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SITE INVESTIGATION AND SOIL GAS SURVEY REPORT OAKLAND BUS TERMINAL 2103 SAN PABLO AVENUE OAKLAND, CALIFORNIA 94608

Green Star Environmental Report No. 11-1379

**Report Prepared For:** 

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

July 5, 2011



#### 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 Subsurface Investigation and Soil Vapor Report, dated July 5, 2011, has been prepared and the related activities were conducted in accordance with the required standards.

05 JULY 2011

DATE

William Little, P.G. California P.G. # 7473 Advanced GeoEnvironmental, Inc. 837 Shaw Road Stockton, CA 91776



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

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

7-5-11 DATE

**Todd Bachand Environmental Manager** FirstGroup America, Inc. 600 Vine Street Cincinnati, OH 45202



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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 Oakland Bus Terminal located at 2103 San Pablo Avenue, Oakland, California ("Site"; Fuel Leak Case No. RO0000074 and Geotracker Global ID T0600100666). At the request of Alameda County Environmental Health (ACEH) in their letter dated April 13, 2010, a subsurface investigation and soil vapor sampling event was conducted at the Site between October 20 and 22, 2010 to document soil impacts related to the Site. A Workplan dated July 16, 2010 that details the scope of work documented by this report was approved by ACEH on September 2, 2010. This report documents the details related to the limited subsurface investigation and soil vapor sampling 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 2 and 3 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. A Site Plan is 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 utilizing, total fluids recovery pumps in four, four-inch diameter 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 well ES-1.

On April 8, 2009, the well network was surveyed to mean sea level (msl) elevation and latitude and longitude 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).

#### 2.0 SUBSURFACE INVESTIGATION

#### 2.1 Soil Evaluation and Subsurface Conditions

Between October 20 and 22, 2010, twelve soil borings (B-1 to B-12) were advanced at the Site in order to evaluate subsurface conditions in the area of the former tankpit (Figure 3). The borings were advanced by Cascade Drilling, a water well driller licensed by the State of California using a direct-push rig to depths ranging from 15 to 20 feet below ground surface (bgs).

Soils observed during drilling activities were documented on boring logs in general accordance with the Unified Soil Classification System (USCS; Appendix A). Materials observed during drilling appeared to generally consist of fill materials near the surface (clays, gravel, concrete, etc.) which were underlain by native clays and clayey sands with some gravel intervals. Groundwater was encountered during drilling at depths ranging from 16 to 17 feet bgs in each boring except borings B-6 and B-11. In boring B-6, gravels prevented recovery of a soil core beneath 12.5 feet bqs. However, the end of the direct-push rod was wet, indicating groundwater had been reached. Due to refusal, boring B-11 was terminated at 15 feet bgs; groundwater was not encountered.

Soil samples were screened using a photoionization detector (PID) as well as by olfactory and visual observations. Soil samples collected from each boring were placed in plastic bags and allowed to equilibrate for at least ten minutes. The headspace within each bag was then screened using the PID and documented on the appropriate boring logs. No portion of soil used for field screening was submitted for laboratory analysis. Elevated PID readings and/or hydrocarbon odors were observed in each of the soil borings.

Samples selected for laboratory analysis were placed in labeled, laboratory prepared glassware and/or single-use 5 cm<sup>3</sup> Core N' One sampling capsules, immediately stored in an ice-cooled chest, and delivered under chain-of-custody for analysis to a California certified laboratory, McCampbell Analytical, Inc..

#### 2.2 Soil Vapor Sample Collection

On October 20, 2010, four direct-push soil borings (SV-1, SV-2, SV-3a, and SV-3b) were advanced to approximately 5 feet bgs in an effort to collect soil vapor samples using Geoprobe soil vapor apparatus. A figure illustrating locations of soil vapor boring locations is presented as Figure 5. An expendable vapor point was placed near the bottom of an assembly of 1.25-inch diameter hollow steel rods. The assembly was then advanced into undisturbed soils and retracted twelve inches in order to expose an interval from which soil vapor could be drawn by vacuum. Single-use, ¼-inch diameter disposable polyethylene tubing was then attached to the apparatus with an O-ring to ensure a vacuum-tight seal. The adapter assembly was lowered through the center of the hollow drive rods to the specified depth and secured by threading into the expendable vapor point holder. Any void space at the surface around the soil vapor sampler was sealed with hydrated bentonite powder to prevent ambient air intrusion.

Four, one-liter Summa sampling and one, six-liter Summa purge canisters were used to purge or collect soil vapor samples. Sampling and purge canisters were connected together with a dedicated and sterilized manifold consisting of: a vapor-tight valve, a particulate filter, a flow restriction meter calibrated to 200 milliliters per minute (ml/min), a stainless steel tee-fitting, two vacuum gauges at either end of the flow controller, and connections for both purge and sampling canisters (manifold assembly). The manifold



assembly was attached to the tubing from the direct-push soil probe rods. The purge canister was attached to the end of the sampling manifold while the sample canisters were attached to the tee-fitting between the sample tubing and purge container. Teflon® tape was placed on the threads of each open fitting of the manifold assembly prior to attaching the sample tubing and sampling and purge canisters.

Each canister's initial vacuum was measured and recorded between -30 and -28 inches of mercury (in Hg). Leak tests were performed on each assembly by attaching and securing the sample and purge canisters to the manifold and opening the valves on the purge canister and the manifold and ensuring no change in vacuum occurred in the sample canister. The leak test was performed for approximately 10 minutes on each assembly.

To ensure a reliable soil vapor sample is collected with no ambient air intrusion down the probe rod, cotton balls were saturated with isopropyl alcohol and placed in a bowl under a heavy plastic shroud containing the manifold assembly and purge and sampling canisters.

Upon achieving a successful leak test and allowing for 20 minutes for equilibrium to be achieved, the purge canister valve was opened for a period of time to allow three calculated volumes of air to be purged. Purge volume was determined by calculating the internal volume of the tubing, vapor point holder and adapter and the volume of sampling void (created by retracting the boring rod). The purge vacuum gauge was continually monitored to ensure the proper decrease of vacuum occurred.

Upon achieving the targeted purge volume, the purge canister valve was closed and the sample canister valve was opened. The initial pressure and time of each sample was recorded. Upon reaching at least -5 in Hg or less, the sample canister valve was closed. Final pressure and time were recorded. It should be noted that only the sample from SV-2 reached a proper final pressure of -5 in Hg. This indicates low permeability soils were present at the sampling depth at borings SV-1, SV-3a, and SV-3b as an adequate volume of soil vapor could not be collected. However, a soil vapor sample was collected at SV-2. Following sampling, the sampling port of each canister was capped with a brass end-cap, properly labeled, and delivered under chain-of-custody to McCampbell Analytical, Inc.

### 2.3 Equipment Decontamination Procedures

Prior to use, non-disposable, down-hole equipment was decontaminated by a solution of laboratory grade soap and tap water followed by a rinse of distilled water, or in the case of drilling equipment, tap water applied at high pressure.

### 2.4 Field-Derived Waste

Decontamination fluids and soil cuttings were containerized in appropriately labeled, DOT-approved 55-gallon drums that were properly sealed and temporarily stored at the Site pending waste characterization and potential off-site disposal.

### 2.5 Site Restoration

Upon completion of soil boring and sampling activities, sampling apparatus was removed from each boring and the remaining void was backfilled using grout to within one-foot of the ground surface. Any remaining void was completed to surface grade with concrete to match surrounding surface conditions.



### 3.0 ANALYTICAL RESULTS

Selected soil samples were analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and gasoline range total petroleum hydrocarbons (TPH-g) via EPA Method 8021 and diesel range TPH (TPH-d) via EPA Method 8015. The soil vapor sample (SV-2) was analyzed for volatile organic compounds (VOCs) including BTEX and TPH-g via EPA Method TO-15; however, due to the presence of low permeability soils, the three other sample canisters were determined to contain insufficient sample volumes for analysis. A trip blank was transported to the laboratory with the samples, but was not analyzed as a review of field sample analytical results did not indicate any apparent quality control issues. Summaries of soil and soil vapor analytical results are presented as Tables 4 and 5, respectively. Analytical reports for the event are presented in Appendix B.

Analytes were differentiated into three groups for discussion purposes: BTEX, TPH, and other VOCs. Tables 4 and 5 present summaries of soil and soil vapor analytical data. Figures 4 and 5 illustrate analytical results for soil and soil vapor, respectively.

#### 3.1 Soil

#### **3.1.1 BTEX Constituents**

Analytical results indicated at least one BTEX constituent was detected in 12 of 20 analyzed samples. Benzene was detected in seven samples at concentrations ranging from 0.0052 mg/Kg in B-1 (6.5') to 3.4 mg/Kg in B-8 (16'). Toluene was detected in five samples at concentrations ranging from 0.0049 mg/Kg in B-1 (14') to 1.1 mg/Kg in B-7 (16'). Ethylbenzene was detected in six samples at concentrations ranging from 0.021 mg/Kg in B-1 (14') to 7.3 mg/Kg in B-8 (16'). Xylenes were detected in eleven samples at concentrations ranging from 0.0043 in B-9 (13') to 13 mg/Kg in B-2 (15.5') and B-4 (15.5').

#### 3.1.2 TPH Constituents

Analytical results indicated at least one TPH constituent was detected in 19 of 20 analyzed samples. TPH-g was detected in 13 samples at concentrations ranging from 1.2 mg/Kg in B-2 (7.5') to 2,600 mg/Kg in B-8 (16'). TPH-d was detected in 17 samples at concentrations ranging from 1.5 mg/Kg in B-7 (5.5') to 3,100 mg/Kg in B-8 (16').

#### 3.1.3 Other VOCs

Analytical results indicated that MTBE was detected above laboratory detection limits only in one sample B-7 (16'), at a concentration of 5.9 mg/Kg. The samples were not analyzed for any other VOCs.

#### 3.2 Soil Vapor

#### 3.2.1 BTEX Constituents

Analytical results indicated that benzene was present at a concentration of  $0.032 \text{ mg/m}^3$  in the sample SV-2. No other BTEX constituents were present above laboratory detection limits.



## 3.2.2 TPH Constituents

Analytical results indicated TPH-g was detected in soil vapor sample SV-2 at an estimated concentration of 8.70 mg/m<sup>3</sup>. TPH-g was reported as an estimated value as a TPH-g standard was not analyzed with the sample for calibration verification. However, McCampbell Analytical, Inc. is confident in the accuracy of the result due to the calibration stability of laboratory equipment with respect to TPH analysis.

## 3.2.3 Other VOCs

Analytical results indicated concentrations of the four following VOCs were detected above laboratory detection limits: cyclohexane (0.0540 mg/m<sup>3</sup>), hexane (0.200 mg/m<sup>3</sup>), 4-methyl-2-pentanone (0.071 mg/m<sup>3</sup>), and 1,2,4-trimethylbenzene (0.013 mg/m<sup>3</sup>). Hexane and 1,2,4-trimethlybenzene are common fuel fractions. Cyclohexane and 4-methyl-2-pentanone, a derivative of acetone, are common laboratory contaminants.

## 3.3 Comparison of Chemicals of Concern to Regulatory Thresholds

Analytical results were compared to San Francisco Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) for each constituent, as applicable. Commercial/industrial, non-drinking water resource ESLs for shallow soils (<3 m) and deep soils (>3 m) and shallow soil gas (<3 m) for commercial/industrial land use only ESLs apply to the Site. ESLs, if established, are presented for each constituent in Tables 2 and 3.

### 3.3.1 Soil

Of the detected constituents in soil samples from the October 2010 event, none of the samples exceeded their RWQCB ESLs for shallow soils (<3m bgs); however, concentrations of benzene, ethylbenzene, xylenes, TPH-g and TPH-d exceeded their established RWQCB ESLs for deep soils (>3m bgs) in seven borings (B-2, B-3, B-4, B-5, B-7, B-8 and B-10). Benzene exceeded its ESL of 2.00 mg/Kg in two samples at concentrations of 2.50 mg/Kg in B-2 (15.5') and 3.40 mg/Kg in B-8 (16'). Ethylbenzene exceeded its ESL of 4.70 mg/Kg in three samples at concentrations ranging from 6.70 mg/Kg in B-4 (15.5') to 7.30 mg/Kg in B-8 (16'). Xylenes exceeded their ESL of 11.0 mg/Kg in two samples at concentrations of 13.0 mg/Kg in B-2 (15.5') and in B-4 (15.5'). TPH-g exceeded its ESL of 180 mg/Kg in seven samples at concentrations ranging from 880 mg/Kg in B-3 (16') to 2,600 mg/Kg in B-8 (16'). TPH-d exceeded its ESL of 180 mg/Kg in 600 mg/Kg in B-8 (16').

### 3.3.2 Soil Vapor

Of the detected chemical constituents, only benzene and TPH-g have established RWQCB ESL's for shallow soil (<3m bgs). Neither benzene (0.032 mg/m<sup>3</sup>) nor TPH-g (8.70 mg/m<sup>3</sup>) exceeded their respective ESLs of 0.280 mg/m<sup>3</sup> or 29.0 mg/m<sup>3</sup>. It should be noted that, only one soil vapor sample (SV-2) could be collected due to low permeability soils.

## 4.0 SUMMARY AND CONCLUSIONS

This Limited Subsurface Investigation and Soil Vapor Sampling Report documents activities conducted in October 2010. 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 utilizing, total fluids recovery pumps in four, four-inch diameter 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 well ES-1.
- During field activities for the October 2010 event, Green Star directed the advancement of 12 soil borings (B-1 through B-12) for collection of soil samples in order to evaluate subsurface impacts at the Site. Boring depths ranged from 15 to 20 feet bgs and groundwater was encountered in each boring at depths ranging from 16 to 17 feet bgs except in boring B-6 and B-11.
- During the October 2010 event Green Star also directed the advancement of four shallow borings (SV-1, SV-2, SV-3a, and SV-3b) for collection of soil vapor samples in order to evaluate potential vapor intrusion concerns at the Site. The four shallow borings ranged in depth from five to six feet bgs.
- Soil vapor analytical results indicated concentrations of benzene, TPH-g, 1,2,4trimethylbenzene, 4-methyl-2-pentanone, cyclohexane, and hexane where detected above laboratory detection limits, but none of the detected analytes exceeded their respective RWQCB ESLs.
- Soil analytical results indicated none of the detected analytes exceeded their RWQCB ESLs for shallow soils (<3 m); however, concentrations of benzene, ethylbenzene, xylenes, TPH-g and/or TPH-d exceeded their respective ESLs for deep soils (>3 m) in seven borings (B-2, B-3, B-4, B-5, B-7, B-8 and B-10).
- Based on data from the subsurface investigation, it appears that the vast majority of residual source area impacts is present at or immediately above the water table present at approximately 15 to 16 feet bgs and not within the original tankhold. The presence of shallow, low permeability soils prevented the collection of soil vapor samples at the majority of proposed locations. Further, the collected soil vapor sample did not contain analytes that exceeded their respective ESLs. The data indicates that residual impacts at the Site do not appear to present significant risk to human health at the surface due to the lack of apparent exposure pathways. A revised Site Conceptual Model is currently being prepared.

#### 5.0 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.

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- TABLE 5Summary of Soil Vapor Results (October 2010)

Reference	Document				
No.	Date	Туре	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.

Reference No.	Document Date	Туре	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.

Reference No.	Document Date	Туре	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.

Reference No.	Document Date	Туре	Title	Author	Description
45	5/19/1995	Report	Quarterly Status Report	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	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	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	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.

Reference No.	Document Date	Туре	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 currentuse 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 RWQCB 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 RWQCB ESLs. The majority of groundwater impacts remained on-site.
65	8/12/2009	Report	Site Conceptual Model	Green Star Environmental	The Site Conceptual Model evaluated known data for the project. No known exposures appear to be occuring 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 July 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 RWQCB 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 RWQCB 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 RWQCB ESLs. The majority of groundwater impacts remained on- site

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			6.15
BC-1	07/03/93	24.41	19.05	19.15	0.10	nm nm	5.34
BC-1 BC-1		24.41					
	08/04/93		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 BC-1	03/07/95	24.41		16.55			7.86
BC-1 BC-1						nm	
	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 BC-1	02/14/97 03/07/97	24.41	-	17.31			7.55
BC-1 BC-1						nm	
	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

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 BC-2	09/01/93	24.37		18.48		nm	
BC-2 BC-2	10/07/93	24.37		19.02		nm	nd <sup>2</sup>
BC-2 BC-2							nd <sup>2</sup>
BC-2 BC-2	11/02/93	24.37		18.76		nm	nd <sup>2</sup>
BC-2 BC-2	12/06/93	24.37		18.87		nm	nd <sup>2</sup>
	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 BC-2	07/09/96	24.37		17.70		nm	nd <sup>2</sup>
BC-2 BC-2	10/08/96	24.37		18.40		nm	nd nd <sup>2</sup>
BC-2 BC-2	11/08/96	24.37		18.30			nd <sup>2</sup>
BC-2 BC-2	12/13/96	24.37		16.80		nm nm	
BC-2 BC-2							nd <sup>2</sup>
	01/16/97	24.37		16.40		nm	nd <sup>2</sup>
BC-2 BC-2	02/14/97	24.37		16.30		nm	nd <sup>2</sup>
	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>

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	
BC-3 BC-3	01/03/94 02/02/94	24.42		16.40			nd <sup>2</sup>
						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	na nd <sup>2</sup>
BC-3 BC-3	03/12/90	24.42		16.60		nm	nd nd <sup>2</sup>
BC-3 BC-3	04/09/96	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>

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	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-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	0.04	nm	5.45
ES-2	03/02/94	24.66	19.00	19.50	0.50		5.57
ES-2	03/02/94 04/07/94	24.66	19.10	19.30	0.09	nm	5.54
ES-2						nm	
	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

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	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 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-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 ES-3	01/03/96	24.93	-	17.55	-		7.38
ES-3 ES-3	01/03/96 02/06/96	24.93		17.86		nm nm	7.38

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	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-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			5.19
ES-4	12/06/93	23.93				nm	5.21
ES-4 ES-4	01/05/94	23.93		18.72 18.55		nm	5.38
ES-4 ES-4	01/05/94 02/02/94	23.93				nm	
				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

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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	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			5.70
						nm	
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-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	19.45	0.34	nm	5.21
ES-5 ES-5	02/02/94	24.08	18.18	19.25	1.80	nm	5.56
ES-5 ES-5	02/02/94 03/02/94	24.08	18.07	18.30	0.23		5.97
ES-5 ES-5	03/02/94 04/07/94	24.08	18.07	18.30	0.23	nm	5.97
ES-5 ES-5			18.37	18.26	0.01	nm	
	05/05/94	24.08				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

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	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	03/24/00	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-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	03/07/95	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	10	20.37		nm	na 6.69
ES-6	07/06/95	27.06		20.55		nm	6.51
ES-6	07/06/95 08/10/95	27.06		20.55		nm	6.25
ES-6	09/07/95	27.06		20.81			
						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

Well No.	Date	Elevation to Top of Casing (feet MSL) <sup>1</sup>	Depth to Phase- Separated Liquid	Depth to Water (feet BMP)	Product Thickness (feet)	Depth to Bottom (feet BMP)	Groundwater Elevation (foot MSL)
<b>FC C</b>	05/07/06	. ,	(feet BMP)	. ,	(feet)	· · ·	(feet MSL)
ES-6 ES-6	05/07/96 06/05/96	27.06 27.06		20.42 20.41		nm	6.64 6.65
ES-6	07/09/96	27.06		20.41		nm	6.32
	10/08/96			21.23		nm	
ES-6		27.06				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-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 ES-7	11/02/95	25.66		19.15		nm	6.30
ES-7 ES-7	12/07/95	25.66	-	19.57	-		6.09
ES-7 ES-7	01/03/96	25.66		19.37		nm	6.37
ES-7 ES-7	01/03/96 02/06/96	25.66		19.29		nm	6.37 7.25
ES-7 ES-7				18.41		nm	
	03/12/96	25.66				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

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	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-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			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			7.39		
						nm			
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		17.34		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		

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	07/00/95	23.33		16.67		nm	6.66
ES-9 ES-9	08/10/95	23.33		16.87			6.46
ES-9 ES-9						nm	
ES-9 ES-9	10/03/95	23.33 23.33		17.09 17.09		nm	6.24
	10/05/95					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

Well No.       Date       Elevation to Top of Casing (feet MSL) <sup>1</sup> Depth to Phase- Separated Liquid (feet BMP)       Depth to Water (feet BMP)       Product Thickness (feet)       Depth to Bottom (feet BMP)       Groundwater Elevation (feet MSL)         ES-10       09/01/93       95.24       m       18.04       m       m       77.20												
		Casing (feet MSL) <sup>1</sup>	Separated Liquid	(feet BMP)	Thickness (feet)		Elevation (feet MSL)					
ES-10	09/01/93	95.24		18.04		nm	77.20					
ES-10	10/07/93	95.24		17.40		nm	77.84					
ES-10	11/02/93	95.24		17.46		nm	77.78					
ES-10	12/06/93	95.24		17.44		nm	77.80					
ES-10	01/05/94	95.24		17.27		nm	77.97					
ES-10	02/02/94	95.24		17.25		nm	77.99					
ES-10	03/02/94	95.24		16.61		nm	78.63					
ES-10	04/07/94	95.24		16.74		nm	78.50					
ES-10	05/05/94	95.24		16.55		nm	78.69					
ES-10	06/07/94	95.24		17.50		nm	77.74					
ES-10	07/13/94	95.24		16.10		nm	79.14					
ES-10	08/03/94	95.24		16.20		nm	79.04					
ES-10	09/14/94	95.24		16.48		nm	78.76					
ES-10	10/06/94	95.24		16.96		nm	78.28					
ES-10	11/02/94	95.24		17.05		nm	78.19					
ES-10	12/07/94	95.24		16.29		nm	78.95					
ES-10	01/13/95	95.24		15.42		nm	79.82					
ES-10	02/14/95	95.24		15.05		nm	80.19					
ES-10 ES-10	03/07/95	95.24		15.34		nm	79.90					
ES-10 ES-10	03/07/95	95.24		14.82		nm	80.42					
ES-10 ES-10	05/09/95	95.24 95.24		15.26		nm	79.98					
ES-10 ES-10	05/09/95	95.24 95.24					79.54					
				15.70		nm						
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					

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

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 3	Oaklan	Oakland Bus 2103 San Pab d, Alameda C			esults							
Sample ID	Date	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX	Naphthalene	MTBE	ETBE	TAME	DIPE	EDB	EDC	ТВА	Ethanol	TPH-g	TPH-d	TPH-o	Total PAHs
BC-1	04/17/97 07/15/97 10/07/97 09/25/08 04/09/09	0.160 0.520 0.310 0.220 0.130	0.072 0.130 0.600 0.022 0.020	0.035 0.170 0.370 0.032 0.017	0.093 0.290 1.90 0.038 0.033	0.360 1.110 3.180 0.312 0.200	nt nt 0.016 0.006	BDL 0.100 BDL <0.00031 <0.0003	nt nt <0.00014 <0.00014	nt nt 0.00026 J 0.00058 J	nt nt 0.082 0.074	nt nt 0.00039 J 0.00027 J	nt nt <0.00024 <0.00023	nt nt <0.006 <0.017	nt nt <0.074 <0.074	0.200 11.0 31.0 3.70 2.10	0.640 95.0 484 2.00 3.70	nt nt <0.290 <0.033	nt 0.203 4.34 nt nt
	07/15/09 10/07/09 07/29/10	0.200 0.230 0.076	<b>0.039</b> 0.034 0.0049	0.035 0.045 0.0086	0.058 0.062 0.0085	<b>0.332</b> 0.371 0.098	<b>0.014</b> 0.023 0.0048	<0.00032 <0.00032 <0.00083	<0.00014 <0.00014 <0.00083	<0.00014 <0.00014 <0.00083	0.110 0.060 nt	0.00028 J <0.00017 <0.00083	<0.00023 <0.00023 <0.00083	<0.017 <0.017 <0.0033	<0.074 <0.074 <0.083	3.20 3.70 1.00	0.910 0.630 0.290	<b>0.150</b> 0.064 <0.250	nt nt nt
BC-2	07/08/92 10/06/92 01/07/93 04/06/93 07/23/93 10/07/93 01/05/94	BDL BDL BDL <b>0.001</b> BDL nt	BDL 0.001 BDL 0.002 BDL nt	BDL 0.001 0.002 BDL 0.002 BDL nt	0.008 0.007 0.010 BDL 0.008 BDL nt	0.008 0.009 0.012 BDL 0.013 BDL nt	nt nt nt nt nt nt	nt nt nt nt nt	nt nt nt nt nt nt	nt nt nt nt nt	nt nt nt nt nt nt	nt nt nt nt nt nt	nt nt nt nt nt nt	nt nt nt nt nt	nt nt nt nt nt nt	nt nt BDL <0.500 nt nt	2.10 BDL BDL 0.130 0.500 1.40 nt	nt nt nt nt nt nt	nt nt nt BDL nt nt
	04/07/94 07/13/94 10/06/94 01/13/95 04/11/95 07/06/95	nt nt BDL BDL BDL	nt nt BDL BDL BDL	nt nt BDL BDL BDL	nt nt BDL BDL BDL	nt nt BDL BDL BDL	nt nt nt nt nt	nt nt nt nt nt	nt nt nt nt nt	nt nt nt nt nt	nt nt nt nt nt	nt nt nt nt nt	nt nt nt nt nt	nt nt nt nt nt	nt nt nt nt nt	nt nt BDL BDL BDL	nt nt <b>1.10</b> BDL <b>0.290</b>	nt nt nt nt nt	nt nt nt nt nt
	10/05/95 04/17/97 07/15/97 10/07/97 09/24/08 04/09/09 07/15/09	0.001 BDL BDL ns ns ns	BDL BDL BDL ns ns ns	BDL BDL BDL ns ns ns	0.001 BDL BDL ns ns ns	0.002 BDL BDL ns ns ns	nt nt nt ns ns ns	nt BDL BDL ns ns ns	nt nt nt ns ns ns	nt nt nt ns ns ns	nt nt nt ns ns ns	nt nt nt ns ns ns	nt nt nt ns ns ns	nt nt nt ns ns ns	nt nt nt ns ns ns	BDL BDL BDL ns ns ns	1.50 0.050 0.680 0.920 ns ns ns	nt nt nt ns ns ns	nt nt BDL BDL ns ns ns ns
	10/07/09 07/29/10	ns ns	ns ns	ns ns	ns ns	ns ns	ns ns	ns ns	ns ns	ns ns	ns ns	ns ns	ns ns	ns ns	ns ns	ns ns	ns ns	ns ns	ns ns

Table 3 - Cumulative Summary of Groundwater Analytical Results Oakland Bus Terminal 2103 San Pablo Avenue Oakland, Alameda County, California Green Star Project No. 10-1379																			
Sample ID	Date	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX	Naphthalene	MTBE	ETBE	TAME	DIPE	EDB	EDC	ТВА	Ethanol	TPH-g	TPH-d	TPH-o	Total PAHs
3C-3	07/08/92	BDL	0.003	BDL	0.006	0.009	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	3.90	nt	nt
	10/06/92	BDL	0.002	0.001	0.002	0.004	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	0.800	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	0.120	nt	nt
	07/23/93	0.003	0.004	0.002	0.008	0.018	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt*	nt	nt
	10/07/93	BDL	BDL	0.0001	0.002	0.003	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	1.40	nt	nt
	01/05/94	BDL	BDL	BDL	0.002	0.002	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	1.80	nt	nt
	04/07/94	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	0.850	nt	nt
	07/13/94	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	0.200	nt	nt
	10/06/94	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	0.820	nt	nt
	01/13/95	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	0.890	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	0.380	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	0.490	nt	BDL
	10/07/97	BDL	BDL	0.002	0.002	0.003	nt	BDL	nt	nt	nt	nt	nt	nt	nt	0.051	1.34	nt	BDL
	09/25/08	< 0.0004	0.0006 J	0.0006 J	< 0.0003	0.001	<0.0003	<0.00031	< 0.00014	0.0007 J	<0.00036	<0.00031	< 0.00024	<0.006	< 0.074	< 0.084	<0.021	1.30	nt
	04/09/09	0.006	0.0008 J	0.0008 J	0.0012 J	0.009	0.005	< 0.0003	< 0.00014	0.00052 J	0.00043 J	<0.00017	< 0.00023	<0.017	< 0.074	<0.024	0.018 J	0.880	nt
	07/15/09	0.0049 J	0.0006 J	0.0003 J	< 0.00013	0.006	0.00022 J	<0.00032	< 0.00014	0.00044 J	0.0003 J	<0.00017	< 0.00023	<0.017	<0.074	0.019 J	0.059	0.170	nt
	10/07/09	0.003	0.0003 J	0.0002 J	0.0004 J	0.004	0.0002 J	<0.00032	< 0.00014	< 0.00014	0.0004 J	< 0.00017	< 0.00023	<0.017	< 0.074	0.025 J	0.058	0.110	nt
	07/29/10	0.0017	0.00047 J	0.00078	0.00055	0.002	0.00059	<0.00025	<0.00025	<0.00025	nt	<0.00025	<0.00025	<0.001	<0.025	<0.050	<0.050	<0.250	nt
ES-1	11/19/91	0.130	0.043	0.010	0.091	0.274	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt	nt
	04/17/97	0.110	0.018	0.007	0.045	0.180	nt	BDL	nt	nt	nt	nt	nt	nt	nt	1.00	BDL	nt	nt
	07/16/97	0.076	0.008	0.011	0.025	0.120	nt	BDL	nt	nt	nt	nt	nt	nt	nt	0.960	1.20	nt	0.014
	10/07/97	0.049	0.034	0.011	0.023	0.100	nt	0.014	nt	nt	nt	nt	nt	nt	nt	1.70	2.77	nt	0.010
	09/25/08	0.140	0.009	0.014	0.016	0.179	0.011	<0.00031	< 0.00014	<0.00026	0.130	<0.00031	0.00049 J	< 0.006	< 0.074	2.90	2.50	<0.290	nt
	04/09/09	0.260	0.029	0.027	0.049	0.365	0.025	< 0.00032	<0.00014	< 0.00014	0.066	0.00037 J	0.00047 J	<0.017	< 0.074	2.40	3.60	<0.036	nt
	07/15/09	0.300	0.063	0.092	0.090	0.545	0.053	< 0.00032	< 0.00014	0.00023 J	0.100	0.00038 J	0.00086 J	<0.017	< 0.074	5.00	0.930	0.210	nt
	10/07/09	0.340	0.036	0.044	0.053	0.473	0.037	< 0.00032	< 0.00014	< 0.00014	0.082	<0.00017	0.0007 J	<0.017	< 0.074	4.10	0.610	0.100	nt
	07/29/10	0.630	0.061	0.110	0.120	0.921	0.095	<0.0062	<0.0062	<0.0062	nt	<0.0062	<0.0062	<0.025	<0.620	5.20	1.10	<0.250	nt
S-2	11/19/91	0.390	0.096	0.078	0.310	0.874	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt	nt
	04/17/97	0.340	0.110	0.110	0.240	0.800	nt	BDL	nt	nt	nt	nt	nt	nt	nt	3.80	1.80	nt	nt
	07/15/97	0.190	0.140	0.073	0.250	0.653	nt	0.081	nt	nt	nt	nt	nt	nt	nt	3.70	16.0	nt	0.194
	10/07/97	0.190	0.046	0.046	0.070	0.352	nt	BDL	nt	nt	nt	nt	nt	nt	nt	7.20	8.04	nt	0.993
	09/25/08	0.700	0.053	0.029	0.084	0.866	0.010	<0.00031	< 0.00014	0.00041 J	0.100	<0.00031	0.00038 J	<0.006	< 0.074	6.00	1.50	nt	<0.290
	04/09/09	0.690	0.059	0.027 J	0.072	0.848	0.008 J	< 0.0032	< 0.0014	0.0056 J	0.110	< 0.0017	< 0.0023	<0.170	<0.740	2.20	7.50	<0.038	nt
	07/15/09	0.700	0.068	0.023	0.094	0.885	0.0019 J	< 0.00032	< 0.00014	0.00042 J	0.120	0.00025 J	< 0.00023	<0.017	< 0.074	8.40	1.30	0.230	nt
	10/07/09	0.730	0.061	0.030	0.090	0.911	0.004	< 0.00032	< 0.00014	< 0.00014	0.085	< 0.00017	< 0.00023	< 0.017	< 0.074	6.00	1.10	0.980	nt
	07/29/10	0.800	0.057	0.015 J	0.078	0.950	0.011 J	< 0.0083	<0.0083	< 0.0083	nt	<0.0083	< 0.0083	< 0.033	<0.830	8.30	1.30	<0.250	nt

	Table 3 - Cumulative Summary of Groundwater Analytical Results Oakland Bus Terminal 2103 San Pablo Avenue Oakland, Alameda County, California Green Star Project No. 10-1379																		
Sample ID	Date	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX	Naphthalene	MTBE	ETBE	TAME	DIPE	EDB	EDC	ТВА	Ethanol	TPH-g	TPH-d	TPH-o	Total PAHs
ES-3	11/19/91	0.061	0.016	0.014	0.033	0.124	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt	nt
	07/08/92	0.051	0.021	0.048	0.034	0.157	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	1.30	nt	nt
	10/06/92	0.093	0.018	BDL	0.011	0.122	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt	nt
	01/07/93	0.052	0.049	0.100	0.250	0.451	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt	nt
	04/06/93	0.053	BDL	0.067	0.078	0.198	nt	nt	nt	nt	nt	nt	nt	nt	nt	4.50	0.510	nt	nt
	07/23/93	0.028	0.006	0.005	0.005	0.043	nt	nt	nt	nt	nt	nt	nt	nt	nt	1.50	0.600	nt	nt
	10/07/93	0.002	0.001	BDL	0.002	0.005	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt	nt
	01/05/94	0.013	0.002	0.007	0.005	0.027	nt	nt	nt	nt	nt	nt	nt	nt	nt	0.530	nt	nt	nt
	04/07/94	0.010	0.009	0.026	0.034	0.079	nt	nt	nt	nt	nt	nt	nt	nt	nt	0.850	0.910	nt	nt
	07/13/94	0.002	0.001	0.001	0.003	0.007	nt	nt	nt	nt	nt	nt	nt	nt	nt	0.370	0.280	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	0.019	0.015	0.072	0.088	0.194	nt	nt	nt	nt	nt	nt	nt	nt	nt	1.60	1.10	nt	nt
	04/11/95	0.020	0.007	0.036	0.022	0.085	nt	nt	nt	nt	nt	nt	nt	nt	nt	0.940	0.390	nt	nt
	07/06/95	0.006	BDL	0.007	BDL	0.013	nt	nt	nt	nt	nt	nt	nt	nt	nt	0.240	1.20	nt	nt
	10/05/95	0.002	0.002	BDL	BDL	0.004	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	0.110	nt	nt
	01/05/96	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt
	04/09/96	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	0.120	nt	nt
	07/09/96	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt
	10/08/96	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt
	01/16/97	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	0.051	BDL	nt	nt
	04/17/97	BDL	BDL	BDL	BDL	BDL	nt	BDL	nt	nt	nt	nt	nt	nt	nt	BDL	0.120	nt	nt
	07/15/97	BDL	BDL	BDL	BDL	BDL	nt	BDL	nt	nt	nt	nt	nt	nt	nt	BDL	0.170	nt	BDL
	10/07/97	BDL	BDL	BDL	BDL	BDL	nt	BDL	nt	nt	nt	nt	nt	nt	nt	BDL	0.205	nt	BDL
	09/24/08	0.230	0.017	0.023	0.048	0.318	0.028	<0.00031	<0.00014	0.00028 J	0.110	<0.00031	0.00078 J	<0.006	<0.074	3.00	1.40	<0.290	nt
	04/09/09	0.340	0.091	0.180	0.372	0.983	0.083	<0.0016	<0.00071	<0.00068	0.096	<0.00086	<0.0011	<0.084	<0.370	2.60	9.70	< 0.032	nt
	07/15/09	0.230	0.075	0.190	0.413	0.908	0.110	<0.0016	<0.00071	<0.00068	0.045 J	<0.00086	<0.0011	<0.084	<0.370	9.40	1.40	0.280	nt
	10/07/09	0.250	0.028	0.042	0.105	0.425	0.035	<0.00032	<0.00014	<0.00014	0.100	<0.00017	0.0008 J	<0.017	<0.074	4.70	0.860	0.084	nt
	07/29/10	0.120	0.044	0.200	0.200	0.564	0.110	<0.0025	<0.0025	<0.0025	nt	<0.0025	<0.0025	<0.010	<0.250	5.80	1.20	<0.250	nt

Table 3 - Cumulative Summary of Groundwater Analytical Results Oakland Bus Terminal 2103 San Pablo Avenue Oakland, Alameda County, California Green Star Project No. 10-1379																			
Sample ID	Date	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX	Naphthalene	MTBE	ETBE	TAME	DIPE	EDB	EDC	ТВА	Ethanol	TPH-g	TPH-d	TPH-o	Total PAHs
ES-4	11/19/91	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt	nt
	07/08/92	0.031	0.006	BDL	0.003	0.039	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt	nt
	10/06/92	0.100	0.008	BDL	0.008	0.116	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt	nt
	01/07/93	0.030	0.007	0.008	0.016	0.060	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt	nt
	04/06/93	0.033	0.002	0.002	0.005	0.042	nt	nt	nt	nt	nt	nt	nt	nt	nt	0.360	BDL	nt	nt
	07/23/93	0.024	0.001	0.001	0.008	0.034	nt	nt	nt	nt	nt	nt	nt	nt	nt	<0.500	<0.500	nt	nt
	10/07/93	0.008 0.015	BDL 0.001	BDL 0.0004	0.002 0.003	0.010 0.019	nt	nt	nt	nt	nt	nt	nt	nt	nt nt	nt 0.130	BDL BDL	nt	nt
	01/05/94 04/07/94	0.015	0.001 BDL	0.0004 BDL	0.003 BDL	0.019	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	0.130	BDL	nt nt	nt nt
	07/13/94	0.001	BDL	BDL	0.001	0.011	nt	nt	nt	nt	nt	nt	nt	nt	nt	0.170	BDL	nt	nt
	10/06/94	0.003	BDL	0.002	0.003	0.010	nt	nt	nt	nt	nt	nt	nt	nt	nt	0.100	BDL	nt	nt
	01/13/95	0.012	BDL	BDL	0.003	0.023	nt	nt	nt	nt	nt	nt	nt	nt	nt	0.150	BDL	nt	nt
	04/11/95	0.039	0.004	0.012	0.024	0.079	nt	nt	nt	nt	nt	nt	nt	nt	nt	0.180	BDL	nt	nt
	07/06/95	0.100	0.010	0.026	0.061	0.197	nt	nt	nt	nt	nt	nt	nt	nt	nt	0.600	0.160	nt	nt
	10/05/95	0.210	0.016	0.071	0.084	0.381	nt	nt	nt	nt	nt	nt	nt	nt	nt	1.20	0.170	nt	nt
	01/05/96	0.034	BDL	0.005	0.004	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	0.120	BDL	nt	nt
	04/09/96	0.057	0.003	0.017	0.019	0.096	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt	nt
	07/09/96	0.043	0.005	0.021	0.017	0.086	nt	nt	nt	nt	nt	nt	nt	nt	nt	0.220	BDL	nt	nt
	10/08/96	0.110	0.004	0.042	0.039	0.195	nt	nt	nt	nt	nt	nt	nt	nt	nt	0.860	BDL	nt	nt
	01/16/97	0.005	BDL	BDL	0.001	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	0.059	BDL	nt	nt
	04/17/97	0.087	0.011	0.049	0.024	0.171	nt	BDL	nt	nt	nt	nt	nt	nt	nt	BDL	0.100	nt	nt
	07/15/97	0.110	0.011	0.042	0.040	0.203	nt	BDL	nt	nt	nt	nt	nt	nt	nt	0.920	0.370	nt	0.018
	10/07/97	0.011	BDL	0.028	0.023	0.016	nt	BDL	nt	nt	nt	nt	nt	nt	nt	0.120	0.101	nt	0.024
	09/25/08	<0.0004	<0.0003	<0.0003	<0.0003	BDL	<0.0003	<0.00031	<0.00014	0.0007 J	0.007 J	<0.00031	<0.00024	<0.006	<0.074	0.069	0.091	nt	<0.029
	04/09/09	0.008	0.0008 J	0.0016 J	0.0025 J	0.013	0.0007 J	<0.0003	< 0.00014	0.00054 J	0.020	< 0.00017	<0.00023	< 0.017	< 0.074	0.640	0.520	< 0.034	nt
	07/15/09	0.0076	0.0017 J	0.0042 J	<0.00013	0.014	0.0019 J	< 0.00032	< 0.00014	< 0.00014	0.025	< 0.00017	< 0.00023	< 0.017	< 0.074	0.800	<b>0.110</b> 0.081	0.045 J	nt
	10/07/09	0.0002 J	< 0.00029	0.0002 J	0.0005 J 0.00058	0.001	<0.00011 0.00026 J	< 0.00032	<0.00014 <0.00025	<0.00014 <0.00025	0.014	< 0.00017	<0.00023 <0.00025	< 0.017	< 0.074	0.310	0.081	<0.029 <0.250	nt
	07/29/10	0.00081	<0.00025	0.00031 J	0.00058	0.002	0.00026 J	<0.00025	<0.00025	<0.00025	nt	<0.00025	<0.00025	<0.001	<0.025	0.250	0.120	<0.250	nt
ES-5	11/19/91	2.10	3.90	0.840	6.00	12.840	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	950	nt	nt
	04/17/97	0.590	1.20	0.180	1.00	2.970	nt	BDL	nt	nt	nt	nt	nt	nt	nt	2.40	1.60	nt	nt
	07/16/97	0.810	1.80	0.430	1.80	9.680	nt	0.350	nt	nt	nt	nt	nt	nt	nt	27.0	15.0	nt	216
	10/07/97	0.260	0.470	0.160	0.590	1.480	nt	BDL	nt	nt	nt	nt	nt	nt	nt	15.0	6.51	nt	0.424
	09/25/08	0.970	0.190	0.400	0.350	1.910	0.180	<0.00031	<0.00014	<0.00026	0.150	<0.00031	0.00057 J	<0.006	<0.074	12.0	1.90	<0.290	nt
	04/09/09	0.590	0.150	0.230	0.248	1.220	0.100	<0.0032	<0.0014	0.0059 J	0.030 J	<0.0017	<0.0023	<0.170	<0.740	3.70	10.0	<0.033	nt
	07/15/09	0.770	0.220	0.430	0.407	1.827	0.180	<0.0016	<0.00071	<0.00068	0.063	<0.00086	<0.0011	<0.084	<0.370	16.0	1.30	0.180	nt
	10/07/09	0.710	0.190	0.440	0.373	1.713	0.160	<0.0032	<0.0014	<0.0014	0.068	<0.0017	<0.0023	<0.170	<0.740	12.0	1.50	0.140	nt
	07/29/10	0.400	0.120	0.270	0.220	1.010	0.160	< 0.005	< 0.005	< 0.005	nt	< 0.005	< 0.005	< 0.020	<0.500	11.0	1.80	0.310	nt

Table 3 - Cumulative Summary of Groundwater Analytical Results         Oakland Bus Terminal         2103 San Pablo Avenue         Oakland, Alameda County, California         Green Star Project No. 10-1379																			
Sample ID	Date	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX	Naphthalene	MTBE	ETBE	TAME	DIPE	EDB	EDC	ТВА	Ethanol	TPH-g	TPH-d	TPH-o	Total PAHs
ES-6	07/23/93	<0.0003	<0.0003	<0.0003	<0.0006	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	<0.500	<0.500	nt	nt
	10/07/93	0.001	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	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	0.160	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 BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL BDL	BDL	nt	nt
	07/06/95		BDL	BDL	0.002 BDL	0.002	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt
	10/05/95	BDL BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt
	01/05/96 04/09/96	BDL	BDL	BDL	BDL	BDL BDL	nt nt	nt	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	nt		BDL 0.220	nt nt	nt
	07/09/96	BDL	BDL	BDL	BDL	BDL	-	nt							nt	nt BDL	BDL	nt	nt nt
	10/08/96	BDL	BDL	BDL	BDL	BDL	nt nt	nt nt	nt nt	nt nt	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	BDL	BDL	nt	nt
	04/17/97	BDL	BDL	BDL	BDL	BDL	nt	BDL	nt	nt	nt	nt	nt	nt	nt	BDL	0.120	nt	nt
	07/15/97	BDL	BDL	BDL	BDL	BDL	nt	BDL	nt	nt	nt	nt	nt	nt	nt	BDL	0.120	nt	BDL
	10/07/97	BDL	BDL	BDL	BDL	BDL	nt	BDL	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	BDL
	09/24/08	<0.0004	<0.0003	< 0.0003	< 0.0003	BDL	0.0005 J	<0.00031	<0.00014	0.00065 J	0.003 J	<0.00031	<0.00024	<0.006	<0.074	<0.017	0.068	<0.290	nt
	04/08/09	<0.0004	<0.0002	<0.0001	<0.0001	BDL	< 0.0001	<0.0003	<0.00014	0.00055 J	0.00093 J	< 0.00017	<0.00024	<0.017	<0.074	<0.022	< 0.016	0.170	nt
	07/15/09	0.0021 J	0.00086 J	0.0021 J	<0.00013	0.005	0.0012 J	<0.00032	<0.00014	0.00074 J	0.00088 J	< 0.00017	<0.00023	< 0.017	<0.074	0.061	0.073	0.200	nt
	10/06/09	<0.0001	< 0.00029	< 0.00015	<0.00013	BDL	<0.00011	< 0.00032	<0.00014	< 0.00014	0.0004 J	<0.00017	<0.00023	<0.017	<0.074	0.017 J	0.030 J	0.034 J	nt
	07/29/10	<0.00025	<0.00025	<0.00025	<0.00025	BDL	<0.00025	<0.00025	<0.00025	<0.00025	nt	<0.00025	<0.00025	<0.001	<0.025	<0.050	<0.050	<0.250	nt
ES-7	07/23/93	<0.0003	<0.0003	<0.0003	<0.0006	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	<0.500	<0.500	nt	nt
	10/07/93	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	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	0.110	0.100	nt	nt
	07/13/94	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt
	10/06/94	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt
	01/13/95	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt
	04/11/95	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt
	07/06/95	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt
	10/05/95	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt
	07/09/96	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt
	04/17/97	BDL	BDL	BDL	BDL	BDL	nt	BDL	nt	nt	nt	nt	nt	nt	nt	BDL	0.060	nt	nt
	09/24/08	<0.0004	<0.0003	<0.0003	<0.0003	BDL	<0.0003	<0.00031	<0.00014	0.00066 J	<0.00036	<0.00031	<0.00024	<0.006	<0.074	<0.017	<0.002	0.150	nt
	04/08/09	<0.0001	<0.0002	<0.0001	<0.0001	BDL	<0.0001	<0.0003	<0.00014	0.00053 J	<0.00015	<0.00017	<0.00023	<0.017	<0.074	<0.023	<0.016	0.690	nt
	07/15/09	0.0013 J	0.00051 J	0.00096 J	<0.00013	0.003	0.00052 J	< 0.00032	<0.00014	0.0007 J	<0.00015	<0.00017	<0.00023	<0.017	<0.074	0.027 J	0.031 J	0.093	nt
	10/06/09	<0.0001	<0.00029	<0.00015	<0.00013	BDL	<0.00011	<0.00032	< 0.00014	<0.00014	<0.00015	<0.00017	<0.00023	<0.017	<0.074	0.024 J	<0.02	0.041 J	nt
	07/29/10	< 0.00025	<0.00025	<0.00025	<0.00025	BDL	<0.00025	<0.00025	< 0.00025	< 0.00025	nt	< 0.00025	< 0.00025	< 0.001	< 0.025	< 0.050	< 0.050	< 0.250	nt

Table 3 - Cumulative Summary of Groundwater Analytical Results Oakland Bus Terminal 2103 San Pablo Avenue Oakland, Alameda County, California Green Star Project No. 10-1379																			
Sample ID	Date	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX	Naphthalene	MTBE	ETBE	TAME	DIPE	EDB	EDC	ТВА	Ethanol	TPH-g	TPH-d	TPH-o	Total PAHs
ES-8	07/23/93	<0.0003	<0.0003	<0.0003	<0.0006	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	<0.500	<0.500	nt	nt
	10/07/93	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	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	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	BDL	nt	nt
	07/13/94 10/06/94	BDL BDL	BDL	BDL	BDL BDL	BDL BDL	nt nt	nt nt	nt nt	nt	nt nt	nt nt	nt nt	nt nt	nt nt	BDL BDL	nt BDL	nt nt	nt nt
	01/13/95	BDL	BDL	BDL	BDL	BDL				nt	nt			nt		BDL	BDL	nt	
	04/11/95	BDL	BDL	BDL	BDL	BDL	nt nt	nt nt	nt nt	nt nt	nt	nt nt	nt nt	nt	nt nt	BDL	BDL	nt	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
	04/08/09	0.015	0.0014 J	0.002 J	0.0027 J	0.021	0.0003 J	<0.0003	< 0.00014	< 0.00014	0.056	< 0.00017	<0.00023	<0.017	< 0.074	1.60	2.30	< 0.033	nt
	07/14/09	0.0058	0.00083 J	0.00061 J	<0.00013	0.007	<0.00011	< 0.00032	< 0.00014	< 0.00014	0.045	<0.00017	<0.00023	<0.017	< 0.074	1.80	0.540	0.230	nt
	10/06/09	0.007	0.001 J	0.001 J	0.001 J	0.010	0.0002 J	<0.00032	< 0.00014	<0.00014	0.036	<0.00017	<0.00023	<0.017	<0.074	1.90	0.270	0.170	nt
	07/28/10	<0.00025	<0.00025	<0.00025	<0.00025	BDL	<0.00025	<0.00025	<0.00025	<0.00025	nt	<0.00025	<0.00025	<0.001	<0.025	0.260	0.084	<0.250	nt
ES-9	07/23/93	<0.0003	< 0.0003	<0.0003	<0.0006	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	<0.500	<0.500	nt	nt
	10/07/93	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	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	1.10	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	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
	04/08/09	<0.0001	< 0.0002	<0.0001	<0.0001	BDL	<0.0001	< 0.0003	< 0.00014	0.00055 J	0.00056 J	<0.00017	<0.00023	<0.017	< 0.074	< 0.023	<0.016	0.210	nt
	07/15/09	<0.0001	<0.00029	<0.00015	<0.00013	BDL	<0.00011	<0.00032	< 0.00014	0.00066 J	0.00052 J	<0.00017	<0.00023	<0.017	< 0.074	<0.016	0.028 J	0.061	nt
	10/06/09	<0.0001	<0.00029	<0.00015	0.0002 J <0.00025	0.000 BDL	<0.00011 <0.00025	<0.00032	<0.00014	<0.00014	0.0005 J	<0.00017	<0.00023	<0.017	< 0.074	0.022 J	0.027 J	0.052 <0.250	nt
	07/28/10	<0.00025	<0.00025	<0.00025	<0.00025	BDL	<0.00025	<0.00025	<0.00025	<0.00025	nt	<0.00025	<0.00025	<0.001	<0.025	<0.050	<0.050	<0.250	nt

							Table 3 -	Oaklan	Oakland Bus 2103 San Pab d, Alameda C		nia	sults							
Sample ID	Date	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX	Naphthalene	МТВЕ	ETBE	TAME	DIPE	EDB	EDC	ТВА	Ethanol	TPH-g	TPH-d	TPH-o	Total PAHs
ES-10	07/23/93	<0.0003	<0.0003	<0.0003	<0.0006	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	<0.500	<0.500	nt	nt
	10/07/93	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	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 10/06/94	BDL BDL	BDL BDL	BDL BDL	BDL BDL	BDL BDL	nt	nt	nt	nt	nt nt	nt	nt	nt	nt	BDL BDL	BDL BDL	nt	nt
	01/13/95	BDL	BDL	BDL	BDL	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 nt	nt nt	nt nt	nt nt	nt nt	BDL	BDL	nt nt	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
	09/24/08	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
	10/7/2009	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
ES-11	07/23/93	<0.0003	0.001	<0.0003	0.001	0.002	nt	nt	nt	nt	nt	nt	nt	nt	nt	<0.500	<0.500	nt	nt
	10/07/93	BDL	BDL	BDL	BDL	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	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	0.350	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	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	0.170	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	<0.0004	<0.0003	<0.0003	<0.0003	BDL	<0.0003	<0.00031	<0.00014	0.00067 J	<0.00036	<0.00031	<0.00024	<0.006	<0.074	<0.017	0.028 J	<0.029	nt
	04/09/09	0.0025 J	0.0009 J	0.0017 J	0.0030 J	0.008	0.0011 J	<0.0003	<0.00014	0.00052 J	0.00025 J	<0.00017	< 0.00023	<0.017	<0.074	<0.025	<0.016	0.200	nt
	07/15/09	0.0028 J	0.00097 J	0.0021 J	<0.00013	0.006	0.0014 J	<0.00032	<0.00014	<0.00014	0.00025 J	<0.00017	<0.00023	<0.017	<0.074	0.041 J	<0.020	<0.029	nt
	10/07/09	<0.0001	<0.00029	<0.00015	<0.00013	BDL	<0.00011	<0.00032	<0.00014	<0.00014	<0.00015	<0.00017	<0.00023	<0.017	<0.074	<0.016	<0.020	<0.029	nt
	07/29/10	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	nt
San Francisco Regional Wate Control Board Environmental Levels (ESLs; water resource	er Quality (RWQCB) Screening drinking	0.001	0.040	0.030	0.020	ne	0.017	0.005	ne	ne	ne	0.00005	0.0005	0.012	ne	0.100	0.100	0.100	ne
RWQCB ESLs (non-drinking resource)		0.046	0.130	0.043	0.100	ne	0.024	1.80	ne	ne	ne	0.150	0.200	18.0	ne	0.210	0.210	0.210	ne
RWQCB ESLs (potential vap concerns, cor	or intrusion	1.80	530	170	160	ne	11.0	80.0	ne	ne	ne	0.510	0.690	(use soil gas)	ne	(use soil gas)	(use soil gas)	ne	ne
	na = not ana	lyzed	nt = not tested	for that constitue	ent ns	= not sampled	Bolded results in dne = doe 2	ndicate detecte es not exist Notes: 1) B ) TPH-d analy	ed concentration ne = not TEX analyzed zed by EPA M analyzed by E	established by EPA Metho ethod 3550/80 EPA Method 80	aboratory dete <, BDL od 8020 15 Modified 015M	ection limits. = below labora	tory detection	limits	J = reported	result is betwee	n the MDL and	PQL	•

							Tal	2 Oakland	ive Summa Dakland Bu 103 San Pa I, Alameda I, Star Proje	s Termina blo Avenu County, C	l e alifornia	Results								
Sample ID	Depth in feet BGS	Date	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX	Naphthalene	МТВЕ	ETBE	TAME	DIPE	EDC	EDB	ТВА	Ethanol	TPH-g	TPH-d	TPH-o	TFH
	200							gation Sample	es (Collect	ed by a P	revious C	Consultan	it)							
BC-1 BC-1	16-16.5 25-25.5	07/08/89 07/08/89	nr <10.0	1.78 <0.001	<b>37.5</b> 0.027	1.13 0.008	40.4 0.035	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	nr nr	nr nr	nr nr	3,060 <10.0
BC-2 BC-2	16-16.5 25-25.5	07/08/89 07/08/89	nr <10.0	4.00 0.090	2.00 0.402	<b>49.5</b> 0.154	55.5 0.646	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	nr nr	nr nr	nr nr	4,260 <10.0
BC-3 BC-3	16-16.5 25-25.5	07/08/89 07/08/89	nr <10.0	2.24 <0.001	<b>28.9</b> 0.008	1.03 <0.001	32.2 0.008	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	nr nr	nr nr	nr nr	1,850 <10.0
ES-1	16-18	11/11/91	<1.00	3.00	3.40	22.0	28.4	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	<2.50	nt	nt
ES-2	16-18	11/12/91	<2.00	27.0	28.0	150	205	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	<2.50	nt	nt
ES-3	16-18	11/12/91	<0.001	<0.002	<0.002	<0.004	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	<2.50	nt	nt
ES-4	16-18	11/13/91	<0.001	<0.002	<0.002	<0.004	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	BDL	nt	nt
ES-5	16-18	11/14/91	<0.001	0.080	0.065	0.330	0.475	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	160	nt	nt
ES-6	15-16.5	07/23/93	<0.005	<0.005	<0.005	<0.015	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	<10.0	<10.0	nt	nt
ES-7	20-21.5	07/20/93	<0.005	<0.005	<0.005	<0.015	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	<10.0	<10.0	nt	nt
ES-8	20-21.5	07/20/93	<0.005	<0.005	<0.005	<0.015	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	<10.0	<10.0	nt	nt
ES-9	15-16.5	07/21/93	<0.005	<0.005	<0.005	<0.015	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	<10.0	<10.0	nt	nt
ES-10	20-21.5	07/21/93	<0.005	<0.005	<0.005	<0.015	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	<10.0	<10.0	nt	nt
ES-11	20-21.5	07/21/93	<0.005	<0.005	<0.005	<0.015	BDL	nt	nt	nt	nt	nt	nt	nt	nt	nt	<10.0	<10.0	nt	nt
				1			1	Source	Area Confi	rmation S	Samples					1	1		1	
B-1 B-1	6.5 14	10/22/10 10/22/10	0.0052 0.053	0.0073 0.0049	<0.0037 0.021	0.033 0.018	0.0455 0.0969	nt nt	<0.037 <0.040	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	16 5.7	27 2.4	nt nt	nt nt
B-2 B-2	7.5 15.5	10/22/10 10/22/10	0.0071 <b>2.5</b>	<0.0039 <2.0	<0.0039 4.6	<0.0039 13	0.0071 20.1	nt nt	<0.039 <20	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	1.2 <b>2,400</b>	<1.0 57	nt nt	nt nt
B-3 B-3	5.5 16	10/22/10 10/22/10	<0.0035 1.3	<0.0035 0.38	<0.0035 3.6	<0.0035 3.1	BDL 8.38	nt nt	<0.035 <1.5	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	<0.71 <b>880</b>	2.2 35	nt nt	nt nt
B-4 B-4	9.5 15.5	10/20/10 10/20/10	<0.0042 <0.82	<0.0042 0.87	<0.0042 6.7	<0.0042 13	BDL 20.6	nt nt	<0.042 <8.2	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	<0.83 <b>1,800</b>	<1.0 <b>1,400</b>	nt nt	nt nt
B-5 B-5	11.5 16	10/20/10 10/20/10	0.018 <0.45	<0.0039 <0.45	<0.0039 <0.45	0.014 1.7	0.032 1.7	nt nt	<0.039 <4.5	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	8.9 930	9.7 <b>260</b>	nt nt	nt nt
B-6	6	10/21/10	<0.0038	<0.0038	<0.0038	<0.0038	BDL	nt	<0.038	nt	nt	nt	nt	nt	nt	nt	<0.76	7.7	nt	nt
B-7	5.5	10/21/10	<0.0045	<0.0045	<0.0045	<0.0045	BDL	nt	<0.045	nt	nt	nt	nt	nt	nt	nt	<0.89	1.5	nt	nt
B-7	16	10/21/10	<0.45	1.1	<0.45	7.1	8.2	nt	5.9	nt	nt	nt	nt	nt	nt	nt	2,500	1,300	nt	nt
B-8 B-8	5.5 16	10/21/10 10/21/10	<0.0042 <b>3.4</b>	<0.0042 <2.2	<0.0042 <b>7.3</b>	<0.0042 6.0	BDL 16.7	nt nt	<0.042 <22	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	<0.83 <b>2,600</b>	4.9 <b>3,100</b>	nt nt	nt nt
B-9	13	10/21/10	<0.0042	<0.0042	<0.0042	0.0043	0.0043	nt	<0.042	nt	nt	nt	nt	nt	nt	nt	2.8	2.2	nt	nt
B-10 B-10	5.5 16	10/21/10 10/21/10	<0.0040 <2.2	<0.0040 <2.2	<0.0040 6.8	<0.0040 9.9	BDL 16.7	nt nt	<0.040 <22	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	<0.80 <b>2,200</b>	1.8 99	nt nt	nt nt
B-11 B-11	5.5 14.5	10/21/10 10/21/10	<0.0040 <0.0043	<0.0040 <0.0043	<0.0040 <0.0043	<0.0040 <0.0043	BDL BDL	nt nt	<0.040 <0.043	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	nt nt	1.3 <0.85	<1.0 7.2	nt nt	nt nt
Quality Con Environmen (ESLs; shall commercial water resou		QCB) _evels bgs,	0.270	9.30	4.70	11.0	ne	2.80	8.40	ne	ne	ne	0.480	0.044	110	ne	180	180	2,500	ne
RWQCB ESI (deep soils, commercial/ water resou	>3m bgs, /industrial, non	-drinking	2.00	9.30	4.70	11.0	ne	4.80	8.40	ne	ne	ne	4.30	1.00	110	ne	180	180	5,000	ne

Analytical test results are reported in milligrams per Kilogram (mg/Kg). <, BDL = below laboratory detection limits nt = not tested for that constituent ne = not established nr = Interpretation of results not possible as reported by previous consultant. SAT = ESL exceeds saturated soil concentration of chemical Bolded results indicate detected concentrations exceeded RWQCB ESLs.

							т	able 5 - Sur	2 Oakland	Oakland I 103 San I I, Alamed	r Analytical Res Bus Terminal Pablo Avenue la County, Califo oject No. 10-137	rnia	2010)								
Sample ID	Depth in feet BGS	Date	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX	TPH-g	TAME	ТВА	Cyclohexane	EDB	1,2-DCA	DIPE	Ethanol	ETBE	Hexane	4-Methyl-2- pentanone	МТВЕ	Naphthalene	1,2,4- Trimethylb enzene
SV-2	4-5	10/20/10	0.032	<0.0077	<0.0088	<0.027	0.032	8.70 <sup>1</sup>	<0.0085	<0.062	0.540	<0.016	<0.0082	<0.0085	<0.096	<0.0085	0.200	0.071	<0.0073	<0.011	0.013
Quality Cor Environme (ESLs; sha	sco Bay Region ntrol Board (RW ntal Screening llow soil gas, < I/industrial land	/QCB) Levels 3m bgs,	0.280	180	3.30	58.0	ne	29.0	ne	ne	ne	0.014	0.310	ne	ne	ne	ne	ne	31.00	0.240	ne
RWQCB ES (shallow so land use)	SLs bil gas, <3m bgs	s, residential	0.084	63.0	0.980	21.0	ne	10.0	ne	ne	ne	0.0041	0.094	ne	ne	ne	ne	ne	9.40	0.072	ne
			Note 1	) TPH-g is r	eported as an es	timated value		PH-g analys		initially re			ard was not a	nalyzed wi	th the sam	ple for calil	bration verifie	cation.			

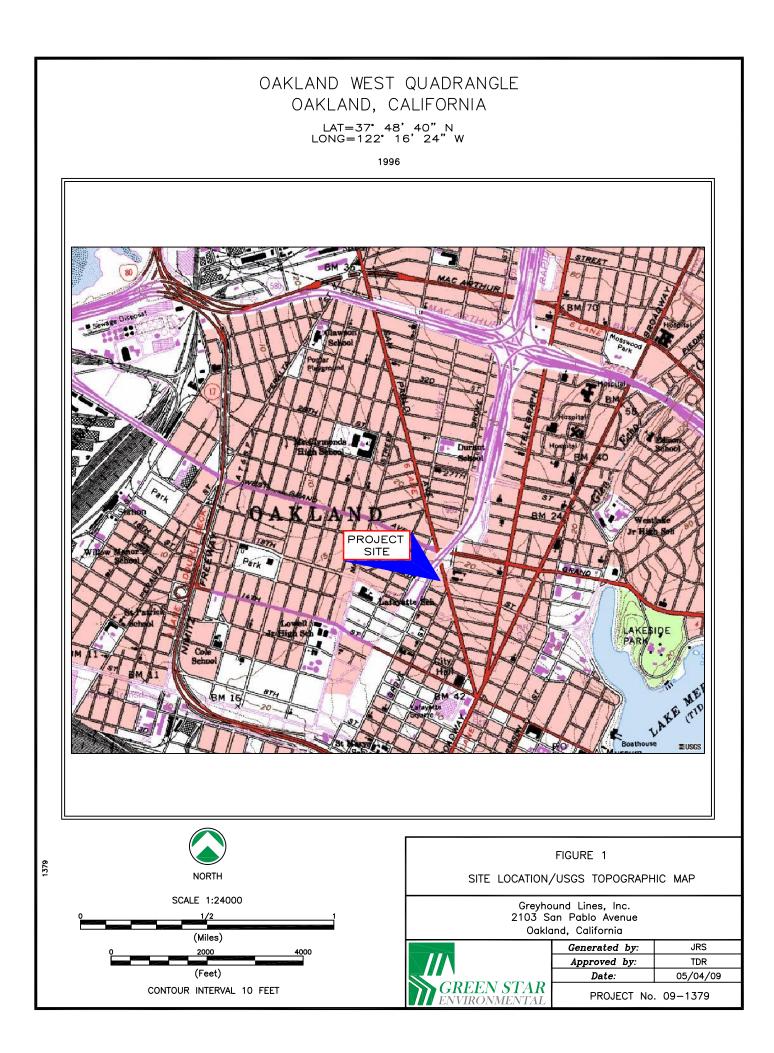
nr = Interpretation of results not possible as reported by previous consultant.

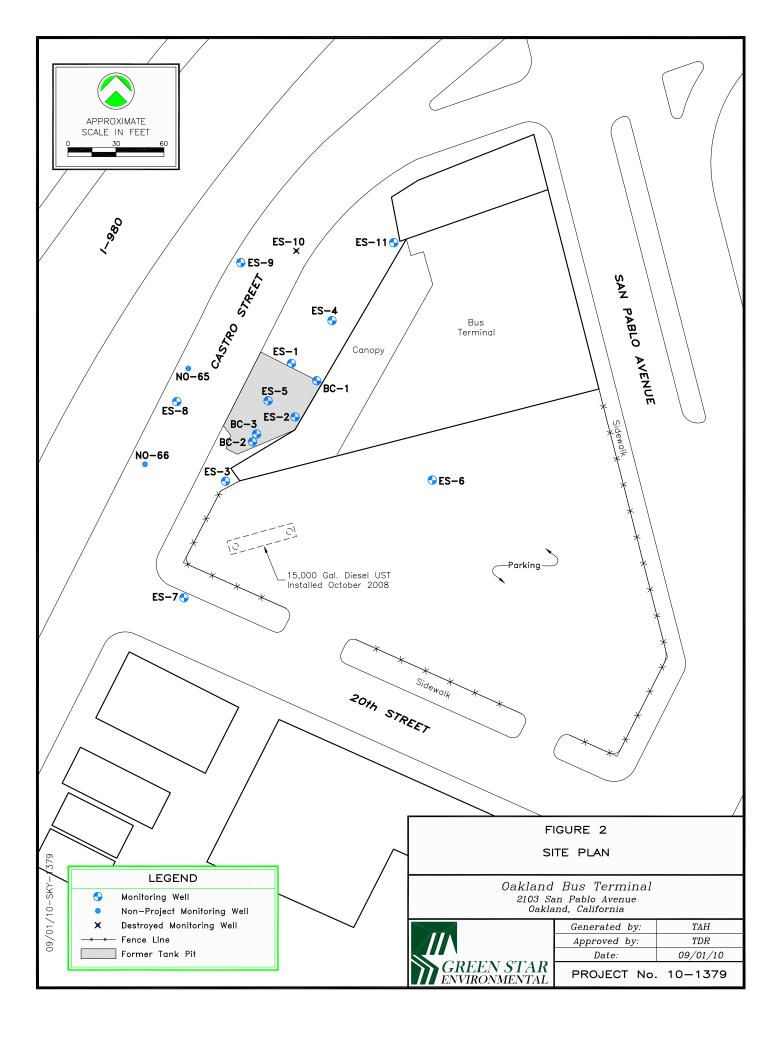
SAT = ESL exceeds saturated soil concentration of chemical

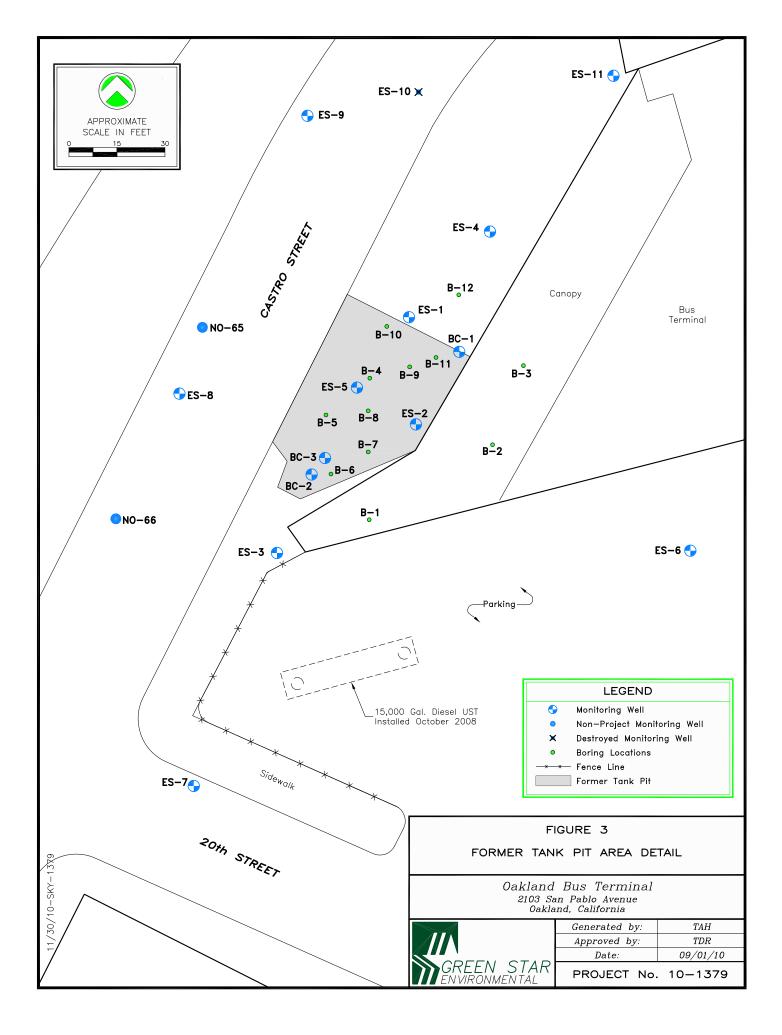
Bolded results indicate detected concentrations exceeded RWQCB ESLs.

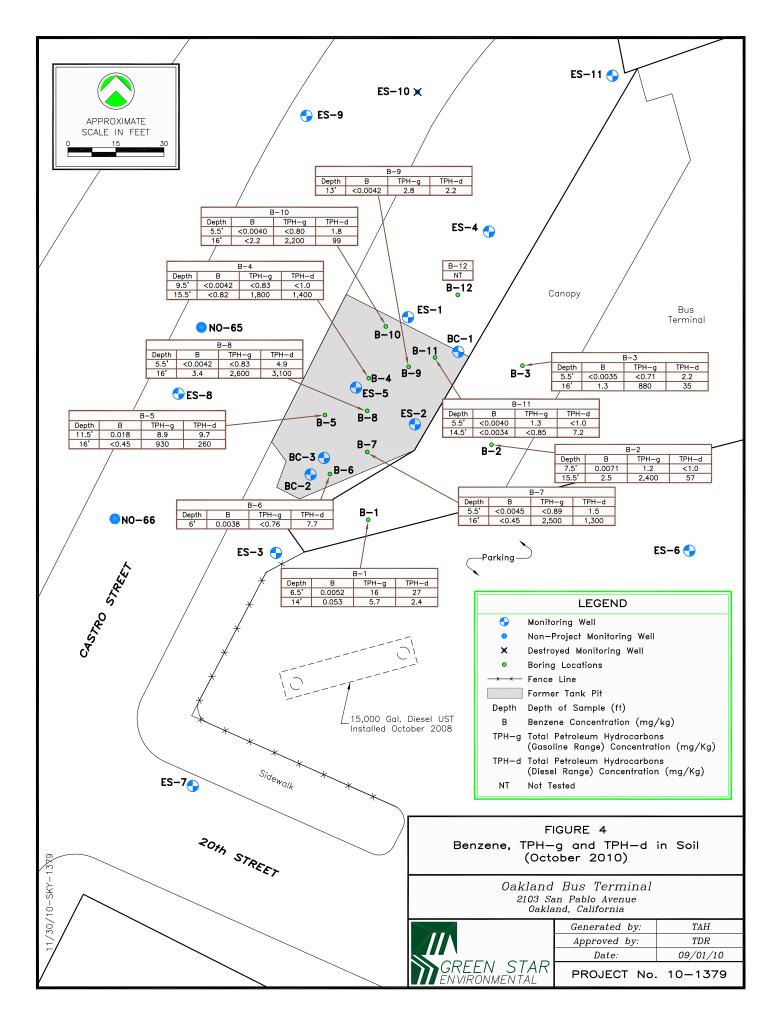
#### LIST OF FIGURES

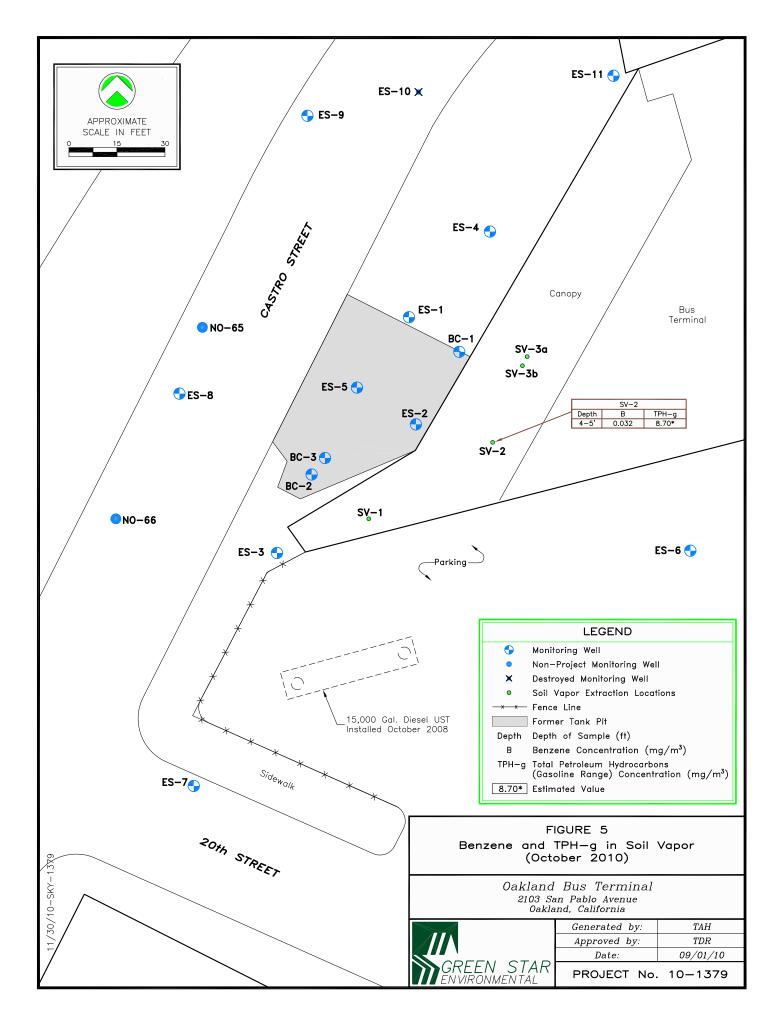
- FIGURE 1 Site Location Map/USGS Topographic Map
- FIGURE 2 Site Plan
- FIGURE 3 Former Tankpit Area Detail (October 2010)
- FIGURE 4 Benzene, TPH-g and TPH-d in Soil (October 2010)
- FIGURE 5 Benzene and TPH-g in Soil Vapor (October 2010)











APPENDIX A

Soil Boring Logs

		DFI	TNT	ST	٨D			BORING/WELL CONSTRUCTION LOG		
$\boldsymbol{n}$	EN	REP VIR	ONM	IEN'	AK					
Project			1379.0					Boring/Well Number:	B-1	
Project			GLI Oa					Date Drilled:		er 22, 2010
Locatio						. Oakla		Casing Type/Diameter:	na	
Drilling						rect Pus		Screen Type/Diameter:	na	
Sampli					(HA)/Dir	rect Pus	sh (DP)	Gravel Pack Type:	na	
Ground				na				Grout Type:	na	
Top of		Elevat	ion:	na	nce Har			Depth to Water/Date:	na	
Logged				Terrar	nce Har	riman		Ground Water Elevation/Date: Drilling Co./Driller:	na	de Drilling/Clautan
Remar						1	_	Drilling Co./Driller:	Casca	de Drilling/Clayton
PID (ppm)	Blow Counts	Recovery (%)	Sampling Method	Sample	Depth (ft. BGL)	U.S.C.S	Graphic Log	Lithologic Description	Contact Depth	
	NA		НА					Concrete Surface		
28	ΝA	100	ПА	х		CL		Moist, soft, gray CLAY FILL with some GRAVEL and hydrocarbon odor		
		100				GW		Moist GRAVEL FILL with few fines		
					5	CL		Moist, medium stiff, gray CLAY with hydrocarbon odor	5	
19		100	DP	{X}						
		100			10			- darker gray	10	
								<ul> <li>increasing fine-grained SAND and stronger odor</li> </ul>		
318				{X}		SC		Moist, loose, gray, fine-grained, well-sorted CLAYEY SAND with hydrocarbon odor		
					15					
					- 10	1			15	
250		100		Х				- wet and darker gray	-	
		100						The boring was terminated at 18 ft. bgs.		
					20				20	

		REI	EN	ST	AR			BORING/WELL CONSTRUCTION LOG		
Project Project	EN Numb	VIR er:	<u>ONM</u> 1379.0 GLI Oa	<u>IEN</u> 6	TAL			Boring/Well Number: Date Drilled:	B-2 Octobe	er 22, 2010
Locatic Drilling Sampli	Metho ng Met	od: thod:	Hand A	Auger (	blo Ave (HA)/Dir (HA)/Dir	ect Pus	sh (DP)	Casing Type/Diameter: Screen Type/Diameter: Gravel Pack Type:	na na na	
Ground Top of Logged	Casing	ition: g Elevat		na na Terrar	nce Har	riman		Grout Type: Depth to Water/Date: Ground Water Elevation/Date:	na na na	
Remar	ks:	1		1	1	1	1	Drilling Co./Driller:	Casca	de Drilling/Clayton
PID (ppm)	Blow Counts	Recovery (%)	Sampling Method	Sample	Depth (ft. BGL)	N.S.C.S	Graphic Log	Lithologic Description	Contact Depth	
	NA		НА					Concrete Surface		
0		100		x	5	CL		Moist, medium stiff, grayish-brown CLAY		
7		100	DP	{X}					5	
					10				10	
160		100		x		SC		- hydrocarbon odor and increasing gray, fine-grained, SAND Moist, loose, brownish-gray, fine-grained, well-sorted SAND hydrocarbon odor		
358		100		{X}	15			- gray - wet	15	
					20			The boring was terminated at 18 ft. bgs.	20	

								BORING/WELL CONSTRUCTION LOG		
	GI	REI VIR	EN	ST.	AR TAL					
	Numb	er:	1379.0	)6				Boring/Well Number:	B-3	
	Name		GLI Oa					Date Drilled:	Octobe	er 22, 2010
ocatio					blo Ave			Casing Type/Diameter:	na	
Drilling	Metho	d:	Hand /	Auger (	(HA)/Dii	rect Pus	sh (DP)	Screen Type/Diameter:	na	
	ng Met		Hand /		(HA)/Dii	rect Pus	sh (DP)	Gravel Pack Type:	na	
	Eleva			na				Grout Type:	na	
		Elevat	ion:	na	nce Har	rimon		Depth to Water/Date: Ground Water Elevation/Date:	na na	
oggeo Remar				Terrai	ice i lai	ninan		Drilling Co./Driller:		de Drilling/Clayton
				1	1	1	0		Casca	de Dhining/Clayton
PID (ppm)	Blow Counts	Recovery (%)	Sampling Method	Sample	Depth (ft. BGL)	U.S.C.S	Graphic Log	Lithologic Description	Contact Depth	
	NIA							Concrete Surface		
	NA		HA			CL		Moist, medium stiff, brown SILTY CLAY	1	
						1				
		100				1				
		100								
~				v		1				
0				Х						
						1				
					5					
						1			5	
1			DP	{X}				- gray		
						1				
						1				
		100								
						1				
						1		- brownish-gray		
					10					
					- 10	1			10	
						4				
						-				
		100						- increasing gray, fine-grianed SAND		
						00			4	
10				Х		SC		Moist, loose, greenish-gray, fine-grained, well-sorted CLAYEY SAND		
					<u> </u>	4		with hydrocarbon odor		
					l					
					15	4			15	
								- darker gray		
1500				{X}		l				
		100						- wet		
						1				
									1	
								The boring was terminated at 18 ft. bgs.		
						]				
						1				
					20					
						1			20	

		REF	EN	ST	AR			BORING/WELL CONSTRUCTION LOG		
Project	EN Numbe	VIR( er:	<u>ONM</u> 1379.0	<u>IEN'</u> 16	TAL			Boring/Well Number:	B-4	
Project			GLI Oa			<u> </u>		Date Drilled:		er 20, 2010
Locatio	n:		2103 S	San Pa	blo Ave	. Oakla	nd, CA	Casing Type/Diameter:	na	
Drilling						rect Pus		Screen Type/Diameter:	na	
Sampli Ground					na)/Dii	rect Pus	sn (DP)	Gravel Pack Type:	na	
Top of				na na				Grout Type: Depth to Water/Date:	na na	
Logged		Eleval			nce Har	rimon		Ground Water Elevation/Date:	na	
Remar				Terrai	ice i lai	IIIIaII		Drilling Co./Driller:		de Drilling/Clayton
Remai					1	1	0	Drining Oo./Driner.	Casca	de Dhilling/Oldyton
PID (ppm)	Blow Counts	Recovery (%)	Sampling Method	Sample	Depth (ft. BGL)	U.S.C.S	Graphic Log	Lithologic Description	Contact Depth	
	NA		HA					Concrete Surface		
	INA		ПA					FILL: broken concrete roadbase	]	
		100				CL		Moist, soft, brown, SILTY CLAY FILL with some GRAVEL		
65				x	5					
						CL		Moist, very stiff, grayish-brown CLAY	5	
			DP							
		100								
								- olive gray with hydrocarbon odor		
170				{X}						
					10				10	
									-	
		•				1		No Recovery		
		0								
					<u> </u>	1				
						1				
					15					
					- 13	SC		Mosit, dense, gray, fine-grained, well-sorted CLAYEY SAND with	15	
1530				{X}		00		hydrocarbon odor		
		100				1		- wet	1	
								The boring was terminated at 17 ft. bgs.	1	
								The bonny was terminated at 17 it. bys.		
						1				
						4				
					20					
					20	4			20	
					I	I	I	1		

		REF	EN	ST	AR			BORING/WELL CONSTRUCTION LOG		
	EN	VIR	ONM	IEN'	TAL					
Project			1379.0					Boring/Well Number:	B-5	
Project			GLI Oa					Date Drilled:		er 20, 2010
Locatio					blo Ave			Casing Type/Diameter:	na	
Drilling					(HA)/Dir			Screen Type/Diameter:	na	
Samplin Ground					(HA)/Dir	rect Pus	sh (DP)	Gravel Pack Type:	na	
Top of				na na				Grout Type: Depth to Water/Date:	na na	
Logged	-	Lieval	1011.		nce Har	riman		Ground Water Elevation/Date:	na	
Remark				Tonta		man		Drilling Co./Driller:		de Drilling/Clayton
Т							D			
PID (ppm)	Blow Counts	Recovery (%)	Sampling Method	Sample	Depth (ft. BGL)	U.S.C.S	Graphic Log	Lithologic Description	Contact Depth	
	NA		HA					Concrete Surface		
	IN/A		1 IA					FILL: broken concrete roadbase		
		100								
		100				CL		Moist, soft, brown SILTY CLAY with some GRAVEL FILL		
			DP							
		100								
4		100		х						
4				~	5				5	
									Ŭ	
						GW		Mosit, angular GRAVEL FILL with few fines		
		50								
		00								
					10				10	
						CL		Moist, stiff, grayish-brown CLAY		
					L			- greenish-gray with hydrocarbon odor		
56		100		{X}						
				,	L					
					L					
									4	
		100			L	SC		Moist, loose, greenish-gray, fine-grained, well-sorted CLAYEY SAND		
1988				х				with hydrocarbon odor		
					15				15	
									· ·	
1678				{X}	L					
		100		6.9				- wet		
					1				Į	
								The boring was terminated at 17.5 ft. bgs.		
					L					
					20				20	
							<u> </u>		-	

$\neq$		REI VIRO	EN	ST.	AR TAL			BORING/WELL CONSTRUCTION LOG		
Project		er:	1379.0	)6				Boring/Well Number:	B-6	
Project	Name		GLI Oa					Date Drilled:	Octob	er 21, 2010
Locatio					blo Ave			Casing Type/Diameter:	na	
Drilling					(HA)/Dii			Screen Type/Diameter:	na	
Sampli			Hand /		(HA)/Dii	rect Pu	sh (DP)	Gravel Pack Type:	na	
Ground			•	na				Grout Type:	na	
Top of		Elevat	ion:	na	nce Har	rimon		Depth to Water/Date: Ground Water Elevation/Date:	na	
Loggeo Remar				Terrar	псе наг	nman		Drilling Co./Driller:	na	de Drilling/Clayton
					1	1	D		04304	de Drilling/Oldyton
PID (ppm)	Blow Counts	Recovery (%)	Sampling Method	Sample	Depth (ft. BGL)	U.S.C.S	Graphic Log	Lithologic Description	Contact Depth	
	NA		HA					Concrete Surface		
	1974		1174					FILL: broken concrete roadbase		
		100				CL		Moist, soft, brown CLAY with some GRAVEL FILL		
0				х						
					5				5	
0			DP	{X}				- stringer of very moist		
3		30		x		GW		Moist, angular GRAVEL FILL with few fines		
					10	-			10	
		30						- stringer of moist, gray, medium stiff CLAY		
						-		No recovery due to GRAVEL		
		0			15	-				
									15	
		0								
					<b> </b>			The boring was terminated at 17.5 ft. bgs.	1	
					20				20	

		REE	EN	$ST_{2}$	AR			BORING/WELL CONSTRUCTION LOG		
Project		VIRO	<u>DNM</u> 1379.0	$\frac{1EN}{16}$	IAL			Boring/Well Number:	B-7	
Project			GLI Oa					Date Drilled:		er 21, 2010
Locatio	n:		2103 S	San Pa	blo Ave	. Oakla	nd, CA	Casing Type/Diameter:	na	
	Metho				(HA)/Dir			Screen Type/Diameter:	na	
	ng Met				(HA)/Dir	ect Pus	sh (DP)	Gravel Pack Type:	na	
	Eleva Casing	Elevat		na na				Grout Type: Depth to Water/Date:	na na	
		Lievai			nce Har	riman		Ground Water Elevation/Date:	na	
Remar								Drilling Co./Driller:		de Drilling/Clayton
PID (ppm)	Blow Counts	Recovery (%)	Sampling Method	Sample	Depth (ft. BGL)	U.S.C.S	Graphic Log	Lithologic Description	Contact Depth	
	NA		НА					Concrete Surface		
		100						FILL: broken concrete roadbase, GRAVEL, and some brick		
0			DP	{X}	5	CL		Moist, soft, brown CLAY with some GRAVEL and brick FILL	5	
		50			10	GW		Moist, angular GRAVEL FILL with few fines	10	
		0						No recovery due to GRAVEL		
360		100		{X}	15	CL SC		Moist, very stiff, olive gray CLAY with hydrocarbon odors Moist, loose, greenish-gray, fine-grianed, well-sorted CLAYEY SAND with hydrocarbon odor - wet The boring was terminated at 18 ft. bgs.	15	
					20				20	

		REI	EN	ST	AR			BORING/WELL CONSTRUCTION LOG		
	EN	VIR	ONM	IEN'	TAL					
Project			1379.0					Boring/Well Number:	B-8	
Project			GLI Oa			Oalda		Date Drilled:		er 21, 2010
Locatio Drilling					blo Ave (HA)/Dir			Casing Type/Diameter: Screen Type/Diameter:	na na	
Samplin					(HA)/Dir			Gravel Pack Type:	na	
Ground				na	(1 <i>11 ()</i> , B1	0011 00		Grout Type:	na	
Top of (				na				Depth to Water/Date:	na	
Logged	l by:			Terrar	nce Har	riman		Ground Water Elevation/Date:	na	
Remark	KS:							Drilling Co./Driller:	Casca	de Drilling/Clayton
PID (ppm)	Blow Counts	Recovery (%)	Sampling Method	Sample	Depth (ft. BGL)	U.S.C.S	Graphic Log	Lithologic Description	Contact Depth	
	NA		HA					Concrete Surface		
								FILL: broken concrete roadbase		
		100				CL		Moist, soft, brown CLAY with some GRAVEL FILL		
						1				
0				Х		1				
					5				_	
0			DP	{X}					5	
						GW		Moist, angular GRAVEL FILL with few fines		
		30								
		00								
					10					
					10			No recovery due to GRAVEL	10	
								NO RECOVERY QUE LO GIVAVEL		
		0				1				
						1				
						CL		- stringer of moist, medium stiff greenish-gray CLAY with h/c odor	1	
						SC		Moist, loose, greenish-gray, fine-grained, well-sorted CLAYEY SAND	1	
		90				J		with hydrocarbon odor		
67				х						
01				^	15	l			15	
345				{X}		Į		—		
				l ` '				- wet		
					┝───	4				
		100								
						1				
					<u> </u>	1				
					20					
<b></b> +						1	I	The boring was terminated at 20 ft. bgs.	20	

			EN	ST	AR			BORING/WELL CONSTRUCTION LOG		
	EN	VIR	ONM	IEN'	TAL					
Project	Numbe	er:	1379.0	)6				Boring/Well Number:	B-9	
Project			GLI Oa			<u> </u>		Date Drilled:		er 21, 2010
Locatio		-l.			blo Ave			Casing Type/Diameter:	na	
Drilling Sampli					(HA)/Dir (HA)/Dir			Screen Type/Diameter: Gravel Pack Type:	na na	
Ground				na	TA)/DII	ectrus		Grout Type:	na	
Top of				na				Depth to Water/Date:	na	
Logged		Liova			nce Hari	riman		Ground Water Elevation/Date:	na	
Remar								Drilling Co./Driller:		de Drilling/Clayton
PID (ppm)	Blow Counts	Recovery (%)	Sampling Method	Sample	Depth (ft. BGL)	U.S.C.S	Graphic Log	Lithologic Description	Contact Depth	
							Ū	Concrete Surface		
	NA		HA					FILL: broken concrete roadbase		
		100								
					5					
0			DP	х	0	CL		Moist, stiff, grayish-brown CLAY	5	
Ū		100		~						
					10			- greenish-gray		
					10				10	
4				Х						
								<ul> <li>increasing greenish-gray, fine-grained SAND and hydrocarbon odor</li> </ul>		
		100								
						SC		Moist, loose, greenish-gray, fine-grained, well-sorted CLAYEY SAND		
				00				with hydrocarbon odor		
30			1	{X}						
350		100		х	15				15	
350		100		^					10	
								- wet		
		100								
$\vdash$					20				20	
								The boring was terminated at 20 ft. bgs.		

		REI	EN	STA	AR			BORING/WELL CONSTRUCTION LOG		
	EN	VIR	ONM	IEN'	TAL					
Project			1379.0					Boring/Well Number:	B-10	
Project			GLI Oa			<u> </u>		Date Drilled:		er 21, 2010
Locatio		-				. Oaklai		Casing Type/Diameter:	na	
Drilling		a:	Hand A	Auger (	HA)/Dir	ect Pus	sn (DP)	Screen Type/Diameter:	na	
Sampli Ground					na)/Dii	ect Pus	in (DP)	Gravel Pack Type:	na	
		Elevat		na na				Grout Type: Depth to Water/Date:	na na	
Logged		Lievai	1011.		nce Har	riman		Ground Water Elevation/Date:	na	
Remar				Torra		man		Drilling Co./Driller:		de Drilling/Clayton
PID (ppm)	Blow Counts	Recovery (%)	Sampling Method	Sample	Depth (ft. BGL)	U.S.C.S	Graphic Log	Lithologic Description	Contact Depth	
							Ū	Concrete Surface		
	NA		HA					FILL: broken concrete roadbase and GRAVEL		
		100								
						CL		Moist, medium stiff, greenish-gray CLAY with hydrocarbon odor		
					5				5	
6			DP	{X}					5	
0				۱۸۶				- very stiff		
								- very sum		
		100								
		100								
					10				10	
								<ul> <li>increasing fine-grained SAND</li> </ul>	-	
6				Х						
		100				<u> </u>		Majot modium donoo, grooniah grou fina groinad wall as to t		
						SC		Moist, medium dense, greenish-gray, fine-grained, well-sorted CLAYEY SAND with hydrocarbon odors		
69				Х	15					
					15				15	
381				{X}				- wet		
								- wet		
		100								
								The boring was terminated at 19 ft. bgs.		
					20			The sening was terminated at to it. bys.		
									20	
<b></b>										

		DEI	TNT	ST	٨D			BORING/WELL CONSTRUCTION LOG		
$\mathcal{T}$	EN	REP VIR	ONN	<b>51</b> 1EN'	TAL					
Project			1379.0					Boring/Well Number:	B-11	
Project			GLI Oa					Date Drilled:	Octobe	er 21, 2010
Locatio			2103 5	San Pa	blo Ave	. Oaklaı	nd, CA	Casing Type/Diameter:	na	
Drilling						ect Pus		Screen Type/Diameter:	na	
Sampli			Hand /		(HA)/Dir	ect Pus	sh (DP)	Gravel Pack Type:	na	
Ground				na				Grout Type:	na	
		Elevat	ion:	na	nce Har	rimon		Depth to Water/Date: Ground Water Elevation/Date:	na	
Loggeo Remar				Terrar	ice Har	nman		Drilling Co./Driller:	na	de Drilling/Clayton
Remai					1		D	Drining Co./Drinet.	Casca	de Dhilling/Clayton
(mqq) OIA	Blow Counts	Recovery (%)	Sampling Method	Sample	Depth (ft. BGL)	U.S.C.S	Graphic Log	Lithologic Description	Contact Depth	
	NA		HA					Concrete Surface		
			117					FILL: GRAVEL		
									4	
					L	CL		Moist,medium stiff, greenish-gray CLAY with hydrocarbon odor		
3		100		х						
-										
								- very stiff		
					_					
					5				5	
2			DP	{X}						
				. ,						
		100								
								- greenish-brown		
					10					
					10				10	
								<ul> <li>gray with increasing fine-grained SAND and stronger odor</li> </ul>		
		200				SC		Moist, medium dense, greenish-gray, fine-grained, well-sorted	-	
28		200		Х		30		CLAYEY SAND with hydrocarbon odor		
					┣───					
		90							1	
		00						- reddish-brown		
165				{X}	15				1	
					.0			The boring was terminated at 15 ft. bgs due to refusal.	15	
1								The sering masterininated at to it, byo due to foldoal.	1	
					L					
					<b> </b>					
					<u> </u>				1	
1					20					
1									20	
					•					

		REI	EN	ST	AR			BORING/WELL CONSTRUCTION LOG		
Project		VIRO	1379.0	IEN	IAL			Boring/Well Number:	B-12	
Project			GLI Oa					Date Drilled:		er 22, 2010
Locatio					blo Ave	Oakla	nd CA	Casing Type/Diameter:	na	51 22, 2010
Drilling					(HA)/Dii			Screen Type/Diameter:	na	
Samplir					(HA)/Dii			Gravel Pack Type:	na	
Ground				na				Grout Type:	na	
Top of (				na				Depth to Water/Date:	na	
Logged		Lievat			nce Har	riman		Ground Water Elevation/Date:	na	
Remark	ks <sup>.</sup>			Terrai		man		Drilling Co./Driller:		de Drilling/Clayton
				Г	T		0		Cuocu	ao Bhinig/ Clayton
PID (ppm)	Blow Counts	Recovery (%)	Sampling Method	Sample	Depth (ft. BGL)	U.S.C.S	Graphic Log	Lithologic Description	Contact Depth	
	NIA							Concrete Surface		
	NA		HA		1			FILL: broken concrete roadbase and GRAVEL	1	
						1				
					1					
		400				CL		Moist, medium stiff, gray CLAY with some hydrocarbon odor	1	
		100								
8				Х		1				
					5					
									5	
			DP							
						1		- mottled brown and gray		
3.0				Х		-				
		100								
					10	l			10	
					1					
					L	1				
					I –					
		100								
		100				]		- increasing fine-grained SAND		
					L			- increasing fine-grained SAND		
30				v		SC		Moist, loose, grayish-brown, fine-grained, well-sorted CLAYEY	1	
30				Х	1			SAND with hydrocarbon odor		
						1				
					15			- gray		
a					<u> </u>	1			15	
355				Х	1			- wet		
		100			<u> </u>	1		- wet		
					1					
					<u> </u>	1				
					1					
┢──┼					<del> </del>	<u> </u>		The boring was terminated at 18 ft. bgs.	1	
					1			The bonny was terminated at to it. bys.		
						4				
					20	4			20	

APPENDIX B

Analytical Results with Chain-of-Custody Documentation

McCampbell An "When Ouality		Web: www.mco	ow Pass Road, Pittsburg, campbell.com E-mail: m ne: 877-252-9262 Fax:	ain@mccampbell.com
Greenstar Environmental	Client Project ID: #1379.0	6; GLI Oakland	Date Sampled:	10/20/10
354 McDonnell Street, Suite 9			Date Received:	10/21/10
Lewisville, TX 75057	Client Contact: Trent Rip	ley	Date Reported:	10/27/10
	Client P.O.:		Date Completed:	10/27/10

#### WorkOrder: 1010606

October 27, 2010

Dear Trent:

Enclosed within are:

- 1) The results of the 2 analyzed samples from your project: **#1379.06; GLI Oakland,**
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius Laboratory Manager McCampbell Analytical, Inc.

																	10	31	0	00	26	0									
N N	IcCAMP	BELL	ANA	LY	<b>FIC</b>	AL.	I	NC.															U	ST	01	DY	R	E	CO	RD	
			LLOW PA											ΤU	RN	AR									Ę	1		C	1	1	
We We	bsite: <u>www.m</u>		RG, CA 9 Il.com Er			meea	mp	bell.c	om															βH				48 I		72	IR 5 DAY
Te	lephone: (87	7) 252-92	262			: (92								Geo	Tra	ack	er I	EDF	3 5												DW) 🖵 👘
-					_							-							Ę					mpl	le is	effl	uen	t an	d ".	" flag	g is required
Report To: Trent				Bill T	0:				_					_				A	nal	ysis	Req	ues	t						0	ther	Comments
Company: Green	1 Star Enviro	onmenta	I										-																		**Indicate
E Mail Adda Look										_			BE		&F)					EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners											here if these
E-Mail: tdripley@		ivironm			(21.0)	222	0.00						8015) / MTBE		Total Petroleum Oil & Grease (1664 / 5520 E/B&F)					ongo						-			ysis		samples are
Tele:         (214) 222-8752         Fax:         (214) 222-8762           Project #:         1379.06         Project Name:         GLI Oakland							15		5520		-	-		s/C						CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)		sample for DISSOLVED metals analysis		potentially						
		hla Arra				me: (	J.L	Oak	lan	d			- 8		64 /	Total Petroleum Hydrocarbons (418.1)	EPA 502.2 / 601 / 8010 / 8021 (HVOCs)	MTBE / BTEX ONLY (EPA 602 / 8021)	~	oclor		EPA 515 / 8151 (Acidic CI Herbicides)			As)	10/6	0/6		tals		dangerous i handle:
Project Location:	and the second	ablo Ave	. Oaklan	d, CA											e (16	1s (4	(HV)	502 /	ides	Art.	(8	rbic	-	(8)	/PN	/ 601	601	(0)	0 me		nandle:
Sampler Signatur	re:	-				_				L M	ETH	IOD	(602 / 8021		rease	rbor	021	PA (	estic	ALY	cide	1 He	00	voc	VHs	00.8	0.8	/ 603	VEI		
		SAM	PLING		~	N	1A1	RI	<			RVEL	09) 8		& G	Iroca	0 / 8	V (E	(CI h	s Or	Pest	die C	0 (V	0 (S	0 (P/	7/2	7/20	5010	SOL		
	LOCATION/			2	ner								s Gas	015)	lio	Hyd	/ 801	ONL	180	PCB	AN)	(Aci	/ 826	/ 827	831	(200	200.	.8 /	DIS		
SAMPLE ID	Field Point			Containers	Type Containers								e Hd	TPH as Diesel (8015)	eum	eum	109	EX	EPA 505/ 608 / 8081 (C1 Pesticides)	082	EPA 507 / 8141 (NP Pesticides)	151	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	stals	tals (	Lead (200.7 / 200.8 / 6010 / 6020)	e for		
	Name	Date	Time	nta	C	1		26	1			- L	F 3	Die	etro	etro	2.2	/ BT	5/ 6(	8/8	11	51	4.2	5.2	270 5	7 MG	5 Me	00.7	hmpl		
				0	ype	Water	Soil	Sludge	Other	ICE	HCL	Other Other	BTEX & TPH	H as	tal P	tal P	V SI	<b>FBE</b>	A 50	A 60	A 50	A SI	A 52	A 52	A 8	I W	FT	ad (2	Filter si		
				#	- E	12	ň ·	< 10	0	¥	Ξ:	= O		41	To	To	EP	M	EP	EP	EP	EP	EP	EP	EP	C	B	Lei	Fil		
3-4 (4.5)	Dakland	10-20-10	16:10	1	5	1	/			V																					
5-4 (9.5)			16:23	2	JL		1			2					1																
3-4 (15.5")			16:50		372		1	-		V		-		V	-				-												
			17:30		5		V	+	-			-	ľ	V	-				-	-	-	_	-		_	_		-			
3-5 (4.5)					-	-	-	-		V	+	-	+	+	-	-		_			-					_				-	
3-5 (11.5')	1		11:40	2	5/2		/	-					-	-			-														
3-5- (14.5')	Y	V	17:44	1	J		1			V									1												
3-5 (16)	Saklenel	10 -00-10	17:48	2	The	1	-			2			V	v	-																
													1																		
							-	-			-	+	+	-	-					-	-			-			-			-	
				-			-	+			-	+	-	-	-		_		-		-	-		-	-		-				
MAI clients MUST	disclose any dar	igerous ch	emicals kn	own to	be pro	esent in	n the	ir sut	omitt	ed sa	mple	es in o	conce	entra	tions	that	may	cause	imn	nedia	te ha	arm (	or set	rious	futu	re he	alth	end	angei	ment	s a result of brief
loved, open air, samp llowing us to work sa	le handling by l	MAI staff.	Non-disclo	sure in	icurs a	n imm	edia	te S23	50 su	rcha	rge a	nd th	e cli	ent is	subj	ect to	full	legal	liabi	lity f	or ha	irm s	suffe	red.	Tha	nk yo	ou fo	r you	ır un	dersta	nding and for
nowing us to work sa	iciy.														1	2	-														
clinquished By:		Date:	Time:	and the second	ived B				1	0	>				5											(	OM	IME	NTS:	6	
and-	· · · ·	10-21-10	1955	0	_				-	_	and a				SPA			NT	-												
Relinquished By:	10	Date:	Time:	Rece	ived B	y:	1	1	/				DI	ECH	LOR	INAT	ED I	NL/													
	51	31/10	1615		K	0	U	VI	P	1					OPRI RVE				NER	S	-										
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	•												-	TROP	DM	TIC		AS	0&				s (	ЭΤΉ	ER						
									-			-	[ Ph	ALSI	RVA	110	1				pH<2	-		_	_	-					

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

## CHAIN-OF-CUSTODY RECORD

Page 1 of 1

(925) 252-9262				WorkO	rder: 101060	6 Client	Code: GSET		
	WaterTrax	WriteOn	EDF	Excel	Fax	Email	HardCopy	ThirdParty	J-flag
Report to:				В	ill to:		Rec	uested TAT:	5 days
Trent Ripley Greenstar Environmental 354 McDonnell Street, Suite 9 Lewisville, TX 75057 (214) 222-8752 FAX (214) 222.876	cc: PO:	dripley@greenst #1379.06; GLI Oa		tal.com		nvironmental Iell Street, Suite 9		te Received: te Printed:	10/21/2010 10/21/2010
						Requested Tests	(See legend b	pelow)	

Lab ID	Client ID	Matrix	Collection Date Hold	1	2	3	4	5	6	7	8	9	10	11	12
										-					
1010606-003	B-4 (15.5')	Soil	10/20/2010 16:50	В	Α										
1010606-007	B-5 (16')	Soil	10/20/2010 17:48	В	А										

#### Test Legend:

1	G-MBTEX_ENCORE
6	
11	

2	TPH(D)_S
7	
12	

3	
8	

4	
9	

5			
10			

Prepared by: Ana Venegas

#### **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.



# McCampbell Analytical, Inc. "When Ouality Counts"

#### Sample Receipt Checklist

Client Name:	Greenstar Enviro	nmental					Date a	and Time Receive	d: 10/21/2010	) 5:17:44 PM
Project Name:	#1379.06; GLI Oa	kland					Check	klist completed ar	nd reviewed by:	Ana Venegas
WorkOrder N°:	1010606	Matrix <u>S</u>	oil				Carrie	er: <u>Rob Pringle</u>	(MAI Courier)	
			<u>Chain</u>	of Cu	stody (C	0C)	Informa	ation		
Chain of custody	present?			Yes	$\checkmark$		No 🗆			
Chain of custody	signed when relinquis	shed and r	eceived?	Yes	$\checkmark$		No 🗆			
Chain of custody	agrees with sample la	abels?		Yes	✓		No 🗌			
Sample IDs noted	by Client on COC?			Yes	$\checkmark$		No 🗆			
Date and Time of	collection noted by Cli	ent on CO	C?	Yes	✓		No 🗆			
Sampler's name r	noted on COC?			Yes			No 🔽			
			Sa	mple	Receipt	Info	mation	n		
Custody seals int	tact on shipping contai	iner/cooler	·?	Yes			No 🗆	_	NA 🔽	
Shipping containe	er/cooler in good condi	ition?		Yes	$\checkmark$		No 🗆			
Samples in prope	er containers/bottles?			Yes	✓		No 🗆			
Sample containe	rs intact?			Yes	$\checkmark$		No 🗆			
Sufficient sample	e volume for indicated	test?		Yes	✓		No 🗌			
		Sam	ple Preser	vatior	n and Ho	ld Ti	me (HT	) Information		
All samples recei	ived within holding time	e?		Yes	<		No 🗌			
Container/Temp E	Blank temperature			Coole	r Temp:	3.2°	С		NA 🗆	
Water - VOA vial	ls have zero headspac	ce / no but	obles?	Yes			No 🗆	No VOA vials su	bmitted 🗹	
Sample labels ch	necked for correct pres	servation?		Yes	✓		No 🗌			
Metal - pH accep	table upon receipt (pH	<2)?		Yes			No 🗆		NA 🗹	
Samples Receive	ed on Ice?			Yes	$\checkmark$		No 🗆			
			(Ісе Туре	e: WE	TICE )	)				
* NOTE: If the "N	No" box is checked, se	e commei	nts below.							

Client contacted:

Date contacted:

Contacted by:

Comments:

	Campbell Analy "When Quality Counts		Web: www.mccamp	Pass Road, Pitts obell.com E-1 877-252-9262	mail: main	@mccamp	bell.com		
Greenstar Envi		Client Project ID: Oakland		Date Sam		10/20/1			
354 McDonnel	1 Street, Suite 9	Oakianu		Date Rec	te Received: 10/21/10				
		Client Contact: Tr	rent Ripley	Date Extr	acted:	10/21/1	0		
Lewisville, TX	75057	Client P.O.:		Date Ana	lyzed	10/24/1	0-10/28/10		
Extraction method		<b>Fotal Extractable Pet</b> Analytical r	roleum Hydrocarbons* nethods: SW8015B			Work Orde	er: 1010606		
Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)		DF	% SS	Comments		
1010606-003A	B-4 (15.5')	S	1400		10	83	e11,e1		
1010606-007A	B-5 (16')	S	260		1	84	e11,e1		
-	ting Limit for DF =1;	W	NA			N	A		
	eans not detected at or re the reporting limit	S	1.0			mg	/Kg		

\* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in  $\mu g/L.$ 

# cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

%SS = Percent Recovery of Surrogate Standard. DF = Dilution Factor

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

e1) unmodified or weakly modified diesel is significant e11) stoddard solvent/mineral spirit (?)

DHS ELAP Certification 1644

O'C for \_\_\_\_\_ Angela Rydelius, Lab Manager

	Greenstar Environmental Client Project I Oakland					: www.mccampl	ass Road, Pittsbur bell.com E-mail: 77-252-9262 Fa	main@mccamp	bell.com		
Greenst	ar Environmental			•	1379.06; GL	I	Date Sample	ed: 10/20	0/10		
254 Ma	Dama all Starage Seri	4a 0	Oaklaı	nd			Date Receiv	ed: 10/2	1/10		
354 MC.	Donnell Street, Sui	te 9	Client	Contact: Tr	ent Ripley		Date Extract	ed: 10/2	1/10		
Lewisvi	lle, TX 75057		Client				Date Analyz	ed: 10/27	7/10		
		ange (C6-	C12) Volatile	Hydrocarbo	ns as Gasolii	ne with BTI	EX and MTB		Samplin	o]*	
Extraction	method: SW5035	lunge (00	C12) Volutile	•	tical methods:				-	<b>·SJ</b> k Order:	1010606
Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comment
003B	B-4 (15.5')	S	1800	ND<8.2	ND<0.82	0.87	6.7	13	200	#	d7,d9,a9
007B	B-5 (16')	S	930	ND<4.5	ND<0.45	ND<0.45	ND<0.45	1.7	100	#	d7,d9,a9
-	ng Limit for DF =1;	W	50	5.0	0.5	0.5	0.5	0.5		ug/I	
	ns not detected at or the reporting limit	S	1.0	0.05	0.005	0.005	0.005	0.005		mg/F	

TCLP & SPLP extracts in mg/L.

# = cluttered chromatogram; sample peak coelutes with surrogate peak. %SS = Percent Recovery of Surrogate Standard. DF = Dilution Factor

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

a9) reporting limit near, but not identical to, our standard reporting limit due to variable Encore sample weightd7) strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogramd9) no recognizable pattern

#### DHS ELAP Certification 1644

OC for Ans

"When Ouality Counts"

#### QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Soil		(	QC Matri	x: Soil			Batch	ID: 53967		WorkC	Order 10106	06
EPA Method SW8021B/8015Bm	Extra	ction SW	5035					5	Spiked San	nple ID	: N/A	
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	e Criteria (%)	
Analyte	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex <sup>£</sup>	N/A	0.60	N/A	N/A	N/A	108	102	5.36	N/A	N/A	70 - 130	30
MTBE	N/A	0.10	N/A	N/A	N/A	117	117	0	N/A	N/A	70 - 130	30
Benzene	N/A	0.10	N/A	N/A	N/A	94.3	95.3	1.08	N/A	N/A	70 - 130	30
Toluene	N/A	0.10	N/A	N/A	N/A	93.1	93.9	0.855	N/A	N/A	70 - 130	30
Ethylbenzene	N/A	0.10	N/A	N/A	N/A	97	94.7	2.33	N/A	N/A	70 - 130	30
Xylenes	N/A	0.30	N/A	N/A	N/A	94.9	94	0.962	N/A	N/A	70 - 130	30
%SS:	N/A	0.10	N/A	N/A	N/A	87	84	3.52	N/A	N/A	70 - 130	30
All target compounds in the Method E NONE	Blank of this	extraction	batch we	re ND les	s than the	method R	L with th	e following	exceptions:			

#### BATCH 53967 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1010606-002B	10/20/10 4:23 PM	10/22/10	10/25/10 6:10 PM	1010606-003B	10/20/10 4:50 PM	10/21/10	10/27/10 2:52 AM
1010606-005B	10/20/10 5:40 PM	10/22/10	10/25/10 6:40 PM	1010606-007B	10/20/10 5:48 PM	10/21/10	10/27/10 3:22 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

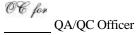
£ TPH(btex) = sum of BTEX areas from the FID.

# cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = 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.

DHS ELAP Certification 1644





1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.mccampbell.com E-mail: main@mccampbell.com Telephone: 877-252-9262 Fax: 925-252-9269

#### "When Ouality Counts"

#### QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Soil		(	QC Matrix		BatchID: 53966 WorkOrder 1010									
EPA Method SW8015B	Extrac	ction SW				5	Spiked San	nple ID	: 1010601-0	01A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	Criteria (%)			
, mary to	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD		
TPH-Diesel (C10-C23)	5.0	40	118	119	0.456	128	126	2.22	70 - 130	30	70 - 130	30		
%SS:	81	25	117	117	0	106	105	1.71	70 - 130	30	70 - 130	30		
%SS: All target compounds in the Meth NONE	÷					30	70 - 130							

#### BATCH 53966 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1010606-003A	10/20/10 4:50 PM	1 10/21/10	10/28/10 11:39 PM	1010606-007A	10/20/10 5:48 PM	10/21/10	10/24/10 9:07 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = 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.

DHS ELAP Certification 1644

OC for QA/QC Officer

McCampbell An "When Ouality		Web: www.mco	ow Pass Road, Pittsburg, campbell.com E-mail: m ne: 877-252-9262 Fax:	ain@mccampbell.com
Greenstar Environmental	Client Project ID: #1379.0	6; GLI Oakland	Date Sampled:	10/20/10
354 McDonnell Street, Suite 9			Date Received:	10/21/10
Lewisville, TX 75057	Client Contact: Trent Rip	ley	Date Reported:	10/27/10
	Client P.O.:		Date Completed:	10/27/10

#### WorkOrder: 1010606

October 27, 2010

Dear Trent:

Enclosed within are:

- 1) The results of the 2 analyzed samples from your project: **#1379.06; GLI Oakland,**
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius Laboratory Manager McCampbell Analytical, Inc.

We we	bsite: <u>www.m</u> lephone: (871	1534 WI PITTSBU ccampbe	LLOW PA RG, CA 9 I <u>Lcom</u> Er 262	.SS RC 4565-1 nail: r	AD 701 nain@ Fax	mee	amp	bel	l.com									01	JNI	Al D T	IN IM	OI E PD	F C		) SH Ex	ا 24 cel		1,	48 I Wr	] HR ite	On (	2 HR (D)	w)
Report To: Trent				Bill T	):														P	Anal	ysis	Ree	ques	t						C	)ther		Comments
Company: Green E-Mail: tdripley@ Tele: (214) 222-8 Project #: 1379.00 Project Location: Sampler Signatur	øgreenstaren 1752 6 : 2103 San Pa	ivironme	ental.con F F	<sup>7</sup> ax: Projec	t Na				aklar	nd				/ 8021 + 8015) / MTBE		Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	bons (418.1)	21 (HVOCs)	A 602/8021)	sticides)	EPA 608 / 8082 PCB's ONLV; Aroclors / Congeners	ides)	Herbicides)	(Cs)	0Cs)	Hs / PNAs)	0.8 / 6010 / 6020)	.8 / 6010 / 6020)	6020)	/ED metals analysis			**Indicate here if these samples are potentially dangerous to handle:
		SAMI	PLING				MA	TR	IX		ME			s (602		& Gre	rocar	0 / 80	V (EP	CI Pe	NO S	Pestic	die CI	0 (VO	0 (SV	0 (PA)	7/20	7/200	/ 0105	SOLA			
SAMPLE ID	LOCATION/ Field Point Name	Date	Time	# Containers	Type Containers	Water	Soil	Air	Sludge Other			HNO		BTEX & TPH as Gas (602/	TPH as Diesel (8015)	Total Petroleum Oil d	Total Petroleum Hydrocarbons (418.1)	EPA 502.2 / 601 / 8010 / 8021 (HVOCs)	MTBE / BTEX ONLY (EPA 602 / 8021)	EPA 505/ 608 / 8081 (CI Pesticides)	EPA 608 / 8082 PCB'	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic CI Herbicides)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Lead (200.7 / 200.8 / 6010 / 6020)	♣. Filter sample for DISSOLVED metals analysis			
3-4 (4.5)	Dateland	10-20-10	16:10	1	5		1																									+	
3-4 (9.5)	-		10:23	2	572		~			1	-			V	1	1																0	ff huld per emai
B-4 (15:5")			16:50	2	372		~			1				V	1																		
3-564.5)			17:30	1	J		V			×	/							•															
3-5 (1.5-)			11:40	2	74		~			1				$\checkmark$	V																		Noff-bold 11
3-5- (14.5')			17:44	1	5		1			1	1																						
3-5 (16')	Cattenel .	10 20-10	17:48	2	The		~			8		-		~	v	-						_											
								-		t																							
**MAI clients MUST gloved, open air, samp allowing us to work sa	le handling by M	igerous cho MAI staff.	emicals kno Non-disclo	own to sure in	be pre curs a	sent n im	in the	eir s ate S	ubmi 250 s	tted	sam hargo	ples e an	in co d the	nce clie	ntrat nt is	ions subje	that ect to	may full	caus legal	e imi liab	nedia ility f	ate h for h	arm ( arm s	or se suffe	rious red.	futu Tha	ure h nk ye	ealth ou fo	i end or you	ange ur ur	rment	t as a andi	result of brief, ng and for
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Relinquished By:		Date:	Time:	Rece	ved B	y:		,	0						ESE			vo	DAS	08		ME pH<		s (	отн	ER							

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1534 Willow Pass Rd Pittsburg CA 04565 1701

## CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Trent RipleyEmail:tdripley@greenstarenvironmental.comTrent RipleyDate Received:10/21/2010Greenstar Environmentalcc:Greenstar EnvironmentalDate Received:10/21/2010	(925) 252-9262				WorkOrd	ler: 1010606	A Client	Code: GSET		
Trent RipleyEmail:tdripley@greenstarenvironmental.comTrent RipleyDate Received:10/21/2010Greenstar Environmentalcc:Greenstar Environmental354 McDonnell Street, Suite 9Date Add-On:10/22/2010Jewisville, TX 75057ProjectNo: #1379.06; GLI OaklandLewisville, TX 75057Date Printed:10/22/2010		WaterTrax	WriteOn	EDF	Excel	Fax	Email	HardCopy	ThirdParty	J-flag
Greenstar EnvironmentalCC:Greenstar EnvironmentalDate Received:10/21/2010354 McDonnell Street, Suite 9PO:354 McDonnell Street, Suite 9Date Add-On:10/22/2010Lewisville, TX 75057ProjectNo: #1379.06; GLI OaklandLewisville, TX 75057Date Printed:10/22/2010	Report to:				Bi	II to:		Re	quested TAT:	5 days
	Greenstar Environmental 354 McDonnell Street, Suite 9	cc: PO:			ital.com	Greenstar E 354 McDonr	Environmental nell Street, Suite 9	Da	te Add-On:	10/22/2010
		Projectivo: #13	379.06; GLI Oai	land		Lewisville, I	X 75057	Da	te Printed:	10/22/2010

							Req	uested	Tests (	See leg	gend be	elow)			
Lab ID	Client ID	Matrix	Collection Date Ho	d 1	2	3	4	5	6	7	8	9	10	11	12
		-			_			-							
1010606-002	B-4 (9.5')	Soil	10/20/2010 16:23	В	А										
1010606-005	B-5 (11.5')	Soil	10/20/2010 17:40	] В	А										

#### Test Legend:

1	G-MBTEX_ENCORE	
6		
11		1

2	TPH(D)_S	
7		
12		

3		
8		

4	
9	

5	
10	

Prepared by: Ana Venegas

#### **Comments:** 002 and 005 off hold 10/22/10 per email

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.

When Ouality Counts"					1534 Willow Pass Road, Pittsburg, CA 94565-1701         Web: www.mccampbell.com         E-mail: main@mccampbell.com         Telephone: 877-252-9262         Fax: 925-252-9269						
Greens	Greenstar Environmental Client Project ID: Oakland				#1379.06; GLI Date Sampled: 10/20/10						
354 McDonnell Street, Suite 9				nd			Date Receiv	red: 10/21	/10		
				Contact: Tr	ent Ripley		Date Extract	ted: 10/22	/10		
				P.O.:			Date Analyz	zed: 10/25	/10		
	Gasoline Ra	nge (C6-0	C12) Volatile	Hydrocarbo	ns as Gasoliı	ne with BTF	EX and MTB	E [Encore S	amplir	ng]*	
Extractio	n method: SW5035			-	tical methods:				_	-	1010606
Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Commen
002B	B-4 (9.5')	S	ND<0.83	ND<0.042	ND<0.0042	ND<0.0042	ND<0.0042	ND<0.0042	1	83	a9
005B	B-5 (11.5')	S	8.9	ND<0.039	0.018	ND<0.0039	ND<0.0039	0.014	1	78	d7,d9,a9
										1	
		+									
-	ting Limit for DF =1;	W	50	5.0	0.5	0.5	0.5	0.5		ug/l	
	e ans not detected at or e the reporting limit	S	1.0	0.05	0.005	0.005	0.005	0.005		mg/H	Kg

TCLP & SPLP extracts in mg/L.

# = cluttered chromatogram; sample peak coelutes with surrogate peak. %SS = Percent Recovery of Surrogate Standard. DF = Dilution Factor

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

a9) reporting limit near, but not identical to, our standard reporting limit due to variable Encore sample weightd7) strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogramd9) no recognizable pattern

#### DHS ELAP Certification 1644

OC for Ange

	Campbell Analy "When Ouality Count		Web: www.mccam	Pass Road, Pitts pbell.com E-1 877-252-9262	mail: main	@mccampbel		
Greenstar Environmental 354 McDonnell Street, Suite 9 Lewisville, TX 75057		Client Project ID:	Client Project ID: #1379.06; GLI			10/20/10		
		Oakland	Client Contact: Trent Ripley			Date Received:10/21/10Date Extracted:10/22/10		
		Client Contact: Tr						
		Client P.O.:				10/26/10	26/10	
Extraction method SV		Total Extractable Petr Analytical n	roleum Hydrocarbons* nethods: SW8015B			Work Order:	1010606	
Lab ID	Client ID	Matrix	TPH-Diesel		DF	% SS	Comment	
1010606-002A	B-4 (9.5')	S	(C10-C23) ND		1	110		
1010606-005A	B-5 (11.5')	S	9.7		1	111	e1/e3,e11	
-	ng Limit for DF =1;	W	NA			NA		
	ns not detected at or the reporting limit	S	1.0			mg/K	g	

\* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

# cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

%SS = Percent Recovery of Surrogate Standard. DF = Dilution Factor

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

e1) unmodified or weakly modified diesel is significant; and/or e3) aged diesel is significant e11) stoddard solvent/mineral spirit (?)

#### DHS ELAP Certification 1644

O'C for \_\_\_\_\_ Angela Rydelius, Lab Manager

"When Ouality Counts"

#### QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Soil		(	QC Matrix	k: Soil			Batch	ID: 53967		WorkC	Order 10106	06
EPA Method SW8021B/8015Bm	Extra	ction SW	5035					5	Spiked San	nple ID	: N/A	
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	Criteria (%)	
Analyte	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex)	N/A	0.60	N/A	N/A	N/A	108	102	5.36	N/A	N/A	70 - 130	30
MTBE	N/A	0.10	N/A	N/A	N/A	117	117	0	N/A	N/A	70 - 130	30
Benzene	N/A	0.10	N/A	N/A	N/A	94.3	95.3	1.08	N/A	N/A	70 - 130	30
Toluene	N/A	0.10	N/A	N/A	N/A	93.1	93.9	0.855	N/A	N/A	70 - 130	30
Ethylbenzene	N/A	0.10	N/A	N/A	N/A	97	94.7	2.33	N/A	N/A	70 - 130	30
Xylenes	N/A	0.30	N/A	N/A	N/A	94.9	94	0.962	N/A	N/A	70 - 130	30
%SS:	N/A	0.10	N/A	N/A	N/A	87	84	3.52	N/A	N/A	70 - 130	30
All target compounds in the Method B NONE	lank of this	extraction	batch we	re ND les	s than the	method R	L with th	e following	exceptions:			

#### BATCH 53967 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1010606-002B	10/20/10 4:23 PM	1 10/22/10	10/25/10 6:10 PM	1010606-005B	10/20/10 5:40 PM	10/22/10	10/25/10 6:40 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

# cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = 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.



"When Ouality Counts"

#### QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Soil		(	QC Matrix	k: Soil			Batch	ID: 53967		WorkC	Order 10106	06
EPA Method SW8021B/8015Bm	Extra	ction SW	5035					5	Spiked San	nple ID	: N/A	
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	Criteria (%)	
Analyte	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex)	N/A	0.60	N/A	N/A	N/A	108	102	5.36	N/A	N/A	70 - 130	30
MTBE	N/A	0.10	N/A	N/A	N/A	117	117	0	N/A	N/A	70 - 130	30
Benzene	N/A	0.10	N/A	N/A	N/A	94.3	95.3	1.08	N/A	N/A	70 - 130	30
Toluene	N/A	0.10	N/A	N/A	N/A	93.1	93.9	0.855	N/A	N/A	70 - 130	30
Ethylbenzene	N/A	0.10	N/A	N/A	N/A	97	94.7	2.33	N/A	N/A	70 - 130	30
Xylenes	N/A	0.30	N/A	N/A	N/A	94.9	94	0.962	N/A	N/A	70 - 130	30
%SS:	N/A	0.10	N/A	N/A	N/A	87	84	3.52	N/A	N/A	70 - 130	30
All target compounds in the Method B NONE	lank of this	extraction	batch we	re ND les	s than the	method R	L with th	e following	exceptions:			

#### BATCH 53967 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1010606-002B	10/20/10 4:23 PM	1 10/22/10	10/25/10 6:10 PM	1010606-005B	10/20/10 5:40 PM	10/22/10	10/25/10 6:40 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

# cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = 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.





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#### "When Ouality Counts"

#### QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Soil		(	QC Matrix	k: Soil			Batch	ID: 53966		WorkC	Order 10106	06
EPA Method SW8015B	Extrac	ction SW	3550B					5	Spiked San	nple ID	: 1010601-0	01A
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	Criteria (%)	
, mary to	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH-Diesel (C10-C23)	5.0	40	118	119	0.456	128	126	2.22	70 - 130	30	70 - 130	30
%SS:	81	25	117	117	0	106	105	1.71	70 - 130	30	70 - 130	30
%SS: All target compounds in the Meth NONE	-				÷					30	70 - 130	

#### BATCH 53966 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1010606-002A	10/20/10 4:23 PM	1 10/22/10	10/26/10 8:31 AM	1010606-005A	10/20/10 5:40 PM	10/22/10	10/26/10 9:46 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = 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.

OC for

QA/QC Officer

McCampbell An "When Quality		Web: www.mccampbell.c	Road, Pittsburg, CA 945 com E-mail: main@mc 52-9262 Fax: 925-252	ccampbell.com
Greenstar Environmental	Client Project ID: #1379.06	; GLI Oakland	Date Sampled:	10/21/10-10/22/10
354 McDonnell Street, Suite 9			Date Received:	10/22/10
554 MeDonnen Street, Suite 9	Client Contact: Trent Riple	еу	Date Reported:	11/01/10
Lewisville, TX 75057	Client P.O.:		Date Completed:	11/01/10

#### WorkOrder: 1010657

November 01, 2010

Dear Trent:

Enclosed within are:

- 1) The results of the 16 analyzed samples from your project: #1379.06; GLI Oakland,
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius Laboratory Manager McCampbell Analytical, Inc.

: main@mccampbell.com Fax: (925) 252-9269	GeoTrac	RUSH 24 HR 48 HR 72 HR cker EDF PDF Excel Write On (DV Check if sample is effluent and "J" flag is	V) 🖵
To:		Analysis Request Other	Comments
			**Indicate
	BE &E		here if these
	E/B.	jonge (	samples are
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	(214) 222-8762 ect Name: GLI Oakland CA MATRIX METHOD PRESERVED J/C V V HUCT HNO <sup>3</sup> Other J/C V MATRIX METHOD PRESERVED J/C	Alter	7/5     7/5

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4	Well	bsite: <u>www.m</u> ephone: (877	1534 WII PITTSBU ccampbel	LLOW PA: RG, CA 94 Lcom Em 62	SS RO 1565-1 1ail: n	AD 701 nain@ Fax:		pbe	ll.com					UR GeoT			OU	ND DF	TI		E PD Che	F cki	RUSI D f sai	l Ex	24 cel	HR	v	48 H Vri	IR te ( d "J	" flag	W) 🖵 is required
	eport To: Trent				ill To	):									_	_	_	A	naly	sis	Req	uest	1	_	_	_	_	_	0	ther	Comments
E- Te Pi Pi	ompany: Green -Mail: tdripley@ ele: (214) 222-87 roject #: 1379.06 roject Location: ampler Signatur SAMPLE ID	greenstaren 752 2103 San Pa	blo Ave.	ntal.com F P	ax: rojec	t Nar	Water Water M	ATI	XIX	PRE	HNO, HOL	/ED	BTEX & TPH as Gas (602 / 8021 + 8015) / MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 502.2 / 601 / 8010/ 8021 (HVOCs)	MTBE / BTEX ONLY (EPA 602 / 8021)	EPA 505/ 608 / 8081 (CI Pesticides)	EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA \$157 8151 (Acidic CI Herbicides)	EPA \$24.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Lead (200.7 / 200.8 / 6010 / 6020)	Filter sample for DISSOLVED metals analysis	Hore I	**Indicate here if these samples are potentially dangerous to handle:
B	-9(13)	417 Dupland	lashin	14:47	)	3/6	V	*		V	-		V			-								-							
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B	10 (10)			10:35	2	5/2		-		V	-		~	V		-	-		-	-		-	-	-	-		-				
13				17:29	1	J	V	-		V	-				-	-	-	-	-	-	-	-		-	-	-	-			V	
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Company: Gr	een Star Enviro	onmental	1												-					ys.											**Indicate
E-Mail: tdripl	ey@greenstaren	vironme	ental.com	1				-				_	MTBE		Grease (1664 / 5520 E/B&F)					ngener									.s		here if these samples are
Tele: (214) 22	2-8752		F	ax:	(214)	222-	8762	2					2) / 1		520 E					/ C0						6020)	20)		nalys		potentially
Project #: 1379	9.06		P	rojec	et Nar	ne: (	GLI	Oak	and				8015)/		4/55	8.1)	Cs)	021)		dors		les)			(8)	0.60	/ 60		als a		dangerous to
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		SAMI	PLING	T	s	1	MAT	RIX	1		SER		as (602 /		8	drocar	10/80	LV (EP	(CI Pe	NO 8,8	Pestic	idic Cl	60 (VC	70 (SV	10 (PA	0.7 / 20	.7/200	/ 0109	for DISSOLVED metals analysis		
SAMPLE ID	LOCATION/ Field Point Name	Date	Time	# Containers	Type Containers	Water	Soil	Sludge	Other	ICE	HNO.	Other	BTEX & TPH as Gas	TPH as Diesel (8015)	Total Petroleum Oil	Total Petroleum Hydrocarbons (418.1)	EPA 502.2 / 601 / 8010 /	MTBE / BTEX ONLY (EPA 602 / 8021)	EPA 505/ 608 / 8081 (C1 Pesticides)	EPA 608 / 8082 PCB's ONLY: Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic Cl Herbicides)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.7 / 200.8 / 6010 /	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Lead (200.7 / 200.8 /	ple	1-tored	
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**MAI clients MU gloved, open air, s allowing us to wor Relinquished By: Relinquished By/ Relinquished By/	21	Date: Date: Date: Date: Date: Date:	Non-disclo	Rece Rece	be proncurs a eved B	n imn	n thei nediat	te s25	mitte 0-sur	d sar	nples ge an	s in co	ICI GO HE DE AP PR	E/t° OOD AD S CHL PRO ESEI	CON SPAC ORI PRI/ RVE	TOIT CE A	full ION BSE ED I CON LAI	legal NT IN LA	B_NER	lity f	or h:	TAL	suffe	red.	Tha	nk yo	ou fo	r you	nts:	derstar	s a result of brief, iding and for eze cill Core n'Orc

M		BELL 1534 WII PITTSBU	LOW PA	SS RO	AD	AL	, II	VC					1	UF	RN .	AR									Ę	1			)	RD	
We Tel	bsite: <u>www.m</u> lephone: (877	ccampbel 7) 252-92	1.com En 62	iail: n	nain@ Fax								0	jeo'	Tra	cke	er E	EDF				F		Ex			1		ite (		IR 5 DAY <b>W</b> ) is required
Report To: Trent	Ripley		E	ill T	o:													A	nal	ysis	Rec	ues	t		_				0	ther	Comments
Company: Green E-Mail: tdripley@ Tele: (214) 222-8 Project #: 1379.00	Dgreenstaren 752 6	ivironme	ntal.com F P	'ax: 'rojeo	(214) et Nai				klar	nd			+ 8015) / MTBE		Grease (1664 / 5520 E/B&F)	(418.1)	(OCs)	/ 8021)	s)	roclors / Congeners		cides)			NAS)	010 / 6020)	10 / 6020)		ietals analysis		**Indicate here if these samples are potentially dangerous to handle:
Project Location:		ibio Ave.	Oakian	u, CA								_	8021		se (16	ns (-	(H)	602	icide	V: AI	es)	lerbi	(s	Cs)	s / P	8/61	8 / 60	020)	CD m		
Sampler Signatur	re:		$\leftarrow$							M	ETH	OD	(602 / 5		reas	arbo	8021	EPA	Pest	NLY	ticid	CIH	VOC	SVO	HV	200.	200.8	0/6	LVE		
SAMPLE ID	LOCATION/ Field Point Name	SAMI Date	Time	# Containers	Type Containers	er		Air		PRI	ESEF	Other Other	TPH as Gas	TPH as Diesel (8015)	Total Petroleum Oil & G	Total Petroleum Hydrocarbons	EPA 502.2 / 601 / 8010 / 8021 (HVOCs)	MTBE / BTEX ONLY (EPA 602 / 8021)	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic Cl Herbicides)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Lead (200.7 / 200.8 / 6010 / 6020)	Filter sample for DISSOLVED metals analysis	1410	
13-2(13.5)	GLI	102+10	13:05	2	516		1			V																				1	
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13-1(6.5')				2			1	+	+	1	-	+	12	1	-																
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**MAI clients MUST gloved, open air, sam allowing us to work sa Relinquished By: Relinquished By: Relinquished By:	ple handling by	Date: Date: Date: Date: 10-22/0 Date:	Non-discle	Rec Rec	eived H	an im	in th medi	eir st ate S	ubmi 250 s	itted si surcha	rge a	es in and th	IC GO HI DI AI	Entral ent is CE/t*_ OOD EAD ECHI PPR( RESE	SPA CON SPA LOR	NDIT CE A INAT	TON BSE TED CO	legal NT_ IN L NTA	AB_	ility	ate h for h	arm	or se suffe	eriou ered.	s futi Tha	ink y	ou fo	or yo	ur ur	idersta	is a result of brief, ading and for for the second in -run to Sumples *
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1534 Willow Pass Rd . . . .

## CHAIN-OF-CUSTODY RECORD

Page 1 of 1

	g, CA 94565-1701 52-9262					Work	Order	: 10106	57	(	Client	Code: G	SET				
		WaterTrax	WriteOn	EDF		Excel		Fax	Ŀ	🗸 Email		Hard	Сору	🗌 Thir	rdParty	□ J-	flag
	nvironmental	cc:	dripley@gree	nstarenvironmen	tal.cor			ent Riple reenstar l		nmenta	al			uested			days
354 McDonr Lewisville, T (214) 222-875		PO: ProjectNo: #	≇1379.06; GLI	Oakland				54 McDon ewisville,			Suite 9			e Rece e Prin		10/22/	
			Mateix	Collection Date	Usla		<b>_</b>		Req	1	1	(See leg	í	T (	40		40
Lab ID	Client ID		Matrix	Collection Date	Ηοία	1	2	3	4	5	6	1	8	9	10	11	12
1010657-002	B-6 (6')		Soil	10/21/2010 10:44		В	Α										
1010657-004	B-7 (5.5')		Soil	10/21/2010 11:53		В	Α										
1010657-005	B-7 (16')		Soil	10/21/2010 11:58		В	Α										
1010657-007	B-8 (5.5')		Soil	10/21/2010 13:10		В	Α										
1010657-009	B-8 (16')		Soil	10/21/2010 13:23		В	А										
1010657-012	B-9 (13')		Soil	10/21/2010 14:47		В	Α										
1010657-014	B-10 (5.5')		Soil	10/21/2010 15:10		В	Α										
1010657-017	B-11 (16')		Soil	10/21/2010 16:35		В	Α										
1010657-019	B-11 (5.5')		Soil	10/21/2010 17:43		В	Α										
1010657-021	B-11 (14.5')	)	Soil	10/22/2010 17:59		В	Α										
1010657-027	B-3 (5.5')		Soil	10/22/2010 11:50		В	Α										
1010657-029	B-3 (16')		Soil	10/22/2010 12:07		В	Α										
1010657-031	B-2 (7.5')		Soil	10/22/2010 12:54		В	Α										
1010657-033	B-2 (15.5')		Soil	10/22/2010 13:10		В	Α										

#### Test Legend:

1	G-MBTEX_ENCORE	2	TPH(D)_S
6		7	
11		12	

3			
8			

4	1
9	]

5			
10			

Prepared by: Ana Venegas

#### **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.

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

## CHAIN-OF-CUSTODY RECORD

Page 1 of 1

(925) 252-9262				WorkO	order: 101065	7 Client	Code: GSET		
	WaterTrax	WriteOn	EDF	Excel	Fax	🖌 Email	HardCopy	ThirdParty	J-flag
Report to:				В	sill to:		Rec	uested TAT:	5 days
Trent Ripley Greenstar Environmental 354 McDonnell Street, Suite 9 Lewisville, TX 75057 (214) 222-8752 FAX (214) 222.876	cc: PO: ProjectNo: ;	dripley@gree #1379.06; GL	nstarenvironmen I Oakland	al.com		nvironmental nell Street, Suite 9		te Received: te Printed:	10/22/2010 10/22/2010
						Requested Tests	See legend l (	pelow)	
		Madala		11.1.1		4 5 0	7 0	0 40	

Lab ID	Client ID	Matrix	Collection Date	Hold	1	2	3	4	5	6	7	8	9	10	11	12
1010657-035	B-1 (6.5')	Soil	10/22/2010 13:41		В	Α										
1010657-036	B-1 (14')	Soil	10/22/2010 13:46		В	А										

#### Test Legend:

1	G-MBTEX_ENCORE
6	
11	

2	TPH(D)_S
7	
12	

3	
8	

4	
9	

5	
10	

Prepared by: Ana Venegas

#### **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.



## McCampbell Analytical, Inc. "When Ouality Counts"

#### Sample Receipt Checklist

Client Name:	Greenstar Enviro	nmental				I	Date a	and Time Received:	10/22/2010	7:47:46 PM
Project Name:	#1379.06; GLI Oal	kland				(	Check	klist completed and re	eviewed by:	Ana Venegas
WorkOrder N°:	1010657	Matrix <u>Soil</u>				(	Carrie	r: <u>Benjamin Yslas</u>	s (MAI Courier)	
			<u>Chain</u>	of Cu	stody (C	OC) Ini	forma	ation		
Chain of custody	present?			Yes	✓	No				
Chain of custody	signed when relinquis	shed and rece	ived?	Yes	✓	No				
Chain of custody	agrees with sample la	abels?		Yes		No				
Sample IDs noted	by Client on COC?			Yes	$\checkmark$	No				
Date and Time of	collection noted by Clie	ent on COC?		Yes	✓	No				
Sampler's name r	noted on COC?			Yes	✓	No				
			Sa	mple	Receipt	Inform	ation	1		
Custody seals int	tact on shipping contai	ner/cooler?		Yes		No			NA 🔽	
Shipping containe	er/cooler in good condi	ition?		Yes	✓	No				
Samples in prope	er containers/bottles?			Yes		No				
Sample containe	rs intact?			Yes		No				
Sufficient sample	volume for indicated	test?		Yes		No				
		Sample	Preser	vatior	and Ho	old Time	ə (HT)	) Information		
All samples recei	ved within holding time	e?		Yes		No				
Container/Temp E	Blank temperature			Coole	r Temp:	5.2°C			NA 🗆	
Water - VOA vial	ls have zero headspac	ce / no bubble	s?	Yes		No		No VOA vials submi	itted 🗹	
Sample labels ch	necked for correct pres	servation?		Yes	✓	No				
Metal - pH accept	table upon receipt (pH	<2)?		Yes		No			NA 🗹	
Samples Receive	ed on Ice?			Yes	✓	No				
		(	Ісе Турє	: WE	TICE	)				
* NOTE: If the "N	lo" box is checked, se	e comments	below.							

Client contacted:

Date contacted:

Contacted by:

Comments:

	Campbell Analy "When Ouality Count		Web: www.mccamp		nail: main	@mccamp	bell.com			
Greenstar Enviro		Client Project ID:	+	Date Sam	Fax: 925-252-9269 npled: 10/21/10-10/22/10					
354 McDonnell	Street Suite Q	Oakland	Oakland			Date Received: 10/22/10				
554 WieDonnen	Succi, Suite 9	Client Contact: T	Client Contact: Trent Ripley			10/22/1	0			
Lewisville, TX 7.	5057	Client P.O.: Date Analyzed 10/28/10-10/2				0-10/29/10				
		Total Extractable Pet	roleum Hydrocarbons*							
Extraction method SV	W3550B	Analytical	methods: SW8015B			Work Ord	er: 1010657			
Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)		DF	% SS	Comments			
1010657-002A	B-6 (6')	S	7.7		1	116	e7,e2			
1010657-004A	B-7 (5.5')	S	1.5		1	80	e7,e2			
1010657-005A	B-7 (16')	S	1300		10	112	e1			
1010657-007A	B-8 (5.5')	S	4.9		1	87	e7,e2			
1010657-009A	B-8 (16')	S	3100		10	88	e1,e11			
1010657-012A	B-9 (13')	S	2.2		1	81	e2			
1010657-014A	B-10 (5.5')	S	1.8		1	83	e2			
1010657-017A	B-11 (16')	S	99		1	117	e11,e2			
1010657-019A	B-11 (5.5')	S	ND		1	109				
1010657-021A	B-11 (14.5')	S	7.2		1	108	e1			
1010657-027A	B-3 (5.5')	S	2.2		1	113	e2			
1010657-029A	B-3 (16')	S	35		1	83	e11,e2			
1010657-031A	B-2 (7.5')	S	ND		1	109				
1010657-033A	B-2 (15.5')	S	57		1	114	e11,e2			
1010657-035A	B-1 (6.5')	S	27		1	111	e11,e2			
-	ng Limit for DF =1;	W	NA		NA					
	ns not detected at or the reporting limit	S					mg/Kg			

\* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in  $\mu g/L.$ 

# cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

SS = Percent Recovery of Surrogate Standard. DF = Dilution Factor

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

e1) unmodified or weakly modified diesel is significant

e2) diesel range compounds are significant; no recognizable pattern

e7) oil range compounds are significant

e11) stoddard solvent/mineral spirit (?)

<u>McC</u>	ampbell Anal "When Ouality Cour		Web: www.mccan	Pass Road, Pitt npbell.com E- : 877-252-9262	mail: main	@mccampl 5-252-9269	bell.com		
Greenstar Enviror		Client Project ID:	Client Project ID: #1379.06; GLI			Date Sampled: 10/21/10-10/22/1			
354 McDonnell St	reet Suite 9	Oakland		Date Rec	Date Received: 10/22/10				
554 Webolinen 5	reet, Suite J	Client Contact: T	rent Ripley	Date Ext	racted:	10/22/1	0		
Lewisville, TX 750	)57	Client P.O.:		Date Analyzed 10/28/10-10/2			0-10/29/10		
		Total Extractable Pet	roleum Hydrocarbons*	:					
Extraction method SW3	3550B	Analytical r	nethods: SW8015B			Work Ord	er: 1010657		
Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)		DF	% SS	Comments		
010657-036A	B-1 (14')	s	2.4		1	109	e2		
					1				
	g Limit for DF =1;	W	NA			N	A		
	not detected at or ne reporting limit	S	1.0				/Kg		

\* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in  $\mu g/L.$ 

# cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

%SS = Percent Recovery of Surrogate Standard. DF = Dilution Factor

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

e1) unmodified or weakly modified diesel is significant

e2) diesel range compounds are significant; no recognizable pattern

e7) oil range compounds are significant

e11) stoddard solvent/mineral spirit (?)



OC for \_\_\_\_\_Angela Rydelius, Lab Manager

	McCampbe	ell An en Oualitv		cal, Ir	<u>nc.</u>		: www.mccampt	ass Road, Pittsbur pell.com E-mail 77-252-9262 Fa	: main@mccamp	bell.com				
Green	star Environmental				•	1379.06; GL	I	Date Sample	ed: 10/21	/10-10/2	22/10			
354 M	CDonnell Street, Suite	- 9		Oakland	1	Date Received: 10/22					2/10			
00111			ľ	Client C	Contact: Tre	ent Ripley		Date Extrac	ted: 10/22	/10				
Lewisville, TX 75057 Client P.O.:								Date Analyz	zed: 10/23	/10-10/2	27/10			
Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE [Encore Sampling]*         Extraction method:       SW5035       Analytical methods:       SW8021B/8015Bm       Work:       1010657														
Lab ID	Client ID	Matrix	TPI	H(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments		
002B	B-6 (6')	S	ND<	<0.76	ND<0.038	ND<0.0038	ND<0.0038	ND<0.0038	ND<0.0038	1	83	a9		
004B	B-7 (5.5')	S	ND<	<0.89	ND<0.045	ND<0.0045	ND<0.0045	ND<0.0045	ND<0.0045	1	86	a9		
005B	B-7 (16')	S	25	500	5.9	ND<0.45	1.1	ND<0.45	7.1	100	96	d7,d9,a9		
007B	B-8 (5.5')	S	ND<	<0.83	ND<0.042	ND<0.0042	ND<0.0042	ND<0.0042	ND<0.0042	1	83	a9		
009B	B-8 (16')	S	26	500	ND<22	3.4	ND<2.2	7.3	6.0	500	#	d7,d9,a9		
012B	B-9 (13')	S	2	2.8	ND<0.042	ND<0.0042	ND<0.0042	ND<0.0042	0.0043	1	88	d7,d9,a9		
014B	B-10 (5.5')	S	ND<	<0.80	ND<0.040	ND<0.0040	ND<0.0040	ND<0.0040	ND<0.0040	1	85	a9		
017B	B-11 (16')	S	22	200	ND<22	ND<2.2	ND<2.2	6.8	9.9	500	#	d7,d9,a9		
019B	B-11 (5.5')	S	1	.3	ND<0.040	ND<0.0040	ND<0.0040	ND<0.0040	ND<0.0040	1	85	d7,a9		
021B	B-11 (14.5')	S	ND<	<0.85	ND<0.043	ND<0.0043	ND<0.0043	ND<0.0043	ND<0.0043	1	81	a9		
027B	B-3 (5.5')	S	ND<	<0.71	ND<0.035	ND<0.0035	ND<0.0035	ND<0.0035	ND<0.0035	1	83	a9		
029B	B-3 (16')	S	8	80	ND<1.5	1.3	0.38	3.6	3.1	20	#	d7,d9,a9		
031B	B-2 (7.5')	S	1	.2	ND<0.039	0.0071	ND<0.0039	ND<0.0039	ND<0.0039	1	85	d1,a9		
033B	B-2 (15.5')	S	24	100	ND<20	2.5	ND<2.0	4.6	13	500	#	d7,d9,a9		
035B	B-1 (6.5')	S	1	16	ND<0.037	0.0052	0.0073	ND<0.0037	0.033	1	100	d7,d9,a9		
036B	B-1 (14')	S	5	5.7	ND<0.040	0.053	0.0049	0.021	0.018	1 88 d1,a9				
	ting Limit for DF =1;	W	5	50	5.0	0.5	0.5	0.5	0.5		ug/I			
	eans not detected at or ve the reporting limit	S	1	.0	0.05	0.005	0.005	0.005	0.005		mg/K	g		

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts in mg/L.

# = cluttered chromatogram; sample peak coelutes with surrogate peak. %SS = Percent Recovery of Surrogate Standard. DF = Dilution Factor

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

CC for

Angela Rydelius, Lab Manager

a9) reporting limit near, but not identical to, our standard reporting limit due to variable Encore sample weight

d1) weakly modified or unmodified gasoline is significant

d7) strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram

d9) no recognizable pattern

1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.mccampbell.com E-mail: main@mccampbell.com Telephone: 877-252-9262 Fax: 925-252-9269

"When Ouality Counts"

#### QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Soil	e Matrix: Soil QC Matrix: Soil						BatchID: 53967 W				VorkOrder 1010657		
EPA Method SW8021B/8015Bm	Extra	ction SW	5035					5	Spiked San	nple ID	: N/A		
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	e Criteria (%)		
, mary to	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD	
TPH(btex <sup>£</sup>	N/A	0.60	N/A	N/A	N/A	108	102	5.36	N/A	N/A	70 - 130	30	
MTBE	N/A	0.10	N/A	N/A	N/A	117	117	0	N/A	N/A	70 - 130	30	
Benzene	N/A	0.10	N/A	N/A	N/A	94.3	95.3	1.08	N/A	N/A	70 - 130	30	
Toluene	N/A	0.10	N/A	N/A	N/A	93.1	93.9	0.855	N/A	N/A	70 - 130	30	
Ethylbenzene	N/A	0.10	N/A	N/A	N/A	97	94.7	2.33	N/A	N/A	70 - 130	30	
Xylenes	N/A	0.30	N/A	N/A	N/A	94.9	94	0.962	N/A	N/A	70 - 130	30	
%SS:	N/A	0.10	N/A	N/A	N/A	87	84	3.52	N/A	N/A	70 - 130	30	
All target compounds in the Method E NONE	lank of this	extraction	batch we	re ND les	s than the	method R	L with th	e following	exceptions:				

	BATCH 53967 SUMMARY									
Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed			
1010657-002B	10/21/10 10:44 AM	10/22/10	10/23/10 12:59 PM	1010657-004B	10/21/10 11:53 AM	10/22/10	10/23/10 4:27 PM			
1010657-005B	10/21/10 11:58 AM	10/22/10	10/23/10 5:56 PM	1010657-007B	10/21/10 1:10 PM	10/22/10	10/23/10 4:57 PM			
1010657-009B	10/21/10 1:23 PM	10/22/10	10/23/10 6:26 PM	1010657-012B	10/21/10 2:47 PM	10/22/10	10/23/10 6:55 PM			
1010657-014B	10/21/10 3:10 PM	10/22/10	10/25/10 5:09 PM	1010657-017B	10/21/10 4:35 PM	10/22/10	10/23/10 7:54 PM			
1010657-019B	10/21/10 5:43 PM	10/22/10	10/25/10 5:40 PM	1010657-021B	10/22/10 5:59 PM	10/22/10	10/23/10 8:54 PM			
1010657-027B	10/22/10 11:50 AM	10/22/10	10/23/10 9:23 PM	1010657-029B	10/22/10 12:07 PM	10/22/10	10/27/10 1:52 AM			
1010657-031B	10/22/10 12:54 PM	10/22/10	10/27/10 1:23 AM	1010657-033B	10/22/10 1:10 PM	10/22/10	10/23/10 11:51 PM			
1010657-035B	10/22/10 1:41 PM	10/22/10	10/25/10 10:38 PM	1010657-036B	10/22/10 1:46 PM	10/22/10	10/24/10 2:19 AM			

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

# cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = 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.

QA/QC Officer



1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.mccampbell.com E-mail: main@mccampbell.com Telephone: 877-252-9262 Fax: 925-252-9269

#### "When Ouality Counts"

#### QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Soil	W.O. Sample Matrix: Soil QC Matrix: Soil						BatchID: 53966			WorkOrder 1010657			
EPA Method SW8015BExtraction SW3550BSpiked Sample ID: 1010601-							1010601-0	01A					
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	Criteria (%)		
/ indigite	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD	
TPH-Diesel (C10-C23)	5.0	40	118	119	0.456	128	126	2.22	70 - 130	30	70 - 130	30	
%SS:	81	25	117	117	0	106	105	1.71	70 - 130	30	70 - 130	30	
All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE													

#### BATCH 53966 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1010657-002A	10/21/10 10:44 AM	10/22/10	10/29/10 12:04 PM	1010657-005A	10/21/10 11:58 AM	10/22/10	10/29/10 10:54 AM
1010657-007A	10/21/10 1:10 PM	10/22/10	10/29/10 5:06 PM	1010657-009A	10/21/10 1:23 PM	10/22/10	10/29/10 6:45 AM
1010657-012A	10/21/10 2:47 PM	10/22/10	10/29/10 12:35 PM	1010657-014A	10/21/10 3:10 PM	10/22/10	10/29/10 1:41 PM
1010657-017A	10/21/10 4:35 PM	10/22/10	10/28/10 7:29 PM	1010657-019A	10/21/10 5:43 PM	10/22/10	10/28/10 9:49 PM
1010657-021A	10/22/10 5:59 PM	10/22/10	10/29/10 2:28 AM	1010657-027A	10/22/10 11:50 AM	10/22/10	10/29/10 2:14 AM
1010657-029A	10/22/10 12:07 PM	10/22/10	10/29/10 4:00 PM	1010657-031A	10/22/10 12:54 PM	10/22/10	10/29/10 12:42 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = 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.

OC for QA/QC Officer



McCampbell Analytical, Inc. "When Quality Counts" 1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.mccampbell.com E-mail: main@mccampbell.com Telephone: 877-252-9262 Fax: 925-252-9269

#### **QC SUMMARY REPORT FOR SW8015B**

W.O. Sample Matrix: Soil	W.O. Sample Matrix: Soil QC Matrix: Soil					BatchID: 53974			WorkOrder 1010657			
EPA Method SW8015B Extraction SW3550B								5	Spiked Sar	nple ID	: 1010622-0	02A
Analyte	Sample	Sample         Spiked         MS         MSD         MS-MSD           mg/Kg         mg/Kg         % Rec.         % Rec.         % RPD         %				LCS	LCSD	LCS-LCSD	Acce	eptance	Criteria (%)	
Analyte	mg/Kg					% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH-Diesel (C10-C23)	550	40	NR	NR	NR	128	128	0	70 - 130	30	70 - 130	30
%SS:	103	25	111	99	11.6	109	108	0.327	70 - 130	30	70 - 130	30
All target compounds in the Meth- NONE	od Blank of this	extraction	batch we	re ND les	s than the	method R	L with th	e following (	exceptions:			

#### BATCH 53974 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1010657-004A	10/21/10 11:53 AM	10/22/10	10/29/10 11:29 AM	1010657-033A	10/22/10 1:10 PM	10/22/10	10/29/10 4:49 AM
1010657-035A	10/22/10 1:41 PM	10/22/10	10/28/10 8:39 PM	1010657-036A	10/22/10 1:46 PM	10/22/10	10/29/10 12:57 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = 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.

OC for QA/QC Officer

McCampbell Au "When Ouality		1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.mccampbell.com E-mail: main@mccampbell.com Telephone: 877-252-9262 Fax: 925-252-9269				
Greenstar Environmental	nstar Environmental Client Project ID: #1379.06; GLI Oakland					
354 McDonnell Street, Suite 9			Date Received:	10/21/10		
554 MeDonnen Street, Suite 5	Client Contact: Trent Riple	еу	Date Reported:	10/28/10		
Lewisville, TX 75057	Client P.O.:		Date Completed:	10/28/10		

#### WorkOrder: 1010610

December 02, 2010

Dear Trent:

Enclosed within are:

- 1) The results of the 1 analyzed sample from your project: #1379.06; GLI Oakland,
- 2) A QC report for the above sample,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius Laboratory Manager McCampbell Analytical, Inc.

								10	1061	0		
McCA Telephone: (925) 2	1534 Pittsbu www.m	Willow P irg, CA 9	ALYTICAL INC Pass Road 14565-1701 ampbell.com Fax: (92)	5) 252-9269	CHAIN OF CUSTODY RECORD TURN AROUND TIME IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII							
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Tele: (214)200-975	h		Fax: (214 ) 2	32-90762		in all in					and the second	
Project #: 1375.66			Project Name:	" Lie Oaldand	A State State State		1943			a area a		
Project Location: 210)	Sen	Pablo	A Poleland	1 LA	and the star for	19 10 19 19		No.		A Charles		
Sampler Signature:		_0	26		Notes: 1 liter sum	The comis	ter; 6	Liter Po	rye con	ichen		
Field Sample ID	Colle	ection		Marr; fo ) ut Sampler Kit SN#	# Call Trent to White Comis	ipley g	+614	1242 0	752 %	conf	rm	
(Location)	Date	Time	Canister SN#	Sampler Kit SN#	Analysis Requested	Indoor Air	Soil Gas	Ca Initial	nister Pres Final	sure/Vacu Receipt	um Final (psi)	
51-1	10-20-10	12:33	6169	316-65 684	TO-15-		×	-28 in the	-27.5 jul		(pos)	
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54-34			6311	316-687	10-15		A	-29.5 inthe		E MAR		
58-36	10-200	16.02	6306	316-682	TO-15		4	-St inthe	-13 inthe			
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Kennquisneo By:	Date:	Time:	Received By:				1					

Chief and States



Page 1 of 1

Pittsburg, CA 94565-1701 (925) 252-9262				WorkO	rder: 101061	0 Client(	Code: GSET		
	WaterTrax	WriteOn	EDF	Excel	Fax	🖌 Email	HardCopy	ThirdParty	J-flag
Report to:				В	ill to:		Rec	quested TAT:	5 days
Trent Ripley Greenstar Environmental 354 McDonnell Street, Suite 9 Lewisville, TX 75057 (214) 222-8752 FAX (214) 222.876	cc: PO:	dripley@greensi #1379.06; GLI O		tal.com		nvironmental Iell Street, Suite 9		te Received: te Printed:	10/21/2010 10/25/2010
						Requested Tests	(See legend l	below)	

Lab ID	Client ID	Matrix	Collection Date Hold	1	2	3	4	5	6	7	8	9	10	11	12
4040040.000	0)/ 0	0		•											
1010610-002	SV-2	Soil Vapor	10/20/2010 13:40	A											

#### Test Legend:

1	TO15_SOIL(UG/M3)		2	
6			7	
11		1	2	

	3	
[	8	

4	
9	

5	
10	

The following SampID: 002A contains testgroup.

Prepared by: Melissa Valles

#### Comments: <u>Sample SV-2 taken off hold 10/22/10</u>

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.



"When Ouality Counts"

#### Sample Receipt Checklist

Client Name:	Greenstar Enviro	onment	al			Date a	and Time Received:	10/21/2010	5:59:15 PM
Project Name:	#1379.06; GLI Oa	kland				Checl	klist completed and r	eviewed by:	Melissa Valles
WorkOrder N°:	1010610	Matrix	Soil Vapor			Carrie	er: <u>Rob Pringle (M</u>	AI Courier)	
			<u>Chain</u>	of Cu	stody (COC	:) Informa	ation		
Chain of custody	v present?			Yes	$\checkmark$	No 🗆			
Chain of custody	v signed when relinqui	shed and	d received?	Yes	$\checkmark$	No 🗆			
Chain of custody	agrees with sample I	abels?		Yes	$\checkmark$	No 🗌			
Sample IDs noted	d by Client on COC?			Yes	$\checkmark$	No 🗆			
Date and Time of	collection noted by Cli	ient on C	:OC?	Yes	✓	No 🗆			
Sampler's name	noted on COC?			Yes	✓	No 🗆			
			<u>s</u>	ample	Receipt Inf	ormatior	<u>1</u>		
Custody seals in	tact on shipping conta	iner/coo	ler?	Yes		No 🗆		NA 🗹	
Shipping contain	er/cooler in good cond	lition?		Yes	$\checkmark$	No 🗆			
Samples in prop	er containers/bottles?			Yes	$\checkmark$	No 🗆			
Sample containe	ers intact?			Yes	$\checkmark$	No 🗆			
Sufficient sample	e volume for indicated	test?		Yes		No 🗌			
		<u>Sa</u>	imple Prese	rvatio	n and Hold	Time (HT	) Information		
All samples rece	ived within holding tim	e?		Yes		No 🗌			
Container/Temp	Blank temperature			Coole	er Temp:			NA 🗹	
Water - VOA via	ls have zero headspa	ce / no b	oubbles?	Yes		No 🗆	No VOA vials subm	itted 🗹	
Sample labels cl	necked for correct pres	servatior	n?	Yes	✓	No 🗌			
Metal - pH accep	table upon receipt (pH	l<2)?		Yes		No 🗆		NA 🗹	
Samples Receive	ed on Ice?			Yes		No 🗹			

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

Client contacted:

Date contacted:

Contacted by:

Comments:

McCampbell An "When Quality		1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.mccampbell.com E-mail: main@mccampbell.com Telephone: 877-252-9262 Fax: 925-252-9269					
Greenstar Environmental	Client Project ID: #1379.0	6; GLI Oakland	Date Sampled:	10/20/10			
354 McDonnell Street, Suite 9			Date Received:	10/21/10			
Lewisville, TX 75057	Client Contact: Trent Rip	ley	Date Reported:	10/28/10			
	Client P.O.:		Date Completed:	10/28/10			

#### Work Order: 1010610

December 02, 2010

#### CASE NARRATIVE REGARDING TO-15 ANALYSIS

TPH(g) by TO15 was reported as an estimate because the TPH(g) was not initially requested therefore, TPH(g)

standard was not analyzed along with the sample for calibration verification.



	McCampbell An "When Ouality C		<u>nc.</u>	Web: w	34 Willow Pass Road, Pittsburg, CA 94565-1 ww.mccampbell.com E-mail: main@mccamp Telephone: 877-252-9262 Fax: 925-252-926	bell.com		
Green	star Environmental	Client P Oakland		1379.06; GLI	Date Sampled: 10/20	/10		
354 M	cDonnell Street, Suite 9				Date Received: 10/21	/10		
			Contact: Tre	nt Ripley	Date Extracted: 10/27	/10		
Lewis	ville, TX 75057	Client P	.0.:		Date Analyzed: 10/27	/10		
Extractio	on method: TO15			heck Compound		Work	Order: 1	010610
Lab ID	Client ID	Matrix	Initial Pressure	Final Pressure	Isopropyl Alcohol	DF	% SS	Comments
002A	SV-2	Soil Vapor	12.98	25.88	ND	1	N/A	
						_		

ND means not detected at or above the reporting limitSpsiapsiaNANA	Reporting Limit for DF =1;	А	psia	psia	10	μg/L
	ND means not detected at or above the reporting limit	S	psia	psia	NA	NA

\* leak check compound is reported in  $\mu$ g/L.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

The IPA reference is:

DTSC, Advisory-Active Soil Gas Investigations, January 28, 2003, page 10, section 2.4.2:

"Tracer compounds, such as ...isopropanol..., may be used as leak check compounds, if a detection limit of  $10 \ \mu g/L$  or less can be achieved." This implies that  $10 \ \mu g/L$  is the cut off definition for a leak, which equals  $10,000 \ \mu g/m^3$ .

The other low IPA hits may be due to extremely small leaks or may be naturally occuring in soil gas, particularly at biologically active sites.

%SS = Percent Recovery of Surrogate Standard DF = Dilution Factor

<u>McCampbell An</u>	nalytical, Ir	nc.			Pass Road, Pittsburg, CA			
"When Ouality	Counts"			Telephone:	877-252-9262 Fax: 92	5-252-9269		
Greenstar Environmental			: #137	9.06; GLI	Date Sampled:	10/20/10		
	Oakland	ł			Date Received:	10/21/10		
354 McDonnell Street, Suite 9	Client C	Contact:	Trent F	Ripley	Date Extracted:	10/27/10		
Lewisville, TX 75057	Client P			1 7	Date Analyzed:	10/27/10		
						10/27/10		
	Vola	tile Orga	anic Co	ompounds in μg/m <sup>2</sup>	3*			
Extraction Method: TO15	1	Analytical M	fethod:	TO15		Work Order: 1010	610	
Lab ID			1010	)610-002A		Initial Pressure	e (psia)	12.98
Client ID				SV-2		Final Pressure		25.88
Matrix			Sc	il Vapor				
Compound	Concentration *	DF	Reporting Limit	Compour	nd	Concentration *	DF	Reporting Limit
TPH(g)	~8700	1.0	1800	Acetone		ND	1.0	120
Acrylonitrile	ND	1.0	4.4	tert-Amyl methyl e	ther (TAME)	ND	1.0	8.5
Benzene	32	1.0	6.5	Benzyl chloride		ND	1.0	11
Bromodichloromethane	ND	1.0	14	Bromoform		ND	1.0	21
Bromomethane	ND	1.0	7.9	1,3-Butadiene		ND	1.0	4.5
2-Butanone (MEK)	ND	1.0	150	t-Butyl alcohol (TB	,	ND	1.0	62
Carbon Disulfide	ND	1.0	6.3	Carbon Tetrachlorid	e	ND	1.0	13
Chlorobenzene	ND	1.0	9.4	Chloroethane		ND	1.0	5.4
Chloroform	ND	1.0	9.9	Chloromethane		ND	1.0	4.2
Cyclohexane	540 ND	<u>1.0</u> 1.0	180 20	Dibromochlorometh		ND ND	1.0	17
1,2-Dibromo-3-chloropropane 1,2-Dichlorobenzene	ND	1.0	12	1,2-Dibromoethane		ND	<u>1.0</u> 1.0	10
1,4-Dichlorobenzene	ND	1.0	12	Dichlorodifluorome		ND	1.0	10
1,1-Dichloroethane	ND	1.0	8.2	1,2-Dichloroethane		ND	1.0	8.2
1,1-Dichloroethene	ND	1.0	8.1	cis-1,2-Dichloroeth		ND	1.0	8.1
trans-1,2-Dichloroethene	ND	1.0	8.1	1,2-Dichloropropan		ND	1.0	9.4
cis-1,3-Dichloropropene	ND	1.0	9.2	trans-1,3-Dichlorop		ND	1.0	9.2
1,2-Dichloro-1,1,2,2-tetrafluoroethan	ND	1.0	14	Diisopropyl ether (1	DIPE)	ND	1.0	8.5
1,4-Dioxane	ND	1.0	7.3	Ethanol		ND	1.0	96
Ethyl acetate	ND	1.0	7.3	Ethyl tert-butyl eth	er (ETBE)	ND	1.0	8.5
Ethylbenzene	ND	1.0	8.8	4-Ethyltoluene		ND	1.0	10
Freon 113	ND	1.0	16	Heptane		ND	1.0	210
Hexachlorobutadiene	ND	1.0	22	Hexane		200	1.0	180
2-Hexanone	ND	1.0	210	4-Methyl-2-pentance	one (MIBK)	71	1.0	8.3
Methyl-t-butyl ether (MTBE)	ND	1.0	7.3	Methylene chloride		ND	1.0	7.1
Naphthalene	ND	1.0	11	Propene		ND	1.0	88
Styrene	ND	1.0	8.6	1,1,1,2-Tetrachloro	ethane	ND	1.0	14
1,1,2,2-Tetrachloroethane	ND	1.0	14	Tetrachloroethene Toluene		ND ND	1.0	14
Tetrahydrofuran 1,2,4-Trichlorobenzene	ND ND	<u>1.0</u> 1.0	6.0 15	1,1,1-Trichloroetha	ne	ND ND	1.0	7.7
1,1,2-Trichloroethane	ND	1.0	15	Trichloroethene		ND	1.0	11
Trichlorofluoromethane	ND	1.0	11	1,2,4-Trimethylben	zene	13	1.0	10
1,3,5-Trimethylbenzene	ND	1.0	10	Vinyl Acetate		ND	1.0	180
Vinyl Chloride	ND	1.0	5.2	Xvlenes		ND	1.0	27
		Surro	gate Re	coveries (%)				
%SS1:	12		<u> </u>	%SS2:		11	3	
							-	
%SS3:	12	5						

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or surrogate coelutes with another peak.

 $\% SS = Percent \ Recovery \ of \ Surrogate \ Standard$ 

DF = Dilution Factor



"When Ouality Counts"

### **QC SUMMARY REPORT FOR TO15**

W.O. Sample Matrix: Air/Soil Vapor

QC Matrix: Soil Vapor

BatchID: 54005

WorkOrder 1010610

EPA Method TO15	Extraction TO15						Spiked Sample ID: N/A						
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce				
Analyte	µg/m³	µg/m³	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD	
Acrylonitrile	N/A	55.2	N/A	N/A	N/A	89.2	96.1	7.40	N/A	N/A	70 - 130	30	
tert-Amyl methyl ether (TAME)	N/A	106.2	N/A	N/A	N/A	97.6	102	4.35	N/A	N/A	70 - 130	30	
Benzene	N/A	81.2	N/A	N/A	N/A	100	108	7.55	N/A	N/A	70 - 130	30	
Benzyl chloride	N/A	131.6	N/A	N/A	N/A	122	126	3.44	N/A	N/A	70 - 130	30	
Bromodichloromethane	N/A	175.5	N/A	N/A	N/A	112	117	4.40	N/A	N/A	70 - 130	30	
Bromoform	N/A	262.7	N/A	N/A	N/A	122	124	1.63	N/A	N/A	70 - 130	30	
1,3-Butadiene	N/A	56.2	N/A	N/A	N/A	95.5	72.4	27.5	N/A	N/A	70 - 130	30	
Carbon Disulfide	N/A	79.1	N/A	N/A	N/A	97.2	106	8.65	N/A	N/A	70 - 130	30	
Carbon Tetrachloride	N/A	159.9	N/A	N/A	N/A	116	122	4.52	N/A	N/A	70 - 130	30	
Chlorobenzene	N/A	117	N/A	N/A	N/A	108	113	4.44	N/A	N/A	70 - 130	30	
Chloroethane	N/A	67.1	N/A	N/A	N/A	112	128	12.8	N/A	N/A	70 - 130	30	
Chloroform	N/A	124.1	N/A	N/A	N/A	94.8	101	5.92	N/A	N/A	70 - 130	30	
Chloromethane	N/A	52.5	N/A	N/A	N/A	117	126	7.99	N/A	N/A	70 - 130	30	
Dibromochloromethane	N/A	216.5	N/A	N/A	N/A	122	126	2.47	N/A	N/A	70 - 130	30	
1,2-Dibromo-3-chloropropane	N/A	245.6	N/A	N/A	N/A	105	105	0	N/A	N/A	70 - 130	30	
1,2-Dibromoethane (EDB)	N/A	195.3	N/A	N/A	N/A	112	116	3.45	N/A	N/A	70 - 130	30	
1,3-Dichlorobenzene	N/A	152.8	N/A	N/A	N/A	112	115	3.05	N/A	N/A	70 - 130	30	
1,4-Dichlorobenzene	N/A	152.8	N/A	N/A	N/A	102	105	2.94	N/A	N/A	70 - 130	30	
Dichlorodifluoromethane	N/A	125.7	N/A	N/A	N/A	98.6	104	5.64	N/A	N/A	70 - 130	30	
1,1-Dichloroethane	N/A	102.9	N/A	N/A	N/A	94.9	103	8.01	N/A	N/A	70 - 130	30	
1,2-Dichloroethane (1,2-DCA)	N/A	102.9	N/A	N/A	N/A	98.6	105	5.87	N/A	N/A	70 - 130	30	
cis-1,2-Dichloroethene	N/A	100.8	N/A	N/A	N/A	104	107	3.21	N/A	N/A	70 - 130	30	
trans-1,2-Dichloroethene	N/A	100.8	N/A	N/A	N/A	103	108	4.66	N/A	N/A	70 - 130	30	
1,2-Dichloropropane	N/A	117.5	N/A	N/A	N/A	94.7	100	5.60	N/A	N/A	70 - 130	30	
cis-1,3-Dichloropropene	N/A	115.3	N/A	N/A	N/A	104	109	4.91	N/A	N/A	70 - 130	30	
trans-1,3-Dichloropropene	N/A	115.3	N/A	N/A	N/A	129	128	0.695	N/A	N/A	70 - 130	30	
1,2-Dichloro-1,1,2,2-tetrafluoroetha	N/A	177.7	N/A	N/A	N/A	97.1	108	10.2	N/A	N/A	70 - 130	30	
Diisopropyl ether (DIPE)	N/A	106.2	N/A	N/A	N/A	92	99.2	7.57	N/A	N/A	70 - 130	30	
1,4-Dioxane	N/A	91.6	N/A	N/A	N/A	104	110	5.21	N/A	N/A	70 - 130	30	
Ethyl acetate	N/A	91.6	N/A	N/A	N/A	95.2	101	6.27	N/A	N/A	70 - 130	30	
Ethyl tert-butyl ether (ETBE)	N/A	106.2	N/A	N/A	N/A	92.2	98.1	6.22	N/A	N/A	70 - 130	30	

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

\* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = 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.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

@C for \_\_\_\_\_QA/QC Officer



"When Ouality Counts"

#### **OC SUMMARY REPORT FOR TO15**

W.O. Sample Matrix: Air/Soil Vapor QC Matrix: Soil Vapor BatchID: 54005 WorkOrder 1010610 **EPA Method TO15 Extraction TO15** Spiked Sample ID: N/A LCSD MSD MS-MSD LCS LCS-LCSD Spiked MS Sample Acceptance Criteria (%) Analyte % RPD % RPD MS / MSD RPD I CS/I CSD RPD µg/m³ µg/m³ % Rec. % Rec. % Rec. % Rec. 110.4 70 - 130 Ethylbenzene N/A N/A N/A N/A 110 114 3.94 N/A N/A 30 124.9 70 - 130 30 4-Ethyltoluene N/A N/A N/A 125 126 0.852 N/A N/A N/A Freon 113 N/A 194.8 N/A N/A N/A 104 111 5.91 N/A N/A 70 - 130 30 70 - 130 Hexachlorobutadiene N/A 271 N/A N/A N/A 121 106 133 N/A N/A 30 4-Methyl-2-pentanone (MIBK) N/A 104.1 N/A N/A N/A 99.2 105 5.48 N/A N/A 70 - 130 30 Methyl-t-butyl ether (MTBE) N/A 91.6 N/A N/A N/A 101 106 4.63 N/A N/A 70 - 130 30 Methylene chloride N/A 88.2 N/A N/A N/A 99.7 106 5.73 N/A N/A 70 - 130 30 133.2 105 10.8 N/A Naphthalene N/A N/A N/A N/A 117 N/A 70 - 13030 108.3 Styrene N/A N/A N/A N/A 123 127 3.62 N/A N/A 70 - 13030 1,1,1,2-Tetrachloroethane N/A 174.5 N/A N/A N/A 102 104 2.30 N/A N/A 70 - 130 30 1,1,2,2-Tetrachloroethane N/A 174.5 N/A N/A N/A 102 106 4.11 N/A N/A 70 - 130 30 Tetrachloroethene N/A 172.4 N/A N/A N/A 108 110 2.15 N/A N/A 70 - 130 30 Tetrahydrofuran N/A 75 N/A N/A N/A 96.9 106 8.89 N/A N/A 70 - 130 30 Toluene N/A 95.8 N/A N/A N/A 106 111 4.10 N/A N/A 70 - 130 30 70 - 130 1,2,4-Trichlorobenzene N/A 188.6 N/A N/A N/A 119 109 9.31 N/A N/A 30 138.7 N/A N/A N/A 100 105 4.12 N/A N/A 70 - 130 30 1.1.1-Trichloroethane N/A 1.1.2-Trichloroethane 138.7 N/A 107 N/A 70 - 130 N/A N/A N/A 110 2.66N/A 30 136.6 N/A N/A N/A 110 112 2.41 N/A N/A 70 - 130 30 Trichloroethene N/A 142.8 129 70 - 130 Trichlorofluoromethane N/A N/A N/A N/A 122 6.14 N/A N/A 30 124.9 N/A N/A 108 110 2.49 N/A N/A 70 - 13030 1.2.4-Trimethylbenzene N/A N/A 1,3,5-Trimethylbenzene N/A 124.9 N/A N/A N/A 104 111 6.53 N/A N/A 70 - 130 30 Vinyl Chloride N/A 65 N/A N/A N/A 114 90 23.4 N/A N/A 70 - 130 30 Xylenes 331 N/A 109 N/A 30 N/AN/A N/A 113 3.94 N/A 70 - 130 %SS1: N/A 500 N/A N/A N/A 104 105 1.14 N/A N/A 70 - 130 30 %SS2: N/A 500 N/A N/A N/A 120 119 0.686 N/A N/A 70 - 130 30 %SS3: N/A 500 N/A N/A N/A 118 118 0 N/A N/A 70 - 13030

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

\* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate. NR = 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.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

OC for \_\_\_\_\_ QA/QC Officer



"When Ouality Counts"

#### **QC SUMMARY REPORT FOR TO15**

W.O. Sample Matrix: Air/Soil Vapor QC Matrix					x: Soil Va	apor		BatchID: 54005			WorkOrder 1010610				
EPA Method TC	015	Extraction TO15							Spiked Sample ID: N/A						
Analyte		Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)					
		µg/m³	µg/m³	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD		
BATCH 54005 SUMMARY															
Lab ID	Date Sampled	Date Ex	tracted	Date Ana	Date Analyzed Lab ID			Date Sampled		Date Extracted		Date Analyzed			
1010610-002A	10/20/10 1:40 H	PM 10/2	27/10 1	0/27/10 1	0:03 PM	1010610	-002A	10/2	0/10 1:40 P	M 10/2	27/10	10/27/10 10:	03 PM		

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

\* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate. NR = 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.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

OC for \_\_\_\_\_QA/QC Officer