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Alameda County  
APR 02 2003  
Environmental Health

**FOURTH QUARTER 2002  
GROUNDWATER MONITORING REPORT**

**575 PASEO GRANDE  
SAN LORENZO, CALIFORNIA**

3/21/03

**SECOR Project No. 05OT.50063.00**

**Prepared For:**

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**Prepared by:**

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March 21, 2003

DAVID D. BOHANNON  
ORGANIZATION

Alameda County  
APR 02 2003  
Environmental Health

March 27, 2003

Ms. Eva Chew  
Alameda County Health Care Services Agency  
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Alameda, California 94502-6577

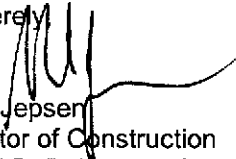
RE: Fourth Quarter 2002 Groundwater Monitoring Report  
575 Paseo Grande  
San Lorenzo, California

Dear Ms. Chew:

Enclosed for your review is the *Fourth Quarter 2002 Groundwater Monitoring Report* prepared by SECOR International Incorporated (SECOR). The report summarizes recent routine groundwater monitoring and sampling conducted by SECOR at 575 Paseo Grande in San Lorenzo, California.

We appreciate your timely review of this document. If you have any questions, please contact me at (650) 358-3256.

Sincerely,



Mike Jepsen  
Director of Construction  
David D. Bohannon Organization

Enclosure

Fourth Quarter 2002 Groundwater Monitoring Report

David D. Bohannon Organization  
575 Paseo Grande  
San Lorenzo, CA  
SECOR Project No. 05OT.50063.00

The material and data in this report were prepared under the supervision and direction of the undersigned. This report was prepared consistent with current and generally accepted geologic and environmental consulting principles and practices that are within the limitations provided herein.

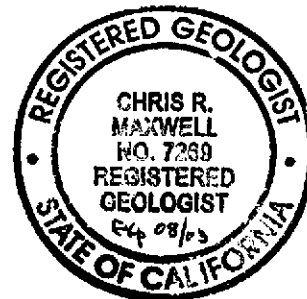
SECOR International Incorporated



Neil Doran  
Project Geologist



Chris R. Maxwell, R.G., No. 7269  
Principal Project Geologist



## LIMITATIONS

The conclusions and recommendations contained in this report/assessment are based upon professional opinions with regard to the subject matter. These opinions have been arrived at in accordance with currently accepted hydrogeologic and engineering standards and practices applicable to this location and are subject to the following inherent limitations:

1. The data and findings presented in this report are valid as of the dates when the investigations were performed. The passage of time, manifestation of latent conditions or occurrence of future events may require further exploration at the Site, analysis of the data, and reevaluation of the findings, observations, and conclusions expressed in the report.
2. The data reported and the findings, observations, and conclusions expressed in the report are limited by the Scope of Work. The Scope of Work was defined by the request of the client, the time and budgetary constraints imposed by the client, and availability of access to the Site.
3. Because of the limitations stated above, the findings, observations, and conclusions expressed by SECOR in this report are not, and should not be, considered an opinion concerning the compliance of any past or present owner or operator of the Site with any federal, state or local law or regulation.
4. No warranty or guarantee, whether expressed or implied, is made with respect to the data or the reported findings, observations, and conclusions, which are based solely upon Site conditions in existence at the time of investigation.
5. SECOR reports present professional opinions and findings of a scientific and technical nature. While attempts were made to relate the data and findings to applicable environmental laws and regulations, the report shall not be construed to offer legal opinion or representations as to the requirements of, nor compliance with, environmental laws, rules, regulations or policies of federal, state or local governmental agencies. Any use of the report constitutes acceptance of the limits of SECOR's liability. SECOR's liability extends only to its client and not to any other parties who may obtain the report. Issues raised by the report should be reviewed by appropriate legal counsel.

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## 1.0 INTRODUCTION

This report presents the results of groundwater monitoring, sampling, and analysis conducted on December 2, 2002, for the property located at 575 Paseo Grande, San Lorenzo, California (Site). This sampling event was conducted to continue the assessment of groundwater conditions beneath the Site. The previous groundwater monitoring and sampling event was conducted in August 2002.

The scope of work included measuring the depth-to-water in groundwater monitoring wells MW-1 through MW-7, and collecting groundwater samples for analysis of total petroleum hydrocarbons as gasoline (TPHg) and benzene, toluene, ethylbenzene, and total xylenes (BTEX).

### 1.1 BACKGROUND

Over the last 25 years, the Site has been used as an asphalt-paved parking area located in a C1 commercial zone. The Site was a gasoline station prior to 1969. Little information is known about the Site history related to its use as a gasoline service station. In anticipation of property redevelopment, initial investigation activities were conducted in March 1995 to determine if out-of-service gasoline service station underground equipment remained on-site. The work was conducted by Twining Laboratories, Inc. (TLI), as documented in their letter report dated April 15, 1995. The investigation included a magnetometer survey followed by an exploratory excavation. In summary, the work conducted identified underground gasoline service station equipment which included what appeared to be the former tank pit, approximately 110 feet of fuel delivery system piping, and a grease sump and/or hydraulic lift pit in an area which may have been the former service garage. Field evidence and one soil sample indicated the potential for soil contamination along the piping runs, around the grease sump, and around the inferred location of the former tank pit. Characterization of the magnitude and extent of potential soil contamination were not performed during initial investigation activities.

In June 1995, SECOR conducted additional activities at the Site which included removal of the former underground storage tank (UST) system piping and the former grease sump, and characterization soil sampling along pipelines and around the former grease sump and former tank pit areas. This work was summarized in SECOR's letter report dated June 29, 1995. The characterization data from this investigation indicated that there were two areas of concern at the Site: 1) the former grease sump area and 2) the former gasoline distribution system area. SECOR subsequently conducted excavation activities in these two areas. The soil excavated from the former sump area was transported off-site for disposal. The soil generated from the UST excavation was treated by means of aeration and later transported off-site for disposal. Three groundwater monitoring wells (MW-1, MW-2, and MW-3) were installed during the investigation activities to evaluate the degree to which the groundwater had been affected. The results of the soil characterization and groundwater monitoring activities are reported in SECOR's *Report of Interim Remedial Actions* dated June 4, 1996, and *Fourth Quarter 1996 Monitoring and Sampling Report* dated November 26, 1996. Monitoring well locations are illustrated on Figure 2.

In June 1999, a utility trench survey was conducted around the Site, and a passive soil vapor survey was performed downgradient from the Site. The results of the utility trench and passive soil vapor surveys are

documented in SECOR's *Third Quarter 1999 Groundwater Monitoring Results and Plume Definition Report* dated October 21, 1999.

On December 5, 2000, four additional groundwater monitoring wells (MW-4 through MW-7) were installed at the Site by SECOR. Soil and groundwater sampling was conducted to evaluate possible off-site migration of petroleum-related constituents originating from the Site, and to collect data to direct further subsurface investigations and/or remediation at the Site, if necessary. The work was conducted in general accordance with the *Work Plan for Additional Groundwater Monitoring Well Installation* dated October 22, 1999, and the *Addendum to the Work Plan for Additional Groundwater Monitoring Well Installation* dated December 2, 1999. The Work Plan was approved with comments in correspondence from the Alameda County Health Care Services Agency (ACHCSA) in a letter dated November 4, 1999.

Historically, two of the on-site wells (MW-2 and MW-3) and one well immediately downgradient to the west (MW-4) contain elevated concentrations of petroleum hydrocarbons. Wells further off-site to the west (MW-6 and MW-7) and south (MW-5) typically do not contain detectable levels of petroleum hydrocarbons, with the exception of well MW-7, which reported low concentrations of total xylenes (up to 6.7 milligrams per kilogram [mg/kg]) in the first two sampling events (December 2000 and February 2001). The well has since been nondetect for all constituents.



## 2.0 GROUNDWATER MONITORING

Groundwater monitoring wells MW-1 through MW-7 were gauged for depth-to-water and sampled on December 2, 2002.

### 2.1 WATER LEVEL GAUGING

Prior to purging and sampling, the depth-to-groundwater was measured from the top of each well casing using a water-level indicator graduated to 0.01 foot. Depth-to-groundwater measurements and surveyed wellhead top-of-casing elevations were used to calculate groundwater surface elevations for each well. Table 1 presents historical groundwater elevation data for the Site.

### 2.2 PURGING AND SAMPLING

Each of the seven wells were purged using a low-flow purging method consisting of dedicated tubing attached to a variable speed peristaltic pump set to extract groundwater at a rate of 0.1 gallons per minute. Temperature, conductivity, pH, dissolved oxygen content, and oxidation-reduction potential were monitored during purging to confirm static water conditions prior to sampling. Copies of the field data sheets are attached as Appendix A.

Samples were collected from each well using the dedicated tubing to eliminate the possibility of cross-contamination between wells. Samples were placed in laboratory supplied sample containers, capped, labeled, and stored on ice pending delivery to STL San Francisco, a California state-certified laboratory. The groundwater samples were analyzed for TPHg by U.S. Environmental Protection Agency (EPA) Method 8015 (modified); and for BTEX by EPA Method 8021B.

### 3.0 RESULTS

#### 3.1 DECEMBER 2002 GROUNDWATER ELEVATION RESULTS

The average depth-to-water measurement taken at the Site on December 2, 2002, was 6.54 feet below the top of the well casing, with an average water-table elevation of 19.49 feet above mean sea level. Groundwater elevations increased an average of 0.24 feet since the previous monitoring event in August 2002.

A potentiometric surface map illustrating the interpreted groundwater surface elevation and flow direction on December 2, 2002, is presented as Figure 3. The hydraulic gradient across the Site was approximately 0.0019 feet per foot toward the southwest. These results are generally consistent with flow direction results obtained during the prior monitoring events. As noted in previous reports, the flow direction beneath the Site is potentially tidally influenced by San Francisco Bay to the west.

#### 3.2 DECEMBER 2002 GROUNDWATER ANALYTICAL RESULTS

Table 2 presents historical groundwater laboratory analytical results for the Site, including the December 2002 sampling event. Petroleum hydrocarbon chemical data for the December 2002 event are illustrated on Figure 4.

TPHg and BTEX concentrations continue to be below laboratory method reporting limits in on-site well MW-1 and off-site wells MW-5, MW-6, and MW-7. Samples from wells MW-2, MW-3, and MW-4 continue to report detectable concentrations of petroleum hydrocarbons.

Copies of the laboratory analytical reports for groundwater samples are attached as Appendix B. The following provides a brief discussion of the analytical results:

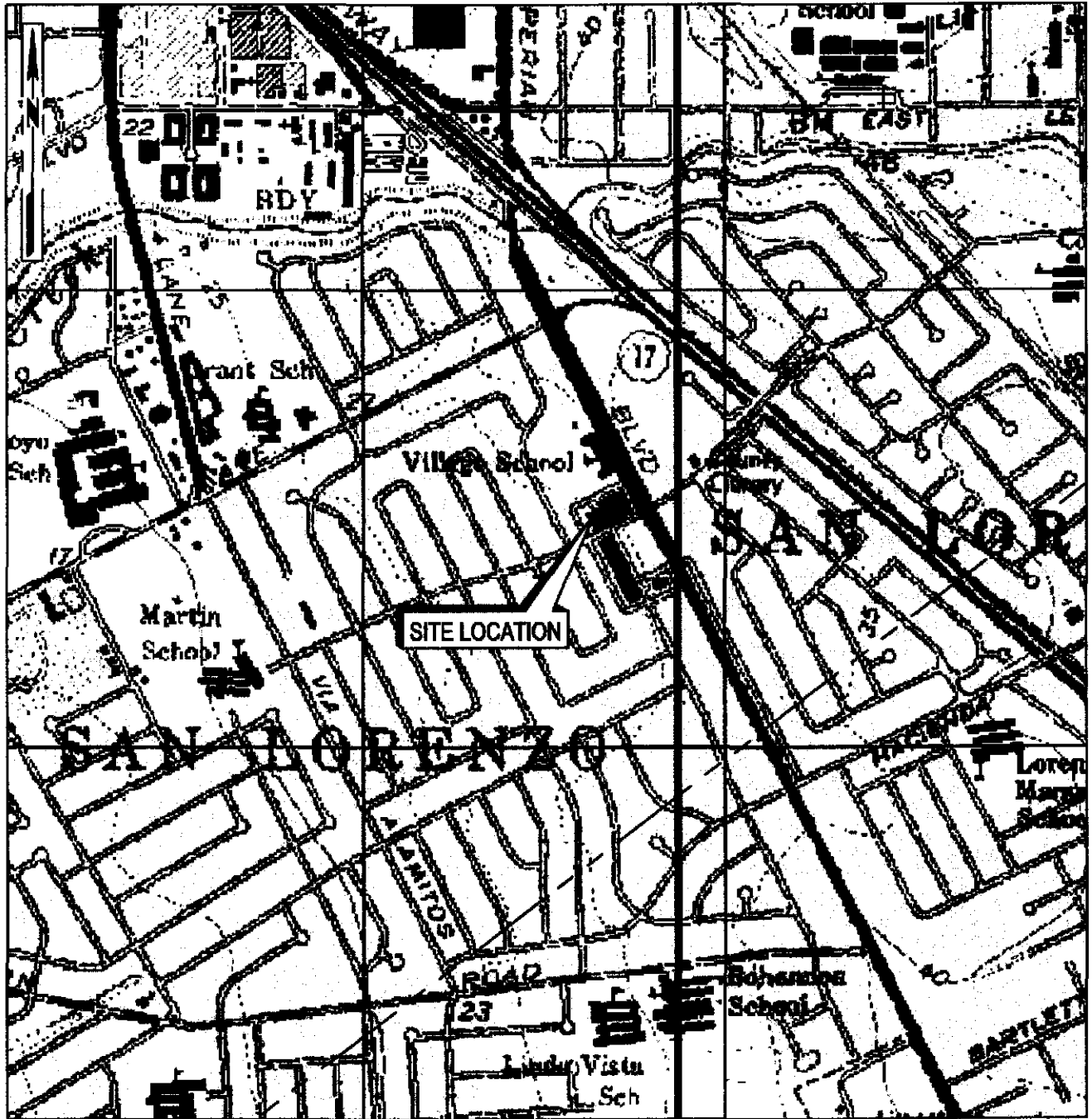
##### 3.2.1 BTEX

BTEX constituents were reported in samples collected from wells MW-2, MW-3, and MW-4. Historical concentrations of benzene in these three wells are shown on Figure 5 (MW-2 and MW-4) and Figure 6 (MW-3). During the December 2002 event, benzene concentrations ranged from 76 micrograms per liter ( $\mu\text{g/L}$ ) in MW-2 to 650  $\mu\text{g/L}$  in MW-3. Reported BTEX concentrations for the December 2002 event are generally consistent with historical results.

##### 3.2.2 TPHg

TPHg was reported in samples collected from wells MW-2, MW-3, and MW-4. Historical concentrations of TPHg in these three wells are shown on Figure 7 (MW-2 and MW-4) and Figure 8 (MW-3). During the December 2002 event, TPHg concentrations ranged from 1,100  $\mu\text{g/L}$  in MW-2 to 5,700  $\mu\text{g/L}$  in MW-3. Reported TPHg concentrations are generally consistent with historical results.

20021011.15472218 E:\BOH\2002 work plan\BOH-SITE LOCATION MAP-FIGURE 1-2002 work plan.dwg



**REFERENCE:**

DeLORME 3-D TOPOQUADS



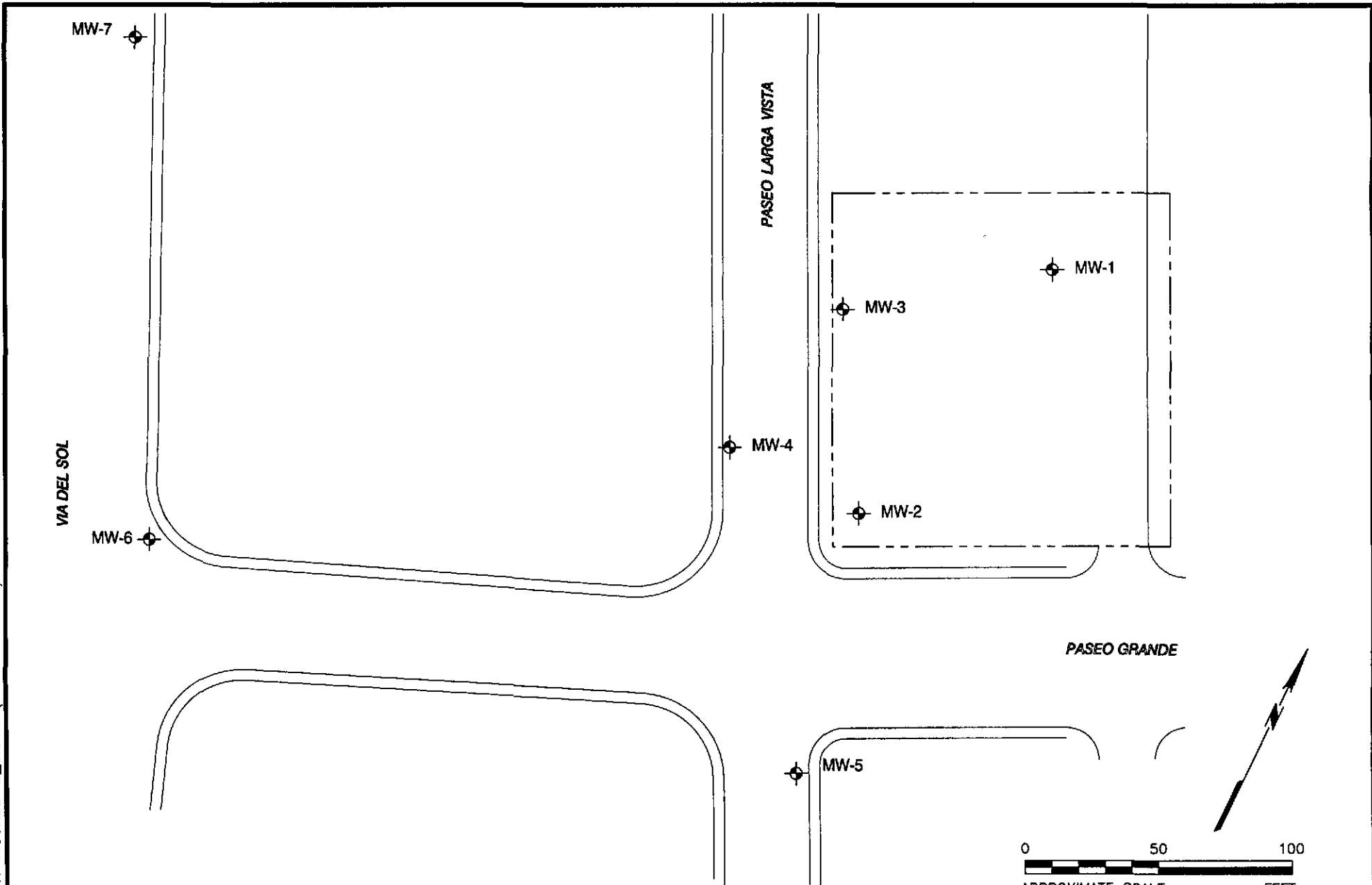
**SECOR**  
*International Incorporated*

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DATE	11 MAY 2002
JOB NO.	05OT.50026.00.0005

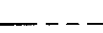
**FIGURE 1**  
**BOHANNON DEVELOPMENT COMPANY**  
 875 PASO GRANDE  
 SAN LORENZO, CALIFORNIA

**SITE LOCATION MAP**

G:\CONCORD\BOH\FIGURES-2\_6.DWG (TAB=FIGURE-2) RRR 3 OCT 01



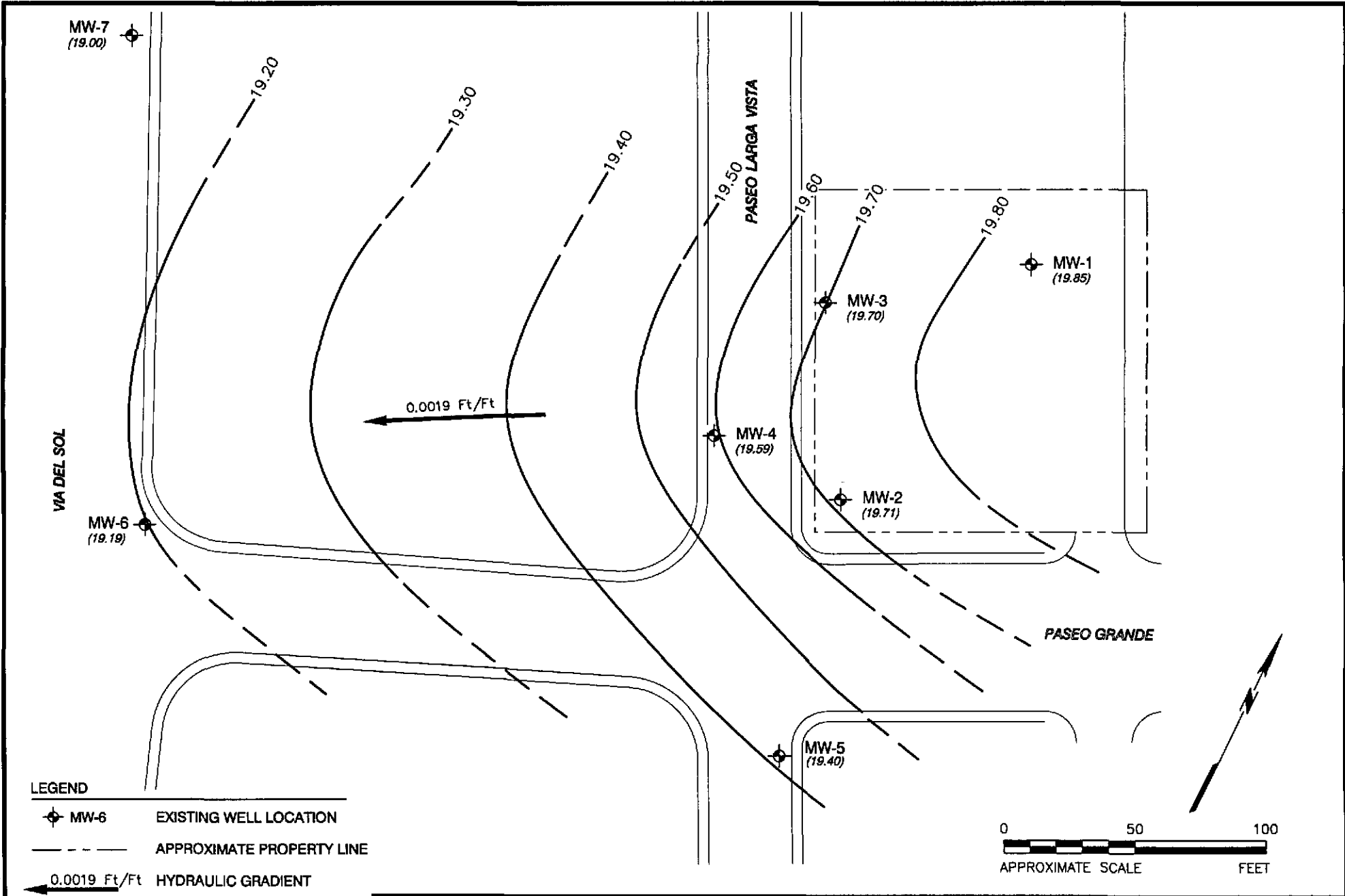
**LEGEND**

-  MW-6 EXISTING WELL LOCATION
-  APPROXIMATE PROPERTY LINE

<p><b>SECOR</b> <i>International Incorporated</i></p>	DRAWN	RRR
	APPR	ND
	DATE	11 MAY 2002
	JOB NO.	050T.50026.00.0005

**FIGURE 2**  
 BOHANNON DEVELOPMENT COMPANY  
 575 PASEO GRANDE  
 SAN LORENZO, CALIFORNIA  
**SITE PLAN**

20030226.05545305 E:\BOH\CONCORD\BOH\BOH-FIGURES-2\_6-DECEMBER\_2002.dwg

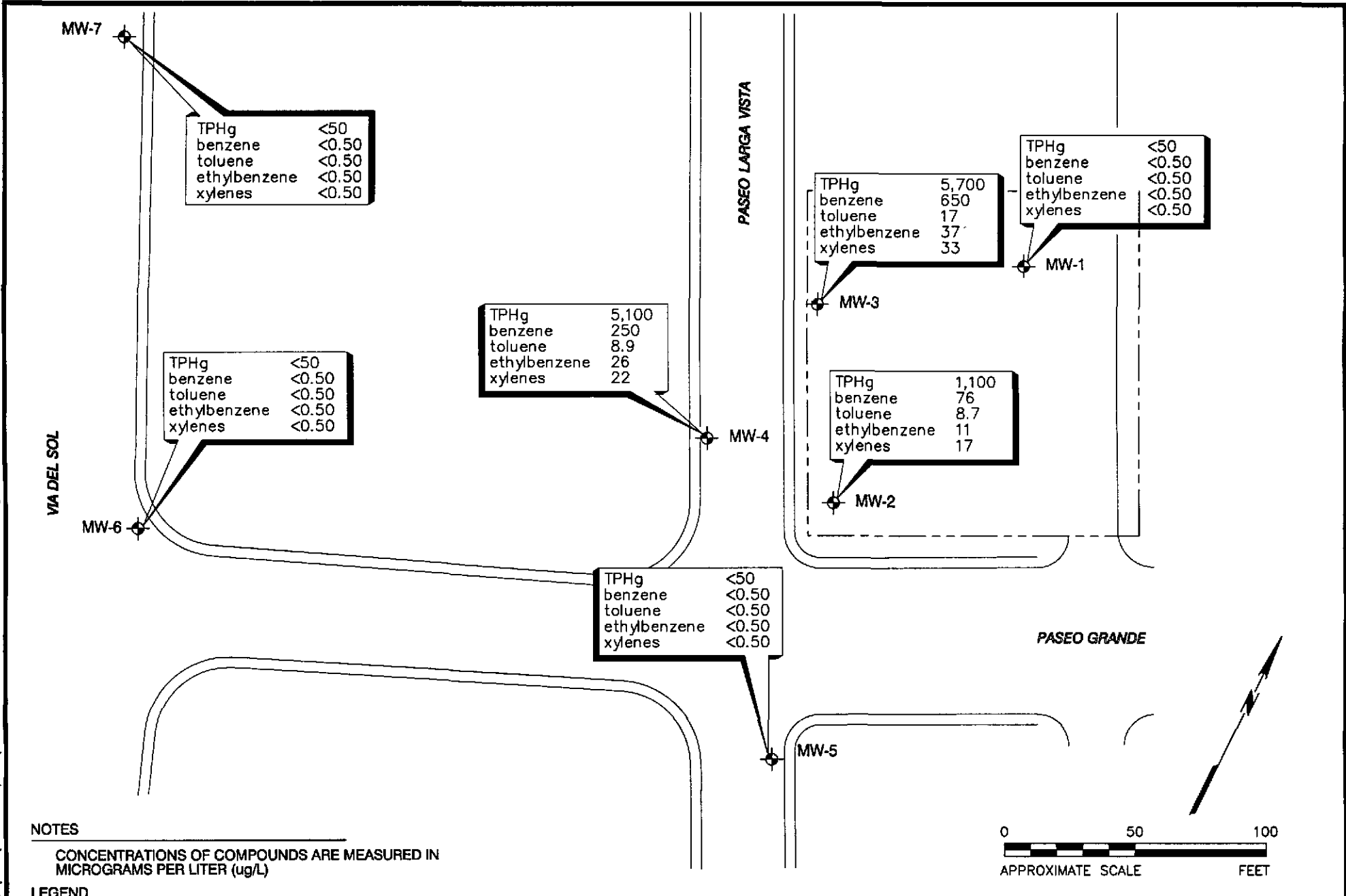


**LEGEND**

- MW-6 EXISTING WELL LOCATION
- APPROXIMATE PROPERTY LINE
- 0.0019 Ft/Ft HYDRAULIC GRADIENT
- 19.20 GROUNDWATER SURFACE ELEVATION CONTOUR (DASHED WHERE INFERRED)
- (19.19) GROUNDWATER ELEVATION (FEET ABOVE MSL)

<h1>SECOR</h1> <p><i>International Incorporated</i></p>	DRAWN	RRR
	APPR	ND
	DATE	17 DEC 2002
	JOB NO.	050T.50063.00.0003

**FIGURE 3**  
 BOHANNON DEVELOPMENT COMPANY  
 575 PASEO GRANDE  
 SAN LORENZO, CALIFORNIA  
**POTENTIOMETRIC SURFACE MAP**  
 DECEMBER 2, 2002



**NOTES**

CONCENTRATIONS OF COMPOUNDS ARE MEASURED IN MICROGRAMS PER LITER (µg/L)

**LEGEND**

- MW-6 EXISTING WELL LOCATION
- APPROXIMATE PROPERTY LINE
- TPHg TOTAL PETROLEUM HYDROCARBONS AS GASOLINE

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International  
Incorporated

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APPR	ND
DATE	17 DEC 2002
JOB NO.	050T.50063.00.0003

FIGURE 4

BOHANNON DEVELOPMENT COMPANY  
575 PASEO GRANDE  
SAN LORENZO, CALIFORNIA

CHEMICAL CONCENTRATIONS IN GROUNDWATER  
DECEMBER 2, 2002

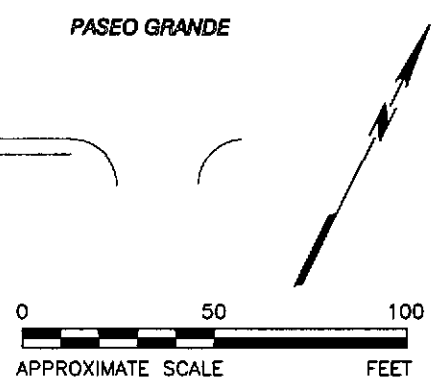


Figure 5 - Historical Concentrations of Benzene at MW-2 and MW-4

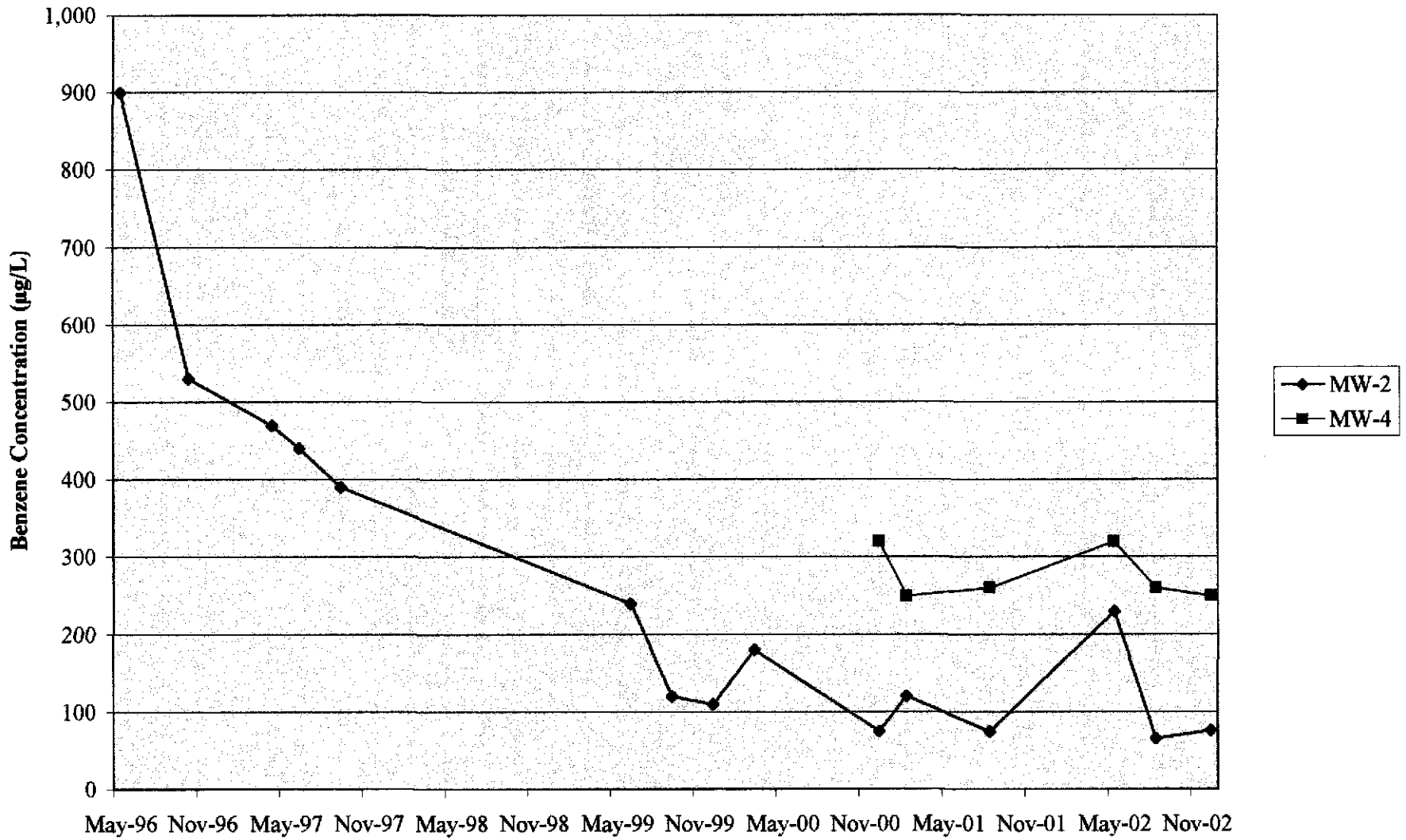


Figure 6 - Historical Concentrations of Benzene at MW-3

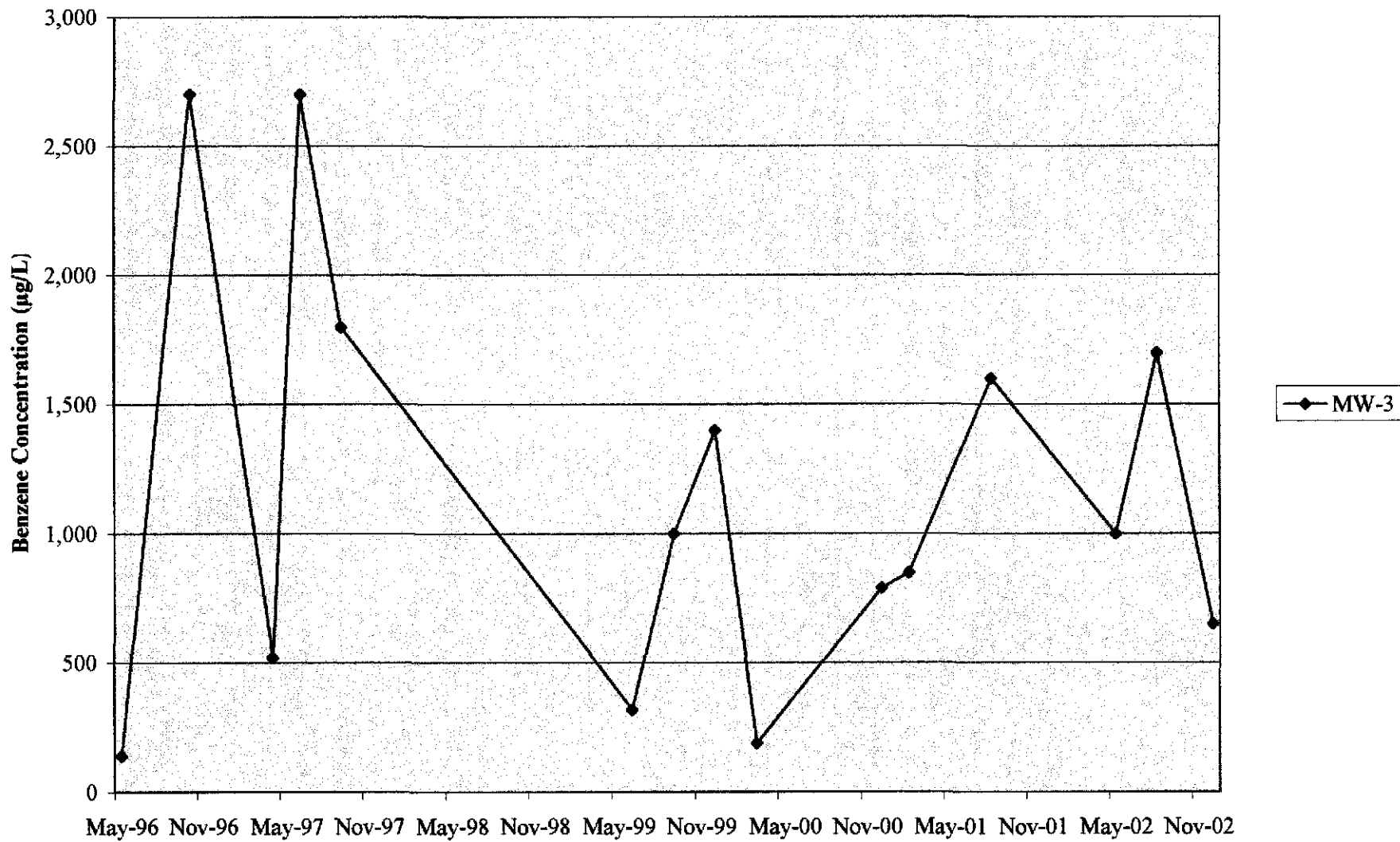




Figure 7 - Historical Concentrations of TPHg at MW-2 and MW-4

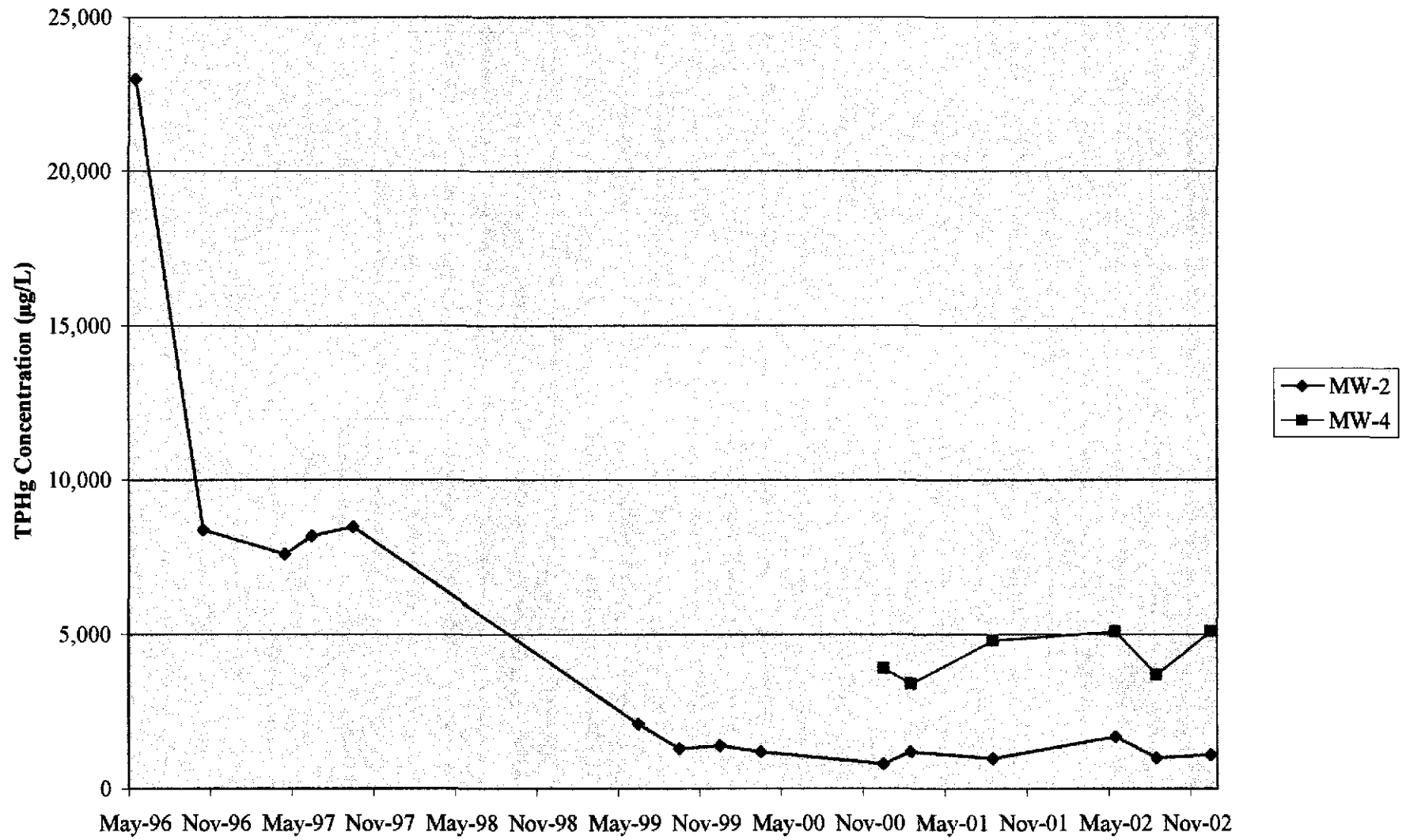
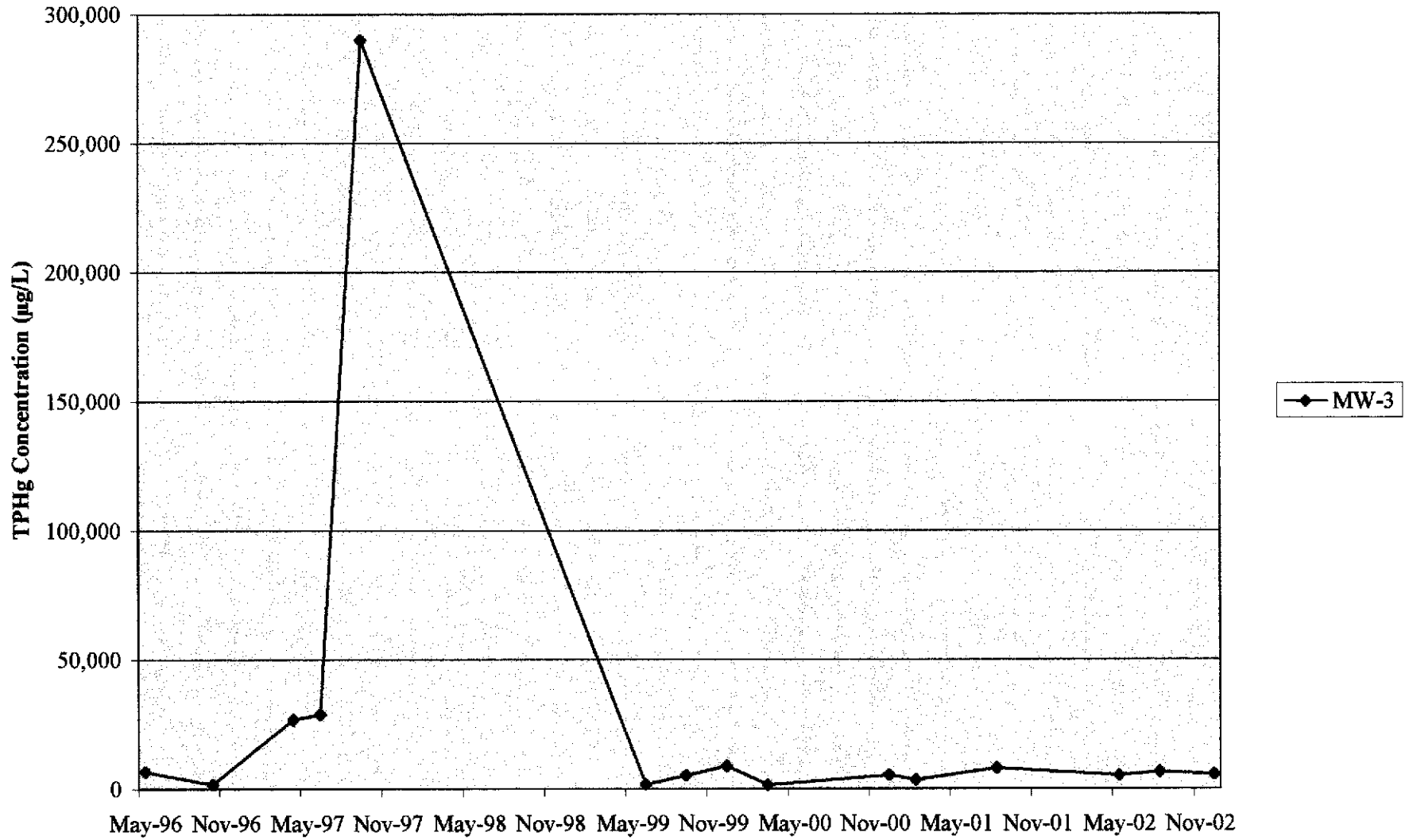


Figure 8 - Historical Concentrations of TPHg at MW-3



**Table 1**  
**Historical Groundwater Elevation Data**  
**575 Paseo Grande**  
**San Lorenzo, California**

Date	TOC (ft msl)	DTW (ft bTOC)	ELEV (ft msl)	
<b>MW-1</b>				
17-May-96	27.11	5.65	21.46	
8-Oct-96		7.47	19.64	
1-Apr-97		6.27	20.84	
12-Jun-97		6.90	20.21	
10-Sep-97		7.48	19.63	
8-Jun-99		6.44	20.67	
13-Sep-99		7.56	19.55	
21-Dec-99		7.41	19.70	
17-Mar-00		26.98	5.35	21.76
5-Dec-00			6.99	19.99
28-Feb-01	5.71		21.27	
22-Aug-01	7.39		19.59	
22-May-02	6.25		20.73	
29-Aug-02	7.23		19.75	
2-Dec-02	7.13		19.85	
<b>MW-2</b>				
17-May-96	26.73	5.56	21.17	
8-Oct-96		7.15	19.58	
1-Apr-97		6.61	20.12	
12-Jun-97		6.76	19.97	
10-Sep-97		7.19	19.54	
8-Jun-99		6.45	20.28	
13-Sep-99		7.46	19.27	
21-Dec-99		7.26	19.47	
17-Mar-00		26.73	5.56	21.17
5-Dec-00			7.01	19.72
28-Feb-01	5.81		20.92	
22-Aug-01	7.42		19.31	
22-May-02	6.40		20.33	
29-Aug-02	7.26		19.47	
2-Dec-02	7.02		19.71	
<b>MW-3</b>				
17-May-96	26.15	4.39	21.76	
8-Oct-96		6.82	19.33	
1-Apr-97		5.53	20.62	
12-Jun-97		6.18	19.97	
10-Sep-97		6.81	19.34	
8-Jun-99		5.74	20.41	
13-Sep-99		6.88	19.27	
21-Dec-99		6.66	19.49	
17-Mar-00		26.55	4.51	21.64
5-Dec-00			6.84	19.71
28-Feb-01	5.44		21.11	
22-Aug-01	7.29		19.26	
22-May-02	6.22		20.33	
29-Aug-02	7.26		19.29	
2-Dec-02	6.85		19.70	

**Table 1**  
**Historical Groundwater Elevation Data**  
**575 Paseo Grande**  
**San Lorenzo, California**

Date	TOC (ft msl)	DTW (ft bTOC)	ELEV (ft msl)
<b>MW-4</b>			
5-Dec-00	25.87	6.28	19.59
28-Feb-01		4.99	20.88
22-Aug-01		6.73	19.14
22-May-02		5.50	20.37
29-Aug-02		6.55	19.32
2-Dec-02		6.28	19.59
<b>MW-5</b>			
5-Dec-00	25.77	6.25	19.52
28-Feb-01		4.95	20.82
22-Aug-01		6.69	19.08
22-May-02		5.50	20.27
29-Aug-02		6.54	19.23
2-Dec-02		6.37	19.40
<b>MW-6</b>			
5-Dec-00	24.89	5.68	19.21
28-Feb-01		4.35	20.54
22-Aug-01		6.15	18.74
22-May-02		4.91	19.98
29-Aug-02		5.96	18.93
2-Dec-02		5.70	19.19
<b>MW-7</b>			
5-Dec-00	25.43	6.43	19.00
28-Feb-01		4.76	20.67
22-Aug-01		6.95	18.48
22-May-02		5.55	19.88
29-Aug-02		NM	--
2-Dec-02		6.43	19.00

Notes:  
 TOC = Top of well casing  
 DTW = Depth to Water  
 ELEV = Water table elevation above MSL  
 ft msl = Feet above mean sea level  
 ft bTOC = Feet below top of casing  
 NM = Not Measured

Table 2  
 Historical Groundwater Analytical Results  
 575 Pasco Grande  
 San Lorenzo, California

	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	Chromium (ug/L)	Dissolved Inorganic Lead (ug/L)
<b>MW-1</b>								
17-May-96	1,100	ND (<0.5)	8.7	7.4	17	NA	ND (<10)	ND (<50)
8-Oct-96	120	ND (<0.5)	ND (<0.5)	2.7	ND (<0.5)	NA	NA	NA
1-Apr-97	550	ND (<0.5)	ND (<0.5)	7.6	6.6	NA	NA	NA
12-Jun-97	160	ND (<0.5)	ND (<0.5)	2.9	1.7	NA	NA	NA
10-Sep-97	640	2.2 <sup>P</sup>	3.8 <sup>P</sup>	7.4 <sup>P</sup>	16 <sup>P</sup>	NA	NA	NA
8-Jun-99	ND (<50)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<10)	ND (<10)	ND (<20)
21-Dec-99	ND (<50)	ND (<0.5)	ND (<0.5)	ND (<0.5)	1.1	NA	NA	ND (<5.0)
13-Sep-99	ND (<50)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	NA	NA	NA
17-Mar-00	ND (<50)	ND (<0.5)	ND (<0.5)	ND (<0.5)	0.79	ND (<5)	NA	ND (<5.0)
5-Dec-00	ND (<50)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	NA	NA	NA
28-Feb-01	ND (<50)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	NA	NA	NA
22-Aug-01	ND (<50)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<5.0)	NA	ND (<5.0)
22-May-02	ND (<50)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	NA	NA	NA
29-Aug-02	ND (<50)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	NA	NA	NA
2-Dec-02	ND (<50)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	NA	NA	NA
<b>MW-2</b>								
17-May-96	23,000	900	330	650	1,500	NA	ND (<10)	ND (<50)
8-Oct-96	8,400	530	ND (<50)	400	360	NA	NA	NA
1-Apr-97	7,600	470	64	210	250	NA	NA	NA
12-Jun-97	8,200	440	52	190	190	NA	NA	NA
10-Sep-97	8,500	390	51 <sup>P</sup>	220	240	NA	NA	NA
8-Jun-99	2,100	240	8	33	40	ND (<10)	ND (<10)	33
13-Sep-99	1,300	120	ND (<5.0)	ND (<5.0)	15	NA	NA	NA
21-Dec-99	1,400	110	5.6	11	17	NA	NA	ND (<5.0)
17-Mar-00	1,200	180	19	28	31	ND (<50)	NA	ND (<5.0)
5-Dec-00	800	75	1.8	11	14	NA	NA	NA
28-Feb-01	1,200	120	7.1	19	27	NA	NA	NA
22-Aug-01	990	75	3.5	8.9	8.1	ND (<5.0)	NA	ND (<5.0)
22-May-02	1,700	230	12	12	25	NA	NA	NA
29-Aug-02	1,000	66	2.6	12	12	NA	NA	NA
2-Dec-02	1,100	76	8.7	11	17	NA	NA	NA
<b>MW-3</b>								
17-May-96	6,700	140	45	210	180	NA	ND (<10)	ND (<50)
8-Oct-96	1,800	2,700	240	910	970	NA	NA	NA
1-Apr-97	27,000	520	50	520	450	NA	NA	NA
12-Jun-97	29,000	2,700	160	940	500	NA	NA	NA
10-Sep-97	290,000	1,800	3,200	2800 <sup>P</sup>	6900 <sup>P</sup>	NA	NA	NA
8-Jun-99	1,700	320	6.4	15	ND (<0.5)	ND (<10)	ND (<10)	24
13-Sep-99	5,400	1,000	ND (<20)	ND (<20)	ND (<20)	NA	NA	NA
21-Dec-99	8,800	1,400	63	17	23	NA	NA	ND (<5.0)
17-Mar-00	1,500	190	ND (<5)	7.6	ND (<5)	ND (<50)	NA	ND (<5.0)
5-Dec-00	5,400	790	20	7.4	10	NA	NA	NA
28-Feb-01	3,600	850	15	25	10	NA	NA	NA
22-Aug-01	8,100	1,600	28	44	17	ND (<50)	NA	ND (<5.0)
22-May-02	5,400	1,000	32	13	21	NA	NA	NA

**Table 2**  
**Historical Groundwater Analytical Results**  
**575 Paseo Grande**  
**San Lorenzo, California**

	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	Chromium (ug/L)	Dissolved Inorganic Lead (ug/L)
29-Aug-02	6,700	1,700	55	49	38	NA	NA	NA
2-Dec-02	5,700	650	17	37	33	NA	NA	NA
<b>MW-4</b>								
5-Dec-00	3,900	320	13	41	31	NA	NA	ND (<5.0)
28-Feb-01	3,400	250	14	44	22	NA	NA	ND (<5.0)
22-Aug-01	4,800	260	12	27	9	ND (<5.0)	NA	ND (<5.0)
22-May-02	5,100	320	29	74	50	NA	NA	NA
29-Aug-02	3,700	260	ND (<5.0)	30	28	NA	NA	NA
2-Dec-02	5,100	250	8.9	26	22	NA	NA	NA
<b>MW-5</b>								
5-Dec-00	ND (<50)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	NA	NA	ND (<5.0)
28-Feb-01	ND (<50)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	NA	NA	ND (<5.0)
22-Aug-01	ND (<50)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<5.0)	NA	ND (<5.0)
22-May-02	ND (<50)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	NA	NA	NA
29-Aug-02	ND (<50)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	NA	NA	NA
2-Dec-02	ND (<50)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	NA	NA	NA
<b>MW-6</b>								
5-Dec-00	ND (<50)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	NA	NA	ND (<5.0)
28-Feb-01	ND (<50)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	NA	NA	ND (<5.0)
22-Aug-01	ND (<50)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<5.0)	NA	ND (<5.0)
22-May-02	ND (<50)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	NA	NA	NA
29-Aug-02	ND (<50)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	NA	NA	NA
2-Dec-02	ND (<50)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	NA	NA	NA
<b>MW-7</b>								
5-Dec-00	ND (<50)	ND (<0.5)	ND (<0.5)	ND (<0.5)	1.5	NA	NA	ND (<5.0)
28-Feb-01	ND (<50)	ND (<0.5)	ND (<0.5)	ND (<0.5)	6.7	NA	NA	ND (<5.0)
22-Aug-01	ND (<50)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<5.0)	NA	ND (<5.0)
22-May-02	ND (<50)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	NA	NA	NA
29-Aug-02	NS	NS	NS	NS	NS	NS	NS	NS
2-Dec-02	ND (<50)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	NA	NA	NA

**Notes:**

TPHg = Total petroleum hydrocarbons quantified as gasoline

ug/L = Micrograms per liter

ND = Below laboratory detection limits (detection limit indicated in parentheses)

<sup>f</sup> The laboratory noted that there was a greater than 25% difference in results between the two GC columns.

NA = Not analyzed

NS = Not Sampled

**APPENDIX A**

**Field Data Sheets**

Fourth Quarter 2002

Groundwater Monitoring Report

575 Paseo Grande

San Lorenzo, California

SECOR Project No. 05OT.50063.00.0003

March 21, 2003

HYDROLOGIC DATA SHEET

DATE: 12-2-02 PROJECT: Bohannon PROJECT # 050T. 50063.00

EVENT: 4<sup>th</sup> QTR 2002 SAMPLER: Neil Doran

WELL OR LOCATION	TIME	MEASUREMENT					COMMENTS
		TOC	DTW	DTP	PT	ELEV	
MW-1	935		7.13				
MW-2	1010		7.02				
MW-3	1100		6.85				
MW-4	1140		6.28				
MW-5	910		6.37				
MW-6	<del>835</del> 900		5.70				
MW-7	805		6.43				

CODES: TOC - TOP OF CASING (FEET, RELATIVE TO MEAN SEA LEVEL)  
 DTW - DEPTH TO WATER (FEET)  
 DTP - DEPTH TO PRODUCT (FEET)  
 PT - PRODUCT THICKNESS (FEET)  
 ELEV - GROUNDWATER ELEVATION (FEET, RELATIVE TO MEAN SEA LEVEL)



**SECOR International Inc.**  
WATER SAMPLE FIELD DATA SHEET

PROJECT #: 050T. 50063.00 PURGED BY: ND WELL I.D.: 12A-1  
 CLIENT NAME: Rohannon SAMPLED BY: ND SAMPLE I.D.: 12A-1  
 LOCATION: 525 Pasa Grande WHAT QA SAMPLES?: \_\_\_\_\_

DATE PURGED 12-2-02 START (2400hr) 937 END (2400hr) 945  
 DATE SAMPLED 12-2-02 SAMPLE TIME (2400hr) 1000

SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_

CASING DIAMETER: 2"  3" \_\_\_\_\_ 4" \_\_\_\_\_ 5" \_\_\_\_\_ 6" \_\_\_\_\_ 8" \_\_\_\_\_ Other \_\_\_\_\_  
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ( )

DEPTH TO BOTTOM (feet) = 14.40 CASING VOLUME (gal) = \_\_\_\_\_  
 DEPTH TO WATER (feet) = 7.13 CALCULATED PURGE (gal) = \_\_\_\_\_  
 WATER COLUMN HEIGHT (feet) = 7.27 ACTUAL PURGE (gal) = 1.50 L

**FIELD MEASUREMENTS**

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	<sup>DO % / ppm</sup> COLOR (visual)	<sup>ORP</sup> TURBIDITY (NTU) (uv)	DTW (ft)
<u>12-2-02</u>	<u>939</u>	<u>250 mL</u>	<u>22.71</u>	<u>1308</u>	<u>7.05</u>	<u>2.7 / 0.25</u>	<u>80.7</u>	
	<u>940</u>	<u>500 mL</u>	<u>22.89</u>	<u>1318</u>	<u>7.03</u>	<u>1.8 / 0.16</u>	<u>77.7</u>	
	<u>941</u>	<u>750 mL</u>	<u>23.00</u>	<u>1325</u>	<u>7.04</u>	<u>1.4 / 0.12</u>	<u>77.2</u>	
	<u>942</u>	<u>1.00 L</u>	<u>23.11</u>	<u>1326</u>	<u>7.05</u>	<u>1.3 / 0.11</u>	<u>77.2</u>	
	<u>943</u>	<u>1.25 L</u>	<u>23.19</u>	<u>1327</u>	<u>7.05</u>	<u>1.3 / 0.11</u>	<u>77.3</u>	
	<u>944</u>	<u>1.50 L</u>	<u>23.46</u>	<u>1330</u>	<u>7.06</u>	<u>1.3 / 0.11</u>	<u>78.3</u>	

**SAMPLE INFORMATION**

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: N/A

80% RECHARGE:  YES  NO ANALYSES: TPH<sub>5</sub>, BTEX

ODOR: none SAMPLE VESSEL / PRESERVATIVE: (3) LOMs

**PURGING EQUIPMENT**

\_\_\_\_ Well Wizard Bladder Pump \_\_\_\_\_ Bailer (Teflon)  
 \_\_\_\_ Active Extration Well Pump \_\_\_\_\_ Bailer (PVC or disp)  
 \_\_\_\_ Submersible Pump \_\_\_\_\_ Bailer (Stainless Steel)  
 Peristaltic Pump \_\_\_\_\_ Dedicated

Other: \_\_\_\_\_  
 Pump Depth: \_\_\_\_\_

**SAMPLING EQUIPMENT**

\_\_\_\_ WW Bladder Pump \_\_\_\_\_ Bailer (Teflon)  
 \_\_\_\_ Sample Port \_\_\_\_\_ Bailer (PVC or disposable)  
 \_\_\_\_ Submersible Pump \_\_\_\_\_ Bailer (Stainless Steel)  
 Peristaltic Pump \_\_\_\_\_ Dedicated

Other: \_\_\_\_\_

WELL INTEGRITY: good LOCK#: \_\_\_\_\_

REMARKS: FOR WW PURGING: DISCHARGE TIME \_\_\_\_\_ REFILL TIME \_\_\_\_\_ AIR PRESSURE \_\_\_\_\_

SIGNATURE: Neil Down Page \_\_\_\_\_ of \_\_\_\_\_

**SECOR International Inc.**  
**WATER SAMPLE FIELD DATA SHEET**

PROJECT #: 050T.50063.00 PURGED BY: ND WELL I.D.: MW-2  
 CLIENT NAME: Bolannon SAMPLED BY: ND SAMPLE I.D.: MW-2  
 LOCATION: 575 Pasco Grande WHAT QA SAMPLES?:       

DATE PURGED 12-2-02 START (2400hr) 1015 END (2400hr)         
 DATE SAMPLED 12-2-02 SAMPLE TIME (2400hr) 1045

SAMPLE TYPE: Groundwater  Surface Water  Treatment Effluent  Other

CASING DIAMETER: 2"  3"  4"  5"  6"  8"  Other   
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ( )

DEPTH TO BOTTOM (feet) = 14.70 CASING VOLUME (gal) =         
 DEPTH TO WATER (feet) = 7.02 CALCULATED PURGE (gal) =         
 WATER COLUMN HEIGHT (feet) = 7.68 ACTUAL PURGE (gal) = 1.75 L

**FIELD MEASUREMENTS**

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F/C)	CONDUCTIVITY (umhos/cm)	pH (units)	<sup>DO% / ppm</sup> COLOR (visual)	<sup>ORP</sup> TURBIDITY (NTU) (mu)	DTW (ft)
<u>12-2-02</u>	<u>1016</u>	<u>200 ml</u>	<u>23.07</u>	<u>1455</u>	<u>6.85</u>	<u>3.0/0.25</u>	<u>-50.4</u>	
	<u>1017</u>	<u>300 ml</u>	<u>23.24</u>	<u>1461</u>	<u>6.85</u>	<u>1.9/0.15</u>	<u>-96.4</u>	
	<u>1018</u>	<u>790 ml</u>	<u>23.27</u>	<u>1463</u>	<u>6.85</u>	<u>1.5/0.12</u>	<u>-99.3</u>	
	<u>1019</u>	<u>1.00 L</u>	<u>23.29</u>	<u>1459</u>	<u>6.84</u>	<u>1.6/0.14</u>	<u>-100.4</u>	
	<u>1020</u>	<u>1.25 L</u>	<u>23.30</u>	<u>1449</u>	<u>6.85</u>	<u>1.5/0.13</u>	<u>-101.4</u>	
	<u>1021</u>	<u>1.50 L</u>	<u>23.28</u>	<u>1442</u>	<u>6.83</u>	<u>1.5/0.12</u>	<u>-100.7</u>	
	<u>1022</u>	<u>1.75 L</u>	<u>23.30</u>	<u>1440</u>	<u>6.83</u>	<u>1.5/0.13</u>	<u>-100.5</u>	

**SAMPLE INFORMATION**

SAMPLE DEPTH TO WATER:        SAMPLE TURBIDITY: N/A

80% RECHARGE:  YES  NO ANALYSES: TPH, BTEX

ODOR: TPH SAMPLE VESSEL / PRESERVATIVE: (5) VOLS

**PURGING EQUIPMENT**

Well Wizard Bladder Pump  Bailer (Teflon)  
 Active Extration Well Pump  Bailer (PVC or disp)  
 Submersible Pump  Bailer (Stainless Steel)  
 Peristaltic Pump  Dedicated

Other:         
 Pump Depth:       

**SAMPLING EQUIPMENT**

WW Bladder Pump  Bailer (Teflon)  
 Sample Port  Bailer (PVC or disposable)  
 Submersible Pump  Bailer (Stainless Steel)  
 Peristaltic Pump  Dedicated

Other:       

WELL INTEGRITY: good LOCK#:       

REMARKS: FOR WW PURGING: DISCHARGE TIME REFILL TIME AIR PRESSURE

SIGNATURE: Neil Down Page        of

**SECOR International Inc.**  
**WATER SAMPLE FIELD DATA SHEET**

PROJECT #: 0501.50063.00 PURGED BY: ND WELL I.D.: MW-3  
 CLIENT NAME: Bolannan SAMPLED BY: ND SAMPLE I.D.: MW-3  
 LOCATION: 575 Paso Grande WHAT QA SAMPLES?: —

DATE PURGED 12-2-02 START (2400hr) 1100 END (2400hr) 1109  
 DATE SAMPLED 12-2-02 SAMPLE TIME (2400hr) 1130

SAMPLE TYPE: Groundwater  Surface Water  Treatment Effluent  Other

CASING DIAMETER: 2"  3"  4"  5"  6"  8"  Other   
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ( )

DEPTH TO BOTTOM (feet) = 13.00 CASING VOLUME (gal) = —  
 DEPTH TO WATER (feet) = 6.85 CALCULATED PURGE (gal) = —  
 WATER COLUMN HEIGHT (feet) = 6.15 ACTUAL PURGE (gal) = 2.00L

**FIELD MEASUREMENTS**

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	<sup>20% / PPM</sup> COLOR (visual)	<sup>ORP</sup> TURBIDITY (NTU) (und)	DTW (ft)
<u>12-2-02</u>	<u>1102</u>	<u>250 mL</u>	<u>22.82</u>	<u>1,525</u>	<u>6.87</u>	<u>6.7/0.55</u>	<u>-142.4</u>	
	<u>1103</u>	<u>300 mL</u>	<u>22.77</u>	<u>1,531</u>	<u>6.85</u>	<u>5.5/0.49</u>	<u>-141.8</u>	
	<u>1104</u>	<u>350 mL</u>	<u>23.09</u>	<u>1,537</u>	<u>6.81</u>	<u>4.0/0.34</u>	<u>-142.0</u>	
	<u>1105</u>	<u>1.00L</u>	<u>23.14</u>	<u>1,541</u>	<u>6.83</u>	<u>3.7/0.32</u>	<u>-142.2</u>	
	<u>1106</u>	<u>1.25L</u>	<u>23.16</u>	<u>1,544</u>	<u>6.85</u>	<u>4.7/0.39</u>	<u>-141.3</u>	
	<u>1107</u>	<u>1.50L</u>	<u>23.16</u>	<u>1,547</u>	<u>6.82</u>	<u>3.0/0.25</u>	<u>-140.1</u>	
	<u>1108</u>	<u>1.75L</u>	<u>23.17</u>	<u>1,550</u>	<u>6.81</u>	<u>2.4/0.21</u>	<u>-139.7</u>	
	<u>1109</u>	<u>2.00L</u>	<u>23.19</u>	<u>1,551</u>	<u>6.82</u>	<u>2.2/0.18</u>	<u>-138.5</u>	

**SAMPLE INFORMATION**

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: N/A

80% RECHARGE:  YES  NO ANALYSES: TPH<sub>5</sub> - BTEX

ODOR: TPH SAMPLE VESSEL / PRESERVATIVE: (3) VOAS

**PURGING EQUIPMENT**

Well Wizard Bladder Pump  Bailer (Teflon)  
 Active Extration Well Pump  Bailer (PVC or disp)  
 Submersible Pump  Bailer (Stainless Steel)  
 Peristaltic Pump  Dedicated \_\_\_\_\_

Other: \_\_\_\_\_  
 Pump Depth: \_\_\_\_\_

**SAMPLING EQUIPMENT**

WW Bladder Pump  Bailer (Teflon)  
 Sample Port  Bailer ( — PVC or — disposable)  
 Submersible Pump  Bailer (Stainless Steel)  
 Peristaltic Pump  Dedicated \_\_\_\_\_

Other: \_\_\_\_\_

WELL INTEGRITY: good LOCK#: \_\_\_\_\_

REMARKS: FOR WW PURGING: DISCHARGE TIME , REFILL TIME , AIR PRESSURE

SIGNATURE: Neil Down Page — of —

**SECOR International Inc.**  
**WATER SAMPLE FIELD DATA SHEET**

PROJECT #: 050T. 50063.00 PURGED BY: ND WELL I.D.: MW-9  
 CLIENT NAME: Bohannon SAMPLED BY: ND SAMPLE I.D.: MW-9  
 LOCATION: 575 8<sup>th</sup> St Frangle WHAT QA SAMPLES?: -

DATE PURGED 12-2-02 START (2400hr) 1145 END (2400hr) 1151  
 DATE SAMPLED 12-2-02 SAMPLE TIME (2400hr) 1215

SAMPLE TYPE: Groundwater  Surface Water  Treatment Effluent  Other

CASING DIAMETER: 2"  3"  4"  5"  6"  8"  Other   
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ( )

DEPTH TO BOTTOM (feet) = 15.15 CASING VOLUME (gal) = -  
 DEPTH TO WATER (feet) = 6.28 CALCULATED PURGE (gal) = -  
 WATER COLUMN HEIGHT (feet) = 8.87 ACTUAL PURGE (gal) = 1.50 L

**FIELD MEASUREMENTS**

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	DO% / PPM COLOR (visual)	ORP TURBIDITY (NTU) (mV)	DTW (ft)
<u>12-2-02</u>	<u>1146</u>	<u>250 mL</u>	<u>20.64</u>	<u>1,056</u>	<u>6.82</u>	<u>3.7/0.51</u>	<u>-101.3</u>	
	<u>1147</u>	<u>500 mL</u>	<u>20.75</u>	<u>1,055</u>	<u>6.81</u>	<u>2.5/0.19</u>	<u>-103.9</u>	
	<u>1148</u>	<u>750 mL</u>	<u>20.75</u>	<u>1,052</u>	<u>6.81</u>	<u>1.6/0.19</u>	<u>-104.9</u>	
	<u>1149</u>	<u>1.00 L</u>	<u>20.77</u>	<u>1,049</u>	<u>6.80</u>	<u>1.4/0.13</u>	<u>-106.2</u>	
	<u>1150</u>	<u>1.25 L</u>	<u>20.76</u>	<u>1,048</u>	<u>6.80</u>	<u>1.2/0.11</u>	<u>-107.2</u>	
	<u>1151</u>	<u>1.50 L</u>	<u>20.73</u>	<u>1,047</u>	<u>6.80</u>	<u>1.2/0.11</u>	<u>-107.7</u>	

**SAMPLE INFORMATION**

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: N/A

80% RECHARGE:  YES  NO ANALYSES: TRH<sub>6</sub> BTEX  
 ODOR: TPH SAMPLE VESSEL / PRESERVATIVE: (3) VOA<sub>5</sub>

**PURGING EQUIPMENT**

**SAMPLING EQUIPMENT**

Well Wizard Bladder Pump  Bailer (Teflon)  
 Active Extration Well Pump  Bailer (PVC or disp)  
 Submersible Pump  Bailer (Stainless Steel)  
 Peristaltic Pump  Dedicated  
 Other: \_\_\_\_\_  
 Pump Depth: \_\_\_\_\_

WW Bladder Pump  Bailer (Teflon)  
 Sample Port  Bailer ( PVC or disposable)  
 Submersible Pump  Bailer (Stainless Steel)  
 Peristaltic Pump  Dedicated  
 Other: \_\_\_\_\_

WELL INTEGRITY: good LOCK#: \_\_\_\_\_

REMARKS: FOR WW PURGING: DISCHARGE TIME \_\_\_\_\_, REFILL TIME \_\_\_\_\_, AIR PRESSURE \_\_\_\_\_

SIGNATURE: Neil Dome Page     of

**SECOR International Inc.**  
**WATER SAMPLE FIELD DATA SHEET**

PROJECT #: 050T. 50063.00 PURGED BY: ND WELL I.D.: MW-5  
 CLIENT NAME: Bohannon SAMPLED BY: ND SAMPLE I.D.: MW-5  
 LOCATION: 575 Paseo Grande WHAT QA SAMPLES?: —

DATE PURGED 12.2.02 START (2400hr) 910 END (2400hr) 922  
 DATE SAMPLED 12.2.02 SAMPLE TIME (2400hr) 930

SAMPLE TYPE: Groundwater  Surface Water  Treatment Effluent  Other

CASING DIAMETER: 2"  3"  4"  5"  6"  8"  Other   
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ( )

DEPTH TO BOTTOM (feet) = 14.35 CASING VOLUME (gal) = —  
 DEPTH TO WATER (feet) = 6.37 CALCULATED PURGE (gal) = —  
 WATER COLUMN HEIGHT (feet) = 7.98 ACTUAL PURGE (gal) = 2.50L

**FIELD MEASUREMENTS**

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F/C)	CONDUCTIVITY (umhos/cm)	pH (units)	DO % / ppm COLOR (visual)	ORP TURBIDITY (NTU) (uv)	DTW (ft)
<u>12.2.02</u>	<u>913</u>	<u>250 mL</u>	<u>21.21</u>	<u>912</u>	<u>7.53</u>	<u>2.3 / 0.74</u>	<u>155.0</u>	
	<u>914</u>	<u>500 mL</u>	<u>21.43</u>	<u>920</u>	<u>7.33</u>	<u>7.3 / 0.65</u>	<u>151.1</u>	
	<u>915</u>	<u>750 mL</u>	<u>21.58</u>	<u>925</u>	<u>7.53</u>	<u>7.0 / 0.61</u>	<u>148.0</u>	
	<u>916</u>	<u>1.00 L</u>	<u>21.71</u>	<u>928</u>	<u>7.33</u>	<u>6.2 / 0.54</u>	<u>145.9</u>	
	<u>917</u>	<u>1.25 L</u>	<u>21.81</u>	<u>930</u>	<u>7.33</u>	<u>5.6 / 0.48</u>	<u>145.8</u>	
	<u>918</u>	<u>1.50 L</u>	<u>21.80</u>	<u>932</u>	<u>7.32</u>	<u>5.2 / 0.46</u>	<u>141.9</u>	
	<u>919</u>	<u>1.75 L</u>	<u>21.83</u>	<u>935</u>	<u>7.31</u>	<u>4.2 / 0.37</u>	<u>139.1</u>	
	<u>920</u>	<u>2.00 L</u>	<u>21.92</u>	<u>936</u>	<u>7.53</u>	<u>3.9 / 0.34</u>	<u>137.2</u>	
	<u>921</u>	<u>2.25 L</u>	<u>21.85</u>	<u>936</u>	<u>7.31</u>	<u>3.7 / 0.32</u>	<u>135.2</u>	
	<u>922</u>	<u>2.50 L</u>	<u>21.86</u>	<u>936</u>	<u>7.30</u>	<u>3.6 / 0.31</u>	<u>134.7</u>	

**SAMPLE INFORMATION**

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: N/A

80% RECHARGE:  YES  NO

ANALYSES: TPH, BTEX

ODOR: none

SAMPLE VESSEL / PRESERVATIVE: (3) VOAs

**PURGING EQUIPMENT**

Well Wizard Bladder Pump  Bailer (Teflon)  
 Active Extration Well Pump  Bailer (PVC or disp)  
 Submersible Pump  Bailer (Stainless Steel)  
 Peristaltic Pump  Dedicated \_\_\_\_\_

Other: \_\_\_\_\_  
 Pump Depth: \_\_\_\_\_

**SAMPLING EQUIPMENT**

WW Bladder Pump  Bailer (Teflon)  
 Sample Port  Bailer (PVC or disposable)  
 Submersible Pump  Bailer (Stainless Steel)  
 Peristaltic Pump  Dedicated \_\_\_\_\_

Other: \_\_\_\_\_

WELL INTEGRITY: good LOCK#: \_\_\_\_\_

REMARKS: FOR WW PURGING: DISCHARGE TIME \_\_\_\_\_, REFILL TIME \_\_\_\_\_, AIR PRESSURE \_\_\_\_\_

SIGNATURE: Trail Down

Page     of

**SECOR International Inc.**  
WATER SAMPLE FIELD DATA SHEET

PROJECT #: 050T-50063.00 PURGED BY: ND WELL I.D.: MW-6  
 CLIENT NAME: Bohannon SAMPLED BY: ND SAMPLE I.D.: MW-6  
 LOCATION: 575 Paseo Grande WHAT QA SAMPLES?: —

DATE PURGED 12-2-02 START (2400hr) 838 END (2400hr) 099  
 DATE SAMPLED 12-2-02 SAMPLE TIME (2400hr) 900

SAMPLE TYPE: Groundwater  Surface Water  Treatment Effluent  Other

CASING DIAMETER: 2"  3"  4"  5"  6"  8"  Other   
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ( )

DEPTH TO BOTTOM (feet) = 14.53 CASING VOLUME (gal) = —  
 DEPTH TO WATER (feet) = 5.70 CALCULATED PURGE (gal) = —  
 WATER COLUMN HEIGHT (feet) = 8.85 ACTUAL PURGE (gal) = 2.50L

**FIELD MEASUREMENTS**

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	DO% / PH-COLOR (visual)	TURBIDITY (NTU) (uv)	DTW (ft)
12-2-02	840	250 ml	19.52	674	7.22	9.0/0.31	160.1	
	841	500 ml	19.76	697	7.15	8.3/0.36	164.5	
	842	750 ml	19.97	700	7.16	7.5/0.68	165.5	
	843	1.00L	20.08	701	7.17	6.8/0.61	163.8	
	844	1.25L	20.14	702	7.17	6.6/0.59	162.4	
	845	1.50L	20.20	702	7.17	6.4/0.55	160.5	
	846	1.75L	20.29	703	7.15	5.8/0.53	160.4	
	847	2.00L	20.27	703	7.16	5.5/0.50	160.0	
	848	2.25L	20.29	703	7.16	5.1/0.46	158.8	
	849	2.50L	20.30	703	7.17	5.0/0.45	157.9	

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE INFORMATION: \_\_\_\_\_ SAMPLE TURBIDITY: N/A

80% RECHARGE:  YES  NO ANALYSES: TPH, BTEX

ODOR: none SAMPLE VESSEL / PRESERVATIVE: (3) 2005

**PURGING EQUIPMENT**

Well Wizard Bladder Pump  Bailer (Teflon)  
 Active Extration Well Pump  Bailer (PVC or disp)  
 Submersible Pump  Bailer (Stainless Steel)  
 Peristaltic Pump  Dedicated

Other: \_\_\_\_\_

Pump Depth: \_\_\_\_\_

**SAMPLING EQUIPMENT**

WW Bladder Pump  Bailer (Teflon)  
 Sample Port  Bailer (PVC or disposable)  
 Submersible Pump  Bailer (Stainless Steel)  
 Peristaltic Pump  Dedicated

Other: \_\_\_\_\_

WELL INTEGRITY: good LOCK#: \_\_\_\_\_

REMARKS: FOR WW PURGING: DISCHARGE TIME \_\_\_\_\_, REFILL TIME \_\_\_\_\_, AIR PRESSURE \_\_\_\_\_

SIGNATURE: Neil Down

**SECOR International Inc.**  
**WATER SAMPLE FIELD DATA SHEET**

PROJECT #: 050T. 50063.00 PURGED BY: ND WELL I.D.: MW. 7  
 CLIENT NAME: Bouanner SAMPLED BY: ND SAMPLE I.D.: MW. 7  
 LOCATION: 575 Paso Grande WHAT QA SAMPLES?: 1

DATE PURGED 12.2.02 START (2400hr) 810 END (2400hr) 820  
 DATE SAMPLED 12.2.02 SAMPLE TIME (2400hr) 830

SAMPLE TYPE: Groundwater  Surface Water  Treatment Effluent  Other

CASING DIAMETER: 2"  3"  4"  5"  6"  8"  Other   
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ( )

DEPTH TO BOTTOM (feet) = 14.40 CASING VOLUME (gal) = —  
 DEPTH TO WATER (feet) = 6.43 CALCULATED PURGE (gal) = —  
 WATER COLUMN HEIGHT (feet) = 7.97 ACTUAL PURGE (gal) = 2.00L

**FIELD MEASUREMENTS**

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	DO% / ppm COLOR (visual)	CRP TURBIDITY (NTU) mL	DTW (ft)
<u>12.2.02</u>	<u>813</u>	<u>250 mL</u>	<u>17.38</u>	<u>817</u>	<u>7.27</u>	<u>8.3/0.80</u>	<u>145.7</u>	
	<u>814</u>	<u>500 mL</u>	<u>17.42</u>	<u>824</u>	<u>7.27</u>	<u>7.3/0.69</u>	<u>145.7</u>	
	<u>815</u>	<u>750 mL</u>	<u>17.58</u>	<u>830</u>	<u>7.27</u>	<u>6.4/0.61</u>	<u>146.0</u>	
	<u>816</u>	<u>1.00 L</u>	<u>17.79</u>	<u>835</u>	<u>7.27</u>	<u>5.4/0.51</u>	<u>146.1</u>	
	<u>817</u>	<u>1.25 L</u>	<u>18.04</u>	<u>841</u>	<u>7.27</u>	<u>4.9/0.47</u>	<u>145.6</u>	
	<u>818</u>	<u>1.50 L</u>	<u>18.15</u>	<u>844</u>	<u>7.27</u>	<u>5.7/0.56</u>	<u>145.7</u>	
	<u>819</u>	<u>1.75 L</u>	<u>18.13</u>	<u>846</u>	<u>7.27</u>	<u>7.8/0.71</u>	<u>145.5</u>	
	<u>820</u>	<u>2.00 L</u>	<u>18.11</u>	<u>848</u>	<u>7.28</u>	<u>7.7/0.73</u>	<u>145.5</u>	
	<u>821</u>	<u>2.25 L</u>						

**SAMPLE INFORMATION**

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: N/A

80% RECHARGE:  YES  NO ANALYSES: TPH, BTEX

ODOR: none SAMPLE VESSEL / PRESERVATIVE: (3) VOLS

**PURGING EQUIPMENT**

Well Wizard Bladder Pump  Bailer (Teflon)  
 Active Extration Well Pump  Bailer (PVC or disp)  
 Submersible Pump  Bailer (Stainless Steel)  
 Peristaltic Pump  Dedicated

Other: \_\_\_\_\_  
 Pump Depth: \_\_\_\_\_

**SAMPLING EQUIPMENT**

WW Bladder Pump  Bailer (Teflon)  
 Sample Port  Bailer (PVC or disposable)  
 Submersible Pump  Bailer (Stainless Steel)  
 Peristaltic Pump  Dedicated

Other: \_\_\_\_\_

WELL INTEGRITY: good LOCK#: \_\_\_\_\_

REMARKS: FOR WW PURGING: DISCHARGE TIME, REFILL TIME, AIR PRESSURE

SIGNATURE: Mal Don Page \_\_\_\_\_ of \_\_\_\_\_

**APPENDIX B**

**Laboratory Analytical Reports**

Fourth Quarter 2002

Groundwater Monitoring Report

575 Paseo Grande

San Lorenzo, California

SECOR Project No. 05OT.50063.00.0003

March 21, 2003



SECOR- Lafayette

December 12, 2002

57 Lafayette Circle, 2nd Floor  
Lafayette, CA 94549-4321

Attn.: Neil Doran

Project#: 050T.50063.00

Project: Bohannon Development

Attached is our report for your samples received on 12/04/2002 16:25

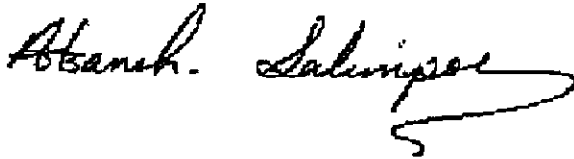
This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 01/18/2003 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.

You can also contact me via email. My email address is: [asalimpour@stl-inc.com](mailto:asalimpour@stl-inc.com)

Sincerely,



Afsaneh Salimpour  
Project Manager

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

**Gas/BTEX by 8015M/8021**

SECOR- Lafayette

Attn.: Neil Doran

57 Lafayette Circle, 2nd Floor  
Lafayette, CA 94549-4321  
Phone: (925) 299-9300 Fax: (925) 299-9302

Project: 050T.50063.00  
Bohannon Development

Received: 12/04/2002 16:25

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
MW-1	12/02/2002 10:00	Water	1
MW-2	12/02/2002 10:45	Water	2
MW-3	12/02/2002 11:30	Water	3
MW-4	12/02/2002 12:15	Water	4
MW-5	12/02/2002 09:30	Water	5
MW-6	12/02/2002 09:00	Water	6
MW-7	12/02/2002 08:30	Water	7

Severn Trent Laboratories, Inc.

12/11/2002 15:33

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566  
Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

**Gas/BTEX by 8015M/8021**

SECOR- Lafayette

Attn.: Neil Doran

57 Lafayette Circle, 2nd Floor  
Lafayette, CA 94549-4321  
Phone: (925) 299-9300 Fax: (925) 299-9302

Project: 050T.50063.00  
Bohannon Development

Received: 12/04/2002 16:25

Prep(s): 5030  
5030  
Sample ID: MW-1  
Sampled: 12/02/2002 10:00  
Matrix: Water

Test(s): 8015M  
8021B  
Lab ID: 2002-12-0090 - 1  
Extracted: 12/10/2002 12:05  
QC Batch#: 2002/12/10-01.05

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	12/10/2002 12:05	
Benzene	ND	0.50	ug/L	1.00	12/10/2002 12:05	
Toluene	ND	0.50	ug/L	1.00	12/10/2002 12:05	
Ethyl benzene	ND	0.50	ug/L	1.00	12/10/2002 12:05	
Xylene(s)	ND	0.50	ug/L	1.00	12/10/2002 12:05	
<b>Surrogates(s)</b>						
Trifluorotoluene	77.5	58-124	%	1.00	12/10/2002 12:05	
4-Bromofluorobenzene-FID	74.1	50-150	%	1.00	12/10/2002 12:05	

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12/11/2002 15:33

Gas/BTEX by 8015M/8021

SECOR- Lafayette

Attn.: Neil Doran

57 Lafayette Circle, 2nd Floor  
Lafayette, CA 94549-4321  
Phone: (925) 299-9300 Fax: (925) 299-9302

Project: 050T.50063.00  
Bohannon Development

Received: 12/04/2002 16:25

Prep(s): 5030 Test(s): 8015M  
5030 8021B  
Sample ID: MW-2 Lab ID: 2002-12-0090 - 2  
Sampled: 12/02/2002 10:45 Extracted: 12/10/2002 12:37  
Matrix: Water QC Batch#: 2002/12/10-01.05

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	1100	250	ug/L	5.00	12/10/2002 12:37	g
Benzene	76	2.5	ug/L	5.00	12/10/2002 12:37	
Toluene	8.7	2.5	ug/L	5.00	12/10/2002 12:37	
Ethyl benzene	11	2.5	ug/L	5.00	12/10/2002 12:37	
Xylene(s)	17	2.5	ug/L	5.00	12/10/2002 12:37	
<b>Surrogates(s)</b>						
Trifluorotoluene	87.6	58-124	%	5.00	12/10/2002 12:37	
4-Bromofluorobenzene-FID	81.4	50-150	%	5.00	12/10/2002 12:37	

Severn Trent Laboratories, Inc.

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12/11/2002 15:33

Page 3 of 18

**Gas/BTEX by 8015M/8021**

SECOR- Lafayette

Attn.: Neil Doran

57 Lafayette Circle, 2nd Floor  
Lafayette, CA 94549-4321  
Phone: (925) 299-9300 Fax: (925) 299-9302

Project: 050T.50063.00  
Bohannon Development

Received: 12/04/2002 16:25

Prep(s): 5030	Test(s): 8015M
5030	8021B
Sample ID: MW-3	Lab ID: 2002-12-0090 - 3
Sampled: 12/02/2002 11:30	Extracted: 12/9/2002 21:50
Matrix: Water	QC Batch#: 2002/12/09-01.05

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	5700	500	ug/L	10.00	12/09/2002 21:50	g
Benzene	650	5.0	ug/L	10.00	12/09/2002 21:50	
Toluene	17	5.0	ug/L	10.00	12/09/2002 21:50	
Ethyl benzene	37	5.0	ug/L	10.00	12/09/2002 21:50	
Xylene(s)	33	5.0	ug/L	10.00	12/09/2002 21:50	
<b>Surrogates(s)</b>						
Trifluorotoluene	73.3	58-124	%	1.00	12/09/2002 21:50	
4-Bromofluorobenzene-FID	81.3	50-150	%	1.00	12/09/2002 21:50	

**Gas/BTEX by 8015M/8021**

SECOR-Lafayette

Attn: Neil Doran

57 Lafayette Circle, 2nd Floor  
Lafayette, CA 94549-4321  
Phone: (925) 299-9300 Fax: (925) 299-9302

Project: 050T.50063.00  
Bohannon Development

Received: 12/04/2002 16:25

Prep(s): 5030 Test(s): 8015M  
5030 8021B  
Sample ID: MW-4 Lab ID: 2002-12-0090 - 4  
Sampled: 12/02/2002 12:15 Extracted: 12/9/2002 22:22  
Matrix: Water QC Batch#: 2002/12/09-01.05

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	5100	500	ug/L	10.00	12/09/2002 22:22	g
Benzene	250	5.0	ug/L	10.00	12/09/2002 22:22	
Toluene	8.9	5.0	ug/L	10.00	12/09/2002 22:22	
Ethyl benzene	26	5.0	ug/L	10.00	12/09/2002 22:22	
Xylene(s)	22	5.0	ug/L	10.00	12/09/2002 22:22	
<b>Surrogates(s)</b>						
Trifluorotoluene	81.6	58-124	%	1.00	12/09/2002 22:22	
4-Bromofluorobenzene-FID	84.1	50-150	%	1.00	12/09/2002 22:22	

Severn Trent Laboratories, Inc.

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Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

12/11/2002.15:33

**Gas/BTEX by 8015M/8021**

SECOR- Lafayette

Attn.: Neil Doran

57 Lafayette Circle, 2nd Floor  
Lafayette, CA 94549-4321  
Phone: (925) 299-9300 Fax: (925) 299-9302

Project: 050T.50063.00  
Bohannon Development

Received: 12/04/2002 16:25

Prep(s):	5030	Test(s):	8015M
	5030		8021B
Sample ID:	MW-5	Lab ID:	2002-12-0090 - 5
Sampled:	12/02/2002 09:30	Extracted:	12/9/2002 22:12
Matrix:	Water	QC Batch#:	2002/12/09-01.04

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	12/09/2002 22:12	
Benzene	ND	0.50	ug/L	1.00	12/09/2002 22:12	
Toluene	ND	0.50	ug/L	1.00	12/09/2002 22:12	
Ethyl benzene	ND	0.50	ug/L	1.00	12/09/2002 22:12	
Xylene(s)	ND	0.50	ug/L	1.00	12/09/2002 22:12	
<b>Surrogates(s)</b>						
Trifluorotoluene	94.9	58-124	%	1.00	12/09/2002 22:12	
4-Bromofluorobenzene-FID	91.7	50-150	%	1.00	12/09/2002 22:12	

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Gas/BTEX by 8015M/8021

SECOR- Lafayette

Attn.: Neil Doran

57 Lafayette Circle, 2nd Floor  
Lafayette, CA 94549-4321  
Phone: (925) 299-9300 Fax: (925) 299-9302

Project: 050T.50063.00  
Bohannon Development

Received: 12/04/2002 16:25

Prep(s):	5030	Test(s):	8015M
	5030		8021B
Sample ID:	MW-6	Lab ID:	2002-12-0090 - 6
Sampled:	12/02/2002 09:00	Extracted:	12/9/2002 22:36
Matrix:	Water	QC Batch#:	2002/12/09-01.04

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	12/09/2002 22:36	
Benzene	ND	0.50	ug/L	1.00	12/09/2002 22:36	
Toluene	ND	0.50	ug/L	1.00	12/09/2002 22:36	
Ethyl benzene	ND	0.50	ug/L	1.00	12/09/2002 22:36	
Xylene(s)	ND	0.50	ug/L	1.00	12/09/2002 22:36	
<b>Surrogates(s)</b>						
Trifluorotoluene	95.9	58-124	%	1.00	12/09/2002 22:36	
4-Bromofluorobenzene-FID	92.3	50-150	%	1.00	12/09/2002 22:36	



Gas/BTEX by 8015M/8021

SECOR- Lafayette

Attn.: Neil Doran

57 Lafayette Circle, 2nd Floor  
Lafayette, CA 94549-4321  
Phone: (925) 299-9300 Fax: (925) 299-9302

Project: 050T.50063.00  
Bohannon Development

Received: 12/04/2002 16:25

Prep(s): 5030  
5030

Test(s): 8015M  
8021B

Sample ID: MW-7

Lab ID: 2002-12-0090 - 7

Sampled: 12/02/2002 08:30

Extracted: 12/9/2002 23:01

Matrix: Water

QC Batch#: 2002/12/09-01.04

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	12/09/2002 23:01	
Benzene	ND	0.50	ug/L	1.00	12/09/2002 23:01	
Toluene	ND	0.50	ug/L	1.00	12/09/2002 23:01	
Ethyl benzene	ND	0.50	ug/L	1.00	12/09/2002 23:01	
Xylene(s)	ND	0.50	ug/L	1.00	12/09/2002 23:01	
<b>Surrogates(s)</b>						
Trifluorotoluene	96.6	58-124	%	1.00	12/09/2002 23:01	
4-Bromofluorobenzene-FID	93.2	50-150	%	1.00	12/09/2002 23:01	

**Gas/BTEX by 8015M/8021**

SECOR-Lafayette

Attn.: Neil Doran

57 Lafayette Circle, 2nd Floor  
Lafayette, CA 94549-4321  
Phone: (925) 299-9300 Fax: (925) 299-9302

Project: 050T.50063.00  
Bohannon Development

Received: 12/04/2002 16:25

**Batch QC Report**

Prep(s): 5030

Method Blank

MB: 2002/12/09-01.04-008

Water

Test(s): 8015M

QC Batch # 2002/12/09-01.04

Date Extracted: 12/09/2002 10:15

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	12/09/2002 10:15	
Benzene	ND	0.5	ug/L	12/09/2002 10:15	
Toluene	ND	0.5	ug/L	12/09/2002 10:15	
Ethyl benzene	ND	0.5	ug/L	12/09/2002 10:15	
Xylene(s)	ND	0.5	ug/L	12/09/2002 10:15	
<b>Surrogates(s)</b>					
Trifluorotoluene	99.4	58-124	%	12/09/2002 10:15	
4-Bromofluorobenzene-FID	93.6	50-150	%	12/09/2002 10:15	

Sewern Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

12/11/2002 15:33

Page 9 of 18

**Gas/BTEX by 8015M/8021**

SECOR- Lafayette

Attn.: Neil Doran

57 Lafayette Circle, 2nd Floor  
Lafayette, CA 94549-4321  
Phone: (925) 299-9300 Fax: (925) 299-9302

Project: 050T.50063.00  
Bohannon Development

Received: 12/04/2002 16:25

**Batch QC Report**

Prep(s): 5030

Method Blank

MB: 2002/12/09-01.05-004

Water

Test(s): 8015M

QC Batch # 2002/12/09-01.05

Date Extracted: 12/09/2002 11:17

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	12/09/2002 08:36	
Benzene	ND	0.5	ug/L	12/09/2002 08:36	
Toluene	ND	0.5	ug/L	12/09/2002 08:36	
Ethyl benzene	ND	0.5	ug/L	12/09/2002 08:36	
Xylene(s)	ND	0.5	ug/L	12/09/2002 08:36	
<b>Surrogates(s)</b>					
Trifluorotoluene	87.0	58-124	%	12/09/2002 08:36	
4-Bromofluorobenzene-FID	77.6	50-150	%	12/09/2002 08:36	

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STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

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**Gas/BTEX by 8015M/8021**

SECOR- Lafayette

Attn.: Neil Doran

57 Lafayette Circle, 2nd Floor  
Lafayette, CA 94549-4321  
Phone: (925) 299-9300 Fax: (925) 299-9302

Project: 050T.50063.00  
Bohannon Development

Received: 12/04/2002 16:25

**Batch QC Report**

Prep(s): 5030

Method Blank

MB: 2002/12/10-01.05-003

Water

Test(s): 8015M

QC Batch # 2002/12/10-01.05

Date Extracted: 12/10/2002 08:03

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	12/10/2002 08:03	
Benzene	ND	0.5	ug/L	12/10/2002 08:03	
Toluene	ND	0.5	ug/L	12/10/2002 08:03	
Ethyl benzene	ND	0.5	ug/L	12/10/2002 08:03	
Xylene(s)	ND	0.5	ug/L	12/10/2002 08:03	
<b>Surrogates(s)</b>					
Trifluorotoluene	85.4	58-124	%	12/10/2002 08:03	
4-Bromofluorobenzene-FID	81.6	50-150	%	12/10/2002 08:03	

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**Gas/BTEX by 8015M/8021**

SECOR- Lafayette

Attn.: Neil Doran

57 Lafayette Circle, 2nd Floor  
Lafayette, CA 94549-4321  
Phone: (925) 299-9300 Fax: (925) 299-9302

Project: 050T.50063.00  
Bohannon Development

Received: 12/04/2002 16:25

**Batch QC Report**

Prep(s): 5030

Test(s): 8021B

Laboratory Control Spike

Water

QC Batch # 2002/12/09-01.04

LCS 2002/12/09-01.04-004

Extracted: 12/09/2002

Analyzed: 12/09/2002 08:38

LCSD 2002/12/09-01.04-005

Extracted: 12/09/2002

Analyzed: 12/09/2002 09:02

Compound	Conc. ug/L		Exp.Conc.	Recovery		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Benzene	106	107	100.0	106.0	107.0	0.9	77-123	20		
Toluene	104	105	100.0	104.0	105.0	1.0	78-122	20		
Ethyl benzene	103	104	100.0	103.0	104.0	1.0	70-130	20		
Xylene(s)	302	304	300	100.7	101.3	0.6	75-125	20		
<b>Surrogates(s)</b>										
Trifluorotoluene	502	523	500	100.4	104.6		58-124			

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**Gas/BTEX by 8015M/8021**

SECOR-Lafayette

Attn.: Neil Doran

57 Lafayette Circle, 2nd Floor  
Lafayette, CA 94549-4321  
Phone: (925) 299-9300 Fax: (925) 299-9302

Project: 050T.50063.00  
Bohannon Development

Received: 12/04/2002 16:25

**Batch QC Report**

Prep(s): 5030

Test(s): 8015M

Laboratory Control Spike

Water

QC Batch # 2002/12/09-01.04

LCS 2002/12/09-01.04-006

Extracted: 12/09/2002

Analyzed: 12/09/2002 09:26

LCSD 2002/12/09-01.04-007

Extracted: 12/09/2002

Analyzed: 12/09/2002 09:50

Compound	Conc. ug/L		Exp. Conc.	Recovery		RPD	Ctrl. Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Gasoline	539	502	500	107.8	100.4	7.1	75-125	20		
<i>Surrogates(s)</i> 4-Bromofluorobenzene-FID	506	487	500	101.2	97.4		50-150			

Gas/BTEX by 8015M/8021

SECOR- Lafayette

Attn.: Neil Doran

57 Lafayette Circle, 2nd Floor  
Lafayette, CA 94549-4321  
Phone: (925) 299-9300 Fax: (925) 299-9302

Project: 050T.50063.00  
Bohannon Development

Received: 12/04/2002 16:25

Batch QC Report

Prep(s): 5030

Test(s): 8021B

Laboratory Control Spike

Water

QC Batch # 2002/12/09-01-05

LCS 2002/12/09-01.05-005

Extracted: 12/09/2002

Analyzed: 12/09/2002 09:08

LCSD 2002/12/09-01.05-006

Extracted: 12/09/2002

Analyzed: 12/09/2002 09:40

Compound	Conc. ug/L		Exp. Conc.	Recovery		RPD	Ctrl. Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Benzene	98.1	93.0	100.0	98.1	93.0	5.3	77-123	20		
Toluene	96.5	91.4	100.0	96.5	91.4	5.4	78-122	20		
Ethyl benzene	97.1	91.3	100.0	97.1	91.3	6.2	70-130	20		
Xylene(s)	291	275	300	97.0	91.7	5.6	75-125	20		
<b>Surrogates(s)</b>										
Trifluorotoluene	460	466	500	92.0	93.2		58-124			

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**Gas/BTEX by 8015M/8021**

SECOR- Lafayette

Attn.: Neil Doran

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Lafayette, CA 94549-4321  
Phone: (925) 299-9300 Fax: (925) 299-9302

Project: 050T.50063.00  
Bohannon Development

Received: 12/04/2002 16:25

**Batch QC Report**

Prep(s): 5030

Test(s): 8015M

Laboratory Control Spike

Water

QC Batch # 2002/12/09-01.05

LCS 2002/12/09-01.05-007

Extracted: 12/09/2002

Analyzed: 12/09/2002 10:13

LCSD 2002/12/09-01.05-008

Extracted: 12/09/2002

Analyzed: 12/09/2002 10:45

Compound	Conc. ug/L		Exp. Conc.	Recovery		RPD	Ctrl. Limits %			Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS	LCSD
Gasoline	545	520	500	109.0	104.0	4.7	75-125	20			
<i>Surrogates(s)</i> 4-Bromofluorobenzene-FID	449	474	500	89.8	94.8		50-150				

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**Gas/BTEX by 8015M/8021.**

SECOR- Lafayette

Attn.: Neil Doran

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Phone: (925) 299-9300 Fax: (925) 299-9302

Project: 050T.50063.00  
Bohannon Development

Received: 12/04/2002 16:25

**Batch QC Report**

Prep(s): 5030

Test(s): 8021B

**Laboratory Control Spike**

**Water**

**QC Batch # 2002/12/10-01.05**

LCS 2002/12/10-01.05-004

Extracted: 12/10/2002

Analyzed: 12/10/2002 08:35

LCSD 2002/12/10-01.05-005

Extracted: 12/10/2002

Analyzed: 12/10/2002 09:07

Compound	Conc. ug/L		Exp. Conc.	Recovery		RPD	Ctrl. Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Benzene	97.6	99.2	100.0	97.6	99.2	1.6	77-123	20		
Toluene	96.4	97.9	100.0	96.4	97.9	1.5	78-122	20		
Ethyl benzene	95.9	96.9	100.0	95.9	96.9	1.0	70-130	20		
Xylene(s)	287	289	300	95.7	96.3	0.6	75-125	20		
<b>Surrogates(s)</b>										
Trifluorotoluene	436	429	500	87.2	85.8		58-124			

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**Gas/BTEX by 8015M/8021**

SECOR- Lafayette

Attn.: Neil Doran

57 Lafayette Circle, 2nd Floor  
Lafayette, CA 94549-4321  
Phone: (925) 299-9300 Fax: (925) 299-9302

Project: 050T.50063.00  
Bohannon Development

Received: 12/04/2002 16:25

**Batch QC Report**

Prép(s): 5030

Test(s): 8015M

**Laboratory Control Spike**

**Water**

**QC Batch # 2002/12/10-01.05**

LCS 2002/12/10-01.05-006

Extracted: 12/10/2002

Analyzed: 12/10/2002 09:39

LCSD 2002/12/10-01.05-007

Extracted: 12/10/2002

Analyzed: 12/10/2002 10:11

Compound	Conc. ug/L		Exp. Conc.	Recovery		RPD	Ctrl. Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Gasoline	427	509	500	85.4	101.8	17.5	75-125	20		
<i>Surrogates(s)</i>										
4-Bromofluorobenzene-FID	358	431	500	71.6	86.2		50-150			

Severn Trent Laboratories, Inc.

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Gas/BTEX by 8015M/8021

SECOR- Lafayette

Attn.: Neil Doran

57 Lafayette Circle, 2nd Floor

Lafayette, CA 94549-4321

Phone: (925) 299-9300 Fax: (925) 299-9302

Project: 050T.50063.00

Bohannon Development

Received: 12/04/2002 16:25

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Legend and Notes

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Result Flag

g

Hydrocarbon reported in the gasoline range does not match our gasoline standard.

Severn Trent Laboratories, Inc.

STL, San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

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2002-12-0090

Chain-of Custody Number: 70608

SECOR Chain-of Custody Record

Field Office: San Francisco  
 Address: 57 Lafayette Circle  
Lafayette, CA 94549

Additional documents are attached, and are a part of this Record.  
 Job Name: Behannon Development  
 Location: 575 Paseo Grande  
San Lorenzo, CA

Project # 050T.50063.00 Task # \_\_\_\_\_  
 Project Manager Neil Doran  
 Laboratory STL San Francisco  
 Turnaround Time Standard

Analysis Request

Sampler's Name Neil Doran  
 Sampler's Signature Neil Doran

Sample ID	Date	Time	Matrix	HCID	TPH <sub>9</sub> /BTEX/WTPH-G 8015 (modified)/8020	TPH <sub>4</sub> /WTPH-D 8015 (modified)	TPH 418.1/WTPH 418.1	Aromatic Volatiles 602/8020	Volatile Organics 624/8240 (GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)	Pesticides/PCBs 608/8080	Total Lead 7421	Priority Pollutant Metals (13)	TCLP Metals	Comments/ Instructions	Number of Containers
MW-1	12-2-02	1000	H <sub>2</sub> O		X												W
MW-2		1045			X												W
MW-3		1130			X												W
MW-4		1215			X												W
MW-5		930			X												W
MW-6		900			X												W
MW-7		1080			X												W

Special Instructions/Comments:  
 4.0°C

Relinquished by:  
 Sign Neil Doran  
 Print Neil Doran  
 Company Secor  
 Time \_\_\_\_\_ Date \_\_\_\_\_

Received by:  
 Sign [Signature]  
 Print MUSA  
 Company STL S.F.  
 Time 1215 Date 12.04.02

Sample Receipt  
 Total no. of containers: \_\_\_\_\_  
 Chain of custody seals: \_\_\_\_\_  
 Rec'd in good condition/cold: \_\_\_\_\_  
 Conforms to record: \_\_\_\_\_

Relinquished by:  
 Sign [Signature]  
 Print MUSA  
 Company STL S.F.  
 Time 1625 Date 12/4/02

Received by:  
 Sign [Signature]  
 Print D. Harrington  
 Company STL SF  
 Time 1625 Date 12/4/02

Client: \_\_\_\_\_  
 Client Contact: \_\_\_\_\_  
 Client Phone: \_\_\_\_\_

### Sample Receipt Checklist

Submission #: 2002- 12 - 0090

Checklist completed by: (initials) CR Date: 12/05/02

Courier name:  STL San Francisco  Client \_\_\_\_\_

Custody seals intact on shipping container/samples

Yes \_\_\_ No \_\_\_ Not Present

Chain of custody present?

Yes  No \_\_\_

Chain of custody signed when relinquished and received?

Yes  No \_\_\_

Chain of custody agrees with sample labels?

Yes  No \_\_\_

Samples in proper container/bottle?

Yes  No \_\_\_

Sample containers intact?

Yes  No \_\_\_

Sufficient sample volume for indicated test?

Yes  No \_\_\_

All samples received within holding time?

Yes  No \_\_\_

Container/Temp Blank temperature in compliance ( $4^{\circ}C \pm 2$ )?

Temp: 4.0°C Yes  No \_\_\_

Water - VOA vials have zero headspace?

No VOA vials submitted \_\_\_ Yes  No \_\_\_

(if bubble is present, refer to approximate bubble size and itemize in comments as S (small -  $\bigcirc$ ), M (medium -  $\bigcirc$ ) or L (large -  $\bigcirc$ ))

Water - pH acceptable upon receipt?  Yes  No

pH adjusted- Preservative used:  HNO<sub>3</sub>  HCl  H<sub>2</sub>SO<sub>4</sub>  NaOH  ZnOAc

For any item check-listed "No", provided detail of discrepancy in comment section below:

Comments:

### Project Management [Routing for instruction of indicated discrepancy(ies)]

Project Manager: (initials) \_\_\_\_\_ Date: \_\_\_\_\_ / \_\_\_\_\_ / 02

Client contacted:  Yes  No

Summary of discussion:

Corrective Action (per PM/Client):