



SECOR  
INTERNATIONAL  
INCORPORATED  
57 Lafayette Circle, 2<sup>nd</sup> Floor  
Lafayette, CA 94549  
925-299-9300 TEL / 925-299-9302 FAX  
www.secor.com

**RECEIVED**

1:12 pm, May 11, 2007

**Alameda County  
Environmental Health**

April 23, 2007

Mr. Steven Plunkett  
Hazardous Materials Specialist  
Alameda County Health Care Services Agency  
Department of Environmental Health  
1131 Harbor Bay Parkway  
Alameda, California 94502

**Re: Groundwater Monitoring and Remediation Progress Report – David D. Bohannon  
Organization Property Located at 575 Paseo Grande - San Lorenzo, CA**

Dear Mr. Plunkett:

On behalf of the David D. Bohannon Organization (Bohannon), SECOR International Incorporated (SECOR) is pleased to submit the above-referenced report. The report provides the results of recent groundwater monitoring and an update on remediation activities at the Site.

Bohannon and SECOR would like to meet with you in the immediate future at your offices to discuss the findings of the attached report, including remedial activities. We will contact you to set a date and time that is convenient.

If you have any questions regarding the attached report, please contact the undersigned at (925) 299-9300 or Mr. Robert Webster of Bohannon at (650) 345-8222.

Sincerely  
**SECOR International Incorporated**

Chris R. Maxwell, P.G.  
Principal Geologist

Attachment: Groundwater Monitoring and Remedial Progress Report (one copy)

cc: Mr. Robert Webster, David D. Bohannon Organization  
Mr. Drew Bassak, Steefel Levitt and Weiss  
Ms. Donna Dragos, Alameda County Health Care Services Agency (w/o Att.)



SECOR  
INTERNATIONAL  
INCORPORATED

[www.secor.com](http://www.secor.com)

**Groundwater Monitoring and Remediation  
Progress Report  
575 Paseo Grande  
San Lorenzo, California**

**April 23, 2007  
SECOR PN: 05OT.50227.01.0002**

**Prepared For:**

**David D. Bohannon Organization  
Sixty – 31<sup>st</sup> Avenue  
San Mateo, California**

**Prepared By:**

**SECOR International Incorporated  
57 Lafayette Circle, 2<sup>nd</sup> Floor  
Lafayette, California 94549**

**TABLE OF CONTENTS**

	<b>Page</b>
<b>1.0 INTRODUCTION .....</b>	<b>1</b>
<b>2.0 BACKGROUND AND SITE CHRONOLOGY .....</b>	<b>2</b>
<b>3.0 REMEDIAL PILOT TESTING .....</b>	<b>5</b>
3.1 Summary of Phase One and Two Injection Program.....	5
3.2 Phase Two Progress Sampling and Phase Three Injections .....	6
3.3 Phase Three Progress Sampling.....	8
3.4 Summary of Oxidant and Nutrient Pilot Remedial Studies .....	10
<b>4.0 DUAL-PHASE EXTRACTION PILOT TESTS BY EFI GLOBAL .....</b>	<b>11</b>
4.1 One-Day Dual-Phase Extraction Test.....	11
4.2 Five-Day Dual-Phase Extraction Test by EFI Global .....	12
4.2.1 Field Activities.....	13
4.2.2 Findings.....	13
<b>5.0 MAY 2005 AND AUGUST 2006 GROUNDWATER SAMPLING .....</b>	<b>15</b>
5.1 Water Level Gauging.....	15
5.2 Purging and Sampling .....	15
5.3 August 2006 Groundwater Elevation Data.....	15
5.4 August 2006 Groundwater Analytical Results.....	16
<b>6.0 DUAL-PHASE EXTRACTION SYSTEM.....</b>	<b>17</b>

## LIST OF TABLES

Table 1	Groundwater Data for Pilot Remedial Program – May 2004 to August 2006
Table 2	April 2005 – Vacuum Gauge and Groundwater Extraction Measurements, Five Day Dual-Phase Extraction Test
Table 3	April 2005 – Influent to Groundwater Treatment System, Five Day Dual-Phase Extraction Test
Table 4	April 2005 – Influent to Soil Vapor Treatment System, Five Day Dual-Phase Extraction Test
Table 5	April 2005 – Estimated Mass of Hydrocarbons Removed in Groundwater, Five Day Dual-Phase Extraction Test
Table 6	April 2005 – Estimated Mass of Hydrocarbons Removed in Vapor, Five Day Dual-Phase Extraction Test
Table 7	Historical Groundwater Elevation Data
Table 8	Historical Groundwater Analytical Data

## LIST OF FIGURES

Figure 1	Site Location Map
Figure 2	Site Plan
Figure 3	Potentiometric Surface Map – August 24, 2006
Figure 4	Chemical Concentrations in Groundwater – August 24, 2006
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

Note: Tables and Figures appear at the end of report.

## LIST OF APPENDICES

Appendix A	Boring Logs
Appendix B	Laboratory Analytical Data Sheets
Appendix C	Field Data Sheets

**LIMITATIONS AND CERTIFICATIONS**

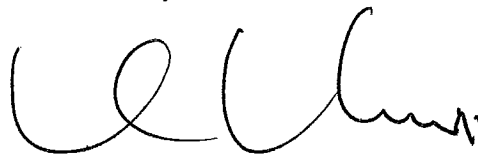
This report was prepared in accordance with the scope of work outlined in SECOR's contract and with generally accepted professional engineering and environmental consulting practices existing at the time this report was prepared and applicable to the location of the site. It was prepared for the exclusive use of David D. Bohannon Organization for the express purpose stated above. Any re-use of this report for a different purpose or by others not identified above shall be at the user's sole risk without liability to SECOR. To the extent that this report is based on information provided to SECOR by third parties, SECOR may have made efforts to verify this third party information, but SECOR cannot guarantee the completeness or accuracy of this information. The opinions expressed and data collected are based on the conditions of the site existing at the time of the field investigation. No other warranties, expressed or implied are made by SECOR.

Prepared by:



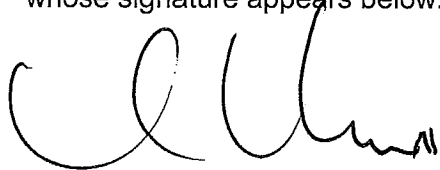
Neil Doran  
Associate Geologist

Reviewed by:

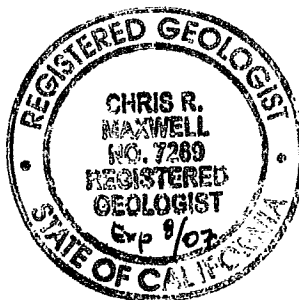


Chris R. Maxwell, P.G.  
Principal Geologist

All information, conclusions, and recommendations provided by SECOR in this document has been prepared under the supervision of and reviewed by the licensed professional whose signature appears below.



Chris R. Maxwell, P.G., #7269  
Principal Geologist



## 1.0 INTRODUCTION

This report presents the results of recent groundwater monitoring at the property located at 575 Paseo Grande in San Lorenzo, California (the Site; see Figure 1) and provides a discussion of remedial activities performed at the Site since April 2005. The most recent groundwater monitoring report issued for the Site was dated April 2005 (EFI Global). The April 2005 document of groundwater monitoring performed in December 2004 and an update of remediation testing at the Site.

Since April 2005, EFI Global and/or SECOR International Incorporated (SECOR) have performed the following actions at the Site:

- Conducted a five-day dual-phase extraction test (April 2005);
- Conducted two Site-wide groundwater monitoring events (May 2005 and August 2006);
- Installed soil borings to refine the target remedial area for dual-phase extraction (June 2005);
- Obtained an air permit from the Bay Area Air Quality Management District (BAAQMD) for full-scale dual-phase extraction (July 2005); and
- Installed seven remedial wells for full-scale dual-phase extraction (July 2005).

This report is being submitted to provide the Alameda County Health Care Services Agency (County) with an update regarding the current Site conditions and remedial activities, and to facilitate coordination prior to implementation of dual-phase extraction. SECOR and Bohannon intend to meet with the County to discuss this report prior to implementation of the dual-phase extraction program.

## 2.0 BACKGROUND AND SITE CHRONOLOGY

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 on-site. 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, 1994, 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 County 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 [ $\mu\text{g}/\text{L}$ ]) 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, and submitted to the County. The Work Plan was approved by the County in a letter dated October 28, 2002. Based on field observations, soil boring logs, and laboratory analytical results, SECOR concluded that: 1) perched groundwater was encountered within fill materials at approximately 5 to 8 feet below ground surface (bgs); 2) water-bearing zones were encountered in silt and sand at depths of 13 to 15 feet bgs (A zone), in sand from 16 to 19 feet bgs (B zone), and in silty sand at 22.5 feet bgs (C zone); and 3) soil sample analytical results suggest that the majority of chemical impact exists in silty clay from approximately 8 to 13.5 feet bgs within and adjacent to the former gasoline 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 County, 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 *Third Quarter 1999 Groundwater Monitoring Results and Plume Definition Report* dated October 21, 1999. 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 County in a letter to Bohannon dated December 15, 2003.

In May 2004, EFI Global began the pilot groundwater remediation program. Four wells were installed on-site for the purposes of injecting nitrate solution into groundwater upgradient of well MW-4 (NIW-A1, NIW-A2, NIW-B1, and NIW-B2). Eight wells were installed on-site for injection of peroxide solution into soil and groundwater upgradient of well MW-3 (PIW-A1 to PIW-A4 and PIW-B1 to PIW-B4). Four wells were installed to observe the effects of the injection program (NOBS-B1, POBS-A1, POBS-B1, and POBS-B2). Injection and observation well installations were completed during May 2004 in accordance with the approved RAW, and initial chemical injections were completed during May/June 2004. Soil boring logs for these wells are provided in Appendix A. The well installation activities were described in the *1<sup>st</sup> Semester 2004 Semi-Annual Groundwater Monitoring Report* prepared by EFI Global (EFI Global, 2004).

Additional injections were completed in July 2004 (Phase Two) and October 2004 (Phase Three). Progress groundwater sampling for Phases Two and Three were conducted in August 2004 and December 2004, respectively. Following Phase Three injections, EFI Global conducted a single-day dual-phase extraction test (February 2005) and a 5-day dual-phase extraction test (April 2005) in the area of the former gasoline UST. The results of the Phase Three progress sampling (December 2004) and single-day dual-phase extraction test (February 2005) are reported in the *Semi-Annual (Second Half 2004) Groundwater Monitoring and Pilot Remedial Progress Report* (EFI Global, April 2005).

Site-wide groundwater monitoring was conducted in May 2005. In June 2005, SECOR advanced 14 soil borings at locations intended to provide additional delineation of the target area for full-scale dual-phase remediation. SECOR obtained an operation permit from the BAAQMD in July 2005 and installed seven additional remediation wells in September 2005. To date, the system infrastructure other than the seven remedial wells has not been installed pending further discussion with the County.

### 3.0 REMEDIAL PILOT TESTING

The 1<sup>st</sup> Semester 2004 report (EFI Global, 2004) provides details regarding the installation and initial operation of the pilot remedial system, including well installation and initial injections (Phase One and Phase Two) of peroxide and nitrate solutions. Lithologic and well completion logs for nitrate and peroxide injection and observation wells are included as Appendix A of this report, and well locations are illustrated on Figure 2. The pilot remedial system generally consisted of temporary chemical storage tanks, connecting valves, and flexible hosing. No permanent storage tanks are currently located at the Site.

The remedial pilot program consisted of gravity injecting nitrate and peroxide solutions to the subsurface. Nitrate was injected upgradient of well MW-4 to reduce concentrations of dissolved phase hydrocarbons in groundwater. The nitrate was intended to facilitate anaerobic degradation. Peroxide was injected upgradient of well MW-3 to chemically oxidize petroleum hydrocarbons in soil and groundwater including light non-aqueous phase liquids (LNAPL). The peroxide may also have increased dissolved oxygen and oxidation reduction potential (ORP) levels in the groundwater, thereby facilitating aerobic degradation.

#### 3.1 Summary of Phase One and Two Injection Program

The Phase One and Phase Two injection program activities are detailed in the 1<sup>st</sup> Semester 2004 report (EFI Global, 2004). The following summarizes these activities including the baseline sampling conducted prior to injections. Referenced injection and observation well locations are shown on Figure 2. Field data sheets and laboratory data for the baseline and Phase One progress sampling are provided in Appendices A and B, respectively, of the 1<sup>st</sup> Semester 2004 report.

Groundwater samples were collected in May 2004 from select injection and observation wells to provide a baseline for groundwater conditions prior to chemical/nitrate injections. These data, in addition to the April 2004 results for wells MW-3 and MW-4, provide a pre-injection baseline from which to evaluate remedial progress. The baseline data is summarized on Table 1.

Phase One injections were completed in late May 2004. Phase One of the chemical oxidation program generally consisted of injecting a total of 1,000 gallons of peroxide solution (7 percent by weight) into the four A Zone (PIW-A1 through PIW-A4) and four B Zone (PIW-B-1 through PIW-B4) injection wells. Phase One of the anaerobic degradation program consisted of injecting approximately 400 gallons of nitrate solution (approximately 260 milligrams per liter [mg/L] total kjeldahl nitrogen or TKN) into the two A Zone (NIW-A1

and NIW-A2) injection wells. Nitrate injections were not conducted for the B Zone wells because baseline data indicated the presence of nitrate.

Phase Two injections were completed in July 2004. Phase Two of the chemical oxidation program consisted of injecting 1,000 gallons of peroxide solution (7 percent by weight) into the four A Zone wells (PIW-A1 to PIW-A4). No peroxide injections were completed for the four B Zone wells because the Phase One progress data suggested the initial injections significantly reduced hydrocarbon concentrations in this zone. Phase Two of the anaerobic degradation program consisted of injecting approximately 2,500 gallons of nitrate solution (approximately 260 mg/L TKN) to the two A Zone wells (NIW-A1 and NIW-A2). The Phase Two nitrate injections were conducted because observation well MW-4 did not indicate the presence of nitrate solution.

### **3.2 Phase Two Progress Sampling and Phase Three Injections**

Phase Two remedial progress sampling was conducted in August 2004 and Phase Three injections were completed in September 2004. The monitoring data and Phase Three injection activities are discussed in the *Semi-Annual (Second Half 2004) Groundwater Monitoring and Pilot Studies Progress Report* (EFI Global, April 2005) and are summarized as follows:

- Chemical oxidation in the A Zone successfully reduced hydrocarbon concentrations in injection wells. However, the radius of influence appears limited based on data for observation wells MW-3 and POBS-A1. Specifically, hydrocarbon concentrations in these two wells were higher than baseline data collected in May 2004.
- Chemical oxidation in the B Zone (Phase One only) significantly reduced hydrocarbon concentrations in the four injection wells and two observation wells (POBS-B1 and POBS-B2). Concentrations at one of the two observations wells (POBS-B2) increased slightly between the Phase One and Two remedial progress sampling (June and August 2004, respectively).
- Nitrate injections in the A Zone wells appeared to significantly reduce hydrocarbon concentrations in both the injection wells (NIW-A1 and NIW-A2) and the observation well (MW-4). The hydrocarbon concentration detected at well MW-4 was significantly lower than historical data since this well was installed in 2000. The nitrate analytical data (TKN and ammonia) suggested dilution of the nitrate solution from the injection wells (i.e., injection well concentrations were approximately 50 percent of the injection solution

concentration). However, neither TKN nor ammonia was detected in the groundwater of well MW-4.

- The relatively low hydrocarbon concentrations in the B Zone wells in the anaerobic degradation pilot remedial testing area (NIW-B1 and NIW-B2 and NOBS-B1) were generally consistent with the May 2004 baseline data. No nitrate injections were completed for the B Zone because the hydrocarbon concentrations are low, and because baseline sampling suggested the presence of nitrate without injections.

Based on the findings of the Phase Two progress sampling (August 2004), Phase Three injections were completed in late September 2004. The goals of the Phase Three injections were to further evaluate the potential for hydrocarbon mass destruction in the A Zone through chemical oxidation, and to determine if nitrate injections in the anaerobic remedial testing area (NIW-A1 and NIW-A2) could extend to observation well MW-4 located approximately 35 feet downgradient. Phase Three injections consisted of:

- Approximately 650 gallons of peroxide solution (7 percent by weight) and 350 gallons of sodium persulfate solution (7 percent by weight) were cumulatively injected into the four A Zone wells (PIW-A1 through PIW-A4). The sodium persulfate was added to the remedial testing program to slow the chemical reaction of the peroxide, and to facilitate Fenton's reaction (i.e., reaction between the hydroxyl radical and hydrocarbons).
- Approximately 650 gallons of peroxide solution (7 percent by weight) and 350 gallons of sodium persulfate solution (7 percent by weight) were cumulatively injected into the four B Zone wells (PIW-B1 through PIW-B4).
- Approximately 2,000 gallons of nitrate solution was injected into the two A Zone wells (NIW-A1 and NIW-A2). The nitrate solution contained approximately 450 mg/L TKN. The TKN concentration was increased compared to Phases One and Two to facilitate movement of nutrients to observation well MW-4.

Phases One and Two oxidant injections were completed by gravity draining the chemical oxidant into the groundwater system. This method was reportedly preferred by EFI Global to high-pressure injection because lower pressure may prevent "short-circuiting" along preferential flow paths. However, according to EFI Global, the low pressure created by the hydraulic head in the well casing (approximately 2 to 3 pounds per square inch [psi]) did not appear to provide a significant radius of influence to move the oxidants into the clay and silt sediments of the A Zone. During Phase Three, the injection pressure was boosted using an air compressor. Injection pressures were still relatively low, ranging from approximately

3 to 10 psi. The injection process was conducted by filling the well casing with chemical oxidant, capping the well, and then applying air pressure as necessary to facilitate movement of the solutions into the soils and groundwater system. The EFI Global field personnel alternated between injecting the hydrogen peroxide and sodium persulfate solutions to facilitate mixing of the chemicals in the aquifer.

During the Phase Three injections, field observations suggested an increase in the radius of influence of the chemical injections. Groundwater in A Zone observation wells MW-3 and POBS-A1, and B Zone observation wells POBS-B1 and POBS-B2 was observed to bubble. This observation suggests movement of oxidant to these locations.

### **3.3 Phase Three Progress Sampling**

Phase Three remedial progress sampling was completed in December 2004 coincident with the above-described 2<sup>nd</sup> Semester 2004 sampling event. The data and results are presented in the *Semi-Annual (Second Half 2004) Groundwater Monitoring and Pilot Remedial Progress Report* (EFI Global, April 2005). The following summarizes the findings of the sampling.

#### **Chemical Oxidant Remedial Test Area**

- ❑ Hydrocarbon concentrations in A Zone peroxide injection wells were significantly lower than baseline levels. At one well (PIW-A1), concentrations were slightly higher than Phase Two progress results. In the other well sampled (PIW-A2), concentrations were the lowest detected since the remedial pilot program was initiated in May 2004.
- ❑ pH measurements collected from select A and B Zone wells in the oxidant remedial area indicate acidic conditions. pH values less than 6.0 pH units were measured at each of the four A Zone oxidant injection wells (PIW-A1 through PIW-A4) and two of the B Zone oxidant injection wells (PIW-B1 and PIW-B2). These data suggest that the injection program has likely resulted in localized Fenton's chemical reactions in the immediate vicinity of the injection wells.
- ❑ Hydrocarbon concentrations in A Zone oxidant observation wells (MW-3 and POBS-A1) continued to be above the May 2004 baseline levels. As noted on Figures 6 and 8, hydrocarbon concentrations at well MW-3 steadily increased during the remedial program. Although field observations (bubbling in observation well groundwater) suggest movement of oxidant to the observation wells, the overall remedial affect of the injections does not appear to have been laterally significant.

Well MW-3 and peroxide injection well PIW-A3 were sampled on December 15, 2004, to further evaluate groundwater conditions in the oxidant injection area. Prior to sampling, both wells were purged of approximately 50 gallons of water to remove sediment and ensure collection of representative aquifer samples. The analytical data for this additional sampling event is provided on Table 1. The concentrations of total petroleum hydrocarbons as gasoline (TPHg) and benzene, toluene, ethylbenzene and total xylenes (BTEX) at well MW-3 were higher in the sample collected on December 15, 2004, than on December 2, 2004. The concentrations at PIW-A3, which is located approximately 5 feet east of well MW-3, were much lower than detected at well MW-3. These data are consistent with samples from other injection wells, where the hydrocarbon concentrations are relatively low at the oxidant injection wells compared to nearby observation wells.

- Hydrocarbon concentrations in B Zone injection and observation wells in the oxidant remedial area indicate much lower levels than the May 2004 baseline, the Phase One progress data, and the Phase Two progress data. Hydrocarbon compounds were slightly above laboratory method reporting limits (MRLs) at both injection wells sampled (PIW-B1 and PIW-B3) and one observation well (POBS-B1), and less than MRLs at the other observation well (POBS-B2). These data represent a decrease in concentration by several orders of magnitude compared to the May 2004 baseline data.

#### **Nitrate Injection Remedial Area**

- Hydrocarbon concentrations in A Zone nitrate injection wells were significantly lower than baseline levels. At one well (NIW-A1), concentrations were approximately five times lower than the baseline levels. In the other well sampled (NIW-A2), concentrations were less than MRLs.
- Hydrocarbon concentrations at the A Zone nitrate observation well (MW-4) were approximately one-half to one-third of the May 2004 baseline levels. As shown on Figures 5 and 7, hydrocarbon concentrations at well MW-4 reached historical lows during the remedial program. The Phase Three progress concentrations were greater than the Phase Two progress data (August 2004).
- TKN and ammonia data indicate dilution and lateral migration of nitrate solutions from the injection wells to well MW-4. TKN concentrations at NIW-A1 (260 mg/L) and NIW-A2 (270 mg/L) are approximately one-half the injected concentration. TKN was not detected at A Zone observation well MW-4, but ammonia was detected at a concentration of 0.34 mg/L. These data suggest that the injected nitrate solution is spreading to well MW-4. Additionally, the very low concentration of ammonia and

absence of TKN at well MW-4 suggest the potential for microbial consumption of the nitrate.

- Hydrocarbon compounds in B Zone injection wells (NIW-B-1 and NIW-B2) and observation well (NOBS-B1) in the nitrate injection area were less than MRLs with the exception of 2.0 µg/L benzene at NOBS-B1. These data indicate a reduction in hydrocarbon concentrations compared to baseline data. Note that although nitrate solution was not injected directly into the B zone, TKN and ammonia were detected in B Zone injection and observation wells. TKN was detected at NIW-B1 (94 mg/L), NIW-B2 (17 mg/L), and NOBS-B1 (4.3 mg/L). The significant reduction in hydrocarbon concentrations in the B Zone may be attributed to the indirect injection of nutrients into the groundwater of this zone.

### 3.4 Summary of Oxidant and Nutrient Pilot Remedial Studies

Based on field observations, field data, and laboratory analytical data, the following can be summarized for the initial three injection phases of the pilot remedial studies conducted at the Site:

- Nitrate solution injections reduced petroleum hydrocarbon concentrations in groundwater of the A and B Zones at the Site. The reduction in concentrations appears to be associated with anaerobic degradation. Microbial studies conducted by EFI Global prior to implementation of the pilot program identified abundant facultative bacteria in the groundwater of well MW-4. The nitrate solution appears to have provided important nutrients for these existing bacteria to aggressively consume hydrocarbons.
- Injection of chemical oxidant reduced petroleum hydrocarbon concentrations in the B Zone groundwater at the Site. The success of the oxidant injections can be attributed to the transmissive nature of the B Zone sand and gravel sediments, and the absence of clay and organic materials that consume the oxidant.
- Injection of chemical oxidant into the A Zone reduced petroleum hydrocarbon concentrations at the injection wells. The injections also facilitated localized Fenton's reactions (i.e., creation of the hydroxyl radical), which is critical for hydrocarbon mass reduction. However, the lateral influence for each injection well appears limited. The A Zone also contains abundant clays and organic matter, which may have consumed some of the injected oxidant.

## 4.0 DUAL-PHASE EXTRACTION PILOT TESTS BY EFI GLOBAL

Based on the findings of the pilot remedial studies, it was determined by EFI Global that chemical oxidation of hydrocarbons in soil and groundwater of the A Zone in the area of the former gasoline UST may not be an appropriate remedy. Specifically, the volume of oxidant required and the spacing of injection wells may not be cost-effective. Dual-phase extraction (extraction of soil vapor and groundwater) was selected for remedial evaluations to reduce benzene concentrations in groundwater.

### 4.1 One-Day Dual-Phase Extraction Test

To initially evaluate this remedial approach, EFI Global provided direct oversight of a one-day test on February 3, 2005. The results of the single-day dual-phase extraction test are reported in the *Semi-Annual (Second Half 2004) Groundwater Monitoring and Pilot Remedial Progress Report* (EFI Global, April 2005). The following summarizes the methods and findings of the test:

- ❑ A 25 horsepower (HP) liquid ring blower was used to extract groundwater and vapor from wells PIW-A1 through PIW-A4. The wells were connected to the unit using temporary flexible hoses and fittings.
- ❑ Measurements were collected at the wellhead and observations wells including vacuum, vapor removal rate (feet per minute), and groundwater extraction rate (gallons per minute or gpm).
- ❑ Extracted vapors were treated using an on-site thermal oxidation unit. The treated vapors will be discharged under a mobile treatment unit permit.
- ❑ Extracted groundwater was stored on-site in 55-gallon drums. An estimated 900 gallons of groundwater were generated during the test.
- ❑ Wells PIW-A2 and PIW-A4 yielded groundwater in excess of several gallons per minute from each well. Groundwater would be more effectively removed from these wells using pumps rather than the vacuum system. These two wells were disconnected from the vacuum system after approximately one-half hour of testing.
- ❑ Vacuum at wells PIW-A1 and PIW-A3 was significant throughout the test, ranging from approximately 25 to 28 inches of water.



- Vacuum at observation wells MW-3 and POBS-A1 were not greater than 0.5 inches of water. These data suggest that the applied vacuum did not develop a significant radius of influence during the test. Note that the test area was not expected to be dewatered in the brief time period of the test. The radius of influence of the applied vacuum would not be expected to expand a significant distance from the vacuum extraction wells until dewatering is more advanced.
- Influent vapor samples to the treatment system were collected four times during the test. Hydrocarbon concentrations as gasoline (TPHg) ranged from approximately 0.17 to 0.97 milligrams per liter of air (mg/L<sub>air</sub>).
- Vapor removal rates ranged from approximately 350 to 800 feet per minute. These data equate to approximately 17 to 39 standard cubic feet per minute (SCFM).
- Assuming 1.0 mg/L<sub>air</sub> and 39 SCFM, the dual-phase extraction system peak hydrocarbon removal rate for the single-day test is estimated at approximately 3.5 pounds of hydrocarbons per day in the vapor phase. The rate would likely increase significantly once the area is effectively dewatered, and air removal rate and concentration should both increase.
- The groundwater removal rate during the test is estimated at approximately 3.0 gpm. The removal rate would have been much higher if all four wells (PIW-A1 through PIW-A4) were connected to the extraction system throughout the test. Although the cumulative removal rate during the initial phase of full-scale application would be much higher than 3.0 gpm (estimated to be the first 12 to 36 hours), less than 1.5 gpm would likely be required once dewatering is complete.

In summary, EFI Global concluded that data collected during the one-day test suggest the dual-phase remedial technology has the potential to remove the volatile hydrocarbons (TPHg) from soil and groundwater in the area of the former gasoline UST. In order to further evaluate the technology, EFI Global recommended conducting a five-day extraction test prior to implementing a full-scale design.

#### **4.2 Five-Day Dual-Phase Extraction Test by EFI Global**

The five-day dual-phase extraction test was conducted by EFI Global during the week of April 25, 2005. Pre-field activities were completed during the preceding weeks.

#### **4.2.1 Field Activities**

Pre-field and field activities reportedly consisted of the following:

- Submittal of permit documents to the Oro Loma Sanitary District (OLSD) for discharge of treated groundwater to the sanitary sewer system.
- Treatment of approximately 1,200 gallons of groundwater and discharge of the treated water to two temporary holding tanks. The groundwater was generated during the prior single-day test. The groundwater was treated using filtration and granular activated carbon (GAC). This initial treatment was conducted to demonstrate to the OLSD that the filtration and GAC treatment would meet their permit requirements.
- Sampling of the treated groundwater for several constituents as required by the OLSD and submittal of the analytical data to the OLSD. The results indicated compliance with OLSD permit requirements, and the agency subsequently provided written approval to proceed with the discharge of treated water to the sanitary sewer at the Site.
- Installation of two down-hole pumps, wiring, control units, and piping for the dual-phase test.
- Mobilization of the mobile vacuum extraction and treatment unit (from Mako Industries).
- Extraction of groundwater and vapor from wells PIW-A1 through PIW-A4. The extraction process began on April 25, 2005, and ended on May 1, 2005.
- Periodic sampling of untreated vapor, untreated groundwater, and treated groundwater. The sampling of untreated vapor and groundwater was done to evaluate mass removal. Sampling of treated groundwater was performed to demonstrate compliance with the OLSD permit.
- Periodic measurements of vacuum extraction pressure, vacuum extraction rates, and vacuum at observation wells.

#### **4.2.2 Findings**

Data collected during the five-day extraction test are summarized on Tables 2 through 6, and the laboratory analytical data is provided in Appendix B. Based on these data, EFI Global made the following conclusions.

- ❑ Vacuum readings at observation wells indicated a significant radius of influence during the test (Table 2).
- ❑ Well PIW-A4 provides a significant volume of vapor inflow with a measurable decline in overall vacuum at the blower and observation wells (Table 2). Vacuum readings at POBS-B1 during the final days of the test suggest that well PIW-A4 may be affecting the sand/gravel deposits of the B zone. Additionally, untreated vapor samples were lower in concentration when well PIW-A4 was fully included in the extraction array (Table 4).
- ❑ More groundwater was pumped than expected during the test with an estimated 9 gpm pumped during the first several days. The majority of the groundwater was pumped from well PIW-A2. Cumulative groundwater recovery rates for the four wells appeared to be declining toward the final days of the test (5 gpm on the final day), suggesting the area of remedial interest were beginning to dewater. In total, an estimated 9,000 gallons of groundwater was pumped and treated.
- ❑ Petroleum hydrocarbon concentrations in groundwater were generally consistent with data collected from wells POBS-A1 and MW-3. These data suggest the pumping program was effective in influencing the area of contamination without substantial dilution from "clean" groundwater.
- ❑ Mass removal rates in groundwater were significant with an estimated 2.75 pounds of hydrocarbons removed during the test (Tables 3 and 5). The mass removal rate for vapor (see below) is substantially higher than for groundwater based on the volume of media removed (i.e., 39,000 gallons of groundwater versus 39 million liters of vapor).
- ❑ Mass removal in soil vapor was significant during the test with an estimated 70 pounds of hydrocarbons removed (Tables 5 and 6). Mass removal rates were highest when PIW-A4 was not fully included in the extraction array.
- ❑ Sampling of the treated groundwater indicated non-detectable concentrations of hydrocarbons. These data indicate the filtration and GAC processes were effective and full compliance with the OLSD permit was attained.

Based on the findings of the five-day test, EFI Global recommended proceeding with full-scale implementation of a dual-phase extraction system. Specifically, EFI Global found that the mass of hydrocarbons removed through vapor and groundwater extraction suggest this technology can be effective in reducing volatile organic compound concentrations.

## 5.0 MAY 2005 AND AUGUST 2006 GROUNDWATER SAMPLING

Site-wide groundwater monitoring and sampling was performed in May 2005 and August 2006. The May 2005 event was conducted by EFI Global, and reportedly consisted of sounding wells MW-1 through MW-7 for depth-to-water, and sampling wells MW-1 through MW-7 and POBS-A1, POBS-B1, POBS-B2, NIW-A1, and NIW-A2. Well gauging data is reported on Table 7. Laboratory analytical data is reported on Table 8 and included in Appendix B. Field data sheets are provided in Appendix C.

In August 2006, groundwater monitoring wells MW-1 through MW-7 were gauged for depth-to-water and wells MW-1 through MW-7 and wells POBS-A1, POBS-B1, POBS-B2, and NOBS-B1 were sampled by SECOR. Field data sheets for the August 2006 sampling event are provided in Appendix C and laboratory analytical data sheets are provided in Appendix B. The following summarizes the data collected by SECOR in August 2006:

### 5.1 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 in wells MW-1 through MW-7. Table 7 presents historical groundwater elevation data for the Site.

### 5.2 Purging and Sampling

Wells were purged and sampled 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 gpm. Temperature, conductivity, pH, dissolved oxygen content, and ORP were monitored using a flow-through cell during purging to confirm stable water conditions prior to sampling. Copies of field data sheets are attached as Appendix C.

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, labeled, and stored on ice pending delivery to Severn Trent Laboratories, Inc. (STL) of San Francisco, a California state-certified laboratory. The groundwater samples were analyzed for TPHg by modified U.S. Environmental Protection Agency (EPA) Method 8015M and for BTEX by EPA Method 8260B.

### 5.3 August 2006 Groundwater Elevation Data

The average depth-to-water measured at the Site on August 24, 2006, was 6.36 feet below the top of well casing with an average water-table elevation of 19.67 feet above mean sea

level (amsl). A potentiometric surface map illustrating the interpreted groundwater surface elevation and flow direction on August 24, 2006, is presented as Figure 3. The hydraulic gradient across the Site was approximately 0.0028 feet per foot (ft/ft) toward the west. These results are consistent with prior monitoring events.

#### **5.4 August 2006 Groundwater Analytical Results**

Petroleum hydrocarbon chemical data for the August 2006 event are illustrated on Figure 4. Copies of the laboratory reports for groundwater samples are attached as Appendix B.

TPHg and BTEX concentrations continued to be below the laboratory MRL in on-site well MW-1, off-site monitoring wells MW-5, MW-6, and MW-7, and in on-site remediation well NOBS-B1. Samples from wells POBS-B1 and POBS-B2 were characterized by much lower concentrations of petroleum hydrocarbons compared to pre-remediation levels; the August 2006 results were the lowest concentrations detected compared to the historical data.

One or more BTEX constituents were reported in samples collected from wells MW-2 through MW-4, POBS-B1, and POBS-A1. Historical concentrations of benzene at wells MW-2 through MW-4 are shown on Figure 5 (MW-2 and MW-4) and Figure 6 (MW-3). During the August 2006 event, benzene concentrations ranged from 1.1 µg/L in POBS-B1 to 1,700 µg/L in POBS-A1. In general, BTEX concentrations in these wells were lower than the pre-remediation baseline levels.

TPHg was reported in samples collected from wells MW-2 through MW-4 and POBS-B1, POBS-B2, and POBS-A1. Historical concentrations of TPHg in wells MW-2 through MW-4 are shown on Figure 7 (MW-2 and MW-4) and Figure 8 (MW-3). During the August 2006 event, the TPHg concentrations ranged from 50 µg/L at POBS-B1 to 8,500 µg/L at POBS-A1. In general, TPHg concentrations in these wells were lower than the pre-remediation baseline levels.

## 6.0 DUAL-PHASE EXTRACTION SYSTEM

In July 2005, SECOR advanced 14 soil borings at the Site (R-1 through R-14). The purpose of these borings was to further define the areas of hydrocarbon-affected soil so as to best locate the wells that would be used for full-scale dual-phase extraction. Soil boring locations were chosen with consideration given to previous work at the Site and were advanced to 16 feet bgs. Soil samples were not submitted for laboratory analysis; rather, soils were screened with a photoionization detector (PID) in the field to evaluate relative mass contaminant concentrations. Soil boring locations are illustrated on Figure 2. Soil boring logs, including the PID field readings, are included in Appendix A.

Based on the data from borings R-1 to R-14, dual-phase extraction wells DP-1 through DP-7 were installed at the Site in September 2005. The well locations are shown on Figure 1, and well construction designs are shown on the boring logs included in Appendix A.

The conceptual full-scale dual-phase design includes aboveground piping, skid-mounted blower and knockout tank, and treatment of water and vapor streams using activated carbon. Finalization of the remedial system design is pending further discussions with the County. SECOR and Bohannon intend to meet with the County to discuss the remedial program following the County's review of this report.

**TABLES**

Groundwater Monitoring and Remediation  
Progress Report  
575 Paseo Grande  
San Lorenzo, California  
SECOR PN: 05OT.50227.01.0002  
April 23, 2007

Table 1  
Groundwater Data for Pilot Remedial Program - May 2004 to August 2006  
575 Paseo Grande  
San Lorenzo, California

Well ID	Date Sampled	TPH-g <i>Units</i> (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Nitrate as NO <sub>3</sub> mg/L	Kjeldahl Nitrogen mg/L	Dissolved Oxygen <sup>(1)</sup> mg/L	Oxidation-Reduction Potential <sup>(1)</sup> millivolts
<b>Peroxide Treatment Area - A Zone Injection Wells</b>										
PIW-A1	5/13/2004	6,800	460	50	31	300	NA	NA	0.10	99
	6/18/2004	240	10	2.1	4	11	NA	NA	25.42	213
	8/27/2004	220	14	1.2	2	5	NA	NA	20.11	NA
	10/5/2004	<50	<0.5	<0.5	<0.5	<1.0	NA	NA	NA	NA
	12/2/2004	640	63	12.0	15	29	NA	NA	3.72	294
PIW-A2	5/13/2004	20,000	1,500	460	760	2,600	NA	NA	1.23	99
	6/18/2004	2,800	150	14	6.5	90	NA	NA	12.57	267
	8/27/2004	500	34	3	4.4	12	NA	NA	19.58	NA
	12/2/2004	350	6.1	1.2	2.4	5.4	NA	NA	18.50	320
PIW-A3	12/14/2004	1,500	220	28	55	99	NA	NA	NA	NA
<b>Peroxide Treatment Area - B Zone Injection Wells</b>										
PIW-B1	5/13/2004	1,900	28	<5.0	11	51	NA	NA	1.30	103
	6/18/2004	270	22	1	2.2	2.7	NA	NA	19.87	243
	8/27/2004	230	11	0.85	1.7	4.3	NA	NA	18.69	NA
	12/2/2002	66	<0.5	<0.5	<0.5	<1.0	NA	NA	29.95	441
PIW-B3	5/13/2004	3,300	420	17	7.8	44	NA	NA	0.32	108
	6/18/2004	180	1.2	<0.5	<0.5	2.4	NA	NA	15.50	302
	8/27/2004	230	20.0	0.93	3.3	2.9	NA	NA	19.12	NA
	12/2/2004	64	0.75	<0.5	<0.5	<1.0	NA	NA	26.96	335
<b>Peroxide Treatment Area - A Zone Observation Wells</b>										
POBS-A1	5/13/2004	16,000	2,200	220	480	980	NA	NA	0.71	126
	6/18/2004	11,000	2,200	150	120	820	NA	NA	1.09	92
	8/27/2004	23,000	2,900	140	180	470	NA	NA	0.15	NA
	10/5/2004	13,000	2,400	83	130	94	NA	NA	NA	NA
	12/2/2004	17,000	3,500	240	210	730	NA	NA	0.22	26
	12/14/2004	13,000	2,700	200	220	510	NA	NA	NA	NA
	5/27/2005	9,600	1,200	62	110	180	NA	NA	0	-153
	8/24/2006	8,500	1,700	58	120	100	NA	NA	2	-43
MW-3	4/13/2004	3,900	1,200	19	<5.0	<10	NA	NA	0.31	-121
	6/18/2004	4,300	1,600	40	81	26	NA	NA	1.19	-66
	8/27/2004	6,900	2,100	59	220	<50	NA	NA	0.33	NA
	10/5/2004	9,800	2,500	52	160	38	NA	NA	NA	NA
	12/2/2004	8,300	2,400	41	200	29	NA	NA	0.43	18
	12/14/2004	15,000	3,600	140	560	210	NA	NA	NA	NA
	5/27/2005	5,500	840	36	210	41	NA	NA	1.80	-155
	8/23/2006	1,700	190	5	51	<10	NA	NA	0.55	-135
<b>Peroxide Treatment Area - B Zone Observation Wells</b>										
POBS-B1	5/13/2004	11,000	250	71	160	590	NA	NA	0.11	77
	6/18/2004	3,500	9.8	<0.5	0.8	13	NA	NA	1.61	132
	8/27/2004	500	1.4	<0.5	<0.5	<1.0	NA	NA	0.19	NA
	12/2/2004	190	2.6	<0.5	<0.5	<1.0	NA	NA	0.22	-21
	5/27/2005	68	17.0	<0.5	1.6	0.52	NA	NA	0.35	-91
	8/24/2006	50	1.1	<0.5	<0.5	<1.0	NA	NA	1.50	14
POBS-B2	5/13/2004	4,500	150	23	11	120	NA	NA	0.21	92
	6/18/2004	97	7.4	0.8	1.6	1.7	NA	NA	7.95	266
	8/27/2004	240	36.0	1.6	6.7	4.2	NA	NA	7.33	NA
	12/2/2004	<50	<0.5	<0.5	<0.5	<1.0	NA	NA	10.80	280
	5/27/2005	97	33.0	0.56	1.3	0.74	NA	NA	0.41	-66
	8/24/2006	57	<0.5	<0.5	<0.5	<1.0	NA	NA	4.10	-66



Table 1  
Groundwater Data for Pilot Remedial Program - May 2004 to August 2006  
575 Paseo Grande  
San Lorenzo, California

Well ID	Date Sampled	TPH-g <i>Units</i> (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Nitrate as NO <sub>3</sub> mg/L	Kjeldahl Nitrogen mg/L	Dissolved Oxygen <sup>(1)</sup> mg/L	Oxidation-Reduction Potential <sup>(1)</sup> millivolts
<b>Nitrate Injection Area - A Zone Injection Wells</b>										
NIW-A1	5/13/2004	9,300	1,800	59	250	96	<1.0	NA	1.93	117
	6/18/2004	3,100	340	22	93	55	<2.0	NA	2.99	-34
	8/27/2004	250	13	1.4	6	5.7	<1.0	180	0.49	NA
	10/5/2004	1,700	150	<5.0	24	12	NA	120	NA	NA
	12/2/2004	1,400	28	6.2	10	23	NA	260	0.13	-1
	5/27/2005	14,000	1,300	61.0	680	300	NA	47	0.75	-109
NIW-A2	5/13/2004	970	18	<2.5	<2.5	4	<1.0	NA	0.53	112
	6/18/2004	200	6.4	1.7	2.1	3.5	<2.0	NA	1.96	-57
	8/27/2004	<500	6.3	<5.0	<5.0	<10	<1.0	180	0.35	NA
	12/2/2004	<50	<0.5	<0.5	<0.5	<1.0	NA	270	0.21	29
	5/27/2005	550	14.0	0.7	1.8	0.9	NA	41	0.51	-110
	<b>Nitrate Injection Area - B Zone Injection Wells</b>									
NIW-B1	5/13/2004	170	6.5	1.1	2.4	8.0	25	NA	0.37	120
	6/18/2004	160	2.9	0.7	2.6	2.5	26	NA	0.55	-76
	8/27/2004	110	6.9	<0.5	1.4	2.0	30	5	0.16	NA
	12/2/2004	<50	<0.5	<0.5	<0.5	<1.0	NA	94	0.18	43
NIW-B2	5/13/2004	260	8.9	1.5	4	8.4	35	NA	0.25	112
	6/18/2004	120	1.0	<0.5	1.1	<1	40	NA	0.35	-46
	8/27/2004	120	4.4	<0.5	1.1	1.6	39	10	0.31	NA
	12/2/2004	<50	<0.5	<0.5	<0.5	<1.0	NA	17	0.26	247
<b>Nitrate Injection Area - Observation Wells</b>										
MW-4	4/13/2004	7,400	290	29	110	100	<1.0	NA	0.33	-52
	6/18/2004	2,700	140	12	36	16	<1.0	NA	0.56	-63
	8/27/2004	460	19	1.2	1.1	1.5	<1.0	<0.40	0.38	NA
	10/5/2004	460	19	<1.0	<1.0	<1.0	NA	<0.40	NA	NA
	12/2/2004	2,800	120	5.4	8.3	5.3	NA	<0.40	0.25	-12
	5/27/2005	7,300	350	37.0	100.0	50.0	NA	NA	0.74	-173
	8/24/2006	2,400	59	8.2	19.0	14.0	NA	0.97	0.50	-117
	NOBS-B1	5/13/2004	120	4.6	0.8	2.3	5.4	35	NA	0.11
6/18/2004		88	1.9	0.7	1.7	<1	34	NA	0.53	-76
8/27/2004		180	5.5	0.53	0.99	1.6	38	1.7	0.30	NA
12/2/2004		<50	2.0	<0.5	<0.5	<1.0	NA	4.3	0.27	12
8/24/2006		<50	<5	<5	<5	<1.0	NA	NA	0.50	8

Notes:  
NA = water sample not analyzed for specified constituents  
(1) - Field Measurement Using Flow Through Cell  
µg/L = micrograms per liter  
mg/L = milligrams per liter  
< = not detected above the referenced laboratory method reporting limit

**Table 2**  
**April 2005 - Vacuum Gauge and Groundwater Extraction Measurements**  
**Five-Day Dual-Phase Extraction Test**

575 Paseo Grande  
San Lorenzo, California

Measurement Date	Measurement Time	Vacuum at Influent to Vapor Treatment System	Air Flow Rate at Influent to Vapor Treatment System			Vacuum at MW-3	Vacuum at POBS-A1	Vacuum at POBS-B1	Volume of Groundwater Pumped			Comments
			inches of Hg	FPM	SCFM				inches H <sub>2</sub> O	inches H <sub>2</sub> O	inches H <sub>2</sub> O	
Units		inches of Hg	FPM	SCFM	inches H <sub>2</sub> O	inches H <sub>2</sub> O	inches H <sub>2</sub> O		gallons	gallons per minute		
4/25/2005	800	NA	NA	NA	NA	NA	NA	234,129	0	NA	Prior to System Start-Up	
4/25/2005	1600	NA	NA	NA	NA	NA	NA	235,335	1,206	NA	Prior to System Start-Up. Discharge of Initial Treatment Water per OLSD Permit.	
4/26/2005	1800	NM	3,850	189	NM	NM	NM	NM	NM	NM	System shutdown between 8:00 p.m. on 4/26 to 10:00 a.m. on 4/27.	
4/27/2005	1640	15	4,150	204	2.8	10.0	0.0	241,225	7,096	9.3	Vacuum to PIW-A4 at approximately 50%	
4/28/2005	900	NM	3,750	184	NM	NM	NM	247,217	13,088	8.6	Vacuum to PIW-A4 at approximately 50%. System shutdown 4:00 a.m. to 9:00 a.m.	
4/29/2005	700	15	4,400	216	5.5	12.0	0.0	258,792	24,663	8.8	Vacuum to PIW-A4 at approximately 50%	
4/29/2005	800	11	7,550	371	8	18.0	0.0	NM	NM	NM	Vacuum to PIW-A4 at approximately 100%	
4/29/2005	1200	NM	NM	NM	NM	NM	NM	260,918	26,789	8.9	Vacuum to PIW-A4 at approximately 100%	
4/30/2005	1200	6	4,709	231	6	13.0	0.0	NM	NM	NM	Vacuum to PIW-A4 returned to 50% at 12:00. System vacuum increased to 11 inches Hg.	
5/1/2005	800	7	5,350	263	5	15.0	0.05	274,726	40,597	5.2	Vacuum to PIW-A4 returned to 100% for reported gauge readings. System vacuum was at 8 inches Hg with PIW-A4 at 50%. Vacuum had been at 50% since 12:00 p.m. on 4/30.	
5/1/2005	845	18	NM	NM	4	8.0	0.0	NM	NM	NM	Vacuum to PIW-A4 turned off. System turned off to complete 5-day test at 9:00 a.m.	

NM = Not measured  
NA = Not applicable  
FPM = Feet per minute  
SCFM = Standard cubic feet per minute (FPM X 0.0491).  
Hg = mercury  
OLSD = Oro Loma Sanitary District

**Table 3**  
**April 2005 - Influent to Groundwater Treatment System**  
**Five-Day Dual-Phase Extraction Test**

575 Paseo Grande  
San Lorenzo, California

Sample ID Number	Sample Date	Sample Time	TPH-gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes	Comments
USEPA Lab Analytical Methods			8015/8021B					
Units			micrograms per liter of air					
Bohannon 4/29/05	04/29/05	730	<b>5,500</b>	<b>370</b>	<b>15</b>	<b>88</b>	<b>210</b>	Most groundwater originating from PIW-A2 and A3. PIW-A1 operating intermittently. PIW-A4 operating rarely.
Bohannon 5/1/05	05/01/05	830	<b>13,000</b>	<b>360</b>	<b>52</b>	<b>150</b>	<b>580</b>	Most groundwater originating from PIW-A2. PIW-A1 and -A3 operating intermittently. PIW-A4 operating rarely.

TPH = total petroleum hydrocarbons

< = less than the laboratory method reporting limit as specified

**Table 4**  
**April 2005 - Influent to Soil Vapor Treatment System**  
**Five-Day Dual-Phase Extraction Test**

575 Paseo Grande  
San Lorenzo, California

Sample ID Number	Sample Date	Sample Time	TPH-gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes	Comments
USEPA Lab Analytical Methods			8015/8021B					
Units			micrograms per liter of air					
Bohannon #1	04/27/05	1130	<b>340</b>	<b>3.0</b>	< 1.0	<b>2.7</b>	<b>4.5</b>	PIW-A4 operating at 50% vacuum
Bohannon #2	04/29/05	700	<b>1,600</b>	<b>11.0</b>	<b>2.2</b>	<b>22.0</b>	<b>40.0</b>	PIW-A4 operating at 50% vacuum
Bohannon #3	04/30/05	1215	<b>460</b>	<0.5	<0.5	<b>2.6</b>	<b>3.9</b>	PIW-A4 operating at 100% vacuum
Bohannon #4	05/01/05	830	<b>400</b>	<0.5	<0.5	<b>2.2</b>	<b>4.1</b>	PIW-A4 operating at 100% vacuum. PIW-A4 was operating at 50% vacuum for approximately 20 hours prior to increasing to 100% vacuum. Sample collected approximately 15 minutes after increasing to 100% vacuum.

TPH = total petroleum hydrocarbons

< = less than the laboratory method reporting limit as specified

**Table 5**  
**April 2005 - Estimated Mass of Hydrocarbons Removed in Groundwater**  
**Five-Day Dual-Phase Extraction Test**

575 Paseo Grande  
San Lorenzo, California

Sample ID Number	Sample Date	Sample Time	TPH-gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes	Comments	Volume of Groundwater Pumped as Represented by Sample	Estimated Mass of Hydrocarbons Removed in Groundwater
USEPA Lab Analytical Methods			8015/8021B							
Units			micrograms per liter of water						gallons	pounds
Bohannon 4/29/05	04/29/05	730	5,500	370	15	88	210	Most groundwater originating from PIW-A2 and A3. PIW-A1 operating intermittently. PIW-A4 operating rarely.	23,457	1.077
Bohannon 5/1/05	05/01/05	830	13,000	360	52	150	580	Most groundwater originating from PIW-A2. PIW-A1 and -A3 operating intermittently. PIW-A4 operating rarely.	15,934	1.729

TPH = total petroleum hydrocarbons

< = less than the laboratory method reporting limit as specified

**Table 6**  
**April 2005 - Estimated Mass of Hydrocarbons Removed in Vapor**  
**Five-Day Dual-Phase Extraction Test**

575 Paseo Grande  
San Lorenzo, California

Sample ID Number	Sample Date	Sample Time	TPH-gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes	Comments	Volume of Soil Vapor Extracted as Represented by Sample	Estimated Mass of Hydrocarbons Removed in Vapor
USEPA Lab Analytical Methods			8015/8021B							
Units			micrograms per liter of vapor						Liters of Vapor	pounds
Bohannon #1	04/27/05	1130	340	3.0	< 1.0	2.7	4.5	PIW-A4 operating at 50% vacuum	3,639,686	2.728
Bohannon #2	04/29/05	700	1,600	11.0	2.2	22.0	40.0	PIW-A4 operating at 50% vacuum	14,130,547	49.844
Bohannon #3	04/30/05	1215	460	<0.5	<0.5	2.6	3.9	PIW-A4 operating at 100% vacuum	12,922,416	13.105
Bohannon #4	05/01/05	830	400	<0.5	<0.5	2.2	4.1	PIW-A4 operating at 100% vacuum. PIW-A4 was operating at 50% vacuum for approximately 20 hours prior to increasing to 100% vacuum. Sample collected approximately 15 minutes after increasing to 100% vacuum.	7,816,320	6.893

TPH = total petroleum hydrocarbons  
< = less than the laboratory method reporting limit as specified

**Table 7**  
**Historical Groundwater Elevation Data**  
 575 Paseo Grande  
 San Lorenzo, California

<b>Date Sampled</b>	<b>TOC (ft msl)</b>	<b>DTW (ft BTOC)</b>	<b>ELEV (ft msl)</b>
<b>MW-1</b>			
5/17/1996	27.11	5.65	21.46
10/8/1996		7.47	19.64
4/1/1997		6.27	20.84
6/12/1997		6.90	20.21
9/10/1997		7.48	19.63
6/8/1999		6.44	20.67
9/13/1999		7.56	19.55
12/21/1999		7.41	19.70
3/17/2000		5.35	21.76
12/5/2000	26.98	6.99	19.99
2/28/2001		5.71	21.27
8/22/2001		7.39	19.59
5/22/2002		6.25	20.73
8/29/2002		7.23	19.75
12/2/2002		7.13	19.85
3/4/2003		5.77	21.21
12/18/2003		6.37	20.61
4/13/2004		6.13	20.85
12/2/2004		6.93	20.05
5/27/2005		5.90	21.08
8/24/2006		6.79	20.19
<b>MW-2</b>			
5/17/1996	26.73	5.56	21.17
10/8/1996		7.15	19.58
4/1/1997		6.61	20.12
6/12/1997		6.76	19.97
9/10/1997		7.19	19.54
6/8/1999		6.45	20.28
9/13/1999		7.46	19.27
12/21/1999		7.26	19.47
3/17/2000		5.56	21.17
12/5/2000	26.73	7.01	19.72
2/28/2001		5.81	20.92
8/22/2001		7.42	19.31
5/22/2002		6.40	20.33
8/29/2002		7.26	19.47
12/2/2002		7.02	19.71
3/4/2003		5.91	20.82
12/18/2003		6.47	20.26
4/13/2004		6.28	20.45
12/2/2004		6.80	19.93
5/27/2005		6.11	20.62
8/24/2006		6.90	19.83

**Table 7**  
**Historical Groundwater Elevation Data**  
575 Paseo Grande  
San Lorenzo, California

<b>Date Sampled</b>	<b>TOC (ft msl)</b>	<b>DTW (ft BTOC)</b>	<b>ELEV (ft msl)</b>
<b>MW-3</b>			
5/17/1996	26.15	4.39	21.76
10/8/1996		6.82	19.33
4/1/1997		5.53	20.62
6/12/1997		6.18	19.97
9/10/1997		6.81	19.34
6/8/1999		5.74	20.41
9/13/1999		6.88	19.27
12/21/1999		6.66	19.49
3/17/2000		4.51	21.64
12/5/2000	26.55	6.84	19.71
2/28/2001		5.44	21.11
8/22/2001		7.29	19.26
5/22/2002		6.22	20.33
8/29/2002		7.26	19.29
12/2/2002		6.85	19.70
3/4/2003		5.72	20.83
12/18/2003		6.15	20.40
4/13/2004		5.97	20.58
12/2/2004		6.64	19.91
5/27/2005		5.74	20.81
8/23/2006		6.69	19.86
<b>MW-4</b>			
12/5/2000	25.87	6.28	19.59
2/28/2001		4.99	20.88
8/22/2001		6.73	19.14
5/22/2002		5.50	20.37
8/29/2002		6.55	19.32
12/2/2002		6.28	19.59
3/4/2003		5.28	20.59
12/18/2003		5.85	20.02
4/13/2004		5.50	20.37
12/2/2004		6.05	19.82
5/27/2005		5.46	20.41
8/24/2006		6.15	19.72
<b>MW-5</b>			
12/5/2000	25.77	6.25	19.52
2/28/2001		4.95	20.82
8/22/2001		6.69	19.08
5/22/2002		5.50	20.27
8/29/2002		6.54	19.23
12/2/2002		6.37	19.40
3/4/2003		5.41	20.36
12/18/2003		5.65	20.12
4/13/2004		5.37	20.40
12/2/2004		6.03	19.74
5/27/2005		5.46	20.31
8/24/2006		6.17	19.60



**Table 7**  
**Historical Groundwater Elevation Data**  
 575 Paseo Grande  
 San Lorenzo, California

<b>Date Sampled</b>	<b>TOC (ft msl)</b>	<b>DTW (ft BTOC)</b>	<b>ELEV (ft msl)</b>
<b>MW-6</b>			
12/5/2000	24.89	5.68	19.21
2/28/2001		4.35	20.54
8/22/2001		6.15	18.74
5/22/2002		4.91	19.98
8/29/2002		5.96	18.93
12/2/2002		5.70	19.19
3/4/2003		4.69	20.20
12/18/2003		5.05	19.84
4/13/2004		4.87	20.02
12/2/2004		5.42	19.47
5/27/2005		4.75	20.14
8/24/2006		5.57	19.32
<b>MW-7</b>			
12/5/2000	25.43	6.43	19.00
2/28/2001		4.76	20.67
8/22/2001		6.95	18.48
5/22/2002		5.55	19.88
8/29/2002		NM	--
12/2/2002		6.43	19.00
3/4/2003		5.10	20.33
12/18/2003		5.65	19.78
4/13/2004		5.27	20.16
12/2/2004		6.15	19.28
5/27/2005		5.12	20.31
8/24/2006		6.28	19.15

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 8**  
**Historical Groundwater Analytical Data**  
575 Paseo Grande  
San Lorenzo, California

Date Sampled	TPHg (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)
<b>Groundwater Monitoring Wells</b>								
<b>MW-1</b>								
5/17/1996	1,100	<0.5	8.7	7.4	17	--	<10	<50
10/8/1996	120	<0.5	<0.5	2.7	<0.5	--	--	--
4/1/1997	550	<0.5	<0.5	7.6	6.6	--	--	--
6/12/1997	160	<0.5	<0.5	2.9	1.7	--	--	--
9/10/1997	640	2.2	3.8	7.4	16	--	--	--
6/8/1999	<50	<0.5	<0.5	<0.5	<0.5	<10	<10	<20
9/13/1999	<50	<0.5	<0.5	<0.5	1.1	--	--	<5
12/21/1999	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
3/17/2000	<50	<0.5	<0.5	<0.5	0.79	<5	--	<5
12/5/2000	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
2/28/2001	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
8/22/2001	<50	<0.5	<0.5	<0.5	<0.5	<5	--	<5
5/22/2002	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
8/29/2002	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
12/2/2002	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
3/4/2003	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
12/18/2003	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
4/13/2004	<50	<0.5	<0.5	<0.5	<1.0	--	--	--
6/18/2004	150	1.5	<0.5	2.7	2.4	--	--	--
5/27/2005	<50	1.6	<0.5	<0.5	<0.5	--	--	--
8/24/2006	<50	<0.5	<0.5	<0.5	<1.0	--	--	--
<b>MW-2</b>								
5/17/1996	23,000	900	330	650	1,500	--	<10	<50
10/8/1996	8,400	530	<50	400	360	--	--	--
4/1/1997	7,600	470	64	210	250	--	--	--
6/12/1997	8,200	440	52	190	190	--	--	--
9/10/1997	8,500	390	51	220	240	--	--	--
6/8/1999	2,100	240	8	33	40	<10	<10	33
9/13/1999	1,300	120	<5	<5	15	--	--	--
12/21/1999	1,400	110	5.6	11	17	--	--	<5
3/17/2000	1,200	180	19	28	31	<50	--	<5
12/5/2000	800	75	1.8	11	14	--	--	--
2/28/2001	1,200	120	7.1	19	27	--	--	--
8/22/2001	990	75	3.5	8.9	8.1	<5	--	<5
5/22/2002	1,700	230	12	12	25	--	--	--
8/29/2002	1,000	66	2.6	12	12	--	--	--
12/2/2002	1,100	76	8.7	11	17	--	--	--
3/4/2003	1,100	130	4.5	22	24	--	--	--
12/18/2003	910	55	4.1	3.3	3.7	--	--	--
4/13/2004	2,700	350	15	18	24	--	--	--
10/5/2004	2,000	120	5.5	<2.5	8.3	--	--	--
5/27/2005	5,700	450	53	240	71	--	--	--
8/24/2006	1,400	90	4.7	16	21	--	--	--
<b>MW-3</b>								
5/17/1996	6,700	140	45	210	180	--	<10	<50
10/8/1996	1,800	2,700	240	910	970	--	--	--
4/1/1997	27,000	520	50	520	450	--	--	--
6/12/1997	29,000	2,700	160	940	500	--	--	--
9/10/1997	290,000	1,800	3,200	2,800	6,900	--	--	--
6/8/1999	1,700	320	6.4	15	<0.5	<10	<10	24
9/13/1999	5,400	1,000	<20	<20	<20	--	--	--
12/21/1999	8,800	1,400	63	17	23	--	--	<5
3/17/2000	1,500	190	<5	7.6	<5	<50	--	<5
12/5/2000	5,400	790	20	7.4	10	--	--	--
2/28/2001	3,600	850	15	25	10	--	--	--
8/22/2001	8,100	1,600	28	44	17	<50	--	<5
5/22/2002	5,400	1,000	32	13	21	--	--	--
8/29/2002	6,700	1,700	55	49	38	--	--	--
12/2/2002	5,700	650	17	37	33	--	--	--
3/4/2003	5,000	650	18	42	27	--	--	--
12/18/2003	5,200	910	25	20	21	--	--	--
4/13/2004	3,900	1,200	19	<5.0	<10	--	--	--
6/18/2004	4,300	1,600	40	81	26	--	--	--
8/27/2004	6,900	2,100	59	220	<50	--	--	--
10/5/2004	9,800	2,500	52	160	38	--	--	--
12/2/2004	8,300	2,400	41	200	29	--	--	--
12/14/2004	15,000	3,600	140	560	210	--	--	--
5/27/2005	5,500	840	36	210	41	--	--	--
8/23/2006	1,700	190	5.3	51	<10	--	--	--

**Table 8**  
**Historical Groundwater Analytical Data**  
575 Paseo Grande  
San Lorenzo, California

Date Sampled	TPHg (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)
<b>MW-4</b>								
12/5/2000	3,900	320	13	41	31	--	--	<5
2/28/2001	3,400	250	14	44	22	--	--	<5
8/22/2001	4,800	260	12	27	9	<50	--	<5
5/22/2002	5,100	320	29	74	50	--	--	--
8/29/2002	3,700	260	<5	30	28	--	--	--
12/2/2002	5,100	250	8.9	26	22	--	--	--
3/4/2003	4,500	170	18	63	47	--	--	--
12/18/2003	2,900	160	8.3	8	<5	--	--	--
4/13/2004	7,400	290	29	110	100	--	--	--
6/18/2004	2,700	140	12	36	16	--	--	--
8/27/2004	460	19	1.2	1.1	1.5	--	--	--
10/5/2004	460	19	<1.0	<1.0	<1.0	--	--	--
12/2/2004	2,800	120	5.4	8.3	5.3	--	--	--
5/27/2005	7,300	350	37	100	50	--	--	--
8/24/2006	2,400	59	8.2	19	14	--	--	--
<b>MW-5</b>								
12/5/2000	<50	<0.5	<0.5	<0.5	<0.5	--	--	<5
2/28/2001	<50	<0.5	<0.5	<0.5	<0.5	--	--	<5
8/22/2001	<50	<0.5	<0.5	<0.5	<0.5	<5	--	<5
5/22/2002	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
8/29/2002	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
12/2/2002	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
3/4/2003	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
12/18/2003	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
4/13/2004	<50	<0.5	<0.5	<0.5	<1.0	--	--	--
12/2/2005	<50	<0.5	<0.5	<0.5	<1.0	--	--	--
5/27/2005	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
8/24/2006	<50	<0.5	<0.5	<0.5	<1.0	--	--	--
<b>MW-6</b>								
12/5/2000	<50	<0.5	<0.5	<0.5	<0.5	--	--	<5
2/28/2001	<50	<0.5	<0.5	<0.5	<0.5	--	--	<5
8/22/2001	<50	<0.5	<0.5	<0.5	<0.5	<5	--	<5
5/22/2002	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
8/29/2002	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
12/2/2002	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
3/4/2003	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
12/18/2003	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
4/13/2004	<50	<0.5	<0.5	<0.5	<1.0	--	--	--
12/2/2004	<50	<0.5	<0.5	<0.5	<1.0	--	--	--
5/27/2005	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
8/24/2006	<50	<0.5	<0.5	<0.5	<1.0	--	--	--
<b>MW-7</b>								
12/5/2000	<50	<0.5	<0.5	<0.5	1.5	--	--	<5
2/28/2001	<50	<0.5	<0.5	<0.5	6.7	--	--	<5
8/22/2001	<50	<0.5	<0.5	<0.5	<0.5	<5	--	<5
5/22/2002	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
12/2/2002	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
3/4/2003	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
12/18/2003	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
4/13/2004	<50	<0.5	<0.5	<0.5	<1.0	--	--	--
12/2/2004	<50	<0.5	<0.5	<0.5	<1.0	--	--	--
5/27/2005	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
8/24/2006	<50	<0.5	<0.5	<0.5	<1.0	--	--	--
<b>Peroxide Treatment Area - A Zone Injection Wells</b>								
<b>PIW-A1</b>								
5/13/2004	6,800	460	50	31	300	--	--	--
6/18/2004	240	10	2.1	4	11	--	--	--
8/27/2004	220	14	1.2	2	5	--	--	--
10/5/2004	<50	<0.5	<0.5	<0.5	<1.0	--	--	--
12/2/2004	640	63	12.0	15	29	--	--	--
<b>PIW-A2</b>								
5/13/2004	20,000	1,500	460	760	2,600	--	--	--
6/18/2004	2,800	150	14	6.5	90	--	--	--
8/27/2004	500	34	3	4.4	12	--	--	--
12/2/2004	350	6.1	1.2	2.4	5.4	--	--	--
<b>PIW-A3</b>								
12/14/2004	1,500	220	28	55	99	--	--	--
<b>Peroxide Treatment Area - B Zone Injection Wells</b>								
<b>PIW-B1</b>								
5/13/2004	1,900	28	<5.0	11	51	--	--	--
6/18/2004	270	22	1	2.2	2.7	--	--	--

**Table 8**  
**Historical Groundwater Analytical Data**  
575 Paseo Grande  
San Lorenzo, California

Date Sampled	TPHg (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)
8/27/2004	230	11	0.85	1.7	4.3	--	--	--
12/2/2002	66	<0.5	<0.5	<0.5	<1.0	--	--	--
<b>PIW-B3</b>								
5/13/2004	3,300	420	17	7.8	44	--	--	--
6/18/2004	180	1.2	<0.5	<0.5	2.4	--	--	--
8/27/2004	230	20.0	0.93	3.3	2.9	--	--	--
12/2/2004	64	0.75	<0.5	<0.5	<1.0	--	--	--
<b>Peroxide Treatment Area - A Zone Observation Wells</b>								
<b>POBS-A1</b>								
5/13/2004	16,000	2,200	220	480	980	--	--	--
6/18/2004	11,000	2,200	150	120	820	--	--	--
8/27/2004	23,000	2,900	140	180	470	--	--	--
10/5/2004	13,000	2,400	83	130	94	--	--	--
12/2/2004	17,000	3,500	240	210	730	--	--	--
12/14/2004	13,000	2,700	200	220	510	--	--	--
5/27/2005	9,600	1,200	62	110	180	--	--	--
8/24/2006	8,500	1,700	58	120	100	--	--	--
<b>Peroxide Treatment Area - B Zone Observation Wells</b>								
<b>POBS-B1</b>								
5/13/2004	11,000	250	71	160	590	--	--	--
6/18/2004	3,500	9.8	<0.5	0.8	13	--	--	--
8/27/2004	500	1.4	<0.5	<0.5	<1.0	--	--	--
12/2/2004	190	2.6	<0.5	<0.5	<1.0	--	--	--
5/27/2005	68	17.0	<0.5	1.6	0.52	--	--	--
8/24/2006	50	1.1	<0.5	<0.5	<1.0	--	--	--
<b>POBS-B2</b>								
5/13/2004	4,500	150	23	11	120	--	--	--
6/18/2004	97	7.4	0.8	1.6	1.7	--	--	--
8/27/2004	240	36.0	1.6	6.7	4.2	--	--	--
12/2/2004	<50	<0.5	<0.5	<0.5	<1.0	--	--	--
5/27/2005	97	33.0	0.56	1.3	0.74	--	--	--
8/24/2006	57	<0.5	<0.5	<0.5	<1.0	--	--	--
<b>Nitrate Injection Area - A Zone Injection Wells</b>								
<b>NIW-A1</b>								
5/13/2004	9,300	1,800	59	250	96	--	--	--
6/18/2004	3,100	340	22	93	55	--	--	--
8/27/2004	250	13	1.4	6	5.7	--	--	--
10/5/2004	1,700	150	<5.0	24	12	--	--	--
12/2/2004	1,400	28	6.2	10	23	--	--	--
5/27/2005	14,000	1,300	61.0	680	300	--	--	--
<b>NIW-A2</b>								
5/13/2004	970	18	<2.5	<2.5	4	--	--	--
6/18/2004	200	6.4	1.7	2.1	3.5	--	--	--
8/27/2004	<500	6.3	<5.0	<5.0	<10	--	--	--
12/2/2004	<50	<0.5	<0.5	<0.5	<1.0	--	--	--
5/27/2005	550	14.0	0.7	1.8	0.93	--	--	--
<b>Nitrate Injection Area - B Zone Injection Wells</b>								
<b>NIW-B1</b>								
5/13/2004	170	6.5	1.1	2.4	8.0	--	--	--
6/18/2004	160	2.9	0.7	2.6	2.5	--	--	--
8/27/2004	110	6.9	<0.5	1.4	2.0	--	--	--
12/2/2004	<50	<0.5	<0.5	<0.5	<1.0	--	--	--
<b>NIW-B2</b>								
5/13/2004	260	8.9	1.5	4	8.4	--	--	--
6/18/2004	120	1.0	<0.5	1.1	<1	--	--	--
8/27/2004	120	4.4	<0.5	1.1	1.6	--	--	--
12/2/2004	<50	<0.5	<0.5	<0.5	<1.0	--	--	--
<b>Nitrate Injection Area - Observation Wells</b>								
<b>NOBS-B1</b>								
5/13/2004	120	4.6	0.8	2.3	5.4	--	--	--
6/18/2004	88	1.9	0.7	1.7	<1	--	--	--
8/27/2004	180	5.5	0.53	0.99	1.6	--	--	--
12/2/2004	<50	2.0	<0.5	<0.5	<1.0	--	--	--
8/24/2006	<50	<0.5	<0.5	<0.5	<1.0	--	--	--

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 8**  
**Historical Groundwater Analytical Data**  
 575 Paseo Grande  
 San Lorenzo, California

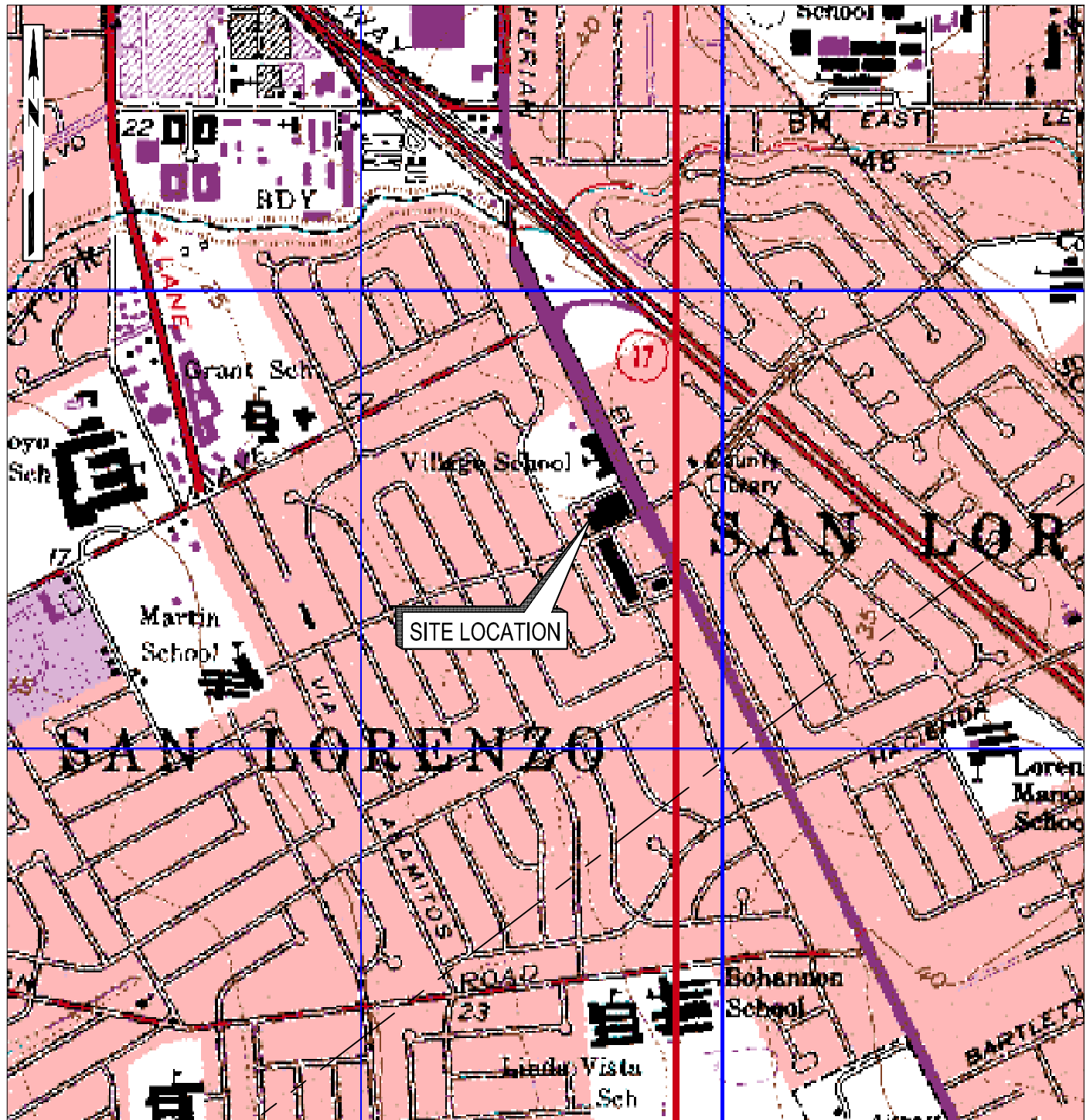
<b>Date Sampled</b>	<b>TPHg</b> (µg/L)	<b>Benzene</b> (µg/L)	<b>Toluene</b> (µg/L)	<b>Ethylbenzene</b> (µg/L)	<b>Total Xylenes</b> (µg/L)	<b>MTBE</b> (µg/L)	<b>Chromium</b> (µg/L)	<b>Dissolved Inorganic Lead</b> (µg/L)
---------------------	-----------------------	--------------------------	--------------------------	-------------------------------	--------------------------------	-----------------------	---------------------------	---

-- = water sample not analyzed for specified constituents

**FIGURES**

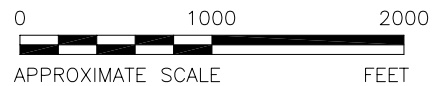
Groundwater Monitoring and Remediation  
Progress Report  
575 Paseo Grande  
San Lorenzo, California  
SECOR PN: 05OT.50227.01.0002  
April 23, 2007

20060927.13450175 Q:\CADD-05\BOHANNON\2003 work plan\BOH-SITE LOCATION MAP-FIGURE 1-JAN\_2003.dwg



REFERENCE:

DeLORME 3-D TOPOQUADS



DRAWN	RRR
APPR	ND
DATE	11 MAY 2002
JOB NO.	05OT.50063.01.0003

**FIGURE 1**  
**DAVID D. BOHANNON ORGANIZATION**  
575 PASEO GRANDE  
SAN LORENZO, CALIFORNIA

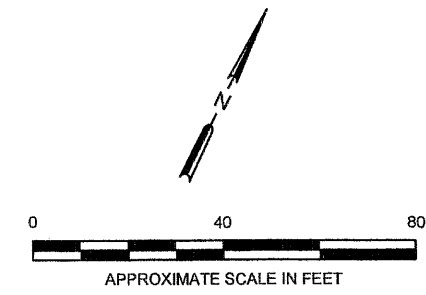
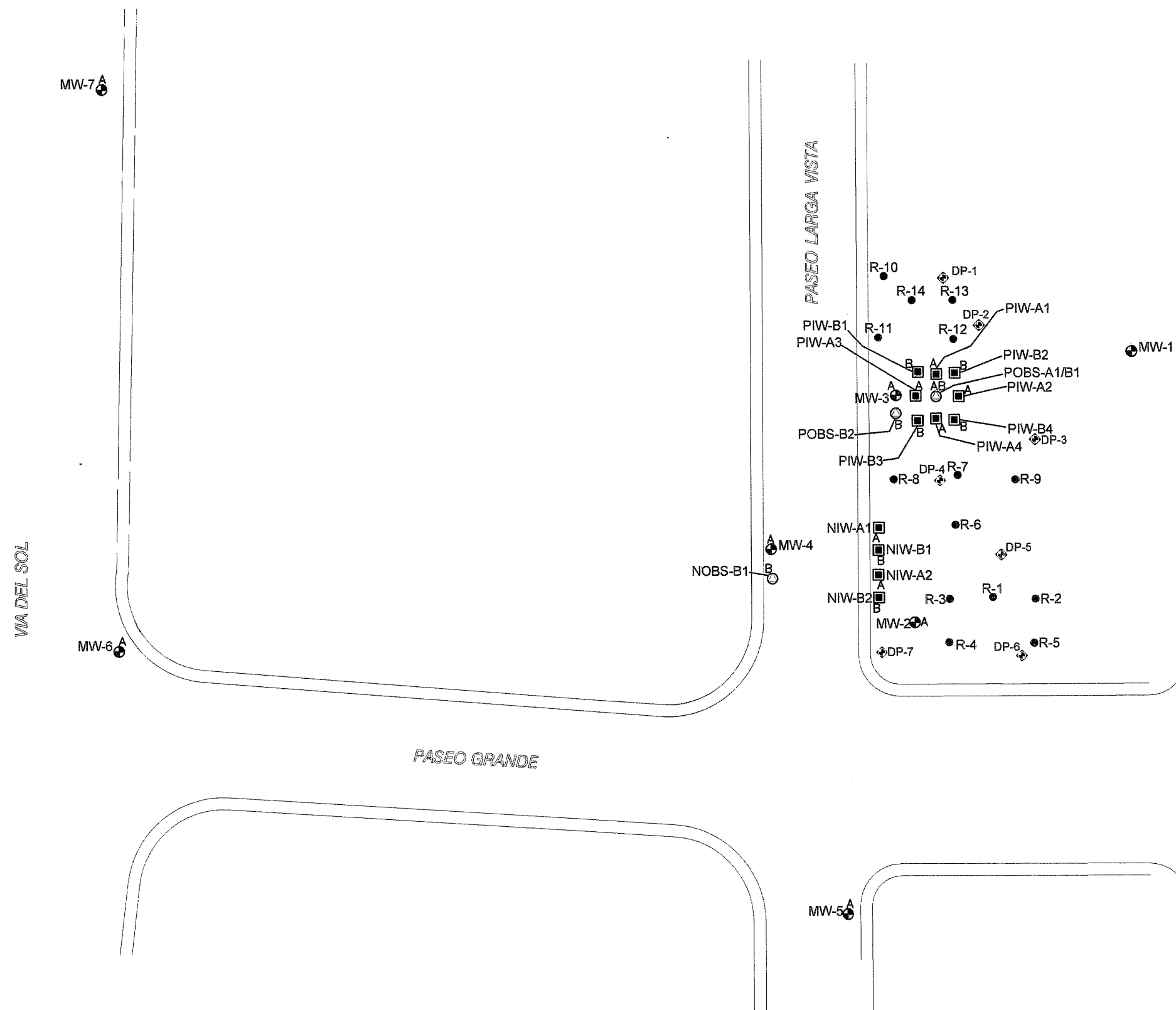
**SITE LOCATION MAP**

LEGEND


- MW-6 MONITORING WELL
- PIW-B3 INJECTION WELL
- ◆ DP-1 DUAL PHASE EXTRACTION WELL (8" PVC - BY SECOR, 2005)
- NOBS-B1 OBSERVATION WELL
- R-1 SOIL BORING - BY SECOR (ABANDONED JULY, 2005)

WELL DESIGNATION

- NIW = INDICATES A NITRATE INJECTION WELL LOCATION
- PIW = INDICATES A HYDROGEN PEROXIDE INJECTION WELL LOCATION
- NOBS = INDICATES A NITRATE OBSERVATION WELL LOCATION
- POBS = INDICATES A HYDROGEN PEROXIDE OBSERVATION WELL LOCATION
- A = INDICATES WELL IN THE A-ZONE
- B = INDICATES WELL IN THE B-ZONE



No warranty is made by SECOR International, Inc. as to the accuracy, reliability, or completeness of these data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed electronically, and may be updated without notification. Any reproduction may result in a loss of scale and or information.

 <b>SECOR</b> 57 Lafayette Circle, 2nd Floor Lafayette CA 94549 PHONE: (925) 299-9300 FAX: (925) 299-9302	FOR: <b>BOHANNON DEVELOPEMENT COMPANY</b> 575 PASEO GRANDE SAN LORENZO, CALIFORNIA		SITE PLAN		FIGURE: <b>2</b>
	JOB NUMBER: 05OT.50227.01.0002	DRAWN BY: RRR	CHECKED BY: ND	APPROVED BY: ND	DATE: 09/26/06

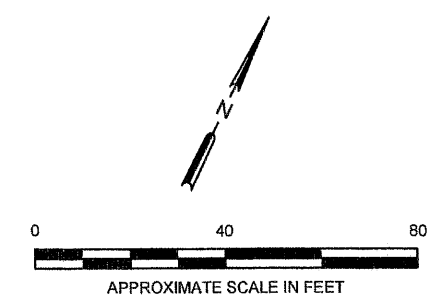
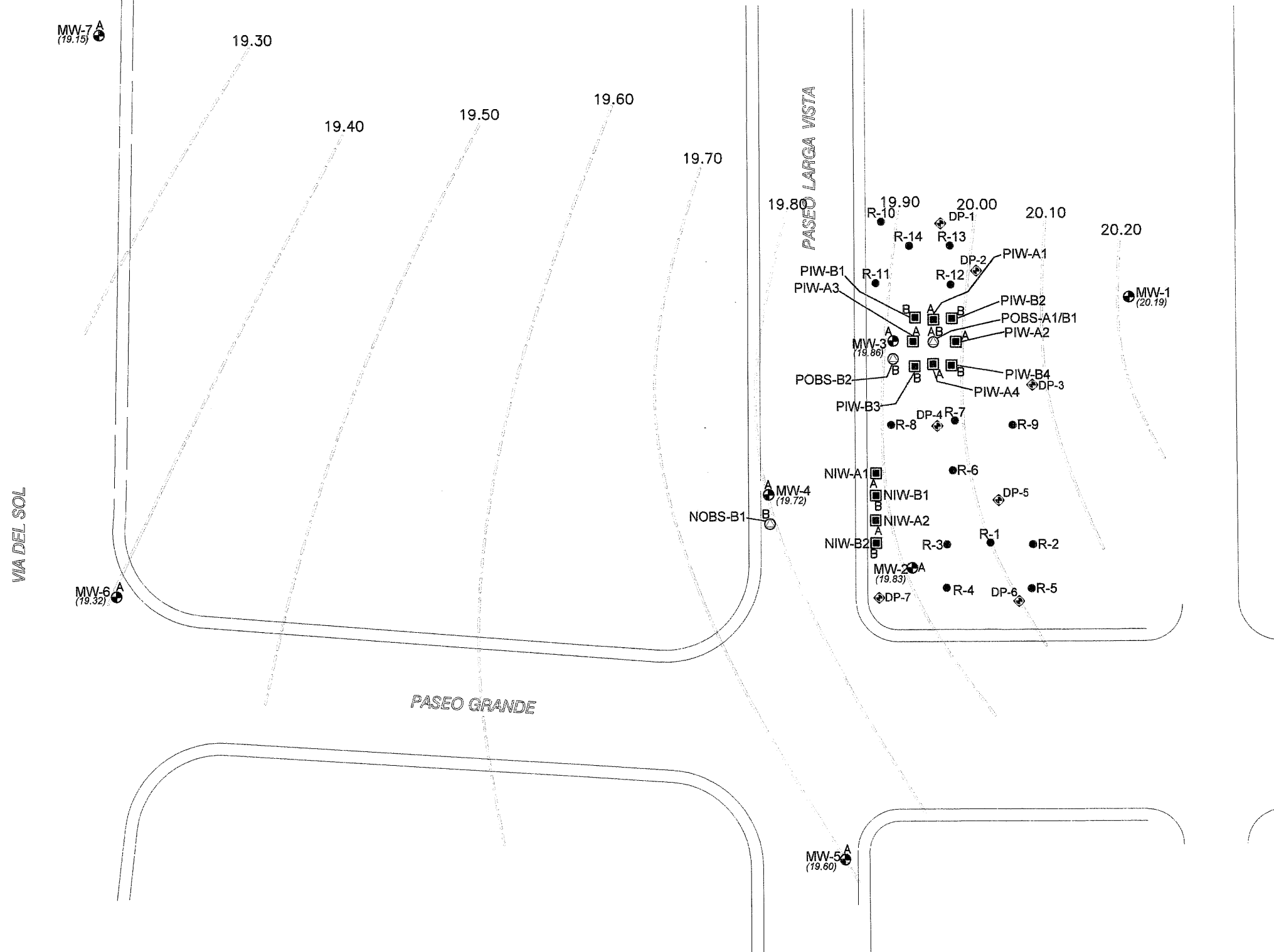


LEGEND


- MW-6 MONITORING WELL
- PIW-B3 INJECTION WELL
- ◆ DP-1 DUAL PHASE EXTRACTION WELL (8" PVC - BY SECOR, 2005)
- NOBS-B1 OBSERVATION WELL
- R-1 SOIL BORING - BY SECOR (ABANDONED JULY, 2005)
- 20.20 GROUNDWATER SURFACE ELEVATION CONTOUR (DASHED WHERE INFERRED)
- (18.81) GROUNDWATER ELEVATION (FEET ABOVE MSL)

WELL DESIGNATION

- NIW = INDICATES A NITRATE INJECTION WELL LOCATION
- PIW = INDICATES A HYDROGEN PEROXIDE INJECTION WELL LOCATION
- NOBS = INDICATES A NITRATE OBSERVATION WELL LOCATION
- POBS = INDICATES A HYDROGEN PEROXIDE OBSERVATION WELL LOCATION
- A = INDICATES WELL IN THE A-ZONE
- B = INDICATES WELL IN THE B-ZONE



No warranty is made by SECOR International, Inc. as to the accuracy, reliability, or completeness of these data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed electronically, and may be updated without notification. Any reproduction may result in a loss of scale and/or information.

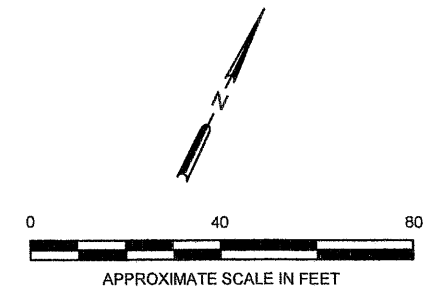
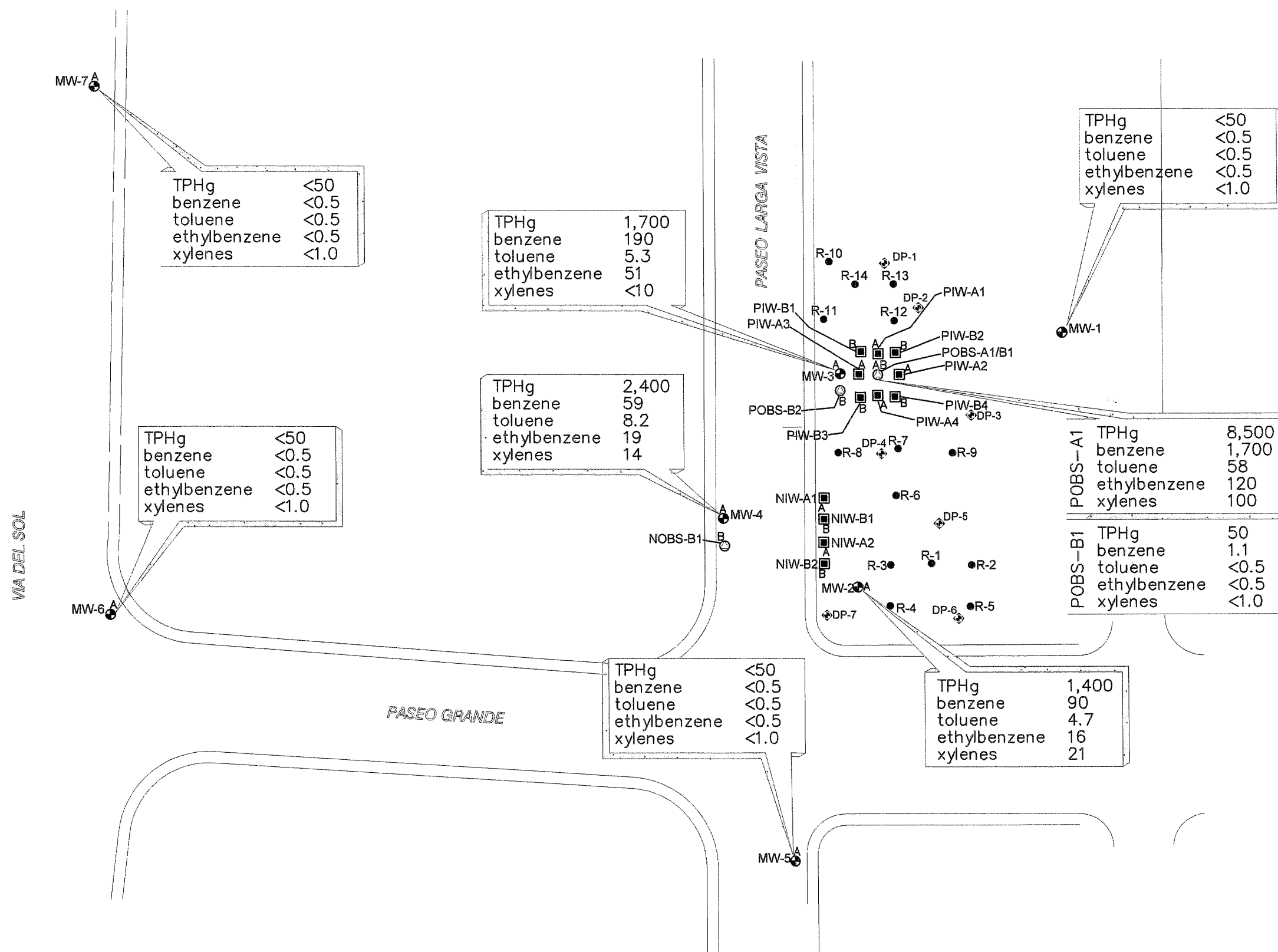
 <b>SECOR</b> 57 Lafayette Circle, 2nd Floor Lafayette CA 94549 PHONE: (925) 299-9300 FAX: (925) 299-9302	FOR: <b>BOHANNON DEVELOPEMENT COMPANY</b> 575 PASEO GRANDE SAN LORENZO, CALIFORNIA		<b>POTENTIOMETRIC SURFACE MAP</b> AUGUST 24, 2006		FIGURE: <b>3</b>
	JOB NUMBER: 05OT.50227.01.0002	DRAWN BY: RRR	CHECKED BY: ND	APPROVED BY: ND	DATE: 09/26/06

LEGEND

- MW-6 MONITORING WELL
- PIW-B3 INJECTION WELL
- ◆ DP-1 DUAL PHASE EXTRACTION WELL (8" PVC - BY SECOR, 2005)
- NOBS-B1 OBSERVATION WELL
- R-1 SOIL BORING - BY SECOR (ABANDONED JULY, 2005)

WELL DESIGNATION

- NIW = INDICATES A NITRATE INJECTION WELL LOCATION
- PIW = INDICATES A HYDROGEN PEROXIDE INJECTION WELL LOCATION
- NOBS = INDICATES A NITRATE OBSERVATION WELL LOCATION
- POBS = INDICATES A HYDROGEN PEROXIDE OBSERVATION WELL LOCATION
- A = INDICATES WELL IN THE A-ZONE
- B = INDICATES WELL IN THE B-ZONE



No warranty is made by SECOR International, Inc. as to the accuracy, reliability, or completeness of these data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed electronically, and may be updated without notification. Any reproduction may result in a loss of scale and/or information.


 57 Lafayette Circle, 2nd Floor Lafayette CA 94549 PHONE: (925) 299-9300 FAX: (925) 299-9302	FOR:	BOHANNON DEVELOPEMENT COMPANY 575 PASEO GRANDE SAN LORENZO, CALIFORNIA		CHEMICAL CONCENTRATIONS IN GROUNDWATER AUGUST 24, 2006		FIGURE:
	JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:	4
	05OT.50227.01.0002	RRR	ND	ND	09/26/06	

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

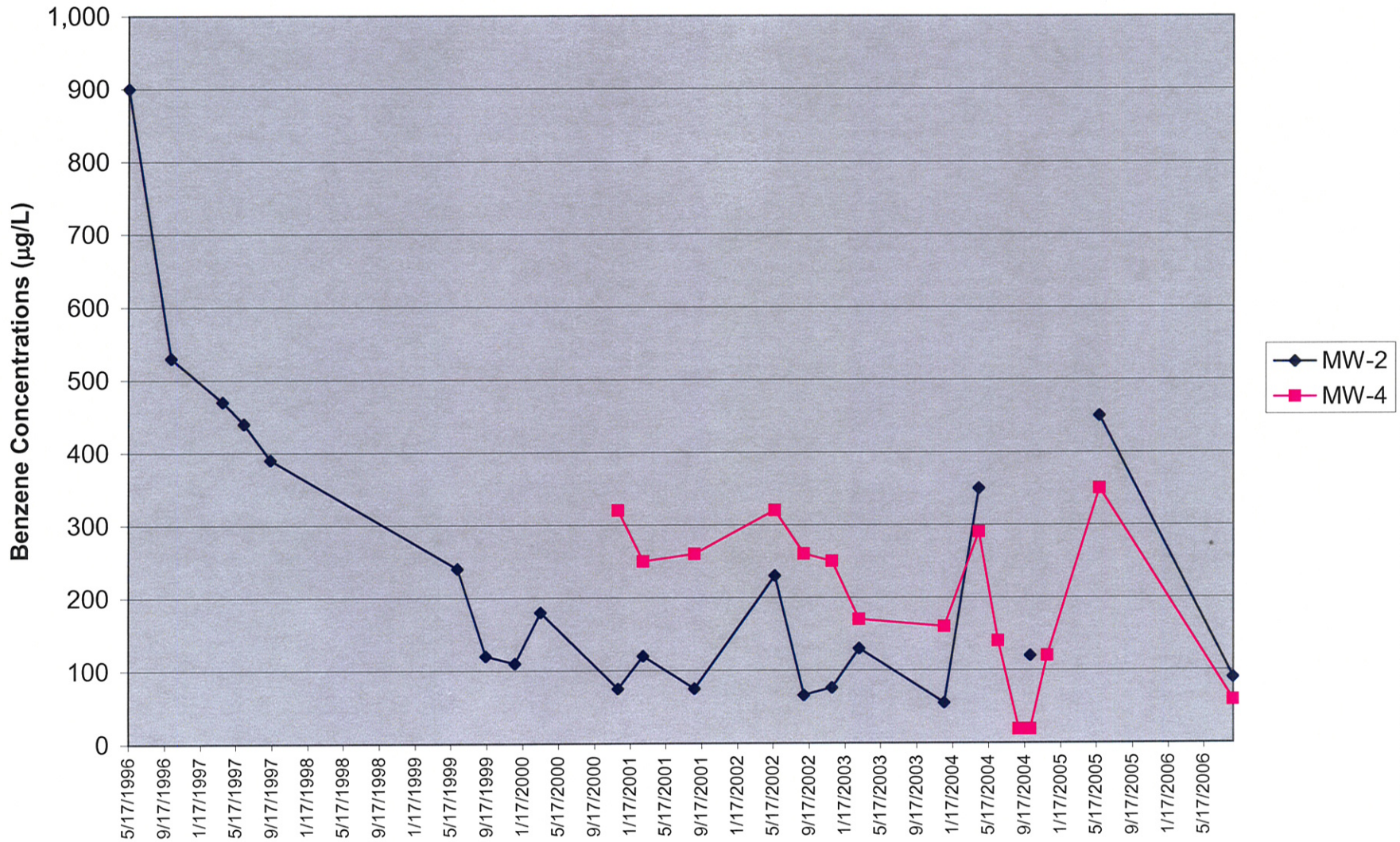


Figure 6 - Historical Concentrations of Benzene at MW-3

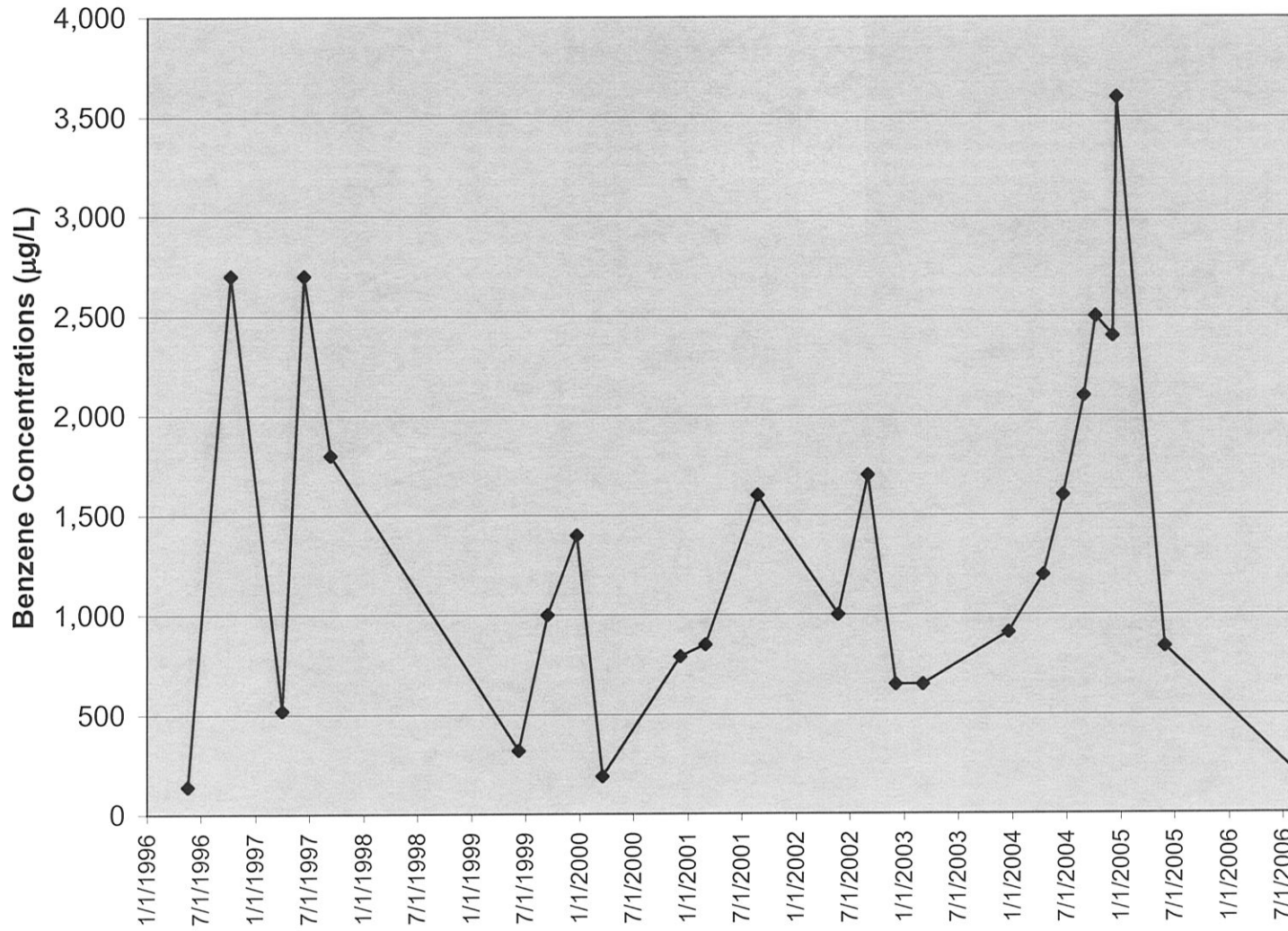


Figure 7 - Historical Concentrations of TPHg at MW-2 and MW-4

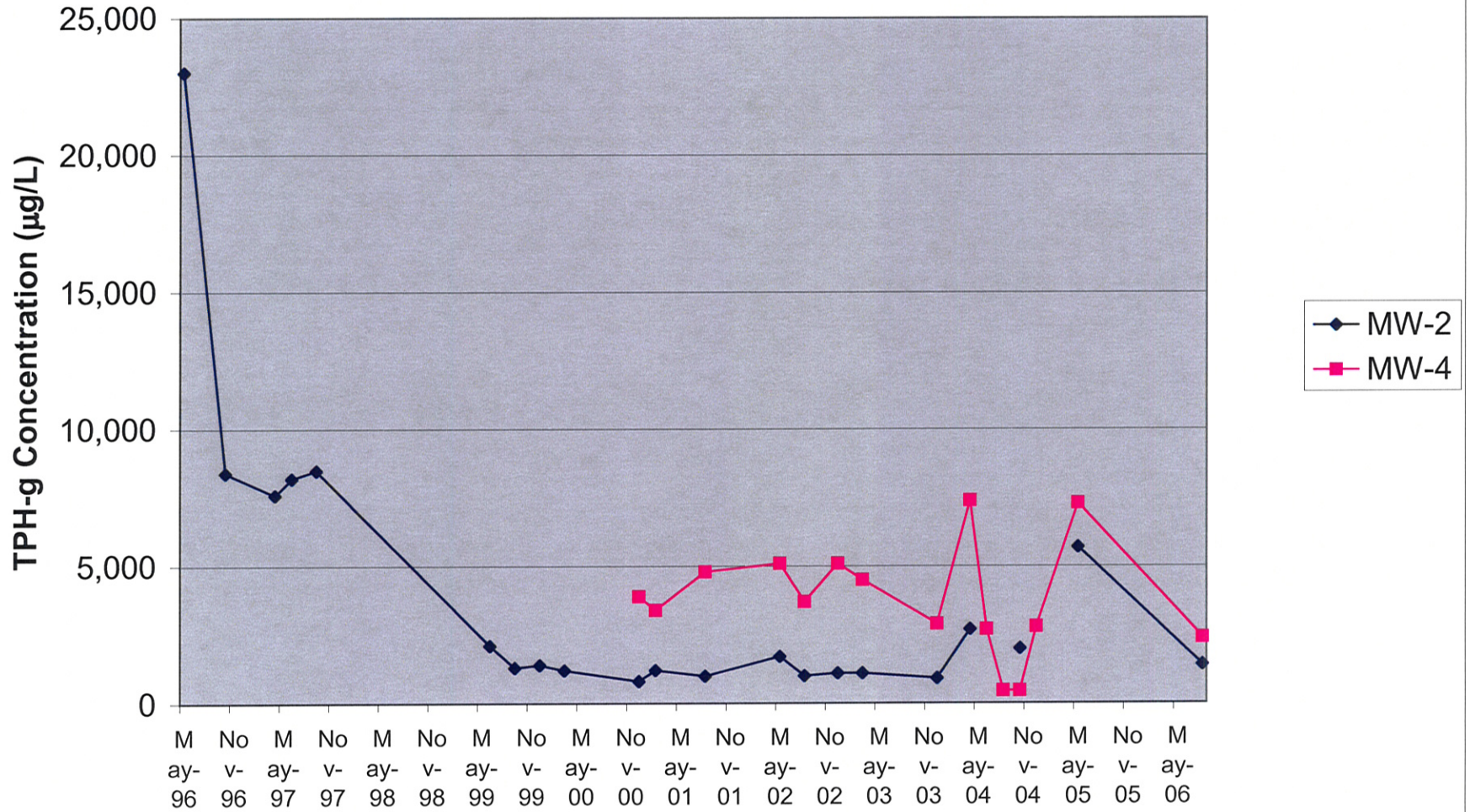
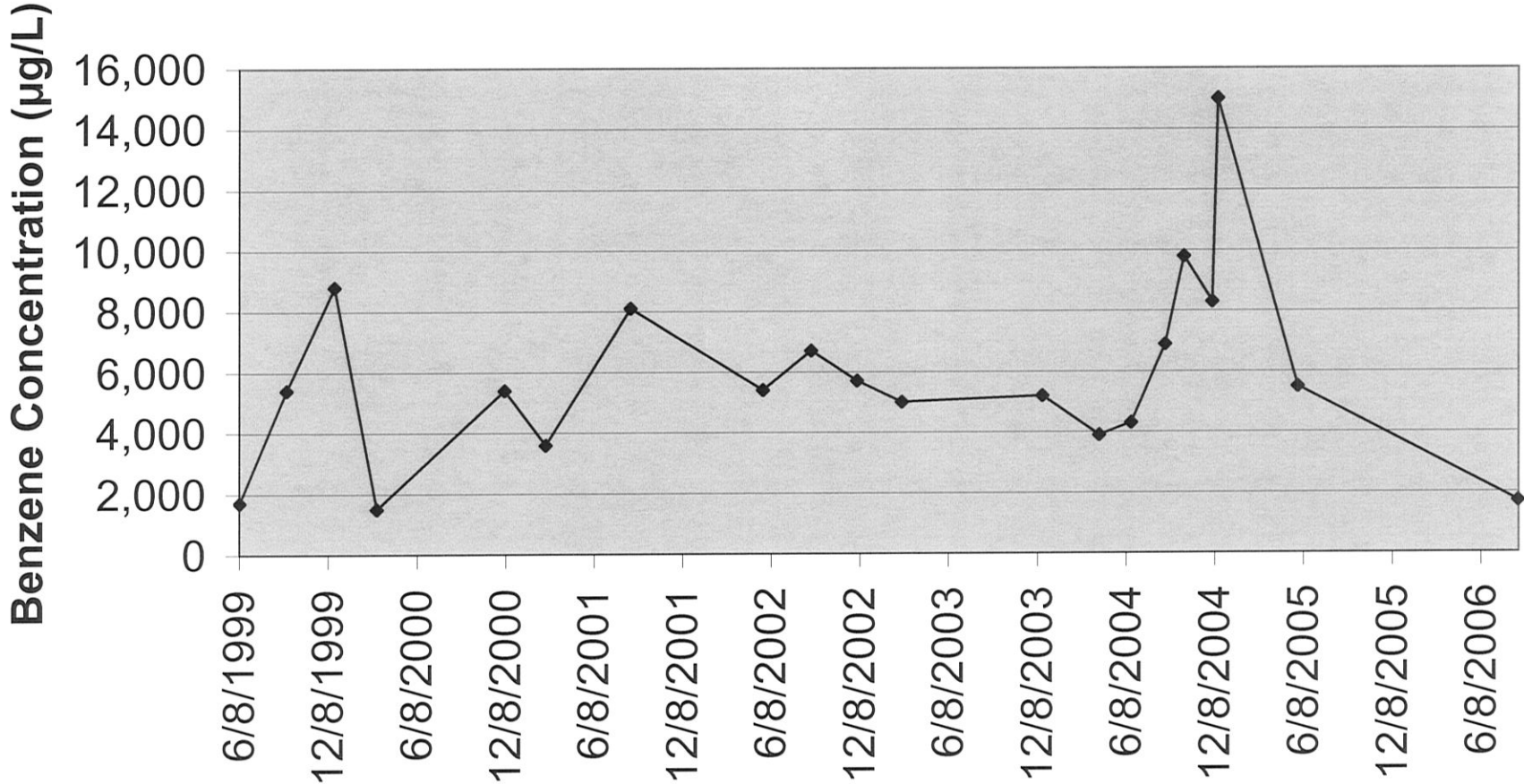


Figure 8 - Historical Concentration of TPHg at Well MW-3



**APPENDIX A**

**Boring Logs**

Groundwater Monitoring and Remediation

Progress Report

575 Paseo Grande

San Lorenzo, California

SECOR PN: 05OT.50227.01.0002

April 23, 2007

PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER: **05OT.50227**

WELL / PROBEHOLE / BOREHOLE NO:

**R-1** PAGE 1 OF 1



DRILLING: STARTED **7/20/05** COMPLETED: **7/20/05**  
 INSTALLATION: STARTED **7/20/05** COMPLETED: **7/20/05**  
 DRILLING COMPANY: **ECA**  
 DRILLING EQUIPMENT: **Geoprobe**  
 DRILLING METHOD: **Direct Push**  
 SAMPLING EQUIPMENT: **Continuous Core**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **12 7/20/05** BOREHOLE DEPTH (ft): **16.0**  
 STATIC DTW (ft): **NE** WELL DEPTH (ft): ---  
 WELL CASING DIAMETER (in): --- BOREHOLE DIAMETER (in):  
 LOGGED BY: **B. Robitaille** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)
0940			ASPHALT BASE FILL						
		GW-GM	<b>GRAVELLY SAND WITH SILT</b> ; GW-GM; 2.5 Y 4/1 dark yellowish brown to dark gray; loose; dry; poorly sorted; with gravel up to 3/4"; (20,60,20,0)						
		GW	<b>SANDY GRAVEL</b> ; GW; dark gray; loose; dry; gravel up to 3/4"; (50,40,10,0)					0	
5			Found geotextile layer (all above is fill?)					17	
		CL	<b>CLAY</b> ; CL; dark gray and black; hard; slightly moist; with caliche					377	
10			Grades dark gray with dark yellowish brown mottling; some silt					414	10
		ML	<b>CLAYEY SILT</b> ; ML; dark gray; moist; strong petroleum odor; moderately soft					317	
15								69	
		CL	<b>SILTY CLAY</b> ; CL; dark gray; hard; slight petroleum odor; slightly moist; dark yellowish brown mottled					0	15
1000			Hole terminated at 16 feet.						

GEO FORM 304 BOHANNON-SAN LORENZO\_R1-R14.GPJ SECOR INTL.GDT\_5/7/07



PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER: **05OT.50227**

WELL / PROBEHOLE / BOREHOLE NO:

**R-2** PAGE 1 OF 1



DRILLING: STARTED **7/20/05** COMPLETED: **7/20/05**  
 INSTALLATION: STARTED **7/20/05** COMPLETED: **7/20/05**  
 DRILLING COMPANY: **ECA**  
 DRILLING EQUIPMENT: **Geoprobe**  
 DRILLING METHOD: **Direct Push**  
 SAMPLING EQUIPMENT: **Continuous Core**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **11-12 7/20/05** BOREHOLE DEPTH (ft): **16.0**  
 STATIC DTW (ft): **NE** WELL DEPTH (ft): ---  
 WELL CASING DIAMETER (in): --- BOREHOLE DIAMETER (in):  
 LOGGED BY: **B. Robitaille** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)
1020			ASPHALT BASE FILL						
		GW	<b>GRAVELLY SAND WITH SILT</b> ; GW; 2.5 Y 4/1 dark yellowish brown to dark gray; loose; dry; poorly sorted; with gravel up to 3/4"; (20,60,20,0)					2	
5									5
		CL	<b>CLAY</b> ; CL; black; moist; strong petroleum odor; moderately hard; dark gray mottling					318	
10									
		CL-ML	<b>CLAY WITH SILT</b> ; CL-ML; dark gray; hard; moist; dark gray mottling					370	10
15								341	
								135	
15									15
1050			Hole terminated at 16 feet.						

GEO FORM 304 BOHANNON-SAN LORENZO\_R1-R14.GPJ SECOR INTL.GDT 5/7/07

PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER: **05OT.50227**

WELL / PROBEHOLE / BOREHOLE NO:

**R-3** PAGE 1 OF 1



DRILLING: STARTED **7/20/05** COMPLETED: **7/20/05**  
 INSTALLATION: STARTED **7/20/05** COMPLETED: **7/20/05**  
 DRILLING COMPANY: **ECA**  
 DRILLING EQUIPMENT: **Geoprobe**  
 DRILLING METHOD: **Direct Push**  
 SAMPLING EQUIPMENT: **Continuous Core**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **9 7/20/05** BOREHOLE DEPTH (ft): **16.0**  
 STATIC DTW (ft): **NE** WELL DEPTH (ft): ---  
 WELL CASING DIAMETER (in): --- BOREHOLE DIAMETER (in):  
 LOGGED BY: **B. Robitaille** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)
0920			ASPHALT BASE FILL						
		GW-GM	<b>GRAVELLY SAND WITH SILT</b> ; GW-GM; 2.5 Y 4/1 dark yellowish brown to dark gray; loose; dry; poorly sorted; with gravel up to 3/4"; (20,60,20,0)					0	
5			Grades increasing gravel; less silt at base					0	
		CL	<b>CLAY</b> ; CL; black; hard; dry to moist; with caliche					0/47	
			Grades with dark mottling					175	
								184	
10		CL	<b>CLAYEY SILT</b> ; CL; dark gray; moist; strong petroleum odor; with dark yellow mottling						
		CL-ML	<b>CLAYEY SILT</b> ; CL-ML; dark gray; moist; moderate petroleum odor; moderately soft; (0,0,60,40)					380	
15			Grades increasing clay					22	
0940			Hole terminated at 16 feet.						

GEO FORM 304 BOHANNON-SAN LORENZO\_R1-R14.GPJ SECOR INTL.GDT 5/7/07

PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER: **05OT.50227**

WELL / PROBEHOLE / BOREHOLE NO:

**R-4** PAGE 1 OF 1



DRILLING: STARTED **7/20/05** COMPLETED: **7/20/05**  
 INSTALLATION: STARTED **7/20/05** COMPLETED: **7/20/05**  
 DRILLING COMPANY: **ECA**  
 DRILLING EQUIPMENT: **Geoprobe**  
 DRILLING METHOD: **Direct Push**  
 SAMPLING EQUIPMENT: **Continuous Core**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **16.0**  
 STATIC DTW (ft): **NE** WELL DEPTH (ft): ---  
 WELL CASING DIAMETER (in): --- BOREHOLE DIAMETER (in):  
 LOGGED BY: **B. Robitaille** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)
0905			ASPHALT BASE FILL						
		SC	<b>CLAYEY SAND</b> ; SC; very dark gray; medium dense; dry  Grades increasing clay					0	
		SP	<b>SAND</b> ; SP; grayish brown; moist; moderately loose; fine to medium grained; with silt and clayey interbeds  Grades CLAYEY SILT with FINE SAND					0	
5		ML	Thin layer of SW (1") <b>CLAYEY SILT</b> ; ML; grayish brown; soft; moist; dark red root traces					13	5
		CL	<b>CLAY</b> ; CL; very dark gray; moist; moderately hard; trace silt and fine sand					11	
		CL	<b>CLAY</b> ; CL; dark gray; with light gray mottles and caliche; strong odor					304	
10		CL	<b>CLAY</b> ; CL; dark gray; with light gray mottles and caliche; strong odor					452	10
		CL	<b>CLAY</b> ; CL; dark gray; with light gray mottles and caliche; strong odor					452	
		CL	<b>CLAY</b> ; CL; dark gray; with light gray mottles and caliche; strong odor					459	
15		ML	<b>CLAYEY SILT</b> ; ML; gray; soft; moist; with trace fine sand					323	15
		SC	<b>SANDY CLAY</b> ; SC; yellowish brown; dry; dark gray mottled						
0920			Hole terminated at 16 feet.					16	

PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER: **05OT.50227**

WELL / PROBEHOLE / BOREHOLE NO:

**R-5** PAGE 1 OF 1



DRILLING: STARTED **7/20/05** COMPLETED: **7/20/05**  
 INSTALLATION: STARTED **7/20/05** COMPLETED: **7/20/05**  
 DRILLING COMPANY: **ECA**  
 DRILLING EQUIPMENT: **Geoprobe**  
 DRILLING METHOD: **Direct Push**  
 SAMPLING EQUIPMENT: **Continuous Core**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **8 7/20/05** BOREHOLE DEPTH (ft): **16.0**  
 STATIC DTW (ft): **NE** WELL DEPTH (ft): ---  
 WELL CASING DIAMETER (in): --- BOREHOLE DIAMETER (in):  
 LOGGED BY: **B. Robitaille** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)
1000			ASPHALT SANDY GRAVEL ; (fill)					0	
5		ML	CLAYEY SILT ; ML; dark gray; soft; moist  Grades increasing clay					2	5
		CL	CLAY ; CL; black; moderately hard; slightly moist; some silt					10	
		SM	SILTY SAND ; SM; dark yellowish brown and dark gray; wet; moderately loose; predominately fine sand					229	
10		ML	SILT ; ML; very dark gray; soft; wet; with fine sand in upper 0.5 feet					10	
		CL	CLAY ; CL; black; with dark gray mottling; moderately hard; moist					6	10
		CL	SILTY CLAY ; CL; dark gray; moist; moderately soft; some olive brown mottling					225 392	
15								326	15
1020			Hole terminated at 16 feet.						

PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER: **05OT.50227**

WELL / PROBEHOLE / BOREHOLE NO:

**R-6** PAGE 1 OF 1



DRILLING: STARTED **7/20/05** COMPLETED: **7/20/05**  
 INSTALLATION: STARTED **7/20/05** COMPLETED: **7/20/05**  
 DRILLING COMPANY: **ECA**  
 DRILLING EQUIPMENT: **Geoprobe**  
 DRILLING METHOD: **Direct Push**  
 SAMPLING EQUIPMENT: **Continuous Core**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **11 7/20/05** BOREHOLE DEPTH (ft): **16.0**  
 STATIC DTW (ft): **NE** WELL DEPTH (ft): ---  
 WELL CASING DIAMETER (in): --- BOREHOLE DIAMETER (in):  
 LOGGED BY: **B. Robitaille** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)
1230			ASPHALT BASE FILL						
			SANDY GRAVEL FILL; GW; dark gray; loose; dry					0	
		CL-ML	CLAYEY SILT ; CL-ML; grayish brown; soft; dry					0	
5			Grades with reddish brown mottling (rootlets)					1	5
		CL	CLAY ; CL; black; moderately hard; slightly moist; with caliche					35	
			Grades with olive gray mottling; strong odor					337	
10								327	10
		CL	SILTY CLAY ; CL; dark gray; with yellowish brown mottling; moderately hard to moderately soft; moist; strong product odor					304	
								297	
15			Grades increasing silt					274	15
1350			Hole terminated at 16 feet.						

GEO FORM 304 BOHANNON-SAN LORENZO\_R1-R14.GPJ SECOR INTL.GDT 5/7/07

PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER: **05OT.50227**

WELL / PROBEHOLE / BOREHOLE NO:

**R-7** PAGE 1 OF 1



DRILLING: STARTED **7/20/05** COMPLETED: **7/20/05**  
 INSTALLATION: STARTED **7/20/05** COMPLETED: **7/20/05**  
 DRILLING COMPANY: **ECA**  
 DRILLING EQUIPMENT: **Geoprobe**  
 DRILLING METHOD: **Direct Push**  
 SAMPLING EQUIPMENT: **Continuous Core**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **8 7/20/05** BOREHOLE DEPTH (ft): **16.0**  
 STATIC DTW (ft): **NE** WELL DEPTH (ft): ---  
 WELL CASING DIAMETER (in): --- BOREHOLE DIAMETER (in):  
 LOGGED BY: **B. Robitaille** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID Method	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)
1120		CL-ML	ASPHALT GRAVELLY SILT WITH CLAY ; CL-ML; (disturbed soil)		.			5	
			SANDY GRAVEL ; (fill)		.				
			As above		.				
5					.			8	5
		CL	CLAY ; CL; black; hard; moist; with dark gray mottling		.			404	
10		CL	CLAY ; CL; very dark gray; moderately hard; slightly moist		.			329	10
					.			313	
					.			307	
15		CL	SILTY CLAY ; CL; dark gray; moist; strong petroleum odor; moderately hard		.				15
1140			Hole terminated at 16 feet.		.			281	

PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER: **05OT.50227**

WELL / PROBEHOLE / BOREHOLE NO:

**R-8** PAGE 1 OF 1



DRILLING: STARTED **7/20/05** COMPLETED: **7/20/05**  
 INSTALLATION: STARTED **7/20/05** COMPLETED: **7/20/05**  
 DRILLING COMPANY: **ECA**  
 DRILLING EQUIPMENT: **Geoprobe**  
 DRILLING METHOD: **Direct Push**  
 SAMPLING EQUIPMENT: **Continuous Core**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **13 7/20/05** BOREHOLE DEPTH (ft): **16.0**  
 STATIC DTW (ft): **NE** WELL DEPTH (ft): ---  
 WELL CASING DIAMETER (in): --- BOREHOLE DIAMETER (in):  
 LOGGED BY: **B. Robitaille** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)
1145			ASPHALT BASE FILL						
			SANDY GRAVEL FILL; GW; dark gray to dark yellowish brown					1	
		SM	<b>SILTY SAND</b> ; SM; dark grayish brown; loose; moist; fine sand; trace fine gravel						
		ML	<b>CLAYEY SILT</b> ; ML; dark grayish brown; soft; moist; trace fine sand					0	
5			Grades with dark yellowish brown mottling; soft					0	5
		CL	<b>CLAY</b> ; CL; black; with dark gray mottling; moderately hard; slightly moist					0	
								2	
								370	
10		CL	<b>CLAY</b> ; CL; dark gray; moderately hard; slightly moist; with gray mottling and caliche					318	10
								306	
		ML	<b>CLAYEY SILT</b> ; ML; dark gray; moist; strong petroleum odor; moderately soft					249	
15								231	15
1210			Hole terminated at 16 feet.						

PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER: **05OT.50227**

WELL / PROBEHOLE / BOREHOLE NO:

**R-9** PAGE 1 OF 1



DRILLING: STARTED **7/20/05** COMPLETED: **7/20/05**  
 INSTALLATION: STARTED **7/20/05** COMPLETED: **7/20/05**  
 DRILLING COMPANY: **ECA**  
 DRILLING EQUIPMENT: **Geoprobe**  
 DRILLING METHOD: **Direct Push**  
 SAMPLING EQUIPMENT: **Continuous Core**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **14 7/20/05** BOREHOLE DEPTH (ft): **16.0**  
 STATIC DTW (ft): **NE** WELL DEPTH (ft): ---  
 WELL CASING DIAMETER (in): --- BOREHOLE DIAMETER (in):  
 LOGGED BY: **B. Robitaille** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)
1050			ASPHALT BASE FILL						
			MIXED SILTY CLAY AND FILL; dark grayish black, dark yellowish brown					17	
		CL	SILTY CLAY ; CL; very dark gray; moderately hard; slightly moist					9	
		ML	CLAYEY SILT WITH FINE SAND ; ML; dark gray; moist; moderately soft					0	
5			Grades no fine sand Clam shell fragment					9	5
		CL	CLAY ; CL; black; dry; moderately hard					26	
10		CL	CLAY ; CL; dark gray; hard; strong petroleum odor; slightly moist; with gray mottling					372	10
			Grades with silt					293	
		CL	SILTY CLAY ; CL; dark gray; moist; moderate petroleum odor; moderately soft					307	
15								257	15
1110			Hole terminated at 16 feet.						

GEO FORM 304 BOHANNON-SAN LORENZO\_R1-R14.GPJ SECOR INTL.GDT 5/7/07



PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER: **05OT.50227**

WELL / PROBEHOLE / BOREHOLE NO:

**R-10** PAGE 1 OF 1



DRILLING: STARTED **7/20/05** COMPLETED: **7/20/05**  
 INSTALLATION: STARTED **7/20/05** COMPLETED: **7/20/05**  
 DRILLING COMPANY: **ECA**  
 DRILLING EQUIPMENT: **Geoprobe**  
 DRILLING METHOD: **Direct Push**  
 SAMPLING EQUIPMENT: **Continuous Core**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **4 7/20/05** BOREHOLE DEPTH (ft): **16.0**  
 STATIC DTW (ft): **NE** WELL DEPTH (ft): ---  
 WELL CASING DIAMETER (in): --- BOREHOLE DIAMETER (in):  
 LOGGED BY: **B. Robitaille** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)
1330			ASPHALT MIXED SOIL AND SANDY GRAVEL FILL; GW						
		SC	SANDY CLAY ; SC; dark grayish brown; hard; dry					1	
								2	
		GW	GRAVELLY SAND WITH SILT ; GW					1	
			SILT ; black to very dark brown; wet; soft to moderately soft; upper is high organic content with shell fragments; lower with clay					1	5
5									
		CL	CLAY ; CL; black; moderately hard; slightly moist					1	
								1	
								1	
10		CL	CLAY ; CL; dark gray; olive brown mottled; moderately hard; slightly moist; with caliche					289	10
								1	
		CL	CLAY ; CL; black; moderately hard; slightly moist; with caliche					0	
15		CL	CLAY ; CL; very dark gray; hard; slightly moist; with gray mottles					372	15
1350			Hole terminated at 16 feet.						

PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER: **05OT.50227**

WELL / PROBEHOLE / BOREHOLE NO:

**R-11** PAGE 1 OF 1



DRILLING: STARTED **7/20/05** COMPLETED: **7/20/05**  
 INSTALLATION: STARTED **7/20/05** COMPLETED: **7/20/05**  
 DRILLING COMPANY: **ECA**  
 DRILLING EQUIPMENT: **Geoprobe**  
 DRILLING METHOD: **Direct Push**  
 SAMPLING EQUIPMENT: **Continuous Core**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **5.5 7/20/05** BOREHOLE DEPTH (ft): **16.0**  
 STATIC DTW (ft): **NE** WELL DEPTH (ft): ---  
 WELL CASING DIAMETER (in): --- BOREHOLE DIAMETER (in):  
 LOGGED BY: **B. Robitaille** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)
0830			ASPHALT BASE FILL						
		SM	FINE SAND ; SM; dark yellowish brown; with clay; dry; silty					1	
5		ML	SILT ; ML; brown; soft; moist; wet at 5.5 feet					2	5
		CL	CLAY ; CL; black; moist; moderately hard					1	
		SP-SM	SAND ; SP-SM; dark grayish brown; dense; dry; trace fine gravel at base						
		CL	SILTY CLAY ; CL; very dark gray; moist; moderate petroleum odor; moderately hard; with caliche					378	10
		CL	CLAY WITH SILT ; CL; dark gray; strong petroleum odor; with olive and light gray mottling					470	
		CL-ML	CLAYEY SILT ; CL-ML; dark olive gray; with gray mottles; moderately soft; wet; strong petroleum odor					471	
15		CL-ML	CLAYEY SILT ; CL-ML; dark olive gray; with gray mottles; moderately soft; wet; strong petroleum odor					360	15
0850			Hole terminated at 16 feet.						

GEO FORM 304 BOHANNON-SAN LORENZO\_R1-R14.GPJ SECOR INTL.GDT 5/7/07

PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER: **05OT.50227**

WELL / PROBEHOLE / BOREHOLE NO:

**R-12** PAGE 1 OF 1



DRILLING: STARTED **7/20/05** COMPLETED: **7/20/05**  
 INSTALLATION: STARTED **7/20/05** COMPLETED: **7/20/05**  
 DRILLING COMPANY: **ECA**  
 DRILLING EQUIPMENT: **Geoprobe**  
 DRILLING METHOD: **Direct Push**  
 SAMPLING EQUIPMENT: **Continuous Core**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **6.4 7/20/05** BOREHOLE DEPTH (ft): **16.0**  
 STATIC DTW (ft): **NE** WELL DEPTH (ft): ---  
 WELL CASING DIAMETER (in): --- BOREHOLE DIAMETER (in):  
 LOGGED BY: **B. Robitaille** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)
0800			ASPHALT FILL						
		CL-ML	CLAYEY SILT ; CL-ML; 10 YR 3/2 very dark grayish brown; dry; moderately hard					0	
		ML	SANDY SILT ; ML; fine sand; trace clay					0	
5		ML	SILT ; ML; grades wet at 6.4 feet					0	5
		CL	CLAY ; CL; very dark gray; moist; moderately hard					3	
10								97	
								0	10
								160	
								436	
		SW-SM	SAND WITH FINE GRAVEL ; SW-SM; dry; some clay						
			CLAY ; dark olive gray; trace caliche; dry						
								373	
15			SILTY CLAY ; moist						15
0825			Hole terminated at 16 feet.					333	

PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER: **05OT.50227**

WELL / PROBEHOLE / BOREHOLE NO:

**R-13** PAGE 1 OF 1



DRILLING: STARTED **7/20/05** COMPLETED: **7/20/05**  
 INSTALLATION: STARTED **7/20/05** COMPLETED: **7/20/05**  
 DRILLING COMPANY: **ECA**  
 DRILLING EQUIPMENT: **Geoprobe**  
 DRILLING METHOD: **Direct Push**  
 SAMPLING EQUIPMENT: **Continuous Core**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **5.5 7/20/05** BOREHOLE DEPTH (ft): **16.0**  
 STATIC DTW (ft): **NE** WELL DEPTH (ft): ---  
 WELL CASING DIAMETER (in): --- BOREHOLE DIAMETER (in):  
 LOGGED BY: **B. Robitaille** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)
1300			ASPHALT BASE FILL						
			MIXED SOIL AND FILL; GW					2	
		GW	GRAVELLY SAND ; GW					1	
		ML	SANDY SILT ; ML; brown; soft; slightly moist; grades with clay					0	5
5		ML	SILT ; ML; dark yellowish brown; soft; wet					1	
			As at 4 feet						
		CL	CLAY ; CL; black; moderately hard; slightly moist					0	
			Grades with caliche					1	
10			Grades very dark gray					267	10
			CLAY ; dark gray; moist; strong petroleum odor; moderately hard; with caliche					248	
		CL-ML	CLAYEY SILT ; CL-ML; dark gray; moist; moderately soft					327	15
15			Hole terminated at 16 feet.					89	
1320									

GEO FORM 304 BOHANNON-SAN LORENZO\_R1-R14.GPJ SECOR INTL.GDT\_5/7/07

PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER: **05OT.50227**

WELL / PROBEHOLE / BOREHOLE NO:

**R-14** PAGE 1 OF 1



DRILLING: STARTED **7/20/05** COMPLETED: **7/20/05**  
 INSTALLATION: STARTED **7/20/05** COMPLETED: **7/20/05**  
 DRILLING COMPANY: **ECA**  
 DRILLING EQUIPMENT: **Geoprobe**  
 DRILLING METHOD: **Direct Push**  
 SAMPLING EQUIPMENT: **Continuous Core**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **6 7/20/05** BOREHOLE DEPTH (ft): **16.0**  
 STATIC DTW (ft): **NE** WELL DEPTH (ft): ---  
 WELL CASING DIAMETER (in): --- BOREHOLE DIAMETER (in):  
 LOGGED BY: **B. Robitaille** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)
1350			ASPHALT BASE FILL						
			MIXED SOIL AND SANDY GRAVEL; GW					1	
								2	
								1	
5		CL-ML	<b>CLAYEY SILT</b> ; CL-ML; dark brown to very dark gray; dry; moderately soft					1	5
		ML	<b>SILT</b> ; ML; dark brown; soft; moist to wet					1	▽
		CL	<b>CLAY</b> ; CL; black; moderately hard; slightly moist; with caliche					27	
10		CL	<b>CLAY</b> ; CL; dark gray; with olive gray mottling; moderately hard; slightly moist; with caliche					33	10
		CL	<b>CLAY</b> ; CL; dark gray; with olive gray mottling; moderately hard; slightly moist; with caliche					372	
		CL	With silt					345	
		CL	<b>CLAYEY SILT</b> ; CL-ML; dark gray; moist; strong petroleum odor; moderately hard					326	
15		CL-ML	<b>CLAYEY SILT</b> ; CL-ML; dark gray; moist; strong petroleum odor; moderately hard					319	15
1400			Hole terminated at 16 feet.						

PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO:

**NIW-A-1** PAGE 1 OF 1



DRILLING: STARTED **5/5/04** COMPLETED: **5/5/04**  
 INSTALLATION: STARTED **5/5/04** COMPLETED: **5/5/04**  
 DRILLING COMPANY: **Gregg Drilling**  
 DRILLING EQUIPMENT: **Hollow Stem Auger**  
 DRILLING METHOD: **Hollow Stem Auger**  
 SAMPLING EQUIPMENT:

NORTHING (ft):  
 LATITUDE:  
 GROUND ELEV (ft):  
 INITIAL DTW (ft): **NE**  
 STATIC DTW (ft): **NE**  
 WELL CASING DIAMETER (in): **4**  
 LOGGED BY:  
 EASTING (ft):  
 LONGITUDE:  
 TOC ELEV (ft):  
 BOREHOLE DEPTH (ft): **18.0**  
 WELL DEPTH (ft): **18.0**  
 BOREHOLE DIAMETER (in):  
 CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
0	ASPHALT		ASPHALT						0	
0 - 5			<b>SILTY CLAY</b> ; dark brown to black; slightly moist; no HC odor; (0,0,40,60)						0 - 5	
5 - 7			<b>SILTY CLAY</b> ; dark brown; slightly moist; no HC odor; (0,0,40,60)	X		1.5	3 4 8		5	cement 1" PVC blank hydrated bentonite
7 - 10			<b>SILTY CLAY</b> ; grayish brown; slight HC odor; slightly moist; (0,0,30,70)	X		1.5	7 7 11		10	sand #2/12
10 - 13			<b>SILTY CLAY</b> ; grayish brown; slight HC odor; slightly moist; (0,0,30,70)							
13 - 16			<b>CLAYEY SILT</b> ; brown; no odor; very moist to slightly saturated; (0,10,60,30)	X		1.5	5 7 8		15	1" PVC slotted 0.020"
16 - 18			<b>SILTY SAND</b> ; brown; saturated; no HC odor; fine grained sand; (0,90,10,0)	X		1.5	8 7 9		18	
18 - 20			Hole terminated at 18 feet.						20	
20 - 25									25	

PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO:

**NIW-A-2** PAGE 1 OF 1



DRILLING: STARTED **5/5/04** COMPLETED: **5/5/04**  
 INSTALLATION: STARTED **5/5/04** COMPLETED: **5/5/04**  
 DRILLING COMPANY: **Gregg Drilling**  
 DRILLING EQUIPMENT: **Hollow Stem Auger**  
 DRILLING METHOD: **Hollow Stem Auger**  
 SAMPLING EQUIPMENT:

NORTHING (ft):  
 LATITUDE:  
 GROUND ELEV (ft):  
 INITIAL DTW (ft): **NE**  
 STATIC DTW (ft): **NE**  
 WELL CASING DIAMETER (in): **4**  
 LOGGED BY:  
 EASTING (ft):  
 LONGITUDE:  
 TOC ELEV (ft):  
 BOREHOLE DEPTH (ft): **18.0**  
 WELL DEPTH (ft): **18.0**  
 BOREHOLE DIAMETER (in):  
 CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
0	ASPHALT									
0 - 4.5		CL	<b>SILTY CLAY</b> ; CL; brownish black; slightly moist; (0,0,40,60)							
4.5 - 8.5		CL	<b>SILTY CLAY</b> ; CL; brownish gray; slightly moist; (0,0,40,60)			1.5	2 4 6		5	cement 1" PVC blank hydrated bentonite
8.5 - 13.5		CL	<b>SILTY CLAY</b> ; CL; brownish gray; strong HC odor; slightly moist			1.5	5 7 8		10	
13.5 - 16.5		SC	<b>CLAYEY SAND</b> ; SC; brown; saturated; no HC odor; (0,70,10,20)			1.5	6 9 11		15	
16.5 - 18.0		SP	<b>SILTY SAND</b> ; SP; black; saturated; fine sand; no HC odor; (0,90,10,0)			1.5	10 12 13		18	1" PVC slotted 0.020"
18.0 - 20			Hole terminated at 18 feet.							

GEO FORM 304 BOHANNON-SAN LORENZO\_P1WS\_NIWS.GPJ SECOR.INTL.GDT 5/7/07

PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO:

**NIW-B-1** PAGE 1 OF 1



DRILLING: STARTED **5/5/04** COMPLETED: **5/5/04**  
 INSTALLATION: STARTED **5/5/04** COMPLETED: **5/5/04**  
 DRILLING COMPANY: **Gregg Drilling**  
 DRILLING EQUIPMENT: **Hollow Stem Auger**  
 DRILLING METHOD: **Hollow Stem Auger**  
 SAMPLING EQUIPMENT:

NORTHING (ft):  
 LATITUDE:  
 GROUND ELEV (ft):  
 INITIAL DTW (ft): **NE**  
 STATIC DTW (ft): **NE**  
 WELL CASING DIAMETER (in): **4**  
 LOGGED BY:  
 EASTING (ft):  
 LONGITUDE:  
 TOC ELEV (ft):  
 BOREHOLE DEPTH (ft): **26.0**  
 WELL DEPTH (ft): **26.0**  
 BOREHOLE DIAMETER (in):  
 CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
			ASPHALT							
0 - 5		CL	<b>SILTY CLAY</b> ; CL; dark brown to black; slightly moist; no HC odor; (0,0,40,60)	X		1.5	2 5 10		5	
5 - 10		CL	<b>SILTY CLAY</b> ; CL; grayish brown; slight HC odor; slightly moist; white mottling; (0,0,30,70)	X		1.5	6 9 10		10	cement
10 - 15		ML	<b>CLAYEY SILT</b> ; ML; brown; no odor; very moist to slightly saturated; (0,10,70,20)	X		1.5	4 6 8		15	1" PVC blank
15 - 20		SP	<b>SILTY SAND</b> ; SP; brown; saturated; fine sand; no HC odor; (0,90,10,0)	X		1.5	9 5 8		20	hydrated bentonite sand #2/12
20 - 25		SW	<b>SAND WITH GRAVEL</b> ; SW; saturated; no HC odor; gravel up to 1/4"; (10,90,0,0)	X		1.5	14 16 20		25	1" PVC slotted 0.020"
25 - 26			Hole terminated at 26 feet.							

GEO FORM 304 BOHANNON-SAN LORENZO\_P1WS\_NIWS.GPJ SECOR.INTL.GDT 5/7/07



PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO:

**NIW-B-2** PAGE 1 OF 1



DRILLING: STARTED **5/5/04** COMPLETED: **5/5/04**  
 INSTALLATION: STARTED **5/5/04** COMPLETED: **5/5/04**  
 DRILLING COMPANY: **Gregg Drilling**  
 DRILLING EQUIPMENT: **Hollow Stem Auger**  
 DRILLING METHOD: **Hollow Stem Auger**  
 SAMPLING EQUIPMENT:

NORTHING (ft):  
 LATITUDE:  
 GROUND ELEV (ft):  
 INITIAL DTW (ft): **NE**  
 STATIC DTW (ft): **NE**  
 WELL CASING DIAMETER (in): **4**  
 LOGGED BY:  
 EASTING (ft):  
 LONGITUDE:  
 TOC ELEV (ft):  
 BOREHOLE DEPTH (ft): **26.0**  
 WELL DEPTH (ft): **26.0**  
 BOREHOLE DIAMETER (in):  
 CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
0	ASPHALT									
0 - 5		CL	<b>SILTY CLAY</b> ; CL; brownish black; slightly moist; (0,0,30,70)							
5			As above; color change to brownish gray	X		1.5	9 30 30		5	
5 - 10		CL	<b>SILTY CLAY</b> ; CL; grayish black; strong HC odor; slightly moist; (0,0,40,60)							
10				X		1.5	4 6 10		10	cement
10 - 15		SC	<b>CLAYEY SAND</b> ; SC; brown; saturated; no HC odor; (0,70,10,20)							
15				X		1.5	10 12 14		15	1" PVC blank
15 - 20		CL	<b>SILTY CLAY</b> ; CL; light brown; moist; (0,0,40,60)							
20				X		1.5	9 9 15		20	hydrated bentonite sand #2/12
20 - 25		SW	<b>GRAVELLY SAND</b> ; SW; saturated; no HC odor; gravel up to 3/8"; (30,60,5,5)							
25			Hole terminated at 26 feet.	X		1.5	8 12 15		25	1" PVC slotted 0.020"

GEO FORM 304 BOHANNON-SAN LORENZO\_P1WS\_NIWS.GPJ SECOR INTL.GDT 5/7/07

PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO:

**NOBS-B** PAGE 1 OF 1

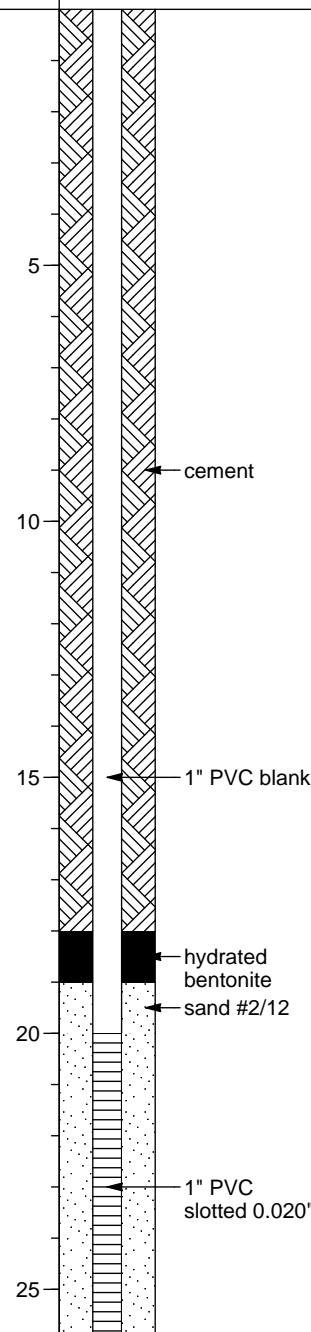


DRILLING: STARTED **5/7/04** COMPLETED: **5/7/04**  
 INSTALLATION: STARTED **5/7/04** COMPLETED: **5/7/04**  
 DRILLING COMPANY: **Gregg Drilling**  
 DRILLING EQUIPMENT: **Hollow Stem Auger**  
 DRILLING METHOD: **Hollow Stem Auger**  
 SAMPLING EQUIPMENT:

NORTHING (ft):  
 LATITUDE:  
 GROUND ELEV (ft):  
 INITIAL DTW (ft): **NE**  
 STATIC DTW (ft): **NE**  
 WELL CASING DIAMETER (in): **2**  
 LOGGED BY:  
 EASTING (ft):  
 LONGITUDE:  
 TOC ELEV (ft):  
 BOREHOLE DEPTH (ft): **26.0**  
 WELL DEPTH (ft): **26.0**  
 BOREHOLE DIAMETER (in):  
 CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
			ASPHALT							
			<b>SANDY CLAY</b> ; light brown; slightly moist; (0,20,10,70)							
5			<b>SILTY CLAY</b> ; dark brown to black; moist; no HC odor							
10										
15										
20										
25										
			Hole terminated at 26 feet.							

GEO FORM 304 BOHANNON-SAN LORENZO\_P1WS\_NIWS.GPJ SECOR.INTL.GDT 5/7/07



PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO:

**PIW-A-2** PAGE 1 OF 1



DRILLING: STARTED **5/4/04** COMPLETED: **5/4/04**  
 INSTALLATION: STARTED **5/4/04** COMPLETED: **5/4/04**  
 DRILLING COMPANY: **Gregg Drilling**  
 DRILLING EQUIPMENT: **Hollow Stem Auger**  
 DRILLING METHOD: **Hollow Stem Auger**  
 SAMPLING EQUIPMENT: **CA Modified Split-Spoon**

NORTHING (ft):  
 LATITUDE:  
 GROUND ELEV (ft):  
 INITIAL DTW (ft): **NE**  
 STATIC DTW (ft): **NE**  
 WELL CASING DIAMETER (in): **4**  
 LOGGED BY:  
 EASTING (ft):  
 LONGITUDE:  
 TOC ELEV (ft):  
 BOREHOLE DEPTH (ft): **18.0**  
 WELL DEPTH (ft): **18.0**  
 BOREHOLE DIAMETER (in):  
 CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
0 - 1	ASPHALT		ASPHALT							
1 - 2	CLAYEY GRAVEL		CLAYEY GRAVEL ; fill; dry							
2 - 5	SILTY CLAY WITH GRAVEL	CL	SILTY CLAY WITH GRAVEL ; CL; grayish brown; (20, 0,30,50)							
5 - 8	SILTY CLAY	CL	SILTY CLAY ; CL; grayish brown; slightly moist; (0,0,40,60)	X		1.5	3 7 12		5	← cement ← 1" PVC blank ← hydrated bentonite ← sand #2/12
8 - 10	CLAYEY SILT	ML	CLAYEY SILT ; ML; brownish gray; moist; strong HC odor; (0,0,70,30)	X		1.5	8 12 18		10	
10 - 13.5	SILTY CLAY	CL	SILTY CLAY ; CL; grayish brown; slight HC odor; saturated at 13.5' to moist at 15'; (0,0,40,60)	X		1.5	4 8 12		15	← 1" PVC slotted 0.020"
13.5 - 18	SILTY CLAY	CL	SILTY CLAY ; CL; brown; moist; no HC odor; (0,0,30,70)	X		1.5	8 10 12			
18 - 20	Hole terminated at 18 feet.									

GEO FORM 304 BOHANNON-SAN LORENZO\_P1WS\_NIWS.GPJ SECOR INTL.GDT 5/7/07

PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO:

**PIW-A-3** PAGE 1 OF 1



DRILLING: STARTED **5/7/04** COMPLETED: **5/7/04**  
 INSTALLATION: STARTED **5/7/04** COMPLETED: **5/7/04**  
 DRILLING COMPANY: **Gregg Drilling**  
 DRILLING EQUIPMENT: **Hollow Stem Auger**  
 DRILLING METHOD: **Hollow Stem Auger**  
 SAMPLING EQUIPMENT: **CA Modified Split-Spoon**

NORTHING (ft):  
 LATITUDE:  
 GROUND ELEV (ft):  
 INITIAL DTW (ft): **NE**  
 STATIC DTW (ft): **NE**  
 WELL CASING DIAMETER (in): **4**  
 LOGGED BY:  
 EASTING (ft):  
 LONGITUDE:  
 TOC ELEV (ft):  
 BOREHOLE DEPTH (ft): **18.0**  
 WELL DEPTH (ft): **18.0**  
 BOREHOLE DIAMETER (in):  
 CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
0 - 5		ML	ASPHALT <b>CLAYEY SILT</b> ; ML; brown; slightly moist; no HC odor; (0,0,60,40)			1.5	4 5 7		0 - 5	cement 1" PVC blank hydrated bentonite sand #2/12
5 - 10		CL	<b>SILTY CLAY</b> ; CL; brownish gray; strong HC odor; white mottling; slightly moist; (0,0,30,70)			1.5	6 9 15		5 - 10	
10 - 15		ML	<b>SILT</b> ; ML; brownish gray; saturated; no odor; (0,0,90,10)						10 - 15	
15 - 18		CL	<b>CLAY</b> ; CL; gray; very dense to very stiff; moist; strong HC odor; (0,0,10,90)			1.5	6 6 7		15 - 18	1" PVC slotted 0.020"
18 - 20		CL	<b>SILTY CLAY</b> ; CL; gray; slight HC odor; ver moist; rust colored mottling; (0,0,40,60)			1.5	6 6 8		18 - 20	
20 - 25			Hole terminated at 18 feet.						20 - 25	

PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO:

**PIW-A-4** PAGE 1 OF 1



DRILLING: STARTED **5/6/04** COMPLETED: **5/6/04**  
 INSTALLATION: STARTED **5/6/04** COMPLETED: **5/6/04**  
 DRILLING COMPANY: **Gregg Drilling**  
 DRILLING EQUIPMENT: **Hollow Stem Auger**  
 DRILLING METHOD: **Hollow Stem Auger**  
 SAMPLING EQUIPMENT:

NORTHING (ft):  
 LATITUDE:  
 GROUND ELEV (ft):  
 INITIAL DTW (ft): **NE**  
 STATIC DTW (ft): **NE**  
 WELL CASING DIAMETER (in): **4**  
 LOGGED BY:  
 EASTING (ft):  
 LONGITUDE:  
 TOC ELEV (ft):  
 BOREHOLE DEPTH (ft): **18.0**  
 WELL DEPTH (ft): **18.0**  
 BOREHOLE DIAMETER (in):  
 CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
0 - 6			ASPHALT GRAVELLY FILL to 6'						0 - 6	
6 - 18			<b>SILTY CLAY</b> ; dark grayish brown; moist; strong HC odor; (0,0,40,60)						6 - 18	
18 - 25			Hole terminated at 18 feet.						18 - 25	

GEO FORM 304 BOHANNON-SAN LORENZO\_P1WS\_NIWS.GPJ SECOR.INTL.GDT 5/7/07

PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO:

**PIW-B-1** PAGE 1 OF 1



DRILLING: STARTED **5/3/04** COMPLETED: **5/3/04**  
 INSTALLATION: STARTED **5/3/04** COMPLETED: **5/3/04**  
 DRILLING COMPANY: **Gregg Drilling**  
 DRILLING EQUIPMENT: **Hollow Stem Auger**  
 DRILLING METHOD: **Hollow Stem Auger**  
 SAMPLING EQUIPMENT:

NORTHING (ft):  
 LATITUDE:  
 GROUND ELEV (ft):  
 INITIAL DTW (ft): **NE**  
 STATIC DTW (ft): **NE**  
 WELL CASING DIAMETER (in): **4**  
 LOGGED BY: **WBC**

EASTING (ft):  
 LONGITUDE:  
 TOC ELEV (ft):  
 BOREHOLE DEPTH (ft): **26.0**  
 WELL DEPTH (ft): **25.5**  
 BOREHOLE DIAMETER (in): **10**  
 CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
	ASPHALT									
		ML	<b>GRAVELLY SILT WITH CLAY</b> ; ML; 7.5 YR 4/3 brown; dry; (25,0,60,15)							
5			<b>SILTY CLAY</b> ; becomes black at 5.75'; moist' rootlets; HC odor; (0,0,40,60)			1.5	2 4 8		5	
		ML	<b>CLAYEY SILT</b> ; ML; grayish black; stiff; dry; strong HC odor; (0,0,70,30)			1.5	5 8 12		10	cement
15		ML	<b>SILT</b> ; ML; 5 GN 4 gray; very stiff; saturated; strong HC odor; (0,0,100,0)			1.5	6 10 20		15	1" PVC blank
20		ML	<b>CLAYEY SILT</b> ; ML; 10 YR 5/6 yellowish brown; stiff; moist to wet; no HC odor; (0,0,80,20)			1.5	5 7 7		20	hydrated bentonite sand #2/12
25		SP	<b>SAND</b> ; SP; 10 YR 5/8 yellowish brown; saturated; rounded gravel; increased clay to sandy clayey sand ar 25.5 - 26'; (15,85,5,5)			1.5	6 15 25		25	1" PVC slotted 0.020"
			Lost 6" of borehole upon removal of plug Hole terminated at 26 feet.							

GEO FORM 304 BOHANNON-SAN LORENZO\_P1WS\_NIWS.GPJ SECOR INTL.GDT 5/7/07

PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO:

**PIW-B-2** PAGE 1 OF 1



DRILLING: STARTED **5/3/04** COMPLETED: **5/3/04**  
 INSTALLATION: STARTED **5/3/04** COMPLETED: **5/3/04**  
 DRILLING COMPANY: **Gregg Drilling**  
 DRILLING EQUIPMENT: **Hollow Stem Auger**  
 DRILLING METHOD: **Hollow Stem Auger**  
 SAMPLING EQUIPMENT:

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **26.0**  
 STATIC DTW (ft): **NE** WELL DEPTH (ft): **26.0**  
 WELL CASING DIAMETER (in): **4** BOREHOLE DIAMETER (in):  
 LOGGED BY: CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
			ASPHALT							above ground riser
		CL	GRAVEL FILL to 6"							
			<b>SILTY CLAY</b> ; CL; brown; slightly moist; (0,0,40,60)							
5		CL	<b>CLAY</b> ; CL; dark gray; moist; strong petroleum odor; (0,0,10,90)				4 6 8		5	1" PVC blank
		CL	<b>SILTY CLAY</b> ; CL; brown; moist; strong petroleum odor; gray mottling; (0,0,40,60)				5 6 7			
10		CL-ML	<b>SILTY CLAY</b> ; CL-ML; grayish brown; strong petroleum odor; very moist; (0,10,40,50)				6 8 8		10	cement
		SC	<b>SANDY CLAY</b> ; SC; brown; moist to saturated; HC odor; (0,30,10,60)				6 7 10		15	
15		CL-ML	<b>SILTY CLAY</b> ; CL-ML; brown; slightly saturated; no HC odor; (0,10,40,50)				9 10 12			
		SC	<b>CLAYEY SAND</b> ; SC; brown; saturated; (0,60,10,30)				10 18 18		20	hydrated bentonite sand #2/12
20		SP	<b>SAND</b> ; SP; light brown; fine-grained; saturated; (0,80,10,10)				4 6 10 4 4 8 8 8 20			1" PVC slotted 0.020"
25			Hole terminated at 26 feet.				12 25 30		25	

GEO FORM 304 BOHANNON-SAN LORENZO\_P1WS\_NIWS.GPJ SECOR.INTL.GDT 5/7/07

PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO:

**PIW-B-3** PAGE 1 OF 1



DRILLING: STARTED **5/4/04** COMPLETED: **5/4/04**  
 INSTALLATION: STARTED **5/4/04** COMPLETED: **5/4/04**  
 DRILLING COMPANY: **Gregg Drilling**  
 DRILLING EQUIPMENT: **Hollow Stem Auger**  
 DRILLING METHOD: **Hollow Stem Auger**  
 SAMPLING EQUIPMENT:

NORTHING (ft):  
 LATITUDE:  
 GROUND ELEV (ft):  
 INITIAL DTW (ft): **NE**  
 STATIC DTW (ft): **NE**  
 WELL CASING DIAMETER (in): **4**  
 LOGGED BY:  
 EASTING (ft):  
 LONGITUDE:  
 TOC ELEV (ft):  
 BOREHOLE DEPTH (ft): **26.0**  
 WELL DEPTH (ft): **26.0**  
 BOREHOLE DIAMETER (in):  
 CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
0 - 1	ASPHALT		ASPHALT							
1 - 5	GRAVELLY SILT		<b>GRAVELLY SILT</b> ; 7.5 YR 4/3 brown; dry; (040,0,60,0)							1" PVC blank
5 - 8.5	SILTY CLAY		<b>SILTY CLAY</b> ; dark gray to black; moist; slight HC odor; some gravel upn to 1/4"; (10,0,30,60)	X		1.5	10 4 4		5	
8.5 - 9	SILTY CLAY		<b>SILTY CLAY</b> ; gray; strong HC odor; saturated at 8.5 - 9'; (0,0,40,60)	X		1.5	4 6 10		10	cement
9 - 13	SILTY CLAY		<b>SILTY CLAY</b> ; brownish gray; moist; HC odor; (0,0,30,70)	X		1.5	5 9 12		15	
13 - 20	CLAYEY SILT		<b>CLAYEY SILT</b> ; light brown; saturated; slight HC odor; (0,0,60,40)	X		1.5	3 3 4		20	hydrated bentonite sand #2/12
20 - 25	SAND		<b>SAND</b> ; brown; fine-grained; saturated; no HC odor; (0,85,5,15)	X		1.5	12 15 25		25	1" PVC slotted 0.020"
25 - 26			Hole terminated at 26 feet.							

GEO FORM 304 BOHANNON-SAN LORENZO\_P1WS\_NIWS.GPJ SECOR INTL.GDT 5/7/07



PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO:

**PIW-B-4** PAGE 1 OF 1



DRILLING: STARTED **5/4/05** COMPLETED: **5/4/04**  
 INSTALLATION: STARTED **5/4/05** COMPLETED: **5/4/04**  
 DRILLING COMPANY: **Gregg Drilling**  
 DRILLING EQUIPMENT: **Hollow Stem Auger**  
 DRILLING METHOD: **Hollow Stem Auger**  
 SAMPLING EQUIPMENT:

NORTHING (ft):  
 LATITUDE:  
 GROUND ELEV (ft):  
 INITIAL DTW (ft): **NE**  
 STATIC DTW (ft): **NE**  
 WELL CASING DIAMETER (in): **4**  
 LOGGED BY:  
 EASTING (ft):  
 LONGITUDE:  
 TOC ELEV (ft):  
 BOREHOLE DEPTH (ft): **26.0**  
 WELL DEPTH (ft): **26.0**  
 BOREHOLE DIAMETER (in):  
 CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
	ASPHALT		ASPHALT							
	GRAVELLY SILT		GRAVELLY SILT ; dry; fill; (20,10,60,10)							
5	SILTY CLAY	CL	SILTY CLAY ; CL; moist; slight HC odor; (0,0,40,60)	X		1.5	2 2 2		5	
10	CLAYEY SILT	ML	CLAYEY SILT ; ML; grayish brown; moist; HC odor; (0,0,70,30)	X		1.5	8 8 12		10	cement
15	SILT	ML	SILT ; ML; brownish gray; saturated; HC odor; (0,0,90,10)	X		1.5	4 8 10		15	1" PVC blank
20	CLAYEY SILT	CL-ML	CLAYEY SILT ; CL-ML; brown; moist to very moist; no HC odor; (0,0,60,40)	X		1.5	5 8 10		20	hydrated bentonite sand #2/12
25	SAND	SP	SAND ; SP; yellowish brown; fine-grained; saturated; no HC odor; (0,80,10,10)	X		1.5	8 10 30		25	1" PVC slotted 0.020"
			Hole terminated at 26 feet.							

GEO FORM 304 BOHANNON-SAN LORENZO\_P1WS\_N1WS.GPJ SECOR INTL.GDT 5/7/07

PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO:

**POBS-1A-B** PAGE 1 OF 1



DRILLING: STARTED **5/6/04** COMPLETED: **5/6/04**  
 INSTALLATION: STARTED **5/6/04** COMPLETED: **5/6/04**  
 DRILLING COMPANY: **Gregg Drilling**  
 DRILLING EQUIPMENT: **Hollow Stem Auger**  
 DRILLING METHOD: **Hollow Stem Auger**  
 SAMPLING EQUIPMENT:

NORTHING (ft):  
 LATITUDE:  
 GROUND ELEV (ft):  
 INITIAL DTW (ft): **NE**  
 STATIC DTW (ft): **NE**  
 WELL CASING DIAMETER (in): **4**  
 LOGGED BY:  
 EASTING (ft):  
 LONGITUDE:  
 TOC ELEV (ft):  
 BOREHOLE DEPTH (ft): **26.0**  
 WELL DEPTH (ft): **26.0**  
 BOREHOLE DIAMETER (in):  
 CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
			ASPHALT GRAVELLY FILL up to 6"							
5		CL	<b>SILTY CLAY</b> ; CL; dark gray to black; moist; slight HC odor; some gravel up to 1/2"; (10,0,30,60)			1.5	4 4 7		5	
10		CL	<b>SILTY CLAY</b> ; CL; gray; strong HC odor; white mottling; (0,0,40,60)			1.5	5 7 11		10	
15		CL	<b>SILTY CLAY</b> ; CL; brownish gray; moist; strong HC odor; (0,0,30,710)			1.5	6 10 11		15	
20		ML	<b>CLAYEY SILT</b> ; ML; light brown; saturated; slight HC odor; (0,0,60,40)			1.5	4 5 4		20	
25		SP	<b>SAND</b> ; SP; black; fine-grained; saturated; no HC odor; (0,80,10,10)			1.5	13 14 19		25	
			Hole terminated at 26 feet.							

GEO FORM 304 BOHANNON-SAN LORENZO\_P1WS\_NIWS.GPJ SECOR INTL.GDT 5/7/07

PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO:

**POBS-2B** PAGE 1 OF 1



DRILLING: STARTED **5/6/04** COMPLETED: **5/6/04**  
 INSTALLATION: STARTED **5/6/04** COMPLETED: **5/6/04**  
 DRILLING COMPANY: **Gregg Drilling**  
 DRILLING EQUIPMENT: **Hollow Stem Auger**  
 DRILLING METHOD: **Hollow Stem Auger**  
 SAMPLING EQUIPMENT:

NORTHING (ft):  
 LATITUDE:  
 GROUND ELEV (ft):  
 INITIAL DTW (ft): **NE**  
 STATIC DTW (ft): **NE**  
 WELL CASING DIAMETER (in): **2**  
 LOGGED BY:  
 EASTING (ft):  
 LONGITUDE:  
 TOC ELEV (ft):  
 BOREHOLE DEPTH (ft): **26.0**  
 WELL DEPTH (ft): **26.0**  
 BOREHOLE DIAMETER (in):  
 CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
0 - 4	ASPHALT GRAVELLY FILL to 4'									
4 - 5.5	CL	CL	<b>SILTY CLAY</b> ; CL; dark gray; slightly moist; HC odor; (0,0,40,60)	X		1.5	4 6 7		5	
5.5 - 10	SC	SC	<b>SANDY CLAY</b> ; SC; black; strong HC odor; very moist to saturated; visible oil; (0,30,10,60)	X		1.5	3 7 7		10	cement
10 - 15	ML	ML	<b>CLAYEY SILT</b> ; ML; blackish gray; moist; strong HC odor; (0,0,70,30)	X		1.5	11 12 12		15	1" PVC blank
15 - 20			<b>FINE SAND WITH SOME GRAVEL</b> ; brown; saturated; no HC odor; (10,80,5,5)	X		1.5			20	hydrated bentonite sand #2/12
20 - 25				X		1.5			25	1" PVC slotted 0.020"
25 - 26			Hole terminated at 26 feet.	X						

GEO FORM 304 BOHANNON-SAN LORENZO\_P1WS\_NIWS.GPJ SECOR INTL.GDT 5/7/07

PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER: **05OT.50227.00**

WELL / PROBEHOLE / BOREHOLE NO:

**DP-1** PAGE 1 OF 1



DRILLING: STARTED **9/30/05** COMPLETED: **9/30/05**  
 INSTALLATION: STARTED **9/30/05** COMPLETED: **9/30/05**  
 DRILLING COMPANY: **Gregg Drilling**  
 DRILLING EQUIPMENT:  
 DRILLING METHOD:  
 SAMPLING EQUIPMENT:

NORTHING (ft):  
 LATITUDE:  
 GROUND ELEV (ft):  
 INITIAL DTW (ft): **15 9/30/06**  
 STATIC DTW (ft): **NE**  
 WELL CASING DIAMETER (in): ---  
 LOGGED BY:  
 EASTING (ft):  
 LONGITUDE:  
 TOC ELEV (ft):  
 BOREHOLE DEPTH (ft): **20.5**  
 WELL DEPTH (ft): ---  
 BOREHOLE DIAMETER (in):  
 CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Borehole Backfill
0740		GC	ASPHALT <b>GRAVELLY SAND SOME CLAY ; GC;</b> brown; dry; (30,30,0,40)							Blank PVC Grout
5		CL	<b>SANDY CLAY TRACE GRAVEL AND FINE SAND ; CL;</b> dark brown to black; moist; (10,35,0,45)  Grades light brown, more gravels, then black						5	Hydrated Bentonite
10		CL	<b>SANDY CLAY ; CL;</b> black; high plasticity; moist; no gravel; (0,30,0,70)						10	0.020" Slotted PVC
0815 15		CL	<b>SANDY CLAY TRACE GRAVEL AND COARSE SAND ; CL;</b> light brown to gray; moist; moderate petroleum odor; medium to high plasticity; (5,25,0,70)						15	Blank PVC #3 Sand
20		CL	<b>SANDY CLAY ; CL;</b> gray; very dense; wet; trouble drilling; (0,40,0,60)						20	Cap
0830			Hole terminated at 20.5 feet.							

GEO FORM 304 BOHANNON-SAN LORENZO\_DP1-7.GPJ SECOR INTL\_GDT 5/7/07

PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER: **05OT.50227.00**

WELL / PROBEHOLE / BOREHOLE NO:

**DP-2** PAGE 1 OF 1



DRILLING: STARTED **9/29/05** COMPLETED: **9/29/05**  
 INSTALLATION: STARTED **9/29/05** COMPLETED: **9/29/05**  
 DRILLING COMPANY: **Gregg Drilling**  
 DRILLING EQUIPMENT:  
 DRILLING METHOD:  
 SAMPLING EQUIPMENT:

NORTHING (ft):  
 LATITUDE:  
 GROUND ELEV (ft):  
 INITIAL DTW (ft): **14 9/29/05**  
 STATIC DTW (ft): **NE**  
 WELL CASING DIAMETER (in): ---  
 LOGGED BY:  
 EASTING (ft):  
 LONGITUDE:  
 TOC ELEV (ft):  
 BOREHOLE DEPTH (ft): **20.0**  
 WELL DEPTH (ft): ---  
 BOREHOLE DIAMETER (in):  
 CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	
1240			ASPHALT SANDY GRAVELLY CLAY; CL; medium brown; angular gravels; moist; (15,30,0,55)							
5		CL	SANDY CLAY WITH FINE SAND ; CL; dark brown; low plasticity; moist; (0,40,0,60)						5	
1330		CL	SANDY CLAY ; CL; black; high plasticity; poorly sorted sand; fine with some coarse sand; (0,15,0,85)						10	
1345		CL	SANDY CLAY ; CL; brown; moist; (0,30,0,70)						15	
1350		CL	CLAY WITH SAND ; CL; gray; dense; wet; (0,40,0,60)						15	
1350			Hole terminated at 20 feet.						20	

GEO FORM 304 BOHANNON-SAN LORENZO\_DP1-7.GPJ SECOR INTL\_GDT 5/7/07

PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER: **05OT.50227.00**

WELL / PROBEHOLE / BOREHOLE NO:

**DP-3** PAGE 1 OF 1



DRILLING: STARTED **9/29/05** COMPLETED: **9/29/05**  
 INSTALLATION: STARTED **9/29/05** COMPLETED: **9/29/05**  
 DRILLING COMPANY: **Gregg Drilling**  
 DRILLING EQUIPMENT:  
 DRILLING METHOD:  
 SAMPLING EQUIPMENT:

NORTHING (ft):  
 LATITUDE:  
 GROUND ELEV (ft):  
 INITIAL DTW (ft): **14 9/29/05**  
 STATIC DTW (ft): **NE**  
 WELL CASING DIAMETER (in): ---  
 LOGGED BY:  
 EASTING (ft):  
 LONGITUDE:  
 TOC ELEV (ft):  
 BOREHOLE DEPTH (ft): **20.2**  
 WELL DEPTH (ft): ---  
 BOREHOLE DIAMETER (in):  
 CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Borehole Backfill
1030		SC	ASPHALT <b>CLAYEY SAND WITH GRAVEL ; SC;</b> brown; small poorly sorted gravel; (20,45,0,35)							6" Above Ground
5		SC	<b>CLAYEY SAND ; SC;</b> dark brown; moist; medium brown; fine sand; trace small gravel or large sand; (5,50,0,45)							Blank PVC Grout
10		CL	<b>SANDY CLAY ; CL;</b> black; high plasticity; no gravel; trace fine sand; more clay with depth; (0,5,0,95)							Hydrated Bentonite
1100		CL	<b>SANDY CLAY ; CL;</b> grayish green; medium plasticity; moist; moderate petroleum odor; poorly sorted fine to medium sand; (0,15,0,85)							0.020" Slotted PVC
15		ML	<b>SILTY SAND ; ML;</b> light brown to grayish green; wet; no gravel; (0,30,70,0)							#3 Sand Blank PVC
20			Hole terminated at 20.2 feet.							Hydrated Bentonite Cap
1115										

GEO FORM 304 BOHANNON-SAN LORENZO\_DP1-7.GPJ SECOR INTL\_GDT\_5/7/07

PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER: **05OT.50227.00**

WELL / PROBEHOLE / BOREHOLE NO:

**DP-4** PAGE 1 OF 1



DRILLING: STARTED **9/28/05** COMPLETED: **9/28/05**  
 INSTALLATION: STARTED **9/28/05** COMPLETED: **9/28/05**  
 DRILLING COMPANY: **Gregg Drilling**  
 DRILLING EQUIPMENT:  
 DRILLING METHOD:  
 SAMPLING EQUIPMENT:

NORTHING (ft):  
 LATITUDE:  
 GROUND ELEV (ft):  
 INITIAL DTW (ft): **14 9/28/05**  
 STATIC DTW (ft): **NE**  
 WELL CASING DIAMETER (in): ---  
 LOGGED BY:  
 EASTING (ft):  
 LONGITUDE:  
 TOC ELEV (ft):  
 BOREHOLE DEPTH (ft): **20.0**  
 WELL DEPTH (ft): ---  
 BOREHOLE DIAMETER (in):  
 CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	
0820		CL	ASPHALT GRAVEL FILL SANDY CLAY ; CL; light brown							<p>Borehole Backfill 10" Above Ground</p> <p>Blank PVC</p> <p>Grout</p> <p>Hydrated Bentonite</p> <p>0.020" Slotted PVC</p> <p>#3 Sand</p> <p>Blank PVC</p> <p>Hydrated Bentonite</p> <p>Cap</p>
5		CL	SANDY CLAY ; CL; dark brown; slight petroleum odor; fine sand (30%)						5	
10			Grades to black clay; 10% fine sand						10	
15			Grades to gray silty clay; 40% fine sand; strong petroleum odor						15	
0925									15	
1153			Hole terminated at 20 feet.						20	

GEO FORM 304 BOHANNON-SAN LORENZO\_DP1-7.GPJ SECOR INTL\_GDT 5/7/07

PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER: **05OT.50227.00**

WELL / PROBEHOLE / BOREHOLE NO:

**DP-5** PAGE 1 OF 1



DRILLING: STARTED **9/28/05** COMPLETED: **9/28/05**  
 INSTALLATION: STARTED **9/28/05** COMPLETED: **9/28/05**  
 DRILLING COMPANY: **Gregg Drilling**  
 DRILLING EQUIPMENT:  
 DRILLING METHOD:  
 SAMPLING EQUIPMENT:

NORTHING (ft):  
 LATITUDE:  
 GROUND ELEV (ft):  
 INITIAL DTW (ft): **15 9/28/05**  
 STATIC DTW (ft): **NE**  
 WELL CASING DIAMETER (in): ---  
 LOGGED BY:  
 EASTING (ft):  
 LONGITUDE:  
 TOC ELEV (ft):  
 BOREHOLE DEPTH (ft): **20.5**  
 WELL DEPTH (ft): ---  
 BOREHOLE DIAMETER (in):  
 CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Borehole Backfill
1100			ASPHALT 3/4" round GRAVEL FILL and SAND; dry							6" Above Ground
5		GP	<b>SANDY GRAVEL</b> ; GP; moist; medium brown; medium to fine sand; (60,40,10,0)  Gravel size and quantity decreases with depth; round 1/2"; (50,10,10,30)						5	Blank PVC Grout Hydrated Bentonite
1135 10		CL	<b>SANDY CLAY WITH GRAVEL</b> ; CL; dark brown; medium plasticity; moist; (5,10,0,85)  Grades to black						10	0.020" Slotted PVC
1145 15		CL	<b>SANDY CLAY</b> ; CL; light brown; slight petroleum odor; fine sand; (0,20,0,80)						15	#3 Sand
		CL	CL; some small gravel; moderate petroleum odor							Blank PVC Hydrated Bentonite
20		CL	<b>SILTY CLAY WITH FINE SAND</b> ; CL; light brown; no gravel; (0,30,20,50)						20	Cap
1153			Hole terminated at 20.5 feet.							

GEO FORM 304 BOHANNON-SAN LORENZO\_DP1-7.GPJ SECOR INTL\_GDT 5/7/07



PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER: **05OT.50227.00**

WELL / PROBEHOLE / BOREHOLE NO:

**DP-6** PAGE 1 OF 1



DRILLING: STARTED **9/29/05** COMPLETED: **9/29/05**  
 INSTALLATION: STARTED **9/29/05** COMPLETED: **9/29/05**  
 DRILLING COMPANY: **Gregg Drilling**  
 DRILLING EQUIPMENT:  
 DRILLING METHOD:  
 SAMPLING EQUIPMENT:

NORTHING (ft):  
 LATITUDE:  
 GROUND ELEV (ft):  
 INITIAL DTW (ft): **13.5 9/29/06**  
 STATIC DTW (ft): **NE**  
 WELL CASING DIAMETER (in): ---  
 LOGGED BY:  
 EASTING (ft):  
 LONGITUDE:  
 TOC ELEV (ft):  
 BOREHOLE DEPTH (ft): **20.2**  
 WELL DEPTH (ft): ---  
 BOREHOLE DIAMETER (in):  
 CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	
0800			ASPHALT GRAVEL FILL							
5										
0825		CL	<b>SANDY CLAY ; CL; dark brown; medium plasticity; moist; slight petroleum odor; (0,20,0,80)</b>							
0835		CL	<b>SANDY CLAY WITH GRAVEL ; CL; medium to dark brown; 1/2" angular gravel; very fine sand; moist; (15,5,0,80)</b>							
15										
0841		CL	<b>SANDY CLAY SOME GRAVEL ; CL; dark brown; high plasticity; wet; small gravel; dard to drill; (10,5,0,85)</b>							
20										
0841			Hole terminated at 20.2 feet.							

GEO FORM 304 BOHANNON-SAN LORENZO\_DP1-7.GPJ SECOR INTL\_GDT 5/7/07

PROJECT: **Bohannon Development Company**  
 LOCATION: **575 Paseo Grande, San Lorenzo, CA**  
 PROJECT NUMBER: **05OT.50227.00**

WELL / PROBEHOLE / BOREHOLE NO:

**DP-7** PAGE 1 OF 1



DRILLING: STARTED **9/28/05** COMPLETED: **9/29/05**  
 INSTALLATION: STARTED **9/28/05** COMPLETED: **9/29/05**  
 DRILLING COMPANY: **Gregg Drilling**  
 DRILLING EQUIPMENT:  
 DRILLING METHOD:  
 SAMPLING EQUIPMENT:

NORTHING (ft):  
 LATITUDE:  
 GROUND ELEV (ft):  
 INITIAL DTW (ft): **14 9/28/05**  
 STATIC DTW (ft): **NE**  
 WELL CASING DIAMETER (in): ---  
 LOGGED BY:  
 EASTING (ft):  
 LONGITUDE:  
 TOC ELEV (ft):  
 BOREHOLE DEPTH (ft): **21.0**  
 WELL DEPTH (ft): ---  
 BOREHOLE DIAMETER (in):  
 CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	
1340		CL	ASPHALT <b>SANDY CLAY</b> ; CL; dark brown; dry; (0,40,0,60)						6" Above Ground	
1410		CL	<b>SANDY CLAY</b> ; CL; black; medium plasticity; moist; angular; trace very fine sand; trace gravel; slight oil odor; (5,10,0,85)						Blank PVC	
1440		CL	<b>SANDY CLAY</b> ; CL; greenish gray; moist; medium to high plasticity; trace very fine sand; (0,3,0,97)						Grout	
1500		CL	<b>SANDY CLAY TRACE GRAVEL</b> ; CL; dark brown; medium plasticity; moist; (5,10,0,85)						Hydrated Bentonite	
1500		SM	<b>SILTY SAND</b> ; SM; light brown; wet; moderate petroleum odor; poorly sorted medium to fine; (0,90,10,0)						0.020" Slotted PVC	
1500			Hole terminated at 21 feet.						#3 Sand	
									Blank PVC	
									Hydrated Bentonite	
									Cap	

GEO FORM 304 BOHANNON-SAN LORENZO\_DP1-7.GPJ SECOR INTL\_GDT 5/7/07

**APPENDIX B**

**Laboratory Analytical Data Sheets**

Groundwater Monitoring and Remediation

Progress Report

575 Paseo Grande

San Lorenzo, California

SECOR PN: 05OT.50227.01.0002

April 23, 2007

**Engineering and Fire Investigations**

April 20, 2005

111 Deerwood Road, Ste 195  
San Ramon, CA 94583

Attn.: Chris Maxwell

Project: Bohannon

Dear Mr. Maxwell,

Attached is our report for your samples received on 04/13/2005 13:41

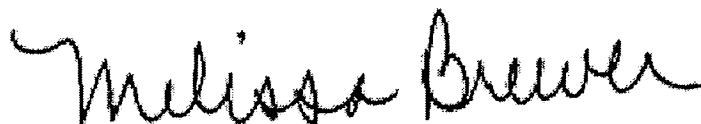
This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 05/28/2005 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions,

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

Sincerely,



Melissa Brewer  
Project Manager

**Dissolved Metals**

Engineering and Fire Investigations

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/13/2005 13:41

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
TREATED WATER	04/13/2005 12:30	Water	1

**Dissolved Metals**

Engineering and Fire Investigations

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/13/2005 13:41

---

Prep(s):	3005A 7470A	Test(s):	6010B 7470A
Sample ID:	<b>TREATED WATER</b>	Lab ID:	2005-04-0394 - 1
Sampled:	04/13/2005 12:30	Extracted:	4/19/2005 09:56 4/19/2005 15:55
Matrix:	Water	QC Batch#:	2005/04/19-01.16 2005/04/19-03.15

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Arsenic	0.0066	0.0050	mg/L	1.00	04/19/2005 18:57	
Cadmium	ND	0.0020	mg/L	1.00	04/19/2005 18:57	
Chromium	ND	0.0050	mg/L	1.00	04/19/2005 18:57	
Copper	ND	0.0050	mg/L	1.00	04/19/2005 18:57	
Lead	ND	0.0050	mg/L	1.00	04/19/2005 18:57	
Nickel	ND	0.0050	mg/L	1.00	04/19/2005 18:57	
Selenium	ND	0.0050	mg/L	1.00	04/19/2005 18:57	
Silver	ND	0.0050	mg/L	1.00	04/19/2005 18:57	
Zinc	0.068	0.010	mg/L	1.00	04/19/2005 18:57	
Mercury	ND	0.00020	mg/L	1.00	04/20/2005 08:52	

**Dissolved Metals**

Engineering and Fire Investigations

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/13/2005 13:41

---

**Batch QC Report**

---

Prep(s): 7470A

Test(s): 7470A

**Method Blank**

**Water**

**QC Batch # 2005/04/19-01.16**

MB: 2005/04/19-01.16-011

Date Extracted: 04/19/2005 09:56

Compound	Conc.	RL	Unit	Analyzed	Flag
Mercury	ND	0.0002	mg/L	04/20/2005 08:37	

**Dissolved Metals**

Engineering and Fire Investigations

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/13/2005 13:41

**Batch QC Report**

Prep(s): 3005A

Test(s): 6010B

**Method Blank**

**Water**

**QC Batch # 2005/04/19-03.15**

MB: 2005/04/19-03.15-001

Date Extracted: 04/19/2005 15:55

Compound	Conc.	RL	Unit	Analyzed	Flag
Arsenic	ND	0.0050	mg/L	04/19/2005 18:37	
Cadmium	ND	0.0020	mg/L	04/19/2005 18:37	
Chromium	ND	0.0050	mg/L	04/19/2005 18:37	
Copper	ND	0.0050	mg/L	04/19/2005 18:37	
Lead	ND	0.0050	mg/L	04/19/2005 18:37	
Nickel	ND	0.0050	mg/L	04/19/2005 18:37	
Selenium	ND	0.0050	mg/L	04/19/2005 18:37	
Silver	ND	0.0050	mg/L	04/19/2005 18:37	
Zinc	ND	0.010	mg/L	04/19/2005 18:37	

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

04/20/2005 12:15



**Dissolved Metals**

Engineering and Fire Investigations

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/13/2005 13:41

**Batch QC Report**

Prep(s): 7470A

Test(s): 7470A

**Laboratory Control Spike**

**Water**

**QC Batch # 2005/04/19-01.16**

LCS 2005/04/19-01.16-012

Extracted: 04/19/2005

Analyzed: 04/20/2005 08:38

LCSD 2005/04/19-01.16-013

Extracted: 04/19/2005

Analyzed: 04/20/2005 08:39

Compound	Conc. mg/L		Exp. Conc.	Recovery %		RPD	Ctrl. Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Mercury	0.0208	0.0206	0.0200	104.0	103.0	1.0	85-115	20		

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

04/20/2005 12:15

**Dissolved Metals**

Engineering and Fire Investigations

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/13/2005 13:41

**Batch QC Report**

Prep(s): 3005A

Test(s): 6010B

**Laboratory Control Spike**

**Water**

**QC Batch # 2005/04/19-03.15**

LCS 2005/04/19-03.15-002

Extracted: 04/19/2005

Analyzed: 04/19/2005 18:39

LCSD 2005/04/19-03.15-003

Extracted: 04/19/2005

Analyzed: 04/19/2005 18:43

Compound	Conc. mg/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Arsenic	0.450	0.458	0.500	90.0	91.6	1.8	80-120	20		
Cadmium	0.514	0.522	0.500	102.8	104.4	1.5	80-120	20		
Chromium	0.518	0.523	0.500	103.6	104.6	1.0	80-120	20		
Copper	0.517	0.522	0.500	103.4	104.4	1.0	80-120	20		
Lead	0.518	0.524	0.500	103.6	104.8	1.2	80-120	20		
Nickel	0.517	0.522	0.500	103.4	104.4	1.0	80-120	20		
Selenium	0.511	0.516	0.500	102.2	103.2	1.0	80-120	20		
Silver	0.511	0.515	0.500	102.2	103.0	0.8	80-120	20		
Zinc	0.514	0.517	0.500	102.8	103.4	0.6	80-120	20		

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

04/20/2005 12:15

**pH**

Engineering and Fire Investigations

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195

San Ramon, CA 94583

Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/13/2005 13:41

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
TREATED WATER	04/13/2005 12:30	Water	1

pH

Engineering and Fire Investigations

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/13/2005 13:41

---

Prep(s):	9040B/150.1	Test(s):	9040B/150.1
Sample ID:	<b>TREATED WATER</b>	Lab ID:	2005-04-0394 - 1
Sampled:	04/13/2005 12:30	Extracted:	4/13/2005 15:00
Matrix:	Water	QC Batch#:	2005/04/13-01.22

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
pH	8.7	0.1	SU	1.00	04/13/2005 15:00	

**pH**

Engineering and Fire Investigations

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/13/2005 13:41

---

**Batch QC Report**

---

Prep(s): 9040B/150.1

**Method Blank**

MB: 2005/04/13-01.22-001

**Water**

Test(s): 9040B/150.1

**QC Batch # 2005/04/13-01.22**

Date Extracted: 04/13/2005

Compound	Conc.	RL	Unit	Analyzed	Flag
pH	7.10	0.1	SU	04/13/2005	

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

Engineering and Fire Investigations

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195

San Ramon, CA 94583

Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/13/2005 13:41

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
TREATED WATER	04/13/2005 12:30	Water	1

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

04/20/2005 14:47

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

Engineering and Fire Investigations

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/13/2005 13:41

---

Prep(s):	5030	Test(s):	8015M
	5030		8021B
Sample ID:	<b>TREATED WATER</b>	Lab ID:	2005-04-0394 - 1
Sampled:	04/13/2005 12:30	Extracted:	4/18/2005 21:01
Matrix:	Water	QC Batch#:	2005/04/18-1A.05

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	04/18/2005 21:01	
Benzene	ND	0.50	ug/L	1.00	04/18/2005 21:01	
Toluene	ND	0.50	ug/L	1.00	04/18/2005 21:01	
Ethyl benzene	ND	0.50	ug/L	1.00	04/18/2005 21:01	
Xylene(s)	ND	0.50	ug/L	1.00	04/18/2005 21:01	
<b>Surrogate(s)</b>						
Trifluorotoluene	114.0	58-124	%	1.00	04/18/2005 21:01	
4-Bromofluorobenzene-FID	89.2	50-150	%	1.00	04/18/2005 21:01	

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

Engineering and Fire Investigations

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/13/2005 13:41

**Batch QC Report**

Prep(s): 5030  
5030

Test(s): 8015M  
8021B

**Method Blank**

**Water**

**QC Batch # 2005/04/18-1A.05**

MB: 2005/04/18-1A.05-003

Date Extracted: 04/18/2005 08:42

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	04/18/2005 08:42	
Benzene	ND	0.5	ug/L	04/18/2005 08:42	
Toluene	ND	0.5	ug/L	04/18/2005 08:42	
Ethyl benzene	ND	0.5	ug/L	04/18/2005 08:42	
Xylene(s)	ND	0.5	ug/L	04/18/2005 08:42	
<b>Surrogates(s)</b>					
Trifluorotoluene	106.0	58-124	%	04/18/2005 08:42	
4-Bromofluorobenzene-FID	95.2	50-150	%	04/18/2005 08:42	

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

04/20/2005 14:47



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

Engineering and Fire Investigations

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/13/2005 13:41

**Batch QC Report**

Prep(s): 5030

Test(s): 8021B

**Laboratory Control Spike**

**Water**

**QC Batch # 2005/04/18-1A.05**

LCS 2005/04/18-1A.05-004

Extracted: 04/18/2005

Analyzed: 04/18/2005 09:16

LCSD

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Benzene	53.9		50	107.8			77-123	20		
Toluene	55.2		50	110.4			78-122	20		
Ethyl benzene	55.1		50	110.2			70-130	20		
Xylene(s)	167		150	111.3			75-125	20		
<b>Surrogates(s)</b>										
Trifluorotoluene	570		500	114.0			58-124			

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

04/20/2005 14:47

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

Engineering and Fire Investigations

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/13/2005 13:41

**Batch QC Report**

Prep(s): 5030

Test(s): 8015M

**Laboratory Control Spike**

**Water**

**QC Batch # 2005/04/18-1A.05**

LCS 2005/04/18-1A.05-005

Extracted: 04/18/2005

Analyzed: 04/18/2005 09:49

LCSD

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Gasoline	247		250	98.8			75-125	20		
<b>Surrogates(s)</b> 4-Bromofluorobenzene-FID	482		500	96.4			50-150			

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

04/20/2005 14:47

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

Engineering and Fire Investigations

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/13/2005 13:41

**Batch QC Report**

Prep(s): 5030

Test(s): 8021B

**Matrix Spike ( MS / MSD )**

**Water**

**QC Batch # 2005/04/18-1A.05**

MS/MSD

Lab ID: 2005-04-0318 - 001

MS: 2005/04/18-1A.05-018

Extracted: 04/18/2005

Analyzed: 04/18/2005 17:41

Dilution: 1.00

MSD: 2005/04/18-1A.05-019

Extracted: 04/18/2005

Analyzed: 04/18/2005 18:14

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level ug/L	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Benzene	54.6	54.0	ND	50	109.2	108.0	1.1	65-135	20		
Toluene	55.0	55.5	ND	50	110.0	111.0	0.9	65-135	20		
Ethyl benzene	55.6	54.7	ND	50	111.2	109.4	1.6	65-135	20		
Xylene(s)	172	167	ND	150	114.7	111.3	3.0	65-135	20		
<b>Surrogate(s)</b>											
Trifluorotoluene	590	567		500	118.0	113.4		58-124			

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

Engineering and Fire Investigations

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/13/2005 13:41

**Batch QC Report**

Prep(s): 5030

Test(s): 8015M

**Matrix Spike ( MS / MSD )**

**Water**

**QC Batch # 2005/04/18-1A.05**

MS/MSD

Lab ID: 2005-04-0318 - 002

MS: 2005/04/18-1A.05-020

Extracted: 04/18/2005

Analyzed: 04/18/2005 18:48

Dilution: 1.00

MSD: 2005/04/18-1A.05-021

Extracted: 04/18/2005

Analyzed: 04/18/2005 19:21

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level ug/L	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Gasoline	202	221	ND	250	80.8	88.4	9.0	65-135	20		
<i>Surrogate(s)</i> 4-Bromofluorobenzene-FID	448	459		500	89.6	91.8		50-150			

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

04/20/2005 14:47

**TEPH w/ Silica Gel Clean-up**

Engineering and Fire Investigations

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/13/2005 13:41

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
TREATED WATER	04/13/2005 12:30	Water	1

**TEPH w/ Silica Gel Clean-up**

Engineering and Fire Investigations

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/13/2005 13:41

Prep(s): 3510/8015M	Test(s): 8015M
Sample ID: <b>TREATED WATER</b>	Lab ID: 2005-04-0394 - 1
Sampled: 04/13/2005 12:30	Extracted: 4/18/2005 08:41
Matrix: Water	QC Batch#: 2005/04/18-01.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	ND	50	ug/L	1.00	04/19/2005 11:25	
Motor Oil	ND	500	ug/L	1.00	04/19/2005 11:25	
<b>Surrogate(s)</b>						
o-Terphenyl	82.9	60-130	%	1.00	04/19/2005 11:25	

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

04/20/2005 16:19

**TEPH w/ Silica Gel Clean-up**

Engineering and Fire Investigations

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/13/2005 13:41

**Batch QC Report**

Prep(s): 3510/8015M

Test(s): 8015M

**Method Blank**

**Water**

**QC Batch # 2005/04/18-01.10**

MB: 2005/04/18-01.10-001

Date Extracted: 04/18/2005 08:41

Compound	Conc.	RL	Unit	Analyzed	Flag
Diesel	ND	50	ug/L	04/19/2005 09:11	
Motor Oil	ND	500	ug/L	04/19/2005 09:11	
<b>Surrogates(s)</b>					
o-Terphenyl	65.6	60-130	%	04/19/2005 09:11	

**TEPH w/ Silica Gel Clean-up**

Engineering and Fire Investigations

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/13/2005 13:41

**Batch QC Report**

Prep(s): 3510/8015M

Test(s): 8015M

**Laboratory Control Spike**

**Water**

**QC Batch # 2005/04/18-01.10**

LCS 2005/04/18-01.10-002

Extracted: 04/18/2005

Analyzed: 04/19/2005 09:37

LCSD 2005/04/18-01.10-003

Extracted: 04/18/2005

Analyzed: 04/19/2005 10:04

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Diesel	703	706	1000	70.3	70.6	0.4	60-130	25		
<i>Surrogates(s)</i> o-Terphenyl	16.0	15.9	20.0	79.8	79.6		60-130	0		



**Total Suspended Solids (TSS)**

Engineering and Fire Investigations

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195

San Ramon, CA 94583

Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/13/2005 13:41

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
TREATED WATER	04/13/2005 12:30	Water	1

**Total Suspended Solids (TSS)**

Engineering and Fire Investigations

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/13/2005 13:41

---

Prep(s):	160.2	Test(s):	160.2
Sample ID:	<b>TREATED WATER</b>	Lab ID:	2005-04-0394 - 1
Sampled:	04/13/2005 12:30	Extracted:	4/19/2005 07:51
Matrix:	Water	QC Batch#:	2005/04/19-01.29

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
TSS	ND	20	mg/L	1.00	04/19/2005 13:57	

**Total Suspended Solids (TSS)**

Engineering and Fire Investigations

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195

San Ramon, CA 94583

Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/13/2005 13:41

---

**Batch QC Report**

---

Prep(s): 160.2

Test(s): 160.2

Method Blank

Water

QC Batch # 2005/04/19-01.29

MB: 2005/04/19-01.29-004

Date Extracted: 04/19/2005 07:51

Compound	Conc.	RL	Unit	Analyzed	Flag
TSS	ND	20	mg/L	04/19/2005 13:46	

**Total Suspended Solids (TSS)**

Engineering and Fire Investigations

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/13/2005 13:41

**Batch QC Report**

Prep(s): 160.2

Test(s): 160.2

**Laboratory Control Spike**

**Water**

**QC Batch # 2005/04/19-01.29**

LCS 2005/04/19-01.29-005

Extracted: 04/19/2005

Analyzed: 04/19/2005 13:56

LCSD 2005/04/19-01.29-006

Extracted: 04/19/2005

Analyzed: 04/19/2005 13:47

Compound	Conc. mg/L		Exp. Conc.	Recovery %		RPD	Ctrl. Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
TSS	848	843	1000	84.8	84.3	0.6	80-120	20		

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

04/19/2005 19:51

STL Chicago  
2417 Bond Street  
University Park, IL 60466

Tel: 708 534 5200 Fax: 708 534 5211  
www.stl-inc.com

SEVERN TRENT LABORATORIES  
ANALYTICAL REPORT

JOB NUMBER: 235815

Prepared For:

Severn Trent Laboratories  
1220 Quarry Lane  
Pleasanton, CA 94566-4756

Project: STL San Francisco

Attention: Melissa Brewer

Date: 04/20/2005

*Bonnie M. Stadelmann*  
Signature

*4/20/05*  
Date

Name: Bonnie M. Stadelmann

Title: Project Manager

E-Mail: bstadelmann@stl-inc.com

STL Chicago  
2417 Bond Street  
University Park, IL 60466

PHONE: (708) 534-5200  
FAX.: (708) 534-5211

This Report Contains ( *8* ) Pages

STL Chicago is part of Severn Trent Laboratories, Inc.

SAMPLE INFORMATION  
Date: 04/20/2005

Job Number.: 235815  
Customer...: Severn Trent Laboratories  
Attn.....: Melissa Brewer

Project Number.....: 20002032  
Customer Project ID....: 2005-04-0394  
Project Description....: STL San Francisco

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
235815-1	TREATED WATER	Water	04/13/2005	12:30	04/15/2005	09:00

STL Chicago is part of Severn Trent Laboratories, Inc.

LABORATORY TEST RESULTS						
Job Number: 235815			Date: 04/20/2005			
CUSTOMER: Severn Trent Laboratories		PROJECT: 2005-04-0394		ATTN: Melissa Brewer		
Customer Sample ID: TREATED WATER Date Sampled.....: 04/13/2005 Time Sampled.....: 12:30 Sample Matrix.....: Water			Laboratory Sample ID: 235815-1 Date Received.....: 04/15/2005 Time Received.....: 09:00			
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
HACH 8000	Chemical Oxygen Demand (HACH) Chemical Oxygen Demand (COD)	8.5	5.0	mg/L	04/20/05	rnm
335.2	Cyanide, Total (Tit., Spec.) Cyanide, Total	<0.010	0.010	mg/L	04/18/05	mtb
420.2	Phenolics, Total Recoverable Phenolics, Total Recoverable	<0.0050	0.0050	mg/L	04/20/05	kd

\* In Description = Dry Wgt.

STL Chicago is part of Severn Trent Laboratories, Inc.

Job Number: 235815		LABORATORY CHRONICLE			Date: 04/20/2005	
CUSTOMER: Severn Trent Laboratories		PROJECT: 2005-04-0394			ATTN: Melissa Brewer	
Lab ID: 235815-1	Client ID: TREATED WATER	Date Recvd: 04/15/2005		Sample Date: 04/13/2005		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
HACH 8000	Chemical Oxygen Demand (HACH)	1	146696	146696	04/20/2005 1533	
335.2	Cyanide, Total (Tit., Spec.)	1	146493	146493	04/18/2005 1354	
PKG IND (WC)	PKG IND (WET CHEMISTRY)	1				
420.2	Phenolics, Total Recoverable	1	146701	146701	04/20/2005 1546	1



Job Number.: 235815

QUALITY CONTROL RESULTS

Report Date.: 04/20/2005

CUSTOMER: Severn Trent Laboratories

PROJECT: 2005-04-0394

ATTN: Melissa Brewer

Test Method: HACH 8000 Batch: 146696 Analyst: rmm  
 Method Description: Chemical Oxygen Demand (HACH) Equipment Code: Test Code: COD  
 Parameter: Chemical Oxygen Demand (COD)

QC	Lab ID	Reagent	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc. F	*	Limits	Date	Time
MB	146696-001		mg/L	3.60000	U						04/20/2005	1530
LCS	146696-002	I05DSTCD1A	mg/L	53.33000		50.00000	3.60000 U	107	%	80-120	04/20/2005	1531
MS	235815-1	I05DSTCD1A	mg/L	64.53000		50.00000	8.53000	112	%	75-125	04/20/2005	1534
MSD	235815-1	I05DSTCD1A	mg/L	43.20000	64.53000	50.00000	8.53000	69	N	75-125	04/20/2005	1535
								47.5	*	R 20		

Test Method: HACH 8000 Batch: 146696 Analyst: rmm  
 Method Description: Chemical Oxygen Demand (HACH) Equipment Code: Test Code: CODH  
 Parameter: Chemical Oxygen Demand (COD-HIGH)

QC	Lab ID	Reagent	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc. F	*	Limits	Date	Time
MB	146696-001		mg/L	8.79000							04/20/2005	1538
LCS	146696-008	I05DSTCD2A	mg/L	426.37000		500.00000	36.00000 U	85	%	80-120	04/20/2005	1539

Test Method: 335.2 Batch: 146493 Analyst: mtb  
 Method Description: Cyanide, Total (Tit. Spec.) Equipment Code: SPECA Test Code: CN  
 Parameter: Cyanide, Total

QC	Lab ID	Reagent	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc. F	*	Limits	Date	Time
MB	146493-004		mg/L	0.00180	U						04/18/2005	1351
LCS	146493-005	I05BSTCN2	mg/L	0.09160		0.10000	0.00180 U	92	%	80-120	04/18/2005	1352

Test Method: 420.2 Batch: 146701 Analyst: kd  
 Method Description: Phenolics, Total Recoverable Equipment Code: LACHAT1 Test Code: PHENTR  
 Parameter: Phenolics, Total Recoverable

QC	Lab ID	Reagent	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc. F	*	Limits	Date	Time
MB	146701-004		mg/L	0.00300	U						04/20/2005	1541
LCS	146701-005	I041STPE2	mg/L	0.09660		0.10000	0.00300 U	97	%	80-120	04/20/2005	1541

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 04/20/2005

REPORT COMMENTS

- 1) All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.
- 2) Soil, sediment and sludge sample results are reported on a "dry weight" basis except when analyzed for landfill disposal or incineration parameters. All other solid matrix samples are reported on an "as received" basis unless noted differently.
- 3) Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.
- 4) The test results for the noted analytical method(s) meet the requirements of NELAC. Lab Cert. ID# 100201
- 5) According to 40CFR Part 136.3, pH, Chlorine Residual and Dissolved Oxygen analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH Field) they were not analyzed immediately, but as soon as possible on laboratory receipt.

Glossary of flags, qualifiers and abbreviations (any number of which may appear in the report)

Inorganic Qualifiers (Q-Column)

- U Analyte was not detected at or above the stated limit.
- < Not detected at or above the reporting limit.
- J Result is less than the RL, but greater than or equal to the method detection limit.
- B Result is less than the CRDL/RL, but greater than or equal to the IDL/MDL.
- S Result was determined by the Method of Standard Additions.
- F AFCEE: Result is less than the RL, but greater than or equal to the method detection limit.

Inorganic Flags (Flag Column)

- ICV,CCV,ICB,CCB,ISA,ISB,CRI,CRA,MRL: Instrument related QC exceed the upper or lower control limits.
- \* LCS, LCD, MD: Batch QC exceeds the upper or lower control limits.
- + MSA correlation coefficient is less than 0.995.
- 4 MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
- E SD: Serial dilution exceeds the control limits.
- H MB, EB1, EB2, EB3: Batch QC is greater than reporting limit or had a negative instrument reading lower than the absolute value of the reporting limit.
- N MS, MSD: Spike recovery exceeds the upper or lower control limits.
- W AS(GFAA) Post-digestion spike was outside 85-115% control limits.

Organic Qualifiers (Q - Column)

- U Analyte was not detected at or above the stated limit.
- ND Compound not detected.
- J Result is an estimated value below the reporting limit or a tentatively identified compound (TIC).
- Q Result was qualitatively confirmed, but not quantified.
- C Pesticide identification was confirmed by GC/MS.
- Y The chromatographic response resembles a typical fuel pattern.
- Z The chromatographic response does not resemble a typical fuel pattern.
- E Result exceeded calibration range, secondary dilution required.
- F AFCEE:Result is an estimated value below the reporting limit or a tentatively identified compound (TIC)

Organic Flags (Flags Column)

- B MB: Batch QC is greater than reporting limit.
- \* LCS, LCD, ELC, ELD, CV, MS, MSD, Surrogate: Batch QC exceeds the upper or lower control limits.
- EB1, EB2, EB3, MLE: Batch QC is greater than reporting limit
- A Concentration exceeds the instrument calibration range
- a Concentration is below the method Reporting Limit (RL)
- B Compound was found in the blank and sample.
- D Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution will be flagged with a D.
- H Alternate peak selection upon analytical review
- I Indicates the presence of an interference, recovery is not calculated.
- M Manually integrated compound.
- P The lower of the two values is reported when the % difference between the results of two GC columns is

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 04/20/2005

greater than 25%.

Abbreviations

AS	Post Digestion Spike (GFAA Samples - See Note 1 below)
Batch	Designation given to identify a specific extraction, digestion, preparation set, or analysis set
CAP	Capillary Column CCB Continuing Calibration Blank
CCV	Continuing Calibration Verification
CF	Confirmation analysis of original
C1	Confirmation analysis of A1 or D1
C2	Confirmation analysis of A2 or D2
C3	Confirmation analysis of A3 or D3
CRA	Low Level Standard Check - GFAA; Mercury
CRI	Low Level Standard Check - ICP
CV	Calibration Verification Standard
Dil Fac	Dilution Factor - Secondary dilution analysis
D1	Dilution 1
D2	Dilution 2
D3	Dilution 3
DLFac	Detection Limit Factor
DSH	Distilled Standard - High Level
DSL	Distilled Standard - Low Level
DSM	Distilled Standard - Medium Level
EB1	Extraction Blank 1
EB2	Extraction Blank 2
EB3	D1 Blank
ELC	Method Extracted LCS
ELD	Method Extracted LCD
ICAL	Initial calibration
ICB	Initial Calibration Blank
ICV	Initial Calibration Verification
IDL	Instrument Detection Limit
ISA	Interference Check Sample A - ICAP
ISB	Interference Check Sample B - ICAP
Job No.	The first six digits of the sample ID which refers to a specific client, project and sample group Lab ID An 8 number unique laboratory identification
LCD	Laboratory Control Standard Duplicate
LCS	Laboratory Control Standard with reagent grade water or a matrix free from the analyte of interest
MB	Method Blank or (PB) Preparation Blank
MD	Method Duplicate
MDL	Method Detection Limit
MLE	Medium Level Extraction Blank
MRL	Method Reporting Limit Standard
MSA	Method of Standard Additions
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ND	Not Detected
PREPF	Preparation factor used by the Laboratory's Information Management System (LIMS)
PDS	Post Digestion Spike (ICAP)
RA	Re-analysis of original
A1	Re-analysis of D1
A2	Re-analysis of D2
A3	Re-analysis of D3
RD	Re-extraction of dilution
RE	Re-extraction of original
RC	Re-extraction Confirmation
RL	Reporting Limit
RPD	Relative Percent Difference of duplicate (unrounded) analyses
RRF	Relative Response Factor
RT	Retention Time

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 04/20/2005

RTW Retention Time Window Sample ID A 9 digit number unique for each sample, the first six digits are referred as the job number

SCB Seeded Control Blank

SD Serial Dilution (Calculated when sample concentration exceeds 50 times the MDL)

UCB Unseeded Control Blank

SSV Second Source Verification Standard

SLCS Solid Laboratory Control Standard(LCS)

PHC pH Calibration Check LCSP pH Laboratory Control Sample

LCDP pH Laboratory Control Sample Duplicate

MDPH pH Sample Duplicate

MDFP Flashpoint Sample Duplicate

LCFP Flashpoint LCS

G1 Gelex Check Standard Range 0-1

G2 Gelex Check Standard Range 1-10

G3 Gelex Check Standard Range 10-100

G4 Gelex Check Standard Range 100-1000

Note 1: The Post Spike Designation on Batch QC for GFAA is designated with an "S" added to the current abbreviation used. EX. LCS S=LCS Post Spike (GFAA); MSS=MS Post Spike (GFAA)

Note 2: The MD calculates an absolute difference (A) when the sample concentration is less than 5 times the reporting limit. The control limit is represented as +/- the RL.

235815



STL

Chain of Custody

Date Shipped: 4/14/2005

2005-04-0394 - 1

From: STL San Francisco (CL) 1220 Quarry Lane Pleasanton, CA 94566-4756

To: STL Chicago 2417 Bond Street University Park, IL 60466

Project Manager: Melissa Brewer
Phone: Ext:
Fax: (925) 484-1096
Email: mbrewer@stl-inc.com

Phone: (708) 534-5200 Ext:
Fax: (708) 534-5211
Contact: Bonnie Stadelmann
Phone: (708) 534-5200 Ext: 154

CL Submission #: 2005-04-0394
CL PO #:

Project #:
Project Name: Bohannon

Table with 4 columns: Description, Quantity, Date/Time, and Analyte/Result. Rows include TREATED WATER, Subcontract - COD, Subcontract - Cyanide-Total, and Subcontract - Phenolics.

PLEASE INCLUDE QC WITH FAXED AND HARD-COPY RESULTS

Due 4-20-05

RELINQUISHED BY: 1. Signature, Time 14:30, Printed Name Bryan Thomas, Date 4/14/05, Company STL-SF

RELINQUISHED BY: 2. Signature, Time, Printed Name, Date, Company

RELINQUISHED BY: 3. Signature, Time, Printed Name, Date, Company

RECEIVED BY: 1. Signature, Time 0900, Printed Name, Date 4/15/05, Company

RECEIVED BY: 2. Signature, Time, Printed Name, Date, Company

RECEIVED BY: 3. Signature, Time, Printed Name, Date, Company



## PERMIT CONDITIONS

### PART 5 Special Discharge - Groundwater Discharges

#### *Sampling Requirements*

<u>Parameter</u>	<u>O.L.S.D. Limit</u>
Arsenic	0.8 mg/L
Cadmium	0.2 mg/L
Copper	0.5 mg/L
Lead	1.0 mg/L
Mercury	0.01 mg/L
Nickel	1.0 mg/L
Selenium	1.0 mg/L
Silver	0.8 mg/L
Total Chromium	2.0 mg/l
Zinc	3.0 mg/L

#### *Additional Testing*

Total Petroleum Hydrocarbons (EPA 8015)	15 mg/L
B.T.E.X. (EPA 8020)	Non-detectable
Phenols	70 mg/L
Cyanide	1.0 mg/L

#### *General Analysis*

COD	N/A
Suspended Solids	N/A
pH	5.5 to 12.5 units





## PERMIT CONDITIONS

### PART 5 Special Discharge - Groundwater Discharges

#### *Sampling Requirements*

<u>Parameter</u>	<u>O.L.S.D. Limit</u>
Arsenic	0.8 mg/L
Cadmium	0.2 mg/L
Copper	0.5 mg/L
Lead	1.0 mg/L
Mercury	0.01 mg/L
Nickel	1.0 mg/L
Selenium	1.0 mg/L
Silver	0.8 mg/L
Total Chromium	2.0 mg/l
Zinc	3.0 mg/L

#### *Additional Testing*

Total Petroleum Hydrocarbons (EPA 8015)	15 mg/L
B.T.E.X. (EPA 8020)	Non-detectable
Phenols	70 mg/L
Cyanide	1.0 mg/L

#### *General Analysis*

COD	N/A
Suspended Solids	N/A
pH	5.5 to 12.5 units

Sample Receipt Checklist

Submission #: 2005- 04-0394

Checklist completed by: <u>MN</u>		DATE: <u>04/14/05</u>									
Courier: <input type="checkbox"/> STL SF	Courier <input type="checkbox"/> Fedex <input type="checkbox"/> UPS <input type="checkbox"/> Other		Client <input checked="" type="checkbox"/>								
Log-In Details		Yes	No								
1	Custody seals intact on shipping container/samples		<input checked="" type="checkbox"/>								
2	Chain of custody present?	<input checked="" type="checkbox"/>									
3	Chain of custody signed when relinquished and received?	<input checked="" type="checkbox"/>	<input type="checkbox"/> Picked-Up at Secure Location <input type="checkbox"/> Client signed-off at time prior to pick-up								
4	All samples checked when COC relinquished		<input checked="" type="checkbox"/>								
5	Chain of custody agrees with sample labels?	<input checked="" type="checkbox"/>									
6	Samples in proper container/bottle?	<input checked="" type="checkbox"/>									
7	Sample containers intact?	<input checked="" type="checkbox"/>									
8	Sufficient sample volume for indicated test?	<input checked="" type="checkbox"/>									
9	All samples received within holding time?	<input checked="" type="checkbox"/>									
Cooler Temperature Compliance Check											
Temperature Blank Reading If no trip blank is submitted individual temperatures must be taken as per SOP.		Cooler Sample Temperature <table border="1"> <tr> <th>#1</th> <th>#2</th> <th>#3</th> <th>Average</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </table>		#1	#2	#3	Average				
#1	#2	#3	Average								
Reason for Elevated Temperature <input type="checkbox"/> - Ice Melted <input type="checkbox"/> Insufficient Ice <input type="checkbox"/> <input type="checkbox"/> Samp. in boxes <input type="checkbox"/> Sampled < 4hr. <input type="checkbox"/> Ice not req.		Samples with Temp > 6°C - Comments									
VOA Sample Inspection											
Are bubbles present in any of the VOA vials?	Sample #	Small	Med.	Large	Samples with broken, cracked or leaking containers						
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
Water - pH acceptable upon receipt?	Yes	No	Samples with Unacceptable pH								
<input type="checkbox"/> pH adjusted- Preservative used: <input checked="" type="checkbox"/> HNO <sub>3</sub> <input type="checkbox"/> HCl <input checked="" type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> NaOH <input type="checkbox"/> ZnOAc -Lot #(s)	Comments: <u>METALS ALG051/0410405</u> <u>→ 405 TL/L 119040/140016</u>										
CLIENT WILL CALL IN WITH ADDITIONAL ANALYSIS. per client AS LAB FILTERS AND PRES. FOR METALS											
Project Management [Routing for instruction of indicated discrepancy(ies)]											
Project Manager: (initials) <u>AS</u>		Date: <u>4 / 14 / 05</u>		Client contacted: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>							
Summary of discussion: <u>per client they need phenolics and</u>											
Corrective Action (per PM/Client): <u>soluble metals.</u>											

**EFI Global**

May 04, 2005

111 Deerwood Road, Ste 195  
San Ramon, CA 94583

Attn.: Chris Maxwell

Project: Bohannon

Dear Mr. Maxwell,

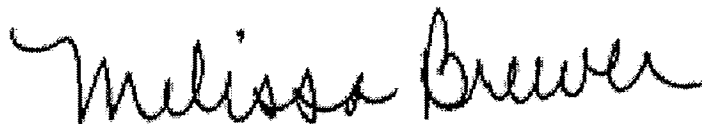
Attached is our report for your samples received on 04/29/2005 16:40  
This report has been reviewed and approved for release. Reproduction of this report  
is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after  
06/13/2005 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions,

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

Sincerely,



Melissa Brewer  
Project Manager

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

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195

San Ramon, CA 94583

Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/29/2005 16:40

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
BOHANNON 4/29/05	04/29/2005 07:30	Water	3

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

05/04/2005 11:17

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

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/29/2005 16:40

---

Prep(s):	5030	Test(s):	8015M
	5030		8021B
Sample ID:	<b>BOHANNON 4/29/05</b>	Lab ID:	2005-04-0888 - 3
Sampled:	04/29/2005 07:30	Extracted:	5/2/2005 11:49
Matrix:	Water	QC Batch#:	2005/05/02-01.05
Analysis Flag: L2 ( See Legend and Note Section )			

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	5500	500	ug/L	10.00	05/02/2005 11:49	
Benzene	370	5.0	ug/L	10.00	05/02/2005 11:49	
Toluene	15	5.0	ug/L	10.00	05/02/2005 11:49	
Ethyl benzene	88	5.0	ug/L	10.00	05/02/2005 11:49	
Xylene(s)	210	5.0	ug/L	10.00	05/02/2005 11:49	
<b>Surrogate(s)</b>						
Trifluorotoluene	109.5	58-124	%	10.00	05/02/2005 11:49	
4-Bromofluorobenzene-FID	98.6	50-150	%	10.00	05/02/2005 11:49	

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

05/04/2005 11:17

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

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/29/2005 16:40

---

**Batch QC Report**

---

Prep(s): 5030  
5030

Test(s): 8015M  
8021B

**Method Blank**

**Water**

**QC Batch # 2005/05/02-01.05**

MB: 2005/05/02-01.05-004

Date Extracted: 05/02/2005 09:52

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	05/02/2005 09:52	
Benzene	ND	0.5	ug/L	05/02/2005 09:52	
Toluene	ND	0.5	ug/L	05/02/2005 09:52	
Ethyl benzene	ND	0.5	ug/L	05/02/2005 09:52	
Xylene(s)	ND	0.5	ug/L	05/02/2005 09:52	
<b>Surrogates(s)</b>					
Trifluorotoluene	101.8	58-124	%	05/02/2005 09:52	
4-Bromofluorobenzene-FID	90.2	50-150	%	05/02/2005 09:52	

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

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/29/2005 16:40

**Batch QC Report**

Prep(s): 5030

Test(s): 8021B

**Laboratory Control Spike**

**Water**

**QC Batch # 2005/05/02-01.05**

LCS 2005/05/02-01.05-005

Extracted: 05/02/2005

Analyzed: 05/02/2005 10:25

LCSD

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Benzene	49.6		50.0	99.2			77-123	20		
Toluene	50.7		50.0	101.4			78-122	20		
Ethyl benzene	51.0		50.0	102.0			70-130	20		
Xylene(s)	154		150	102.7			75-125	20		
<b>Surrogates(s)</b>										
Trifluorotoluene	516		500	103.2			58-124	0		

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

05/04/2005 11:17

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

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/29/2005 16:40

**Batch QC Report**

Prep(s): 5030

Test(s): 8015M

**Laboratory Control Spike**

**Water**

**QC Batch # 2005/05/02-01.05**

LCS 2005/05/02-01.05-006  
LCSD

Extracted: 05/02/2005

Analyzed: 05/02/2005 10:59

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Gasoline	230		250	92.0			75-125	20		
<b>Surrogates(s)</b> 4-Bromofluorobenzene-FID	465		500	93.0			50-150			

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

05/04/2005 11:17



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

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/29/2005 16:40

**Batch QC Report**

Prep(s): 5030

Test(s): 8021B

**Matrix Spike ( MS / MSD )**

**Water**

**QC Batch # 2005/05/02-01.05**

MS/MSD

Lab ID: 2005-04-0876 - 008

MS: 2005/05/02-01.05-031

Extracted: 05/03/2005

Analyzed: 05/03/2005 01:27

Dilution: 1.00

MSD: 2005/05/02-01.05-032

Extracted: 05/03/2005

Analyzed: 05/03/2005 02:00

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level ug/L	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Benzene	49.1	48.6	ND	50.0	98.2	97.2	1.0	65-135	20		
Toluene	50.5	50.1	ND	50.0	101.0	100.2	0.8	65-135	20		
Ethyl benzene	50.0	49.5	ND	50.0	100.0	99.0	1.0	65-135	20		
Xylene(s)	153	151	ND	150	102.0	100.7	1.3	65-135	20		
<b>Surrogate(s)</b>											
Trifluorotoluene	502	494		500	100.4	98.8		58-124			

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

05/04/2005 11:17

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

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/29/2005 16:40

**Batch QC Report**

Prep(s): 5030

Test(s): 8015M

**Matrix Spike ( MS / MSD )**

**Water**

**QC Batch # 2005/05/02-01.05**

MS/MSD

Lab ID: 2005-04-0876 - 009

MS: 2005/05/02-01.05-033

Extracted: 05/03/2005

Analyzed: 05/03/2005 02:34

Dilution: 1.00

MSD: 2005/05/02-01.05-034

Extracted: 05/03/2005

Analyzed: 05/03/2005 03:07

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level	Recovery %			Limits %		Flags	
	MS	MSD	Sample		ug/L	MS	MSD	RPD	Rec.	RPD	MS
Gasoline	216	226	ND	250	86.4	90.4	4.5	65-135	20		
<b>Surrogate(s)</b>											
4-Bromofluorobenzene-FID	489	483		500	97.8	96.6		50-150			

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

05/04/2005 11:17

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

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195

San Ramon, CA 94583

Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 04/29/2005 16:40

---

**Legend and Notes**

---

**Analysis Flag**

L2

Reporting limits were raised due to high level of analyte present  
in the sample.

**Gas/BTEX Fuel Oxygenates by 8260B**

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195

San Ramon, CA 94583

Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohanna

Received: 04/29/2005 16:40

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
BOHANNON#1	04/27/2005 11:30	Air	1
BOHANNON#2	04/29/2005 07:30	Air	2

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

05/02/2005 14:56

**Gas/BTEX Fuel Oxygenates by 8260B**

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohanna

Received: 04/29/2005 16:40

---

Prep(s):	5030B	Test(s):	8260B
Sample ID:	<b>BOHANNON#1</b>	Lab ID:	2005-04-0888 - 1
Sampled:	04/27/2005 11:30	Extracted:	4/30/2005 10:06
Matrix:	Air	QC Batch#:	2005/04/30-1A.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	340	50	ug/L	1.00	04/30/2005 10:06	
Benzene	3.0	1.0	ug/L	1.00	04/30/2005 10:06	
Toluene	ND	1.0	ug/L	1.00	04/30/2005 10:06	
Ethylbenzene	2.7	1.0	ug/L	1.00	04/30/2005 10:06	
Total xylenes	4.5	1.0	ug/L	1.00	04/30/2005 10:06	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	120.1	72-128	%	1.00	04/30/2005 10:06	
Toluene-d8	101.8	80-113	%	1.00	04/30/2005 10:06	

**Gas/BTEX Fuel Oxygenates by 8260B**

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohanna

Received: 04/29/2005 16:40

Prep(s):	5030B	Test(s):	8260B
Sample ID:	<b>BOHANNON#2</b>	Lab ID:	2005-04-0888 - 2
Sampled:	04/29/2005 07:30	Extracted:	4/30/2005 10:26
Matrix:	Air	QC Batch#:	2005/04/30-1A.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	1600	50	ug/L	1.00	04/30/2005 10:26	
Benzene	11	1.0	ug/L	1.00	04/30/2005 10:26	
Toluene	2.2	1.0	ug/L	1.00	04/30/2005 10:26	
Ethylbenzene	22	1.0	ug/L	1.00	04/30/2005 10:26	
Total xylenes	40	1.0	ug/L	1.00	04/30/2005 10:26	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	103.8	72-128	%	1.00	04/30/2005 10:26	
Toluene-d8	91.3	80-113	%	1.00	04/30/2005 10:26	

**Gas/BTEX Fuel Oxygenates by 8260B**

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohanna

Received: 04/29/2005 16:40

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Method Blank**

**Water**

**QC Batch # 2005/04/30-1A.69**

MB: 2005/04/30-1A.69-035

Date Extracted: 04/30/2005 09:35

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	04/30/2005 09:35	
Benzene	ND	0.5	ug/L	04/30/2005 09:35	
Toluene	ND	0.5	ug/L	04/30/2005 09:35	
Ethylbenzene	ND	0.5	ug/L	04/30/2005 09:35	
Total xylenes	ND	1.0	ug/L	04/30/2005 09:35	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	96.2	73-130	%	04/30/2005 09:35	
Toluene-d8	110.6	81-114	%	04/30/2005 09:35	

**Gas/BTEX Fuel Oxygenates by 8260B**

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohanna

Received: 04/29/2005 16:40

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Laboratory Control Spike**

**Water**

**QC Batch # 2005/04/30-1A.69**

LCS 2005/04/30-1A.69-056

Extracted: 04/30/2005

Analyzed: 04/30/2005 08:56

LCSD

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Benzene	26.2		25	104.8			69-129	20		
Toluene	29.5		25	118.0			70-130	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	448		500	89.6			73-130			
Toluene-d8	466		500	93.2			81-114			

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

05/02/2005 14:56



**Gas/BTEX Fuel Oxygenates by 8260B**

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohanna

Received: 04/29/2005 16:40

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Matrix Spike ( MS / MSD )**

**Water**

**QC Batch # 2005/04/30-1A.69**

MS/MSD

Lab ID: 2005-04-0571 - 001

MS: 2005/04/30-1A.69-005

Extracted: 04/30/2005

Analyzed: 04/30/2005 12:05

Dilution: 1.00

MSD: 2005/04/30-1A.69-025

Extracted: 04/30/2005

Analyzed: 04/30/2005 12:25

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level ug/L	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Benzene	28.6	29.5	ND	25	114.4	118.0	3.1	69-129	20		
Toluene	28.3	30.2	ND	25	113.2	120.8	6.5	70-130	20		
<b>Surrogate(s)</b>											
1,2-Dichloroethane-d4	448	487		500	89.6	97.4		73-130			
Toluene-d8	493	527		500	98.6	105.4		81-114			

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

05/02/2005 14:56

**2005-04-0888**

Report To						Analysis Request																		Number of Containers		
Attn:	Company:	Address:	Phone:	Email:	Sampled By:	TPH EPA - 80158021 <input type="checkbox"/> 8260B	Purgeable Aromatics	TEPH EPA 801.5M* <input type="checkbox"/> Silica Gel	Fuel Tests EPA 8260B: <input type="checkbox"/> Gas <input type="checkbox"/> BTEX	Purgeable Halocarbons (HVOCS) EPA 8021 by 8260B	Volatile Organics GC/MS (VOCs) <input type="checkbox"/> EPA 8260B <input type="checkbox"/> 624	Semivolatiles GC/MS <input type="checkbox"/> EPA 8270 <input type="checkbox"/> 625	Oil and Grease <input type="checkbox"/> Petroleum (EPA 1664) <input type="checkbox"/> Total	Pesticides <input type="checkbox"/> EPA 8081 <input type="checkbox"/> 608	PCBs <input type="checkbox"/> EPA 8082 <input type="checkbox"/> 608	PNAs by <input type="checkbox"/> 8270 <input type="checkbox"/> 8310	CAM17 Metals (EPA 601074707471)	Metals: <input type="checkbox"/> Lead <input type="checkbox"/> LUFT <input type="checkbox"/> RCRA <input type="checkbox"/> Other:	Low Level Metals by EPA 200.86020 (ICP-MS):	W.E.T (STLC) <input type="checkbox"/> TCLP	Hexavalent Chromium pH (24h hold time for H <sub>2</sub> O) <input type="checkbox"/> <input type="checkbox"/>	Spec Cond. <input type="checkbox"/> Alkalinity <input type="checkbox"/> TDS <input type="checkbox"/>	Antions: <input type="checkbox"/> Cl <input type="checkbox"/> SO <sub>4</sub> <input type="checkbox"/> NO <sub>3</sub> <input type="checkbox"/> F <input type="checkbox"/> Br <input type="checkbox"/> NO <sub>2</sub> <input type="checkbox"/> PO <sub>4</sub>			
Sample ID	Date	Time	Mat rix	Pres erv.																						
Bonhann #1	4/29/05	1130	Gas	-	X																					1
Bonhann #2	4/29/05	0700	Gas	-	X																					1
Bonhann	4/29/05	0730	H <sub>2</sub> O	101	X																					3

Project Info.		Sample Receipt	
Project Name: <u>Bonhann</u>	# of Containers: <u>5</u>		
Project#:	Head Space:		
PO#:	Temp: <u>20°C</u>		
Credit Card#:	Conforms to record:		

1) Relinquished by:  
Chris Maxwell  
Signature \_\_\_\_\_ Time \_\_\_\_\_  
Printed Name Chris Maxwell Date 4/29/05  
Company EFI 1640

2) Relinquished by:  
Signature \_\_\_\_\_ Time \_\_\_\_\_  
Printed Name \_\_\_\_\_ Date \_\_\_\_\_  
Company \_\_\_\_\_

3) Relinquished by:  
Signature \_\_\_\_\_ Time \_\_\_\_\_  
Printed Name \_\_\_\_\_ Date \_\_\_\_\_  
Company \_\_\_\_\_

T A T	<u>5</u> Day	72h	48h	24h	Other:
Report: <input type="checkbox"/> Routine <input type="checkbox"/> Level 3 <input type="checkbox"/> Level 4 <input type="checkbox"/> EDD <input type="checkbox"/> State Tank Fund EDF <input type="checkbox"/> Global ID _____					
Special Instructions / Comments:					

1) Received by:  
Sam Bull 16:40  
Signature \_\_\_\_\_ Time \_\_\_\_\_  
Printed Name T. Bull Date 4/29/05  
Company STL-SF

2) Received by:  
Signature \_\_\_\_\_ Time \_\_\_\_\_  
Printed Name \_\_\_\_\_ Date \_\_\_\_\_  
Company \_\_\_\_\_

3) Received by:  
Signature \_\_\_\_\_ Time \_\_\_\_\_  
Printed Name \_\_\_\_\_ Date \_\_\_\_\_  
Company \_\_\_\_\_

Sample Receipt Checklist

Submission #: 2005- 04-0888

Checklist completed by: <u>SJA</u>	DATE: <u>4/30/05</u>
Courier: <input type="checkbox"/> STL SF	Courier <input type="checkbox"/> Fedex <input type="checkbox"/> UPS <input type="checkbox"/> Other
Client <input checked="" type="checkbox"/>	

Log-In Details		Yes	No	Comments
1	Custody seals intact on shipping container/samples		<input checked="" type="checkbox"/>	
2	Chain of custody present?	<input checked="" type="checkbox"/>		
3	Chain of custody signed when relinquished and received?	<input checked="" type="checkbox"/>		<input type="checkbox"/> Picked-Up at Secure Location <input type="checkbox"/> Client signed-off at time prior to pick-up
4	All samples checked when COC relinquished		<input checked="" type="checkbox"/>	
5	Chain of custody agrees with sample labels?	<input checked="" type="checkbox"/>		
6	Samples in proper container/bottle?	<input checked="" type="checkbox"/>		
7	Sample containers intact?	<input checked="" type="checkbox"/>		
8	Sufficient sample volume for indicated test?	<input checked="" type="checkbox"/>		
9	All samples received within holding time?	<input checked="" type="checkbox"/>		

Cooler Temperature Compliance Check

Temperature Blank Reading	If no trip blank is submitted individual temperatures must be taken as per SOP.	Cooler Sample Temperature			
		#1	#2	#3	Average
		<u>20</u>	<u>20</u>	<u>20</u>	<u>20</u>

AIR & WATER

Reason for Elevated Temperature:	Samples with Temp > 6°C - Comments
<input type="checkbox"/> - Ice Melted <input checked="" type="checkbox"/> Insufficient Ice <u>WATER</u>	
<input type="checkbox"/> Samp. in boxes <input type="checkbox"/> Sampled < 4 hr. <input checked="" type="checkbox"/> Ice not req. <u>AIR</u>	

VOA Sample Inspection

Are bubbles present in any of the VOA vials?	VOA Sample Inspection			Samples with broken, cracked or leaking containers
	Small	Med.	Large	
Sample #	<u>0</u>	<u>0</u>	<u>0</u>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Samples with Unacceptable pH
-------------------------------------	------------------------------	-----------------------------	------------------------------

pH adjusted- Preservative used:  HNO<sub>3</sub>  HCl  H<sub>2</sub>SO<sub>4</sub>  NaOH  ZnOAc -Lot #(s) \_\_\_\_\_

Comments:

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

Project Manager: (initials) \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/05 Client contacted: Yes  No

Summary of discussion:

Corrective Action (per PM/Client): \_\_\_\_\_

**EFI Global**

May 09, 2005

111 Deerwood Road, Ste 195  
San Ramon, CA 94583

Attn.: Chris Maxwell

Project: Bohannon

Dear Mr. Maxwell,

Attached is our report for your samples received on 05/02/2005 15:50

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 06/16/2005 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions,

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

Sincerely,



Melissa Brewer  
Project Manager

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](http://www.stl-inc.com) \* CA DHS ELAP# 2496

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

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 05/02/2005 15:50

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
BOHANNON #3	04/30/2005 12:15	Air	1
BOHANNON #4	05/01/2005 08:30	Air	2

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

05/06/2005 16:52

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

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 05/02/2005 15:50

Prep(s):	5030 5030	Test(s):	8015M 8021B
Sample ID:	<b>BOHANNON #3</b>	Lab ID:	2005-05-0030 - 1
Sampled:	04/30/2005 12:15	Extracted:	5/3/2005 00:20
Matrix:	Air	QC Batch#:	2005/05/02-01.05

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	460	50	ug/L	1.00	05/03/2005 00:20	Q1
Benzene	ND	0.50	ug/L	1.00	05/03/2005 00:20	
Toluene	ND	0.50	ug/L	1.00	05/03/2005 00:20	
Ethyl benzene	2.6	0.50	ug/L	1.00	05/03/2005 00:20	
Xylene(s)	3.9	0.50	ug/L	1.00	05/03/2005 00:20	
<b>Surrogate(s)</b>						
Trifluorotoluene	93.3	58-124	%	1.00	05/03/2005 00:20	
4-Bromofluorobenzene-FID	127.0	50-150	%	1.00	05/03/2005 00:20	

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

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 05/02/2005 15:50

Prep(s):	5030 5030	Test(s):	8015M 8021B
Sample ID:	<b>BOHANNON #4</b>	Lab ID:	2005-05-0030 - 2
Sampled:	05/01/2005 08:30	Extracted:	5/3/2005 00:53
Matrix:	Air	QC Batch#:	2005/05/02-01.05

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	400	50	ug/L	1.00	05/03/2005 00:53	Q1
Benzene	ND	0.50	ug/L	1.00	05/03/2005 00:53	
Toluene	ND	0.50	ug/L	1.00	05/03/2005 00:53	
Ethyl benzene	2.2	0.50	ug/L	1.00	05/03/2005 00:53	
Xylene(s)	4.1	0.50	ug/L	1.00	05/03/2005 00:53	
<b>Surrogate(s)</b>						
Trifluorotoluene	88.2	58-124	%	1.00	05/03/2005 00:53	
4-Bromofluorobenzene-FID	129.7	50-150	%	1.00	05/03/2005 00:53	

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

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 05/02/2005 15:50

**Batch QC Report**

Prep(s): 5030  
5030

Test(s): 8015M  
8021B

Method Blank

Water

QC Batch # 2005/05/02-01.05

MB: 2005/05/02-01.05-004

Date Extracted: 05/02/2005 09:52

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	05/02/2005 09:52	
Benzene	ND	0.5	ug/L	05/02/2005 09:52	
Toluene	ND	0.5	ug/L	05/02/2005 09:52	
Ethyl benzene	ND	0.5	ug/L	05/02/2005 09:52	
Xylene(s)	ND	0.5	ug/L	05/02/2005 09:52	
<b>Surrogates(s)</b>					
Trifluorotoluene	101.8	58-124	%	05/02/2005 09:52	
4-Bromofluorobenzene-FID	90.2	50-150	%	05/02/2005 09:52	



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

EFI Global  
Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 05/02/2005 15:50

**Batch QC Report**

Prep(s): 5030

Test(s): 8021B

**Laboratory Control Spike**

**Water**

**QC Batch # 2005/05/02-01.05**

LCS 2005/05/02-01.05-005

Extracted: 05/02/2005

Analyzed: 05/02/2005 10:25

LCSD

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Benzene	49.6		50.0	99.2			77-123	20		
Toluene	50.7		50.0	101.4			78-122	20		
Ethyl benzene	51.0		50.0	102.0			70-130	20		
Xylene(s)	154		150	102.7			75-125	20		
<b>Surrogates(s)</b>										
Trifluorotoluene	516		500	103.2			58-124	0		

Severn Trent Laboratories, Inc.

05/06/2005 16:52

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

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

EFI Global  
Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 05/02/2005 15:50

**Batch QC Report**

Prep(s): 5030

Test(s): 8015M

**Laboratory Control Spike**

**Water**

**QC Batch # 2005/05/02-01.05**

LCS 2005/05/02-01.05-006

Extracted: 05/02/2005

Analyzed: 05/02/2005 10:59

LCSD

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Gasoline	230		250	92.0			75-125	20		
<b>Surrogates(s)</b>										
4-Bromofluorobenzene-FID	465		500	93.0			50-150			

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

05/06/2005 16:52

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

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 05/02/2005 15:50

**Batch QC Report**

Prep(s): 5030

Test(s): 8021B

**Matrix Spike ( MS / MSD )**

**Water**

**QC Batch # 2005/05/02-01.05**

MS/MSD

Lab ID: 2005-04-0876 - 008

MS: 2005/05/02-01.05-031

Extracted: 05/03/2005

Analyzed: 05/03/2005 01:27

Dilution: 1.00

MSD: 2005/05/02-01.05-032

Extracted: 05/03/2005

Analyzed: 05/03/2005 02:00

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level ug/L	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Benzene	49.1	48.6	ND	50.0	98.2	97.2	1.0	65-135	20		
Toluene	50.5	50.1	ND	50.0	101.0	100.2	0.8	65-135	20		
Ethyl benzene	50.0	49.5	ND	50.0	100.0	99.0	1.0	65-135	20		
Xylene(s)	153	151	ND	150	102.0	100.7	1.3	65-135	20		
<b>Surrogate(s)</b>											
Trifluorotoluene	502	494		500	100.4	98.8		58-124			

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

05/06/2005 16:52

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

EFI Global  
Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 05/02/2005 15:50

**Batch QC Report**

Prep(s): 5030

Test(s): 8015M

**Matrix Spike ( MS / MSD )**

**Water**

**QC Batch # 2005/05/02-01.05**

MS/MSD

Lab ID: 2005-04-0876 - 009

MS: 2005/05/02-01.05-033

Extracted: 05/03/2005

Analyzed: 05/03/2005 02:34

Dilution: 1.00

MSD: 2005/05/02-01.05-034

Extracted: 05/03/2005

Analyzed: 05/03/2005 03:07

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level ug/L	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Gasoline	216	226	ND	250	86.4	90.4	4.5	65-135	20		
<i>Surrogate(s)</i> 4-Bromofluorobenzene-FID	489	483		500	97.8	96.6		50-150			

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

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195

San Ramon, CA 94583

Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 05/02/2005 15:50

---

**Legend and Notes**

---

**Result Flag**

Q1

Quantit. of unknown hydrocarbon(s) in sample based on gasoline.

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

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195

San Ramon, CA 94583

Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 05/02/2005 15:50

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
BOHANNON 5/1/05	05/01/2005 08:30	Water	3
BOHANNON OLSD	05/01/2005 08:45	Water	4

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

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 05/02/2005 15:50

Prep(s):	5030	Test(s):	8015M
	5030		8021B
Sample ID:	<b>BOHANNON 5/1/05</b>	Lab ID:	2005-05-0030 - 3
Sampled:	05/01/2005 08:30	Extracted:	5/6/2005 13:52
Matrix:	Water	QC Batch#:	2005/05/06-1A.05
Analysis Flag: L2 ( See Legend and Note Section )			

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	13000	2500	ug/L	50.00	05/06/2005 13:52	
Benzene	360	25	ug/L	50.00	05/06/2005 13:52	
Toluene	52	25	ug/L	50.00	05/06/2005 13:52	
Ethyl benzene	150	25	ug/L	50.00	05/06/2005 13:52	
Xylene(s)	580	25	ug/L	50.00	05/06/2005 13:52	
<b>Surrogate(s)</b>						
Trifluorotoluene	115.4	58-124	%	50.00	05/06/2005 13:52	
4-Bromofluorobenzene-FID	85.7	50-150	%	50.00	05/06/2005 13:52	

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

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 05/02/2005 15:50

Prep(s):	5030 5030	Test(s):	8015M 8021B
Sample ID:	<b>BOHANNON OLSD</b>	Lab ID:	2005-05-0030 - 4
Sampled:	05/01/2005 08:45	Extracted:	5/3/2005 19:38
Matrix:	Water	QC Batch#:	2005/05/03-01.05

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	05/03/2005 19:38	
Benzene	ND	0.50	ug/L	1.00	05/03/2005 19:38	
Toluene	ND	0.50	ug/L	1.00	05/03/2005 19:38	
Ethyl benzene	ND	0.50	ug/L	1.00	05/03/2005 19:38	
Xylene(s)	ND	0.50	ug/L	1.00	05/03/2005 19:38	
<b>Surrogate(s)</b>						
Trifluorotoluene	108.3	58-124	%	1.00	05/03/2005 19:38	
4-Bromofluorobenzene-FID	94.7	50-150	%	1.00	05/03/2005 19:38	



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

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 05/02/2005 15:50

**Batch QC Report**

Prep(s): 5030  
5030

Test(s): 8015M  
8021B

**Method Blank**

**Water**

**QC Batch # 2005/05/03-01.05**

MB: 2005/05/03-01.05-003

Date Extracted: 05/03/2005 08:44

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	05/03/2005 08:44	
Benzene	ND	0.5	ug/L	05/03/2005 08:44	
Toluene	ND	0.5	ug/L	05/03/2005 08:44	
Ethyl benzene	ND	0.5	ug/L	05/03/2005 08:44	
Xylene(s)	ND	0.5	ug/L	05/03/2005 08:44	
<b>Surrogates(s)</b>					
Trifluorotoluene	103.0	58-124	%	05/03/2005 08:44	
4-Bromofluorobenzene-FID	95.9	50-150	%	05/03/2005 08:44	

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

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 05/02/2005 15:50

**Batch QC Report**

Prep(s): 5030  
5030

Test(s): 8015M  
8021B

**Method Blank**

**Water**

**QC Batch # 2005/05/06-1A.05**

MB: 2005/05/06-1A.05-007

Date Extracted: 05/06/2005 11:21

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	05/06/2005 11:21	
Benzene	ND	0.5	ug/L	05/06/2005 11:21	
Toluene	ND	0.5	ug/L	05/06/2005 11:21	
Ethyl benzene	ND	0.5	ug/L	05/06/2005 11:21	
Xylene(s)	ND	0.5	ug/L	05/06/2005 11:21	
<b>Surrogates(s)</b>					
Trifluorotoluene	116.4	58-124	%	05/06/2005 11:21	
4-Bromofluorobenzene-FID	82.0	50-150	%	05/06/2005 11:21	

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

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 05/02/2005 15:50

**Batch QC Report**

Prep(s): 5030

Test(s): 8021B

**Laboratory Control Spike**

**Water**

**QC Batch # 2005/05/03-01.05**

LCS 2005/05/03-01.05-004

Extracted: 05/03/2005

Analyzed: 05/03/2005 09:18

LCSD

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Benzene	48.4		50.0	96.8			77-123	20		
Toluene	51.3		50.0	102.6			78-122	20		
Ethyl benzene	53.8		50.0	107.6			70-130	20		
Xylene(s)	163		150	108.7			75-125	20		
<b>Surrogates(s)</b>										
Trifluorotoluene	541		500	108.2			58-124			

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

05/09/2005 13:24

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

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 05/02/2005 15:50

**Batch QC Report**

Prep(s): 5030

Test(s): 8015M

**Laboratory Control Spike**

**Water**

**QC Batch # 2005/05/03-01.05**

LCS 2005/05/03-01.05-005

Extracted: 05/03/2005

Analyzed: 05/03/2005 09:51

LCSD

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Gasoline	242		250	96.8			75-125	20		
<b>Surrogates(s)</b>										
4-Bromofluorobenzene-FID	502		500	100.4			50-150			

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

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 05/02/2005 15:50

**Batch QC Report**

Prep(s): 5030

Test(s): 8021B

**Laboratory Control Spike**

**Water**

**QC Batch # 2005/05/06-1A.05**

LCS 2005/05/06-1A.05-004

Extracted: 05/06/2005

Analyzed: 05/06/2005 09:18

LCSD

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Benzene	55.4		50	110.8			77-123	20		
Toluene	53.0		50	106.0			78-122	20		
Ethyl benzene	51.6		50	103.2			70-130	20		
Xylene(s)	155		150	103.3			75-125	20		
<b>Surrogates(s)</b>										
Trifluorotoluene	557		500	111.4			58-124			

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

05/09/2005 13:24

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

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 05/02/2005 15:50

**Batch QC Report**

Prep(s): 5030

Test(s): 8015M

**Laboratory Control Spike**

**Water**

**QC Batch # 2005/05/06-1A.05**

LCS 2005/05/06-1A.05-008

Extracted: 05/06/2005

Analyzed: 05/06/2005 11:54

LCSD

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Gasoline	242		250	96.8			75-125	20		
<b>Surrogates(s)</b>										
4-Bromofluorobenzene-FID	413		500	82.6			50-150			

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

05/09/2005 13:24

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

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 05/02/2005 15:50

**Batch QC Report**

Prep(s): 5030

Test(s): 8021B

**Matrix Spike ( MS / MSD )**

**Water**

**QC Batch # 2005/05/03-01.05**

MS/MSD

Lab ID: 2005-04-0897 - 001

MS: 2005/05/03-01.05-030

Extracted: 05/04/2005

Analyzed: 05/04/2005 00:39

Dilution: 1.00

MSD: 2005/05/03-01.05-031

Extracted: 05/04/2005

Analyzed: 05/04/2005 01:13

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level	Recovery %			Limits %		Flags	
	MS	MSD	Sample	ug/L	MS	MSD	RPD	Rec.	RPD	MS	MSD
Benzene	47.5	46.6	ND	50.0	95.0	93.2	1.9	65-135	20		
Toluene	51.0	48.2	ND	50.0	102.0	96.4	5.6	65-135	20		
Ethyl benzene	53.0	49.8	ND	50.0	106.0	99.6	6.2	65-135	20		
Xylene(s)	161	151	ND	150	107.3	100.7	6.3	65-135	20		
<b>Surrogate(s)</b>											
Trifluorotoluene	523	508		500	104.6	101.6		58-124			

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

05/09/2005 13:24

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

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 05/02/2005 15:50

**Batch QC Report**

Prep(s): 5030

Test(s): 8015M

**Matrix Spike ( MS / MSD )**

**Water**

**QC Batch # 2005/05/03-01.05**

MS/MSD

Lab ID: 2005-04-0897 - 002

MS: 2005/05/03-01.05-032

Extracted: 05/04/2005

Analyzed: 05/04/2005 01:46

Dilution: 1.00

MSD: 2005/05/03-01.05-033

Extracted: 05/04/2005

Analyzed: 05/04/2005 02:20

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level ug/L	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Gasoline	228	215	ND	250	91.2	86.0	5.9	65-135	20		
<b>Surrogate(s)</b> 4-Bromofluorobenzene-FID	477	493		500	95.4	98.6		50-150			



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

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 05/02/2005 15:50

**Batch QC Report**

Prep(s): 5030

Test(s): 8021B

**Matrix Spike ( MS / MSD )**

**Water**

**QC Batch # 2005/05/06-1A.05**

MS/MSD

Lab ID: 2005-05-0094 - 001

MS: 2005/05/06-1A.05-033

Extracted: 05/07/2005

Analyzed: 05/07/2005 02:10

Dilution: 1.00

MSD: 2005/05/06-1A.05-034

Extracted: 05/07/2005

Analyzed: 05/07/2005 02:43

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level	Recovery %			Limits %		Flags	
	MS	MSD	Sample	ug/L	MS	MSD	RPD	Rec.	RPD	MS	MSD
Benzene	53.9	55.3	ND	50	107.8	110.6	2.6	65-135	20		
Toluene	51.5	52.0	ND	50	103.0	104.0	1.0	65-135	20		
Ethyl benzene	49.1	50.5	ND	50	98.2	101.0	2.8	65-135	20		
Xylene(s)	150	151	ND	150	100.0	100.7	0.7	65-135	20		
<b>Surrogate(s)</b>											
Trifluorotoluene	567	556		500	113.4	111.2		58-124			

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

05/09/2005 13:24

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

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 05/02/2005 15:50

**Batch QC Report**

Prep(s): 5030

Test(s): 8015M

**Matrix Spike ( MS / MSD )**

**Water**

**QC Batch # 2005/05/06-1A.05**

MS/MSD

Lab ID: 2005-05-0094 - 002

MS: 2005/05/06-1A.05-035

Extracted: 05/07/2005

Analyzed: 05/07/2005 03:17

Dilution: 1.00

MSD: 2005/05/06-1A.05-036

Extracted: 05/07/2005

Analyzed: 05/07/2005 03:50

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level ug/L	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Gasoline	223	230	ND	250	89.2	92.0	3.1	65-135	20		
<b>Surrogate(s)</b> 4-Bromofluorobenzene-FID	431	437		500	86.2	87.4		50-150			

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

05/09/2005 13:24

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

EFI Global

Attn.: Chris Maxwell

111 Deerwood Road, Ste 195

San Ramon, CA 94583

Phone: (925) 457-6187 Fax: (925) 820-9587

Project: Bohannon

Received: 05/02/2005 15:50

---

**Legend and Notes**

---

**Analysis Flag**

L2

Reporting limits were raised due to high level of analyte present in the sample.

Sample Receipt Checklist

Submission #: 2005- 05-0030

Checklist completed by:	<u>BT</u>	DATE	<u>5/3/05</u>
Courier: <input checked="" type="checkbox"/> STL SF	Courier <input type="checkbox"/> Fedex <input type="checkbox"/> UPS <input type="checkbox"/> Other	Client <input type="checkbox"/>	

Log-In Details		Yes	No	Comments
1	Custody seals intact on shipping container/samples		<input checked="" type="checkbox"/>	
2	Chain of custody present?	<input checked="" type="checkbox"/>		
3	Chain of custody signed when relinquished and received?	<input checked="" type="checkbox"/>		<input type="checkbox"/> Picked-Up at Secure Location <input type="checkbox"/> Client signed-off at time prior to pick up
4	All samples checked when COC relinquished		<input checked="" type="checkbox"/>	
5	Chain of custody agrees with sample labels?	<input checked="" type="checkbox"/>		
6	Samples in proper container/bottle?	<input checked="" type="checkbox"/>		
7	Sample containers intact?	<input checked="" type="checkbox"/>		
8	Sufficient sample volume for indicated test?	<input checked="" type="checkbox"/>		
9	All samples received within holding time?	<input checked="" type="checkbox"/>		

Cooler Temperature Compliance Check

Temperature: Blank Reading	If no trip blank is submitted individual temperatures must be taken as per SOP	Cooler Sample Temperature				<u>112</u> <u>21°C / 21°C</u>
		#1	#2	#3	Average	
		<u>3</u>	<u>4</u>	<u>3</u>	<u>(3)</u>	
Reason for Elevated Temperature		Samples with Temp > 6°C - Comments				
<input type="checkbox"/> - Ice Melted <input type="checkbox"/> Insufficient Ice <input type="checkbox"/> <input type="checkbox"/> Samp. in boxes <input type="checkbox"/> Sampled < 4hr <input type="checkbox"/> Ice not req.						

VOA Sample Inspection

Are bubbles present in any of the VOA vials?	Sample #	Small	Med.	Large	Samples with broken, cracked or leaking containers
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Samples with Unacceptable pH
-------------------------------------	------------------------------	-----------------------------	------------------------------

pH adjusted - Preservative used:  HNO<sub>3</sub>  HCl  H<sub>2</sub>SO<sub>4</sub>  NaOH  ZnOAc - Lot #(s) \_\_\_\_\_

Comments:

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

Project Manager: (Initials) \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/05 Client contacted: Yes  No

Summary of discussion:

Corrective Action (per PM/Client):

**SEVERN**  
**TRENT**

**STI**  
**2005-05-0030**

**STL San Francisco Chain of Custody**  
1220 Quarry Lane • Pleasanton CA 94566-4756  
Phone: (925) 484-1919 • Fax: (925) 484-1096  
Email: [sflogin@stl-inc.com](mailto:sflogin@stl-inc.com)

Reference #: 114710

Date 5/1/05 Page 1 of 1

Report To					Analysis Request															Number of Containers			
Attn:	Company:	Address:	Phone:	Email:	TPH EPA-8015/8021	Purgeable Aromatics	TERP EPA-8015M*	Fuel Tests EPA-8200B	Purgeable Hydrocarbons (HVO-C)	Volatiles Organics GC/MS (VOCs)	Semivolatiles GC/MS	Oil and Grease (EPA 1654)	Pesticides PCBs	PNAs by	CM17 Metals (EPA 60107/4707/471)	Metals: Lead LUFT FCRA	Low Level Metals by EPA 200.8A/620 (ICP-MS)	W.E.T (STLO)	Hexavalent Chromium pH (24h acid time for H <sub>2</sub> O)		Spec Cond. Alkalinity TSS	Anions: Cl SO <sub>4</sub> NO <sub>3</sub> Br NO <sub>2</sub> PO <sub>4</sub>	
Bill To:	Sampled By:	TPH EPA-8015/8021	TPH EPA-8015/8021	TPH EPA-8015/8021	TPH EPA-8015/8021	TPH EPA-8015/8021	TPH EPA-8015/8021	TPH EPA-8015/8021	TPH EPA-8015/8021	TPH EPA-8015/8021	TPH EPA-8015/8021	TPH EPA-8015/8021	TPH EPA-8015/8021	TPH EPA-8015/8021	TPH EPA-8015/8021	TPH EPA-8015/8021	TPH EPA-8015/8021	TPH EPA-8015/8021	TPH EPA-8015/8021	TPH EPA-8015/8021	TPH EPA-8015/8021	TPH EPA-8015/8021	TPH EPA-8015/8021
Sample ID	Date	Time	Mat. rx	Pres. crv.	TPH EPA-8015/8021	Purgeable Aromatics	TERP EPA-8015M*	Fuel Tests EPA-8200B	Purgeable Hydrocarbons (HVO-C)	Volatiles Organics GC/MS (VOCs)	Semivolatiles GC/MS	Oil and Grease (EPA 1654)	Pesticides PCBs	PNAs by	CM17 Metals (EPA 60107/4707/471)	Metals: Lead LUFT FCRA	Low Level Metals by EPA 200.8A/620 (ICP-MS)	W.E.T (STLO)	Hexavalent Chromium pH (24h acid time for H <sub>2</sub> O)	Spec Cond. Alkalinity TSS	Anions: Cl SO <sub>4</sub> NO <sub>3</sub> Br NO <sub>2</sub> PO <sub>4</sub>	Number of Containers	
Behanmon #3	4/30/05	1215	Gas	-	X																		1
Behanmon #4	5/1/05	0830	Gas	-	X																		1
Behanmon 3/1/05	5/1/05	0830	H <sub>2</sub> O	UCL	X																		3
Behanmon BLSD	5/1/05	0815	H <sub>2</sub> O	UCL	X																		3

Project Info.		Sample Receipt		1) Relinquished by:		2) Relinquished by:		3) Relinquished by:	
Project Name: <u>Behanmon</u>	# of Containers:	Signature: <u>Chris Maxwell</u>	Time: <u>9/1/05</u>	Signature: <u>Muse</u>	Time: <u>1550</u>	Signature:	Time:	Signature:	Time:
Project#:	Head Space:	Printed Name: <u>BEI Global</u>	Date: <u>5/2/05</u>	Printed Name: <u>MUSE</u>	Date: <u>5/2/05</u>	Printed Name:	Date:	Printed Name:	Date:
PO#:	Temp: <u>3°C / 21°C AIR</u>	Company: <u>STL SF</u>		Company: <u>STL SF</u>		Company:		Company:	
Credit Card#:	Conforms to recbrd:	1) Received by:		2) Received by:		3) Received by:			
T A T	5 Day	72h	48h	24h	Other:	Signature: <u>MUSE</u>	Time: <u>1535</u>	Signature: <u>M.V. KLANEVA</u>	Time: <u>05/02/05</u>
Request: <input type="checkbox"/> Routine <input type="checkbox"/> Level 3 <input type="checkbox"/> Level 4 <input type="checkbox"/> EDC <input type="checkbox"/> Single Tank Fluid ELB <input type="checkbox"/> Global ID		Special Instructions / Comments:		Printed Name: <u>5/2/05</u>		Printed Name: <u>STL SF</u>		Printed Name: <u>STL SF</u>	
*STL SF reports 8015M from C <sub>2</sub> -C <sub>3</sub> (Industry norm) Default for 8015B is C <sub>10</sub> -C <sub>23</sub>				Company: <u>STL SF</u>		Company: <u>STL SF</u>		Company:	

**EFI Global**

June 08, 2005

111 Deerwood Road, Ste 195  
San Ramon, CA 94583

Attn.: Mark Williams

Project#: 98360-00-007

Project: Bohannon

Dear Mr. Williams,

Attached is our report for your samples received on 05/27/2005 16:24

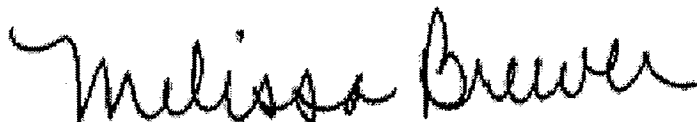
This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 07/11/2005 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions,

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

Sincerely,



Melissa Brewer  
Project Manager

STL Chicago  
2417 Bond Street  
University Park, IL 60466

Tel: 708 534 5200 Fax: 708 534 5211  
www.stl-inc.com

SEVERN TRENT LABORATORIES  
ANALYTICAL REPORT

JOB NUMBER: 237141

Prepared For:

Severn Trent Laboratories  
1220 Quarry Lane  
Pleasanton, CA 94566-4756

Project: STL San Francisco

Attention: Melissa Brewer

Date: 06/06/2005

*Bonnie M. Stadelmann*

Signature

06/07/05

Date

Name: Bonnie M. Stadelmann

Title: Project Manager

E-Mail: bstadelmann@stl-inc.com

STL Chicago  
2417 Bond Street  
University Park, IL 60466

PHONE: (708) 534-5200  
FAX: (708) 534-5211

This Report Contains ( 10 ) Pages

STL Chicago is part of Severn Trent Laboratories, Inc.

SAMPLE INFORMATION

Date: 06/06/2005

Job Number.: 237141

Customer...: Severn Trent Laboratories

Attn.....: Melissa Brewer

Project Number.....: 20002032

Customer Project ID....: 2005-05-0784

Project Description....: STL San Francisco

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
237141-1	MW-4	Water	05/27/2005	12:00	06/02/2005	08:45
237141-2	NIW-A2	Water	05/27/2005	12:30	06/02/2005	08:45
237141-3	NIW-A1	Water	05/27/2005	13:00	06/02/2005	08:45



STL Chicago is part of Severn Trent Laboratories, Inc.

LABORATORY TEST RESULTS						
Job Number: 237141			Date: 06/06/2005			
CUSTOMER: Severn Trent Laboratories		PROJECT: 2005-05-0784		ATTN: Melissa Brewer		
Customer Sample ID: MW-4 Date Sampled.....: 05/27/2005 Time Sampled.....: 12:00 Sample Matrix.....: Water			Laboratory Sample ID: 237141-1 Date Received.....: 06/02/2005 Time Received.....: 08:45			
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
350.2	Nitrogen, Ammonia (Dist./Nessler.) Ammonia(NH3+NH4), as N	0.29	0.20	mg/L	06/06/05	jmk
351.3	Nitrogen, Total Kjeldahl Nitrogen, Total Kjeldahl as N (TKN)	0.97	0.40	mg/L	06/06/05	jmk

\* In Description = Dry Wgt.

STL Chicago is part of Severn Trent Laboratories, Inc.

LABORATORY TEST RESULTS		Job Number: 237141		Date: 06/06/2005		
CUSTOMER: Severn Trent Laboratories		PROJECT: 2005-05-0784		ATTN: Melissa Brewer		
Customer Sample ID: NIW-A2		Date Sampled.....: 05/27/2005		Laboratory Sample Id: 237141-2		Date Received.....: 06/02/2005
Time Sampled.....: 12:30		Sample Matrix.....: Water		Time Received.....: 08:45		
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
350.2	Nitrogen, Ammonia (Dist./Nessler.) Ammonia(NH3+NH4), as N	41	10	mg/L	06/06/05	jmk
351.3	Nitrogen, Total Kjeldahl Nitrogen, Total Kjeldahl as N (TKN)	41	20	mg/L	06/06/05	jmk

\* In Description = Dry Wgt.

STL Chicago is part of Severn Trent Laboratories, Inc.

Job Number: 237141		LABORATORY TEST RESULTS			Date: 06/06/2005	
CUSTOMER: Severn Trent Laboratories		PROJECT: 2005-05-0784		ATTN: Melissa Brewer		
Customer Sample ID: NIW-A1		Laboratory Sample ID: 237141-3				
Date Sampled.....: 05/27/2005		Date Received.....: 06/02/2005				
Time Sampled.....: 13:00		Time Received.....: 08:45				
Sample Matrix.....: Water						
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
350.2	Nitrogen, Ammonia (Dist./Nessler.) Ammonia(NH3+NH4), as N	50	10	mg/L	06/06/05	jmk
351.3	Nitrogen, Total Kjeldahl Nitrogen, Total Kjeldahl as N (TKN)	47	20	mg/L	06/06/05	jmk

\* In Description = Dry Wgt.

STL Chicago is part of Severn Trent Laboratories, Inc.

Job Number: 237141		LABORATORY CHRONICLE				Date: 06/06/2005	
CUSTOMER: Severn Trent Laboratories		PROJECT: 2005-05-0784			ATTN: Melissa Brewer		
Lab ID: 237141-1	Client ID: MW-4	Date Recvd: 06/02/2005		Sample Date: 05/27/2005			
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION
350.2	Nitrogen, Ammonia (Dist./Nessler.)	1	151070	151070		06/06/2005 1144	
351.3	Nitrogen, Total Kjeldahl	1	151080	151080		06/06/2005 1219	
PKG INO (WC)	PKG INO (WET CHEMISTRY)	1					
Lab ID: 237141-2	Client ID: NIW-A2	Date Recvd: 06/02/2005		Sample Date: 05/27/2005			
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION
350.2	Nitrogen, Ammonia (Dist./Nessler.)	1	151070	151070		06/06/2005 1145	50
351.3	Nitrogen, Total Kjeldahl	1	151080	151080		06/06/2005 1220	50
Lab ID: 237141-3	Client ID: NIW-A1	Date Recvd: 06/02/2005		Sample Date: 05/27/2005			
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION
350.2	Nitrogen, Ammonia (Dist./Nessler.)	1	151070	151070		06/06/2005 1147	50
351.3	Nitrogen, Total Kjeldahl	1	151080	151080		06/06/2005 1221	50

Job Number.: 237141

QUALITY CONTROL RESULTS

Report Date.: 06/06/2005

CUSTOMER: Severn Trent Laboratories

PROJECT: 2005-05-0784

ATTN: Melissa Brewer

Test Method: 350.2

Batch: 151070

Analyst: jmk

Method Description: Nitrogen, Ammonia (Dist./Nessler.)

Equipment Code: SPEC1

Test Code: NH3

Parameter: Ammonia(NH3+NH4); as N

QC	Lab ID	Reagent	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc. F	*	Limits	Date	Time
MB	151070-004		mg/L	0.13000	U						06/06/2005	1103
LCS	151070-005	I05ASTTK2	mg/L	2.86000		2.50000	0.13000 U	114	%	80-120	06/06/2005	1105
LCD	151070-006	I05ASTTK2	mg/L	2.53800	2.86000	2.50000	0.13000 U	102	%	80-120	06/06/2005	1106
								12	R	20		

Test Method: 351.3

Batch: 151080

Analyst: jmk

Method Description: Nitrogen, Total Kjeldahl

Equipment Code: SPEC1

Test Code: TKN

Parameter: Nitrogen, Total Kjeldahl as N (TKN)

QC	Lab ID	Reagent	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc. F	*	Limits	Date	Time
MB	151080-004		mg/L	0.10000	U						06/06/2005	1203
LCS	151080-005	I05ASTTK2	mg/L	2.56800		2.50000	0.10000 U	103	%	80-120	06/06/2005	1204
MS	237141-3	I05ASTTK2	mg/L	49.30000		200.00000	46.60000	68	4 %	75-125	06/06/2005	1223
MSD	237141-3	I05ASTTK2	mg/L	54.15000	49.30000	200.00000	46.60000	189	4 %	75-125	06/06/2005	1224
								94-2	*	R 20		

Q U A L I T Y A S S U R A N C E M E T H O D S

R E F E R E N C E S A N D N O T E S

Report Date: 06/06/2005

REPORT COMMENTS

- 1) All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.
- 2) Soil, sediment and sludge sample results are reported on a "dry weight" basis except when analyzed for landfill disposal or incineration parameters. All other solid matrix samples are reported on an "as received" basis unless noted differently.
- 3) Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.
- 4) The test results for the noted analytical method(s) meet the requirements of NELAC Lab Cert. ID# 100201
- 5) According to 40CFR Part 136.3, pH, Chlorine Residual and Dissolved Oxygen analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH field) they were not analyzed immediately, but as soon as possible on laboratory receipt.

Glossary of flags, qualifiers and abbreviations (any number of which may appear in the report)

Inorganic Qualifiers (Q-Column)

- U Analyte was not detected at or above the stated limit.
- < Not detected at or above the reporting limit.
- J Result is less than the RL, but greater than or equal to the method detection limit.
- B Result is less than the CRDL/RL, but greater than or equal to the IDL/MDL.
- S Result was determined by the Method of Standard Additions.
- F AFCEE: Result is less than the RL, but greater than or equal to the method detection limit.

Inorganic Flags (Flag Column)

- ICV,CCV,ICB,CCB,ISA,ISB,CRI,CRA,MRL: Instrument related QC exceed the upper or lower control limits.
- \* LCS, LCD, MD: Batch QC exceeds the upper or lower control limits.
- + MSA correlation coefficient is less than 0.995.
- 4 MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
- E SD: Serial dilution exceeds the control limits.
- H MB, EB1, EB2, EB3: Batch QC is greater than reporting limit or had a negative instrument reading lower than the absolute value of the reporting limit.
- N MS, MSD: Spike recovery exceeds the upper or lower control limits.
- W AS(GFAA) Post-digestion spike was outside 85-115% control limits.

Organic Qualifiers (Q - Column)

- U Analyte was not detected at or above the stated limit.
- ND Compound not detected.
- J Result is an estimated value below the reporting limit or a tentatively identified compound (TIC).
- Q Result was qualitatively confirmed, but not quantified.
- C Pesticide identification was confirmed by GC/MS.
- Y The chromatographic response resembles a typical fuel pattern.
- Z The chromatographic response does not resemble a typical fuel pattern.
- E Result exceeded calibration range, secondary dilution required.
- F AFCEE:Result is an estimated value below the reporting limit or a tentatively identified compound (TIC)

Organic Flags (Flags Column)

- B MB: Batch QC is greater than reporting limit.
- \* LCS, LCD, ELC, ELD, CV, MS, MSD, Surrogate: Batch QC exceeds the upper or lower control limits.
- EB1, EB2, EB3, MLE: Batch QC is greater than reporting Limit
- A Concentration exceeds the instrument calibration range
- a Concentration is below the method Reporting Limit (RL)
- B Compound was found in the blank and sample.
- D Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution will be flagged with a D.
- H Alternate peak selection upon analytical review
- I Indicates the presence of an interference, recovery is not calculated.
- M Manually integrated compound.
- P The lower of the two values is reported when the % difference between the results of two GC columns is

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 06/06/2005

greater than 25%.

Abbreviations

AS	Post Digestion Spike (GFAA Samples - See Note 1 below)
Batch	Designation given to identify a specific extraction, digestion, preparation set, or analysis set
CAP	Capillary Column CCB Continuing Calibration Blank
CCV	Continuing Calibration Verification
CF	Confirmation analysis of original
C1	Confirmation analysis of A1 or D1
C2	Confirmation analysis of A2 or D2
C3	Confirmation analysis of A3 or D3
CRA	Low Level Standard Check - GFAA; Mercury
CR1	Low Level Standard Check - ICP
CV	Calibration Verification Standard
Dil Fac	Dilution Factor - Secondary dilution analysis
D1	Dilution 1
D2	Dilution 2
D3	Dilution 3
DLFac	Detection Limit Factor
DSH	Distilled Standard - High Level
DSL	Distilled Standard - Low Level
DSM	Distilled Standard - Medium Level
EB1	Extraction Blank 1
EB2	Extraction Blank 2
EB3	DI Blank
ELC	Method Extracted LCS
ELD	Method Extracted LCD
ICAL	Initial calibration
ICB	Initial Calibration Blank
ICV	Initial Calibration Verification
IDL	Instrument Detection Limit
ISA	Interference Check Sample A - ICAP
ISB	Interference Check Sample B - ICAP
Job No.	The first six digits of the sample ID which refers to a specific client, project and sample group Lab ID An 8 number unique laboratory identification
LCD	Laboratory Control Standard Duplicate
LCS	Laboratory Control Standard with reagent grade water or a matrix free from the analyte of interest
MB	Method Blank or (PB) Preparation Blank
MD	Method Duplicate
MDL	Method Detection Limit
MLE	Medium Level Extraction Blank
MRL	Method Reporting Limit Standard
MSA	Method of Standard Additions
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ND	Not Detected
PREPF	Preparation factor used by the Laboratory's Information Management System (LIMS)
PDS	Post Digestion Spike (ICAP)
RA	Re-analysis of original
A1	Re-analysis of D1
A2	Re-analysis of D2
A3	Re-analysis of D3
RD	Re-extraction of dilution
RE	Re-extraction of original
RC	Re-extraction Confirmation
RL	Reporting Limit
RPD	Relative Percent Difference of duplicate (unrounded) analyses
RRF	Relative Response Factor
RT	Retention Time

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 06/06/2005

RTW Retention Time Window Sample ID A 9 digit number unique for each sample, the first six digits are referred as the job number  
 SCB Seeded Control Blank  
 SD Serial Dilution (Calculated when sample concentration exceeds 50 times the MDL)  
 UCB Unseeded Control Blank  
 SSV Second Source Verification Standard  
 SLCS Solid Laboratory Control Standard(LCS)  
 PHC pH Calibration Check LCSP pH Laboratory Control Sample  
 LCDP pH Laboratory Control Sample Duplicate  
 MDPH pH Sample Duplicate  
 MDFP Flashpoint Sample Duplicate  
 LCFP Flashpoint LCS  
 G1 Gelex Check Standard Range 0-1  
 G2 Gelex Check Standard Range 1-10  
 G3 Gelex Check Standard Range 10-100  
 G4 Gelex Check Standard Range 100-1000

Note 1: The Post Spike Designation on Batch QC for GFAA is designated with an "S" added to the current abbreviation used. EX. LCS S=LCS Post Spike (GFAA); MSS=MS Post Spike (GFAA)

Note 2: The MD calculates an absolute difference (A) when the sample concentration is less than 5 times the reporting limit. The control limit is represented as +/- the RL.



237141

Date Shipped: 5/28/2005

2005-05-0784 - 1

SEVERN

TRENT

STL

Chain of Custody

From: STL San Francisco (CL)  
1220 Quarry Lane  
Pleasanton, CA 94566-4756

To: STL Chicago  
2417 Bond Street  
University Park, IL 60466

Project Manager: Melissa Brewer  
Phone: Ext:  
Fax: (925) 484-1096  
Email: mbrewer@stl-inc.com

Phone: (708) 534-5200 Ext:  
Fax: (708) 534-5211  
Contact: Bonnie Stadelmann  
Phone: (708) 534-5200 Ext: 154

CL Submission #: 2005-05-0784  
CL PO #:

Project #: 98360-00-007  
Project Name: Bohannon

Client Sample #	Analysis	Matrix	Time	Day
1 MW-4	Subcontract - Ammonia /*AMMONIA AND NITROGEN *351.3*/	Water	5/27/2005 12:00:00PM	5 Day
	Subcontract - Total Kjeldahl Nitrogen /*350.2*/	350.3		5 Day
		351.4		5 Day
2 NIW-A2	Subcontract - Ammonia /*AMMONIA AND NITROGEN *351.3*/	Water	5/27/2005 12:30:00PM	5 Day
	Subcontract - Total Kjeldahl Nitrogen /*350.2*/	350.3		5 Day
		351.4		5 Day
3 NIW-A1	Subcontract - Ammonia /*AMMONIA AND NITROGEN *351.3*/	Water	5/27/2005 1:00:00PM	5 Day
	Subcontract - Total Kjeldahl Nitrogen /*350.2*/	350.3		5 Day
		351.4		5 Day

Due 6-6-05

PLEASE INCLUDE QC WITH FAXED AND HARD-COPY RESULTS

RELINQUISHED BY: 1.

Signature: *[Signature]* Time: 1500

Printed Name: Bryan Thomas Date: 5/31/05

Company: STL-SF

RELINQUISHED BY: 2.

Signature: \_\_\_\_\_ Time: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Date: \_\_\_\_\_

Company: \_\_\_\_\_

RELINQUISHED BY: 3.

Signature: \_\_\_\_\_ Time: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Date: \_\_\_\_\_

Company: \_\_\_\_\_

RECEIVED BY: 1.

Signature: *[Signature]* Time: 0845

Printed Name: \_\_\_\_\_ Date: 6/2/05

Company: \_\_\_\_\_

RECEIVED BY: 2.

Signature: \_\_\_\_\_ Time: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Date: \_\_\_\_\_

Company: \_\_\_\_\_

RECEIVED BY: 3.

Signature: \_\_\_\_\_ Time: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Date: \_\_\_\_\_

Company: \_\_\_\_\_

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

EFI Global

Attn.: Mark Williams

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-7384 Fax: (925) 820-9587

Project: 98360-00-007  
Bohannon

Received: 05/27/2005 16:24

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
MW-7	05/27/2005 10:30	Water	1
MW-6	05/27/2005 11:00	Water	2
MW-5	05/27/2005 11:30	Water	3
MW-4	05/27/2005 12:00	Water	4
NIW-A2	05/27/2005 12:30	Water	5
NIW-A1	05/27/2005 13:00	Water	6
MW-2	05/27/2005 13:30	Water	7
MW-1	05/27/2005 14:00	Water	8
POBS-B2	05/27/2005 14:30	Water	9
POBS-B1	05/27/2005 15:00	Water	10
POBS-A1	05/27/2005 15:15	Water	11
MW-3	05/27/2005 15:30	Water	12

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

EFI Global

Attn.: Mark Williams

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-7384 Fax: (925) 820-9587

Project: 98360-00-007  
Bohannon

Received: 05/27/2005 16:24

Prep(s): 5030 Test(s): 8015M  
5030 8021B  
Sample ID: MW-7 Lab ID: 2005-05-0784 - 1  
Sampled: 05/27/2005 10:30 Extracted: 6/2/2005 11:47  
Matrix: Water QC Batch#: 2005/06/02-01.05

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	06/02/2005 11:47	
Benzene	ND	0.50	ug/L	1.00	06/02/2005 11:47	
Toluene	ND	0.50	ug/L	1.00	06/02/2005 11:47	
Ethyl benzene	ND	0.50	ug/L	1.00	06/02/2005 11:47	
Xylene(s)	ND	0.50	ug/L	1.00	06/02/2005 11:47	
<b>Surrogate(s)</b>						
Trifluorotoluene	111.1	58-124	%	1.00	06/02/2005 11:47	
4-Bromofluorobenzene-FID	88.6	50-150	%	1.00	06/02/2005 11:47	

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

EFI Global

Attn.: Mark Williams

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-7384 Fax: (925) 820-9587

Project: 98360-00-007  
Bohannon

Received: 05/27/2005 16:24

Prep(s): 5030	Test(s): 8015M
5030	8021B
Sample ID: MW-6	Lab ID: 2005-05-0784 - 2
Sampled: 05/27/2005 11:00	Extracted: 6/2/2005 12:13
Matrix: Water	QC Batch#: 2005/06/02-01.05

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	06/02/2005 12:13	
Benzene	ND	0.50	ug/L	1.00	06/02/2005 12:13	
Toluene	ND	0.50	ug/L	1.00	06/02/2005 12:13	
Ethyl benzene	ND	0.50	ug/L	1.00	06/02/2005 12:13	
Xylene(s)	ND	0.50	ug/L	1.00	06/02/2005 12:13	
<b>Surrogate(s)</b>						
Trifluorotoluene	115.3	58-124	%	1.00	06/02/2005 12:13	
4-Bromofluorobenzene-FID	87.0	50-150	%	1.00	06/02/2005 12:13	

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

EFI Global

Attn.: Mark Williams

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-7384 Fax: (925) 820-9587  
Project: 98360-00-007  
Bohannon

Received: 05/27/2005 16:24

Prep(s): 5030 Test(s): 8015M  
5030 8021B  
Sample ID: MW-5 Lab ID: 2005-05-0784 - 3  
Sampled: 05/27/2005 11:30 Extracted: 6/2/2005 16:20  
Matrix: Water QC Batch#: 2005/06/02-01.05

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	06/02/2005 16:20	
Benzene	ND	0.50	ug/L	1.00	06/02/2005 16:20	
Toluene	ND	0.50	ug/L	1.00	06/02/2005 16:20	
Ethyl benzene	ND	0.50	ug/L	1.00	06/02/2005 16:20	
Xylene(s)	ND	0.50	ug/L	1.00	06/02/2005 16:20	
<b>Surrogate(s)</b>						
Trifluorotoluene	86.5	58-124	%	1.00	06/02/2005 16:20	
4-Bromofluorobenzene-FID	91.7	50-150	%	1.00	06/02/2005 16:20	

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

EFI Global

Attn.: Mark Williams

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-7384 Fax: (925) 820-9587

Project: 98360-00-007  
Bohannon

Received: 05/27/2005 16:24

---

Prep(s): 5030	Test(s): 8015M
5030	8021B
Sample ID: <b>MW-4</b>	Lab ID: 2005-05-0784 - 4
Sampled: 05/27/2005 12:00	Extracted: 6/2/2005 17:36
Matrix: Water	QC Batch#: 2005/06/02-01.05

Analysis Flag: L2 ( See Legend and Note Section )

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	7300	500	ug/L	10.00	06/02/2005 17:36	
Benzene	350	5.0	ug/L	10.00	06/02/2005 17:36	
Toluene	37	5.0	ug/L	10.00	06/02/2005 17:36	
Ethyl benzene	100	5.0	ug/L	10.00	06/02/2005 17:36	
Xylene(s)	50	5.0	ug/L	10.00	06/02/2005 17:36	
<b>Surrogate(s)</b>						
4-Bromofluorobenzene	117.0	50-150	%	10.00	06/02/2005 17:36	
4-Bromofluorobenzene-FID	88.7	50-150	%	10.00	06/02/2005 17:36	

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

EFI Global

Attn.: Mark Williams

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-7384 Fax: (925) 820-9587

Project: 98360-00-007  
Bohannon

Received: 05/27/2005 16:24

---

Prep(s): 5030	Test(s): 8015M
5030	8021B
Sample ID: NIW-A2	Lab ID: 2005-05-0784 - 5
Sampled: 05/27/2005 12:30	Extracted: 6/3/2005 11:58
Matrix: Water	QC Batch#: 2005/06/03-01.05

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	550	50	ug/L	1.00	06/03/2005 11:58	
Benzene	14	0.50	ug/L	1.00	06/03/2005 11:58	
Toluene	0.70	0.50	ug/L	1.00	06/03/2005 11:58	
Ethyl benzene	1.8	0.50	ug/L	1.00	06/03/2005 11:58	
Xylene(s)	0.93	0.50	ug/L	1.00	06/03/2005 11:58	
<b>Surrogate(s)</b>						
Trifluorotoluene	118.7	58-124	%	1.00	06/03/2005 11:58	
4-Bromofluorobenzene-FID	97.3	50-150	%	1.00	06/03/2005 11:58	

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

EFI Global

Attn.: Mark Williams

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-7384 Fax: (925) 820-9587

Project: 98360-00-007  
Bohannon

Received: 05/27/2005 16:24

---

Prep(s): 5030	Test(s): 8015M
5030	8021B
Sample ID: NIW-A1	Lab ID: 2005-05-0784 - 6
Sampled: 05/27/2005 13:00	Extracted: 6/2/2005 18:02
Matrix: Water	QC Batch#: 2005/06/02-01.05
Analysis Flag: L2 ( See Legend and Note Section )	

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	14000	1000	ug/L	20.00	06/02/2005 18:02	
Benzene	1300	10	ug/L	20.00	06/02/2005 18:02	
Toluene	61	10	ug/L	20.00	06/02/2005 18:02	
Ethyl benzene	680	10	ug/L	20.00	06/02/2005 18:02	
Xylene(s)	300	10	ug/L	20.00	06/02/2005 18:02	
<b>Surrogate(s)</b>						
4-Bromofluorobenzene	118.8	50-150	%	20.00	06/02/2005 18:02	
4-Bromofluorobenzene-FID	87.2	50-150	%	20.00	06/02/2005 18:02	



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

EFI Global

Attn.: Mark Williams

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-7384 Fax: (925) 820-9587

Project: 98360-00-007  
Bohannon

Received: 05/27/2005 16:24

---

Prep(s): 5030	Test(s): 8015M
5030	8021B
Sample ID: MW-2	Lab ID: 2005-05-0784 - 7
Sampled: 05/27/2005 13:30	Extracted: 6/2/2005 18:27
Matrix: Water	QC Batch#: 2005/06/02-01.05
Analysis Flag: L2 ( See Legend and Note Section )	

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	5700	1300	ug/L	25.00	06/02/2005 18:27	
Benzene	450	13	ug/L	25.00	06/02/2005 18:27	
Toluene	53	13	ug/L	25.00	06/02/2005 18:27	
Ethyl benzene	240	13	ug/L	25.00	06/02/2005 18:27	
Xylene(s)	71	13	ug/L	25.00	06/02/2005 18:27	
<b>Surrogate(s)</b>						
Trifluorotoluene	93.5	58-124	%	25.00	06/02/2005 18:27	
4-Bromofluorobenzene-FID	90.4	50-150	%	25.00	06/02/2005 18:27	

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

EFI Global

Attn.: Mark Williams

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-7384 Fax: (925) 820-9587

Project: 98360-00-007  
Bohannon

Received: 05/27/2005 16:24

---

Prep(s): 5030	Test(s): 8015M
5030	8021B
Sample ID: MW-1	Lab ID: 2005-05-0784 - 8
Sampled: 05/27/2005 14:00	Extracted: 6/2/2005 16:45
Matrix: Water	QC Batch#: 2005/06/02-01.05

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	06/02/2005 16:45	
Benzene	1.6	0.50	ug/L	1.00	06/02/2005 16:45	
Toluene	ND	0.50	ug/L	1.00	06/02/2005 16:45	
Ethyl benzene	ND	0.50	ug/L	1.00	06/02/2005 16:45	
Xylene(s)	ND	0.50	ug/L	1.00	06/02/2005 16:45	
<b>Surrogate(s)</b>						
Trifluorotoluene	106.8	58-124	%	1.00	06/02/2005 16:45	
Trifluorotoluene-FID	110.1	58-124	%	1.00	06/02/2005 16:45	

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

EFI Global

Attn.: Mark Williams

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-7384 Fax: (925) 820-9587

Project: 98360-00-007  
Bohannon

Received: 05/27/2005 16:24

Prep(s): 5030 Test(s): 8015M  
5030 8021B  
Sample ID: **POBS-B2** Lab ID: 2005-05-0784 - 9  
Sampled: 05/27/2005 14:30 Extracted: 6/3/2005 17:28  
Matrix: Water QC Batch#: 2005/06/03-01.05

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	97	50	ug/L	1.00	06/03/2005 17:28	
Benzene	33	0.50	ug/L	1.00	06/03/2005 17:28	
Toluene	0.56	0.50	ug/L	1.00	06/03/2005 17:28	
Ethyl benzene	1.3	0.50	ug/L	1.00	06/03/2005 17:28	
Xylene(s)	0.74	0.50	ug/L	1.00	06/03/2005 17:28	
<b>Surrogate(s)</b>						
Trifluorotoluene	99.6	58-124	%	1.00	06/03/2005 17:28	
4-Bromofluorobenzene-FID	89.1	50-150	%	1.00	06/03/2005 17:28	

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

EFI Global

Attn.: Mark Williams

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-7384 Fax: (925) 820-9587

Project: 98360-00-007  
Bohannon

Received: 05/27/2005 16:24

Prep(s): 5030	Test(s): 8015M
5030	8021B
Sample ID: <b>POBS-B1</b>	Lab ID: 2005-05-0784 - 10
Sampled: 05/27/2005 15:00	Extracted: 6/2/2005 17:11
Matrix: Water	QC Batch#: 2005/06/02-01.05

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	68	50	ug/L	1.00	06/02/2005 17:11	Q6
Benzene	17	0.50	ug/L	1.00	06/02/2005 17:11	
Toluene	ND	0.50	ug/L	1.00	06/02/2005 17:11	
Ethyl benzene	1.6	0.50	ug/L	1.00	06/02/2005 17:11	
Xylene(s)	0.52	0.50	ug/L	1.00	06/02/2005 17:11	
<b>Surrogate(s)</b>						
Trifluorotoluene	123.2	58-124	%	1.00	06/02/2005 17:11	
4-Bromofluorobenzene-FID	86.3	50-150	%	1.00	06/02/2005 17:11	

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

EFI Global

Attn.: Mark Williams

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-7384 Fax: (925) 820-9587

Project: 98360-00-007  
Bohannon

Received: 05/27/2005 16:24

---

Prep(s): 5030	Test(s): 8015M
5030	8021B
Sample ID: <b>POBS-A1</b>	Lab ID: 2005-05-0784 - 11
Sampled: 05/27/2005 15:15	Extracted: 6/2/2005 19:43
Matrix: Water	QC Batch#: 2005/06/02-01.05
Analysis Flag: L2 ( See Legend and Note Section )	

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	9600	1300	ug/L	25.00	06/02/2005 19:43	
Benzene	1200	13	ug/L	25.00	06/02/2005 19:43	
Toluene	62	13	ug/L	25.00	06/02/2005 19:43	
Ethyl benzene	110	13	ug/L	25.00	06/02/2005 19:43	
Xylene(s)	180	13	ug/L	25.00	06/02/2005 19:43	
<b>Surrogate(s)</b>						
Trifluorotoluene	87.3	58-124	%	25.00	06/02/2005 19:43	
4-Bromofluorobenzene-FID	90.6	50-150	%	25.00	06/02/2005 19:43	

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

EFI Global

Attn.: Mark Williams

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-7384 Fax: (925) 820-9587

Project: 98360-00-007  
Bohannon

Received: 05/27/2005 16:24

---

Prep(s): 5030	Test(s): 8015M
5030	8021B
Sample ID: <b>MW-3</b>	Lab ID: 2005-05-0784 - 12
Sampled: 05/27/2005 15:30	Extracted: 6/2/2005 20:09
Matrix: Water	QC Batch#: 2005/06/02-01.05
Analysis Flag: L2 ( See Legend and Note Section )	

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	5500	500	ug/L	10.00	06/02/2005 20:09	
Benzene	840	5.0	ug/L	10.00	06/02/2005 20:09	
Toluene	36	5.0	ug/L	10.00	06/02/2005 20:09	
Ethyl benzene	210	5.0	ug/L	10.00	06/02/2005 20:09	
Xylene(s)	41	5.0	ug/L	10.00	06/02/2005 20:09	
<b>Surrogate(s)</b>						
Trifluorotoluene	93.2	58-124	%	10.00	06/02/2005 20:09	
4-Bromofluorobenzene-FID	94.1	50-150	%	10.00	06/02/2005 20:09	

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

EFI Global

Attn.: Mark Williams

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-7384 Fax: (925) 820-9587

Project: 98360-00-007  
Bohannon

Received: 05/27/2005 16:24

**Batch QC Report**

Prep(s): 5030  
5030

Test(s): 8015M  
8021B

**Method Blank**

**Water**

**QC Batch # 2005/06/02-01.05**

MB: 2005/06/02-01.05-003

Date Extracted: 06/02/2005 07:41

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	06/02/2005 07:41	
Benzene	ND	0.5	ug/L	06/02/2005 07:41	
Toluene	ND	0.5	ug/L	06/02/2005 07:41	
Ethyl benzene	ND	0.5	ug/L	06/02/2005 07:41	
Xylene(s)	ND	0.5	ug/L	06/02/2005 07:41	
<b>Surrogates(s)</b>					
Trifluorotoluene	100.0	58-124	%	06/02/2005 07:41	
4-Bromofluorobenzene-FID	89.6	50-150	%	06/02/2005 07:41	

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

EFI Global

Attn.: Mark Williams

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-7384 Fax: (925) 820-9587

Project: 98360-00-007  
Bohannon

Received: 05/27/2005 16:24

**Batch QC Report**

Prep(s): 5030  
5030

Test(s): 8015M  
8021B

**Method Blank**

**Water**

**QC Batch # 2005/06/03-01.05**

MB: 2005/06/03-01.05-007

Date Extracted: 06/03/2005 10:41

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	06/03/2005 10:41	
Benzene	ND	0.5	ug/L	06/03/2005 10:41	
Toluene	ND	0.5	ug/L	06/03/2005 10:41	
Ethyl benzene	ND	0.5	ug/L	06/03/2005 10:41	
Xylene(s)	ND	0.5	ug/L	06/03/2005 10:41	
<b>Surrogates(s)</b>					
Trifluorotoluene	98.6	58-124	%	06/03/2005 10:41	
4-Bromofluorobenzene-FID	84.2	50-150	%	06/03/2005 10:41	



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

EFI Global

Attn.: Mark Williams

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-7384 Fax: (925) 820-9587

Project: 98360-00-007  
Bohannon

Received: 05/27/2005 16:24

**Batch QC Report**

Prep(s): 5030

Test(s): 8021B

**Laboratory Control Spike**

**Water**

**QC Batch # 2005/06/02-01.05**

LCS 2005/06/02-01.05-004

Extracted: 06/02/2005

Analyzed: 06/02/2005 08:06

LCSD

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Benzene	50.0		50.0	100.0			77-123	20		
Toluene	54.5		50.0	109.0			78-122	20		
Ethyl benzene	53.4		50.0	106.8			70-130	20		
Xylene(s)	159		150	106.0			75-125	20		
<b>Surrogates(s)</b>										
Trifluorotoluene	512		500	102.4			58-124			

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

06/08/2005 10:40

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

EFI Global

Attn.: Mark Williams

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-7384 Fax: (925) 820-9587

Project: 98360-00-007  
Bohannon

Received: 05/27/2005 16:24

**Batch QC Report**

Prep(s): 5030

Test(s): 8015M

**Laboratory Control Spike**

**Water**

**QC Batch # 2005/06/02-01.05**

LCS 2005/06/02-01.05-005  
LCSD

Extracted: 06/02/2005

Analyzed: 06/02/2005 08:32

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Gasoline	231		250	92.4			75-125	20		
<b>Surrogates(s)</b> 4-Bromofluorobenzene-FID	465		500	93.0			50-150			

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

06/08/2005 10:40

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

EFI Global

Attn.: Mark Williams

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-7384 Fax: (925) 820-9587

Project: 98360-00-007  
Bohannon

Received: 05/27/2005 16:24

**Batch QC Report**

Prep(s): 5030

Test(s): 8021B

**Laboratory Control Spike**

**Water**

**QC Batch # 2005/06/03-01.05**

LCS 2005/06/03-01.05-005  
LCSD

Extracted: 06/03/2005

Analyzed: 06/03/2005 09:31

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Benzene	48.0		50.0	96.0			77-123	20		
Toluene	52.7		50.0	105.4			78-122	20		
Ethyl benzene	52.2		50.0	104.4			70-130	20		
Xylene(s)	157		150	104.7			75-125	20		
<b>Surrogates(s)</b>										
Trifluorotoluene	480		500	96.0			58-124			

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

06/08/2005 10:40

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

EFI Global

Attn.: Mark Williams

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-7384 Fax: (925) 820-9587

Project: 98360-00-007  
Bohannon

Received: 05/27/2005 16:24

**Batch QC Report**

Prep(s): 5030

Test(s): 8015M

**Laboratory Control Spike**

**Water**

**QC Batch # 2005/06/03-01.05**

LCS 2005/06/03-01.05-006

Extracted: 06/03/2005

Analyzed: 06/03/2005 09:57

LCSD

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Gasoline	224		250	89.6			75-125	20		
<b>Surrogates(s)</b> 4-Bromofluorobenzene-FID	464		500	92.8			50-150			

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

06/08/2005 10:40

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

EFI Global

Attn.: Mark Williams

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-7384 Fax: (925) 820-9587

Project: 98360-00-007  
Bohannon

Received: 05/27/2005 16:24

**Batch QC Report**

Prep(s): 5030

Test(s): 8021B

**Matrix Spike ( MS / MSD )**

**Water**

**QC Batch # 2005/06/02-01.05**

MW-7 >> MS

Lab ID: 2005-05-0784 - 001

MS: 2005/06/02-01.05-028

Extracted: 06/02/2005

Analyzed: 06/02/2005 21:25

Dilution: 1.00

MSD: 2005/06/02-01.05-029

Extracted: 06/02/2005

Analyzed: 06/02/2005 21:51

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level ug/L	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Benzene	47.1	46.6	ND	50.0	94.2	93.2	1.1	65-135	20		
Toluene	52.6	53.2	ND	50.0	105.2	106.4	1.1	65-135	20		
Ethyl benzene	50.4	51.9	ND	50.0	100.8	103.8	2.9	65-135	20		
Xylene(s)	144	149	ND	150	96.0	99.3	3.4	65-135	20		
<b>Surrogate(s)</b>											
Trifluorotoluene	451	445		500	90.2	89.0		58-124	0		

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

06/08/2005 10:40

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

EFI Global

Attn.: Mark Williams

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-7384 Fax: (925) 820-9587

Project: 98360-00-007  
Bohannon

Received: 05/27/2005 16:24

**Batch QC Report**

Prep(s): 5030

Test(s): 8015M

**Matrix Spike ( MS / MSD )**

**Water**

**QC Batch # 2005/06/02-01.05**

MW-6 >> MS

Lab ID: 2005-05-0784 - 002

MS: 2005/06/02-01.05-030

Extracted: 06/02/2005

Analyzed: 06/02/2005 22:17

Dilution: 1.00

MSD: 2005/06/02-01.05-031

Extracted: 06/02/2005

Analyzed: 06/02/2005 22:42

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level	Recovery %			Limits %		Flags	
	MS	MSD	Sample		ug/L	MS	MSD	RPD	Rec.	RPD	MS
Gasoline	196	192	ND	250	78.4	76.8	2.1	65-135	20		
<b>Surrogate(s)</b>											
4-Bromofluorobenzene-FID	446	450		500	89.2	89.9		50-150			

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

EFI Global

Attn.: Mark Williams

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-7384 Fax: (925) 820-9587

Project: 98360-00-007  
Bohannon

Received: 05/27/2005 16:24

**Batch QC Report**

Prep(s): 5030

Test(s): 8015M

**Matrix Spike ( MS / MSD )**

**Water**

**QC Batch # 2005/06/03-01.05**

MS/MSD

Lab ID: 2005-06-0047 - 001

MS: 2005/06/03-01.05-012

Extracted: 06/03/2005

Analyzed: 06/03/2005 13:14

Dilution: 1.00

MSD: 2005/06/03-01.05-013

Extracted: 06/03/2005

Analyzed: 06/03/2005 13:40

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level	Recovery %			Limits %		Flags	
	MS	MSD	Sample		ug/L	MS	MSD	RPD	Rec.	RPD	MS
Gasoline	220	214	ND	250	88.0	85.6	2.8	65-135	20		
<b>Surrogate(s)</b>											
4-Bromofluorobenzene-FID	477	468		500	95.4	93.6		50-150			

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

06/08/2005 10:40

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

EFI Global

Attn.: Mark Williams

111 Deerwood Road, Ste 195  
San Ramon, CA 94583  
Phone: (925) 457-7384 Fax: (925) 820-9587

Project: 98360-00-007  
Bohannon

Received: 05/27/2005 16:24

**Batch QC Report**

Prep(s): 5030

Test(s): 8021B

**Matrix Spike ( MS / MSD )**

**Water**

**QC Batch # 2005/06/03-01.05**

POBS-B2 >> MS

Lab ID: 2005-05-0784 - 009

MS: 2005/06/03-01.05-019

Extracted: 06/03/2005

Analyzed: 06/03/2005 17:53

Dilution: 1.00

MSD: 2005/06/03-01.05-020

Extracted: 06/03/2005

Analyzed: 06/03/2005 18:18

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level ug/L	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Benzene	82.3	83.6	32.7	50.0	99.2	101.8	2.6	65-135	20		
Toluene	52.5	56.2	0.563	50.0	103.9	111.3	6.9	65-135	20		
Ethyl benzene	52.2	56.5	1.30	50.0	101.8	110.4	8.1	65-135	20		
Xylene(s)	147	165	0.735	150	97.5	109.5	11.6	65-135	20		
<b>Surrogate(s)</b>											
Trifluorotoluene	504	502		500	100.8	100.4		58-124			

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

06/08/2005 10:40



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

EFI Global

Attn.: Mark Williams

111 Deerwood Road, Ste 195

San Ramon, CA 94583

Phone: (925) 457-7384 Fax: (925) 820-9587

Project: 98360-00-007

Bohannon

Received: 05/27/2005 16:24

---

**Legend and Notes**

---

**Analysis Flag**

L2

Reporting limits were raised due to high level of analyte present in the sample.

**Result Flag**

Q6

The concentration reported reflect(s) individual or discrete unidentified peaks not matching a typical fuel pattern.

SEVERN  
TRENT

STL

2005-05-0784  
STL San Francisco Chain of Custody  
1220 Quarry Lane • Pleasanton CA 94566-4756  
Phone: (925) 484-1919 • Fax: (925) 484-1096  
Email: [sflogin@stl-inc.com](mailto:sflogin@stl-inc.com)

Reference #: 115451

Date 5/27/05 Page 1 of 2

San Ramon, CA 94583

Report To Analysis Request

Attn: Mark Williams  
Company: EFL Global  
Address: 111 Deerwood Rd Suite 195  
Phone: Email:  
Bill To: Sampled By: Mark Williams  
Attn: Phone: 925457-7380

TPH EPA - 8015/8021 8260B  
Gas w/ BTEX X MTBE  
Purgeable Aromatics  
BTEX EPA - 8021 8260B  
TEPH EPA 8015M\* Silica Gel  
Diesel Motor Oil Other  
Fuel Tests EPA 8260B: Gas BTEX  
Five Oxygenates DCA, EDB Ethanol  
Purgeable Halocarbons  
(HVOCS) EPA 8021 by 8260B  
Volatile Organics GC/MS (VOCs)  
EPA 8260B 624  
Semi-volatiles 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  
(CP-MS):  
W.E.T (STLC)  
TCLP  
Hexavalent Chromium  
pH (24h hold time for H<sub>2</sub>O)  
Spec Cond. Alkalinity  
TSS TDS  
Anions: Cl SO<sub>4</sub> NO<sub>3</sub> F  
Br NO<sub>2</sub> PO<sub>4</sub>

Sample ID	Date	Time	Mat rix	Pres erv.	TPH	BTEX	TEPH	Fuel Tests	Halocarbons	VOCs	Semi-volatiles	Oil and Grease	Pesticides	PCBs	PNAs	CAM17	Metals	Low Level	W.E.T	Hexavalent	Spec Cond.	TSS	Anions	TKN	Number of Containers
MW-7	5/27/05	10:30	Water	Yes	X																				
MW-6		11:00	Water		X																				
MW-5		11:30			X																				
MW-4		12:00			X																				
NIW-A2		12:30			X																				
NIW-A1		1:00			X																				
MW-2		1:30			X																				
MW-1		2:00			X																				
POSS-B2		2:30			X																				

**Project Info.**  
Project Name: Bohannon  
Project#: 98360-60-007  
PO#:   
Credit Card#:   
Temp: 6°

**Sample Receipt**  
# of Containers:   
Head Space:   
Conforms to record:   
Company:

1) Relinquished by: [Signature] 4:24pm  
Signature: Mark Williams  
Printed Name: Mark Williams  
Date: 5/27/05  
Company:

2) Relinquished by:  
Signature: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Date: \_\_\_\_\_  
Company: \_\_\_\_\_

3) Relinquished by:  
Signature: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Date: \_\_\_\_\_  
Company: \_\_\_\_\_

Report:  Routine  Level 3  Level 4  EDD  State Tank Fund EDF  Global ID  
Special Instructions / Comments:

1) Received by: [Signature] 1624  
Signature: M. Williams  
Printed Name: M. Williams  
Date: 5/27/05  
Company: STL SP

2) Received by:  
Signature: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Date: \_\_\_\_\_  
Company: \_\_\_\_\_

3) Received by:  
Signature: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Date: \_\_\_\_\_  
Company: \_\_\_\_\_

SEVERN  
TRENT

STL

2005-05-0784  
STL San Francisco Chain of Custody  
1220 Quarry Lane • Pleasanton CA 94566-4756  
Phone: (925) 484-1919 • Fax: (925) 484-1096  
Email: [sflogin@stl-inc.com](mailto:sflogin@stl-inc.com)

Reference #: 115451

Date 5/27/05 Page 2 of 2

Report To					Analysis Request																									
Attn: MARK WILLIAM					<input type="checkbox"/> TPH EPA-8015/8021 <input type="checkbox"/> 8260B <input type="checkbox"/> Gas w/ <input type="checkbox"/> BTEX <input type="checkbox"/> MTBE <input type="checkbox"/> Purgeable Aromatics <input type="checkbox"/> BTEX EPA-8021 <input type="checkbox"/> 8260B <input type="checkbox"/> TEPH EPA 801.5M* <input type="checkbox"/> Silica Gel <input type="checkbox"/> Diesel <input type="checkbox"/> Motor Oil <input type="checkbox"/> Other <input type="checkbox"/> Fuel Tests EPA 8260B: <input type="checkbox"/> Gas <input type="checkbox"/> BTEX <input type="checkbox"/> Five Oxygenates <input type="checkbox"/> DCA, EDB <input type="checkbox"/> Ethanol <input type="checkbox"/> Purgeable Halocarbons <input type="checkbox"/> (HVOCS) EPA 8021 by 8260B <input type="checkbox"/> Volatile Organics GC/MS (VOCs) <input type="checkbox"/> EPA 8260B <input type="checkbox"/> 624 <input type="checkbox"/> Semivolatiles GC/MS <input type="checkbox"/> EPA 8270 <input type="checkbox"/> 625 <input type="checkbox"/> Oil and Grease <input type="checkbox"/> Petroleum <input type="checkbox"/> (EPA 1664) <input type="checkbox"/> Total <input type="checkbox"/> Pesticides <input type="checkbox"/> EPA 8081 <input type="checkbox"/> 608 <input type="checkbox"/> PCBs <input type="checkbox"/> EPA 8082 <input type="checkbox"/> 608 <input type="checkbox"/> PNAs by <input type="checkbox"/> 8270 <input type="checkbox"/> 8310 <input type="checkbox"/> CAM17 Metals <input type="checkbox"/> (EPA 6010/7470/7471) <input type="checkbox"/> Metals: <input type="checkbox"/> Lead <input type="checkbox"/> LUFT <input type="checkbox"/> RCRA <input type="checkbox"/> Other: <input type="checkbox"/> Low Level Metals by EPA 200.8/6020 <input type="checkbox"/> (ICP-MS): <input type="checkbox"/> W.E.T (STLC) <input type="checkbox"/> TCLP <input type="checkbox"/> Hexavalent Chromium <input type="checkbox"/> pH (24h hold time for H <sub>2</sub> O) <input type="checkbox"/> Spec Cond. <input type="checkbox"/> Alkalinity <input type="checkbox"/> TSS <input type="checkbox"/> TDS <input type="checkbox"/> <input type="checkbox"/> Anions: <input type="checkbox"/> Cl <input type="checkbox"/> SO <sub>4</sub> <input type="checkbox"/> NO <sub>3</sub> <input type="checkbox"/> F <input type="checkbox"/> Br <input type="checkbox"/> NO <sub>2</sub> <input type="checkbox"/> PO <sub>4</sub> TRN 350.2 Common Nitrogs 351.3	Company: EFI Glaxo					Address: See pag 1					Phone: Email:					Bill To: Sampled By: markwilliam									
Attn: Phone:						Sample ID					Date					Time					Mat rix					Pres erv.				
POBS-B1						5/27/05					3:00					H2O					ALL					<input checked="" type="checkbox"/>				
POBS-A1											3:15					↓					↓					<input checked="" type="checkbox"/>				
MW-3											3:30					↓					↓					<input checked="" type="checkbox"/>				

**Project Info.**

Project Name: # of Containers:

Project#: Head Space:

PO#: Temp: 6°

Credit Card#: Conforms to record:

1) Relinquished by:

Signature: *[Signature]* Time: 4:24 pm

Printed Name: Mark William Date: 5/27/05

Company: EFI Glaxo

2) Relinquished by:

Signature: \_\_\_\_\_ Time: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Date: \_\_\_\_\_

Company: \_\_\_\_\_

3) Relinquished by:

Signature: \_\_\_\_\_ Time: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Date: \_\_\_\_\_

Company: \_\_\_\_\_

T  
A  
T

5 Day 72h 48h 24h Other:

Report:  Routine  Level 3  Level 4  EDD  State Tank Fund EDF  
 Special Instructions / Comments:  Global ID \_\_\_\_\_

1) Received by:

Signature: *[Signature]* Time: 1624

Printed Name: M. WILLIAM Date: 5/27/05

Company: STL SF

2) Received by:

Signature: \_\_\_\_\_ Time: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Date: \_\_\_\_\_

Company: \_\_\_\_\_

3) Received by:

Signature: \_\_\_\_\_ Time: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Date: \_\_\_\_\_

Company: \_\_\_\_\_

Sample Receipt Checklist

Submission #: 2005- 05-784

Checklist completed by: <u>JBT</u>		DATE: <u>5-31-05</u>
Courier: <input type="checkbox"/> STL SF	Courier <input type="checkbox"/> Fedex <input type="checkbox"/> UPS <input type="checkbox"/> Other	Client: <input checked="" type="checkbox"/>
Log-In Details		Yes No Comments
1	Custody seals intact on shipping container/samples	<input checked="" type="checkbox"/>
2	Chain of custody present?	<input checked="" type="checkbox"/>
3	Chain of custody signed when relinquished and received?	<input checked="" type="checkbox"/>
4	All samples checked when COC relinquished	<input checked="" type="checkbox"/>
5	Chain of custody agrees with sample labels?	<input checked="" type="checkbox"/> ON POBS B2 sample needs POBSA2
6	Samples in proper container/bottle?	<input checked="" type="checkbox"/>
7	Sample containers intact?	<input checked="" type="checkbox"/>
8	Sufficient sample volume for indicated test?	<input checked="" type="checkbox"/>
9	All samples received within holding time?	<input checked="" type="checkbox"/>

Cooler Temperature Compliance Check

Temperature Blank Reading	If no trip blank is submitted individual temperatures must be taken as per SOP.	Cooler Sample Temperature			
		#1	#2	#3	Average
		<u>6</u>	<u>6</u>	<u>6</u>	<u>(6)</u>

Reason for Elevated Temperature	Samples with Temp > 6°C - Comments
<input type="checkbox"/> - Ice Melted <input type="checkbox"/> Insufficient Ice <input type="checkbox"/> <input type="checkbox"/> Samp. in boxes <input type="checkbox"/> Sampled < 4hr. <input type="checkbox"/> Ice not req.	

VOA Sample Inspection

Are bubbles present in any of the VOA vials?	Sample #	Small	Med.	Large	Samples with broken, cracked or leaking containers
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Water - pH acceptable upon receipt?	Yes	No	Samples with Unacceptable pH		
	<input type="checkbox"/>	<input type="checkbox"/>			

pH adjusted - Preservative used:  HNO<sub>3</sub>  HCl  H<sub>2</sub>SO<sub>4</sub>  NaOH  ZnOAc - Lot #(s) \_\_\_\_\_

Comments:

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

Project Manager: (initials) MB Date: 5/31/05 Client contacted:  Yes  No

Summary of discussion: POBS-B2 correct, not POBSA2

Corrective Action (per PM/Client): PL Mark



**STL**

## ANALYTICAL REPORT

Job Number: 720-5258-1

Job Description: Bohannon Dev.

For:  
SECOR International, Inc.  
57 Lafayette Circle  
2nd Floor  
Lafayette, CA 94549-4321

Attention: Mr. Chris Maxwell

A handwritten signature in black ink, appearing to read "Afsaneh Salimpour".

---

Afsaneh Salimpour  
Project Manager I  
asalimpour@stl-inc.com  
09/05/2006

Project Manager: Afsaneh Salimpour

**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

## EXECUTIVE SUMMARY - Detections

Client: SECOR International, Inc.

Job Number: 720-5258-1

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
<b>720-5258-1</b>	<b>POBS-B2-060823</b>				
Gasoline Range Organics (GRO)-C5-C12		57	50	ug/L	8260B
<b>720-5258-2</b>	<b>MW-3-060823</b>				
Benzene		190	5.0	ug/L	8260B
Ethylbenzene		51	5.0	ug/L	8260B
Toluene		5.3	5.0	ug/L	8260B
Gasoline Range Organics (GRO)-C5-C12		1700	500	ug/L	8260B
<b>720-5258-3</b>	<b>MW-2-060824</b>				
Benzene		90	2.5	ug/L	8260B
Ethylbenzene		16	2.5	ug/L	8260B
Toluene		4.7	2.5	ug/L	8260B
Xylenes, Total		21	5.0	ug/L	8260B
Gasoline Range Organics (GRO)-C5-C12		1400	250	ug/L	8260B
<b>720-5258-8</b>	<b>MW-4-060824</b>				
Benzene		59	5.0	ug/L	8260B
Ethylbenzene		19	5.0	ug/L	8260B
Toluene		8.2	5.0	ug/L	8260B
Xylenes, Total		14	10	ug/L	8260B
Gasoline Range Organics (GRO)-C5-C12		2400	500	ug/L	8260B
<b>720-5258-10</b>	<b>POBS-A1-060824</b>				
Benzene		1700	5.0	ug/L	8260B
Ethylbenzene		120	5.0	ug/L	8260B
Toluene		58	5.0	ug/L	8260B
Xylenes, Total		100	10	ug/L	8260B
Gasoline Range Organics (GRO)-C5-C12		8500	500	ug/L	8260B
<b>720-5258-11</b>	<b>POBS-B1-060824</b>				
Benzene		1.1	0.50	ug/L	8260B
Gasoline Range Organics (GRO)-C5-C12		50	50	ug/L	8260B

## METHOD SUMMARY

Client: SECOR International, Inc.

Job Number: 720-5258-1

Description	Lab Location	Method	Preparation Method
<b>Matrix: Water</b>			
Volatile Organic Compounds by GC/MS	STL SF	SW846 8260B	
Purge-and-Trap	STL SF		SW846 5030B

### LAB REFERENCES:

STL SF = STL San Francisco

### METHOD REFERENCES:

SW846 - "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986  
And Its Updates.

## METHOD / ANALYST SUMMARY

Client: SECOR International, Inc.

Job Number: 720-5258-1

<b>Method</b>	<b>Analyst</b>	<b>Analyst ID</b>
SW846 8260B	Ali, Badri	BA
SW846 8260B	Chen, Amy	AC
SW846 8260B	Lew, Matthew	MLEW



## SAMPLE SUMMARY

Client: SECOR International, Inc.

Job Number: 720-5258-1

<b>Lab Sample ID</b>	<b>Client Sample ID</b>	<b>Client Matrix</b>	<b>Date/Time Sampled</b>	<b>Date/Time Received</b>
720-5258-1	POBS-B2-060823	Water	08/23/2006 1510	08/28/2006 1200
720-5258-2	MW-3-060823	Water	08/23/2006 1605	08/28/2006 1200
720-5258-3	MW-2-060824	Water	08/24/2006 1810	08/28/2006 1200
720-5258-4	MW-1-060824	Water	08/24/2006 1735	08/28/2006 1200
720-5258-5	MW-6-060824	Water	08/24/2006 1605	08/28/2006 1200
720-5258-6	MW-7-060824	Water	08/24/2006 1530	08/28/2006 1200
720-5258-7	MW-5-060824	Water	08/24/2006 1455	08/28/2006 1200
720-5258-8	MW-4-060824	Water	08/24/2006 1320	08/28/2006 1200
720-5258-9	NOBS-B1-060824	Water	08/24/2006 1245	08/28/2006 1200
720-5258-10	POBS-A1-060824	Water	08/24/2006 1045	08/28/2006 1200
720-5258-11	POBS-B1-060824	Water	08/24/2006 1010	08/28/2006 1200

## Analytical Data

Client: SECOR International, Inc.

Job Number: 720-5258-1

Client Sample ID: POBS-B2-060823

Lab Sample ID: 720-5258-1

Date Sampled: 08/23/2006 1510

Client Matrix: Water

Date Received: 08/28/2006 1200

### 8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 720-12600

Instrument ID: Varian 3900C

Preparation: 5030B

Lab File ID: c:\saturday\data\200608\08

Dilution: 1.0

Initial Weight/Volume: 40 mL

Date Analyzed: 08/30/2006 2029

Final Weight/Volume: 40 mL

Date Prepared: 08/30/2006 2029

Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	57		50
Surrogate	%Rec		Acceptance Limits
Toluene-d8 (Surr)	95		77 - 121
1,2-Dichloroethane-d4 (Surr)	115		73 - 130

**Analytical Data**

Client: SECOR International, Inc.

Job Number: 720-5258-1

**Client Sample ID: MW-3-060823**

Lab Sample ID: 720-5258-2

Date Sampled: 08/23/2006 1605

Client Matrix: Water

Date Received: 08/28/2006 1200

---

**8260B Volatile Organic Compounds by GC/MS**

Method: 8260B

Analysis Batch: 720-12600

Instrument ID: Varian 3900C

Preparation: 5030B

Lab File ID: c:\saturday\data\200608\08

Dilution: 10

Initial Weight/Volume: 40 mL

Date Analyzed: 08/30/2006 1656

Final Weight/Volume: 40 mL

Date Prepared: 08/30/2006 1656

Analyte	Result (ug/L)	Qualifier	RL
Benzene	190		5.0
Ethylbenzene	51		5.0
Toluene	5.3		5.0
Xylenes, Total	ND		10
Gasoline Range Organics (GRO)-C5-C12	1700		500
Surrogate	%Rec		Acceptance Limits
Toluene-d8 (Surr)	115		77 - 121
1,2-Dichloroethane-d4 (Surr)	109		73 - 130

**Analytical Data**

Client: SECOR International, Inc.

Job Number: 720-5258-1

**Client Sample ID: MW-2-060824**

Lab Sample ID: 720-5258-3

Date Sampled: 08/24/2006 1810

Client Matrix: Water

Date Received: 08/28/2006 1200

---

**8260B Volatile Organic Compounds by GC/MS**

Method: 8260B

Analysis Batch: 720-12600

Instrument ID: Varian 3900C

Preparation: 5030B

Lab File ID: c:\saturday\data\200608\08

Dilution: 5.0

Initial Weight/Volume: 40 mL

Date Analyzed: 08/30/2006 2055

Final Weight/Volume: 40 mL

Date Prepared: 08/30/2006 2055

Analyte	Result (ug/L)	Qualifier	RL
Benzene	90		2.5
Ethylbenzene	16		2.5
Toluene	4.7		2.5
Xylenes, Total	21		5.0
Gasoline Range Organics (GRO)-C5-C12	1400		250
Surrogate	%Rec		Acceptance Limits
Toluene-d8 (Surr)	108		77 - 121
1,2-Dichloroethane-d4 (Surr)	110		73 - 130

## Analytical Data

Client: SECOR International, Inc.

Job Number: 720-5258-1

**Client Sample ID: MW-1-060824**

Lab Sample ID: 720-5258-4

Date Sampled: 08/24/2006 1735

Client Matrix: Water

Date Received: 08/28/2006 1200

---

### 8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 720-12577

Instrument ID: Varian 3900A

Preparation: 5030B

Lab File ID: c:\saturday\data\200608\08

Dilution: 1.0

Initial Weight/Volume: 10 mL

Date Analyzed: 08/31/2006 0403

Final Weight/Volume: 10 mL

Date Prepared: 08/31/2006 0403

Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50
Surrogate	%Rec		Acceptance Limits
Toluene-d8 (Surr)	92		77 - 121
1,2-Dichloroethane-d4 (Surr)	93		73 - 130

## Analytical Data

Client: SECOR International, Inc.

Job Number: 720-5258-1

Client Sample ID: MW-6-060824

Lab Sample ID: 720-5258-5

Date Sampled: 08/24/2006 1605

Client Matrix: Water

Date Received: 08/28/2006 1200

---

### 8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 720-12577

Instrument ID: Varian 3900A

Preparation: 5030B

Lab File ID: c:\saturday\data\200608\08

Dilution: 1.0

Initial Weight/Volume: 10 mL

Date Analyzed: 08/31/2006 0426

Final Weight/Volume: 10 mL

Date Prepared: 08/31/2006 0426

Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50
Surrogate	%Rec		Acceptance Limits
Toluene-d8 (Surr)	91		77 - 121
1,2-Dichloroethane-d4 (Surr)	95		73 - 130

## Analytical Data

Client: SECOR International, Inc.

Job Number: 720-5258-1

**Client Sample ID: MW-7-060824**

Lab Sample ID: 720-5258-6

Date Sampled: 08/24/2006 1530

Client Matrix: Water

Date Received: 08/28/2006 1200

---

### 8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 720-12577

Instrument ID: Varian 3900A

Preparation: 5030B

Lab File ID: c:\saturnws\data\200608\08

Dilution: 1.0

Initial Weight/Volume: 10 mL

Date Analyzed: 08/31/2006 0448

Final Weight/Volume: 10 mL

Date Prepared: 08/31/2006 0448

Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50
Surrogate	%Rec		Acceptance Limits
Toluene-d8 (Surr)	95		77 - 121
1,2-Dichloroethane-d4 (Surr)	97		73 - 130

**Analytical Data**

Client: SECOR International, Inc.

Job Number: 720-5258-1

**Client Sample ID: MW-5-060824**

Lab Sample ID: 720-5258-7

Date Sampled: 08/24/2006 1455

Client Matrix: Water

Date Received: 08/28/2006 1200

---

**8260B Volatile Organic Compounds by GC/MS**

Method: 8260B

Analysis Batch: 720-12577

Instrument ID: Varian 3900A

Preparation: 5030B

Lab File ID: c:\saturday\data\200608\08

Dilution: 1.0

Initial Weight/Volume: 10 mL

Date Analyzed: 08/31/2006 0510

Final Weight/Volume: 10 mL

Date Prepared: 08/31/2006 0510

Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50
Surrogate	%Rec		Acceptance Limits
Toluene-d8 (Surr)	93		77 - 121
1,2-Dichloroethane-d4 (Surr)	96		73 - 130



## Analytical Data

Client: SECOR International, Inc.

Job Number: 720-5258-1

Client Sample ID: MW-4-060824

Lab Sample ID: 720-5258-8

Date Sampled: 08/24/2006 1320

Client Matrix: Water

Date Received: 08/28/2006 1200

---

### 8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 720-12577

Instrument ID: Varian 3900A

Preparation: 5030B

Lab File ID: c:\saturday\data\200608\08

Dilution: 10

Initial Weight/Volume: 10 mL

Date Analyzed: 08/31/2006 0532

Final Weight/Volume: 10 mL

Date Prepared: 08/31/2006 0532

Analyte	Result (ug/L)	Qualifier	RL
Benzene	59		5.0
Ethylbenzene	19		5.0
Toluene	8.2		5.0
Xylenes, Total	14		10
Gasoline Range Organics (GRO)-C5-C12	2400		500
Surrogate	%Rec		Acceptance Limits
Toluene-d8 (Surr)	93		77 - 121
1,2-Dichloroethane-d4 (Surr)	97		73 - 130

## Analytical Data

Client: SECOR International, Inc.

Job Number: 720-5258-1

**Client Sample ID: NOBS-B1-060824**

Lab Sample ID: 720-5258-9

Date Sampled: 08/24/2006 1245

Client Matrix: Water

Date Received: 08/28/2006 1200

---

### 8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 720-12713

Instrument ID: Varian 3900A

Preparation: 5030B

Lab File ID: c:\saturday\data\200608\08

Dilution: 1.0

Initial Weight/Volume: 10 mL

Date Analyzed: 08/31/2006 0959

Final Weight/Volume: 10 mL

Date Prepared: 08/31/2006 0959

Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50
Surrogate	%Rec		Acceptance Limits
Toluene-d8 (Surr)	92		77 - 121
1,2-Dichloroethane-d4 (Surr)	89		73 - 130

## Analytical Data

Client: SECOR International, Inc.

Job Number: 720-5258-1

**Client Sample ID: POBS-A1-060824**

Lab Sample ID: 720-5258-10

Date Sampled: 08/24/2006 1045

Client Matrix: Water

Date Received: 08/28/2006 1200

---

### 8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 720-12710

Instrument ID: Varian 3900C

Preparation: 5030B

Lab File ID: c:\saturaws\data\200608\08

Dilution: 10

Initial Weight/Volume: 40 mL

Date Analyzed: 08/31/2006 1755

Final Weight/Volume: 40 mL

Date Prepared: 08/31/2006 1755

Analyte	Result (ug/L)	Qualifier	RL
Benzene	1700		5.0
Ethylbenzene	120		5.0
Toluene	58		5.0
Xylenes, Total	100		10
Gasoline Range Organics (GRO)-C5-C12	8500		500
Surrogate	%Rec		Acceptance Limits
Toluene-d8 (Surr)	109		77 - 121
1,2-Dichloroethane-d4 (Surr)	109		73 - 130

## Analytical Data

Client: SECOR International, Inc.

Job Number: 720-5258-1

Client Sample ID: POBS-B1-060824

Lab Sample ID: 720-5258-11

Date Sampled: 08/24/2006 1010

Client Matrix: Water

Date Received: 08/28/2006 1200

---

### 8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 720-12704

Instrument ID: Saturn 2100

Preparation: 5030B

Lab File ID: c:\saturaws\data\200608\08

Dilution: 1.0

Initial Weight/Volume: 10 mL

Date Analyzed: 08/31/2006 1751

Final Weight/Volume: 10 mL

Date Prepared: 08/31/2006 1751

Analyte	Result (ug/L)	Qualifier	RL
Benzene	1.1		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	50		50
Surrogate	%Rec		Acceptance Limits
Toluene-d8 (Surr)	104		77 - 121
1,2-Dichloroethane-d4 (Surr)	102		73 - 130

## Quality Control Results

Client: SECOR International, Inc.

Job Number: 720-5258-1

### QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
<b>GC/MS VOA</b>					
<b>Analysis Batch:720-12577</b>					
LCS 720-12577/5	Lab Control Spike	T	Water	8260B	
LCSD 720-12577/4	Lab Control Spike Duplicate	T	Water	8260B	
MB 720-12577/6	Method Blank	T	Water	8260B	
720-5196-C-1 MS	Matrix Spike	T	Water	8260B	
720-5196-C-1 MSD	Matrix Spike Duplicate	T	Water	8260B	
720-5258-4	MW-1-060824	T	Water	8260B	
720-5258-5	MW-6-060824	T	Water	8260B	
720-5258-6	MW-7-060824	T	Water	8260B	
720-5258-7	MW-5-060824	T	Water	8260B	
720-5258-8	MW-4-060824	T	Water	8260B	
<b>Analysis Batch:720-12600</b>					
LCS 720-12600/2	Lab Control Spike	T	Water	8260B	
LCSD 720-12600/1	Lab Control Spike Duplicate	T	Water	8260B	
MB 720-12600/3	Method Blank	T	Water	8260B	
720-5258-1	POBS-B2-060823	T	Water	8260B	
720-5258-2	MW-3-060823	T	Water	8260B	
720-5258-2MS	Matrix Spike	T	Water	8260B	
720-5258-2MSD	Matrix Spike Duplicate	T	Water	8260B	
720-5258-3	MW-2-060824	T	Water	8260B	
<b>Analysis Batch:720-12704</b>					
LCS 720-12704/2	Lab Control Spike	T	Water	8260B	
LCSD 720-12704/1	Lab Control Spike Duplicate	T	Water	8260B	
MB 720-12704/3	Method Blank	T	Water	8260B	
720-5258-11	POBS-B1-060824	T	Water	8260B	
720-5266-A-3 MS	Matrix Spike	T	Water	8260B	
720-5266-A-3 MSD	Matrix Spike Duplicate	T	Water	8260B	
<b>Analysis Batch:720-12710</b>					
LCS 720-12710/2	Lab Control Spike	T	Water	8260B	
LCSD 720-12710/1	Lab Control Spike Duplicate	T	Water	8260B	
MB 720-12710/3	Method Blank	T	Water	8260B	
720-5258-10	POBS-A1-060824	T	Water	8260B	
720-5304-A-4 MS	Matrix Spike	T	Water	8260B	
720-5304-A-4 MSD	Matrix Spike Duplicate	T	Water	8260B	
<b>Analysis Batch:720-12713</b>					
LCS 720-12713/1	Lab Control Spike	T	Water	8260B	
LCSD 720-12713/3	Lab Control Spike Duplicate	T	Water	8260B	
MB 720-12713/4	Method Blank	T	Water	8260B	
720-5258-9	NOBS-B1-060824	T	Water	8260B	
720-5258-9MS	Matrix Spike	T	Water	8260B	
720-5258-9MSD	Matrix Spike Duplicate	T	Water	8260B	

STL San Francisco

## Quality Control Results

Client: SECOR International, Inc.

Job Number: 720-5258-1

### QC Association Summary

<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Report Basis</u>	<u>Client Matrix</u>	<u>Method</u>	<u>Prep Batch</u>
----------------------	-------------------------	---------------------	----------------------	---------------	-------------------

Report Basis

T = Total

## Quality Control Results

Client: SECOR International, Inc.

Job Number: 720-5258-1

**Method Blank - Batch: 720-12577**

**Method: 8260B**  
**Preparation: 5030B**

Lab Sample ID: MB 720-12577/6  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 08/30/2006 1023  
Date Prepared: 08/30/2006 1023

Analysis Batch: 720-12577  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Varian 3900A  
Lab File ID: c:\saturaws\data\200608\08  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	95	77 - 121
1,2-Dichloroethane-d4 (Surr)	90	73 - 130

**Lab Control Spike/  
Lab Control Spike Duplicate Recovery Report - Batch: 720-12577**

**Method: 8260B**  
**Preparation: 5030B**

LCS Lab Sample ID: LCS 720-12577/5  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 08/30/2006 0854  
Date Prepared: 08/30/2006 0854

Analysis Batch: 720-12577  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Varian 3900A  
Lab File ID: c:\saturaws\data\200608\08  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-12577/4  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 08/30/2006 0916  
Date Prepared: 08/30/2006 0916

Analysis Batch: 720-12577  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Varian 3900A  
Lab File ID: c:\saturaws\data\200608\08  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Benzene	95	94	69 - 129	0	25		
Toluene	98	97	70 - 130	1	25		
MTBE	101	100	65 - 165	1	25		
Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits				
Toluene-d8 (Surr)	95	96	77 - 121				
1,2-Dichloroethane-d4 (Surr)	92	93	73 - 130				

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: SECOR International, Inc.

Job Number: 720-5258-1

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 720-12577**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 720-5196-C-1 MS  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 08/30/2006 1336  
Date Prepared: 08/30/2006 1336

Analysis Batch: 720-12577  
Prep Batch: N/A

Instrument ID: Varian 3900A  
Lab File ID: c:\saturnws\data\200608\  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

MSD Lab Sample ID: 720-5196-C-1 MSD  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 08/30/2006 1358  
Date Prepared: 08/30/2006 1358

Analysis Batch: 720-12577  
Prep Batch: N/A

Instrument ID: Varian 3900A  
Lab File ID: c:\saturnws\data\200608\  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Benzene	94	95	69 - 129	1	20		
Toluene	98	98	70 - 130	0	20		
MTBE	92	94	65 - 165	2	20		
Surrogate		MS % Rec	MSD % Rec		Acceptance Limits		
Toluene-d8 (Surr)		96	96		77 - 121		
1,2-Dichloroethane-d4 (Surr)		87	86		73 - 130		

Calculations are performed before rounding to avoid round-off errors in calculated results.



## Quality Control Results

Client: SECOR International, Inc.

Job Number: 720-5258-1

**Method Blank - Batch: 720-12600**

**Method: 8260B**  
**Preparation: 5030B**

Lab Sample ID: MB 720-12600/3  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 08/30/2006 1255  
Date Prepared: 08/30/2006 1255

Analysis Batch: 720-12600  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Varian 3900C  
Lab File ID: c:\saturmws\data\200608\06  
Initial Weight/Volume: 40 mL  
Final Weight/Volume: 40 mL

Analyte	Result	Qual	RL
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	106	77 - 121
1,2-Dichloroethane-d4 (Surr)	112	73 - 130

**Lab Control Spike/  
Lab Control Spike Duplicate Recovery Report - Batch: 720-12600**

**Method: 8260B**  
**Preparation: 5030B**

LCS Lab Sample ID: LCS 720-12600/2  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 08/30/2006 1134  
Date Prepared: 08/30/2006 1134

Analysis Batch: 720-12600  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Varian 3900C  
Lab File ID: c:\saturmws\data\200608\06  
Initial Weight/Volume: 40 mL  
Final Weight/Volume: 40 mL

LCSD Lab Sample ID: LCSD 720-12600/1  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 08/30/2006 1201  
Date Prepared: 08/30/2006 1201

Analysis Batch: 720-12600  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Varian 3900C  
Lab File ID: c:\saturmws\data\200608\08  
Initial Weight/Volume: 40 mL  
Final Weight/Volume: 40 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Benzene	103	100	69 - 129	3	25		
Toluene	115	100	70 - 130	14	25		
MTBE	104	104	65 - 165	0	25		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
Toluene-d8 (Surr)	118		107		77 - 121		
1,2-Dichloroethane-d4 (Surr)	107		106		73 - 130		

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: SECOR International, Inc.

Job Number: 720-5258-1

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 720-12600**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 720-5258-2  
Client Matrix: Water  
Dilution: 10  
Date Analyzed: 08/30/2006 1722  
Date Prepared: 08/30/2006 1722

Analysis Batch: 720-12600  
Prep Batch: N/A

Instrument ID: Varian 3900C  
Lab File ID: c:\saturnws\data\200608\06  
Initial Weight/Volume: 40 mL  
Final Weight/Volume: 40 mL

MSD Lab Sample ID: 720-5258-2  
Client Matrix: Water  
Dilution: 10  
Date Analyzed: 08/30/2006 1749  
Date Prepared: 08/30/2006 1749

Analysis Batch: 720-12600  
Prep Batch: N/A

Instrument ID: Varian 3900C  
Lab File ID: c:\saturnws\data\200608\06  
Initial Weight/Volume: 40 mL  
Final Weight/Volume: 40 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Benzene	95	92	69 - 129	1	20		
Toluene	118	102	70 - 130	14	20		
MTBE	109	104	65 - 165	5	20		
Surrogate	MS % Rec		MSD % Rec		Acceptance Limits		
Toluene-d8 (Surr)	120		106		77 - 121		
1,2-Dichloroethane-d4 (Surr)	105		102		73 - 130		

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: SECOR International, Inc.

Job Number: 720-5258-1

**Method Blank - Batch: 720-12704**

**Method: 8260B**  
**Preparation: 5030B**

Lab Sample ID: MB 720-12704/3  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 08/31/2006 1142  
Date Prepared: 08/31/2006 1142

Analysis Batch: 720-12704  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Saturn 2100  
Lab File ID: c:\saturnws\data\200608\08  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	101	77 - 121
1,2-Dichloroethane-d4 (Surr)	109	73 - 130

**Lab Control Spike/  
Lab Control Spike Duplicate Recovery Report - Batch: 720-12704**

**Method: 8260B**  
**Preparation: 5030B**

LCS Lab Sample ID: LCS 720-12704/2  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 08/31/2006 1049  
Date Prepared: 08/31/2006 1049

Analysis Batch: 720-12704  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Saturn 2100  
Lab File ID: c:\saturnws\data\200608\08  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-12704/1  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 08/31/2006 1116  
Date Prepared: 08/31/2006 1116

Analysis Batch: 720-12704  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Saturn 2100  
Lab File ID: c:\saturnws\data\200608\08  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Benzene	102	103	69 - 129	1	25		
Toluene	102	101	70 - 130	1	25		
MTBE	105	104	65 - 165	0	25		
Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits				
Toluene-d8 (Surr)	101	98	77 - 121				
1,2-Dichloroethane-d4 (Surr)	97	96	73 - 130				

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: SECOR International, Inc.

Job Number: 720-5258-1

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 720-12704**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 720-5266-A-3 MS  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 08/31/2006 1513  
Date Prepared: 08/31/2006 1513

Analysis Batch: 720-12704  
Prep Batch: N/A

Instrument ID: Saturn 2100  
Lab File ID: c:\saturnws\data\200608\  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

MSD Lab Sample ID: 720-5266-A-3 MSD  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 08/31/2006 1539  
Date Prepared: 08/31/2006 1539

Analysis Batch: 720-12704  
Prep Batch: N/A

Instrument ID: Saturn 2100  
Lab File ID: c:\saturnws\data\200608\  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Benzene	102	104	69 - 129	2	20		
Toluene	102	104	70 - 130	2	20		
MTBE	110	117	65 - 165	5	20		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
Toluene-d8 (Surr)		102	102			77 - 121	
1,2-Dichloroethane-d4 (Surr)		101	99			73 - 130	

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: SECOR International, Inc.

Job Number: 720-5258-1

**Method Blank - Batch: 720-12710**

**Method: 8260B**  
**Preparation: 5030B**

Lab Sample ID: MB 720-12710/3  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 08/31/2006 1656  
Date Prepared: 08/31/2006 1656

Analysis Batch: 720-12710  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Varian 3900C  
Lab File ID: c:\saturnws\data\200608\08  
Initial Weight/Volume: 40 mL  
Final Weight/Volume: 40 mL

Analyte	Result	Qual	RL
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	92	77 - 121
1,2-Dichloroethane-d4 (Surr)	109	73 - 130

**Lab Control Spike/  
Lab Control Spike Duplicate Recovery Report - Batch: 720-12710**

**Method: 8260B**  
**Preparation: 5030B**

LCS Lab Sample ID: LCS 720-12710/2  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 08/31/2006 1228  
Date Prepared: 08/31/2006 1228

Analysis Batch: 720-12710  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Varian 3900C  
Lab File ID: c:\saturnws\data\200608\08  
Initial Weight/Volume: 40 mL  
Final Weight/Volume: 40 mL

LCSD Lab Sample ID: LCSD 720-12710/1  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 08/31/2006 1322  
Date Prepared: 08/31/2006 1322

Analysis Batch: 720-12710  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Varian 3900C  
Lab File ID: c:\saturnws\data\200608\08  
Initial Weight/Volume: 40 mL  
Final Weight/Volume: 40 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Benzene	102	100	69 - 129	2	25		
Toluene	103	103	70 - 130	0	25		
MTBE	97	98	65 - 165	1	25		
Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits				
Toluene-d8 (Surr)	106	105	77 - 121				
1,2-Dichloroethane-d4 (Surr)	105	104	73 - 130				

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: SECOR International, Inc.

Job Number: 720-5258-1

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 720-12710**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 720-5304-A-4 MS  
Client Matrix: Water  
Dilution: 10  
Date Analyzed: 08/31/2006 1535  
Date Prepared: 08/31/2006 1535

Analysis Batch: 720-12710  
Prep Batch: N/A

Instrument ID: Varian 3900C  
Lab File ID: c:\saturnws\data\200608\08  
Initial Weight/Volume: 40 mL  
Final Weight/Volume: 40 mL

MSD Lab Sample ID: 720-5304-A-4 MSD  
Client Matrix: Water  
Dilution: 10  
Date Analyzed: 08/31/2006 1602  
Date Prepared: 08/31/2006 1602

Analysis Batch: 720-12710  
Prep Batch: N/A

Instrument ID: Varian 3900C  
Lab File ID: c:\saturnws\data\200608\08  
Initial Weight/Volume: 40 mL  
Final Weight/Volume: 40 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Benzene	102	98	69 - 129	3	20		
Toluene	102	111	70 - 130	9	20		
MTBE	104	102	65 - 165	2	20		
Surrogate	MS % Rec		MSD % Rec		Acceptance Limits		
Toluene-d8 (Surr)	108		117		77 - 121		
1,2-Dichloroethane-d4 (Surr)	105		106		73 - 130		

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: SECOR International, Inc.

Job Number: 720-5258-1

**Method Blank - Batch: 720-12713**

**Method: 8260B**  
**Preparation: 5030B**

Lab Sample ID: MB 720-12713/4  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 08/31/2006 0936  
Date Prepared: 08/31/2006 0936

Analysis Batch: 720-12713  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Varian 3900A  
Lab File ID: c:\saturnws\data\200608\08  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	93	77 - 121
1,2-Dichloroethane-d4 (Surr)	89	73 - 130

**Lab Control Spike/  
Lab Control Spike Duplicate Recovery Report - Batch: 720-12713**

**Method: 8260B**  
**Preparation: 5030B**

LCS Lab Sample ID: LCS 720-12713/1  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 08/31/2006 0852  
Date Prepared: 08/31/2006 0852

Analysis Batch: 720-12713  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Varian 3900A  
Lab File ID: c:\saturnws\data\200608\08  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-12713/3  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 08/31/2006 0914  
Date Prepared: 08/31/2006 0914

Analysis Batch: 720-12713  
Prep Batch: N/A  
Units: ug/L

Instrument ID: Varian 3900A  
Lab File ID: c:\saturnws\data\200608\08  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Benzene	95	92	69 - 129	3	25		
Toluene	97	95	70 - 130	3	25		
MTBE	95	90	65 - 165	5	25		
Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits				
Toluene-d8 (Surr)	94	93	77 - 121				
1,2-Dichloroethane-d4 (Surr)	90	88	73 - 130				

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: SECOR International, Inc.

Job Number: 720-5258-1

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 720-12713**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 720-5258-9  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 08/31/2006 1212  
Date Prepared: 08/31/2006 1212

Analysis Batch: 720-12713  
Prep Batch: N/A

Instrument ID: Varian 3900A  
Lab File ID: c:\saturnws\data\200608\08  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

MSD Lab Sample ID: 720-5258-9  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 08/31/2006 1043  
Date Prepared: 08/31/2006 1043

Analysis Batch: 720-12713  
Prep Batch: N/A

Instrument ID: Varian 3900A  
Lab File ID: c:\saturnws\data\200608\08  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Benzene	92	95	69 - 129	3	20		
Toluene	94	97	70 - 130	3	20		
MTBE	90	96	65 - 165	5	20		
Surrogate	MS % Rec		MSD % Rec		Acceptance Limits		
Toluene-d8 (Surr)	93		94		77 - 121		
1,2-Dichloroethane-d4 (Surr)	85		87		73 - 130		

Calculations are performed before rounding to avoid round-off errors in calculated results.



720-5258

101556

FIELD OFFICE INFORMATION		PROJECT INFORMATION				ANALYSES / METHOD REQUEST		REMARKS / PRECAUTIONS										
OFFICE: 05 Lafayette		Project No.: 0507.50227.01 Task: 0001																
Send Report To: Chris Maxwell 57 Lafayette Circle 2nd Floor Lafayette, CA 94549		Project Name: Bohannon																
Telephone: 925-299-9300		Project Manager: Chris Maxwell																
Fax / E-Mail:		Laboratory: STL																
Sample No. / Identification	SAMPLE			Container & Size **	Preservative	Number of Containers	TAT		REPORTING REQUIREMENTS									
	Date	Time	Matrix*				Normal	Rush	Other	MB & SURGS	Dup/MS/MSD	Raw Data	CLP Rpt	EDD	Other			
POBS-B2-060823	8/23/06	1510	W	3 V	HCL	3	X	X										
MW-3-060823	8/23/06	1605	W	3 V	HCL	3	X	X										
MW-2-060824	8/24/06	1810	W	3 V	HCL	3	X	X										
MW-1-060824	8/24/06	1735	W	3 V	HCL	3	X	X										
MW-6-060824	8/24/06	1605	W	3 V	HCL	3	X	X										
MW-7-060824	8/24/06	1530	W	3 V	HCL	3	X	X										
MW-5-060824	8/24/06	1455	W	3 V	HCL	3	X	X										
MW-4-060824	8/24/06	1320	W	3 V	HCL	3	X	X										
MOBS-B1-060824	8/24/06	1245	W	3 V	HCL	3	X	X										
POBS-A1-060824	8/24/06	1045	W	3 V	HCL	3	X	X										
POBS-B1-060824	8/24/06	1010	W	3 V	HCL	3	X	X										
Possible Hazard Identification						Sample Disposal												
<input type="checkbox"/> Non-Hazardous <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown						<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months												

Sampled by:		Shipment Method:		Airbill Number:	
Signature	Print Name	Company	Date	Time	
1a Relinquished by:	Andy VanSicklewood	SECOR	8/23/06	11:26	
1b Received by:	Harry Sidhu	STL	08/28/06	11:30	
2a Relinquished by:	Hilary Sidhu	STLST	08/28/06	12:00	
2b Received by:	Hilary Sidhu	STLST	8-28-06	12:00	
3a Relinquished by:					
3b Received by:					

\*Matrix Key: AO = Aqueous AR = Air SO = Soil WA = Waste OT = Other \*\*Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other

## LOGIN SAMPLE RECEIPT CHECK LIST

Client: SECOR International, Inc.

Job Number: 720-5258-1

**Login Number: 5258**

Question	T/F/NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	NA	
The cooler's custody seal, if present, is intact.	NA	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

**APPENDIX C**

**Field Data Sheets**

Groundwater Monitoring and Remediation

Progress Report

575 Paseo Grande

San Lorenzo, California

SECOR PN: 05OT.50227.01.0002

April 23, 2007

**GROUNDWATER WELL - PURGING AND SAMPLING RECORD**

Date: May 27, 2005

Project Name: Bohannon

Well Designation: MW-1

Project Number: 98360-00-009

Field Personnel: Mark Williams

Site Location: \_\_\_\_\_

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	
		<del>5.7</del> 5.90	=		0.16	0.64	1.44	1X =
								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	7:45	1:48	1:50	1:52			
Volume Purged							
Purge Rate (gpm)							
Temperature (°C)	20.76	20.77	20.77	20.74			
ORP	-64.2	-64.9	-65.7	-71.7			
Dissolved Oxygen	0.61	0.59	0.54	0.45			
pH	7.10	7.11	7.10	7.08			
Specific Conductivity (µmhos)	1123	1124	1124	1124			
Turbidity/Color	Clear	Clear	Clear	Clear			
Odor/Sheen	none	none	none	none			
Depth to Water During Purge (ft)							
Number of Casing Volumes Removed							
Dewatered?							
Comments:	_____						

**SAMPLE DATA:**

Static Water Level: 5.90 Description of Water Level Measurement Point: \_\_\_\_\_

Water Level Determined By: \_\_\_\_\_

Purge Method: \_\_\_\_\_

Purge Depth: \_\_\_\_\_ Percent Recovery: \_\_\_\_\_ Depth to Water During Sampling: \_\_\_\_\_

Sampling Equipment: \_\_\_\_\_

Time of Sample Collection: 2:00 pm

Comments: \_\_\_\_\_

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

**PURGE WATER DISPOSAL:**

Total Discharge (gal): \_\_\_\_\_ Disposal Method: \_\_\_\_\_

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: \_\_\_\_\_

**GROUNDWATER WELL – PURGING AND SAMPLING RECORD**

 Date: May 27, 2005

 Project Name: Bohannon

 Well Designation: MW-2

 Project Number: 98360-00-009

 Field Personnel: Mark Williams

Site Location: \_\_\_\_\_

WELL VOLUME CALCULATION								
Total Well Depth (ft)	-	Depth to Water (ft)	=	Water Column (ft)	Casing Diameter Multiplier (SCHD 40)			Casing Volume Purge Quantity
	-	<u>6.11</u>	=		2-inch	4-inch	6-inch	1X =
					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	<u>1:15</u>	<u>1:18</u>	<u>1:21</u>				
Volume Purged							
Purge Rate (gpm)							
Temperature (°C)	<u>22.23</u>	<u>22.22</u>	<u>22.22</u>				
ORP	<u>-125.7</u>	<u>-133.4</u>	<u>-139.1</u>				
Dissolved Oxygen	<u>0.61</u>	<u>0.58</u>	<u>0.56</u>				
pH	<u>7.12</u>	<u>7.13</u>	<u>7.12</u>				
Specific Conductivity (µmhos)	<u>1017</u>	<u>1011</u>	<u>1012</u>				
Turbidity/Color	<u>Clear</u>	<u>Clear</u>	<u>Clear</u>				
Odor/Sheen	<u>no odor</u>	<u>no odor</u>	<u>no odor</u>				
Depth to Water During Purge (ft)							
Number of Casing Volumes Removed							
Dewatered?							
Comments:	_____						

**SAMPLE DATA:**

 Static Water Level: 6.11 Description of Water Level Measurement Point: \_\_\_\_\_

Water Level Determined By: \_\_\_\_\_

Purge Method: \_\_\_\_\_

Purge Depth: \_\_\_\_\_ Percent Recovery: \_\_\_\_\_ Depth to Water During Sampling: \_\_\_\_\_

Sampling Equipment: \_\_\_\_\_

 Time of Sample Collection: 1:30 pm

Comments: \_\_\_\_\_

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

**PURGE WATER DISPOSAL:**

Total Discharge (gal): \_\_\_\_\_ Disposal Method: \_\_\_\_\_

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: \_\_\_\_\_

**GROUNDWATER WELL – PURGING AND SAMPLING RECORD**

 Date: May 27, 2005

 Project Name: Bohannon

 Well Designation: MW-3

 Project Number: 98360-00-009

 Field Personnel: Mark Williams

Site Location: \_\_\_\_\_

WELL VOLUME CALCULATION								
Total Well Depth (ft)	-	Depth to Water (ft)	=	Water Column (ft)	Casing Diameter Multiplier (SCHD 40)			Casing Volume Purge Quantity
	-	<u>5.74</u>	=		2-inch	4-inch	6-inch	1X =
					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	<u>3:20</u>	<u>3:22</u>	<u>3:24</u>				
Volume Purged							
Purge Rate (gpm)							
Temperature (°C)	<u>21.34</u>	<u>21.33</u>	<u>21.33</u>				
ORP	<u>-133.1</u>	<u>-133.9</u>	<u>-134.5</u>				
Dissolved Oxygen	<u>0.78</u>	<u>0.61</u>	<u>0.55</u>				
pH	<u>6.71</u>	<u>6.72</u>	<u>6.71</u>				
Specific Conductivity (µmhos)	<u>2963</u>	<u>2962</u>	<u>2961</u>				
Turbidity/Color	<u>Clear</u>	<u>Clear</u>	<u>Clear</u>				
Odor/Sheen	<u>petroleum</u>	<u>"</u>	<u>"</u>				
Depth to Water During Purge (ft)							
Number of Casing Volumes Removed							
Dewatered?							
Comments:	_____						

**SAMPLE DATA:**

 Static Water Level: 5.74 Description of Water Level Measurement Point: \_\_\_\_\_

Water Level Determined By: \_\_\_\_\_

Purge Method: \_\_\_\_\_

Purge Depth: \_\_\_\_\_ Percent Recovery: \_\_\_\_\_ Depth to Water During Sampling: \_\_\_\_\_

Sampling Equipment: \_\_\_\_\_

 Time of Sample Collection: 3:30

Comments: \_\_\_\_\_

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

**PURGE WATER DISPOSAL:**

Total Discharge (gal): \_\_\_\_\_ Disposal Method: \_\_\_\_\_

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: \_\_\_\_\_

**GROUNDWATER WELL – PURGING AND SAMPLING RECORD**

 Date: May 27, 2005

 Project Name: Bohannon  
 Project Number: 98360-00-009  
 Site Location: \_\_\_\_\_

 Well Designation: MW-4  
 Field Personnel: Mark Williams

WELL VOLUME CALCULATION								
Total Well Depth (ft)	-	Depth to Water (ft)	=	Water Column (ft)	Casing Diameter Multiplier (SCHD 40)			Casing Volume Purge Quantity
	-	<u>5.46</u>	=		2-inch	4-inch	6-inch	1X =
					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	<u>11:45</u>	<u>11:48</u>	<u>11:51</u>				
Volume Purged							
Purge Rate (gpm)							
Temperature (°C)	<u>18.97</u>	<u>18.96</u>	<u>18.97</u>				
ORP	<u>-173.4</u>	<u>-172.9</u>	<u>-173.3</u>				
Dissolved Oxygen	<u>0.76</u>	<u>0.75</u>	<u>0.74</u>				
pH	<u>6.77</u>	<u>6.76</u>	<u>6.76</u>				
Specific Conductivity (µmhos)	<u>992</u>	<u>990</u>	<u>991</u>				
Turbidity/Color	<u>Clear</u>	<u>Clear</u>	<u>Clear</u>				
Odor/Sheen	<u>Strong</u>	<u>Strong</u>	<u>Strong</u>				
Depth to Water During Purge (ft)							
Number of Casing Volumes Removed							
Dewatered?							
Comments:	<u>described petrochem odor on tubing, black debris, looks like bacterial mats</u>						

**SAMPLE DATA:**

 Static Water Level: 5.46 Description of Water Level Measurement Point: \_\_\_\_\_  
 Water Level Determined By: \_\_\_\_\_  
 Purge Method: \_\_\_\_\_  
 Purge Depth: \_\_\_\_\_ Percent Recovery: \_\_\_\_\_ Depth to Water During Sampling: \_\_\_\_\_  
 Sampling Equipment: \_\_\_\_\_  
 Time of Sample Collection: 12:00  
 Comments: \_\_\_\_\_

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

**PURGE WATER DISPOSAL:**

 Total Discharge (gal): \_\_\_\_\_ Disposal Method: \_\_\_\_\_  
 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: \_\_\_\_\_

**GROUNDWATER WELL – PURGING AND SAMPLING RECORD**

Date: May 27, 2005

Project Name: Bohannon  
Project Number: 98360-00-009  
Site Location: \_\_\_\_\_

Well Designation: MW-5  
Field Personnel: Mark Williams

WELL VOLUME CALCULATION								
Total Well Depth (ft)	-	Depth to Water (ft)	=	Water Column (ft)	Casing Diameter Multiplier (SCHD 40)			Casing Volume Purge Quantity
	-	<u>5.46</u>	=		2-inch	4-inch	6-inch	1X =
					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	<u>11:15</u>	<u>11:19</u>	<u>11:22</u>	<u>11:24</u>	<u>11:26</u>	<u>11:28</u>	
Volume Purged							
Purge Rate (gpm)							
Temperature (°C)	<u>19.88</u>	<u>19.85</u>	<u>19.85</u>	<u>19.81</u>	<u>19.79</u>	<u>19.78</u>	
ORP	<u>21.1</u>	<u>19.3</u>	<u>8.5</u>	<u>4.3</u>	<u>0.7</u>	<u>1.6</u>	
Dissolved Oxygen	<u>1.05</u>	<u>1.04</u>	<u>1.04</u>	<u>0.92</u>	<u>0.88</u>	<u>0.86</u>	
pH	<u>7.35</u>	<u>7.34</u>	<u>7.35</u>	<u>7.30</u>	<u>7.29</u>	<u>7.27</u>	
Specific Conductivity (µmhos)	<u>771</u>	<u>774</u>	<u>772</u>	<u>780</u>	<u>782</u>	<u>786</u>	
Turbidity/Color	<u>Clear</u>	<u>clear</u>	<u>clear</u>	<u>Clear</u>	<u>Clear</u>	<u>Clear</u>	
Odor/Sheen	<u>None</u>	<u>None</u>	<u>None</u>	<u>None</u>	<u>None</u>	<u>None</u>	
Depth to Water During Purge (ft)							
Number of Casing Volumes Removed							
Dewatered?							
Comments:	_____						

**SAMPLE DATA:** 5.46 Description of Water Level Measurement Point: \_\_\_\_\_  
 Static Water Level: \_\_\_\_\_  
 Water Level Determined By: \_\_\_\_\_  
 Purge Method: \_\_\_\_\_  
 Purge Depth: \_\_\_\_\_ Percent Recovery: \_\_\_\_\_ Depth to Water During Sampling: \_\_\_\_\_  
 Sampling Equipment: \_\_\_\_\_  
 Time of Sample Collection: 11:30  
 Comments: ORP rapidly dropped from 11:15 to 11:24 then slowly to 11:28

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

**PURGE WATER DISPOSAL:**  
 Total Discharge (gal): \_\_\_\_\_ Disposal Method: \_\_\_\_\_  
 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: \_\_\_\_\_



**GROUNDWATER WELL – PURGING AND SAMPLING RECORD**

Date: May 27, 2005

Project Name: Bohannon  
Project Number: 98360-00-009  
Site Location: \_\_\_\_\_

Well Designation: MW-6  
Field Personnel: Mark Williams

WELL VOLUME CALCULATION								
Total Well Depth (ft)	-	Depth to Water (ft)	=	Water Column (ft)	Casing Diameter Multiplier (SCHD 40)			Casing Volume Purge Quantity
	-	<u>4.75</u>	=		2-inch	4-inch	6-inch	1X =
					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	<u>10:45</u>	<u>10:48</u>	<u>10:51</u>				
Volume Purged							
Purge Rate (gpm)							
Temperature (°C)	<u>18.94</u>	<u>19.95</u>	<u>19.85</u>				
ORP	<u>19.1</u>	<u>17.7</u>	<u>11.5</u>				
Dissolved Oxygen	<u>1.27</u>	<u>1.26</u>	<u>1.24</u>				
pH	<u>7.07</u>	<u>7.06</u>	<u>7.05</u>				
Specific Conductivity (µmhos)	<u>930</u>	<u>930</u>	<u>930</u>				
Turbidity/Color	<u>clear</u>	<u>clear</u>	<u>clear</u>				
Odor/Sheen	<u>none</u>	<u>none</u>	<u>none</u>				
Depth to Water During Purge (ft)							
Number of Casing Volumes Removed							
Dewatered?							
Comments:	_____						

**SAMPLE DATA:**

Static Water Level: 4.75 Description of Water Level Measurement Point: \_\_\_\_\_  
 Water Level Determined By: \_\_\_\_\_  
 Purge Method: \_\_\_\_\_  
 Purge Depth: \_\_\_\_\_ Percent Recovery: \_\_\_\_\_ Depth to Water During Sampling: \_\_\_\_\_  
 Sampling Equipment: \_\_\_\_\_  
 Time of Sample Collection: 11:00 AM  
 Comments: \_\_\_\_\_

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

**PURGE WATER DISPOSAL:**

Total Discharge (gal): \_\_\_\_\_ Disposal Method: \_\_\_\_\_  
 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: \_\_\_\_\_

**GROUNDWATER WELL - PURGING AND SAMPLING RECORD**

Date: May 27, 2005

Project Name: Bohannon  
Project Number: 98360-00-009  
Site Location: \_\_\_\_\_

Well Designation: MW-9  
Field Personnel: Mark Williams

WELL VOLUME CALCULATION								
Total Well Depth (ft)	-	Depth to Water (ft)	=	Water Column (ft)	Casing Diameter Multiplier (SCHD 40)			Casing Volume Purge Quantity
	-	<u>5.12</u>	=		<u>2-inch</u> 0.16	4-inch 0.64	6-inch 1.44	1X = 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	<u>10:15</u>	<u>10:18</u>	<u>10:21</u>				
Volume Purged							
Purge Rate (gpm)							
Temperature (°C)	<u>17.46</u>	<u>17.39</u>	<u>17.38</u>				
ORP	<u>48.1</u>	<u>45.2</u>	<u>43.0</u>				
Dissolved Oxygen mg/L	<u>1.44</u>	<u>1.36</u>	<u>1.35</u>				
pH	<u>7.01</u>	<u>6.97</u>	<u>6.98</u>				
Specific Conductivity (µmhos)	<u>292</u>	<u>879</u>	<u>889</u>				
Turbidity/Color	<u>clear</u>	<u>clear</u>	<u>clear</u>				
Odor/Sheen	<u>none</u>	<u>none</u>	<u>none</u>				
Depth to Water During Purge (ft)							
Number of Casing Volumes Removed							
Dewatered?							
Comments:	_____						

**SAMPLE DATA:**

Static Water Level: 5.12 Description of Water Level Measurement Point: \_\_\_\_\_  
 Water Level Determined By: \_\_\_\_\_  
 Purge Method: \_\_\_\_\_  
 Purge Depth: \_\_\_\_\_ Percent Recovery: \_\_\_\_\_ Depth to Water During Sampling: \_\_\_\_\_  
 Sampling Equipment: peristaltic pump  
 Time of Sample Collection: 10:30  
 Comments: \_\_\_\_\_

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

**PURGE WATER DISPOSAL:**

Total Discharge (gal): \_\_\_\_\_ Disposal Method: \_\_\_\_\_  
 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: \_\_\_\_\_

**GROUNDWATER WELL - PURGING AND SAMPLING RECORD**

Date: May 27, 2005

Project Name: Bohannon  
Project Number: 98360-00-009  
Site Location: \_\_\_\_\_

Well Designation: ~~W-8~~ POB5-A1  
Field Personnel: Mark Williams

WELL VOLUME CALCULATION								
Total Well Depth (ft)	-	Depth to Water (ft)	=	Water Column (ft)	Casing Diameter Multiplier (SCHD 40)			Casing Volume Purge Quantity
	-	<u>—</u>	=		2-inch	4-inch	6-inch	1X =
					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	<u>3:10</u>	<u>3:12</u>	<u>3:14</u>				
Volume Purged							
Purge Rate (gpm)							
Temperature (°C)	<u>21.20</u>	<u>21.19</u>	<u>21.19</u>				
ORP	<u>-152.6</u>	<u>-153.5</u>	<u>-153.2</u>				
Dissolved Oxygen	<u>0.33</u>	<u>0.29</u>	<u>0.26</u>				
pH	<u>6.74</u>	<u>6.74</u>	<u>6.74</u>				
Specific Conductivity (µmhos)	<u>1397</u>	<u>1396</u>	<u>1396</u>				
Turbidity/Color	<u>clear</u>	<u>clear</u>	<u>clear</u>				
Odor/Sheen	<u>none</u>	<u>none</u>	<u>none</u>				
Depth to Water During Purge (ft)							
Number of Casing Volumes Removed							
Dewatered?							
Comments:	_____						

**SAMPLE DATA:**

Static Water Level: \_\_\_\_\_ Description of Water Level Measurement Point: \_\_\_\_\_  
 Water Level Determined By: \_\_\_\_\_  
 Purge Method: \_\_\_\_\_  
 Purge Depth: \_\_\_\_\_ Percent Recovery: \_\_\_\_\_ Depth to Water During Sampling: \_\_\_\_\_  
 Sampling Equipment: \_\_\_\_\_  
 Time of Sample Collection: 3:15  
 Comments: \_\_\_\_\_

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

**PURGE WATER DISPOSAL:**

Total Discharge (gal): \_\_\_\_\_ Disposal Method: \_\_\_\_\_  
 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: \_\_\_\_\_

**GROUNDWATER WELL - PURGING AND SAMPLING RECORD**

Date: May 27, 2005

Project Name: Bohannon  
Project Number: 98360-00-009  
Site Location: \_\_\_\_\_

Well Designation: PAW P035-B1  
Field Personnel: Mark Williams

WELL VOLUME CALCULATION								
Total Well Depth (ft)	-	Depth to Water (ft)	=	Water Column (ft)	Casing Diameter Multiplier (SCHD 40)			Casing Volume Purge Quantity
	-	<u>    </u>	=		2-inch	4-inch	6-inch	1X =
					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	<u>2:45</u>	<u>2:49</u>	<u>2:51</u>				
Volume Purged							
Purge Rate (gpm)							
Temperature (°C)	<u>21.66</u>	<u>21.67</u>	<u>21.66</u>				
ORP	<u>-90.4</u>	<u>-90.8</u>	<u>-91.2</u>				
Dissolved Oxygen	<u>0.36</u>	<u>0.35</u>	<u>0.35</u>				
pH	<u>6.93</u>	<u>6.93</u>	<u>6.93</u>				
Specific Conductivity (µmhos)	<u>1220</u>	<u>1221</u>	<u>1219</u>				
Turbidity/Color	<u>Clear</u>	<u>Clear</u>	<u>Clear</u>				
Odor/Sheen	<u>None</u>	<u>None</u>	<u>None</u>				
Depth to Water During Purge (ft)							
Number of Casing Volumes Removed							
Dewatered?							
Comments:	_____						

**SAMPLE DATA:**

Static Water Level: \_\_\_\_\_ Description of Water Level Measurement Point: \_\_\_\_\_  
 Water Level Determined By: \_\_\_\_\_  
 Purge Method: \_\_\_\_\_  
 Purge Depth: \_\_\_\_\_ Percent Recovery: \_\_\_\_\_ Depth to Water During Sampling: \_\_\_\_\_  
 Sampling Equipment: \_\_\_\_\_  
 Time of Sample Collection: 3:00  
 Comments: \_\_\_\_\_

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

**PURGE WATER DISPOSAL:**

Total Discharge (gal): \_\_\_\_\_ Disposal Method: \_\_\_\_\_  
 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: \_\_\_\_\_

## GROUNDWATER WELL – PURGING AND SAMPLING RECORD

Project Name: Bohannon Well Designation: POBS-BZ Date: May 27, 2005  
 Project Number: 98360-00-009 Field Personnel: Mark Williams  
 Site Location: \_\_\_\_\_

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 =
					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	2:15	2:18	2:23				
Volume Purged							
Purge Rate (gpm)							
Temperature (°C)	21.30	21.29	21.29				
ORP	-65.0	-66.2	-66.3				
Dissolved Oxygen	0.49	0.45	0.41				
pH	6.85	6.84	6.85				
Specific Conductivity (µmhos)	1316	1317	1316				
Turbidity/Color	clear	clear	clear				
Odor/Sheen	none	none	none				
Depth to Water During Purge (ft)							
Number of Casing Volumes Removed							
Dewatered?							
Comments:	_____						

**SAMPLE DATA:**

Static Water Level: — Description of Water Level Measurement Point: \_\_\_\_\_  
 Water Level Determined By: \_\_\_\_\_  
 Purge Method: \_\_\_\_\_  
 Purge Depth: \_\_\_\_\_ Percent Recovery: \_\_\_\_\_ Depth to Water During Sampling: \_\_\_\_\_  
 Sampling Equipment: \_\_\_\_\_  
 Time of Sample Collection: 2:30 pm - 2:30 pm  
 Comments: \_\_\_\_\_

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

**PURGE WATER DISPOSAL:**

Total Discharge (gal): \_\_\_\_\_ Disposal Method: \_\_\_\_\_  
 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: \_\_\_\_\_

**GROUNDWATER WELL - PURGING AND SAMPLING RECORD**

 Date: May 27, 2005

 Project Name: Bohannon

 Well Designation: N1W-A1

 Project Number: 98360-00-009

 Field Personnel: Mark Williams

Site Location: \_\_\_\_\_

WELL VOLUME CALCULATION								
Total Well Depth (ft)	-	Depth to Water (ft)	=	Water Column (ft)	Casing Diameter Multiplier (SCHD 40)			Casing Volume Purge Quantity
	-	<u>—</u>	=		2-inch	4-inch	6-inch	1X =
					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	<u>12:45</u>	<u>12:48</u>	<u>12:52</u>				
Volume Purged							
Purge Rate (gpm)							
Temperature (°C)	<u>20.91</u>	<u>20.92</u>	<u>20.92</u>				
ORP	<u>-108.7</u>	<u>-109.3</u>	<u>-109.9</u>				
Dissolved Oxygen	<u>0.91</u>	<u>0.86</u>	<u>0.75</u>				
pH	<u>6.74</u>	<u>6.74</u>	<u>6.74</u>				
Specific Conductivity (µmhos)	<u>1310</u>	<u>1307</u>	<u>1307</u>				
Turbidity/Color	<u>Clear</u>	<u>Clear</u>	<u>Clear</u>				
Odor/Sheen	<u>no odor</u>	<u>no odor</u>	<u>no odor</u>				
Depth to Water During Purge (ft)							
Number of Casing Volumes Removed							
Dewatered?							
Comments:	_____						

**SAMPLE DATA:**

Static Water Level: \_\_\_\_\_ Description of Water Level Measurement Point: \_\_\_\_\_

Water Level Determined By: \_\_\_\_\_

Purge Method: \_\_\_\_\_

Purge Depth: \_\_\_\_\_ Percent Recovery: \_\_\_\_\_ Depth to Water During Sampling: \_\_\_\_\_

Sampling Equipment: \_\_\_\_\_

 Time of Sample Collection: 1:00 pm

Comments: \_\_\_\_\_

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

**PURGE WATER DISPOSAL:**

Total Discharge (gal): \_\_\_\_\_ Disposal Method: \_\_\_\_\_

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: \_\_\_\_\_

**GROUNDWATER WELL - PURGING AND SAMPLING RECORD**

Project Name: Bohannon Well Designation: NIW-AZ Date: May 27, 2005  
 Project Number: 98360-00-009 Field Personnel: Mark Williams  
 Site Location: \_\_\_\_\_

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 =
					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							
Volume Purged	12:15	12:18	12:21				
Purge Rate (gpm)							
Temperature (°C)	21.07	21.07	21.07				
ORP	-106.9	-107.3	-110.1				
Dissolved Oxygen	0.58	0.53	0.51				
pH	6.75	6.76	6.75				
Specific Conductivity (µmhos)	1023	1025	1023				
Turbidity/Color	Slightly blue	Slightly blue	Slightly blue				
Odor/Sheen	none	none	none				
Depth to Water During Purge (ft)							
Number of Casing Volumes Removed							
Dewatered?							
Comments:	_____						

**SAMPLE DATA:**

Static Water Level: \_\_\_\_\_ Description of Water Level Measurement Point: \_\_\_\_\_  
 Water Level Determined By: \_\_\_\_\_  
 Purge Method: \_\_\_\_\_  
 Purge Depth: \_\_\_\_\_ Percent Recovery: \_\_\_\_\_ Depth to Water During Sampling: \_\_\_\_\_  
 Sampling Equipment: \_\_\_\_\_  
 Time of Sample Collection: 12:30  
 Comments: \_\_\_\_\_

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

**PURGE WATER DISPOSAL:**

Total Discharge (gal): \_\_\_\_\_ Disposal Method: \_\_\_\_\_  
 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: \_\_\_\_\_

SECOR International Inc.

WATER SAMPLE FIELD DATA SHEET

PROJECT #: 05OT.50227.01
CLIENT NAME: Bohannon Development
LOCATION: 575 Paseo Grande, San Lorenzo

PURGED BY: AUV
SAMPLED BY: AUV

WELL I.D.: MW-1
SAMPLE I.D.: MW-1-060824
QA SAMPLES:

DATE PURGED: 8/24/06
DATE SAMPLED: 8/24/06
START (2400hr): 1715
SAMPLE TIME (2400hr): 1735
END (2400hr): 1735
SAMPLE TYPE: Groundwater [X] Surface Water Treatment Effluent Other
IF WELL NOT SAMPLED, STATE REASON WHY

CASING DIAMETER: 2" [X] 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) =
DEPTH TO WATER (feet) = 6.79
WATER COLUMN HEIGHT (feet) =
CASING VOLUME (gal) =
CALCULATED PURGE (gal) =
ACTUAL PURGE (gal) =

FIELD MEASUREMENTS

Table with 8 columns: DATE, TIME (2400hr), VOLUME (gal), TEMP. (degrees F), CONDUCTIVITY (umhos/cm), pH (units), ORP (mV), Dis. Oxy. (% / PPM). Rows contain handwritten data for 8/24/06 at 1720, 1725, and 1730.

FERROUS IRON (measured at time of sample collection) - PPM

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER:
SAMPLE TURBIDITY:
PRESENCE OF NON-AQUEOUS PHASE LIQUID?
80% RECHARGE: YES NO
ANALYSES:
ODOR: NO
SAMPLE VESSEL / PRESERVATIVE: 3 Vials HCL

PURGING EQUIPMENT

SAMPLING EQUIPMENT

Bladder Pump
Centrifugal Pump
Submersible Pump
[X] Peristaltic Pump
Bailer (Teflon)
Bailer (PVC)
Bailer (Stainless Steel)
Dedicated
Other:
Pump Depth:

Bladder Pump
Centrifugal Pump
Submersible Pump
[X] Peristaltic Pump
Bailer (Teflon)
Bailer ( PVC or disposable)
Bailer (Stainless Steel)
Dedicated
Other:

WELL INTEGRITY: Good
LOCK#:
REMARKS:

SIGNATURE:
Page of



# SECOR International Inc.

## WATER SAMPLE FIELD DATA SHEET

PROJECT #: 050T.50227.01 PURGED BY: AWW WELL I.D.: MW-2  
 CLIENT NAME: Bohannon Development SAMPLED BY: 1750 AWW SAMPLE I.D.: MW-2-060824  
 LOCATION: 575 Paseo Grande, San Lorenzo QA SAMPLES: \_\_\_\_\_

DATE PURGED 8/24/06 START (2400hr) 1750 END (2400hr) 1810  
 DATE SAMPLED 8/24/06 SAMPLE TIME (2400hr) 1810  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_  
 IF WELL NOT SAMPLED, STATE REASON WHY \_\_\_\_\_

CASING DIAMETER: 2" 4 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) = \_\_\_\_\_ CASING VOLUME (gal) = \_\_\_\_\_  
 DEPTH TO WATER (feet) = 6.90 CALCULATED PURGE (gal) = \_\_\_\_\_  
 WATER COLUMN HEIGHT (feet) = \_\_\_\_\_ ACTUAL PURGE (gal) = \_\_\_\_\_

### FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	ORP (mV)	Dis. Oxy. (% / PPM)
<u>8/24/06</u>	<u>1755</u>	<u>~1</u>	<u>23.87</u>	<u>1661</u>	<u>6.57</u>	<u>-185.7</u>	<u>1.2</u>
<u>8/24/06</u>	<u>1800</u>	<u>~1.5</u>	<u>23.93</u>	<u>1658</u>	<u>6.52</u>	<u>-173.0</u>	<u>0.9</u>
<u>8/24/06</u>	<u>1805</u>	<u>~2</u>	<u>23.96</u>	<u>1647</u>	<u>6.51</u>	<u>-164.3</u>	<u>1.0</u>
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

FERROUS IRON (measured at time of sample collection) - \_\_\_\_\_ PPM

### SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: \_\_\_\_\_  
 PRESENCE OF NON-AQUEOUS PHASE LIQUID? \_\_\_\_\_  
 80% RECHARGE:  YES  NO ANALYSES: \_\_\_\_\_  
 ODOR: Yes SAMPLE VESSEL / PRESERVATIVE: 3 Vials HCL

#### PURGING EQUIPMENT

Bladder Pump       Bailer (Teflon)  
 Centrifugal Pump       Bailer (PVC)  
 Submersible Pump       Bailer (Stainless Steel)  
 Peristaltic Pump       Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: \_\_\_\_\_

#### SAMPLING EQUIPMENT

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

WELL INTEGRITY: Good LOCK#: \_\_\_\_\_

REMARKS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

SIGNATURE: [Signature] Page \_\_\_\_\_ of \_\_\_\_\_

# SECOR International Inc.

## WATER SAMPLE FIELD DATA SHEET

PROJECT #: 05OT.50227.01 PURGED BY: AWW WELL I.D.: MW-3  
 CLIENT NAME: Bohannon Development SAMPLED BY: AWW SAMPLE I.D.: MW-3-060823  
 LOCATION: 575 Paseo Grande, San Lorenzo QA SAMPLES: \_\_\_\_\_

DATE PURGED 8/22/06 START (2400hr) 1540 END (2400hr) 1555  
 DATE SAMPLED 8/23/06 SAMPLE TIME (2400hr) 1605  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_  
 IF WELL NOT SAMPLED, STATE REASON WHY \_\_\_\_\_

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) = \_\_\_\_\_ CASING VOLUME (gal) = \_\_\_\_\_  
 DEPTH TO WATER (feet) = 6.69' CALCULATED PURGE (gal) = \_\_\_\_\_  
 WATER COLUMN HEIGHT (feet) = \_\_\_\_\_ ACTUAL PURGE (gal) = \_\_\_\_\_

### FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	ORP (mV)	Dis. Oxy. (% / PPM)
<u>8/23/06</u>	<u>1545</u>	<u>~.5</u>	<u>24.07</u>	<u>3873</u>	<u>6.66</u>	<u>-152.3</u>	<u>2.5</u>
<u>8/23/06</u>	<u>1550</u>	<u>~1</u>	<u>24.02</u>	<u>3867</u>	<u>6.65</u>	<u>-150.8</u>	<u>1.6</u>
<u>8/23/06</u>	<u>1555</u>	<u>~1.5</u>	<u>23.85</u>	<u>3853</u>	<u>6.65</u>	<u>-155.3</u>	<u>1.8</u>
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

FERROUS IRON (measured at time of sample collection) - \_\_\_\_\_ PPM

### SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: \_\_\_\_\_  
 PRESENCE OF NON-AQUEOUS PHASE LIQUID? \_\_\_\_\_  
 80% RECHARGE:  YES  NO ANALYSES: \_\_\_\_\_  
 ODOR: Yes SAMPLE VESSEL / PRESERVATIVE: 3 Vials, ALL

#### PURGING EQUIPMENT

Bladder Pump       Bailer (Teflon)  
 Centrifugal Pump       Bailer (PVC)  
 Submersible Pump       Bailer (Stainless Steel)  
 Peristaltic Pump       Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: \_\_\_\_\_

#### SAMPLING EQUIPMENT

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

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

REMARKS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

SIGNATURE: [Signature]



# SECOR International Inc.

## WATER SAMPLE FIELD DATA SHEET

PROJECT #: 05OT.50227.01  
 CLIENT NAME: Bohannon Development  
 LOCATION: 575 Paseo Grande, San Lorenzo

PURGED BY: AWW  
 SAMPLED BY: AWW

WELL I.D.: MW-84  
 SAMPLE I.D.: MW-84-060824  
 QA SAMPLES: \_\_\_\_\_

DATE PURGED 8/24/06 START (2400hr) 1300 END (2400hr) 1320  
 DATE SAMPLED 8/24/06 SAMPLE TIME (2400hr) 1320  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_  
 IF WELL NOT SAMPLED, STATE REASON WHY \_\_\_\_\_

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) = \_\_\_\_\_ CASING VOLUME (gal) = \_\_\_\_\_  
 DEPTH TO WATER (feet) = 6.15' CALCULATED PURGE (gal) = \_\_\_\_\_  
 WATER COLUMN HEIGHT (feet) = \_\_\_\_\_ ACTUAL PURGE (gal) = \_\_\_\_\_

### FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	ORP (mV)	Dis. Oxy. (% / PPM)
<u>8/24/06</u>	<u>1305</u>	<u>~.5</u>	<u>21.32</u>	<u>1274</u>	<u>6.45</u>	<u>-111.9</u>	<u>1.7</u>
<u>8/24/06</u>	<u>1310</u>	<u>~1</u>	<u>21.02</u>	<u>1280</u>	<u>6.44</u>	<u>-118.4</u>	<u>0.9</u>
<u>8/24/06</u>	<u>1315</u>	<u>~1.5</u>	<u>21.10</u>	<u>1290</u>	<u>6.43</u>	<u>-117.0</u>	<u>0.5</u>
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

FERROUS IRON (measured at time of sample collection) - \_\_\_\_\_ PPM

### SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: \_\_\_\_\_  
 PRESENCE OF NON-AQUEOUS PHASE LIQUID? \_\_\_\_\_  
 80% RECHARGE:  YES  NO ANALYSES: \_\_\_\_\_  
 ODOR: Yes SAMPLE VESSEL / PRESERVATIVE: 3 Vials HCL

### PURGING EQUIPMENT

\_\_\_\_\_ Bladder Pump \_\_\_\_\_ Bailer (Teflon)  
 \_\_\_\_\_ Centrifugal Pump \_\_\_\_\_ Bailer (PVC)  
 \_\_\_\_\_ Submersible Pump \_\_\_\_\_ Bailer (Stainless Steel)  
 Peristaltic Pump \_\_\_\_\_ Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: \_\_\_\_\_

### SAMPLING EQUIPMENT

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

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

REMARKS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

SIGNATURE: [Signature] Page \_\_\_\_\_ of \_\_\_\_\_

# SECOR International Inc.

## WATER SAMPLE FIELD DATA SHEET

PROJECT #: 05OT.50227.01 PURGED BY: AUV WELL I.D.: MW-5  
 CLIENT NAME: Bohannon Development SAMPLED BY: AUV SAMPLE I.D.: MW-5-060824  
 LOCATION: 575 Paseo Grande, San Lorenzo QA SAMPLES: \_\_\_\_\_

DATE PURGED 8/24/06 START (2400hr) 1345 END (2400hr) 1455  
 DATE SAMPLED 8/24/06 SAMPLE TIME (2400hr) 1455  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_  
 IF WELL NOT SAMPLED, STATE REASON WHY \_\_\_\_\_

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) = \_\_\_\_\_ CASING VOLUME (gal) = \_\_\_\_\_  
 DEPTH TO WATER (feet) = 6.17 CALCULATED PURGE (gal) = \_\_\_\_\_  
 WATER COLUMN HEIGHT (feet) = \_\_\_\_\_ ACTUAL PURGE (gal) = \_\_\_\_\_

### FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal) <sup>~.5</sup>	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	ORP (mV)	Dis. Oxy. (% / PPM)
<u>8/24/06</u>	<u>1350</u>	<u>23.60</u>	<u>23.60</u>	<u>938</u>	<u>7.15</u>	<u>-17.2</u>	<u>3.4</u>
<u>8/24/06</u>	<u>1440</u>	<u>~.5</u>	<u>24.01</u>	<u>986</u>	<u>7.11</u>	<u>-15.7</u>	<u>6.1</u>
<u>8/24/06</u>	<u>1445</u>	<u>~1</u>	<u>22.82</u>	<u>970</u>	<u>6.97</u>	<u>-10.4</u>	<u>2.2</u>
<u>8/24/06</u>	<u>1450</u>	<u>~1.5</u>	<u>22.72</u>	<u>1003</u>	<u>6.93</u>	<u>-7.6</u>	<u>1.5</u>
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

FERROUS IRON (measured at time of sample collection) - \_\_\_\_\_ PPM

### SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: \_\_\_\_\_  
 PRESENCE OF NON-AQUEOUS PHASE LIQUID? \_\_\_\_\_  
 80% RECHARGE:  YES  NO ANALYSES: \_\_\_\_\_  
 ODOR: NO SAMPLE VESSEL / PRESERVATIVE: 3 vials ACL

#### PURGING EQUIPMENT

Bladder Pump       Bailer (Teflon)  
 Centrifugal Pump       Bailer (PVC)  
 Submersible Pump       Bailer (Stainless Steel)  
 Peristaltic Pump       Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: \_\_\_\_\_

#### SAMPLING EQUIPMENT

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

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

REMARKS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

SIGNATURE: [Signature] Page \_\_\_\_\_ of \_\_\_\_\_

# SECOR International Inc.

## WATER SAMPLE FIELD DATA SHEET

PROJECT #: 05OT.50227.01 PURGED BY: AWW WELL I.D.: MW-6  
 CLIENT NAME: Bohannon Development SAMPLED BY: AWW SAMPLE I.D.: MW-6-060824  
 LOCATION: 575 Paseo Grande, San Lorenzo QA SAMPLES: \_\_\_\_\_

DATE PURGED 8/24/06 START (2400hr) 1545 END (2400hr) 1605  
 DATE SAMPLED 8/24/06 SAMPLE TIME (2400hr) 1605  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_  
 IF WELL NOT SAMPLED, STATE REASON WHY \_\_\_\_\_

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) = \_\_\_\_\_ CASING VOLUME (gal) = \_\_\_\_\_  
 DEPTH TO WATER (feet) = 5.57 CALCULATED PURGE (gal) = \_\_\_\_\_  
 WATER COLUMN HEIGHT (feet) = \_\_\_\_\_ ACTUAL PURGE (gal) = \_\_\_\_\_

### FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	ORP (mV)	Dis. Oxy. (% / PPM)
<u>8/24/06</u>	<u>1550</u>	<u>2.5</u>	<u>21.20</u>	<u>955</u>	<u>6.81</u>	<u>20.9</u>	<u>2.9</u>
<u>8/24/06</u>	<u>1555</u>	<u>2.1</u>	<u>21.51</u>	<u>958</u>	<u>6.74</u>	<u>17.5</u>	<u>2.1</u>
<u>8/24/06</u>	<u>1600</u>	<u>2.5</u>	<u>21.60</u>	<u>957</u>	<u>6.83</u>	<u>14.6</u>	<u>1.8</u>
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

FERROUS IRON (measured at time of sample collection) - \_\_\_\_\_ PPM

### SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: \_\_\_\_\_  
 PRESENCE OF NON-AQUEOUS PHASE LIQUID? \_\_\_\_\_  
 80% RECHARGE:  YES  NO ANALYSES: \_\_\_\_\_  
 ODOR: no SAMPLE VESSEL / PRESERVATIVE: 3 Vials, HCL

#### PURGING EQUIPMENT

Bladder Pump                       Bailer (Teflon)  
 Centrifugal Pump                   Bailer (PVC)  
 Submersible Pump                   Bailer (Stainless Steel)  
 Peristaltic Pump                     Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: \_\_\_\_\_

#### SAMPLING EQUIPMENT

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

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

REMARKS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

SIGNATURE: [Signature] Page \_\_\_\_\_ of \_\_\_\_\_

**SECOR International Inc.**

**WATER SAMPLE FIELD DATA SHEET**

PROJECT #: 05OT.50227.01 PURGED BY: AWW WELL I.D.: MW-7  
 CLIENT NAME: Bohannon Development SAMPLED BY: \_\_\_\_\_ SAMPLE I.D.: MW-7-060824  
 LOCATION: 575 Paseo Grande, San Lorenzo QA SAMPLES: \_\_\_\_\_

DATE PURGED 8/24/06 START (2400hr) 1510 END (2400hr) 1530  
 DATE SAMPLED 8/24/06 SAMPLE TIME (2400hr) 1530  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_  
 IF WELL NOT SAMPLED, STATE REASON WHY \_\_\_\_\_

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) = \_\_\_\_\_ CASING VOLUME (gal) = \_\_\_\_\_  
 DEPTH TO WATER (feet) = 6.28 CALCULATED PURGE (gal) = \_\_\_\_\_  
 WATER COLUMN HEIGHT (feet) = \_\_\_\_\_ ACTUAL PURGE (gal) = \_\_\_\_\_

**FIELD MEASUREMENTS**

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	ORP (mV)	Dis. Oxy. (% / PPM)
<u>8/24/06</u>	<u>1515</u>	<u>2.5</u>	<u>19.27</u>	<u>924</u>	<u>6.92</u>	<u>6.2</u>	<u>1.7</u>
<u>8/24/06</u>	<u>1520</u>	<u>~1</u>	<u>18.86</u>	<u>912</u>	<u>6.88</u>	<u>9.9</u>	<u>0.9</u>
<u>8/24/06</u>	<u>1525</u>	<u>~1.5</u>	<u>19.19</u>	<u>918</u>	<u>6.89</u>	<u>10.8</u>	<u>1.2</u>
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

FERROUS IRON (measured at time of sample collection) - \_\_\_\_\_ PPM

**SAMPLE INFORMATION**

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: \_\_\_\_\_  
 PRESENCE OF NON-AQUEOUS PHASE LIQUID? \_\_\_\_\_  
 80% RECHARGE:  YES  NO ANALYSES: \_\_\_\_\_  
 ODOR: no SAMPLE VESSEL / PRESERVATIVE: 3 vials, HCL

**PURGING EQUIPMENT**

\_\_\_\_\_ Bladder Pump \_\_\_\_\_ Bailer (Teflon)  
 \_\_\_\_\_ Centrifugal Pump \_\_\_\_\_ Bailer (PVC)  
 \_\_\_\_\_ Submersible Pump \_\_\_\_\_ Bailer (Stainless Steel)  
 Peristaltic Pump \_\_\_\_\_ Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: \_\_\_\_\_

**SAMPLING EQUIPMENT**

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

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

REMARKS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

SIGNATURE: [Signature] Page \_\_\_\_\_ of \_\_\_\_\_

# SECOR International Inc.

## WATER SAMPLE FIELD DATA SHEET

PROJECT #: 05OT.50227.01 PURGED BY: AWW WELL I.D.: PORS-B1  
 CLIENT NAME: Bohannon Development SAMPLED BY: AWW SAMPLE I.D.: PORS-B1-060824  
 LOCATION: 575 Paseo Grande, San Lorenzo QA SAMPLES: \_\_\_\_\_

DATE PURGED 8/24/06 START (2400hr) 0940 END (2400hr) 1010  
 DATE SAMPLED 8/24/06 SAMPLE TIME (2400hr) 1010  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_  
 IF WELL NOT SAMPLED, STATE REASON WHY \_\_\_\_\_

CASING DIAMETER: 2" \_\_\_\_\_ 3" \_\_\_\_\_ 4" \_\_\_\_\_ 5" \_\_\_\_\_ 6" \_\_\_\_\_ 8" \_\_\_\_\_ Other  1"  
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) (1')

DEPTH TO BOTTOM (feet) = \_\_\_\_\_ CASING VOLUME (gal) = \_\_\_\_\_  
 DEPTH TO WATER (feet) = 7.21 CALCULATED PURGE (gal) = \_\_\_\_\_  
 WATER COLUMN HEIGHT (feet) = \_\_\_\_\_ ACTUAL PURGE (gal) = \_\_\_\_\_

### FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	ORP (mV)	Dis. Oxy. (% / PPM)
<u>8/24/06</u>	<u>0945</u>	<u>~1.5</u>	<u>21.20</u>	<u>1401</u>	<u>6.73</u>	<u>-75.2</u>	<u>21.5</u>
<u>8/24/06</u>	<u>0950</u>	<u>~1</u>	<u>21.47</u>	<u>1417</u>	<u>6.69</u>	<u>-8.3</u>	<u>16.8</u>
<u>8/24/06</u>	<u>0955</u>	<u>~1.5</u>	<u>21.46</u>	<u>1417</u>	<u>6.67</u>	<u>6.3</u>	<u>7.4</u>
<u>8/24/06</u>	<u>1000</u>	<u>~2</u>	<u>21.42</u>	<u>1419</u>	<u>6.66</u>	<u>10.9</u>	<u>7.5</u>
<u>8/24/06</u>	<u>1005</u>	<u>~7.5</u>	<u>21.42</u>	<u>1419</u>	<u>6.64</u>	<u>14.2</u>	<u>1.5</u>

FERROUS IRON (measured at time of sample collection) - \_\_\_\_\_ PPM

### SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: \_\_\_\_\_  
 PRESENCE OF NON-AQUEOUS PHASE LIQUID? \_\_\_\_\_  
 80% RECHARGE:  YES  NO ANALYSES: \_\_\_\_\_  
 ODOR: No SAMPLE VESSEL / PRESERVATIVE: 3 Vials, HCL

#### PURGING EQUIPMENT

Bladder Pump                       Bailer (Teflon)  
 Centrifugal Pump                   Bailer (PVC)  
 Submersible Pump                   Bailer (Stainless Steel)  
 Peristaltic Pump                    Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: \_\_\_\_\_

#### SAMPLING EQUIPMENT

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

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

REMARKS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

SIGNATURE: [Signature] Page \_\_\_\_\_ of \_\_\_\_\_

**SECOR International Inc.**

**WATER SAMPLE FIELD DATA SHEET**

PROJECT #: 05OT.50227.01 PURGED BY: AWW WELL I.D.: POBS-B2  
 CLIENT NAME: Bohannon Development SAMPLED BY: AWW SAMPLE I.D.: POBS-B2-060823  
 LOCATION: 575 Paseo Grande, San Lorenzo QA SAMPLES: \_\_\_\_\_

DATE PURGED 8/23/06 START (2400hr) 1440 END (2400hr) 1505  
 DATE SAMPLED 8/23/06 SAMPLE TIME (2400hr) 1510  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_  
 IF WELL NOT SAMPLED, STATE REASON WHY \_\_\_\_\_

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) = \_\_\_\_\_ CASING VOLUME (gal) = \_\_\_\_\_  
 DEPTH TO WATER (feet) = 6.54' CALCULATED PURGE (gal) = \_\_\_\_\_  
 WATER COLUMN HEIGHT (feet) = \_\_\_\_\_ ACTUAL PURGE (gal) = \_\_\_\_\_

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	ORP (mV)	Dis. Oxy. (% / PPM)
<u>8/23/06</u>	<u>1445</u>	<u>1</u>	<u>21.83</u>	<u>1813</u>	<u>6.48</u>	<u>-145.3</u>	<u>16.0</u>
<u>8/23/06</u>	<u>1450</u>	<u>1.5</u>	<u>22.08</u>	<u>1847</u>	<u>6.50</u>	<u>-1086.3</u>	<u>6.5</u>
<u>8/23/06</u>	<u>1455</u>	<u>2</u>	<u>22.11</u>	<u>1860</u>	<u>6.50</u>	<u>-66.6</u>	<u>4.7</u>
<u>8/23/06</u>	<u>1500</u>	<u>~2.52.3</u>	<u>22.09</u>	<u>1858</u>	<u>6.51</u>	<u>-54.2</u>	<u>4.3</u>
<u>8/23/06</u>	<u>1505</u>	<u>~2.6</u>	<u>22.05</u>	<u>1852</u>	<u>6.50</u>	<u>-65.7</u>	<u>4.1</u>

FERROUS IRON (measured at time of sample collection) - \_\_\_\_\_ PPM

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: \_\_\_\_\_  
 PRESENCE OF NON-AQUEOUS PHASE LIQUID? \_\_\_\_\_  
 80% RECHARGE: YES \_\_\_\_\_ NO \_\_\_\_\_ ANALYSES: \_\_\_\_\_  
 ODOR: no SAMPLE VESSEL / PRESERVATIVE: 3/low's, HLL

PURGING EQUIPMENT

\_\_\_\_ Bladder Pump \_\_\_\_\_ Bailer (Teflon)  
 \_\_\_\_ Centrifugal Pump \_\_\_\_\_ Bailer (PVC)  
 \_\_\_\_ Submersible Pump \_\_\_\_\_ Bailer (Stainless Steel)  
 Peristaltic Pump \_\_\_\_\_ Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: \_\_\_\_\_

SAMPLING EQUIPMENT

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

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

REMARKS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

SIGNATURE: AWW Page \_\_\_\_ of \_\_\_\_



**SECOR International Inc.**

**WATER SAMPLE FIELD DATA SHEET**

PROJECT #: 05OT.50227.01  
 CLIENT NAME: Bohannon Development  
 LOCATION: 575 Paseo Grande, San Lorenzo

PURGED BY: AUV  
 SAMPLED BY: AUV

WELL I.D.: POTS-A1  
 SAMPLE I.D.: POTS-A1-060824  
 QA SAMPLES: \_\_\_\_\_

DATE PURGED 8/24/06 START (2400hr) 1025 END (2400hr) 1045  
 DATE SAMPLED 8/24/06 SAMPLE TIME (2400hr) 1045  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_  
 IF WELL NOT SAMPLED, STATE REASON WHY \_\_\_\_\_

CASING DIAMETER: 2" \_\_\_\_\_ 3" \_\_\_\_\_ 4" \_\_\_\_\_ 5" \_\_\_\_\_ 6" \_\_\_\_\_ 8" \_\_\_\_\_ Other  1"  
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) (1)

DEPTH TO BOTTOM (feet) = \_\_\_\_\_ CASING VOLUME (gal) = \_\_\_\_\_  
 DEPTH TO WATER (feet) = 7.09 CALCULATED PURGE (gal) = \_\_\_\_\_  
 WATER COLUMN HEIGHT (feet) = \_\_\_\_\_ ACTUAL PURGE (gal) = \_\_\_\_\_

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	ORP (mV)	Dis. Oxy. (% / PPM)
<u>8/24/06</u>	<u>1030</u>	<u>~.5</u>	<u>22.14</u>	<u>1811</u>	<u>6.51</u>	<u>-147.7</u>	<u>0.7</u>
<u>8/24/06</u>	<u>1035</u>	<u>~1</u>	<u>22.28</u>	<u>1790</u>	<u>6.51</u>	<u>-142.2</u>	<u>0.7</u>
<u>8/24/06</u>	<u>1040</u>	<u>~1.5</u>	<u>22.16</u>	<u>1777</u>	<u>6.50</u>	<u>-43.2</u>	<u>1.6</u>
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

FERROUS IRON (measured at time of sample collection) - \_\_\_\_\_ PPM

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: \_\_\_\_\_  
 PRESENCE OF NON-AQUEOUS PHASE LIQUID? \_\_\_\_\_  
 80% RECHARGE:  YES  NO ANALYSES: \_\_\_\_\_  
 ODOR: YES SAMPLE VESSEL / PRESERVATIVE: 3 Vials, HCL

PURGING EQUIPMENT

\_\_\_\_\_ Bladder Pump \_\_\_\_\_ Bailer (Teflon)  
 \_\_\_\_\_ Centrifugal Pump \_\_\_\_\_ Bailer (PVC)  
 \_\_\_\_\_ Submersible Pump \_\_\_\_\_ Bailer (Stainless Steel)  
 Peristaltic Pump \_\_\_\_\_ Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: \_\_\_\_\_

SAMPLING EQUIPMENT

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

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

SIGNATURE: [Signature] Page \_\_\_\_\_ of \_\_\_\_\_

# SECOR International Inc.

## WATER SAMPLE FIELD DATA SHEET

PROJECT #: 05OT.50227.01  
 CLIENT NAME: Bohannon Development  
 LOCATION: 575 Paseo Grande, San Lorenzo

PURGED BY: AUV  
 SAMPLED BY: AUV

WELL I.D.: NOBS-B1  
 SAMPLE I.D.: NOBS-B1-060824  
 QA SAMPLES: \_\_\_\_\_

DATE PURGED 8/24/06 START (2400hr) 1230 END (2400hr) 1245  
 DATE SAMPLED 8/24/06 SAMPLE TIME (2400hr) 1245  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_  
 IF WELL NOT SAMPLED, STATE REASON WHY \_\_\_\_\_

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) = \_\_\_\_\_ CASING VOLUME (gal) = \_\_\_\_\_  
 DEPTH TO WATER (feet) = 6.00' CALCULATED PURGE (gal) = \_\_\_\_\_  
 WATER COLUMN HEIGHT (feet) = \_\_\_\_\_ ACTUAL PURGE (gal) = \_\_\_\_\_

### FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	ORP (mV)	Dis. Oxy. (% / PPM)
<u>8/24/06</u>	<u>1230</u>	<u>4.5</u>	<u>20.93</u>	<u>1291</u>	<u>6.79</u>	<u>2.2</u>	<u>1.2</u>
<u>8/24/06</u>	<u>1235</u>	<u>~0.8</u>	<u>20.84</u>	<u>1287</u>	<u>6.71</u>	<u>5.0</u>	<u>0.6</u>
<u>8/24/06</u>	<u>1240</u>	<u>~1.5</u>	<u>20.82</u>	<u>1286</u>	<u>6.71</u>	<u>7.9</u>	<u>0.5</u>
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

FERROUS IRON (measured at time of sample collection) - \_\_\_\_\_ PPM

### SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: \_\_\_\_\_  
 PRESENCE OF NON-AQUEOUS PHASE LIQUID? \_\_\_\_\_  
 80% RECHARGE: YES \_\_\_\_\_ NO \_\_\_\_\_ ANALYSES: \_\_\_\_\_  
 ODOR: No SAMPLE VESSEL / PRESERVATIVE: 3 Vials HCL

#### PURGING EQUIPMENT

Bladder Pump       Bailer (Teflon)  
 Centrifugal Pump       Bailer (PVC)  
 Submersible Pump       Bailer (Stainless Steel)  
 Peristaltic Pump       Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: \_\_\_\_\_

#### SAMPLING EQUIPMENT

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

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

REMARKS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

SIGNATURE: [Signature]