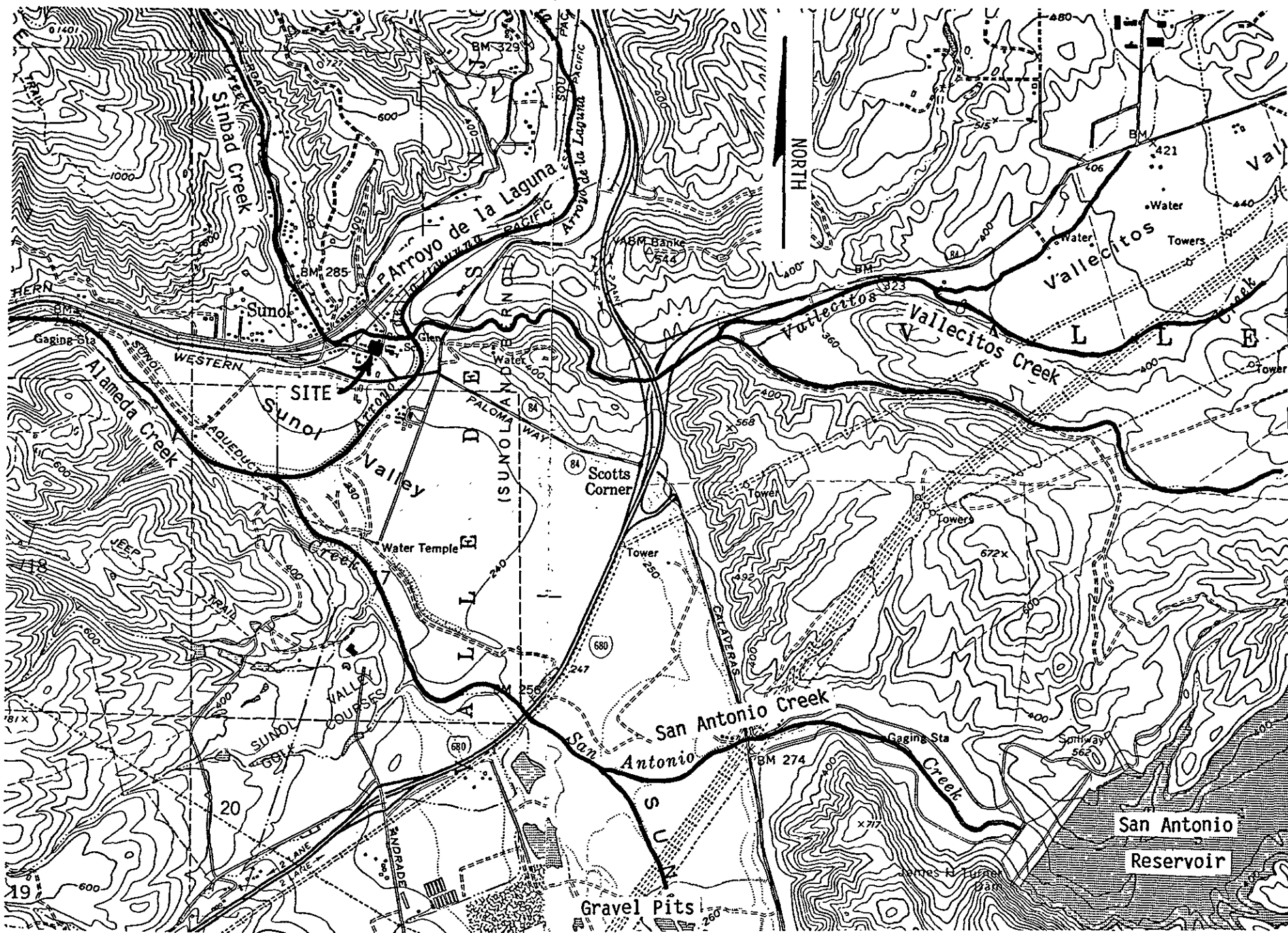


FIGURE 1. Site Vicinity Map

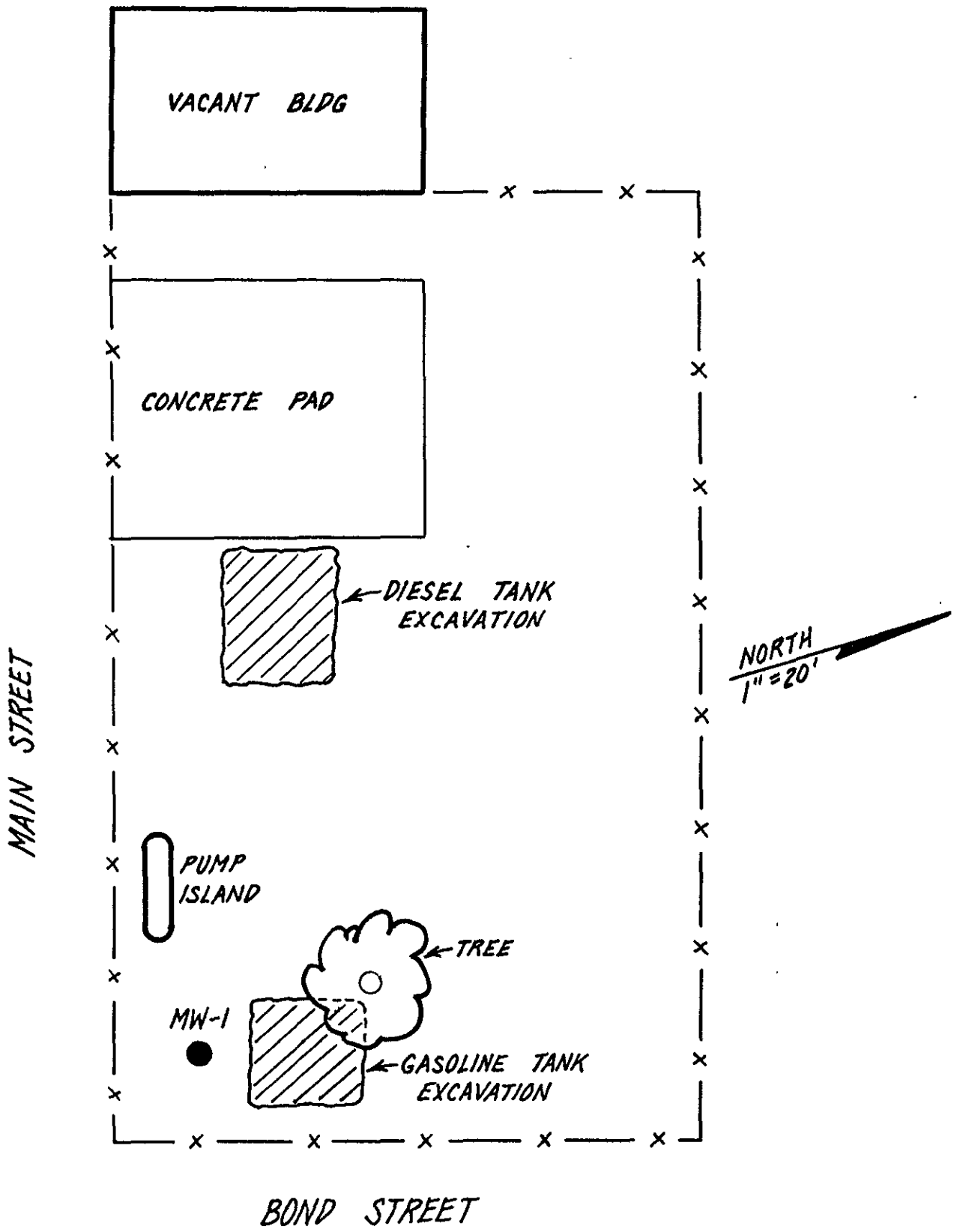


FIGURE 2.
Site Map.

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 cold storage unit at the Hageman-Aguiar offices. The samples were subsequently picked up by laboratory personnel and transported under chain-of-custody to the laboratory.

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.

All analyses were conducted by a California State DOHS certified laboratory in accordance with EPA recommended procedures. The groundwater sample was analyzed for Total Petroleum Hydrocarbons as Diesel, Total Petroleum Hydrocarbons as Gasoline, and Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX).

All water removed from the well during development and purging was drummed and stored on-site until the results of laboratory analyses were obtained. Depending upon these results, the water will be sewerred as a non-hazardous liquid waste in accordance with local sewerred agency permit requirements, or else it will be transported as a hazardous

liquid waste under proper manifest to an appropriate TSD facility for treatment and disposal.

Water Level Measurement.

The shallow groundwater elevation in MW-1 was measured as 33.32 feet below ground surface on December 4, 1992.

Laboratory Results.

Table 1 presents the results of the laboratory analysis for TPH and BTEX of the groundwater sample collected from monitoring well MW-1. As shown in this table, no detectable concentrations of either Gasoline or Benzene were found in the shallow groundwater sample.

For this round of shallow groundwater sampling, total petroleum hydrocarbons as Diesel were found at a concentration of 180 $\mu\text{g/L}$ (ppb).

For this round of shallow groundwater sampling, total petroleum hydrocarbons at the Kerosene boiling point were found at a concentration of 120 $\mu\text{g/L}$ (ppb).

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) | Ethylbenzene (ug/L) | Total Xylenes (ug/L) | Motor Oil (mg/L) |
|------------------------|----------|------------------------|------------------------|----------------------|----------------|----------------|---------------------|----------------------|------------------|
| MW-1 | 11-13-91 | ND | --- | 840 | ND | ND | ND | ND | --- |
| | 02-26-91 | ND | --- | ND | ND | ND | ND | ND | --- |
| | 05-16-91 | ND | --- | ND | ND | ND | ND | ND | --- |
| | 08-19-91 | 260 | --- | 220 | 0.6 | ND | 0.7 | 3.1 | --- |
| | 12-20-91 | 500 | --- | 480 | ND | ND | ND | 1.7 | --- |
| | 02-12-92 | 440 | 2,200 | ND | 0.6 | 0.6 | 0.6 | 2.9 | --- |
| | 05-13-92 | ND | 280 | ND | ND | ND | 0.6 | 3.6 | ND |
| | 08-10-92 | ND | 520 | 650 | ND | ND | ND | ND | --- |
| | 12-04-92 | ND | 120 | 180 | ND | ND | ND | ND | ND |
| Detection Limit | | 50 | 50 | 50 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |

ND = Not Detected

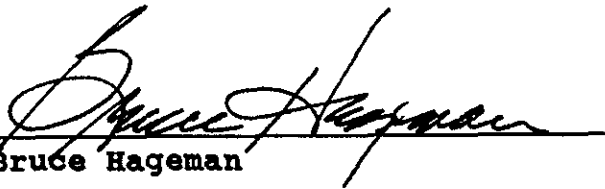
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Gary Aguiar

RCE 34262


Bruce Hageman

ATTACHMENT A

WELL SAMPLING LOGS

WELL SAMPLING LOG

Project/No. O'LAUGHLIN
Site Location SUNOL, CA
Well No. MW 1
Weather CLEAR / 65°F

Page 1 of 1
Date 12-4-92
Time Began 1238
Completed 1320

EVACUATION DATA

Description of Measuring Point (MP) WELL BOX AT GRADE
Total Sounded Depth of Well Below MP 64.00
- Depth to Water Below MP 33.32 Diameter of Casing 2"
= Water Column in Well 30.68
Gallons in Casing 4.9 + Annular Space (x4) = Total Gallons 19.6
(30% porosity)
Gallons Pumped Prior to Sampling 20
Evacuation Method TEFLON BAILER

SAMPLING DATA / FIELD PARAMETERS

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

| | <u>1238</u> | <u>1252</u> | <u>1302</u> | <u>1314</u> |
|--------------|----------------|-------------------|--------------------|--------------------|
| Time | | | | |
| Gals Removed | <u>0</u> | <u>7</u> | <u>14</u> | <u>20</u> |
| Temperature | <u>16.1</u> | <u>16.2</u> | <u>15.7</u> | <u>15.9</u> |
| Conductivity | <u>750</u> | <u>850</u> | <u>850</u> | <u>900</u> |
| pH | <u>7.5</u> | <u>7.3</u> | <u>7.4</u> | <u>7.4</u> |
| Color / Odor | <u>CLR/ORG</u> | <u>LT. GRN/NO</u> | <u>LT. GRN/ORG</u> | <u>LT. GRN/ORG</u> |
| Turbidity | <u>LOW</u> | <u>MED</u> | <u>MED</u> | <u>HIGH</u> |

Comments: NONE

ATTACHMENT B

ANALYTICAL RESULTS: GROUNDWATER



PRIORITY ENVIRONMENTAL LABS

Precision Environmental Analytical Laboratory

December 07, 1992

PEL # 9212013

HAGEMAN - AGUIAR, INC.

Attn: Jeffrey Roth

Re: One water sample for Gasoline/BTEX and TEPH analyses.

Project name: O'Laughlin

Project location: Sunol, CA.

Date sampled: Dec 04, 1992


Date submitted: Dec 04, 1992

Date extracted: Dec 04-05, 1992

Date analyzed: Dec 04-05, 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) | Motor Oil (mg/L) |
|--------------------|-----------------|-----------------|---------------|----------------|----------------|----------------------|----------------------|------------------|
| MW 1 | 120 | N.D. | 180 | 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. |
| Spiked Recovery | 83.2% | 102.3% | 86.4% | 100.7% | 98.4% | 97.9% | 103.2% | ---- |
| Detection limit | 50 | 50 | 50 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Method of Analysis | 3510 / 8015 | 5030 / 8015 | 3510 / 8015 | 602 | 602 | 602 | 602 | 3510 / 8015 |


 David Duong
 Laboratory Director

