R0167

DAVID D. BOHANNON
ORGANIZATION

June 21, 2004

JUN 2 5 2004

Ms. Eva Chu
Hazardous Materials Specialist
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502

Re: 2nd Semester 2003 Groundwater Monitoring Report – David D. Bohannon Organization Property Located at 575 Paseo Grande –San Lorenzo, CA

Dear Ms. Chu:

The David D. Bohannon Organization is pleased to provide the enclosed copy of the above-referenced report. The report was prepared by Engineering and Fire Investigations (EFI).

Please contact the undersigned or Mr. Chris Maxwell of EFI if you have any questions or comments regarding the report.

Sincerely,

Mr. Robert L. Webster,
Chairman

Enclosure

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SEMI-ANNUAL (SECOND HALF 2003)
Groundwater Monitoring Report

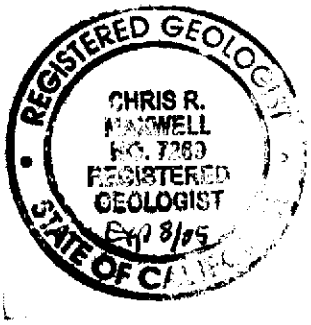
575 Paseo Grande
San Lorenzo, California

Prepared for:
David D. Bohannon Organization
Sixty 31st Avenue
San Mateo, California

Prepared By:
EFI
San Ramon, California
EFI Project No. 98360-00001
June 2004

Semi-Annual (Second Half 2003)
Groundwater Monitoring Report
575 Paseo Grande
San Lorenzo, California

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.



EFI

Chris Maxwell, R.G.
Branch Manager

Warren B. Chamberlain for

Mark Williams
Senior Scientist

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1.0 INTRODUCTION

This report presents the results of groundwater monitoring, sampling, and analysis conducted on December 18, 2003 for the property located at 575 Paseo Grande, San Lorenzo, California (Site), Figure 1. This sampling event was conducted to continue the assessment of groundwater conditions beneath the Site. The previous groundwater monitoring and sampling was conducted in March 2003.

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 (TPH-g) and benzene, toluene, ethylbenzene, and total xylenes, (collectively BTEX).

During the December 2003 sampling event, a local resident verbally indicated the presence of an inactive residential irrigation well located in the resident's backyard. On behalf of David D. Bohannon Organization, EFI conducted a door-to-door well survey near the Site. The results of the well survey are presented in Section 4.

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 former underground service station equipment remained-onsite. The work was conducted by Twining Laboratories, Inc. 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 the initial 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 the 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, 1995, and *Fourth Quarter 1996 Monitoring and Sampling Report* dated November 26, 1996. Monitoring well locations are illustrated in 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 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. 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 SECOR's *Work Plan for Additional Groundwater Monitoring Well Installation* dated October 22, 1999, and SECOR's *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 exception of MW-7, which reported low concentrations of total xylenes (up to 6.7 microgram per Liter [µg/L]) in the first two sampling events (December 2000 and February 2001). The well has since been non-detect for all constituents.

In January 2003, SECOR performed an additional limited subsurface investigation as described in the *Remedial Action Work Plan* dated October 25, 2002. The Work Plan was approved by the ACHSA in a letter dated October 28, 2002. Based on field observations, soil boring logs, and laboratory analytical results, SECOR concluded that perched groundwater was encountered within fill materials at approximately 5 to 8 feet below ground surface (bgs). SECOR determined that subsurface sediments consist primarily of fine-grained soils punctuated by zones of silty sand. Water-bearing sediments were categorized by SECOR into relatively thin silt and sand layers at depths of approximately 13 to 15 feet bgs (A Zone), 16 to 19 feet bgs (B Zone), and 22.5 feet bgs (C Zone). Based on the soil sample analytical results, SECOR concluded that the majority of chemical impact exists in silty clay from approximately 8 to 13.5 feet bgs within and adjacent to the former UST and pump island excavation.

The findings of the investigation were presented in the report *Limited Subsurface Investigation Report and Work Plan for Additional Soil and Groundwater Assessment* dated February 19, 2003 and prepared by SECOR.

At the request of the Alameda County Health Care Service Agency (ACHCSA), a sensitive receptor survey was performed for the Site. The survey consisted of identifying the locations and depths of subsurface utilities near the Site, and reviewing data provided by the California Department of Water Resources (DWR) for potential groundwater production wells. The survey results are presented in SECOR'S *Sensitive Receptor Survey and Conduit Study* dated June 30, 2003. The report indicates that no groundwater production wells are likely to be affected by hydrocarbons in the soil and groundwater at the Site.

The October 2002 *Remedial Action Workplan* (RAW) proposed nitrate injections to stimulate biological degradation of hydrocarbons in the groundwater. Based on the data collected in January 2003, additional remediation of soil was also recommended. An addendum to the RAW was submitted by SECOR in December 2003 proposing hydrogen peroxide injections for chemical oxidation of soils in addition to nitrate injections. The RAW addendum was approved by the ACHCSA in a letter to Bohannon dated December 15, 2003.

2.0 GROUNDWATER MONITORING

Groundwater monitoring wells MW-1 through MW-7 were gauged for depth-to-water and sampled on December 18, 2003.

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 monitor 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 approximately 0.1 gallons per minute (gpm). Temperature, conductivity, pH, dissolved oxygen content, and oxidation-reduction potential were monitored using a flow-through cell during purging to confirm stable 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 TPH-g by modified U.S. Environmental Protection Agency (EPA) Method 8015m; and for BTEX by EPA Method 8012B.

3.0 RESULTS

3.1 Groundwater Elevation Results

The average depth to water measurements taken at the Site on December 18, 2003 was 5.88 feet below the top of well casing, with an average water table elevation of 20.15 feet above mean sea level. Groundwater elevations decreased an average of 0.47 feet since the previous monitoring event in March 2003.

A potentiometric surface map illustrating the interpreted groundwater surface elevation and flow direction on December 18, 2003 is presented as Figure 3. The hydraulic gradient across the Site was approximately 0.002 feet per foot (ft/ft) 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 the San Francisco bay to the west.

3.2 Groundwater Analytical Results

Table 2 presents historical groundwater laboratory analytical results for the Site including the December 18, 2003 event. Petroleum hydrocarbon chemical data for the December 2003 event are illustrated on Figure 4.

TPH-g and BTEX concentrations continue to be below the 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 two subsections provide 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 18, 2003 event, benzene concentrations ranged from 55 µg/L in MW-2 to 910 µg/L in MW-3. Reported BTEX concentrations are generally consistent with historical results.

3.2.2 TPH-g

TPH-g was reported in samples collected from wells MW-2, MW-3, and MW-4. Historical concentrations of TPH-g in these three wells are shown on Figure 7 (MW-2 and MW-4) and Figure 8 (MW-3). During the December 2003 event, the TPH-g concentrations ranged from 910 µg/L in MW-2 to 5,200 µg/L in MW-3. Reported TPH-g concentrations are generally consistent with historical results.

The groundwater samples were also analyzed for total petroleum hydrocarbons as diesel (TPH-d). The TPH-d results are included on the laboratory data sheets. TPH-d was detected in the following wells: MW-2 at 200 µg/L; MW-3 at 970 µg/L; and MW-4 at 500 µg/L. The analytical results for the three wells were flagged in the laboratory data report by the following note: *hydrocarbon reported does not match the pattern of our diesel/gasoline standard.* TPH-d was not detected in the other four wells above the laboratory reporting limits (<50 µg/L).

4.0 WELL SURVEY

As discussed in Section 2, SECOR previously conducted a well survey for the Site. The records search did not indicate the presence of production wells in close proximity to the Site. However, during the December 2003 sampling event, a resident indicated the presence of an inactive residential irrigation well in the resident's backyard. On behalf of Bohannon, EFI conducted a door-to-door well survey in the immediate vicinity of the Site. The results of the survey are illustrated on Figure 9.

In summary, there are two inactive landscape irrigation wells near the Site. Neither well is currently in use or likely to be used in the immediate future. EFI and Bohannon are currently in discussion with the two residents to ensure that the wells are not used while the proposed remedial action is implemented at the Site. Both residents have indicated that they do not want to use the wells in the future because of limited yield and the availability of public water supply, and have requested that Bohannon assist with their proper abandonment. Both wells will be properly abandoned in accordance with appropriate agency regulations and requirements.

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

Date Sampled	TOC (ft msl)	DTW (ft bTOC)	ELEV (ft msl)
MW-1			
5/17/96	27.11	5.65	21.46
10/8/96		7.47	19.64
4/1/97		6.27	20.84
6/12/97		6.90	20.21
9/10/97		7.48	19.63
6/8/99		6.44	20.67
9/13/99		7.56	19.55
12/21/99		7.41	19.70
3/17/00		5.35	21.76
12/5/00	26.98	6.99	19.99
2/28/01		5.71	21.27
8/22/01		7.39	19.59
5/22/02		6.25	20.73
8/29/02		7.23	19.75
12/2/02		7.13	19.85
3/4/03		5.77	21.21
12/18/03		6.37	20.61
MW-2			
5/17/96	26.73	5.56	21.17
10/8/96		7.15	19.58
4/1/97		6.61	20.12
6/12/97		6.76	19.97
9/10/97		7.19	19.54
6/8/99		6.45	20.28
9/13/99		7.46	19.27
12/21/99		7.26	19.47
3/17/00		5.56	21.17
12/5/00	26.73	7.01	19.72
2/28/01		5.81	20.92
8/22/01		7.42	19.31
5/22/02		6.40	20.33
8/29/02		7.26	19.47
12/2/02		7.02	19.71
3/4/03		5.91	20.82
12/18/03		6.47	20.26

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

Date Sampled	TOC (ft msl)	DTW (ft bTOC)	ELEV (ft msl)
MW-3			
5/17/96	26.15	4.39	21.76
10/8/96		6.82	19.33
4/1/97		5.53	20.62
6/12/97		6.18	19.97
9/10/97		6.81	19.34
6/8/99		5.74	20.41
9/13/99		6.88	19.27
12/21/99		6.66	19.49
3/17/00		4.51	21.64
12/5/00	26.55	6.84	19.71
2/28/01		5.44	21.11
8/22/01		7.29	19.26
5/22/02		6.22	20.33
8/29/02		7.26	19.29
12/2/02		6.85	19.70
3/4/03		5.72	20.83
12/18/03		6.15	20.40
MW-4			
12/5/00	25.87	6.28	19.59
2/28/01		4.99	20.88
8/22/01		6.73	19.14
5/22/02		5.50	20.37
8/29/02		6.55	19.32
12/2/02		6.28	19.59
3/4/03		5.28	20.59
12/18/03		5.85	20.02
MW-5			
12/5/00	25.77	6.25	19.52
2/28/01		4.95	20.82
8/22/01		6.69	19.08
5/22/02		5.50	20.27
8/29/02		6.54	19.23
12/2/02		6.37	19.40
3/4/03		5.41	20.36
12/18/03		5.65	20.12
MW-6			
12/5/00	24.89	5.68	19.21
2/28/01		4.35	20.54
8/22/01		6.15	18.74
5/22/02		4.91	19.98
8/29/02		5.96	18.93
12/2/02		5.70	19.19
3/4/03		4.69	20.20
12/18/03		5.05	19.84

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

Date Sampled	TOC (ft msl)	DTW (ft bTOC)	ELEV (ft msl)
MW-7			
12/5/00	25.43	6.43	19.00
2/28/01		4.76	20.67
8/22/01		6.95	18.48
5/22/02		5.55	19.88
8/29/02		NM	--
12/2/02		6.43	19.00
3/4/03		5.10	20.33
12/18/03		5.65	19.78

Notes:
TOC = Top of casing
DTW = Depth to water
ELEV = Water table elevation above mean sea level (msl)
ft msl = feet above msl
ft bTOC = feet below TOC
NM = Not measured

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

Date Sampled	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Chromium (µg/L)	Dissolved Inorganic Lead (µg/L)
MW-1								
5/17/96	**1,100**	<0.5	**8.7**	**7.4**	**17**	--	<10	<50
10/8/96	**120**	<0.5	<0.5	**2.7**	<0.5	--	--	--
4/1/97	**550**	<0.5	<0.5	**7.6**	**6.6**	--	--	--
6/12/97	**160**	<0.5	<0.5	**2.9**	**1.7**	--	--	--
9/10/97	**640**	**2.2**	**3.8**	**7.4**	**16**	--	--	--
6/8/99	<50	<0.5	<0.5	<0.5	<0.5	<10	<10	<20
9/13/99	<50	<0.5	<0.5	<0.5	**1.1**	--	--	<5
12/21/99	<50	<0.5	<0.5	<0.5	<0.5	--	--	
3/17/00	<50	<0.5	<0.5	<0.5	**0.79**	<5	--	<5
12/5/00	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
2/28/01	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
8/22/01	<50	<0.5	<0.5	<0.5	<0.5	<5		<5
5/22/02	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
8/29/02	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
12/2/02	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
3/4/03	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
12/18/03	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
MW-2								
5/17/96	**23,000**	**900**	**330**	**650**	**1,500**	--	<10	<50
10/8/96	**8,400**	**530**	<50	**400**	**360**	--	--	--
4/1/97	**7,600**	**470**	**64**	**210**	**250**	--	--	--
6/12/97	**8,200**	**440**	**52**	**190**	**190**	--	--	--
9/10/97	**8,500**	**390**	**51**	**220**	**240**	--	--	--
6/8/99	**2,100**	**240**	**8**	**33**	**40**	<10	<10	**33**
9/13/99	**1,300**	**120**	<5	<5	**15**	--	--	--
12/21/99	**1,400**	**110**	**5.6**	**11**	**17**	--	--	<5
3/17/00	**1,200**	**180**	**19**	**28**	**31**	<50	--	<5
12/5/00	**800**	**75**	**1.8**	**11**	**14**	--	--	--
2/28/01	**1,200**	**120**	**7.1**	**19**	**27**	--	--	--
8/22/01	**990**	**75**	**3.5**	**8.9**	**8.1**	<5	--	<5
5/22/02	**1,700**	**230**	**12**	**12**	**25**	--	--	--
8/29/02	**1,000**	**66**	**2.6**	**12**	**12**	--	--	--
12/2/02	**1,100**	**76**	**8.7**	**11**	**17**	--	--	--
3/4/03	**1,100**	**130**	**4.5**	**22**	**24**	--	--	--
12/18/03	**910**	**55**	**4.1**	**3.3**	**3.7**	--	--	--

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

Date Sampled	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Chromium (µg/L)	Dissolved Inorganic Lead (µg/L)
MW-3								
5/17/96	6,700	140	45	210	180	--	<10	<50
10/8/96	1,800	2,700	240	910	970	--	--	--
4/1/97	27,000	520	50	520	450	--	--	--
6/12/97	29,000	2,700	160	940	500	--	--	--
9/10/97	290,000	1,800	3,200	2,800	6,900	--	--	--
6/8/99	1,700	320	6.4	15	<0.5	<10	<10	24
9/13/99	5,400	1,000	<20	<20	<20	--	--	--
12/21/99	8,800	1,400	63	17	23	--	--	<5
3/17/00	1,500	190	<5	7.6	<5	<50		<5
12/5/00	5,400	790	20	7.4	10	--	--	--
2/28/01	3,600	850	15	25	10	--	--	--
8/22/01	8,100	1,600	28	44	17	<50	--	<5
5/22/02	5,400	1,000	32	13	21	--	--	--
8/29/02	6,700	1,700	55	49	38	--	--	--
12/2/02	5,700	650	17	37	33	--	--	--
3/4/03	5,000	650	18	42	27	--	--	--
12/18/03	5,200	910	25	20	21	--	--	--
MW-4								
12/5/00	3,900	320	13	41	31	--	--	<5
2/28/01	3,400	250	14	44	22	--	--	<5
8/22/01	4,800	260	12	27	9	<50	--	<5
5/22/02	5,100	320	29	74	50	--	--	--
8/29/02	3,700	260	<5	30	28	--	--	--
12/2/02	5,100	250	8.9	26	22	--	--	--
3/4/03	4,500	170	18	63	47	--	--	--
12/18/03	2,900	160	8.3	8	<5	--	--	--
MW-5								
12/5/00	<50	<0.5	<0.5	<0.5	<0.5	--	--	<5
2/28/01	<50	<0.5	<0.5	<0.5	<0.5	--	--	<5
8/22/01	<50	<0.5	<0.5	<0.5	<0.5	<5	--	<5
5/22/02	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
8/29/02	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
12/2/02	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
3/4/03	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
12/18/03	<50	<0.5	<0.5	<0.5	<0.5	--	--	--

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

Date Sampled	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Chromium (µg/L)	Dissolved Inorganic Lead (µg/L)
MW-6								
12/5/00	<50	<0.5	<0.5	<0.5	<0.5	--	--	<5
2/28/01	<50	<0.5	<0.5	<0.5	<0.5	--	--	<5
8/22/01	<50	<0.5	<0.5	<0.5	<0.5	<5	--	<5
5/22/02	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
8/29/02	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
12/2/02	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
3/4/03	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
12/18/03	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
MW-7								
12/5/00	<50	<0.5	<0.5	<0.5	**1.5**	--	--	<5
2/28/01	<50	<0.5	<0.5	<0.5	**6.7**	--	--	<5
8/22/01	<50	<0.5	<0.5	<0.5	<0.5	<5	--	<5
5/22/02	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
8/29/2002*	--	--	--	--	--	--	--	--
12/2/02	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
3/4/03	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
12/18/03	<50	<0.5	<0.5	<0.5	<0.5	--	--	--

Notes:
TOC = Top of casing
DTW = Depth to water
ELEV = Water table elevation above mean sea level (msl)
ft msl = feet above msl
ft bTOC = feet below TOC
NM = Not measured
* = well not sampled
-- = water sample not analyzed for specified constituents

TOPOGRAPHIC MAP
SAN LORENZO, CALIFORNIA
1993

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FIGURE 1

SITE LOCATION MAP

BOHANNON DEVELOPMENT COMPANY

575 PASEO GRANDE
SAN LORENZO, CALIFORNIA

EFI Job No.
98360.00001

4/5/04

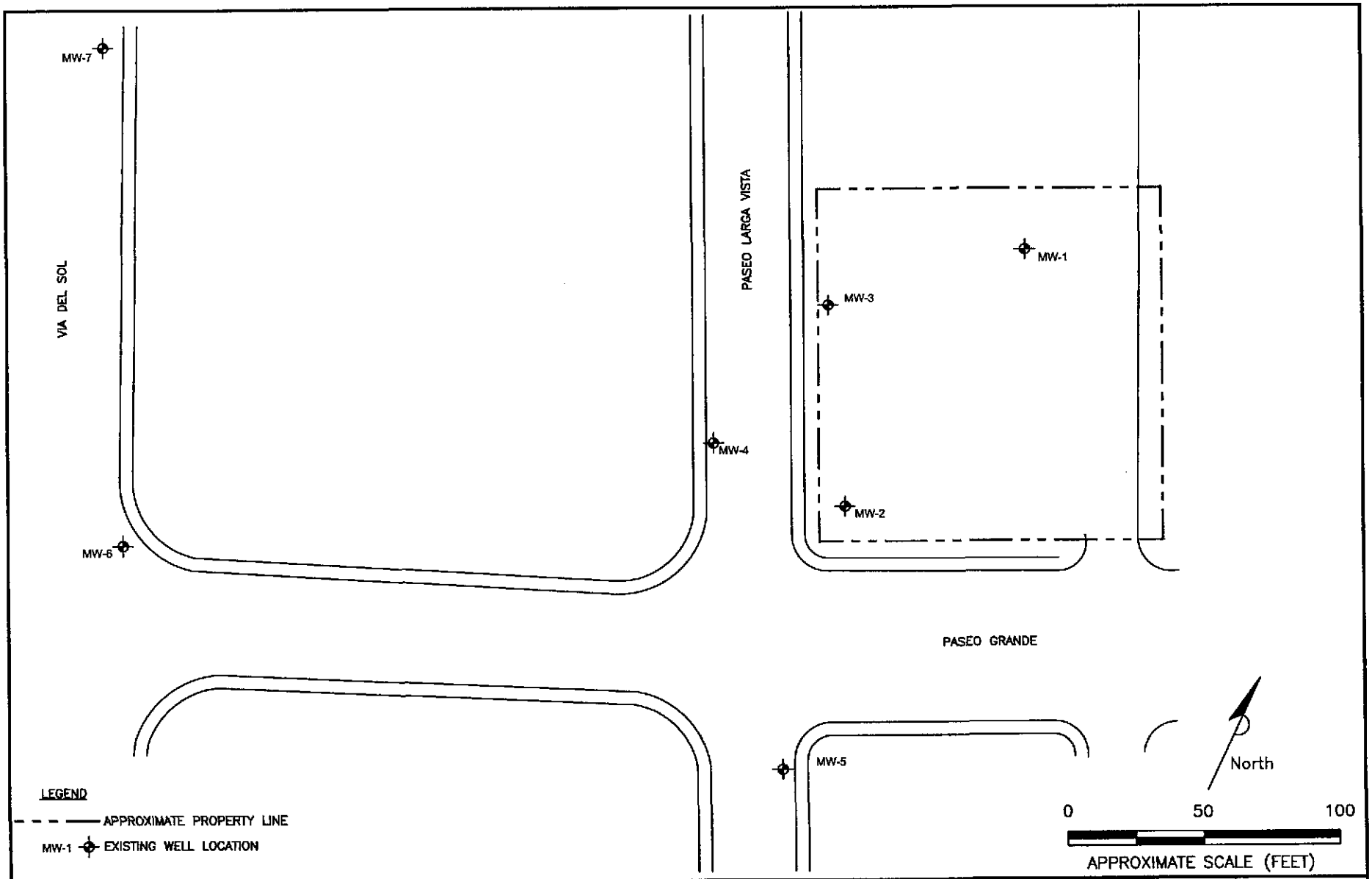

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FIGURE 2

SITE PLAN

BOHANNON DEVELOPMENT COMPANY

575 PASEO GRANDE
SAN LARENZO, CALIFORNIA

EFI Job No.
98360.00001

4/5/04

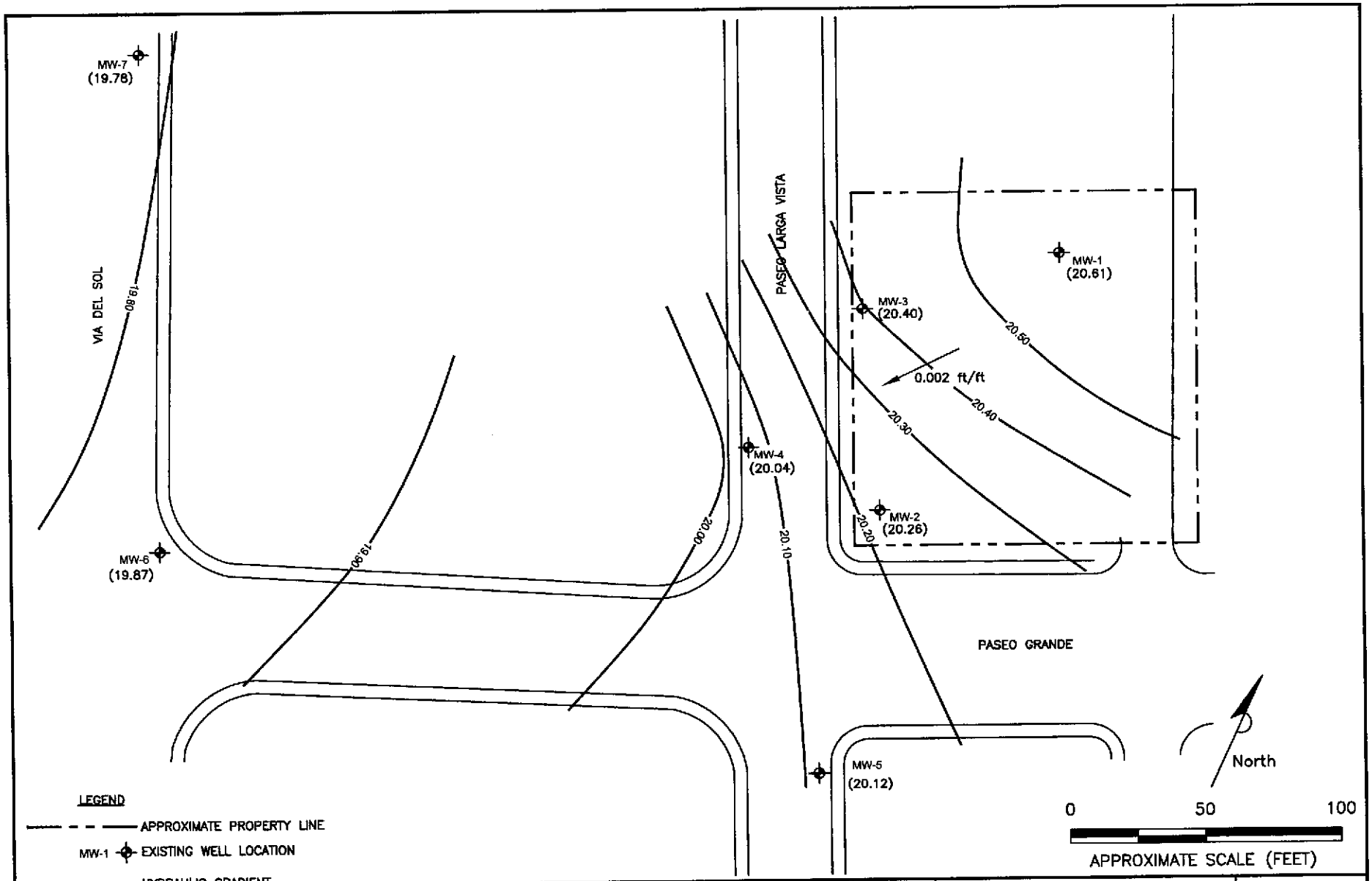

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FIGURE 3

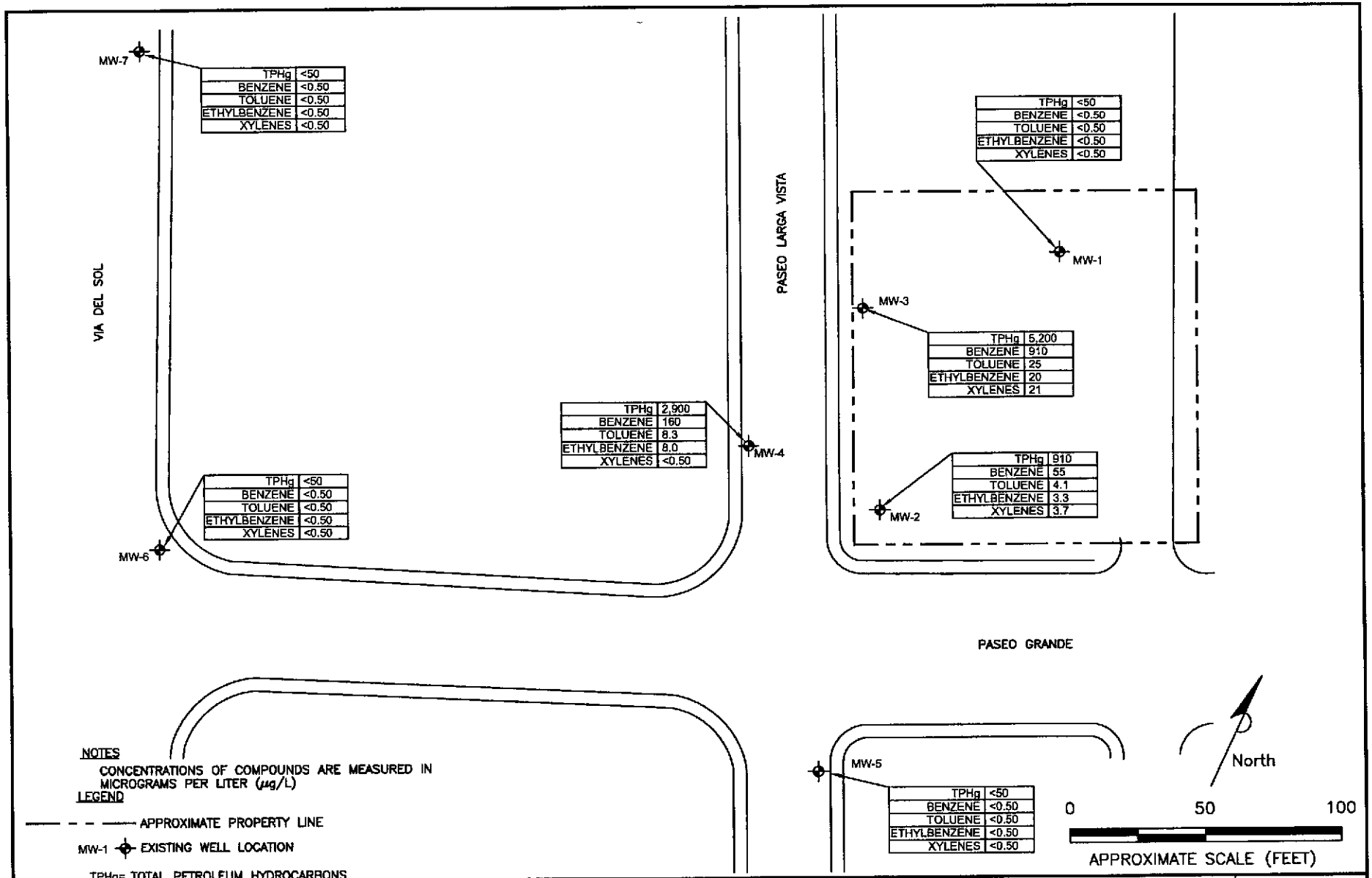
POTENTIOMETRIC SURFACE MAP (12/18/03)

BOHANNON DEVELOPMENT COMPANY

575 PASEO GRANDE
SAN LARENZO, CALIFORNIA

EFI Job No.
98360.00001

4/5/04



NOTES

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

LEGEND

APPROXIMATE PROPERTY LINE

MW-1 EXISTING WELL LOCATION

TPHg= TOTAL PETROLEUM HYDROCARBONS AS GASOLINE

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FIGURE 4

CHEMICAL CONCENTRATIONS IN GROUNDWATER
12/18/03

BOHANNON DEVELOPMENT COMPANY

575 PASEO GRANDE
SAN LARENZO, CALIFORNIA

EFI Job No.
98360.00001

4/5/04

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

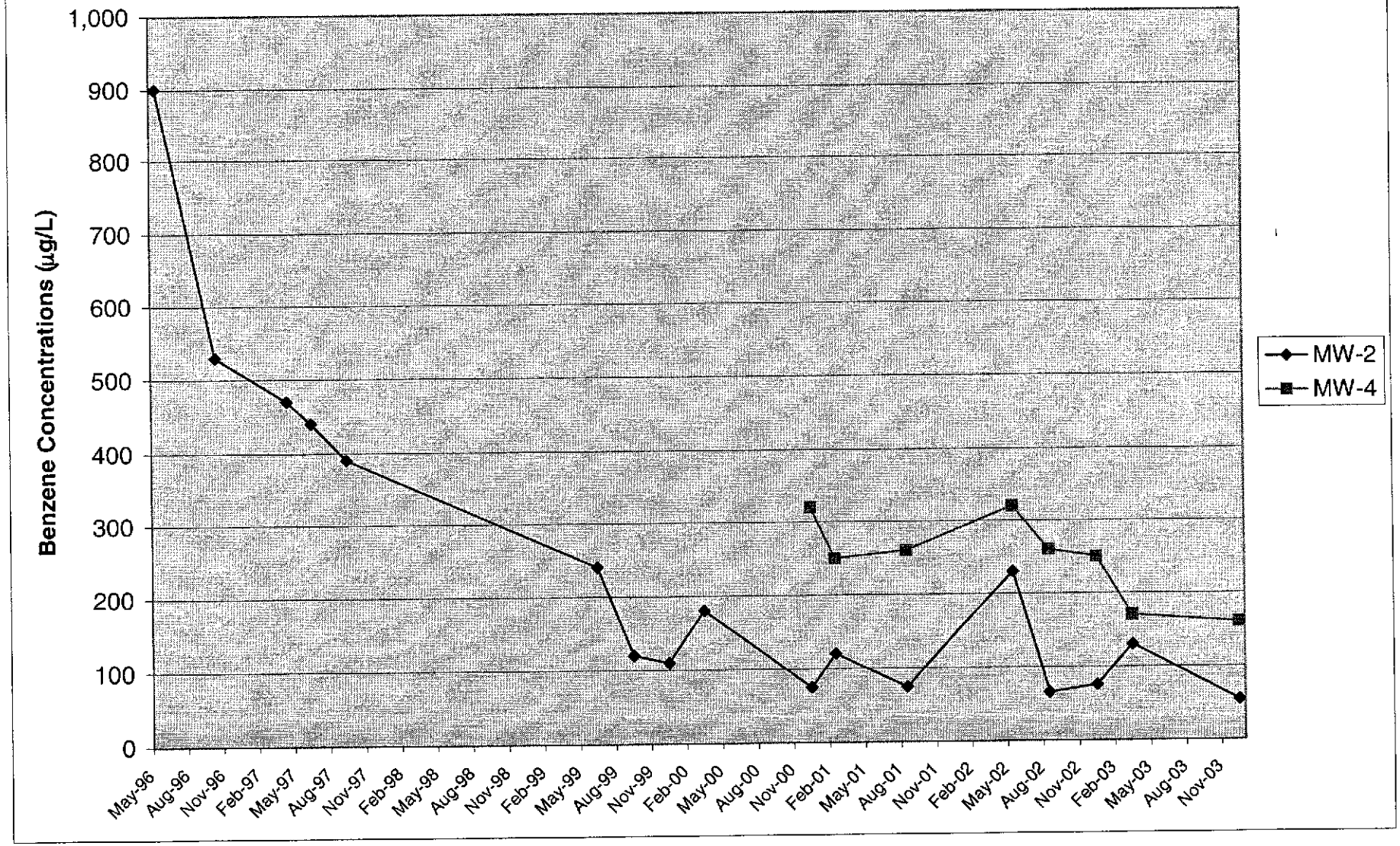


Figure 6 - Historical Concentrations of Benzene at MW-3

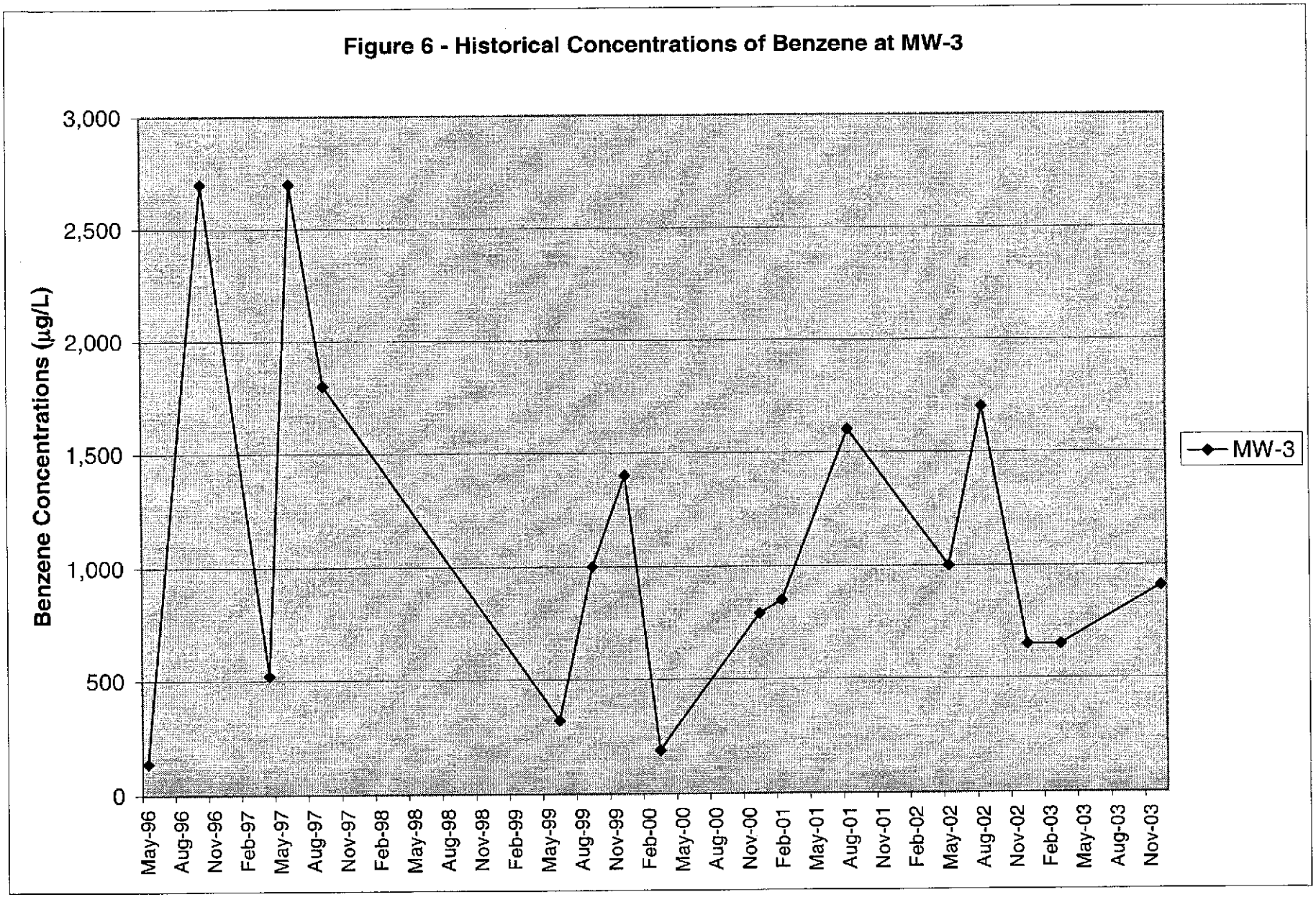


Figure 7 - Historical Concentrations of TPH-g at MW-2 and MW-4

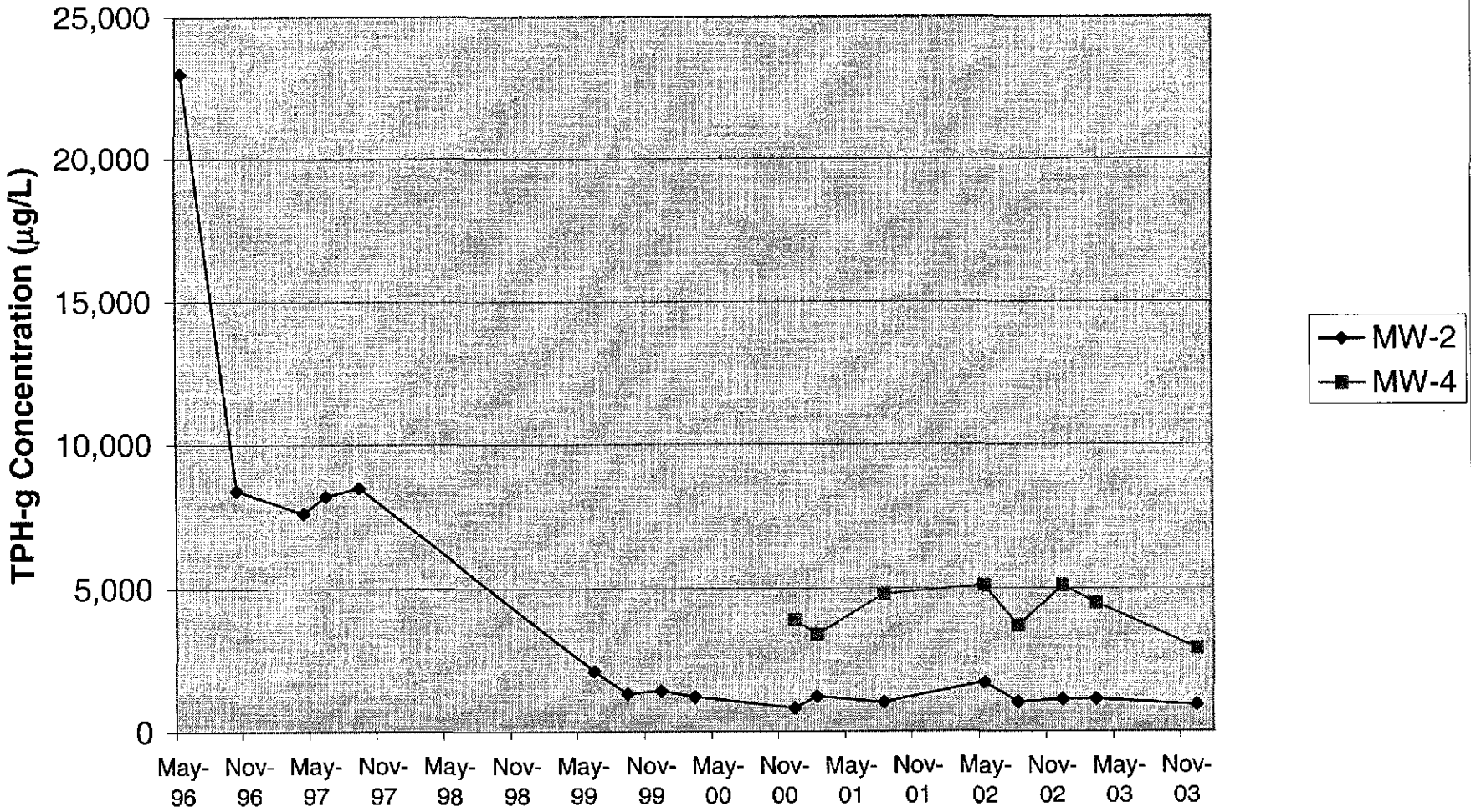
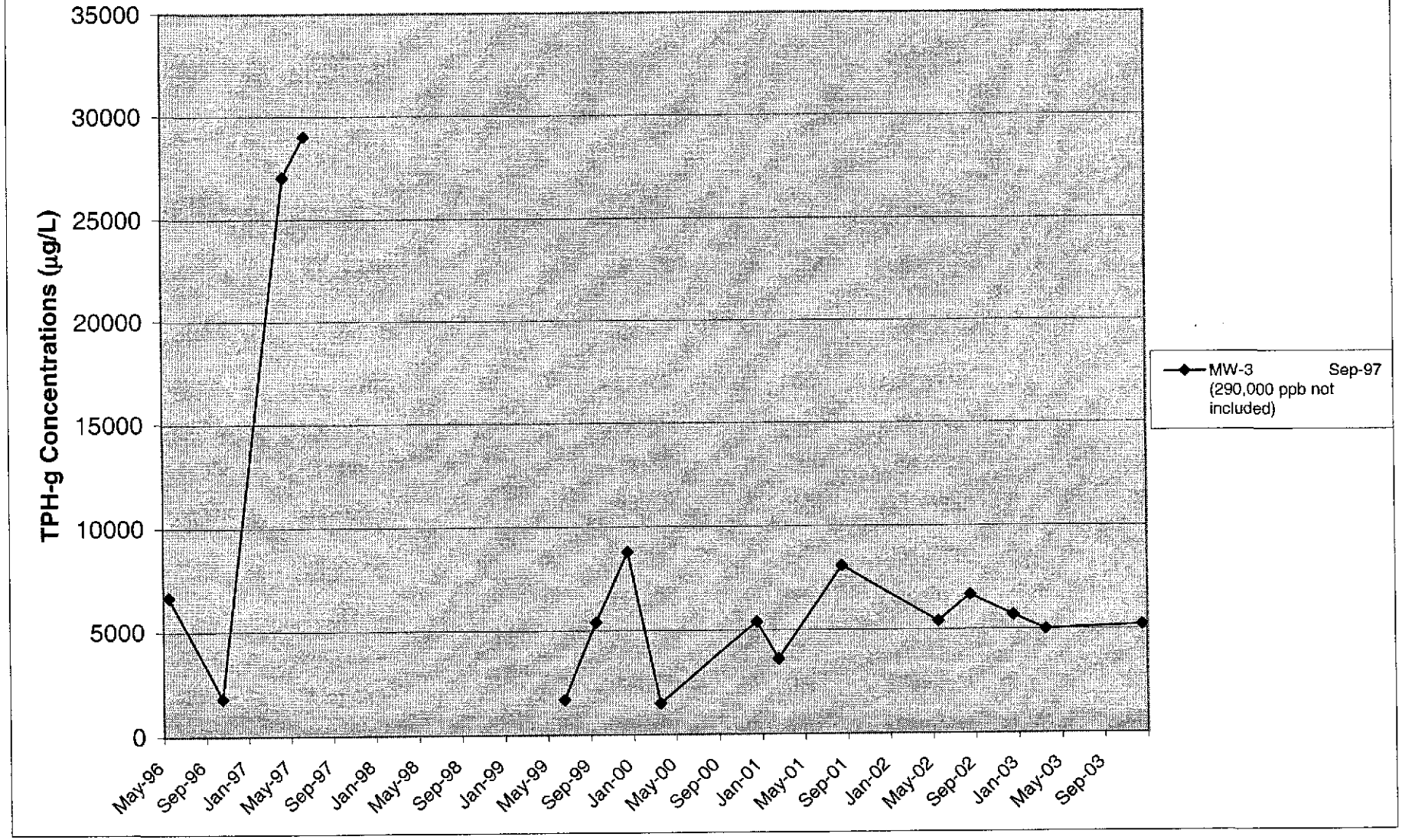


Figure 8 - Historical Concentrations of TPH-g at MW-3



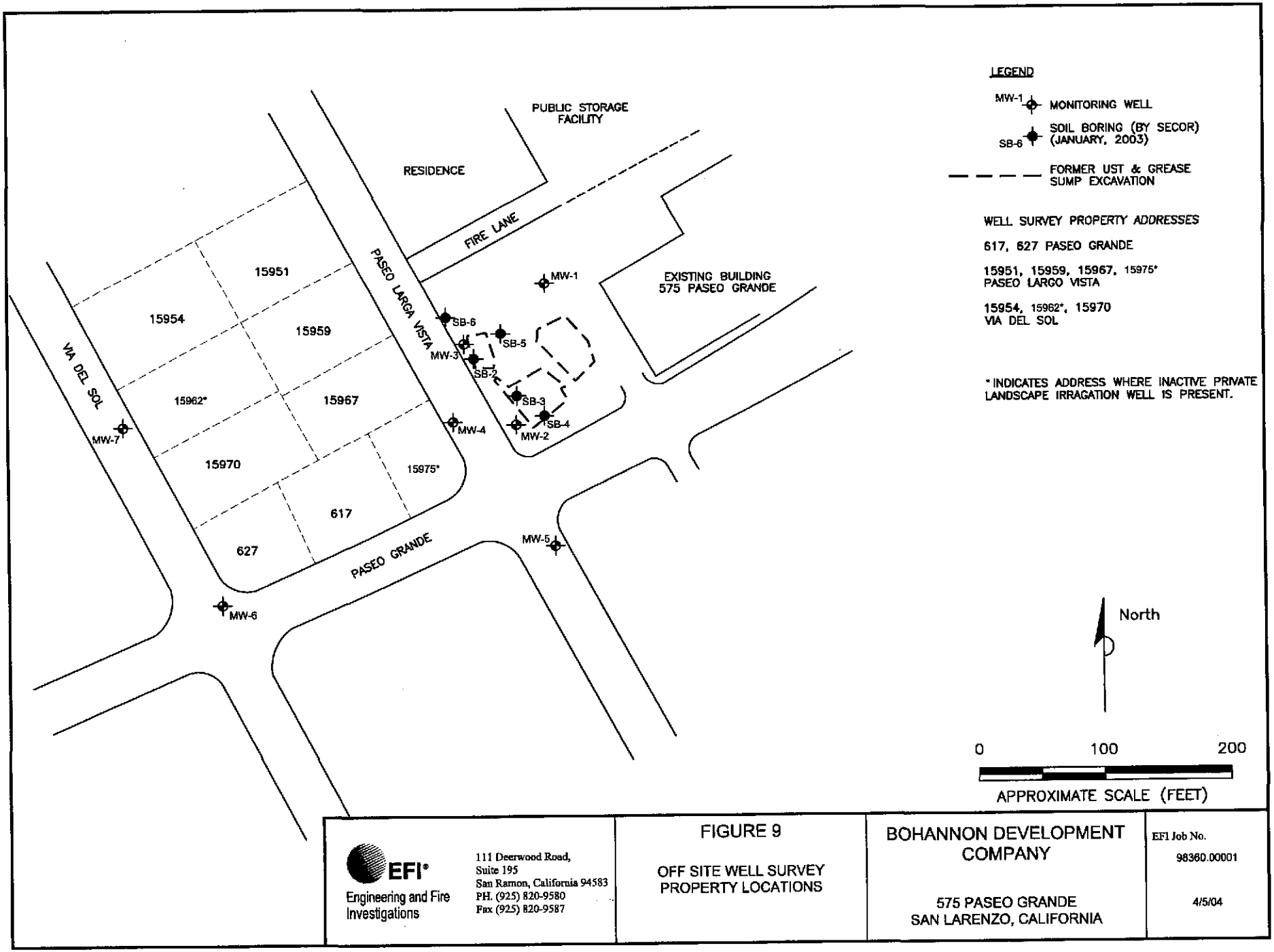


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FIGURE 9

OFF SITE WELL SURVEY
PROPERTY LOCATIONS

BOHANNON DEVELOPMENT COMPANY

575 PASEO GRANDE
SAN LARENZO, CALIFORNIA

EFI Job No.
98360.00001

4/5/04

APPENDIX A

FIELD DATA SHEETS

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GROUNDWATER WELL – PURGE AND SAMPLE RECORD

Date: 12-18-03

Project Name: Bonanno
Project Number: 98360-01
Site Location: San Lorenzo

Well Designation: MW-1
Field Personnel: Maxwell, C.

WELL VOLUME CALCULATION

Total Well Depth (ft)	-	Depth to Water (ft)	=	Water Column (ft)	Casing Diameter Multiplier (SCHD 40)			Casing Volume Purge Quantity
					2-inch	4-inch	6-inch	1X =
	-	6.37	=		0.16	0.64	1.44	3X =

Parameter	Purge Sample 1	Purge Sample 2	Purge Sample 3	Purge Sample 4	Purge Sample 5	Purge Sample 6	Purge Sample 7
Time of Day	1446	1453	1457				
Volume Purged	0.50 ga	1.50 ga	2.40 ga				
Purge Rate (gpm)	0.15 gpm	0.15 gpm	0.15 ga				
Temperature (°C)	22.40	22.59	22.32				
ORP	182.8	178.6	176.3				
Dissolved Oxygen	0.77	0.64	0.55				
pH	7.00	7.01	7.01				
Specific Conductivity (µmhos)	1,380	1,372	1370				
Turbidity/Color	216.2	19.9	5.0				
Odor/Sheen	None	None	None				
Depth to Water During Purge (ft)	6.40	6.45	6.47				
Number of Casing Volumes Removed	NA	NA	NA				
Dewatered?	No	No	No				

Comments:

SAMPLE DATA:
Static Water Level: 6.37 Description of Water Level Measurement Point: Notch in Casing
Water Level Determined By: Electronic Meter
Purge Method: Low Volume - Peristaltic Pump
Purge Depth: _____ Percent Recovery: 100 Depth to Water During Sampling: 6.37 - 6.47
Sampling Equipment: Peristaltic Pump - Dedicated Tubing
Time of Sample Collection: 1459
Comments: Replaced dedicated tubing

Sample No.	No. of Containers	Container Type	Preservative	Field Filtration	Analytical Method Comments

PURGE WATER DISPOSAL:
Total Discharge (gal): ~2.5 Disposal Method: Drum
Drum Designation(s)/Volume:
Comments:

WELL HEAD CONDITIONS:
Well Security Device Working as Designed?: (YES) NO Well Casing Intact?: (YES) NO
Inside of Well Head and Outer Casing Dry?: (YES) NO
Comments:

EFI
Engineering and Fire Investigations

GROUNDWATER WELL – PURGE AND SAMPLE RECORD

Date: 12-18-03

Project Name: Bohannon
Project Number: 98 3600-01
Site Location: San Lorenzo

Well Designation: MW-2
Field Personnel: Maxwell, C.

WELL VOLUME CALCULATION

Total Well Depth (ft)	-	Depth to Water (ft)	=	Water Column (ft)	Casing Diameter Multiplier (SCHD 40)			Casing Volume Purge Quantity
					2-inch	4-inch	6-inch	1X =
	-	6.47	=		0.16	0.64	1.44	3X =

Parameter	Purge Sample 1	Purge Sample 2	Purge Sample 3	Purge Sample 4	Purge Sample 5	Purge Sample 6	Purge Sample 7
Time of Day	1525	1530					
Volume Purged	0.50 ga	1.25 ga					
Purge Rate (gpm)	0.15 gpm	0.15 gpm					
Temperature (°C) 23.53	~~23.10~~	23.51					
ORP	@95.3	@91.6					
Dissolved Oxygen	7.59	7.89					
pH	7.35	7.34					
Specific Conductivity (µmhos)	170	176					
Turbidity/Color	0.0	0.0					
Odor/Sheen	Strong Petr. Odor	Strong Odor					
Depth to Water During Purge (ft)	6.51	6.49					
Number of Casing Volumes Removed	NA	NA					
Dewatered?	No	No					

Comments:

SAMPLE DATA:

Static Water Level: 6.47 Description of Water Level Measurement Point: Notch in Casing
Water Level Determined By: Electronic Meter
Purge Method: Low Flow Peristaltic Pump
Purge Depth: _____ Percent Recovery: 100 Depth to Water During Sampling: 6.51
Sampling Equipment: Peristaltic Pump w/ Dedicated Tubing
Time of Sample Collection: 1535
Comments:

Sample No.	No. of Containers	Container Type	Preservative	Field Filtration	Analytical Method Comments

PURGE WATER DISPOSAL:

Total Discharge (gal): ~1.5 ga Disposal Method: Drum
Drum Designation(s)/Volume:
Comments:

WELL HEAD CONDITIONS:

Well Security Device Working as Designed?: (YES) NO Well Casing Intact?: (YES) NO
Inside of Well Head and Outer Casing Dry?: (YES) NO
Comments:

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GROUNDWATER WELL – PURGE AND SAMPLE RECORD

Date: 12/18/03

Project Name: Chanman
Project Number: 983100-01
Site Location: San Lorenzo

Well Designation: MW-3
Field Personnel: Maxwell, C.

WELL VOLUME CALCULATION

Total Well Depth (ft)	-	Depth to Water (ft)	=	Water Column (ft)	Casing Diameter Multiplier (SCHD 40)			Casing Volume Purge Quantity
					2-inch	4-inch	6-inch	1X =
	-	6.15	=		0.16	0.64	1.44	3X =

Parameter	Purge Sample 1	Purge Sample 2	Purge Sample 3	Purge Sample 4	Purge Sample 5	Purge Sample 6	Purge Sample 7
Time of Day	1552	1558	1602				
Volume Purged	0.5 ga	1.95 ga	2.0 ga				
Purge Rate (gpm)	0.15 gpm	0.15 gpm	0.15 gpm				
Temperature (°C)	22.38	23.29	22.31				
ORP	0142.7	0141.7	0140.1				
Dissolved Oxygen	1.79	0.34	0.47				
pH	6.83	6.84	6.82				
Specific Conductivity (µmhos)	1550	1558	1584				
Turbidity/Color	1382	1378	21.0				
Odor/Sheen	Strong Odor	Strong Odor	Strong Odor				
Depth to Water During Purge (ft)	6.19	6.19	6.18				
Number of Casing Volumes Removed	NA	NA	NA				
Dewatered?	No	No	No				

Comments:

SAMPLE DATA:

Static Water Level: 6.15 Description of Water Level Measurement Point:
Water Level Determined By: Electronic Meter
Purge Method: Peri Pump
Purge Depth: Percent Recovery: 1120 Depth to Water During Sampling: 6.15 to 6.21
Sampling Equipment: Peri Pump
Time of Sample Collection: 1605
Comments: Slight Sheen

Sample No.	No. of Containers	Container Type	Preservative	Field Filtration	Analytical Method Comments

PURGE WATER DISPOSAL:

Total Discharge (gal): ~2.0 ga Disposal Method: Drum
Drum Designation(s)/Volume:
Comments:

WELL HEAD CONDITIONS:

Well Security Device Working as Designed?: (YES) NO Well Casing Intact?: (YES) NO
Inside of Well Head and Outer Casing Dry?: (YES) NO
Comments:

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GROUNDWATER WELL – PURGE AND SAMPLE RECORD

Date: 12/18-03

Project Name: Bohemian
Project Number: 9E3169 – 01
Site Location: San Lorenzo

Well Designation: MW-4
Field Personnel: Maxwell, C.

WELL VOLUME CALCULATION

Total Well Depth (ft)	-	Depth to Water (ft)	=	Water Column (ft)	Casing Diameter Multiplier (SCHD 40)			Casing Volume Purge Quantity
					2-inch	4-inch	6-inch	1X =
	-	5.85	=		0.16	0.64	1.44	3X =

Parameter	Purge Sample 1	Purge Sample 2	Purge Sample 3	Purge Sample 4	Purge Sample 5	Purge Sample 6	Purge Sample 7
Time of Day	1623	1627	1631				
Volume Purged	0.50ga	1.0ga	1.75ga				
Purge Rate (gpm)	0.15gpm	0.15gpm	0.15gpm				
Temperature (°C)	20.47	20.52	20.61				
ORP	0105.8	0106.2	0103.2				
Dissolved Oxygen	2.20	2.13	2.17				
pH	6.79	6.78	6.75				
Specific Conductivity (µmhos)	1161	1160	1151				
Turbidity/Color	101.0	11.5	11.5				
Odor/Sheen	Moderate Odor	Mod. Odor	Mod. Odor				
Depth to Water During Purge (ft)	5.91	5.93	5.95				
Number of Casing Volumes Removed	NA	NA	NA				
Dewatered?	NO	NO	NO				
Comments:							

SAMPLE DATA:
Static Water Level: 5.95 Description of Water Level Measurement Point: Notch in Casing
Water Level Determined By: Electronic Meter
Purge Method: Low Flow Peristaltic Pump
Purge Depth: _____ Percent Recovery: 100 Depth to Water During Sampling: 5.85 to 5.97
Sampling Equipment: Peristaltic Pump + Dedicated Tubing
Time of Sample Collection: ~~1633~~ 1633
Comments:

Sample No.	No. of Containers	Container Type	Preservative	Field Filtration	Analytical Method Comments

PURGE WATER DISPOSAL:
Total Discharge (gal): ~2.0 ga Disposal Method: Drum
Drum Designation(s)/Volume:
Comments:

WELL HEAD CONDITIONS:
Well Security Device Working as Designed?: (YES) NO Well Casing Intact?: (YES) NO
Inside of Well Head and Outer Casing Dry?: (YES) NO
Comments:

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Engineering and Fire Investigations

GROUNDWATER WELL – PURGE AND SAMPLE RECORD

Date: 12-18-03

Project Name: Bonanza
Project Number: 983610-01
Site Location: San Lorenzo

Well Designation: MW-5
Field Personnel: Maxwell, S.

WELL VOLUME CALCULATION

Total Well Depth (ft)	-	Depth to Water (ft)	=	Water Column (ft)	Casing Diameter Multiplier (SCHD 40)			Casing Volume Purge Quantity
					2-inch	4-inch	6-inch	1X =
	-	5.65	=		0.16	0.64	1.44	3X =

Parameter	Purge Sample 1	Purge Sample 2	Purge Sample 3	Purge Sample 4	Purge Sample 5	Purge Sample 6	Purge Sample 7
Time of Day	1406	1411	1415				
Volume Purged	0.5 gal	1.25 gal	2.0 gal				
Purge Rate (gpm)	0.15 gpm	0.15 gpm	0.15 gpm				
Temperature (°C)	21.45	21.61	21.64				
ORP	166.0	165.6	165.2				
Dissolved Oxygen	0.76	0.54	0.51				
pH	7.25	7.22	7.20				
Specific Conductivity (µmhos)	966	979	981				
Turbidity/Color	216.9	64.5	109.0				
Odor/Sheen	None	None	None				
Depth to Water During Purge (ft)	5.72	5.72	5.72				
Number of Casing Volumes Removed	NA	NA	NA				
Dewatered?	No	No	No				
Comments:							

SAMPLE DATA:
Static Water Level: 5.65 Description of Water Level Measurement Point: Notch in Casing
Water Level Determined By: Electronic Meter
Purge Method: Low Volume - Peri. Pump
Purge Depth: _____ Percent Recovery: 100 Depth to Water During Sampling: 5.72
Sampling Equipment: Peri Pump and Dedicated Tubing
Time of Sample Collection: 1420
Comments: _____

Sample No.	No. of Containers	Container Type	Preservative	Field Filtration	Analytical Method Comments

PURGE WATER DISPOSAL:
Total Discharge (gal): 22.0 gal Disposal Method: Drum
Drum Designation(s)/Volume: _____
Comments: _____

WELL HEAD CONDITIONS:
Well Security Device Working as Designed?: (YES) NO Well Casing Intact?: (YES) NO
Inside of Well Head and Outer Casing Dry?: (YES) NO
Comments: _____

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Engineering and Fire Investigations

GROUNDWATER WELL – PURGE AND SAMPLE RECORD

Date: 12-18-03

Project Name: Bonanno
Project Number: 983600-01
Site Location: San Lorenzo

Well Designation: MW-6
Field Personnel: Maxwell, C.

WELL VOLUME CALCULATION

Total Well Depth (ft)	-	Depth to Water (ft)	=	Water Column (ft)	Casing Diameter Multiplier (SCHD 40)			Casing Volume Purge Quantity
					2-inch	4-inch	6-inch	1X =
	-	5.02	=		0.16	0.64	1.44	3X =

Parameter	Purge Sample 1	Purge Sample 2	Purge Sample 3	Purge Sample 4	Purge Sample 5	Purge Sample 6	Purge Sample 7
Time of Day	1330	1334	1340				
Volume Purged	0.50 ga	1.0 ga	2.0 ga				
Purge Rate (gpm)	0.15 gpm	0.15 gpm	0.15 gpm				
Temperature (°C)	20.59	20.60	20.51				
ORP	180.9	192.6	184.4				
Dissolved Oxygen mg/L	2.26	1.96	1.65				
pH	7.07	7.04	7.04				
Specific Conductivity (µmhos)	821	812	807				
Turbidity/Color	275	0.30	0				
Odor/Sheen	None	None					
Depth to Water During Purge (ft)	5.05	5.07	5.07				
Number of Casing Volumes Removed	NA	NA	NA				
Dewatered?	No	No	No				
Comments:							

SAMPLE DATA:

Static Water Level: 5.05 Description of Water Level Measurement Point: Notch in Casing
Water Level Determined By: Electronic Meter
Purge Method: Low Volume – Peri Pump
Purge Depth: _____ Percent Recovery: 100 Depth to Water During Sampling: 5.02 to 5.07
Sampling Equipment: Peri Pump / Dedicated Tubing
Time of Sample Collection: 1345
Comments: _____

Sample No.	No. of Containers	Container Type	Preservative	Field Filtration	Analytical Method Comments

PURGE WATER DISPOSAL:

Total Discharge (gal): ~2.0 ga Disposal Method: Drum
Drum Designation(s)/Volume: _____
Comments: _____

WELL HEAD CONDITIONS:

Well Security Device Working as Designed?: (YES) NO Well Casing Intact?: (YES) NO
Inside of Well Head and Outer Casing Dry?: (YES) NO
Comments: _____

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Engineering and Fire Investigations

GROUNDWATER WELL – PURGE AND SAMPLE RECORD

Date: 12-18-03

Project Name: Bohannon
Project Number: 983100-01
Site Location: San Lorenzo

Well Designation: MW-7
Field Personnel: Maxwell, S.

WELL VOLUME CALCULATION

Total Well Depth (ft)	-	Depth to Water (ft)	=	Water Column (ft)	Casing Diameter Multiplier (SCHD 40)			Casing Volume Purge Quantity
					2-inch	4-inch	6-inch	1X =
	-	5.65	=		0.16	0.64	1.44	3X =

Parameter	Purge Sample 1	Purge Sample 2	Purge Sample 3	Purge Sample 4	Purge Sample 5	Purge Sample 6	Purge Sample 7
Time of Day	1157	1204	1211	1215			
Volume Purged	0.50 ga	1.5 ga	2.5 ga	3.0 ga			
Purge Rate (gpm)	0.10 gpm	0.15 gpm	0.15	0.05 ga			
Temperature (°C)	18.61	18.61	18.62	18.74			
ORP	189.5	186.9	186.8	191.0			
Dissolved Oxygen mg/L	1.40	0.88	0.75	0.74			
pH	7.16	7.13	7.13	7.16			
Specific Conductivity (µmhos)	972	967	965	971			
Turbidity/Color	24 NTU	6.4	8.8	30.1			
Odor/Sheen	None	None	None	None			
Depth to Water During Purge (ft)	5.65	5.65	5.65	5.65			
Number of Casing Volumes Removed	NA	NA	NA	NA			
Dewatered?	No	No	No				
Comments:							

SAMPLE DATA:

Static Water Level: 5.65 Description of Water Level Measurement Point: Notch in Casing
Water Level Determined By: Electronic
Purge Method: Low Volume Peri pump
Purge Depth: 9.65 Percent Recovery: 100 Depth to Water During Sampling: 5.65
Sampling Equipment: Dedicated Tubing
Time of Sample Collection: 1215
Comments:

Sample No.	No. of Containers	Container Type	Preservative	Field Filtration	Analytical Method Comments

PURGE WATER DISPOSAL:

Total Discharge (gal): ~ 3.0 ga Disposal Method: Drum
Drum Designation(s)/Volume:
Comments:

WELL HEAD CONDITIONS:

Well Security Device Working as Designed?: (YES) NO Well Casing Intact?: (YES) NO
Inside of Well Head and Outer Casing Dry?: (YES) NO
Comments:

APPENDIX B

CHAIN OF CUSTODY RECORD AND ANALYTICAL DATA SHEETS

SEVERN TRENT STL

Submission#: 2003-12-0660

Engineering and Fire Investigations

December 31, 2003

449 Nob Hill Drive
Walnut Creek, CA 94596
Attn.: Chris Maxwell
Project: Bohannon

Dear Mr. Maxwell,

Attached is our report for your samples received on 12/19/2003 10:23
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 02/02/2004 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: vvancil@stl-inc.com

Sincerely,

Vincent Vancil
Project Manager

SEVERN TRENT STL

Submission #: 2003-12-0660

Diesel

Engineering and Fire Investigations
Attn.: Chris Maxwell

449 Nob Hill Drive
Walnut Creek, CA 94596
Phone: (925) 457-6157 Fax: ( ) -

Project: Bohannon

Received: 12/19/2003 10:23

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW-7	12/18/2003 12:15	Water	1
MW-6	12/18/2003 13:45	Water	2
MW-5	12/18/2003 14:20	Water	3
MW-1	12/18/2003 14:59	Water	4
MW-2	12/18/2003 15:35	Water	5
MW-3	12/18/2003 16:05	Water	6
MW-4	12/18/2003 16:33	Water	7

Diesel

Engineering and Fire Investigations
Attn.: Chris Maxwell

449 Nob Hill Drive
Walnut Creek, CA 94596
Phone: (925) 457-6157 Fax: ( ) -

Project: Bohannon

Received: 12/19/2003 10:23

Prep(s): 3510/8015M
Sample ID: **MW-7**
Sampled: 12/18/2003 12:15
Matrix: Water

Test(s): *8015M*
Lab ID: 2003-12-0660 - 1
Extracted: 12/22/2003 08:10
QC Batch#: 2003/12/22-02.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	ND	50	ug/L	1.00	12/23/2003 14:14	
Surrogate(s)						
o-Terphenyl	68.6	60-130	%	1.00	12/23/2003 14:14	

Diesel

Engineering and Fire Investigations
Attn.: Chris Maxwell

449 Nob Hill Drive
Walnut Creek, CA 94596
Phone: (925) 457-6157 Fax: ( ) -

Project: Bohannon

Received: 12/19/2003 10:23

Prep(s): 3510/8015M
Sample ID: **MW-6**
Sampled: 12/18/2003 13:45
Matrix: Water

Test(s): 8015M
Lab ID: 2003-12-0660 - 2
Extracted: 12/29/2003 07:36
QC Batch#: 2003/12/29-03.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	ND	50	ug/L	1.00	12/29/2003 23:26	
Surrogate(s)						
o-Terphenyl	70.6	60-130	%	1.00	12/29/2003 23:26	

SEVERN TRENT STL

Submission #: 2003-12-0660

Diesel

Engineering and Fire Investigations
Attn.: Chris Maxwell

449 Nob Hill Drive
Walnut Creek, CA 94596
Phone: (925) 457-6157 Fax: ( ) -

Project: Bohannon

Received: 12/19/2003 10:23

Prep(s): 3510/8015M
Sample ID: **MW-5**
Sampled: 12/18/2003 14:20
Matrix: Water

Test(s): 8015M
Lab ID: 2003-12-0660 - 3
Extracted: 12/29/2003 07:36
QC Batch#: 2003/12/29-03.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	ND	50	ug/L	1.00	12/29/2003 23:57	
Surrogate(s)						
o-Terphenyl	74.8	60-130	%	1.00	12/29/2003 23:57	

Diesel

Engineering and Fire Investigations
Attn.: Chris Maxwell

449 Nob Hill Drive
Walnut Creek, CA 94596
Phone: (925) 457-6157 Fax: ( ) -

Project: Bohannon

Received: 12/19/2003 10:23

Prep(s):	3510/8015M	Test(s):	8015M
Sample ID:	**MW-1**	Lab ID:	2003-12-0660 - 4
Sampled:	12/18/2003 14:59	Extracted:	12/29/2003 07:36
Matrix:	Water	QC Batch#:	2003/12/29-03.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	ND	50	ug/L	1.00	12/29/2003 16:13	
Surrogate(s)						
o-Terphenyl	77.6	60-130	%	1.00	12/29/2003 16:13	

Diesel

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Project: Bohannon

Received: 12/19/2003 10:23

Prep(s): 3510/8015M
Sample ID: **MW-2**
Sampled: 12/18/2003 15:35
Matrix: Water

Test(s): 8015M
Lab ID: 2003-12-0660 - 5
Extracted: 12/22/2003 08:10
QC Batch#: 2003/12/22-02.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	200	50	ug/L	1.00	12/23/2003 10:26	ndp
Surrogate(s)						
o-Terphenyl	67.2	60-130	%	1.00	12/23/2003 10:26	

Diesel

Engineering and Fire Investigations
Attn.: Chris Maxwell

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Project: Bohannon

Received: 12/19/2003 10:23

Prep(s): 3510/8015M
Sample ID: **MW-3**
Sampled: 12/18/2003 16:05
Matrix: Water

Test(s): 8015M
Lab ID: 2003-12-0660 - 6
Extracted: 12/22/2003 08:10
QC Batch#: 2003/12/22-02.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	970	50	ug/L	1.00	12/23/2003 10:51	ndp
Surrogate(s)						
o-Terphenyl	71.1	60-130	%	1.00	12/23/2003 10:51	

Diesel

Engineering and Fire Investigations
Attn.: Chris Maxwell

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Project: Bohannon

Received: 12/19/2003 10:23

Prep(s): 3510/8015M
Sample ID: **MW-4**
Sampled: 12/18/2003 16:33
Matrix: Water

Test(s): 8015M
Lab ID: 2003-12-0660 - 7
Extracted: 12/22/2003 08:10
QC Batch#: 2003/12/22-02.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	500	50	ug/L	1.00	12/23/2003 11:16	ndp
Surrogate(s)						
o-Terphenyl	71.6	60-130	%	1.00	12/23/2003 11:16	

Diesel

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Project: Bohannon

Received: 12/19/2003 10:23

Batch QC Report

Prep(s): 3510/8015M

Test(s): 8015M

Method Blank

Water

QC Batch # 2003/12/22-02.10

MB: 2003/12/22-02.10-001

Date Extracted: 12/22/2003 08:10

Compound	Conc.	RL	Unit	Analyzed	Flag
Diesel	ND	50	ug/L	12/22/2003 16:43	
Surrogates(s)					
o-Terphenyl	77.9	60-130	%	12/22/2003 16:43	

Diesel

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Project: Bohannon

Received: 12/19/2003 10:23

Batch QC Report

Prep(s): 3510/8015M

Test(s): 8015M

Method Blank

Water

QC Batch # 2003/12/29-03.10

MB: 2003/12/29-03.10-001

Date Extracted: 12/29/2003 07:36

Compound	Conc.	RL	Unit	Analyzed	Flag
Diesel	ND	50	ug/L	12/29/2003 15:12	
Surrogates(s)					
o-Terphenyl	79.9	60-130	%	12/29/2003 15:12	

Diesel

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Project: Bohannon

Received: 12/19/2003 10:23

Batch QC Report

Prep(s): 3510/8015M

Test(s): 8015M

Laboratory Control Spike **Water** **QC Batch # 2003/12/22-02.10**

LCS 2003/12/22-02.10-002 Extracted: 12/22/2003 Analyzed: 12/22/2003 17:13
LCSD 2003/12/22-02.10-003 Extracted: 12/22/2003 Analyzed: 12/22/2003 17:44

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Diesel	797	762	1000	79.7	76.2	4.5	60-130	25		
Surrogates(s)										
o-Terphenyl	16.6	15.8	20.0	83.2	78.8		60-130	0		

Diesel

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Phone: (925) 457-6157 Fax: ( ) -

Project: Bohannon

Received: 12/19/2003 10:23

Batch QC Report

Prep(s): 3510/8015M

Test(s): 8015M

Laboratory Control Spike **Water** **QC Batch # 2003/12/29-03.10**

LCS 2003/12/29-03.10-002 Extracted: 12/29/2003 Analyzed: 12/30/2003 11:50
LCSD 2003/12/29-03.10-003 Extracted: 12/29/2003 Analyzed: 12/30/2003 12:21

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Diesel	803	803	1000	80.3	80.3	0.0	60-130	25		
Surrogates(s)										
o-Terphenyl	16.5	16.5	20.0	82.7	82.4		60-130	0		

SEVERN TRENT STL

Submission #: 2003-12-0660

Diesel

Engineering and Fire Investigations
Attn.: Chris Maxwell

449 Nob Hill Drive
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Project: Bohannon

Received: 12/19/2003 10:23

Legend and Notes

Result Flag

ndp

Hydrocarbon reported does not match the pattern of our Diesel standard

SEVERN TRENT STL

Submission #: 2003-12-0660

Gas/BTEX by 8015M/8021

Engineering and Fire Investigations
Attn.: Chris Maxwell

449 Nob Hill Drive
Walnut Creek, CA 94596
Phone: (925) 457-6157 Fax: ( ) -

Project: Bohannon

Received: 12/19/2003 10:23

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW-2	12/18/2003 15:35	Water	5

SEVERN TRENT STL

Submission #: 2003-12-0660

Gas/BTEX by 8015M/8021

Engineering and Fire Investigations
Attn.: Chris Maxwell

449 Nob Hill Drive
Walnut Creek, CA 94596
Phone: (925) 457-6157 Fax: ( ) -

Project: Bohannon

Received: 12/19/2003 10:23

Prep(s): 5030
5030

Test(s): 8015M
8021B

Sample ID: **MW-2**

Lab ID: 2003-12-0660 - 5

Sampled: 12/18/2003 15:35

Extracted: 12/30/2003 12:31

Matrix: Water

QC Batch#: 2003/12/30-01.05

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	910	50	ug/L	1.00	12/30/2003 12:31	g
Benzene	55	0.50	ug/L	1.00	12/30/2003 12:31	
Toluene	4.1	0.50	ug/L	1.00	12/30/2003 12:31	
Ethyl benzene	3.3	0.50	ug/L	1.00	12/30/2003 12:31	
Xylene(s)	3.7	0.50	ug/L	1.00	12/30/2003 12:31	
Surrogate(s)						
Trifluorotoluene	85.3	58-124	%	1.00	12/30/2003 12:31	
4-Bromofluorobenzene-FID	84.7	50-150	%	1.00	12/30/2003 12:31	

Gas/BTEX by 8015M/8021

Engineering and Fire Investigations
Attn.: Chris Maxwell

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Project: Bohannon

Received: 12/19/2003 10:23

Batch QC Report

Prep(s): 5030
Method Blank

Water

Test(s): 8015M
QC Batch # 2003/12/30-01.05

MB: 2003/12/30-01.05-009

Date Extracted: 12/30/2003 10:56

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	12/30/2003 10:56	
Benzene	ND	0.5	ug/L	12/30/2003 10:56	
Toluene	ND	0.5	ug/L	12/30/2003 10:56	
Ethyl benzene	ND	0.5	ug/L	12/30/2003 10:56	
Xylene(s)	ND	0.5	ug/L	12/30/2003 10:56	
Surrogates(s)					
Trifluorotoluene	99.6	58-124	%	12/30/2003 10:56	
4-Bromofluorobenzene-FID	99.7	50-150	%	12/30/2003 10:56	

Gas/BTEX by 8015M/8021

Engineering and Fire Investigations
Attn.: Chris Maxwell

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Walnut Creek, CA 94596
Phone: (925) 457-6157 Fax: ( ) -

Project: Bohannon

Received: 12/19/2003 10:23

Batch QC Report

Prep(s): 5030

Test(s): 8021B

Laboratory Control Spike **Water** **QC Batch # 2003/12/30-01.05**

LCS 2003/12/30-01.05-005 Extracted: 12/30/2003 Analyzed: 12/30/2003 08:49
LCSD 2003/12/30-01.05-006 Extracted: 12/30/2003 Analyzed: 12/30/2003 09:21

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Benzene	105	107	100.0	105.0	107.0	1.9	77-123	20		
Toluene	108	112	100.0	108.0	112.0	3.6	78-122	20		
Ethyl benzene	101	105	100.0	101.0	105.0	3.9	70-130	20		
Xylene(s)	305	314	300	101.7	104.7	2.9	75-125	20		
Surrogates(s)										
Trifluorotoluene	558	574	500	111.6	114.8		58-124			

Gas/BTEX by 8015M/8021

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Attn.: Chris Maxwell

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Phone: (925) 457-6157 Fax: ( ) -

Project: Bohannon

Received: 12/19/2003 10:23

Batch QC Report

Prep(s): 5030

Test(s): 8015M

Laboratory Control Spike **Water** **QC Batch # 2003/12/30-01.05**

LCS 2003/12/30-01.05-007 Extracted: 12/30/2003 Analyzed: 12/30/2003 09:52
LCSD 2003/12/30-01.05-008 Extracted: 12/30/2003 Analyzed: 12/30/2003 10:24

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Gasoline	463	484	500	92.6	96.8	4.4	75-125	20		
Surrogates(s)										
4-Bromofluorobenzene-FID	522	544	500	104.4	108.8		50-150			

SEVERN TRENT STL

Submission #: 2003-12-0660

Gas/BTEX by 8015M/8021

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Project: Bohannon

Received: 12/19/2003 10:23

Legend and Notes

Result Flag

g

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

SEVERN TRENT STL

Submission #: 2003-12-0660

Gas/BTEX by 8015M/8021

Engineering and Fire Investigations
Attn.: Chris Maxwell

449 Nob Hill Drive
Walnut Creek, CA 94596
Phone: (925) 457-6157 Fax: ( ) -

Project: Bohannon

Received: 12/19/2003 10:23

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW-7	12/18/2003 12:15	Water	1
MW-6	12/18/2003 13:45	Water	2
MW-5	12/18/2003 14:20	Water	3
MW-1	12/18/2003 14:59	Water	4
MW-3	12/18/2003 16:05	Water	6
MW-4	12/18/2003 16:33	Water	7

SEVERN TRENT STL

Submission #: 2003-12-0660

Gas/BTEX by 8015M/8021

Engineering and Fire Investigations
Attn.: Chris Maxwell

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Phone: (925) 457-6157 Fax: ( ) -

Project: Bohannon

Received: 12/19/2003 10:23

Prep(s): 5030
5030

Test(s): 8015M
8021B

Sample ID: **MW-7**

Lab ID: 2003-12-0660 - 1

Sampled: 12/18/2003 12:15

Extracted: 12/27/2003 00:29

Matrix: Water

QC Batch#: 2003/12/26-01.05

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	12/27/2003 00:29	
Benzene	ND	0.50	ug/L	1.00	12/27/2003 00:29	
Toluene	ND	0.50	ug/L	1.00	12/27/2003 00:29	
Ethyl benzene	ND	0.50	ug/L	1.00	12/27/2003 00:29	
Xylene(s)	ND	0.50	ug/L	1.00	12/27/2003 00:29	
Surrogate(s)						
Trifluorotoluene	101.1	58-124	%	1.00	12/27/2003 00:29	
4-Bromofluorobenzene-FID	108.0	50-150	%	1.00	12/27/2003 00:29	

SEVERN TRENT STL

Submission #: 2003-12-0660

Gas/BTEX by 8015M/8021

Engineering and Fire Investigations
Attn.: Chris Maxwell

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Walnut Creek, CA 94596
Phone: (925) 457-6157 Fax: ( ) -

Project: Bohannon

Received: 12/19/2003 10:23

Prep(s): 5030
5030

Test(s): 8015M
8021B

Sample ID: **MW-6**

Lab ID: 2003-12-0660 - 2

Sampled: 12/18/2003 13:45

Extracted: 12/27/2003 01:01

Matrix: Water

QC Batch#: 2003/12/26-01.05

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	12/27/2003 01:01	
Benzene	ND	0.50	ug/L	1.00	12/27/2003 01:01	
Toluene	ND	0.50	ug/L	1.00	12/27/2003 01:01	
Ethyl benzene	ND	0.50	ug/L	1.00	12/27/2003 01:01	
Xylene(s)	ND	0.50	ug/L	1.00	12/27/2003 01:01	
Surrogate(s)						
Trifluorotoluene	99.6	58-124	%	1.00	12/27/2003 01:01	
4-Bromofluorobenzene-FID	110.8	50-150	%	1.00	12/27/2003 01:01	

Gas/BTEX by 8015M/8021

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Phone: (925) 457-6157 Fax: ( ) -

Project: Bohannon

Received: 12/19/2003 10:23

Prep(s):	5030 5030	Test(s):	8015M 8021B
Sample ID:	**MW-5**	Lab ID:	2003-12-0660 - 3
Sampled:	12/18/2003 14:20	Extracted:	12/27/2003 01:32
Matrix:	Water	QC Batch#:	2003/12/26-01.05

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	12/27/2003 01:32	
Benzene	ND	0.50	ug/L	1.00	12/27/2003 01:32	
Toluene	ND	0.50	ug/L	1.00	12/27/2003 01:32	
Ethyl benzene	ND	0.50	ug/L	1.00	12/27/2003 01:32	
Xylene(s)	ND	0.50	ug/L	1.00	12/27/2003 01:32	
Surrogate(s)						
Trifluorotoluene	101.4	58-124	%	1.00	12/27/2003 01:32	
4-Bromofluorobenzene-FID	114.0	50-150	%	1.00	12/27/2003 01:32	

Gas/BTEX by 8015M/8021

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Project: Bohannon

Received: 12/19/2003 10:23

Prep(s):	5030 5030	Test(s):	8015M 8021B
Sample ID:	**MW-1**	Lab ID:	2003-12-0660 - 4
Sampled:	12/18/2003 14:59	Extracted:	12/29/2003 10:00
Matrix:	Water	QC Batch#:	2003/12/29-01.05

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	12/29/2003 10:00	
Benzene	ND	0.50	ug/L	1.00	12/29/2003 10:00	
Toluene	ND	0.50	ug/L	1.00	12/29/2003 10:00	
Ethyl benzene	ND	0.50	ug/L	1.00	12/29/2003 10:00	
Xylene(s)	ND	0.50	ug/L	1.00	12/29/2003 10:00	
Surrogate(s)						
Trifluorotoluene	97.4	58-124	%	1.00	12/29/2003 10:00	
4-Bromofluorobenzene-FID	110.5	50-150	%	1.00	12/29/2003 10:00	

SEVERN TRENT STL

Submission #: 2003-12-0660

Gas/BTEX by 8015M/8021

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Project: Bohannon

Received: 12/19/2003 10:23

Prep(s): 5030
5030

Test(s): 8015M
8021B

Sample ID: **MW-3**

Lab ID: 2003-12-0660 - 6

Sampled: 12/18/2003 16:05

Extracted: 12/29/2003 11:04

Matrix: Water

QC Batch#: 2003/12/29-01.05

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	5200	500	ug/L	10.00	12/29/2003 11:04	g
Benzene	910	5.0	ug/L	10.00	12/29/2003 11:04	
Toluene	25	5.0	ug/L	10.00	12/29/2003 11:04	
Ethyl benzene	20	5.0	ug/L	10.00	12/29/2003 11:04	
Xylene(s)	21	5.0	ug/L	10.00	12/29/2003 11:04	
Surrogate(s)						
Trifluorotoluene	66.6	58-124	%	10.00	12/29/2003 11:04	
4-Bromofluorobenzene-FID	70.8	50-150	%	10.00	12/29/2003 11:04	

SEVERN TRENT STL

Submission #: 2003-12-0660

Gas/BTEX by 8015M/8021

Engineering and Fire Investigations
Attn.: Chris Maxwell

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Phone: (925) 457-6157 Fax: ( ) -

Project: Bohannon

Received: 12/19/2003 10:23

Prep(s): 5030
5030

Test(s): 8015M
8021B

Sample ID: **MW-4**

Lab ID: 2003-12-0660 - 7

Sampled: 12/18/2003 16:33

Extracted: 12/29/2003 11:36

Matrix: Water

QC Batch#: 2003/12/29-01.05

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	2900	500	ug/L	10.00	12/29/2003 11:36	g
Benzene	160	5.0	ug/L	10.00	12/29/2003 11:36	
Toluene	8.3	5.0	ug/L	10.00	12/29/2003 11:36	
Ethyl benzene	8.0	5.0	ug/L	10.00	12/29/2003 11:36	
Xylene(s)	ND	5.0	ug/L	10.00	12/29/2003 11:36	
Surrogate(s)						
Trifluorotoluene	63.2	58-124	%	10.00	12/29/2003 11:36	
4-Bromofluorobenzene-FID	67.0	50-150	%	10.00	12/29/2003 11:36	

Gas/BTEX by 8015M/8021

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Project: Bohannon

Received: 12/19/2003 10:23

Batch QC Report

Prep(s): 5030
Method Blank
MB: 2003/12/26-01.05-003

Water

Test(s): 8015M
QC Batch # 2003/12/26-01.05
Date Extracted: 12/26/2003 08:09

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	12/26/2003 08:09	
Benzene	ND	0.5	ug/L	12/26/2003 08:09	
Toluene	ND	0.5	ug/L	12/26/2003 08:09	
Ethyl benzene	ND	0.5	ug/L	12/26/2003 08:09	
Xylene(s)	ND	0.5	ug/L	12/26/2003 08:09	
Surrogates(s)					
Trifluorotoluene	89.2	58-124	%	12/26/2003 08:09	
4-Bromofluorobenzene-FID	98.0	50-150	%	12/26/2003 08:09	

Gas/BTEX by 8015M/8021

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Project: Bohannon

Received: 12/19/2003 10:23

Batch QC Report

Prep(s): 5030
Method Blank

Water

Test(s): 8015M
QC Batch # 2003/12/29-01.05

MB: 2003/12/29-01.05-003

Date Extracted: 12/29/2003 06:51

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	12/29/2003 06:51	
Benzene	ND	0.5	ug/L	12/29/2003 06:51	
Toluene	ND	0.5	ug/L	12/29/2003 06:51	
Ethyl benzene	ND	0.5	ug/L	12/29/2003 06:51	
Xylene(s)	ND	0.5	ug/L	12/29/2003 06:51	
Surrogates(s)					
Trifluorotoluene	85.0	58-124	%	12/29/2003 06:51	
4-Bromofluorobenzene-FID	97.6	50-150	%	12/29/2003 06:51	

Gas/BTEX by 8015M/8021

Engineering and Fire Investigations
Attn.: Chris Maxwell

449 Nob Hill Drive
Walnut Creek, CA 94596
Phone: (925) 457-6157 Fax: ( ) -

Project: Bohannon

Received: 12/19/2003 10:23

Batch QC Report

Prep(s): 5030

Test(s): 8021B

Laboratory Control Spike **Water** **QC Batch # 2003/12/26-01.05**

LCS 2003/12/26-01.05-004 Extracted: 12/26/2003 Analyzed: 12/26/2003 08:41
LCSD 2003/12/26-01.05-005 Extracted: 12/26/2003 Analyzed: 12/26/2003 09:12

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Benzene	88.1	85.7	100.0	88.1	85.7	2.8	77-123	20		
Toluene	90.9	87.6	100.0	90.9	87.6	3.7	78-122	20		
Ethyl benzene	83.9	80.5	100.0	83.9	80.5	4.1	70-130	20		
Xylene(s)	269	260	300	89.7	86.7	3.4	75-125	20		
Surrogates(s)										
Trifluorotoluene	349	334	500	69.8	66.8		58-124			

Gas/BTEX by 8015M/8021

Engineering and Fire Investigations
Attn.: Chris Maxwell

449 Nob Hill Drive
Walnut Creek, CA 94596
Phone: (925) 457-6157 Fax: ( ) -

Project: Bohannon

Received: 12/19/2003 10:23

Batch QC Report

Prep(s): 5030

Test(s): 8015M

Laboratory Control Spike **Water** **QC Batch # 2003/12/26-01.05**

LCS 2003/12/26-01.05-006 Extracted: 12/26/2003 Analyzed: 12/26/2003 09:43
LCSD 2003/12/26-01.05-007 Extracted: 12/26/2003 Analyzed: 12/26/2003 10:15

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Gasoline	444	434	500	88.8	86.8	2.3	75-125	20		
Surrogates(s)										
4-Bromofluorobenzene-FID	492	480	500	98.4	96.0		50-150			

Gas/BTEX by 8015M/8021

Engineering and Fire Investigations
Attn.: Chris Maxwell

449 Nob Hill Drive
Walnut Creek, CA 94596
Phone: (925) 457-6157 Fax: ( ) -

Project: Bohannon

Received: 12/19/2003 10:23

Batch QC Report

Prep(s): 5030

Test(s): 8021B

Laboratory Control Spike **Water** **QC Batch # 2003/12/29-01.05**

LCS 2003/12/29-01.05-004 Extracted: 12/29/2003 Analyzed: 12/29/2003 07:22
LCSD 2003/12/29-01.05-005 Extracted: 12/29/2003 Analyzed: 12/29/2003 07:54

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Benzene	88.5	92.2	100.0	88.5	92.2	4.1	77-123	20		
Toluene	92.5	96.1	100.0	92.5	96.1	3.8	78-122	20		
Ethyl benzene	86.4	89.3	100.0	86.4	89.3	3.3	70-130	20		
Xylene(s)	274	285	300	91.3	95.0	4.0	75-125	20		
Surrogates(s)										
Trifluorotoluene	503	443	500	100.6	88.6		58-124			

Gas/BTEX by 8015M/8021

Engineering and Fire Investigations
Attn.: Chris Maxwell

449 Nob Hill Drive
Walnut Creek, CA 94596
Phone: (925) 457-6157 Fax: ( ) -

Project: Bohannon

Received: 12/19/2003 10:23

Batch QC Report

Prep(s): 5030

Test(s): 8015M

Laboratory Control Spike **Water** **QC Batch # 2003/12/29-01.05**

LCS 2003/12/29-01.05-006 Extracted: 12/29/2003 Analyzed: 12/29/2003 08:26
LCSD 2003/12/29-01.05-007 Extracted: 12/29/2003 Analyzed: 12/29/2003 08:57

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Gasoline	492	501	500	98.4	100.2	1.8	75-125	20		
Surrogates(s)										
4-Bromofluorobenzene-FID	525	381	500	105.0	76.2		50-150			

Gas/BTEX by 8015M/8021

Engineering and Fire Investigations
Attn.: Chris Maxwell

449 Nob Hill Drive
Walnut Creek, CA 94596
Phone: (925) 457-6157 Fax: ( ) -

Project: Bohannon

Received: 12/19/2003 10:23

Legend and Notes

Result Flag

g

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

SEVERN TRENT STL

STL San Francisco Chain of Custody

2003-12-0660

1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 484-1096
Email: sflogin@stl-inc.com

Reference #: 81341

Date 12/18/03 Page 1 of 1

Report To

Attn: Chris Maxwell
Company: EFI 94596
Address: 449 Nob Hill Drive Walnut Creek
Phone: 925 457 6167 Email: mettersco@aol.com
Bill To: Same
Sampled By: Maxwell
Attn: Chris Maxwell Phone: same

Analysis Request

Sample ID	Date	Time	Matrix	Preserv.	TPH EPA - ☒ 8015/8021 ☐ 8260B ☒ Gas w/ ☒ BTEX ☐ MTBE	Purgeable Aromatics BTEX EPA - ☐ 8021 ☐ 8260B	TEPH EPA 8015M ☐ Silica Gel ☒ Diesel ☐ Motor Oil ☐ Other ___	Fuel Tests EPA 8260B: ☐ Gas ☐ BTEX ☐ Five Oxyenates ☐ DCA, EDB ☐ Ethanol	Purgeable Halocarbons (HVOCs) EPA 8021 by 8260B	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B ☐ 624	Semivolatiles GC/MS ☐ EPA 8270 ☐ 625	Oil and Grease ☐ Petroleum (EPA 1664) ☐ Total	Pesticides ☐ EPA 8081 ☐ 608 PCBs ☐ EPA 8082 ☐ 608	PNAs by ☐ 8270 ☐ 8310	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___	Low Level Metals by EPA 200.8/6020 (ICP-MS): ___	☐ W.E.T (STLC) ☐ TCLP	Hexavalent Chromium ☐ ☐ pH (24h hold time for H_2O)	Spec Cond. ☐ Alkalinity ☐ ☐ TDS ☐ TSS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4				Number of Containers
MW-7	12/18/03	1215	H_2O		X		X																			5
MW-6	12/18/03	1345	H_2O		X		X																			5
MW-5	12/18/03	1420	H_2O		X		X																			5
MW-1	12/18/03	1459	H_2O		X		X																			5
MW-2	12/18/03	1535	H_2O		X		X																			5
MW-3	12/18/03	1605	H_2O		X		X																			5
MW-4	12/18/03	1633	H_2O		X		X																			5

Project Info.

Project Name: Bohannon
Project#:
PO#:
Credit Card#:

Sample Receipt

of Containers:
Head Space:
Temp: 3.1
Conforms to record:

TAT: 5 Day | 72h | 48h | 24h | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ State Tank Fund EDF ☐ Global ID ___

Special Instructions / Comments:

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [signature] Time: 1023	Signature: Time:	Signature: Time:
Printed Name: Chris Maxwell Date: 12/19/03	Printed Name: Date:	Printed Name: Date:
Company: EFI	Company:	Company:

1) Received by:	2) Received by:	3) Received by:
Signature: [signature] Time: 1023	Signature: Time:	Signature: Time:
Printed Name: Ting Louangxay 12/19/03	Printed Name: Date:	Printed Name: Date:
Company: STL SF	Company:	Company:

Rev 10/03

SEVERN TRENT STL

STL San Francisco

Sample Receipt Checklist

Submission #:2003- 12 - 0660

Checklist completed by: (initials) DSH Date: 12/19/03

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 (4^0 C ± 2)?	Temp: 3.1 °C Yes ✓ No___	
	Ice Present 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 ~O), **M** (medium ~ O) or L (large ~ O)

Water - **pH acceptable upon receipt?** ☒ Yes ☐ No

☐ **pH adjusted**– Preservative used: ☐ HNO_3 ☐ HCl ☐ H_2SO_4 ☐ NaOH ☐ ZnOAc –**Lot #(s)** _____

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: ___/___/03

Client contacted: ☐ Yes ☐ No

Summary of discussion:

Corrective Action (per PM/Client):