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February 12, 2015

**RECEIVED**

*By Alameda County Environmental Health at 12:01 pm, Mar 02, 2015*

Mr. Mark Detterman  
Senior Hazardous Materials Specialist, PG, CEG  
Alameda County Environmental Health  
1131 Harbor Bay Parkway  
Alameda, CA 94502

Re: Alameda County Letters dated April 7, 2014 and January 20, 2015  
Request for Focused Site Conceptual Model and Data Gap Work Plan  
2013 San Pablo Ave  
Oakland, CA 94608  
Fuel Leak Case No. RO0000074  
Geotracker Global ID T0600100666

Dear Mr. Detterman:

Greyhound Lines, Inc. (Greyhound) is transmitting the attached documents to Alameda County Environmental Health (ACEH) in response to ACEH letters dated April 7, 2014 and January 20, 2015 regarding the above referenced site (Site). The attached documents include a Green Star Environmental letter dated February 12, 2015 with a Focused Site Conceptual Model and Data Gap Investigation Work Plan for the Site and a Groundwater Monitoring Report dated February 10, 2015 which documents a groundwater sampling event conducted at the Site in August 2014.

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached documents are true and correct to the best of my knowledge.

Sincerely,

**GREYHOUND LINES, INC.**



Susan Kirkpatrick  
Sr. Environmental Project & Program Manager



**GREEN STAR**  
**ENVIRONMENTAL**

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

Green Star Environmental Report No. 15-1379

Report Prepared For:

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

February 10, 2015

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**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 February 10, 2015 has been prepared and the related activities were conducted in accordance with the required standards.

February 10, 2015

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DATE

*William Little*



A circular professional seal for William R. Little, a Professional Geologist in the State of California. The seal contains the text "PROFESSIONAL GEOLOGIST", "WILLIAM R. LITTLE", and "No. 7473".

---

William Little, P.G.  
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Report Prepared By:

Green Star Environmental  
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*Terrance Harriman*

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Terrance Harriman  
Project Manager

*Leonard Albright*

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Leonard C. Albright, R.E.M.  
Principal

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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). Following receipt of a letter from Alameda County Environmental Health (ACEH) dated April 7, 2014, Green Star proposed to conduct a groundwater sampling event to obtain current data prior to responding to the letter. A groundwater monitoring event was conducted at the Site in August 2014 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 utilized 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 12 monitoring wells at the Site was conducted in August 2014. 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 ES-1 was also inaccessible during the August 2014 event. Monitoring wells BC-2 and BC-3 were not sampled due to concerns about each monitoring well's integrity. 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 Keck® interface probe on August 4 and 6, 2014. Table 2a presents a summary of groundwater gauging data from the August 2014 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 2014 and has not been detected since October 1997. Groundwater elevations in the monitoring wells gauged ranged from 7.13 feet above msl in monitoring well ES-3 to 8.56 feet above msl in monitoring well ES-7. The calculated hydraulic gradient was approximately 0.04 ft/ft. The groundwater flow direction was radial in all directions from in the vicinity of monitoring wells ES-5 and ES-7. The groundwater gradient in August 2014 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. Due to the extended period of time between sampling events, an initial purge of groundwater was extracted from each monitoring well for a period of ten minutes. Following this initial purge, 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 an 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 10 monitoring wells (BC-1, ES-2 through ES-9, and ES-11). BC-2 and BC-3 were not sampled due to each monitoring well's sealing cap being missing for an unknown length of time and concerns of infiltration of surface water. Each monitoring well cap was replaced with a new sealing compression cap. Monitoring well ES-1 was not accessible during the groundwater monitoring event and was not sampled. 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-milliter (mL) glass vials preserved with HCl. A laboratory prepared 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 2014 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 were present in five monitoring wells (BC-1, ES-2, ES-3, ES-5, and ES-8). 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 (BC-1, ES-2, ES-3, and ES-5) and at a maximum concentration of 850 µg/L in the sample collected from monitoring well ES-2. Toluene, Ethylbenzene, and Xylenes were detected at concentrations that exceeded their respective RWQCB ESL for non-drinking water resources in the sample collected from monitoring well ES-5 at maximum concentrations of 130 µg/L, 220 µg/L, and 210 µg/L respectively. 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 six monitoring wells (BC-1, ES-2, ES-3, ES-4, ES-5, and ES-8). TPH-g was detected at a concentration that exceeded the RWQCB ESL for non-drinking water resources in five monitoring wells (BC-1, ES-2, ES-3, ES-5 and ES-8) and at a maximum concentration of 9,600 µg/L in the sample collected from monitoring well ES-5. TPH-d was detected at a concentration that exceeded the RWQCB ESL for non-drinking water resources in four monitoring wells (BC-1, ES-2, ES-3, and ES-5) and at a maximum concentration of 1,100 µg/L in the samples collected from monitoring wells ES-2 and ES-5. TPH-o was not detected above laboratory detection limits in any of the monitoring wells that were sampled. 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**

The only miscellaneous petroleum hydrocarbons detected above laboratory detection limits were naphthalene and DIPE. Naphthalene was detected in five monitoring wells (BC-1, ES-3, ES-4, ES-5, and ES-8) and exceeded the RWQCB ESL for non-drinking water resources in two monitoring wells (ES-3 and ES-5) and at a maximum concentration of 99 µg/L in ES-5. DIPE was detected in six monitoring wells (BC-1, ES-2, ES-3, ES-4, ES-8, and ES-9) and at a maximum concentration of 85 µg/L in ES-2. MTBE, ETBE, TAME, EDB, EDC, TBA 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 2014. 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 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.
- Currently, the monitoring well network at the Site is comprised of 13 monitoring wells. In August 2014, total depths, depths to groundwater, and the presence of PSH were measured in each monitoring well. Ten monitoring wells were sampled for BTEX, TPH and miscellaneous petroleum hydrocarbons. BC-2 and BC-3 were not sampled due to each monitoring well's sealing cap being missing for an unknown length of time and concerns of infiltration of surface water. Each monitoring well cap was replaced with a new sealing compression cap. Monitoring well ES-1 was not accessible during the groundwater monitoring event and was not sampled.
- PSH was not detected in August 2014 and has not been detected since October 1997. Groundwater elevations in the monitoring wells gauged ranged from 7.13 feet above msl in monitoring well ES-3 to 8.56 feet above msl in monitoring well ES-7. The calculated hydraulic gradient was approximately 0.04 ft/ft. The groundwater flow direction was radial in all directions from in the vicinity of monitoring wells ES-5 and ES-7.
- 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 850 µg/L in the sample collected from monitoring well ES-2. Toluene, Ethylbenzene, and Xylenes were detected at maximum concentrations of 130 µg/L, 220 µg/L, and 210 µg/L respectively in the sample collected from monitoring well ES-5. Naphthalene was detected at a maximum concentration of 99 µg/L in the sample collected from monitoring well ES-5. TPH-g was detected at a maximum concentration of 9,600 µg/L in the sample collected from monitoring well ES-5. TPH-d was detected at a maximum concentration of 1,100 µg/L in the samples collected from monitoring wells ES-2 and ES-5. DIPE was detected in six monitoring wells but concentrations did not exceed the RWQCB ESL for non-drinking water resources. TPH-o, MTBE, ETBE, TAME, EDB, EDC, TBA, and ethanol were not detected above laboratory detection limits and 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. 14-1379**

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 Sorgee 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. 14-1379**

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.

**Table 1 - Summary of Previous Reports  
Oakland Bus Terminal  
2103 San Pablo Avenue  
Oakland, Alameda County, California  
Green Star Project No. 14-1379**

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. 14-1379**

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. 14-1379**

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 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 Risk Management Plan in place.
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. 14-1379**

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 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.

ACEH = Alameda County Environmental Health

RWQCB = Regional Water Quality Control Board

**Table 2a - Summary of Groundwater Level Measurements (August 2014)**

Oakland Bus Terminal  
2103 San Pablo Ave.  
Oakland, Alameda County, California  
Green Star Project No. 14-1379

Well No.	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	08/04/14	unknown	24.41	--	17.20	--	29.71	7.21
BC-2 <sup>2</sup>	08/04/14	unknown	24.37	--	17.12	--	20.16	na
BC-3 <sup>2</sup>	08/04/14	unknown	24.42	--	17.22	--	20.20	na
ES-1	08/04/14	10.5-30.5	24.11	nm	nm	nm	nm	nm
ES-2	08/04/14	10.5-30.5	24.66	--	17.39	--	30.24	7.27
ES-3	08/04/14	15-35	24.93	--	17.80	--	31.72	7.13
ES-4	08/04/14	10.5-30.5	23.93	--	16.68	--	30.00	7.25
ES-5	08/04/14	10.5-30.5	24.08	--	15.83	--	30.31	8.25
ES-6	08/04/14	15-35	27.06	--	19.64	--	35.11	7.42
ES-7	08/04/14	15-35	25.66	--	17.10	--	31.61	8.56
ES-8	08/06/14	15-35	24.74	--	17.09	--	29.30	7.65
ES-9	08/06/14	15-35	23.33	--	16.05	--	34.90	7.28
ES-10 <sup>3</sup>	08/04/14	15-35	nm	nm	nm	nm	nm	nm
ES-11	08/04/14	15-35	24.08	--	16.60	--	35.10	7.48

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 well 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. 14-1379**

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

**Table 2b - Cumulative Summary of Groundwater Level Measurements**  
**Oakland Bus Terminal**  
**2103 San Pablo Ave.**  
**Oakland, Alameda County, California**  
**Green Star Project No. 14-1379**

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>

**Table 2b - Cumulative Summary of Groundwater Level Measurements**  
**Oakland Bus Terminal**  
**2103 San Pablo Ave.**  
**Oakland, Alameda County, California**  
**Green Star Project No. 14-1379**

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>

**Table 2b - Cumulative Summary of Groundwater Level Measurements**  
**Oakland Bus Terminal**  
**2103 San Pablo Ave.**  
**Oakland, Alameda County, California**  
**Green Star Project No. 14-1379**

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



**Table 2b - Cumulative Summary of Groundwater Level Measurements**  
**Oakland Bus Terminal**  
**2103 San Pablo Ave.**  
**Oakland, Alameda County, California**  
**Green Star Project No. 14-1379**

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

**Table 2b - Cumulative Summary of Groundwater Level Measurements**  
**Oakland Bus Terminal**  
**2103 San Pablo Ave.**  
**Oakland, Alameda County, California**  
**Green Star Project No. 14-1379**

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

**Table 2b - Cumulative Summary of Groundwater Level Measurements**  
**Oakland Bus Terminal**  
**2103 San Pablo Ave.**  
**Oakland, Alameda County, California**  
**Green Star Project No. 14-1379**

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

**Table 2b - Cumulative Summary of Groundwater Level Measurements**  
**Oakland Bus Terminal**  
**2103 San Pablo Ave.**  
**Oakland, Alameda County, California**  
**Green Star Project No. 14-1379**

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

**Table 2b - Cumulative Summary of Groundwater Level Measurements**  
**Oakland Bus Terminal**  
**2103 San Pablo Ave.**  
**Oakland, Alameda County, California**  
**Green Star Project No. 14-1379**

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

**Table 2b - Cumulative Summary of Groundwater Level Measurements**  
**Oakland Bus Terminal**  
**2103 San Pablo Ave.**  
**Oakland, Alameda County, California**  
**Green Star Project No. 14-1379**

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

**Table 2b - Cumulative Summary of Groundwater Level Measurements**  
**Oakland Bus Terminal**  
**2103 San Pablo Ave.**  
**Oakland, Alameda County, California**  
**Green Star Project No. 14-1379**

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



**Table 2b - Cumulative Summary of Groundwater Level Measurements**  
**Oakland Bus Terminal**  
**2103 San Pablo Ave.**  
**Oakland, Alameda County, California**  
**Green Star Project No. 14-1379**

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

**Table 2b - Cumulative Summary of Groundwater Level Measurements**  
**Oakland Bus Terminal**  
**2103 San Pablo Ave.**  
**Oakland, Alameda County, California**  
**Green Star Project No. 14-1379**

<b>Well No.</b>	<b>Date</b>	<b>Elevation to Top of Casing (feet MSL)<sup>1</sup></b>	<b>Depth to Phase-Separated Liquid (feet BMP)</b>	<b>Depth to Water (feet BMP)</b>	<b>Product Thickness (feet)</b>	<b>Depth to Bottom (feet BMP)</b>	<b>Groundwater Elevation (feet MSL)</b>
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

**Table 2b - Cumulative Summary of Groundwater Level Measurements**  
**Oakland Bus Terminal**  
**2103 San Pablo Ave.**  
**Oakland, Alameda County, California**  
**Green Star Project No. 14-1379**

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

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 2014)**  
**Oakland Bus Terminal**  
**2103 San Pablo Avenue**  
**Oakland, Alameda County, California**  
**Green Star Project No. 14-1379**

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	08/06/14	<b>74</b>	7.6	10	16	108	10	<.50	<0.35	<1.1	42	<0.60	<0.45	<4.7	<110	<b>1200</b>	<b>270</b>	<250
BC-2	08/06/14	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
BC-3	08/06/14	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
ES-1	08/06/14	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
ES-2	08/06/14	<b>850</b>	61	14 J	87	1012	<8.0	<5.0	<3.5	<11	85	<6.0	<4.5	<47	<1100	<b>6200</b>	<b>1100</b>	<250
ES-3	08/05/14	<b>290</b>	36	42	55	423	<b>31</b>	<2.0	<1.4	<4.4	75	<2.4	<1.8	<19	<440	<b>4000</b>	<b>830</b>	<250
ES-4	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
ES-5	08/06/14	<b>400</b>	<b>130</b>	<b>220</b>	<b>210</b>	960	<b>99</b>	<3.3	<2.3	<7.3	<2.3	<4.0	<3.0	<31	<730	<b>9600</b>	<b>1100</b>	<250
ES-6	08/05/14	<0.051	<0.040	<0.050	<0.25	BDL	< 0.016	<0.10	<0.070	<0.22	<0.070	<0.12	<0.090	<0.94	<22	<50	<50	<250
ES-7	08/06/14	<0.051	<0.040	<0.050	<0.25	BDL	< 0.016	<0.10	<0.070	<0.22	<0.070	<0.12	<0.090	<0.94	<22	<50	<50	<250
ES-8	08/06/14	3.4	0.33 J	1.3 J	<1.2	5.03	1.2 J	<0.50	<0.35	<1.1	74	<0.60	<0.45	<4.7	<110	<b>730</b>	71	<250
ES-9	08/06/14	<0.051	<0.040	<0.050	<0.25	BDL	< 0.016	<0.10	<0.070	<0.22	1.3	<0.12	<0.090	<0.94	<22	<50	<50	<250
ES-10	08/06/14	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne
ES-11	08/06/14	<0.051	<0.040	<0.050	<0.25	BDL	< 0.016	<0.10	<0.070	<0.22	<0.070	<0.12	<0.090	<0.94	<22	<50	<50	<250
<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>1800</b>	ne	ne	ne	<b>150</b>	<b>200</b>	<b>18000</b>	ne	<b>210</b>	<b>210</b>	<b>210</b>
<b>RWQCB ESLs (potential vapor intrusion concerns, commercial)</b>		<b>1800</b>	<b>530000</b>	<b>170000</b>	<b>160000</b>	ne	<b>11000</b>	<b>80000</b>	ne	ne	ne	<b>510</b>	<b>690</b>	(use soil gas)	ne	(use soil gas)	(use soil gas)	ne

Analytical test results are reported in micrograms per liter (µg/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

**Table 3b - Cumulative Summary of Groundwater Analytical Results**  
**Oakland Bus Terminal**  
**2103 San Pablo Avenue**  
**Oakland, Alameda County, California**  
**Green Star Project No. 14-1379**

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	<0.5	<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	
	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	nt	BDL	nt	nt	
01/07/93		BDL	1	2	10	13	nt	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	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	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	nt	BDL	1100	nt	nt
04/11/95		BDL	BDL	BDL	BDL	BDL	nt	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	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	
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		
BC-3	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	nt	BDL	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	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	BDL	nt	nt	
07/15/97	BDL	BDL	BDL	BDL	BDL	nt	BDL	nt	nt	nt	nt	nt	nt	nt	BDL	490	nt	BDL		

**Table 3b - Cumulative Summary of Groundwater Analytical Results**  
**Oakland Bus Terminal**  
**2103 San Pablo Avenue**  
**Oakland, Alameda County, California**  
**Green Star Project No. 14-1379**

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-1	10/07/97	BDL	BDL	1.9	2	3.9	nt	BDL	nt	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	<0.14	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	
	11/19/91	130	43	10	91	274	nt	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	nt	nt	100	BDL	nt	nt
	07/16/97	76	8	11	25	120	nt	BDL	nt	nt	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	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		
ES-2	11/19/91	390	96	78	310	874	nt	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	nt	3800	1800	nt	nt	
	07/15/97	190	140	73	250	653	nt	81	nt	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	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	<0.14	85	<0.17	<0.23	<17	<74	6000	1100	980	nt	
	07/29/10	800	57	15 J	78	950	11 J	<8.3	<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	<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	6.6	<25	6900	1200	<250	nt	
08/06/14	850	61	14 J	87	1012	<8.0	<5.0	<3.5	<11	85	<6.0	<4.5	<47	<1100	6200	1100	<250	nt		
ES-3	11/19/91	61	16	14	33	124	nt	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	nt	1300	nt	nt	
	10/06/92	93	18	BDL	11	122	nt	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	nt	BDL	nt	nt	
	04/06/93	53	BDL	67	78	198	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	4500	510	nt	nt
	07/23/93	28	6	5	5	44	nt	nt	nt	nt	nt	nt	nt	nt	nt	1500	600	nt	nt	
	10/07/93	2	1	BDL	2	5	nt	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	nt	530	nt	nt	nt
	04/07/94	10	9	26	34	79	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	850	910	nt	nt
	07/13/94	2	1	1	3	7	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	370	280	nt	nt
	10/06/94	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt
	01/13/95	19	15	72	88	194	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	1600	1100	nt	nt
	04/11/95	20	7	36	22	85	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	940	390	nt	nt
	07/06/95	6	BDL	7	BDL	13	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	240	1200	nt	nt
	10/05/95	2	2	BDL	BDL	4	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	110	nt	nt
	01/05/96	BDL	BDL	BDL	BDL	BDL	nt	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	nt	120	nt	nt
07/09/96	BDL	BDL	BDL	BDL	BDL	nt	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	nt	BDL	BDL	nt	nt	
01/16/97	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	51	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. 14-1379**

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-4	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	
	11/19/91	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt
	07/08/92	31	6	BDL	3	39	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt
	10/06/92	100	8	BDL	8	116	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt
	01/07/93	30	7	8	16	60	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt
	04/06/93	33	2	2	5	42	nt	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	nt	<500	<500	nt	nt
	10/07/93	8	BDL	BDL	2	10	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt
	01/05/94	15	1	0.4	3	19	nt	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	nt	170	BDL	nt	nt
	07/13/94	9	BDL	BDL	1	10	nt	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	nt	100	BDL	nt	nt
	01/13/95	12	BDL	BDL	2	14	nt	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	nt	180	BDL	nt	nt
	07/06/95	100	10	26	61	197	nt	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	nt	1200	170	nt	nt
	01/05/96	34	BDL	5	4	BDL	nt	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	BDL	nt	nt
	07/09/96	43	5	21	17	86	nt	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	nt	860	BDL	nt	nt
01/16/97	5	BDL	BDL	1	BDL	nt	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	nt	BDL	100	nt	nt	
07/15/97	110	11	42	40	203	nt	BDL	nt	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	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	<0.3	<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	17	<8.3	<8.3	<67	<1700	9700	2200	<250	nt		
ES-5	11/19/91	2100	390	840	6000	9330	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	950000	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	
	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	



**Table 3b - Cumulative Summary of Groundwater Analytical Results**  
**Oakland Bus Terminal**  
**2103 San Pablo Avenue**  
**Oakland, Alameda County, California**  
**Green Star Project No. 14-1379**

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-6	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	960.00	99	<3.3	<2.3	<7.3	<2.3	<4.0	<3.0	<31	<730	9600	1100	<250	nt	
	07/23/93	<0.3	<0.3	<0.3	<0.6	BDL	nt	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	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	BDL	nt	nt
	10/06/94	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	BDL	nt	nt
	01/13/95	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	BDL	nt	nt
	04/11/95	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	BDL	nt	nt
	07/06/95	BDL	BDL	BDL	2	2	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	BDL	nt	nt
	10/05/95	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	BDL	nt	nt
	01/05/96	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	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	nt
	07/09/96	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	BDL	nt	nt
	10/08/96	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	BDL	nt	nt
	01/16/97	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	BDL	nt	nt
	04/17/97	BDL	BDL	BDL	BDL	BDL	nt	BDL	nt	nt	nt	nt	nt	nt	nt	BDL	120	nt	nt	nt
	07/15/97	BDL	BDL	BDL	BDL	BDL	nt	BDL	nt	nt	nt	nt	nt	nt	nt	BDL	60	nt	BDL	BDL
	10/07/97	BDL	BDL	BDL	BDL	BDL	nt	BDL	nt	nt	nt	nt	nt	nt	nt	BDL	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	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	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	<16	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	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	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	<50	<250	nt	nt	
12/13/11	4.5	0.54	0.49 J	0.68	5.72	0.52	<0.25	<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	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	BDL	BDL	nt	nt
	01/05/94	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	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	BDL	nt	nt
	10/06/94	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	BDL	nt	nt
	01/13/95	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	BDL	nt	nt
	04/11/95	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	BDL	nt	nt
	07/06/95	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	BDL	nt	nt
	10/05/95	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	BDL	nt	nt
	07/09/96	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	BDL	nt	nt
	04/17/97	BDL	BDL	BDL	BDL	BDL	nt	BDL	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	BDL	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	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	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	<17	<74	27 J	31 J	93
	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	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	nt
02/09/11	<0.25	<0.25	<0.25	<0.25	BDL	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<2	<50	<50	<50	<250	nt	nt	
12/13/11	2.7	0.40 J	0.42 J	0.56	4.08	0.33 J	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<1.0	<25	<50	<50	<250	nt	nt	
08/06/14	<0.051	<0.040	<0.050	<0.25	0.00	< 0.016	<0.10	<0.070	<0.22	<0.070	<0.12	<0.090	<0.94	<22	<50	<50	<250	nt	nt	
ES-8	07/23/93	<0.3	<0.3	<0.3	<0.6	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	BDL	BDL	nt	nt
	01/05/94	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	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. 14-1379**

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-9	04/07/94	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt	
	07/13/94	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt	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	
	09/24/08	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
	04/08/09	15	1.4 J	2 J	2.7 J	21.1	0.3 J	<0.3	<0.14	<0.14	<0.14	56	<0.17	<0.23	<17	<74	1600	2300	<33	nt
	07/14/09	6	0.83 J	0.61 J	<0.13	7.4	<0.11	<0.32	<0.14	<0.14	45	<0.17	<0.23	<17	<74	1800	540	230	nt	
	10/06/09	7	1 J	1 J	1 J	10	0.2 J	<0.32	<0.14	<0.14	36	<0.17	<0.23	<17	<74	1900	270	170	nt	
	07/28/10	<0.25	<0.25	<0.25	<0.25	BDL	<0.25	<0.25	<0.25	<0.25	120	<0.25	<0.25	<1	<25	260	84	<250	nt	
	02/08/11	1	<0.25	<0.25	<0.25	1.000	<0.25	<0.25	<0.25	<0.25	120	<0.25	<0.25	<2	<50	280	91	<250	nt	
	12/13/11	0.36 J	<0.25	<0.25	<0.25	0.36	<0.25	<0.25	<0.25	<0.25	34	<0.25	<0.25	<1.0	<25	280	61	<250	nt	
	08/06/14	3.4	0.33 J	1.3 J	<1.2	5.03	1.2 J	<0.50	<0.35	<1.1	74	<0.60	<0.45	<4.7	<110	730	71	<250	nt	
	07/23/93	<0.3	<0.3	<0.3	<0.6	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	BDL	BDL	nt	nt
	01/05/94	BDL	BDL	BDL	BDL	BDL	nt	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	nt	BDL	BDL	nt	nt
07/13/94	BDL	BDL	BDL	BDL	BDL	nt	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	nt	BDL	BDL	nt	nt	
01/13/95	BDL	BDL	BDL	BDL	BDL	nt	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	nt	BDL	BDL	nt	nt	
07/06/95	BDL	BDL	BDL	BDL	BDL	nt	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	nt	BDL	BDL	nt	nt	
09/24/08	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	
04/08/09	<0.1	<0.2	<0.1	<0.1	BDL	<0.1	<0.3	<0.14	0.55 J	0.56 J	<0.17	<0.23	<17	<74	<23	<16	210	nt		
07/15/09	<0.1	<0.29	<0.15	<0.13	BDL	<0.1	<0.32	<0.14	0.66 J	0.52 J	<0.17	<0.23	<17	<74	<16	28 J	61	nt		
10/06/09	<0.1	<0.29	<0.15	0.2 J	0.2	<0.1	<0.32	<0.14	<0.14	0.5 J	<0.17	<0.23	<17	<74	22 J	27 J	52	nt		
07/28/10	<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		
02/08/11	<0.25	<0.25	<0.25	<0.25	BDL	<0.25	<0.25	<0.25	<0.25	0.45 J	<0.25	<0.25	<2	<50	<50	<50	<250	nt		
12/13/11	<0.25	<0.25	<0.25	<0.25	BDL	<0.25	<0.25	<0.25	<0.25	6.0000	<0.25	<0.25	<1.0	<25	<50	<50	<250	nt		
08/06/14	<0.051	<0.040	<0.050	<0.25	0.00	< 0.016	<0.10	<0.070	<0.22	1.3	<0.12	<0.090	<0.94	<22	<50	<50	<250	nt		
ES-10	07/23/93	<0.3	<0.3	<0.3	<0.6	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	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	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	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	
	09/24/08	dne	dne	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	dne	dne
	07/15/09	dne	dne	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	dne	dne
07/29/10	dne	dne	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	dne	dne	
12/13/11	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	dne	

**Table 3b - Cumulative Summary of Groundwater Analytical Results  
Oakland Bus Terminal  
2103 San Pablo Avenue  
Oakland, Alameda County, California  
Green Star Project No. 14-1379**

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-11	07/23/93	<0.3	1	<0.3	1	2	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	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	BDL	<b>350</b>	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	BDL	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	<b>170</b>	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	BDL	nt	nt	
	09/25/08	<0.4	<0.3	<0.3	<0.3	BDL	<0.3	<0.31	<0.14	<b>0.67 J</b>	<0.36	<0.31	<0.24	<6	<74	<17	<b>28 J</b>	<29	nt	
	04/09/09	<b>2.5 J</b>	<b>0.9 J</b>	<b>1.7 J</b>	<b>3 J</b>	8.1	<b>1.1 J</b>	<0.3	<0.14	<b>0.52 J</b>	<b>0.25 J</b>	<0.17	<0.23	<17	<74	<25	<16	<b>200</b>	nt	
	07/15/09	<b>2.8 J</b>	<b>0.97 J</b>	<b>2.1 J</b>	<0.13	5.87	<b>1.4 J</b>	<0.32	<0.14	<0.14	<b>0.25 J</b>	<0.17	<0.23	<17	<74	<b>41 J</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	na	na
02/09/11	0.47 J	<0.25	0.26 J	<0.25	0.73	0.27 J	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<2	<50	<50	<50	<250	nt		
12/13/11	1.2	<0.25	<0.25	0.32 J	1.52	0.28 J	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<1.0	<25	<50	<50	<250	nt		
08/06/14	<0.051	<0.040	<0.050	<0.25	0.00	< 0.016	<0.10	<0.070	<0.22	<0.070	<0.12	<0.090	<0.94	<22	<50	<50	<250	nt		
<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>1800</b>	ne	ne	ne	<b>150</b>	<b>200</b>	<b>18000</b>	ne	<b>210</b>	<b>210</b>	<b>210</b>	ne	
<b>RWQCB ESLs (potential vapor intrusion concerns, commercial)</b>		<b>1800</b>	<b>530000</b>	<b>170000</b>	<b>160000</b>	ne	<b>11000</b>	<b>80000</b>	ne	ne	ne	<b>540</b>	<b>690</b>	(use soil gas)	ne	(use soil gas)	(use soil gas)	ne	ne	

Analytical test results are reported in micrograms per liter (µg/L).

Bolded results indicate detected concentrations exceeded laboratory detection limits.

na = not analyzed      nt = not tested for that constituent      ns = not sampled      dne = does not exist      ne = not established      < = below laboratory detection limits      J = reported result is between the MDL and PQL

\* 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

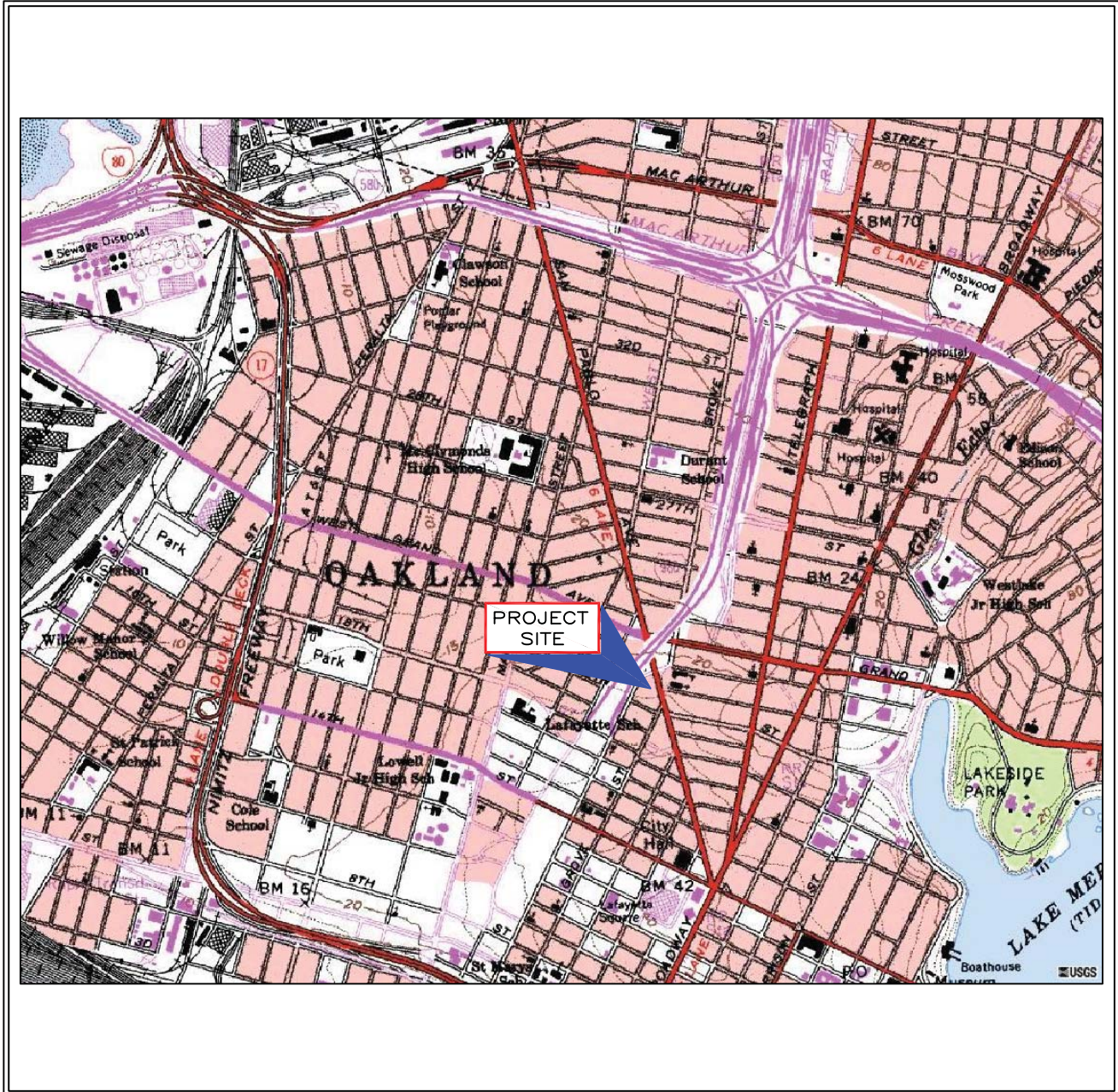
\*\* Sample not analyzed due to broken sample bottle during shipment

## FIGURES

OAKLAND WEST QUADRANGLE  
OAKLAND, CALIFORNIA

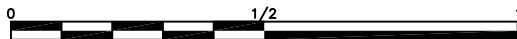
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1996

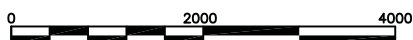


NORTH

SCALE 1:24000



(Miles)



(Feet)

CONTOUR INTERVAL 10 FEET

FIGURE 1

SITE LOCATION/USGS TOPOGRAPHIC MAP

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



Generated by:	TAH
Approved by:	TDR
Date:	04/08/11

PROJECT No. 11-1379



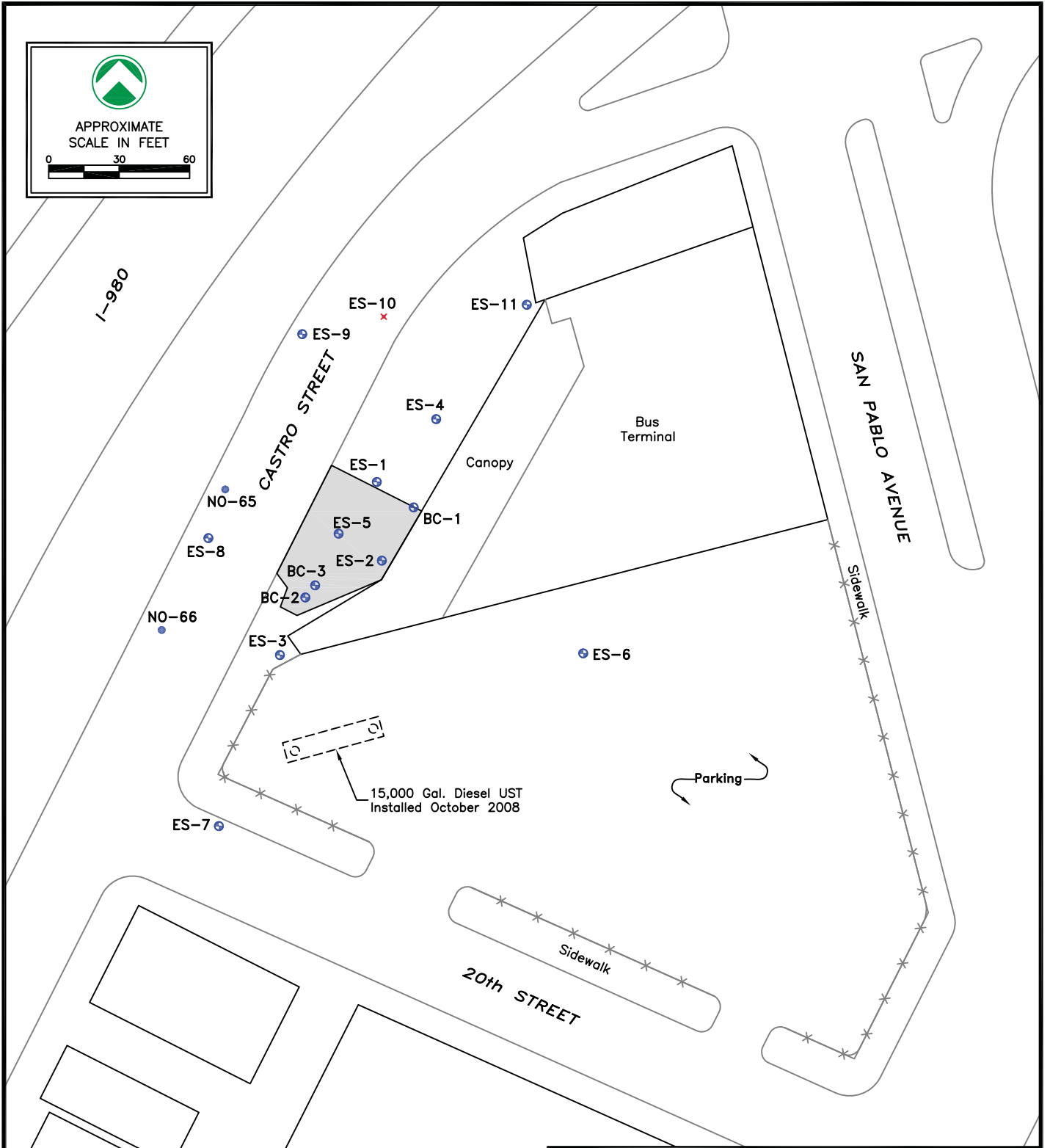
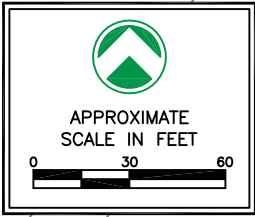


FIGURE 2  
SITE PLAN

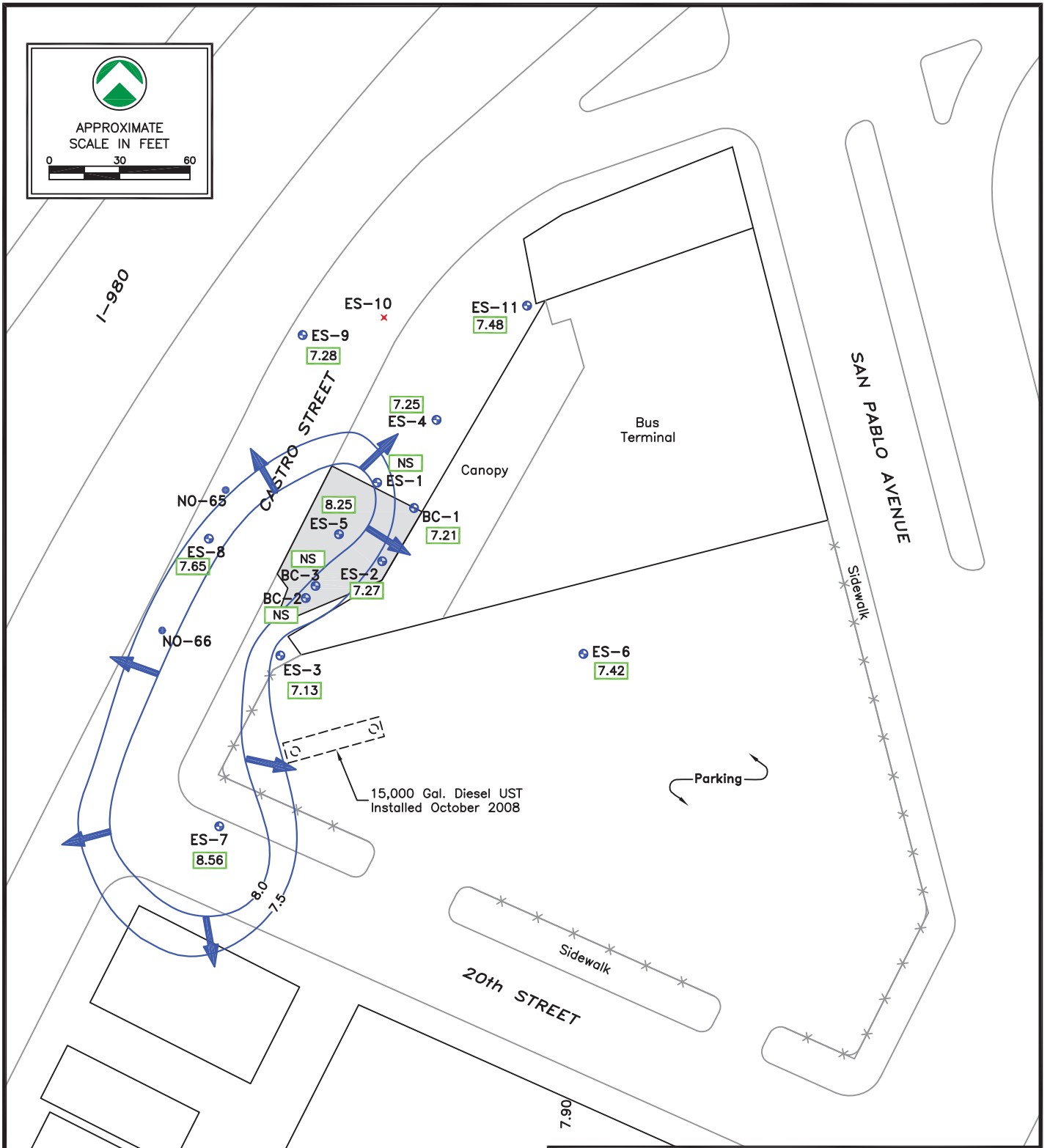
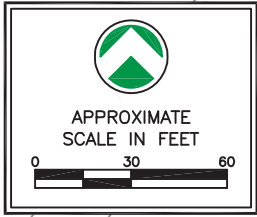
**Oakland Bus Terminal**  
2103 San Pablo Avenue  
Oakland, California

LEGEND	
	Monitoring Well
	Non-Project Monitoring Well
	Destroyed Monitoring Well
	Fence Line
	Former Tank Pit



Generated by:	TAH
Approved by:	TDR
Date:	04/08/11
PROJECT No. 11-1379	

04/08/11 LBA 1379



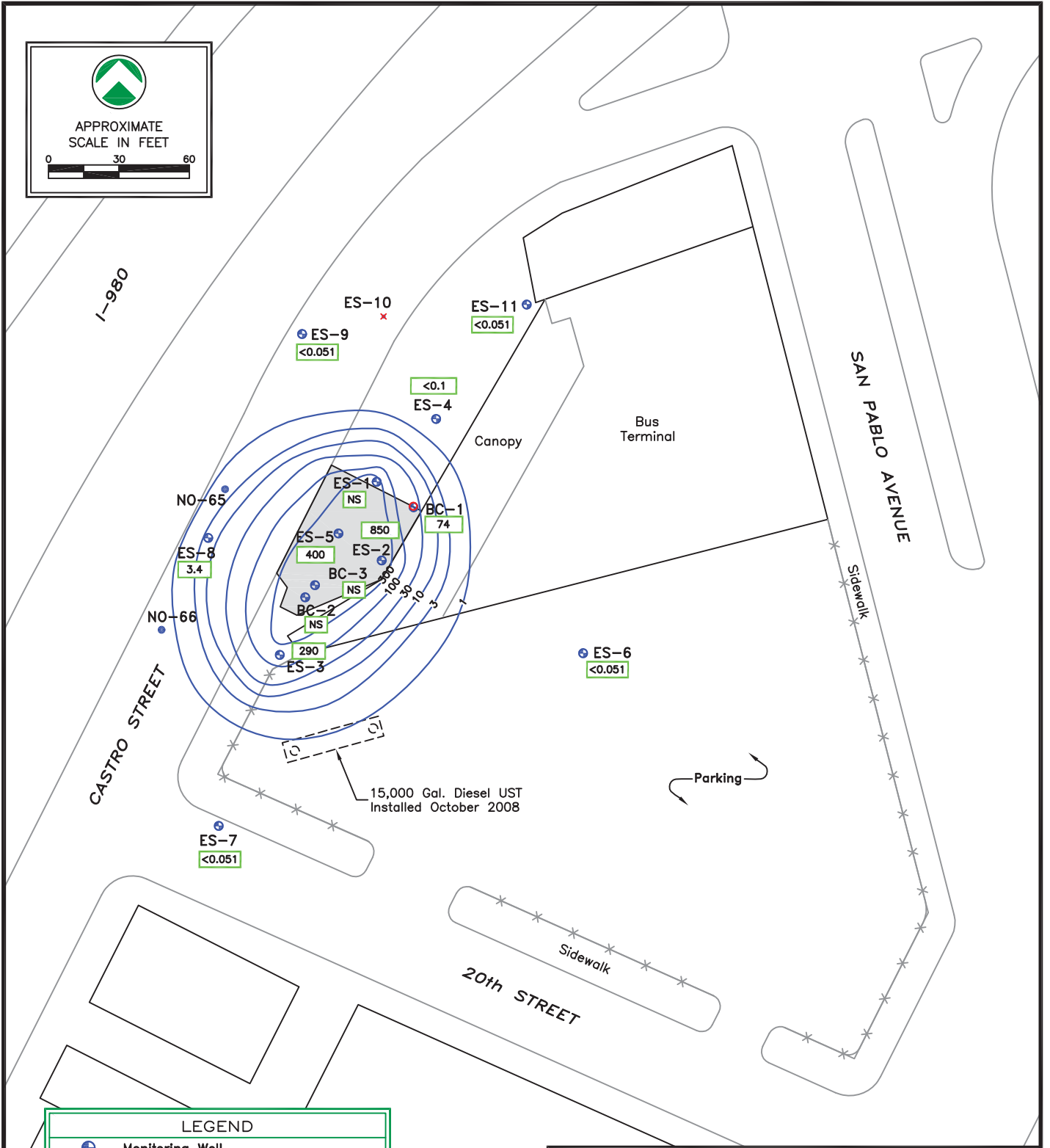
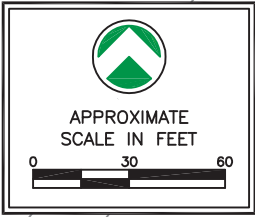
LEGEND	
	Monitoring Well
	Non-Project Monitoring Well
	Destroyed Monitoring Well
	Fence Line
	Former Tank Pit
	Direction Of Groundwater Flow
	Groundwater Elevation Contour
	Elevation of Groundwater (ft)
	NS Not Sampled

FIGURE 3  
GROUNDWATER GRADIENT  
(August 2014)

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

	Generated by:	TAH
	Approved by:	DMB
	Date:	09/11/14
PROJECT No. 14-1379		

09/11/14 LBA 1379



LEGEND	
	Monitoring Well
	Non-Project Monitoring Well
	Destroyed Monitoring Well
	Fence Line
	Former Tank Pit
	Contour Interval Logarithmic in $\mu\text{g/L}$
	Benzene Concentration in Groundwater ( $\mu\text{g/L}$ )
NS	Not Sampled
$\mu\text{g/L}$	Micrograms Per Liter

FIGURE 4  
DISSOLVED-PHASE BENZENE IN GROUNDWATER  
(August 2014)

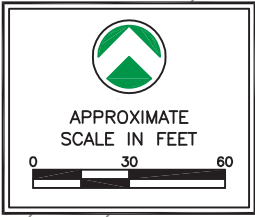
*Oakland Bus Terminal*  
2103 San Pablo Avenue  
Oakland, California

	Generated by:	TAH
	Approved by:	DMB
	Date:	09/11/14

PROJECT No. 14-1379

9/11/14 LBA-1379



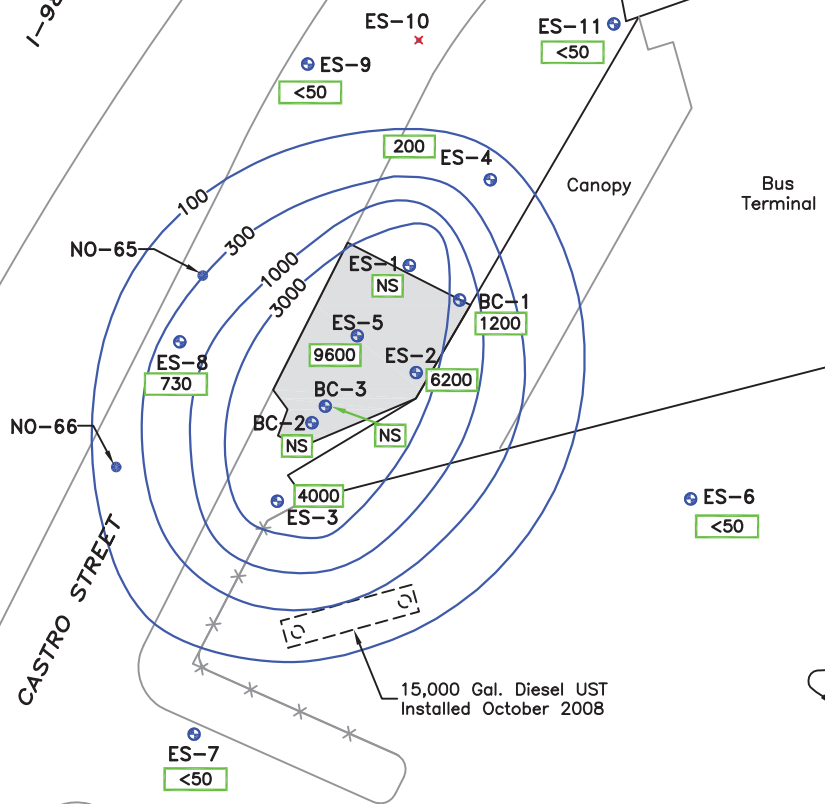


I-980

CASTRO STREET

SAN PABLO AVENUE

20th STREET



15,000 Gal. Diesel UST  
Installed October 2008

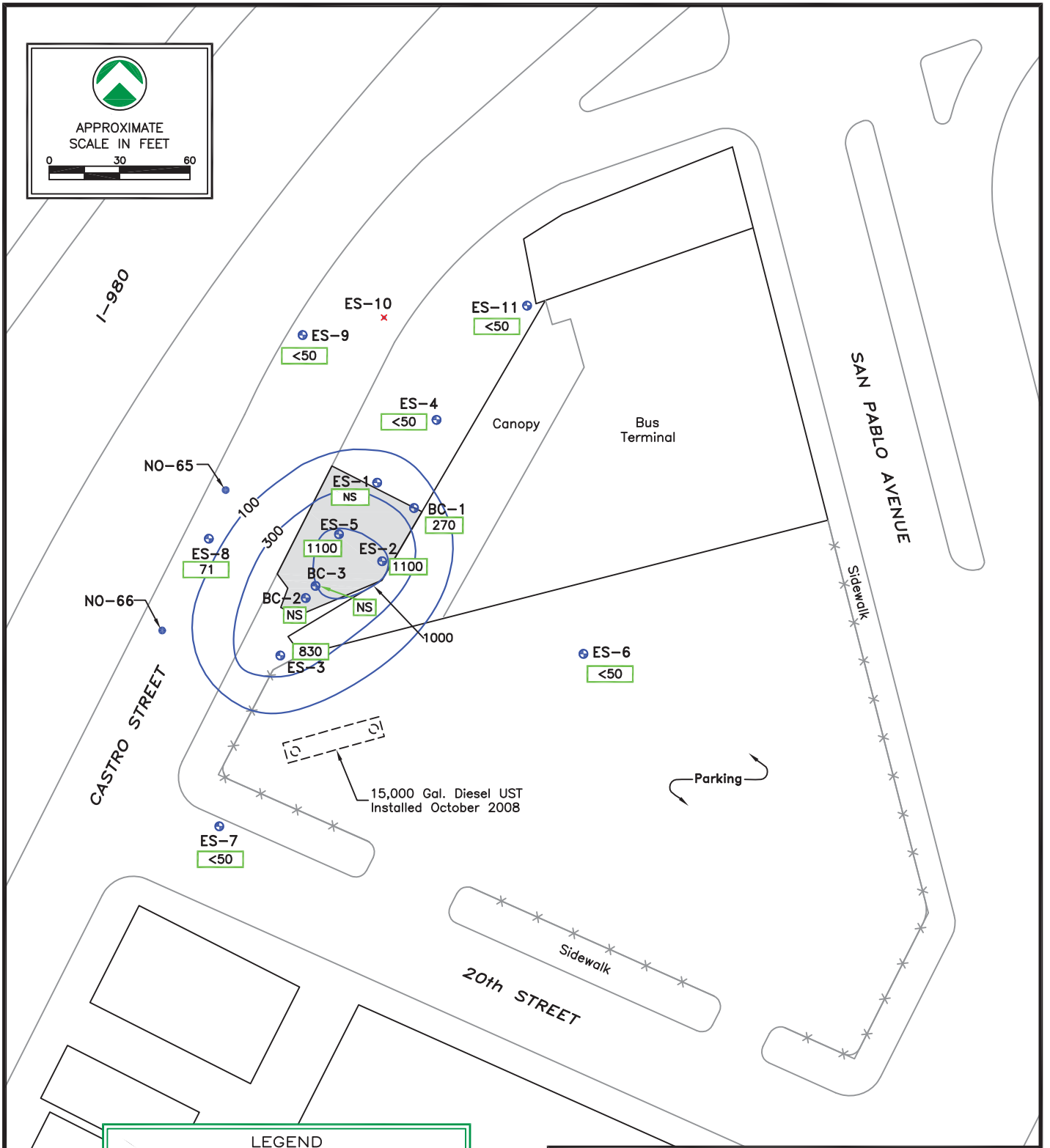
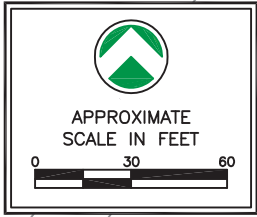
LEGEND	
	Monitoring Well
	Non-Project Monitoring Well
	Destroyed Monitoring Well
	Fence Line
	Former Tank Pit
	Contour Interval Logarithmic in $\mu\text{g/L}$
	Total Petroleum Hydrocarbons Gasoline Range (TPH-g) in Groundwater ( $\mu\text{g/L}$ )
	270
	NS Not Sampled
	$\mu\text{g/L}$ Micrograms Per Liter

FIGURE 5  
DISSOLVED-PHASE TPH-g IN GROUNDWATER  
(August 2014)

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

	Generated by:	TAH
	Approved by:	DMB
	Date:	09/11/14
PROJECT No. 14-1379		

9/11/14 LBA 1379



LEGEND	
	Monitoring Well
	Non-Project Monitoring Well
	Destroyed Monitoring Well
	Fence Line
	Former Tank Pit
	Contour Interval Logarithmic in $\mu\text{g/L}$
	Total Petroleum Hydrocarbons Gasoline Range (TPH-d) in Groundwater ( $\mu\text{g/L}$ )
790	
NS	Not Sampled
$\mu\text{g/L}$	Micrograms Per Liter

FIGURE 6  
DISSOLVED-PHASE TPH-d IN GROUNDWATER  
(August 2014)

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

	Generated by:	TAH
	Approved by:	DMB
	Date:	09/11/14
PROJECT No. 14-1379		

09/11/14 LBA 1379

## **APPENDIX A**

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



# McC Campbell Analytical, Inc.

"When Quality Counts"

## Analytical Report

**WorkOrder:** 1408186 **Amended:** 09/05/2014

**Report Created for:** Green Star Environmental  
354 McDonnell Street, Suite 9  
Lewisville, TX 75057

**Project Contact:** Debra Boopsingh  
**Project P.O.:**  
**Project Name:** #1393; Oakland

**Project Received:** 08/06/2014

Analytical Report reviewed & approved for release on 08/14/2014 by:

Question about  
your data?

[Click here to email  
McC Campbell](#)

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:** Greenstar Environmental  
**Project:** #1393; Oakland  
**WorkOrder:** 1408186

### Glossary Abbreviation

95% Interval	95% Confident Interval
DF	Dilution Factor
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
ND	Not detected at or above the indicated MDL or RL
NR	Matrix interferences, or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix; or sample diluted due to high matrix or analyte content.
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
TEQ	Toxicity Equivalence

### Analytical Qualifiers

J	analyte detected below quantitation limits
S	spike recovery outside accepted recovery limits
c4	surrogate recovery outside of the control limits due to coelution with another peak(s) / cluttered chromatogram.
d1	weakly modified or unmodified gasoline is significant
e4	gasoline range compounds are significant.

### Quality Control Qualifiers

F1	MS/MSD recovery and/or RPD was out of acceptance criteria; LCS validated the prep batch.
----	------------------------------------------------------------------------------------------



## Analytical Report

**Client:** Green Star Environmental  
**Project:** #1393; Oakland  
**Date Received:** 8/6/14 17:26  
**Date Prepared:** 8/11/14-8/13/14

**WorkOrder:** 1408186  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

### Volatiles Organics + Oxygenates by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ES-6	1408186-002A	Water	08/05/2014 19:00	GC10	93921

Analytes	Result	MDL	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	0.22	0.50	1	08/11/2014 23:32
Benzene	ND	0.051	0.50	1	08/11/2014 23:32
t-Butyl alcohol (TBA)	ND	0.94	2.0	1	08/11/2014 23:32
1,2-Dibromoethane (EDB)	ND	0.12	0.50	1	08/11/2014 23:32
1,2-Dichloroethane (1,2-DCA)	ND	0.090	0.50	1	08/11/2014 23:32
Diisopropyl ether (DIPE)	ND	0.070	0.50	1	08/11/2014 23:32
Ethanol	ND	22	50	1	08/11/2014 23:32
Ethylbenzene	ND	0.050	0.50	1	08/11/2014 23:32
Ethyl tert-butyl ether (ETBE)	ND	0.070	0.50	1	08/11/2014 23:32
Methyl-t-butyl ether (MTBE)	ND	0.10	0.50	1	08/11/2014 23:32
Naphthalene	ND	0.16	0.50	1	08/11/2014 23:32
Toluene	ND	0.040	0.50	1	08/11/2014 23:32
Xylenes, Total	ND	0.25	0.50	1	08/11/2014 23:32
<b>Surrogates</b>	<b>REC (%)</b>	<b>Limits</b>			
Dibromofluoromethane	103	70-130			08/11/2014 23:32
Toluene-d8	100	70-130			08/11/2014 23:32
4-BFB	102	70-130			08/11/2014 23:32

(Cont.)



## Analytical Report

**Client:** Green Star Environmental  
**Project:** #1393; Oakland  
**Date Received:** 8/6/14 17:26  
**Date Prepared:** 8/11/14-8/13/14

**WorkOrder:** 1408186  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

### Volatiles Organics + Oxygenates by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ES-3	1408186-003A	Water	08/05/2014 19:40	GC28	93943

Analytes	Result	MDL	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	4.4	10	20	08/11/2014 17:35
Benzene	<b>290</b>	1.0	10	20	08/11/2014 17:35
t-Butyl alcohol (TBA)	ND	19	40	20	08/11/2014 17:35
1,2-Dibromoethane (EDB)	ND	2.4	10	20	08/11/2014 17:35
1,2-Dichloroethane (1,2-DCA)	ND	1.8	10	20	08/11/2014 17:35
Diisopropyl ether (DIPE)	<b>75</b>	1.4	10	20	08/11/2014 17:35
Ethanol	ND	440	1000	20	08/11/2014 17:35
Ethylbenzene	<b>42</b>	1.0	10	20	08/11/2014 17:35
Ethyl tert-butyl ether (ETBE)	ND	1.4	10	20	08/11/2014 17:35
Methyl-t-butyl ether (MTBE)	ND	2.0	10	20	08/11/2014 17:35
Naphthalene	<b>31</b>	3.2	10	20	08/11/2014 17:35
Toluene	<b>36</b>	0.80	10	20	08/11/2014 17:35
Xylenes, Total	<b>55</b>	5.0	10	20	08/11/2014 17:35

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	90	70-130	08/11/2014 17:35
Toluene-d8	100	70-130	08/11/2014 17:35
4-BFB	89	70-130	08/11/2014 17:35

(Cont.)



## Analytical Report

**Client:** Green Star Environmental  
**Project:** #1393; Oakland  
**Date Received:** 8/6/14 17:26  
**Date Prepared:** 8/11/14-8/13/14

**WorkOrder:** 1408186  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

### Volatiles Organics + Oxygenates by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ES-11	1408186-004A	Water	08/06/2014 06:55	GC10	93943

Analytes	Result	MDL	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	0.22	0.50	1	08/13/2014 01:51
Benzene	ND	0.051	0.50	1	08/13/2014 01:51
t-Butyl alcohol (TBA)	ND	0.94	2.0	1	08/13/2014 01:51
1,2-Dibromoethane (EDB)	ND	0.12	0.50	1	08/13/2014 01:51
1,2-Dichloroethane (1,2-DCA)	ND	0.090	0.50	1	08/13/2014 01:51
Diisopropyl ether (DIPE)	ND	0.070	0.50	1	08/13/2014 01:51
Ethanol	ND	22	50	1	08/13/2014 01:51
Ethylbenzene	ND	0.050	0.50	1	08/13/2014 01:51
Ethyl tert-butyl ether (ETBE)	ND	0.070	0.50	1	08/13/2014 01:51
Methyl-t-butyl ether (MTBE)	ND	0.10	0.50	1	08/13/2014 01:51
Naphthalene	ND	0.16	0.50	1	08/13/2014 01:51
Toluene	ND	0.040	0.50	1	08/13/2014 01:51
Xylenes, Total	ND	0.25	0.50	1	08/13/2014 01:51

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	98	70-130	08/13/2014 01:51
Toluene-d8	100	70-130	08/13/2014 01:51
4-BFB	99	70-130	08/13/2014 01:51

(Cont.)





## Analytical Report

**Client:** Green Star Environmental  
**Project:** #1393; Oakland  
**Date Received:** 8/6/14 17:26  
**Date Prepared:** 8/11/14-8/13/14

**WorkOrder:** 1408186  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

### Volatiles Organics + Oxygenates by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ES-4	1408186-005A	Water	08/06/2014 07:30	GC18	93943

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND		0.44	1.0	2	08/12/2014 22:29
Benzene	ND		0.10	1.0	2	08/12/2014 22:29
t-Butyl alcohol (TBA)	ND		1.9	4.0	2	08/12/2014 22:29
1,2-Dibromoethane (EDB)	ND		0.24	1.0	2	08/12/2014 22:29
1,2-Dichloroethane (1,2-DCA)	ND		0.18	1.0	2	08/12/2014 22:29
Diisopropyl ether (DIPE)	<b>62</b>		0.14	1.0	2	08/12/2014 22:29
Ethanol	ND		44	100	2	08/12/2014 22:29
Ethylbenzene	ND		0.10	1.0	2	08/12/2014 22:29
Ethyl tert-butyl ether (ETBE)	ND		0.14	1.0	2	08/12/2014 22:29
Methyl-t-butyl ether (MTBE)	ND		0.20	1.0	2	08/12/2014 22:29
Naphthalene	<b>0.36</b>	J	0.32	1.0	2	08/12/2014 22:29
Toluene	ND		0.080	1.0	2	08/12/2014 22:29
Xylenes, Total	ND		0.50	1.0	2	08/12/2014 22:29
<b>Surrogates</b>	<b>REC (%)</b>			<b>Limits</b>		
Dibromofluoromethane	101			70-130		08/12/2014 22:29
Toluene-d8	114			70-130		08/12/2014 22:29
4-BFB	114			70-130		08/12/2014 22:29

(Cont.)



## Analytical Report

**Client:** Green Star Environmental  
**Project:** #1393; Oakland  
**Date Received:** 8/6/14 17:26  
**Date Prepared:** 8/11/14-8/13/14

**WorkOrder:** 1408186  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

### Volatiles Organics + Oxygenates by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ES-2	1408186-006A	Water	08/06/2014 08:30	GC18	93943

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND		11	25	50	08/12/2014 23:07
Benzene	<b>850</b>		2.6	25	50	08/12/2014 23:07
t-Butyl alcohol (TBA)	ND		47	100	50	08/12/2014 23:07
1,2-Dibromoethane (EDB)	ND		6.0	25	50	08/12/2014 23:07
1,2-Dichloroethane (1,2-DCA)	ND		4.5	25	50	08/12/2014 23:07
Diisopropyl ether (DIPE)	<b>85</b>		3.5	25	50	08/12/2014 23:07
Ethanol	ND		1100	2500	50	08/12/2014 23:07
Ethylbenzene	<b>14</b>	J	2.5	25	50	08/12/2014 23:07
Ethyl tert-butyl ether (ETBE)	ND		3.5	25	50	08/12/2014 23:07
Methyl-t-butyl ether (MTBE)	ND		5.0	25	50	08/12/2014 23:07
Naphthalene	ND		8.0	25	50	08/12/2014 23:07
Toluene	<b>61</b>		2.0	25	50	08/12/2014 23:07
Xylenes, Total	<b>87</b>		12	25	50	08/12/2014 23:07
<b>Surrogates</b>	<b>REC (%)</b>			<b>Limits</b>		
Dibromofluoromethane	100			70-130		08/12/2014 23:07
Toluene-d8	116			70-130		08/12/2014 23:07
4-BFB	114			70-130		08/12/2014 23:07

(Cont.)



## Analytical Report

**Client:** Green Star Environmental  
**Project:** #1393; Oakland  
**Date Received:** 8/6/14 17:26  
**Date Prepared:** 8/11/14-8/13/14

**WorkOrder:** 1408186  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

### Volatiles Organics + Oxygenates by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ES-5	1408186-007A	Water	08/06/2014 09:30	GC28	93943

Analytes	Result	MDL	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	7.3	17	33	08/11/2014 23:52
Benzene	<b>400</b>	1.7	17	33	08/11/2014 23:52
t-Butyl alcohol (TBA)	ND	31	67	33	08/11/2014 23:52
1,2-Dibromoethane (EDB)	ND	4.0	17	33	08/11/2014 23:52
1,2-Dichloroethane (1,2-DCA)	ND	3.0	17	33	08/11/2014 23:52
Diisopropyl ether (DIPE)	ND	2.3	17	33	08/11/2014 23:52
Ethanol	ND	730	1700	33	08/11/2014 23:52
Ethylbenzene	<b>220</b>	1.7	17	33	08/11/2014 23:52
Ethyl tert-butyl ether (ETBE)	ND	2.3	17	33	08/11/2014 23:52
Methyl-t-butyl ether (MTBE)	ND	3.3	17	33	08/11/2014 23:52
Naphthalene	<b>99</b>	5.3	17	33	08/11/2014 23:52
Toluene	<b>130</b>	1.3	17	33	08/11/2014 23:52
Xylenes, Total	<b>210</b>	8.3	17	33	08/11/2014 23:52
Surrogates	REC (%)	Limits			
Dibromofluoromethane	93	70-130			08/11/2014 23:52
Toluene-d8	101	70-130			08/11/2014 23:52
4-BFB	93	70-130			08/11/2014 23:52

(Cont.)



## Analytical Report

**Client:** Green Star Environmental  
**Project:** #1393; Oakland  
**Date Received:** 8/6/14 17:26  
**Date Prepared:** 8/11/14-8/13/14

**WorkOrder:** 1408186  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

### Volatiles Organics + Oxygenates by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-1	1408186-008A	Water	08/06/2014 10:45	GC28	93943

Analytes	Result	MDL	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	1.1	2.5	5	08/12/2014 00:30
Benzene	<b>74</b>	0.26	2.5	5	08/12/2014 00:30
t-Butyl alcohol (TBA)	ND	4.7	10	5	08/12/2014 00:30
1,2-Dibromoethane (EDB)	ND	0.60	2.5	5	08/12/2014 00:30
1,2-Dichloroethane (1,2-DCA)	ND	0.45	2.5	5	08/12/2014 00:30
Diisopropyl ether (DIPE)	<b>42</b>	0.35	2.5	5	08/12/2014 00:30
Ethanol	ND	110	250	5	08/12/2014 00:30
Ethylbenzene	<b>10</b>	0.25	2.5	5	08/12/2014 00:30
Ethyl tert-butyl ether (ETBE)	ND	0.35	2.5	5	08/12/2014 00:30
Methyl-t-butyl ether (MTBE)	ND	0.50	2.5	5	08/12/2014 00:30
Naphthalene	<b>10</b>	0.80	2.5	5	08/12/2014 00:30
Toluene	<b>7.6</b>	0.20	2.5	5	08/12/2014 00:30
Xylenes, Total	<b>16</b>	1.2	2.5	5	08/12/2014 00:30
<b>Surrogates</b>	<b>REC (%)</b>	<b>Limits</b>			
Dibromofluoromethane	94	70-130			08/12/2014 00:30
Toluene-d8	99	70-130			08/12/2014 00:30
4-BFB	94	70-130			08/12/2014 00:30

(Cont.)



## Analytical Report

**Client:** Green Star Environmental  
**Project:** #1393; Oakland  
**Date Received:** 8/6/14 17:26  
**Date Prepared:** 8/11/14-8/13/14

**WorkOrder:** 1408186  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

### Volatiles Organics + Oxygenates by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ES-7	1408186-009A	Water	08/06/2014 12:30	GC10	93943

Analytes	Result	MDL	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	0.22	0.50	1	08/13/2014 02:32
Benzene	ND	0.051	0.50	1	08/13/2014 02:32
t-Butyl alcohol (TBA)	ND	0.94	2.0	1	08/13/2014 02:32
1,2-Dibromoethane (EDB)	ND	0.12	0.50	1	08/13/2014 02:32
1,2-Dichloroethane (1,2-DCA)	ND	0.090	0.50	1	08/13/2014 02:32
Diisopropyl ether (DIPE)	ND	0.070	0.50	1	08/13/2014 02:32
Ethanol	ND	22	50	1	08/13/2014 02:32
Ethylbenzene	ND	0.050	0.50	1	08/13/2014 02:32
Ethyl tert-butyl ether (ETBE)	ND	0.070	0.50	1	08/13/2014 02:32
Methyl-t-butyl ether (MTBE)	ND	0.10	0.50	1	08/13/2014 02:32
Naphthalene	ND	0.16	0.50	1	08/13/2014 02:32
Toluene	ND	0.040	0.50	1	08/13/2014 02:32
Xylenes, Total	ND	0.25	0.50	1	08/13/2014 02:32

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	97	70-130	08/13/2014 02:32
Toluene-d8	99	70-130	08/13/2014 02:32
4-BFB	99	70-130	08/13/2014 02:32

(Cont.)



## Analytical Report

**Client:** Green Star Environmental  
**Project:** #1393; Oakland  
**Date Received:** 8/6/14 17:26  
**Date Prepared:** 8/11/14-8/13/14

**WorkOrder:** 1408186  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

### Volatiles Organics + Oxygenates by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ES-9	1408186-010A	Water	08/06/2014 13:30	GC10	93943

Analytes	Result	MDL	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	0.22	0.50	1	08/13/2014 03:14
Benzene	ND	0.051	0.50	1	08/13/2014 03:14
t-Butyl alcohol (TBA)	ND	0.94	2.0	1	08/13/2014 03:14
1,2-Dibromoethane (EDB)	ND	0.12	0.50	1	08/13/2014 03:14
1,2-Dichloroethane (1,2-DCA)	ND	0.090	0.50	1	08/13/2014 03:14
Diisopropyl ether (DIPE)	1.3	0.070	0.50	1	08/13/2014 03:14
Ethanol	ND	22	50	1	08/13/2014 03:14
Ethylbenzene	ND	0.050	0.50	1	08/13/2014 03:14
Ethyl tert-butyl ether (ETBE)	ND	0.070	0.50	1	08/13/2014 03:14
Methyl-t-butyl ether (MTBE)	ND	0.10	0.50	1	08/13/2014 03:14
Naphthalene	ND	0.16	0.50	1	08/13/2014 03:14
Toluene	ND	0.040	0.50	1	08/13/2014 03:14
Xylenes, Total	ND	0.25	0.50	1	08/13/2014 03:14

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	98	70-130	08/13/2014 03:14
Toluene-d8	97	70-130	08/13/2014 03:14
4-BFB	98	70-130	08/13/2014 03:14

(Cont.)



## Analytical Report

**Client:** Green Star Environmental  
**Project:** #1393; Oakland  
**Date Received:** 8/6/14 17:26  
**Date Prepared:** 8/11/14-8/13/14

**WorkOrder:** 1408186  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

### Volatiles Organics + Oxygenates by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ES-8	1408186-011A	Water	08/06/2014 14:05	GC18	93943

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND		1.1	2.5	5	08/13/2014 07:17
Benzene	<b>3.4</b>		0.26	2.5	5	08/13/2014 07:17
t-Butyl alcohol (TBA)	ND		4.7	10	5	08/13/2014 07:17
1,2-Dibromoethane (EDB)	ND		0.60	2.5	5	08/13/2014 07:17
1,2-Dichloroethane (1,2-DCA)	ND		0.45	2.5	5	08/13/2014 07:17
Diisopropyl ether (DIPE)	<b>74</b>		0.35	2.5	5	08/13/2014 07:17
Ethanol	ND		110	250	5	08/13/2014 07:17
Ethylbenzene	<b>1.3</b>	J	0.25	2.5	5	08/13/2014 07:17
Ethyl tert-butyl ether (ETBE)	ND		0.35	2.5	5	08/13/2014 07:17
Methyl-t-butyl ether (MTBE)	ND		0.50	2.5	5	08/13/2014 07:17
Naphthalene	<b>1.2</b>	J	0.80	2.5	5	08/13/2014 07:17
Toluene	<b>0.33</b>	J	0.20	2.5	5	08/13/2014 07:17
Xylenes, Total	ND		1.2	2.5	5	08/13/2014 07:17

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	106	70-130	08/13/2014 07:17
Toluene-d8	113	70-130	08/13/2014 07:17
4-BFB	102	70-130	08/13/2014 07:17



# Analytical Report

**Client:** Greenstar Environmental  
**Project:** #1393; Oakland  
**Date Received:** 8/6/14 17:26  
**Date Prepared:** 8/8/14-8/12/14

**WorkOrder:** 1408186  
**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/ExtType	Date Collected	Instrument	Batch ID
ES-6	1408186-002B	Water	08/05/2014 19:00	GC3	93788

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	08/08/2014 04:01
MTBE	---	5.0	1	08/08/2014 04:01
Benzene	---	0.50	1	08/08/2014 04:01
Toluene	---	0.50	1	08/08/2014 04:01
Ethylbenzene	---	0.50	1	08/08/2014 04:01
Xylenes	---	0.50	1	08/08/2014 04:01
Surrogates	REC (%)	Limits		Date Analyzed
aaa-TFT_2	101	70-130		08/08/2014 04:01

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ES-3	1408186-003B	Water	08/05/2014 19:40	GC3	93788

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	4000	500	10	08/08/2014 05:30
MTBE	---	50	10	08/08/2014 05:30
Benzene	---	5.0	10	08/08/2014 05:30
Toluene	---	5.0	10	08/08/2014 05:30
Ethylbenzene	---	5.0	10	08/08/2014 05:30
Xylenes	---	5.0	10	08/08/2014 05:30
Surrogates	REC (%)	Limits	Analytical Comments: d1	
aaa-TFT_2	130	70-130	08/08/2014 05:30	

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ES-11	1408186-004B	Water	08/06/2014 06:55	GC3	93788

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	08/08/2014 05:59
MTBE	---	5.0	1	08/08/2014 05:59
Benzene	---	0.50	1	08/08/2014 05:59
Toluene	---	0.50	1	08/08/2014 05:59
Ethylbenzene	---	0.50	1	08/08/2014 05:59
Xylenes	---	0.50	1	08/08/2014 05:59
Surrogates	REC (%)	Limits		Date Analyzed
aaa-TFT_2	103	70-130		08/08/2014 05:59

(Cont.)





## Analytical Report

**Client:** Greenstar Environmental  
**Project:** #1393; Oakland  
**Date Received:** 8/6/14 17:26  
**Date Prepared:** 8/8/14-8/12/14

**WorkOrder:** 1408186  
**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/ExtType	Date Collected	Instrument	Batch ID
ES-4	1408186-005B	Water	08/06/2014 07:30	GC3	93788

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	200	50	1	08/08/2014 08:27
MTBE	---	5.0	1	08/08/2014 08:27
Benzene	---	0.50	1	08/08/2014 08:27
Toluene	---	0.50	1	08/08/2014 08:27
Ethylbenzene	---	0.50	1	08/08/2014 08:27
Xylenes	---	0.50	1	08/08/2014 08:27
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	Analytical Comments: d1	
aaa-TFT_2	113	70-130		08/08/2014 08:27

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ES-2	1408186-006B	Water	08/06/2014 08:30	GC3	93788

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	6200	500	10	08/08/2014 08:56
MTBE	---	100	10	08/08/2014 08:56
Benzene	---	5.0	10	08/08/2014 08:56
Toluene	---	5.0	10	08/08/2014 08:56
Ethylbenzene	---	5.0	10	08/08/2014 08:56
Xylenes	---	5.0	10	08/08/2014 08:56
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	Analytical Comments: d1	
aaa-TFT_2	122	70-130		08/08/2014 08:56

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ES-5	1408186-007B	Water	08/06/2014 09:30	GC3	93788

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	9600	500	10	08/08/2014 09:26
MTBE	---	50	10	08/08/2014 09:26
Benzene	---	5.0	10	08/08/2014 09:26
Toluene	---	5.0	10	08/08/2014 09:26
Ethylbenzene	---	5.0	10	08/08/2014 09:26
Xylenes	---	5.0	10	08/08/2014 09:26
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	Analytical Comments: d1	
aaa-TFT_2	126	70-130		08/08/2014 09:26

(Cont.)



## Analytical Report

**Client:** Greenstar Environmental  
**Project:** #1393; Oakland  
**Date Received:** 8/6/14 17:26  
**Date Prepared:** 8/8/14-8/12/14

**WorkOrder:** 1408186  
**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/ExtType	Date Collected	Instrument	Batch ID
BC-1	1408186-008B	Water	08/06/2014 10:45	GC3	93866

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	1200	100	2	08/12/2014 00:34
MTBE	---	10	2	08/12/2014 00:34
Benzene	---	1.0	2	08/12/2014 00:34
Toluene	---	1.0	2	08/12/2014 00:34
Ethylbenzene	---	1.0	2	08/12/2014 00:34
Xylenes	---	1.0	2	08/12/2014 00:34
Surrogates	REC (%)	Limits	Analytical Comments: d1	
aaa-TFT_2	121	70-130		08/12/2014 00:34

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ES-7	1408186-009B	Water	08/06/2014 12:30	GC3	93788

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	08/09/2014 00:26
MTBE	---	5.0	1	08/09/2014 00:26
Benzene	---	0.50	1	08/09/2014 00:26
Toluene	---	0.50	1	08/09/2014 00:26
Ethylbenzene	---	0.50	1	08/09/2014 00:26
Xylenes	---	0.50	1	08/09/2014 00:26
Surrogates	REC (%)	Limits		
aaa-TFT_2	96	70-130		08/09/2014 00:26

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ES-9	1408186-010B	Water	08/06/2014 13:30	GC3	93866

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	08/08/2014 19:56
MTBE	---	5.0	1	08/08/2014 19:56
Benzene	---	0.50	1	08/08/2014 19:56
Toluene	---	0.50	1	08/08/2014 19:56
Ethylbenzene	---	0.50	1	08/08/2014 19:56
Xylenes	---	0.50	1	08/08/2014 19:56
Surrogates	REC (%)	Limits		
aaa-TFT_2	94	70-130		08/08/2014 19:56

(Cont.)



## Analytical Report

**Client:** Greenstar Environmental  
**Project:** #1393; Oakland  
**Date Received:** 8/6/14 17:26  
**Date Prepared:** 8/8/14-8/12/14

**WorkOrder:** 1408186  
**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/ExtType	Date Collected	Instrument	Batch ID
ES-8	1408186-011B	Water	08/06/2014 14:05	GC3	93866
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	730		50	1	08/08/2014 20:27
MTBE	---		25	1	08/08/2014 20:27
Benzene	---		0.50	1	08/08/2014 20:27
Toluene	---		0.50	1	08/08/2014 20:27
Ethylbenzene	---		0.50	1	08/08/2014 20:27
Xylenes	---		0.50	1	08/08/2014 20:27
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>	Analytical Comments: d1,c4	
aaa-TFT_2	143	S	70-130	08/08/2014 20:27	



## Analytical Report

**Client:** Greenstar Environmental  
**Project:** #1393; Oakland  
**Date Received:** 8/6/14 17:26  
**Date Prepared:** 8/6/14-8/8/14

**WorkOrder:** 1408186  
**Extraction Method:** SW3510C/3630C  
**Analytical Method:** SW8015B  
**Unit:** µg/L

### Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ES-6	1408186-002B	Water	08/05/2014 19:00	GC6A	93666

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	08/07/2014 23:06
TPH-Motor Oil (C18-C36)	ND	250	1	08/07/2014 23:06
Surrogates	REC (%)	Limits		Date Analyzed
C9	93	70-130		08/07/2014 23:06

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ES-3	1408186-003B	Water	08/05/2014 19:40	GC6B	93784

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	<b>830</b>	50	1	08/08/2014 23:03
TPH-Motor Oil (C18-C36)	ND	250	1	08/08/2014 23:03
Surrogates	REC (%)	Limits	Analytical Comments: e4	
C9	125	70-130		08/08/2014 23:03

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ES-11	1408186-004B	Water	08/06/2014 06:55	GC6A	93666

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	08/08/2014 01:29
TPH-Motor Oil (C18-C36)	ND	250	1	08/08/2014 01:29
Surrogates	REC (%)	Limits		Date Analyzed
C9	93	70-130		08/08/2014 01:29

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ES-4	1408186-005B	Water	08/06/2014 07:30	GC6A	93666

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	08/08/2014 06:16
TPH-Motor Oil (C18-C36)	ND	250	1	08/08/2014 06:16
Surrogates	REC (%)	Limits		Date Analyzed
C9	90	70-130		08/08/2014 06:16

(Cont.)



## Analytical Report

**Client:** Greenstar Environmental  
**Project:** #1393; Oakland  
**Date Received:** 8/6/14 17:26  
**Date Prepared:** 8/6/14-8/8/14

**WorkOrder:** 1408186  
**Extraction Method:** SW3510C/3630C  
**Analytical Method:** SW8015B  
**Unit:** µg/L

### Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ES-2	1408186-006B	Water	08/06/2014 08:30	GC6B	93666

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	1100	50	1	08/09/2014 00:15
TPH-Motor Oil (C18-C36)	ND	250	1	08/09/2014 00:15

Surrogates	REC (%)	Limits	Analytical Comments: e4	Date Analyzed
C9	123	70-130		08/09/2014 00:15

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ES-5	1408186-007B	Water	08/06/2014 09:30	GC9b	93666

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	1100	50	1	08/12/2014 01:17
TPH-Motor Oil (C18-C36)	ND	250	1	08/12/2014 01:17

Surrogates	REC (%)	Limits	Analytical Comments: e4	Date Analyzed
C9	106	70-130		08/12/2014 01:17

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-1	1408186-008B	Water	08/06/2014 10:45	GC6B	93784

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	270	50	1	08/09/2014 01:27
TPH-Motor Oil (C18-C36)	ND	250	1	08/09/2014 01:27

Surrogates	REC (%)	Limits	Analytical Comments: e4	Date Analyzed
C9	122	70-130		08/09/2014 01:27

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ES-7	1408186-009B	Water	08/06/2014 12:30	GC6A	93784

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	08/08/2014 08:40
TPH-Motor Oil (C18-C36)	ND	250	1	08/08/2014 08:40

Surrogates	REC (%)	Limits	Date Analyzed
C9	90	70-130	08/08/2014 08:40

(Cont.)



## Analytical Report

**Client:** Greenstar Environmental  
**Project:** #1393; Oakland  
**Date Received:** 8/6/14 17:26  
**Date Prepared:** 8/6/14-8/8/14

**WorkOrder:** 1408186  
**Extraction Method:** SW3510C/3630C  
**Analytical Method:** SW8015B  
**Unit:** µg/L

### Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ES-9	1408186-010B	Water	08/06/2014 13:30	GC6A	93784

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	08/08/2014 07:28
TPH-Motor Oil (C18-C36)	ND	250	1	08/08/2014 07:28

Surrogates	REC (%)	Limits	Date Analyzed
C9	93	70-130	08/08/2014 07:28

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ES-8	1408186-011B	Water	08/06/2014 14:05	GC6A	93784

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	71	50	1	08/08/2014 09:52
TPH-Motor Oil (C18-C36)	ND	250	1	08/08/2014 09:52

Surrogates	REC (%)	Limits	Analytical Comments: e4	Date Analyzed
C9	93	70-130		08/08/2014 09:52



# Quality Control Report

**Client:** Greenstar Environmental  
**Date Prepared:** 8/12/14  
**Date Analyzed:** 8/11/14  
**Instrument:** GC10  
**Matrix:** Water  
**Project:** #1393; Oakland

**WorkOrder:** 1408186  
**BatchID:** 93921  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L  
**Sample ID:** MB/LCS-93921  
 1408330-001AMS/MSD

## QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	1.7	10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	21.0	0.22	0.50	20	-	105	70-130
Benzene	ND	18.5	0.051	0.50	20	-	92.7	70-130
Bromobenzene	ND	-	0.060	0.50	-	-	-	-
Bromochloromethane	ND	-	0.090	0.50	-	-	-	-
Bromodichloromethane	ND	-	0.20	0.50	-	-	-	-
Bromoform	ND	-	0.066	0.50	-	-	-	-
Bromomethane	ND	-	0.16	0.50	-	-	-	-
2-Butanone (MEK)	ND	-	0.49	2.0	-	-	-	-
t-Butyl alcohol (TBA)	ND	78.7	0.94	2.0	80	-	98.4	70-130
n-Butyl benzene	ND	-	0.084	0.50	-	-	-	-
sec-Butyl benzene	ND	-	0.060	0.50	-	-	-	-
tert-Butyl benzene	ND	-	0.050	0.50	-	-	-	-
Carbon Disulfide	ND	-	0.066	0.50	-	-	-	-
Carbon Tetrachloride	ND	-	0.069	0.50	-	-	-	-
Chlorobenzene	ND	18.9	0.050	0.50	20	-	94.5	70-130
Chloroethane	ND	-	0.31	0.50	-	-	-	-
Chloroform	ND	-	0.064	0.50	-	-	-	-
Chloromethane	ND	-	0.13	0.50	-	-	-	-
2-Chlorotoluene	ND	-	0.070	0.50	-	-	-	-
4-Chlorotoluene	ND	-	0.070	0.50	-	-	-	-
Dibromochloromethane	ND	-	0.080	0.50	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.12	0.20	-	-	-	-
1,2-Dibromoethane (EDB)	ND	20.6	0.12	0.50	20	-	103	70-130
Dibromomethane	ND	-	0.080	0.50	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.080	0.50	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.071	0.50	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.072	0.50	-	-	-	-
Dichlorodifluoromethane	ND	-	0.063	0.50	-	-	-	-
1,1-Dichloroethane	ND	-	0.060	0.50	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	20.7	0.090	0.50	20	-	103	70-130
1,1-Dichloroethene	ND	18.0	0.086	0.50	20	-	89.9	70-130
cis-1,2-Dichloroethene	ND	-	0.050	0.50	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.060	0.50	-	-	-	-
1,2-Dichloropropane	ND	-	0.055	0.50	-	-	-	-
1,3-Dichloropropane	ND	-	0.10	0.50	-	-	-	-
2,2-Dichloropropane	ND	-	0.10	0.50	-	-	-	-
1,1-Dichloropropene	ND	-	0.060	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.090	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.070	0.50	-	-	-	-

(Cont.)



## Quality Control Report

**Client:** Greenstar Environmental  
**Date Prepared:** 8/12/14  
**Date Analyzed:** 8/11/14  
**Instrument:** GC10  
**Matrix:** Water  
**Project:** #1393; Oakland

**WorkOrder:** 1408186  
**BatchID:** 93921  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L  
**Sample ID:** MB/LCS-93921  
 1408330-001AMS/MSD

### QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	20.2	0.070	0.50	20	-	101	70-130
Ethylbenzene	ND	-	0.050	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	20.7	0.070	0.50	20	-	104	70-130
Freon 113	ND	-	0.066	0.50	-	-	-	-
Hexachlorobutadiene	ND	-	0.085	0.50	-	-	-	-
Hexachloroethane	ND	-	0.060	0.50	-	-	-	-
2-Hexanone	ND	-	0.44	0.50	-	-	-	-
Isopropylbenzene	ND	-	0.070	0.50	-	-	-	-
4-Isopropyl toluene	ND	-	0.050	0.50	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	19.5	0.10	0.50	20	-	97.7	70-130
Methylene chloride	ND	-	0.052	0.50	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.24	0.50	-	-	-	-
Naphthalene	ND	-	0.16	0.50	-	-	-	-
n-Propyl benzene	ND	-	0.060	0.50	-	-	-	-
Styrene	ND	-	0.060	0.50	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.070	0.50	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.11	0.50	-	-	-	-
Tetrachloroethene	ND	-	0.082	0.50	-	-	-	-
Toluene	ND	20.2	0.040	0.50	20	-	101	70-130
1,2,3-Trichlorobenzene	ND	-	0.11	0.50	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.086	0.50	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.050	0.50	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.080	0.50	-	-	-	-
Trichloroethene	ND	18.8	0.060	0.50	20	-	94.1	70-130
Trichlorofluoromethane	ND	-	0.047	0.50	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.14	0.50	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.065	0.50	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.070	0.50	-	-	-	-
Vinyl Chloride	ND	-	0.070	0.50	-	-	-	-
Xylenes, Total	ND	-	0.25	0.50	-	-	-	-

#### Surrogate Recovery

Dibromofluoromethane	24.2	25.3			25	97	101	70-130
Toluene-d8	24.7	26.4			25	99	106	70-130
4-BFB	2.57	2.69			2.5	103	108	70-130

(Cont.)





## Quality Control Report

**Client:** Greenstar Environmental  
**Date Prepared:** 8/12/14  
**Date Analyzed:** 8/11/14  
**Instrument:** GC10  
**Matrix:** Water  
**Project:** #1393; Oakland

**WorkOrder:** 1408186  
**BatchID:** 93921  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L  
**Sample ID:** MB/LCS-93921  
 1408330-001AMS/MSD

### QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	21.1	22.9	20	ND	105	114	70-130	8.22	20
Benzene	19.0	18.3	20	ND	94.8	91.4	70-130	3.69	20
t-Butyl alcohol (TBA)	77.3	99.7	80	ND	96.6	125	70-130	25.3,F1	20
Chlorobenzene	19.7	18.3	20	ND	98.6	91.4	70-130	7.58	20
1,2-Dibromoethane (EDB)	22.0	21.8	20	ND	110	109	70-130	1.02	20
1,2-Dichloroethane (1,2-DCA)	20.4	21.5	20	ND	102	108	70-130	5.17	20
1,1-Dichloroethene	18.8	17.7	20	ND	93.9	88.6	70-130	5.86	20
Diisopropyl ether (DIPE)	20.4	21.1	20	ND	102	106	70-130	3.21	20
Ethyl tert-butyl ether (ETBE)	21.1	22.6	20	ND	106	113	70-130	6.57	20
Methyl-t-butyl ether (MTBE)	20.2	22.9	20	ND	101	114	70-130	12.7	20
Toluene	20.1	18.8	20	ND	100	93.8	70-130	6.84	20
Trichloroethene	19.4	17.7	20	ND	97.3	88.5	70-130	9.45	20
<b>Surrogate Recovery</b>									
Dibromofluoromethane	25.6	26.1	25		103	104	70-130	1.67	20
Toluene-d8	25.2	25.5	25		101	102	70-130	1.14	20
4-BFB	2.37	2.42	2.5		95	97	70-130	1.71	20



# Quality Control Report

**Client:** Greenstar Environmental  
**Date Prepared:** 8/12/14  
**Date Analyzed:** 8/11/14 - 8/12/14  
**Instrument:** GC28  
**Matrix:** Water  
**Project:** #1393; Oakland

**WorkOrder:** 1408186  
**BatchID:** 93943  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L  
**Sample ID:** MB/LCS-93943  
 1408186-004AMS/MSD

## QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	1.7	10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	18.0	0.22	0.50	20	-	89.8	70-130
Benzene	ND	19.7	0.051	0.50	20	-	98.4	70-130
Bromobenzene	ND	-	0.060	0.50	-	-	-	-
Bromochloromethane	ND	-	0.090	0.50	-	-	-	-
Bromodichloromethane	ND	-	0.20	0.50	-	-	-	-
Bromoform	ND	-	0.066	0.50	-	-	-	-
Bromomethane	ND	-	0.16	0.50	-	-	-	-
2-Butanone (MEK)	ND	-	0.49	2.0	-	-	-	-
t-Butyl alcohol (TBA)	ND	57.8	0.94	2.0	80	-	72.3	70-130
n-Butyl benzene	ND	-	0.084	0.50	-	-	-	-
sec-Butyl benzene	ND	-	0.060	0.50	-	-	-	-
tert-Butyl benzene	ND	-	0.050	0.50	-	-	-	-
Carbon Disulfide	ND	-	0.066	0.50	-	-	-	-
Carbon Tetrachloride	ND	-	0.069	0.50	-	-	-	-
Chlorobenzene	ND	18.7	0.050	0.50	20	-	93.4	70-130
Chloroethane	ND	-	0.31	0.50	-	-	-	-
Chloroform	ND	-	0.064	0.50	-	-	-	-
Chloromethane	ND	-	0.13	0.50	-	-	-	-
2-Chlorotoluene	ND	-	0.070	0.50	-	-	-	-
4-Chlorotoluene	ND	-	0.070	0.50	-	-	-	-
Dibromochloromethane	ND	-	0.080	0.50	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.12	0.20	-	-	-	-
1,2-Dibromoethane (EDB)	ND	18.2	0.12	0.50	20	-	91.2	70-130
Dibromomethane	ND	-	0.080	0.50	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.080	0.50	-	-	-	-
1,3-Dichlorobenzene	0.0741,J	-	0.071	0.50	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.072	0.50	-	-	-	-
Dichlorodifluoromethane	ND	-	0.063	0.50	-	-	-	-
1,1-Dichloroethane	ND	-	0.060	0.50	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	18.5	0.090	0.50	20	-	92.3	70-130
1,1-Dichloroethene	ND	17.8	0.086	0.50	20	-	89.1	70-130
cis-1,2-Dichloroethene	ND	-	0.050	0.50	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.060	0.50	-	-	-	-
1,2-Dichloropropane	ND	-	0.055	0.50	-	-	-	-
1,3-Dichloropropane	ND	-	0.10	0.50	-	-	-	-
2,2-Dichloropropane	ND	-	0.10	0.50	-	-	-	-
1,1-Dichloropropene	ND	-	0.060	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.090	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.070	0.50	-	-	-	-

(Cont.)



# Quality Control Report

**Client:** Greenstar Environmental  
**Date Prepared:** 8/12/14  
**Date Analyzed:** 8/11/14 - 8/12/14  
**Instrument:** GC28  
**Matrix:** Water  
**Project:** #1393; Oakland

**WorkOrder:** 1408186  
**BatchID:** 93943  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L  
**Sample ID:** MB/LCS-93943  
 1408186-004AMS/MSD

## QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	18.5	0.070	0.50	20	-	92.4	70-130
Ethylbenzene	ND	-	0.050	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	17.9	0.070	0.50	20	-	89.6	70-130
Freon 113	ND	-	0.066	0.50	-	-	-	-
Hexachlorobutadiene	ND	-	0.085	0.50	-	-	-	-
Hexachloroethane	ND	-	0.060	0.50	-	-	-	-
2-Hexanone	ND	-	0.44	0.50	-	-	-	-
Isopropylbenzene	ND	-	0.070	0.50	-	-	-	-
4-Isopropyl toluene	ND	-	0.050	0.50	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	17.1	0.10	0.50	20	-	85.7	70-130
Methylene chloride	ND	-	0.052	0.50	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.24	0.50	-	-	-	-
Naphthalene	0.423,J	-	0.16	0.50	-	-	-	-
n-Propyl benzene	ND	-	0.060	0.50	-	-	-	-
Styrene	ND	-	0.060	0.50	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.070	0.50	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.11	0.50	-	-	-	-
Tetrachloroethene	ND	-	0.082	0.50	-	-	-	-
Toluene	ND	18.4	0.040	0.50	20	-	91.9	70-130
1,2,3-Trichlorobenzene	ND	-	0.11	0.50	-	-	-	-
1,2,4-Trichlorobenzene	0.112,J	-	0.086	0.50	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.050	0.50	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.080	0.50	-	-	-	-
Trichloroethene	ND	19.5	0.060	0.50	20	-	97.3	70-130
Trichlorofluoromethane	ND	-	0.047	0.50	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.14	0.50	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.065	0.50	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.070	0.50	-	-	-	-
Vinyl Chloride	ND	-	0.070	0.50	-	-	-	-
Xylenes, Total	ND	-	0.25	0.50	-	-	-	-

### Surrogate Recovery

Dibromofluoromethane	23.3	23.8			25	93	95	70-130
Toluene-d8	25.2	24.3			25	101	97	70-130
4-BFB	2.37	2.47			2.5	95	99	70-130

(Cont.)



## Quality Control Report

**Client:** Greenstar Environmental  
**Date Prepared:** 8/12/14  
**Date Analyzed:** 8/11/14 - 8/12/14  
**Instrument:** GC28  
**Matrix:** Water  
**Project:** #1393; Oakland

**WorkOrder:** 1408186  
**BatchID:** 93943  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L  
**Sample ID:** MB/LCS-93943  
 1408186-004AMS/MSD

### QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	18.7	18.5	20	ND	93.4	92.7	70-130	0.744	20
Benzene	18.7	17.8	20	ND	93.7	89	70-130	5.13	20
t-Butyl alcohol (TBA)	68.7	71.5	80	ND	85.8	89.3	70-130	4.01	20
Chlorobenzene	18.5	17.8	20	ND	92.3	88.7	70-130	3.96	20
1,2-Dibromoethane (EDB)	19.4	18.9	20	ND	96.8	94.3	70-130	2.61	20
1,2-Dichloroethane (1,2-DCA)	18.6	18.9	20	ND	92.7	94.5	70-130	1.91	20
1,1-Dichloroethene	17.5	16.8	20	ND	87.5	84.1	70-130	3.97	20
Diisopropyl ether (DIPE)	18.7	18.0	20	ND	93.3	89.9	70-130	3.69	20
Ethyl tert-butyl ether (ETBE)	18.9	18.6	20	ND	94.4	93.1	70-130	1.34	20
Methyl-t-butyl ether (MTBE)	18.6	18.4	20	ND	93.2	91.8	70-130	1.60	20
Toluene	18.2	17.3	20	ND	91.1	86.6	70-130	5.06	20
Trichloroethene	18.7	17.7	20	ND	93.4	88.5	70-130	5.33	20
<b>Surrogate Recovery</b>									
Dibromofluoromethane	24.5	24.4	25		98	98	70-130	0	20
Toluene-d8	25.2	25.0	25		101	100	70-130	1.18	20
4-BFB	2.43	2.40	2.5		97	96	70-130	1.05	20



## Quality Control Report

**Client:** Greenstar Environmental  
**Date Prepared:** 8/8/14  
**Date Analyzed:** 8/7/14  
**Instrument:** GC3  
**Matrix:** Water  
**Project:** #1393; Oakland

**WorkOrder:** 1408186  
**BatchID:** 93788  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** µg/L  
**Sample ID:** MB/LCS-93788  
 1408150-002AMS/MSD

### QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	61.9	40	60	-	103	70-130
MTBE	ND	10.5	5.0	10	-	105	70-130
Benzene	ND	9.64	0.50	10	-	96.4	70-130
Toluene	ND	9.86	0.50	10	-	98.6	70-130
Ethylbenzene	ND	9.94	0.50	10	-	99.4	70-130
Xylenes	ND	30.1	0.50	30	-	100	70-130

**Surrogate Recovery**

aaa-TFT_2	9.53	9.42		10	95	94	70-130
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	61.1	61.4	60	ND	102	102	70-130	0	20
MTBE	10.6	10.4	10	ND	106	103	70-130	2.45	20
Benzene	9.58	9.76	10	ND	95.8	97.6	70-130	1.92	20
Toluene	9.81	9.94	10	ND	98.1	99.4	70-130	1.35	20
Ethylbenzene	9.96	10.1	10	ND	99.6	101	70-130	1.64	20
Xylenes	30.2	30.7	30	ND	101	102	70-130	1.60	20

**Surrogate Recovery**

aaa-TFT_2	9.51	9.64	10		95	96	70-130	1.39	20
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(Cont.)



# Quality Control Report

**Client:** Greenstar Environmental  
**Date Prepared:** 8/11/14  
**Date Analyzed:** 8/8/14  
**Instrument:** GC3  
**Matrix:** Water  
**Project:** #1393; Oakland

**WorkOrder:** 1408186  
**BatchID:** 93866  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** µg/L  
**Sample ID:** MB/LCS-93866  
 1408257-001EMS/MSD

## QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	62.2	40	60	-	104	70-130
MTBE	ND	11.2	5.0	10	-	111	70-130
Benzene	ND	9.99	0.50	10	-	99.9	70-130
Toluene	ND	10.1	0.50	10	-	101	70-130
Ethylbenzene	ND	10.3	0.50	10	-	103	70-130
Xylenes	ND	31.2	0.50	30	-	104	70-130

**Surrogate Recovery**

aaa-TFT_2	9.52	9.36		10	95	94	70-130
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	61.4	62.9	60	ND	102	105	70-130	2.38	20
MTBE	10.9	10.9	10	ND	109	109	70-130	0	20
Benzene	9.74	9.91	10	ND	97.4	99.1	70-130	1.67	20
Toluene	9.89	9.94	10	ND	98.9	99.3	70-130	0.432	20
Ethylbenzene	9.88	10.0	10	ND	98.8	100	70-130	1.44	20
Xylenes	30.1	30.5	30	ND	100	102	70-130	1.28	20

**Surrogate Recovery**

aaa-TFT_2	9.38	9.34	10		94	93	70-130	0.392	20
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## Quality Control Report

**Client:** Greenstar Environmental  
**Date Prepared:** 8/5/14  
**Date Analyzed:** 8/5/14 - 8/6/14  
**Instrument:** GC11A  
**Matrix:** Water  
**Project:** #1393; Oakland

**WorkOrder:** 1408186  
**BatchID:** 93666  
**Extraction Method:** SW3510C/3630C  
**Analytical Method:** SW8015B  
**Unit:** µg/L  
**Sample ID:** MB/LCS-93666

### QC Summary Report for SW8015B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	927	50	1000	-	92.7	70-130
<b>Surrogate Recovery</b>							
C9	647	628		625	104	100	70-130

(Cont.)



## Quality Control Report

**Client:** Greenstar Environmental  
**Date Prepared:** 8/7/14  
**Date Analyzed:** 8/8/14  
**Instrument:** GC6B  
**Matrix:** Water  
**Project:** #1393; Oakland

**WorkOrder:** 1408186  
**BatchID:** 93784  
**Extraction Method:** SW3510C/3630C  
**Analytical Method:** SW8015B  
**Unit:** µg/L  
**Sample ID:** MB/LCS-93784

### QC Summary Report for SW8015B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	1130	50	1000	-	113	70-130
<b>Surrogate Recovery</b>							
C9	739	747		625	118	119	70-130





1534 Willow Pass Rd  
Pittsburg, CA 94565-1701  
(925) 252-9262

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 1408186

ClientCode: GSET

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  EQUS   
  Email   
  HardCopy   
  ThirdParty   
  J-flag

**Report to:**  
 Debra Boopsingh  
 Greenstar Environmental  
 354 McDonnell Street, Suite 9  
 Lewisville, TX 75057  
 (214) 222-8752    FAX: (214) 222-8752

**Email:**    dmboopsingh@greenstarenvironmental.co  
 cc/3rd Party:  
**PO:**  
 ProjectNo: #1393; Oakland

**Bill to:**  
 Patricia Cardenas  
 Greenstar Environmental  
 P.O Box 13482  
 Arlington, TX 76094-0482  
 greenstar@greenstarenvironmental.c

**Requested TAT:**            **5 days**  
  
**Date Received:**        **08/06/2014**  
**Date Printed:**         **08/14/2014**

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	
1408186-001	Trip Blank	Water	8/5/2014	<input checked="" type="checkbox"/>	A												
1408186-002	ES-6	Water	8/5/2014 19:00	<input type="checkbox"/>	A	B											
1408186-003	ES-3	Water	8/5/2014 19:40	<input type="checkbox"/>	A	B											
1408186-004	ES-11	Water	8/6/2014 6:55	<input type="checkbox"/>	A	B											
1408186-005	ES-4	Water	8/6/2014 7:30	<input type="checkbox"/>	A	B											
1408186-006	ES-2	Water	8/6/2014 8:30	<input type="checkbox"/>	A	B											
1408186-007	ES-5	Water	8/6/2014 9:30	<input type="checkbox"/>	A	B											
1408186-008	BC-1	Water	8/6/2014 10:45	<input type="checkbox"/>	A	B											
1408186-009	ES-7	Water	8/6/2014 12:30	<input type="checkbox"/>	A	B											
1408186-010	ES-9	Water	8/6/2014 13:30	<input type="checkbox"/>	A	B											
1408186-011	ES-8	Water	8/6/2014 14:05	<input type="checkbox"/>	A	B											

**Test Legend:**

1	8260B+7OXY_W	2	G-MBTEx_W	3		4		5	
6		7		8		9		10	
11		12							

The following SamplIDs: 002B, 003B, 004B, 005B, 006B, 007B, 008B, 009B, 010B, 011B contain testgroup.

**Prepared by: Jena Alfaro**

**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:** GREENSTAR ENVIRONMENTAL

**QC Level:** LEVEL 2

**Work Order:** 1408186

**Project:** #1393; Oakland

**Client Contact:** Debra Boopsingh

**Date Received:** 8/6/2014

**Comments:**

**Contact's Email:** dmboopsingh@greenstarenvironmental.com

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Number of Containers	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1408186-001A	Trip Blank	Water	SW8260B (VOCs+7 Oxys) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Ethanol, Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene, Xylenes,	2	VOA w/ HCl	<input type="checkbox"/>	8/5/2014	5 days	None	<input checked="" type="checkbox"/>	
1408186-002A	ES-6	Water	SW8260B (VOCs+7 Oxys) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Ethanol, Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene, Xylenes,	2	VOA w/ HCl	<input type="checkbox"/>	8/5/2014 19:00	5 days	Present	<input type="checkbox"/>	
1408186-002B	ES-6	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	2	VOA w/ HCl	<input type="checkbox"/>	8/5/2014 19:00	5 days	Present	<input type="checkbox"/>	
1408186-003A	ES-3	Water	SW8260B (VOCs+7 Oxys) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Ethanol, Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene, Xylenes,	2	VOA w/ HCl	<input type="checkbox"/>	8/5/2014 19:40	5 days	Present	<input type="checkbox"/>	

**\* NOTE: STLC and TCLP extractions require 48 hrs to complete; therefore, all TATs begin after the extraction is completed (i.e., 24hr TAT yields results in 72 hrs from sample submission).**

**Bottle Legend:**

VOA w/ HCl = 43mL VOA w/ HCl



## WORK ORDER SUMMARY

**Client Name:** GREENSTAR ENVIRONMENTAL

**QC Level:** LEVEL 2

**Work Order:** 1408186

**Project:** #1393; Oakland

**Client Contact:** Debra Boopsingh

**Date Received:** 8/6/2014

**Comments:**

**Contact's Email:** dmboopsingh@greenstarenvironmental.com

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Number of Containers	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1408186-003B	ES-3	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	2	VOA w/ HCl	<input type="checkbox"/>	8/5/2014 19:40	5 days	Present	<input type="checkbox"/>	
1408186-004A	ES-11	Water	SW8260B (VOCs+7 Oxys) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Ethanol, Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene, Xylenes,	2	VOA w/ HCl	<input type="checkbox"/>	8/6/2014 6:55	5 days	Present	<input type="checkbox"/>	
1408186-004B	ES-11	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	2	VOA w/ HCl	<input type="checkbox"/>	8/6/2014 6:55	5 days	Present	<input type="checkbox"/>	
1408186-005A	ES-4	Water	SW8260B (VOCs+7 Oxys) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Ethanol, Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene, Xylenes,	2	VOA w/ HCl	<input type="checkbox"/>	8/6/2014 7:30	5 days	Present	<input type="checkbox"/>	
1408186-005B	ES-4	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	2	VOA w/ HCl	<input type="checkbox"/>	8/6/2014 7:30	5 days	Present	<input type="checkbox"/>	

**\* NOTE: STLC and TCLP extractions require 48 hrs to complete; therefore, all TATs begin after the extraction is completed (i.e., 24hr TAT yields results in 72 hrs from sample submission).**

**Bottle Legend:**

VOA w/ HCl = 43mL VOA w/ HCl



## WORK ORDER SUMMARY

**Client Name:** GREENSTAR ENVIRONMENTAL

**QC Level:** LEVEL 2

**Work Order:** 1408186

**Project:** #1393; Oakland

**Client Contact:** Debra Boopsingh

**Date Received:** 8/6/2014

**Comments:**

**Contact's Email:** dmboopsingh@greenstarenvironmental.com

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  Fax   
 Email   
 HardCopy   
 ThirdParty   
 J-flag

Lab ID	Client ID	Matrix	Test Name	Number of Containers	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1408186-006A	ES-2	Water	SW8260B (VOCs+7 Oxys) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Ethanol, Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene, Xylenes,	2	VOA w/ HCl	<input type="checkbox"/>	8/6/2014 8:30	5 days	Present	<input type="checkbox"/>	
1408186-006B	ES-2	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	2	VOA w/ HCl	<input type="checkbox"/>	8/6/2014 8:30	5 days	Present	<input type="checkbox"/>	
1408186-007A	ES-5	Water	SW8260B (VOCs+7 Oxys) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Ethanol, Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene, Xylenes,	2	VOA w/ HCl	<input type="checkbox"/>	8/6/2014 9:30	5 days	Present	<input type="checkbox"/>	
1408186-007B	ES-5	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	2	VOA w/ HCl	<input type="checkbox"/>	8/6/2014 9:30	5 days	Present	<input type="checkbox"/>	

**\* NOTE: STLC and TCLP extractions require 48 hrs to complete; therefore, all TATs begin after the extraction is completed (i.e., 24hr TAT yields results in 72 hrs from sample submission).**

**Bottle Legend:**

VOA w/ HCl = 43mL VOA w/ HCl



## WORK ORDER SUMMARY

**Client Name:** GREENSTAR ENVIRONMENTAL

**QC Level:** LEVEL 2

**Work Order:** 1408186

**Project:** #1393; Oakland

**Client Contact:** Debra Boopsingh

**Date Received:** 8/6/2014

**Comments:**

**Contact's Email:** dmboopsingh@greenstarenvironmental.com

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Number of Containers	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1408186-008A	BC-1	Water	SW8260B (VOCs+7 Oxys) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Ethanol, Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene, Xylenes,	2	VOA w/ HCl	<input type="checkbox"/>	8/6/2014 10:45	5 days	Present	<input type="checkbox"/>	
1408186-008B	BC-1	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	2	VOA w/ HCl	<input type="checkbox"/>	8/6/2014 10:45	5 days	Present	<input type="checkbox"/>	
1408186-009A	ES-7	Water	SW8260B (VOCs+7 Oxys) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Ethanol, Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene, Xylenes,	2	VOA w/ HCl	<input type="checkbox"/>	8/6/2014 12:30	5 days	Present	<input type="checkbox"/>	
1408186-009B	ES-7	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	2	VOA w/ HCl	<input type="checkbox"/>	8/6/2014 12:30	5 days	Present	<input type="checkbox"/>	

**\* NOTE: STLC and TCLP extractions require 48 hrs to complete; therefore, all TATs begin after the extraction is completed (i.e., 24hr TAT yields results in 72 hrs from sample submission).**

**Bottle Legend:**

VOA w/ HCl = 43mL VOA w/ HCl



## WORK ORDER SUMMARY

**Client Name:** GREENSTAR ENVIRONMENTAL

**QC Level:** LEVEL 2

**Work Order:** 1408186

**Project:** #1393; Oakland

**Client Contact:** Debra Boopsingh

**Date Received:** 8/6/2014

**Comments:**

**Contact's Email:** dmboopsingh@greenstarenvironmental.com

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  Fax   
 Email   
 HardCopy   
 ThirdParty   
 J-flag

Lab ID	Client ID	Matrix	Test Name	Number of Containers	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1408186-010A	ES-9	Water	SW8260B (VOCs+7 Oxys) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Ethanol, Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene, Xylenes,	2	VOA w/ HCl	<input type="checkbox"/>	8/6/2014 13:30	5 days	Present	<input type="checkbox"/>	
1408186-010B	ES-9	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	2	VOA w/ HCl	<input type="checkbox"/>	8/6/2014 13:30	5 days	Present	<input type="checkbox"/>	
1408186-011A	ES-8	Water	SW8260B (VOCs+7 Oxys) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Ethanol, Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene, Xylenes,	2	VOA w/ HCl	<input type="checkbox"/>	8/6/2014 14:05	5 days	Present	<input type="checkbox"/>	
1408186-011B	ES-8	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	2	VOA w/ HCl	<input type="checkbox"/>	8/6/2014 14:05	5 days	Present	<input type="checkbox"/>	

**\* NOTE: STLC and TCLP extractions require 48 hrs to complete; therefore, all TATs begin after the extraction is completed (i.e., 24hr TAT yields results in 72 hrs from sample submission).**

**Bottle Legend:**

VOA w/ HCl = 43mL VOA w/ HCl







### Sample Receipt Checklist

Client Name: **Greenstar Environmental** Date and Time Received: **8/6/2014 5:26:36 PM**  
 Project Name: **#1393; Oakland** LogIn Reviewed by: **Jena Alfaro**  
 WorkOrder №: **1408186** Matrix: Water Carrier: Rob Pringle (MAI Courier)

#### Chain of Custody (COC) Information

Chain of custody present? Yes  No   
 Chain of custody signed when relinquished and received? Yes  No   
 Chain of custody agrees with sample labels? Yes  No   
 Sample IDs noted by Client on COC? Yes  No   
 Date and Time of collection noted by Client on COC? Yes  No   
 Sampler's name noted on COC? Yes  No

#### Sample Receipt Information

Custody seals intact on shipping container/cooler? Yes  No  NA   
 Shipping container/cooler in good condition? Yes  No   
 Samples in proper containers/bottles? Yes  No   
 Sample containers intact? Yes  No   
 Sufficient sample volume for indicated test? Yes  No

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

All samples received within holding time? Yes  No   
 Container/Temp Blank temperature Cooler Temp: 2.5°C NA   
 Water - VOA vials have zero headspace / no bubbles? Yes  No  NA   
 Sample labels checked for correct preservation? Yes  No   
 pH acceptable upon receipt (Metal: pH<2; 522: pH<4)? Yes  No  NA   
 Samples Received on Ice? Yes  No

(Ice Type: WET ICE )

\* NOTE: If the "No" box is checked, see comments below.

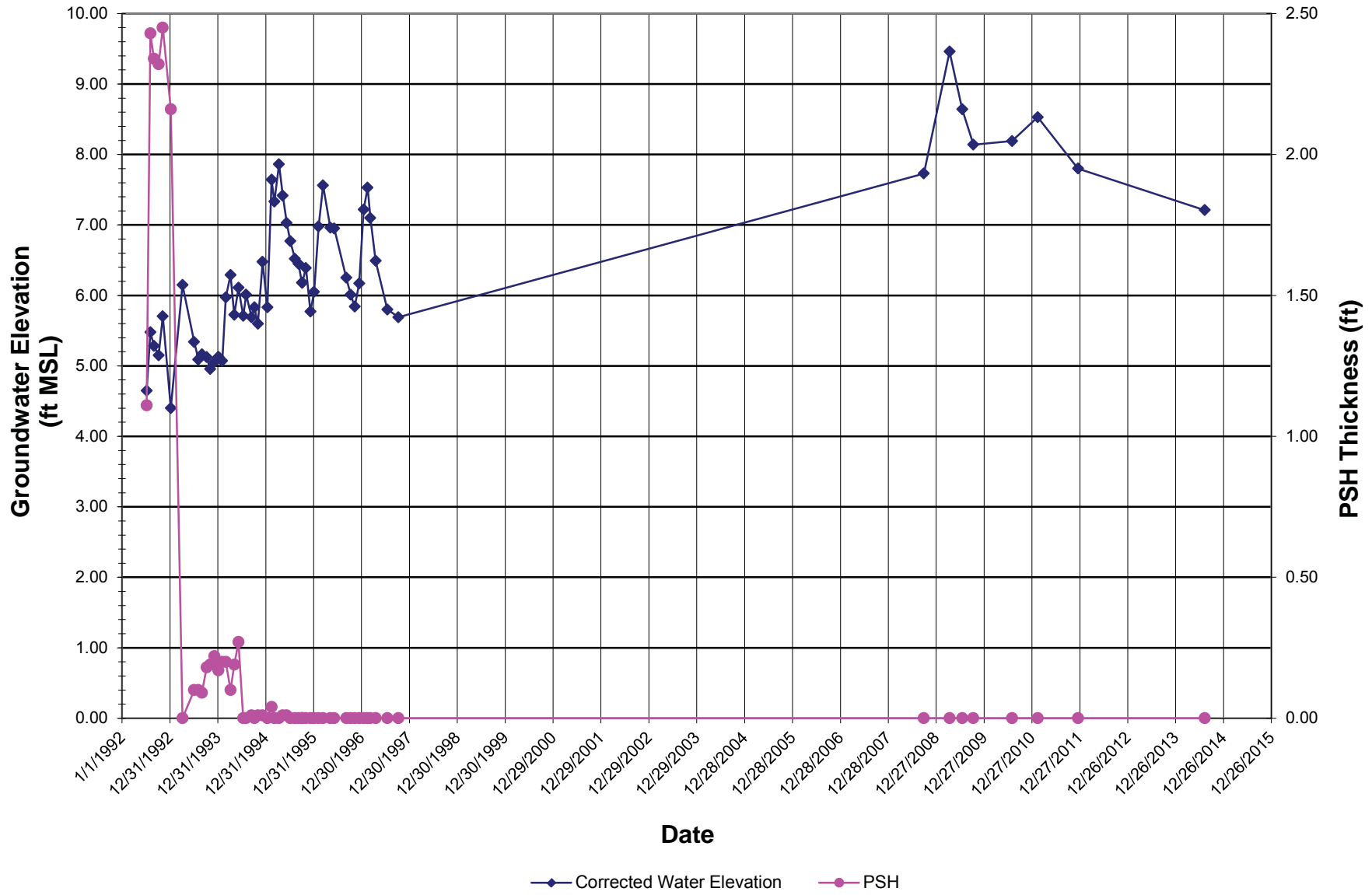
-----  
 Comments:



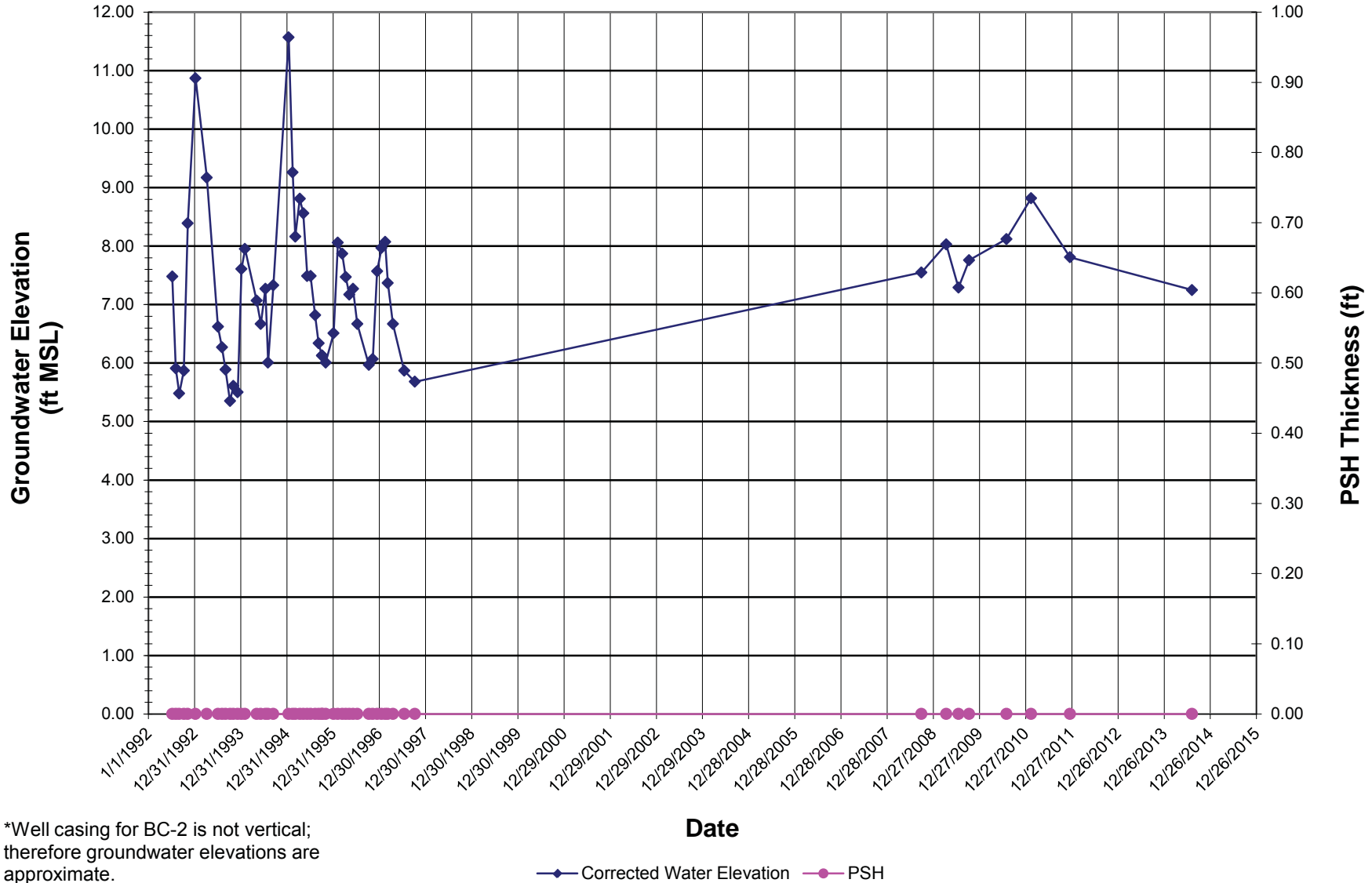
## **APPENDIX B**

### **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

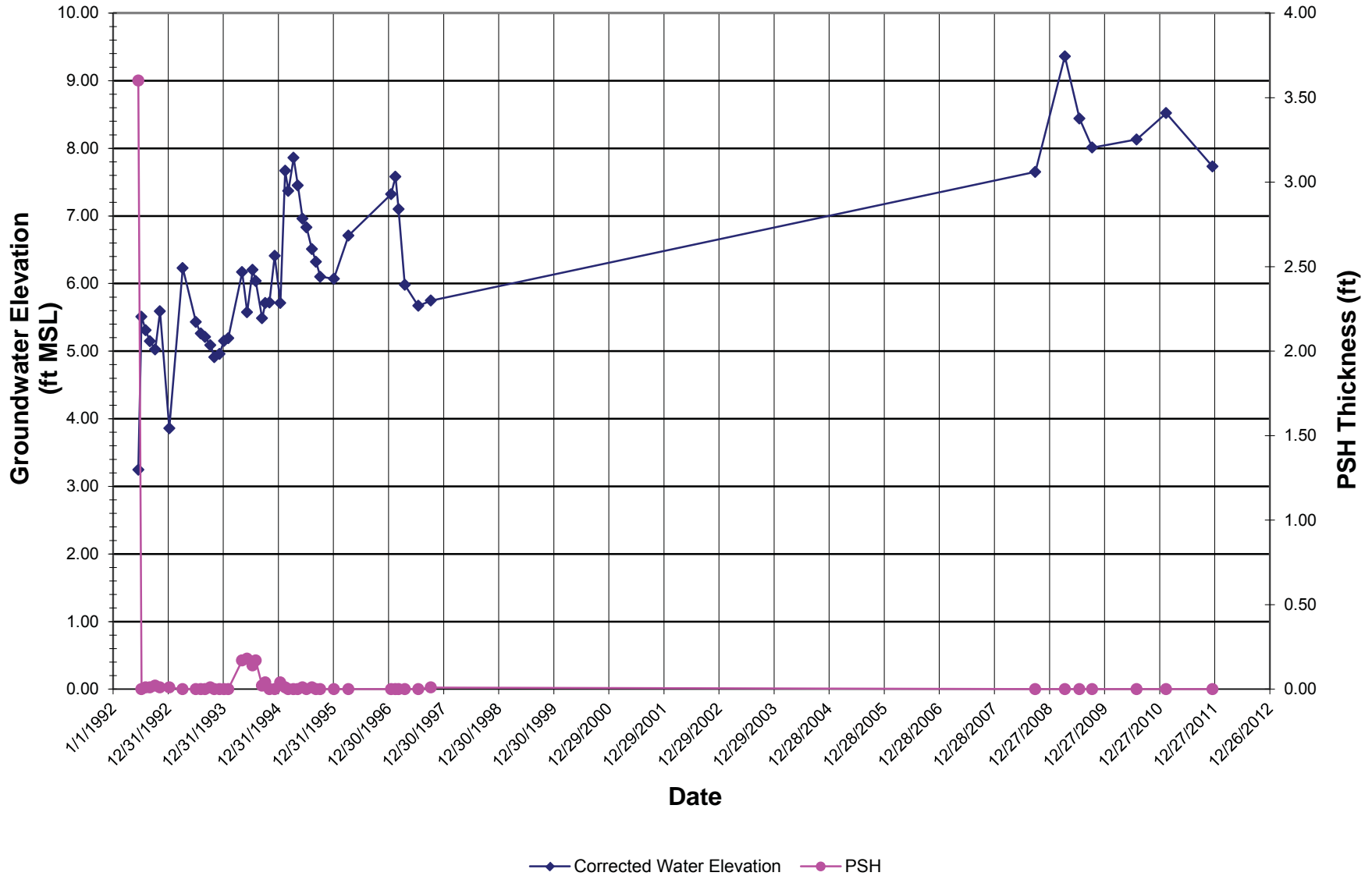


\*Well casing for BC-2 is not vertical;  
therefore groundwater elevations are  
approximate.

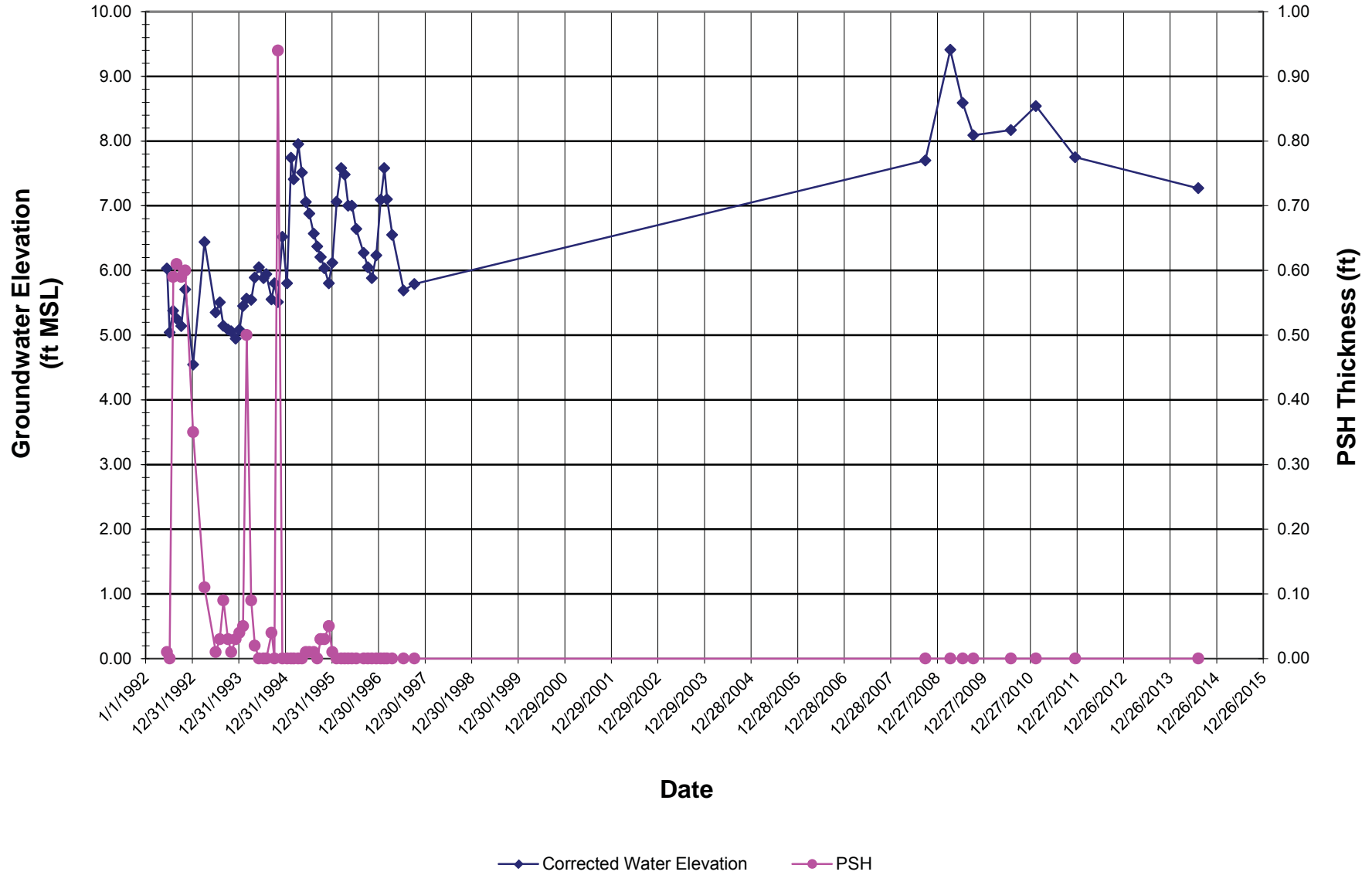
—◆— Corrected Water Elevation    —●— PSH



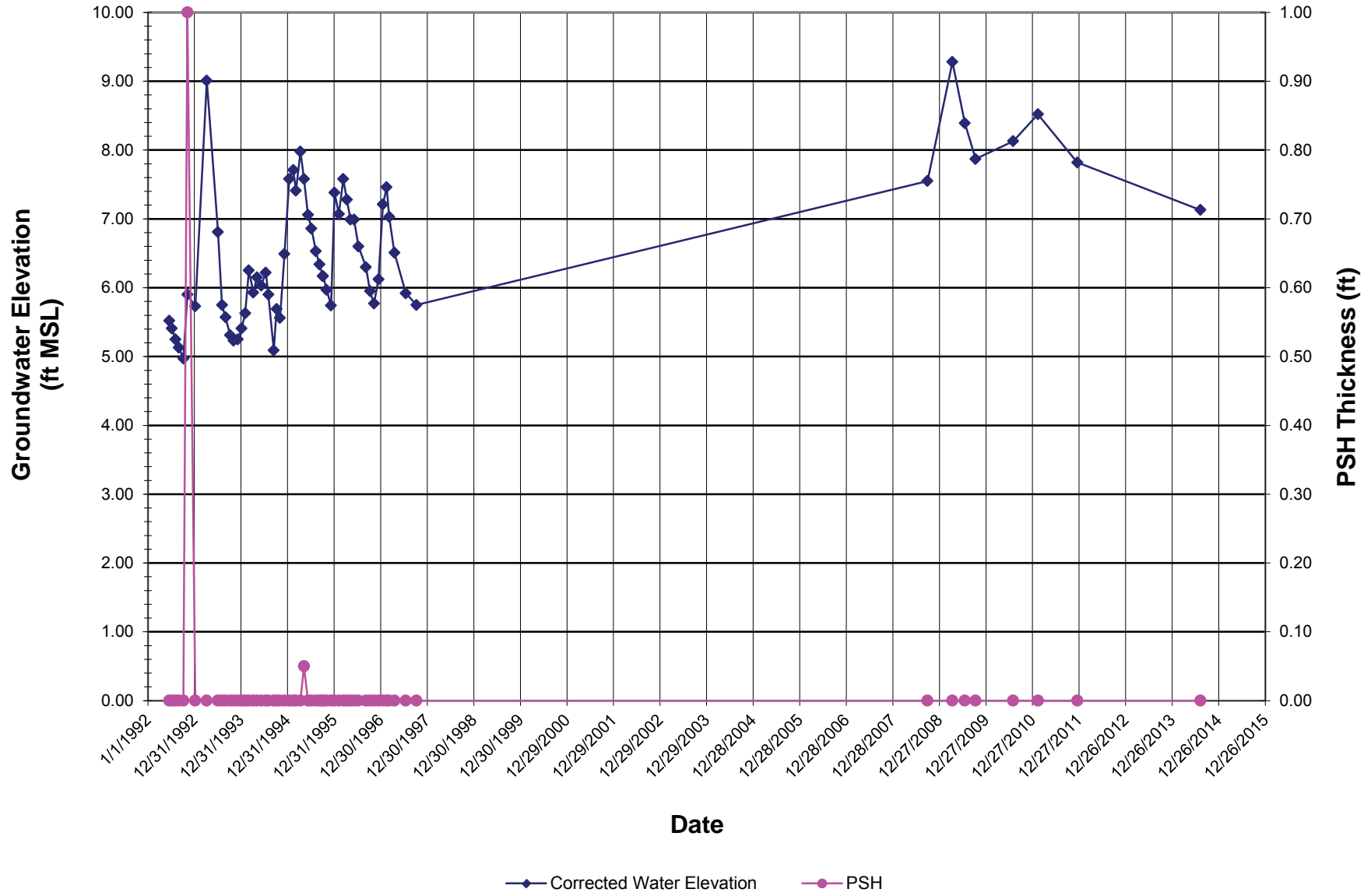
# Product Thickness and Groundwater Elevation Versus Time Well ES-1



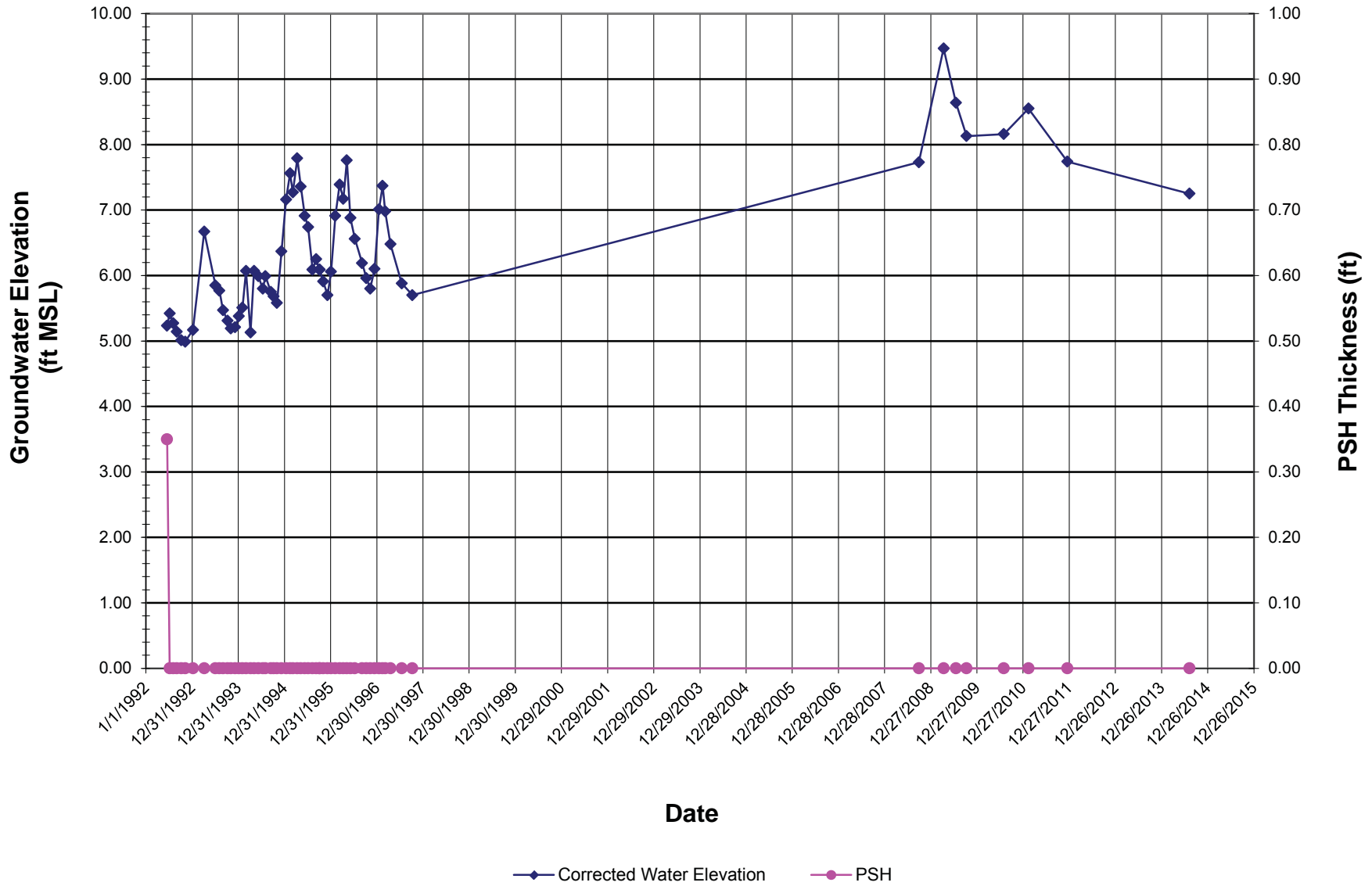
# Product Thickness and Groundwater Elevation Versus Time Well ES-2



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

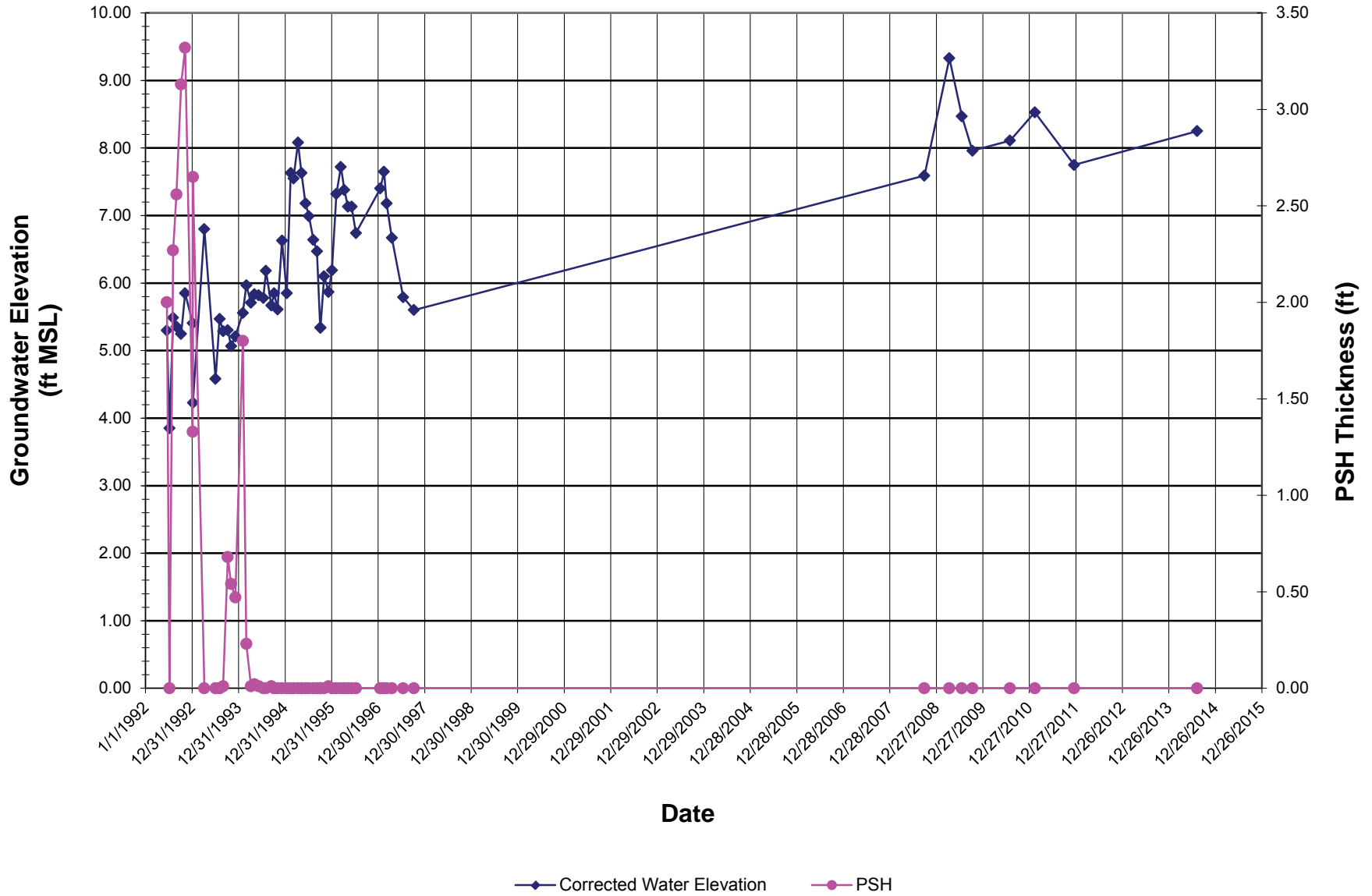


# Product Thickness and Groundwater Elevation Versus Time Well ES-4

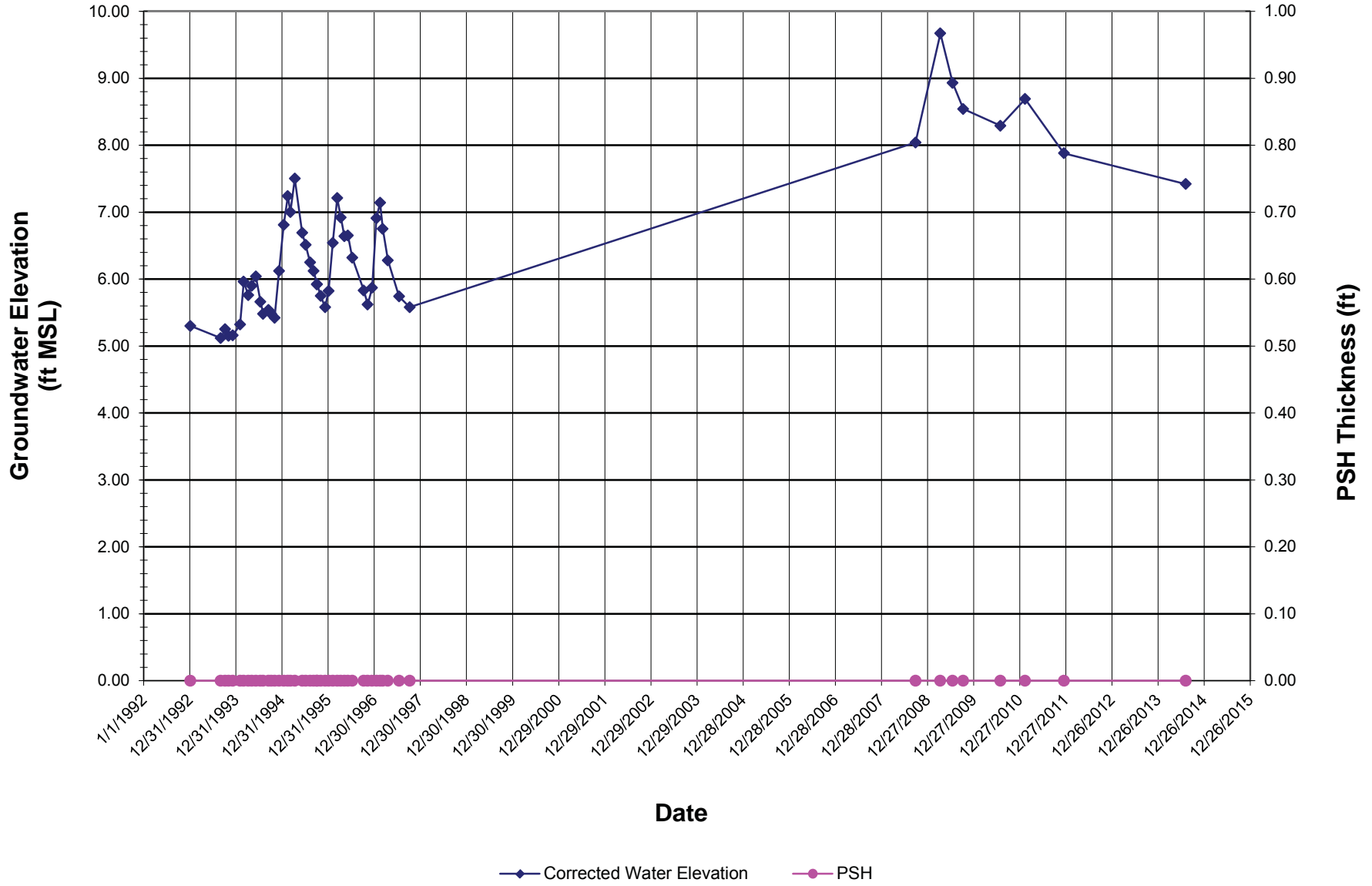




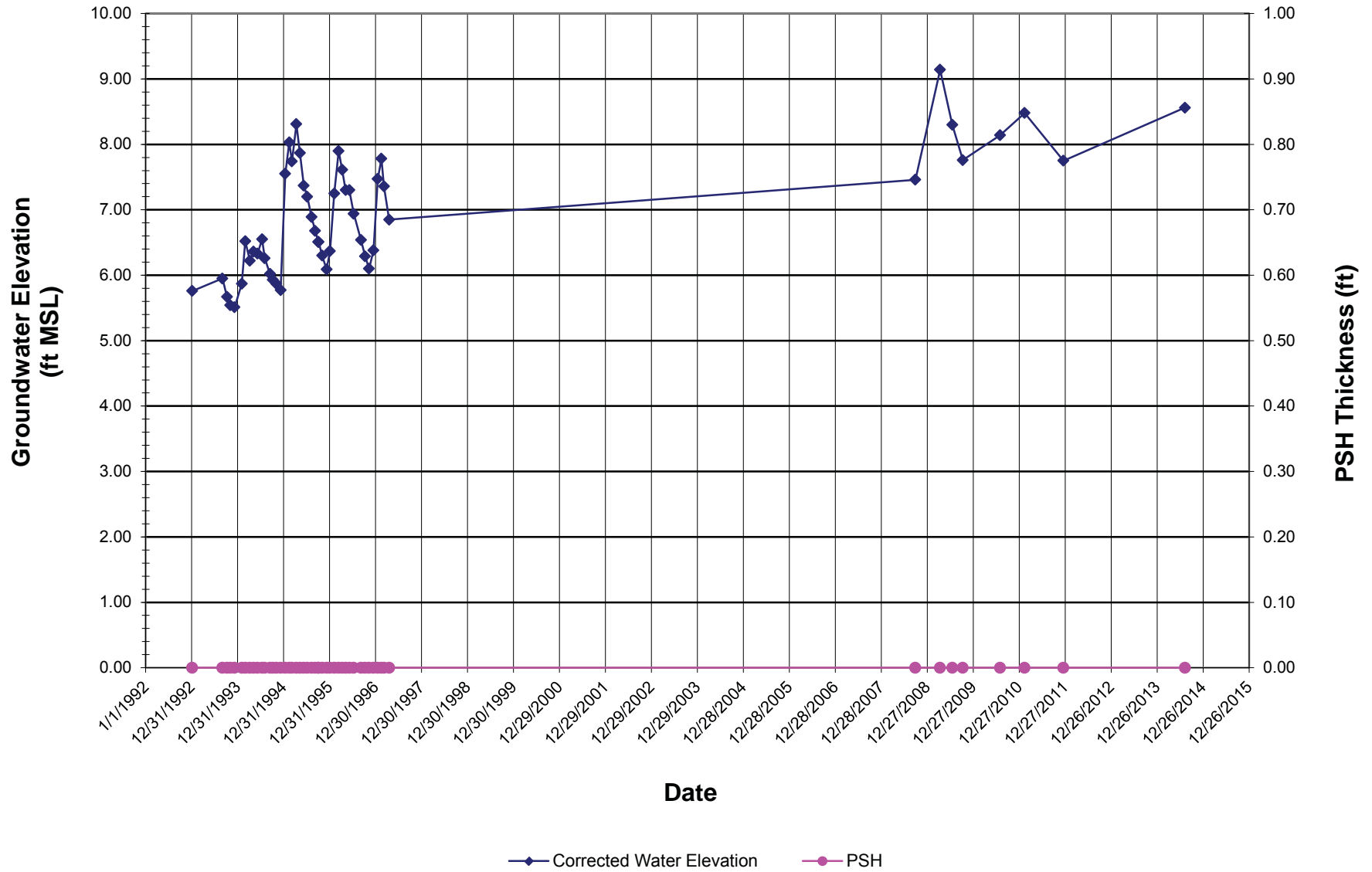
# Product Thickness and Groundwater Elevation Versus Time Well ES-5



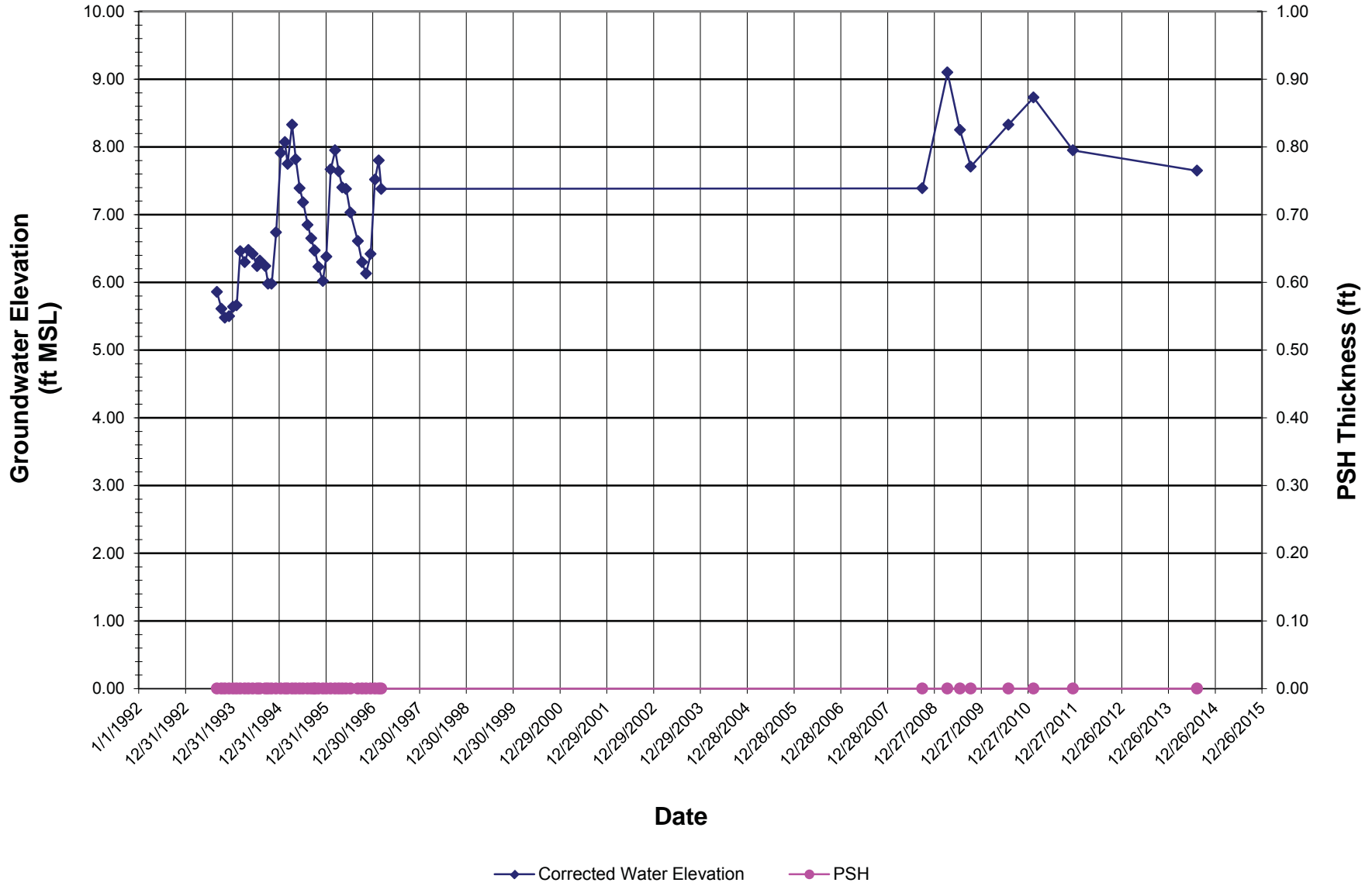
# Product Thickness and Groundwater Elevation Versus Time Well ES-6



# Product Thickness and Groundwater Elevation Versus Time Well ES-7

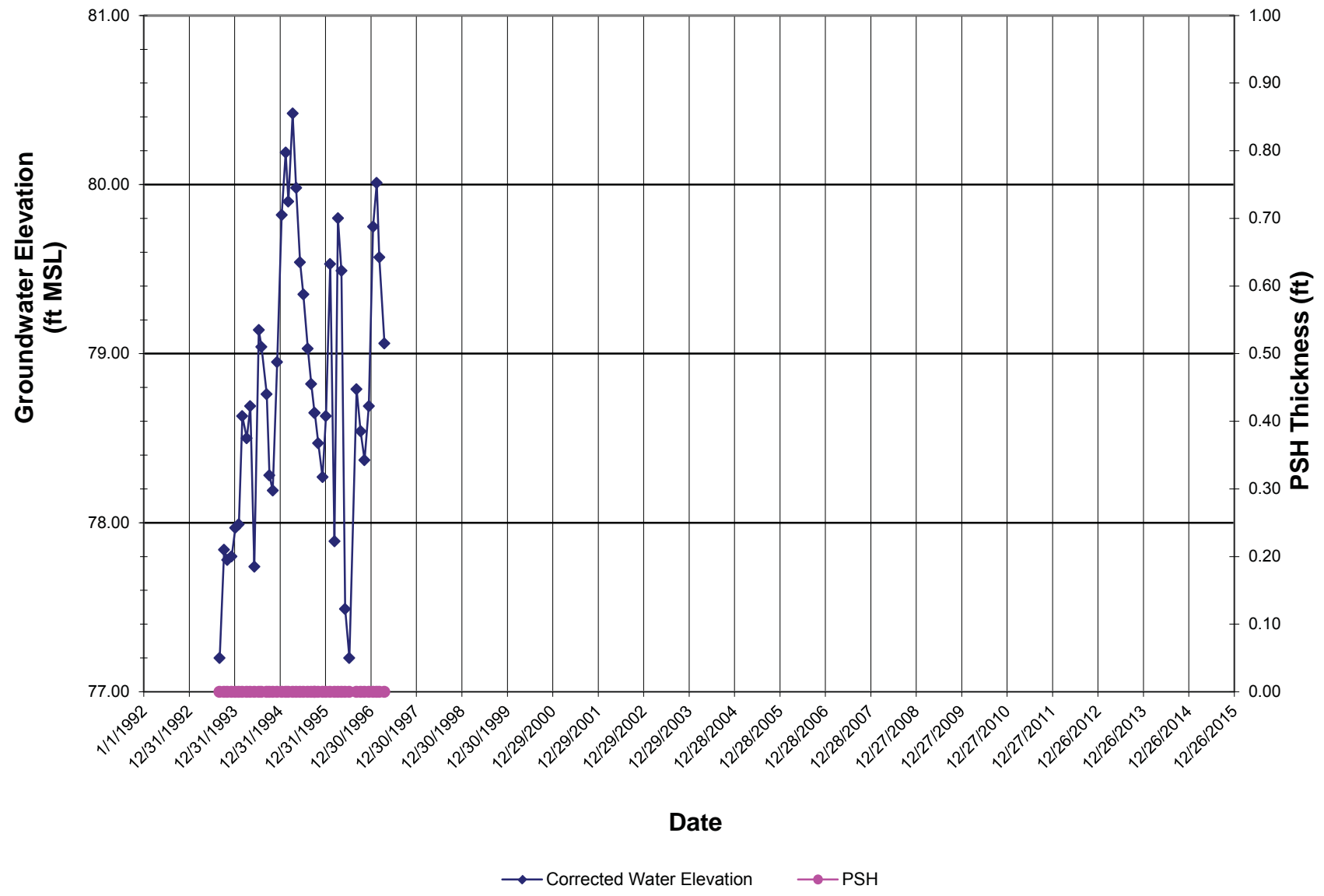


# Product Thickness and Groundwater Elevation Versus Time Well ES-8

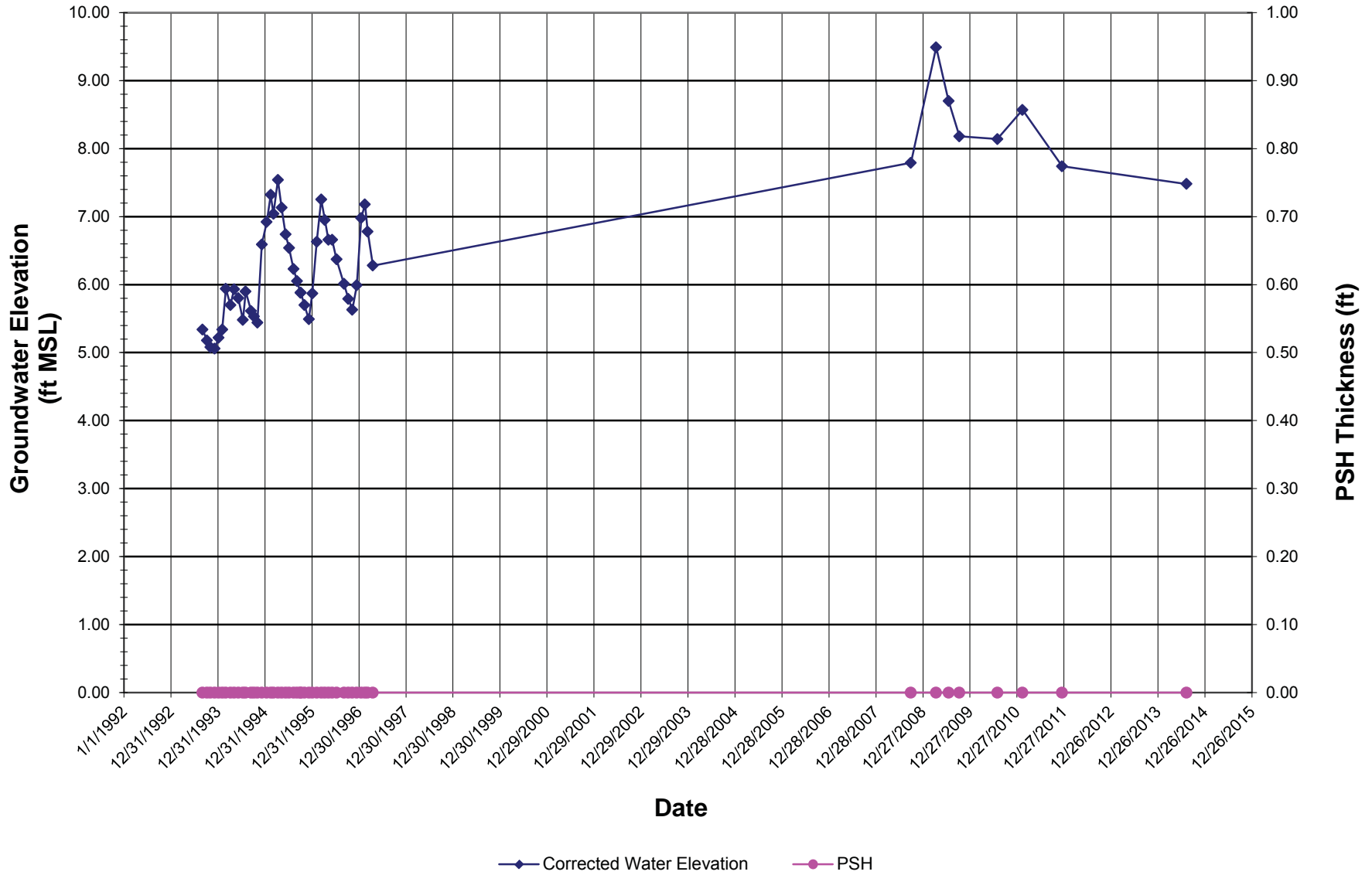




# Product Thickness and Groundwater Elevation Versus Time Well ES-10



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



**APPENDIX C**

**Groundwater Sampling Records**



**Groundwater Sampling Record**

Project No.: 14-1379.05	Project Name: GLI - Oakland	Date: 8-4-14
Well No.: ES-6	Total Depth to LNAPL (ft. BMP): -	
Gauged By: ACF	Starting Water Level (ft. BMP): 19.64	
Measuring Point of Well: North TOC	Total Depth to DNAPL (ft. BMP): -	
Screened Interval (ft. BGL): -	Total Depth (ft. BMP): 35.11	
Filter Pack Interval (ft. BGL): -	Casing Diameter (in. ID): 4"	

**Monitor Well Inspection**

Condition of Concrete Pad: good
Condition of Lock: none
Condition of Well Cover and Cap: good
Condition of Well: good
Other: hard bottom

**Quality Assurance**

Methods:	
Cleaning Solution: Alconox soap solution, tap rinse water, deionized water rinse	
Purging: Peristaltic Pump (Low-Flow)	Sampling: Low-Flow Method
Disposal of Discharge Water: Collected purge water in 55 gal. drum for disposal	
Instruments:	
Water Level:	Thermometer: YSI 556 MPS
PH Meter/ORP: YSI 556 MPS	Field Calibration: ET-Envirotech
Conductivity/DO Meter: YSI 556 MPS	Field Calibration: ET
Filtration: N/A	Other: N/A

**Sample Inventory**

Time	Bottles Collected			Filtration (Yes/No)	Preservation Type	Remarks (QC Sample, Other)
	Volume	Composition	Quantity			
	<del>1 L</del>	<del>Amber Glass</del>	<del>1</del>	<del>No</del>	<del>HCl</del>	<del>DRO, ORO</del>
19:00	40 mL	Glass VOA	46	No	HCl	GRO VOCs

Abbreviations		Green Star Environmental	
BMP: Below Measuring Point	C: Celsius	1325 W Randol Mill Road	
BGL: Below Ground Level	mL/m: milliliters per minute	Suite 104	
Cum Vol: Cumulative Volume	mL: milliliters	Arlington, TX 76012	
ID: Inner Diameter	in: inches	817-461-9210	







Groundwater Sampling Record

Project No.: 14-1379.05	Project Name: GLI - Oakland	Date: 8-5-14
Well No.: ES-3	Sampler Name: Adam Falkofske	

Sampling Measurements

Controller Settings:	Fill: 45 sec	Discharge: 10 sec	Pressure: /
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Starting Time:	Purge Characteristics			Water Quality Data				Appearance		
Time	Cum Vol (mL)	Purge Rate (mL/period)	GW Level (ft)	Temp (F/C)	pH	Conductivity (mS/cm)	ORP (mV)	Color	Turbidity & Sediment	Remarks
19:15	2000	400	17.92		± 0.1	± 3%	± 10 mV			
19:25	0	400	17.95	21.5	6.58	1.17	31.2	clear	none	
19:28	400	4800	18.01	21.5	6.58	1.17	33.5			
19:31	800	400	18.03	21.4	6.57	1.20	-5.5			
19:34	1200	500	18.04	21.4	6.57	1.21	-6.6			
19:37	1700	400	18.06	21.4	6.57	1.21	-6.8			

Water Level (ft BMP) at end of Purge: 18.06      Sample Intake Depth (ft BMP): -

Field Notes

<p><b>Abbreviations</b></p> <p>BMP: Below Measuring Point      C: Celsius          BGL: Below Ground Level      mL/m: milliliters per minute          Cum Vol: Cumulative Volume      mL: milliliters          ID: Inner Diameter      in: inches</p>	<p><b>Green Star Environmental</b></p> <p>1325 W Randol Mill Road          Suite 104          Arlington, TX 76012          817-461-9210</p>
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**Groundwater Sampling Record**

Project No.: 14-1379.05	Project Name: GLI - Oakland	Date: 8-4-14
Well No.: BC-3	Total Depth to LNAPL (ft. BMP): -	
Gauged By: ACF	Starting Water Level (ft. BMP): 17.22	
Measuring Point of Well: North TOC	Total Depth to DNAPL (ft. BMP): -	
Screened Interval (ft. BGL): -	Total Depth (ft. BMP): 20.20	
Filter Pack Interval (ft. BGL): -	Casing Diameter (in. ID): 4"	

**Monitor Well Inspection**

Condition of Concrete Pad: good
Condition of Lock: none
Condition of Well Cover and Cap: none *
Condition of Well: good
Other: hard bottom

**Quality Assurance**

Methods:	
Cleaning Solution: Alconox soap solution, tap rinse water, deionized water rinse	
Purging: Peristaltic Pump (Low-Flow)	Sampling: Low-Flow Method
Disposal of Discharge Water: Collected purge water in 55 gal. drum for disposal	
Instruments:	
Water Level:	Thermometer: YSI 556 MPS
PH Meter/ORP: YSI 556 MPS	Field Calibration: ET
Conductivity/DO Meter: YSI 556 MPS	Field Calibration: ET
Filtration: N/A	Other: N/A

**Sample Inventory**

Time	Bottles Collected			Filtration (Yes/No)	Preservation Type	Remarks (QC Sample, Other)
	Volume	Composition	Quantity			
	<del>1 L</del>	<del>Amber Glass</del>	<del>1</del>	<del>No</del>	<del>HCl</del>	<del>DRO, ORO</del>
20:10	40 mL	Glass VOA	16	No	HCl	GRO VOCs, DRO, ORO

Abbreviations		<b>Green Star Environmental</b>	
BMP: Below Measuring Point	C: Celsius	1325 W Randol Mill Road	
BGL: Below Ground Level	mL/m: milliliters per minute	Suite 104	
Cum Vol: Cumulative Volume	mL: milliliters	Arlington, TX 76012	
ID: Inner Diameter	in: inches	817-461-9210	

Groundwater Sampling Record

Project No.: 14-1379.05	Project Name: GLI - Oakland	Date: 8-5-14
Well No.: BC-3	Sampler Name: Adam Falkofske	

Sampling Measurements

Controller Settings:	Fill: 45 sec	Discharge: 10 sec	Pressure: /
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Starting Time:	Purge Characteristics			Water Quality Data				Appearance		
Time	Cum Vol (mL)	Purge Rate (mL/period)	GW Level (ft)	Temp (F/C)	pH	Conductivity (mS/cm)	ORP (mV)	Color	Turbidity & Sediment	Remarks
19:45	1700	500			± 0.1	± 3%	± 10 mV			
19:55	0	500	17.20	21.1	6.62	1.22	-53.6	clear	none	
<del>19:58</del> 19:58	500	500	17.25	21.0	6.63	1.21	-52.8			
20:01	1000	500	17.28	21.0	6.66	1.17	-49.6			
20:04	1500	500	17.35	21.0	6.66	1.17	-49.6			
20:07	2000	500	17.38	21.0	6.66	1.18	-49.6			

Water Level (ft BMP) at end of Purge: 17.38      Sample Intake Depth (ft BMP): —

Field Notes

did not send samples to lab due to lock mat on top of well

<p><b>Abbreviations</b></p> <p>BMP: Below Measuring Point      C: Celsius          BGL: Below Ground Level      mL/m: milliliters per minute          Cum Vol: Cumulative Volume      mL: milliliters          ID: Inner Diameter      in: inches</p>	<p><b>Green Star Environmental</b></p> <p>1325 W Randol Mill Road          Suite 104          Arlington, TX 76012          817-461-9210</p>
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**Groundwater Sampling Record**

Project No.: 14-1379.05	Project Name: GLI - Oakland	Date: 8-4-14
Well No.: ES-11	Total Depth to LNAPL (ft. BMP): -	
Gauged By: ACF	Starting Water Level (ft. BMP): 16.60	
Measuring Point of Well: North TOC	Total Depth to DNAPL (ft. BMP): <del>35.10</del> -	
Screened Interval (ft. BGL): -	Total Depth (ft. BMP): 35.10	
Filter Pack Interval (ft. BGL): -	Casing Diameter (in. ID): 4"	

**Monitor Well Inspection**

Condition of Concrete Pad: good, no bolts
Condition of Lock: none
Condition of Well Cover and Cap: good, no bolts
Condition of Well: good
Other: soft bottom

**Quality Assurance**

Methods:	
Cleaning Solution: Alconox soap solution, tap rinse water, deionized water rinse	
Purging: Peristaltic Pump (Low-Flow)	Sampling: Low-Flow Method
Disposal of Discharge Water: Collected purge water in 55 gal. drum for disposal	
Instruments:	
Water Level: <del>62.4</del>	Thermometer: YSI 556 MPS
PH Meter/ORP: YSI 556 MPS	Field Calibration: ET
Conductivity/DO Meter: YSI 556 MPS	Field Calibration: ET
Filtration: N/A	Other: N/A

**Sample Inventory**

Time	Bottles Collected			Filtration (Yes/No)	Preservation Type	Remarks (QC Sample, Other)
	Volume	Composition	Quantity			
<del>6:55</del>	<del>1 L</del>	<del>Amber Glass</del>	<del>1</del>	<del>No</del>	<del>HCl</del>	<del>DRO, ORO</del>
6:55	40 mL	Glass VOA	1	No	HCl	GRO VOCs, DRO, ORO

Abbreviations		<b>Green Star Environmental</b>	
BMP: Below Measuring Point	C: Celsius	1325 W Randol Mill Road	
BGL: Below Ground Level	mL/m: milliliters per minute	Suite 104	
Cum Vol: Cumulative Volume	mL: milliliters	Arlington, TX 76012	
ID: Inner Diameter	in: inches	817-461-9210	





**Groundwater Sampling Record**

Project No.: 14-1379.05	Project Name: GLI - Oakland	Date: 8-4-14
Well No.: ES-4	Total Depth to LNAPL (ft. BMP): —	
Gauged By: ACF	Starting Water Level (ft. BMP): 16.68	
Measuring Point of Well: North TOC	Total Depth to DNAPL (ft. BMP): —	
Screened Interval (ft. BGL): —	Total Depth (ft. BMP): 30.00	
Filter Pack Interval (ft. BGL): —	Casing Diameter (in. ID): 4"	

**Monitor Well Inspection**

Condition of Concrete Pad: good
Condition of Lock: good
Condition of Well Cover and Cap: good, missing 1 bolt
Condition of Well: good
Other: soft bottom

**Quality Assurance**

Methods:
Cleaning Solution: Alconox soap solution, tap rinse water, deionized water rinse
Purging: Peristaltic Pump (Low-Flow)      Sampling: Low-Flow Method
Disposal of Discharge Water: Collected purge water in 55 gal. drum for disposal
Instruments:
Water Level:      Thermometer: YSI 556 MPS
PH Meter/ORP: YSI 556 MPS      Field Calibration: ET
Conductivity/DO Meter: YSI 556 MPS      Field Calibration: ET
Filtration: N/A      Other: N/A

**Sample Inventory**

Time	Bottles Collected			Filtration (Yes/No)	Preservation Type	Remarks (QC Sample, Other)
	Volume	Composition	Quantity			
	1 L	Amber Glass	1	No	HCl	DRO, ORO
7:30	40 mL	Glass VOA	16	No	HCl	GRO VOCs, DRO, ORO

Abbreviations		<b>Green Star Environmental</b>	
BMP: Below Measuring Point	C: Celsius	1325 W Randol Mill Road	
BGL: Below Ground Level	mL/m: milliliters per minute	Suite 104	
Cum Vol: Cumulative Volume	mL: milliliters	Arlington, TX 76012	
ID: Inner Diameter	in: inches	817-461-9210	





**Groundwater Sampling Record**

Project No.: 14-1379.05	Project Name: GLI - Oakland	Date: 8-4-14
Well No.: ES-2	Total Depth to LNAPL (ft. BMP): -	
Gauged By: ACF	Starting Water Level (ft. BMP): 17.39	
Measuring Point of Well: North TOC	Total Depth to DNAPL (ft. BMP): -	
Screened Interval (ft. BGL): -	Total Depth (ft. BMP): 30.24	
Filter Pack Interval (ft. BGL): -	Casing Diameter (in. ID): 4"	

**Monitor Well Inspection**

Condition of Concrete Pad: good
Condition of Lock: none
Condition of Well Cover and Cap: good, no wingnut
Condition of Well: good
Other: hard bottom

**Quality Assurance**

Methods:	
Cleaning Solution: Alconox soap solution, tap rinse water, deionized water rinse	
Purging: Peristaltic Pump (Low-Flow)	Sampling: Low-Flow Method
Disposal of Discharge Water: Collected purge water in 55 gal. drum for disposal	
Instruments:	
Water Level:	Thermometer: YSI 556 MPS
PH Meter/ORP: YSI 556 MPS	Field Calibration: ET
Conductivity/DO Meter: YSI 556 MPS	Field Calibration: ET
Filtration: N/A	Other: N/A

**Sample Inventory**

Bottles Collected				Filtration (Yes/No)	Preservation Type	Remarks (QC Sample, Other)
Time	Volume	Composition	Quantity			
	<del>1 L</del>	<del>Amber Glass</del>	<del>1</del>	No	HCl	DRO, ORO
8:30	40 mL	Glass VOA	16	No	HCl	GRO VOCs, DRO, ORO

Abbreviations		<b>Green Star Environmental</b>	
BMP: Below Measuring Point	C: Celsius	1325 W Randol Mill Road	
BGL: Below Ground Level	mL/m: milliliters per minute	Suite 104	
Cum Vol: Cumulative Volume	mL: milliliters	Arlington, TX 76012	
ID: Inner Diameter	in: inches	817-461-9210	





**Groundwater Sampling Record**

Project No.: 14-1379.05	Project Name: GLI - Oakland	Date: 8-4-14
Well No.: ES-5	Total Depth to LNAPL (ft. BMP): —	
Gauged By: ACF	Starting Water Level (ft. BMP): 15.83	
Measuring Point of Well: North TOC	Total Depth to DNAPL (ft. BMP): —	
Screened Interval (ft. BGL): —	Total Depth (ft. BMP): 30.31	
Filter Pack Interval (ft. BGL): —	Casing Diameter (in. ID): 4"	

**Monitor Well Inspection**

Condition of Concrete Pad: good
Condition of Lock: none
Condition of Well Cover and Cap: good
Condition of Well: good
Other: soft bottom

**Quality Assurance**

Methods:
Cleaning Solution: Alconox soap solution, tap rinse water, deionized water rinse
Purging: Peristaltic Pump (Low-Flow)      Sampling: Low-Flow Method
Disposal of Discharge Water: Collected purge water in 55 gal. drum for disposal
Instruments:
Water Level:      Thermometer: YSI 556 MPS
PH Meter/ORP: YSI 556 MPS      Field Calibration: ET
Conductivity/DO Meter: YSI 556 MPS      Field Calibration: ET
Filtration: N/A      Other: N/A

**Sample Inventory**

Bottles Collected				Filtration (Yes/No)	Preservation Type	Remarks (QC Sample, Other)
Time	Volume	Composition	Quantity			
	1 L	Amber Glass	1	No	HCl	DRO, ORO
9:30	40 mL	Glass VOA	4	No	HCl	GRO VOCs

Abbreviations		<b>Green Star Environmental</b>
BMP: Below Measuring Point	C: Celsius	1325 W Randol Mill Road
BGL: Below Ground Level	mL/m: milliliters per minute	Suite 104
Cum Vol: Cumulative Volume	mL: milliliters	Arlington, TX 76012
ID: Inner Diameter	in: inches	817-461-9210





**Groundwater Sampling Record**

Project No.: 14-1379.05	Project Name: GLI - Oakland	Date: <del>4-14</del> 4-14
Well No.: BC-1	Total Depth to LNAPL (ft. BMP): —	
Gauged By: ACF	Starting Water Level (ft. BMP): 17.20	
Measuring Point of Well: North TOC	Total Depth to DNAPL (ft. BMP): —	
Screened Interval (ft. BGL): —	Total Depth (ft. BMP): 29.71	
Filter Pack Interval (ft. BGL): —	Casing Diameter (in. ID): 4"	

**Monitor Well Inspection**

Condition of Concrete Pad:	good/metal
Condition of Lock:	no lock
Condition of Well Cover and Cap:	good
Condition of Well:	good
Other:	soft bottom, metal cover required 2 crowbars to pry out

**Quality Assurance**

Methods:	
Cleaning Solution:	Alconox soap solution, tap rinse water, deionized water rinse
Purging:	Peristaltic Pump (Low-Flow)
Sampling:	Low-Flow Method
Disposal of Discharge Water:	Collected purge water in 55 gal. drum for disposal
Instruments:	
Water Level:	Thermometer: YSI 556 MPS
PH Meter/ORP:	YSI 556 MPS Field Calibration: ET
Conductivity/DO Meter:	YSI 556 MPS Field Calibration: ET
Filtration:	N/A Other: N/A

**Sample Inventory**

Time	Bottles Collected			Filtration (Yes/No)	Preservation Type	Remarks (QC Sample, Other)
	Volume	Composition	Quantity			
	1 L	Amber Glass	1	No	HCl	DRO, ORO
10:45	40 mL	Glass VOA	1/6	No	HCl	GRO VOCs, PPO, ORO

Abbreviations		Green Star Environmental	
BMP: Below Measuring Point	C: Celsius	1325 W Randol Mill Road	
BGL: Below Ground Level	mL/m: milliliters per minute	Suite 104	
Cum Vol: Cumulative Volume	mL: milliliters	Arlington, TX 76012	
ID: Inner Diameter	in: inches	817-461-9210	





**Groundwater Sampling Record**

Project No.: 14-1379.05	Project Name: GLI - Oakland	Date: 3-4-14
Well No.: ES-7	Total Depth to LNAPL (ft. BMP): —	
Gauged By: ACF	Starting Water Level (ft. BMP): 17.10	
Measuring Point of Well: North TOC	Total Depth to DNAPL (ft. BMP): —	
Screened Interval (ft. BGL): —	Total Depth (ft. BMP): 31.61	
Filter Pack Interval (ft. BGL): —	Casing Diameter (in. ID): 4"	

**Monitor Well Inspection**

Condition of Concrete Pad: good, missing 1 bolt
Condition of Lock: no lock
Condition of Well Cover and Cap: good, sediment filled up halfway in manway
Condition of Well: good
Other: hard bottom

**Quality Assurance**

Methods:
Cleaning Solution: Alconox soap solution, tap rinse water, deionized water rinse
Purging: Peristaltic Pump (Low-Flow)      Sampling: Low-Flow Method
Disposal of Discharge Water: Collected purge water in 55 gal. drum for disposal
Instruments:
Water Level: Thermometer: YSI 556 MPS
PH Meter/ORP: YSI 556 MPS      Field Calibration: ET
Conductivity/DO Meter: YSI 556 MPS      Field Calibration: ET
Filtration: N/A      Other: N/A

**Sample Inventory**

Bottles Collected				Filtration (Yes/No)	Preservation Type	Remarks (QC Sample, Other)
Time	Volume	Composition	Quantity			
	<del>1 L</del>	<del>Amber Glass</del>	<del>1</del>	No	HCl	DRO, ORO
12:30	40 mL	Glass VOA	1	No	HCl	GRO VOCs

Abbreviations		Green Star Environmental	
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BGL: Below Ground Level	mL/m: milliliters per minute	Suite 104	
Cum Vol: Cumulative Volume	mL: milliliters	Arlington, TX 76012	
ID: Inner Diameter	in: inches	817-461-9210	





**Groundwater Sampling Record**

Project No.: 14-1379.05	Project Name: GLI - Oakland	Date: 8-6-14
Well No.: ES-9	Total Depth to LNAPL (ft. BMP): —	
Gauged By: ACF	Starting Water Level (ft. BMP): 16.05	
Measuring Point of Well: North TOC	Total Depth to DNAPL (ft. BMP): —	
Screened Interval (ft. BGL): —	Total Depth (ft. BMP): 34.90	
Filter Pack Interval (ft. BGL): —	Casing Diameter (in. ID): 4 1/2	

**Monitor Well Inspection**

Condition of Concrete Pad: good, missing 1 bolt
Condition of Lock: none
Condition of Well Cover and Cap: good
Condition of Well: good
Other: soft bottom

**Quality Assurance**

Methods:
Cleaning Solution: Alconox soap solution, tap rinse water, deionized water rinse
Purging: Peristaltic Pump (Low-Flow)      Sampling: Low-Flow Method
Disposal of Discharge Water: Collected purge water in 55 gal. drum for disposal
Instruments:
Water Level:      Thermometer: YSI 556 MPS
PH Meter/ORP: YSI 556 MPS      Field Calibration: ET
Conductivity/DO Meter: YSI 556 MPS      Field Calibration: ET
Filtration: N/A      Other: N/A

**Sample Inventory**

Time	Bottles Collected			Filtration (Yes/No)	Preservation Type	Remarks (QC Sample, Other)
	Volume	Composition	Quantity			
	1 L	Amber Glass	1	No	HCl	DRO, ORO
(3:30)	40 mL	Glass VOA	4/10	No	HCl	GRO VOCs, DRO, ORO

<p><b>Abbreviations</b></p> <p>BMP: Below Measuring Point      C: Celsius          BGL: Below Ground Level      mL/m: milliliters per minute          Cum Vol: Cumulative Volume      mL: milliliters          ID: Inner Diameter      in: inches</p>		<p><b>Green Star Environmental</b></p> <p>1325 W Randol Mill Road          Suite 104          Arlington, TX 76012          817-461-9210</p>
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Project No.: 14-1379.05	Project Name: GLI - Oakland	Date: 8-6-14
Well No.: ES-8	Total Depth to LNAPL (ft. BMP): —	
Gauged By: ACF	Starting Water Level (ft. BMP): 17.09	
Measuring Point of Well: North TOC	Total Depth to DNAPL (ft. BMP): —	
Screened Interval (ft. BGL): —	Total Depth (ft. BMP): 29.30	
Filter Pack Interval (ft. BGL): —	Casing Diameter (in. ID): 4"	

<b>Monitor Well Inspection</b>	
Condition of Concrete Pad:	good, missing 2 bolts
Condition of Lock:	none
Condition of Well Cover and Cap:	good
Condition of Well:	good
Other:	soft bottom

<b>Quality Assurance</b>	
Methods:	
Cleaning Solution: Alconox soap solution, tap rinse water, deionized water rinse	
Purging: Peristaltic Pump (Low-Flow)	Sampling: Low-Flow Method
Disposal of Discharge Water: Collected purge water in 55 gal. drum for disposal	
Instruments:	
Water Level:	Thermometer: YSI 556 MPS
PH Meter/ORP: YSI 556 MPS	Field Calibration: ET
Conductivity/DO Meter: YSI 556 MPS	Field Calibration: ET
Filtration: N/A	Other: N/A

Sample Inventory				Filtration (Yes/No)	Preservation Type	Remarks (QC Sample, Other)
Time	Volume	Composition	Quantity			
	1 L	Amber Glass	1	No	HCl	DRO, ORO
2:05	40 mL	Glass VOA	4/6	No	HCl	GRO VOCs

Abbreviations		Green Star Environmental
BMP: Below Measuring Point	C: Celsius	1325 W Randol Mill Road Suite 104 Arlington, TX 76012 817-461-9210
BGL: Below Ground Level	mL/m: milliliters per minute	
Cum Vol: Cumulative Volume	mL: milliliters	
ID: Inner Diameter	in: inches	

