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**GROUNDWATER MONITORING REPORT  
OAKLAND BUS TERMINAL  
2103 SAN PABLO AVENUE  
OAKLAND, CALIFORNIA 94608**

Green Star Environmental Report No. 16-1379

Report Prepared For:

FirstGroup America, Inc.  
600 Vine Street  
Cincinnati, OH 45202

October 07, 2016

**Oakland Bus Terminal  
2103 San Pablo Avenue  
Oakland, California**

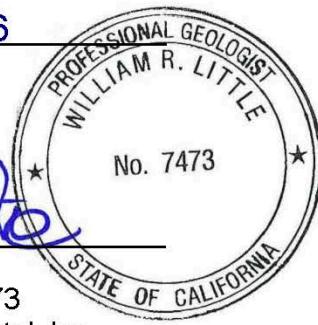
Having reviewed the attached Groundwater Monitoring Event Report, being familiar with the project to which it relates, and understanding the guidelines of the San Francisco Bay Regional Water Quality Control Board, I hereby certify that the attached Groundwater Monitoring Event Report, dated October 07, 2016 has been prepared and the related activities were conducted in accordance with the required standards.

10 - 13 - 2016

DATE

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**Oakland Bus Terminal  
2103 San Pablo Avenue  
Oakland, California**

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached Groundwater Monitoring Event Report dated October 07, 2016 are true and correct to the best of my knowledge.

October 10, 2016  
DATE

  
\_\_\_\_\_  
Susan Kirkpatrick  
Senior Environmental Project & Program Manager  
FirstGroup America, Inc.  
600 Vine Street  
Cincinnati, OH 45202

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**2103 San Pablo Avenue**  
**Oakland, California**

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## **1.0 INTRODUCTION**

Green Star Environmental (Green Star) has been retained by Greyhound Lines, Inc. (Greyhound) to manage environmental issues related to the Greyhound Lines Terminal located at 2103 San Pablo Avenue, Oakland, California ("Site"; Fuel Leak Case No. RO0000074 and Geotracker Global ID T0600100666). In accordance with a letter from Alameda County Environmental Health (ACEH) dated December 7, 2015, a groundwater monitoring event was conducted at the Site in August 2016 to document groundwater impacts related to the project. This report documents the details related to the groundwater monitoring event. Table 1 presents a summary of previous environmental reports for the Site.

### **1.1 Background Information**

Six, out-of-service underground storage tanks (USTs) were removed from the Site in 1989. The USTs were reportedly out of use for at least two decades prior to their removal. Subsurface investigations between 1989 and 1997 indicated that a relatively small area of impact to soil and groundwater of petroleum hydrocarbons was present at the Site. Tables 2b and 3b present cumulative summaries of groundwater data. Table 4 presents a cumulative summary of soil analytical results. A Site Location/USGS Topographic Map is presented as Figure 1. Site details are illustrated in Figure 2.

A remediation system was operated from 1992 to 1997 to recover phase-separated hydrocarbons (PSH) and dissolved-phase impacts in groundwater using total fluids recovery pumps in four, four-inch diameter monitoring wells (ES-1, ES-5, BC-1 and ES-2). The recovered fluids were treated with an oil/water separator and activated carbon absorption columns prior to discharge to the sanitary sewer. Data indicate that the system was effective as PSH greater than 0.1-foot has not been detected since 1995. PSH was last detected at the Site in October 1997 in monitoring well ES-1.

On April 8, 2009, the elevation and latitude and longitude of the well network were surveyed using the North American Vertical Datum 1988 (NAVD88) and North American Datum 1983 (NAD83) coordinate systems by a California licensed surveyor.

### **1.2 Geology and Hydrogeology**

According to the United States Geological Survey (USGS), the Site is underlain by unconsolidated Quaternary-aged sediments generally associated with beach and dune formations. Lake Merritt is the nearest surface water body at approximately 0.50-mile east-southeast from the Site. The Oakland Inner Harbor is located approximately 1.1 miles south-southwest of the Site. Groundwater in the area is used for limited irrigation and industrial purposes. The City of Oakland obtains its municipal and drinking water from the East Bay Municipal Utility District (EBMUD). EBMUD imports this water from the surface waters of the Sierra Nevada Mountain Range, located approximately 200 miles east of the Site.

Historically, shallow groundwater at the Site has ranged from approximately 12 to 22 feet below surface grade (approximately 3.6 to 9.7 feet above msl) while the groundwater flow direction at the Site has typically been in a radial pattern (ranging from west-southwest to the northwest). Current shallow groundwater data is detailed below in Section 2.1.

## 2.0 GROUNDWATER MONITORING AND ANALYSIS

A groundwater monitoring event using the network of 13 monitoring wells at the Site was conducted in August 2016. Historically, the monitoring well network at the Site has been comprised of 14 monitoring wells, but, in September 2008, monitoring well ES-10 was found to have been covered by pavement comprising Castro Street. Monitoring well BC-2 was not sampled due to its close proximity to monitoring well BC-3. Green Star obtained the necessary traffic control permits from the City of Oakland to access monitoring wells ES-8 and ES-9, which are located in Castro Street.

### 2.1 Groundwater Level Monitoring

Total depths, depths to groundwater, and the potential presence of phase-separated hydrocarbons (PSH) were measured in each monitoring well using a Solonist® interface probe on August 16 and 18, 2016. Table 2a presents a summary of groundwater gauging data from the August 2016 event while Table 2b presents a cumulative summary of groundwater gauging data. Copies of the groundwater sampling records documenting the gauging data from the event are presented as Appendix C.

PSH was not detected in August 2016 and has not been detected since October 1997. Groundwater elevations in the monitoring wells gauged ranged from 7.76 feet above msl in monitoring well ES-6 to 7.35 feet above msl in monitoring well ES-7. The calculated hydraulic gradient was approximately 0.003 ft/ft. The groundwater flow direction was towards the west of the site. The groundwater gradient in August 2016 is presented as Figure 3. Cumulative graphs of groundwater elevations and PSH thicknesses are presented as Appendix B.

### 2.2 Groundwater Sample Collection

Groundwater samples were collected by low-flow methods with a peristaltic pump and polyethylene discharge tubing dedicated to each monitoring well. All monitoring wells were accessible during the August 2016 monitoring event and were purged per standard low-flow sampling procedure. Groundwater chemistry parameters (temperature, pH, oxidation-reduction potential, and specific conductance) were monitored during purging activities in order to confirm that the collected groundwater samples were representative of the surrounding aquifer using a YSI 556 parameter meter and flow through cell. The purging process continued until parameters stabilized for three consecutive readings to within EPA specified margins. The acceptable ranges are  $\pm 0.1$  standard units for pH,  $\pm 3\%$  for conductivity, and  $\pm 10$  mV for oxidation-reduction potential.

Groundwater samples were collected from 12 monitoring wells (BC-1, BC-3, ES-1 through ES-9, and ES-11). BC-2 was not sampled due to its close proximity to BC-3. Each well was sampled for total petroleum hydrocarbons-gasoline, diesel, and oil ranges (TPH-g, TPH-d, and TPH-o respectively), benzene, toluene, ethylbenzene, and xylenes (BTEX), naphthalene, methyl tertiary butyl ether (MTBE), ethyl tertiary butyl ether (ETBE), tert-amyl methyl ether (TAME), diisopropyl ether (DIPE), 1,2-dichloroethane (EDC), 1,2-dibromoethane (EDB), tertiary butyl alcohol (TBA), and ethanol.

The collected groundwater samples were transferred into laboratory-provided 40-milliliter (mL) glass vials. A trip blank of distilled water in 40-mL vials was included with the ice chest and transported to the laboratory with the samples. The collected groundwater samples were labeled, stored in ice-cooled chests, and logged on the appropriate chain-of-custody form.

### **2.3 Analytical Methodology**

Collected groundwater samples were analyzed for TPH-g, TPH-d, and TPH-o via EPA Method 8015 modified as well as for BTEX, naphthalene, MTBE, ETBE, TAME, DIPE, EDC, EDB, TBA, and ethanol via EPA Method 8260 at McCampbell Analytical, Inc. in Pittsburg, California, a California certified laboratory. Analytical reports for the event are presented in Appendix A.

### **2.4 Groundwater Analytical Results**

Analytes have been differentiated into three groups for discussion purposes: BTEX, TPH, and miscellaneous petroleum hydrocarbons (naphthalene, MTBE, ETBE, TAME, DIPE EDC, EDB, TBA and ethanol). Table 3a presents a summary of groundwater analytical data from the August 2016 event while Table 3b presents a cumulative summary of groundwater analytical data.

#### **2.4.1 BTEX Constituents**

Analytical results from the groundwater event indicated concentrations of at least one dissolved-phase BTEX constituent was present in seven of the monitoring wells sampled. Benzene was detected at a concentration that exceeded the San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Level (ESL) for non-drinking water resources in four monitoring wells (ES-1, ES-2, ES-3 and ES-5) at a maximum concentration of 790 µg/L in the sample collected from monitoring well ES-2. Ethylbenzene was detected at concentrations that exceeded the RWQCB ESL for non-drinking water resources in the samples collected from monitoring wells ES-3 and ES-5 at a maximum concentration of 180 µg/L in the sample collected from monitoring well ES-5. Xylenes were detected at concentrations that exceeded the RWQCB ESL for non-drinking water resources in the samples collected from monitoring wells ES-3 and ES-5 at a maximum concentration of 200 µg/L. Toluene, was detected at concentrations that exceeded its respective RWQCB ESL for non-drinking water in the sample collected from monitoring well ES-5 at a concentration of 110 µg/L. Dissolved-phase benzene in groundwater is illustrated as Figure 4.

#### **2.4.2 TPH Constituents**

Analytical results from the groundwater event indicated concentrations of at least one dissolved-phase TPH constituent were present in 12 monitoring wells sampled including BC-1, BC-3, ES-1 through ES-9, and ES-11. TPH-g was detected at a concentration that exceeded the RWQCB ESL for non-drinking water resources in six monitoring wells (BC-1, ES-1 through ES-3, ES-5 and ES-8) and at a maximum concentration of 15,000 µg/L in the sample collected from monitoring well ES-3. TPH-d was detected at a concentration that exceeded the RWQCB ESL for non-drinking water resources in four monitoring wells (ES1 to ES3, and ES-5) at a maximum concentration of 1000 µg/L. TPH-o was detected above laboratory detection limits in one monitoring well, ES-7, but did not exceed the RWQCB ESL for non-drinking water resources. Concentrations of dissolved-phase TPH-g and TPH-d in groundwater are illustrated as Figures 5 and 6, respectively.

#### **2.4.3 Miscellaneous Petroleum Hydrocarbons**

Three miscellaneous petroleum hydrocarbons were detected above laboratory detection limits, including naphthalene, DIPE, and TBA. Naphthalene was detected in two monitoring wells (ES-3 and ES-5) at a concentration that exceeded the RWQCB ESL for non-drinking water resources at a maximum concentration of 40 µg/L. DIPE was detected in eight monitoring wells (BC-1, ES-1 through ES-5, ES-8, and ES-9) at a maximum concentration of 58 µg/L in the sample collected from monitoring well ES-2. TBA was detected in three monitoring wells (BC-1, ES-8 and ES-9) at a maximum concentration of 3.3J µg/L. MTBE, ETBE, TAME, EDB, EDC and ethanol were not detected above laboratory detection limits.

#### **2.5 Equipment Decontamination Procedures**

Non-disposable or non-dedicated downhole equipment was decontaminated before and after each use with a solution of Alconox™ soap and distilled water and then rinsed with distilled water. Polyethylene tubing dedicated to each monitoring well was used to purge and sample the monitoring wells.

#### **2.6 Field-Derived Waste**

Purged groundwater and decontamination fluids were containerized in appropriately labeled, DOT-approved, 55-gallon drums pending off site disposal.

### 3.0 SUMMARY AND CONCLUSIONS

This Groundwater Monitoring Report documents groundwater monitoring activities conducted in August 2016. The following is a summary of the report.

- Six out-of-service USTs were removed from the Site in 1989. The USTs were reportedly out of use for at least two decades prior to their removal. Subsurface investigations between 1989 and 1997 indicated that a relatively small area of impacts to soil and groundwater of petroleum hydrocarbons is present at the Site. A remediation system was operated from 1992 to 1997 to recover PSH and dissolved-phase impacts in groundwater using total fluids recovery pumps in four, four-inch diameter monitoring wells (ES-1, ES-5, BC-1 and ES-2). Data indicates that the system was effective as PSH greater than 0.1-foot has not been detected since 1995. PSH was last detected at the Site in October 1997 in monitoring well ES-1.
- Currently, the monitoring well network at the Site is comprised of 13 monitoring wells. In August 2016, total depths, depths to groundwater, and the presence of PSH were measured in each monitoring well. Twelve monitoring wells were sampled for BTEX, TPH and miscellaneous petroleum hydrocarbons. BC-2 was not sampled due to its close proximity to BC-3.
- PSH was not detected in August 2016 and has not been detected since October 1997. Groundwater elevations in the monitoring wells gauged ranged from 7.76 feet above msl in monitoring well ES-6 to 7.35 feet above msl in monitoring well ES-7. The calculated hydraulic gradient was approximately 0.003 ft/ft. The groundwater flow direction was towards the west of the site.
- Analytical results from the groundwater event indicated concentrations of BTEX, TPH-g, TPH-d, and naphthalene were detected above their respective San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Level (ESL) for non-drinking water resources. Benzene was detected at a maximum concentration of 790 µg/L in the sample collected from monitoring well ES-2. Ethylbenzene and xylenes were detected in the sample collected from monitoring well ES-3 at maximum concentrations of 180 µg/L and 200 µg/L respectively. Toluene was detected at a maximum concentration of 110 µg/L in the sample collected from monitoring well ES-5. TPH-g was detected at a maximum concentration of 15,000 µg/L in the sample collected from monitoring well ES-3. TPH-d was detected at a maximum concentration of 1,000 µg/L in the sample collected from monitoring well ES-3. TPH-o was not detected above RWQCB ESL for non-drinking water resources. MTBE, ETBE, TAME, EDB, EDC, TBA, and ethanol were not detected above laboratory detection limits in any of the monitoring wells that were sampled.

#### **4.0 QUALIFICATIONS**

Our professional services have been performed, our findings obtained, and our recommendations prepared in accordance with customary principles and practices in the fields of environmental science and engineering. This warranty is in lieu of all other warranties either expressed or implied. This company is not responsible for the independent conclusions, opinions or recommendations made by others based on the records review, site inspection, field exploration, and laboratory test data presented in this report.

It should be noted that all environmental assessments are inherently limited because they are developed from limited research and site investigation. Subsurface conditions investigated as part of these kinds of investigations may differ from conditions observed on the surface or indicated in written reports. It is also important to note that the conditions observed at the project site and surrounding properties are limited to the day of the site visit and may change with the passage of time.

## **TABLES**

**Table 1 - Summary of Previous Reports**  
**Oakland Bus Terminal**  
**2103 San Pablo Avenue**  
**Oakland, Alameda County, California**  
**Green Star Project No. 15-1379**

Reference No.	Document Date	Type	Title	Author	Description
1	6/22/1989	Report	Phase I Investigation	Brown and Caldwell	Report determined that six USTs were present at the Site. Based on analytical testing of residual liquids in the USTs and soil samples, the USTs appeared to contain diesel, gasoline and water and at least some release has occurred to the subsurface. Groundwater was encountered at approximately 22 ft bgs, but was not sampled. Wells BC-1, BC-2, and BC-3 were found to be installed by 1992, but were not documented by this report.
2	7/21/1989	Letter	Report of Soil Contamination	Greyhound Lines, Vernon Sorgree PE	Reported release of diesel and/or gasoline from six, out of service USTs.
3	1/27/1992	Report	Preliminary Site Investigation Report	Engineering-Science, Inc.	The six USTs were reportedly unused for approximately 20 years. The six USTs were removed after the 1989 investigation. In November 1991, Engineering-Science, Inc. installed five monitoring wells (ES-1 through ES-5) and performed groundwater monitoring and a storm drain inspection. PSH was detected in wells BC-1 and ES-5. In soil, TPH-d was detected in only one sample from ES-5 while TEX was present samples from ES-1, ES-2, and ES-5. In groundwater, BTEX was present in ES-1, ES-2, ES-3 and ES-5 while TPH-d was present only in ES-5. Wells BC-1, BC-2 and BC-3 were not sampled. No evidence of impacts were observed in the inspected storm drains.
4	7/13/1992	Letter	Monthly Monitoring Report	Engineering-Science, Inc.	Monthly monitoring report of water levels and PSH. PSH was detected in four of the monitoring wells.
5	8/5/1992	Letter	Monthly Monitoring Report	Engineering-Science, Inc.	Continued monthly monitoring report. PSH was detected in three of the monitoring wells. Quarterly groundwater sampling was performed.
6	8/19/1992	Letter	Monthly Monitoring Report	Engineering-Science, Inc.	Continued monthly monitoring report. PSH was detected in four of the monitoring wells.
7	10/1/1992	Letter	Hydrocarbon Recovery System Installation/ Monitoring	Engineering-Science, Inc.	Summarizes the proposed remediation system that is to be installed. Documents system monitoring and groundwater monitoring procedures which include monthly and quarterly reports.
8	10/6/1992	Letter	Monthly Monitoring Report	Engineering-Science, Inc.	Continued monthly monitoring report. PSH was detected in four of the monitoring wells.
9	11/11/1992	Letter	Monthly Monitoring Report	Engineering-Science, Inc.	Continued monthly monitoring report. PSH was detected in four of the monitoring wells. Quarterly groundwater sampling was performed.
10	12/15/1992	Letter	Monthly Monitoring Report	Engineering-Science, Inc.	Continued monthly monitoring report. PSH was detected in four of the monitoring wells. The hydrocarbon recovery system was installed in November 1992.
11	12/15/1992	Report	Tank Closure Documentation	Engineering-Science, Inc.	The six USTs were removed in April 1990. As no documentation of the tank removal was available on the San Francisco Bay Region of the California RWQCB's fuel leak list, this report was created to document the removal. The report contains tank disposal records, records of soil disposal, analytical results of samples collected during the tank/soil removal, laboratory reports including quality control/quality assurances, and chain-of-custody documentation in order to provide the proper tank closure documentation requested by ACEH. No release determination samples were collected as part of the removal operation.
12	12/18/1992	Report	Hydrocarbon Recovery System Installation	Engineering-Science, Inc.	A remediation system was installed in November 1992 to recover PSH utilizing pneumatic, total fluids pumps in four, four-inch ID diameter recovery wells (30 ft. deep; ES-1, ES-5, BC-1 and ES-2). The recovered fluids were treated with an oil/water separator and activated carbon absorption columns prior to discharge to the sanitary sewer. Weekly system maintenance checks were performed during the initial start-up and first eight weeks of operation.

**Table 1 - Summary of Previous Reports**  
**Oakland Bus Terminal**  
**2103 San Pablo Avenue**  
**Oakland, Alameda County, California**  
**Green Star Project No. 15-1379**

Reference No.	Document Date	Type	Title	Author	Description
13	1/11/1993	Letter	Monthly Monitoring Report	Engineering-Science, Inc.	Continued monthly monitoring report. PSH was detected in three of the monitoring wells.
14	1/31/1993	Report	Quarterly Status Report	Engineering-Science, Inc.	Quarterly monitoring report. PSH was detected in four of the wells. Quarterly groundwater sampling was performed.
15	3/8/1993	Report	Quarterly Status Report	Engineering-Science, Inc.	Continued quarterly monitoring report. PSH was detected in three of the wells. Quarterly groundwater sampling was performed.
16	3/8/1993	Letter	Monthly Monitoring Report	Engineering-Science, Inc.	Continued monthly monitoring report. PSH was detected in three of the monitoring wells.
17	4/2/1993	Report	Supplemental Site Assessment Investigation Work Plan	Engineering-Science, Inc.	A workplan was created to further define the lateral and vertical extent of soil and groundwater contamination. Specific remedial actions for mitigating the contamination will also be assessed. Proposed work includes installation of six to eight soil borings which will be converted to groundwater monitoring wells.
18	4/13/1993	Letter	Monthly Monitoring Report	Engineering-Science, Inc.	Continued monthly monitoring report. PSH was detected in three of the monitoring wells.
19	5/11/1993	Report	Quarterly Status Report	Engineering-Science, Inc.	Continued quarterly groundwater monitoring report. PSH was detected in three of the monitoring wells. Quarterly groundwater sampling was performed.
20	6/15/1993	Letter	Monthly Monitoring Report	Engineering-Science, Inc.	Continued monthly monitoring report. PSH was detected in three of the monitoring wells.
21	7/29/1993	Letter	Monthly Monitoring Report	Engineering-Science, Inc.	Continued monthly monitoring report. PSH was detected in three of the monitoring wells.
22	8/12/1993	Letter	Monthly Monitoring Report	Engineering-Science, Inc.	Continued monthly monitoring report. PSH was detected in two of the monitoring wells.
23	8/30/1993	Letter	Monthly Monitoring Report	Engineering-Science, Inc.	Continued monthly monitoring report. PSH was detected in two of the monitoring wells.
24	10/1/1993	Report	Preliminary Risk Evaluation	Engineering-Science, Inc.	The risk assessment includes an evaluation of potential contaminant exposure pathways, existing contaminant levels and distribution, chemical characteristics, and site-specific factors such as soil permeability, and local land and water uses. For this assessment, the site was divided into two regions: the former Tank Pit area (source area) and the region surrounding the source area (perimeter). Concentrations of contaminants in groundwater within the source area exceed criteria derived to protect both human health and the environment. None of the chemicals detected in the groundwater within the perimeter were found to exceed the criteria used, indicating that the recovery system is preventing migration of contaminants from the source area. Concentrations of BTEX in soils did not exceed calculated risk-based preliminary remediation goals in either the source area or the perimeter sample locations. TPH was detected in soils in the source area, but risk-based PRGs could not be derived for these contaminants because USEPA-derived toxicity values are not available. It was concluded that a more detailed quantitative risk assessment was not needed.
25	10/15/1993	Letter	Monthly Monitoring Report	Engineering-Science, Inc.	Continued monthly monitoring report. PSH was detected in three of the monitoring wells.
26	11/16/1993	Report	Quarterly Status Report	Engineering-Science, Inc.	Continued quarterly groundwater monitoring report. PSH was detected in four of the monitoring wells. Quarterly groundwater sampling was performed.

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**Oakland Bus Terminal**  
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**Oakland, Alameda County, California**  
**Green Star Project No. 15-1379**

Reference No.	Document Date	Type	Title	Author	Description
27	11/18/1993	Report	Supplemental Site Assessment	Engineering-Science, Inc.	Documented the installation of six soil borings/wells (ES-6 through ES-11) and groundwater monitoring event. No impacts were detected in the soil samples. ES-11 was the only newly installed monitoring well with detectable concentrations of BTEX. While PSH was not detected, the continued operation of the groundwater recovery system on-site and continued groundwater monitoring was recommended. Groundwater impacts were limited to wells near the former USTs and ES-11.
28	12/15/1993	Letter	Monthly Monitoring Report	Engineering-Science, Inc.	Continued monthly monitoring report. PSH was detected in three of the monitoring wells.
29	1/13/1994	Letter	Monthly Monitoring Report	Engineering-Science, Inc.	Continued monthly monitoring report. PSH was detected in three of the monitoring wells.
30	2/26/1994	Report	Quarterly Status Report	Engineering-Science, Inc.	Continued quarterly groundwater monitoring report. PSH was detected in three of the monitoring wells. Quarterly groundwater sampling was performed.
31	3/18/1994	Letter	Monthly Monitoring Report	Engineering-Science, Inc.	Continued monthly monitoring report. PSH was detected in three of the monitoring wells.
32	4/11/1994	Letter	Monthly Monitoring Report	Engineering-Science, Inc.	Continued monthly monitoring report. PSH was detected in four of the monitoring wells.
33	5/18/1994	Report	Quarterly Status Report	Engineering-Science, Inc.	Continued quarterly groundwater monitoring report. PSH was detected in four of the monitoring wells. Quarterly groundwater sampling was performed.
34	6/1/1994	Letter	Monthly Monitoring Report	Engineering-Science, Inc.	Continued monthly monitoring report. PSH was detected in four of the monitoring wells.
35	7/8/1994	Letter	Monthly Monitoring Report	Engineering-Science, Inc.	Continued monthly monitoring report. PSH was detected in three of the monitoring wells.
36	9/1/1994	Letter	Monthly Monitoring Report	Engineering-Science, Inc.	Continued monthly monitoring report. PSH was detected in four of the monitoring wells.
37	9/7/1994	Report	Quarterly Status Report	Engineering-Science, Inc.	Continued quarterly groundwater monitoring report. PSH was not recorded due to equipment theft. Quarterly groundwater sampling was performed.
38	9/28/1994	Letter	Monthly Monitoring Report	Engineering-Science, Inc.	Continued monthly monitoring report. PSH was detected in four of the monitoring wells.
39	10/31/1994	Report	Quarterly Status Report	Engineering-Science, Inc.	Continued quarterly groundwater monitoring report. PSH was detected in one of the monitoring wells. Quarterly groundwater sampling was performed.
40	12/15/1994	Letter	Monthly Monitoring Report	Engineering-Science, Inc.	Continued monthly monitoring report. PSH was detected in two of the monitoring wells. The last report in which PSH was detected greater than 0.1-foot.
41	1/23/1995	Letter	Monthly Monitoring Report	Engineering-Science, Inc.	Continued monthly monitoring report. PSH was detected at less than 0.1-foot in one of the monitoring wells.
42	2/14/1995	Report	Quarterly Status Report	Engineering-Science, Inc.	Continued quarterly groundwater monitoring report. PSH was not detected in any of the monitoring wells. Quarterly groundwater sampling was performed.
43	2/23/1995	Letter	Monthly Monitoring Report	Engineering-Science, Inc.	Continued monthly monitoring report. PSH was detected at less than 0.1-foot in two of the monitoring wells.
44	3/23/1995	Letter	Monthly Monitoring Report	Parsons Engineering-Science, Inc.	Continued monthly monitoring report. PSH was detected at less than 0.1-foot in one of the monitoring wells.

**Table 1 - Summary of Previous Reports**  
**Oakland Bus Terminal**  
**2103 San Pablo Avenue**  
**Oakland, Alameda County, California**  
**Green Star Project No. 15-1379**

Reference No.	Document Date	Type	Title	Author	Description
45	5/19/1995	Report	Quarterly Status Report	Parsons Engineering-Science, Inc.	Continued quarterly groundwater monitoring report. PSH was detected at less than 0.1-foot in one of the monitoring wells. Quarterly groundwater sampling was performed.
46	7/6/1995	Letter	Monthly Monitoring Report	Parsons Engineering-Science, Inc.	Continued monthly monitoring report. PSH was detected at less than 0.1-foot in three of the monitoring wells.
47	7/7/1995	Letter	Monthly Monitoring Report	Parsons Engineering-Science, Inc.	Continued monthly monitoring report. PSH was detected at less than 0.1-foot in one of the monitoring wells.
48	8/8/1995	Report	Quarterly Status Report	Parsons Engineering-Science, Inc.	Continued quarterly groundwater monitoring report. PSH was detected at less than 0.1-foot in one of the monitoring wells. Quarterly groundwater sampling was performed.
49	9/25/1995	Letter	Monthly Monitoring Report	Parsons Engineering-Science, Inc.	Continued monthly monitoring report. PSH was detected at less than 0.1-foot in two of the monitoring wells.
50	10/17/1995	Letter	Monthly Monitoring Report	Parsons Engineering-Science, Inc.	Continued monthly monitoring report. PSH was detected at less than 0.1-foot in one of the monitoring wells.
51	12/5/1995	Report	Quarterly Status Report	Parsons Engineering-Science, Inc.	Continued quarterly groundwater monitoring report. PSH was detected at less than 0.1-foot in one of the monitoring wells. Quarterly groundwater sampling was performed.
52	2/26/1996	Report	Quarterly Status Report	Parsons Engineering-Science, Inc.	Continued quarterly groundwater monitoring report. PSH was detected at less than 0.1-foot in one of the monitoring wells. Quarterly groundwater sampling was performed.
53	5/2/1996	Report	Quarterly Status Report	Parsons Engineering-Science, Inc.	Continued quarterly groundwater monitoring report. PSH was not detected in any of the monitoring wells. Quarterly groundwater sampling was performed.
54	8/9/1996	Report	Quarterly Status Report	Parsons Engineering-Science, Inc.	Continued quarterly groundwater monitoring report. PSH was not detected in any of the monitoring wells. Quarterly groundwater sampling was performed.
55	11/26/1996	Report	Quarterly Status Report	Parsons Engineering-Science, Inc.	Continued quarterly groundwater monitoring report. PSH was not detected in any of the monitoring wells. Quarterly groundwater sampling was performed.
56	2/18/1997	Report	Quarterly Status Report	Parsons Engineering-Science, Inc.	Continued quarterly groundwater monitoring report. PSH was not detected in any of the monitoring wells. Quarterly groundwater sampling was performed.
57	5/23/1997	Report	Quarterly Status Report	Parsons Engineering-Science, Inc.	Continued quarterly groundwater monitoring report. PSH was not detected in any of the monitoring wells. Quarterly groundwater sampling was performed.
58	9/15/1997	Report	Quarterly Status Report	Parsons Engineering-Science, Inc.	Continued quarterly groundwater monitoring report. PSH was not detected in any of the monitoring wells. Quarterly groundwater sampling was performed. Product had not been recovered since September 1994 and to date 1,015 gallons of free product had been recovered. In addition, 82,610 gallons of groundwater had been treated and discharged to the sanitary sewer.
59	11/25/1997	Report	Quarterly Status Report	Parsons Engineering-Science, Inc.	Continued quarterly groundwater monitoring report. PSH was detected at less than 0.1-foot in one of the monitoring wells. Quarterly groundwater sampling was performed. The recovery system was deactivated in January 1997.
60	6/14/2000	Report	Case Closure Checklist, Leaking Underground Storage Tank Program	Central Valley Regional Water Quality Control Board	Case closure checklist, site location map, water well driller's reports, analytical summary (monitoring wells: 07/08/92-10/07/97), site plan, soil analytical data map, groundwater analytical data map.

**Table 1 - Summary of Previous Reports**  
**Oakland Bus Terminal**  
**2103 San Pablo Avenue**  
**Oakland, Alameda County, California**  
**Green Star Project No. 15-1379**

Reference No.	Document Date	Type	Title	Author	Description
61	6/15/2000	Report	Risk Management Plan	Parsons Engineering Science, Inc.	Includes stipulations and restrictions that must be followed in order to comply with all requirements of the Risk Management Plan as specified by the ACEH, CASE closure checklist, site location map, analytical summary (monitoring wells: 07/08/92-10/07/97), site plan, soil analytical data map, and groundwater analytical data map.
62	6/15/2000	Report	Final Closure Request	Parsons Engineering Science, Inc.	Reviews site history and existing conditions (in 12/97, the groundwater monitoring program was terminated with ACEH and RWQCB's approval). Requested No Further Action (NFA) as: none of the 384 wells located in Section 26 are used for municipal water supply, Lake Merrit is located approximately 1,700 feet east of the site and is the nearest surface water body, regional groundwater flow is to the south-southwest, no soil remediation was required at the site, a total fluid recovery system was used between 01/93 through 02/97 to remove PSH discovered in four onsite wells (ES-1, ES-2, ES-5, and BC-1), PSH was completely removed and dissolved constituents were reduced to levels of diminishing returns, factors limiting potential adverse impacts include the limited horizontal and vertical extent of the dissolved hydrocarbon plume and the removal of PSH from the vicinity of the former UST locations, and absence of potable drinking wells or reservoirs within a one-mile radius. Conclusions from the Preliminary Risk Evaluation and Tier II Benzene assessment indicated the lack of any significant health or environmental threats to current or future users of the site under current use conditions. It was recommended that a NFA status be granted for the site with a deed restriction and <i>Risk Management Plan in place</i> .
63	11/12/2008	Report	Groundwater Monitoring Report	Green Star Environmental	A groundwater monitoring event was performed in September 2008 utilizing 13 wells. PSH was not detected. Benzene, toluene, and naphthalene exceeded City of Oakland RBSLs. TPH-g and TPH-d exceeded Cal EPA ESLs. The majority of the groundwater impacts remained on-site.
64	5/12/2009	Report	Groundwater Monitoring Report	Green Star Environmental	A groundwater monitoring event was performed in April 2009 utilizing 13 wells. PSH was not detected. Benzene, toluene, naphthalene, and EDB exceeded City of Oakland RBSLs. TPH-g and TPH-d exceeded California EPA ESLs. The majority of groundwater impacts remained on-site.
65	7/1/2009	Report	Site Conceptual Model	Green Star Environmental	The Site Conceptual Model evaluated known data for the project. No known exposures appear to be occurring and the majority of the groundwater impacts have remained on-site. No downgradient receptors appear to be at risk. A Workplan to confirm current soil impacts was submitted to ACEH.
66	9/28/2009	Report	Groundwater Monitoring Report	Green Star Environmental	A groundwater monitoring event was performed in April 2009 utilizing 13 wells. PSH was not detected. Benzene, toluene, naphthalene, EDB, and EDC exceeded City of Oakland RBSLs. TPH-g and TPH-d exceeded California EPA ESLs. The majority of groundwater impacts remained on-site.
67	12/11/2009	Report	Groundwater Monitoring Report	Green Star Environmental	A groundwater monitoring event was performed in October 2009 utilizing 13 wells. PSH was not detected. Benzene, toluene, naphthalene, and EDC exceeded City of Oakland RBSLs. TPH-g and TPH-d exceeded California EPA ESLs. The majority of groundwater impacts remained on-site.
68	9/23/2010	Report	Groundwater Monitoring Report	Green Star Environmental	A groundwater monitoring event was performed in July 2010 utilizing 13 wells. PSH was not detected. Benzene, toluene, ethylbenzene, xylenes, naphthalene, and EDC exceeded City of Oakland RBSLs. TPH-g, TPH-d, and TPH-o exceeded California EPA ESLs. The majority of groundwater impacts remained on-site.
69	7/6/2011	Report	Groundwater Monitoring Report	Green Star Environmental	A groundwater monitoring event was performed in February 2011 utilizing 13 wells. PSH was not detected. Benzene, toluene, ethylbenzene, xylenes, naphthalene, and EDC exceeded RWQCB ESLs. TPH-g, TPH-d, and TPH-o exceeded California EPA ESLs. The majority of groundwater impacts remained on-site.

**Table 1 - Summary of Previous Reports**  
**Oakland Bus Terminal**  
**2103 San Pablo Avenue**  
**Oakland, Alameda County, California**  
**Green Star Project No. 15-1379**

Reference No.	Document Date	Type	Title	Author	Description
70	7/6/2011	Report	Site Investigation and Soil Gas Survey Report	Green Star Environmental	In October 2010, 12 soil borings were advanced to evaluate subsurface conditions in the area of the former tankpit and 4 direct-push soil borings were used to collect soil vapor samples. None of the soil samples exceeded the RWQCB ESL for shallow soils, however, benzene, ethylbenzene, xylenes, TPH-g, and TPH-d exceeded the RWQCB ESL for deep soils. Of the detected chemical constituents in the collected soil vapor sample, RWQCB ESLs for shallow soils were established only for benzene and TPH-g, and neither were exceeded in the sample.
71	12/21/2011	Report	Site Conceptual Model	Green Star Environmental	The Site Conceptual Model evaluated known data for the project. No known exposures appear to be occurring and the majority of the groundwater impacts have remained on-site. No downgradient receptors appear to be at risk.
72	2/13/2012	Report	Groundwater Monitoring Report	Green Star Environmental	A groundwater monitoring event was performed in December, 2011 utilizing 12 wells. PSH was not detected. Analytical results indicated that benzene, ethylbenzene, xylenes, naphthalene, and TPH (TPH-g and TPH-d) were detected above the non-ingestion-specific RWQCB ESL for each constituent.
73	2/10/2015	Report	Groundwater Monitoring Report	Green Star Environmental	A groundwater monitoring event was performed in August 2014 utilizing 12 wells. PSH was not detected. Benzene, ethylbenzene, xylenes, and naphthalene exceeded RWQCB ESLs. TPH-g, TPH-d exceeded California EPA ESLs. The majority of groundwater impacts remained on-site.
74	4/6/2015	Report	Groundwater Monitoring Report	Green Star Environmental	A groundwater monitoring event was performed in March 2015 utilizing 12 wells. PSH was not detected. Benzene, ethylbenzene, xylenes, and naphthalene exceeded RWQCB ESLs. TPH-g, TPH-d exceeded California EPA ESLs. The majority of groundwater impacts remained on-site.
75	10/16/2015	Report	Groundwater Monitoring Report	Green Star Environmental	A groundwater monitoring event was performed in August 2015 utilizing 12 wells. PSH was not detected. Benzene, ethylbenzene, xylenes, and naphthalene exceeded RWQCB ESLs. TPH-g, TPH-d exceeded California EPA ESLs. The majority of groundwater impacts remained on-site.
76	4/22/2016	Report	Groundwater Monitoring Report	Green Star Environmental	A groundwater monitoring event was performed in February 2016 utilizing 12 wells. PSH was not detected. Benzene, ethylbenzene, xylenes, and naphthalene exceeded RWQCB ESLs. TPH-g, TPH-d exceeded California EPA ESLs. The majority of groundwater impacts remained on-site.

ACEH = Alameda County Environmental Health

RWQCB = Regional Water Quality Control Board

**Table 2a - Summary of Groundwater Level Measurements (August2016)**

**Oakland Bus Terminal**

**2103 San Pable Ave.**

**Oakland, Alameda County, California**

**Green Star Project No. 16-1379**

Well	Date	Screened Interval (feet bgs)	Elevation to Top of Casing (feet MSL) <sup>1</sup>	Depth to Phase- Separated Liquid (feet BMP)	Depth to Water (feet BMP)	Product Thickness (feet)	Depth to Bottom (feet BMP)	Groundwater Elevation (feet MSL)
BC-1	08/16/16	unknown	24.41	--	16.83	--	29.72	7.58
BC-2 <sup>2</sup>	08/16/16	unknown	24.37	--	16.89	--	19.91	na
BC-3 <sup>2</sup>	08/16/16	unknown	24.42	--	17.05	--	20.24	na
ES-1	08/16/16	10.5-30.5	24.11	--	16.60	--	30.18	7.51
ES-2	08/16/16	10.5-30.5	24.66	--	17.10	--	30.22	7.56
ES-3	08/16/16	15-35	24.93	--	17.49	--	31.62	7.44
ES-4	08/16/16	10.5-30.5	23.93	--	16.32	--	30.05	7.61
ES-5	08/16/16	10.5-30.5	24.08	--	16.58	--	30.16	7.50
ES-6	08/16/16	15-35	27.06	--	19.30	--	35.11	7.76
ES-7	08/16/16	15-35	25.66	--	18.31	--	34.13	7.35
ES-8	08/18/16	15-35	24.74	--	17.12	--	29.23	7.62
ES-9	08/18/16	15-35	23.33	--	15.94	--	35.04	7.39
ES-10 <sup>3</sup>	nm	15-35	nm	nm	nm	nm	nm	nm
ES-11	08/16/16	15-36	24.08	--	16.45	--	35.00	7.63

nm = not measured      na = not applicable      -- = none detected      BMP = Below Measuring Point

Note: 1) On April 8, 2009, the well network was surveyed according to the North American Vertical Datum 1988 (NAVD 88) system

2) Well casings are not vertical.

3) Monitoring wells ES-10 has been paved over and is not accessible.

Table 2b - Cumulative Summary of Groundwater Level Measurements

Oakland Bus Terminal  
 2103 San Pablo Ave.  
 Oakland, Alameda County, California  
 Green Star Project No. 15-1379

Well No.	Date	Elevation to Top of Casing (feet MSL) <sup>1</sup>	Depth to Phase-Separated Liquid (feet BMP)	Depth to Water (feet BMP)	Product Thickness (feet)	Depth to Bottom (feet BMP)	Groundwater Elevation (feet MSL)
BC-1	07/07/92	24.41	19.55	20.66	1.11	nm	4.65
BC-1	08/04/92	24.41	18.47	20.90	2.43	nm	5.48
BC-1	08/31/92	24.41	18.68	21.02	2.34	nm	5.29
BC-1	10/06/92	24.41	18.82	21.14	2.32	nm	5.15
BC-1	11/06/92	24.41	18.24	20.69	2.45	nm	5.70
BC-1	01/07/93	24.41	19.60	21.76	2.16	nm	4.40
BC-1	04/06/93	24.41	--	18.26	--	nm	6.15
BC-1	07/03/93	24.41	19.05	19.15	0.10	nm	5.34
BC-1	08/04/93	24.41	19.30	19.40	0.10	nm	5.09
BC-1	09/01/93	24.41	19.23	19.32	0.09	nm	5.16
BC-1	10/07/93	24.41	19.25	19.43	0.18	nm	5.13
BC-1	11/02/93	24.41	19.42	19.61	0.19	nm	4.95
BC-1	12/06/93	24.41	19.31	19.53	0.22	nm	5.06
BC-1	01/05/94	24.41	19.25	19.42	0.17	nm	5.13
BC-1	02/02/94	24.41	19.30	19.50	0.20	nm	5.07
BC-1	03/02/94	24.41	18.40	18.60	0.20	nm	5.97
BC-1	04/07/94	24.41	18.10	18.20	0.10	nm	6.29
BC-1	05/05/94	24.41	18.65	18.84	0.19	nm	5.72
BC-1	06/07/94	24.41	18.25	18.52	0.27	nm	6.11
BC-1	07/13/94	24.41	--	18.70	--	nm	5.71
BC-1	08/03/94	24.41	--	18.40	--	nm	6.01
BC-1	09/14/94	24.41	18.72	18.73	0.01	nm	5.69
BC-1	10/06/94	24.41	--	18.58	--	nm	5.83
BC-1	11/02/94	24.41	18.81	18.82	0.01	nm	5.60
BC-1	12/07/94	24.41	17.93	17.94	0.01	nm	6.48
BC-1	01/13/95	24.41	--	18.58	--	nm	5.83
BC-1	02/14/95	24.41	16.76	16.80	0.04	nm	7.64
BC-1	03/07/95	24.41	--	17.08	--	nm	7.33
BC-1	04/11/95	24.41	--	16.55	--	nm	7.86
BC-1	05/09/95	24.41	16.99	17.00	0.01	nm	7.42
BC-1	06/09/95	24.41	17.38	17.39	0.01	nm	7.03
BC-1	07/06/95	24.41	--	17.64	--	nm	6.77
BC-1	08/10/95	24.41	--	17.89	--	nm	6.52
BC-1	09/07/95	24.41	--	17.96	--	nm	6.45
BC-1	10/03/95	24.41	--	18.23	--	nm	6.18
BC-1	10/05/95	24.41	--	18.23	--	nm	6.18
BC-1	11/02/95	24.41	--	18.02	--	nm	6.39
BC-1	12/07/95	24.41	--	18.64	--	nm	5.77
BC-1	01/03/96	24.41	--	18.36	--	nm	6.05
BC-1	02/06/96	24.41	--	17.43	--	nm	6.98
BC-1	03/12/96	24.41	--	16.85	--	nm	7.56
BC-1	05/07/96	24.41	--	17.45	--	nm	6.96
BC-1	06/05/96	24.41	--	17.46	--	nm	6.95
BC-1	09/05/96	24.41	--	18.16	--	nm	6.25
BC-1	10/08/96	24.41	--	18.40	--	nm	6.01
BC-1	11/08/96	24.41	--	18.57	--	nm	5.84
BC-1	12/13/96	24.41	--	18.24	--	nm	6.17
BC-1	01/16/97	24.41	--	17.19	--	nm	7.22
BC-1	02/14/97	24.41	--	16.88	--	nm	7.53
BC-1	03/07/97	24.41	--	17.31	--	nm	7.10
BC-1	04/17/97	24.41	--	17.92	--	nm	6.49
BC-1	07/15/97	24.41	--	18.61	--	nm	5.80
BC-1	10/07/97	24.41	--	18.72	--	nm	5.69
BC-1	09/24/08	24.41	--	16.68	--	29.55	7.73
BC-1	04/08/09	24.41	--	14.95	--	29.55	9.46
BC-1	07/14/09	24.41	--	15.77	--	29.58	8.64
BC-1	10/06/09	24.41	--	16.27	--	29.59	8.14
BC-1	07/28/10	24.41	--	16.22	--	29.75	8.19
BC-1	02/08/11	24.41	--	15.88	--	29.56	8.53
BC-1	12/13/11	24.41	--	16.61	--	29.70	7.80
BC-1	08/04/14	24.41	--	17.20	--	29.71	7.21
BC-1	03/12/15	24.41	--	16.37	--	29.65	8.04
BC-1	08/20/15	24.41	--	17.36	--	29.66	7.05
BC-1	02/22/16	24.41	--	16.26	--	29.70	8.15
BC-1	08/16/16	24.41	--	16.83	--	29.72	7.58

Table 2b - Cumulative Summary of Groundwater Level Measurements

Oakland Bus Terminal

2103 San Pablo Ave.

Oakland, Alameda County, California

Green Star Project No. 15-1379

Well No.	Date	Elevation to Top of Casing (feet MSL) <sup>1</sup>	Depth to Phase-Separated Liquid (feet BMP)	Depth to Water (feet BMP)	Product Thickness (feet)	Depth to Bottom (feet BMP)	Groundwater Elevation (feet MSL)
BC-2	07/07/92	24.37	--	16.89	--	nm	nd <sup>2</sup>
BC-2	08/04/92	24.37	--	18.46	--	nm	nd <sup>2</sup>
BC-2	08/31/92	24.37	--	18.89	--	nm	nd <sup>2</sup>
BC-2	10/06/92	24.37	--	18.50	--	nm	nd <sup>2</sup>
BC-2	11/06/92	24.37	--	15.98	--	nm	nd <sup>2</sup>
BC-2	01/07/93	24.37	--	13.50	--	nm	nd <sup>2</sup>
BC-2	04/06/93	24.37	--	15.20	--	nm	nd <sup>2</sup>
BC-2	07/03/93	24.37	--	17.75	--	nm	nd <sup>2</sup>
BC-2	08/04/93	24.37	--	18.10	--	nm	nd <sup>2</sup>
BC-2	09/01/93	24.37	--	18.48	--	nm	nd <sup>2</sup>
BC-2	10/07/93	24.37	--	19.02	--	nm	nd <sup>2</sup>
BC-2	11/02/93	24.37	--	18.76	--	nm	nd <sup>2</sup>
BC-2	12/06/93	24.37	--	18.87	--	nm	nd <sup>2</sup>
BC-2	01/05/94	24.37	--	16.76	--	nm	nd <sup>2</sup>
BC-2	02/02/94	24.37	--	16.42	--	nm	nd <sup>2</sup>
BC-2	05/05/94	24.37	--	17.30	--	nm	nd <sup>2</sup>
BC-2	06/07/94	24.37	--	17.70	--	nm	nd <sup>2</sup>
BC-2	07/13/94	24.37	--	17.10	--	nm	nd <sup>2</sup>
BC-2	08/03/94	24.37	--	18.36	--	nm	nd <sup>2</sup>
BC-2	09/14/94	24.37	--	17.04	--	nm	nd <sup>2</sup>
BC-2	01/13/95	24.37	--	12.80	--	nm	nd <sup>2</sup>
BC-2	02/14/95	24.37	--	15.11	--	nm	nd <sup>2</sup>
BC-2	03/07/95	24.37	--	16.21	--	nm	nd <sup>2</sup>
BC-2	04/11/95	24.37	--	15.56	--	nm	nd <sup>2</sup>
BC-2	05/09/95	24.37	--	15.81	--	nm	nd <sup>2</sup>
BC-2	06/09/95	24.37	--	16.88	--	nm	nd <sup>2</sup>
BC-2	07/06/95	24.37	--	16.88	--	nm	nd <sup>2</sup>
BC-2	08/10/95	24.37	--	17.55	--	nm	nd <sup>2</sup>
BC-2	09/07/95	24.37	--	18.03	--	nm	nd <sup>2</sup>
BC-2	10/03/95	24.37	--	18.24	--	nm	nd <sup>2</sup>
BC-2	10/05/95	24.37	--	18.24	--	nm	nd <sup>2</sup>
BC-2	11/02/95	24.37	--	18.36	--	nm	nd <sup>2</sup>
BC-2	01/03/96	24.37	--	17.86	--	nm	nd <sup>2</sup>
BC-2	02/06/96	24.37	--	16.31	--	nm	nd <sup>2</sup>
BC-2	03/12/96	24.37	--	16.50	--	nm	nd <sup>2</sup>
BC-2	04/09/96	24.37	--	16.90	--	nm	nd <sup>2</sup>
BC-2	05/07/96	24.37	--	17.20	--	nm	nd <sup>2</sup>
BC-2	06/05/96	24.37	--	17.10	--	nm	nd <sup>2</sup>
BC-2	07/09/96	24.37	--	17.70	--	nm	nd <sup>2</sup>
BC-2	10/08/96	24.37	--	18.40	--	nm	nd <sup>2</sup>
BC-2	11/08/96	24.37	--	18.30	--	nm	nd <sup>2</sup>
BC-2	12/13/96	24.37	--	16.80	--	nm	nd <sup>2</sup>
BC-2	01/16/97	24.37	--	16.40	--	nm	nd <sup>2</sup>
BC-2	02/14/97	24.37	--	16.30	--	nm	nd <sup>2</sup>
BC-2	03/07/97	24.37	--	17.00	--	nm	nd <sup>2</sup>
BC-2	04/17/97	24.37	--	17.70	--	nm	nd <sup>2</sup>
BC-2	07/15/97	24.37	--	18.50	--	nm	nd <sup>2</sup>
BC-2	10/07/97	24.37	--	18.69	--	nm	nd <sup>2</sup>
BC-2	09/24/08	24.37	--	16.82	--	19.90	nd <sup>2</sup>
BC-2	04/08/09	24.37	--	16.34	--	19.91	nd <sup>2</sup>
BC-2	07/14/09	24.37	--	17.08	--	19.93	nd <sup>2</sup>
BC-2	10/06/09	24.37	--	16.61	--	19.94	nd <sup>2</sup>
BC-2	07/28/10	24.37	--	16.25	--	20.02	nd <sup>2</sup>
BC-2	02/08/11	24.37	--	15.55	--	19.85	nd <sup>2</sup>
BC-2	12/13/11	24.37	--	16.56	--	20.02	nd <sup>2</sup>
BC-2	08/04/14	24.37	--	17.12	--	20.16	nd <sup>2</sup>
BC-2	03/12/15	24.37	--	16.39	--	19.93	nd <sup>2</sup>
BC-2	08/19/15	25.37	--	17.32	--	20.85	nd <sup>2</sup>
BC-2	02/23/16	25.37	--	16.76	--	20.00	nd <sup>2</sup>
BC-2	08/16/16	25.37	--	16.89	--	19.91	nd <sup>2</sup>

Table 2b - Cumulative Summary of Groundwater Level Measurements

Oakland Bus Terminal

2103 San Pablo Ave.

Oakland, Alameda County, California

Green Star Project No. 15-1379

Well No.	Date	Elevation to Top of Casing (feet MSL) <sup>1</sup>	Depth to Phase-Separated Liquid (feet BMP)	Depth to Water (feet BMP)	Product Thickness (feet)	Depth to Bottom (feet BMP)	Groundwater Elevation (feet MSL)
BC-3	07/07/92	24.42	--	16.68	--	nm	nd <sup>2</sup>
BC-3	08/04/92	24.42	--	19.24	--	nm	nd <sup>2</sup>
BC-3	08/31/92	24.42	--	19.10	--	nm	nd <sup>2</sup>
BC-3	10/06/92	24.42	--	18.93	--	nm	nd <sup>2</sup>
BC-3	11/06/92	24.42	--	16.81	--	nm	nd <sup>2</sup>
BC-3	01/07/93	24.42	--	16.55	--	nm	nd <sup>2</sup>
BC-3	04/06/93	24.42	--	15.44	--	nm	nd <sup>2</sup>
BC-3	07/03/93	24.42	--	16.81	--	nm	nd <sup>2</sup>
BC-3	08/04/93	24.42	--	18.82	--	nm	nd <sup>2</sup>
BC-3	09/01/93	24.42	--	18.40	--	nm	nd <sup>2</sup>
BC-3	10/07/93	24.42	--	18.58	--	nm	nd <sup>2</sup>
BC-3	11/02/93	24.42	--	18.53	--	nm	nd <sup>2</sup>
BC-3	12/06/93	24.42	--	18.67	--	nm	nd <sup>2</sup>
BC-3	01/05/94	24.42	--	17.51	--	nm	nd <sup>2</sup>
BC-3	02/02/94	24.42	--	16.40	--	nm	nd <sup>2</sup>
BC-3	03/02/94	24.42	--	15.00	--	nm	nd <sup>2</sup>
BC-3	04/07/94	24.42	--	17.70	--	nm	nd <sup>2</sup>
BC-3	05/05/94	24.42	--	17.90	--	nm	nd <sup>2</sup>
BC-3	06/07/94	24.42	--	17.34	--	nm	nd <sup>2</sup>
BC-3	07/13/94	24.42	--	18.10	--	nm	nd <sup>2</sup>
BC-3	08/03/94	24.42	--	18.36	--	nm	nd <sup>2</sup>
BC-3	09/14/94	24.42	--	18.31	--	nm	nd <sup>2</sup>
BC-3	10/06/94	24.42	--	18.58	--	nm	nd <sup>2</sup>
BC-3	11/02/94	24.42	--	18.61	--	nm	nd <sup>2</sup>
BC-3	12/07/94	24.42	--	16.29	--	nm	nd <sup>2</sup>
BC-3	01/13/95	24.42	--	15.40	--	nm	nd <sup>2</sup>
BC-3	02/14/95	24.42	--	15.86	--	nm	nd <sup>2</sup>
BC-3	03/07/95	24.42	--	16.21	--	nm	nd <sup>2</sup>
BC-3	04/11/95	24.42	--	15.08	--	nm	nd <sup>2</sup>
BC-3	05/09/95	24.42	--	16.92	--	nm	nd <sup>2</sup>
BC-3	06/09/95	24.42	--	16.90	--	nm	nd <sup>2</sup>
BC-3	07/06/95	24.42	--	16.87	--	nm	nd <sup>2</sup>
BC-3	08/10/95	24.42	--	17.54	--	nm	nd <sup>2</sup>
BC-3	09/07/95	24.42	--	17.80	--	nm	nd <sup>2</sup>
BC-3	10/03/95	24.42	--	17.95	--	nm	nd <sup>2</sup>
BC-3	10/05/95	24.42	--	17.95	--	nm	nd <sup>2</sup>
BC-3	11/02/95	24.42	--	18.33	--	nm	nd <sup>2</sup>
BC-3	01/03/96	24.42	--	17.55	--	nm	nd <sup>2</sup>
BC-3	02/06/96	24.42	--	17.15	--	nm	nd <sup>2</sup>
BC-3	03/12/96	24.42	--	16.50	--	nm	nd <sup>2</sup>
BC-3	04/09/96	24.42	--	16.60	--	nm	nd <sup>2</sup>
BC-3	05/07/96	24.42	--	16.90	--	nm	nd <sup>2</sup>
BC-3	06/05/96	24.42	--	17.00	--	nm	nd <sup>2</sup>
BC-3	07/09/96	24.42	--	17.40	--	nm	nd <sup>2</sup>
BC-3	10/08/96	24.42	--	18.10	--	nm	nd <sup>2</sup>
BC-3	11/08/96	24.42	--	18.20	--	nm	nd <sup>2</sup>
BC-3	12/13/96	24.42	--	17.60	--	nm	nd <sup>2</sup>
BC-3	09/24/08	24.42	--	17.01	--	20.11	nd <sup>2</sup>
BC-3	04/08/09	24.42	--	14.93	--	20.15	nd <sup>2</sup>
BC-3	07/14/09	24.42	--	16.10	--	20.16	nd <sup>2</sup>
BC-3	10/06/09	24.42	--	16.66	--	20.16	nd <sup>2</sup>
BC-3	07/28/10	24.42	--	16.32	--	20.24	nd <sup>2</sup>
BC-3	02/08/11	24.42	--	15.92	--	20.15	nd <sup>2</sup>
BC-3	12/13/11	24.42	--	16.59	--	20.23	nd <sup>2</sup>
BC-3	08/04/14	24.42	--	17.22	--	20.20	nd <sup>2</sup>
BC-3	03/12/15	24.42	--	16.42	--	20.08	nd <sup>2</sup>
BC-3	08/19/15	25.42	--	17.36	--	20.28	nd <sup>2</sup>
BC-3	02/23/16	25.42	--	16.19	--	20.25	nd <sup>2</sup>
BC-3	08/16/16	25.42	--	17.05	--	20.24	nd <sup>2</sup>

Table 2b - Cumulative Summary of Groundwater Level Measurements

Oakland Bus Terminal

2103 San Pablo Ave.

Oakland, Alameda County, California

Green Star Project No. 15-1379

Well No.	Date	Elevation to Top of Casing (feet MSL) <sup>1</sup>	Depth to Phase-Separated Liquid (feet BMP)	Depth to Water (feet BMP)	Product Thickness (feet)	Depth to Bottom (feet BMP)	Groundwater Elevation (feet MSL)
ES-1	06/16/92	24.11	20.18	23.78	3.60	nm	3.25
ES-1	07/07/92	24.11	--	18.60	--	nm	5.51
ES-1	08/04/92	24.11	18.80	18.81	0.01	nm	5.31
ES-1	08/31/92	24.11	18.96	18.97	0.01	nm	5.15
ES-1	10/06/92	24.11	19.08	19.10	0.02	nm	5.03
ES-1	11/06/92	24.11	18.52	18.53	0.01	nm	5.59
ES-1	01/07/93	24.11	20.27	20.26	0.01	nm	3.86
ES-1	04/06/93	24.11	--	17.88	--	nm	6.23
ES-1	07/03/93	24.11	--	18.68	--	nm	5.43
ES-1	08/04/93	24.11	--	18.85	--	nm	5.26
ES-1	09/01/93	24.11	--	18.90	--	nm	5.21
ES-1	10/07/93	24.11	19.04	19.03	0.01	nm	5.09
ES-1	11/02/93	24.11	--	19.20	--	nm	4.91
ES-1	12/06/93	24.11	--	19.15	--	nm	4.96
ES-1	01/05/94	24.11	--	18.96	--	nm	5.15
ES-1	02/02/94	24.11	--	18.92	--	nm	5.19
ES-1	05/05/94	24.11	17.91	18.08	0.17	nm	6.17
ES-1	06/07/94	24.11	18.50	18.68	0.18	nm	5.58
ES-1	07/13/94	24.11	17.88	18.02	0.14	nm	6.20
ES-1	08/03/94	24.11	18.04	18.21	0.17	nm	6.04
ES-1	09/14/94	24.11	18.66	18.64	0.02	nm	5.49
ES-1	10/06/94	24.11	18.39	18.43	0.04	nm	5.71
ES-1	11/02/94	24.11	--	18.39	--	nm	5.72
ES-1	12/07/94	24.11	--	17.70	--	nm	6.41
ES-1	01/13/95	24.11	18.39	18.43	0.04	nm	5.71
ES-1	02/14/95	24.11	16.44	16.45	0.01	nm	7.67
ES-1	03/07/95	24.11	--	16.74	--	nm	7.37
ES-1	04/11/95	24.11	--	16.25	--	nm	7.86
ES-1	05/09/95	24.11	--	16.66	--	nm	7.45
ES-1	06/09/95	24.11	17.15	17.16	0.01	nm	6.96
ES-1	07/06/95	24.11	--	17.28	--	nm	6.83
ES-1	08/10/95	24.11	17.60	17.61	0.01	nm	6.51
ES-1	09/07/95	24.11	--	17.79	--	nm	6.32
ES-1	10/05/95	24.11	--	18.01	--	nm	6.10
ES-1	01/03/96	24.11	--	18.04	--	nm	6.07
ES-1	04/09/96	24.11	--	17.40	--	nm	6.71
ES-1	01/16/97	24.11	--	16.79	--	nm	7.32
ES-1	02/14/97	24.11	--	16.53	--	nm	7.58
ES-1	03/07/97	24.11	--	17.01	--	nm	7.10
ES-1	04/17/97	24.11	--	18.13	--	nm	5.98
ES-1	07/15/97	24.11	--	18.44	--	nm	5.67
ES-1	10/07/97	24.11	18.36	18.37	0.01	nm	5.75
ES-1	09/24/08	24.11	--	16.46	--	30.13	7.65
ES-1	04/08/09	24.11	--	14.75	--	30.15	9.36
ES-1	07/14/09	24.11	--	15.67	--	30.08	8.44
ES-1	10/06/09	24.11	--	16.10	--	30.15	8.01
ES-1	07/28/10	24.11	--	15.98	--	30.24	8.13
ES-1	02/08/11	24.11	--	15.59	--	30.11	8.52
ES-1	12/13/11	24.11	--	16.38	--	30.19	7.73
ES-1	08/04/14	24.11	nm	nm	nm	nm	nm
ES-1	03/12/15	24.11	--	16.13	--	30.18	7.98
ES-1	08/19/15	24.11	--	17.15	--	30.22	6.96
ES-1	02/23/16	24.11	--	16.00	--	30.94	8.11
ES-1	08/16/16	24.11	--	16.60	--	30.18	7.51

**Table 2b - Cumulative Summary of Groundwater Level Measurements**  
**Oakland Bus Terminal**  
**2103 San Pablo Ave.**  
**Oakland, Alameda County, California**  
**Green Star Project No. 15-1379**

Well No.	Date	Elevation to Top of Casing (feet MSL) <sup>1</sup>	Depth to Phase-Separated Liquid (feet BMP)	Depth to Water (feet BMP)	Product Thickness (feet)	Depth to Bottom (feet BMP)	Groundwater Elevation (feet MSL)
ES-2	06/16/92	24.66	18.63	18.64	0.01	nm	6.03
ES-2	07/07/92	24.66	--	19.62	--	nm	5.04
ES-2	08/04/92	24.66	19.17	19.76	0.59	nm	5.38
ES-2	08/31/92	24.66	19.29	19.90	0.61	nm	5.25
ES-2	10/06/92	24.66	19.41	20.00	0.59	nm	5.14
ES-2	11/06/92	24.66	18.84	19.44	0.60	nm	5.71
ES-2	01/07/93	24.66	20.05	20.40	0.35	nm	4.54
ES-2	04/06/93	24.66	18.20	18.31	0.11	nm	6.44
ES-2	07/03/93	24.66	19.31	19.32	0.01	nm	5.35
ES-2	08/04/93	24.66	19.15	19.18	0.03	nm	5.50
ES-2	09/01/93	24.66	19.50	19.59	0.09	nm	5.14
ES-2	10/07/93	24.66	19.57	19.60	0.03	nm	5.08
ES-2	11/02/93	24.66	19.60	19.61	0.01	nm	5.06
ES-2	12/06/93	24.66	19.71	19.74	0.03	nm	4.94
ES-2	01/05/94	24.66	19.57	19.61	0.04	nm	5.08
ES-2	02/02/94	24.66	19.20	19.25	0.05	nm	5.45
ES-2	03/02/94	24.66	19.00	19.50	0.50	nm	5.57
ES-2	04/07/94	24.66	19.10	19.19	0.09	nm	5.54
ES-2	05/05/94	24.66	18.77	18.79	0.02	nm	5.89
ES-2	06/07/94	24.66	--	18.61	--	nm	6.05
ES-2	07/13/94	24.66	--	18.78	--	nm	5.88
ES-2	08/03/94	24.66	--	18.72	--	nm	5.94
ES-2	09/14/94	24.66	19.10	19.14	0.04	nm	5.55
ES-2	10/06/94	24.66	--	18.86	--	nm	5.80
ES-2	11/02/94	24.66	18.97	19.91	0.94	nm	5.51
ES-2	12/07/94	24.66	--	18.14	--	nm	6.52
ES-2	01/13/95	24.66	--	18.86	--	nm	5.80
ES-2	02/14/95	24.66	--	16.92	--	nm	7.74
ES-2	03/07/95	24.66	--	17.25	--	nm	7.41
ES-2	04/11/95	24.66	--	16.71	--	nm	7.95
ES-2	05/09/95	24.66	--	17.15	--	nm	7.51
ES-2	06/09/95	24.66	17.60	17.61	0.01	nm	7.06
ES-2	07/06/95	24.66	17.78	17.79	0.01	nm	6.88
ES-2	08/10/95	24.66	18.09	18.10	0.01	nm	6.57
ES-2	09/07/95	24.66	--	18.29	--	nm	6.37
ES-2	10/03/95	24.66	18.45	18.48	0.03	nm	6.20
ES-2	10/05/95	24.66	18.45	18.48	0.03	nm	6.20
ES-2	11/02/95	24.66	18.62	18.65	0.03	nm	6.03
ES-2	12/07/95	24.66	18.85	18.90	0.05	nm	5.80
ES-2	01/03/96	24.66	18.54	18.55	0.01	nm	6.12
ES-2	02/06/96	24.66	--	17.60	--	nm	7.06
ES-2	03/12/96	24.66	--	17.08	--	nm	7.58
ES-2	04/09/96	24.66	--	17.18	--	nm	7.48
ES-2	05/07/96	24.66	--	17.66	--	nm	7.00
ES-2	06/05/96	24.66	--	17.66	--	nm	7.00
ES-2	07/09/96	24.66	--	18.02	--	nm	6.64
ES-2	09/05/96	24.66	--	18.39	--	nm	6.27
ES-2	10/08/96	24.66	--	18.61	--	nm	6.05
ES-2	11/08/96	24.66	--	18.78	--	nm	5.88
ES-2	12/13/96	24.66	--	18.43	--	nm	6.23
ES-2	01/16/97	24.66	--	17.57	--	nm	7.09
ES-2	02/14/97	24.66	--	17.08	--	nm	7.58
ES-2	03/07/97	24.66	--	17.56	--	nm	7.10
ES-2	04/17/97	24.66	--	18.11	--	nm	6.55
ES-2	07/15/97	24.66	--	18.97	--	nm	5.69
ES-2	10/07/97	24.66	--	18.87	--	nm	5.79
ES-2	09/24/08	24.66	--	16.96	--	30.19	7.70
ES-2	04/08/09	24.66	--	15.25	--	31.15	9.41
ES-2	07/14/09	24.66	--	16.07	--	30.16	8.59
ES-2	10/06/09	24.66	--	16.57	--	30.15	8.09
ES-2	07/28/10	24.66	--	16.49	--	30.30	8.17
ES-2	02/08/11	24.66	--	16.12	--	30.15	8.54
ES-2	12/13/11	24.66	--	16.91	--	30.29	7.75
ES-2	08/04/14	24.66	--	17.39	--	30.24	7.27
ES-2	03/12/15	24.66	--	16.64	--	30.24	8.02
ES-2	08/19/15	24.66	--	17.65	--	30.25	7.01
ES-2	02/23/16	24.66	--	16.52	--	30.22	8.14
ES-2	08/16/16	24.66	--	17.10	--	30.22	7.56

Table 2b - Cumulative Summary of Groundwater Level Measurements

Oakland Bus Terminal

2103 San Pablo Ave.

Oakland, Alameda County, California

Green Star Project No. 15-1379

Well No.	Date	Elevation to Top of Casing (feet MSL) <sup>1</sup>	Depth to Phase-Separated Liquid (feet BMP)	Depth to Water (feet BMP)	Product Thickness (feet)	Depth to Bottom (feet BMP)	Groundwater Elevation (feet MSL)
ES-3	06/16/92	24.93	--	19.41	--	nm	5.52
ES-3	07/07/92	24.93	--	19.52	--	nm	5.41
ES-3	08/04/92	24.93	--	19.68	--	nm	5.25
ES-3	08/31/92	24.93	--	19.80	--	nm	5.13
ES-3	10/06/92	24.93	--	19.96	--	nm	4.97
ES-3	11/06/92	24.93	18.84	19.84	1.00	nm	5.90
ES-3	01/07/93	24.93	--	19.20	--	nm	5.73
ES-3	04/06/93	24.93	--	15.92	--	nm	9.01
ES-3	07/03/93	24.93	--	18.12	--	nm	6.81
ES-3	08/04/93	24.93	--	19.18	--	nm	5.75
ES-3	09/01/93	24.93	--	19.36	--	nm	5.57
ES-3	10/07/93	24.93	--	19.62	--	nm	5.31
ES-3	11/02/93	24.93	--	19.70	--	nm	5.23
ES-3	12/06/93	24.93	--	19.68	--	nm	5.25
ES-3	01/05/94	24.93	--	19.52	--	nm	5.41
ES-3	02/02/94	24.93	--	19.30	--	nm	5.63
ES-3	03/02/94	24.93	--	18.68	--	nm	6.25
ES-3	04/07/94	24.93	--	19.00	--	nm	5.93
ES-3	05/05/94	24.93	--	18.78	--	nm	6.15
ES-3	06/07/94	24.93	--	18.90	--	nm	6.03
ES-3	07/13/94	24.93	--	18.71	--	nm	6.22
ES-3	08/03/94	24.93	--	19.03	--	nm	5.90
ES-3	09/14/94	24.93	--	19.84	--	nm	5.09
ES-3	10/06/94	24.93	--	19.24	--	nm	5.69
ES-3	11/02/94	24.93	--	19.37	--	nm	5.56
ES-3	12/07/94	24.93	--	18.44	--	nm	6.49
ES-3	01/13/95	24.93	--	17.35	--	nm	7.58
ES-3	02/14/95	24.93	--	17.22	--	nm	7.71
ES-3	03/07/95	24.93	--	17.52	--	nm	7.41
ES-3	04/11/95	24.93	--	16.95	--	nm	7.98
ES-3	05/09/95	24.93	17.34	17.39	0.05	nm	7.58
ES-3	06/09/95	24.93	--	17.87	--	nm	7.06
ES-3	07/06/95	24.93	--	18.07	--	nm	6.86
ES-3	08/10/95	24.93	--	18.40	--	nm	6.53
ES-3	09/07/95	24.93	--	18.59	--	nm	6.34
ES-3	10/03/95	24.93	--	18.76	--	nm	6.17
ES-3	10/05/95	24.93	--	18.76	--	nm	6.17
ES-3	11/02/95	24.93	--	18.96	--	nm	5.97
ES-3	12/07/95	24.93	--	19.19	--	nm	5.74
ES-3	01/03/96	24.93	--	17.55	--	nm	7.38
ES-3	02/06/96	24.93	--	17.86	--	nm	7.07
ES-3	03/12/96	24.93	--	17.35	--	nm	7.58
ES-3	04/09/96	24.93	--	17.65	--	nm	7.28
ES-3	05/07/96	24.93	--	17.94	--	nm	6.99
ES-3	06/05/96	24.93	--	17.94	--	nm	6.99
ES-3	07/09/96	24.93	--	18.33	--	nm	6.60
ES-3	09/05/96	24.93	--	18.63	--	nm	6.30
ES-3	10/08/96	24.93	--	18.98	--	nm	5.95
ES-3	11/08/96	24.93	--	19.16	--	nm	5.77
ES-3	12/13/96	24.93	--	18.81	--	nm	6.12
ES-3	01/16/97	24.93	--	17.72	--	nm	7.21
ES-3	02/14/97	24.93	--	17.47	--	nm	7.46
ES-3	03/07/97	24.93	--	17.90	--	nm	7.03
ES-3	04/17/97	24.93	--	18.42	--	nm	6.51
ES-3	07/15/97	24.93	--	19.01	--	nm	5.92
ES-3	10/07/97	24.93	--	19.18	--	nm	5.75
ES-3	09/24/08	24.93	--	17.38	--	31.44	7.55
ES-3	04/08/09	24.93	--	15.65	--	31.55	9.28
ES-3	07/14/09	24.93	--	16.54	--	31.51	8.39
ES-3	10/06/09	24.93	--	17.06	--	31.56	7.87
ES-3	07/28/10	24.93	--	16.80	--	31.74	8.13
ES-3	02/08/11	24.93	--	16.41	--	31.45	8.52
ES-3	12/13/11	24.93	--	17.11	--	31.46	7.82
ES-3	08/04/14	24.93	--	17.80	--	31.72	7.13
ES-3	03/12/15	24.93	--	16.96	--	31.49	7.97
ES-3	08/19/15	24.93	--	17.98	--	31.75	6.95
ES-3	02/23/16	24.93	--	16.84	--	31.74	8.09
ES-3	08/16/16	24.93	--	17.49	--	31.62	7.44

Table 2b - Cumulative Summary of Groundwater Level Measurements

Oakland Bus Terminal

2103 San Pablo Ave.

Oakland, Alameda County, California

Green Star Project No. 15-1379

Well No.	Date	Elevation to Top of Casing (feet MSL) <sup>1</sup>	Depth to Phase-Separated Liquid (feet BMP)	Depth to Water (feet BMP)	Product Thickness (feet)	Depth to Bottom (feet BMP)	Groundwater Elevation (feet MSL)
ES-4	06/16/92	23.93	18.63	18.98	0.35	nm	5.23
ES-4	07/07/92	23.93	--	18.51	--	nm	5.42
ES-4	08/04/92	23.93	--	18.66	--	nm	5.27
ES-4	08/31/92	23.93	--	18.79	--	nm	5.14
ES-4	10/06/92	23.93	--	18.92	--	nm	5.01
ES-4	11/06/92	23.93	--	18.94	--	nm	4.99
ES-4	01/07/93	23.93	--	18.76	--	nm	5.17
ES-4	04/06/93	23.93	--	17.26	--	nm	6.67
ES-4	07/03/93	23.93	--	18.08	--	nm	5.85
ES-4	08/04/93	23.93	--	18.16	--	nm	5.77
ES-4	09/01/93	23.93	--	18.46	--	nm	5.47
ES-4	10/07/93	23.93	--	18.62	--	nm	5.31
ES-4	11/02/93	23.93	--	18.74	--	nm	5.19
ES-4	12/06/93	23.93	--	18.72	--	nm	5.21
ES-4	01/05/94	23.93	--	18.55	--	nm	5.38
ES-4	02/02/94	23.93	--	18.42	--	nm	5.51
ES-4	03/02/94	23.93	--	17.86	--	nm	6.07
ES-4	04/07/94	23.93	--	18.80	--	nm	5.13
ES-4	05/05/94	23.93	--	17.86	--	nm	6.07
ES-4	06/07/94	23.93	--	17.94	--	nm	5.99
ES-4	07/13/94	23.93	--	18.13	--	nm	5.80
ES-4	08/03/94	23.93	--	17.94	--	nm	5.99
ES-4	09/14/94	23.93	--	18.18	--	nm	5.75
ES-4	10/06/94	23.93	--	18.25	--	nm	5.68
ES-4	11/02/94	23.93	--	18.35	--	nm	5.58
ES-4	12/07/94	23.93	--	17.56	--	nm	6.37
ES-4	01/13/95	23.93	--	16.77	--	nm	7.16
ES-4	02/14/95	23.93	--	16.37	--	nm	7.56
ES-4	03/07/95	23.93	--	16.66	--	nm	7.27
ES-4	04/11/95	23.93	--	16.14	--	nm	7.79
ES-4	05/09/95	23.93	--	16.57	--	nm	7.36
ES-4	06/09/95	23.93	--	17.02	--	nm	6.91
ES-4	07/06/95	23.93	--	17.19	--	nm	6.74
ES-4	08/10/95	23.93	--	17.84	--	nm	6.09
ES-4	09/07/95	23.93	--	17.68	--	nm	6.25
ES-4	10/03/95	23.93	--	17.84	--	nm	6.09
ES-4	10/05/95	23.93	--	17.84	--	nm	6.09
ES-4	11/02/95	23.93	--	18.02	--	nm	5.91
ES-4	12/07/95	23.93	--	18.23	--	nm	5.70
ES-4	01/03/96	23.93	--	17.87	--	nm	6.06
ES-4	02/06/96	23.93	--	17.02	--	nm	6.91
ES-4	03/12/96	23.93	--	16.54	--	nm	7.39
ES-4	04/09/96	23.93	--	16.76	--	nm	7.17
ES-4	05/07/96	23.93	--	16.17	--	nm	7.76
ES-4	06/05/96	23.93	--	17.05	--	nm	6.88
ES-4	07/09/96	23.93	--	17.37	--	nm	6.56
ES-4	09/05/96	23.93	--	17.74	--	nm	6.19
ES-4	10/08/96	23.93	--	17.97	--	nm	5.96
ES-4	11/08/96	23.93	--	18.13	--	nm	5.80
ES-4	12/13/96	23.93	--	17.83	--	nm	6.10
ES-4	01/16/97	23.93	--	16.92	--	nm	7.01
ES-4	02/14/97	23.93	--	16.56	--	nm	7.37
ES-4	03/07/97	23.93	--	16.95	--	nm	6.98
ES-4	04/17/97	23.93	--	17.45	--	nm	6.48
ES-4	07/15/97	23.93	--	18.05	--	nm	5.88
ES-4	10/07/97	23.93	--	18.23	--	nm	5.70
ES-4	09/24/08	23.93	--	16.20	--	29.94	7.73
ES-4	04/08/09	23.93	--	14.46	--	29.95	9.47
ES-4	07/14/09	23.93	--	15.29	--	29.96	8.64
ES-4	10/06/09	23.93	--	15.80	--	29.94	8.13
ES-4	07/28/10	23.93	--	15.77	--	29.83	8.16
ES-4	02/08/11	23.93	--	15.38	--	29.65	8.55
ES-4	12/13/11	23.93	--	16.19	--	30.05	7.74
ES-4	08/04/14	23.93	--	16.68	--	30.00	7.25
ES-4	03/12/15	23.93	--	15.90	--	28.49	8.03
ES-4	08/19/15	23.93	--	16.90	--	30.11	7.03
ES-4	02/23/16	23.93	--	15.77	--	30.06	8.16
ES-4	08/16/16	23.93	--	16.32	--	30.05	7.61

**Table 2b - Cumulative Summary of Groundwater Level Measurements**  
**Oakland Bus Terminal**  
**2103 San Pablo Ave.**  
**Oakland, Alameda County, California**  
**Green Star Project No. 15-1379**

Well No.	Date	Elevation to Top of Casing (feet MSL) <sup>1</sup>	Depth to Phase-Separated Liquid (feet BMP)	Depth to Water (feet BMP)	Product Thickness (feet)	Depth to Bottom (feet BMP)	Groundwater Elevation (feet MSL)
ES-5	06/16/92	24.08	18.40	20.40	2.00	nm	5.30
ES-5	07/07/92	24.08	--	20.23	--	nm	3.85
ES-5	08/04/92	24.08	18.16	20.43	2.27	nm	5.49
ES-5	08/31/92	24.08	18.24	20.80	2.56	nm	5.35
ES-5	10/06/92	24.08	18.24	21.37	3.13	nm	5.25
ES-5	11/06/92	24.08	17.60	20.92	3.32	nm	5.85
ES-5	01/05/93	24.08	18.42	19.75	1.33	nm	5.41
ES-5	01/07/93	24.08	19.35	22.00	2.65	nm	4.23
ES-5	04/06/93	24.08	--	17.28	--	nm	6.80
ES-5	07/03/93	24.08	--	19.50	--	nm	4.58
ES-5	08/04/93	24.08	--	18.61	--	nm	5.47
ES-5	09/01/93	24.08	18.79	18.80	0.01	nm	5.29
ES-5	10/07/93	24.08	18.65	19.33	0.68	nm	5.30
ES-5	11/02/93	24.08	18.91	19.45	0.54	nm	5.07
ES-5	12/06/93	24.08	18.78	19.25	0.47	nm	5.21
ES-5	02/02/94	24.08	18.18	19.98	1.80	nm	5.56
ES-5	03/02/94	24.08	18.07	18.30	0.23	nm	5.97
ES-5	04/07/94	24.08	18.37	18.38	0.01	nm	5.71
ES-5	05/05/94	24.08	18.24	18.26	0.02	nm	5.84
ES-5	06/07/94	24.08	18.26	18.27	0.01	nm	5.82
ES-5	07/13/94	24.08	--	18.30	--	nm	5.78
ES-5	08/03/94	24.08	--	17.90	--	nm	6.18
ES-5	09/14/94	24.08	18.41	18.42	0.01	nm	5.67
ES-5	10/06/94	24.08	--	18.23	--	nm	5.85
ES-5	11/02/94	24.08	--	18.47	--	nm	5.61
ES-5	12/07/94	24.08	--	17.45	--	nm	6.63
ES-5	01/13/95	24.08	--	18.23	--	nm	5.85
ES-5	02/14/95	24.08	--	16.45	--	nm	7.63
ES-5	03/07/95	24.08	--	16.53	--	nm	7.55
ES-5	04/11/95	24.08	--	16.00	--	nm	8.08
ES-5	05/09/95	24.08	--	16.45	--	nm	7.63
ES-5	06/09/95	24.08	--	16.90	--	nm	7.18
ES-5	07/06/95	24.08	--	17.09	--	nm	6.99
ES-5	08/10/95	24.08	--	17.44	--	nm	6.64
ES-5	09/07/95	24.08	--	17.61	--	nm	6.47
ES-5	10/03/95	24.08	--	18.74	--	nm	5.34
ES-5	10/05/95	24.08	--	18.74	--	nm	5.34
ES-5	11/02/95	24.08	--	17.98	--	nm	6.10
ES-5	12/07/95	24.08	18.21	18.22	0.01	nm	5.87
ES-5	01/03/96	24.08	--	17.89	--	nm	6.19
ES-5	02/06/96	24.08	--	16.76	--	nm	7.32
ES-5	03/12/96	24.08	--	16.36	--	nm	7.72
ES-5	04/09/96	24.08	--	16.70	--	nm	7.38
ES-5	05/07/96	24.08	--	16.95	--	nm	7.13
ES-5	06/05/96	24.08	--	16.95	--	nm	7.13
ES-5	07/09/96	24.08	--	17.34	--	nm	6.74
ES-5	01/16/97	24.08	--	16.68	--	nm	7.40
ES-5	02/14/97	24.08	--	16.43	--	nm	7.65
ES-5	03/07/97	24.08	--	16.90	--	nm	7.18
ES-5	04/17/97	24.08	--	17.41	--	nm	6.67
ES-5	07/15/97	24.08	--	18.29	--	nm	5.79
ES-5	10/07/97	24.08	--	18.48	--	nm	5.60
ES-5	09/24/08	24.08	--	16.49	--	30.06	7.59
ES-5	04/08/09	24.08	--	14.75	--	30.13	9.33
ES-5	07/15/09	24.08	--	15.61	--	30.08	8.47
ES-5	10/06/09	24.08	--	16.12	--	30.08	7.96
ES-5	07/28/10	24.08	--	15.97	--	30.26	8.11
ES-5	02/08/11	24.08	--	15.55	--	30.05	8.53
ES-5	12/13/11	24.08	--	16.33	--	30.16	7.75
ES-5	08/04/14	24.08	--	15.83	--	30.31	8.25
ES-5	03/12/15	24.08	--	16.12	--	30.19	7.96
ES-5	08/19/15	24.08	--	17.01	--	30.23	7.07
ES-5	02/23/16	24.08	--	15.96	--	30.15	8.12
ES-5	08/16/16	24.08	--	16.58	--	30.16	7.50

Table 2b - Cumulative Summary of Groundwater Level Measurements

Oakland Bus Terminal

2103 San Pablo Ave.

Oakland, Alameda County, California

Green Star Project No. 15-1379

Well No.	Date	Elevation to Top of Casing (feet MSL) <sup>1</sup>	Depth to Phase-Separated Liquid (feet BMP)	Depth to Water (feet BMP)	Product Thickness (feet)	Depth to Bottom (feet BMP)	Groundwater Elevation (feet MSL)
ES-6	01/05/93	27.06	--	21.76	--	nm	5.30
ES-6	09/01/93	27.06	--	21.94	--	nm	5.12
ES-6	10/07/93	27.06	--	21.81	--	nm	5.25
ES-6	11/02/93	27.06	--	21.91	--	nm	5.15
ES-6	12/06/93	27.06	--	21.90	--	nm	5.16
ES-6	02/02/94	27.06	--	21.74	--	nm	5.32
ES-6	03/02/94	27.06	--	21.10	--	nm	5.96
ES-6	04/07/94	27.06	--	21.30	--	nm	5.76
ES-6	05/05/94	27.06	--	21.16	--	nm	5.90
ES-6	06/07/94	27.06	--	21.02	--	nm	6.04
ES-6	07/13/94	27.06	--	21.40	--	nm	5.66
ES-6	08/03/94	27.06	--	21.58	--	nm	5.48
ES-6	09/14/94	27.06	--	21.52	--	nm	5.54
ES-6	10/06/94	27.06	--	21.58	--	nm	5.48
ES-6	11/02/94	27.06	--	21.64	--	nm	5.42
ES-6	12/07/94	27.06	--	20.94	--	nm	6.12
ES-6	01/13/95	27.06	--	20.25	--	nm	6.81
ES-6	02/14/95	27.06	--	19.82	--	nm	7.24
ES-6	03/07/95	27.06	--	20.06	--	nm	7.00
ES-6	04/11/95	27.06	--	19.56	--	nm	7.50
ES-6	05/09/95	27.06	nd <sup>4</sup>	nd <sup>4</sup>	nd <sup>4</sup>	nm	nd <sup>4</sup>
ES-6	06/09/95	27.06	--	20.37	--	nm	6.69
ES-6	07/06/95	27.06	--	20.55	--	nm	6.51
ES-6	08/10/95	27.06	--	20.81	--	nm	6.25
ES-6	09/07/95	27.06	--	20.94	--	nm	6.12
ES-6	10/03/95	27.06	--	21.14	--	nm	5.92
ES-6	10/05/95	27.06	--	21.14	--	nm	5.92
ES-6	11/02/95	27.06	--	21.31	--	nm	5.75
ES-6	12/07/95	27.06	--	21.48	--	nm	5.58
ES-6	01/03/96	27.06	--	21.24	--	nm	5.82
ES-6	02/06/96	27.06	--	20.52	--	nm	6.54
ES-6	03/12/96	27.06	--	19.85	--	nm	7.21
ES-6	04/09/96	27.06	--	20.14	--	nm	6.92
ES-6	05/07/96	27.06	--	20.42	--	nm	6.64
ES-6	06/05/96	27.06	--	20.41	--	nm	6.65
ES-6	07/09/96	27.06	--	20.74	--	nm	6.32
ES-6	10/08/96	27.06	--	21.23	--	nm	5.83
ES-6	11/08/96	27.06	--	21.44	--	nm	5.62
ES-6	12/13/96	27.06	--	21.19	--	nm	5.87
ES-6	01/16/97	27.06	--	20.15	--	nm	6.91
ES-6	02/14/97	27.06	--	19.92	--	nm	7.14
ES-6	03/07/97	27.06	--	20.31	--	nm	6.75
ES-6	04/17/97	27.06	--	20.78	--	nm	6.28
ES-6	07/15/97	27.06	--	21.32	--	nm	5.74
ES-6	10/07/97	27.06	--	21.48	--	nm	5.58
ES-6	09/24/08	27.06	--	19.02	--	34.98	8.04
ES-6	04/08/09	27.06	--	17.39	--	35.00	9.67
ES-6	07/14/09	27.06	--	18.13	--	35.03	8.93
ES-6	10/06/09	27.06	--	18.52	--	35.00	8.54
ES-6	07/28/10	27.06	--	18.77	--	35.12	8.29
ES-6	02/08/11	27.06	--	18.37	--	34.93	8.69
ES-6	12/13/11	27.06	--	19.18	--	39.19	7.88
ES-6	08/04/14	27.06	--	19.64	--	35.11	7.42
ES-6	03/12/15	27.06	--	18.95	--	35.04	8.11
ES-6	08/19/15	27.06	--	19.92	--	35.13	7.14
ES-6	02/23/16	27.06	--	18.75	--	35.11	8.31
ES-6	08/16/16	27.06	--	19.30	--	35.11	7.76

Table 2b - Cumulative Summary of Groundwater Level Measurements

Oakland Bus Terminal

2103 San Pablo Ave.

Oakland, Alameda County, California

Green Star Project No. 15-1379

Well No.	Date	Elevation to Top of Casing (feet MSL) <sup>1</sup>	Depth to Phase-Separated Liquid (feet BMP)	Depth to Water (feet BMP)	Product Thickness (feet)	Depth to Bottom (feet BMP)	Groundwater Elevation (feet MSL)
ES-7	01/05/93	25.66	--	19.90	--	nm	5.76
ES-7	09/01/93	25.66	--	19.71	--	nm	5.95
ES-7	10/07/93	25.66	--	19.99	--	nm	5.67
ES-7	11/02/93	25.66	--	20.12	--	nm	5.54
ES-7	12/06/93	25.66	--	20.15	--	nm	5.51
ES-7	02/02/94	25.66	--	19.79	--	nm	5.87
ES-7	03/02/94	25.66	--	19.14	--	nm	6.52
ES-7	04/07/94	25.66	--	19.44	--	nm	6.22
ES-7	05/05/94	25.66	--	19.30	--	nm	6.36
ES-7	06/07/94	25.66	--	19.33	--	nm	6.33
ES-7	07/13/94	25.66	--	19.11	--	nm	6.55
ES-7	08/03/94	25.66	--	19.40	--	nm	6.26
ES-7	09/14/94	25.66	--	19.64	--	nm	6.02
ES-7	10/06/94	25.66	--	19.73	--	nm	5.93
ES-7	11/02/94	25.66	--	19.79	--	nm	5.87
ES-7	12/07/94	25.66	--	19.89	--	nm	5.77
ES-7	01/13/95	25.66	--	18.11	--	nm	7.55
ES-7	02/14/95	25.66	--	17.63	--	nm	8.03
ES-7	03/07/95	25.66	--	17.92	--	nm	7.74
ES-7	04/11/95	25.66	--	17.35	--	nm	8.31
ES-7	05/09/95	25.66	--	17.79	--	nm	7.87
ES-7	06/09/95	25.66	--	18.29	--	nm	7.37
ES-7	07/06/95	25.66	--	18.46	--	nm	7.20
ES-7	08/10/95	25.66	--	18.77	--	nm	6.89
ES-7	09/07/95	25.66	--	18.98	--	nm	6.68
ES-7	10/03/95	25.66	--	19.15	--	nm	6.51
ES-7	10/05/95	25.66	--	19.15	--	nm	6.51
ES-7	11/02/95	25.66	--	19.36	--	nm	6.30
ES-7	12/07/95	25.66	--	19.57	--	nm	6.09
ES-7	01/03/96	25.66	--	19.29	--	nm	6.37
ES-7	02/06/96	25.66	--	18.41	--	nm	7.25
ES-7	03/12/96	25.66	--	17.76	--	nm	7.90
ES-7	04/09/96	25.66	--	18.05	--	nm	7.61
ES-7	05/07/96	25.66	--	18.36	--	nm	7.30
ES-7	06/05/96	25.66	--	18.36	--	nm	7.30
ES-7	07/09/96	25.66	--	18.72	--	nm	6.94
ES-7	09/05/96	25.66	--	19.12	--	nm	6.54
ES-7	10/08/96	25.66	--	19.37	--	nm	6.29
ES-7	11/08/96	25.66	--	19.56	--	nm	6.10
ES-7	12/13/96	25.66	--	19.28	--	nm	6.38
ES-7	01/16/97	25.66	--	18.19	--	nm	7.47
ES-7	02/14/97	25.66	--	17.88	--	nm	7.78
ES-7	03/07/97	25.66	--	18.30	--	nm	7.36
ES-7	04/17/97	25.66	--	18.81	--	nm	6.85
ES-7	09/24/08	25.66	--	18.20	--	31.28	7.46
ES-7	04/08/09	25.66	--	16.52	--	31.29	9.14
ES-7	07/14/09	25.66	--	17.36	--	31.30	8.30
ES-7	10/06/09	25.66	--	17.90	--	31.72	7.76
ES-7	07/28/10	25.66	--	17.52	--	31.50	8.14
ES-7	02/08/11	25.66	--	17.18	--	31.33	8.48
ES-7	12/13/11	25.66	--	17.91	--	33.55	7.75
ES-7	08/04/14	25.66	--	17.10	--	31.61	8.56
ES-7	03/12/15	25.66	--	17.79	--	33.28	7.87
ES-7	08/19/15	25.66	--	18.75	--	33.58	6.91
ES-7	02/23/16	25.66	--	17.70	--	33.96	7.96
ES-7	08/16/16	25.66	--	18.31	--	34.13	7.35

Table 2b - Cumulative Summary of Groundwater Level Measurements

Oakland Bus Terminal

2103 San Pablo Ave.

Oakland, Alameda County, California

Green Star Project No. 15-1379

Well No.	Date	Elevation to Top of Casing (feet MSL) <sup>1</sup>	Depth to Phase-Separated Liquid (feet BMP)	Depth to Water (feet BMP)	Product Thickness (feet)	Depth to Bottom (feet BMP)	Groundwater Elevation (feet MSL)
ES-8	09/01/93	24.74	--	18.88	--	nm	5.86
ES-8	10/07/93	24.74	--	19.13	--	nm	5.61
ES-8	11/02/93	24.74	--	19.26	--	nm	5.48
ES-8	12/06/93	24.74	--	19.24	--	nm	5.50
ES-8	01/05/94	24.74	--	19.10	--	nm	5.64
ES-8	02/02/94	24.74	--	19.08	--	nm	5.66
ES-8	03/02/94	24.74	--	18.28	--	nm	6.46
ES-8	04/07/94	24.74	--	18.44	--	nm	6.30
ES-8	05/05/94	24.74	--	18.26	--	nm	6.48
ES-8	06/07/94	24.74	--	18.32	--	nm	6.42
ES-8	07/13/94	24.74	--	18.50	--	nm	6.24
ES-8	08/03/94	24.74	--	18.42	--	nm	6.32
ES-8	09/14/94	24.74	--	18.50	--	nm	6.24
ES-8	10/06/94	24.74	--	18.76	--	nm	5.98
ES-8	11/02/94	24.74	--	18.76	--	nm	5.98
ES-8	12/07/94	24.74	--	18.00	--	nm	6.74
ES-8	01/13/95	24.74	--	16.83	--	nm	7.91
ES-8	02/14/95	24.74	--	16.67	--	nm	8.07
ES-8	03/07/95	24.74	--	16.99	--	nm	7.75
ES-8	04/11/95	24.74	--	16.41	--	nm	8.33
ES-8	05/09/95	24.74	--	16.92	--	nm	7.82
ES-8	06/09/95	24.74	--	17.35	--	nm	7.39
ES-8	07/06/95	24.74	--	17.56	--	nm	7.18
ES-8	08/10/95	24.74	--	17.89	--	nm	6.85
ES-8	09/07/95	24.74	--	18.09	--	nm	6.65
ES-8	10/03/95	24.74	--	18.27	--	nm	6.47
ES-8	10/05/95	24.74	--	18.27	--	nm	6.47
ES-8	11/02/95	24.74	--	18.51	--	nm	6.23
ES-8	12/07/95	24.74	--	18.72	--	nm	6.02
ES-8	01/03/96	24.74	--	18.36	--	nm	6.38
ES-8	02/06/96	24.74	--	17.07	--	nm	7.67
ES-8	03/12/96	24.74	--	16.79	--	nm	7.95
ES-8	04/09/96	24.74	--	17.10	--	nm	7.64
ES-8	05/07/96	24.74	--	17.34	--	nm	7.40
ES-8	06/05/96	24.74	--	17.36	--	nm	7.38
ES-8	07/09/96	24.74	--	17.71	--	nm	7.03
ES-8	09/05/96	24.74	--	18.13	--	nm	6.61
ES-8	10/08/96	24.74	--	18.44	--	nm	6.30
ES-8	11/08/96	24.74	--	18.61	--	nm	6.13
ES-8	12/13/96	24.74	--	18.32	--	nm	6.42
ES-8	01/16/97	24.74	--	17.22	--	nm	7.52
ES-8	02/14/97	24.74	--	16.94	--	nm	7.80
ES-8	03/07/97	24.74	--	17.36	--	nm	7.38
ES-8	09/24/08	24.74	--	17.35	--	28.94	7.39
ES-8	04/08/09	24.74	--	15.64	--	28.80	9.10
ES-8	07/14/09	24.74	--	16.49	--	28.85	8.25
ES-8	10/06/09	24.74	--	17.03	--	29.16	7.71
ES-8	07/28/10	24.74	--	16.41	--	29.21	8.33
ES-8	02/08/11	24.74	--	16.01	--	29.11	8.73
ES-8	12/13/11	24.74	--	16.79	--	29.32	7.95
ES-8	08/06/14	24.74	--	17.09	--	29.30	7.65
ES-8	03/12/15	24.74	--	16.55	--	29.22	8.19
ES-8	08/20/15	24.74	--	17.58	--	29.31	7.16
ES-8	02/24/16	24.74	--	16.50	--	29.26	8.24
ES-8	08/18/16	24.74	--	17.12	--	29.23	7.62

Table 2b - Cumulative Summary of Groundwater Level Measurements

Oakland Bus Terminal

2103 San Pablo Ave.

Oakland, Alameda County, California

Green Star Project No. 15-1379

Well No.	Date	Elevation to Top of Casing (feet MSL) <sup>1</sup>	Depth to Phase-Separated Liquid (feet BMP)	Depth to Water (feet BMP)	Product Thickness (feet)	Depth to Bottom (feet BMP)	Groundwater Elevation (feet MSL)
ES-9	09/01/93	23.33	--	19.74	--	nm	3.59
ES-9	10/07/93	23.33	--	17.90	--	nm	5.43
ES-9	12/06/93	23.33	--	18.00	--	nm	5.33
ES-9	01/05/94	23.33	--	17.80	--	nm	5.53
ES-9	02/02/94	23.33	--	17.02	--	nm	6.31
ES-9	03/02/94	23.33	--	17.12	--	nm	6.21
ES-9	04/07/94	23.33	--	17.24	--	nm	6.09
ES-9	05/05/94	23.33	--	17.04	--	nm	6.29
ES-9	06/07/94	23.33	--	17.06	--	nm	6.27
ES-9	07/13/94	23.33	--	17.40	--	nm	5.93
ES-9	08/03/94	23.33	--	17.10	--	nm	6.23
ES-9	09/14/94	23.33	--	17.09	--	nm	6.24
ES-9	10/06/94	23.33	--	17.46	--	nm	5.87
ES-9	11/02/94	23.33	--	17.55	--	nm	5.78
ES-9	12/07/94	23.33	--	16.79	--	nm	6.54
ES-9	01/13/95	23.33	--	15.80	--	nm	7.53
ES-9	02/14/95	23.33	--	15.49	--	nm	7.84
ES-9	03/07/95	23.33	--	15.79	--	nm	7.54
ES-9	04/11/95	23.33	--	15.23	--	nm	8.10
ES-9	05/09/95	23.33	--	15.72	--	nm	7.61
ES-9	06/09/95	23.33	--	16.13	--	nm	7.20
ES-9	07/06/95	23.33	--	16.34	--	nm	6.99
ES-9	08/10/95	23.33	--	16.67	--	nm	6.66
ES-9	09/07/95	23.33	--	16.87	--	nm	6.46
ES-9	10/03/95	23.33	--	17.09	--	nm	6.24
ES-9	10/05/95	23.33	--	17.09	--	nm	6.24
ES-9	11/02/95	23.33	--	17.30	--	nm	6.03
ES-9	12/07/95	23.33	--	17.48	--	nm	5.85
ES-9	01/03/96	23.33	--	17.12	--	nm	6.21
ES-9	02/06/96	23.33	--	16.00	--	nm	7.33
ES-9	03/12/96	23.33	--	15.63	--	nm	7.70
ES-9	04/09/96	23.33	--	15.92	--	nm	7.41
ES-9	05/07/96	23.33	--	16.17	--	nm	7.16
ES-9	06/05/96	23.33	--	16.19	--	nm	7.14
ES-9	07/09/96	23.33	--	16.52	--	nm	6.81
ES-9	09/05/96	23.33	--	16.92	--	nm	6.41
ES-9	10/08/96	23.33	--	17.19	--	nm	6.14
ES-9	11/08/96	23.33	--	17.37	--	nm	5.96
ES-9	12/13/96	23.33	--	17.09	--	nm	6.24
ES-9	01/16/97	23.33	--	15.99	--	nm	7.34
ES-9	02/14/97	23.33	--	15.71	--	nm	7.62
ES-9	03/07/97	23.33	--	16.12	--	nm	7.21
ES-9	04/17/97	23.33	--	16.66	--	nm	6.67
ES-9	09/24/08	23.33	--	15.88	--	34.91	7.45
ES-9	04/08/09	23.33	--	14.14	--	34.97	9.19
ES-9	07/14/09	23.33	--	14.98	--	34.94	8.35
ES-9	10/06/09	23.33	--	15.52	--	34.91	7.81
ES-9	07/28/10	23.33	--	15.31	--	34.94	8.02
ES-9	02/08/11	23.33	--	14.89	--	34.84	8.44
ES-9	12/13/11	23.33	--	15.69	--	34.95	7.64
ES-9	08/06/14	23.33	--	16.05	--	34.90	7.28
ES-9	03/12/15	23.33	--	15.41	--	34.99	7.92
ES-9	08/20/15	23.33	--	16.45	--	35.00	6.88
ES-9	02/24/16	23.33	--	15.34	--	34.95	7.99
ES-9	08/18/16	23.33	--	15.94	--	35.04	7.39

Table 2b - Cumulative Summary of Groundwater Level Measurements

Oakland Bus Terminal

2103 San Pablo Ave.

Oakland, Alameda County, California

Green Star Project No. 15-1379

Well No.	Date	Elevation to Top of Casing (feet MSL) <sup>1</sup>	Depth to Phase-Separated Liquid (feet BMP)	Depth to Water (feet BMP)	Product Thickness (feet)	Depth to Bottom (feet BMP)	Groundwater Elevation (feet MSL)
ES-10	09/01/93	95.24	--	18.04	--	nm	77.20
ES-10	10/07/93	95.24	--	17.40	--	nm	77.84
ES-10	11/02/93	95.24	--	17.46	--	nm	77.78
ES-10	12/06/93	95.24	--	17.44	--	nm	77.80
ES-10	01/05/94	95.24	--	17.27	--	nm	77.97
ES-10	02/02/94	95.24	--	17.25	--	nm	77.99
ES-10	03/02/94	95.24	--	16.61	--	nm	78.63
ES-10	04/07/94	95.24	--	16.74	--	nm	78.50
ES-10	05/05/94	95.24	--	16.55	--	nm	78.69
ES-10	06/07/94	95.24	--	17.50	--	nm	77.74
ES-10	07/13/94	95.24	--	16.10	--	nm	79.14
ES-10	08/03/94	95.24	--	16.20	--	nm	79.04
ES-10	09/14/94	95.24	--	16.48	--	nm	78.76
ES-10	10/06/94	95.24	--	16.96	--	nm	78.28
ES-10	11/02/94	95.24	--	17.05	--	nm	78.19
ES-10	12/07/94	95.24	--	16.29	--	nm	78.95
ES-10	01/13/95	95.24	--	15.42	--	nm	79.82
ES-10	02/14/95	95.24	--	15.05	--	nm	80.19
ES-10	03/07/95	95.24	--	15.34	--	nm	79.90
ES-10	04/11/95	95.24	--	14.82	--	nm	80.42
ES-10	05/09/95	95.24	--	15.26	--	nm	79.98
ES-10	06/09/95	95.24	--	15.70	--	nm	79.54
ES-10	07/06/95	95.24	--	15.89	--	nm	79.35
ES-10	08/10/95	95.24	--	16.21	--	nm	79.03
ES-10	09/07/95	95.24	--	16.42	--	nm	78.82
ES-10	10/03/95	95.24	--	16.59	--	nm	78.65
ES-10	10/05/95	95.24	--	16.59	--	nm	78.65
ES-10	11/02/95	95.24	--	16.77	--	nm	78.47
ES-10	12/07/95	95.24	--	16.97	--	nm	78.27
ES-10	01/03/96	95.24	--	16.61	--	nm	78.63
ES-10	02/06/96	95.24	--	15.71	--	nm	79.53
ES-10	03/12/96	95.24	--	17.35	--	nm	77.89
ES-10	04/09/96	95.24	--	15.44	--	nm	79.80
ES-10	05/07/96	95.24	--	15.75	--	nm	79.49
ES-10	06/05/96	95.24	--	17.75	--	nm	77.49
ES-10	07/09/96	95.24	--	18.04	--	nm	77.20
ES-10	09/05/96	95.24	--	16.45	--	nm	78.79
ES-10	10/08/96	95.24	--	16.70	--	nm	78.54
ES-10	11/08/96	95.24	--	16.87	--	nm	78.37
ES-10	12/13/96	95.24	--	16.55	--	nm	78.69
ES-10	01/16/97	95.24	--	15.49	--	nm	79.75
ES-10	02/14/97	95.24	--	15.23	--	nm	80.01
ES-10	03/07/97	95.24	--	15.67	--	nm	79.57
ES-10	04/17/97	95.24	--	16.18	--	nm	79.06
ES-10 <sup>3</sup>	09/24/08	nm	nm	nm	nm	nm	nm
ES-10 <sup>3</sup>	07/14/09	nm	nm	nm	nm	nm	nm
ES-10 <sup>3</sup>	10/06/09	nm	nm	nm	nm	nm	nm
ES-10 <sup>3</sup>	07/28/10	nm	nm	nm	nm	nm	nm
ES-10 <sup>3</sup>	02/08/11	nm	nm	nm	nm	nm	nm
ES-10 <sup>3</sup>	12/13/11	nm	nm	nm	nm	nm	nm
ES-10 <sup>3</sup>	08/04/14	nm	nm	nm	nm	nm	nm
ES-10 <sup>3</sup>	03/12/15	nm	nm	nm	nm	nm	nm
ES-10 <sup>3</sup>	08/19/15	nm	nm	nm	nm	nm	nm
ES-10 <sup>3</sup>	02/22/16	nm	nm	nm	nm	nm	nm
ES-10 <sup>3</sup>	08/18/16	nm	nm	nm	nm	nm	nm

Table 2b - Cumulative Summary of Groundwater Level Measurements

Oakland Bus Terminal

2103 San Pablo Ave.

Oakland, Alameda County, California

Green Star Project No. 15-1379

Well No.	Date	Elevation to Top of Casing (feet MSL) <sup>1</sup>	Depth to Phase-Separated Liquid (feet BMP)	Depth to Water (feet BMP)	Product Thickness (feet)	Depth to Bottom (feet BMP)	Groundwater Elevation (feet MSL)
ES-11	09/01/93	24.08	--	18.74	--	nm	5.34
ES-11	10/07/93	24.08	--	18.90	--	nm	5.18
ES-11	11/02/93	24.08	--	19.00	--	nm	5.08
ES-11	12/06/93	24.08	--	19.02	--	nm	5.06
ES-11	01/05/94	24.08	--	18.86	--	nm	5.22
ES-11	02/02/94	24.08	--	18.74	--	nm	5.34
ES-11	03/02/94	24.08	--	18.14	--	nm	5.94
ES-11	04/07/94	24.08	--	18.38	--	nm	5.70
ES-11	05/05/94	24.08	--	18.15	--	nm	5.93
ES-11	06/07/94	24.08	--	18.28	--	nm	5.80
ES-11	07/13/94	24.08	--	18.60	--	nm	5.48
ES-11	08/03/94	24.08	--	18.18	--	nm	5.90
ES-11	09/14/94	24.08	--	18.47	--	nm	5.61
ES-11	10/06/94	24.08	--	18.55	--	nm	5.53
ES-11	11/02/94	24.08	--	18.64	--	nm	5.44
ES-11	12/07/94	24.08	--	17.49	--	nm	6.59
ES-11	01/13/95	24.08	--	17.16	--	nm	6.92
ES-11	02/14/95	24.08	--	16.76	--	nm	7.32
ES-11	03/07/95	24.08	--	17.04	--	nm	7.04
ES-11	04/11/95	24.08	--	16.54	--	nm	7.54
ES-11	05/09/95	24.08	--	16.95	--	nm	7.13
ES-11	06/09/95	24.08	--	17.34	--	nm	6.74
ES-11	07/06/95	24.08	--	17.54	--	nm	6.54
ES-11	08/10/95	24.08	--	17.85	--	nm	6.23
ES-11	09/07/95	24.08	--	18.03	--	nm	6.05
ES-11	10/03/95	24.08	--	18.20	--	nm	5.88
ES-11	10/05/95	24.08	--	18.20	--	nm	5.88
ES-11	11/02/95	24.08	--	18.38	--	nm	5.70
ES-11	12/07/95	24.08	--	18.59	--	nm	5.49
ES-11	01/03/96	24.08	--	18.21	--	nm	5.87
ES-11	02/06/96	24.08	--	17.45	--	nm	6.63
ES-11	03/12/96	24.08	--	16.83	--	nm	7.25
ES-11	04/09/96	24.08	--	17.13	--	nm	6.95
ES-11	05/07/96	24.08	--	17.42	--	nm	6.66
ES-11	06/05/96	24.08	--	17.42	--	nm	6.66
ES-11	07/09/96	24.08	--	17.71	--	nm	6.37
ES-11	09/05/96	24.08	--	18.07	--	nm	6.01
ES-11	10/08/96	24.08	--	18.29	--	nm	5.79
ES-11	11/08/96	24.08	--	18.45	--	nm	5.63
ES-11	12/13/96	24.08	--	18.09	--	nm	5.99
ES-11	01/16/97	24.08	--	17.10	--	nm	6.98
ES-11	02/14/97	24.08	--	16.90	--	nm	7.18
ES-11	03/07/97	24.08	--	17.30	--	nm	6.78
ES-11	04/17/97	24.08	--	17.80	--	nm	6.28
ES-11	09/24/08	24.08	--	16.29	--	35.00	7.79
ES-11	04/08/09	24.08	--	14.59	--	35.05	9.49
ES-11	07/14/09	24.08	--	15.38	--	35.03	8.70
ES-11	10/06/09	24.08	--	15.90	--	35.04	8.18
ES-11	07/28/10	24.08	--	15.94	--	35.19	8.14
ES-11	02/08/11	24.08	--	15.51	--	34.94	8.57
ES-11	12/13/11	24.08	--	16.34	--	35.14	7.74
ES-11	08/04/14	24.08	--	16.60	--	35.10	7.48
ES-11	03/12/15	24.08	--	16.03	--	35.05	8.05
ES-11	08/19/15	24.08	--	17.02	--	35.06	7.06
ES-11	02/22/16	24.08	--	15.89	--	35.08	8.19
ES-11	08/16/16	24.08	--	16.45	--	35.00	7.63

nm = not measured    nd = not determined    -- = none detected

BMP = Below Measuring Point

Note: 1) On April 8, 2009, the well network was surveyed according to the North American Vertical Datum 1988 (NAVD 88) system.

2) Well casings are not vertical.

3) Monitoring well ES-10 has been paved over and is not accessible.

4) Data not entered due to apparent typographical error in previous consultant's findings.

**Table 3a - Summary of Groundwater Analytical Results ( August 2016)**  
**Oakland Bus Terminal**  
**2103 San Pablo Avenue**  
**Oakland, Alameda County, California**  
**Green Star Project No. 16-1379**

Sample ID	Date	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX	Naphthalene	MTBE	ETBE	TAME	DIPE	EDB	EDC *	TBA	Ethanol	TPH-g	TPH-d	TPH-o
BC-1	08/17/16	2.8	0.28 JB	0.32 J	<0.62	3.4	0.46 J	<0.25	<0.18	<0.55	51	<0.30	<0.23	3.3 J	<78	<b>660</b>	62	<65
BC-2	08/17/16	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
BC-3	08/17/16	<0.051	<0.040	<0.050	<0.25	BDL	<0.16	<0.10	<0.070	<0.22	<0.070	<0.12	<0.090	<0.94	<31	19 J	<24	<65
ES-1	08/17/16	<b>270</b>	21	12	69	372	9.5	<1.0	<0.70	<2.2	38	<1.2	<0.90	<9.4	<310	<b>7400</b>	<b>680</b>	<65
ES-2	08/17/16	<b>790</b>	47	10 J	55	892	<8.0	<5.0	<3.5	<11	58	<6.0	<4.5	<47	<1600	<b>12000</b>	<b>750</b>	<65
ES-3	08/17/16	<b>200</b>	67	<b>180</b>	<b>200</b>	647	<b>40</b>	<1.0	<0.70	<2.2	20	<1.2	<0.90	<9.4	<310	<b>15000</b>	<b>1000</b>	<65
ES-4	08/17/16	0.18 J	0.042 JB	<0.050	<0.25	0.22	<0.16	<0.10	<0.070	<0.22	8.0	<0.12	<0.090	<0.94	<31	41 J	<24	<65
ES-5	08/17/16	<b>620</b>	<b>110</b>	<b>93</b>	<b>160</b>	983	<b>37</b>	<2.5	<1.8	<5.5	40	<3.0	6.9 J	<24	<780	<b>13000</b>	<b>890</b>	<65
ES-6	08/17/16	<0.051	<0.040	<0.050	<0.25	BDL	<0.16	<0.10	<0.070	<0.22	<0.070	<0.12	<0.090	<0.94	<31	23 J	25 J	<65
ES-7	08/17/16	<0.051	<0.040	<0.050	<0.25	BDL	<0.16	<0.10	<0.070	<0.22	<0.070	<0.12	<0.090	1.0 J	<31	19 J	<24	68 J
ES-8	08/18/16	0.86	0.13JB	<0.50	<0.25	0.99	<0.16	<0.10	<0.070	<0.22	35	<0.12	<0.090	0.97 J	<31	<b>580</b>	31 J	<65
ES-9	08/18/16	<0.051	<0.040	<0.050	<0.25	BDL	<0.16	<0.10	<0.070	<0.22	0.59	<0.12	<0.090	<0.94	<31	13 J	<24	<65
ES-10	08/18/16	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	
ES-11	08/17/16	<0.051	<0.040	<0.050	<0.25	BDL	<0.16	<0.10	<0.070	<0.22	<0.070	<0.12	<0.090	<0.94	<31	15 J	<24	<65
<b>RWQCB ESLs (non-drinking water resource)</b>		<b>46</b>	<b>130</b>	<b>43</b>	<b>100</b>	ne	<b>24</b>	<b>180</b>	ne	ne	ne	<b>73</b>	<b>99</b>	<b>18000</b>	ne	<b>440</b>	<b>640</b>	<b>50000</b>
<b>RWQCB ESLs (potential vapor intrusion concerns, commercial)</b>		<b>260</b>	ne	<b>3300</b>	ne	ne	<b>1600</b>	<b>130000</b>	ne	ne	ne	<b>73</b>	<b>790</b>	ne	ne	ne	ne	

Analytical test results are reported in micrograms per liter ( $\mu\text{g/L}$ ).

Bolded results indicate detected concentrations exceeded RWQCB ESLs for non-drinking water resource.

\* EDC is the abbreviation for 1,2-Dichloroethane (1,2-DCA) presented in the Analytical Report attached as Appendix A.

ne = not established    ns = not sampled    nt = not tested for that constituent    dne = does not exist    na = not analyzed    <, BDL = below laboratory detection limits

J = reported result is between the MDL and PQL

B = analyte detected in the associated Method Blank and in the sample

**Table 3b - Cumulative Summary of Groundwater Analytical Results**  
**Oakland Bus Terminal**  
**2103 San Pablo Avenue**  
**Oakland, Alameda County, California**  
**Green Star Project No. 15-1379**

Sample ID	Date	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX	Naphthalene	MTBE	ETBE	TAME	DIPE	EDB	EDC *	TBA	Ethanol	TPH-g	TPH-d	TPH-o	Total PAHs
BC-1	04/17/97	160	72	35	93	360	nt	BDL	nt	nt	nt	nt	nt	nt	nt	200	640	nt	nt
	07/15/97	520	130	170	290	1110	nt	100	nt	nt	nt	nt	nt	nt	nt	11000	95000	nt	203
	10/07/97	310	600	370	1900	3180	nt	BDL	nt	nt	nt	nt	nt	nt	nt	31000	484000	nt	4340
	09/25/08	220	22	32	38	312	16	<0.31	<0.14	0.26 J	82	0.39 J	<0.24	<6	<74	3700	2000	<290	nt
	04/09/09	130	20	17	33	200	6	<0.3	<0.14	0.58 J	74	0.27 J	<0.23	<17	<74	2100	3700	<33	nt
	07/15/09	200	39	35	58	332	14	<0.32	<0.14	<0.14	110	0.28 J	<0.23	<17	<74	3200	910	150	nt
	10/07/09	230	34	45	62	371	23	<0.32	<0.14	<0.14	60	<0.17	<0.23	<17	<74	3700	630	64	nt
	07/29/10	76	4.9	8.6	8.5	98	4.8	<0.83	<0.83	<0.83	nt	<0.83	<0.83	<3.3	<83	1000	290	<250	nt
	02/09/11	35	2.5	2.8	4.7	45	2.3	<0.5	<0.5	<0.5	49	<0.5	<0.50	<4.0	<100	420	370	<250	nt
	12/13/11	120	6.9	3.2	6.8	136.9	4.1	<0.25	<0.25	<0.25	65	<0.25	<0.25	3.7	<25	1200	300	<250	nt
	12/13/11	74	7.6	10	16	108	10	<.50	<0.35	<1.1	42	<0.60	<0.45	<4.7	<110	1200	270	<250	nt
	03/12/15	6	0.56J	0.38J	<0.62	8	<0.40	<0.25	<0.18	<0.55	73	<0.30	<0.23	<2.4	<78	540	180	<65	nt
	08/19/15	31	1.7	1	2	36	2	<0.20	<0.14	<0.44	65	<0.24	<0.18	<1.9	<62	570	130	68J	nt
	02/24/16	10	<0.50	<0.50	1	11	<0.50	<0.50	<0.50	<0.50	50	<0.50	<0.50	<2.0	<50	370	120	120 J	nt
	08/17/16	3	0.28 JB	0.32 J	<0.62	3	0.46 J	<0.25	<0.18	<0.55	51	<0.30	<0.23	3.3 J	<78	660	62	<65	nt
BC-2	07/08/92	BDL	BDL	BDL	8	8	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	2100	nt	nt
	10/06/92	BDL	1	1	7	9	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt	nt	
	01/07/93	BDL	1	2	10	13	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt	nt	
	04/06/93	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	130	nt	
	07/23/93	1	2	2	8	13	nt	nt	nt	nt	nt	nt	nt	nt	nt	<500	500	nt	BDL
	10/07/93	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	1400	nt	nt	
	01/05/94	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
	04/07/94	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
	07/13/94	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
	10/06/94	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
	01/13/95	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	1100	nt	nt
	04/11/95	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt
	07/06/95	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	290	nt	nt
	10/05/95	1	BDL	BDL	1	2	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	1500	nt	nt
	04/17/97	BDL	BDL	BDL	BDL	BDL	nt	BDL	nt	nt	nt	nt	nt	nt	nt	BDL	50	nt	nt
	07/15/97	BDL	BDL	BDL	BDL	BDL	nt	BDL	nt	nt	nt	nt	nt	nt	nt	BDL	680	nt	BDL
	10/07/97	BDL	BDL	BDL	BDL	BDL	nt	BDL	nt	nt	nt	nt	nt	nt	nt	BDL	920	nt	BDL
BC-3	09/24/08	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
	04/09/09	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
	07/15/09	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
	10/07/09	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
	07/29/10	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
	02/09/11	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
	12/13/11	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
	08/19/15	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
	02/23/16	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
	08/17/16	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
	07/08/92	BDL	2.5	BDL	6	8.5	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	3900	nt	nt
	10/06/92	BDL	1.9	0.5	2	4.4	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	800	nt	nt
	01/07/93	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt	nt	nt
	04/06/93	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	120	nt	nt
	07/23/93	3	3.6	1.8	8	16.4	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt**	nt	nt
	10/07/93	BDL	BDL	0.1	2	2	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	1400	nt	nt
	01/05/94	BDL	BDL	BDL	2	2	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	1800	nt	nt
	04/07/94	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	850	nt	nt
	07/13/94	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	200	nt	nt
	10/06/94	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	820	nt	nt
	01/13/95	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	890	nt	nt
	04/11/95	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt
	07/06/95	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	380	nt	nt
	10/05/95	BDL	BDL	BDL	BDL	BDL	nt	BDL	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt
	04/17/97	BDL	BDL	BDL	BDL	BDL	nt	BDL	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt

**Table 3b - Cumulative Summary of Groundwater Analytical Results**  
**Oakland Bus Terminal**  
**2103 San Pablo Avenue**  
**Oakland, Alameda County, California**  
**Green Star Project No. 15-1379**

Sample ID	Date	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX	Naphthalene	MTBE	ETBE	TAME	DIPE	EDB	EDC *	TBA	Ethanol	TPH-g	TPH-d	TPH-o	Total PAHs
BC-3	07/15/97	BDL	BDL	BDL	BDL	BDL	nt	BDL	nt	nt	nt	nt	nt	nt	BDL	490	nt	BDL	
	10/07/97	BDL	BDL	1.9	2	3.9	nt	BDL	nt	nt	nt	nt	nt	nt	51	1340	nt	BDL	
	09/25/08	<4	0.6 J	0.6 J	<0.3	1.2	<0.3	<0.31	<0.14	0.7 J	<0.36	<0.31	<0.24	<6	<74	<84	<21	1300	nt
	04/09/09	6	0.8 J	0.8 J	1.2 J	8.8	5	<0.3	<0.14	0.52 J	0.43 J	<0.17	<0.23	<17	<74	<24	18 J	880	nt
	07/15/09	4.9 J	0.6 J	0.3 J	<0.13	5.8	0.22 J	<0.32	<0.14	0.44 J	0.3 J	<0.17	<0.23	<17	<74	19 J	59	170	nt
	10/07/09	3	0.3 J	0.2 J	0.4 J	3.9	0.2 J	<0.32	<0.14	0.4 J	<0.17	<0.23	<17	<74	25 J	58	110	nt	
	07/29/10	1.7	0.47 J	0.78	0.55	3.5	0.59	<0.25	<0.25	<0.25	nt	<0.25	<0.25	<1	<25	<50	<50	<250	nt
	02/09/11	0.44 J	0.69	1.3	2.2	4.6	0.88	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<2	<50	<50	<50	<250	nt
	12/13/11	2.2	0.65	0.88	1.0	4.73	1.5	<0.25	<0.25	3.3	<0.25	<0.25	<0.25	2.0	<25	<50	<50	<250	nt
	03/13/15	0.16JB	0.065J	<0.050	<0.25	0.23	<0.16	<0.10	<0.070	<0.22	<0.070	<0.12	<0.090	<0.94	<31	22J	<24	<65	nt
	08/19/15	<0.051	<0.040	<0.050	<0.25	BDL	<0.16	<0.10	<0.070	<0.22	<0.070	<0.12	<0.090	<0.94	<31	19J	35J	<65	nt
	02/23/16	<0.50	<0.50	<0.50	<0.50	BDL	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<50	<50	<24	<65	nt
	08/17/16	<0.051	<0.040	<0.050	<0.25	BDL	<0.16	<0.10	<0.070	<0.22	<0.070	<0.12	<0.090	<0.94	<31	19 J	<24	<65	nt
ES-1	11/19/91	130	43	10	91	274	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt	nt	
	04/17/97	110	18	7	45	180	nt	BDL	nt	nt	nt	nt	nt	nt	100	BDL	nt	nt	
	07/16/97	76	8	11	25	120	nt	BDL	nt	nt	nt	nt	nt	nt	960	1200	nt	14	
	10/07/97	49	34	11	23	117	nt	14	nt	nt	nt	nt	nt	nt	1700	2770	nt	10	
	09/25/08	140	9	14	16	179	11	<0.31	<0.14	<0.26	130	<0.31	0.49 J	<6	<74	2900	2500	<290	nt
	04/09/09	260	29	27	49	365	25	<0.32	<0.14	<0.14	66	0.37 J	0.47 J	<17	<74	2400	3600	<36	nt
	07/15/09	300	63	92	90	545	53	<0.32	<0.14	0.23 J	100	0.38 J	0.86 J	<17	<74	5000	930	210	nt
	10/07/09	340	36	44	53	473	37	<0.32	<0.14	<0.14	82	<0.17	0.7 J	<17	<74	4100	610	100	nt
	07/29/10	630	61	110	120	921	95	<6.2	<6.2	<6.2	nt	<6.2	<6.2	<25	<620	5200	1100	<250	nt
	02/09/11	390	41	52	71	554	33	<5	<5	<5	49	<5	<5	<40	<1000	4400	810	<250	nt
	12/13/11	470	46	66	87	669	64	<0.25	<0.25	<0.25	59	<0.25	<0.25	<1.0	<25	4600	790	<250	nt
	03/12/15	120	14	10	50	194	12	<0.50	<0.35	<1.1	37	<0.60	1.8JB	<4.7	<160	4000	370	<65	nt
	08/20/15	170	14	22	52	258	8	<1.0	<0.070	<2.2	43	<1.2	<0.90	<9.4	<310	3600	400	<65	nt
	02/23/16	230	20	34	71	355	11	<5.0	<5.0	<5.0	53	<5.0	<5.0	<20	<500	2900	310	100 J	nt
	08/17/16	270	21	12	69	372	10	<1.0	<0.70	<2.2	38	<1.2	<0.90	<9.4	<310	7400	680	<65	nt
ES-2	11/19/91	390	96	78	310	874	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt	nt	
	04/17/97	340	110	110	240	800	nt	BDL	nt	nt	nt	nt	nt	nt	3800	1800	nt	nt	
	07/15/97	190	140	73	250	653	nt	81	nt	nt	nt	nt	nt	nt	3700	16000	nt	194	
	10/07/97	190	46	46	70	352	nt	BDL	nt	nt	nt	nt	nt	nt	7200	8040	nt	993	
	09/25/08	700	53	29	84	866	10	<0.31	<0.14	0.41 J	100	<0.31	0.38 J	<6	<74	6000	1500	nt	<290
	04/09/09	690	59	27 J	72	848	8 J	<3.2	<1.4	5.6 J	110	<1.7	<2.3	<170	<740	2200	7500	<38	nt
	07/15/09	700	68	23	94	885	1.9 J	<0.32	<0.14	0.42 J	120	0.25 J	<0.23	<17	<74	8400	1300	230	nt
	10/07/09	730	61	30	90	911	4	<0.32	<0.14	85	<0.17	<0.23	<17	<74	6000	1100	980	nt	
	07/29/10	800	57	15 J	78	950	11 J	<8.30	<8.3	<8.3	nt	<8.3	<8.3	<33	<830	8300	1300	<250	nt
	02/09/11	1000	76	20 J	110	1206	<12	<12.0	<12	<12	99	<12	<12	<100	<2500	5500	1700	500	nt
	12/13/11	1100	69	17	84	1270	<0.25	<0.25	<0.25	<0.25	95	<0.25	<0.25	<25	6.6	6900	1200	<250	nt
	08/06/14	850	61	14 J	87	1012	<8.0	<5.00	<3.5	<11	85	<6.0	<4.5	<47	<1100	6200	1100	<250	nt
	03/12/15	740	50	15 J	63	868	<5.3	<3.30	<2.30	<7.30	77	<4.0	5.9JB	<31	<1000	7100	830	96J	nt
	08/19/15	650	40	6.7J	32	729	<8.0	<5.0	<3.5	<11	79	<6.0	<4.5	<47	<1600	5500	770	71J	nt
	02/24/16	950	44	<25	50	1044	<25	<25	<25	<25	97	<25	<25	<100	<2500	5400	550	<65	nt
	08/17/16	790	47	10 J	55	892	<8.0	<5.0	<3.5	<11	58	<6.0	<4.5	<47	<1600	12000	750	<65	nt
ES-3	11/19/91	61	16	14	33	124	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt	nt	
	07/08/92	51	21	48	34	154	nt	nt	nt	nt	nt	nt	nt	nt	nt	1300	nt	nt	
	10/06/92	93	18	BDL	11	122	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt	nt	
	01/07/93	52	49	100	250	451	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt	nt	
	04/06/93	53	BDL	67	78	198	nt	nt	nt	nt	nt	nt	nt	nt	nt	4500	510	nt	
	07/23/93	28	6	5	5	44	nt	nt	nt	nt	nt	nt	nt	nt	nt	1500	600	nt	
	10/07/93	2	1	BDL	2	5	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt	nt	
	01/05/94	13	2	7	5	27	nt	nt	nt	nt	nt	nt	nt	nt	nt	530	nt	nt	
	04/07/94	10	9	26	34	79	nt	nt	nt	nt	nt	nt	nt	nt	nt	850	910	nt	
	07/13/94	2	1	1	3	7	nt	nt	nt	nt	nt	nt	nt	nt	nt	370	280	nt	
	10/06/94	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	
	01/13/95	19	15	72	88	194	nt	nt	nt	nt	nt	nt	nt	nt	nt	1600	1100	nt	
	04/11/95	20	7	36	22	85	nt	nt	nt	nt	nt	nt	nt	nt	nt	940	390	nt	
	07/06/95	6	BDL	7	BDL	13	nt	nt	nt	nt	nt	nt	nt	nt	nt	240	1200	nt	
	10/05/95	2	2	BDL	BDL	4	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	110	nt	
	01/05/96	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	

Table 3b - Cumulative Summary of Groundwater Analytical Results																			
Oakland Bus Terminal 2103 San Pablo Avenue Oakland, Alameda County, California Green Star Project No. 15-1379																			
Sample ID	Date	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX	Naphthalene	MTBE	ETBE	TAME	DIPE	EDB	EDC *	TBA	Ethanol	TPH-g	TPH-d	TPH-o	Total PAHs
ES-3	04/09/96	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	120	nt	nt
	07/09/96	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt	nt	
	10/08/96	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt	nt	
	01/16/97	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	51	BDL	nt	nt
	04/17/97	BDL	BDL	BDL	BDL	BDL	nt	BDL	nt	nt	nt	nt	nt	nt	nt	BDL	120	nt	nt
	07/15/97	BDL	BDL	BDL	BDL	BDL	nt	BDL	nt	nt	nt	nt	nt	nt	nt	BDL	170	nt	BDL
	10/07/97	BDL	BDL	BDL	BDL	BDL	nt	BDL	nt	nt	nt	nt	nt	nt	nt	BDL	205	nt	BDL
	09/24/08	230	17	23	48	318	28	<0.31	<0.14	0.28 J	110	<0.31	0.78 J	<6	<74	3000	1400	<290	nt
	04/09/09	340	91	180	372	983	83	<1.6	<0.71	<0.68	96	<0.86	<1.1	<84	<370	2600	9700	<3.2	nt
	07/15/09	230	75	190	413	908	110	<1.6	<0.71	<0.68	45 J	<0.86	<1.1	<84	<370	9400	1400	280	nt
	10/07/09	250	28	42	105	425	35	<0.32	<0.14	<0.14	100	<0.17	0.8 J	<17	<74	4700	860	84	nt
	07/29/10	120	44	200	200	564	110	<2.5	<2.5	<2.5	nt	<2.5	<2.5	<10	<250	5800	1200	<250	nt
	02/09/11	120	74	360	400	954	180	<2.5	<2.5	<2.5	180	<2.5	<2.5	<20	<500	4300	1600	<250	nt
	12/13/11	84	47	120	160	411	81	<0.25	<0.25	<0.25	18	<0.25	<0.25	5.4	<25	5200	1200	<250	nt
	08/06/14	290	36	42	55	423	31	<2.0	<1.4	<4.4	75	<2.4	<1.8	<19	<440	4000	830	<250	nt
	03/12/15	84	27	120	110	341	40	<0.50	<0.35	<1.1	21	<0.60	1.7JB	<4.7	<160	5300	630	<65	nt
	08/19/15	250	41	93	140	524	37	<1.0	<0.70	<2.2	52	<1.2	2.4J	<9.4	<310	5500	740	68J	nt
	02/23/16	41	14	43	66	164	21	<5.0	<5.0	<5.0	7.6	<5.0	<5.0	<20	<500	2900	520	82 J	nt
	08/17/16	200	67	180	200	647	40	<1.0	<0.70	<2.2	20	<1.2	<0.90	<9.4	<310	15000	1000	<65	nt
ES-4	11/19/91	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt	nt	nt
	07/08/92	31	6	BDL	3	39	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt	nt	nt
	10/06/92	100	8	BDL	8	116	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt	nt	nt
	01/07/93	30	7	8	16	60	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt	nt	nt
	04/06/93	33	2	2	5	42	nt	nt	nt	nt	nt	nt	nt	nt	nt	360	BDL	nt	nt
	07/23/93	24	1	1	8	34	nt	nt	nt	nt	nt	nt	nt	nt	nt	<500	<500	nt	nt
	10/07/93	8	BDL	BDL	2	10	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt	nt	nt
	01/05/94	15	1	0.4	3	19	nt	nt	nt	nt	nt	nt	nt	nt	nt	130	BDL	nt	nt
	04/07/94	11	BDL	BDL	BDL	11	nt	nt	nt	nt	nt	nt	nt	nt	nt	170	BDL	nt	nt
	07/13/94	9	BDL	BDL	1	10	nt	nt	nt	nt	nt	nt	nt	nt	nt	130	BDL	nt	nt
	10/06/94	18	BDL	2	3	23	nt	nt	nt	nt	nt	nt	nt	nt	nt	100	BDL	nt	nt
	01/13/95	12	BDL	BDL	2	14	nt	nt	nt	nt	nt	nt	nt	nt	nt	150	BDL	nt	nt
	04/11/95	39	4	12	24	79	nt	nt	nt	nt	nt	nt	nt	nt	nt	180	BDL	nt	nt
	07/06/95	100	10	26	61	197	nt	nt	nt	nt	nt	nt	nt	nt	nt	600	160	nt	nt
	10/05/95	210	16	71	84	381	nt	nt	nt	nt	nt	nt	nt	nt	nt	1200	170	nt	nt
	01/05/96	34	BDL	5	4	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	120	BDL	nt	nt
	04/09/96	57	3	17	19	96	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt	nt
	07/09/96	43	5	21	17	86	nt	nt	nt	nt	nt	nt	nt	nt	nt	220	BDL	nt	nt
	10/08/96	110	4	42	39	195	nt	nt	nt	nt	nt	nt	nt	nt	nt	860	BDL	nt	nt
	01/16/97	5	BDL	BDL	1	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	59	BDL	nt	nt
	04/17/97	87	11	49	24	171	nt	BDL	nt	nt	nt	nt	nt	nt	nt	100	BDL	nt	nt
	07/15/97	110	11	42	40	203	nt	BDL	nt	nt	nt	nt	nt	nt	nt	920	370	nt	18
	10/07/97	11	BDL	28	23	16	nt	BDL	nt	nt	nt	nt	nt	nt	nt	120	101	nt	24
	09/25/08	<0.4	<0.3	<0.3	<0.3	BDL	<0.3	<0.31	<0.14	0.7 J	7 J	<0.31	<0.24	<6	<74	69	91	nt	<29
	04/09/09	8	0.8 J	1.6 J	2.5 J	13	0.7 J	<0.30	<0.14	0.54 J	20	<0.17	<0.23	<17	<74	640	520	<34	nt
	07/15/09	8	1.7 J	4.2 J	<0.13	14	1.9 J	<0.32	<0.14	<0.14	25	<0.17	<0.23	<17	<74	800	110	45 J	nt
	10/07/09	0.2 J	<0.29	0.2 J	0.5 J	1	<0.11	<0.32	<0.14	<0.14	14	<0.17	<0.23	<17	<74	310	81	<29	nt
	07/29/10	0.81	<0.25	0.31 J	0.58	2	0.26 J	<0.25	<0.25	<0.25	nt	<0.25	<0.25	<1	<25	250	120	<250	nt
	02/09/11	1	0.58	0.49 J	0.97	3	0.56	<0.25	<0.25	<0.25	17	<0.25	<0.25	<2	<50	220	72	<250	nt
	12/13/11	11	0.89	0.73	1.1	13.72	0.76	<0.25	<0.25	2.2	28	<0.25	<0.25	3.4	<25	270	95	<250	nt
	08/06/14	<0.1	<0.080	<0.10	<0.50	BDL	0.36 J	<0.20	<0.14	<0.44	62	<0.24	<0.18	<1.9	<44	200	<50	<250	nt
	03/12/15	0.11JB	0.13J	0.056J	<0.25	0.30	<0.16	<0.10	<0.070	<0.22	21	<0.12	0.15JB	<0.94	<31	85	<24	77J	nt
	08/19/15	2	0.16J	0.14J	<0.25	2.15	<0.16	<0.10	<0.070	<0.22	27	<0.12	<0.090	<0.94	<31	410	64	79J	nt
	02/23/16	5.3	<0.50	<0.50	0.72	6.02	<0.50	<0.50	<0.50	<0.50	24	<0.50	<0.50	<2	<50	260	51	160 J	nt
	08/17/16	0.18 J	0.042 JB	<0.050	<0.25	0.22	<0.16	<0.10	<0.070	<0.22	8	<0.12	<0.090	<0.94	<31	41 J	<24	<65	nt
ES-5	11/19/91	2100	390	840	6000	9330	nt	nt	nt	nt	nt	nt	nt	nt	nt	950000	nt	nt	nt
	04/17/97	590	120	180	1000	1890	nt	BDL	nt	nt	nt	nt	nt	nt	nt	2400	1600	nt	nt
	07/16/97	810	180	430	1800	3220	nt	350	nt	nt	nt	nt	nt	nt	nt	27000	15000	nt	216000
	10/07/97	260	470	160	590	1480	nt	BDL	nt	nt	nt	nt	nt	nt	nt	15000	6510	nt	424

**Table 3b - Cumulative Summary of Groundwater Analytical Results**  
**Oakland Bus Terminal**  
**2103 San Pablo Avenue**  
**Oakland, Alameda County, California**  
**Green Star Project No. 15-1379**

Sample ID	Date	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX	Naphthalene	MTBE	ETBE	TAME	DIPE	EDB	EDC *	TBA	Ethanol	TPH-g	TPH-d	TPH-o	Total PAHs	
ES-5	09/25/08	970	190	400	350	1910	180	<0.31	<0.14	<0.26	150	<0.31	0.57 J	<6	<74	12000	1900	<290	nt	
	04/09/09	590	150	230	248	1218	100	<3.2	<1.4	5.9 J	30 J	<1.7	<2.3	<170	<740	3700	10000	<33	nt	
	07/15/09	770	220	430	407	1827	180	<1.6	<0.71	<0.68	63	<0.86	<1.1	<84	<370	16000	1300	180	nt	
	10/07/09	710	190	440	373	1713	160	<3.2	<1.4	<1.4	68	<1.7	<2.3	<170	<740	12000	1500	140	nt	
	07/29/10	400	120	270	220	1010	160	<5	<5	<5	nt	<5	<5	<20	<500	11000	1800	310	nt	
	02/09/11	650	180	400	330	1560	170	<8.3	<8.3	<8.3	17	<8.3	<8.3	<67	<1700	9700	2200	<250	nt	
	12/13/11	290	93	170	210	763	130	<0.25	<0.25	<0.25	2.5	<0.25	<0.25	<1.0	<25	6600	1200	<250	nt	
	12/13/11	400	130	220	210	960	99	<3.3	<2.3	<7.3	<2.3	<4.0	<3.0	<31	<730	9600	1100	<250	nt	
	03/13/15	290	110	130	160	690	53	<1.0	<0.70	<2.2	4.3J	<1.2	6.6	<9.4	<310	6200	750	91J	nt	
	08/19/15	430	140	220	220	1010	79	<5.0	<3.5	<11	3.8J	<6.0	<2.5	<47	<1600	9200	1100	<65	nt	
	02/24/16	300	140	200	240	880	75	<5.0	<5.0	<5.0	5.0	<5.0	<20	<500	6900	1100	<65	nt		
	08/17/16	620	110	93	160	983	37	<2.5	<1.8	<5.5	40	<3.0	6.9 J	<24	<780	13000	890	<65	nt	
ES-6	07/23/93	<0.3	<0.3	<0.3	<0.6	BDL	nt	nt	nt	nt	nt	nt	nt	nt	<500	<500	nt	nt		
	10/07/93	1	BDL	BDL	BDL	1	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	01/05/94	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	04/07/94	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	160	BDL	BDL	nt	nt
	07/13/94	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	10/06/94	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	01/13/95	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	04/11/95	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	07/06/95	BDL	BDL	BDL	BDL	2	2	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	10/05/95	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	01/05/96	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	04/09/96	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	220	nt	nt	
	07/09/96	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	10/08/96	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	01/16/97	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	04/17/97	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	120	nt	nt	
	07/15/97	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	60	nt	BDL	
	10/07/97	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	BDL	
	09/24/08	<0.4	<0.3	<0.3	<0.3	BDL	0.5 J	<0.31	<0.14	0.65 J	3 J	<0.31	<0.24	<6	<74	<17	68	<290	nt	
	04/08/09	<0.1	<0.2	<0.1	<0.1	BDL	0.1	<0.3	<0.14	0.55 J	0.93 J	<0.17	<0.23	<17	<74	<22	<16	170	nt	
	07/15/09	2.1 J	0.86 J	2.1 J	0.13	5,060	1.2 J	<0.32	<0.14	0.74 J	0.88 J	<0.17	<0.23	<17	<74	161	73	200	nt	
	10/06/09	<0.1	<0.29	<0.15	<0.13	BDL	<0.11	<0.32	<0.14	<0.14	0.4 J	<0.17	<0.23	<17	<74	17 J	30 J	34 J	nt	
	07/29/10	<0.25	<0.25	<0.25	<0.25	BDL	<0.25	<0.25	<0.25	<0.25	nt	<0.25	<0.25	<1	<25	<50	<50	<250	nt	
	02/09/11	<0.25	<0.25	<0.25	<0.25	BDL	<0.25	<0.25	<0.25	<0.25	0.37 J	<0.25	<0.25	<2	<50	<50	<250	nt	nt	
	12/13/11	4.5	0.54	0.49 J	0.68	5.72	0.52	<0.25	<0.25	2.9	0.33 J	<0.25	<0.25	2.1	<25	<50	<50	<250	nt	
	08/05/14	<0.051	<0.040	<0.050	<0.25	0.00	<0.016	<0.1	<0.070	<0.22	<0.070	<0.12	<0.090	<0.94	<22	<50	<50	<250	nt	
	03/12/15	0.19JB	0.11J	<0.050	<0.25	0.30	<0.16	<0.10	<0.070	<0.22	<0.070	<0.12	<0.090	<0.94	<31	16J	<24	74J	nt	
	08/19/15	<0.051	<0.040	<0.050	<0.25	BDL	<0.16	<0.10	<0.070	<0.22	<0.070	<0.12	<0.090	<0.94	<31	20J	<24	<65	nt	
	02/23/16	<0.50	<0.50	<0.50	<0.50	BDL	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<50	<50	<24	100 J	nt	
	08/17/16	<0.051	<0.040	<0.050	<0.25	BDL	<0.16	<0.10	<0.070	<0.22	<0.070	<0.12	<0.090	<0.94	<31	23 J	25 J	<65	nt	
ES-7	07/23/93	<0.3	<0.3	<0.3	<0.0006	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	<500	<500	nt	nt	
	10/07/93	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
	01/05/94	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	04/07/94	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	110	100	nt	nt	
	07/13/94	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	10/06/94	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	01/13/95	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	04/11/95	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	07/06/95	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	10/05/95	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	07/09/96	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	04/17/97	BDL	BDL	BDL	BDL	BDL	nt	BDL	nt	nt	nt	nt	nt	nt	nt	BDL	60	nt	nt	
	09/24/08	<0.4	<0.3	<0.3	<0.3	BDL	<0.3	<0.31	<0.14	0.66 J	<0.36	<0.31	<0.24	<6	<74	<17	<2	150	nt	
	04/08/09	<0.1	<0.2	<0.1	<0.1	BDL	<0.1	<0.3	<0.14	0.53 J	<0.15	<0.17	<0.23	<17	<74	<23	<16	690	nt	
	07/15/09	1.3 J	0.51 J	0.96 J	<0.13	2.77	0.52 J	<0.32	<0.14	0.7 J	<0.15	<0.17	<0.23	<17	<74	27 J	31 J	93	nt	
	10/06/09	<0.1	<0.29	<0.15	<0.13	BDL	<0.11	<0.32	<0.14	<0.14	<0.15	<0.17	<0.23	<17	<74	24 J	<20	41 J	nt	

**Table 3b - Cumulative Summary of Groundwater Analytical Results**

**Oakland Bus Terminal**  
**2103 San Pablo Avenue**  
**Oakland, Alameda County, California**  
**Green Star Project No. 15-1379**

**Table 3b - Cumulative Summary of Groundwater Analytical Results**  
**Oakland Bus Terminal**  
**2103 San Pablo Avenue**  
**Oakland, Alameda County, California**  
**Green Star Project No. 15-1379**

Sample ID	Date	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX	Naphthalene	MTBE	ETBE	TAME	DIPE	EDB	EDC *	TBA	Ethanol	TPH-g	TPH-d	TPH-o	Total PAHs
ES-10	04/11/95	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	07/06/95	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	10/05/95	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	09/24/08	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	
	04/09/09	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	
	07/15/09	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	
	10/7/2009	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	
	07/29/10	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	
	02/09/11	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	
	12/13/11	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	
	08/19/15	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	
	02/23/16	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	
	08/18/16	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	
ES-11	07/23/93	<0.3	<b>1</b>	<0.3	<b>1</b>	2	nt	nt	nt	nt	nt	nt	nt	nt	<500	<500	nt	nt	
	10/07/93	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	01/05/94	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	04/07/94	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	BDL	350	nt	nt	
	07/13/94	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	10/06/94	BDL	BDL	BDL	BDL	BDL	nt	BDL	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	01/13/95	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	04/11/95	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	170	BDL	nt	nt	
	07/06/95	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	10/05/95	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	07/09/96	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	04/17/97	BDL	BDL	BDL	BDL	BDL	nt	BDL	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	09/25/08	<0.4	<0.3	<0.3	<0.3	BDL	<0.3	<0.31	<0.14	<b>0.67J</b>	<0.36	<0.31	<0.24	<6	<74	<17	<b>28J</b>	<29	nt
	04/09/09	<b>2.5J</b>	<b>0.9J</b>	<b>1.7J</b>	<b>3J</b>	8.1	<b>1.1J</b>	<0.3	<0.14	<b>0.52J</b>	<b>0.25J</b>	<0.17	<0.23	<17	<74	<25	<16	<b>200</b>	nt
	07/15/09	<b>2.8J</b>	<b>0.97J</b>	<b>2.1J</b>	<0.13	5.87	<b>1.4J</b>	<0.32	<0.14	<0.14	<b>0.25J</b>	<0.17	<0.23	<17	<74	<b>41J</b>	<20	<29	nt
	10/07/09	<0.1	<0.29	<0.15	<0.13	BDL	<0.11	<0.32	<0.14	<0.14	<0.15	<0.17	<0.23	<17	<74	<16	<20	<29	nt
	07/29/10	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
	02/09/11	<b>0.47J</b>	<0.25	<b>0.26J</b>	<0.25	0.73	<b>0.27J</b>	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<2	<50	<50	<250	nt
	12/13/11	<b>1.2</b>	<0.25	<0.25	<b>0.32J</b>	1.52	<b>0.28J</b>	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<1.0	<25	<50	<250	nt	
	08/06/14	<0.051	<b>&lt;0.040</b>	<0.050	<0.050	0.00	< 0.016	< 0.10	< 0.070	< 0.22	< 0.070	< 0.12	< 0.090	< 0.94	<22	<50	<50	<250	nt
	03/13/15	<b>0.057JB</b>	<b>0.19J</b>	<0.050	<0.050	0.25	<0.16	<0.10	<0.070	<0.22	<0.070	<0.12	<0.090	<0.94	<31	<b>19J</b>	<24	<65	nt
	08/19/15	<0.051	<0.040	<0.050	<0.050	<0.50	BDL	<0.16	<0.50	<0.50	<0.50	<0.50	<0.50	<0.94	<31	<b>21J</b>	<24	<65	nt
	02/23/16	<0.50	<0.50	<0.50	<0.50	BDL	<0.10	<0.070	<0.22	<0.070	<0.12	<0.090	<0.94	<50	<50	<50	<24	150 J	nt
	08/17/16	<0.051	<0.040	<0.050	<0.050	<0.25	BDL	<0.16	<0.10	<0.070	<0.22	<0.070	<0.12	<0.94	<31	<b>15 J</b>	<24	<65	nt
RWQCB ESLs (non-drinking water resource)	46	130	43	100	ne	24	180	ne	ne	ne	73	99	18000	ne	440	640	50000	ne	
RWQCB ESLs (potential vapor intrusion concerns, commercial)	260	ne	3300	ne	ne	1600	130000	ne	ne	ne	73	790	ne	ne	ne	ne	ne	ne	

Analytical test results are reported in micrograms per liter ( $\mu\text{g/L}$ ).

Bolded results indicate detected concentrations exceeded laboratory detection limits.

nt = not tested for that constituent    ns = not sampled    dne = does not exist    ne = not established    <, BDL = below laboratory detection limits    J = reported result is between the MDL and PQL    B = analyte detected in the associated Method Blank and in the sample    na = not analyzed

\* EDC is the abbreviation for 1,2-Dichloroethane (1,2-DCA) presented in the Analytical Report attached as Appendix A.

Notes: 1) BTEX analyzed by EPA Method 8260

2) TPH-d analyzed by EPA Method 3550/8015 Modified

3) TPH-g analyzed by EPA Method 8015M

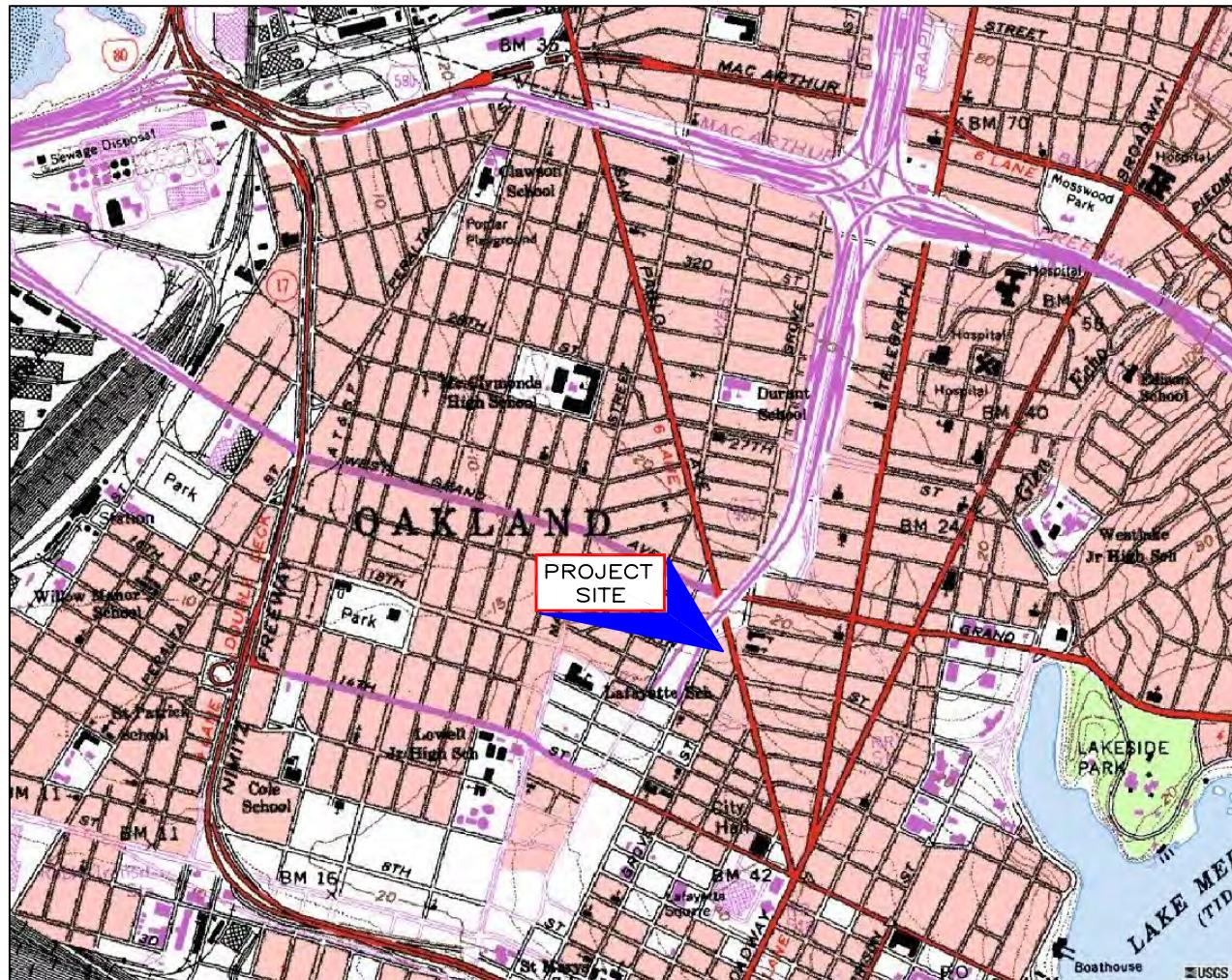
\*\* Sample not analyzed due to broken sample bottle during shipment

## **FIGURES**

OAKLAND WEST QUADRANGLE  
OAKLAND, CALIFORNIA

LAT=37° 48' 40" N  
LONG=122° 16' 24" W

1996



NORTH

SCALE 1:24000

0 1/2 1  
(Miles)

0 2000 4000  
(Feet)

CONTOUR INTERVAL 10 FEET

FIGURE 1

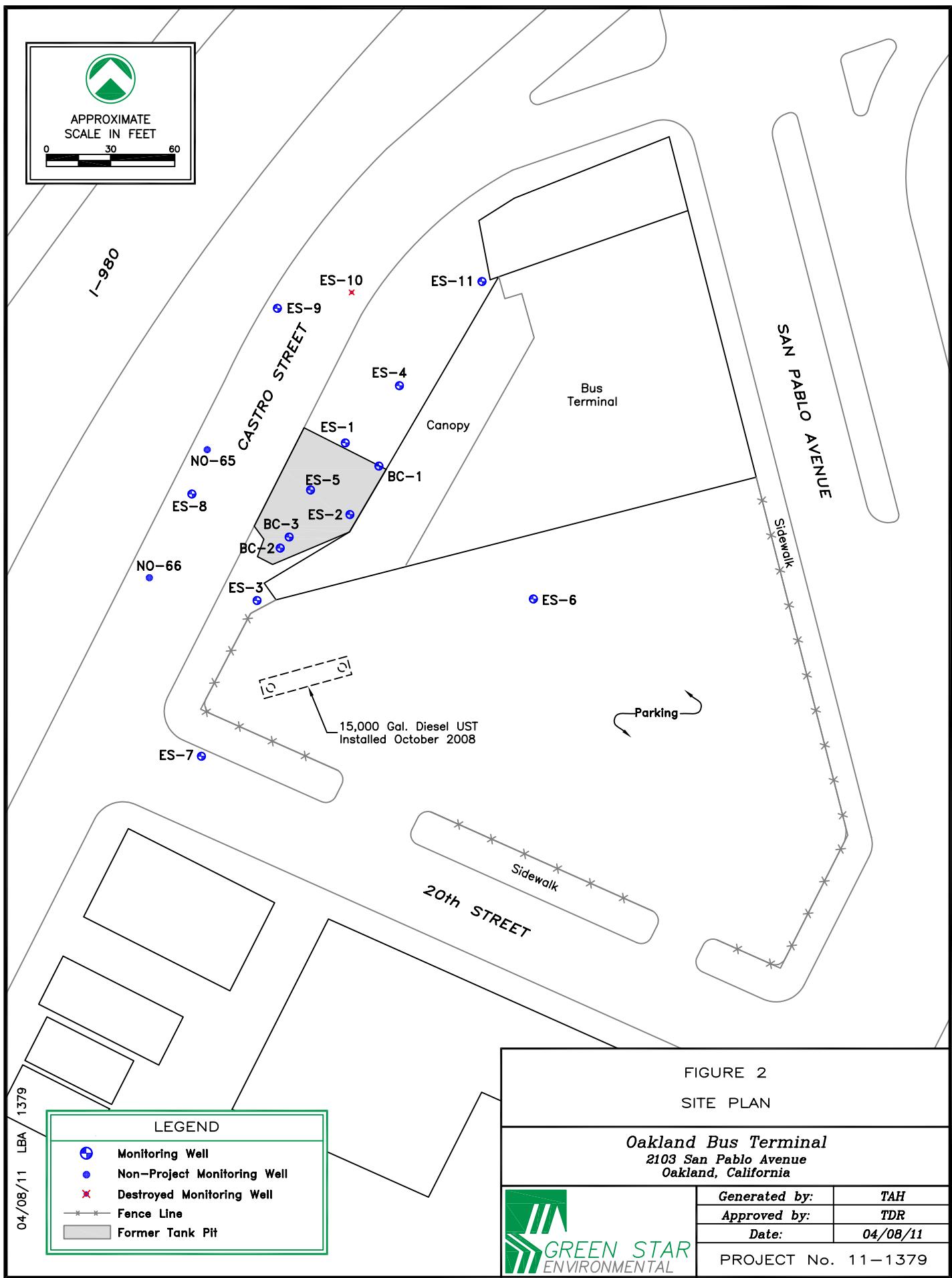
SITE LOCATION/USGS TOPOGRAPHIC MAP

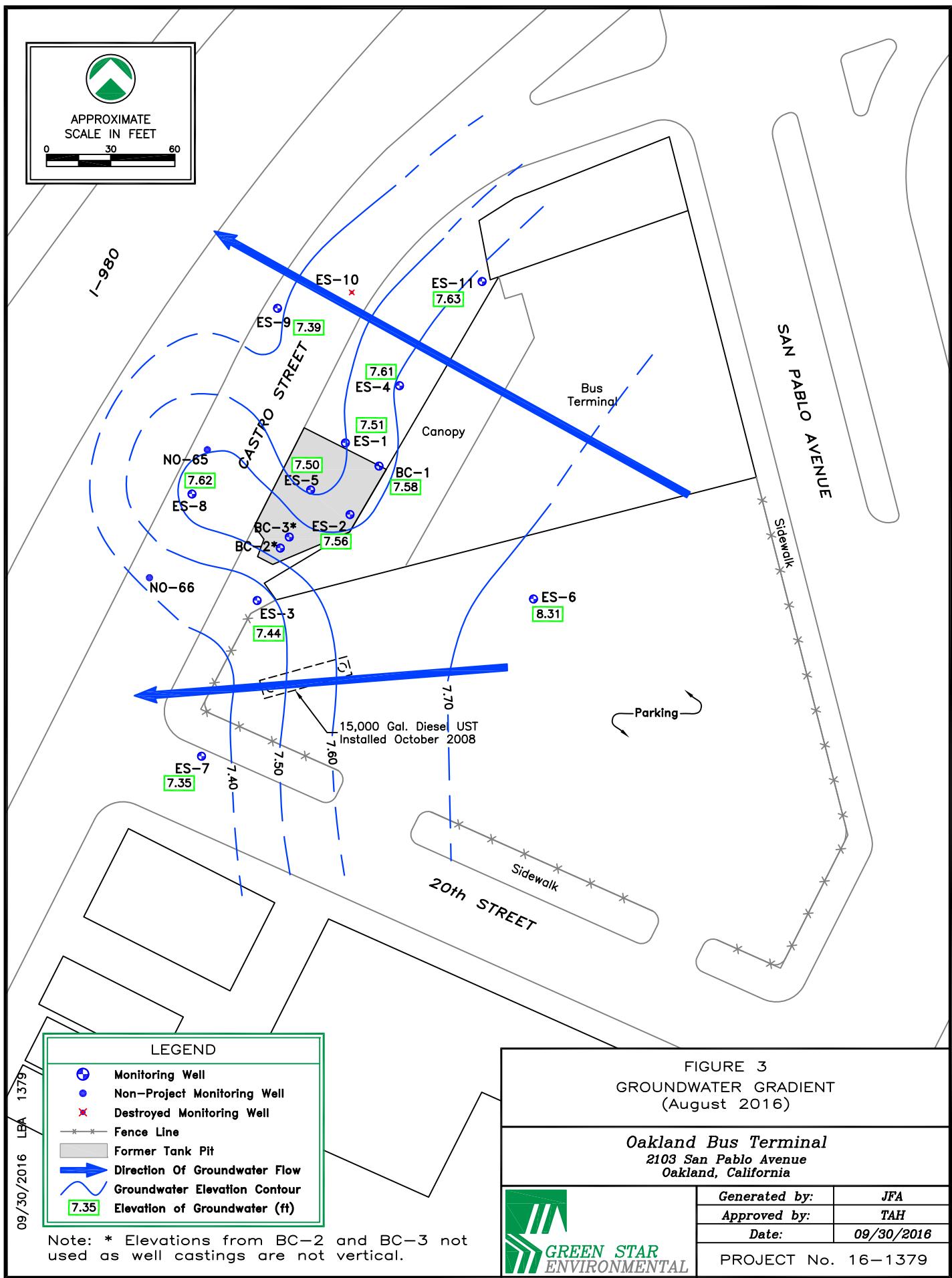
Greyhound Lines, Inc.  
2103 San Pablo Avenue  
Oakland, California

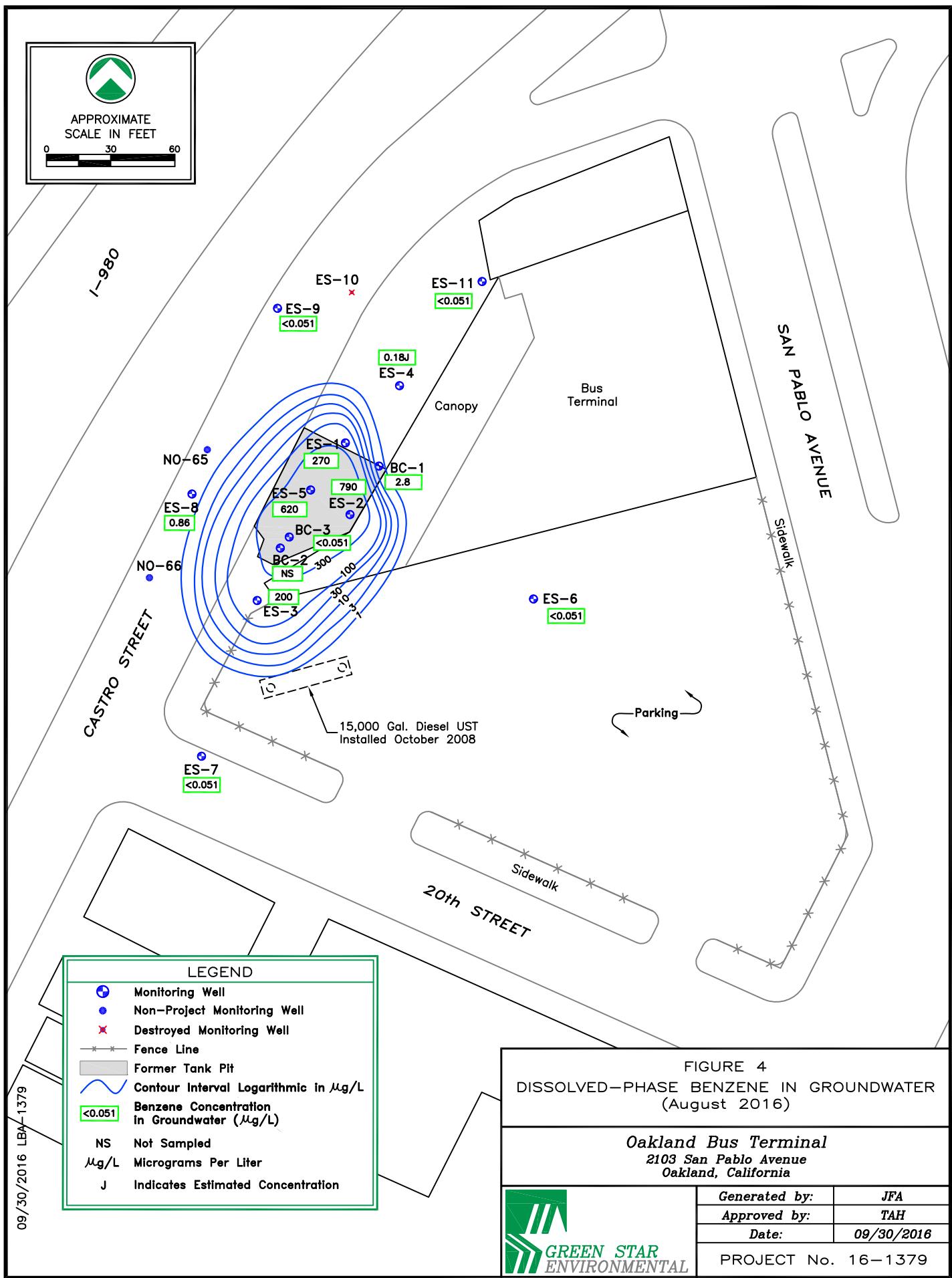


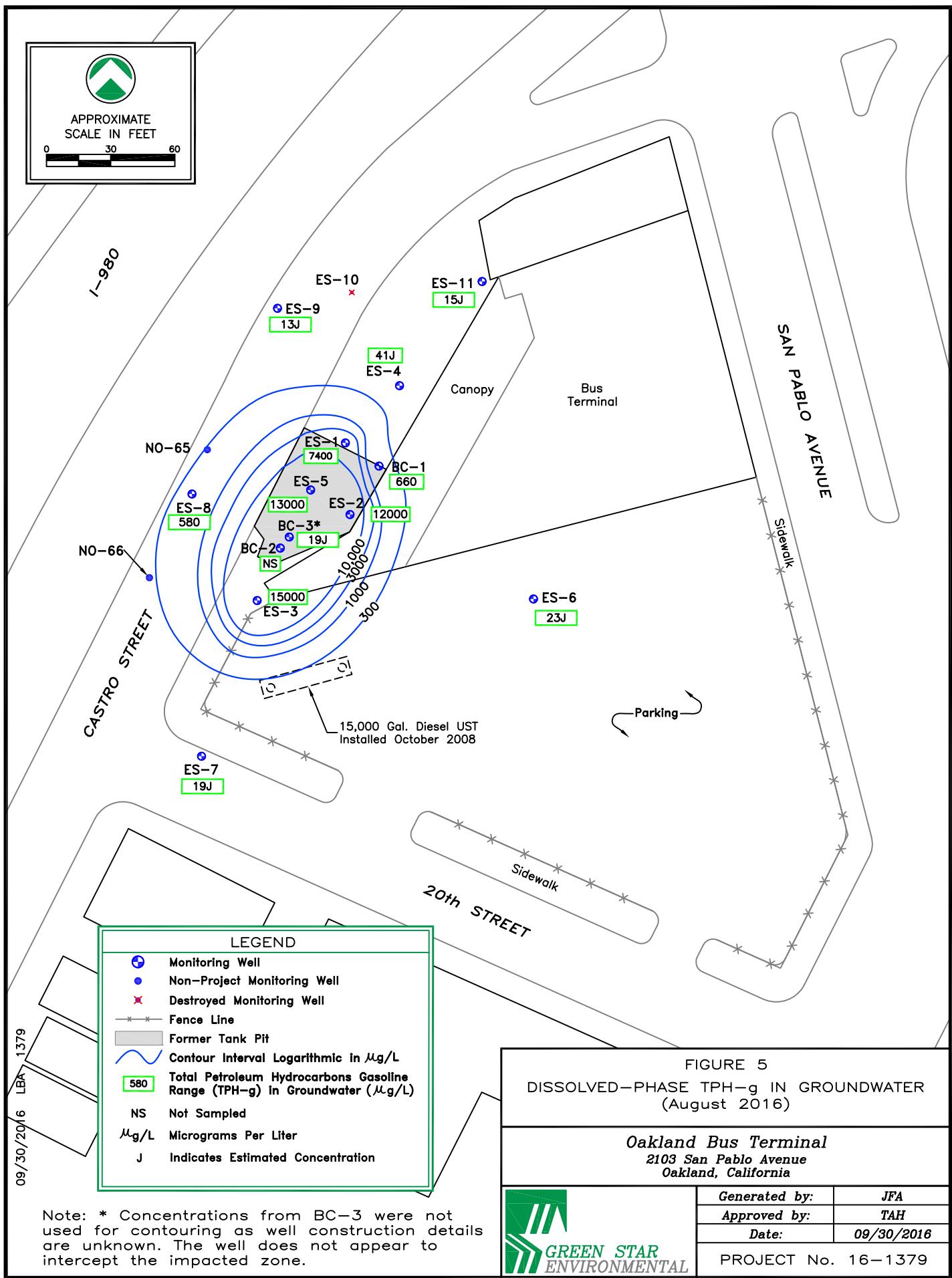
GREEN STAR  
ENVIRONMENTAL

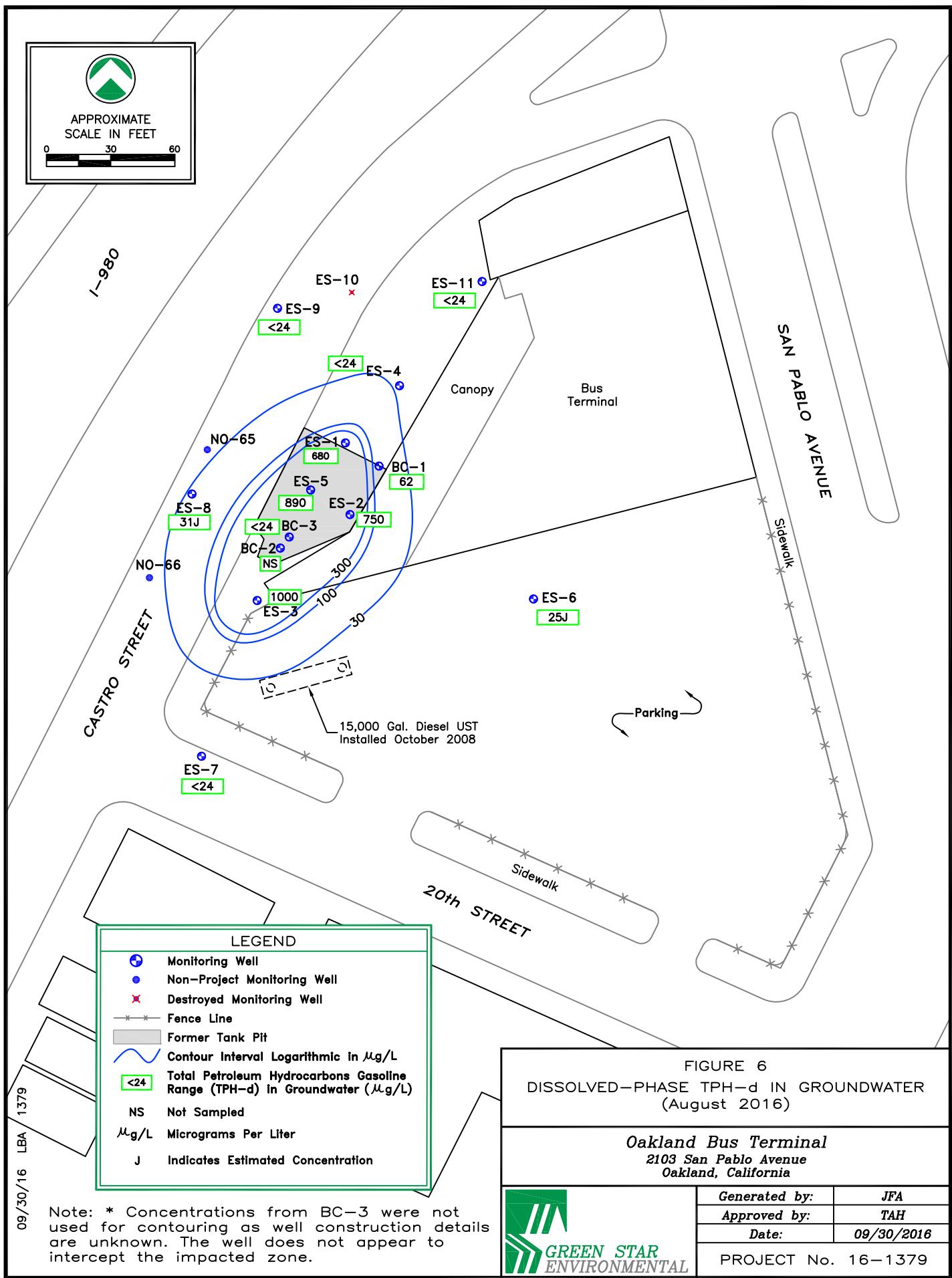
Generated by:	JRS
Approved by:	TDR
Date:	05/04/09
PROJECT No. 09-1379	











**APPENDIX A**

**Analytical Results with Chain-of-Custody Documentation**



# McCampbell Analytical, Inc.

"When Quality Counts"

## Analytical Report

**WorkOrder:** 1608861

**Report Created for:** Green Star Environmental

354 McDonnell Street, Suite 9  
Lewisville, TX 75057

**Project Contact:** Terrance A. Harriman

**Project P.O.:**

**Project Name:** GLI Oakland/ 1379

**Project Received:** 08/18/2016

Analytical Report reviewed & approved for release on 08/24/2016 by:

Angela Rydelius,  
Laboratory Manager

***The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.***





## Glossary of Terms & Qualifier Definitions

**Client:** Green Star Environmental  
**Project:** GLI Oakland/ 1379  
**WorkOrder:** 1608861

### Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



## Glossary of Terms & Qualifier Definitions

**Client:** Green Star Environmental

**Project:** GLI Oakland/ 1379

**WorkOrder:** 1608861

### **Analytical Qualifiers**

- B analyte detected in the associated Method Blank and in the sample
- J Result is less than the RL/ML but greater than the MDL. The reported concentration is an estimated value.
- b6 lighter than water immiscible sheen/product is present
- d1 weakly modified or unmodified gasoline is significant
- d9 no recognizable pattern
- e2 diesel range compounds are significant; no recognizable pattern
- e4 gasoline range compounds are significant.
- e8 kerosene/kerosene range/jet fuel range



## Analytical Report

**Client:** Green Star Environmental  
**Date Received:** 8/18/16 13:34  
**Date Prepared:** 8/18/16-8/22/16  
**Project:** GLI Oakland/ 1379

**WorkOrder:** 1608861  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

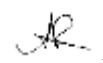
### Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ES-07	1608861-001A	Water	08/17/2016 11:28	GC28	125395
<u>Analytes</u>	<u>Result</u>	<u>Qualifiers</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>
tert-Amyl methyl ether (TAME)	ND		0.22	0.50	1
Benzene	ND		0.051	0.50	1
t-Butyl alcohol (TBA)	1.0	J	0.94	2.0	1
1,2-Dibromoethane (EDB)	ND		0.12	0.50	1
1,2-Dichloroethane (1,2-DCA)	ND		0.090	0.50	1
Diisopropyl ether (DIPE)	ND		0.070	0.50	1
Ethanol	ND		31	50	1
Ethylbenzene	ND		0.050	0.50	1
Ethyl tert-butyl ether (ETBE)	ND		0.070	0.50	1
Methyl-t-butyl ether (MTBE)	ND		0.10	0.50	1
Naphthalene	ND		0.16	0.50	1
Toluene	ND		0.040	0.50	1
Xylenes, Total	ND		0.25	0.50	1
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	110		70-130		08/18/2016 22:45
Toluene-d8	104		70-130		08/18/2016 22:45
4-BFB	86		70-130		08/18/2016 22:45

Analyst(s): MW

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



## Analytical Report

**Client:** Green Star Environmental  
**Date Received:** 8/18/16 13:34  
**Date Prepared:** 8/18/16-8/22/16  
**Project:** GLI Oakland/ 1379

**WorkOrder:** 1608861  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

### Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ES-06	1608861-002A	Water	08/17/2016 12:28	GC28	125395
<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
tert-Amyl methyl ether (TAME)	ND	0.22	0.50	1	08/18/2016 23:23
Benzene	ND	0.051	0.50	1	08/18/2016 23:23
t-Butyl alcohol (TBA)	ND	0.94	2.0	1	08/18/2016 23:23
1,2-Dibromoethane (EDB)	ND	0.12	0.50	1	08/18/2016 23:23
1,2-Dichloroethane (1,2-DCA)	ND	0.090	0.50	1	08/18/2016 23:23
Diisopropyl ether (DIPE)	ND	0.070	0.50	1	08/18/2016 23:23
Ethanol	ND	31	50	1	08/18/2016 23:23
Ethylbenzene	ND	0.050	0.50	1	08/18/2016 23:23
Ethyl tert-butyl ether (ETBE)	ND	0.070	0.50	1	08/18/2016 23:23
Methyl-t-butyl ether (MTBE)	ND	0.10	0.50	1	08/18/2016 23:23
Naphthalene	ND	0.16	0.50	1	08/18/2016 23:23
Toluene	ND	0.040	0.50	1	08/18/2016 23:23
Xylenes, Total	ND	0.25	0.50	1	08/18/2016 23:23
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	111		70-130		08/18/2016 23:23
Toluene-d8	105		70-130		08/18/2016 23:23
4-BFB	87		70-130		08/18/2016 23:23

Analyst(s): MW

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



## Analytical Report

**Client:** Green Star Environmental  
**Date Received:** 8/18/16 13:34  
**Date Prepared:** 8/18/16-8/22/16  
**Project:** GLI Oakland/ 1379

**WorkOrder:** 1608861  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

### Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ES-11	1608861-003A	Water	08/17/2016 13:19	GC28	125395
<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
tert-Amyl methyl ether (TAME)	ND	0.22	0.50	1	08/19/2016 00:02
Benzene	ND	0.051	0.50	1	08/19/2016 00:02
t-Butyl alcohol (TBA)	ND	0.94	2.0	1	08/19/2016 00:02
1,2-Dibromoethane (EDB)	ND	0.12	0.50	1	08/19/2016 00:02
1,2-Dichloroethane (1,2-DCA)	ND	0.090	0.50	1	08/19/2016 00:02
Diisopropyl ether (DIPE)	ND	0.070	0.50	1	08/19/2016 00:02
Ethanol	ND	31	50	1	08/19/2016 00:02
Ethylbenzene	ND	0.050	0.50	1	08/19/2016 00:02
Ethyl tert-butyl ether (ETBE)	ND	0.070	0.50	1	08/19/2016 00:02
Methyl-t-butyl ether (MTBE)	ND	0.10	0.50	1	08/19/2016 00:02
Naphthalene	ND	0.16	0.50	1	08/19/2016 00:02
Toluene	ND	0.040	0.50	1	08/19/2016 00:02
Xylenes, Total	ND	0.25	0.50	1	08/19/2016 00:02
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	108		70-130		08/19/2016 00:02
Toluene-d8	106		70-130		08/19/2016 00:02
4-BFB	83		70-130		08/19/2016 00:02

Analyst(s): MW

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



## Analytical Report

**Client:** Green Star Environmental  
**Date Received:** 8/18/16 13:34  
**Date Prepared:** 8/18/16-8/22/16  
**Project:** GLI Oakland/ 1379

**WorkOrder:** 1608861  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

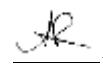
### Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ES-04	1608861-004A	Water	08/17/2016 14:05	GC28	125395
<u>Analytes</u>	<u>Result</u>	<u>Qualifiers</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>
tert-Amyl methyl ether (TAME)	ND		0.22	0.50	1
Benzene	<b>0.18</b>	J	0.051	0.50	1
t-Butyl alcohol (TBA)	ND		0.94	2.0	1
1,2-Dibromoethane (EDB)	ND		0.12	0.50	1
1,2-Dichloroethane (1,2-DCA)	ND		0.090	0.50	1
Diisopropyl ether (DIPE)	<b>8.0</b>		0.070	0.50	1
Ethanol	ND		31	50	1
Ethylbenzene	ND		0.050	0.50	1
Ethyl tert-butyl ether (ETBE)	ND		0.070	0.50	1
Methyl-t-butyl ether (MTBE)	ND		0.10	0.50	1
Naphthalene	ND		0.16	0.50	1
Toluene	<b>0.042</b>	JB	0.040	0.50	1
Xylenes, Total	ND		0.25	0.50	1
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	111		70-130		08/19/2016 00:40
Toluene-d8	104		70-130		08/19/2016 00:40
4-BFB	93		70-130		08/19/2016 00:40

Analyst(s): MW

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



## Analytical Report

**Client:** Green Star Environmental  
**Date Received:** 8/18/16 13:34  
**Date Prepared:** 8/18/16-8/22/16  
**Project:** GLI Oakland/ 1379

**WorkOrder:** 1608861  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

### Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BC-01	1608861-005A	Water	08/17/2016 14:47	GC28	125395
<u>Analytes</u>	<u>Result</u>	<u>Qualifiers</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>
tert-Amyl methyl ether (TAME)	ND		0.55	1.2	2.5
Benzene	<b>2.8</b>		0.13	1.2	2.5
t-Butyl alcohol (TBA)	<b>3.3</b>	J	2.4	5.0	2.5
1,2-Dibromoethane (EDB)	ND		0.30	1.2	2.5
1,2-Dichloroethane (1,2-DCA)	ND		0.23	1.2	2.5
Diisopropyl ether (DIPE)	<b>51</b>		0.18	1.2	2.5
Ethanol	ND		78	120	2.5
Ethylbenzene	<b>0.32</b>	J	0.12	1.2	2.5
Ethyl tert-butyl ether (ETBE)	ND		0.18	1.2	2.5
Methyl-t-butyl ether (MTBE)	ND		0.25	1.2	2.5
Naphthalene	<b>0.46</b>	J	0.40	1.2	2.5
Toluene	<b>0.28</b>	JB	0.10	1.2	2.5
Xylenes, Total	ND		0.62	1.2	2.5
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	116		70-130		08/19/2016 15:59
Toluene-d8	102		70-130		08/19/2016 15:59
4-BFB	93		70-130		08/19/2016 15:59

Analyst(s): MW

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



## Analytical Report

**Client:** Green Star Environmental  
**Date Received:** 8/18/16 13:34  
**Date Prepared:** 8/18/16-8/22/16  
**Project:** GLI Oakland/ 1379

**WorkOrder:** 1608861  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

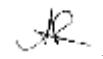
### Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BC-03	1608861-006A	Water	08/17/2016 16:15	GC28	125395
<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
tert-Amyl methyl ether (TAME)	ND	0.22	0.50	1	08/19/2016 01:56
Benzene	ND	0.051	0.50	1	08/19/2016 01:56
t-Butyl alcohol (TBA)	ND	0.94	2.0	1	08/19/2016 01:56
1,2-Dibromoethane (EDB)	ND	0.12	0.50	1	08/19/2016 01:56
1,2-Dichloroethane (1,2-DCA)	ND	0.090	0.50	1	08/19/2016 01:56
Diisopropyl ether (DIPE)	ND	0.070	0.50	1	08/19/2016 01:56
Ethanol	ND	31	50	1	08/19/2016 01:56
Ethylbenzene	ND	0.050	0.50	1	08/19/2016 01:56
Ethyl tert-butyl ether (ETBE)	ND	0.070	0.50	1	08/19/2016 01:56
Methyl-t-butyl ether (MTBE)	ND	0.10	0.50	1	08/19/2016 01:56
Naphthalene	ND	0.16	0.50	1	08/19/2016 01:56
Toluene	ND	0.040	0.50	1	08/19/2016 01:56
Xylenes, Total	ND	0.25	0.50	1	08/19/2016 01:56
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	112		70-130		08/19/2016 01:56
Toluene-d8	106		70-130		08/19/2016 01:56
4-BFB	86		70-130		08/19/2016 01:56

Analyst(s): MW

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



## Analytical Report

**Client:** Green Star Environmental  
**Date Received:** 8/18/16 13:34  
**Date Prepared:** 8/18/16-8/22/16  
**Project:** GLI Oakland/ 1379

**WorkOrder:** 1608861  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

### Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ES-03	1608861-007A	Water	08/17/2016 16:54	GC28	125395
<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
tert-Amyl methyl ether (TAME)	ND	2.2	5.0	10	08/19/2016 02:35
Benzene	<b>200</b>	0.51	5.0	10	08/19/2016 02:35
t-Butyl alcohol (TBA)	ND	9.4	20	10	08/19/2016 02:35
1,2-Dibromoethane (EDB)	ND	1.2	5.0	10	08/19/2016 02:35
1,2-Dichloroethane (1,2-DCA)	ND	0.90	5.0	10	08/19/2016 02:35
Diisopropyl ether (DIPE)	<b>20</b>	0.70	5.0	10	08/19/2016 02:35
Ethanol	ND	310	500	10	08/19/2016 02:35
Ethylbenzene	<b>180</b>	0.50	5.0	10	08/19/2016 02:35
Ethyl tert-butyl ether (ETBE)	ND	0.70	5.0	10	08/19/2016 02:35
Methyl-t-butyl ether (MTBE)	ND	1.0	5.0	10	08/19/2016 02:35
Naphthalene	<b>40</b>	1.6	5.0	10	08/19/2016 02:35
Toluene	<b>67</b>	0.40	5.0	10	08/19/2016 02:35
Xylenes, Total	<b>200</b>	2.5	5.0	10	08/19/2016 02:35
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	108		70-130		08/19/2016 02:35
Toluene-d8	103		70-130		08/19/2016 02:35
4-BFB	100		70-130		08/19/2016 02:35

Analyst(s): MW

Analytical Comments: b6

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



## Analytical Report

**Client:** Green Star Environmental  
**Date Received:** 8/18/16 13:34  
**Date Prepared:** 8/18/16-8/22/16  
**Project:** GLI Oakland/ 1379

**WorkOrder:** 1608861  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

### Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ES-01	1608861-008A	Water	08/17/2016 17:39	GC28	125395
<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
tert-Amyl methyl ether (TAME)	ND	2.2	5.0	10	08/19/2016 03:13
Benzene	<b>270</b>	0.51	5.0	10	08/19/2016 03:13
t-Butyl alcohol (TBA)	ND	9.4	20	10	08/19/2016 03:13
1,2-Dibromoethane (EDB)	ND	1.2	5.0	10	08/19/2016 03:13
1,2-Dichloroethane (1,2-DCA)	ND	0.90	5.0	10	08/19/2016 03:13
Diisopropyl ether (DIPE)	<b>38</b>	0.70	5.0	10	08/19/2016 03:13
Ethanol	ND	310	500	10	08/19/2016 03:13
Ethylbenzene	<b>12</b>	0.50	5.0	10	08/19/2016 03:13
Ethyl tert-butyl ether (ETBE)	ND	0.70	5.0	10	08/19/2016 03:13
Methyl-t-butyl ether (MTBE)	ND	1.0	5.0	10	08/19/2016 03:13
Naphthalene	<b>9.5</b>	1.6	5.0	10	08/19/2016 03:13
Toluene	<b>21</b>	0.40	5.0	10	08/19/2016 03:13
Xylenes, Total	<b>69</b>	2.5	5.0	10	08/19/2016 03:13
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	108		70-130		08/19/2016 03:13
Toluene-d8	103		70-130		08/19/2016 03:13
4-BFB	95		70-130		08/19/2016 03:13

Analyst(s): MW

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



## Analytical Report

**Client:** Green Star Environmental  
**Date Received:** 8/18/16 13:34  
**Date Prepared:** 8/18/16-8/22/16  
**Project:** GLI Oakland/ 1379

**WorkOrder:** 1608861  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

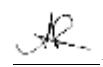
### Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ES-05	1608861-009A	Water	08/17/2016 18:18	GC28	125466
<u>Analytes</u>	<u>Result</u>	<u>Qualifiers</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>
tert-Amyl methyl ether (TAME)	ND		5.5	12	25
Benzene	<b>620</b>		1.3	12	25
t-Butyl alcohol (TBA)	ND		24	50	25
1,2-Dibromoethane (EDB)	ND		3.0	12	25
1,2-Dichloroethane (1,2-DCA)	<b>6.9</b>	J	2.2	12	25
Diisopropyl ether (DIPE)	<b>40</b>		1.8	12	25
Ethanol	ND		780	1200	25
Ethylbenzene	<b>93</b>		1.2	12	25
Ethyl tert-butyl ether (ETBE)	ND		1.8	12	25
Methyl-t-butyl ether (MTBE)	ND		2.5	12	25
Naphthalene	<b>37</b>		4.0	12	25
Toluene	<b>110</b>		1.0	12	25
Xylenes, Total	<b>160</b>		6.2	12	25
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	108		70-130		08/19/2016 13:20
Toluene-d8	106		70-130		08/19/2016 13:20
4-BFB	94		70-130		08/19/2016 13:20

Analyst(s): MW

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



## Analytical Report

**Client:** Green Star Environmental  
**Date Received:** 8/18/16 13:34  
**Date Prepared:** 8/18/16-8/22/16  
**Project:** GLI Oakland/ 1379

**WorkOrder:** 1608861  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

### Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ES-02	1608861-010A	Water	08/17/2016 18:54	GC28	125466
<u>Analytes</u>	<u>Result</u>	<u>Qualifiers</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>
tert-Amyl methyl ether (TAME)	ND		11	25	50
Benzene	<b>790</b>		2.6	25	50
t-Butyl alcohol (TBA)	ND		47	100	50
1,2-Dibromoethane (EDB)	ND		6.0	25	50
1,2-Dichloroethane (1,2-DCA)	ND		4.5	25	50
Diisopropyl ether (DIPE)	<b>58</b>		3.5	25	50
Ethanol	ND		1600	2500	50
Ethylbenzene	<b>10</b>	J	2.5	25	50
Ethyl tert-butyl ether (ETBE)	ND		3.5	25	50
Methyl-t-butyl ether (MTBE)	ND		5.0	25	50
Naphthalene	ND		8.0	25	50
Toluene	<b>47</b>		2.0	25	50
Xylenes, Total	<b>55</b>		12	25	50
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	110		70-130		08/19/2016 11:17
Toluene-d8	106		70-130		08/19/2016 11:17
4-BFB	94		70-130		08/19/2016 11:17

Analyst(s): MW

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



## Analytical Report

**Client:** Green Star Environmental  
**Date Received:** 8/18/16 13:34  
**Date Prepared:** 8/18/16-8/22/16  
**Project:** GLI Oakland/ 1379

**WorkOrder:** 1608861  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

### Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ES-08	1608861-011A	Water	08/18/2016 10:18	GC10	125466
<u>Analytes</u>	<u>Result</u>	<u>Qualifiers</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>
tert-Amyl methyl ether (TAME)	ND		0.22	0.50	1
Benzene	<b>0.86</b>		0.051	0.50	1
t-Butyl alcohol (TBA)	<b>0.97</b>	J	0.94	2.0	1
1,2-Dibromoethane (EDB)	ND		0.12	0.50	1
1,2-Dichloroethane (1,2-DCA)	ND		0.090	0.50	1
Diisopropyl ether (DIPE)	<b>35</b>		0.070	0.50	1
Ethanol	ND		31	50	1
Ethylbenzene	ND		0.050	0.50	1
Ethyl tert-butyl ether (ETBE)	ND		0.070	0.50	1
Methyl-t-butyl ether (MTBE)	ND		0.10	0.50	1
Naphthalene	ND		0.16	0.50	1
Toluene	<b>0.13</b>	JB	0.040	0.50	1
Xylenes, Total	ND		0.25	0.50	1
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	102		70-130		08/22/2016 16:55
Toluene-d8	100		70-130		08/22/2016 16:55
4-BFB	107		70-130		08/22/2016 16:55

Analyst(s): KF

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



## Analytical Report

**Client:** Green Star Environmental  
**Date Received:** 8/18/16 13:34  
**Date Prepared:** 8/18/16-8/22/16  
**Project:** GLI Oakland/ 1379

**WorkOrder:** 1608861  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

### Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ES-09	1608861-012A	Water	08/18/2016 11:03	GC28	125466
<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
tert-Amyl methyl ether (TAME)	ND	0.22	0.50	1	08/19/2016 12:39
Benzene	ND	0.051	0.50	1	08/19/2016 12:39
t-Butyl alcohol (TBA)	ND	0.94	2.0	1	08/19/2016 12:39
1,2-Dibromoethane (EDB)	ND	0.12	0.50	1	08/19/2016 12:39
1,2-Dichloroethane (1,2-DCA)	ND	0.090	0.50	1	08/19/2016 12:39
Diisopropyl ether (DIPE)	<b>0.59</b>	0.070	0.50	1	08/19/2016 12:39
Ethanol	ND	31	50	1	08/19/2016 12:39
Ethylbenzene	ND	0.050	0.50	1	08/19/2016 12:39
Ethyl tert-butyl ether (ETBE)	ND	0.070	0.50	1	08/19/2016 12:39
Methyl-t-butyl ether (MTBE)	ND	0.10	0.50	1	08/19/2016 12:39
Naphthalene	ND	0.16	0.50	1	08/19/2016 12:39
Toluene	ND	0.040	0.50	1	08/19/2016 12:39
Xylenes, Total	ND	0.25	0.50	1	08/19/2016 12:39
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	113		70-130		08/19/2016 12:39
Toluene-d8	105		70-130		08/19/2016 12:39
4-BFB	84		70-130		08/19/2016 12:39

Analyst(s): MW



## Analytical Report

**Client:** Green Star Environmental  
**Date Received:** 8/18/16 13:34  
**Date Prepared:** 8/19/16-8/20/16  
**Project:** GLI Oakland/ 1379

**WorkOrder:** 1608861  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** µg/L

### Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ES-07	1608861-001B	Water	08/17/2016 11:28	GC3	125351
<u>Analytes</u>	<u>Result</u>	<u>Qualifiers</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>
TPH(g)	19	J	11	50	1
MTBE	ND		0.36	5.0	1
Benzene	ND		0.070	0.50	1
Toluene	ND		0.14	0.50	1
Ethylbenzene	ND		0.070	0.50	1
Xylenes	ND		0.14	1.5	1
<u>Surrogates</u>	<u>REC (%)</u>			<u>Limits</u>	
aaa-TFT	100			70-130	08/19/2016 10:20

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ES-06	1608861-002B	Water	08/17/2016 12:28	GC3	125351
<u>Analytes</u>	<u>Result</u>	<u>Qualifiers</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>
TPH(g)	23	J	11	50	1
MTBE	ND		0.36	5.0	1
Benzene	ND		0.070	0.50	1
Toluene	ND		0.14	0.50	1
Ethylbenzene	ND		0.070	0.50	1
Xylenes	ND		0.14	1.5	1
<u>Surrogates</u>	<u>REC (%)</u>			<u>Limits</u>	
aaa-TFT	100			70-130	08/19/2016 11:22

Analyst(s): IA

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NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



## Analytical Report

**Client:** Green Star Environmental  
**Date Received:** 8/18/16 13:34  
**Date Prepared:** 8/19/16-8/20/16  
**Project:** GLI Oakland/ 1379

**WorkOrder:** 1608861  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** µg/L

### Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ES-11	1608861-003B	Water	08/17/2016 13:19	GC7	125464
<u>Analytes</u>	<u>Result</u>	<u>Qualifiers</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>
TPH(g)	15	J	11	50	1
MTBE	ND		0.36	5.0	1
Benzene	ND		0.070	0.50	1
Toluene	ND		0.14	0.50	1
Ethylbenzene	ND		0.070	0.50	1
Xylenes	ND		0.14	1.5	1
<u>Surrogates</u>	<u>REC (%)</u>			<u>Limits</u>	
aaa-TFT	109			70-130	08/19/2016 15:55

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ES-04	1608861-004B	Water	08/17/2016 14:05	GC3	125464
<u>Analytes</u>	<u>Result</u>	<u>Qualifiers</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>
TPH(g)	41	J	11	50	1
MTBE	0.65	JB	0.36	5.0	1
Benzene	0.12	J	0.070	0.50	1
Toluene	ND		0.14	0.50	1
Ethylbenzene	0.12	J	0.070	0.50	1
Xylenes	0.36	J	0.14	1.5	1
<u>Surrogates</u>	<u>REC (%)</u>			<u>Limits</u>	
aaa-TFT	99			70-130	08/20/2016 23:36

Analyst(s): LT

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NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



## Analytical Report

**Client:** Green Star Environmental  
**Date Received:** 8/18/16 13:34  
**Date Prepared:** 8/19/16-8/20/16  
**Project:** GLI Oakland/ 1379

**WorkOrder:** 1608861  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** µg/L

### Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BC-01	1608861-005B	Water	08/17/2016 14:47	GC7	125464

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
TPH(g)	660		11	50	1	08/19/2016 18:01
MTBE	ND		0.36	5.0	1	08/19/2016 18:01
Benzene	8.6		0.070	0.50	1	08/19/2016 18:01
Toluene	0.28	J	0.14	0.50	1	08/19/2016 18:01
Ethylbenzene	0.99		0.070	0.50	1	08/19/2016 18:01
Xylenes	2.5		0.14	1.5	1	08/19/2016 18:01

Surrogates	REC (%)	Limits	
aaa-TFT	104	70-130	08/19/2016 18:01

Analyst(s): IA Analytical Comments: d1,d9

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BC-03	1608861-006B	Water	08/17/2016 16:15	GC7	125464

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
TPH(g)	19	J	11	50	1	08/19/2016 17:30
MTBE	ND		0.36	5.0	1	08/19/2016 17:30
Benzene	ND		0.070	0.50	1	08/19/2016 17:30
Toluene	ND		0.14	0.50	1	08/19/2016 17:30
Ethylbenzene	ND		0.070	0.50	1	08/19/2016 17:30
Xylenes	ND		0.14	1.5	1	08/19/2016 17:30

Surrogates	REC (%)	Limits	
aaa-TFT	104	70-130	08/19/2016 17:30

Analyst(s): IA

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



## Analytical Report

**Client:** Green Star Environmental  
**Date Received:** 8/18/16 13:34  
**Date Prepared:** 8/19/16-8/20/16  
**Project:** GLI Oakland/ 1379

**WorkOrder:** 1608861  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** µg/L

### Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ES-03	1608861-007B	Water	08/17/2016 16:54	GC7	125464

Analyses	Result	MDL	RL	DF	Date Analyzed
TPH(g)	15,000	110	500	10	08/19/2016 20:04
MTBE	ND	3.6	50	10	08/19/2016 20:04
Benzene	340	0.70	5.0	10	08/19/2016 20:04
Toluene	67	1.4	5.0	10	08/19/2016 20:04
Ethylbenzene	190	0.70	5.0	10	08/19/2016 20:04
Xylenes	240	1.4	15	10	08/19/2016 20:04

Surrogates	REC (%)	Limits	
aaa-TFT	101	70-130	08/19/2016 20:04

Analyst(s): IA Analytical Comments: d1,b6

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ES-01	1608861-008B	Water	08/17/2016 17:39	GC7	125464

Analyses	Result	MDL	RL	DF	Date Analyzed
TPH(g)	7400	55	250	5	08/19/2016 20:35
MTBE	ND	1.8	25	5	08/19/2016 20:35
Benzene	320	0.35	2.5	5	08/19/2016 20:35
Toluene	24	0.70	2.5	5	08/19/2016 20:35
Ethylbenzene	23	0.35	2.5	5	08/19/2016 20:35
Xylenes	110	0.70	7.5	5	08/19/2016 20:35

Surrogates	REC (%)	Limits	
aaa-TFT	125	70-130	08/19/2016 20:35

Analyst(s): IA Analytical Comments: d1

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NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



## Analytical Report

**Client:** Green Star Environmental  
**Date Received:** 8/18/16 13:34  
**Date Prepared:** 8/19/16-8/20/16  
**Project:** GLI Oakland/ 1379

**WorkOrder:** 1608861  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** µg/L

### Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ES-05	1608861-009B	Water	08/17/2016 18:18	GC7	125464

Analyses	Result	MDL	RL	DF	Date Analyzed
TPH(g)	13,000	110	500	10	08/19/2016 21:06
MTBE	ND	3.6	50	10	08/19/2016 21:06
Benzene	760	0.70	5.0	10	08/19/2016 21:06
Toluene	110	1.4	5.0	10	08/19/2016 21:06
Ethylbenzene	110	0.70	5.0	10	08/19/2016 21:06
Xylenes	230	1.4	15	10	08/19/2016 21:06

Surrogates	REC (%)	Limits	
aaa-TFT	103	70-130	08/19/2016 21:06

Analyst(s): IA Analytical Comments: d1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ES-02	1608861-010B	Water	08/18/2016 18:54	GC7	125464

Analyses	Result	MDL	RL	DF	Date Analyzed
TPH(g)	12,000	110	500	10	08/19/2016 21:36
MTBE	ND	3.6	50	10	08/19/2016 21:36
Benzene	930	0.70	5.0	10	08/19/2016 21:36
Toluene	53	1.4	5.0	10	08/19/2016 21:36
Ethylbenzene	21	0.70	5.0	10	08/19/2016 21:36
Xylenes	90	1.4	15	10	08/19/2016 21:36

Surrogates	REC (%)	Limits	
aaa-TFT	128	70-130	08/19/2016 21:36

Analyst(s): IA Analytical Comments: d1

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



## Analytical Report

**Client:** Green Star Environmental  
**Date Received:** 8/18/16 13:34  
**Date Prepared:** 8/19/16-8/20/16  
**Project:** GLI Oakland/ 1379

**WorkOrder:** 1608861  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** µg/L

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### Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

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Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ES-08	1608861-011B	Water	08/18/2016 10:18	GC7	125464

Analyses	Result	Qualifiers	MDL	RL	DF	Date Analyzed
TPH(g)	580		22	100	2	08/19/2016 22:06
MTBE	ND		0.72	10	2	08/19/2016 22:06
Benzene	3.5		0.14	1.0	2	08/19/2016 22:06
Toluene	0.49	J	0.28	1.0	2	08/19/2016 22:06
Ethylbenzene	2.3		0.14	1.0	2	08/19/2016 22:06
Xylenes	3.7		0.28	3.0	2	08/19/2016 22:06

Surrogates	REC (%)	Limits	
aaa-TFT	126	70-130	08/19/2016 22:06

Analyst(s): IA Analytical Comments: d1,d9

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Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ES-09	1608861-012B	Water	08/18/2016 11:03	GC7	125464

Analyses	Result	Qualifiers	MDL	RL	DF	Date Analyzed
TPH(g)	13	J	11	50	1	08/19/2016 16:58
MTBE	ND		0.36	5.0	1	08/19/2016 16:58
Benzene	ND		0.070	0.50	1	08/19/2016 16:58
Toluene	ND		0.14	0.50	1	08/19/2016 16:58
Ethylbenzene	ND		0.070	0.50	1	08/19/2016 16:58
Xylenes	ND		0.14	1.5	1	08/19/2016 16:58

Surrogates	REC (%)	Limits	
aaa-TFT	103	70-130	08/19/2016 16:58

Analyst(s): IA

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## Analytical Report

**Client:** Green Star Environmental  
**Date Received:** 8/18/16 13:34  
**Date Prepared:** 8/18/16  
**Project:** GLI Oakland/ 1379

**WorkOrder:** 1608861  
**Extraction Method:** SW3510C/3630C  
**Analytical Method:** SW8015B  
**Unit:** µg/L

### Total Extractable Petroleum Hydrocarbons w/ Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ES-07	1608861-001B	Water	08/17/2016 11:28	GC11B	125368

Analyses	Result	Qualifiers	MDL	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND		24	50	1	08/19/2016 05:06
TPH-Motor Oil (C18-C36)	68	J	65	250	1	08/19/2016 05:06

Surrogates	REC (%)	Limits			
C9	96	70-130			08/19/2016 05:06

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ES-06	1608861-002B	Water	08/17/2016 12:28	GC11B	125368

Analyses	Result	Qualifiers	MDL	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	25	J	24	50	1	08/19/2016 09:39
TPH-Motor Oil (C18-C36)	ND		65	250	1	08/19/2016 09:39

Surrogates	REC (%)	Limits			
C9	96	70-130			08/19/2016 09:39

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ES-11	1608861-003B	Water	08/17/2016 13:19	GC11B	125368

Analyses	Result	MDL	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	24	50	1	08/19/2016 09:00
TPH-Motor Oil (C18-C36)	ND	65	250	1	08/19/2016 09:00

Surrogates	REC (%)	Limits			
C9	93	70-130			08/19/2016 09:00

Analyst(s): TK

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 Angela Rydelius, Lab Manager



## Analytical Report

**Client:** Green Star Environmental  
**Date Received:** 8/18/16 13:34  
**Date Prepared:** 8/18/16  
**Project:** GLI Oakland/ 1379

**WorkOrder:** 1608861  
**Extraction Method:** SW3510C/3630C  
**Analytical Method:** SW8015B  
**Unit:** µg/L

### Total Extractable Petroleum Hydrocarbons w/ Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ES-04	1608861-004B	Water	08/17/2016 14:05	GC11B	125368

Analyses	Result	MDL	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	24	50	1	08/19/2016 10:18
TPH-Motor Oil (C18-C36)	ND	65	250	1	08/19/2016 10:18

Surrogates	REC (%)	Limits		
C9	96	70-130		08/19/2016 10:18

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BC-01	1608861-005B	Water	08/17/2016 14:47	GC9b	125368

Analyses	Result	MDL	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	62	24	50	1	08/19/2016 14:32
TPH-Motor Oil (C18-C36)	ND	65	250	1	08/19/2016 14:32

Surrogates	REC (%)	Limits		
C9	93	70-130		08/19/2016 14:32

Analyst(s): TK

Analytical Comments: e4,e8,e2

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BC-03	1608861-006B	Water	08/17/2016 16:15	GC11B	125368

Analyses	Result	MDL	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	24	50	1	08/19/2016 10:57
TPH-Motor Oil (C18-C36)	ND	65	250	1	08/19/2016 10:57

Surrogates	REC (%)	Limits		
C9	96	70-130		08/19/2016 10:57

Analyst(s): TK

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



## Analytical Report

**Client:** Green Star Environmental  
**Date Received:** 8/18/16 13:34  
**Date Prepared:** 8/18/16  
**Project:** GLI Oakland/ 1379

**WorkOrder:** 1608861  
**Extraction Method:** SW3510C/3630C  
**Analytical Method:** SW8015B  
**Unit:** µg/L

### Total Extractable Petroleum Hydrocarbons w/ Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ES-03	1608861-007B	Water	08/17/2016 16:54	GC9b	125368

Analyses	Result	MDL	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	1000	24	50	1	08/19/2016 17:56
TPH-Motor Oil (C18-C36)	ND	65	250	1	08/19/2016 17:56

Surrogates	REC (%)	Limits		
C9	97	70-130		08/19/2016 17:56

Analyst(s): TK      Analytical Comments: e4,b6

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ES-01	1608861-008B	Water	08/17/2016 17:39	GC9b	125368

Analyses	Result	MDL	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	680	24	50	1	08/19/2016 23:24
TPH-Motor Oil (C18-C36)	ND	65	250	1	08/19/2016 23:24

Surrogates	REC (%)	Limits		
C9	95	70-130		08/19/2016 23:24

Analyst(s): TK      Analytical Comments: e4

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ES-05	1608861-009B	Water	08/17/2016 18:18	GC9b	125368

Analyses	Result	MDL	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	890	24	50	1	08/20/2016 00:42
TPH-Motor Oil (C18-C36)	ND	65	250	1	08/20/2016 00:42

Surrogates	REC (%)	Limits		
C9	98	70-130		08/20/2016 00:42

Analyst(s): TK      Analytical Comments: e4

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



## Analytical Report

**Client:** Green Star Environmental  
**Date Received:** 8/18/16 13:34  
**Date Prepared:** 8/18/16  
**Project:** GLI Oakland/ 1379

**WorkOrder:** 1608861  
**Extraction Method:** SW3510C/3630C  
**Analytical Method:** SW8015B  
**Unit:** µg/L

### Total Extractable Petroleum Hydrocarbons w/ Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ES-02	1608861-010B	Water	08/18/2016 18:54	GC9b	125368

Analyses	Result	MDL	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	750	24	50	1	08/20/2016 01:59
TPH-Motor Oil (C18-C36)	ND	65	250	1	08/20/2016 01:59

Surrogates	REC (%)	Limits		
C9	93	70-130		08/20/2016 01:59

Analyst(s): TK      Analytical Comments: e4

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ES-08	1608861-011B	Water	08/18/2016 10:18	GC9b	125368

Analyses	Result	Qualifiers	MDL	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	31	J	24	50	1	08/20/2016 03:17
TPH-Motor Oil (C18-C36)	ND		65	250	1	08/20/2016 03:17

Surrogates	REC (%)	Limits		
C9	92	70-130		08/20/2016 03:17

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ES-09	1608861-012B	Water	08/18/2016 11:03	GC11B	125368

Analyses	Result	MDL	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	24	50	1	08/19/2016 07:42
TPH-Motor Oil (C18-C36)	ND	65	250	1	08/19/2016 07:42

Surrogates	REC (%)	Limits		
C9	94	70-130		08/19/2016 07:42

Analyst(s): TK



## Quality Control Report

<b>Client:</b>	Green Star Environmental	<b>WorkOrder:</b>	1608861
<b>Date Prepared:</b>	8/19/16	<b>BatchID:</b>	125466
<b>Date Analyzed:</b>	8/19/16	<b>Extraction Method:</b>	SW5030B
<b>Instrument:</b>	GC28	<b>Analytical Method:</b>	SW8260B
<b>Matrix:</b>	Water	<b>Unit:</b>	µg/L
<b>Project:</b>	GLI Oakland/ 1379	<b>Sample ID:</b>	MB/LCS-125466 1608861-012AMS/MSD

### QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Benzene	ND	9.16	0.051	0.50	10	-	92	47-158
Ethylbenzene	ND	8.58	0.050	0.50	10	-	86	60-152
Methyl-t-butyl ether (MTBE)	ND	9.38	0.10	0.50	10	-	94	53-139
Naphthalene	ND	8.17	0.16	0.50	10	-	82	66-127
Toluene	0.0424,J	8.66	0.040	0.50	10	-	87	52-137
Xylenes, Total	ND	24.9	0.25	0.50	30	-	83	70-130

#### Surrogate Recovery

Dibromofluoromethane	27.2	26.9	25	109	108	70-130
Toluene-d8	27.0	26.9	25	108	107	70-130
4-BFB	2.16	2.38	2.5	87	95	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Benzene	10.0	9.98	10	ND	100	100	69-141	0	20
Ethylbenzene	9.43	9.38	10	ND	94	94	73-128	0	20
Methyl-t-butyl ether (MTBE)	12.3	12.0	10	ND	123	120	73-139	1.79	20
Naphthalene	9.45	9.55	10	ND	95	96	54-148	1.05	20
Toluene	9.17	9.04	10	ND	92	90	71-128	1.37	20
Xylenes, Total	29.4	29.1	30	ND	98	97	70-130	0.974	20

#### Surrogate Recovery

Dibromofluoromethane	29.5	29.6	25	118	118	73-131	0	20
Toluene-d8	26.3	26.1	25	105	104	72-117	0.669	20
4-BFB	2.18	2.20	2.5	87	88	74-116	0.800	20



## Quality Control Report

Client:	Green Star Environmental	WorkOrder:	1608861
Date Prepared:	8/18/16	BatchID:	125395
Date Analyzed:	8/18/16	Extraction Method:	SW5030B
Instrument:	GC28	Analytical Method:	SW8260B
Matrix:	Water	Unit:	µg/L
Project:	GLI Oakland/ 1379	Sample ID:	MB/LCS/LCSD-125395

### QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Benzene	ND	0.051	0.50	-	-	-
Ethylbenzene	ND	0.050	0.50	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.10	0.50	-	-	-
Naphthalene	ND	0.16	0.50	-	-	-
Toluene	0.0483,J	0.040	0.50	-	-	-
Xylenes, Total	ND	0.25	0.50	-	-	-

#### Surrogate Recovery

Dibromofluoromethane	27.7	25	111	70-130
Toluene-d8	27.1	25	108	70-130
4-BFB	2.26	2.5	91	70-130

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Benzene	9.97	9.78	10	100	98	47-158	1.95	20
Ethylbenzene	9.50	9.25	10	95	92	60-152	2.73	20
Methyl-t-butyl ether (MTBE)	11.7	11.6	10	117	115	53-139	1.01	20
Naphthalene	9.45	9.79	10	95	98	66-127	3.53	20
Toluene	9.13	9.07	10	91	91	52-137	0	20
Xylenes, Total	29.0	27.8	30	97	93	70-130	4.41	20

#### Surrogate Recovery

Dibromofluoromethane	30.0	29.7	25	120	119	70-130	1.22	20
Toluene-d8	26.2	26.2	25	105	105	70-130	0	20
4-BFB	2.26	2.29	2.5	90	92	70-130	1.48	20

(Cont.)

NELAP 4033ORELAP

 QA/QC Officer



## Quality Control Report

<b>Client:</b>	Green Star Environmental	<b>WorkOrder:</b>	1608861
<b>Date Prepared:</b>	8/17/16	<b>BatchID:</b>	125351
<b>Date Analyzed:</b>	8/17/16	<b>Extraction Method:</b>	SW5030B
<b>Instrument:</b>	GC7	<b>Analytical Method:</b>	SW8021B/8015Bm
<b>Matrix:</b>	Water	<b>Unit:</b>	µg/L
<b>Project:</b>	GLI Oakland/ 1379	<b>Sample ID:</b>	MB/LCS-125351 1608710-007AMS/MSD

### QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	52.6	40	40	60	-	88	70-130
MTBE	ND	9.74	0.36	5.0	10	-	97	70-130
Benzene	ND	9.25	0.070	0.50	10	-	92	70-130
Toluene	ND	8.80	0.14	0.50	10	-	88	70-130
Ethylbenzene	ND	9.08	0.070	0.50	10	-	91	70-130
Xylenes	ND	27.9	0.14	1.5	30	-	93	70-130
<b>Surrogate Recovery</b>								
aaa-TFT	10.4	10.6			10	104	106	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	59.5	59.7	60	ND	99	100	70-130	0.414	20
MTBE	10.0	9.97	10	ND	94	94	70-130	0	20
Benzene	10.0	10.4	10	ND	99	103	70-130	3.21	20
Toluene	9.50	9.76	10	ND	95	98	70-130	2.65	20
Ethylbenzene	9.88	10.1	10	ND	99	101	70-130	2.23	20
Xylenes	30.1	31.0	30	ND	100	103	70-130	2.95	20
<b>Surrogate Recovery</b>									
aaa-TFT	10.9	10.9	10		109	109	70-130	0	20

(Cont.)

NELAP 4033ORELAP



QA/QC Officer



## Quality Control Report

<b>Client:</b>	Green Star Environmental	<b>WorkOrder:</b>	1608861
<b>Date Prepared:</b>	8/19/16	<b>BatchID:</b>	125464
<b>Date Analyzed:</b>	8/19/16	<b>Extraction Method:</b>	SW5030B
<b>Instrument:</b>	GC7	<b>Analytical Method:</b>	SW8021B/8015Bm
<b>Matrix:</b>	Water	<b>Unit:</b>	µg/L
<b>Project:</b>	GLI Oakland/ 1379	<b>Sample ID:</b>	MB/LCS-125464 1608861-003BMS/MSD

### QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	49.6	40	40	60	-	83	70-130
MTBE	0.608,J	8.93	0.36	5.0	10	-	89	70-130
Benzene	ND	8.48	0.070	0.50	10	-	85	70-130
Toluene	ND	8.08	0.14	0.50	10	-	81	70-130
Ethylbenzene	ND	8.31	0.070	0.50	10	-	83	70-130
Xylenes	ND	25.4	0.14	1.5	30	-	85	70-130
<b>Surrogate Recovery</b>								
aaa-TFT	10.1	10.8			10	101	108	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	54.3	55.8	60	ND	91	93	70-130	2.58	20
MTBE	9.05	8.80	10	ND	90	88	70-130	2.81	20
Benzene	9.32	9.69	10	ND	93	97	70-130	3.84	20
Toluene	9.01	9.24	10	ND	90	92	70-130	2.57	20
Ethylbenzene	9.32	9.56	10	ND	93	96	70-130	2.48	20
Xylenes	28.0	28.6	30	ND	93	95	70-130	2.09	20
<b>Surrogate Recovery</b>									
aaa-TFT	10.8	11.0	10		109	110	70-130	1.78	20



## Quality Control Report

**Client:** Green Star Environmental      **WorkOrder:** 1608861  
**Date Prepared:** 8/18/16      **BatchID:** 125368  
**Date Analyzed:** 8/24/16 - 8/25/16      **Extraction Method:** SW3510C/3630C  
**Instrument:** GC39B      **Analytical Method:** SW8015B  
**Matrix:** Water      **Unit:** µg/L  
**Project:** GLI Oakland/ 1379      **Sample ID:** MB/LCS/LCSD-125368

### QC Report for SW8015B w/ Silica Gel Clean-Up

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
TPH-Diesel (C10-C23)	ND	24	50	-	-	-
TPH-Motor Oil (C18-C36)	ND	65	250	-	-	-
<b>Surrogate Recovery</b>						
C9	596			625	95	65-122
Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits
TPH-Diesel (C10-C23)	1150	1200	1000	115	120	61-157
<b>Surrogate Recovery</b>						
C9	576	586	625	92	94	65-122
						4.07
						30
						1.80
						30



# CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 1608861

ClientCode: GSET

WaterTrax     WriteOn     EDF     Excel     EQuIS     Email     HardCopy     ThirdParty     J-flag

## Report to:

Terrance A. Harriman  
Green Star Environmental  
354 McDonnell Street, Suite 9  
Lewisville, TX 75057  
(214) 222-8752    FAX: (214) 222-8752

Email: taharriman@greenstarenvironmental.com  
cc/3rd Party:  
PO:  
ProjectNo: GLI Oakland/ 1379

## Bill to:

Patricia Cardenas  
Green Star Environmental  
P.O Box 13482  
Arlington, TX 76094-0482  
greenstar@greenstarenvironmental.com

Requested TAT: 5 days;

Date Received: 08/18/2016  
Date Logged: 08/18/2016

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1608861-001	ES-07	Water	8/17/2016 11:28	<input type="checkbox"/>	A	B	A	B								
1608861-002	ES-06	Water	8/17/2016 12:28	<input type="checkbox"/>	A	B		B								
1608861-003	ES-11	Water	8/17/2016 13:19	<input type="checkbox"/>	A	B		B								
1608861-004	ES-04	Water	8/17/2016 14:05	<input type="checkbox"/>	A	B		B								
1608861-005	BC-01	Water	8/17/2016 14:47	<input type="checkbox"/>	A	B		B								
1608861-006	BC-03	Water	8/17/2016 16:15	<input type="checkbox"/>	A	B		B								
1608861-007	ES-03	Water	8/17/2016 16:54	<input type="checkbox"/>	A	B		B								
1608861-008	ES-01	Water	8/17/2016 17:39	<input type="checkbox"/>	A	B		B								
1608861-009	ES-05	Water	8/17/2016 18:18	<input type="checkbox"/>	A	B		B								
1608861-010	ES-02	Water	8/17/2016 18:54	<input type="checkbox"/>	A											
1608861-010	ES-02	Water	8/18/2016 18:54	<input type="checkbox"/>		B		B								
1608861-011	ES-08	Water	8/18/2016 10:18	<input type="checkbox"/>	A	B		B								
1608861-012	ES-09	Water	8/18/2016 11:03	<input type="checkbox"/>	A	B		B								

Test Legend:

1	8260VOC_W
5	
9	

2	G-MBTEX_W
6	
10	

3	PREDF REPORT
7	
11	

4	TPH(DMO)WSG_W
8	
12	

Prepared by: Valerie Riva

The following SampIDs: 001B, 002B, 003B, 004B, 005B, 006B, 007B, 008B, 009B, 010B, 011B, 012B contain testgroup Multi RangeWSG\_W.

**Comments:**

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.



## WORK ORDER SUMMARY

**Client Name:** GREEN STAR ENVIRONMENTAL

**QC Level:** LEVEL 2

**Work Order:** 1608861

**Project:** GLI Oakland/ 1379

**Client Contact:** Terrance A. Harriman

**Date Logged:** 8/18/2016

**Comments:**

**Contact's Email:** [taharriman@greenstareenvironmental.com](mailto:taharriman@greenstareenvironmental.com)

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1608861-001A	ES-07	Water	SW8260B (VOCs) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Diisopropyl ether (DIPE), Ethanol, Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene,	1	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	8/17/2016 11:28	5 days	None	<input type="checkbox"/>	
1608861-001B	ES-7	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	8/17/2016 11:28	5 days	None	<input type="checkbox"/>	
1608861-002A	ES-06	Water	SW8260B (VOCs) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Diisopropyl ether (DIPE), Ethanol, Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene,	1	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	8/17/2016 12:28	5 days	Trace	<input type="checkbox"/>	
1608861-002B	ES-06	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	8/17/2016 12:28	5 days	Trace	<input type="checkbox"/>	

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



## WORK ORDER SUMMARY

**Client Name:** GREEN STAR ENVIRONMENTAL

**QC Level:** LEVEL 2

**Work Order:** 1608861

**Project:** GLI Oakland/ 1379

**Client Contact:** Terrance A. Harriman

**Date Logged:** 8/18/2016

**Comments:**

**Contact's Email:** [taharriman@greenstareenvironmental.com](mailto:taharriman@greenstareenvironmental.com)

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1608861-003A	ES-11	Water	SW8260B (VOCs) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Diisopropyl ether (DIPE), Ethanol, Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene,	1	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	8/17/2016 13:19	5 days	None	<input type="checkbox"/>	
1608861-003B	ES-11	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	8/17/2016 13:19	5 days	None	<input type="checkbox"/>	
1608861-004A	ES-04	Water	SW8260B (VOCs) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Diisopropyl ether (DIPE), Ethanol, Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene,	1	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	8/17/2016 14:05	5 days	None	<input type="checkbox"/>	
1608861-004B	ES-04	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	8/17/2016 14:05	5 days	None	<input type="checkbox"/>	

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



## WORK ORDER SUMMARY

**Client Name:** GREEN STAR ENVIRONMENTAL

**QC Level:** LEVEL 2

**Work Order:** 1608861

**Project:** GLI Oakland/ 1379

**Client Contact:** Terrance A. Harriman

**Date Logged:** 8/18/2016

**Comments:**

**Contact's Email:** [taharriman@greenstareenvironmental.com](mailto:taharriman@greenstareenvironmental.com)

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1608861-005A	BC-01	Water	SW8260B (VOCs) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Diisopropyl ether (DIPE), Ethanol, Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene,	1	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	8/17/2016 14:47	5 days	Trace	<input type="checkbox"/>	
1608861-005B	BC-01	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	8/17/2016 14:47	5 days	Trace	<input type="checkbox"/>	
1608861-006A	BC-03	Water	SW8260B (VOCs) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Diisopropyl ether (DIPE), Ethanol, Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene,	1	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	8/17/2016 16:15	5 days	Trace	<input type="checkbox"/>	
1608861-006B	BC-03	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	8/17/2016 16:15	5 days	Trace	<input type="checkbox"/>	

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



## WORK ORDER SUMMARY

**Client Name:** GREEN STAR ENVIRONMENTAL

**QC Level:** LEVEL 2

**Work Order:** 1608861

**Project:** GLI Oakland/ 1379

**Client Contact:** Terrance A. Harriman

**Date Logged:** 8/18/2016

**Comments:**

**Contact's Email:** [taharriman@greenstareenvironmental.com](mailto:taharriman@greenstareenvironmental.com)

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1608861-007A	ES-03	Water	SW8260B (VOCs) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Diisopropyl ether (DIPE), Ethanol, Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene,	1	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	8/17/2016 16:54	5 days	None	<input type="checkbox"/>	
1608861-007B	ES-03	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	8/17/2016 16:54	5 days	None	<input type="checkbox"/>	
1608861-008A	ES-01	Water	SW8260B (VOCs) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Diisopropyl ether (DIPE), Ethanol, Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene,	1	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	8/17/2016 17:39	5 days	None	<input type="checkbox"/>	
1608861-008B	ES-01	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	8/17/2016 17:39	5 days	None	<input type="checkbox"/>	

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WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1608861-009A	ES-05	Water	SW8260B (VOCs) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Diisopropyl ether (DIPE), Ethanol, Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene,	1	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	8/17/2016 18:18	5 days	None	<input type="checkbox"/>	
1608861-009B	ES-05	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	8/17/2016 18:18	5 days	None	<input type="checkbox"/>	
1608861-010A	ES-02	Water	SW8260B (VOCs) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Diisopropyl ether (DIPE), Ethanol, Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene,	1	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	8/17/2016 18:54	5 days	Trace	<input type="checkbox"/>	
1608861-010B	ES-02	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	8/18/2016 18:54	5 days	Trace	<input type="checkbox"/>	

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

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WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1608861-011A	ES-08	Water	SW8260B (VOCs) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Diisopropyl ether (DIPE), Ethanol, Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene,	1	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	8/18/2016 10:18	5 days	Trace	<input type="checkbox"/>	
1608861-011B	ES-08	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	8/18/2016 10:18	5 days	Trace	<input type="checkbox"/>	
1608861-012A	ES-09	Water	SW8260B (VOCs) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Diisopropyl ether (DIPE), Ethanol, Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene,	1	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	8/18/2016 11:03	5 days	None	<input type="checkbox"/>	
1608861-012B	ES-09	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	8/18/2016 11:03	5 days	None	<input type="checkbox"/>	
1608861-013A	TRIP BLANK	Water		1		<input type="checkbox"/>	8/17/2016		None	<input checked="" type="checkbox"/>	
1608861-014A	TEMP BLANK	Water		1		<input type="checkbox"/>	8/17/2016		None	<input checked="" type="checkbox"/>	

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

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 <p><b>McCAMPBELL ANALYTICAL, INC.</b></p> <p>1534 Willow Pass Rd. Pittsburg, Ca. 94565-1701  Telephone: (877) 252-9262 / Fax: (925) 252-9269  <a href="http://www.mccampbell.com">www.mccampbell.com</a> <a href="mailto:main@mccampbell.com">main@mccampbell.com</a></p>	CHAIN OF CUSTODY RECORD													
	Turn Around Time: 1 Day Rush				2 Day Rush		3 Day Rush		STD	X	Quote #			
	J-Flag / MDL		ESL		Cleanup Approved				Bottle Order #					
Delivery Format: GeoTracker EDF				X	PDF	X	EDD	Write On (DW)			EQuIS			
Report To: Terrence Harriman Bill To: Company: Green Star Environmental Email: <a href="mailto:tharriman@greenstareenvironmental.com">tharriman@greenstareenvironmental.com</a> Email: Tele: (214) 222-8752 Project Name/#: GLI Oakland / 1319 Project Location: 2103 San Pablo Ave PO # Sampler Signature: 														
<b>SAMPLE ID</b> Location / Field Point	Sampling		#Containers	Matrix	Preservative	Analysis Requested								
	Date	Time				BTEX	TPH as Gas (80°C)	Diesel (80°C)	EPA 8260 (WOC, See above)	Hold	Please Request MDL & J-Flags			
	8-17-16	11:28				6	GW	4	2	/	/	/	/	
	ES-07	8-17-16				12:28	6	GW	4	2	/	/	/	/
	ES-06	8-17-16				13:19	6	GW	4	2	/	/	/	/
	ES-11	8-17-16				14:05	6	GW	4	2	/	/	/	/
	ES-04	8-17-16				14:47	6	GW	4	2	/	/	/	/
	BC-01	8-17-16				16:15	6	GW	4	2	/	/	/	/
	BC-03	8-17-16				16:54	6	GW	4	2	/	/	/	/
	ES-03	8-17-16				17:39	6	GW	4	2	/	/	/	/
ES-01	8-17-16	18:18	6	GW	4	2	/	/	/	/				
ES-05	8-17-16	18:54	6	GW	4	2	/	/	/	/				
ES-02	8-17-16	18:54	6	GW	4	2	/	/	/	/				
**MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate \$250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.														
*** If metals are requested for water samples and the water type (Matrix) is not specified on the chain of custody, MAI will default to metals by E200.8.														
Please provide an adequate volume of sample for testing being submitted. If the volume is not sufficient for a MS/MSD a LCS/LCSD will be prepared in its place and noted in the report.														
Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time	Comments / Instructions Include Geotracker Global ID in EDF: TD600100666								
Julio Alvarez / Green Star	8-18-16	13:34	Agustina V. Maff	8-18	13:34									

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SW=Seawater, S=Soil, SL=Sludge, A=Air, WP=Wipe, O=Other

Preservative Code: 1=4°C 2=HCl 3=H<sub>2</sub>SO<sub>4</sub> 4=HNO<sub>3</sub> 5=NaOH 6=ZnOAc/NaOH 7=None

Temp \_\_\_\_\_ °C Initials \_\_\_\_\_

 <b>McCAMPBELL ANALYTICAL, INC.</b> 1534 Willow Pass Rd. Pittsburg, Ca. 94565-1701 Telephone: (877) 252-9262 / Fax: (925) 252-9269 <a href="http://www.mccampbell.com">www.mccampbell.com</a> <a href="mailto:main@mccampbell.com">main@mccampbell.com</a>		<b>CHAIN OF CUSTODY RECORD</b>												
		<input type="checkbox"/> Turn Around Time: 1 Day Rush			<input type="checkbox"/> 2 Day Rush		<input type="checkbox"/> 3 Day Rush		<input type="checkbox"/> STD	<input checked="" type="checkbox"/>	Quote #			
		<input type="checkbox"/> J-Flag / MDL			<input type="checkbox"/> ESL		<input type="checkbox"/> Cleanup Approved		<input type="checkbox"/> Bottle Order #					
		<input type="checkbox"/> Delivery Format: GeoTracker EDF			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> EDD	<input type="checkbox"/> Write On (DW)			<input type="checkbox"/> EQuIS		
Report To: <u>Terrance Harriman</u> Bill To:		<b>Analysis Requested</b>												
Company: <u>Green Star Environmental</u> Email: <u>taharriman@greenstareenvironmental.com</u> Email: <u></u> Tele: <u>(214) 222-8182</u>		<u>STPRA &amp; TPH as Gas (8021/8031) HTE</u> <u>TPH as Diesel (8010) (Silent Cut)</u> <u>EPA (8260) (Inc. Oils)</u> <u>(See Attached)</u>												
Project Name #: <u>GLI Oakland / 1379</u> Project Location: <u>2103 San Pablo Ave</u> PO #		<u>Hold</u> <u>Please Report MDL &amp; Flags</u>												
Sampler Signature: <u></u>														
<b>SAMPLE ID</b> Location / Field Point	<b>Sampling</b>		<b>#Containers</b>	<b>Matrix</b>	<b>Preservative</b>		<u>HCl</u> <u>4°C</u>							
	Date	Time			✓	✓	✓	<u>STPRA &amp; TPH as Gas (8021/8031) HTE</u> <u>TPH as Diesel (8010) (Silent Cut)</u> <u>EPA (8260) (Inc. Oils)</u> <u>(See Attached)</u>						
ES-08	8-18-16	10:18	6	GW	4	2	✓	✓	✓	✓				
ES-09	8-18-16	11:03	6	GW	4	2	✓	✓	✓	✓				
TRIP BLANK	8-17-16	AM	1	0	0	1								
TEMP BLANK	8-17-16	AM	1	0	0	1	✓							
<small>**MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate \$250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.</small>														
<small>** If metals are requested for water samples and the water type (Matrix) is not specified on the chain of custody, MAI will default to metals by E200.8.</small>														
<small>Please provide an adequate volume of sample for testing being submitted. If the volume is not sufficient for a MS/MSD a LCS/LCSD will be prepared in its place and noted in the report.</small>														
Relinquished By / Company Name	Date	Time	Received By / Company Name			Date	Time	<small>Comments / Instructions</small> <small>Include Geotracker Global ID in EDF:</small> <small>TD600100666</small>						
<u>Julie Harriman / Green Star</u>	8-18-16	13:34	<u>J. Harriman / MAI</u>			8/18	13:34							
<small>Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SW=Seawater, S=Soil, SL=Sludge, A=Air, WP=Wipe, O=Other</small>														
<small>Preservative Code: 1=4°C 2=HCl 3=H<sub>2</sub>SO<sub>4</sub> 4=HNO<sub>3</sub> 5=NaOH 6=ZnOAc/NaOH 7=None</small>														
<small>Temp _____ °C Initials _____</small>														

**Groundwater (14 samples)**

- TPH (All ranges: Gasoline, Diesel, Oil) Via EPA Method 8015M
- The following VOCs via EPA Method 8260
  - BTEX
  - Naphthalene
  - MTBE
  - ETBE
  - TAME
  - DIPE
  - EDB
  - EDC
  - TBA
  - Ethanol

50xy Pb Scar ETOH Naph  
BTEX



## Sample Receipt Checklist

Client Name: **Green Star Environmental**  
Project Name: **GLI Oakland/ 1379**  
WorkOrder No: **1608861** Matrix: Water  
Carrier: Client Drop-In

Date and Time Received: **8/18/2016 13:34**  
Date Logged: **8/18/2016**  
Received by: **Agustina Venegas**  
Logged by: **Valerie Riva**

### Chain of Custody (COC) Information

- |   |   |                             |
|---|---|-----------------------------|
| Chain of custody present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Chain of custody agrees with sample labels?             | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Sample IDs noted by Client on COC?                      | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Date and Time of collection noted by Client on COC?     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Sampler's name noted on COC?                            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |

### Sample Receipt Information

- |  |   |                             |  |
|--|---|-----------------------------|--|
| Custody seals intact on shipping container/cooler? | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/> |
| Shipping container/cooler in good condition?       | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| Samples in proper containers/bottles?              | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| Sample containers intact?                          | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| Sufficient sample volume for indicated test?       | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |

### Sample Preservation and Hold Time (HT) Information

- |   |   |                             |  |
|---|---|-----------------------------|--|
| All samples received within holding time?                   | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| Sample/Temp Blank temperature                               |   | Temp: 2.9°C                 | NA <input type="checkbox"/>            |
| Water - VOA vials have zero headspace / no bubbles?         | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/>            |
| Sample labels checked for correct preservation?             | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)? | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/> |
| Samples Received on Ice?                                    | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |

(Ice Type: WET ICE )

### UCMR3 Samples:

- |  |                              |                             |  |
|--|------------------------------|-----------------------------|--|
| Total Chlorine tested and acceptable upon receipt for EPA 522? Yes               | <input type="checkbox"/>     | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/> |
| Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/> |

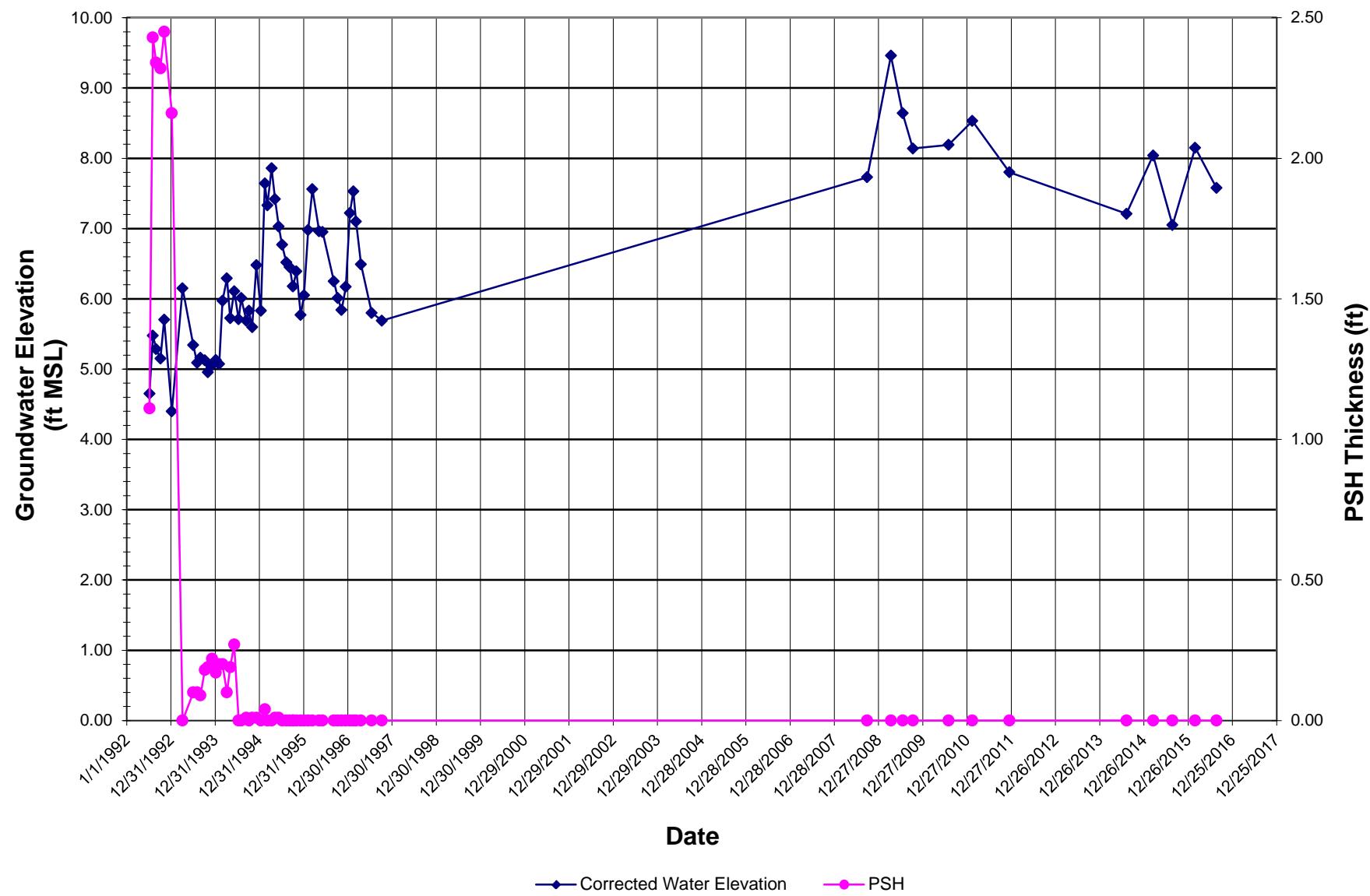
Comments:

**APPENDIX B**

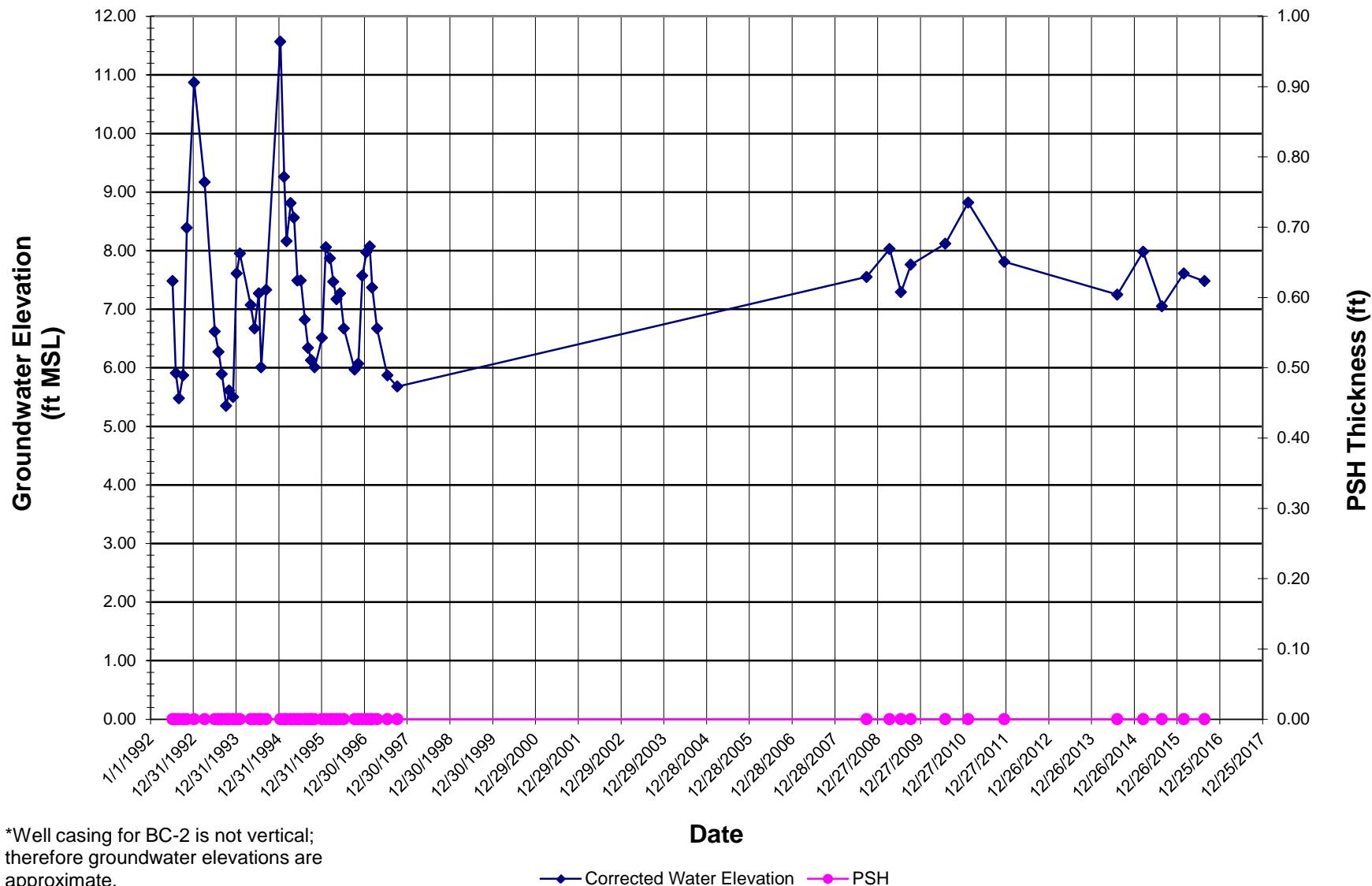
**PSH Thickness and Groundwater Elevation Graphs**

## Product Thickness and Groundwater Elevation Versus Time

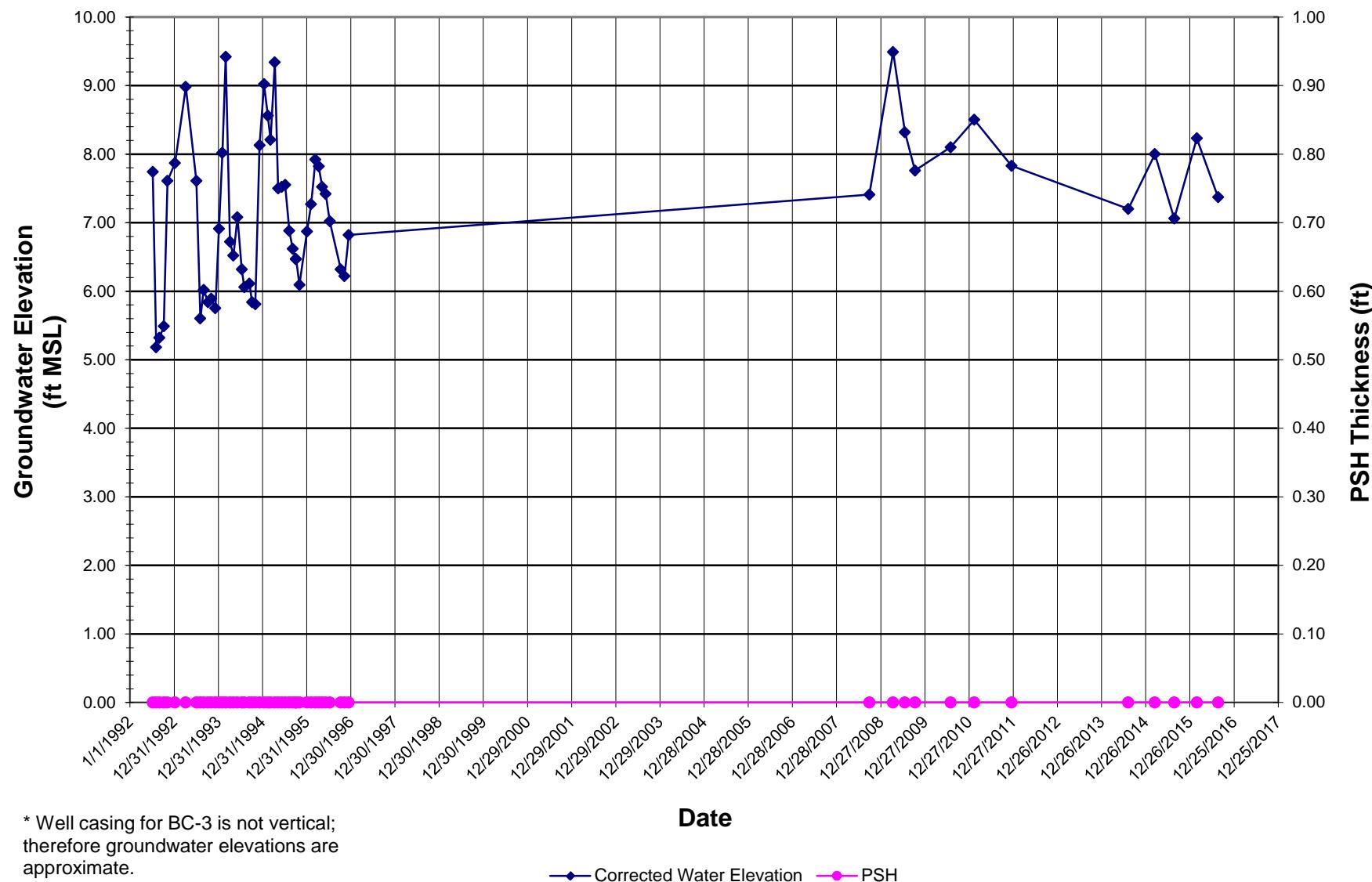
### Well BC-1



## Product Thickness and Approximate\* Groundwater Elevation Versus Time Well BC-2

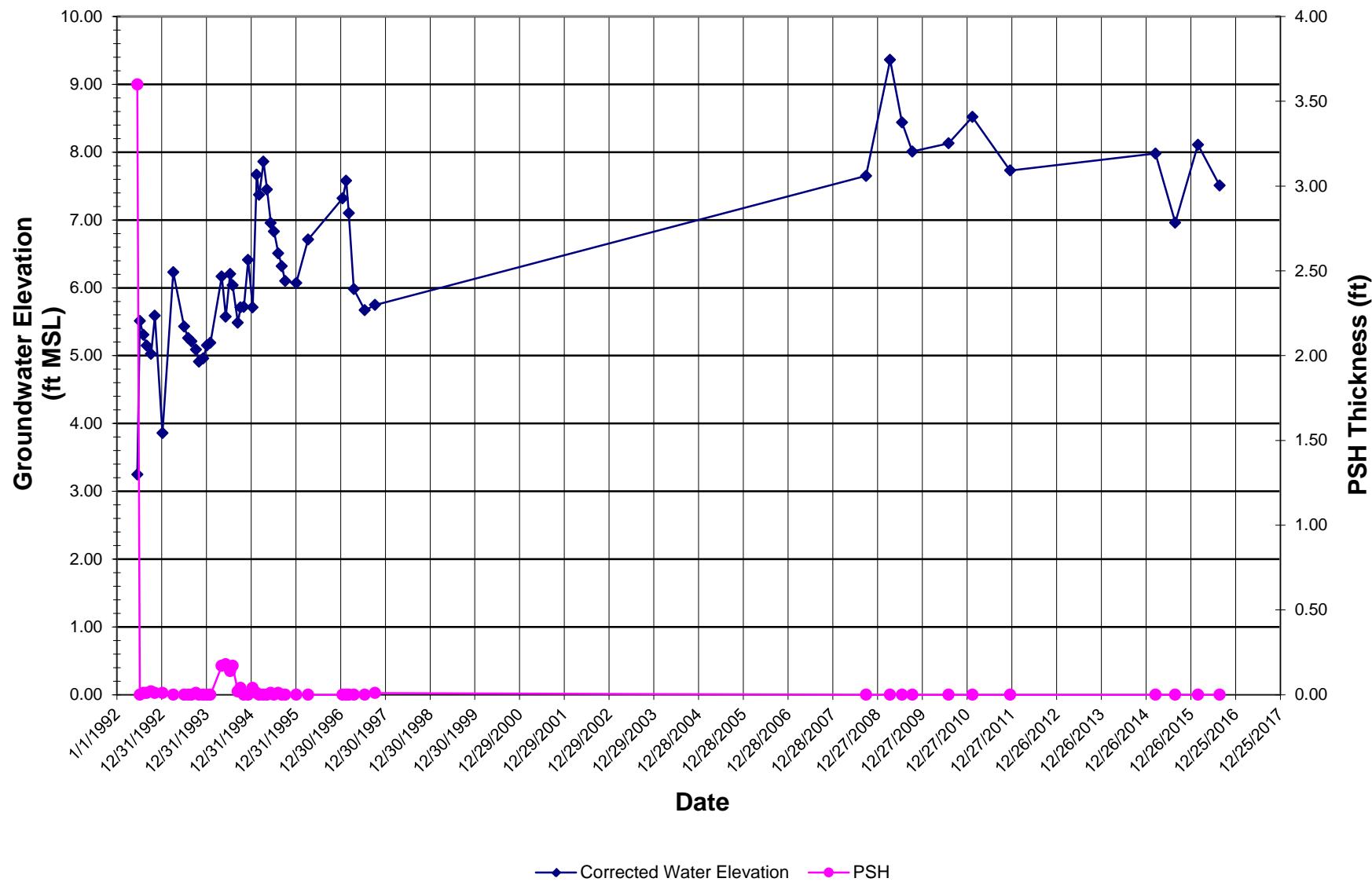


## Product Thickness and Approximate\* Groundwater Elevation Versus Time Well BC-3

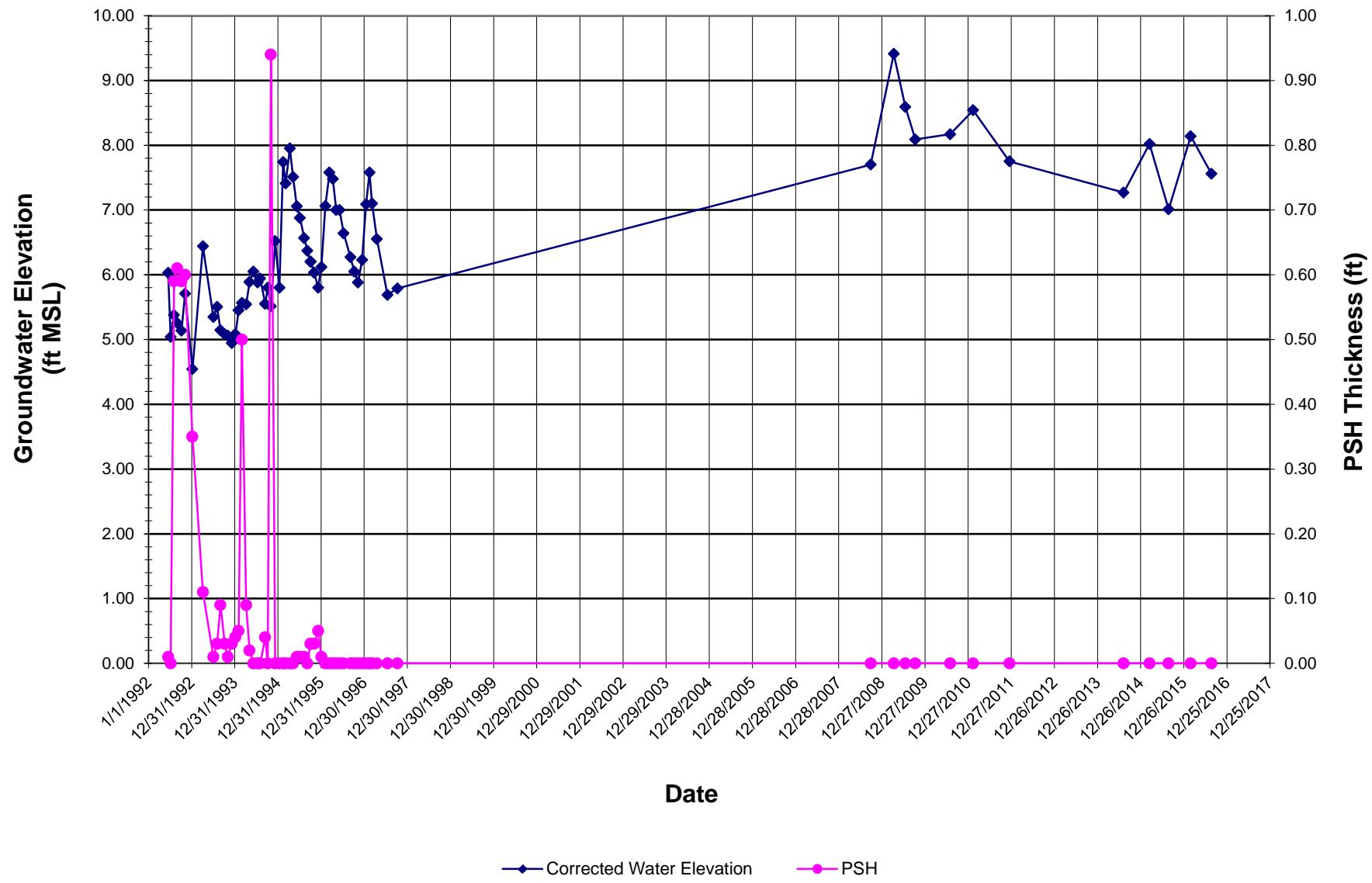


## Product Thickness and Groundwater Elevation Versus Time

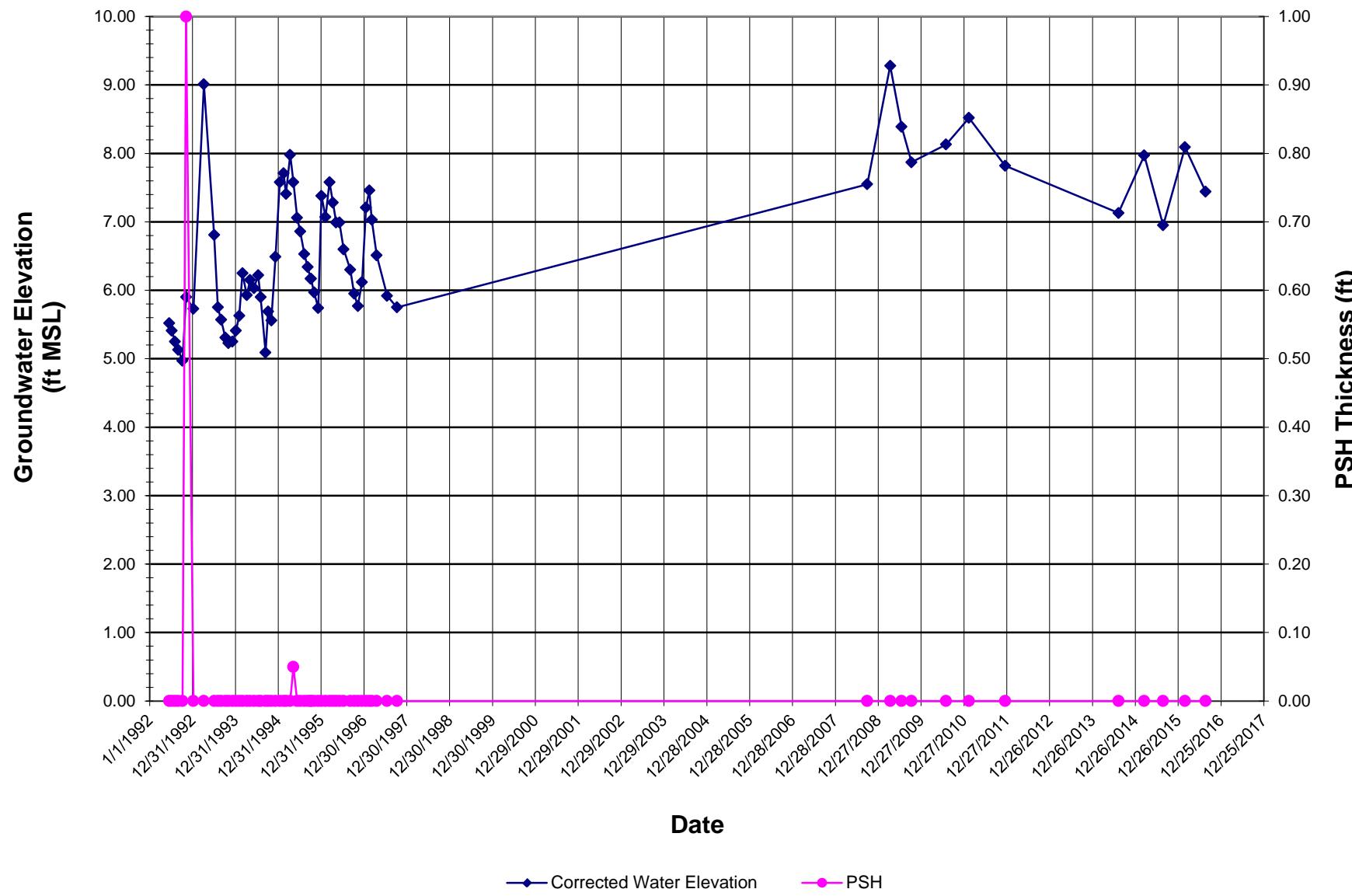
### Well ES-1



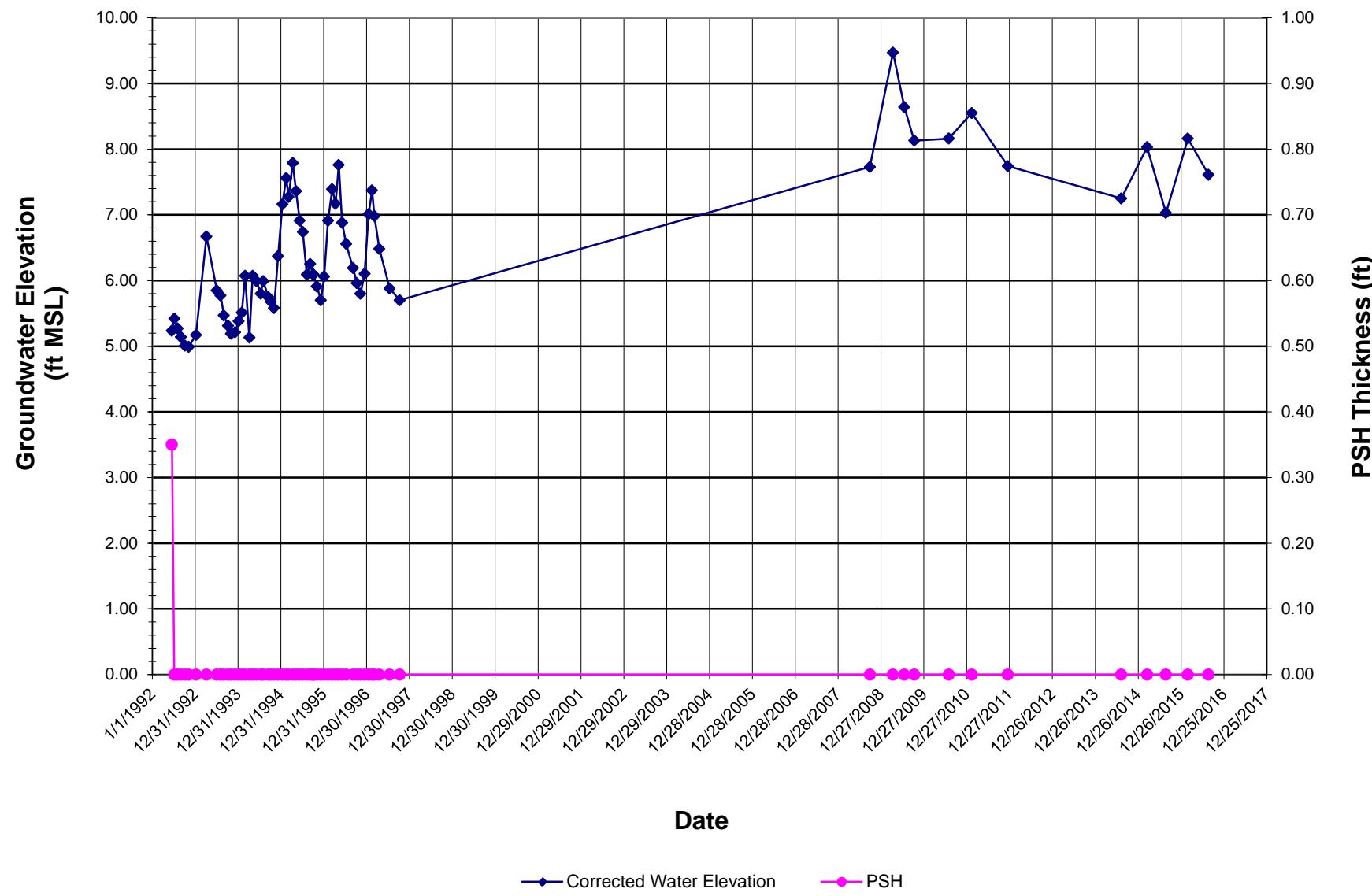
## Product Thickness and Groundwater Elevation Versus Time Well ES-2



## Product Thickness and Groundwater Elevation Versus Time Well ES-3

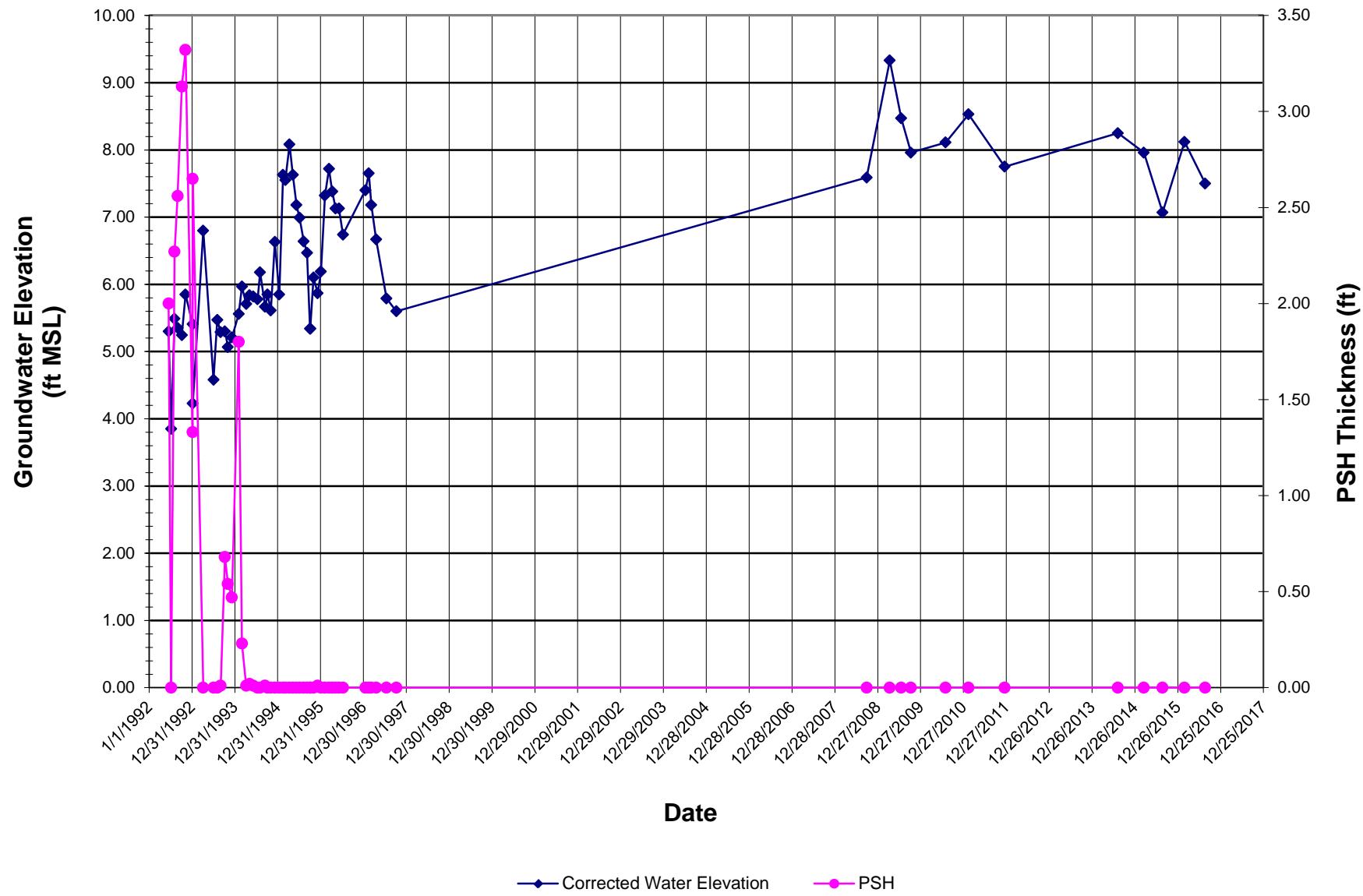


## Product Thickness and Groundwater Elevation Versus Time Well ES-4



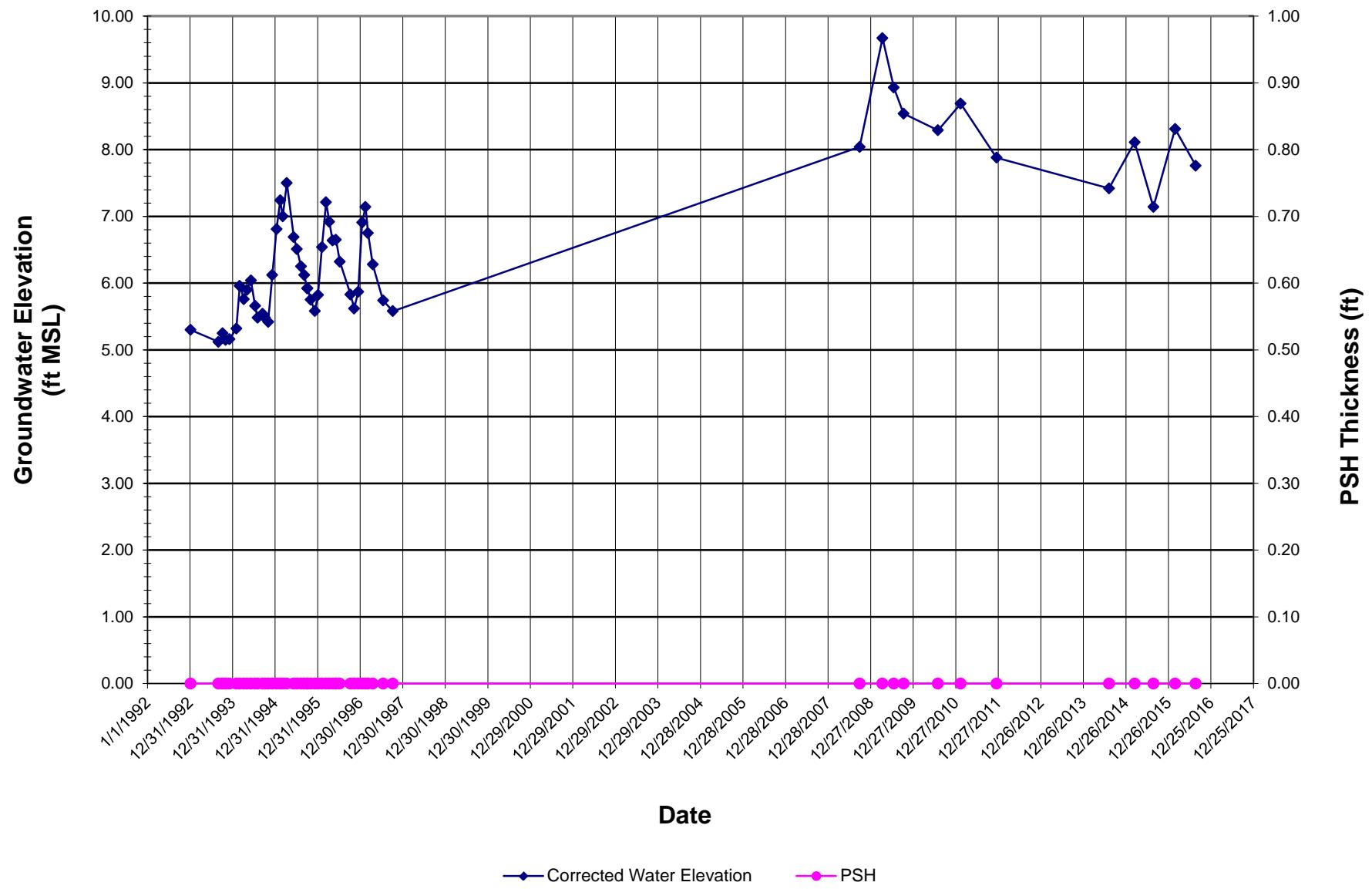
## Product Thickness and Groundwater Elevation Versus Time

### Well ES-5



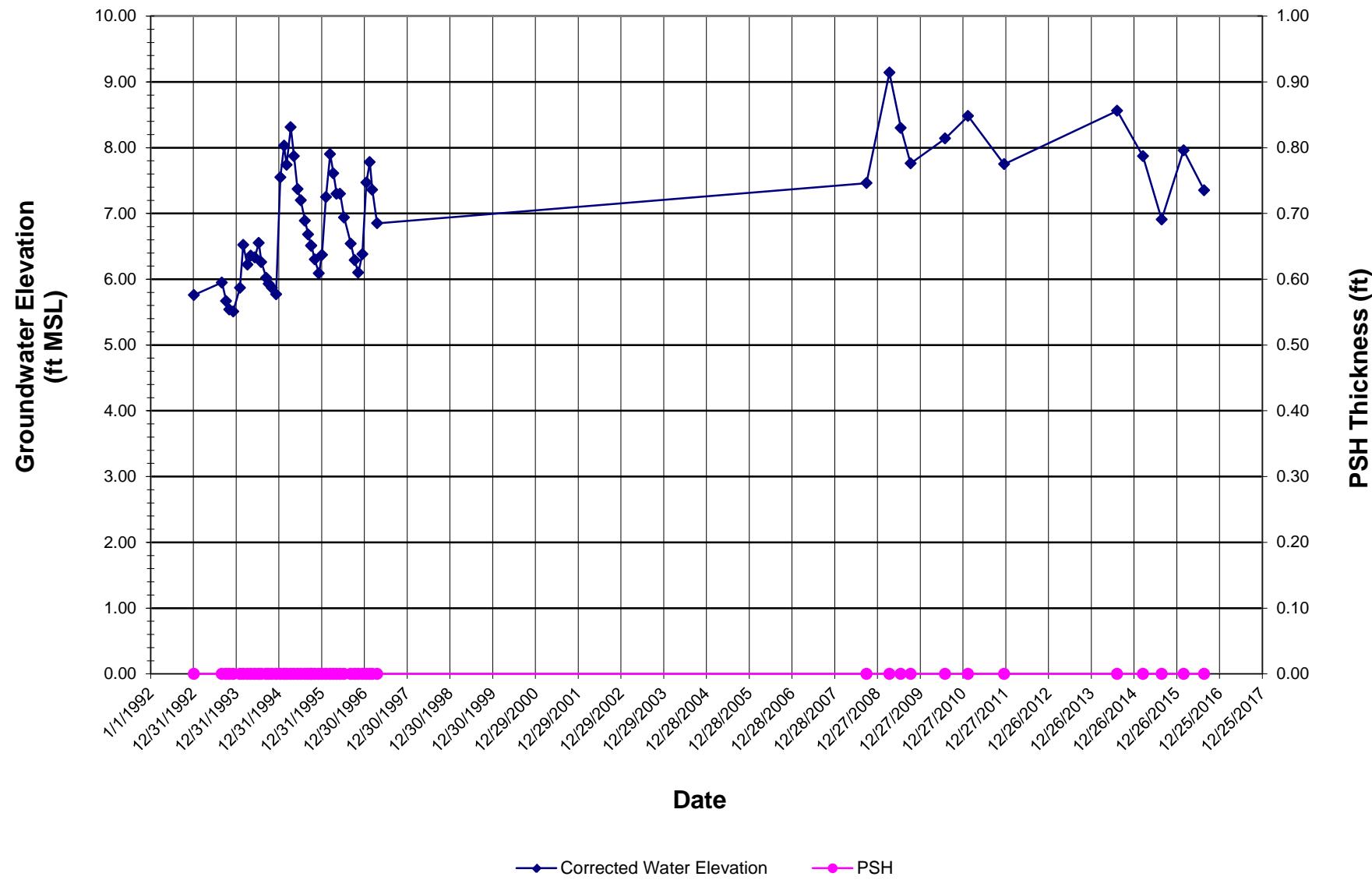
## Product Thickness and Groundwater Elevation Versus Time

### Well ES-6



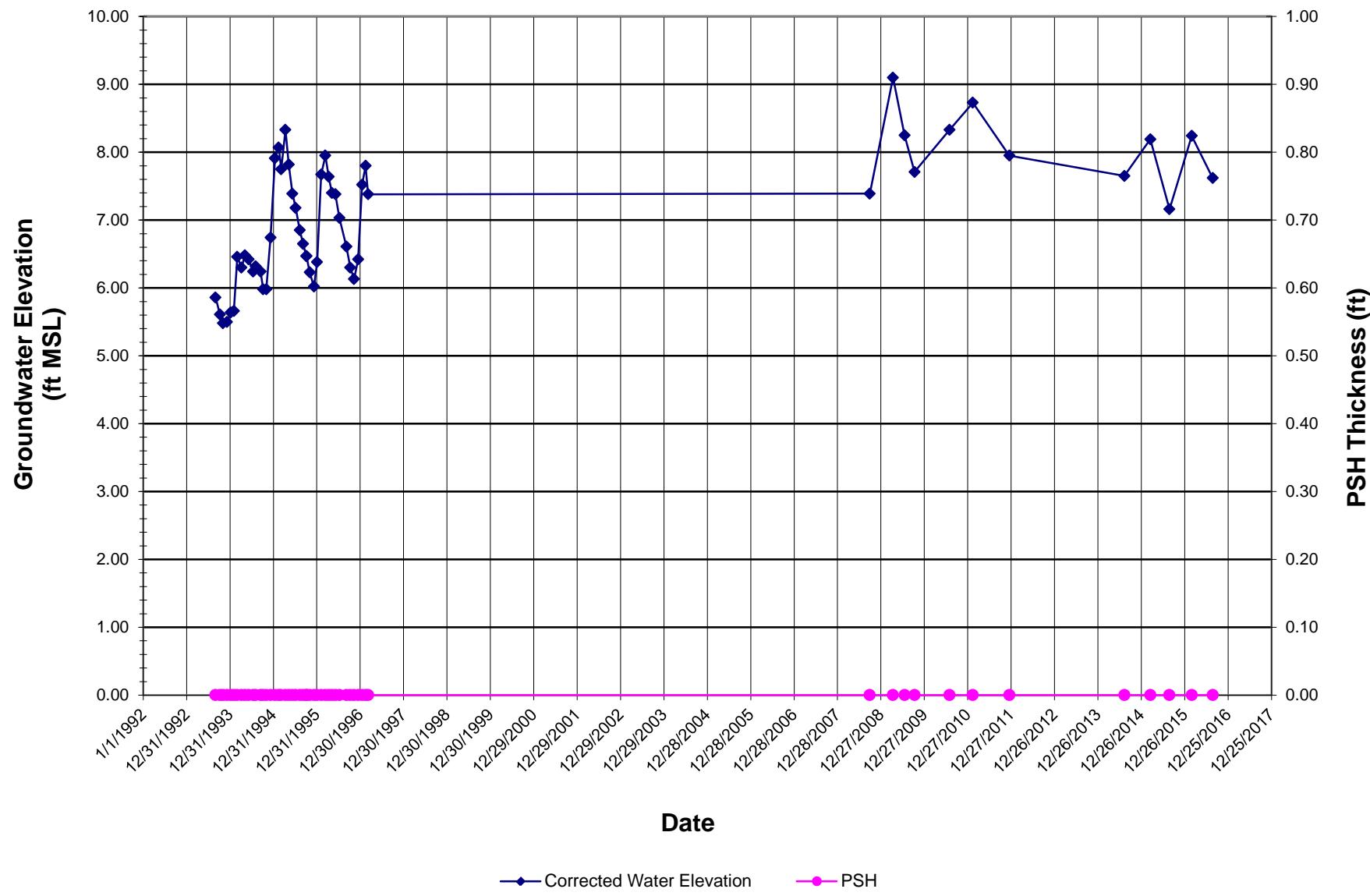
## Product Thickness and Groundwater Elevation Versus Time

### Well ES-7

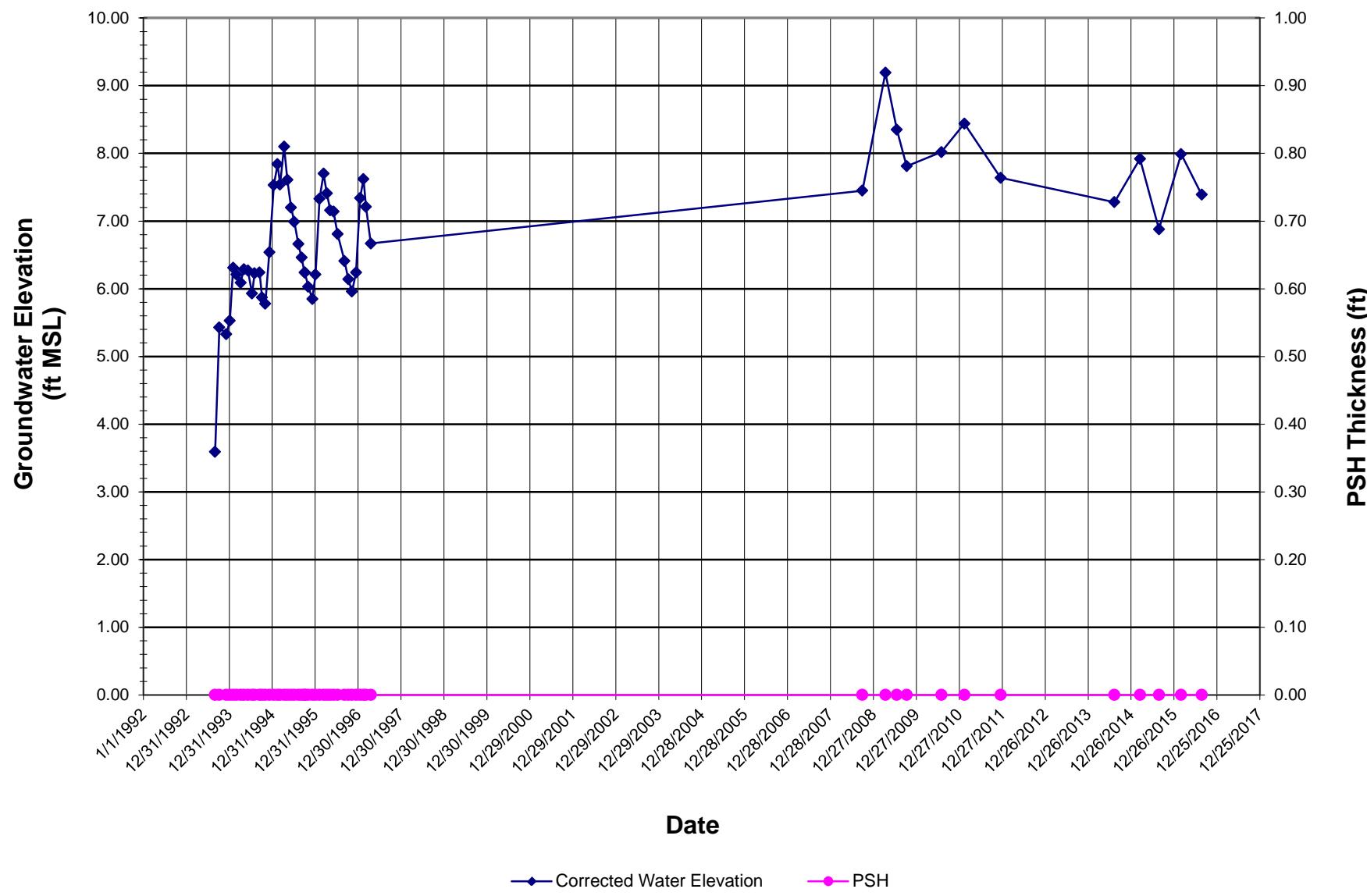


## Product Thickness and Groundwater Elevation Versus Time

### Well ES-8

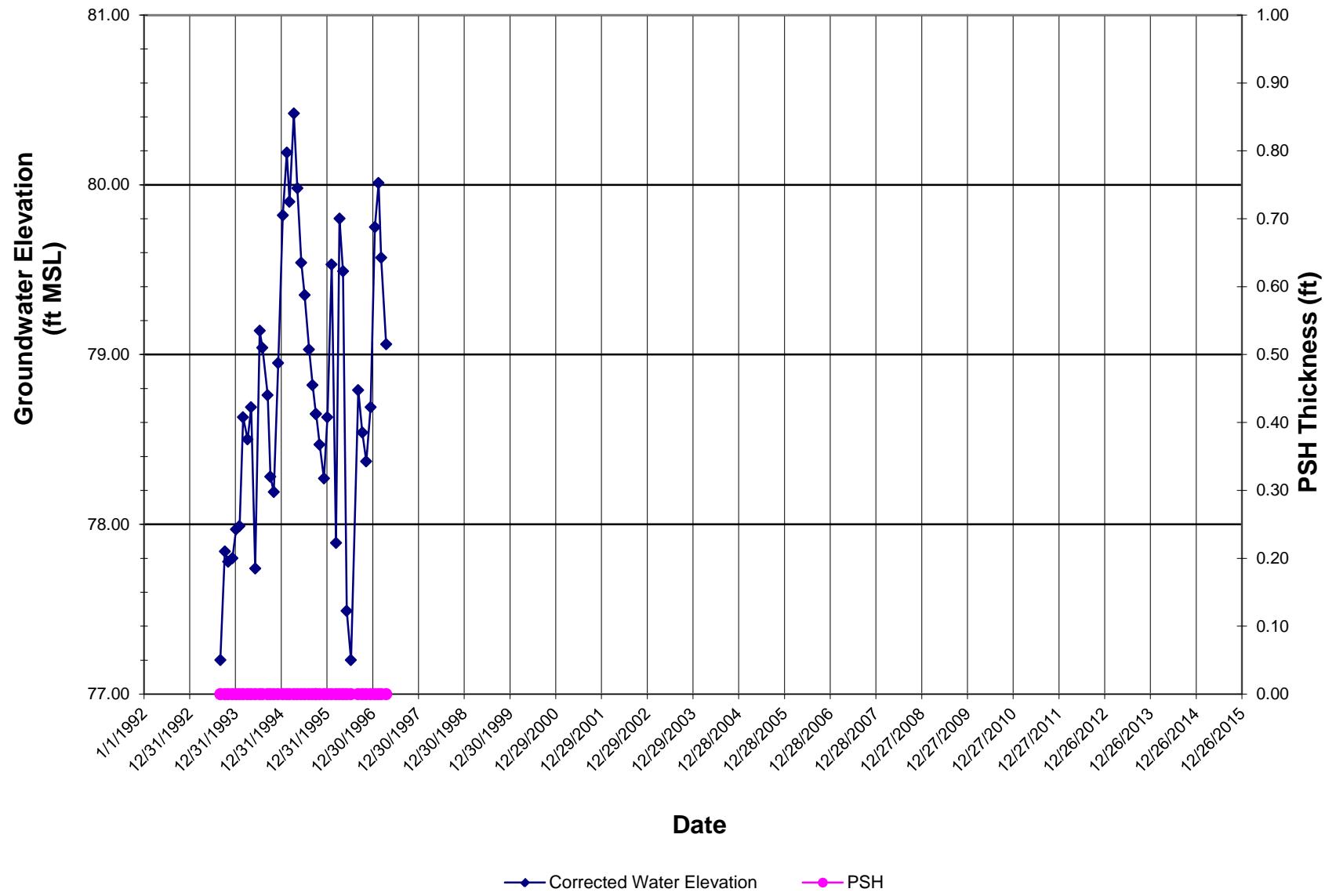


## Product Thickness and Groundwater Elevation Versus Time Well ES-9

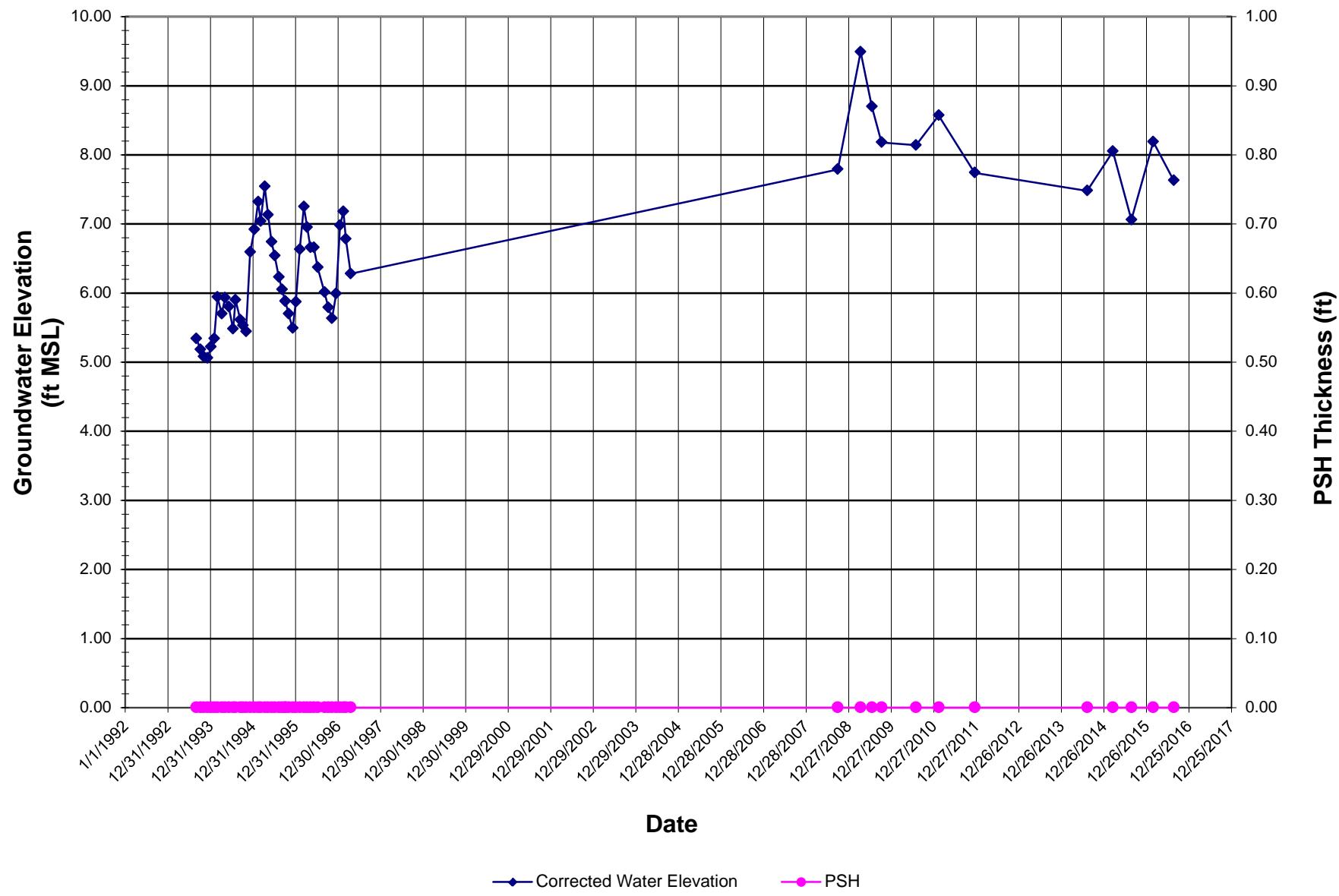


## Product Thickness and Groundwater Elevation Versus Time

### Well ES-10



## Product Thickness and Groundwater Elevation Versus Time Well ES-11



**APPENDIX C**  
**Groundwater Sampling Records**

# GROUNDWATER SAMPLING RECORD

Project Number:	16-1379	Project Name:	GLI-Las Vegas	Date	8-17-16
Sampling Location (well ID, etc.):	BC-1	Total Depth to LNAPL (ft. BMP):	—		
Gauged by:	JFA	Starting Water Level (ft. BMP):	16.83		
Casing Diameter (In ID):	4" ID	Total Depth (ft. BMP):	29.72		
Total Fluids Purged (gal)	—	Three Well Volume (gal)	—		

## Monitor Well Inspection:

Condition of Concrete Pad: good

Condition of Lock, Well Cover and Cap: no lock, good cap

Condition of Well: good

## QUALITY ASSURANCE

### METHODS (describe):

Cleaning Equipment: Alconox soap solution, tap water rinse, de-ionized water rinse

Purging: Disposable Bailer peri-pump Sampling: Disposable Bailer " "

Disposal of Discharged Water: Collect purge water in 55-gallon drum for disposal

### INSTRUMENTS (Indicate make, model, I.D.):

Water Level: SOLINST Thermometer: YSI

pH Meter/ORP: YSI Filtration: n/a

Conductivity/DO Meter: YSI Other: —

## SAMPLE INVENTORY

Bottles Collected				Filtration	Preservation		Remarks
Time	Vol.	Composition (glass, plastic)	Quantity	(Y/N)	(type)		(quality control sample, other)
14:47	40mL	glass	6	N	4 HCl	2 ICE	—

Date : 8-17-16 Time	Purge Characteristics Cumul Vol. (Gallons)	Water Quality Data				Appearance		REMARKS	
		Field Chemistry Parameters				Color	Turbidity & Sediment		
		Temp (F/C)	pH	Conduct- ivity	ORP				
14:32	473 mL	18.16	6.87	1.031	-2.4	clear	low		
14:35	370 mL	18.13	6.89	1.041	-7.5	clear	low		
14:38	400 mL	18.18	6.88	1.050	-6.1	clear	low		
14:41	473 mL	18.25	6.87	1.052	-5.8	clear	low		
14:44	400 mL	18.22	6.87	1.054	-9.6	clear	low		

Water level (ft. BMP) at End of Purge: 16.87 ft

### Field Notes:

# GROUNDWATER SAMPLING RECORD

Project Number:	16-1379	Project Name:	GLI-Las Vegas	Date	8-17-16
Sampling Location (well ID, etc.):	RC-3	Total Depth to LNAPL (ft. BMP):	—		
Gauged by:	JFA	Starting Water Level (ft. BMP):	17.05		
Casing Diameter (In ID):	4" ID	Total Depth (ft. BMP):	20.24		
Total Fluids Purged (gal)		Three Well Volume (gal)	—		

**Monitor Well Inspection:**

Condition of Concrete Pad: good

Condition of Lock, Well Cover and Cap: no lock

Condition of Well: good / slanted

## QUALITY ASSURANCE

**METHODS (describe):**

Cleaning Equipment: Alconox soap solution, tap water rinse, de-ionized water rinse

Purging: Disposable Bailer Sampling: Disposable Bailer

Disposal of Discharged Water: Collect purge water in 55-gallon drum for disposal

**INSTRUMENTS (Indicate make, model, I.D.):**

Water Level: SOLINST Thermometer: YSI

pH Meter/ORP: YSI Filtration: n/a

Conductivity/DO Meter: YSI Other: \_\_\_\_\_

## SAMPLE INVENTORY

Bottles Collected				Filtration (Y/N)	Preservation (type)		Remarks
Time	Vol.	Composition (glass, plastic)	Quantity				(quality control sample, other)
16:15							
Date : 8-17-16	Purge Characteristics	Cumul Vol. (Gallons)	Water Quality Data			Appearance	
Time	Temp (F)	pH	Conductivity	ORP + ~ 10		Color	Turbidity & Sediment
16:46	18.85	7.42	0.805	123.1	cloudy	med	
16:49	18.95	7.50	0.807	129.2	cloudy	med	
16:52	—	19.23	7.56	0.806	134.9	cloudy	med
16:55	—	19.27	7.57	0.806	136.9	cloudy	med
16:58	—	19.62	7.58	0.806	139.3	cloudy	med
17:01	19.84	7.40	0.827	131.6	cloudy	med	
17:04	19.33	7.38	0.839	110.0	cloudy	med	
17:07	19.21	7.38	0.834	111.5	cloudy	med	
17:10	18.99	7.40	0.828	117.5	cloudy	med	

Water level (ft. BMP) at End of Purge: 17.54

**Field Notes:** tubing fell into hole, used spare tubing brought from office.  
drawn down very quickly

# GROUNDWATER SAMPLING RECORD

Project Number: 16-1379 Project Name: GLI-Las Vegas Date 8-17-16  
 Sampling Location (well ID, etc.): GS-01 Total Depth to LNAPL (ft. BMP): —  
 Gauged by: JFA Starting Water Level (ft. BMP): 16.60  
 Casing Diameter (In ID): 4" ID Total Depth (ft. BMP): 30.18  
 Total Fluids Purged (gal) Three Well Volume (gal) —

## Monitor Well Inspection:

Condition of Concrete Pad: good

Condition of Lock, Well Cover and Cap: rubber sleeve

Condition of Well: good

## QUALITY ASSURANCE

### **METHODS (describe):**

Cleaning Equipment: Alconox soap solution, tap water rinse, de-ionized water rinse

Purging: Disposable Bailer Sampling: Disposable Bailer

Disposal of Discharged Water: Collect purge water in 55-gallon drum for disposal

### **INSTRUMENTS (Indicate make, model, I.D.):**

Water Level: SOLINST Thermometer: YSI

pH Meter/ORP: YSI Filtration: n/a

Conductivity/DO Meter: YSI Other: \_\_\_\_\_

## SAMPLE INVENTORY

Bottles Collected				Filtration (Y/N)	Preservation (type)		Remarks
Time	Vol.	Composition (glass, plastic)	Quantity				(quality control sample, other)
17:39	40mL	glass	6	N	4HC1 2 ICE	/	
Date :  Time	Purge Characteristics		Water Quality Data			Appearance	
	Cumul Vol. (Gallons)		Field Chemistry Parameters			Color	Turbidity & Sediment
			Temp (F/C)	pH	Conduct- ivity		
17:23	710 mL	18.25	6.78	1.066	-31.4	clear	low
17:28	600 mL	18.31	6.81	1.064	-29.5	clear	low
17:29	500 mL	18.39	6.83	1.065	-34.2	clear	low
17:32	400 mL	18.45	6.83	1.064	-35.1	clear	low
17:35	473 mL	18.52	6.84	1.064	-35.4	clear	low

Water level (ft. BMP) at End of Purge: 16.63 ft

### **Field Notes:**

## **GROUNDWATER SAMPLING RECORD**

Project Number: 16-1379 Project Name: GLI-Las Vegas Date 8-17-16  
Sampling Location (well ID, etc.): G802 Total Depth to LNAPL (ft. BMP): —  
Gauged by: JFA Starting Water Level (ft. BMP): 17.10  
Casing Diameter (In ID): 4" ID Total Depth (ft. BMP): 30.22  
Total Fluids Purged (gal) Three Well Volume (gal) —

## **Monitor Well Inspection:**

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#### Condition of Concrete Pad:

#### Condition of Lock, Well Cover and Cap:

### Condition of Well:

## **QUALITY ASSURANCE**

#### METHODS (describe):

Cleaning Equipment: Alconox soap solution, tap water rinse, de-ionized water rinse

Purging: Disposable Bailer Peri - Pump Sampling: Disposable Bailer Peri - Pump

Disposal of Discharged Water: Collect purge water in 55-gallon drum for disposal

**INSTRUMENTS (Indicate make, model, I.D.):**

Water Level: SOLINST Thermometer: YSI

Conductivity/DO Meter: YSI Other:

## SAMPLE INVENTORY

Bottles Collected				Filtration (Y/N)	Preservation (type)	Remarks (quality control sample, other)
Time	Vol.	Composition (glass, plastic)	Quantity			
18:54	41 ml	glass	6	N	4 HCl 2 ICG	—

Water level (ft. BMP) at End of Purge: 17 : 22 81

## **Field Notes:**

# GROUNDWATER SAMPLING RECORD

Project Number:	16-1379	Project Name:	GLI-Las Vegas	Date	8-17-16
Sampling Location (well ID, etc.):	<u>E-8-08</u>	Total Depth to LNAPL (ft. BMP):	<u>—</u>		
Gauged by:	JFA	Starting Water Level (ft. BMP):	<u>19.49</u>		
Casing Diameter (In ID):	4" ID	Total Depth (ft. BMP):	<u>31.62</u>		
Total Fluids Purged (gal)	Three Well Volume (gal) <u>—</u>				

### Monitor Well Inspection:

Condition of Concrete Pad: good

Condition of Lock, Well Cover and Cap: good

Condition of Well: good

### QUALITY ASSURANCE

#### METHODS (describe):

Cleaning Equipment: Alconox soap solution, tap water rinse, de-ionized water rinse

Purging: Disposable Bailer Sampling: Disposable Bailer

Disposal of Discharged Water: Collect purge water in 55-gallon drum for disposal

#### INSTRUMENTS (Indicate make, model, I.D.):

Water Level: SOLINST Thermometer: YSI

pH Meter/ORP: YSI Filtration: n/a

Conductivity/DO Meter: YSI Other: \_\_\_\_\_

### SAMPLE INVENTORY

Bottles Collected				Filtration (Y/N)	Preservation (type)		Remarks	
Time	Vol.	Composition (glass, plastic)	Quantity				(quality control sample, other)	
16:54	400 mL	glass	6	N	4HCl	21CE	<u>—</u>	
Date : _____								
Time	Purge Characteristics		Water Quality Data			Appearance		
	Cumul Vol. (Gallons)		Field Chemistry Parameters			Color	Turbidity & Sediment	
			Temp (F/C)	pH	Conduct- ivity			
16:37	400 mL	18.42	6.75	0.764	-2.6	clear/green	low	
16:40	500 mL	18.50	6.77	0.766	-5.0	clear/green	low	
16:43	450 mL	18.47	6.78	0.770	-6.5	clear	low	
16:46	473 mL	18.04	6.76	0.775	-6.3	clear	low	
16:49		18.06	6.71	0.775	-7.1	clear	low	

Water level (ft. BMP) at End of Purge: 17.59 ft.

#### Field Notes:

# GROUNDWATER SAMPLING RECORD

Project Number: 16-1379 Project Name: GLI-Las Vegas Date 8-17-16  
 Sampling Location (well ID, etc.): ES-01 Total Depth to LNAPL (ft. BMP): —  
 Gauged by: JFA Starting Water Level (ft. BMP): 16.32  
 Casing Diameter (In ID): 4" ID Total Depth (ft. BMP): 30.05  
 Total Fluids Purged (gal) Three Well Volume (gal)

## Monitor Well Inspection:

Condition of Concrete Pad: good

Condition of Lock, Well Cover and Cap: rusted lock

Condition of Well: good

## QUALITY ASSURANCE

### METHODS (describe):

Cleaning Equipment: Alconox soap solution, tap water rinse, de-ionized water rinse

Purging: Disposable Bailer Sampling: Disposable Bailer

Disposal of Discharged Water: Collect purge water in 55-gallon drum for disposal

### INSTRUMENTS (Indicate make, model, I.D.):

Water Level: SOLINST Thermometer: YSI

pH Meter/ORP: YSI Filtration: n/a

Conductivity/DO Meter: YSI Other: \_\_\_\_\_

## SAMPLE INVENTORY

Bottles Collected				Filtration (Y/N)	Preservation (type)		Remarks		
Time	Vol.	Composition (glass, plastic)	Quantity				(quality control sample, other)		
<u>14:05</u>	<u>40mL</u>	<u>glass</u>	<u>6</u>	<u>N</u>	<u>4HCU 21CE</u>		<u>—</u>		
<u>Date : 8-11-16</u>	<u>Purge Characteristics</u>  <u>Cumul Vol. (Gallons) mL</u>	Water Quality Data				<u>Appearance</u>	<u>REMARKS</u>		
		Field Chemistry Parameters							
		Temp (F/C)	pH	Conduct- ivity	ORP				
		<u>+/- 0.1</u>	<u>6.71</u>	<u>+/- 3%</u>	<u>+/- 10</u>				
<u>13:47</u>	<u>480 mL</u>	<u>18.91</u>	<u>6.70</u>	<u>0.545</u>	<u>114.5</u>	<u>clear</u>	<u>low</u>		
<u>13:50</u>	<u>380 mL</u>	<u>19.00</u>	<u>6.72</u>	<u>0.545</u>	<u>109.4</u>	<u>clear</u>	<u>low</u>		
<u>13:53</u>	<u>385 mL</u>	<u>19.00</u>	<u>6.73</u>	<u>0.541</u>	<u>107.6</u>	<u>clear</u>	<u>low</u>		
<u>13:57</u>	<u>385 mL</u>	<u>19.07</u>	<u>6.73</u>	<u>0.537</u>	<u>104.0</u>	<u>clear</u>	<u>low</u>		
<u>14:00</u>	<u>385 mL</u>	<u>18.88</u>	<u>6.72</u>	<u>0.534</u>	<u>96.6</u>	<u>clear</u>	<u>low</u>		
<u>14:03</u>	<u>385 mL</u>	<u>18.82</u>	<u>6.77</u>	<u>0.532</u>	<u>96.4</u>	<u>clear</u>	<u>low</u>		

Water level (ft. BMP) at End of Purge: 16.30 ft.

### Field Notes:

# GROUNDWATER SAMPLING RECORD

Project Number: 16-1379

Sampling Location (well ID, etc.): ES-05

Gauged by: JFA

Casing Diameter (In ID): 4" ID

Total Fluids Purged (gal)

Project Name: GLI-Las Vegas Date 8-17-16

Total Depth to LNAPL (ft. BMP): 16.58

Starting Water Level (ft. BMP): 16.58

Total Depth (ft. BMP): 30.11

Three Well Volume (gal)

**Monitor Well Inspection:**

Condition of Concrete Pad: good

Condition of Lock, Well Cover and Cap: plastic sleeve

Condition of Well: good

## QUALITY ASSURANCE

**METHODS (describe):**

Cleaning Equipment: Alconox soap solution, tap water rinse, de-ionized water rinse

Purging: Disposable Bailer Peri-Pump Sampling: Disposable Bailer Peri-pump

Disposal of Discharged Water: Collect purge water in 55-gallon drum for disposal

**INSTRUMENTS (Indicate make, model, I.D.):**

Water Level: SOLINST Thermometer: YSI

pH Meter/ORP: YSI Filtration: n/a

Conductivity/DO Meter: YSI Other:

## SAMPLE INVENTORY

Bottles Collected				Filtration (Y/N)	Preservation (type)		Remarks (quality control sample, other)	
Time	Vol.	Composition (glass, plastic)	Quantity					
18:18	40 mL	glass	6	N	4HCl 21C		—	
Date: 8-17-16	Purge Characteristics		Water Quality Data		Appearance		REMARKS  Strong HC odor	
	Cumul Vol. (Gallons) mL	Field Chemistry Parameters			Color	Turbidity & Sediment		
18:03		Temp (F/C)	pH	Conductivity				
18:06								
18:09								
18:12								
18:15								

Water level (ft. BMP) at End of Purge:

**Field Notes:**

# GROUNDWATER SAMPLING RECORD

Project Number:	16-1379	Project Name:	GLI-Las Vegas	Date	8-16-16
Sampling Location (well ID, etc.):	ES-16	Total Depth to LNAPL (ft. BMP):			
Gauged by:	JFA	Starting Water Level (ft. BMP):	19.30		
Casing Diameter (In ID):	4" ID	Total Depth (ft. BMP):	35.11		
Total Fluids Purged (gal)		Three Well Volume (gal)			

**Monitor Well Inspection:**

Condition of Concrete Pad: good

Condition of Lock, Well Cover and Cap: none

Condition of Well: good

### QUALITY ASSURANCE

**METHODS (describe):**

Cleaning Equipment: Alconox soap solution, tap water rinse, de-ionized water rinse

Purging: Disposable Bailer Sampling: Disposable Bailer?

Disposal of Discharged Water: Collect purge water in 55-gallon drum for disposal

**INSTRUMENTS (Indicate make, model, I.D.):**

Water Level: SOLINST Thermometer: YSI

pH Meter/ORP: YSI Filtration: n/a

Conductivity/DO Meter: YSI Other: \_\_\_\_\_

### SAMPLE INVENTORY

Bottles Collected				Filtration (Y/N)	Preservation (type)		Remarks (quality control sample, other)
Time	Vol.	Composition (glass, plastic)	Quantity				
12:28	40 mL	glass	6	N	4HCl 21C7		
Date : 8-16-16	Purge Characteristics	Water Quality Data			Appearance		REMARKS
	Cumul Vol. (Gallons)	Field Chemistry Parameters			Color	Turbidity & Sediment	
Time		Temp (F/C)	pH	Conduct- ivity			
12:13	600 mL	20.09	6.98	0.842	267.1	clear	low
12:16	473 mL	20.12	7.00	0.849	268.8	clear	low
12:19	500 mL	20.29	7.01	0.852	270.6	clear	low
12:22	500 mL	20.48	7.01	0.861	270.6	clear	low
12:25	400 mL	20.52	7.01	0.864	270.2	clear	low

Water level (ft. BMP) at End of Purge: 19.30

**Field Notes:**

# GROUNDWATER SAMPLING RECORD

Project Number: 16-1379 Project Name: GLI-Las Vegas Date 8-17-16  
 Sampling Location (well ID, etc.): ES-1 Total Depth to LNAPL (ft. BMP):  
 Gauged by: JFA Starting Water Level (ft. BMP): 18.81  
 Casing Diameter (In ID): 4" ID Total Depth (ft. BMP): 34.13  
 Total Fluids Purged (gal) Three Well Volume (gal)

**Monitor Well Inspection:**  
 Condition of Concrete Pad: good

Condition of Lock, Well Cover and Cap: none

Condition of Well: good

## QUALITY ASSURANCE

### METHODS (describe):

Cleaning Equipment: Alconox soap solution, tap water rinse, de-ionized water rinse

Purging: Disposable Bailer Sampling: Disposable Bailer

Disposal of Discharged Water: Collect purge water in 55-gallon drum for disposal

### INSTRUMENTS (Indicate make, model, I.D.):

Water Level: SOLINST Thermometer: YSI

pH Meter/ORP: YSI Filtration: n/a

Conductivity/DO Meter: YSI Other: \_\_\_\_\_

## SAMPLE INVENTORY

Bottles Collected				Filtration (Y/N)	Preservation (type)		Remarks
Time	Vol.	Composition (glass, plastic)	Quantity				(quality control sample, other)
11:28	40 ml	glass	6	N	4 HCl 2 kg		
Date: 8-18-16 17:18	Purge Characteristics Cumul Vol. (Gallons) Liters mL	Water Quality Data Field Chemistry Parameters mS/cm		Color	Turbidity & Sediment		REMARKS
Time	Temp (F/C)	pH	Conductivity	ORP +~ 10			
10:46				+/- 80	+/- 10		
10:49	500 mL	17.48	6.79	0.669	320.6	clear	none
10:52	500 mL	17.37	6.79	0.669	280.2	clear	none
10:55	500 mL	17.47	6.80	0.669	254.1	clear	none
10:58	400 mL	17.48	6.80	0.670	228.3	clear	none
11:01	600 mL	17.68	6.80	0.670	211.2	clear	none
11:04	400 mL	17.57	6.79	0.670	191.4	clear	none
11:07	500 mL	17.49	6.79	0.670	185.6	clear	none
11:10	500 mL	17.49	6.80	0.671	171.0	clear	none

Water level (ft. BMP) at End of Purge: 18.48 ft.

### Field Notes:

11:13	500 mL	17.56	6.80	0.670	168.5	clear	none
11:16	500 mL	17.47	6.80	0.671	154.8	clear	none
11:19	500 mL	17.44	6.79	0.671	148.3	clear	none

# GROUNDWATER SAMPLING RECORD

Project Number:	16-1379	Project Name:	GLI-Las Vegas	Date	8-16-16
Sampling Location (well ID, etc.):	<u>ES 18</u>	Total Depth to LNAPL (ft. BMP):	<u>—</u>		
Gauged by:	JFA	Starting Water Level (ft. BMP):	<u>17.12</u>		
Casing Diameter (In ID):	4" ID	Total Depth (ft. BMP):	<u>29.23</u>		
Total Fluids Purged (gal)	Three Well Volume (gal) <u>—</u>				
<b>Monitor Well Inspection:</b>					
Condition of Concrete Pad:	<u>good</u>				
Condition of Lock, Well Cover and Cap:	<u>no lock</u>				
Condition of Well:	<u>good</u>				

## QUALITY ASSURANCE

### METHODS (describe):

Cleaning Equipment: Alconox soap solution, tap water rinse, de-ionized water rinse

Purging: Disposable Bailer Sampling: Disposable Bailer

Disposal of Discharged Water: Collect purge water in 55-gallon drum for disposal

### INSTRUMENTS (Indicate make, model, I.D.):

Water Level:	SOLINST	Thermometer:	YSI
pH Meter/ORP:	YSI	Filtration:	n/a
Conductivity/DO Meter:	YSI	Other:	

## SAMPLE INVENTORY

Bottles Collected				Filtration (Y/N)	Preservation (type)		Remarks	
Time	Vol.	Composition (glass, plastic)	Quantity				(quality control sample, other)	
10:18	40 mL	glass	6	N	L HCl 21(C)		—	
Date: 8-18-16	Purge Characteristics Cumul Vol. (Gallons) ml	Water Quality Data			Appearance		REMARKS	
		Field Chemistry Parameters			Color	Turbidity & Sediment		
		Temp (F/C)	pH	Conductivity				
		+/- 0.1	+/- 3%	+/- 10				
9:46	400 mL	18.40	6.76	0.716	21.1	clear	low	
9:49	500 mL	18.72	6.75	0.786	17.5	clear	low	
9:52	600 mL	18.07	6.73	0.842	16.9	clear	low	
9:55	500 mL	18.36	6.73	0.883	14.2	clear	hw	
9:58	500 mL	18.45	6.72	0.921	13.8	clear	low	
10:01	500 mL	18.45	6.71	0.960	14.9	clear	low	
10:04	500 mL	18.51	6.70	0.978	15.1	clear	low	
10:07	400 mL	18.32	6.70	0.997	16.2	clear	low	
10:10	400 mL	18.12	6.69	0.011	17.0	clear	low	

Water level (ft. BMP) at End of Purge:

17.22 ft

### Field Notes:

10:13

500 mL

18.07 6.68

1.018 17.8

clear low

# GROUNDWATER SAMPLING RECORD

Project Number: 16-1379 Project Name: GLI-Las Vegas Date 8-18-16  
 Sampling Location (well ID, etc.): ES-09 Total Depth to LNAPL (ft. BMP): —  
 Gauged by: JFA Starting Water Level (ft. BMP): 15.94  
 Casing Diameter (In ID): 4" ID Total Depth (ft. BMP): 35.04 ft  
 Total Fluids Purged (gal) — Three Well Volume (gal) —

### Monitor Well Inspection:

Condition of Concrete Pad: good

Condition of Lock, Well Cover and Cap: no lock

Condition of Well: good

### QUALITY ASSURANCE

#### METHODS (describe):

Cleaning Equipment: Alconox soap solution, tap water rinse, de-ionized water rinse

Purging: Disposable Bailer Peri-pump Sampling: Disposable Bailer Peri-Pump

Disposal of Discharged Water: Collect purge water in 55-gallon drum for disposal

#### INSTRUMENTS (Indicate make, model, I.D.):

Water Level: SOLINST Thermometer: YSI

pH Meter/ORP: YSI Filtration: n/a

Conductivity/DO Meter: YSI Other: —

### SAMPLE INVENTORY

Bottles Collected				Filtration (Y/N)	Preservation (type)		Remarks
Time	Vol.	Composition (glass, plastic)	Quantity				(quality control sample, other)
11:03	40 mL	glass	6	N	4HCl 2 ICE		—
Date : 8-18-16	Purge Characteristics		Water Quality Data		Appearance		REMARKS
Time	Gross Vol. (*gallons) mL		Field Chemistry Parameters		Color	Turbidity & Sediment	Slight HC odor
			Temp (F/C)	pH	Conductivity	ORP	
10:46	500 mL	18.73	6.91	0.788	96.8	Clear	low
10:49	500 mL	18.62	6.95	0.788	96.1	Clear	low
10:52	500 mL	18.62	6.97	0.788	95.2	Clear	low
10:55	500 mL	18.61	6.98	0.788	96.9	Clear	low
10:58	400 mL	18.65	6.99	0.789	99.3	Clear	low

Water level (ft. BMP) at End of Purge: 16.00 ft.

#### Field Notes:

# GROUNDWATER SAMPLING RECORD

Project Number:	16-1379	Project Name:	GLI-Las Vegas	Date	8-17-16
Sampling Location (well ID, etc.):	<u>ES-11</u>	Total Depth to LNAPL (ft. BMP):	—		
Gauged by:	JFA	Starting Water Level (ft. BMP):	16.45		
Casing Diameter (In ID):	4" ID	Total Depth (ft. BMP):	85.00		
Total Fluids Purged (gal)		Three Well Volume (gal)	—		

**Monitor Well Inspection:**

Condition of Concrete Pad: good

Condition of Lock, Well Cover and Cap: no lock, cap difficult to put in place.

Condition of Well: good

## QUALITY ASSURANCE

**METHODS (describe):**

Cleaning Equipment: Alconox soap solution, tap water rinse, de-ionized water rinse

Purging: Disposable Bailer Sampling: Disposable Bailer

Disposal of Discharged Water: Collect purge water in 55-gallon drum for disposal

**INSTRUMENTS (Indicate make, model, I.D.):**

Water Level: SOLINST Thermometer: YSI

pH Meter/ORP: YSI Filtration: n/a

Conductivity/DO Meter: YSI Other: \_\_\_\_\_

## SAMPLE INVENTORY

Bottles Collected				Filtration (Y/N)	Preservation (type)		Remarks	
Time	Vol.	Composition (glass, plastic)	Quantity				(quality control sample, other)	
13:19	40 mL	glass	6	n	4HCl 21C6	—		
Date : 8-17-16	Purge Characteristics	Water Quality Data			Appearance		REMARKS	
	Cumul Vol. (Gallons)	Field Chemistry Parameters			Color	Turbidity & Sediment		
Time		Temp (F)	pH	Conductivity				
		+60.1	7.79	+/- 30				
13:04	473 mL	16.85	7.72	0.903	262.3	clear	low	
13:07	473 mL	16.27	7.79	0.908	260.7	clear	low	
13:10	480 mL	16.25	7.82	0.908	260.0	clear	low	
13:13	485 mL	16.24	7.83	0.908	260.5	clear	low	
13:16	591 mL	16.19	7.83	0.908	262.1	clear	low	
Water level (ft. BMP) at End of Purge:	<u>16.50 ft.</u>							

**Field Notes:**