

# HAGEMAN-AGUIAR, INC.

*Underground Contamination Investigations  
Groundwater Consultants, Environmental Engineering*

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**SEPTEMBER 26, 1991**

## **QUARTERLY GROUNDWATER SAMPLING REPORT**

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

On August 19, 1991, 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 August 19, 1991, 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 3 to 5 casing volumes of water. Field conductivity,

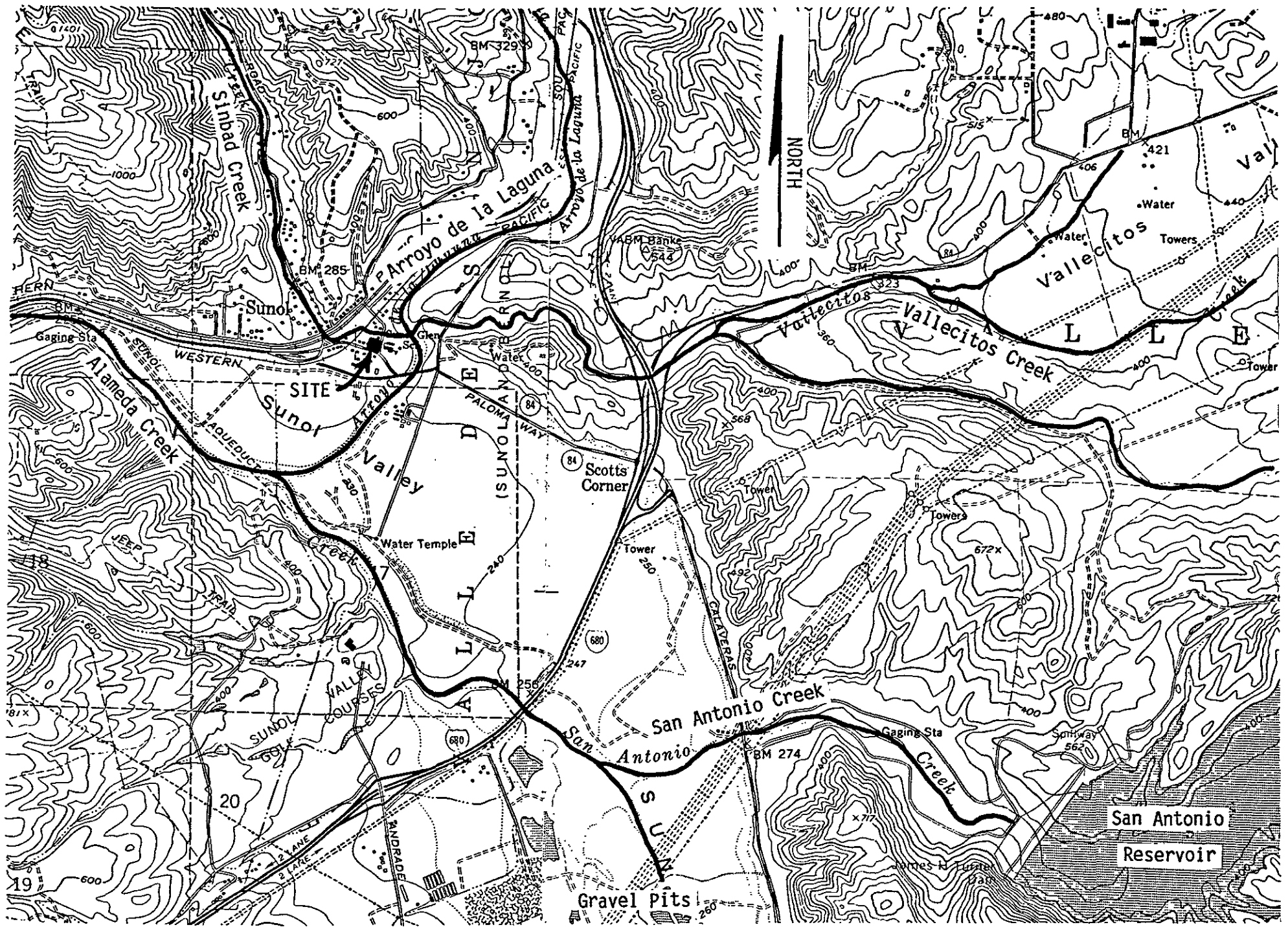


FIGURE 1. Site Vicinity Map

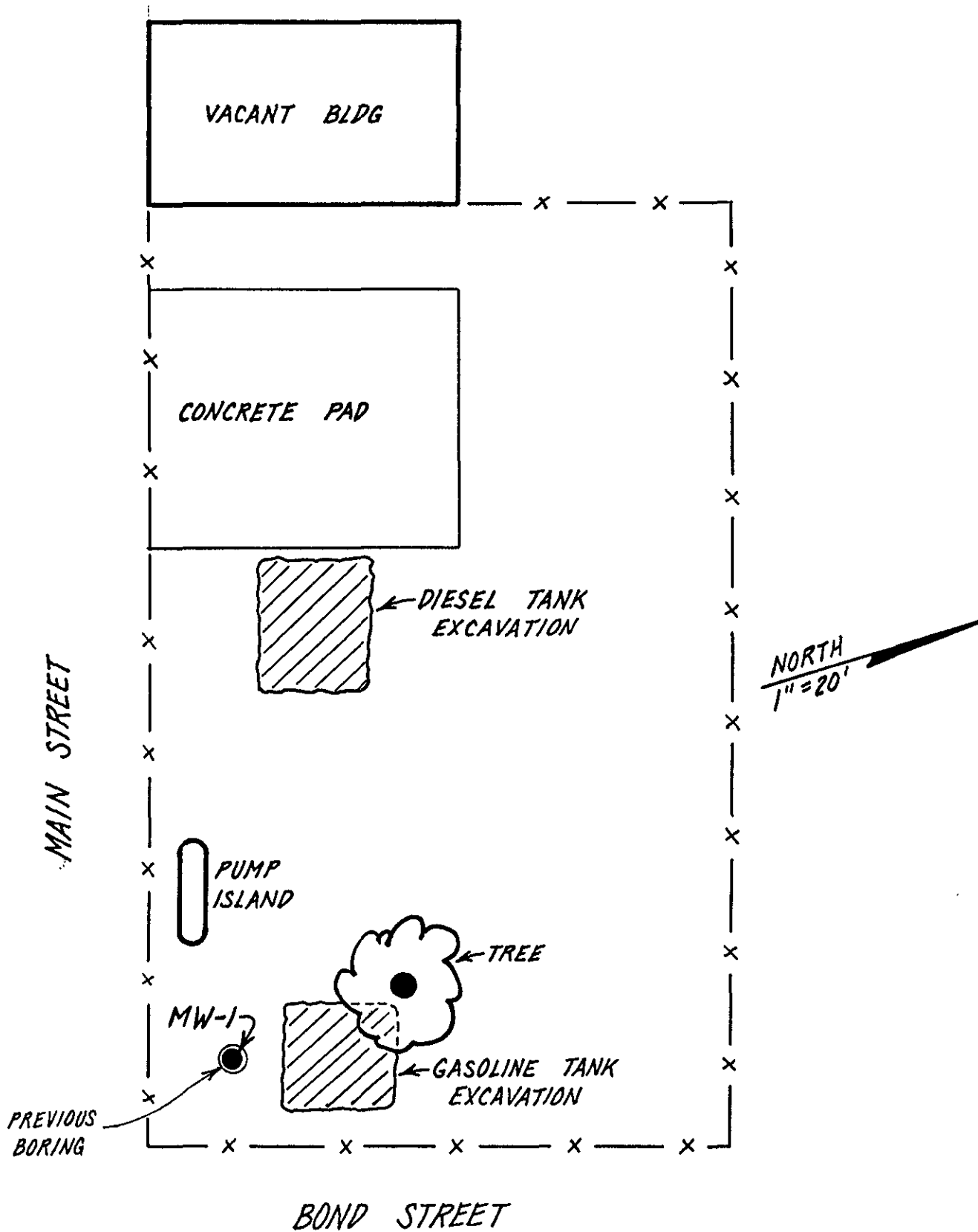


FIGURE 2.  
Location of Shallow Groundwater  
Monitoring Well MW-1.

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 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.

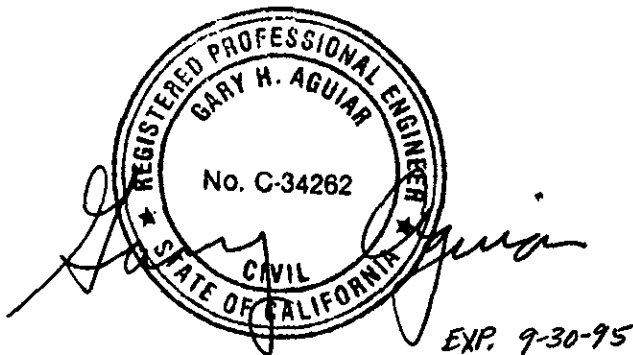
All analyses were conducted by a California State DOHS certified laboratory in accordance with EPA recommended procedures. The groundwater sample was analyzed for total petroleum hydrocarbons as Diesel, total petroleum hydrocarbons as Gasoline, and Benzene, Toluene, Ethylbenzene, and Total Xylenes.

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 sewered as a non-hazardous liquid waste in accordance with local sewerage 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.

**Laboratory Results.**

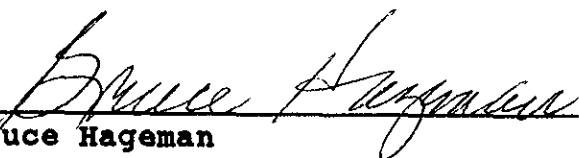
Table 1 presents the results of the laboratory analysis for TPH and BTEX of the groundwater sample collected from monitoring well MW-1. As shown in this table, the shallow groundwater sample showed 480 ug/L (ppb) of dissolved Diesel. For the first time since shallow groundwater monitoring began at the site, Gasoline, Benzene, Ethylbenzene, and Total Xylenes were detected in the groundwater sample at concentrations of 260 ug/L (ppb), 0.6 ug/L (ppb), 0.7 ug/L (ppb) and 3.1 ug/L (ppb), respectively.

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



Gary Aguiar

RCE 34262

  
Bruce Hageman

**TABLE 1.**

**Shallow Groundwater Sampling Results**

<b>Well</b>	<b>Date</b>	<b>TPH as Diesel (ug/L)</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>	11-13-91	840	ND	ND	ND	ND	ND
	02-26-91	ND	ND	ND	ND	ND	ND
	05-16-91	220	ND	ND	ND	ND	ND
	08-19-91	480	260	0.6	ND	0.7	3.1
<b>Detection Limit</b>		50	0.5	0.5	0.5	0.5	0.5

**ATTACHMENT A**

**WELL SAMPLING LOGS**

# WELL SAMPLING LOG

Project/No. O'LAUGHLIN Page 1 of 1  
Site Location SUNOL, CA Date 8-19-91  
Well No. MW-1  
Weather CLOUDY, 65° F Time Sampling Began 11:20  
Completed 12:30

## EVACUATION DATA

Description of Measuring Point (MP) WELL BOX (AT GRADE)  
Total Sounded Depth of Well Below MP 64.20  
Depth to Water Below MP 32.75 Diameter of Casing 2"  
Water Column in Well 31.45  
Gallons in Well 5.15 Gallons Pumped/Bailed Prior to Sampling 18  
Evacuation Method TEFLON BAILER

## SAMPLING DATA / FIELD PARAMETERS

Color CLEAR Odor NONE  
Appearance NO SHEEN Temperature 18.5 °F 10 °C  
Specific Conductance (umhos/cm) 875 pH 7.07  
Sampling Method and Material TEFLON BAILER

FIELD ANALYSES:	Start	Mid	End
Time	<u>11:38</u>	<u>12:00</u>	<u>12:20</u>
Temperature	<u>18.0</u>	<u>18.5</u>	<u>18.5</u>
Conductivity	<u>900</u>	<u>875</u>	<u>875</u>
pH	<u>7.08</u>	<u>7.08</u>	<u>7.07</u>

Sampling Personnel Keith Jay



**ATTACHMENT B**

**ANALYTICAL RESULTS: GROUNDWATER**

# CHROMALAB, INC.

5 DAYS TURNAROUND

Analytical Laboratory (E694)

August 30, 1991

ChromaLab File No.: 0891168

HAGEMAN-AGUIAR, INC.

Attn: Keith Jay

RE: One water sample for Gasoline/BTEX and Diesel analyses

Project Name: Jim O'Laughlin

Project Location: Sunol, CA

Date Sampled: August 19, 1991

Date Submitted: August 19, 1991

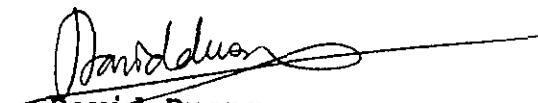
Date Extracted: August 29, 1991

Date Analyzed: August 29, 1991

## RESULTS:

Sample I.D.	Gasoline ( $\mu\text{g}/\text{l}$ )	Diesel ( $\mu\text{g}/\text{l}$ )	Benzene ( $\mu\text{g}/\text{l}$ )	Toluene ( $\mu\text{g}/\text{l}$ )	Ethyl Benzene ( $\mu\text{g}/\text{l}$ )	Total Xylenes ( $\mu\text{g}/\text{l}$ )
MW-1	260	480	0.6.	N.D.	0.7	3.1
BLANK	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
SPIKE REC.	83.0%	92.7%	87.4%	86.65	87.9%	87.7%
DET. LIMIT	50	50	0.5	0.5	0.5	0.5
METHOD OF ANALYSIS	5030/ 8015	3510/ 8015	602	602	602	602

ChromaLab, Inc.

  
David Duong  
Chief Chemist

  
Eric Tam  
Laboratory Director

# CHAIN OF CUSTODY RECORD

PROJECT NAME AND ADDRESS: <i>TIM CLAUHILLIN</i> <del>XXXX</del> <i>SUNOL, CA</i>					SAMPLER: (Signature) <i>Keith Jay</i>		ANALYSIS REQUESTED <i>TDH-DIESEL</i> <i>TDH-GAS</i> <i>BTEX</i>					
HAGEMAN - AGUIAR, INC. 3732 Mt. Diablo Blvd., Suite 372 Lafayette, CA 94549 (415)284-1661 (415)284-1664 (FAX)												
CROSS REFERENCE NUMBER	DATE	TIME	SOIL	WATER	STATION LOCATION	REMARKS						
MW-1	8-19-91	12:30		X	MONITOR WELL-1	X	X	X			10 DAY	
RELINQUISHED BY: (Signature) <i>Keith Jay</i>					DATE 8-19-91	TIME 15:40	RECEIVED BY: (Signature) <i>T. Donovan</i>					DATE 8-19-91
RELINQUISHED BY: (Signature)					DATE	TIME	RECEIVED BY: (Signature)					DATE
RELINQUISHED BY: (Signature)					DATE	TIME	RECEIVED BY: (Signature)					DATE
RELINQUISHED BY: (Signature)					DATE	TIME	RECEIVED FOR LABORATORY BY: (Signature)					DATE